Wisdom of the Impulse

On the Nature of Musical Free Improvisation

Part 2

Tom Nunn

Pdf edition, 2004

ISBN 87-91425-03-4 (Part 2)

For technical reasons, the document had to be divided into two parts. This is a continuation of Part 1.

CHAPTER 5

CRITICAL LISTENING

Introduction

Listening is a series of complicated processes involving the intricate physical structure of the ear, responsible for the transformation of physically moving air into neuronal impulses, the routing of those impulses to the brain, and the cognitive processing of neuronal impulses into "information," such as the recognition of the sound as a human voice, a bird, squeaking brakes, a waterfall, etc. Beyond this level of recognition, however, lie the further meanings, both emotional and intellectual, that we individually and uniquely impose based upon personality, life experience and circumstances of the moment. All of this makes listening unique for each of us.

* * *

As stated earlier, most improvisers will say that listening is possibly the most important skill an improviser can have, even more than instrumental technique. (Note: An example of this view would be an improviser's use of found objects or unfamiliar instruments to eliminate the tendency toward familiar patterning. This shifts the focus from instrumental technique to compositional technique.) Action in free improvisation stems from intuitively responding to the Flow, once the first sound is made, and whatever follows continues to be a response to it. (Note: This is basically, but not entirely true. Again, there can be circumstances of free improvisation wherein improvisers in a group consciously try to avoid listening to one another to achieve a certain dissociative character about the music.) On hearing that initial sound, of course, neither the performer(s) nor the audience knows what direction or shape the music will take. The fact that both perspectives begin at the same point offers a level of excitement, involvement and challenge to the audience listener that is unique, at least in degree, to free improvisation.

Obviously, performers of all music listen critically to what they are doing in practice and in performance. A performing musician listens actively and critically in order to improve technique and general musical awareness (knowing the literature and styles of one's particular instrument). Audiences are likewise critical (not just the critics), based on personal knowledge and experience of the music or type of music, as well as the emotional affect it tends to generate. So, critical listening should not be a new experience to most.

Critical listening implies a knowledge of "ground rules," so to speak; a foundation for musical meaning. If a performance sounds like music, then it has certain elements which the listener recognizes as "musical." In this light, John Cage has proposed that virtually any sound, including ambient sound, can be heard as music if we listen for the music. The impact of this revelation was most obvious and immediate in its effect on composers' strategies about creating compositions, and on their attitudes about the potential role of the performer. As discussed in Chapter 2, the concepts of "chance" and "indeterminacy" arose as important elements of new music, along with improvisation. But in a more far reaching way, such concepts represent an entire paradigm shift, primarily away from linearity/control and toward more organic, self-generating processes. The very bases of critical listening in this music must therefore be re-evaluated.

The term, "critical listening," as used here is a double entendre'. We listen critically in an active response to music of interest. Personal critical values determine preferences. At the same time, it is critical specifically to free improvisation that listeners, audience as well as performers, listen actively. If the performers don't, the music goes nowhere; if the audience doesn't, the music has no real meaning outside of possible stylistic referents. So, the audience listener is a vital element of the creative PROCESS of free improvisation. The more put into the experience, the more gotten out.

This chapter examines briefly some of the knowledge about listening presented in the writings of various authors and musicians. First, how we sonically perceive the environment is examined. Then how music is heard, generally, as music, and specifically as free improvisation. Next is an examination of the idea of communication in music, whether it is a viable idea, and whether or how it takes place in free improvisation. Finally, critical values relating to free improvisation are discussed from the perspective of critic, audience listener and improviser.

* * *

The Environment and Listening

It may seem odd to talk about listening to the environment itself within a discussion of the perception of free improvisation. But, there is much to learn from what has been discovered about "soundscapes," their impact on and reflection of the culture, and how people listen to such sounds. This information, indeed, has direct relevance to the experience of listening to music, and especially the music of free improvisation.

The term "soundscape" was coined by composer R. Murray Schafer, whose World Soundscape Project documented the acoustic environments of different cities and villages in Canada and throughout Europe. The results of their studies reveal how sound is an integral part of the environment, with a number of societal functions, such as providing a sense of security through familiarity or regularity, or signalling (fog horns, church bells, school bells, clock towers, etc.). Also noted is how the acoustic environments of civilization have changed over time in drastic ways. It is easy to imagine the difference between typical sounds of the city in 1898 and those of 1998; the latter are obviously much noisier. The differences between one century and the previous one, however, become less and less. That is to say, the acoustic environments of today have "exploded" with sound, much of it machine noise, much of it "commercial noise," and a good deal of it simply the result of a vastly increased population density.

Composer Barry Truax worked with Schafer and discusses some of the principles developed to describe the nature of listening. Truax (1986) names three kinds of listening: listening-in-search, listening-in-readiness, and background listening.

In any example of listening-in-search, one scans the environment for a particular sound of importance, or in the case of echolocation, one listens for the environment's response to the sound one has produced. (p. 15)

Listening-in-readiness is described as a situation where

the attention is in readiness to receive significant information, but where the focus of one's attention is probably directed elsewhere. This type of listening ... depends on associations being built up over time, so that the sounds are familiar and can be readily identified even by background processing in the brain....

Listening-in-readiness also requires a favourable environmental situation for it to be effective. The brain is adept at pattern detection, but a minimum signal-to-noise ratio is required so that the desired signal may be separated from any competing noise. (p. 14)

Truax terms a favorable circumstance with a low signal-to-noise ratio as a "hi-fi" environment; a noisy environment he terms "lo-fi."

Within the hi-fi environment, the listening process is characterized by interaction. One does not have to fight the environment to make sense of it. Rather, it invites participation and reinforces a positive relationship between the individual and the environment. The lo-fi environment, in contrast, seems to encourage feelings of being cut off or separated from the environment. The person's attention is directed inwards, and interaction with others is discouraged by the effort to break through that is required. Feelings of alienation and isolation can be the result. Ibid

Background listening is most common as we cannot help but hear background sounds, which are virtually always present.

background listening ... occurs when we are not listening for a particular sound, and when its occurrence has no special or immediate significance to us. However, we are still aware of the sound, in the sense that, if asked whether we had heard it, we could probably respond affirmatively, as long as the event were not too distant in the past..." "[Background sounds] are a usual occurrence, and therefore expected and predictable. They may be singled out for attention if the need should arise, but normally they aren't specifically noticed. Ibid

Truax points out that background listening "is an important part of the listening process, but one that has associated with it particular problems." Increased levels of noise produce increased stress, both physically and psychologically. "Such environments do not encourage more active types of listening, and their prevalence

may prevent listeners from experiencing any alternative." Truax likens background listening to "distracted listening [where] the listener is actively engaged in other activity." He cites electroacoustic technology, with its redundant, low-information sounds, as favoring background listening.

Exact repetition and predictable formats in broadcasting also reduce the amount of new information reaching the listener. And finally, the general trend away from the aural sense as a source of information in daily life tends to make people focus their attention elsewhere and keep nearly all sound in the background. (p. 15)

The danger in all of this, of course, is the effect contemporary sonic environments have on listening sensibilities. As people become more adept at blocking out sound (or effectively blocking it out through background listening), sensitivity to sound diminishes, and the abilities to listen-in-search and listen-in-readiness are threatened. Although actively listening to music is a special kind of listening experience (normally with little competing noise or distraction), bad listening habits and a decreased ability to concentrate attention on sound alone will have a negative impact. It is admirable that some musicians have taken notice of the ramifications of contemporary sonic environments and have worked to raise consciousness about this issue throughout the world. Readers interested in this topic will find the Soundscape Newsletter a valuable information resource (see bibliography).

* * *

Music and Listening

Investigators in a number of different fields have studied aural perception as well as the perception of music. Some studies may address listening in general, without distinguishing the circumstances (learning theory, cognitive processing, information theory, acoustic design, etc.). Others address listening to music, even a particular kind of music, or a specific kind of listening environment (music theory, musicology, ethnomusicology, sociology, etc.). Without a doubt, the study of aural perception is broad and complex in the extreme, and at times contradictory, as one would expect given the many processes involved and the subjective nature of the listening experience. Obviously, no writer, scientist, or analyst can predict in any precise way what a person's listening experience will be, though they may describe a particular (isolated) process and its characteristic properties or probabilities that a certain kind of experience will occur under specific circumstances. But a listening experience, as most human experience, will always be highly personal in its meaning. Though limited, any information about how human beings listen is, nevertheless, interesting and useful in an investigation of free improvisation, because active listening is such a key ingredient to both perceiving and making the music.

Inevitably, formulations about the nature of musical meaning must be modified somewhat to account for free improvisation, since "musical meaning" normally implies an underlying system that is highly defined and broadly known, e.g., a particular style of music, or even a particular composition familiar to the listener. Where the music is essentially unpredictable, meaning becomes more personal-and-tied-to-a-particular-experience rather than cultural-and-tied-to-a-particular-style. These circumstances necessarily alter the nature of musical meaning.

In his book Emotion and Meaning in Music (1956), Leonard Meyer laid a foundation for thinking about or describing how emotion and meaning manifest in music. (Note: See Charles and Steven Feld, Music Grooves, "Motion and Feeling Through Music" (University of Chicago Press), 1994 for a response to Meyer in light of improvised music.) However, the subject of Meyer's investigation is classical Western music, not improvisation (and not popular music or non-Western music). Nevertheless, a number of the concepts about emotion and meaning Meyer discusses can be adapted to the circumstances of free improvisation while others cannot. When a listener is familiar with a particular composition, any sense of "surprise" about the music there may be is necessarily the interpretation of it rather than its composition. Where a listener is familiar with the general style and period of a piece of music, there is a potentially greater compositional interest in how the piece is "recreated" in performance (to the extent the listener has specific interest in music as composition). Finally, where there is not even a familiarity with the general style or period, the listener is challenged to accept a greater degree of uncertainty about the music.

Free improvisation, being a direct and immediate expression through impulse-driven physical activity, is

intimately connected to the body, as emphasized before. Because of this, the emotions felt by the improviser have direct and immediate access, through the body, to the music. The improviser is naturally sensitive to the potential emotional character of the music as feeling, and through the performing body, this feeling is translated directly to sound. Hence, the emotion expressed by the performer(s) is an integral component of free improvisation. For example, the impulse to initiate a Transition can be triggered emotionally as well as intellectually, and this will directly INFLUENCE the formal outcome of the improvisation.

Meyer discusses the nature of emotion itself, citing the law of affect, "which states that emotion is evoked when a tendency to respond is inhibited, [and is] a general proposition relevant to human psychology in all realms of experience." He goes on to make a distinction between affect and affective experiences due to different stimuli. Affective or emotional experiences of music are different than those of ordinary life, primarily because "musical stimuli are non-referential;" that is, they do not rely upon some extramusical association. (Note: Though some listeners would disagree with this, it appears to be the common thought that musical meaning is self-referential. But this in no way precludes meaning from occurring in any way it might, and it certainly can occur as an extra-musical association.)

A big problem comes up for free improvisation when Meyer states:

In art inhibition of tendency becomes meaningful because the relationship between tendency and its necessary resolution is made explicit and apparent. Tendencies do not simply cease to exist: they are resolved, they conclude. [citing John Dewey, Art as Experience, fn 28, Chapt.1] (p. 23)

The problem here lies in the degree to which "the relationship between tendency and its necessary resolution is made explicit and apparent" in free improvisation, given its inherent level of unpredictability.

Meyer places great emphasis on the value of familiarity with the style of the music and describes musical styles as

more or less complex systems of sound relationships understood and used in common by a group of individuals. The relationships obtaining within such a style system are such that: (a) only some sounds or "unitary sound combinations" are possible; (b) those sounds possible within the system may be plurisituational within defined limits; (c) the sounds possible within the system can be combined only in certain ways to form compound terms; (d) the conditions stated in (a), (b), and (c) are subject to the probability relationships obtaining within the system; (e) the probability relationships prevailing within the system are a function of context within a particular work as well as within the style system generally. The occurrence of any sound or group of sounds, simultaneously or in sequence, will be more or less probable depending upon the structure of the system and the context in which the sounds occur. (p. 45)

Meyer's explication of style is somewhat applicable to free improvisation. However, the multi-stylistic nature of free improvisation (Meta-Style) should be kept in mind when reading what Meyer has to say about the nature and function of style in music. (It is possible that Meyer would have considered free improvisation, in 1956, a difficult if not invalid proposition. Coincidentally, his book was published at a germinal moment in history for free improvisation.)

As stated above, Meyer considers meaning in music non-referential, having no common or assumed extramusical meanings, and this seems to simplify (if not oversimplify) the picture. Describing this distinction further, he cites "embodied meaning" as one in which the "stimulus indicates events or consequences which are of the same kind as the stimulus itself," while designative meaning implies the "stimulus indicates events or consequences that are different from itself in kind." Embodied musical meaning is accordingly "a product of stylistic experience, [thus], music in a style with which we are totally unfamiliar is meaningless."

What contradicts this idea is: 1) a "totally unfamiliar style" will still likely have musical elements that can be related to familiar styles; 2) people are now familiar with many different styles that are related or similar to music never heard before, so it is hard to imagine such "total unfamiliarity" with any style of music; and 3) the style of a free improvisation reveals itself as the music forms and tends to establish its own stylistic identity.

Meyer does qualify his statement somewhat, however, though the disclaimer does not go far enough to include free improvisation:

once the aesthetic attitude has been brought into play, very few gestures actually appear to be meaningless so long as the listener has some experience with the style of the work in question. (p. 35)

Or familiarity with a style(s) similar to that of the work in question. Since cross-cultural influences among musical styles abound, music unfamiliar to a listener can still have meaning, albeit a meaning not necessarily intended -- but perhaps a fascinating kind of meaning that makes that particular listening experience special. Is only one meaning allowed?

At the same time, listeners among a group's following who have become very familiar with the group probably listen in a way similar to the audience of classical or traditional music, with a strong reliance upon some level of predictability of style within the otherwise unpredictable compositional PROCESSES. Again, however, for free improvisation, a danger lies down this path of increasing reliance on style and predictability; the music ultimately becomes less and less improvised, substituting a fascination with identity for the fascination with PROCESS.

Both audience and improviser must ultimately rely more on the real time, personal experience of the music (and its CONTEXT) for meaning and affect than on education and/or familiarity with a culturally defined style, whether classical or popular or even experimental new music. Listening to free improvisation is inevitably a PROCESS of "adjustment" or "rearrangement" of expectations within a milieu of unpredictability out of which meaning is formed in the mind and heart of the listener.

Meyer states that since listening tendencies in music may be considered in part the product of one's education and experience with the music, musical stimuli are thus inherently meaningful in establishing and maintaining a particular musical syntax as determined by the particular style. Again, in the context of free improvisation, where style is syntactically fragmented and complex, musical stimuli are open to the establishment of temporally localized meaning that must be implied and realized in the moment. The particular syntax used thus reflects manifestations of Meta-Style, as described earlier.

* * *

Creative Listening

Through listening we distinguish, that is create, shapes that have the concreteness of images out of the dimness and at the same time respond to what we have made out. We read into the music what we can, we imagine it to be music, it is not 'objectively' music without our imagination of it as such, without our animation and image formation. (Jack Wright, untitled, 1994)

There is a notion worthy of exploration called here "creative listening." Creative listening is simply listening with the imagination. The imagination comes from within and is intimately personal. Creative listening might be considered a more "active" kind of listening; not listening for confirmation of what is already known, but rather for inspiration to feed the imagination.

Creative listening is analogous to Zen consciousness as expressed in the title of Shunryu Suzuki's book, Zen Mind, Beginner's Mind (1977). Beginner's mind is open, accepting of what is. The listener will, ideally, be in a state of mind very much like that of the improviser -- "no mind." How can this state of mind best be described? Expectations are underlying and very general; the mind is at once blank and "ready to pounce." The moment the music begins, the active listening mind becomes the music just as do the improvisers. Poetic as this may sound, it is no overstatement. Just as the ego of the improviser must disappear, so must the ego of the listener. It is this transparency of the perceiver that both allows the music to form itself and facilitates a truer comprehension and enjoyment of it.

Creative listening implies listening-in-search, to use Truax's term. We listen for this or that; we listen with some kind of "expectation." Yet, the distinction must always be made between the nature of listener expectations of familiar music versus those of unfamiliar and/or relatively unpredictable music. The free improvisation listener ideally has the expectation of an unfolding process, listening-in-search for musical ideas and relationships, though not knowing what they will be. This can be a conscious activity, such as listening for specific PROCESSES (Identities, Transitions, etc.) Listening to free improvisation in this way provides a

firm basis on which to both understand and criticize a performance. Again, "it is critical to listen critically" -- to note, say, how interestingly an Identity was formed and used, how it was shared among players, what Composites were formed, how well, how quickly, how often, and so forth. On a formal level, of course, a listener can perceive and understand Transitions, how well and how quickly or smoothly they are executed. Even ambiguity, itself, can be appreciated, such as a rhythmic character that lies between associative (regular, predictable) and dissociative (irregular, unpredictable), or a harmonic character that plays with the border between tonality and atonality. And, of course, the complex ways in which Meta-Style functions provides another element of interest. As some or all of these components are heard, the listener gains an impression of the uniqueness of the particular performance, as well as the improviser's or group's compositional skill in constructing music in real time. Active listening has always been stressed by music educators as a way to perceive the depths of music, and this applies no less to free improvisation than to other kinds of music, perhaps more.

As we talk about listening -- active listening, critical listening, creative listening -- it becomes clear that there are two things going on: the music itself and the perception of it. In written music, the music itself is often defined by a score (the "composition"). In free improvisation, it is difficult to distinguish between the music itself and the perception of it, since the perception of it by the performers virtually generates it. The closest analogy to a score would be, of course, a recording of a free improvisation. A recording can be analyzed through transcription (though very likely not to the extent a written score can be) as an entity separate from the original experience of the live performance. Though many improvisers would prefer this separation not be made, it is possible. And if free improvisation is to be subject to such inquiry, it is important to distinguish its two manifestations -- a conceptualization of the music, and the experience of it.

In his article, "On the Psychology of Music," International Review of the Aesthetics and Sociology of Music, p. 215, (1973), Gerhard Albersheim emphasizes how the study of music (theory, musicology, etc.) is not a study of how music is understood. Rather, this entails a phenomenological study of the process.

The purpose of a phenomenology of music is to describe how we hear music. Among those who can perceive the sound-phenomena of music are infants, tone-deaf people, and many animals, none of whom, however, hear these sounds as music. In order to hear the sounds of music as music, a listener must be able to understand the musical arrangement of simultaneous and successive sounds as a meaningful auditory process, as a particular kind of human utterance or expression which communicates a very specific sort of auditory experience. This, of course, requires much more from the listener than the mere perception of the sounds; it requires his participation, his personal involvement in the processes occurring in his aural field which thereby become an experience and expression of the listener's own self. Ibid.

In other words, music is not only the performance, the musicians, the score, the improvisation, the sound waves, it is all of these plus the perceptions and personal experiences of the event by the audience listener.

* * *

Communication in Music

There is no question that communication takes place when two people are talking to one another. However, when communication is considered in the context of music, it becomes a thorny issue. Theorists in various fields (music theory, psychology, music therapy, communications, etc.) have addressed this subject. It is undeniably a difficult and complex topic worthy of numerous volumes! Usually, the question is whether or not communication takes place between the composer and the audience. Under the circumstances of free improvisation, however, the issue of communication should be focused on the performance interactions among improvisers within the real time collective creative PROCESS, as evidenced by Relational Functions (intended roles) and their resulting Composites (perceived roles), and this is discussed further below.

While some regard music (when written or memorized) as a form, or special circumstance, of communication, others vehemently deny it. The basis for doubt lies in the fact that communication involves "a conscious interchange of information" (Kneif, 1974). In his article, "Some Non-Communicative Aspects in Music" (1974), Kneif discusses this debatable topic in terms of whether communication takes place between composer and audience in the context of performances of written compositions. Though speaking about circumstances quite

different from those among free improvisers in group performances, Kneif clarifies the issue of communication in music in a way useful to the inquiry here by describing the essential requirements for any communication:

In order to prove that music is a medium of communication, three requirements must be simultaneously fulfilled. First, a physical substratum must be present to serve as a means of transferring information; second, there must be an informational content different from the physical medium in which it is being transferred; and third, a coherent exchange of information must occur. To put it in behavioural terminology, each end of the communication channel must influence the conduct of the other. Ibid.

An exchange of information implies "a real dialogue ... rather than an exchange of unrelated information." But Kneif declares there is confusion over the term "information" as used in information theory, when adapted to explain problems of musical communication, since "information" implies only the "degree of newness compared with the actual previous knowledge of a person." Kneif warns that the term "information," as used in information theory, must not be confused with that term as used in the traditional semiotic sense. The former is essentially "deviation from expectation" while the latter implies that information "is always bound to sign-vehicles." Ibid. Ultimately, Kneif concludes, "Music is a topic of social intercourse, not a medium of communication."

Albersheim (1973) reinforces the notion that music, as any art, is non-referential (or self-referential):

The equivalence of experience and appearance explains the powerful communicative character of all art. However, this is no semantic communication of a message in actual life (from creator to public) ... art rather communicates a vital experience within an aesthetic field directly through the unequivocal expressive and dynamic qualities and the intellectual import of its phenomenal aspects. Therefore, the phenomenal body of an art work is not the symbol for what the work is about, for what it expresses, in other words, not a sign, pointing to something beyond itself which it signifies, ... but the direct expression, the manifestation of the aesthetic experience. Ibid.

* * *

Communication in Group Free Improvisation

Free improvisation is a collective creative PROCESS that must be considered in terms of communication as improvisers in a group are necessarily responding immediately and intuitively to one another's playing (even when a response is intentionally dissociative). And Kneif's three requirements are fulfilled: the physical substratum is sound; information content manifests as ideation which can be considered in abstraction from the sound itself; (Note: This applies to any music and thus makes one wonder why Kneif implies it does not. Any musical PROCESS can certainly be recognized as such and can be the subject of communication via words (analysis, criticism, etc.) as well as sounds.) and a coherent exchange of information (relative to the formation of the music) can be heard in the real time articulation of Relational Functions/Composites and Transitions. Furthermore, group free improvisation occurs among two or more individuals expected to respond freely, whether affirming or negating implied Flow potential; action (performance) can be perceived as response (direct or indirect); interaction can be perceived as response to a response (affirmation, continuation or change of Flow); and it all occurs in real time (not unlike the interactive dynamics of conversations or group discussions). These aspects of free group improvisation strongly imply a process of communication. (Note: In a solo free improvisation, of course, there is no intergroup communication because there is only one improviser. Though an audience may occasionally have a strong impact on the performance of solo free improvised music (e.g., body language, extraneous noise or movement, or "vibes"), such "communication" is not acknowledged by writers such as Kneif or Albersheim. In another sense, however, the solo improviser, by creating the illusion of different "voices," can articulate a kind of intrapersonal communication among those "voices." But it is group free improvisation that most obviously evidences communication whereby music forms itself out of the collective creative interaction.) After all, how can there be interaction without communication of some kind?

Of course, the "structure" of a conversation and that of a group free improvisation are different in important ways, yet their similarities are also apparent and reveal a psychologically based human interaction apart from language, per se. The Relational Function/Composite, Dialogue, makes reference to a type of linguistic, verbal communication that implies a direct loop -- each party, in turn, is physically perceiving, mentally decoding, emotionally reacting, and intellectually evaluating what is heard both continually and cumulatively as the other is talking; then creatively formulating, psychologically strategizing, and "uttering" a response, followed

by the initial condition of active/expectant listening for the response to the response.

Dialogue in free improvisation, however, is not linear to this extent and, again, may involve more than two improvisers. Interactions almost always overlap as the direct back-and-forth communications loop continues, with each player immediately affecting, and responding to, the other(s). Even Interpolation, the interjection of "unrelated" material, can be heard as communication if heard as being intentional, "broadening" the Flow to incorporate two distinctly different musical characters, with obvious similarity to a bifurcated group discussion or cocktail party full of adjacent conversations (which can be heard as a single sonic collage-like linguistic image).

One of the aspects of communication is "miscommunication" -- misunderstanding. A distinction has been made between Relational Functions as intended relationships and Composites as perceived relationships. This distinction is very important in understanding the communicative nature of free improvisation. Just as something someone says can be misinterpreted to mean something quite different, the intentions of improvisers in the efforts to communicate, are not always realized. An improviser may intend the music go in one direction and play something that (to her or him) implies that direction, but there is never a guarantee that others in the group will recognize or support that intended direction. An improviser responding to another may sense the music taking a different direction, or a different musical character (possibly an Identity) emerging which affirms and augments the apparent direction of the flow. Or she/he might misinterpret the musical intention, and a "mistake" happens, though, again, there is always the possibility of contextualizing a mistaken response and effectively erase the sense of "mistake" in retrospect. In written/rehearsed music, this could be considered simply "faking it." However, in free improvisation, there is nothing to "fake." Decisions made in retrospect are no less valid compositionally than those projected into the future.

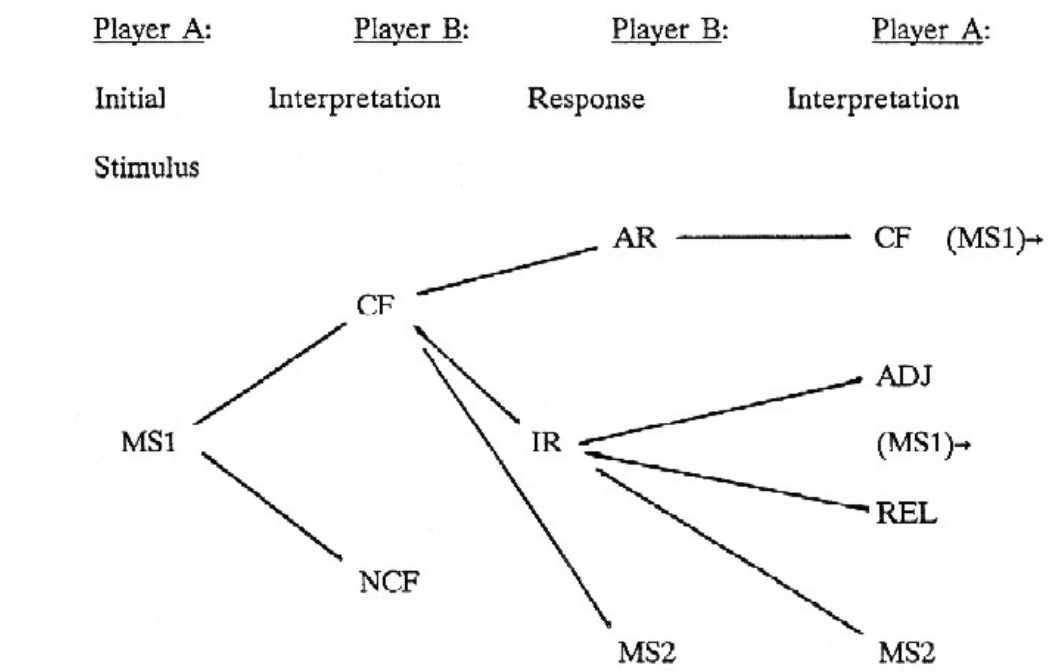
It is possible to conceptually separate perception and behavior in free improvisation, but in reality, of course, they occur simultaneously in the cumulative progression and continuity of the Flow. Only if time could be frozen and thinly sliced, might we get an impression of exact temporal placement and separation of perception and consequent action. But even then, the overlapping of perception and response would be evident. The conceptualization of perception and response as separate aspects of communication in free improvisation, however, is useful to illustrate, in an abstract way, the interactive or relational possibilities inherent within a single cycle (stimulus to stimulus/perception to response/stimulus to response/stimulus/perception). Of course, such a cycle could take no more than a second!

The Chart of Interpretation and Response which follows illustrates fundamental communicational possibilities that arise in the process of free improvisation and describes a highly simplified model of two improvisers wherein potential decisions are isolated and different "paths" of communication are illustrated within a single cycle of interpretation-to-response-to-interpretation of an initial stimulus.

Referring to the Chart, first, a Musical Stimulus (MS1 or MS2) could be virtually any sound event. For the sake of clarity in the imaginary ear, it is given that a Musical Stimulus is a rather short sound (.25" to 1.0"). To further simplify the situation, it will be given that there is no overlapping of sounds.

CHART OF INTERPRETATION[1] AND RESPONSE
IN FREE IMPROVISATION

Cycle 1



MS1 = Musical Stimulus (Sound), first
MS2 = Musical Stimulus (Sound), second
CF = Confirmed Flow
NCF = Non-Confirmed Flow
AR = Appropriate Response - affirmation
IR = Inappropriate Response - mistake and/or transition
ADJ = Adjusting (to flow) - a process to establish a composite
REL = Relating (to flow) - a composite

.....
(1) The term "interpretation" implies here perception and cognition. The term "response" implies the action stimulated by the interpretation. And "stimulated" implies both impulsive behavior of the "Intelligent Body" and ideation of the Intellect.
.....

Reading now from left to right representing the passage of time, Player A begins by making a sound, or Musical Stimulus (MS1). Player B may then perceive MS1 as implying a direction, designated here as "Confirmed Flow" (CF); or Player B may perceive no implied direction, a "Non-Confirmed Flow" (NCF). If Player B perceives CF, she/he has three possible responses: to give an Appropriate Response (affirming the implied flow); to give an Inappropriate Response (which could be heard initially as a Transition cue, or a mistake); or, to introduce a new Musical Stimulus (MS2). What determines this choice could be either intention or misinterpretation. If Player B's response is appropriate (AR), Player A will likely perceive it as Confirmed Flow (CF), though here, too, is a possibility of misinterpretation. If Player B's response is inappropriate (IR), Player A could perceive it as either intentional (Catalyst, Interpolation, etc.) or unintentional (a mistake). Whether perceived as intentional or unintentional, however, Player A will interpret three possibilities: the IR is perceived as adjusting (ADJ) to the implied Flow; relating (REL) to the implied Flow; or, initiating a potentially new Flow (MS2) that is non-relating, articulating at least momentarily dissociative polyphony (DP).

MS2 is a strange sort of response. The effect on the music is to introduce a new musical character, possibly an Identity, implying a different direction that complicates or changes the character of the Flow. At this point,

Player A could either drop MS1 and go in the direction implied by MS2 or reiterate and formally sustain MS1 and its direction, in effect affirming two simultaneous but different Flows (musical character/direction), which will likely be heard as DF/DP, Transition, Interpolation or Sound Mass.

It is easy to imagine how extremely complicated things get when cycles such as the above multiply, overlap and intersect in any group improvisation, especially in light of how brief the duration of a cycle can be. Furthermore, each additional player beyond two adds a whole other dimension of communicative possibilities; and each moment cumulatively weighs on decisions to follow such that precisely tracking communication through the complex of interactions would be impossible. The point here is merely to illustrate that communication does take place, is extremely complex, and is essential to free improvisation.

So, how does such communication impact the music? If we acknowledge that a form of communication occurs among improvisers in a group, that communication necessarily represents the dynamic (changing) aspect of the formation of Composites. Likewise, it is essential to any group consensus about Identities and Transitions. Thus, formal and structural elements of group free improvisation are, themselves, outgrowths of communication. Again, it is clear that this communication is of a different order than language. The "message" might be represented by simple repetition, either continuous, implying a Ground or Support, or periodic and developing, implying an Identity, or the intent to establish one. If what seems like a Ground or Support is articulated, the "message" is essentially an invitation for another or others to take the lead (if Solo or Dialogue) or to join to create a homogeneous texture (if Sound Mass). If an Identity is implied, the "message" is a statement of direction that seeks support or confirmation. If a strong apparent Identity unrelated to the Flow is articulated by one player, the others do not necessarily know what might be implied. The gesture may be interpreted as a Catalyst, in which case the appropriate, and usually spontaneous, response is to change something about the Flow. If it is interpreted as an Interpolation, the appropriate response is no response, but rather to maintain the original Flow (though perhaps making minor adjustments to clarify or accommodate the intended Relational Function).

The very process that converts, or fails to convert, the intentions of Relational Functions to the actuality of Composites is communication. Moreover, such qualities of consensus and the evolution of intention to actuality cannot occur without communication.

* * *

Table of Elements/Relational Functions/Actions

Under the circumstances of communication among improvisers, the question arises, what does the improviser actually do when responding to others in group improvisation? That is, what responsive action is taken? First, it is necessary to identify basic elements of the Flow of sound that may be considered as stimuli. Since content is unknown entirely, a set of basic elements is identified here simply in terms of relative duration. An Event is a single, isolated sound. A Figure is a small group of sounds, such as a motive. A Phrase is a larger group of sounds that are continuous as well as contiguous (immediately adjacent), such as a melody. A Ground is a static, sustained sound or sound pattern that continues indefinitely. (Ground is a special case, being both a basic element and a Relational Function). As a Composite, a Ground may be heard alone, but is usually heard as a special kind of Support that tends to be static, while Support, per se, implies a more active accompaniment.) These basic elements, of course, are continued over time through PROCESSES of Linear Functioning, such as repetition, extension, development, fragmentation, variation, etc. Thus, they are not always stimulating a particular response; only when they appear to focus the structural character of the music do they become stimuli -- in a sense, cues -- to other players. The basic elements of Event, Figure, Phrase and Ground are considered in this regard below, as stimuli of certain basic actions -- Maintain (don't change), Change, Adjust, Interact and Lead -- necessary to achieve a like Composite.

The following Table of Elements/Relational Functions/Actions illustrates how the basic elements might be perceived by the improviser in terms of Relational Functions and the "most appropriate" basic actions. For example, a phrase heard as a Solo mandates the player to adjust what she/he is doing to accommodate. Or, if a phrase is heard as inviting a Dialogue, the player should interact to create that Composite.

The table is read as follows: If **[Element]** is heard as **[Relational Function]**, then the most appropriate or

likely response is **[Action]**. (Note: A fine point must be clarified here. A Relational Function is not just an intention, but the articulation of an intention and the perception of it as an intention. This perception, by improvisers and audience as well, is extremely rapid (hopefully) and, in the case of the other improvisers, immediately stimulates a particular kind of action. In this split-second moment, the Relational Function is perceived as such; however, soon afterwards, in retrospect, the Composite (the actual result of the response) is perceived, and it may or may not be heard as being the same Composite as the Relational Function, in which case either a miscommunication has occurred or a "battle of wills" to determine which way the music is tending to, or should, go.)

TABLE OF ELEMENTS/RELATIONAL FUNCTIONS/ACTIONS

Element (stimulus)	**Relational Function**	**Action**
Event	Catalyst	Change
	Support	Maintain/Adjust
	Interpolation	Maintain
Figure	Catalyst	Change
	Solo	Adjust
	Dialogue	Interact
	Support	Lead
	Interpolation	Maintain
Phrase	Catalyst	Change
	Solo	Adjust
	Dialogue	Interact
	Support	Lead
	Sound Mass	Maintain/Adjust
	Interpolation	Maintain
Ground	Catalyst	Change
	Support	Maintain/Lead
	Sound Mass	Maintain/Adjust
	Interpolation	Maintain

Change implies a change (often sudden and obvious) to virtually anything or to a new direction that may be immediately implied by the group as a whole. Maintain implies no response whatsoever, as if there were no stimulus. Adjust implies a subtle change to accommodate the intended Relational Function. Interact implies a direct response to one or more players who has left "room" for such a response (i.e., short periods of silence). Lead implies taking a Solo role and determining the direction of the music, with a possible Support or Ground by the other players.

These "most appropriate" responses are, of course, not the only possible ones, but rather generally tend to establish an actual Composite that is the same as the intended Relational Function. Again, however, the intention may not be realized and a Composite that is different from the Relational Function may occur.

Certain rare combinations are not listed. For example, an Event heard as initiating a Dialogue; an Event implying a Solo; Ground heard as a Solo, since an interesting Ground can often sustain interest alone for a period of time before a response seems musically necessary.

* * *

Purposeful Ambiguity and Non-Communication

Before leaving the subject of communication in free improvisation, it is necessary to address how a listener might hear elements of non-communication. Interpolation and Sound Mass were cited as Composites that appear non-communicative, wherein the improvisers seem not to be listening to one another. Such non-interaction is acceptable when the intention is clear even though the results are ambiguous -- i.e., the improvisers seem to remain in control of the situation. This control is manifest in the balance among the disparate parts and how the compound/complex sonic image is established and left. Thus, the efficacy of such non-interactive improvising lies in the ability of the group to clearly articulate the intended ambiguity, one of a number of paradoxes found in free improvisation. (Note: Though one may doubt it, a clear articulation of ambiguity is both interesting to hear and a challenge to do, while an ambiguous articulation of ambiguity is simply confusing and disruptive to the Flow. Thus, DF/DP is a tool in free improvisation, not just a default circumstance.)

These areas of non-interaction can be heard functionally as suspensions, Transitions or intentional dissociative moments in the form of Sound Mass and/or Interpolation. Furthermore, as mentioned earlier as an aspect of creative listening, the mind seeks order, even where none is apparent. A good illustration of this is the "deaf dub." A soloist records an improvisation on one track of a two-track tape, then rewinds the tape and records the other track without listening back to the first track. Though there may be some vague memory of the first track, by and large it is forgotten, and no attempt is made to recall it or somehow synchronize with it. Listening back to the two tracks together can reveal an unexpected level of synchronization, however, where there seems to be a definite relationship between the two tracks. Our underlying natural desire for order comes into play and, through creative listening, we project meaning as listeners.

The function of ambiguity in free improvisation is partly a result of the previously mentioned confounding principles of Simultaneity, Hybridization, Kinesis and Unpredictability. Indeed, the special relationship between ambiguity and listener expectations is a vital dynamic of free improvisation, creating a level of "mystery" that lends a true excitement to the music.

* * *

Critical Values in Free Improvisation

As discussed above, communication in music is most viable under the circumstances of group free improvisation; and this communication is held to occur among the improvisers, not between improvisers and listening audience (because the audience has no interactive "voice" during the performance). Nevertheless, it is not difficult to extend the idea of "communication" beyond the moment of performance or its immediate impact. Reviews of performances and recordings represent a response to music expressing critical values, and often an improviser will eventually become aware of this response. To the extent the response actually impacts the improviser's music from that point on, a sort of interaction or communication has taken place (somewhat like letter writing). In a special sense, communication of critical values can even be from and to oneself. Self-evaluation of recordings by improvisers is an important part of musical growth. Discussions of performances and compositional strategies or techniques among improvisers and non-improvisers will display critical values of one sort or another.

A list of issues often addressed by reviewers include:

Historical or sociological context of the recording (e.g., a compilation, a collaboration, a live recording from a particular performance or festival, location of the recording session, etc.)

Performance quality (technical abilities) and rapport (ensemble ability) of the group; and acknowledgement of particular outstanding players

Compositional abilities and/or strategies of the improviser(s) and how they are expressed

Comparisons (technique, style, composition, etc.) to previous recordings or other similar groups or players

Uniqueness of style (group and/or individual)

Styles that may be used or parodied

Metaphorical allusions to the sound with possible reference to instrumentation and/or technique

Unusual instruments or instrumentation

Remarks about or quotations from liner notes

The form of the whole recording (i.e., how the individual pieces work -- or do not work -- together)

Recording quality

Outright recommendations or non-recommendations

A reviewer or critic of free improvisation will ideally show evidence of a genuine familiarity, as expected in the criticism of any music. Often this is expressed in terms of comparisons (to earlier recordings or to other improvisers, even to non-improvised music). But ideally, this familiarity should not focus on style and technique alone, but on audible compositional PROCESSES as well. Free improvisation has its more well known performers and groups and recordings that might be referred to via a comparison (negative or positive). But reviews that comment on the compositional nature of the performance speak more directly about the music itself, apart from its "historical" or stylistic circumstances, and thus reveal essential critical values held somewhat in common among improvisers and audiences.

* * *

Survey of Reviews

Below is a brief survey of some reviews of performances and recordings, with quotations given here as examples. Although there is a variety of writing styles among reviewers of free improvisation, commentary is most often colorfully metaphorical and entertaining in itself.

The Improvisor

For over a decade, The Improvisor, published in Birmingham, Alabama by Davey Williams and LaDonna Smith, has provided an invaluable resource to musicians, with articles, editorials, letters, graphics, announcements, ads, and reviews. Appropriately, the reviews are written by improvisers, not music critics. Hence, there is a sensitivity and insight that comes from personal experience and a dedication to the art.

In Volume X (1993), there are nine packed pages of reviews of 39 free improvisation recordings on CDs, cassette tapes and LPs. Reviewers include Milo Fine, Glenn Engstrand, LaDonna Smith, Mike Hovanscek, Sczjd Reasoning, and Davey Williams. Some reviews are fairly extensive, while some are quite short; and there are negative as well as positive reviews.

LaDonna Smith's review of the cassette tape, "Say What" by Steve Noble (drums, percussion), Davey Williams (electric guitar), and Oren Marshall (tuba, didgeridoo), is a kind of collage-story in a metaphorical, almost poetic writing style.

Say What sneaks in with a rhythmic vamp. Grooving like traffic as it thickens and deepens, rush, stall and wait, motors running, with Williams triple picking. Impatient monotonic commentary within the subtle, slightly rock heartbeat. The second piece is the worksite of alchemical manufacturing. Beautiful singing feedback glisses over the machine shop. Again let that funky music roll. Relentless rock-n-roll drumming with guitarist gagged and bound squirming to free himself underwater. Please! What kind of band is this? Who wants to dance? Abandonment. Singing saws return in somnambulistic forays. Electrical transposition. Each is alienated with the rhythmic noise of a barman. The trio provides an excellent format for the interesting guitar music of Williams with the more traditional band format of guitar-based rock. Marshall displays an old-timey authenticity at times with his tuba vamps while Noble plays the straight man. Williams singing soars like a

bird. Sounding highly intense, sweaty and all boy, under the relentless drumming of Noble. Relief comes as they turn back the clock alluding to the Dixieland, to the Hawaiian, to the Swing, to the Blues. Improvisation of 'color.' A fun band. They should play the U.S. bar circuit. A stretch from the usual. (The Improvisor, 1993)

This review entertainingly describes general sonic images, playing techniques and specific traditional styles utilized in the music. Something of the personality of the three players is alluded to. The review does not comment on the overall form or format of the cassette (how many pieces, lengths of pieces, etc.). The improvisers are obviously accomplished performers, yet there is the hint of a criticism of an overdependence on style (in this case, rock).

LaDonna Smith also comments on the use of style in the CD, "WIE: Wiesbadener Improvisations Ensemble" (Dick Marwedel, alto and soprano saxophone; Ulrich Phillipp, contrabass, electronics; Wolfgang Schliewann, percussion).

These people are highly sensitive listeners and players. Their music is also liberated from the derivations and connotations generally expected in German free-jazz. This is not jazz. It is improvisation, pure and clear. There is a sense of timing and spacing, timbre and range, akin to painting. (The Improvisor, 1993)

The emphatic comment that the group is not jazz points to a strong stylistic distinction that sets free improvisation apart from jazz. The recording is given a high recommendation.

Reviews, unfortunately, cannot get into much detail about the music. A review is usually succinct and focuses on the more apparent or notable features. Space within a publication is always an issue forcing brevity. And when a recording is a compilation of a large number of musicians, as is more and more the case, a reviewer is extremely limited, since all the players and their instruments must be acknowledged. The variety of music in such recordings presents a further dilemma. The reviewer is usually obliged to choose certain pieces on which to comment. Mike Hovanscek's review of the mammoth three-CD compilation, "(Y)earbook," produced by Gino Robair and Rastascan Records, is a case in point. His review (not quite a full column, or half-page) comments on Robair's "brilliant job of combining a remarkable variety of musical mindsets..." Hovanscek acknowledges how such compilations benefit the practice of free improvisation as a whole.

Another admirable quality of this project is its combination of extremely well-known improvisers alongside some lesser-known but very talented musicians. As a result, the bigger names will attract interest to the smaller names. What better way is there for the world of improvised music to grow and develop? (The Improvisor, 1993)

The reviewer is forced to keep his commentary to a minimum, as he names off performers/instruments. He concludes with the obligatory disclaimer: "A review of this length could never do justice to the many wonderful ideas that are included..."

Some quotations from this issue of The Improvisor follow, which give an idea of critical values within the improvising community:

"The music therein was solid, but lacked the spark that has really ignited the group since its inception in 1966."

"There is an instant rapport evident in the free improvisations of this NY trio."

"Are you tired of normal weirdness?"

"This side-long improvisation grows tiring after the first few minutes due to the fact that none of the performers appear able (or willing) to interact in a way that would cause the separate parts to congeal into something whole."

"The material on side two ... has its moments of interest but tends to be the type of free jazz that is mostly free and just barely jazz. It would be far more interesting if it either lapsed into moments of coherent structure from time to time or if it was broken into a series of short improvisations each involving a different ensemble/approach to music."

"Although they have a variety of estimable repertoire, there is not another group that I've ever heard improvising that sounds like this."

"This tape has a tighter and more 'compositional' feel."

"what we have here is a mastering of restraint and steadfast refusal to like any given moments in the improvisation so much that they hang around too long in sound areas."

"these musicians all discover various stages of play and interaction, sound discoveries between free and jazz structures."

"A virtuoso saxophonist of tones in textures, rich notes, melodic excursions, dissonance, all you could ask from a saxophone."

"Incredibly truncated explosions of gestural sound, too difficult to describe!"

"despite the constantly-evolving diversity of the music, a kind of aural hypnosis takes over in the room, making for pleasant listening indeed."

"Funny, the art of electronics improv is so much like the function of the stomach."

"it never holds one mood or tempo too long before it moves to another soundscape. Resolutions segue to new beginnings..."

"they are not meandering at any point... the focus and unit of intent ... is both immediately obvious and quite impressive."

"The quality is jumping in rich sounds and rockets, gorgeous sonorities and aftertones."

"I really liked [the] idea of using the computer to affect objects in real space as improvised by the performer (taking the possibilities of MIDI to the next level)."

* * *

The Voice of New Music by Tom Johnson

Musician, journalist Tom Johnson has been a major contributor to new music criticism since the early 70's, writing for The Village Voice. Het Apollohuis, in Eindhoven, The Netherlands, published a collection of Johnson's reviews of concerts in New York City over the period of a decade entitled The Voice of New Music: New York City 1972-1982 (1989). This 543-page (paperback) book is a monumental source of critical values and is historically significant in describing the new music "fashions," interests, or directions over a ten-year period. Several venues hosted these performances, such as the Kitchen, Brooklyn Academy, MOMA, the Composers' Forum, even Central Park. A number of concert reviews in this volume discuss how improvisation is used. The quotations below will give somewhat a sense of "New York" critical values as related to improvisation.

In a review entitled "Evan Parker's Free Sax" (November 19-25, 1980), Johnson echoes a number of common associations or prejudices people have with free improvisation, yet finds himself charmed.

I was accustomed to thinking of unstructured improvisation as undisciplined and usually self-indulgent. I had grown to really dislike the idea of 'expanding the vocabulary' of various instruments, because I find that the expanded vocabulary is usually not nearly as pleasant to listen to as the sounds the instruments were intended to produce... Yet Parker devoted his whole set to free improvisation, expanded the vocabulary of the saxophone as much as he could, played multiphonics more or less constantly, did just about everything I thought I didn't like, and I was so taken by the integrity and the excitement of what was happening that I completely forgot my biases. (p. 460)

Johnson explains how Parker accomplishes this feat (an hour-long solo saxophone improvisation) through his technique:

"... it was apparent that this was a man who had been playing like this for many years... He was never playing 'special effects.' He was just playing the way he always plays." (pp. 460-461)

However, when he speaks of technique, Johnson does not talk about virtuosity, but rather an integration of physical and mental abilities in spontaneous action.

When he would go for a particular tonal area, he seemed to know exactly what notes would come out, and he knew just how to wiggle his fingers to make his complex sustained textures ripple or flutter or sputter the way he wanted them to. He heard where the tonic was, when there was one, and how to ease back to it, if he desired. He even had control over difference tones. (p. 461)

It is obvious in this review that Johnson is responding to Parker's depth of musicianship and experience, his familiarity that provides such a wealth of "source material" for improvisation, and a mature compositional technique that can sustain interest and intensity in an hour-long solo free improvisation.

In another review, "John Zorn and Other Improvisers" (November 24-30, 1980), Johnson notes that trombonist, composer George Lewis had recently become music director at the Kitchen, where a new emphasis on improvisation would be given in programming, "to open the door to new forms of improvising and provide an outlet for performers to present their own programs." Johnson comments on Zorn's improvisational piece, "Jai Alai" (with Zorn, Coby Batty, Polly Bradfield, Eugene Chadbourne, Wayne Horovitz, M.E. Miller, C.K. Noyes, and Bob Ostertag).

The performers had a great deal of freedom in choosing what to play, and yet the evening seemed extremely controlled and unified, perhaps even static... I can't remember a single point when the music fell into a steady beat, nor was there much concern for specific pitches, tonalities, harmonies, or melodic motifs. Perhaps the main thing that kept this music on such an even keel was the intellectual structure that Zorn overlaid on the improvising. By holding up cards and utilizing sound cues, he controlled the combinations of musicians that could play during particular sections. (p. 456)

This is an interesting comment that belies an underlying paradox of values. Johnson may have considered the music too static and non-specific, yet he applauds Zorn's "intellectual structure" as "the main thing that kept this music on such an even keel." It would seem that the music actually needed some "craziness," rather than some overlaying structure that controls change and spontaneity. This may subtly suggest a composition-centric (actually, notation-centric) bias in critical values.

Johnson comments on a performance by trombonist George Lewis in his review, "Richard Teitelbaum, George Lewis, William Hawley" (March 19, 1979):

Lewis's opening improvisation made particularly effective transitions between sections of conventional virtuoso playing, sections employing fresh combinations of trombone sounds and vocal sounds, and sections that grumbled and sputtered in highly personal ways. (p. 376)

Critical values about compositional skill and instrumental technique are seen in the expressions, "effective transitions" and "fresh combinations."

In this same review, Johnson also comments on Richard Teitelbaum's improvisational abilities:

... while so much recent electronic music uses only pretty sounds, Teitelbaum always kept some buzz or edge in the [synthesizer] mix so that the result was never quite syrupy. There was also a good deal of brainwork involved in the way Teitelbaum knitted together radically different themes in 'Shrine.' (p. 376)

The reference to "syrupy" electronic music is most likely a response to typical synthesizer pieces or performances at that time -- 1979. Johnson's appreciation for the "buzz or edge in the mix" shows a sensitivity to a character of improvisation that utilizes noise in timbrally interesting ways. Of course, the comment on "brainwork" is, again, an acknowledgement of compositional ability, in this case integrating "radically different themes."

Johnson is obviously an insightful, sensitive and sincere critic of improvisation and new music. His book is a

reference to be treasured, not only in documenting the "New York scene" for a decade but in providing extensive examples of critical values that are appropriately applied. Although not all will agree with Johnson's impressions or understanding of the music in any given review, his critical values are clearly expressed. It is also interesting to consider what, if any, critical values may have changed over the decade or so since Johnson's reviews were first published.

* * *

Freeway

Freeway was a small, local publication in the San Francisco Bay Area produced by improvisers under the auspices of the Improvised Music Association (IMA) in the mid-90's. Like many reviews, those in Freeway make comparisons between the subject recording (or performance) and other players or groups. This gives the reader some idea of how improvisers can influence one another at times, though as mentioned before, there is little real evidence of stylistic imitation but, rather, stylistic assimilation. Such comparisons can also illustrate how free improvisation activities in certain regions or cities may tend to revolve around particular players or groups: "He's also been part of the emerging Sacramento scene." And certain improvisers who have been playing for many years are ften given due credit: "His role as an innovator in American improvisation and a still-active 'senior member' of our community is documented on two new CD compilations," attesting to a sense of historical continuity.

A publication such as Freeway often galvanizes a local improvisation community, presenting articles by local improvisers and notices of upcoming events, as well as reviews. And this is not only beneficial to the local community; it serves improvisers outside the community as well, who come through on tours, often providing reviews and/or announcements of their performances and information about their music.

Reviewers for Freeway include Myles Boisen, Tom Djll, Dan Plonsey, Hillary Fielding and other local improvisers. The style of writing is "hip," with lots of wit, sarcasm and humor, giving the review a literary interest of its own (e.g., "Tom Djll puts his trumpet where his mouth is on his first CD"). These reviews are not terribly analytical, though sometimes touching on salient features that describe an essence of the musicians' different approaches. The following quotations are taken from a number of reviews in Volume 3 of Freeway (1994).

"Both reedsmen are precise and adventurous, though they seem most at home on their strong interpretations of bop-based charts." (MB)

"It's humorous, glib, slick, tight, intellectual, ambitious. Much of it is dance music of a high order." (TD)

"He takes sounds straight off the street and, using highly polished techniques of digital manipulation, turns them into deeply disturbing political manifesti." (TD)

"Instead of stealing indigenous melodies and rhythms and singing about injustice, he snatches the very sounds of people's lives and experiences of injustice and re-composes them into abstract sound-worlds which overwhelm the listener in glittering shards of tiny variation and multiplication." (TD)

"No particular place to go, no agenda to fill, just serene, calm walking along the bottom of a warm lake. Much of the music retains this feeling of mystic tranquillity, yet it's never 'new agey.' The natural, unpretentious way Ms. Masaoka approaches the koto as a sound-producer leads her past the cloying cliches and into the realm of pure music." (TD)

"The SANDBOX TRIO squishes spacy electronic textures together with idiomatic free playing, ethnic instrumentation, and a well-regulated moodiness." (MB)

"Even if it ain't the ultimate embodiment of unfettered musical spontaneity, this band is still wild, free, and probably too nutty to get famous." (MB)

"the grittiness of the source material and the haunting reed sounds are a unique signature." (MB)

"Solo improvising has always been a forte of Henry's [Kaiser], and his careful choices of archival material,

offered in generally digestible durations of 1-6 minutes, highlight a restless creativity limited only by what you can do with a thin steel string." (MB)

"a crazy funhouse mirror transformation of both trumpet and musical logic... This music is an extraordinarily musical solution to the problem of making a single-voiced instrument polyphonic."

"Most of this captures the elusive spirit of the band's inspired live sweatbaths, with a level of fluid, one-mind communication which is central to the Pluto personality, though notoriously difficult to achieve in a recording studio." (MB) [Pluto is the name of the group.]

"Clarinetist Beth Custer keeps the music heartfelt and substantive, especially when it veers off course toward contrived multi-culturalism. That said (yes, the silly ethnic fashions do bug me), Stephen Kent's inspired didgeridoo playing is another major asset; respectful of sacred tradition, but also pushed to the far-flung frontiers of weirdness." (MB)

"They don't have a regular lineup, a definable sound, or anything close to a style; that's three points in their favor... Ultimately, VTH [Vacuumtreehead] emerges as a group of unrestrained sound artists, rather than style-mongers. Isn't that what this music is all about?" (MB)

Publications such as Freeway, with little or no financial support, serve local communities of improvisers and audiences in different parts of the country and throughout the world by presenting a forum for the exchange of ideas and information that provides an important element of the evolution of this young practice.

* * *

CONCLUSION

Critical listening is found useful in different circumstances -- an awareness (sometimes enjoyment) of the sonic environment, the critic or reviewer who aims to uphold "high standards," the audience that listens critically and ultimately decides whether the music is worthwhile to them, and the improvisers themselves, who cannot avoid the necessity of listening critically. It is, perhaps, this latter circumstance which is the most important function of critical listening in free improvisation as the improviser's ongoing awareness in performance ultimately guides every perception, decision and action. But for audience listeners, the experience of free improvised music can be unexpectedly rich when listening with the imagination creatively and with some understanding of the magical self-generative PROCESSES taking place.

CHAPTER 6

CURRENT PRACTICE

This is a turbulent period in history throughout the world, with the end of the Cold War and the beginning of the "New Order," which is obviously struggling in its own right. But the approaching millennium seems to offer a new opportunity to re-evaluate how things are done and, most importantly, how people and nations can get along. There is, moreover, a growing consciousness of the value of diversity and equality. Free improvisation aptly expresses these very values. So it seems appropriate to address the social, political and economic circumstances of free improvisation, and of the improvisers themselves, particularly given the fact that an improviser's music is, sometimes quite directly, affected by the social, political and economic climate. To this end, the following examines the current circumstances of free improvisation as a cultural expression and as a practice.

* * *

Sociopolitical Circumstances

Few musicians commence a practice of free improvisation without some kind of musical background, training or education. And for many, the path toward free improvisation begins simply as a fascination with sound. Another, perhaps more important, impetus is a search for one's own "original voice" where specific restrictions of form, style and technique can be dropped, leaving space for the deeper, more intuitive

personality to express itself.

Free improvisers tend to be non-conformists, feeling they have broken with "tradition," or at least extended it. Their lifestyles and values may sometimes lie at the edge of social acceptability, though some may also be doctors, lawyers, engineers, programmers, etc. But free improvisers also tend to be politically liberal, (Note: The reader will recall the socialist ideological basis of the Scratch Orchestra in England as an example of overt political expression. Likewise, there are some improvisers who center their work around political and social issues. One example is the "Plunderphonics" movement headed by John Oswald which utilizes, through sampling, copyrighted material. This has cost Oswald much (e.g. attorney's fees), yet his commitment to freeing music of the onus of "ownership" continues.) and this is not so surprising. Harold Budd (1982) comments:

Sometimes I think that one shouldn't overlook, in the broadest sense, the political aspect. Improvisation, to a certain extent, is a political statement antagonistic to more formal concerns in music... It has as its basis perhaps a kind of anti-establishment bias.

Just like any musician, the free improviser wants to bring her/his music to the public ear. Yet great effort and substantial costs may be involved as there is sometimes strong resistance. Jack Wright (1994, untitled) has commented on the sociological circumstances of free improvisation:

[Free improvisation] is generally considered 'underground,' not capable of commercial exploitation, nor does it receive the attention of a serious art form. Not a single person makes a living playing it, an audience of twenty is large... These are times when people fear we live with too much dissolution... [Free improvisation] sets us free of the fear of inner destruction by entering it through the front door and finding we are not so destroyed, rather we are stripped down to our bare essentials, the musical structures we thought we needed turn out to be excess baggage that weighs us down.

Such comments illustrate the challenge free improvisation faces as a practice and as a "message" to people about the innate value of this spontaneous expression of creativity.

Free improvisers are important to the society in bringing to light some fundamental values and ideas, for example: how to get along; how to be flexible; how to be creative; how to be supportive; how to be angry; how to make do. So there is a social and political "content" in their music that seems appropriate today, though it may not usually be overt.

The practice of any music involves having a place to play it. Sometimes, this itself presents the first problem. If an acoustically secluded place cannot be found, neighbors can be intimidating. Indeed, a place to play without distraction is an important resource. Some musicians spend (individually or collectively) hundreds of dollars a month renting a warehouse space or basement to rehearse in. Others are fortunate enough to have such a space as part of their living quarters. Very often, basements and garages will function as studios.

Economic Circumstances

Free improvisers are likely to have day jobs like most everyone else. Performances usually pay poorly, if at all, and publicity is often minimal because of scant economic resources. Audiences are thus generally small. Creating and maintaining a regular venue for free improvisation is an enormous task requiring an administrative and financial commitment of the improvisers themselves, so opportunities to perform in public are not as readily available as for most other kinds of music, particularly popular music. While hundreds of thousands of dollars are spent by governments and corporations to erect monuments to music in the form of modern new concert halls (which have been known to require expensive re-engineering and construction modifications), little money manages to trickle down to musicians themselves. It seems some people tend to think of music as architecture!

Networking

Ultimately, improvisers tend to rely heavily upon networking among themselves, throughout the world, in order to present music to the public. Improvisation festivals in cities such as Seattle, Birmingham, San Francisco, New York, Chicago, Vancouver, Victoriaville (Quebec), Berlin, Amsterdam, Ghent, and throughout Canada, Eastern and Western Europe, Asia and South America, Australia, New Zealand and the Pacific Rim are the products of networking. And there are long-term venues/organizations devoted to presenting new music and improvised music, such as Het Apollohuis in Eindhoven and Bim House in Amsterdam, The

Netherlands, Logos in Ghent, Belgium, and others. (Note: Sadly, and surprisingly, the Council for Culture Holland cut funding for Het Apollohuis in the summer of 1996, in spite of its long-standing international reputation as one of the best and most active venues for new music in Europe. See Rene van Peer's article, "Holland Blunts the Cutting Edge," Musicworks, No. 69 (Dec. 1997), pp. 28-31.)

In the San Francisco Bay Area, currently one of the "centers" of free improvisation in the U.S., a series of venues featuring improvisation lasting from a few months to a couple of years has created a healthy interest in this music. For several years in succession, the Bay Area Improv Fest, consisting of four or five performance evenings, was held in Oakland featuring improvisers from other countries and other parts of the U.S., as well as the Bay Area. In April 1994, the Seattle Festival of Improvised Music was held for the ninth consecutive year, featuring more than 20 groups. In her article, "Festivals in the USA" (The Improvisor, 1993), editor/publisher Ladonna Smith notes the multiplicity of improvisation festivals in the U.S. and Canada, including "Birmingham Improv 93, the Shaking Ray Levis Music Festival (Chattanooga), New Music Across America, Earwhacks (Detroit), the [San Francisco] Bay Area Improv Fest, the Festival de Musique Actuelle (Victoriaville, Quebec), to name a few."

Networking is an expression of community, and community is vital to free improvisation. The interactions of improvisers, whether performing or socializing together, are enriching, providing a chance to play, discuss and criticize the music. Indeed, free improvisation is such a natural forum for musical collaboration that an absence of community can be quite difficult. But free improvisation is likewise a forum for experimentation by musicians who may have never tried it before; it is possible to recruit. And there are indications that such recruiting is going on all the time as the ranks of free improvisers grow. Even isolated improvisers can enjoy this sense of community through correspondence, touring, trading of tapes and CDs, hosting visiting improvisers, and being generally active in getting the music before the public ear.

Magazine publications provide one of the most effective tools of networking. The Improvisor, (Birmingham, Ala.) mentioned above, published an issue annually from 1983 to 1996. Volume 10 lists a number of other publications that evidence this facet of networking among improvisers. (Note: The 1996 edition of The Improviser is practically a book, more than twice the size of any previous edition. Indeed, the editors have decided to shift the format from an annual periodical to a small press book publisher devoted to improvisation and related topics.) Publications such as these are almost invariably produced by improvisers and thus are a vital part of the network in sharing ideas through articles, critical values as expressed in reviews of performances and recordings, notices of festivals and other opportunities, interactions with readers through letters to the editor, and advertisements of newly released tapes and CDs or experimental new instruments.

Another form of networking is, of course, tape trading. Since a majority of cassettes, CDs and records of free improvisation are self-produced, any interactions among improvisers, personally or via the mail, will often involve the trading of tapes or CDs. A particularly interesting variation on this idea is that of "mail collaborations."

Mike Hovancsek, an improviser in Kent, Ohio, has produced several cassette tapes (under the label Pointless Music) in which improvisers collaborate via mail. One improviser records the first track then mails the tape to the other improviser, who then adds her/his track. This idea is as effective as it is simple.

Spanish composer/improviser Fernando Lopez (Madrid) has produced a gorgeous minimalist CD entitled "Azoic Zone," which is also the result of a mail collaboration. Lopez has produced over 40 tapes/CDs and is active in the International Cassette Network; his recordings have been produced and distributed in several countries including the U.S. Undoubtedly, this network will only expand. As Lopez (1993) states in the text accompanying "Azoic Zone," he hopes "to turn the cassette network into a more general home-music network. This CD has been conceived with that spirit." Such intimate long-distance collaborations as these bring improvisers together who could not afford otherwise necessary travel costs.

One Bay Area improviser, Marc Weinstein, co-owns and operates Amoeba Music in Berkeley, California. Amoeba is well known for its distribution of improvised music CDs. Most improv CDs produced in the Bay Area are carried by Amoeba, as well as extensive selections in jazz and world music. Weinstein relates how Amoeba got started and his purpose in taking on such an enterprise:

Amoeba Music was started in 1990 as a partnership between many veterans in the retail music business who each have their own take on what an inspired environment in which to find and learn about new music should be. The current owners include Dave Prinz, Mike Boyder and myself. We started off just jamming on what

inspired us the most about record stores. And from those discussions, we designed a seed from which Amoeba was born. Four years later, the store is patronized by thousands of avid music appreciators everyday. Almost 50 employees are dedicated to getting independent music to the people, despite obvious structures in place in our society to keep people from even knowing that many different kinds of music exist. As a cultural resource to the community, the store has become much more than anyone involved in its early evolution ever imagined it could. The very name, "Amoeba," seems to have taken on more meaning than we were aware of at first. We have become a literal manifestation of an amoeba whose life involves constant incorporation and adjustment. Somehow an amoeba 'understands' the nature of change and therefore represents a perfect metaphor for the constant evolution of life. This model inspired a very dynamic approach, as opposed to a dogmatic approach, to designing the business.

The store itself is managed improvisationally, without a typical managerial hierarchy; rather, everything finds its own level naturally, and a system is born that is unique and able to adjust itself to the demands of change. In this sense, Amoeba Music could be considered a very successful business application model of improvisational principles at work. And there are undoubtedly many other examples.

* * *

Some improvisers host radio shows that provide a great service to both listener and the improvisation community. Often these programs will include interviews and live performances as well as recordings. A good example is Ben Lindgren's "Mob Ecstasy." This once-a-month program on KPFA in Berkeley featured improvised music performed live on the air in the KPFA studio. Lindgren also often incorporated brief interviews with the musicians. "Mob Ecstacy" presented 47 different groups in their first 48 programs over a four-year period. Russ Jennings' "Morning Concert," also on KPFA in Berkeley, is another example. Jennings has presented more extensive interviews of various musicians (not all improvisers) and plays tapes and/or CDs of the guest artist's work. This gives the listening audience a chance to learn something about the music featured and about the guest musician or group. And improvisers in other parts of the country, such as Andrew Faltonson (Fresno), Hal Rammel (Chicago), Chuck Smart (Seattle), Bonnie Barnette (Los Angeles), and the Shakin' Ray Levis (Chattanooga) host similar radio programs featuring improvisation.

Occasionally, cable TV programs will provide opportunities for improvisers to present their music live to a broad public. The author has appeared several times with fellow improvisers on "The Bruce Latimer Show," a local cable network production that features local talent. Networking continues to expand through such programs.

Again, Jack Wright's comments are notable:

As I go around the country playing I renew the ties that are important to my life. The common thread between all members of my community is our mutual need to play together; this alone makes the community concrete and not the abstraction of 'all improvisers.' The openness of the community is expressed in my invitation to play with anyone at least a first time... (Wright, 1994)

The Practice

"Practice makes perfect." How many times too many have we heard that? For free improvisation, it might better be said, "Practice makes whole." Practice is the discipline; wholeness is the outcome -- a gestalt. To willingly take on the unknown (in public, no less) and incorporate it -- grace it -- requires an awareness of wholeness, the interrelatedness of one's music and one's life.

Practicing can be just about anything; it is a very personal matter, and there are many different strategies used by improvisers. One musician might spend hours exploring technique alone, while another performs every time she/he picks up the instrument, regardless of the absence of an audience. Indeed, sometimes it is unnecessary to make a distinction at all in free improvisation between "practicing" and "performing." After all, the term "rehearsal" implies rehearing. Nothing in free improvisation is ever heard (live) more than once, so (unless recorded and heard back) there is really nothing to rehearse, in the usual sense of the word. The "practice session" focuses instead on the creative PROCESS and the musical materials chosen to work with.

Some improvisers will spend a great deal of attention on "warming up," not just technically, but mentally as

well. For example, improviser Doug Carroll will sometimes practice Tai Chi just before a performance, preparing both body (becoming relaxed yet physically aware) and mind (becoming focused on the moment). And, as in any music, some instruments require a warm up period to prepare the body (breath, lips, fingers, limbs, etc.).

Then there are those improvisers who rarely practice at all, in which case the whole concept of what "practice" is must be expanded to include experiences in life and mental reflections; further evidence of how integral free improvisation can be to the whole life experience.

Free improvising involves many skills -- technical, compositional, technological, relational, adaptive, musical, etc. And in some ways, these skills can be practiced outside of the studio, in the context of everyday experience. In pure thought alone, a musician can "contemplate" technique to an extent, or simply practice listening carefully. Percussionists can even be heard drumming on tables, chairs or whatever else is at hand. And for those improvisers that choose to incorporate technology in the form of amplifiers, processors, synthesizers, samplers, mixers, computers, microphones and pickups, etc., an understanding of the technology available and how to use it effectively is an important aspect of practice that requires hours of studying, experimenting and/or programming.

Listening to other music, improvised or not, is another aspect of practice to an improviser, as a fundamental skill is listening carefully. In the exchange of tapes among networking improvisers, large libraries of free improvisation are being accumulated. As players listen to one another's music, ideas are shared, styles (or usages of style) are compared, and a comradeship is established. The art of free improvisation thus grows through this mutual interchange. Listening to non-improvised music can be just as valuable, of course. Music is music, and each kind has its own things to teach. An improviser (hopefully) listens to music, any music, the same way a traditional composer would, listening to the elements of style, form and structure, motives, themes, progressions, orchestration, and the myriad of compositional and interactional PROCESSES that may be heard.

Even purely social interactions can bring insights to an improviser about how thoughts are shared verbally versus musically; how egos are expressed and politically interact with one another; even how the "form" of a conversation relates to the "form" of an improvisation. Reading articles and books on music, other arts, philosophy, education and science can affect the improviser's consciousness in ways that positively contribute to her/his practice. And the experience of life itself can teach much. Improviser Tom Djll has attested to the value of studying the martial art, Aikido, as a discipline that has helped his practice of music.

But how is free improvisation actually practiced? What is practiced is, essentially, being in the moment. Sometimes, in the midst of focusing on technique -- a mechanical sort of conditioning -- the creative impulse sneaks in and suddenly the practice of composition ensues, and the two kinds of practicing go hand-in-hand. Indeed, the lure of composition can be strong when trying to focus on such things as technical details. This is a problem of unique degree in free improvisation. There is a certain discipline, though, about practicing which typically involves a fairly intense focus on a particular aspect of one's playing. Sometimes this is technical, but it obviously involves compositional matters as well. Yet the practice of real time composition very often accompanies the practice of instrumental technique, and for some, making a distinction between the two is unnecessary.

Malcolm Goldstein (1990) comments on the special nature of technique as applied to improvisation: "a technique that is the realization of necessity ... aware of the needs of the moment/sounding: a dialogue of discovery ... Improvisation as a process of defining a technique that is itself always evolving." Paul Dutton (1982), poet and vocal improviser, states:

I make some sounds I can't even explain how to do, let alone be bothered trying to come up with a name or a symbol for them... I pursue the sounds that suggest themselves, discovering the form within the material rather than imposing form on it, going for the diencephalic level to see what's happening there, trusting the unconscious. In short, freely improvising... It is my conviction, too, that both technical and improvisational accomplishment are arrived at through development rather than training, a distinction that I consider important... (pp. 14-15)

Since listening is so much a part of free improvising, many improvisers tape record their practice sessions and then listen critically to the tapes. This can be invaluable. Tapes can reveal all kinds of things the improviser did not hear in the moment of performance. The audience perspective provides a better opportunity to hear the music as a whole, without the mandate to contribute to it. And listening to a tape of a practice session several times can reveal much about the subtler aspects of playing and tendencies (good and bad) the individual or group may have.

Improvisers are as different from one another in their approach to practicing as their music is. Pianist Casey Sokol (1981) describes a particularly interesting approach, which he calls "handicapping," the intentional creation of obstacles. In terms of improvising on the piano, he cites several examples:

... not to use some necessary part of the body (no thumbs, no L.H., no feet...) or not to use some part of the instrument (no playing on the keyboard, no white keys, no letting up the damper pedal...). One could also decide not to use certain musical ideas -- no scales with more than four tones, no gradations of dynamics beyond two fixed levels of soft and loud, not more than one note sounding... (p. 16)

"Handicapping" represents a self-imposed challenge designed not only to limit material or techniques but to focus on particular material or techniques. Composers of written music do the same when they determine the instrumentation and compositional approach they will take; they are limiting the possibilities in order to focus on the potentialities. (Note: Some composers may not be as rational or systematic in the creation of their music as might be implied here. There are any number of ways to approach the writing of music.) And as Sokol points out, "'handicapping' is not so different ... from jazz improvisation, where a musician decides not to depart from a fixed harmonic structure."

The notions and methods of handicapping used by musicians involved in free improvisation may sometimes be simply reinforcing (or even defining) undeveloped areas of training, but the literal quality of some of these notions makes them useful because they are potentially very specific in their musical intent. (p. 16) (emphasis added)

This approach is radically different from the usual one of practicing to achieve some level of "perfection." The purpose is rather to mine the riches of the imperfect.

Drummer/percussionist Gino Robair has a number of practice strategies. One is to explore the potential of electronics in a way he would not in performance; that is, he experiments in order to discover. Some of these discoveries then carry over into his performance. When he practices drums, he practices technique. Robair also plays a Theremin, which happens to have a quasi-random element (possibly a flaw) that he practices utilizing -- how to create a phrase or musical shape when the machine is always changing unpredictably. When working with musical ideas, however, Robair is cautious not to explore them too deeply in a practice session. The idea is to know of their existence but save the real exploration for live performance. And here is a person who can drop a cymbal on the floor and express a musical phrase with it! With such musicians, there is never a lack of ideas or ability to express them. In the spirit of free improvisation, Gino Robair invites the unknown -- even concocts it -- and uses it to create a response-to-the-moment excitement about his performances.

* * *

Group practice sessions are often a place to try out specific ideas or improvisation plans, a place to experiment and hone rapport. Discussions among the musicians can address issues of group style, group phrasing and balance, special combinations or subgroups of players or instruments; and, of course, discussions of practical matters such as getting gigs. Groups can become like families; the relationships are usually personal as well as musical. Sometimes social or political issues come up in sessions; sometimes personal ones. From a "strictly business" point of view, this may seem like a lot of wasted time. Are the musicians there to play or to talk? But such discussions are possibly as important as playing together at certain times. Since improvising incorporates both mental and emotional states at the moment, a separation of life from art is hopelessly futile; free improvisation expresses integration, not separation. So interactions of all kinds, including life experiences, are "practice" to this extent.

Without a doubt, different groups, just as different individuals, have their own strategies for practicing free improvisation. The Splatter Trio -- Gino Robair (drums/ percussion), Myles Boisen (electric guitar/bass) and

Dave Barrett (saxophones) -- has gone through some changes in its approach since its beginnings in the late 80's, according to Robair. (Note: In 1996, Dave Barrett moved temporarily to Mexico; but the group intends to reunite and continue working when Dave returns.) Originally, the group focused mostly on jazz and wrote pieces which they would rehearse. Robair described three goals he had for the group when it started: the "Grateful Dead technique" of using tunes as springboards for improvisation; Anthony Braxton's idea of different pieces that overlap in some way; and what was described as the "gamalan idea" of last-second cues to determine which of a number of possible directions the music will take. In the latter case, cues might be visual, as hand signs, but are typically sonic, using a rhythmic or melodic motive or "theme" to signal the change. Over a period of time, the group gradually shifted its focus more toward free improvisation, sometimes completely free and other times using elements of their composed pieces; and the use of electronics.

In their weekly rehearsals, pieces were played straight through. But these "pieces" were less strict and consisted of known elements (phrases, riffs, tunes, etc.) that were freely allowed to appear and be assimilated into the improvisation, often serving as change cues. Their aim in using electronics has been to cross boundaries; for example, Barrett's sax would sometimes be processed by Robair or Boisen. The instrumental sounds were thus able to be further integrated in this way, and new kinds of interactions brought out. According to Robair, a typical practice session for Splatter was to improvise an hour; then rehearse a couple pieces; then improvise another hour. If one thing stands out about this group, it is their ability to mix and match known elements within the free improvisation PROCESS without losing focus or direction. They are each superb improvisers/instrumentalists and as a group, their tight rapport has always been evident.

* * *

Use of Technology in Free Improvisation

Some free improvisers prefer to play acoustic instruments. And even those who do not can attest to the advantages of this attitude -- less equipment to carry around, quicker and easier set ups, less capital investment (sometimes), and the absence of "ghosts" that occasionally haunt electronic equipment. But despite the hassles, many free improvisers utilize technology, not only to expand their palette of sounds but as another system with which to interact and incorporate compositionally.

Technology can range from simply an amplification system (microphone/pickup, preamp and amplifier) to a complex interactive computer system. Very often, digital delays or digital and/or analog processors are used by free improvisers to provide real time modification of sounds with an enormous range of possibilities. And two or more processors can be linked sequentially to multiply these possibilities. Controllers in the form of foot pedals and switches are common and give the improviser free reign to keep the hands moving while the feet shift the effects. Sometimes "hold" devices (a sample-and-hold mechanism within the processor) are used to establish a repetitive rhythmic ground over which to play a solo, or with which to interact rhythmically. The series of effects banks can be programmed to provide a formal structure for an improvisation through a precomposed sequence of banks.

Beyond digital processors, there are samplers, which can be triggered in real time by any instrument to produce the sound of another instrument or any prerecorded sound and can sequence these sounds according to a precomposed program. Libraries of samples can be purchased; but in a more creative vein, an improviser can prerecord her/his own selection of sounds. For example, Doug Carroll has collected over 150 disks of samples of the author's original instruments, providing a unique private library of resource sounds. Such possibilities bring back the "musique concrete" strategies of the early days of electronic and tape music.

The computer is the most sophisticated piece of technology employed by musicians. The computer can be used to "compose" music, of course. And it is very effective for editing recordings. But its value as a real time device has, for the most part, been overlooked. Some free improvisers have ventured into this cyber domain, however, and have found very effective ways to use the computer for improvisation.

Tim Perkis, an improviser who uses primarily computer, has invented a device called the Hub, which provides an interface for a number of computers to interact. He also founded a group called The Hub, a "computer network band," with John Bischoff, Chris Brown, Scott Gresham-Lancaster, Phil Stone, and Mark Trayle.

Quoting notes from their CD, "Wrecking Ball," Perkis describes the way it works:

Six individual composer/performers connect separate computer-controlled music synthesizers into a network. Individual composers design pieces for the network, in most cases just specifying the nature of the data which is to be exchanged between players in the piece, but leaving implementation details to the individual players, and leaving the actual sequence of music to the emergent behavior of the network. Each player writes a computer program which makes musical decisions in keeping with the character of the piece, in response to messages from the other computers in the network and control actions of the player himself. (Perkis, 1994)

The basis of this communication is, of course, MIDI (Musical Instrument Device Interface). But, as Perkis explains, "in certain ways MIDI is inappropriate for our uses, and we use it in a way it was never intended to be used: as a medium of communication between players." Here is a good example of how improvisers will use technology (or any possible resource) in their own creative ways, and in so doing break ground and expand the possibilities available to other musicians. Although technology will always have its headaches, the universe of sonic and ideational resources it offers can be enticing.

* * *

The Voice in Free Improvisation

If there is a perfect instrument, the human voice is it. Simply the potential for integrally combining language and sound puts it in a category of its own. (Note: It should be noted that, even though not a free improviser, Bobbie McFarren is probably one of the most amazing vocal talents today in the extraordinary and numerous ways he can use his voice (and his body). He can create three "voices" nearly simultaneously (high, low and rhythm); and the ranges of timbre he employs is unbelievable.) In a predominantly instrumental ensemble, the voice stands out; it is uniquely human and attracts the ear readily. It is no accident that songs have been the dominant purveyor of music from the beginning, whether sacred or secular. Some form of "opera" is found in a number of different cultures as a classical form of vocal art music. "Sound poets" have discovered common ground with musicians in their creative synthesis of sound and language. And some improvise their performances. An extensive article on this very subject, written by sound poet b. p. nichol, appears in volume 38 of the Canadian publication, Musicworks (1987). In a question-and-answer format, nichol interviews 10 Canadian sound poets about their opinions and approaches to improvisation. The relationship between text and sound is a major issue, of course: the audibility and comprehensibility of text; the role of text in the improvisational strategy; the relationship of voice to other instruments; the utilization of the acoustics of the performance space; and other issues common to all improvisers. This article provides an excellent insight into a number of approaches that bridge the gap between abstract sound and language through improvisation.

Styles of vocalization in improvisation are as broad as instrumentation itself. The way text is used, if at all, involves not only syntax but audibility; a vocalized text can be quite audible above the instrumental sound, but it can also be sonically integrated into that sound in many ways. A remarkable ability of the voice is to quickly and drastically change the emotional ambience of the music through changes in voice quality alone, not to mention text. The vocalist/instrumentalist may even combine vocal and instrumental sounds, singing and playing at the same time; this is particularly interesting in wind instruments, where it is possible to create chords by humming and blowing simultaneously. Trombonist/vocalist Ron Heglin combines voice and instrument, uttering a fictitious language through the trombone while mixing it with various trombone sounds. In this way, he can, at times, create the impression of two or more "voices."

It is curious that many improvising and new music vocalists are women. Women seem to far outnumber men in this medium. Mike Hovancsek's article, "Extending the Human Voice" (The Improvisor, 1993) discusses this phenomenon and lists Diamanda Galas, LaDonna Smith, Lisa Sokolov, Anna Homler, Elise Kermani, Kira Vollman, Amy Denio and Emily Hay as examples, all of whom have unique approaches to the use of the voice. "Why are women so prominent here?" he asks. "Perhaps it is because women are more verbal and capable of more complex forms of communication than their sexual counterparts." Whether this is true or not, the fact remains that women seem to dominate in this medium of improvisation.

* * *

Experimental/Original Instruments in Free Improvisation

As mentioned throughout, sound itself is the starting point for free improvisation. It is a starting point for both an improvisation and an initial interest in the practice of improvisation. Moreover, sound itself becomes more interesting -- enticing -- as one practices and/or listens to free improvisation. The particular acoustic properties of a sound give guidance to the musical impulse, directing the Flow in a way that makes creative use of those properties. Improvisers who play traditional instruments will often utilize special playing techniques and various attachments to extend the sonic possibilities of the instrument. Making one's own instruments is but taking this idea a step further, albeit a fairly big step! It takes courage, time and money, and a willingness to fail without (too much) regret, to take on the challenge of designing and building original instruments. And once an instrument has been invented, there remains the task of learning to play it well.

Experimental or original instruments provide immediate advantages for free improvisation: listener expectations are all but nullified because the instruments are unfamiliar; technique is usually somewhat unique to the instrument, though techniques can be borrowed from the playing of traditional instruments; the sounds of these instruments are usually attractive in their own right and thus help to sustain listener attention; how these instruments interact orchestrationally with other, traditional instruments expands the improvisational possibilities of both kinds of instruments; and the making of experimental/original instruments provides the maker an intimate understanding of how her/his instruments work. But more to the point, these instruments provide relatively unexplored fields of play. New playing techniques can be discovered over a period of years while old techniques are polished, thus retaining a certain "freshness" about the playing experience. Furthermore, if and when an improviser gets tired of playing a particular instrument, another one can be designed and built to either improve some things or provide an entirely new "voice" to the whole instrumentation. (Note: See the author's articles, "Original Musical Instruments for Real Time Composition," Musicworks 37, 1987b, pp. 9-10; "Electroacoustic Percussion Boards: Sculptured Musical Instruments for Improvisation," Leonardo, 21:3, Pergamon Press, Cambridge, 1988, pp. 261-265; and "Improvisation with Experimental Musical Instruments," Experimental Musical Instruments, 8:1, Nicasio, Calif., 1992.)

The making of experimental/original instruments is, itself, a kind of improvisation, of course; a creative response to materials. Sometimes traditional instrument making techniques are used or adapted in the construction of original instruments, themselves possibly an offshoot or modification of a traditional instrument. But often new problems have to be solved. The two main challenges to creating a new instrument are to articulate interesting sounds and to make the instrument accessible to playing techniques; that is, the particular device that makes the sound must be playable (i.e., room for hands and what they hold and how they move, or accommodation to embouchure in the case of wind instruments. Thus, playing technique has to be taken into account when designing an ergonomic arrangement of sound devices. Beyond this, there may also be a concern with visual aesthetics and craftsmanship.

Original instruments can be quite simple, such as a collection of "found objects" (metal pipes and plates, glass bowls, automobile brake drums, pieces of ceramic, BB's in plastic film containers, soda straws, etc.). They can also be finely crafted, sophisticated instruments of extraordinary uniqueness, such as those of Harry Partch, Cris Forster, the Bachet brothers (France), Hugh Davies (England), and Oliver DiCicco. Although not all instrument designers/builders are improvisers and may have created their instruments for any number of reasons, those who are have found the making of original or experimental instruments an important aspect of their "original voice." Many free improvisation groups today incorporate "found" objects percussion (e.g., San Diego improviser Jonathan Glazier and New York improviser Skip LaPlante), toy instruments (e.g. Australian composer/improviser Warren Burt), modified electronic educational toys (e.g. Qubias Reed Ghazala), drastically extended or modified traditional instruments (e.g., cellist Fred Lomberg-Holms and saxophonist Tom Gurelnic). Original hand-built self-designed electronics (e.g., Chris Brown and David Poyourow), and, of course, computer programming of a unique kind (e.g., Tim Perkis, et al.).

The most inexpensive of materials can be used to create a fascinating and varied "orchestra" for improvisation. Styrofoam packaging inserts, for example, provide efficient sound radiators or mounting systems for metal tubes or rods. A simple balloon, placed in a small cardboard paint bucket, provides the most resonant mounting system to support metal objects, such as long aluminum or steel rods, or metal plates. The elasticity of the balloon allows the object to vibrate freely; the result is an extremely resonant sound with a great timbral/pitch range effected through selective dampening of the object. Another useful rubber product is rubber bands, particularly very large ones. Daryl DeVore has made extraordinary use of styrofoam, rubber bands, wooden dowels and metal objects to assemble a fine-sounding percussion console and assortment of hand-held instruments. DeVore, who has spent a lot of time working with children through

the Petaluma (California) school district, also makes extensive use of bamboo to create a number of very different instruments -- mallet instruments, shakers, wind instruments, bullroarer-type instruments, stamping tubes, etc. (Note: It is interesting to note the fact that Devore lives and works in the same small Northern California town as did Harry Partch. Partch also lived and worked in Sausalito and San Diego, California, both in the midst of larger area communities where experimental instrument-making now flourishes. Partch's influence remains a vital one. The reader is referred to his magnificent book, Genesis of a Music (1974) (see bibliography).)

Hugh Davies has been active for years in England creating original instruments, most often with simple found objects, yet in visually interesting and graceful designs. Davies has also been an active teacher of instrument making in English schools and is the author of the text on new instruments in Grove's Dictionary of Musical Instruments (1984).

One of the more well known original instruments is the Waterphone, used in a good number of movie sound tracks since its invention by Richard Waters (another Bay Area instrument maker) in 1966. This is a truly unique instrument. Two stainless steel bowls (kitchenware) are brazed together to form a resonator; a tube is brazed to an opening in the top of the resonator to form a "neck" by which the instrument is held. Various lengths of bare bronze brazing rods are then welded along the circumference perpendicular to the neck. A small amount of water is added to the stainless steel resonator. The rods are bowed with a bass bow, and as the instrument is moved and bowed, the sloshing water inside modulates the pitch and timbre of the vibrating rods by dampening portions of inside bottom and sides of the resonator. The sound is breathtaking.

Sometimes one experimental/original instrument will suggest another. A case in point is the Crustacean, an instrument designed by the author, which utilizes the idea of bowed rods from the Waterphone, adapting it to a round stainless steel plate supported by inflated balloons in small buckets, as described above. Another example is the author's electroacoustic percussion board, the T-Rodimba (plywood sheet with bent threaded steel 1/4" rods, nails, strings, springs, etc.). This instrument was redesigned by David Barnes (Bastard Finders - Got One!) to create a unique acoustic version of the same basic idea.

The saga of experimental instrument making since 1985 has been well documented in Experimental Musical Instruments magazine, edited by Bart Hopkin (Nicasio, CA). Bart himself has created several original instruments, such as the Bentwood Chalameaux (a kind of "slide" clarinet). (Note: Bart Hopkin has also written three marvelous books on experimental instruments: Making Simple Musical Instruments, which is beautifully illustrated with numerous color photographs and clearly drawn assembly graphics. The text is succinct and the instructions are clear and precise. Musical Instrument Design, a more in-depth exploration of "underlying principles for design and construction of acoustic instruments of all sorts." And Gravikords, Whirlies & Pyrophones, a survey of the work of 37 different instrument makers (including the author). All three publications can be ordered from Experimental Musical Instruments (see bibliography).) This fine publication has provided a forum for instrument makers to share their ideas and experiences. Topics range from the philosophical to the technical. Various charts and tables (e.g., organological charts, frequency tables) are presented occasionally which can become valuable references for other builders. Photographs, graphics and elegant stipple drawings enhance explanations and are immediately enticing to the reader. And a broad range of writing styles is allowed, given most accounts are written by the instrument makers themselves; yet through superb editing, information is always presented clearly and understandably, and most often quite entertainingly. In addition to articles, there are letters, advertisements and reviews that perpetuate a dialogue among instrument makers. Experimental Musical Instruments is to the instrument inventor what The Improvisor is to the free improviser -- a vitally important resource for exchange of information within an "underground" community; again, an expression of networking. Such instruments provide a fertile field for the free improviser and create a very "fresh" and personal music.

* * *

Free Improvisation and Society

Clearly, social values -- and antisocial values -- are expressed quite effectively through music. Words deliver the message through song. So called "art music" is also sometimes quite explicit in its support or condemnation of social values. Even in its most abstract form, music expresses the consciousness of the society, an umbilical link to the collective values of people and common, time-specific circumstances called "the culture." The degree to which free improvisation is affected by this culture is obviously great, as the improviser is constantly affected by the culture and society in which she/he lives.

* * *

In Europe, music and arts of all kinds receive more financial support from governments and funding agencies, and more support from the culture than in the United States. Government support of music in Western Europe provides venues, budgets to cover administrative costs, personnel to manage the venues, and reasonable (sometimes generous) compensation to performing artists. Each major city in Holland, for instance, has a state supported venue specifically for experimental music, free jazz and free improvisation at which several concerts a week are given, representing musicians from all over the world. Germany is also known for its generous support of new and experimental music. Australia and New Zealand likewise support artists and musicians through government travel grants for tours, participation in festivals, and/or research in other countries.

Regrettably, this situation is not found in the United States and even support in Europe appears to be diminishing (e.g. the loss of funding for Het Apollohuis). The National Endowment for the Arts (NEA) is the primary source of federal government funding for the arts. (Note: Another source is a government/nonprofit agency called the Fund for U.S. Artists that provides grants to U.S. artists who have been invited to participate in festivals and symposia in other countries.) Although millions of dollars are given to artists and musicians, the demand far exceeds the supply; and politically powerful arts and music organizations absorb much of the funding, thus lowering the dollar per capita support of artists and musicians. The problem is not so much one of money, though that is always an issue regardless of circumstances, but rather a matter of priorities. The arts in the United States do not seem to be a priority except as mass entertainment. Predictably, "stars are born," worshipped, emulated, coddled and gossiped about; their biggest problem is usually to keep from self-destructing. Embarrassing amounts of money are paid to them while the vast majority of musicians in the United States are minimally supported if at all.

Free improvisation represents a vision of society that acknowledges the spirit of creativity in all individuals. The social/economic circumstances of the times present this music with a considerable challenge, being experimental and highly personal by nature. At the same time, however, free improvisation provides anyone with the opportunity to make music with any sound in any way, no matter how strange, no matter how ordinary, no matter how anything! The opportunity is always there.

* * *

Live Performance versus Recordings

With the advent of recording technology, people's access to music has increased many fold. Before that time, all music was live music. This can be difficult to imagine today, as hearing music is so common an experience. But the circumstances of listening to live music versus recorded music is now something to consider. The listener's attention is usually more focused on the music when listening to a live performance as opposed to a recording. A live performance often costs as much, or nearly as much, as a recording; those attending must usually plan ahead for the event, drive to the performance (and find a place to park) or take public transportation; a considerable effort must be made. Listening to a recording, on the other hand, requires nothing but a playback system, which most people have; there is a choice about the time, the place, the circumstances. So there's an important distinction between live and recorded music.

Free improvisation can be heard in both formal and informal contexts such as museums, churches, art galleries, even concert halls, or bars, clubs, and other informal settings. But regardless of the setting, in the view of many, free improvisation is more effective in live performance than on recording. Much of the excitement of the unknown-about-to-be-known is lost in recordings; the image of the musicians playing together, communicating, collectively creating in the moment is impossible to capture on tape. There are even some improvisers who choose not to record their music, objecting because so much of the experience is lost in doing so. In a way, this is true, not only with free improvisation but with any music. A live performance is indeed a special experience, particularly in the presence of the virtual creation of the music.

Recordings, however, do have a positive role: they provide a way of sharing the music with a much larger audience; they are an important aspect of networking, as mentioned before; they represent "milestones" in the on-going development of an improviser's or group's work and offer a means for self criticism. And, of course, recordings can be very useful educationally through repeated listenings to gain a more intimate familiarity and deeper understanding of the PROCESSES at work. As mentioned earlier, improvisation groups will often utilize recordings in rehearsals to criticize (positively and negatively). It is a well known fact that

jazz improvisers have learned (and continue to learn) by listening to recordings and emulating the styles of well known players. In free improvisation, again, there is rarely such a degree of emulation, though listening to different free improvisers/groups can have a strong impact on one's own improvisations. Harold Budd (1982) comments on a statement made by Cage at the New Music America '82 festival.

I admit that I was astonished by Cage's statement in Chicago ... that 'perhaps if there were less recordings there'd be more music.' (What's even more astonishing was the applause...) I wonder if people truly appreciate how democratic recordings are? There's a certain point, you know, when the record's out there, that it isn't yours any more, that its use really isn't you any more, it's theirs. (p. 56)

Budd makes an important point here: once recorded, the music (any music) belongs to its audience and really no longer represents the musician's current work. Free improvisation is a music of this moment; a recording never represents the improviser's "this" moment. The recorded music takes on its own life, apart from that of the improviser.

A last word about recordings: Producing a cassette tape or CD for distribution is no small task, and often calls on improvisers to dig deep into their finances. Fortunately, there are many recording labels (often produced by improvisers themselves) which will help distribute a recording throughout the U.S. and in various other areas of the world such as Japan, England, Canada, and the European countries. There are also underground tape trading opportunities. While recordings are usually produced to make money, most improvisers will be lucky to get an even return on investment, even if they sell a thousand or two thousand copies. Yet, to a large extent, an improviser or group needs a recording (something more than a demo tape) in order to gain a degree of credibility, in terms of one's commitment to the music. CDs are very helpful when applying to festivals, and, of course, can be sold at performances where the audience has an opportunity to hear the improviser or group live first.

Producing a CD of free improvisation represents a unique challenge. Two approaches can be taken: 1) Practice a lot in preparation for a specific recording session(s), and whatever is used is taken from that session (s); 2) Record practice sessions and performances as much as possible (and as well as possible), then take the time to listen back through these recordings to select the "best" pieces to be included on the CD. Strategy #1 will likely involve more structured or planned improvisations, or at least "pieces" that have predetermined characters of some kind. Strategy #2 is more of a documentary approach; recordings are being made every session. (It would not be surprising if there were other approaches to making a CD of free improvisation, but these seem most representative in this author's experience.) Regardless of the strategy used, there comes a point when each member of a group has to put her/his musicianship and skill on the line. A recording lasts a long time. Critical listening and critical values come into play, and sometimes members of a group find there are differences of opinion. It is one thing to adapt musically to someone else's will in a free improvisation, but apparently it is another thing to come to agreement over what music should represent the group. Through this "painful" process, the group will likely go through a sort of transformation that, at least on the first recording, is like a trial by fire -- if the group survives, it's stronger, more focused, or at least more aware of its own dynamics and values.

* * *

Free Improvisation in Other Arts

Artists of all types have come to realize the special value of free improvisation. Improvisation in the theater has a long tradition already. In dance, classical ballet evolved to modern dance, which in turn has brought forth "contact improvisation," a free style in which dancers remain in physical contact with one another throughout the dance, playing with the effects of gravity. Visual arts media are also appropriate for free improvisation, though not often associated with it. Watercolor is a real time, one-way medium in which "mistakes" cannot be erased or painted over. Other visual media also depend on the real time PROCESS of creation and forgive few if any "mistakes." The chipping away of stone in the effort to find the sculpture within is such an example. And as Nachmanovitch (1993) points out, the Zen practice of painting a circle, a large "O", in a single stroke intensely embodies the moment of creation, the scribe's essence at that moment.

Ultimately, free improvisation can be applied to any artistic medium if the PROCESS is one of on-going

association and self-realization of the artwork. Real time need not be a factor, the PROCESS is essentially the same -- to build on the moment, always heading forward, never retracing steps, to realize inherent potentialities. But creativity demands an open mind, open to the possibilities inherent in the medium, the Flow of sound. Most often, the medium itself interacts with pre-thought ideas, themselves simply mental abstractions yet to be realized or actualized. When an idea is made concrete in some way, the medium not only expands it, but often changes it. The concrete artistic "product" is a reflection of both.

The use of free improvisation in other artforms is evidence of its identity as a PROCESS rather than a style. There have been times when "movements" or "schools" in music and the visual arts have shared an identity. Impressionism is a good example, a term applied first to visual arts and then to music composed around the turn of the last century. But this identity is based on style; though the elements of expressing style in visual arts and music are obviously different, the two media shared an emphasis on common basic aesthetic values that came to stylistically identify them as related. There have also been rare instances in which a PROCESS, itself, is essentially common to different media. For example, the paintings of Jackson Pollock utilize a PROCESS similar to the compositions of Cage in their mutual use of chance (Pollock threw paint, Cage threw dice). Of course, this PROCESS leaves room for many different styles of expression within the medium, whatever it might be. The significance of free improvisation, in the larger sense, thus goes beyond medium to the very heart of creativity.

* * *

Free Improvisation and the Evolution of Music

The evolution of music reflects the evolution of human consciousness. Music reveals wonders of nature -- the nature of the universe (ratios and acoustics) and the nature of humanity (intellect, intuition, and emotion). As a real time expression, it can transform the state of mind of audience as well as performer. At the same time, it reflects the culture in a broad way and, directly or indirectly, economic, social and political circumstances within the society.

If the practice of free improvisation continues and grows, control over music will tend to decentralize toward a communal expression and experience -- not the work of a single composer, not at the direction of any controlling individual or style, not an expression of one ego, and not the separations between player and instrument, musicians and audience, amateur and professional, art and life.

How free improvisation will impact the evolution of music is yet to be seen, but there are signs: a multiplicity of styles, a decentralization of style, an immediate accessibility to anyone, a generalized rapport among players unfamiliar with one another, global networks for trading of recordings and tour assistance, etc. The nature of free improvisation itself is thus astonishingly similar to the nature of global society today; it might even be considered indicative of a direction art-making has taken at this stage of human history -- a response to the larger moment.

Perhaps the most significant contribution to the evolution of music free improvisation can make, however, from a sociological point of view, is its decentralization of power. Power hierarchies are utterly destroyed by a musical practice that welcomes the unpredictable, delights in the balance between control and non-control, is not economically or stylistically tied to trends, and requires neither leaders nor middle men. The music of free improvisation is uncomplicated by issues of "whose in charge?" or "what's the plan?" The music, itself, is in charge and that's the plan!

CHAPTER 7

FREE IMPROVISATION AND EDUCATION

This chapter examines two related issues: the teaching of improvisation, and the value of improvisation as an educational tool. Improvisation is taught in the context of both classrooms and private workshops, usually presented by practicing improvisers. One-on-one private lessons represent an intensive approach; more often it is taught in groups. What methods are employed in teaching improvisation, particularly free improvisation? And what understanding of improvisation do these methods provide? These questions are addressed first. Regarding improvisation as a educational tool, some educators who have used it as such have written about

their experiences in various journals and other publications. To find a formal music curriculum that incorporates improvisation, however, is rare. Examples of such programs or courses are discussed in the latter portion of this chapter.

Approaches to teaching improvisation vary a great deal. Sometimes the aim is to develop general musicianship. Or it may be to teach a particular kind of improvisation such as jazz, or how to incorporate traditional improvisation as a part of studies of performance practices in instrumental education. The goal may also be to simply introduce the music-making experience to "non-musicians" or the lay public, from small children to senior citizens.

* * *

The Teaching of Improvisation

Traditional forms of improvisation can be taught readily as there is a documented history of the practice and usually numerous recordings. However, there are few guidelines available for the teaching of free improvisation, though there are some.

Many practicing improvisers and groups experiment (in the privacy of a rehearsal) by trying different "exercises" or "plans." Of course, it does not negate their practice of free improvisation simply because artificial restrictions are imposed; rather, it allows improvisers to explore certain aspects of the process more deeply by focusing on particular issues. What is learned from this may then be incorporated (consciously and/or subconsciously) into performance.

Improvisation is often taught in workshops presented to the public, as well as in the school classroom. Private workshops will most likely be taught by practicing improvisers. Classroom teachers, on the other hand, are not necessarily trained in improvisation. Those teachers who choose to use improvisation probably already have a degree of familiarity with some form of improvisation (as audience or improviser) or may have read and studied articles about improvisation as an educational tool.

Where younger students are involved, personal creativity is usually the focus of attention; the challenge here is not so much to get the kids to come up with something, it is to help them learn how to use what they come up with to make music. In the process, basic elements of music can be taught. Workshops for lay adults or practicing musicians, on the other hand, generally focus on improvised music, itself, as the goal. Adult participants often discover new facets of their own musical awareness and potential. Workshops or classes are usually taught by one or two individuals, while some incorporate suggestions by the participants, having no defined agenda but rather following the particular direction of learning that comes up. These, however, would more likely involve experienced improvisers in a sort of "continuing education" forum for experimental collaboration. Of course, a "rehearsal" of free improvisation can be, at least in part, a workshop where the improvisers "rehear" the realizations of certain composed "plans" or processes, or discuss and criticize a recording made of the session.

Several improvisation workshop designs and exercises by various improvisers and educators are now presented, with commentary on the approach, the type of student appropriate, and inherent improvisational concepts.

* * *

"Planning for Improvisational Music" by Francis Engel (1993), in collaboration with Jonathan Glasier, is a description of what might be considered a "theatrical approach." The improvisation is likened to a story.

Outlining for Improvisation contains the same musical stages that musicians already act on anytime they play. It describes these stages as if music were an outlined story. As much as is possible, it uses words that plainly say what role players are using to carry out the action of the music. The same player can assume different roles for the occasion of the musical part played. (p. 2)

The roles outlined include: Callers, Supporters, Keepers, Developers, Contrasters, Peakers, Returners and Signalers. As described by Engel, these roles seem to overlap somewhat. For example, Supporters "define,

contribute, and reinforce the Call..." Keepers are designated as rhythmic components, but ultimately their function is supportive. "Keepers can also play the role of Signalers..." Engel presents, as a way of describing an improvisation, a number of columns denoting specific "stages" in the progression of the improvisation as follows:

This | Of Who | Acting | What With | How Many | Remember | Until

---

These column headings, from left to right, indicate how many players (for that "stage"); instrument(s); the role to be played (Caller, Supporter, etc.); musical interactions such as delay, mimic, delay drone, stagger, backwards, etc.; generally "Any adverb that modifies the action of the piece," such as roughly, smoothly, dramatically, drearily, quietly, etc., etc.; "the word for you to bear in mind while you are interpreting the sentence of the outline;" and "the Signaling section" indicating "how long you do what has been suggested in the rest of the sentence" -- e.g., "the number of times around that you would repeat the music that you started, some special sound made by you or another player that will signify the timing of the next 'sentence' that another player is to start." The lines of instruction then determine, somewhat like a sentence, what happens during that "stage" of the music. Each "sentence" is thus a "stage."

This is an interesting approach to building an improvisation that calls on extramusical associations and language in order to make learning more accessible to the lay public. The format creates a sense of syntax about the process, both in describing each stage and implying a linear progression of stages. Engel encourages participants to ultimately invent their own terminology as necessary, which opens the PROCESS up to the imaginations of the participants.

There are potential problems in this approach, however: its complexity; the extended, precomposed formalization of the music through stages; and the number of roles described which actually overlap. When improvisational plans are complicated -- no matter how clear or well explained they might be -- the attention of the improviser is constantly divided between the plan and the musical moment, having to remember, or look at a score, a graphic, or even a conductor (which Engel suggests as a possible role). What often happens is that both the plan and the music suffer from this divided attention. When plans, methods or scores are complicated, they are less immediate, requiring practice individually and rehearsal collectively. As long as there is sufficient time under the circumstances, such devices may work well. It would seem such an approach would work best in a multi-session workshop or classroom course setting where sufficient time is allotted to learning and practicing the roles and interactions that can come up in performance. Additionally, participants are challenged to make linguistic-musical associations that stimulate thinking about music and compositional processes, and to communicate in performance with fellow participants. At the same time, this approach provides a kind of model enabling improvisers to interpret the free improvisation PROCESS.

Precomposing the formal nature of an otherwise free improvisation can work, but again, ordinarily it should be quite simple, since very often plans may be decided on the spur of the moment just before performance. The challenge to improvisers in working within a precomposed form is integrating it with the inherent compositional tendencies of the particular improvisation as it forms. Whenever the improviser is thinking, "a cue is coming up" or "I'm going to do this when she does that," the attention becomes one of expectation potentially out of context; that is, the music may not oblige so that if the improviser tries to do what is mandated by the plan, its effect is more damaging than enhancing. Improvised music is very much like a wild animal, it goes wherever it wants to go. Imposing a form on free improvisation, then, is essentially "caging" the animal and observing it's behavior within the particular confines. (Compare the behavior of any animal in a zoo with that kind of animal in the wild.) Therefore, precomposing formal plans about an improvisation presents a particular challenge to the improviser -- how to make the "cage" so interesting that it seems to disappear.

Engel describes a number of roles improvisers may play. There is a potential problem here because, in reality, roles shift a great deal in group improvisation, as necessitated by the music. Earlier chapters have described intended and perceived relationships rather than roles because of this. Relationships created by improvisers (Relational Functions) focus on the collective interaction (communication) of the group, while roles tend to be

defined and singular, thus severely limiting the Intelligent Body and the Intellect.

An important issue in writing improvisational plans such as Engel's is terminology. Sometimes a general or familiar terminology is used (or invented) in order to better communicate with students without musical training. Engel has adopted that approach. Some very general musical terms are used, but mostly common words of association (e.g., "Peakers" who bring the music to a peak). However, where the students are known to have musical training and understand musical terminology, it would seem most beneficial to use that specific terminology whenever possible to explain concepts of improvisation; and if not, the known terminology can at least form a basis for the derived terminology that is more specific to music and improvisational concepts.

* * *

In his article, "Figure Ground and Field, Gesture and Texture: a gestalt strategy for group improvisation," Mark Bradlyn (1991) describes an exercise utilizing the "concepts originated by the psychologist Wolfgang Kohler to explain aspects of the phenomonology of visual perception." Though figure, ground and field are essentially visual terms, they are equally applicable to sound as "soundscape." The reader will recall Truax's three kinds of listening -- in search, in readiness and background. It is no surprise that Bradlyn was impressed by how Canadian composer R. Murray Schafer (with whom Truax had worked) "appropriated Kohler's gestalt vocabulary and applied it to the phenomonology of listening..."

Bradlyn states an important principle in free improvisation when he writes:

improvisation ... succeeds as music only to the extent that listening achieves equal status with playing... The first step in learning to listen is stopping still and opening our ears, first to figure, next to ground, next to field. The field, the aggregate soundscape, is the most difficult to perceive... the field is often ambiguous, faint, pointillistic, or droning. (Bradlyn, 1991) (emphasis added)

The concepts of figure, ground and field are described in relation to improvisation. (Note: It is interesting to compare Bradlyn's terms with those presented in Chapter 3. His comments on "gesture" are also interesting in light of the discussion in Chapter 4 of the gestural nature of free improvisation.) Bradlyn supports the notion discussed above that an improviser's role will shift in an improvisation: "For improvisation to succeed there must be a constant flux, a never fully focussed shifting among figure, ground and field." He points out that group improvisation may fail whenever there is the "common fault of failing to hear the texture, the field, in the pursuit of the dramatic figure, the gesture." Of course, gestures are important as figures, a focus of attention and direction.

In successful improvisation however, just what constitutes a gesture is a matter of listening, not necessarily expression... gestures in a group improvisation change according to small variations in the collective process of playing. One performer's playing may suddenly emerge as a stark figure against the ground of another's only to just as suddenly submerge into the ground or even farther back into the field as another voice emerges. Id.

Bradlyn accurately describes the continuously changing nature of collective free improvisation where the interrelational dynamics are shifting throughout a performance, sometimes quite suddenly or rapidly. And in order to focus on this, he uses the concepts of figure, ground and field, gesture and texture to identify the relationships among the improvisers. He offers an exercise using six instructions (with accompanying explanation). These are summarized below:

1) ... each of the three performers or groups will initially undertake the task of providing one of the three soundscape parameters, either figure, ground or field. This decision may be made democratically...

2) When the three parameters have been decided, the performers will separate themselves spatially at the angles of an imaginary triangle and turn so that each player is visible to the others. This helps ensure good auditory contact.

3) The field begins to play... This is the ambient texture over which the other players will layer their contributions to the soundscape... an aggregate, a moving substratum, and not a monochromatic drone. The most important aspect to control, however, is the dynamic range. Improvisatory activity should occur in

texture, color, timbre, attack, etc.

4) The ground joins in. The ground has much greater freedom of dynamics than the field, but less freedom of timbral choice... sounds making up the ground are not pointillistic in the way the sounds of the field may be... slow attacks, long sustains, and protracted decays... The dynamics of these sound events rise and fall, but they are always more than subliminal, less than dominant.

5) Although the figure may appear to be a soloist in contrast to the ground and field, this is not the whole picture of the figure's role in a group improvisation. The figure cannot simply blow free in absolute disregard of ground and field... A gestalt is a whole structure, organic, meaningful, possessing an inner logic even while its components may appear disparate at first glance... initially restricting oneself to a limited range of ideas will help provide a sense of continuity and structure, especially for new improvisers.

6) Shifting roles. At a previously agreed-upon time or signal, the performers change roles: figure to field, field to ground, ground to figure. However, each performer continues using the same vocabulary he or she has explored in the previous section... As the improvisation continues and the players again shift roles, what began as a very controlled and limited exercise will open up into a vital and richly orchestrated experience, provided that the performers constantly remind themselves to listen.

The improvisation ends when the three parameters return to their original places for a brief coda.

Bradlyn's improvisatory exercise effectively sets up a situation in which all improvisers must listen to the group as a whole, almost more than they should listen to themselves, an emphasis on the gestalt (synonymous to "Flow," as used here). The relative simplicity of this exercise and the concepts utilized in it, as well as the clear and detailed explanation of the characteristics of figure, ground and field provide an accessible learning strategy.

* * *

Basing her work on that of Jean Gebser, improviser, teacher and author Elizabeth Behnke has put forth a phenomenological perspective of improvisation (1981, 1986) that is similar to Bradyln's approach in its acknowledgement of the gestalt that free improvisation expresses. As an improviser, Behnke has devised within this perspective a form of improvisation she terms "soundplay." Though not specifically an "exercise" or teaching method, soundplay is an interesting approach to free improvisation that could be used in a workshop or course.

Behnke (1986) first addresses the paradox of planning improvisations.

Preparing for something in advance and spontaneous improvisation are contradictory only for dualistic thinking, which can only distinguish two such possibilities by opposing them, and then must choose... But with the mutation to an integral consciousness, careful preparation and the leap of freedom into the unforeseen need not be conceived as antithetical in the first place. We need not choose between them; they are not mutually exclusive... Ibid.

Behnke describes her practice sessions as being of two kinds: "foundation work" focusing on bodily awareness and movement, and "realizations of whatever specific improvisatory work I may be preparing." These "realizations" are not, however, goal directed in the usual sense; neither are they "aimless meanderings... Instead, they are 'realizations' of the work in question -- of this soundplay improvisation" (emphasis in original).

Behnke describes soundplay as follows:

Each work ... has an identity of its own: a characteristic physiognomy, mood, or style -- in the sense in which 'a style is not a pattern or a superior norm imposed from outside but ... a quality of inner certainty of character.' [quoting Gebser, Ursprung und Gegenwart (1973)] (Behnke, 1986)

And she offers a telling comment on the nature of Identity about such music:

What is important, then, is not for the work to be the same each time, but for it to be true to itself each time;

the work is not an identical ideal object, but a fluid context whose 'identity' is that of its own essentially indeterminate possibilities. Thus when I return to an improvisatory work again and again, what guides the work is its own integrity. Ibid.

But it is tempting to ask what techniques are used to give a soundplay its "fluid identity," its "context," its "own integrity?"

... when I am working on a specific soundplay improvisation, certain 'landmarks' may begin to recur. These are neither fixed characteristics of the work nor obligatory rules for its production; rather, they spring up spontaneously and become more 'themselves' with each realization in which they occur... such landmarks are qualities of sound and movement, rather than collections of 'notes.' In addition, they are always improvised anew -- which means that however much they may bear their history within them, they are open in principle to radical transformation at any time. And any attempt to repeat a previous realization merely frustrates the improvisation. Ibid.

Behnke discusses the use of poetry as a way of guiding a soundplay improvisation, as well as other methods. Again, although soundplays are not "exercises" but rather complete performance formats for free improvisation, their potential as a teaching/learning vehicle is strong. A workshop might include open discussions eliciting suggestions of possible "landmarks," for example, or underlying non-musical structures (such as a poem or a sequence of body movements). Soundplay offers a uniquely open yet focused approach in learning to free improvise. (Note: For those interested in the more philosophical issues in free improvisation, Dr. Behnke's writings are highly recommended. Space limitations have precluded a broader discussion of her intriguing work.)

* * *

John Stevens, according to Derek Bailey (1993), was "the first musician [in England] to run an improvising class." Stevens describes his initial impetus toward education as simply "Something that I often found myself doing long before I started playing free music or almost any music was grabbing people to play." Stevens was always interested in large ensembles. At first, he worked primarily with other known improvisers, such as the members of the Spontaneous Music Ensemble (SME). At the same time, less experienced musicians were also involved. Eventually, Stevens chose to work primarily with people who had little or no music education or training.

Stevens makes an important point that underlies the potential success or failure of a teaching situation when he states, "Initially, what everyone is looking for is comfort." Improvisation can be an intimidating prospect to a non-musician or a musician not accustomed to improvising. So an approach which begins by establishing a level of comfort among the participants is most appropriate. Beginning with a single sustained tone of the player's choice, the improvisation gradually progresses and the players "can allow the note to change in sympathy with the group."

Stevens also notes the importance of "staying in touch with the whole group of people all the time. Keeping watch for the equivalent of the little kid at school who is shy -- who feels the more things are going on the more he is excluded." This shows a genuine concern to ensure everyone gets the experience, acknowledging different personalities and incorporating them in a comfortable, non-threatening setting. Simplicity is stressed as a component of comfort. Any approach to teaching improvisation should acknowledge the germinal nature of "composing" -- pieces, exercises, plans, etc., as well as formal considerations. At the same time, as Stevens points out that the experience

has to be demanding enough of concentration to satisfy those who are more developed musicians. So, for instance, in the continuum exercise, the long note thing, the breathing is one part that any musician can concentrate on and find useful. Ibid (p. 120)

Over the years, Stevens developed numerous pieces and exercises. At the time of Bailey's interview, Stevens professed to carry these pieces and exercises in his head. However, Baily points out that subsequently, Stevens wrote a book entitled Search and Reflect, "which is now used as the basis of all teaching carried out by Community Music of London, who also publish it."

Some of Stevens' pieces demand a "moment by moment involvement... [which gives students] an experience

of how quickly they can relate to each other and forces them to keep their ears open to the rest of the group.... I have this complete faith that if the players can be made to feel a thing working they will then know the essential part about how to do it."

In response to his feeling that workshop participants might rely too much on him as the teacher, Stevens states:

I made a rule: I said to them 'You're coming here because you're supposed to want to play. This is a room in which you can play, so, as soon as you get in this room you are going to prove you want to play by getting on and playing. If you don't want to do that, none of what I'm doing here makes any sense whatsoever. If there are four or two or even if you are the first to arrive, as soon as you get here -- start playing. And if someone comes who's new to the class then it's the responsibility of the people who are experienced in the class to invite the newcomer to play. In a sense, this is what it is about.' (p. 121)

Under these circumstances -- a genuine desire to play -- the music will happen. The teacher need only make the barest suggestion, plant a seed, and the music will generally take care of itself. Participants then truly get the sense that the music is "bigger" than anyone playing it. Bailey (1992) comments on the essence of Stevens' approach:

The aim of teaching usually is to show people how to do something. What Stevens aims at, it seems to me, is to instil in the people he works with enough confidence to try and attempt what they want to do before they know how to do it. Encouraging them to work empirically, and trusting that they will then learn, with some guidance, from the attempted playing experience. (p. 121)

Bailey also relates how Han Bennink and Misha Mengelberg would teach improvisation in a weekly class at the Muziekshool in Haarlem, Holland. The students were trained musicians. Bennink describes what may seem like a radical approach to teaching free improvisation. "I do nothing when I go there... We play records sometimes... Maybe we talk about jazz -- how it was. We get [the students] to talk about themselves." However, they would also actually improvise.

Yes, we use those little rules we used to use years ago, you know. Split them into groups -- get quiet instruments to play very loud -- loud instruments very quiet -- play staccato passages -- long lines -- we use those sort of indeterminate scoring instructions. We used to divide the day into three parts, one part theory, one part analysis, one part playing. Now Misha and I go as the duo... We play a little, stop and discuss it, maybe Misha analyses it. Maybe we all talk about it. (p. 122)

Although Bennink insists he "does nothing," he reveals some "tricks" he uses whenever the students seem unable to produce anything. "I have some simple statements, some ideas, on which we can work to provoke them, to start them off." This illustrates perfectly how the nature of "improvisational composition" is apt to be germinal instead of formal -- providing seeds instead of frameworks. Ultimately, Bennink echoes the feelings of many on the subject of teaching improvisation when he states:

We are teaching them to make music out of their own background, not someone else's background. Learning what you are. In my eyes that's all you can do. Let people find out what they are and where they are and where their musical influences and preferences come from. Teach them to explore their own background. (p. 123)

* * *

British composer and instrument maker Hugh Davies has presented numerous workshops that integrate improvisation and instrument making. (Cf. Chapt. 6) Davies recognizes how improvisation is a natural approach to the utilization of original or experimental hand-made musical instruments. As he states, the interest of musicians in creating new instruments has blossomed in the second half of the 20th Century.

This has gone hand in hand with the growth of improvisation, so that the repertoire problem of what music to play on them is greatly reduced. People who are musically neither trained nor self-taught are thus enabled to participate practically to a greater extent than before, which is especially beneficial for children. It is no longer necessary to be able to play a traditional instrument or to read staff notation in order to perform in a

collective composition. (Davies, 1994)

Although the focus of Davies' workshops is primarily on making instruments, improvisation is a necessary part, whether that be his own improvisational demonstrations of instruments he has designed and built or working with people to create "collective compositions." As a teacher, Davies sees himself as "a motivator and coordinator, enabling the children to function fairly freely within a loose framework, rather than as a composer who imposed his preconceived ideas on the children."

* * *

The interest in found objects and experimental musical instruments belies an interest in sound, itself -- the pure pleasure in hearing an interesting or beautiful sound. A composer well known for her "sonic meditations" and "deep listening" is Pauline Oliveros. She has always expressed a genuine originality that shines through her music, reflecting an intense involvement with, and regard for, sound. Oliveros' "The Klickitat Ride, 108 Possibilities 54 Opposites," published in Perspectives of New Music (1982-83), Vol. 21, is truly a "sonic" improvisation; any instrument or voice can be used, no training is necessary, it is performable by just about anyone.

Oliveros lists 108 instructions to be read aloud by a reader "to an audience or an ensemble of musicians," emphasizing the ambiguity of the word "'sound' which is sometimes both a noun and a verb in the command/ statements," and which appears in each one-line instruction. The single line instructions are to be orated in a specific manner, being sensitive to the responses and "finding openings among the sounds for each new statement." It is left up to the reader to decide when to read the next command/statement on the list, sometimes allowing silence before reading the next one, sometimes overlapping the response to one command/statement with recitation of the next one. It is both a theater piece and a group improvisation; it is also a useful exercise in just about any educational setting.

As an example of the command/statements, the first 20 are listed here:

1 Make a familiar sound strange.

2 Make a strange sound familiar.

3 Make a slow sound fast.

4 Make a fast sound slow.

5 Make a loud sound soft.

6 Make a soft sound loud.

7 Make a new sound old.

8 Make an old sound new.

9 Make a light sound heavy.

10 Make a heavy sound light.

11 Make a weak sound strong.

12 Make a strong sound weak

13 Make a whole sound part.

14 Make a part sound whole

15 Make a found sound lost.

16 Make a lost sound found.

17 Make a large sound small.

18 Make a small sound large.

19 Make more sound less.

20 Make less sound more.

The title betrays the underlying idea here of pairs of "opposites." These "opposites" also include simple/complex, far/near, real/imaginary, full/empty, beautiful/ugly, rich/poor, and so forth. Obviously, the ways sounds are to be made (vocally, instrumentally), the number of players, and whether participants are musicians or audience are not determined. Oliveros often involves the audience, namely in her Deep Listening "performances," sharing the experience of music directly and intimately.

"The Klickitat Ride" is included here as an example of how the simplest statements or instructions can potentially yield a very complex music. While these instructions sound simple initially, they offer a real challenge in having to respond musically to extra-musical ideas. For some, this is easy and for others, quite difficult.

* * *

Australian educator and composer Roger Dean has written a superb book entitled Creative Improvisation that consists almost entirely of improvisational exercises focusing on various facets of sound and process. (Note: The reader will recall earlier mention of Dean's New Structures in Improvised Music and Jazz Since 1960 (1992).) Dean's book covers basic musical elements such as motives and melodies, harmonic progressions, rhythm and timbre in the first section of the book. Section 2 deals with interactions among improvising musicians -- soloist in a group and the individual as a group improviser. Section 3 addresses "planned" improvisation, or the interpretation of directions, instructions, and visual stimuli. Section 4 follows up with exercises in the realization of improvisatory compositions, such as "mobiles" and composed motives. This section also introduces improvisation within a jazz context. The last section "Codetta - The final (open) chorus," culminates in free improvisation. The purpose of improvising in the first place is discussed, as is the "personal character" and "universal constraints" inherent in free improvisation. The text of this book is replete with examples in the form of both traditional and graphic notation. The reader may also order a cassette tape of examples that illustrate explanations while providing a "group" (in the vein of "music-minus-one") for the reader to play with when trying the exercises. Of course, Dean also encourages the reader to assemble some friends with whom to realize the exercises.

Dean's book is a thorough and well planned introduction to improvisation. It could easily function as the textbook of a course on improvisation (as a "lab" class emphasizing participation over lecture). It provides a very useful resource for those improvisers who may want to offer workshops, or even private lessons. Indeed, it is being used in a course at UCSD taught by trombonist/improviser George Lewis.

* * *

Cellist/improviser Doug Carroll has taught free improvisation privately. (Note: Doug Carroll also teaches courses in broadcasting and recording in colleges and universities in the San Francisco Bay Area. He and the author are members of a trio, Off Ramp, and the quartet, ROTODOTI.) The one-on-one teaching situation is rare for this music. Yet, being such a personal expression, there are distinct advantages to this approach. The interaction between teacher and student is obviously more direct and immediate than in group situations. Doug Carroll now relates his thoughts on the teaching of free improvisation:

Teaching improvisation on an individual basis and the fact that the cello is not known for improvisation in recent times, makes this task especially difficult. Learning to communicate the intuitive processes inherent in improvisation provides a significant problem for the teacher. The approach that has proven somewhat successful involves a total integration of all the performer's faculties, including body, mind and spirit.

In the improvisation lesson, which should ideally happen once a week, it is best to begin with some body exercises that loosen tension and relax the student and teacher. For the cello, problems in the shoulder are

especially common, and the exercises should definitely address tension in this area. Tai Chi type movements and warm-ups have been beneficial in this regard.

Too many music lessons, be they classical or jazz, involve the teacher in a somewhat dictatorial role, disseminating wisdom in a top-down fashion, not allowing room for the student's own creativity. Individual lessons in improvisation should definitely avoid this approach. Therefore, it's always best to begin the instruction with an inquiry to the student as to any particular problems or ideas that he or she had encountered during the previous week. The teacher should address these problems or ideas in an open dialogue. This tends to keep the instruction student-centered instead of instructor-centered.

After working on the student's concerns, the instruction should shift to exercises and examples that the teacher has created. These usually involve short motives or melodies, timbral areas, rhythm, articulations and formal approaches to improvising.

One of the most fruitful musical concepts for improvisers is simply A/B. This basic musical idea is found in almost any music, and its application for improvisers is far ranging. And is easily used in improvisations. A/B could be applied at the motivic level in a line. For example, an A motive that forms an ascending line of eighth notes for two beats is complimented by a descending triplet that constitutes a B motive of the phrase. Together, they form a complete musical idea that consists of a rise and fall, a journey and return, or a complete gestalt. The improvisation student may consider motivic inversion, transposition, fragmentation, diminution and augmentation (rhythmically and intervalically).

In applying the A/B idea to the phrase level, a phrase may be considered an A element which contrasts, slightly or greatly, a following phrase, a B element. The nature of the contrast may vary from slight to complete. For example, a slight contrast might only involve an inversion or intervallic variation; whereas a complete contrast would employ a totally different musical character in the second phrase. This could be something radical (e.g. silence), or a distinct contrast of articulation. Of course, when identifying phrases as A and B, there must be enough distinction or contrast that a listener does not hear the B phrase as some variation of A. At the same time, there is the matter of continuity that makes musical sense. The "the law of good continuation" (Note: Leonard Meyer (1956) discusses the "law of good continuation" and it's function in music -- "A shape or pattern will, other things being equal, tend to be continued in its initial mode of operation." (p. 92)) on one hand, and the importance of contrast on the other, presents a challenge to the improvisation student.

On the formal level, an entire melody, A phrase and B phrase, may represent another A element of a higher order that can be contrasted with another section, ideally of a distinctly different musical character, such as a more "noisy" timbre or even different stylistic implications.

Another approach involves the use of very limited narrative instructions on what the piece should be like such as the following:

1) Just bird sounds.

2) Have an argument.

3) Leaves falling.

4) Other worldliness.

5) Mice scurrying

6) Dinosaurs - marsh sounds, roars and screeches

Though it is obviously important for the teacher to improvise with the student, students should not become too reliant on the instructor's support and should be encouraged to improvise on their own and with others. Improvisation is more often heard in groups, though some improvisers prefer and are best when playing solo. But the interpersonal nature of group improvisation accounts for much of its appeal.

Another educational tool potentially useful in one-on-one teaching is computer software (assuming the

teacher and/or student has a computer). One type of these programs is MIDI Jazz Improvisation by Tom Rudolph and Roger Morgen (Electronic Courseware Systems, 1994). (Note: Versions available on computer disk include 1 Minus Mac or ST, which require a sequencer that reads standard MIDI files.) This program aids instrumental and vocal students with play-along material to learn jazz improvisation. Original tunes in this volume follow traditional chord progressions, and a handbook is included for step-by-step instruction. Exercises include II-V-I progressions, slow blues in Bb, medium blues in F, fast blues in C and minor blues. The second volume of this two-volume set introduces more advanced concepts like samba, 12-bar blues with substitutions, blues with a bridge, and funk/rock improvisation in complex II-V-I progressions. Obviously, this program deals with learning to play jazz, not free improvisation. (Note: Electronic Courseware Systems offers a number of music education programs. A review of the various software titles, however, reveals a mainstream market -- nothing really new in what is being taught or even how it is being taught. For example, the program, "Musique," includes "interval and chord analysis, harmonic dictation, aural identification of chord function within a chord series, keyboard topography, note placement, scales and modes, and over 100 basic music terms." The program is designed to "support a two-year theory curriculum." The four programs dealing with jazz are the only ones addressing improvisation to any extent.) Finding a computer program that helps free improvisers, however, is difficult if not impossible. Those utilizing computers in improvisation (such as Tim Perkis, et al. mentioned before) will likely design their own interactive programs to suit their individual needs and compositional strategies.

* * *

Improvisation in Educational Curricula

Schools, from elementary school to graduate school, unfortunately tend to ignore improvisation, and at times even hold it in disdain. It may be acknowledged -- in a way akin to chicken soup as cure for a cold (it can't hurt) -- but it is not taken seriously. It may be presented in some extramusical way, such as notation, analysis, etc., but as an expression of composition, it goes unrecognized. This may be a result of the influence of science and technology on musical thinking, where the subject matter is imminently measurable. But science and technology have also contributed much to musical thinking, with recent explorations of chaos theory, (Note: See Bradlyn, Mark, "Chaos Theory and Group Improvisation," The Improviser, Vol. 8, 1988-89, pp. 15-18.) subatomic physics, gestalt psychology, etc.

Larry Solomon (1982) comments on how education can instil in the student a bias that is ultimately damaging to the spirit of improvisation:

Summarily, students are ear-trained (or ear-chained) to formulae taught to regard certain sounds and combinations as superior to others, and are often obliged to adopt the values and prejudices of teachers, all in the name of education and musical tradition -- music that was never created as formula or dogma, but was rather in constant flux and renewal. Id.

Indeed, Solomon goes so far as to say outright, "Contemporary performance practice in academia is anti-improvisational." Students who have been trained with this attitude "adhere doggedly to the printed notes and try their best to be 'authentic,' however impossible and even undesirable that may be." Solomon offers the reminder that "The score was never meant to imprison the performer's imagination."

If the absence of improvisational interpretation of music is characteristic of any music, that music belongs to the late Romantic Period (with its excessive stipulation of expression markings) and early 20th Century (with its refinement of excessive control). By the end of the 19th Century, musical form had essentially reached a penultimate extension of sonata form as seen in the massive symphonic works of Berlioz, Bruckner and Mahler. As forms and orchestration were expanded, new technical (and endurance) demands were made of instrumentalists and vocalists. Through the line of composers from Brahms to Schoenberg, from Debussy to Stravinsky to Stockhausen, the accumulating challenges facing performers, in effect squeezing their creativity out of the process, can be traced. So much control did the composer take on that there was ultimately no room whatsoever left for interpretation. Unfortunately, this could not help but impact education, instrumentalists and vocalists having become essentially a "service industry" for composers and conductors. Within the span of less than a century, the status of the performer shifted from a respected creative role to that of a technical functionary. It is no wonder that classically trained musicians today often have difficulty with improvisation, while at the same time exhibiting amazing technical skills, sight-reading abilities and fine musicianship. Only in the last three or so decades have instrumentalists confronted more creative challenges in "interpretation," yet still, musical pedagogy too often lags behind.

* * *

Music, itself is fleeting -- it's here, it's gone. The next time is different, never the same. Change is the dynamic basis of music, of course; it is a temporal art articulated through change over time moment-by-moment. And, of course, change functions historically, period-by-period, cycle-by-cycle. Even within the life work of a single composer, such as Stravinsky -- from The Firebird to The Owl and the Pussycat -- we see remarkable evidence of how music must change and evolve, a process that never stops, in spite of the complications this might cause the historian, musicologist, analyst or educator. The responsibility of education is to provide students not just information, not just knowledge, not just problem-solving skills, but opportunities to creatively express themselves as individuals -- from the child in daycare to the Ph.D. candidate at Stanford. Change, after all, is the succor of creativity.

So what are the answers for education? How can the situation be remedied? How can improvisation be incorporated (once again) into the mainstream of music education? First, are the teachers aptly prepared for this challenge, given their own education and training? It would seem that those teachers who choose to, and find a way to, bring improvisation into the classroom very likely have some experience with improvisation. Through improvisation, the teacher can (indeed must) bring in her/his own personal experiences. This close involvement and enjoyment of the teacher with the PROCESS is what will most likely impress students and bring them into that PROCESS.

* * *

Articles have been written by educators who have utilized improvisation in the music class. Predictably, many of these are oriented toward jazz. But others exhibit a number of different approaches designed to help teach basic musical skills. Volume 66 of the Music Educators Journal (Jan. 1980) devotes the entire issue to improvisation, such as the article by A. Welwood entitled "Improvisation with Found Sounds." Here, a teacher brings an awareness to the students of sound, itself, as well as the experience of improvisation, an ideal way to get students to listen in a "fresh" way. Found objects are not only uniquely interesting in their sound, they are always around, always available; discovering what objects make what sounds and how those sounds can be used in improvisation is, itself, a creative challenged to the student. And there are no prior technical demands, no "right" way to play a found object, so students are encouraged to experiment.

There are certainly signs that efforts are being made by a number of music educators to utilize improvisation, enhancing their ability to reach their students. C.A. Elliott's article, "Teaching Theory Via Improvisation," Educator, Vol. 8, pp. 20-22 (1975) and S. Reeves' article "Improvisation: New Teaching Strategies," Jazz Research Papers, Vol. 10, pp. 96-98 (1990) are further evidence of this. Moreover, this interest in improvisation in education is found to be shared by teachers and educators throughout the world, as seen in articles such as Eddie Prevost's article, "Improvisation: Music for an Occasion," and other such writings in the British Journal of Music Education, Vol. 2 (1985). There is also a reawakening to the place of improvisation in "classical" music as evidenced in B. Bechtel's article, "Improvisation in Early Music," Music Educators Journal, Vol. 66, pp. 109-12 (1980).

* * *

In his article, "A Case for Improvisation to be an Integral Part of Music Curriculum" (The Improvisor, 1996), improviser (in the group Manufacturing of Humidifiers) and teacher (in the Oakland School District) Randy Porter offers a clearly written and well-focused description of the challenges that face educators wanting to utilize improvisation.

traditional music educational approaches teach that improvisation is not important. This message becomes part of the implicit curriculum, because improvisation isn't dealt with....

The implicit curriculum is at work in all our psyches, and is a major factor in society's attitude toward the arts, especially something as seemingly esoteric as improvisation.

Porter poses the question: "But what if kids were taught improvisation along with note-reading, tone production, composing, theory and listening?"

For the past several years, Porter has taught music to fourth, fifth and sixth graders using improvisation and reports, "Each year the results have become more and more encouraging. These first improvisational attempts by elementary school kids are usually charming and occasionally even profound." Porter has found teachers who want to incorporate improvisation into the curriculum are hindered by the lack of a methodology. Improvisation games are cited as a good way to involve the students. The musical elements are very simple and highly restricted in these games. "Some of the games aren't really improvisations at all, but give students important skills to be better improvisers and better overall musicians." Apparently this approach has proved successful in teaching basic musical principles while helping students to exercise their own boundless creativity.

Over 70% of fourth through sixth grade students are enrolled... Because improvisation is taught, students have more fun and are more motivated. They are more sensitive and creative. They are better musicians.

Classroom teachers -- and administrators with courage and conviction -- can turn things around. Programs, projects, pieces, exercises, or teaching strategies, such as those described above, which are found to be effective can become models. Experience can be shared through articles and books, or simply outlines (that could be faxed at a moment's notice). And now, creative ideas can be shared via computers on a global scale through the Internet. (Note: See Peter Stubley, "The Internet and Free Improvisation," The Improviser, Vol. XI (1996), pp. 83-86.) Education has always had a responsibility to inform; but its highest responsibility is to inspire. And inspiration is self-realization. How improvisation fits into this is clear.

* * *

Improvisation in Higher Education

Up until very recently, a college or university music student interested in improvisation (outside of mainstream jazz) could not find a music department that offered a major in improvisation. The Berkeley School of jazz and Northwest Texas State University are two well known music departments that offer degrees in jazz. Also, there are institutions dedicated to non-Western music, such as the Ali Akbar College in Marin County, California, which teaches Indian music and performance practices. And some of the more experimental or new music oriented university music departments may offer courses in compositional methods that incorporate improvisation, but the idea of a baccalaureate degree in improvisation has been nonexistent in academia. However, there are signs that the value of improvisation in higher education is becoming more recognized. Below is a description of some examples of programs/courses involving improvisation that are offered in higher education.

Stuart Smith (1982) describes two of what he terms "trans-media performance systems," which he has created as a way to introduce students (music majors at The University of Maryland-Baltimore County) to improvisation in the context of the U.M.B.C. New Music Ensemble. Music majors are required to perform in this group at least one semester, and the group meets three times a week for one hour. "We perform every sort of new music: tonal, serial, graphically notated, theatrical, minimal, etc. The ensemble's goal is to expose the student to a full range of new music." Ibid.

Within this context, Smith acknowledges the importance of teaching improvisation:

1. Most of the musicians that enter the class read music... For many, music is something on paper. Studying improvisation gives the student an ear orientation, i.e., listening skills. 2. Many students from their earliest years are told what to play both by their teachers and by the music itself. This emphasis on interpretative skills over creative skills is ubiquitous throughout our educational system. Improvising is a first small step in correcting this unhealthy imbalance. 3. The educational and social results in generations of students trained almost exclusively to just follow orders, i.e., reading the music, playing what you are told, etc., could be potentially very dangerous politically to our culture. Once students begin to gain confidence in their own decision-making skills through improvising, they change. They begin to go to the library and choose their own pieces to perform. They ask troubling questions, compose their own pieces, and are generally much more self-motivated. Ibid.

Smith's Return and Recall and Initiatives and Reactions, are mixed media improvisation designs, as the name, "trans-media performance systems," implies. They are intended to be "studies in the concept of group

composition, for actors, musicians, dancers, mimes, etc." Smith points out that improvisation is just the first step in realizing these pieces. "The performers start with improvising solutions to certain tasks, gradually progressing to composing collectively by consensus as a group within my prescribed piece." There is a subtle difference in objective here between improvisatory plans or scores and Smith's "performance systems," which involve preparation to a much larger extent. Again, improvisation is seen as a way of generating material. Smith's objective is collective creativity, as opposed to some specific format for group improvisation. Nevertheless, students are presented with opportunities to improvise solutions to specific challenges in the score.

The graphic system used in Return and Recall is explained in an article by Linda Fiore, a student who had worked with the piece. The symbols utilized are, fortunately, limited to a few simple elements that can be combined in various ways. For example, the symbol "X" designates a source. "The source should be well-defined and recognizable as a refrain-like basis of the composition." It is supposed to be about 15 seconds in length and "should be 'temporally modifiable.'" Arrows pointing upward designate "higher, more (exaggerated), louder," while arrows pointing downward designate "lower, less (understated), softer." Durations are designated simply "S" for short/fast, "M" for medium, and "L" for long/slow. An empty circle designates imitation. The arrows and/or duration symbols may appear attached to or within the circle to modify the imitation. The letter "D" designates development (of "an experienced event"). A circle with a vertical line enclosed designates "blend, match, or try to be in unison with an event as it is being experienced." "Z" designates "choose a fragment from a previously experienced event forming a repeating pattern."

Without going into a more detailed explanation, it is plain to see that these symbols and the processes they represent deal with basic musical elements which can be combined in numerous ways to achieve a compositional plan. It is also apparent that even though improvisation is considered the "first step" in the process, the performances likely retain a good deal of it.

* * *

In the fall of 1991, San Jose State University, under the direction of Dwight Cannon, established the first degree program in the country focusing on improvisation not limited to jazz. Other faculty include Hafez Modirzadeh, Dan Sabanovich, Royal Hartigan, Baomi Butts-Bhanji, and Greg Murai. S.J.S.U. offers a master's degree as well as a bachelor's degree in Improvised Music Studies. A brief overview of curriculum is described in the Improvised Music Studies (IMS) News Journal (1993) as follows:

Improvised - Music Ensemble Musicianship (basics, rhythm, melody, advanced jazz - ensemble and solo techniques)

World Music Systems - Applied (Africa, Central & South Americas, Middle East, India, Far East, Native American Indians, etc.)

Electronic Music, Computers & Recording Arts (electro-acoustic music studios, sound recording)

American-European Art Music & Musicianship (theory, musicianship, Classical & Romantic & 20th Century practices & analysis, and history)

Senior Project & Review

Student Lessons

Performing Ensembles - Improvised Music

The graduate studies curriculum is described briefly as "Required Core Courses (theory, history, etc. in improvised music and American-European art music), graduate electives, thesis." Additionally, "special-interest courses (electives)" are provided to graduate students in the form of "Advanced electro-acoustic & recording arts, film-scoring, orchestration, advanced jazz arranging, conducting, computers for musicians, music education, music in world cultures, jazz in America, pop songwriting, advanced theory."

Obviously, such a program as this is broad-based enough to incorporate several different improvised music study tracks to choose from and, at the same time, provides the student a larger understanding of improvisation as it exists in other cultures, in the classical Western tradition, in popular music, and in experimental electroacoustic and electronic music. Indeed, it is a well rounded curriculum that incorporates tradition and experimentation, academic and practical studies, commercial and non-commercial music. To have brought together such diverse fields in an integrated curriculum is no small accomplishment, but certainly one worthy of emulation by other music departments. It is a hopeful sign that academia is possibly taking another look at improvisation and acknowledging its importance. Baroque improvisation, African improvised music, technology and improvisation, Indian raga, Persian Dastgah, chance and indeterminate forms of new music and notation, jazz, rock, Native American music, recording arts, film scoring, etc., all under one roof! Hopefully, this new program will succeed and possibly form a model for other schools. (Note: Some may take issue with this statement given the close relationship of improvisation "plans" to some indeterminant compositions such as those mentioned in Chapter 2. Though debatable, the issue is passed on here, having been discussed previously. See Chapter 2.) Those interested in further information about this program can contact Dwight Cannon at: Improvised Music Studies, School of Music, San Jose State University, One Washington Square, San Jose, CA 95129.

* * *

Evidently there are excellent teachers of improvisation and numerous different approaches available, not to mention those an educator might design for her/his own teaching circumstances. And there are signs that even some educational establishments are coming to recognize the value of improvisation. Music-making has undergone a significant change that now, more often than not, incorporates improvisation, or at least creative interpretation. Rather than ignore this fact, there is a mandate -- the evolution and vitality of music, itself -- to acknowledge it and make the necessary adjustments in attitude and curricula. The examples presented here represent only a small fraction of the work improvisers are doing to get the musical experience to everyone.

APPENDICES

APPENDIX A

IMPROVISATORY FORMS IN WESTERN CLASSICAL MUSIC

Ornamental Embellishment:

frangere voces, fractio (11th C.)
discantus supra librum (14th C.)
passaggi (16th C.)
clausula (16th C.)
falsobordoni passeggiati (16th C.)
rompere (17th C.)
Blumen (17th C.)
Verblumung (fioritura) (17th C.)
contrapunctus fractus, floridus (17th C.)
abbellimente (17th C.)
passi and passaggi (18th C.)
agremens (18th C.)
"graces" (18th C.)
glosas (18th C.)
"essential" and "arbitrary" embellishments (18th C.)
acciatura (18th C.)
patterned figuration (England) (17th C.)
doubles
broderies (French) (17th C.)
tremblements (French) (17th C.)
agrements (French) (17th C.)
coloration vs. figuration
imitative and linear figuration

Division Embellishment
diminution
divisions
koloraturien
"breaking the ground"
contrapuntal embellishment
embellishment of solo parts
diminution in thorough-bass
gorgia
five classes of ornaments (Caccini)
patterned figuration
varied couple
arioso
slow movements of Corelli sonatas

Cellular Elaboration
melodic formulas of Hebrew Chant
short formulas of Gregorian Chant
differentiae and cadence formula of psalm-tones
ligatures
currents
metrical cursus
rhythmic cursus
occursus
flexa
modal nucleus
neumes
any conventional melodic figures
figural patterns
stereotyped opening of trumpet sonata
freely invented motives
cadences in Western polyphony

Adding Voices - Harmonization
supra librum cantare (15th C.)
English discant
faburden
fauxbourdon
gymel
contrappunto alla mente

Adding Voices - Polyphonization
sortisatio
countering
Regolamente of St. Marks
chorale variation

Adding Voices - Basso Orientation
basse dance
bassadanza
passamezzo dances
spagna
basso seguente
organ bass
basso ostinato
ostinato variation (Ortiz)

extemporizing upon a ground (Simpson)
chaccone
passacaglia
partita (sectional variations on bass melodies)
cantata (early Baroque, Venice)
patterned bass (quasi-ostinato)
obbligo forms (self imposed obligations)
basso quasi ostinato
folia
bergamask
Manierlich Generalbassspiel
strophic bass

Frame and Style - Initial Frames
enechemata (Byzantine)
martyriai (Byzantine)
psalm-tones
noeane (Christian)
"Tastar de corde" (Dalza) (lute)
opening figure of canzona
"head motive"

Frame and Style - Cadential Frames
musical rhyme (a general technique)
modal nucleus
differentiae
flexa
occursus
cursus (metrical; rhythmic)
cadential formula (Renaissance)
cadenza finali
cadenza of dacapo aria
instrumental cadenzas
florid cadences of falsobordone
"under third" cadence of Renaissance
clausulae (16th C.)
recitative cadences
echappe
jubilus of Alleluia
adagio cadences of Frescobaldi's variation ricercar

Frame and Style - Whole Forms
ricercari
intonazione
preamble
preambula
prelude
introit
chorale prelude
intrada
introductory pieces
overture of late Baroque suite
keyboard overture
"quilt" canzonas
variation canzona
cappricio
partimento (related to basso continuo((17th-18th C.)

Frame and Style - Style Alone
complicated canon forms and double counterpoint
improvisation taught by Zacconi, Brunelli, and others
polyphonic improvisations on the Introit
of the Mass (16th C.)
fantasias based on rules of counterpoint
(for organists) (16th C.)
ostinato variations
improvised dance music
(origin of tema con variazioni)
descant division
free polyphonic improvising on a given motive (17th-20th C.)
improvised accompaniments to arias (e.g. Handel)
free fantasia in organ music of Baroque
free instrumental cadenza
Adagio sections (short cadenza in free style of the toccata) in Frescobaldi's variation canzona

APPENDIX B

EXERCISES

This book is obviously not about "how to free improvise," but an involvement in the process itself can be invaluable to the reader in perceiving, through experience, the ideas presented here. There is a point at which something must be experienced in order to be understood. That is the purpose of this appendix. Whether or not the reader is a musician, she/he is encouraged to try the exercises presented below, using voice and/or found objects percussion, or any musical instrument. There are exercises for solo improvisers and for groups. The reader may want to invite some friends (musicians or not) to try the group exercises.

The reader will recall from the workshops and exercises described in Chapter 7 that plans or instructions for improvisation are best when simple. The smallest restriction in free improvisation can have a significant INFLUENCE upon the music. Complex or long instructions can sometimes be confusing, time-consuming in rehearsal, and ultimately deleterious to an improvisation, considering how the attention is already divided between one's own playing and that of the group (if not a solo improvisation). To add another attention factor that, itself, is difficult to remember or complex can make concentration on the Flow difficult. The composition of a plan for improvisation is not composition in the traditional sense. (Note: Some may take issue with this statement given the close relationship of improvisation "plans" to some indeterminant compositions such as those mentioned in Chapter 2. Though debatable, the issue is passed on here, having been discussed previously. See Chapter 2.) The purpose of the latter, of course, is to render a graphic image of a whole piece of music. The composition of improvisational plans, instead, purports to stimulate compositional thought (e.g. Sokol's idea of "handicapping"), provide a flexible conceptual terminology for the improvisation (e.g., Bradlyn's use of Gestalt concepts of figure, ground, field, etc.), or establish a formal framework such as Engel's storyline format. Whatever approach is taken or guidelines set up, essentially "less is more" when it comes to composing plans for improvisation. On the other hand, certain composers of such plans may justifiably feel it is more than a mere exercise or vehicle to stimulate creativity, instead possessing enough of a unique character to warrant Identity as a composition (e.g., pieces by John Zorn and Anthony Braxton)

* * *

Usually, an improvisational plan allows any instruments or sound-making objects to be used; "found" objects such as metal kitchenware, metal tubes or pipes, small pieces of board (e.g. scraps), large plastic water bottles, etc. can be played with the hands and small sticks or rods, such as wood dowel, chopsticks or knitting needles, even pencils. (Note: If such pointed implements are used, be very cautious not to impale yourself! Where children are involved, pointed implements should not be used.) Combs are also useful for creating a variety of sustaining noise textures by scraping them on rough surfaces in various ways. Even crumpling different kinds of paper and plastic will supply a wealth of interesting noise makers. For some time now superballs have been used as an implement with

which to rub smooth surfaces to create friction sounds that can be quite amazing, especially when rubbing metal; a length of coathanger wire is inserted into the ball as a flexible stick-like handle. Before jumping right into the exercises described below, the reader may want to experiment a bit first with some selected sound objects, implements to play them with if needed, and playing techniques.

Those who play instruments are encouraged to forget everything they know (consciously) and focus on the properties of sound and the idea of the exercise. Technical facility can be at any level, from novice to virtuoso. But here, the compositional possibilities that arise from the Flow of sound are more important than technical ability.

Each exercise has an instruction and is followed by a brief discussion of the purpose or focus of it and what challenges might be met in performing it. It is suggested the reader try each exercise at least once, and perhaps several times; then read the discussion in the text, which may include questions about the improvisation. Next, try the exercise again at least once, keeping in mind the issues mentioned in the discussion. Though most of the exercises below are rather simple, some are a bit more detailed. The reader may choose to "work on" these exercises at some point.

If the means are available, these exercises can be recorded, then reviewed later. The reader is encouraged to do this. The object, of course, is not merely to criticize, but to broaden the listening perspective to include being an audience to your own playing and enjoying the music as such. As mentioned before, this can be quite interesting and possibly helpful if the improviser is listening for things, such as technique, Transitions, quality of textures, group interactions (Composites), formal clarity, Identities, etc. At this point, the reader should have a good idea of the parameters involved, and listening back to one's own improvisations provides an opportunity to hear the music in this more active way. Whether or not the exercises are recorded, however, the reader will gain much in the experience of trying them. (Note: The reader is reminded that the terminology and concepts presented in Chapters 3 and 4 are intended to aid the audience listening perspective, leaving the improviser to listen intuitively, not analytically, when playing. The point here is to avoid a restrictive methodology that might well hinder the musician's state of mind while improvising. As an exercise, however, the terminology and concepts can be useful in creating a particular focus of attention on one aspect of the improvisation or another.)

* * *

Individual Exercises

To get an idea of a starting point and make a connection with the "original voice," the reader should begin with a totally free improvisation. There are no instructions or rules whatsoever.

Exercise #1: Free improvisation

Instruction: None.

Discussion: This exercise should be tried first with no conception about the music. Just do it! After this, you might try using simple instructions of your own making. Any number of "instructions" might be used that are metaphoric or poetic, suggesting a state of mind for a free improvisation. Though not directly impacting anything about the eventual music, such "instructions" can create a certain impetus for the music. For example, the instruction "play anything" implies play "randomly," while the instruction "listen carefully" implies the opposite, without saying anything about what might be played. Other free improvisation "instructions" of a metaphorical sort might be: "lose yourself;" "become one with the Flow of sound;" "become transparent;" "ride the Flow."

There are also instructions for free improvisation that can be of a similarly general nature, yet focus on technical or compositional issues. For example: "work a motive;" "build on a ground;" "use Interpolation;" "articulate a Dialogue;" use a good deal of silence;" "keep one tempo;" "do not play in tempo;" etc.

Another possible kind of free improvisation "instruction" is a visual or graphic stimulus; for example, a painting or photograph, the grain in wood, light shining through a prism, an abstract sketch, the movements of fish in a tank, etc. When visual stimuli are allowed to impact a free improvisation, they have an effect, but one that is difficult or impossible to define. The stimulus is also, in a way, an "irritant" to the otherwise free process of improvising, or a "filter" through which response to the moment must pass.

And finally, a free improvisation can incorporate ambient sounds that otherwise might interfere with your concentration. Rather than trying to ignore ambient sounds (if you are in a somewhat noisy environment), the improviser should assimilate these sounds into the music. This takes deep listening and quick response, but it can be a fascinating, even inspiring, experience.

Exercise #2: Grow a Sound

Instruction: "Grow a sound." Play a very simple sound, motive, or brief phrase and cadence. Repeat it once or twice with silence following (to memorize it and establish it as an Identity). Then continue the improvisation by adding something new with each repetition to create longer and longer phrases; silence may or may not follow. "Grow" a sound through longer and longer variations of it.

Discussion: This is an exercise in Identity manipulation. The Identity, of course, is the initial sound, motive or phrase. The purpose of the exercise is to maintain the Identity as the foundation of the whole improvisation. The Identity changes gradually, yet "repeats" periodically. It becomes longer and more complex. The difficulty of such an exercise is to resist the temptation to destroy the Identity and move freely away from it into other ideas. But once the cycle of variation is established, it sets up a kind of formal rhythm; this requires the improviser to begin at the beginning of the Identity with each variation. If this is done, the cycle can be maintained.

The reader should note the different ways she/he extended and modified the Identity. Was this accomplished rhythmically, melodically, texturally or timbrally, gesturally (lengthening the gesture)?

Exercise #3: Find a Sound

Instructions: Begin by playing a complex continuous Sound Mass, very gradually Fragmenting it by inserting brief moments of silence, which become longer and more frequent as the improvisation continues. During this Fragmenting PROCESS, focus in on one element within Sound Mass and begin featuring and/or isolating that single sound element so that it alone concludes the improvisation.

Discussion: This exercise is the opposite of the previous one. Instead of building or growing, an Identity is materializing gradually through a continuous Fragmentation of a Sound Mass. This exercises the ability to listen into a complex sound and extract some interesting aspect of it. This is a common practice in free improvisation. We always listen for possibilities (the ideas, musical characters, emotional expression) within the Flow.

Exercise #4: Two Voices (Solo)

Instruction: As a soloist (unaccompanied), articulate two distinct "voices." If possible, this should be done on a single instrument, but two instruments (no more) may be used. These two "voices" may then interact in any way.

Discussion: The articulation of two "voices" on a single instrument sounds more difficult than it is. If playing a traditional instrument, a separation of "voices" can be accomplished in a number of ways, such as use of different registers, different articulation, different dynamic, different tempo or rhythmic character, etc. But the Identity of these two "voices" must be established and maintained, so that in and of themselves, these "voices" should remain relatively simple; it is the interaction of the two that is the focus of this exercise, not the development of them.

Interactions between the two "voices" can be quite varied. What Relational Functions were used in the improvisation? Which one(s) seems easiest to articulate? Which one(s) seems most difficult? Why?

Exercise #5: Density Fluctuations

Instruction: Create exaggerated density fluctuations within the improvisation.

Discussion: This is a simple exercise to do, but possibly a difficult one to do well. The dynamic of the process is expressed in changes of overall density and complexity of texture. This in itself is not necessarily difficult. However, the improviser must always maintain the Flow in some way; a mere fluctuation of density does not

necessarily move or direct the music. It certainly helps establish a formal sense about the improvisation, but a sense of "moving forward" should also be evident in the Flow. The improviser may choose to "ebb the Flow" or "pool the sound" during moments of high density and move it more quickly forward in the low density sections.

Some issues confronted in this exercise include: how long the alternating high/low density sections last; how the change in density is made (e.g., how suddenly or gradually); what material relationship the two different characters have, if any (e.g., whether or to what extent material is shared); how the apparent speed of the Flow is affected by density fluctuations; and how clear the improvisation is formally (i.e., how well or interestingly changes in density are articulated).

Exercise #6: Associative/Dissociative Fluctuations

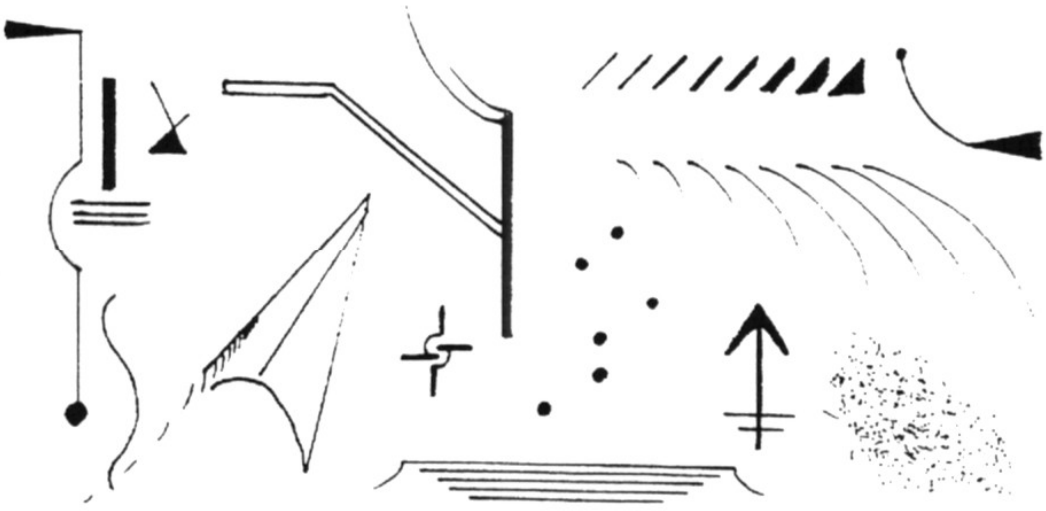
Instruction: Alternate between associative playing (moment-to-moment cause-and-effect) and dissociative playing (absence of continuity and repetition) throughout the improvisation.

Discussion: This exercise resembles the previous one, except that the fluctuations occur in terms of association/ dissociation rather than density. Many of the same issues mentioned in the previous exercise can apply to this one, essentially how the changes are made. Likewise, the Flow can be greatly affected by these sorts of changes. Associative playing often (but not always) occurs within a definite tempo and has melodic continuity. Dissociative playing, on the other hand, is discontinuous by nature and thus interrupts or fragments the Flow with apparent chaos.

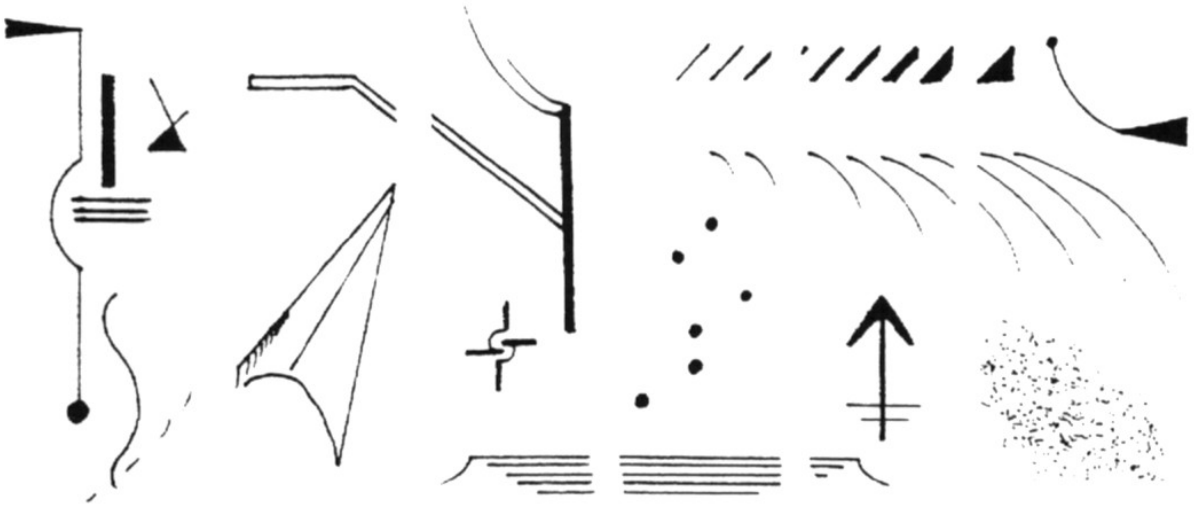
The improviser can play the obvious associative and dissociative qualities and articulate a definite distinction between them readily. However, a challenge lies in the articulation of an overall continuity in which there is an element(s) common to both associative and dissociative qualities. And again, how the changes from one to the other are made can be quite interesting.

Exercise #7: Abstract Graphic (Solo)

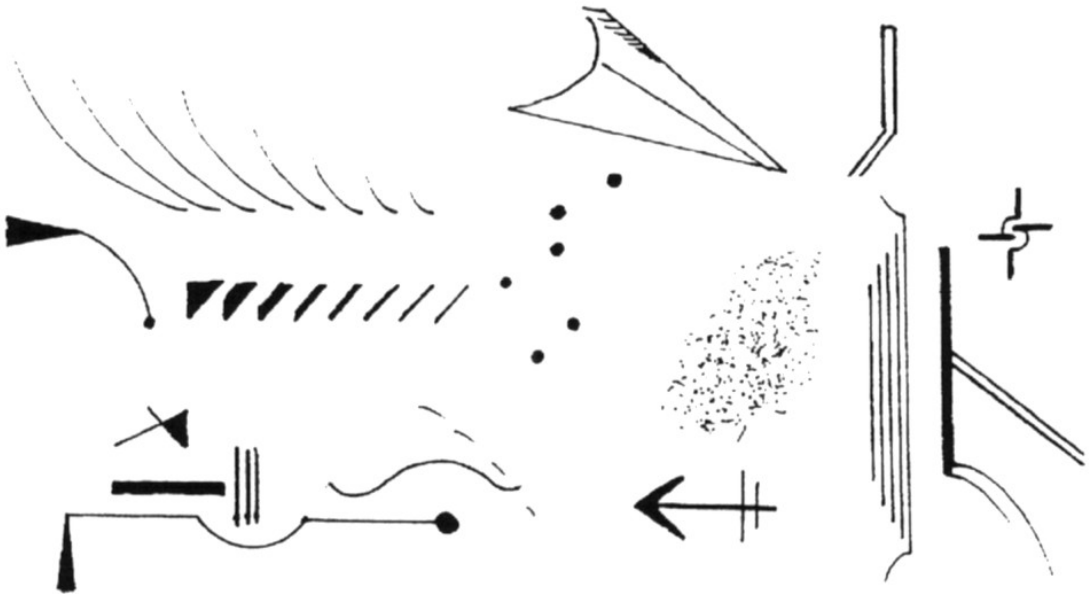
Instruction: Improvise on this abstract graphic.



Discussion: How can an improviser relate sound to an abstract visual graphic? There are a number of ways. One way is to establish in the mind a matrix of horizontal and vertical, then follow the graphic, as if following text or music, from left to right (or vice versa). Of course, what the graphic actually designates while scanning or "reading" it in this way may be just about anything, but normally would be a pitch association with the vertical and a rhythmic or temporal association with the horizontal. The speed at which you scan the graphic can vary; the graphic can be scanned in this way several times; etc. A visual aid might be to cut (a copy of) the graphic into strips and separate the strips somewhat; then improvise (somewhat briefly) on each vertical strip. You may or may not want some continuity or relationship between or among these vertical strips. And though you might read them from left to right, the order, of course, could be different.



Another way to relate sound to the graphic would be to "spot check" it and respond to only certain features or areas of the graphic, then shift the focus of visual attention to another feature or area. For example, the "blocks" below which have been extracted from the original graphic and rearranged.



You may also "travel" through a graphic at random, as if going through a maze, and free-associate with the series of images seen.

For some, a graphic, even an abstract one, may call up certain emotions, a general feeling, a memory, or some extra-musical association (looks like giraffe) which may form the basis of the sonic/visual relationship.

There are undoubtedly many ways to create a relationship between a two-dimensional graphic and the sounds played. For some, this is easy; for others, it is quite difficult.

* * *

Group Exercises

The exercises above may be played by one or (sometimes) more improvisers. Those that follow are designed specifically for group improvisation.

A group may be two or more players, though five is a lot. As the number of improvisers in the group grows, it is increasingly necessary for the individual players to "leave more space" for the others, and to listen all the more attentively to the group sound, the Flow. Otherwise, Sound Mass will be about the only Composite

heard. The reader will recall how the size of a group tends to favor certain Relational Functions over others, though usually just about any of them can be used in any size group.

Careful listening is always important, whether improvising as solo or in a group. Listening in the group situation, however, can be quite challenging, because you never know what the other players will play; an unexpected change can happen at just about any moment (though such change made in a "bad spirit" can be highly destructive). There needs to be a level of trust among improvisers in a group, whether or not they've played together before. Egos need to be left at the door. A group is not just a number of improvisers, it is a unit, a "team," that functions together to create one Composite sound Flow image. Under these circumstances, an improviser can feel comfortable and can focus attention on the group sound as well as her/his own sound.

The exercises for group improvisation below are similar in ways to those presented above, though they focus on different kinds of interaction among improvisers. Those doing these exercises are encouraged to discuss their efforts and the comments accompanying each exercise. Again, if possible, tape record the exercises and listen back, keeping in mind the focus of the exercise and the discussion of it in the text.

Group Exercise #1: Free Improvisation

Instruction: None

Discussion: As in the first exercise, this is a free improvisation without restrictions of any kind. Unlike the first exercise, however, much of the improvisation will be out of the control of a single player. Therefore, the group sound is more important than any one individual's sound and must be the focus of everyone's attention. An acoustically balanced dynamic is important so that some players do not always dominate simply by playing louder. A sensitivity to the size of the group is necessary to know how much to play, and a sensitivity to phrasing and change is necessary to know when to play (or drop out).

Group Exercise #2: Pulse

Instruction: Establish a steady pulse and free improvise on that pulse. Do not change the basic pulse, but the rhythmic accentuation should vary (so that the common pulse can imply more than a single tempo and meter). Given this steady pulse, vary the implied tempo and meter as much as possible.

Discussion: [Those already familiar with music may wish to skip the next two paragraphs.] For some who have no musical training or background, this might be a difficult exercise, but it need not be. It can be as simple or complex as the group wishes. A meter is established by accenting every two, three, four, five, etc. beats of the pulse. An accent every two can be expressed in musical notation by the meter 2/4; for every three, 3/4; and so on. The meter designates how many beats are in a measure and what the value of the beat is -- quarter note, eighth note, etc. The value of the beat is a relative figure. What determines the tempo is the pulse or steady succession of beats; for this exercise, the value of the beat is irrelevant. The number of beats in a group or measure, articulated through accents (or implied accents), is what will give the impression of meter.

There are two things to do with a beat to change it without changing the tempo or pulse rate: group the beats through accents, as described above; or subdivide the beats. Each pulse or beat is a short duration of time that can be subdivided. A beat might be divided into two, three, four, five, etc. subdivisions, just as it can be grouped metrically through accents. One is called divisive rhythm and the other additive rhythm. For those not accustomed to rhythmic complexities, it is suggested this improvisation be in 2/4 (accenting every other beat); or in 4/4 (accenting the first of four beats). To begin, get the sense of tempo and meter with fairly short, simple sounds, then expand or extend these simple sounds gradually. Do not play too many sounds and always maintain the pulse as accurately as possible. Then try holding the pulse and changing the meter (e.g. from 2/4 to 3/4). Finally, eliminate the sense of meter altogether and just play the pulse, with any combinations of accents.

Those readers who have played music before may want to complicate the Flow rhythmically with various subdivisions and changing meters. A soloist can do this with no problem; but in a group improvisation, without knowing what one another is going to do, changing meters can be tricky. It often requires a rhythmic

voice that strongly establishes the meter or change of meter. Subdivisions are an individual matter, so long as the pulse remains even. However, too much subdivision of the beat (rhythmic complexity) can "blur" the sense of pulse and even destroy it if subdivisions are not accurate.

For the adventurous, the sense of pulse, itself, can become the subject of the improvisation, intentionally "blurring" it periodically without losing it entirely. This can be quite fun and can make for a very interesting improvisation.

Group Exercise #3: One Voice

Instruction: As a group, articulate a single "voice."

Discussion: Group articulation of a single "voice" requires the alternation of players; simultaneous sounds are to be avoided. This means that everyone is a "soloist," but only for a very short time, demanding extremely heightened listening attention. Simultaneous sounds are going to happen; they are almost impossible to avoid. But with careful listening, you can sense when it is appropriate to "take over."

This exercise could be accomplished easily with visual cues designating "who goes next." But the improvisers are encouraged to try depending entirely on listening, even though simultaneous sounds will occur. (This might be done by avoiding eye contact among players.) It is also interesting to do this exercise twice, first not cuing visually and then using eye contact (or even hand signals). Where visual cues are used, the challenge is to maintain continuity of Flow and idea in order to avoid a mere series of very short solos. The purpose of the exercise is, after all, to articulate a single voice, so there should be continuity when one player takes over from another, and there should be variety and interest in the line articulated by the collective voice. A further possibility would be to rotate the change of soloists in a known order, such as a circle, going clockwise or counterclockwise.

In this exercise, changes of instrumentation within the single voice line might occasionally be relatively quick and involve all players at changes between more extended solos. For example, one player might improvise a solo for 15 seconds, then the whole group enters playing only a short note or two each, hopefully successively, but one player continues playing and takes over the single voice, trading this lead role among the players following each whole group entrance.

Group Exercise #4: Sound Mass

Instruction: Create and maintain a Sound Mass.

Discussion: Creating and maintaining a Sound Mass is not difficult; maintaining an interesting Sound Mass, however, can be difficult. A Sound Mass expresses a "static Flow" that seems to energize itself, requiring no particular musical direction. As mentioned earlier, this can work for a time, but there comes a point when a desire for less density arises. The purpose of this exercise is to find ways to maintain interest in a Sound Mass for as long as possible. (Finding a musical way to cadence it is also a challenge.)

What makes a Sound Mass interesting? And once it is interesting, how is that interest maintained? A Sound Mass is usually immediately interesting simply because of its complexity. It is an easy Composite to recognize. To maintain interest, however, requires that changes be made within that Sound Mass, giving the impression of change-within-stasis. And just like any change, the issues are: how often, how dynamically, and how, strategically, change is made. In a Sound Mass, the overall character of the music is unchanging, therefore changes within the Sound Mass must be relatively subtle and continuous. There is also the danger of disintegrating the Sound Mass image if relative density is not maintained (e.g., suddenly two players drop out). Sound Mass implies that everyone is playing all the time. Dynamic balance, or relative loudness among the players, is also an important factor. (Remember, a Sound Mass need not always be loud.) If a single player stands out above the others, a Sound Mass might be heard as a Solo/Support Composite, and the relationship among the players loses parity; the "outstanding" player may also imply or instigate the formation of a new Composite and completely different musical character. In free improvisation, this is fine; for the purposes of this exercise, however, the objective is to sustain the Sound Mass without changing the nature of the Composite.

Group Exercise #5: Grooves and Transitions

Instruction: Establish a "groove" (e.g., a rhythmic accompaniment or ground with or without a lead voice(s)) then make a Transition to a different "groove." Do this several times.

Discussion: This exercise focuses specifically on Transitions without specifying what kind of "groove" you are going from or to. A "groove" is simply a continuous rhythmic/metric Flow; the group plays in a common tempo, or possibly even a common meter. Recall the various Transition types discussed in Chapters 3 and 4: Sudden/Unexpected Segue; Pseudo-Cadential Segue; Climatic Segue; Feature Overlap; Feature Change; Fragmentation; and Internal Cadence. Any of these Transitions might be used. Transitions can also articulate combinations of different types (e.g., Pseudo-Cadential Segue with Feature Overlap). One improviser described a Transition as "Bait and Run," where one player sets up a direction, then as soon as the others follow, she/he immediately heads off in a different direction, leaving the others to adapt or ignore. A variation of this might be "Follow the Leader," in which one player determines the direction while the others follow, constantly adjusting to the leader's changes. So, a number of strategies might be used to make Transitions, but the strategy should always be appropriate to the moment, even if a sudden or surprising change. Each groove can be a different tempo, creating an interesting compositional problem to solve during the Transitions.

Group Exercise #6: Conducted

Instruction: One player conducts the others in a free improvisation.

Discussion: This is a fun exercise. Players can take turns being the conductor. The conductor cues the music with hand signals indicating who is to play when, what tempo there should be, if any, which players should play louder and which softer, how loud or soft the whole group should be, etc. Hand/body gestures can also signal certain "moods" or musical characters or certain textures. The group can even precompose a set of hand signals that cue specific things (e.g., a closed fist signifies a jagged, angular, staccato texture; a sweep of the arm signifies a change to a homophonic or chordal texture; two fingers held up signifies a duo; etc.) The number of hand signals possible is enormous, of course (look at the number and complexity of hand signals in baseball, for example).

It is the job of the conductor to suggest more than control. It should be remembered that egos are left at the door! The conductor must listen as a composer, nudging the music in a direction sometimes, changing the Flow drastically at others. The improvisation should express continuity, balance and sonic interest throughout. This is primarily the conductor's responsibility. Take turns being the conductor.

Group Exercise #7: Interaction

Instruction: Articulate as many different kinds of group interaction (Relational Functions/Composites) as possible.

Discussion: The reader will recall the seven Relational Functions/Composites: Solo, Ground, Support, Catalyst, Sound Mass, Dialogue, and Interpolation. The purpose of this exercise is to articulate each one of these at some point during the improvisation. The group may decide beforehand on a series of Relational Functions and combinations there of, or leave that to be decided in the moment. It would be interesting to try this exercise both ways and compare the results.

If not precomposed, what sequence of Composites was established? How long did the different Composites last? What kinds of Transitions were used when shifting from one Composite to the next? What instruments tended to express what Relational Functions, or were there any such associations? Was the resulting form of the improvisation coherent? How did the changes in Composites affect the overall form?

In completely free improvisations, where there are no instructions or restrictions, Relational Functions are automatically expressed and Composites are formed. Which Composites are formed will depend on the continuous unfolding of the Flow, and there is no limit on what Composite is formed when, though the music will imply this to a certain extent. In this exercise, the establishment of a number of different Composites is the focus; but again, there needs to be a sensitivity to the music to determine the nature and pace of such

change, and a sensitivity to continuity and balance, as always.

Group Exercise #8: Interpolation

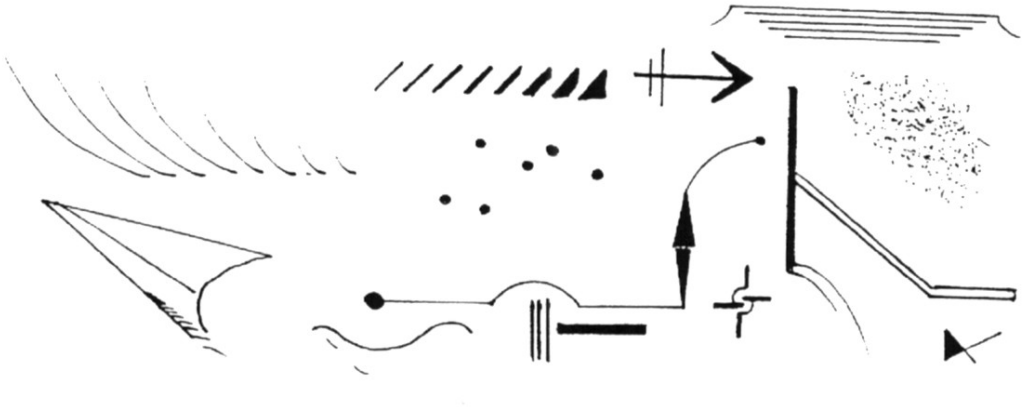
Instruction: Divide the group into two subgroups. (This can even be done with just two players, each considered a subgroup.) One subgroup begins a free improvisation and maintains a musical character. The other subgroup then Interpolates a completely different character periodically. The original character remains unchanged with the Interpolation, and the Interpolated character likewise remains autonomous. Throughout the improvisation, the first subgroup continues its original musical character. But each periodic Interpolation by the second subgroup should be different.

Discussion: The sense of Interpolation is the sense that two unrelated things are happening in the music at the same time. The tendency of one musical character to adapt to or assimilate another distinctly different musical character is strong. This exercise focuses on the ability to avoid that tendency and maintain autonomy between the two subgroups.

The musical character of the first subgroup should be relatively simple and easily identifiable. The different musical characters of the second, Interpolating, subgroup should likewise be relatively simple and identifiable. A "strength of purpose" is required to avoid mutual INFLUENCE. The musical character of the second subgroup should be quite different with each successive Interpolation.

Group Exercise #9: Graphic (Group)

Instruction: Improvise on this abstract graphic.



Discussion: The same issues as discussed in the solo graphic exercise are applicable here. The horizontal/ vertical matrix can be used; the graphic can be cut into strips or blocks; and extra-musical associations might be called upon.

Of course, the difference is that this exercise is for group improvisation. With two or more improvisers consulting the graphic, it is very likely that multiple strategies, including those the improvisers may create themselves, will be used because of the inherently subjective nature of a translation of such purely visual stimulus into music. Given this, two approaches can be taken: 1) it doesn't matter what strategies (ways of "reading" the graphic) or combinations of strategies are used; 2) a strategy is decided in advance; or a series of strategies is determined in advance for all improvisers in the group. Regardless of the strategy used, there will likely be little direct evidence of the impact of the graphic. That is, it will probably be difficult to listen to the music (assuming, for the improvisers, it was recorded) and deduce any direct link with the graphic, though sometimes this can happen. More often, the effect of a graphic on an otherwise free improvisation is

going to be quite subtle; yet the impact of the graphic is often audible in a general way. A good test of this is to do two improvisations, one completely free, and the other using a graphic. See if it seems as if the graphic had an impact on the second improvisation; and if so, how might it be described?

* * *

Designing Exercises

You may want to design your own improvisation exercises or "plans." Numerous approaches have been mentioned in the discussions of indeterminate compositions, chance compositions, graphic notation, "ancient" rules of practice, simple command statements (e.g., Oliveros), pictorial statements (e.g., Carroll), text (e.g. sound poets), and so on. Hence, there is a vast array of ways to "compose" improvisational music. Exercises are typically limited in scope and focused on something in particular. At the same time, as such, they are usually more accessible and easier to realize than complexities that venture into the realm of written composition. The idea of simplicity has been stressed as most effective when planning improvisations. Even longer performances can evolve from one or two simple ideas; an "exercise" can be used in an experimental way, but can also be adapted to a performance. So the composition of exercises and the composition of planned improvisation are much the same.

Attempting now to give a larger perspective of possible exercises, four different compositional "media" are suggested: Images, Text, Concepts, and Contexts. Of course, these media can overlap and be combined.

Images could be an abstract graphic (such as those above), a painting, a photograph, a real time painting, a sculpture, the movements of a dancer, TV sans sound, and so forth. This calls on our creative ability to assign and utilize "designative" meaning, to use Meyer's term; that is, the challenge of translating the meaning of the image into sound. Obviously, this "meaning of the image" can be anything, from highly personal (a photo of your dog, of yourself, etc.) to universal (a rose, the human body in motion, a live seascape, subatomic particle disintegration images, etc.).

Text could be in the form of a poem, a described image, a story, a described sound, a written instruction(s), a text phrase, a letter, fictitious language, etc. The reader will recall Pauline Oliveros' composition, "The Klickitat Ride" (Chapter 7) consisting of 108 instructions in 54 pairs of opposites -- e.g., "Make a familiar sound strange. Make a strange sound familiar." The possible sources of text potentially useful as a basis for free improvisation are nearly limitless -- dictionaries, instructional manuals, advertisements, graffiti, traffic signs, and on and on.

Concepts are, obviously, abstract ideas. A concept as the basis for a planned improvisation would be communicated verbally among the improvisers before playing. Concepts are as plentiful as images or text. The terms presented in Chapter 3, such as Dissociative Flow/Dissociative Polyphony (DF/DP), Relational and Linear Functions, are examples of somewhat general concepts. More specific examples would include imitation, inversion, blend and balance, only upper (or lower) register, various cause-and-effect instructions such as, "If she plays high, you play low." An example that incorporates elements of graphics and text as well as concepts would be a sequence of letters designating nonspecific performance gestures:

A - B - A - A' - B' - B - A' - C - B - A

Contexts consist primarily of the acoustics of a space and a particular instrument or instrumentation. This sounds very general and not appropriate for an exercise; however, both the acoustics of a space and the instrumentation can be very special ways to focus on free improvisation. You can listen for environments with special acoustic properties -- a place where music is not usually played -- and arrange to improvise there. An improviser can focus more specifically on the composition of improvisation through an exploration of an unfamiliar instrument, or an experimental instrument, or found objects. As mentioned before, found objects and experimental or original musical instruments provide a tremendous resource for free improvisation without requiring refined technique. Another example of Context is the number of improvisers in the group, their relative individual experience, and the relative familiarity of the musicians with one another. The mere limiting of the number of players in a group to something less than the whole group (e.g., trios within a quartet or quintet) is a very useful exercise in that it forces a group to "thin out," and the music will likely become more interactive.

APPENDIX C

SURVEY OF IMPROVISERS

Introduction

An understanding of what improvisers, themselves, think about the issues and circumstances of free improvisation is important to any investigation of its nature. Various improvisers have been quoted at times in the text. But this appendix presents a focus on comments by practicing improvisers about their concepts, attitudes and approaches to the music.

The subjects covered include many of the topics discussed in the text. It gives the reader an opportunity to hear about the diversity of opinions and strategies improvisers have and use. And it is a test, in a sense, of the validity or appropriateness of the concepts and information presented previously. The comments below were elicited via a survey questionnaire sent to a number of practicing improvisers in the United States (and one in Canada). The questionnaire requested simple written answers to some questions; more complex questions or issues were recorded verbally by the respondent on a blank cassette tape accompanying the questionnaire. A few respondents chose to write all of their answers; most utilized the tape. Tape recorded comments were transcribed verbatim, then edited and summarized for use in compiling this appendix.

This survey, which represents 20 respondents, is too small, of course, to be statistically significant in any way, and it was not meant to be so. Rather, an anecdotal approach was taken. Given the subjective nature of free improvisation, it was felt that tape recorded verbal answers would most readily allow respondents the flexibility and spontaneity needed and appropriate to addressing some of the more complex issues. (Note: An acknowledged flaw in this survey is the regrettably few number of female respondents (only 2 out of 20). This does not imply a ratio that exists in the practice -- there are many female improvisers and groups practicing today, though possibly fewer than the number of males. This survey was distributed by the author to improvisers known personally, and the limitations of expense prohibited a more cross-sectional accounting of the improvisation community within this country or throughout the world. Hence, the results of the survey discussed here should not be taken to statistically represent anything, but rather to expand the singular perspective of the author.)

Three other surveys of improvisers are of interest. C.F. Atton and Phillippe Renaud sent questionnaires to approximately 50 musicians and got responses from just under half. The results were published in Atton's article, "Some Answers to Some Questions about Improvised Music" (1988-89). Insightful comments are found in this article that supplement information presented here. Atton mentions a survey in Musics, Vol. 21 that addresses how improvisers actually practice. And in Musicworks, Vol. 38 (1987), the late Canadian sound poet b.p. nichol addressed improvisation in his article entitled "Ten Sound Poets on the Poetics of Sound." These are performers who deal as much with vocal sound as with text, per se, and their ideas about improvisation are thought-provoking. Some of these poets utilize improvisation a great deal, and others not. But each of them provides an insight into the uses and/or processes of improvisation.

* * *

IMPROVISER SURVEY

The individual improvisers surveyed appear in a list at the end of this appendix. Each is referenced by a number, which is used in the text below to identify the author of a comment. Along with the improviser's name is her/his age (at the time the questionnaire was completed), gender, professional (professed) occupation, instruments played, and number of years involved in free improvisation.

The questionnaire addressed seven basic areas: background information; definition/nature of free improvisation; style in free improvisation; solo versus group; use of instrumentation and technology; live performance versus recordings; and the significance or importance of free improvisation. Each topic is addressed individually, select comments by the improvisers surveyed are presented, and any overall consensus, or lack thereof, is discussed.

* * *

Defining Free Improvisation

Several respondents were unable or unwilling to actually define free improvisation, evidencing a genuine concern among some that defining a music as broad, open-ended and unpredictable as free improvisation unduly restricts understanding of it, perhaps even kills its spirit.

The idea of free improvisation might be beyond linguistic definition. The great Miles Davis once said, 'I'll play it and tell you what it is later.' That's what free improvisation is. It's self-defining in action. (1)

Other improvisers warn that defining free improvisation is "a dangerous thing..., because as soon as you define something..., it kind of dies on the page ... free improvisation is something that cannot be defined." (2) "Everyone has some sort of background..., and so the question is, is it truly free if you're bringing some sort of knowledge to the experience?" (13) "We have to figure out a way to define free improvisation in such a way as to not really pin it down, since it is like music itself -- it's always evolving and changing." (1) "I try not to define free improvisation because ... any form of improvisation isn't really free.... I don't define it, but I sometimes use it." (6) This same respondent also said, however, "free improvisation to me usually means an improvisation that's outside of any known and systematized tradition of improvisation," and within the jazz tradition, "improvisation... without chord changes" might be considered free improvisation.

One respondent points out the objectifying nature of attempting to define free improvisation: "it's an idea that people can talk about more than they can do, because it's an ideal." (10) But within this ideal, what is truly free about free improvisation?

To me, free improvisation is the immediate presentation of music including all or any kind of sounds which are created via an instrument, the body or any devices or objects which may be at hand. Free improvisation is the tapping of resources within one's psyche... (18)

In my experience, it is the capacity to allow a stream of consciousness to take place for oneself, either solo or in a group. (20)

One respondent offers a succinct definition of free improvisation as:

a contextually ordered, spontaneous instrumental exercise in which the formal constraints derive from the process of performing, rather than having been fixed in advance. (12)

This respondent makes reference to similar "exercises" in literature.

it seems to me to be in a line with various sorts of literary exercise ... the sagas of the bards, the last chapter of James Joyce's Ulysses, and Yeats' exercises in automatic writing. (12)

I would define free improvisation as any activity that is performed without reliance on preconceived structures, restrictions, intentions, directions, notions of good or bad, or ideas concerning the final outcome. (16)

* * *

Describing Free Improvisation

Although some of the improvisers surveyed could not or would not attempt to define free improvisation, each was willing to describe it in some way, pointing out certain characteristics that collectively point to its fundamental nature. Particular ideas arose within these efforts to describe key characteristics of free improvisation.

Originality: "it hasn't been played before... it sounds fresh;" (1) "it should start off as a personal experience;" (14) "the improvisation itself creates a language that is, in a sense, a definition of something;" (6) "no preconception of what you [are] going to do;" (7) "improvisation in which anything can happen... not limited by constraining factors such as style;" (8) "It is free-fall, a leap into the abyss;" (16) "improvisation which is devoid of received stylistic elements;" (10) "even the larger formal things, such as alterations of solos and tutties [whole group], would be something that were sensed at the moment rather than sketched out." (12)

Spontaneity: "it's totally spontaneous, made up on the spot;" (14) "being in the moment..., the music has a life of its own, and that life is seriously threatened by players not being in the moment;" (3); "the spontaneous creation of audible music rendered from thought;" (4) "places great emphasis on the inspiration of the moment;" (5) "a spontaneous oral exercise;" (12) "a personal expression and exercise;" (14) "that ability to associate on the spur of the moment;" (7) "sometimes it really does feel like you're being guided by some other force, or that you can only do what you must do at a certain moment;" (3) "other forces are at work there that we don't totally understand;" (9) "It should be constantly surprising to everyone, especially yourself;" (16) "you really need to have a clear head and not think about what you know, unless the music takes on a certain direction where your knowledge would apply;" (14) "I like the term that has been used before, 'spontaneous composition'... [but] I don't know if total spontaneity is possible." (11)

Communication: "instantaneous communication... it's basically dialogue, communication;" (7)

[Free improvisation is] more a conversation than... a recitation... more a reflection/interaction ... than it is an adherence to predetermined parameters... (2)

what's exciting about it is the sense of interaction and all the different ways dialogue can happen, and all the different new things that can arise out of this dialogue. (19)

everybody is listening to everything that's going on, not just their own playing." (9)

You're listening for communication. You want to hear acknowledgement, something in the playing acknowledges the contribution of someone else. (11)

it certainly can be likened to conversation, discussion, monologue, someone who tells a story and makes it up as they go along. (20)

Absence of ego: "I've always played with a mind toward erasing the mind." (3)

My search is for essence of Universal Music, and I think free improvisation is a definite tool to attain Universal Music... I personally think free improvisation is a state of grace -- the perfect condition of creation. At one, with one." (1)

With solo [improvisation], you have to listen ... to what you're doing and try not to think. How do you try not to think? (18)

[Group improvisation] involves a lot more sublimation of the ego, which is about the most difficult thing to do, because you can't will it; you have to not will it. (3)

Often the process of free improvisation is described as something almost independent of the player(s); the music seems to form itself from itself, unfolding, as it were, over time.

it's based on the right brain process. It's intuitive. It's letting the music play itself to some degree... Also the process involves being present in the moment. A certain amount of psychic receptivity is involved... (15)

somehow, the sound has a life of it's own. (18)

In fact, instruments may be modified or built to enhance this sensation.

I try to build that [quality of surprise] into my electronic instruments so that ... it has some of that dialectical quality or that dialogue quality ... [in which] the instrument can do surprising things and lead me in directions I didn't foresee. (19)

As Working Out Material:

personally, free improvisation really means composing my work, having a lot of different utilities and sounds, and just tools around me to work with while I'm working on a particular piece. For example, just twisting knobs, pulling strings, whatever at the moment I feel needs to be done to be put into this piece. (17)

improvisation's role in a general array or process of composition ... is more that it's a crucible... therefore it's pre-composition, or proto-composition in that it's the first stages of composition... let's say, 'embryonic composition.' (20)

Relationship to Composition

As just mentioned above, improvisation can represent a process of working out compositional material. Whether the end product will be a completely composed piece of written music or a "partially composed" (chance, indeterminate or improvisational) piece, the actual composition process involves trying things out. Beyond this, however, the relationship of improvisation to composition is always subject to debate.

When asked the question, "Do you think of improvisation as a form of composition?" almost every respondent answered "Yes." Of course, most of these answers were qualified by further commentary.

"Silent free improv is known as composition." (4)

I think improvisation and composition are too often presented as some sort of grim dichotomy. Certainly composition arises out of playing around with sounds, i.e. improvising... I like to use the word premeditation... when there is some pre-selection or prior decision about how this piece might proceed. 'Memory composition' is another phrase I sometimes use to describe a structured improvisation. (5)

Another respondent describes a distinction between "improvisational thought" and "compositional thought," both of which are components of free improvisation:

there is a music that one makes without thought and without a kind of consciousness, and I would call that improvisational. Compositional thought is when one hears something and reacts to it..., you think, 'Here's a good thing to play. It will go along with what I'm hearing'... Anytime that kind of thinking happens, that's compositional thinking. Improvisational being is simply when... those thoughts are not going through your head. (8)

But this same respondent cautions, "there's consciousness and unconsciousness operating together in a way that's ... beyond anyone's power to really separate..." (8) As a conscious element, it may be the intention of the improviser, before the performance, to use certain known elements.

A lot of times in free improvisation... I do have a fairly clear head about playing a riff or a rhythm and then reacting to that, to get myself going. (13)

However, most often, these decisions are made spontaneously in response to the moment. Indeed, some free improvisers feel that precomposition can actually get in the way.

I think [precomposition is] a kind of a jinx, either in solo or in group improv. It's kind of anti-improv. You only want to think a couple of notes ahead of what you're playing, and you have to constantly be listening in group improv. So a preconceived or precomposed idea shuts you off from reacting spontaneously..." (11)

One improviser thinks of improvisation as

a form of inadvertent music... The word 'compose' means to put things together. And when you improvise, sometimes you're improvising to take things apart... But inadvertently, if music results, then, after the fact, it becomes a composition. (1)

As mentioned before, pre-composition of some aspect of an improvisation can, and should, be quite simple -- a statement or two requiring no rehearsal, possibly made up on-the-spot just before a performance can work (though at times it can also get in the way).

Oddly, some of the more successful times I've played with groups -- with and without an audience -- was when there was a very short, yet clear, verbal discussion just before we play about what direction the music might take..., so that that feeling was in the air among everybody in the group. (3)

* * *

Role of Pre-existent Styles in Free Improvisation

The improvisers surveyed comment on the complexities of style within free improvisation. For some, style is something to avoid if possible; for others, it is a key ingredient of their music, albeit normally used in some non-traditional way. All can agree, however, that style is an inevitable and important issue in free improvisation, whether it serves one's purposes or threatens the improvisation.

For me, this is deeply rich... I love pre-existing styles. I steal, I borrow, I might barter... I take what I can, what suggests itself to me, what's relevant to music that's going on in my mind at the time. (20)

[pre-existing styles] play a big role, because previous experience becomes encoded in the hands or body... (15)

Sometimes [style] will just pop out of a player spontaneously. At other times, it may be injected in order to cause a certain effect. (18)

If one is going to play freely, then everything one has played before, everything one has thought musically before will be part of the bank that one draws from. To that extent, you cannot escape stylistic reference. And yet if one decides there is a style, even a free improvisational style, then that limits the concept of free improvisation. (12)

If it's a solo improvisation, the use of an idiom is more of a commentary. There is something in that pre-existing style that communicates certain cultural information to the listener... In group free improvisation, pre-existing styles played by one member of the group would be a signpost or a rallying point... with which to show some contrast in styles for satirical effect or some kind of social commentary. (11)

just by listening to an album of a particular artist... I may be inspired by that album and find myself doing things, which I've been thinking about, that have characteristics of what I was just listening to... [and] I'll use a combination of a couple of different people who manipulate guitar sounds. (17)

I do stylistic borrowings all the time, and I enjoy them, because I like the music that I've heard in my history so much that I like to reproduce it. And I have no ambitions regarding originality... But in a certain sense, it goes against the ideal of free improvisation. (10)

The latter quote is a more than slightly humble statement by a very original musician, who is both a professional guitarist/singer and experimental instrument designer/builder, as well as writer/editor. The use of styles is certainly not antithetical to free improvisation.

General "themes" appear in the comments of improvisers on the subject of style.

Absence/Transcendence of style.

I think free improvisation has to be free of all stylistic considerations. However, in freely improvising, it's absolutely alright if a style of music inadvertently just pops up... true free improvisation should be beyond style; it should transcend style. (1)

possibilities are opened up simply by working with the idea of avoiding style, as long as one is aware that to do so is paradoxically stylistic, too... (8)

I think that improvisation benefits by all of the influences and technique and traditions that one brings to it, but that it really retains its improvisational character. Then it basically is being free, achieving free. (6)

There are many situations where the music does become horizontal or abstract, because you're pushing some sort of envelope of trying to leave [style] out. (13)

there's a more subtle way style can be involved, just being the training of the players... [but] it's problematical. Sometimes that's a real limitation, you can hear the player's fingers taking over..., patterns that they are just bringing in unconsciously from their playing in some particular style. But other times it can

be a real strength. (19)

Sound precedence over style. The instrument itself is often the most immediate source of inspiration within free improvisation. The sound itself implies musical directions which can then take on characteristics possibly associated with style, or a particular style. Several of the improvisers surveyed design and build their own instruments. In such cases, the sound of the instrument is likely to be somewhat unique and thus carry a level of interest on its own, though ultimately, of course, the music that arises from these sounds is the purpose of the instrument.

My improvisation is based on sound, the sound of the instrument I'm playing, whatever instrument it is. I'm trying to improvise in such a way as to release the voices, the music of each instrument I play. (1)

basically, we play the influences that we have in us, but filtered through the instruments, and the instruments kind of dictate which way the music's going to go. It's always a constant interplay between how you react to the instrument, what the instrument gives you back, and you're working off the feedback of that. And then we just take whatever elements from "traditional music" that we need to give it a shape... And that's what I consider style in improvisation. (7)

Among instrument designers and people that are playing nonconventional instruments, [use of pre-existing styles is] not quite as apparent [as on conventional instruments]. Unless you were to know and have heard that person playing for quite a while, a pre-existing style would not be recognized. (9)

Style as a starting point. Stylistic features are immediately recognizable by those familiar with the particular style. Only small portions or elements of the style (style signs) are necessary to cause a mental association in the listener. Improvisers can utilize -- in isolation and out of context -- certain style signs that can not only immediately draw the attention of the audience (and set up certain expectations to either fulfill or deny), but can also function as a starting point for the improvisers themselves; a "springboard," in a sense.

as "Bub," [name of group] that's a big, big, big part [of] how we identify things to each other... But I don't think that necessarily is a key element in free improvisation... it's a launching point... (14)

It's my mother tongue... It's probably my first language, not only music but also a tonal style of 19th Century [and] early 20th Century... And this is the reservoir from which I get many of my ideas. Often they're harmonic ideas. (20)

I think very fondly about old time electronic music, music from the 50's and 60's, this kind of classical electronic music sound..., and I think my electronic sound has a lot of... historical reference to that era, and I really want to sort of pay homage to that era in a way and use that sound, that quality. (19)

Style as communication device. In the context of free improvisation, style functions as a sign in terms of communication. Associations with that sign can bring forth expectations among improvisers in a group that will usually stimulate some change. And whether a style sign or style semblance, the audience listener will also be affected.

Style to me is language, vocabulary. You can't communicate without a vocabulary. So we are always working with (or extending) pre-existent vocabulary (style). If it seems that free improvisation is non-idiomatic, it is simply that we are so submerged in the dominant idiom (i.e., the Western European classical tradition...) (5)

utilizing pre-existing styles is an extraordinarily effective way of affecting perception and cognition. It's affecting your listener on a deeper, more internalized level. The reason is that there are certain expectations that go with any pre-existing style, and by first utilizing those styles, you've created in the minds of your listeners expectations of what you're going to do next... Then by betraying these expectations, you've created a situation where rather than the listener just simply listening to sounds, they're trying to deal with the fact that you're taking what they are expecting... away from them. (2)

use of styles, use of reference points is very charged. When you leave the abstract and come down with something specific, that can really change the whole way that the hearing is working. (8)

Style as Parody/Irony. It is an accepted practice within free improvisation to parody various styles (a form of style semblance), though this is a more literal or theatrical, less abstract, approach to free association. Once a style has been strongly implied -- this in itself can be startling when expectations are so open -- attention shifts toward how it will be manipulated, contorted, deconstructed, collaged, or otherwise changed.

In my experience, there are two approaches to using pre-existing styles in the music, which sort of define each other. One is non-ironic use, and the other is ironic use... the ironic sense... is a theatrical sense, where the use of the music calls attention to itself, calls attention to the style very much and the dislocation aspect of using a certain style alongside another style..., where you have two different things going on at the same time or more, can be a very useful theatrical element. It can also be quite interesting musically. (3)

A lot of players really have that as their ability to mimic styles as one part of their language. I don't myself, feel like I use this that much. (6)

I love most of the existing musical languages too much not to try to incorporate them into what I do... we end up using genre as a form of release following a period of tension from more abstract playing. It also frequently serves to inject a little humor into the proceedings for us, and ... makes the music a little more user-friendly for the audience. (16)

I generally use [pre-existing styles] to be a smart ass, which is also a way of signalling something, giving a cue, contrast to what's going on, sarcasm, and using it as a color. (11)

Sometimes, in a concert of several improvisations, one might be selected as a "humorous" piece or as social or political satire.

sometimes we will try to do things based on our version of a particular type of music. And occasionally we'll actually try to do covers, where someone will sing the lyrics to a song, but the music to it will bear very little resemblance to what the song was about ... we will even cop a melodic theme. We'll actually try to do like a Beatles tune or a Pink Floyd tune or something like that... it's more like taking a vocal style and laying it over what we do, as opposed to trying to actually play those changes in a traditional way. (7)

Non-western instruments, whether ethnic or experimental, can imply stylistic elements whether the player intends this or not.

In my own playing I work to avoid stylistic parodies. However, soloing on a number of my own single-string instruments frequently draws on single-string instrument styles from all over the world (e.g., one-string guitar, mouth bow, diddley bow, berimbau, gopychand, etc.). (5)

One of the improvisers surveyed reported a truly unique and interesting practice of free improvisation that reverently and sincerely employs stylistic "parody." A concert of free improvisation moves through stylistic eras:

I slide along the chronology line in such a way that I begin with playing something that sounds a little bit like Bach; I move to where... it sounds like early Beethoven; it goes into Grieg; it goes into Mahler; I begin to chromaticize; and sure enough, I have a chronological trip in which I have spanned a hundred to two hundred years of harmonic usage. I suppose it's like speaking in a very, very simple way and gradually inflecting and elaborating on your language until you are speaking poetry. (20)

This improviser does not parody in the usual sense of that word, but rather absorbs an essence of a style and then allows that influence to irrupt.

it's not just nondescript language, 'babbling' in 19th Century style. I sit down and play Schumann, and if I'm ripe for composition at a certain time, I will play Schumann as though I were a prospector panning through a river and trying to sift out material until I find nuggets of gold. (20)

Style Characteristics of Free Improvisation. The reader will recall aspects of style in free improvisation that were characteristic of the particular improviser or group, and which seemed to be indigenous to the "language" of free improvisation. Improvisers were asked what role pre-existent style plays in free

improvisation, and in their own playing. It appears some are intentional in how they use styles, while others deny any consciousness of style whatsoever.

What, then, seems particularly characteristic about the use of style in free improvisation as improvisers see it?

if I get to the point where I know what's going to happen ten seconds down the road, then I feel that what's going on is pastiche rather than free improvisation, and I'll try to move away from it... the idea of style should be something that is constantly changing. (12)

something that's very common in practice of free improvisation is little phrases often that you could identify as being of a style. Other times, other groups are less shy about, say, jumping into a march. (8)

Two styles are of interest here - the style of playing an instrument as well as the style of composing... style models the interpretation of a subject, therefore the emotional value of the piece. (4)

I think that every individual player has their own style, no matter what, especially when they're solo. And when you start putting those personal styles together in a very natural way, then that's when things happen, positive things happen... (13)

There's thirty years of history in this area of free improv or free jazz, and so it itself could be said to be a pre-existent style. Certainly in terms of the saxophone... a readily recognizable language [is] associated with this kind of music. (16)

Some improvisers remark that style will enter into a free improvisation one way or another, intentionally or unintentionally, consciously or subconsciously -- that is, that style in one form or another is inevitable.

I think pre-existing styles -- all the styles that a player knows -- enter into a free improvisation just by necessity. In fact, we're not starting from nothing. None of us start from nothing, and what we play winds up being a reflection of what we know. (6)

we're all influenced by our environment, and we are constantly aware of all these different musical idioms that exist. So I think that, even subconsciously, that filters into your music. (7)

Davey Williams' phrase "pan-idiomatic" much more clearly fits the sort of free reign over stylistic reference that often is the substance of much contemporary improvising (e.g., Chadbourne or Jon Rose). (5)

Finally, one of the questions asked of improvisers was a multiple choice: "Which term best describes free improvisation: a style; a process; a genre; or a scene?" The vast majority considered process the most appropriate answer. Not one respondent said it was a style in itself. One of the improvisers ordered the choices stating, "The process becomes a style, which becomes a genre, which can become a scene." (4) One respondent warns against applying such terms to free improvisation: "To reduce it to a codified style, genre, or scene would be to effectively kill it as a viable form... (16) Another stated, "The term 'style,' I think, is a problem." (12) But he goes on to qualify the other choices according to perspective:

From the point of view of the performer, I think it's a process. From the point of view of the auditor, a scene. From the point of view of the music critic, it may or may not be a genre, depending on their orientation. (12)

* * *

Solo versus Group Free Improvisation

Improvisers were asked to describe the difference between solo free improvisation and group free improvisation. They were also asked which they considered more difficult, which they preferred, and why.

Respondents were almost equally divided in their opinions whether group improvisation or solo is more difficult. At the same time, the majority preferred group improvisation over solo.

Comments on the differences between solo and group free improvisation give a good indication of the communicative and interactive aspects of free improvisation. They also attest to pre-compositional thinking in

solo improvisation and certain necessary social attitudes in group improvisation. Again, particular "themes" come to light examining this aspect of free improvisation.

Differences between solo and group improvisation. Though the differences between solo and group improvisation are obvious on the surface, improvisers' comments shed light on the nature of these differences. Of those surveyed, 60% (12 out of 20) preferred group, while only 10% (2 out of 20) preferred solo. On the other hand, in terms of difficulty, improvisers were nearly evenly divided: 30% (6 out of 20) considered solo more difficult, and 35% (7 out of 20) considered group more difficult. (At the same time, several responses were either both or non-responses, 6 (30%) regarding preference and 7 (35%) regarding relative difficulty. A diversity of opinion is evident about both issues, yet all agree that there are important differences.

I'd say the difference is counterpoint. When I improvise on my own, I refer back to what I've done, and I anticipate forward to what I'm going to do... So, I'm sort of in 'temporal counterpoint'... Whereas, with group improvisation, I am in direct and immediate counterpoint with what these other people are doing at the time, and we are playing off each other... through impulse... It's chamber music of a very deep kind... (20)

I think [solo improvising is] one of the most wonderful ways of discovering things about your instrument and yourself... when you are improvising by yourself, it's a much more open forum. You're not being influenced by any other players that might hinder you or change your directions... It's something that ... every player should do... (14)

[solo improvising] allows me to have the kind of quality and the kind of commitment that I really want with music... [But] playing with other people is really much more exciting, because there's much more [an] element of unpredictableness... (15)

Two totally different worlds, as far as I'm concerned. I do a lot of solo free improvisation, working at home on tapes. And that's a completely different process for me... it's a completely different atmosphere and a different feeling altogether... (17)

Giving up control in group improvisation. Improvisers in a group each follow the musical implications of the Flow as they each hear it, and thus can alter the Flow at any time but not completely control it. "In group free improvisation... you can't really impose your ideas... You absolutely have to give up personal agenda." (1)

Control is a big issue in free improvisation, because if you are trying to control something or someone else is trying to control something in a free improvisation, it can't work. The attempt to control free improvisation annihilates the existence of the improvisation as being free... a process usually takes place within an individual [and] as they go on in the experience of free improvisation, they learn how to let go or else! (18)

Group interaction. Most improvisers preferred group improvisation. The interactive aspect of the process seems to be the dominant reason for this.

I find group preferable and most exciting because ... I like the surprise of seeing the ways in which my playing impinges on other people and the sorts of things that are fed back to me for me to build on. (12)

The group thing is more about dialogue, and really listening to one another. The solo thing is basically going off in any direction... I prefer group improvisation. I like the interaction. And I like the fact that you're more readily surprised, because you don't really know what someone else will do. The music can take off in a different direction that you hadn't visualized... But you have to find the right group in order for that to work. (7)

When you hear another person play something, you always have at least three clear choices: play something complementary to it, play something non-complementary, or opposed to it, or ignore it altogether and play whatever you want... there's endless degrees and shades of those options to be explored. (16)

Respondent (2) has produced several cassettes of free improvisation in which he mails a blank tape to another improviser, who then records one track of improvisation and returns the tape (as mentioned in Chapter 6). At that point, he records an improvisation on the second track as he listens to the first track.

Sometimes he records the first track and his correspondent improviser records the second track. This he calls "mail collaboration." It presents a hybrid situation because, as the one recording the first track,

you're doing a solo improvisation, but keeping in mind intentionally leaving space for collaboration. You're not interacting with the other person, you're interacting with the concept that another person is going to be there later... It's a very different experience. (2)

Interpersonal relationships. Interaction (communication) in free improvisation groups can, and often does, extend into personal lives and particular interpersonal relationships among members of a group. Though not specifically a musical issue, this relationship is probably as important as the ensemble relationships developed in performance, if not more so. There needs to be a high level of trust within a free improvisation group, and that trust stems from personal as well as musical interactions; it supports a psychic level of communication.

The music can affect friendships, it can affect how we think of each other... It's all part of the whole development of the individual as a social being. That's a real important aspect to group improvisation, and one that makes it very complex. And it would seem to be extramusical -- how we get along with each other, how we feel about each other -- it's all worked out in group improvisation. (8)

It's like playing basketball, it's fun. (10)

Group improv ... is about community and relationships. You are playing in relation to other people, listening to the whole and constantly making choices accordingly. (16)

each person brings to the group their own history, their own memory, their own psychological crosses and their own emotion... we're all complex beings, so if you've had a bad day or a bad year, or a bad life... that'll come up, as well as any positive feelings... So you really get both sides... When you're improvising in a group..., it's a communal give-and-take. (18)

Interaction within solo improvisation. Normally, an unaccompanied solo (improvisation or not) might be thought to have no possibility of "interaction," since there is only one player. However, as mentioned before, a single player can produce sound (sometimes with the aid of electronics) that gives the impression of more than one instrument or musician (i.e. more than one "voice"). But beyond this, a single line instrument can easily give the impression of two (or more) "voices," normally through timbral/articulation identity. And there is also the interaction between the player and the instrument (which may be to say an interaction between the Intellect and the Intelligent Body).

I can sort of predict what I'm going to do [in solo improvisation], how I'm going to work against myself... (17)

you're really interacting with yourself and your instrument, your audience if there is one, the reverberative qualities of the room you're in. You're also interacting with your moods and your past experiences. No matter what you do, it's interaction. (2)

what makes any kind of ... improvised music that involves a group especially interesting is that there is dialogue and there is interaction. And basically, as an observer or an audience to this kind of music, the most exciting thing is to see compositional ideas, improvisational ideas develop as they bounce back and forth between two people... With a solo piece, you've got to be responsible for creating the whole dialogue yourself. (6)

even when you're playing solo, it still is a counterpoint; you're playing a counterpoint to your memory. (8)

Some respondents commented on the linguistic nature of improvisation, pointing out the distinguishing ability to "talk" and "listen" at the same time that is characteristic of free improvisation.

it's related, I think, to conversation of a type... One of the... main differences is that both participants in the dialogue can talk -- that is to say, play -- at the same time and still listen, which usually doesn't happen with speech... Players are playing and listening at the same time. That's the art. So there is an instantaneous feedback of ideas from player to player. (6)

Compositional nature of solo improvising. Improvisers were asked if they "tend to precompose solo

performances of improvisation more than group performances," and the vast majority replied "Yes." It is evident that free improvisers consider themselves in some sense composers. Though the differences between written composition and free improvisation may be more obvious than the similarities, the similarities are more significant.

In solo improv, you're free to follow one thought all the way through and put your own spin on it as far as emotion and intellectual structuring go. In an uninterrupted way, it truly is stream-of-consciousness. (11)

in solo, you're actually free to do more intellectualizing, thinking, instantaneous composing on the spot... you can appear to be playing free improvisation when you actually aren't. And you can come up with something that sounds, to an outside observer, like a free improvisation when it actually isn't. (1)

the choices you have in solo performance are starting by defining for yourself a 'how,' and seeing where that leads, or defining for yourself some sort of goal, some sort of 'where' to get to, and seeing how one may choose to get there. (12)

compositional ... thoughts that enter the improvisation are going to be sequential, rather than simultaneous, when you're playing by yourself. (8)

I will draw synchronous flow charts, one for each sound source, to diagram where improv sections will go in recordings and compositions. I've also looked to such things as variations in wood-grain, skylines, surf, etc. to provide envirokinetic graphic notation in both types of group situations (partners human or non). (4)

I don't want to be standing out there with my pants around my ankles, so to speak... In a solo situation, I like to have something to fall back on if it ain't happening. (16)

Solos within group improvisation.

There are obviously two circumstances of solo playing in free improvisation: unaccompanied solos and solos within group improvisation. The challenge of free improvising an unaccompanied solo is enormous; and to free improvise a whole solo concert is a feat. Solos within group improvisation, on the other hand, are commonplace, and can rely, formally at least, on the musical context provided by the other players in preparation for the solo. One improviser commented:

I personally like group improvisations that ... explore the situation where everybody's playing at once, but also ones in which there is room for individuals to develop solos that then are commented on or extended by the next person doing a solo... (6)

Instrumental and Technological Resources

Improvisers were asked whether or not they utilize "extended techniques," preparations or modifications of their instruments, experimental or ethnic instruments, electronic processing, and multimedia in their performances. Again, some respondents make their own instruments, so issues of "extended technique" and preparation or modification of the instrument are somewhat moot since they are included in the experimental/ explorational process that normally happens with such instruments. (But for the purposes here, instrument makers are assumed to use both "extended technique" and preparations/modifications of their instruments.)

It is interesting to look at the answers statistically (though, again, the sample is too small to establish any statistical significance).

100% reported using "extended techniques."

80% use preparation/modification of instruments.

90% use experimental or ethnic instruments. (Note: This does not mean that these improvisers do not play traditional western instruments; it means they use experimental or ethnic instruments to some extent, in some cases all the time, but in most cases not.)

75% use some form of electronic processing.

And only 30% utilize multimedia.

Almost any sound can be used:

My interest is in being a master of sounds, a 'sound wizard.'" (1)

to me, anything that produces sound is an instrument... I did a performance with Halim El Dab this spring where ... between the two of us we played 30 some odd instruments, and no two were from the same culture. (2)

I'll play along with storms, animal calls, passing trains, empty factories... (4)

I use a lot of trashy things that I like to make sound good -- various pots and pans, things like that... I have a love for kitchen stuff in percussion. (17)

whatever it takes -- I think about those words -- 'whatever it takes' to get across something. (14)

Extended techniques:

It is important to note that what is non-traditional technique in the European classical mode is often traditional in other cultures... (5)

[the] overtone series of odd partials [in the clarinet family] leaves portions of the instrument that have unusual tunings ... so that there are areas of the instrument which are not exploited in traditional Western music, which open up a number of possibilities for improvisation (12)

[Extended techniques] is really a big part of the fun of free improvisation. Since you're not following a prepared score or improvising in idioms, we have endless possibilities. (18)

What I like is an improvisation that can move fluidly between 'extended' and 'non-extended' (if there is such a thing) techniques on an instrument. Fluidity is really what I'm after at this point. (6)

'Extended technique' doesn't mean 'no preconception.' It means that you've heard a sound and/or rhythm in your mind, and you're trying to achieve it on your instrument, even if that instrument isn't known for that. (13)

Electronics

I do a lot of work with CD's now, where I'll also be playing the CD player, using the fast forward and rewind buttons. It's sort of like a manual sampling effect, where you can form like a manual loop... I'm real fond of a lot of reverb on certain instruments. I use a harmonizer a lot... I also do a lot of work on the MacIntosh computer... (17)

What interests me is trying to create sounds that are unique without resorting to electronic manipulation or synthesis. (7)

I've heard some really atrocious misuses of [electronic processing]... (13)

I'm not interested in extensive processing... I have a preference for what I call 'natural sounds,' which is just a way of limiting myself, I suppose. (8)

Electronic processing is the last step in my thought process... I like to look at that more as kind of dressing, rather than the main focus... You have to do your homework around electronics. (14)

Ethnic Instruments

I do collect and play ethnic instruments, as many as I can get my hands on. (11)

once you experience these other ethnic instruments and the neat sounds they make, it makes you want to try to nurse them out of your own instrument. (13)

It is interesting to note that while the exploration of sound, and thus techniques on instruments, can be extensive in free improvisation, there is acknowledgement of the value of traditional training and discipline.

I've been very influenced by the practice of a martial art, Aikido, which has shown me that a very traditional approach to learning can be very powerful. And an emphasis on starting at the beginning, having a good, strong teacher, and learning very basic techniques in that martial art has made me go back to basic techniques on the trumpet. As a result, my playing is a lot stronger, and it's a lot more satisfying. (3)

I have training in Chinese music, and I have training in Japanese music. I've studied various instruments from both cultures, and I've studied the traditional forms. I've learned to read the music... I've also studied psychology... [and] many other things that people would consider to be outside of music, but which I consider to be very much a part of the music that I do. (2)

Free improvisation has nothing, necessarily, to do with multimedia, but improvised music can be heard in some multimedia productions today. A number of free improvisers surveyed use or have used multimedia (30%). Where instruments that are sculptural in appearance are used (as some experimental/original instruments are), of course, the visual interest of the performance is already heightened. Add to this the "dance" of improvising musicians as they play these strange instruments, and there is a mixture of media that is integrated through the necessities of visual image and instrumental technique articulated in real time.

In a sense, music is multimedia ... because in a performance you're inevitably combining the visual and the sonic. (2)

It's very satisfying to collaborate across forms, but if you're really seriously concentrating in your form, you don't need anything else. (11)

One improviser uses costumes,

in an attempt to become even more distant from the audience, more mysterious, and evoke some kind of other worldly being. (8)

Another has produced dance pieces with musicians and large instruments and sound installations on stage.

we had the stage strung with wire going up into the lighting grid that was amplified. We had this giant hamster wheel that was like a big music box; it was seven foot in diameter. The dancer would get inside of it, and as they moved it, the strings would run against a paintbrush, and there'd be a little guitar amplifier, so it'd create this sound. (7)

Some improvisation groups utilize multimedia as a key element of their performances. This not only can provide a non-musical stimulus to which the musicians react spontaneously, multimedia also extends the potential number of "meanings" an audience might perceive (no one of which was necessarily intended). Indeed, in such theatrical circumstances, the audience might become involved in the performance. This is a tremendous challenge!

The Philosophers included a lot of multimedia. We were a free improvising group which really went into realms of theater, and we would include the audience. Or rather, they somehow felt free to include themselves, and of course they were welcome. (18)

* * *

Instrumental Technique/Virtuosity

A good deal of free improvisation involves some highly technical, even virtuosic instrumental performance. Free improvisation that has strong associations with rock or jazz, in particular, is often complex in texture due to instrumental displays of stylistically typical rapid passages and use of extreme registers. The place of virtuosity, or at least an accomplished instrumental technique, in free improvisation was addressed in the questionnaire. Most respondents had difficulty with the idea of "virtuosity" for one reason or another, the vagueness of its meaning, its shallowness or egoistic qualities, etc., yet almost everyone commented on the

importance of instrumental facility. Others brought up the idea of a virtuosity of composition or group interaction rather than instrumental technique. Several improvisers felt that instrumental technique is sufficient if not allowed to get in the way.

Instrumental technique and virtuosity are, I believe, quite important in making mature music. But not essential!... you have to have enough technique at your disposal to do what you want to do, to make the music you want to make... In free music, you have to develop your own language, your own techniques. The more you have at your disposal, the more versatile you can be. (16)

I would say virtuosity is a virtue in free improvisation, but it's not necessary to attain music. (1)

You could call a virtuoso somebody who can utilize technique to a brilliant end... But in a sense, that can take away quite a lot from the music. If you focus that much on the technique, then you're not as focused on the expression, the emotion. And that can completely destroy the element that makes music interesting to a lot of people. So, it's a matter of semantics... (2)

I find that the better I am as a pianist, the better I improvise, for the very simple reason that it's more beautiful sounding. I can get a greater range of touch..., pressure..., color..., velocity... And what ends up happening is... the sensuality of it is just more beautiful. (20)

if we can separate virtuosity as an end in itself from facility, then I would say we can do away with virtuosity, but facility certainly benefits the player and the listener. (10)

a word I might use instead of 'virtuosity' would be the word 'talent'... desire is part of talent; technical ability is a certain part of talent. And it's also whether the listener feels compelled to be involved. (13)

You can't help but be dazzled by someone that has mastered their instrument... certain kinds of players that are virtuosos are impressive when you play with them..., so you tend to want to excel also. (9)

I'm looking for every possible technique to get ideas across... [But] As a listener to free improv, I'm not concerned about technique at all. I just want to hear the ideas and the emotion. (11)

Instrumental technique, I think, is not at all important except to the individual performer. If one allows that one's able to say what one wants to say within the span of one's technique, then one has sufficient virtuosity for the message one wants to deliver... Technique in improvisation is enough equivalent to musicality that I think it should disappear. (12)

In free improvisation, the instrument is not only a tool to make sound, it is to some a spirit with a voice, and it is the improviser's job to let this voice speak clearly and freely, whether this is called "virtuosity" or not.

I think mastery of an instrument is essential before you can really be free to express the spirit of the instrument... mastery of the instrument is essential to take the instrument further than it's been before. (1)

one of the primary things about improvising, for me, has always been somewhat technical; that is, exploring the limitations of instruments. And the exploration is part of the process that's being exposed and being turned into a performance. So that involves virtuosity... it's [also] something to be desired that one could improvise without having to depend so much on virtuosity... though I would consider that a form of compositional virtuosity that doesn't depend on instrumental virtuosity. (6)

Although virtuosity is normally considered to be a high degree of technical proficiency on an instrument, free improvisers sometimes look at it in a broader perspective.

Whether or not virtuosity is important in free improvisation really depends on how you define virtuosity. (2)

virtuosity is important in the sense of virtuosity being intensity, knowing your instrument and being intimately related with your instrument. (19)

Respondent (2) points out that although he has limited musical training in Western music, he has studied Chinese and Japanese music, and he has studied various instruments from these cultures and has learned

their traditional forms. He has also studied psychology and the physics of sound. This training and experience might be considered as important as pure instrumental technique, or more so, in free improvisation.

Virtuosity can apply to different things. You can have instrumental virtuosity, or you can have virtuosity of interplay and empathy among players. And I think the latter is much more important, essential to free improvisation... Virtuosity -- I've never liked that word. It seems to imply some kind of showiness, some kind of showing off just for the sake of doing it... I think virtuosity in that sense has no place in free improvisation. (3)

Another issue that comes up in a discussion of instrumental technique is the ability to improvise on an unfamiliar instrument, something far from instrumental virtuosity! This idea is foreign to almost any other music, but since sound itself is the starting point in free improvisation, it is not uncommon to hear improvisers playing instruments that they have not formally studied, or even may have no knowledge of whatsoever. Under these circumstances, the instrument is simply a sound-maker that the improviser explores in performance. Instrumental virtuosity does not describe such an activity, yet there are musical rewards for free improvisers.

There's a lot of instruments that I play that I couldn't play a chord to save my life, but I really like the technique that I'm using. And I've played with a lot of people who are the same way ... they really don't know how to play that instrument and have never had any formal training to speak of. But what they can do with that instrument ... is still very important... (17)

Your body gets used to making certain moves, you develop habits, and sometimes it can be hard to break them or move beyond them. Every once in a while I like to pick up an instrument I don't know how to play and see if I can do anything with it. It's an exercise to force myself to try to be musical with an instrument on which I have no technique whatsoever. (16)

even on an instrument you don't know, you have to be able to get some sound out of it. And furthermore, there has to be something unique there. So that's where the virtuosity is. I want to be able to have my own voice on any instrument I play. (8)

If you can just pick up something and make noise with it, it's just an incredible feeling. In fact, it's great to hear children do this, because they don't have the experience of struggling and trying to achieve perfection on their instrument. (18)

I wouldn't say I am so concerned with virtuosity in terms of being able to ... make a display of technique. On the other hand, I am concerned with exploring all the sounds that an instrument can make... free improvisation embodies a willingness to go just about anywhere the sounds might take you, and having a wide-ranging facility with an instrument is very important. (5)

For those improvisers who design and build their own instruments, the subject of virtuosity is somewhat skewed. There really are no virtuosos on experimental or original instruments, in the traditional sense, because there has not been time for many people, much less generations, to learn how to play them. There are no masters. Therefore, the subject becomes one of the value of instrumental technique in an explorational circumstance where a virtuosity of technical invention is as important as a virtuosity of technical achievement.

With these instruments, there are so many ways you can play them that having a working knowledge of them can sometimes be helpful and sometimes be a pain. It can be frustrating when you know what you want to do but you can't physically pull it off. But it can be very liberating when you can just immerse yourself in the sounds that the things'll make and just go with it. (7)

Almost all improvisers are concerned with how they use the instruments they play in order to get the most sound from the instrument, thus generating more possibilities to work with. Technical display for its own sake is not valued, though many surveyed are quite accomplished instrumentalists -- some might even be considered virtuosic. But the spirit of intent remains an intense exploration of sound through the instrument that generates music spontaneously in real time.

* * *

Live Performance versus Recordings

In a performance of free improvisation, the audience plays an important and dynamic role. Improvisers are usually quite sensitive to their audience, and the audience can "communicate" satisfaction and dissatisfaction readily. Because free improvisation is so directly a personal expression of the moment, any "signals" (whether a sense of restlessness or one of intense interest) sent out by an audience will usually impact the music, sometimes quite immediately. So, the presence of the audience is a dynamic part of the circumstances of free improvisation. What happens, then, when there is no audience, and the improvisation is going to be recorded? What is the difference when the very purpose of the improvisation is to produce a recording, rather than perform for an audience?

Improvisers surveyed acknowledged several important differences. Most stated a preference for live performance over recording primarily because of the positive effect the presence a listening audience has.

In live playing, I'm always aware of the audience, and that affects the way I play and the choices I make. Sometimes that's good, sometimes not so good. (16)

the live performance experience of free improvisation is a much more heightened awareness for the player/ performer ... your free improvisation will respond to and reflect an audience, and that will change things, oftentimes, toward more freedom ... than when you're in a tape session. (1)

free improvisation and live performance go hand in hand, to the extent that all recorded performances, I think are, in a sense, dilutions of the experience of free improvisation. (12)

The recording has all the drawbacks of live performance -- the self-consciousness, the performance anxiety, the conflicting agendas, with none of the benefits of the wonderful feedback and electricity of a live performance... [But] philosophically, I refuse to recognize the difference... You're one hundred percent committed either way. (11)

it's hard to be free at times when you're playing when there's an electronic ear there... But both the audience and the tape recorder are parameters which ... take some effort ... to get beyond. (18)

live performance wins out just about every time. I have developed most of my techniques because I've had the opportunity to perform live just about every week for the last two or three years, and I feel like that's been my education... I don't think I've reached the level of intensity in the studio that I have live in front of an audience. (14)

A recording can be strange, because it's sort of like taking a certain part of yourself and standing it up in the corner and turning it on... There's something about taping a session that's private, that tends to get precious. And one of the good things about playing in front of an audience, even though it's more unpredictable ..., because it's more unpredictable, is that it doesn't allow for any of that preciousness. (3)

Free improvisation is a response to your environment on many, many levels. And so, obviously, whether you're performing in front of an audience or in a studio or anything else, you're responding to what's going on around you. (2)

You can't just totally ignore the audience and say, 'Well, hey, this is our thing. If you like it, you like it.'... If you're just jamming with some friends, you may take something that should've ended five minutes ago and just keep going on it until everyone's sick of playing it. (7)

you have to come to grips with the fact that what you're doing can't just be an abstraction. You have to speak with what you're doing and ... get the listener involved emotionally with what you're doing. (13)

No one wants to "play down" to an audience; this is disrespectful to both musicians and audience. However, improvisers attest to the importance of being sensitive to their audience and value its feedback as part of the experience. When an improvisation is going well and the improvisers sense the audience's excitement and satisfaction, the music itself is encouraged and "charged" with the appreciation; the musicians can sense the

audience's connection with the music.

this is a mysterious process that I still don't understand... somehow you get something from the audience... you pick up the excitement from an audience that's excited, or you pick up their boredom. (19)

Though many improvisers prefer live performance, some do prefer recording sessions.

I think live performance is definitely the ideal, but I prefer recording sessions, actually; most of the time because a lot of the negative factors involved in most performance situations aren't there. (15)

I feel more in control in a room rather than in front of a group of people, which is always a little unnerving for me. It's nice to have just a comfortable place to be, with all my stuff right around me, ready to go. (17)

Others expressed no particular preference, acknowledging that they are simply different circumstances.

In a studio, it's more relaxed, there's time to get comfortable with the space, and there's no audience vibe at all. So it's a freer environment in some senses. Without the pressure to keep an audience interested, I can explore different things. But without the audience to inspire me, sometimes I can't get to the same places, even if I try to. (16)

I would think that the best recordings of free improvisations would be in which the players decided that they would produce an improvisation a number of times in succession and then choose the interesting one, more interesting ones, for release on record. (12)

The recording session can be just as vital as the live session if you're juxtaposing, you're playing off of other players... [But] just standing up in front of people ... is an important editing tool, because you start compressing things in your mind to try to make them come across properly. (13)

Respondent (2) suggests a third situation that is between live performance and recording:

live radio performances, where you have an implied audience that you can't see or hear, but it's there... you know the audience is there, but you don't know what their response is... [and yet] you can't take it back. You can't stop and try something else..." (2)

* * *

Significance of Free Improvisation - Personal

There is a personal adventure, excitement and satisfaction in free improvising that likely contributes to its growing popularity among musicians. It is an opportunity to let the mind and body express music in an unprecedented way that incorporates, indeed is dependent upon, stream-of-consciousness thinking and intense interaction. The psychological and physiological effects on the improviser can be substantial.

I think that the value of free improvisation is in the doing it; that it feels good to do it; and that a few people are healthier when they express themselves [in this way]. (10)

it has allowed me to explore my creativity and musicianship to the fullest potential... in terms of my own playing, it felt like I found myself, I found my voice as an artist after years of searching and struggling to fit into other molds that were too confining... It keeps me sane -- and it's a whole lot cheaper than therapy. (16)

As with all music, I think performance of free improvisation is essentially most important to the performers themselves... (12)

I have to say, I think it's more important to the players than to the audience, in a way. I think it's most successful... as a freeing process. (19)

Free improvisation ... removes a lot of the barriers of a structured performance... [and] I really enjoy not having those boundaries to work within... it can give you chills if it's really good. (17)

It's a psychological growth process. It stimulates awareness on all levels... (15)

I've always been kind of an explorer... to simply go out and find what's there and roam about in the wide open landscapes of the mind. (3)

There are really no rewards in this music beyond a sense of personal exploration and discovery, and, on a broader scale, the promotion (and acting out) of an egalitarian, non-hierarchical, anti-commodity social vision. But then what more rewards could you want? (5)

I like to see the imagination just let loose, and the music not limited to being nice... Music that doesn't have crisis is less interesting to me than music that does. And one of the biggest crises -- one that does happen more in free improvisation than anywhere else -- is simply [when playing,] sooner or later you get to this point where you just don't know what to do. You just feel like an idiot, maybe. And you start doubting everything; you doubt that you can play; you maybe doubt that you should be up there; you just feel like leaving... Everyone should experience that. And experience what happens as you come out the other side of it. (8)

* * *

Musical Significance of Free Improvisation

One improviser expressed some disdain for the distinction between "free" improvisation and other kinds of improvisation.

I'd rather focus on the idea of improvisation, rather than the focus on a specific type, or to call "free improvisation" a specific type of improvisation. I think that's secondary... what tends to happen is that you start developing ideas about a style called "free improvisation," and I don't really relate to that. (6)

However, the reader will recall that most improvisers considered process the best description of free improvisation given a choice of style, process, genre or scene, and none considered it to be style, per se.

Another respondent points to the immediacy and simplicity of free improvisation:

I'm troubled by there being too many documents in our world... I really value the fleetingness of free improvisation... You do it and then it's gone; and the world isn't cluttered up. You didn't chop down any trees to do it. You didn't have to build roads to do it. You didn't have to add yet another cassette to your cassette collection, which is completely disorganized and you can't keep track of it anyway! (10)

One respondent remarks on the value of free improvisation to those who normally perform written compositions.

[Free improvisation is] very important for those of us who spend a lot of time playing predetermined music as a way of expanding and testing our feelings about what makes shape, what makes form, what textures are viable, how much real pitch content does there need to be. All of these things. (12)

Free improvisers are well aware of the economic limitations inherent in such non-commercial art and obviously do it for other reasons, both personal and cultural.

I like to think that art is moving forward. And I think that improvisation, of all the musical idioms that I see, is tending to keep moving, is trying to keep moving forward, because it's not a commercial type of music. And because there's really no chance of it ever really being popular, you're freer. (7)

There are inevitably those who think free improvisation is something less than serious, and that it is not, and cannot be, a significant part of music. Some comments by the respondents address this objection.

Even if it's like, 'My five year old could do that' -- that sort of response that both free improvisation and abstract art get -- I think is a positive response. It's that creativity is something that everyone has and can exercise. I think that's a really important thing that it does. (8)

free improvisation you might call a kindergarten, in the best sense of the word, of musical performance. (12)

In my work with children, they are so receptive and so excited about improvising! This is really the core of creativity... And free improvisation is the process. At times it may be presented as a product. But I think pure improvisation is never a product... It's a connection with spirit. (18)

I have absolutely no illusions that free improvisation somehow should be Art with a capital A, that people should listen to and study in school, and that will actually somehow make the world a better place in any sense other than that participating in it is fun. And, in a sense, that's good for the soul. (10)

* * *

Cultural/Historical Significance of Free Improvisation

Beyond the personal and musical, there is ultimately a cultural/historical significance about free improvisation. Yet, "somehow, to call it important is to kill some of the anarchic importance of it! Free improvisation is just basically life." (6).

I think it's a generous return of ideas back to ideas..., you're drawing from a general cultural/social/ imaginational pool when you're improvising -- you're almost like a lightening rod or a set of coordinates that come together in your imagination. (20)

Filmmaker Werner Herzog once said that we absolutely need new images in the culture... That's one of the main functions of the artist at this point is to go out and find us new images of humankind... (3)

I think free improvisation should be a required course in the public schools. No kidding! Free improvisation is a validation of the emotional and spiritual sides of ourselves, and I think it would balance the over-emphasis ... on our cultural focus, on scientific, factual learning and memory. (15)

The acculturation of invention, be it in music or otherwise, paves new roads into expanded futures for the arts, sciences, society, and the individual. Here technology and aesthetics are at their best, working side-by-side. (4)

Several improvisers felt that free improvisation (primarily group improvisation), as a democratic process of collective expression, reflects culture and social behavior.

[The ways free improvisation is important] are definitely cultural; pattern for creative thought, pattern for change, ways to deal with conflict, defined resolution, common goals, the democracy. As a musician, you show by example how to interact with other people, how to take ideas from them, how to share ideas, how to reach new heights by interaction. (11)

I can't begin to write about the extent to which such experiences (such lessons in trust in the internal sources of inspiration and creativity, in the value of non-coercive anarchist-oriented social relations, etc.) have carried over into my life outside of musical improvisation. (5)

what makes group improv most interesting and exciting to me are its implications as a social model. Consider: a group of people who all have different backgrounds, training, temperaments, beliefs, ethnicity, sexuality, religion, etc. etc. are thrown together and must get along well enough to make music. Not only that, they've thrown out the rule book... (16)

One of the things I've noticed [is] that not always, but generally, there's a tendency for most men to play louder and more aggressively... And in my experience with playing with women, it has seemed as if most women are already more receptive, better at listening... Stereotypically, women are taught to listen to other people's problems or to each other's emotional life, whereas men are outward and don't always express what's going on with them. And so it can come out in a kind of explosive fashion in some free improvisations... (18)

I'm more interested in how a not only healthy kind of interaction can happen in free improvisation, but what would be called 'unhealthy' -- someone who goes nuts and is just blasting away... rather than finding that

troublesome, I find that very exciting, possibly, in that someone running amuck in a grocery store with a butcher knife or something is not something you want to experience. But the musical equivalent is possible, and it provides an outlet for behavior... that we would never get to do. (8) [!]

Some improvisers are introspective about what they do, while others see it in terms fundamental to human experience.

One of the things that's most important to me about free improvisation is ... the idea of forcing people to redefine things and abandon their preconceived notions about things, and reaching that purest state of the mind where you're scrambling, scrambling to explain something... And it's especially important if the person is responding to it because it's caused them to redefine or to question or to rethink their notions about how something is supposed to be... I think the evolution of the human brain, the evolution of everything that goes on in humanity, has to do with people redefining things. (2)

I want to absorb what's around, I want to process it, and then I want to respond by returning it to people's ears in a way that gives some meaning to so much of what's going on around, and a meaning to the relations between and among what's going on... I'm giving back to the culture what I draw from the culture, processed through my own inimitable voice and experience. (20)

* * *

The comments above affirm both indigenous and diverse qualities of free improvisation that make it so difficult to define or even describe in a neat and tidy way. This is due, in part, to the relative youth of this practice (35 to 40 years old). But it is also due to the fact that free improvisation is a kind of musical expression that will never be imprisoned by definition. It is a universal/personal process available to those seeking their own voice to express most directly what they are as human beings. Again, it is clear that free improvisation is decidedly noncommercial, though its appeal is broadening. But the dedication of some musicians in spite of this fact is a strong indication that it offers much in the way of intangible benefits to those involved in it, and, hopefully, those listening to it.

List of Responding Improvisers

Name / Age* / Gender / Years in Free Improv*
Occupation
Instruments used in free improvisation
---
* At time questionnaire was completed (1994)
.....

1. Darrell DeVore 54 Male 32
Sound Artist, Musician-Teacher
Piano, string bass, percussion, most objects of musical sound, everything that moves, the universe

2. Mike Hovancsek 27 Male 27
Director of a shelter-care facility for neglected/abused children; also counselor at the shelter
Anything that makes sound.

3. Tom Djll 36 Male 15
Grad student, Mills College, C.C.M.
Piano, trumpet, electronics, voice, percussion, etc.

4. Qubais Reed Ghazala 40 Male 38
Musician, visual artist, writer, incentor.
Many original (circuit-bending or other) instruments - around 50; plus trap set, piano, er hu, recorder/flutes,

electric bass, voice, and less frequently others of the 100's in the collection.

5. Hal Rammel 46 Male 15
Teach instrument construction to children/adults in a wide variety of settings (workshops, classrooms, etc.)
Musical saw, assorted percussion, many instruments of my own design and construction.

6. Chris Brown 40 Male 20
Musician/Educator.
Piano and electronics.

7. Oliver Di Cicco 42 Male 22
Recording engineer/record producer.
Original instruments plus guitar and "some" bass.

8. Dan Plonsey 35 Male 15
Composer, saxophonist, computer programmer.
Saxophone (alto, tenor, bari, sop.), bass (electric), clarinet (Eb, Bb, bass, alto), piano, voice.

9. Richard Waters 58 Male 27
Multi-media artist and instrument designer.
All of my own instruments - wind, string and percussion; waterphones (patented); saw; keyboards.

10. Bart Hopkin 41 Male 4
Hippie. [Editor, Experimental Musical Instruments]
Lots of invented instruments; also I play more conventional music on guitar.

11. David Slusser 42 Male 25
Sound designer (mixer/editor for post production sound).
Saxophones, flutes, bass clarinet, keyboards, xylophone, hybrid electronics, synthesizers, samplers, tape with effects.

12. Jim Russell 58 Male 6
Musician.
Single reeds.

13. Tony Passarell 37 Male 6
No occupation listed.
Saxophones.

14. Dan Panasenko 25 Male 4
No occupation listed.
Guitar and percussion.

15. Lisa Moskow 47 Female 26
Musician/performer, composer, recording; health practitioner
Sarod, voice, tabla. Some violin, guitar and piano.

16. Dave Barrett 36 Male 18
Theatre administrator/musician. All saxophones and some keyboard.

17. Eric Hausmann 29 Male 10
Computer technician/graphic designer
Guitar, drums and percussion, trumpet, keyboards, tapes and CD's, MacIntosh computer

18. Hillary Dill-Fielding 37 Female 16
Music teacher
Flute, saxophone, guitar, vocals

19. Tim Perkis 43 Male 10
Artist
Computer, synthesizer, flute and violin
No. Name Age Gender Years in Free
Occupation Improv

20. Allan Crossman 51 Male 30
Composer/teacher
Piano/keyboards

APPENDIX D
Index from book version.

[Publisher's note: You can search any of the terms electronically - please see the edit menu. Due to the conversion of documents, page numbers could not be preserved. Please be aware that the work has been divided into two parts and that, consequently, in order to search within Part 1 you may have to change document.]

A
A/B
Abstract Graphic (Solo)
(exercise)
academia (see: education;
schools; improvised
music programs)
acoustic design
Acoustic Environment
as component of CONTEXT
acoustics; acoustic
environment(s); acoustic
properties;
acoustic instruments
Acoustics as component of
SOUND
Action (re "feedback loop"/
Perception)
active listening (see critical
listening)
actor(s); acting and improvisation
(see: theater
improvisation in)
adaptation; Adaptation
additive rhythm
Adjust (a basic action --
see Table of Elements/
Relational Functions/
Actions)
adjusting to Flow
(Chart of Interpretation
and Response)
aesthetic dilemma
compositional control

affect (see also: law of affect)
affective experiences
Africa; African Americans
Agazzari A.
Aikido
Alabama (see: Birmingham)
Albersheim Gerhard
aleatoric compositional processes (see also: chance)
Ali Akbar College (Marin County California)
ambient sound; ambience (see also: acoustic environment(s))
ambiguity in free improvisation (see also: Dissociative Flow; Dissociative Polyphony)
America; American (see: U.S.; United States)
AMM (group)
Amoeba Music (record store)
amplifier(s); amplification (system)
Amsterdam
analysis
ancient music
Anthiel George
antiphony
Apel Willi
Apollohuis Het
approach to studying free improvisation (see also: education)
"Appropriate Response"
Aron Harry
Art as Experience (Dewey)
art galleries (as venues)
Asia
Associative/Dissociative Fluctuations (exercise)
atonal; atonality
Atton C.F.
audience:
communication to performers (survey)
informed and critical (see also: listening)
augmentation (as Linear Function)
Austin Larry
Australia
the author (see Nunn)
avant garde music
"Azoic Zone" (CD)

B
Babbitt Milton
Bach C.P.E.
Bach J.S.
Bachet brothers
"background" factor
    INFLUENCE as
background listening
background musical
background information
    (per survey)
background (personal) as
    source for improvisation
background processing
Bailey Derek
"bait and run"
    (transition strategy)
balloon mounting system
banjo
Barnes David
Barnette Bonnie
Baroque improvisation
Barrett Dave
    as survey participant
    comments information
bars (as venues)
baseball
basic elements of Flow
basic musical skills
    (see: technique
    proficiency)
baskebtall
bass electric
bass (string bass/contrabass)
bass diminution
    ("breaking the ground")
"Bastard Finders - Got One!"
    (cassette)
Batty Coby
Bay Area (see San Francisco)
Bay Area Improv Fest
Beatles
bebop
Bechtel B.
Beethoven (Ludvig van)
beginner's mind
Behnke Elizabeth
Behrman David
Belgium
Bennink Han
Bentwood Chalameaux
    ("slide" clarinet
    experimental instrument)
berimbau
Berio Luciano

Berkeley California
The Berkeley School of Jazz
Berlin
Berlioz Hector
big band
Bim House (venue in Amsterdam)
    (see: Society of
    Improvising Musicians)
Biological Context
Biological INFLUENCES (of INTELLIGENT BODY)
    (Figure 2)
Birmingham Alabama
Birmingham Improv (festival)
Bischoff John
blues
body (human):
Boisen Myles (MB)
    (as reviewer)
"Bolero" (M. Ravel)
bop (bebop)
Boulez Pierre
Boyder Mike
Bradford Polly
Bradlyn Mark
Brahms Johannes
Brandt Henry
Braxton Anthony
"breaking the ground"
    (bass diminution)
Breuker William
Britain; British
    (see: England)
British Journal of Music
    Education
broadcasting
Brooklyn Academy (as venue)
Brown Chris
    as survey participant
    comments information
Brown Earl
"The Bruce Latimer Show"
    (cable TV program)
Bruckner Anton
Bryant Allan
Bub (group)
Budd Harold
Buddhist (teaching)
bullroarer-type instruments
Burt Warren
Butler Martin
Butts-Bhanji Baomi

C
cable TV
Cadence (Figure 5)

cadence (closure; termination)
cadential processes as cues
cadenza
Cage John
"caging" free improvisation
California (see also: Berkeley;
Davis; Oakland; Marin
County; Los Angeles;
San Diego; San Francisco)
Callers (see: Engel)
Cambridge
Canada; Canadian
Cannon Dwight
cantus compositus
(notated composition)
Cardew Cornelius
Carroll Doug
"A Case for Improvisation
to be an Integral
Part of Music Curriculum"
(Porter) (article)
cassette(s) (see: tape exchange;
tape music; etc.)
Catalyst (Relational Function/
Composite)
catalytic processes as cues
categorization
Categorizational Impression
causation
CCMC
"CCMC Vol. III"
CDs (compact discs)
(see: recordings)
CDs player as instrument
cello; cellist(s); electric cello
Center for Contemporary Music (CCM)
Center for Music Experiment
and Related Research (CME)
Central America
Central Park (N.Y.C.) (as venue)
Chadbourne Eugene
chance; chance composition
CHANGE (Figure 1)
Change (a basic action --
see Table of Elements/
Relational Functions/Actions)
change
"change hierarchy of"
chaos; chaotic
chaos theory
"Chaos Theory and Group Improvisation"
(Bradlyn) (article)
Chart of Context (Fig. 2)
Chart itself
Chart of Influences and
Processes (Fig. 1)

Chart itself
Chart of Interpretation and Response
Chart itself
Chart of Linear Functions and
Identities (Fig. 5)
Chart itself
Chart of Meta-Style Relational
Functions and Transitions
(Fig. 4)
Chart itself
Chart of Perception (Fig. 3)
Chart itself
charts (see: Figures)
Chattanooga (Tennessee)
Chicago
Chicago Art Ensemble
Childs Barney
Chinese music
Chopin Frederick
Chopra Depak
chromatic; chromaticism
church bells
churches (as venues)
circuit-bending instruments
clarinet; clarinettist(s)
clarinet bass
clarinet slide (experimental
instrument)
classical ballet
classical music; classical
Western music
classical new music
Clementi Aldo
Climactic Segue (Transition)
clock towers
closure type of transition
clubs (as venues)
"Cobra" (Zorn)
cognition
cognitive processing
Cold War
Coleman Ornette
collaboration mail
(see: tape exchange)
collage (see also: parody)
"collective compositions"
collective creativity (see: creativity)
comfort about improvising
commercial; "commercial noise"
commercial music (see: popular music)
"common practice" lack of in
free improvisation
communication:
among improvisers
in a group
between performer and audience

in music generally
non-communication (intentional)
with self
style as communication device
sign (survey)
(see also: Style Semblance;
Style Sign)
survey responses
among women improvisers
(see also: interaction; psychic component; Relational
Functions)
Communist; Communism
Community Music of London
compact discs (CDs)
(see: recordings)
Composers' Forum (venue)
composer's relationship to player
Composites; COMPOSITES
(see: Relational Functions)
composition by (group) consensus
composition identity of
composition for improvisation
germinal nature of
composition relation to
free improvisation
compositional intent;
compositional decision(s)
compositional impression
(see critical impression)
compositional "media"
(for designing exercises/plans)
Compositional Nature of
Solo Improvising (survey)
compositional PROCESSES
compositional technique;
strategies
compositional thought
computer
"computer network band"
(see: Hub The)
Concepts (compositional "medium")
conceptualization of music
(vs. experience of it)
concert halls
Conducted (exercise)
conductor; conducted
improvisations
"Confirmed Flow"
Confounding Principles of
Complexity
consciousness of improviser
about the performance
"contact improvisation"
contact microphone (see pickup)
Content/CONTENT
Contemporaneous Flow

Perception
Context/CONTEXT
context of plans/methods
context of recordings
(see also: recordings)
Contexts (compositional
"medium")
Contexts of the Intellect
contextualization/
CONTEXTUALIZATION
(see: mistakes)
Contextual INFLUENCE
continuity (see also: "law of
good continuation")
Continuity Processes
contrast (see also: change)
Contrasters (see Engel)
control compositional
control decentralization of
(see: decentralization
of control)
Control Giving Up in Group
Improvisation (survey)
control psychological
(over performer)
controllers digital/computer
Cope David
costumes
Courlander Harold
courses in improvisation/free
improvisation (see: education;
teaching improvisation)
Crab (electroacoustic percussion board)
Creation (of new IDENTITIES)
(Figure 5)
Creative Improvisation (Dean)
creative impulse in practicing
(see also: practice)
creative listening
(see also: critical listening)
"creative music"
creative role of performer
creativity
collective
general
individual student
critical impression
critical listening; active
listening
critical values; criticism;
self-criticism/evaluation
criticism (see: critical
impression; critical values)
critics (music reviewers)
Crossman Allan (as survey
participant comments

information)
Crustacean (experimental instrument)
cue(s)
Cultural Context (the Culture) (see also: practice of improvisation)
cross-cultural influences
defined
Cultural/Historical Significance of Free Improvisation (survey)
Cultural Identity
culture
Cumulative Flow Perception
Cumulative INFLUENCE upon IMPRESSION (Figure 1)
Curran Alvin
curriculum; curricula of improvised music
Custer Beth
cymbal

D
Dadaist composers
dance; dancer; modern dance
Dastgah (Persian)
Davies Hugh
Davis California
Davis University of California at
Davis Miles
"deaf dub"
Dean Roger
Debussy Claude
decentralization of control free improvisation as
decentralization of power
decentralization of style through free improvisation
deconstructed; deconstruction (see also: Dissociative Flow; Dissociative Polyphony)
decisions; decision making; (see also: compositional intent compositional decision(s); formal decision to change; impulse decision making)
"deep listening" (see also: Oliveros Pauline)
definitions (see also: terminology specific to text):
to "compose"
"free" (re: improvisation)
free improvisation

free improvisation
per survey of improvisers
improvisation (extemporization)
impulse
"law of good continuation"
Sound/SOUND
Del Sonare sopra'l basso
(A. Agazzari)
democracy; democratic process
in free improvissation
Denio Amy
Describing Free Improvisation
(survey Appendix C)
"designative" meaning
Density Fluctuations (exercise)
"descanting upon the ground"
(counterpointing)
Desire Impulse
Detroit (Michigan)
Developers (see: Engel)
development (of practice)
development (as a Linear
Function); developmental
PROCESSES
DeVore Darrel
as survey participant
comments information
Dewey John
Dialogue (Relational Function/
Composite);
dialogue general
DiCicco Oliver
as survey participant
comments information
diddley bow
didgeridoo
difference tones
digital processing; digital delay(s)
(see also: electronics;
instruments electronic)
diminution (as Linear Function)
discipline
disorientation
dissociative character of
free improvisation
(see Dissociative Flow/
Dissociative Polyphony)
Dissociative Flow/Dissociative
Polyphony (DF/DP)
division as improvised variations
Division Viol (Christopher Simpson)
Division Violist (Christopher
Simpson)
divisive rhythm
Dixieland
Djll Tom

as survey participant
comments information
Dolphy Eric
drums; drummers; drumming
(see also: percussion;
percussionists)
Dutton Paul

E
Earwhacks (festival)
the East
Eaton John
echolocation
economic circumstances of
free improvisers/
improvisation
Education as component
of CONTEXT
education:
improvisation absent
and needed in
improvisation in higher
education
improvisation as a
tool in
instructions (plan score)
recordings as part of
(see also: schools
improvised music programs)
Educator (journal)
egos of composers
ego of improviser
ego of listener
Ego Absence of (survey)
Eindhoven The Netherlands
Eine Kleine Nachtmusik (Mozart)
El Dab Halim
electric bass
(see: bass electric)
electric guitar
(see: guitar electric)
electric guitar/bass
(single instrument)
electroacoustic music
electroacoustic percussion board(s)
"Electroacoustic Percussion Boards:
Sculptural Musical
Instruments for Improvisation"
(article) (Nunn)
electroacoustic technology
effects on listening
Electronic Courseware Systems
electronic devices; electronics;
electronic processing
(see also: computer;

technology);
(survey)
electronic instruments
(see also: computer;
technology)
electronic music; electronic
improvisation
element(s) (see: basic elements
of Flow)
Elliott C.A.
"embodied meaning"
"embryonic composition"
emotion(s)
Emotion and Meaning in Music
(Myer)
Enchiridion (Nicholas Wollick)
Engel Francis
England
Engstrand Glenn
ensemble (see: group)
envirokinetic graphic notation
(see also: notation
graphic)
environment
Environment Physical
(Figure 2)
Environment Cultural
(Figure 2)
ergonomics (and experimental
instrument design)
er hu
Erickson Robert
Essay (C.P.E. Bach)
ethnic (attributes in
free improvisation)
ethnic instruments
(see: instruments ethnic)
ethnomusicology
Europe; Western Europe;
European
"Evan Parker's Free Sax"
(Johnson) (article)
Evangelisti Franco
Event (as basic element of Flow)
Eventual IMPRESSION (Figure 1)
evolution of music
and free
improvisation
exercises designing
exercises in improvisation:
alternative to
examples (Appendix B)
group (Appendix B)
individual (Appendix B)
performance format vs.
expectation(s)

(see also: Meyer Leonard)
Experience as component of CONTEXT -
experimental music (see: new music experimental)
Experimental Musical Instruments magazine
Experimental/original instruments in free improvisation
experimental notation
extended techniques; special techniques (instrumental)
Extended techniques (survey)
"Extending the Human Voice" (Hovancsek)
"external" style (see also: collage; parody)
extramusical association(s); non-musical association(s)
"extra-performance" (outside of performance)

F
facility (versus virtuosity as an end in itself)
"faking it"
Falkenstein Clara
Faltonson Andrew
FAMILIARITY (Figure 3)
familiarity:
with acoustic environment
with composition/piece
deconstruction of
with free improvised music
general
with group
isolated
lack of in free improvisation (see also: unfamiliarity)
with the moment
with musical tendencies of others
patterning
from recordings
as security
with styles
with terminology
Far East
Feature Change (Transition)
Feature Overlap (Transition)
feedback audience (see: audience communication to performers)

"feedback loop" (of responsive
self-generating action)
(see also: self-generation
of free improvisation)
Feld Steven
female improvisers (see: women
in free improvisation)
Ferrand Ernst
festivals of improvised music
Festival de Musique Actuelle
"Festivals in the USA"
(L. Smith) (article)
fiddle (violin)
field (see: Bradlyn; "Figure
Ground and Field...")
Fielding Hillary
as survey participant
comments information
figure (see: Bradlyn; "Figure
Ground and Field...")
Figure (as basic element
of Flow)
FIGURE 1 - Chart of INFLUENCES
and PROCESSES
Figure 1 (chart) itself
FIGURE 2 - Chart of CONTEXT
Figure 2 (chart) itself
FIGURE 3 - Chart of Perception
Figure 3 (chart) itself
FIGURE 4 - Chart of Meta-Style
Relational Functions and
Transitions
Figure 4 (chart) itself
FIGURE 5 - Chart of Linear Functions
and Identities
Figure 5 (chart) itself
"Figure Ground and Field
Gesture and Texture:
a gestalt strategy for
group improvisation"
(Bradlyn)
financial support;
lack of financial support
(see also: economic
circumstances)
"Find a Sound" (exercise)
Fine Milo
Fiore Linda
The Firebird (Stravinsky) (ballet)
Flow
Flow Perception/FLOW
PERCEPTION
(see also: PERCEPTION)
fluidity (see also: continuity)
flute; recorder
FLUXUS

fog horns
"Follow the Leader"
(group interaction strategy)
"foreign material"
(see also: Interpolation)
form; formation:
(see also: structure)
perception of in free
improvisation
forms traditional improvisation
list of (Appendix A)
formal decision to change
(see also: change)
"formal gesture"
formal structure; framework
(see: structure; structural
elements/character)
formulaic improvisation
formats performance
(see also: notation)
Forster Cris
Foss Lukas
(see also: Improvisational
Chamber Ensemble)
"foundation" instruments
(A. Agazzari)
found objects; found sounds
Fragmentation (Transition)
fragmentation (as a Linear
Function)
France
Franck Cesar
"free" as referring to
improvisation
"Free Improvisation" (exercises)
free improvisation as a form
of composition
(see also: composition;
form)
free improvisation
short vs. long
free jazz (see also: jazz)
Free Play (Stephen Nachmanovich)
Freedman Harry
Freeway (magazine)
Fresno (California)
Fund for U.S. Artists
Fundamental Reciprocal Processes
fundamental social values
Fundamentum organisandi
(Conrad Paumann)
"fusion music"

G
Gabrielli (Giovanni)

Galas Diamanda
gamalan
games (see: improvisational games)
Gare Lou
Gebser Jean
Genesis of a Music (Partch)
genre free improvisation as
German free-jazz
(see also: free jazz)
Germany
germinal nature of
"improvisational
composition"
gestalt
gestalt psychology
Gestural Continuity/Integrity
gesture in free
improvisation
Ghazala Qubias Reed
as survey participant
comments information
Ghent (Belgium)
Glasier Jonathan
Goldstein Malcolm
gopychand
grace state of
Graphic (Group) (exercise)
graphic scores; graphics
(see: notation; graphic)
Grateful Dead The
Gravikords Whirlies & Pyrophones
(Hopkin)
Gresham-Lancaster Scott
Grieg _____
"groove"
Grooves and Transitions
(exercise)
ground general (see also:
Bradlyn; "Figure Ground
and Field...")
Ground (as basic element of Flow)
Ground (Relational Function/
Composite)
group communication
(see: communication
among improvisers in
a group)
Group Consciousness/
GROUP CONSCIOUSNESS
(see also: rapport)
group decision making
(see: decisions; rapport)
group exercises
Group Interaction (survey)
group mind; group sound
(see also: rapport)

group practice sessions
Group Processes (Figure 3)
groups as families; trust
groups teaching
improvisation to
Grove's Dictionary of Musical
Instruments
"Grow a Sound" (exercise)
Gruppo di Improvisazione da
Nuova Consonanza (GINC)
guitar
Gurelnic Tom

H
Haarlem Holland
"handicapping"
handmade instruments
(see: experimental/original
instruments)
hand signals (see: cue(s))
harmonizer
Harrison Lou
Hartigan Royal
Harvard Dictionary of Music
Hausman Eric (as survey
participant comments
information)
Hawaiian (style)
Hay Emily
Hearon Jim
Heglin Ron
Herzog Werner
Het Apollohuis
"hierarchy of change"
"hi-fi" environment
Hobbs Christopher
Holland (see The Netherlands)
"Holland Blunts the Cutting
Edge" (van Peer) (article)
homemade instruments
(see: instruments
experimental)
Homler Anna
homophonic (see: texture)
Hopkin Bart
as survey participant
comments information
Horn Paul
Horovitz Wayne
Hovancsek Mike
as survey participant
comments, information
human condition
improvisation as
reflection of

(see: improvisation generally: human condition)
human voice
Huxley Audous
Hub (computer music network device - T. Perkis)
Hub The
humor
Hybridization (confounding principle of complexity); hybrid(s)

I
I Ching
ideas; ideation; Ideation (see also: Concepts)
Identificational Processes
Identity/Identities/ IDENTITIES
"The Identity of a Work of Music"
identity of a composition
identity based on style
ideology (see: political; social)
Images (compositional "medium")
imagination; Imagination as component of CONTEXT
imitation (as an example of Dialogue)
imperfection vs. perfection
importance of free improvisation (see: significance of free improvisation)
IMPRESSION
Impressionism
improvisation generally:
compositional material as generating
in education (see: education)
evolution/growth
historical Western practices as reflection of the human condition
"Improvisation in Early Music" (Bechtel) (article)
"Improvisation with Experimental Musical Instruments" (Nunn) (article)
"Improvisation with Found Sounds" (Welwood) (article)
"Improvisation: Music for an Occasion" (Prevost) (article)
Improvisation: Its Nature and Practice in Music (Derek Bailey)
"Improvisation: New Teaching

Strategies" (Reeves) (article)
Improvisational Chamber Ensemble
Los Angeles (Lukas Foss)
improvisational games
Improvisational Milieu
"improvisational thought"
(versus "compositional thought")
Improvised Music Association (IMA)
(S.F. Bay Area)
Improvised Music Studies
(degree program)
Improvised Music Studies
News Journal
The Improvisor magazine
impulse:
body functioning of
components of
decision-making impulsive
(see also: impulse)
definition
emotional
first sound as impulsive
guided by influences
(see also: Desire Impulse;
IMPULSE; Intent Impulse)
Impulse/IMPULSE
inadvertent music free
improvisation as
"Inappropriate Response"
indeterminacy; indeterminate
PROCESSES
India
Indian music (see also: North
Indian classical music;
South Indian music)
indigenous music (see: world
music)
Indigenous Style
Individual Consciousness/
INDIVIDUAL
CONSCIOUSNESS
individual decision making
(see: decisions)
Indonesian gamalan
(see: gamalan)
"information"
information theory
Influence(s)/INFLUENCE(S)
defined
general
information theory
initial sound (see: sound initial;
starting point)
Initiatives and Reactions
(Smith S.) (mixed media
improvisation design)

Instant Composers Pool (Holland)
instruction(s) (see: plan;
education instructions)
Instrumental Technique
as component of CONTEXT
Instrumental Technique/
Virtuosity (survey)
Instrumental and Technological
Resources (survey)
instrumentation and technology
per survey of improvisers
Instrument(s) as component of CONTEXT
instruments:
ethnic;
(survey)
expanded techniques; modified
experimental/original/modified
sound potential of
spirit of
traditional
training
integration; integrity (structural)
(see also: Gestural Continuity/
Integrity)
Intellect/INTELLECT
intellectual meaning (see meaning)
Intelligent Body/INTELLIGENT
BODY
Intent Impulse
intention as component of
Relational Functions
intentional use of style
(see generally: style)
Interact (a basic action --
see Table of Elements/
Relational Functions/
Actions)
Interaction (exercise)
interaction:
(see also: communication)
among computers
in conversation
among improvisers
between medium and
pre-thought ideas
between player and instrument
with self (as solo using
technology)
between student and teacher
between "voices" in
solo improvisation
Internal Cadence (Transition)
International Cassette Network
International Review of the
Aesthetics and Sociology
of Music

Internet
"The Internet and Free Improvisation"
Interpersonal Relationships
Among Improvisers (survey)
(see also: interaction among improvisers)
Interpolation (exercise)
Interpolation (Relational Function/Composite)
interpolation (as Linear Function)
interpretation; realization (of music/notation/instructions/plans)
intrapersonal communication
among "voices"
in solo improvisation
intuition
inversion (as Linear Function)
irony; ironic use of style
(see also: style as parody/irony)
Italy; Italian
Ives Charles

J
"Jai Alai" (Zorn)
Japan
Japanese music
jazz generally
jazz:
acquired skills by listening/emulating
definition
distinction from/comparison to free improvisation
in education
free (see: free jazz)
groove (see also: "grooves")
modern
origin
parallel development with free improvisation
regional styles
relationship to free improvisation
since
technique in
theme formal presentation of
third-stream
walking bass line
Jazz Research Papers (journal)
Jennings Russ
Jew's harp

Johnson Tom
"John Zorn and Other Improvisers"
(Johnson) (article)
just intonation

K
Kaiser Henry
Karkoschka Erhard
Keepers (see: Engel)
Keil Charles
Kent Ohio
Kent Stephen
Kermani Elise
keyboard(s) (see: piano)
Khatchadourian Haig
Kinesis (confounding principle
of complexity)
The Kitchen (venue)
KIVA (group)
"The Klickitat Ride
Possibilities
Opposites"
(improvisational
composition) (Oliveros)
Kneif Tibor
Kohler Wolfgang
koto
KPFA (radio station)

L
"landmarks" (see also: Behnke
Elizabeth)
Landini
language (verbal) and
free improvisation
"language" of free
improvisation
LaPlante Skip
law of affect
law of good continuation"
Lead (a basic action --
see Table of Elements/
Relational Functions/
Actions)
learning theory
Leonardo magazine
Lewis George
Liber de arte contrapuncti
(Johannes Tinctoris)
"licks"
Ligeti Gyorgi
Limitations of the Body
as component of
CONTEXT
Lindgren Ben

linguistic (see: language)
"linear causation"; linearity
Linear Functions; LINEAR FUNCTIONS; linear functioning
listener (see: audience; listening)
listening:
constructing meaning
common perspective of audience and improviser
critical (see: critical listening)
expectations of listener (see: expectation(s))
and experimental/original instruments
failure to listen
importance of
intuitive (see also: intuition)
live performance versus recordings (see: live performance)
as major skill of improvisers
to music
to other (various) music (as part of practice)
versus reading music
unique experience; unique challenge
uniquely imposed
what to listen for
listening-in-readiness
listening-in-search
live performance
Live Performance versus Recordings (survey)
live recording
"lo-fi" environment
Logos (venue)
Lomberg-Holms Fred
long-term memory
Lopez Fernando
Los Angeles
Lutoslawski Vitold

M
MacIntosh (computer)
Madrid
Mahler Gustav
"mail collaborations"
Maintain (a basic action; see Table of Elements/ Relational Functions/ Actions)

Maintenance (of IDENTITIES) (Figure 5)
Making Simple Musical Instruments (Hopkin)
Manufacturing of Humidifiers (group)
march (musical form)
Marin County California
Marshall Oren
martial arts (see also: Aikido; Tai Chi)
Marwedel Dick
Maryland-Baltimore County The University of
Masaoka Mia
"masking" (loss of details in sound complex)
mbira (African) (improvisation)
McFarren Bobbie
meaning (in music) (see also: designative meaning; Meyer Leonard; syntax/syntactical meaning)
meaning localized (see also: contextualization)
Mechanism of hearing as component of SOUND
medium; media (artistic)
melodies; melodic idea(s) (see: songs)
memorization
memory
"memory composition"
Mengelberg Misha
mental states (see: mind)
mente (meaning improvised)
metaphorical allusions (to sound)
Meta-Style/META-STYLE
meter
methods of teaching improvisation
alternative to
Mexico
Meyer Leonard (see also: Emotion and Meaning in Music)
microphone (see also: pickup)
microtonality; unusual tunings
Middle East
MIDI (Musical Instrument Device Interface)
MIDI Jazz Improvisation (computer software)
"milestones" recordings as

(see also: recordings)
Milhaud Darius
Miller M.E.
Mills College
mind; mental states
Minimalist/Conceptual form; minimalism
miscommunication/misinterpretation in group free improvisation (see also: "mistake")
"mistake" in free improvisation
"Mob Ecstasy" (radio show) (see also: KPFA)
"mobiles"
modal (tonal system); modes
model improvisation as for a business
model educational methods as
model improvisation as social
model of response in free improvisation (see: Chart of Interpretation and Response)
modes (see modal)
Modirzadeh Hafez
MOMA (Museum of Modern Art N.Y.) (as venue)
the moment
"momentary consciousness"
Monteverdi
Morgen Roger
"Morning Concert" (radio program)
Moskow Lisa (as survey participant comments information)
"Motion and Feeling Through Music" (article)
motive(s)
Mozart Wolfgang Amadeus
multimedia (survey) (see also: visual/sonic relationship)
multiphonics
multiple tempi
Murai Greg
museums (as venues)
music box giant
Music Educators Journal
"music-minus-one"
music theory
music therapy
Musica Electronica Viva
musical character
Musical Grooves magazine
Musical Instrument Design (Hopkin)

Musical Mandate (Figure 1)
musical saw
"Musical Stimulus"
musicianship; musical awareness;
musicality
musicology
Musics (journal)
Musicworks magazine
"Musique" (computer software)
"musique concrete"
Muziekshool (Haarlem Holland)
myth (the free improvisation
is easy)

N
Nachmanovich Stephen
National Endowment for
the Arts (NEA)
Native American Indians;
Native American music
Neo Classicalism
Neo Primitivism
The Netherlands (Holland)
~new music:
classical
education
and evolution of free improvisation
experimental
New Music Across America
(festival); New Music America
New Music Ensemble (U.C. Davis)
"New Order"
New Orleans
New Structures in Jazz and Improvised
Music Since (Roger Dean)
News Journal Improvised Music Studies
New York City; New York scene
New Zealand
network computer (see: Hub The)
networking
Nicasio (California)
nichol b. p.
Nine Centuries of Improvisation in
Western Music (Ernst Ferrand)
19th Century
Noble Steve
noise
"No Mind" (Figure 1); nothing in mind
(re initial sound)
non-closure type of transition
non-communication
(in free improvisation)
(see also: Dissociative Flow/
Dissociative Polyphony)
"Non-Confirmed Flow"

non-musical associations
(see: extramusical associations)
non-referential (see: self-referential)
non-Western practices; non-Western music
North Indian (improvisation)
Northwest Texas State University
notation:
absence of
"authenticity"
as bias (notation-centric)
as controlling/defining (the music)
(see also: control compositional)
in education
experimental
graphic
improvisation as notational challenge
indeterminate notational systems
development of
obeying score
restricted by
similarities (of writing music
to improvising)
simplicity as a virtue
sound and movement vs. "notes"
time to reflect
Notation in New Music (Karkoschka)
Noyes C.K.
Nunn (Tom) (author)

O

"O" (Zen symbol of the moment)
Oakland
Oakland School District
Off Ramp
Oliveros Pauline -
"On the Psychology of Music"
(Albersheim) (article)
1 Minus Mac (computer software)
One Voice (exercise)
opera
"opposites" (see: "The Klickitat Ride")
oral tradition
order seeking
(see: Dissociative Flow/
Dissociative Polyphony;
listening-in-search; Sound Mass)
organ
"organic causation"
Origin (Figure 1)
"Original Musical Instruments for Real Time
Composition" (article) (Nunn)
"original voice" (see: own voice)
Originality in free improvisation (survey)

"ornamentation" instrumnts (A. Agazzari)
Ortiz Diego
Ostertag Bob
Oswald John
other arts and free improvisation
"other forces at work"
"outside of time" sense of being
overlapping of perception and response
The Owl and the Pussycat
(Stravinsky) (song)
own voice; original voice

P

Pacific Rim
Paganini
painting; painters
Panasenko Dan (as survey participant
comments information)
Paris
Parker Charlie
Parker Evan
parody relative to style
Partch Harry
Passarell Tony (as survey participant
comments information)
pastiche (see also: collage)
Pastoral Symphony (No.) (Beethoven)
"paths of communication"
(see also: Chart of Interpretation
and Response)
pattern detection
Paumann Conrad
Pavlov's dog
Peakers (see Engel)
pedagogy musical (see: education)
Perception/PERCEPTION;
perceptual circumstances
Perceptual INFLUENCES
percussion; percussionist(s)
(see also: drums; drummers)
performance art
"performance behavior"
performance formats (see also: Behnke)
performance practice
performer function
Pergamon Press
Perkis Tim
as survey participant comments
information
Persian (Dastgah) (improvisation)
Personal Consciousness

Personal Context
Personal/Group Style
Perspectives of New Music
Petaluma (California)
phenomenology of music;
phenomenology of listening
Phillipp Ulrich
Philosophers The (group)
philosophy; philosophical issue
phrase; phrasing
Phrase (as basic element of Flow)
Physical Context; physical environment
defined
Physical Medium
"Physiological Intelligence"
piano; pianist(s); keyboard(s)
Piano Concerto (Cage)
Pierrot Lunaire (Schoenberg)
pickup (contact microphone)
Pink Floyd
"Planning for Improvisational Music"
(method; self-published) (Engel)
plan(s) (partially pre-composed
improvisations) (see also: notation)
in education
exercises (Appendix B)
designing
paradox of
as practicing
as structure
in teaching improvisation
Plonsey Dan
as survey participant comments
information
"Plunderphonics"
Pluto (group)
poetry (see also: sound poets)
Pointless Music (label)
political beliefs/ideology
(see also: Communism;
Scratch music; society
impact on free improvisation)
Pollock Jackson
Popular Classics (of Scratch Orchestra)
popular music; pop
popularity of free improvisation
Porter Randy
Potential Sonic Material
Pousseur Henri
Poyourow David
practice of free improvisation -
historical practices (Appendix A)
practicing improvisation
preamp (preamplifier)
precomposition (see also generally:
composition; improvisation)

predictability
(see: familiarity; unpredictability)
Prevost Eddie
Prinz Dave
private (one-on-one) teaching
of improvisation
probability; probabilities
(see also: "stochastic" music)
Processes/PROCESSES
processors digital (see: digital
processing; digital delays)
"product" artistic
programming computer
Projection/PROJECTION
Pseudo-Cadential Segue (Transition)
psychic component of free improvisation
psychological/psychosocial aspect
of free improvisation
Psychological Medium
psychology; psychologist(s)
proto-composition
Pulse (exercise)
purpose of studying improvisation

Q

quasi-random (element)
Quebec
questionnaire survey
(see: survey of improvisers)

R

Rachmaninov Serge
radio (see also: KPFA)
radio live performance on
raga Indian (see: Indian music)
ragtime
Rammel Hal
as survey participant comments
information
random/randomness
random number tables
Random House Dictionary of the English
Language The
rapport
Rastascan Records (label)
ratios
Ravel (Maurice)
real time device
real time composition
Reasoning Sczjd
Renaud Phillippe
Reciprocal Influence(s)
reciprocal Processes

reciprocal relationships (among CONTEXTS)
re-contextualize
(see also: Contextualization)
recordings: (see also: tape exchange)
for analysis (see also: recordings
criticism; self-evaluation
through)
CD; compact disc
computer editing of
context historical/sociological
criticism of (see: recordings self-
evaluation; criticism)
education
live performance versus
(see: live performance)
quality of; review of
self-evaluation through
self-production distribution
strategies
transcription of limited value -
value/uses of
Reese Gustav
Reeves S.
rehearsal(s)
relating to Flow (Chart of Interpretation
and Response)
Relational Functions/RELATIONAL FUNCTIONS
(see: Composites)
Relational Processes
Renaissance
repetition (as a Linear Function)
Requiem (Brahms)
res facts ("the finished thing")
response; responsive
(see also: interaction)
Return and Recall (Smith S.)
(mixed media improvisation design)
Returners (see Engel)
reviewers (see: critics; reviews)
reviews (of performances/recordings)
Reynolds Roger
rhythm:
asymmetrical non-metrical
"Richard Teitelbaum George Lewis
William Hawley" (Johnson) (article)
Riley Terry
ROTODOTI (group)
Rowe Keith
right brain (see: intuition)
ritornelli (accompaniment to operatic
recitative)
Robair Gino
rock; rock-n-roll
role (see also: Relational Functions;
interaction)
Romantic Period

Rome
Rose Gloria
Rose Jon
rubber bands
rules; lack of (see also: plan(s))
Rudolph Tom
Rush Loren
Russell Jim (as survey participant
comments information)
Rzewski Frederick

S
Sabanovich Dan
Sacramento
samba
samplers; samples; sampling
Sandbox Trio
San Diego (California)
(see also: University of
California San Diego)
San Francisco; San Francisco Bay Area
San Francisco Tape Music Center
San Jose State University (California)
sarcasm
sarod
Sausalito (California)
saxophone(s)
scene free improvisation as
Schafer R. Murray
Schliewann Wolfgang
Schoenberg Arnold
School bells
schools improvised music programs
"schools" (of thought/style)
in music and visual arts
Schumann
score (see: notation)
"Scratchbooks"
Scratch Ideological Group
Scratch Music (book)
Scratch music
Scratch Orchestra
scripto (meaning written)
sculpture; sculptural instruments
(see also: instruments
experimental/original)
Search and Reflect (Stevens)
Seattle
Seattle Festival of Improvised Music
Second Piano Concerto (Rachmaninov)
sectional nature of free improvisation
(see also: Segmental Form)
Segmental Form
self-consciousness
self-criticism;

self-evaluation (see: criticism)
self-generation of free improvisation
self-realization of the artwork
self-referential meaning of music
Sender Ramon
sequencing (see programming)
serialism
"service industry" of performers for composers/conductors
Seven Spiritual Laws of Success (videotape)
shakers
Shakin Ray Levis
Shaking Ray Levis Music Festival
Sheaff Laurence
short-term memory
"Shrine" (Teitelbaum)
sight-reading skills
sight-specific composers
Signalers (see: Engel)
signals (see: cue(s))
signal-to-noise ratio
significance of free improvisation; survey
Significance of Free Improvisation Cultural/Historical (survey)
Significance of Free Improvisation Musical (survey)
Significance of Free Improvisation - Personal (survey)
Silber John
silence
simplicity:
as a component of comfort in the teaching of improvisation
as a virtue in notation/composition for improvisation (see also: notation)
Simpson Christopher
Simultaneity (confounding principle of complexity)
"singing over the book"
sinfonia (operatic interludes)
skills (see also: compositional technique; Instrumental Technique; practice; technique)
Slusser David (as survey participant comments information)
Smart Chuck
Smith Bill
Smith LaDonna
Smith Stuart
sobre cosas compuestas (playing over composed piece)
"social" component of group improvisation; social circumstances; social issues (see generally: cultural;

social/socialist; political; see also
Scratch music)
socialist aspect of free improvisation
(see: Communist; Communism)
society impact of free improvisation
(see also: culture)
society impact on free improvisation ---
Society of Improvising Musicians (BIM)
sociopolitical circumstances
(of free improvisation)
Sokol Casey
Sokolov Lisa
solo; soloist (free improvisation)
Solo (Relational Function/Composite)
Solo/Support Composite
Solo Improvising Compositional Nature of
(survey)
solo versus group (survey)
Solos within group improvisation (survey)
Solomon Larry
songs; tunes; melodies
"sonic meditations"
(see also: Oliveros Pauline)
Sonics (group)
"Some Answers to Some Questions about
Improvised Music" (Atton; Renaud)
(article)
"Some Non-Communicative Aspects in Music"
(article) (Kneif)
sortisatio
Sound/SOUND
    alone as stylistic component
    any sound as music
    of experimental/original instruments;
    defined
    fascination with; basis as
    ideation distinct from
    initial; starting point
sound installations (see also: instruments
experimental/original)
sound poets
soundplay (see also: Behnke Elizabeth)
"sound wizzard"
Soundscape Newsletter
"soundscapes"
Sound Mass (exercise)
Sound Mass (Relational Function/Composite)
SOURCE Music of the Avant Garde
South America
South Indian (improvisation)
"space jams" (The Grateful Dead)
Splatter Trio
spontaneity; spontaneous generation
Spontaneous Music Ensemble
spontaneous transitions
ST (computer software)

stamping tubes
Stanford (University)
Star Spangled Banner
stasis; static element
STASIS (Figure "one")
Stearns Marshall
Stevens John
Stitt Sonny
"stochastic" music/processes
Stockhausen Karlheinz
Stone Phil
Stravinski Igor
stream-of-consciousness
structure; structural elements/character
structured improvisation (see generally:
composition; improvisation)
Stubley Peter
style:
    Absence/Transcendence of (survey)
    assimilation stylistic (vs. imitation)
    breadth of styles incorporporated
    as a byproduct of free improvisation
    as Communication Device (survey)
    comparisons
    familiarity with
    as used in free improvisation -
    of free improvisation (survey)
     (see also: Indigenous Style)
    identity (stylistic identity);
     uniqueness
    multiplicity of in free improvisation
    as Parody/Irony (survey)
    per survey of improvisers
    Pre-existent Styles in
     Free Improvisation (survey)
    as "quality of of inner certainty
     of character" (see also: Behnke;
     Gebser)
    as Starting Point (survey)
    Sound Precedence over (survey)
    as superficial
    versus PROCESS as essence/identity of
     free improvisation
    of vocalization
style semblance/Style Semblance
style signs/Style Signs
styrofoam
subatomic physics
subconscious
subdivision (of the beat)
(see divisive rhythm)
Subotnik Morton
Sudden/Unexpected Segue (Transition)
superballs (as rubbing implement)
Support (Relational Function/Composite)
Supporters (see: Engel)

supra librum cantare
suspensions
survey of improvisers (Appendix C)
Suzuki Shunryu
synchronisity; synchronisities
synchronisity of "deaf dub"
syntax; syntactical meaning (in music)
synthesizer(s) (see also: sampler)
"systems maps"
(see: Braxton; notation graphic)

T
tabla
Table of Elements/Relational Functions/
Actions
Table itself
Tai Chi
Taj Mahal
"talent"
tape exchange; tape trading
(see also: "mail collaborations")
tape music; use of tape in performance
tapes (as used in practice sessions)
(see also: recordings)
teaching improvisation (see also: education) -
importance of
"Teaching Theory Via Improvisation"
(Elliott) (article)
technical ability (see technique(s))
technique(s):
    compositional
        (see: compositional technique)
    "contemplating"
    "conventional" instrumental
    evolving
    with experimental/original
        instruments found objects
    extended special instrumental
        (see: extended techniques)
    lack of (intentional)
    metaphorical allusions to
    practicing technique
    proficiency (see also: virtuosity)
    reviewed (by critics)
    (see also: Instrumental Technique)
technology
Teitelbaum Richard
"temporal counterpoint"
"Ten Sound Poets on the Poetics of Sound"
(nichol) (article)
tendencies
terminology:
little consensus
terminology specific to text - defined:
Biological Context

Catalyst (Relational Function/
Composite)
Categorizational Impression
CONTENT
Contemporaneous Flow Perception
CONTEXT
CONTEXTUALIZATION
Continuity Processes
Critical Impression
Cultural Context
Cumulative Flow Perception
Desire Impulse
Dialogue (Relational Function/Composite)
Dissociative Flow (DF)
Dissociative Polyphony (DP)
FLOW PERCEPTION
Fragmentation (Transition)
Free Improvisation
(FREE) IMPROVISATIONAL MILIEU
Gestural Continuity/Integrity
Ground (Relational Function/Composite)
Identificational Processes
Identities
IMPULSE
Indigenous Style
INFLUENCE
Intellect
Intelligent Body
Intent Impulse
Internal Cadence (Transition)
Interpolation (Relational Function/
Composite)
LINEAR FUNCTION
Personal Context
Personal/Group Style
Physical Context
Potential Sonic Material
PROJECTION
Reciprocal Influence
Relational Functions
Relational Processes

S

Segmental Form
SOUND
Solo (Relational Function/Composite)
Sound Mass (Relational Function/
Composite)
Style Semblance
Style Signs
Support (Relational Function/Composite)
Transitional/Cadential Processes
Transitions
text (compositional "medium")

(see also: language and free improvisation; poetry; sound poets)
texture (see also: timbre)
theater improvisation in; theatrical
aspects of improvisation
theme(s)
theme and variation
theory music (see: music theory)
theory/theoretical:
    absence of foundation
    appropriate values
    concerns of traditional music
    in teaching improvisation
    treatises
"A Theory of the Compositional Work of Music"
theoretical foundation lack of
Theremin
Timar Andrew
timbre (see also: texture)
Tinctoris Johannes
tonal system(s); tonality
toy instruments; modified electronic
educational toys
traditional approaches to
music education
tradition(s) of improvised music
traditional instruments
(see: instruments traditional)
traditional music; traditional
compositional strategies
Training as component of CONTEXT
training general musical
transcriptions of recordings
limited value -
Transitional/Cadential Processes
Transitions
defined
seven types
translating meaning of image
into sound
"trans-media performance systems"
transposition
Tratado de glosas sobre clausulas
(Diego Ortiz)
Trayle Mark
T-Rodimba (experimental instrument)
trombone; trombonist
Truax Barry
trumpet
tuba
tunes (see: songs)
"twelve-tone music"
20th Century
"Two Voices" (exercise)

U

U.M.B.C. New Music Ensemble
(U. of Maryland-Baltimore County)
unconsciousness of improviser about
performance (see also: subconscious)
unconventional instruments
(see: instruments experimental)
UNFAMILIARITY (Figure 3)
unfamiliar music
unfamiliar instruments
(see also: experimental/original
instruments)
University of California Davis
(U.C. Davis)
University of California San Diego (UCSD)
Universal Music
unpredictability; uncertainty
Unpredictability (as confounding principle
of complexity)
"Untitled Afterthoughts"
unusual tunings (see: microtonality)
Ursprung und Gegenwart (Gebser)
(see also: Behnke)
U.S.; United States

V
Vacuumtreehead (VTH) (group)
Vancouver
Vandor Ivan
van Peer Rene
variation (as a Linear Function)
(see also: theme and variation)
venues types of (for free improvisation)
Victoriaville (Quebec)
Village Voice The
viol
violin; violinist(s); electric violin
virtuosity compositional
virtuosity instrumental
Virtuosity Instrumental Technique/
(survey)
visual arts
visual cues (see: cue(s))
visual perception
visual/sonic relationship
(see also: multimedia)
visual stimuli
(see also: notation graphic)
voice in free improvisation
Voice of New Music: New York City
- The (Johnson)
"voice"; "voices"
voice box (electronic device)
Vollman Kira

WWW

walking bass line
(see: jazz walking bass line)
"warming up"
watercolor (as real time visual art)
Waterphone
Waters Richard
as survey participant comments
information
Webern Anton
Webster William E.
Weinstein Marc
Welwood A.
the West
Western music: (see: classical music;
classical Western music)
wholeness
WIE: Wiesbadener Improvisations Ensemble
Williams Davey
Wolf Christian
Wollick Nicolas
women in free improvisation
the "work" (see: composition identity of;
see also: aesthetic dilemma)
workshops in improvisation
world music (see also: ethnic instruments)
World Soundscape Project
"Wrecking Ball" (CD)
Wright Jack
written music (see notation)

X
Xenakis Yannis
xylophone

Y
"(Y)earbook" (CD)
Young LaMonte

Z
Zen
Zen Mind Beginner's Mind (Suzuki)
Zorn John

BIBLIOGRAPHY

Publications Referenced in Text

Albersheim, Gerhard, "On the Psychology of Music, International Review of the Aesthetics and Sociology of Music, Vol. IV, No. 2, 1973, pp. 213-226.

Atton, C. F., "Some Answers to Some Questions About Improvised Music," The Improvisor, Vol. VIII,

Birmingham, Alabama, 1988-89, pp. 32-40.

Austin, Larry, "Larry Austin" [interview by Barney Childs and Christopher Hobbs, in Forum: Improvisation], Perspectives of New Music, Vol. 21, 1982-83, pp. 26-33.

Bailey, Derek, Improvisation: Its Nature and Practice in Music, (2nd revised ed.) New York: Da Capo Press, 1980/1993.

Bailey, Derek, "Derek Bailey," [interview by Barney Childs and Christopher Hobbs, in Forum: Improvisation], Perspectives of New Music, Vol. 21, 1982-83, pp. 46-52.

Bartlett, Martin, "Electro-Acoustic Methods," Musicworks Vol. 28, 1984, p. 9

Bechtel, B., "Improvisation in Early Music," Music Educators Journal, Vol. 66, pp. 109-112, 1980.

Behnke, Elizabeth, "The Craft of Improvisation: Sounding the Integral World," California Center for Jean Gebser Studies, 1986.

Behrman, David, "What Indeterminate Notation Determines," Perspectives of New Music, Vol. 3, No. 2, 1965, pp. 58-73.

Bradlyn, Mark, "Chaos Theory and Group Improvisation," The Improvisor, 8, Birmingham, Alabama, 1988-89, pp. 15-18.

Bradlyn, Mark, "Figure, Ground and Field: Gesture and Texture," The Improvisor, 9, Birmingham, Alabama, 1991, pp. 23-26.

Budd, Harold, "Harold Budd," [interview by Barney Childs and Christopher Hobbs, in Forum: Improvisation], Perspectives of New Music, Vol. 21, 1982-83, pp. 53-61.

Cardew, Cornelius (Ed.), Scratch Music, Cambridge, Mass.: MIT Press, 1974.

Cope, David, New Directions in Music, Dubuque, Iowa: Wm. C. Brown Co., 1971.

Courlander, Harold, Negro Folk Music, USA, New York: Columbia University Press, 1963.

Davies, Hugh, "The Musical Potential of Found Objects in New Instruments Invented by Young People," Musicworks, Vol. 57, 1994.

Dean, Roger, New Structures in Jazz and Improvised Music Since 1960, Milton Keynes, Philadelphia; Philadelphia: Open University Press, 1992.

Dean, Roger, Creative Improvisation, Philadelphia: Open University Press, 1989.

Dutton, Paul, "Beyond Doo-Wop," Musicworks, Vol. 54, 1982, pp. 8-19.

Electronic Courseware Systems, "Instructional Software Catalog," 1994.

Elliott, C. A., "Teaching Theory Via Improvisation," Educator, Vol. 8, pp. 20-22, 1975.

Engel, Francis, "Planning for Improvisational Music," (unpublished), Bolinas, CA, 1993.

Experimental Musical Instruments, Bart Hopkin, ed., Nicasio, CA.

Ferand, Ernst, Improvisation in Nine Centuries of Western Music, Historical Anthology of Music, Vol. 12, (Willi Apel, Ed.), Cologne: A. Volk Verlag, 1961.

Freedman, Harry, "CCMC Vol. III," Musicworks Vol. 1, 1978, p. 3.

Freeway [reviews], Vol. 3, No. 1, 1994.

Goldstein, Malcolm, "The Gesture of Improvisation (1982)" Musicworks, Vol. 46, 1990, pp. 28-33.

Grove's Dictionary of Musical Instruments, New York: MacMillan, 1984.

Harvard Dictionary of Music, Cambridge, Mass.: Harvard University Press, 1966.

Hopkin, Bart, Making Simple Musical Instruments, Asheville, NC: Lark Books, 1995.

Hopkin, Bart, Musical Instrument Design, See Sharp Press, 1996.

Hopkin, Bart, Gravikords, Whirlies & Pyrophones, Roslyn, New York: Ellipsis Arts..., (1996).

Hovancsek, Michael, "Extending the Human Voice," The Improvisor, Vol. 10, 1993, pp. 12-13, 69.

The Improvisor, Reviews, Vol. 10, 1993, pp. 40-52.

Johnson, Tom, The Voice of New Music: New York City 1972-1982, Eindhoven, The Netherlands: Het Apollohuis, 1989.

Karkoschka, Erhard, Notation in New Music, New York: Praeger Publishers, 1972.

Keil,Charles and Steven Feld, Music Grooves, "Motion and Feeling Through Music" (University of Chicago Press), 1994

Khatchadourian, Haig, "The Identity of a Work of Music," Music & Man, Vol. 1, No. 1, 1973, pp. 33-57.

Kneif, Tibor, "Some Non-Communicative Aspects in Music," International Review of the Aesthetics and Sociology of Music, Vol. V, No. 1, 1974, pp. 51-58.

Meyer, Leonard S., Emotion and Meaning in Music, Chicago: The University of Chicago Press, 1956.

Music Educators Journal, Vol. 66, 1980 (various articles).

Nachmanovitch, Stephen, Free Play: The Power of Improvisation in Life and the Arts, Los Angeles: Jeremy P. Tarcher/Perigee, 1990.

nichol, bp, "Improvising Sound: Ten Sound Poets on the Poetics of Sound," Musicworks, Vol. 38, 1987a, pp. 9-17.

Nunn, Tom, "Original Musical Instruments for Real Time Composition," Musicworks 37, 1987b, pp. 9-10.

Nunn, Tom, "Electroacoustic Percussion Boards: Sculptured Musical Instruments for Improvisation," Leonardo, 21:3, Pergamon Press, Cambridge, 1988, pp. 261-265.

Nunn, Tom, "Improvisation with Experimental Musical Instruments," Experimental Musical Instruments, 8:1, Nicasio, Calif., 1992.

Nunn, Tom, "A Theoretical Framework for Free Improvisation," The Improvisor, Vol. XI, 1996, pp. 72-78.

Oliveros, Pauline, "The Klickitat Ried: 108 Possibilities 54 Opposites," Perspectives of New Music, Vol. 21, 1982-83, pp. 107-111.

Oswald, John, "Plunderphonics, or Audio Piracy as a Compositional Prerogative," Musicworks, Vol. 34, pp. 5-8, 1986.

Partch, Harry, Genesis of a Music, (2nd Ed.) New York: Da Capo Press, 1974.

Porter, Randy, "A case for Improvisation to be an Integral Part of Music Curriculum," The Improvisor, Vol. XI, pp. 70-71, 1996.

Prevost, Eddie, and Rowe, Keith, "AMM: Eddie Prevost, Keith Rowe" [interview by Barney Childs and

Christopher Hobbs, in Forum: Improvisation], Perspectives of New Music, Vol. 21, 1982-83, pp. 34-45.

Prevost, Eddie, "Improvisation: Music for an Occasion," British Journal of Music Education, Vol. 2 (1985).

Random House Dictionary of the English Language (2nd ed.), 1983.

Reese, Gustave, Music in the Renaissance, New York: Norton, 1959.

Reeves, S., "Improvisation: New Teaching Strategies," Jazz Research Papers, Charles T. Brown, ed., Vol. 10, pp. 96-98, 1990.

Reynolds, Roger, "Indeterminacy: Some Considerations," Colloquy and Review, Perspectives of New Music, Vol. 4, No. 1, 1969, pp. 136-140.

Rose, Gloria, "Agazzari and the Improvising Orchestra, Journal of the American Musicological Society, Vol. 18, 1965, pp. 382-393.

Silber, John, "KIVA" Perspectives of New Music, Vol. 21, 1982-83.

Smith, LaDonna, "Festivals in the USA," The Improvisor, Vol. 10, 1993.

Smith, Stuart (and Linda Fiore), "Return and Recall: (Improvisation - The First Step) at U.M.B.C.," Perspectives of New Music, Vol. 21, 1982-83, pp. 286-302.

Sokol, Casey, "Pushing the Limits," Musicworks, Vol. 17, 1981, pp. 16-19.

Solomon, Larry, "Improvisation (1)," Perspectives of New Music, Vol. 21, 1982-83, pp. 71-78.

Soundscape Newsletter, The, World Soundscape Project, Department of Communication, Simon Fraser University, Burnaby, B.C., Canada, V5A 1S6.

SOURCE, Music of the Avant Garde, Larry Austin, ed., University of California, Davis.

Suzuki, Shunryu, Zen Mind, Beginner's Mind, New York: Weatherhill, 1977.

Timar, Andrew, "Misha Mengelberg," Musicworks, Vol. 14, 1981.

Truax, Barry, "The Listener," Musicworks, Vol. 35, 1986, pp. 13-16.

Webster, William E., "A Theory of the Compositional Work of Music," Journal of Aesthetics & Art Criticism, Vol. 33, 1975, pp. 59-66.

Wright, Jack, [untitled, unpublished writing], 1994.

RELATED WRITINGS:

Improvisation in Western Classical Music:

Bukofzer, Manfred, "The Gymel, The Earliest Form of English Polyphony," Music and Letters, Vol. 16, No. 2, 1935, pp. 77-84.

Ferand, Ernest T., "'Sodaine and Unexpected' Music in the Renaissance," The Musical Quarterly, Vo.l. 37, 1951, pp. 10-27.

Maynard, Judson D., "Heir Beginnis Countering," Journal of the American Musicological Society, Vol. 20, No. 2, 1967.

Miller, Hugh M., "Sixteenth-Century English Faburden Compositions for Keyboard," The Musical Quarterly, Vol. 31, 1940, pp. 50-64.

Nelson, Robert Uriel, The Technique of Variation; a study of the instrumental variation from Antonio de Cabezon to Max Reger, Berkeley: University of California Press, 1948.

Pignon, Paul, "Far From Equilibrium," Unfiled, ReR/Recommended Sourcebook 0401 (limited edition), Chris Cutler, ed., England, 1994.

Pressing, Jeff, "Improvisation: Methods and Models," In Generative Processes in Music, (John A. Sloboda, Ed.), Oxford: Clarendon Press, 1988, pp. 129-178.

Reese, Gustave, Music in the Middle Ages, New York: W. W. Norton, 1948

Sanders, Ernest H., "Catilena and Discant in 14th-Century England," Musica Disciplina, Vol. ___, 1965, pp. 7-52.

Treitler, Leo. "Medieval Improvisation," World Music, Vol. 33, 1991, pp. 66-91.

Improvisation in Other Cultures:

Danielou, Alain, "The Psychology of Improvisation in the Music of North India," The World of Music, Vol. 17, No. 4, 1975, pp. 16-22.

Nettl, Bruno, with Bela Foltin, Jr., Daramad of Chahagah, a study in the performance practice of Persian music. Detroit Monographs in Musicology, no. 2, Detroit, 1972.

Nettl, Bruno, "Thoughts on Improvisation: A Comparative Approach," The Musical Quarterly, Vol. 9, No. 1, 1974, pp. 1-19.

Tsuge, Gen'ichi, "Rhythmic Aspects of the Avaz in Persian Music," Ethnomusicology, Vol. 14, No. 2, 1970, pp. 205-227.

Wade, Bonnie, "Chiz in Khyal: The Traditional Composition in the Improvised Performance," Ethnomusicology, Vol. 17, No. 3, 1973, pp. 443-459.

Further Reading:

Atton, C. F., "Some Answers to Some Questions About Improvised Music," The Improvisor, Vol. VIII, Birmingham, Alabama, 1988-89, pp. 32-40.

Behnke, Elizabeth, "Toward a Description of Integral Atonality," California Center for Jean Gebser Studies, 1981.

Bouliane, Yves, "Talk About Improvising," [interview with Crawford/Oswald/Harwood], Musicworks, Vol. 10, 1980, pp. 14-15.

Cardew, Cornelius, "Towards an Ethic of Improvisation," in Treatise Handbook, London: Peters Edition.

Cherry, Colin, On Human Communication, Cambridge, Mass.: MIT Press, 1980.

DeMaria, Michael Brant, "Improvisation, Attitude, and the Self," The Improvisor, 9, Birmingham, Alabama, 1991, pp. 27-29.

Dittmann, Rigobert, "Pidgeonholing Sucks, Too," The Improvisor, 8, Birmingham, Alabama, 1988-89, pp. 24-25.

Francis, Lindo, and Trussell-Cullen, Alan, Hooked on Making Musical Instruments, Aukland, New Zealand:

Longman Paul Limited, 1989.

Gleick, James, Chaos: Making a New Science, New York: Penguin Books, 1987.

Hall, Helen, "Sound and Gesture: An interview with percussionist Fast Forward," Musicworks, Vol. 46, 1990, pp. 36-42.

Hearon, James, "Composition and Improvisation," The Improvisor, 8, Birmingham, Alabama, 1988-89, pp. 19-23.

Hearon, Jeams, "Emotion in Improvisation," The Improvisor, 9, Birmingham, Alabama, 1991, pp. 19-22.

Jung, Carl, Synchronisity (2nd Ed.), Princeton, NJ: Princeton University Press, 1969.

Kaplan, Lee, and Golea, Vinny, "Lee Kaplan and Vinny Golea," [interview by Barney Childs and Christopher Hobbs, in Forum: Improvisation], Perspectives of New Music, Vol. 21, 1982-83, pp. 63-68.

LaRue, Jan, Guidelines for Style Analysis, New York: Norton, 1970.

Nyman, Michael, Experimental Music, Cage and Beyond, New York: Schirmer, 1974.

Plonsey, Dan, review of AMM's "Combine and Laminates" CD, quoting Eddie Prevost, Freeway, 2:1, San Francisco, (March-May, 1992).

Salzman, Eric, Twentiety-Century Music: An Introduction, Englewood Cliffs, New Jersey: Prentice-Hall, 1967.

Schafer, R. Murray, The Tuning of the World, New York: Knopf, 1977.

Schwartz, Elliott, "Elliott Schwartz," [interview by Barney Childs and Christopher Hobbs, in Forum: Improvisation], Perspectives of New Music, Vol. 21, 1982-83, pp. 69-70.

Sloboda, J., The Musical Mind: the Cognitive Psychology of Music, Oxford: Clarendon Press, 1985.

Sloboda, John A. (ed.), Generative Processes in Music: the psychology of performance, improvisation, and composition, Oxford (England): Clarendon Press; New York: Oxford University Press, 1988.

van Peer, Rene, "Holland Blunts the Cutting Edge," Musicworks, Vol. 69, 1997, pp. 28-31 .

Williams, Davey, "Concerning the Music That Will Be," Perspectives of New Music, Vol. 21, 1982-83, pp. 101-105.

Wright, Jack, "Theatre of the Moment & Against Improvisation," private publication, 1988.

* * * * * *