

Wisdom of the Impulse
On the Nature of Musical Free Improvisation
Part 1

Tom Nunn

© 1998

Pdf edition, 2004

ISBN 87-91425-02-6 (Part1)

For technical reasons, the document had to be divided into two parts. Please see continuation in Part 2.

PUBLISHER'S NOTE

This pdf freeware edition was made for the website International Improvised Music Archive (IIMA) in agreement with the author on the basis of the printed book and its data files. There are no changes in the contents, however there are some adjustments for technical reasons. Footnotes have been integrated into the text to avoid any navigation problems. Please be advised that page numbers do not match the printed edition and that some details differ, as slight changes to available files were made by the author before printing. An index has been preserved here as Appendix D without the page numbers.

Carl Bergstroem-Nielsen.

CONTENTS

[The reader is advised to use the bookmarks for navigating within the text - this can, however, serve as an overview. Please note that you must have both Part 1 and Part 2 to be able to view the entire document.]

[Part 1:]

PREFACE

CHAPTER 1. PURPOSE AND APPROACH

Purpose

Approach

CHAPTER 2. ORIGINS OF THE PRACTICE

Improvisation in the History of Western Classical Music

Sources

Jazz

Jazz Since 1960

Relationship of Jazz to Free Improvisation

New Music and the Evolution of

Free Improvisation

Improvisation, Chance and Indeterminacy

The Evolution of Free Improvisation as a Practice

Conclusion

CHAPTER 3. TERMINOLOGY

Terms

Free Improvisation

Sound

Influence

Context

Impulse

Improvisational Milieu

Content

Linear Functions

Identities

Relational Functions

Transitions

Gestural Continuity/Integrity

Segmental Form

Meta-Style

Contextualization

Projection

Flow Perception

Impression

CHAPTER 4. PERSPECTIVE: CHARTING THE INFLUENCES AND PROCESSES

Reading the Charts

Figure 1 - Chart of Influences and Processes

Figure 2 - Chart of Context

Figure 3 - Chart of Perception

Figure 4 - Chart of Meta-Style, Relational Functions and Transitions

Figure 5 - Chart of Linear Functions and Identities

Discussion

The Complex Nature of Processes

Confounding Principles of Complexity

Linear Functions

Identities

Relational Functions/Composites

Transitions

Gestural Continuity/Integrity

Segmental Form

Summary

CHARTS (Figures 1-5)

[Part 2:]

CHAPTER 5. CRITICAL LISTENING

Introduction

The Environment and Listening

Music and Listening

Creative Listening

Communication in Music

Communication in Group Free Improvisation

CHART of Interpretation and Response

Table of Elements/Relational Functions/
Actions

TABLE

Purposeful Ambiguity and Non-Communication

Critical Values in Free Improvisation

Survey of Reviews

The Improvisor

The Voice of New Music (by Tom Johnson)

Freeway

Conclusion

CHAPTER 6. CURRENT PRACTICE

Sociopolitical Circumstances

Economic Circumstances

Networking

The Practice

Used of Technology in Free Improvisation

The Voice in Free Improvisation

Experimental/Original Instruments in Free improvisation

Free Improvisation and Society

Live Performance versus Recordings

Free Improvisation in Other Arts

Free Improvisation and the Evolution of Music

CHAPTER 7. FREE IMPROVISATION AND EDUCATION

The Teaching of Improvisation

Engel
Bradlyn
Behnke
Stevens
Bennick/Mengelberg
Davies
Oliveros

Dean

Carroll

Improvisation in Educational Curricula

Improvisation in Higher Education

APPENDICES

APPENDIX A: IMPROVISATIONAL FORMS IN WESTERN CLASSICAL MUSIC

APPENDIX B: EXERCISES

Individual Exercises

Solo Exercise #1 - Free Improvisation
Solo Exercise #2 - Grow a Sound
Solo Exercise #3 - Find a Sound
Solo Exercise #4 - Two Voices (Solo)
Solo Exercise #5 - Density Fluctuations
Solo Exercise #6 - Associative/Dissociative Fluctuations
Solo Exercise #7 - Abstract Graphic

Group Exercises

Group Exercise #1 - Free Improvisation
Group Exercise #2 - Pulse
Group Exercise #3 - One Voice
Group Exercise #4 - Sound Mass
Group Exercise #5 - Grooves and Transitions
Group Exercise #6 - Conducted
Group Exercise #7 - Interaction
Group Exercise #8 - Interpolation
Group Exercise #9 - Graphic

Designing Exercise

APPENDIX C: Survey of Improvisers

Introduction

Improviser Survey

Defining Free Improvisation
Describing Free Improvisation
Originality
Spontaneity
Communication
Absence of ego
As Working Out Material
Relationship to Composition
Role of Pre-existent Styles

- Absence/Transcendence of style
- Sound precedence over style
- Style as a starting point
- Style as communication device
- Style as Parody/Irony
- Style Characteristics of Free Improvisation
- Solo versus Group Free Improvisation
- Differences between solo and group
- Giving up control in group improvisation
- Group interaction
 - Interpersonal relationship
 - Interaction within solo improvisation
- Compositional nature of solo improvisation
- Solos within group improvisation
- Instrumental and Technological Resources
- Almost any sound can be used
- Extended techniques
- Electronics
- Instrumental Technique/Virtuosity
- Live Performance versus Recordings
- Significance of Free Improvisation -
 - Personal
 - Musical Significance of Free Improvisation
 - Cultural/Historical Significance of Free Improvisation
- List of Responding Improvisers

APPENDIX D: Index from book version

BIBLIOGRAPHY

PREFACE

Free improvisation is the imagination unleashed through impulse. What informs the imagination and what actions are stimulated by impulse, in the realm of music, is what will be explored here. As we all know, impulse can lead to good things or bad; it depends on the circumstances and how we respond to them. Everyone, every day, in thousands of ways, acts on impulse, or doesn't act; but impulse is always there. "Considered decisions" may resist immediate response, but they are also often guided by first impressions.

What is an impulse? The Random House Dictionary of the English Language (2nd edition unabridged, p. 963) defines it as follows:

1. the influence of a particular feeling, mental state, etc.
2. sudden, involuntary inclination prompting to action ...
4. a psychic drive or instinctual urge.
5. an impelling action or force, driving onward or inducing motion...

These particular definitions among the several offered apply most directly to free improvisation. It is often a highly emotional music, but at the same time, the conscious mind or intellect plays a part. It is typically sudden, quick-changing, unpredictable, yet improvisers are prepared for this. There is an uncanny psychic connection between free improvisers in an experienced group that makes it seem to respond as one mind. And musical free improvisation, once it begins, must drive onward, the improviser cannot rest; the music induces motion and involvement, demanding these real time composers keep creating ideas which express an inevitable direction or evolution the music must take. It is a headlong tumble into the unknown; quick-

changing complexities of sound that, in one sense, could go anywhere, but in another sense, reflect an organic consensus among co-creators in forming the music.

All music reflects the human condition. Free improvisation reflects it most directly. The responsive impulse is what gives it this directness. But the impulse is no mere physiological autonomic reaction to stimulus. The impulse is intelligent; indeed, the impulse can be wise.

The human condition reflected in music and free improvisation is, obviously, multifaceted. There are innumerable influences operating upon human behavior at any given moment. These influences -- whether physical, environmental, psychological, cultural, political, emotional, or even intellectual -- will guide the impulse in some way. It is impossible to be otherwise. A human being, given the task of making music without any conscious predeterminations whatsoever, will do certain things. Patterns will appear in the "performance behavior," as well as overt gestures of expression. Abstract ideas may be heard; there will be some concern about the technique of producing the sounds; there may also be an awareness about how the sounds connect to one another and how they group themselves into musical characters. But whatever happens, the involvement of the human being will be evident. Chimpanzees, as smart as they are, will not give the same impression. When human beings make music, there is usually something "musical" about the sound which we acknowledge; even though it may be different from what we are used to, it is heard as music. It is a human expression.

If the impulse is guided by these many influences, how is it possible to understand their relationship to free improvisation? That is, just how do they influence the music? And what is the nature of a music that has no defined content, anyway? How does one listen to something that is, to a large extent, unpredictable, even to the improvisers, themselves?

These are some of the complicated questions that will be explored here, not with the idea of defining for all the world what this practice is about, but rather presenting the thoughts of one improviser which are the fruits of performance experience, study, reflection, and being a small part of the worldwide community of free improvisers. Personal experience here seems essential. Without it, whatever is said is truly hypothetical. As a relatively young practice of music, historically speaking, much is yet to be learned about free improvisation. But it is not just a trend among trends. Rather, it bespeaks a new and appropriate consciousness about music, appropriate because it says so much about the human condition.

Free improvisation requires dedication, just like any music. This is more than practicing one's instrument. It entails reflection, self-criticism, and a desire and ability to reach out to people to share with them the magic we, as improvisers, are experiencing. It is difficult for some music listeners to accept free improvisation, if they know it exists at all. It may seem wild beyond control, formless, just a bunch of people "screaming" through their instruments. But, as will hopefully be conveyed in the following pages, it is much deeper than expected. The music, itself, is bringing all sorts of styles together to a neutral place where all can coexist. It is a celebration of differences and an affirmation of similarities, expressing the ingenuity of the spontaneous mind as well as the facility of the unencumbered proficient body. Free improvisation is a product of our time and consciousness, not only about music, but about life.

CHAPTER 1

PURPOSE AND APPROACH

Freely improvised music is a relatively recent phenomenon as a practice, though improvisation in one form or another has existed as an important part of music throughout human history. Today, improvisation is probably most strongly associated in the West with jazz and, to an extent, rock. Non-Western cultures throughout the world, however, have also utilized improvisation in their music to a high degree. The most sophisticated, "classical" practices include North Indian, South Indian, and Persian (Dastgah). Other musics, such as Indonesian gamelan, African solo mbira ("thumb piano") music, etc. make use of improvisation, as do many folk musics of the West, the latter often associated with particular instruments such as the fiddle (violin), jew's harp, banjo, etc. Not only has improvisation been found throughout non-Western cultures, it has also played a significant role in the thousand year old history of classical Western music (Ferrand, 1961).

Improvisation has a fundamental relationship to any creative process. Free improvisation, though intimately

linked to certain predecessors, represents a bold leap in a new direction. For the first time, musicians are practicing an art that is entirely generated spontaneously, completely uniting the functions of composer and performer. As such, the music is unpredictable and personal. Yet, this is not to say it is "random" or "mindless." As demonstrated in the chapters to follow, free improvisation calls on instrumental technique, a knowledge of styles, and a compositional imagination. No less than other kinds of music, it is an art which requires practice and dedication. The music itself is complex and broad in the extreme, challenging audiences as well as improvisers to stretch the bounds of perception and imagination. But for the effort, free improvisation represents a refreshing moment of artistic truth, coming directly and impulsively from the (trained and experienced) body as well as the (educated and imaginative) mind. And it is the essence of all forms of improvisation.

It is important here and now to destroy the myth that free improvisation is easy, that mistakes can't be made, or that anything goes. The truth is, free improvisation is a natural expression (but one that needs cultivating), mistakes are made (but they can be "contextualized" in retrospect within the music), and anything might go (but only as an outgrowth of the performance itself). As an educational tool, conscious limitations in the form of simple exercises can serve to focus attention on this or that, making free improvisation relatively easy and accessible. But too often, improvisation in education is used only as a means to an end, whether that be the teaching of traditional musical concepts to younger students or the generation of raw material for written composition in advanced or university courses. It is time to consider free improvisation in a more serious light as an art in and of itself.

* * *

Purpose

The purpose of this investigation is to enhance the listening experience of free improvisation through an understanding of its circumstances and characteristics. The ideas and comments presented here are intended to help the reader become a more informed (and critical) listener, whether as an audience member or improviser. Active, creative listening is indispensable to free improvisation. The very process of creating an improvisation relies each and every moment on the improviser's aural acuity to "make sense" of what just happened and respond accordingly. The audience is also called upon to use imagination to "make sense" of a music about which no one knows the outcome until after the fact.

One might wonder, "Why bother trying to figure out what makes free improvisation what it is? After all, the spirit of the music is emotional, wild and free; it goes beyond mere conscious knowing. And what can be said anyway about something so unpredictable? Free improvisation can no more be harnessed by theory than it can be dissected by analysis." (Devil's Advocate)

Free improvisation, like any music, needs an audience; and in order to continue and grow, it needs an informed audience, a critical audience. At this point in time, free improvisation is growing in popularity, though it is not really a commercial kind of music. People are becoming more aware of different kinds of music -- new music, ancient music, and indigenous musics throughout the world; along with this comes, for some, an awareness of free improvisation. A need exists to develop some common ground of understanding that can generate a greater appreciation of the music, stimulate discussion about it, and develop critical perspectives that address more than superficial stylistic aspects.

* * *

Approach

Free improvisation presents a thorny problem to anyone wishing to examine it in detail. There are obviously no scores, no notation to consider. The transcription of recordings has been used in the analysis of jazz, and could be used in a limited way in the analysis of free improvisation. However, transcriptions can give only a gross approximation where the music becomes extremely dense and complex, as it does in free improvisation. And transcriptions cannot hope to accurately convey important subtleties, such as microtonal intervals, intricacies of articulation, timbral changes within a single instrument, extended instrumental techniques, and quasi-rhythmic or arrhythmic patterns, all of which are vital expressive and structural components of free improvisation. So one cannot rely on transcriptions of recordings to the extent possible in

jazz or even non-Western improvisation where melody and harmony are predominant and where a good deal is known about the form and style of the music before it is heard.

Nevertheless, the transcription of free improvisation recordings, when possible, can provide information useful to illustrate structural coherency on a detailed level and perhaps show relationships that integrate structure, form and style. But transcription is not necessary in order to understand a great deal about the music; and in some ways, it is ineffectual. While listening to a live performance of free improvisation is a "fleeting" experience, listening to recordings repeatedly creates over time a familiarity that can lead to a more specific understanding of that performance, the particular improvisers, and free improvisation itself. Hearing a live performance is exciting in its own way, full of mystery; what will happen? But a single hearing of a free improvisation does not ordinarily reveal more than a small percent of the content of the music (though the emotional impact may be completely effective). This becomes apparent when listening several times to a recording of a live performance one has attended. Subtleties and nuances not heard initially become more apparent; the ever changing relationships among the improvisers in a group become clearer; important changes in the music, transitions, can be heard more readily in a growing awareness of the form the improvisation.

* * *

A common theoretical foundation for free improvisation is currently absent, though numerous authors (usually improvisers) have written about it in books, articles and reviews. (See Chapter 6.) Much like the music itself, the perspectives and approaches taken to describe improvisation -- even free improvisation -- vary a great deal. For example, compare the approach taken in Stephen Nachmanovich's Free Play (1990) with that of Derek Bailey's Improvisation: Its Nature and Practice in Music (1993). Indeed, there seems to be little consensus about a theoretical understanding of free improvisation, per se, and a terminology to more precisely and consistently discuss it.

Many, including improvisers, believe that free improvisation is beyond theory or analysis; and to some extent, it is. The sheer complexity of the music at times, as well as its unpredictable nature, can thoroughly disintegrate one's ability (as well as desire) to study it closely. But without some common ground of understanding, there can never be the fullest appreciation for the evolving language of this music. Furthermore, the art itself grows through the establishment of appropriate critical values, i.e. those which can be specific yet incorporate the breadth of styles, approaches and personalities represented by free improvisation. The validity of such critical values can only come from an intimate awareness of the practice, and this growing awareness ultimately leads to, at least, an interest in establishing appropriate theoretical concepts.

* * *

Free improvisation has become a major component of new music, whether in the realm of classical, jazz, rock, or world music fusion. Many things seem to have accounted for this -- changes in the structure and nature of society, a new awareness of ourselves that is the product of the confluence of East and West, the new accessibility to recordings of music from cultures throughout the world, composers and improvisers who have continued to alter the nature of music throughout its history. Such changes have opened doors to new possibilities, and free improvisation has come into its own. The time is right -- musically, sociologically, psychologically, spiritually. The deeper meaning of free improvisation goes far beyond the performance, the entertainment, the accomplishment of producing a good recording, the improviser's reputation, even the community and community values it represents. Free improvisation expresses directly the concept of free will. It is the democratization of musical process. For all of these reasons, it is a fascinating and apt subject of investigation.

CHAPTER 2

ORIGINS OF THE PRACTICE

The practice of free improvisation did not just suddenly appear, of course. Like any music, it evolved from what came before and expresses something essential and unique to the historical/cultural moment. It is hard to imagine free improvisation being practiced in a society where individuals have little or no concept of

individual rights and freedom, for example. It is thus no coincidence that free improvisation developed where and when it did, a product of democracy. Being ultimately open to influences -- indeed, inviting them -- there are many. In one sense, free improvisation "comes from" these many influences, which include the culture, the individual, the circumstances of each performance, and the performance, itself, exerting its own cumulative and generative influence.

This chapter examines the musical roots of free improvisation. Brief reference is made first to older historical practices in Western music, both classical and popular; jazz and classical new music are next described as the strongest, most immediate progenitors. (Note: Of course "world music" has also had an influence on free improvisation. But it is jazz and Western classical new music that have had the most profound and direct impact. For this reason, "world music" is not addressed here.)

* * *

Improvisation in the History of Western Classical Music

Classical music of the West is still commonly considered by many today to be a tradition of written music that is absent improvisation to any important extent, while traditions in the East are well known for their extemporaneous character. There are acknowledged exceptions to this stereotype, of course, such as the improvised cadenza of classical instrumental concerti or the church organist improvising as needed, carrying on a long tradition. But for the most part, the Western musical heritage is presently considered to be embodied in written compositions that have stood the test of time over the last several hundred years. This attitude developed in proportion to composers' egos in the late 19th Century. Forms expanded beyond proportion; experimentation around the turn of the century brought Impressionism, Neo Primitivism, Neo Classicalism, and ultimately Serialism. By the time Serialism reached its height in the 40's and 50's, performers were left only with the remnants of "interpretation," if that. Serial composers including Schoenberg, Webern, Stockhausen (early), Berio, Babbitt, etc. placed unbelievable demands upon the skills of highly trained performers, yet left little or no room for "interpretation." There was only one correct way to play the music. This was the penultimate moment of control for composers; but it all went downhill from there, and rapidly. Things began to change in the 1950's and 60's. Classical new music composers started to reconsider the issue of control by experimenting with notation, electronic music and unusual instrumentations, and extending the role of the instrumentalist or vocalist, eventually (and unknowingly), in conjunction with jazz, spawning free improvisation.

The genesis and history of this consciousness lies in nine centuries Western music that exhibit a wealth of improvisational forms and practices, representing vocal and instrumental music, solo, chamber and large ensembles, sacred and secular, different nationalities, and musical forms of varied complexity.

Solomon (1982) notes how important improvisation was in times past, quoting C.P.E. Bach in 1760 who wrote:

The public demands that practically every idea be constantly altered, sometimes without investigating whether the structure of the piece or the skill of the performer permits such alteration. One no longer has the patience to play the written notes [even] for the first time. (brackets in original)

Many composers, such as Landini, J.S. Bach, Mozart, Beethoven, Brahms, Chopin, Franck, and Milhaud, are known to have been as accomplished at improvising as they were at writing music. He cites Chopin as a composer who made no real distinction between the two kinds of composition, except for actually preferring improvisation to writing music. Composers and performers have always shared creative responsibility for the music, and composers did not generally consider the written music to be "the work;" this is a relatively recent idea (Cf., Webster, "A Theory of the Compositional Work of Music," 1975; Khatchadourian, "The Identity of a Work of Music," 1973).

Long before the invention of printing, melodies were shared through a network of oral tradition; bards would travel throughout Europe telling stories in song, with improvised self-accompaniment. And whether church composer or street performer, there was a need to come up with new material. Improvisation is always a good way to do this. Indeed, a multitude of improvisational forms are found throughout the history of classical music in the West. The reader is referred to Appendix A for a list of examples.

* * *

Sources

To learn something of how ancient practices of improvised music were accomplished, one looks for rules; and rules are found in the theoretical treatises of the time. A few examples are briefly cited below. However, for more in-depth information, the reader is referred to Ernst Ferrand's magnum opus, Nine Centuries of Improvisation in Western Music, Historical Anthology of Music, Vol. 12, (Willi Apel, Ed.), Cologne: A. Volk Verlag, 1961. Examples of such theoretical treatises are listed below:

One of the earliest written sources of keyboard music reflecting the long-practiced art of improvisation over liturgical cantus firmi was Conrad Paumann's Fundamentum organisandi (1452). (*Id.* p. 9)

A particularly important treatise is Liber de arte contrapuncti (1477) by Johannes Tinctoris, which states that both simple and diminished counterpoint may be performed either written (scripto) or improvised (mente) and presents detailed descriptions and definitions of the practice of "singing over the book" or supra librum cantare; the notated composition (cantus compositus) is termed res facta, meaning "the finished thing."

Nicolas Wollick's Enchiridion (1512) describes a practice called "sortisatio" as a sort of "music by chance;" it means the sudden, unexpected ordering of some chant by the addition of various concordant melodies. (*Ibid*)

Division Viol (1659) and Division Violist (1665) by Christopher Simpson present three types of division, or improvised variations, as practiced in England: "breaking the ground" or bass diminution; "descanting upon the ground" or counterpointing over the bass; and a mixture of these in both "single notes" and "double notes" (double stops).

Del Sonare sopra'l basso (1607) by A. Agazzari describes groupings of "foundation" instruments and "ornamentation" instruments for improvised orchestral music, both as accompaniment to recitative and as interludes in opera (ritornelli and sinfonia). (Rose, 1965)

C.P.E. Bach's Essay (1753) describes ornamentation and cadenza. The Tratado de glosas sobre clausulas (1553) by Diego Ortiz describes three kinds of string and keyboard playing: improvised fantasy or fantasia; improvised simple or elaborate counterpoints (viol) over an ostinato bass (organ); and sobre cosas compuestas, or playing over a composed piece, where keyboard plays the original piece and viol plays one or another of the parts in embellished form (diminution). (Ferrand, 1961, Reese, 1959).

While theoretical texts at times became somewhat lofty, instructional manuscripts gave students of the performance practice down-to-earth rules and guidelines, the original "how-to" music books. It is evident from these writings that improvisation was an important part of almost all music-making at the time.

* * *

Jazz

The term "jazz" is of uncertain origin, but it came into use between 1913 and 1915 and several different musical expressions ultimately became known as jazz -- blues, ragtime, Dixieland, big band, bebop, modern jazz, third-stream, etc. Although originated by African Americans, it evolved into the multi-racial, multi-ethnic form that it is today.

One definition of jazz reported by Marshall Stearns (1963) is

'a semi-improvisational American music distinguished by an immediacy of communication and expressiveness characteristic of the free use of the human voice and a complex flowing rhythm; it is the result of a 300-year blending in the United States of the European and West African musical traditions; and its predominant components are European harmony, Euro-African melody, and African rhythm.' (cited in Courlander, 1963, p. 3)

Improvisation has been widely recognized as a distinguishing attribute of jazz music, though some styles were more improvisational than others. The various jazz styles have always represented the people, the places and the times out of which the particular style arose. This is seen in the association of well known

players, regions or cities, and historical periods with certain styles. It seems likely that the strong element of improvisation in jazz, being a direct and contemporaneous emotional expression of life, has contributed to this phenomenon of personal, regional and chronological associations with styles.

At the same time, avant garde, or classical new music had a strong impact on jazz, and vice versa: jazz incorporated ideas such as atonality, while classical new music took on some elements of jazz. One of the common links that developed between these two traditions was instrumental virtuosity, wherein techniques expanding and extending the sonic possibilities of instruments provided the material of improvisation. The use of atonality, dense textures, asymmetrical or non-metrical rhythm, and open forms or forms derived from the music rather than imposed upon it are other examples of developments common to both jazz and the avant garde leading up to today's free improvisation.

* * *

Jazz Since 1960

While much of composed music in the 1950's dealt with "extremely complex organization of pitches, rhythms and timbral elements ('integral serialism') or developing electronic or taped sound control . . . [jazz] was functioning with much simpler structures than composed music." (Dean, 1992) Player roles were predetermined somewhat strictly, and inequitably, in terms of soloist and rhythm section (accompaniment) and improvisations were largely formulaic. It was at this time, however, that a more equitable and flexible distribution of roles evolved with the tendency away from formulaic improvisation.

Rhythm became more complicated in a number of ways. Motivic improvising led to harmonic developments tending away from a tonal diatonic orientation toward the use of modes, chromaticism, and atonality; and the importance of timbre increased dramatically with textural improvising.

This period of development in jazz is fascinating and incorporates a union of sorts between itself and classical new music. The story of this period in jazz and improvised music is well told by Roger Dean in his book, New Structures in Jazz and Improvised Music Since 1960. Dean thoroughly describes, analyzes and documents this development through numerous transcribed examples, clear explication and a very comprehensive discography, among other treasures, and as such, his book is a valuable resource for in-depth information.

* * *

Relationship of Jazz to Free Improvisation

As mentioned above, around mid-century, jazz experienced a radical evolution. Traditionally, jazz improvisation has been based on songs that provide a melodic, harmonic, rhythmic and/or formal framework for improvisation, as well as an emotional mood or feeling based on the text of the song. A solid understanding of functional harmony is prerequisite to the ability to develop or extend melodic ideas, as those ideas have to work within the harmonic scheme. As in any music, a keen sense of rhythm and a proficient technique are likewise considered basic skills. Beyond this, the jazz improviser has typically acquired skills by listening to favorite players, then practicing by emulating the styles, techniques and interpretations of standard tunes by particular well known players. The radical expressions of jazz developing over the last three or four decades, however, evidence a shift away from a such a strong harmonic/melodic orientation toward timbre -- sound itself -- heard as dense masses of complex sound, multiphonics and other special instrumental techniques, extremely complicated rhythmic processes, multiple tempi, etc. As discussed below, these developments paralleled similar happenings in classical music, both ultimately leading toward free improvisation as practiced today.

As the jazz improviser moves in a direction toward free improvisation to explore new stylistic and compositional possibilities, the traditional theoretical basis of the music becomes less and less applicable, while more general concepts such as gesture, identity, shifting group relationships, extended instrumental techniques, spontaneous transitions, etc., take their place.

In his article, "CCMC Vol. III," Harry Freedman (1978) comments on some distinctions between jazz and free improvisation:

the music the CCMC [a Canadian free improvisation group] creates is closer to jazz than to anything else, but where jazz relies for its organizational discipline on external elements -- the chord progressions and the rigid pulse -- this music relies on nothing but its own 'being'. Nothing is imposed, nothing taken for granted. It simply begins and grows. And it grows through a process which more than anything else defines its difference from jazz: it is a group process in a way that jazz never has been, not even in the early New Orleans days.

Yet, it can be difficult at times to distinguish between free improvisation and jazz when the latter is pushed to its definitional extreme. Indeed, making the distinction may not even be important at that point. If an improviser feels she/he is playing jazz, then jazz it is, no matter how little it might sound like traditional jazz. And if an improviser identifies as a free improviser (or nonidiomatic improviser), so be it. We could say that when the underlying generative principles shift from a basis in other music (i.e., tunes) and from a basis in style, to a basis in sound, itself, this is where jazz leaves off and free improvisation begins. But whether or not one takes this attitude, the relationship between jazz (in its more radical expressions) and free improvisation is one of a continuum.

* * *

New Music and the Evolution of Free Improvisation

Some new music of the 20th century has embraced improvisation, along with indeterminacy and chance, as an important part of performance, calling on classically trained performers to make creative decisions in their realizations of the music. Composers such as Stockhausen, Berio, Cage, Earl Brown, Ligeti, Boulez, Kagel, Lutoslawski, Oliveros, Erickson, Pousseur, and Schafer have utilized some form of improvisation and/or indeterminacy in their work. Lucas Foss was particularly active in the development of improvisation in the context of avant garde music, with his Improvisational Chamber Ensemble in Los Angeles in the late 1950's.

But it should also be recognized that some contemporary composers, who have not utilized improvisation whatsoever in their music, have nevertheless contributed much to musical consciousness that has directly influenced free improvisation. Charles Ives (b. 1874) showed us around the turn of the century that hearing two different musics at once is not a bad thing! Harry Partch (b. 1901) reintroduced the ideas of microtonality and just intonation to the history of music and laid a firm foundation (along with Lou Harrison) for the current exploration of original and experimental musical instruments. These influences combined with that of John Cage to create a circumstance of consciousness about music ripe for the eventual appearance of free improvisation.

* * *

Improvisation, Chance and Indeterminacy

Contemporary written composition in the west has evolved beyond the very strict, deterministic approach of serialism introduced by Schoenberg around the first quarter of the century. The concepts of "indeterminacy" and "chance," as well as improvisation, have become an important part of written music today, broadening the practice of composition to include elements outside of the composer's control. The performer assumes a more creative role, often to the point of impacting the structure of the composition in significant ways; for example, choosing the order of sections or blocks of music. The unpredictable nature of such approaches to composition speaks of a new fascination among composers with a balance between control and non-control.

John Cage has greatly affected the direction of Western music, reflecting a blend of Eastern and Western thought, itself an inevitable outgrowth of mass communication, recordings, and evolving world consciousness. Curiously, Cage has criticized improvisation because he feels it is ultimately reduced to gesture. (Note: (As reported by Doug Carroll to be a comment made at a public lecture.) Gesture, indeed, is germane to free improvisation; this, however, is not seen as an unwelcome characteristic but rather as a strength, being the product of emotional, spontaneous response to musical potentialities inherent in the flow of sound. Much more is said about this in the chapters to follow.) His method of composition employed various random or chance processes such as throwing the yarrow sticks of the I Ching, dice, random number tables, etc. to make compositional decisions about the music. This "chance" element did not always extend to the performers themselves, however, who were normally instructed in precise ways how to interpret the score or realize the composition in performance. It is important to understand the distinctions between chance or aleatoric compositional processes such as Cage's and free improvisation, for they are very different. Other composers have allowed

players, within limits, to interpret the written score in their own way.

Another term used in contemporary music is "indeterminacy," implying some lack of determination on the composer's part about the performance realization of the music. Dean (1989) objects to the term stating, "'Indeterminacy' is so general a term that it is rarely very useful in relation to music." In spite of this, the term has been used a great deal, and not always consistently. A most useful definition would designate a kind of music in which the composer gives up a degree of control to the performers, as opposed to chance or aleatoric music in which control is given up to chance during the compositional process. (Note: The "stochastic" music of Yannis Xenakis represents a more specific compositional approach that works with mathematical probabilities.)

For some theoreticians and performers, the composer's relinquishment of control presents an aesthetic dilemma. Questions come up: What is the work? Is it the score or the performance? And does this mean the composer doesn't care a whit about the outcome, feeling that no matter what happens, the identity of the composition will remain intact? Very few composers will take this attitude about the performance of their music. Composers of indeterminate music open the compositional process to share with other minds -- informed and experienced minds, ideally. The score the composer has written out will still often determine to a great extent what the performers are expected to do, even when given extreme latitude or "freedom" to realize unwritten portions of the music. The familiarity of the player(s) with the general style of such music (or with the particular composer), and an understanding and willingness to participate in real time compositional decisions are essential. To this extent, we find the seeds of a performance practice tradition in new music comparable to that of three hundred years ago in its improvisational involvement of players.

Interestingly, Derek Bailey (1980) emphasizes a distinction between improvisation and experimental or avant-garde music, stating few improvisers consider their activities experimental, and unlike composers, "the desire to stay ahead of the field is not common among improvisers." (p. 83) Nevertheless, experimental music -- in the form of experimental notation -- utilizes improvisation (at least "improvisational interpretation") to a degree, and this has had a considerable impact on improvisers in their efforts to plan or structure their improvisations. David Cope (1971) emphasizes the role of notation in the use of improvisation in avant garde music.

Improvisation is more a notational than philosophical challenge to traditional directions. Improvisation must inherently exist to some extent in all music in which exact notation of every detail is not possible: therefore in all music. Id. (p. 70)

This comment bespeaks a died-in-the-wool composer's perspective. If we equate "improvisation" with "interpretation" or "performance practice," then the above statement might be considered true. Performance practices traditionally incorporate interpretational latitude allowing the player certain creative freedom. Not only is a difference of degree involved between improvisation and interpretation, however, but a difference in compositional intent and performer function. And free improvisation, at least, is most definitely more a philosophical challenge to traditional directions than a notational one! Nevertheless, improvisation can be considered not only a practice in itself, but also an attribute of the performance of composed music. But why did composers begin experimenting with notation? Again, there is evidence of an interest in the very nature of compositional control over performance.

The traditional Western music notation system has been altered in multifarious ways to graphically represent the compositional responsibility of the performer. One of the best sources of information about this is Erhard Karkoschka's Notation in New Music (1972), which presents a dazzling variety of notational schemata attesting to the highly experimental nature of this music and discussing those facets of performance left to the performer to realize. (Note: Of course, the realization of experimental notation may also be worked out by the performer(s) before the performance; this would depend on the nature of the particular composition.)

It is curious that strict serial composition (so called "12-tone music") may well have been a major contributor to the evolution of indeterminacy, chance and improvisation in new music, expressed through a plethora of experimental notation. David Behrman (1965) aptly describes how this might have occurred.

In the course of at least one branch of development of serial music, the performer's 'musicianship' came to outlive its usefulness. The composer no longer expected him to read between the lines of his score... [the

performer's] job was now to obey the literal requirements of the score in a deadpan fashion. Ibid

A high degree of precision, in some cases unrealistically high, was demanded of performers while at the same time their power within the music was drastically diminished. Indeed, sometimes performers, because of the absurd difficulty of the music, would simply fake it.

The degree of precision demanded was sometimes so high that it taxed the ability of the performer and led him to deliver what in fact was a subjective interpretation -- to play in a way that would 'sound as though' he were fulfilling the notation's demands. Ibid.

In their efforts to control every possible aspect of the music, composers and performers alike discovered that the range of sound which a player is capable of covering is so extensive and so susceptible to nuance that no notation can hope to control the whole of it, especially not at once. In such a view the composer, with his rules and his notation, is in a position comparable to the dramatist's, with his stage directions and his dialogue. Both score and script are at the mercy of the interpreter who can make a thousand realizations of every symbol... Ibid.

Behrman points out that for some composers "conventional" instrumental techniques were no longer wanted. Rather,

[The composer's] ideal may be to put the player in a fresh frame of mind, to shock him out of an environment which puts a smoke screen of technique between himself and the experience of playing, to make him feel as though the making of sounds on an instrument were a fresh experience. Ibid.

This has presented a new challenge to performers. A higher level of creative involvement in the music is now expected, as well as a familiarity with the styles and issues of music written today. This may involve a close relationship to the composer, who attends rehearsals and "coaches" the musicians; it may involve literally hours of studying the notation of a given composition to be performed; it may even involve listening to and studying recordings of other interpretations of the piece, or becoming familiar with the composer's other works. The development of various indeterminate notational systems not only provides greater variety of possible realizations of "the work," but also places the performer in a more (compositionally) responsible position, and hopefully a more creative frame of mind about performance.

At the same time, composers differ in their attitudes and approaches to performances of their music. Some will let a highly indeterminate graphic score alone suffice, while others will write complicated instructions explaining how to "interpret" the score. Still others want to be there personally to coach the performers in rehearsal. And there are those composers who have worked directly with selected performers over a long period of time (e.g. Stockhausen, Cage, Foss) to ensure a knowledgeable realization of their music, extending their control into the psychological arena.

Roger Reynolds (1969) addresses the distinction between compositional approaches to the unpredictable and sees

improvisation, indeterminacy, and chance as progressive degrees of a tendency to leave detail unspecified. The latter two are distinct from improvisation in that the notion of a 'common practice' is excluded a priori. If one wants the stylized freedom of improvisation, an appropriately framed set of conventions is necessary. If, on the other hand, a composer wants an indeterminate situation, there can be no preferred solutions -- and, ultimately, in the case of chance, virtually no 'rules.' Ibid

Obviously, improvisation, indeterminacy and chance do have in common that element of the unforeseen. Their differences lie in the process of creating and realizing the music and in the relationships of composers and performers to the music ultimately produced. Reynolds acknowledges traditional forms of improvisation, but does not account for the situation of free improvisation, because there is no implied "common practice," in the traditional sense. In this case, free improvisation might be considered a separate category, itself.

Composer Martin Bartlett (1984) describes a middle ground between composition and improvisation that has elements of predetermined composition and yet is unpredictable -- a "generative method" employing

computer.

In this, the composer's principal work is not the composition of data but the creation of generative algorithms which will produce the data... We can consider the compositional method as a branching tree of IF...THEN... ELSE structures in which the answer to the conditional question may be supplied either intentionally by means of a random, stochastic or deterministic decision-making process, or externally (supplied by monitoring some action of a performer or the environment), or a combination of both. Ibid.

Such compositional strategies further illustrate composers' acceptance of -- indeed, interest in -- the unpredictable results of a composed set of circumstances.

Other composers/improvisers have utilized the computer in similar ways to provide a precomposed framework for non-predictable results. For example, Tim Perkis has created an interactive device called the Hub to facilitate real time interactions within a network of computers (see Chapter 6).

Thus, an interesting relationship between free improvisation and experimental or avant-garde music can be found in spite of their differences because the nature of composition, itself, has evolved to where the composition and the performance of it are less and less separable.

* * *

The Evolution of Free Improvisation as a Practice

The evolution of free improvisation as a practice is a story not just of historical events but of a change of attitude about music that seems to have simultaneously appeared in both Europe and the United States.

One of the first instances, if not the first instance, of a performance of free improvisation occurred in 1956, when Pauline Oliveros, Terry Riley and Loren Rush recorded a five-minute segment of a soundtrack for a film about Clara Falkenstein, a San Francisco Bay Area sculptor. (Note: This account comes from a personal telephone conversation between the author and Pauline Oliveros in January, 1997.) Several improvisations were performed and recorded, then Terry Riley chose the one to be used in the soundtrack.

According to Oliveros, the three musicians were so impressed by this experience that they began to meet periodically over the next couple of years at the studios of KPFA, where Loren Rush worked at the time. They explored the possibilities of free improvisation through a process of playing, recording, listening and discussing the music -- much like an improvisation session today. As composers, of course, they were inclined to try to predetermine the improvisations in some way, but found that predeterminations "fell flat." Pauline Oliveros, Terry Riley and Loren Rush were all studying composition and electronic music during this time with Robert Erickson, who encouraged their explorations at KPFA in Berkeley.

Around 1958, Erickson began working with Ramon Sender, a relationship which led to Oliveros and Sender improvising together as "Sonics" in 1960. Around this time, Loren Rush moved to Paris and Terry Riley began working with LaMonte Young. And Pauline Oliveros taught improvisation classes. Though they primarily performed notated experimental music, every performance of Sonics would also include a free improvisation. (Note: Oliveros tells of a performance she, Riley and Rush attended of Lukas Foss' improvising orchestra. Noticing that the musicians were still reading some kind of notation, they asked Foss what would happen if the musicians had no notation to refer to whatsoever, and he responded it would be "utter chaos!") Later, Morton Subotnik joined the group. Sonics was the precursor of the San Francisco Tape Music Center, which began in 1960 and was headed by Erickson. The SFTMC relocated to Mills College in 1966 and became the Center for Contemporary Music (CCM). At UCSD, Oliveros and Erickson founded the Project for Music Experiment, which was renamed The Center for Music Experiment and Related Research (CME). (Note: Interestingly, the author also studied with Robert Erickson (as well as with Pauline Oliveros) at the University of California, San Diego several years later.)

It is not a great surprise to realize that some of our finest contemporary composers were "inventing" free improvisation in the early days of their careers. Though known for the literature they have created, however, it is not generally known how seminal these people were to the evolution of free improvisation.

* * *

In England, in the mid-60's, Eddie Prevost, Lou Gare, and Keith Rowe started the group AMM. They were later joined by Laurence Sheaff and Cornelius Cardew, though several other improvisers played in the group at first. In an interview of Eddie Prevost and Keith Rowe by Barney Childs and Christopher Hobbs (Perspectives of New Music, Vol. 21, 1982-83), Prevost and Rowe describe the musical evolution of this group, which continues to perform to this day! Indeed, AMM is one of only a few surviving "founders" of free improvisation.

Lou Gare and Keith Rowe had been schooled in painting, and among the first "experiments" they tried was a "colour-shift" of "tonality" (in the visual sense). Rowe describes examples: "Let's forget the pitch, but get the timing of the note right. So it didn't matter what note you played so long as you got the timing right... And of course, then dropping the bar-lengths too just created havoc." Nevertheless, "the visual arts were important because I think we were adopting attitudes which were much closer to painting, or painters, rather than to musicians." But, in the beginning, the group's musical orientation was jazz.

In 1965-66, AMM went through a transition period, beginning with a music Rowe describes as "still jazz-like but quite free in November '65, but by June '66 it had undergone a complete change..." AMM had broken free of jazz to create a music that was radical for the time. Asked if he knew of other musicians doing similar work at the time, Rowe states,

No, not at all -- I'm sure Cornelius knew of people, but not from a jazz point of view. The only thing close to it would be Spontaneous Music Ensemble, but they were still attached, as far as we were concerned, to the ideas which were pre-November '65 for us!

(Cornelius Cardew was another "founder" of free improvisation who established the Scratch Orchestra in England. The Scratch Orchestra was just as much a political statement as it was a musical one. This group -- or rather, project -- is discussed below.)

The mid-1960's saw the beginnings of a great social schism with the emergence of the anti-war movement, drugs and an experimental subculture. Many of the social values representing that movement could be found (looking back on history) to be closely related to process values expressed in free improvisation. Eddie Prevost comments on this:

... AMM was hardly in the middle of the Flower Power thing. Nevertheless it was certainly affected by that ethos, Cage and so on. What one hopes we've arrived at now is more of a synthesis of the recognition of the power of intuition but with a rational perspective... to look for that kind of balance -- which is implicit, of course, in Buddhist teaching.

AMM dispersed temporarily in 1972 then came back together in 1975. Just before breaking up, AMM had begun to change its sound; "a lot of the electronics had been dropped," according to Prevost. When the group got back together in '75, the style had changed with an emphasis on "basics." Prevost states, "The skills needed refining... There's a sense in which I personally enjoyed going back to just playing the drums, my playing has improved in that respect a good deal. But it's been done with a different consciousness."

AMM has continued to perform and develop since that time and stands as one of the most enduring free improvisation groups in history.

In another interview in Perspectives (Vol. 21, 1982), Larry Austin describes how in the summer of 1963, the New Music Ensemble (U.C. Davis) began experimenting with group free improvisation. The following summer he went to Rome to share this new idea with other composers, Franco Evangelisti, Aldo Clementi, Ivan Vandor, Cornelius Cardew and American "expatriates" Frederick Rzewski, Bill Smith, John Eaton, Allan Bryant and Alvin Curran. He played them tapes of his group in Davis. As Austin describes it,

Hearing the tapes or the record, they -- mostly Franco -- would say, 'Ahh, but what process are you using?' 'Nothing except how we feel about one another's playing and responding to it in the moment.' They'd say 'Impossible!' And I would go on to say, 'No, I swear it's stand-up composing'..."

Apparently, Evangelisti was most enthusiastic about this way of making music, having given up writing music as "a contrivance, a manipulation." Austin remarks how political beliefs came into play as Evangelisti, a

Communist, later told him in 1967,

that composition was dead, that the whole 'act' of sitting down to contrive a piece of music was decadent... In improvisation he felt that music and ideology could be reconciled. I think that was probably the case with Cornelius Cardew as well.

Indeed, political ideology played a very significant role in the work of early free improvisation groups. Austin (1982) states,

Cardew certainly had to cope with the contradiction of elitist composing and ideological beliefs ... and his Scratch Orchestra and AMM were, I've since learned, manifestations of that political stance. If you embrace a kind of musical anarchy, pretty soon you begin to think politically.

Some of these composers formed an international group that year, Il Gruppo di Improvisazione da Nuova Consonanza (GINC). "We were all composers who also played. That was how you got in." Austin notes aside how "elitist" this attitude actually was for someone with Communist ideals. But this was a time, after all, when the division between "composer" and "performer" was still quite strong. In spite of this, however, there were no "leaders" within GINC. "The group dynamic was the thing to sustain individuals coming together to make music and react freely to one another." Apparently, this was such a new approach that a psychologist, Harry Aron, observed and wrote about GINC.

So, here are free improvisation groups forming in Davis, California (New Music Ensemble), England (Scratch Orchestra) and Italy (GINC), all around the same time, and all influencing one another through shared personnel. Austin remarks on the inverse direction of influence: "It's marvelous to think that a California outfit had something to do with influencing Europeans and expatriate Americans as early as 1964."

Larry Austin went on to establish SOURCE, Music of the Avant Garde, which consisted of highly experimental new music, including various planned or structured improvisation, as well as new forms of notation and compositional processes. SOURCE was an important and unique publication that documented much of the experimental music of the 60's. According to Austin, "SOURCE [itself] was improvised: it came out of the music we were making."

Austin apparently was influenced by composer Lukas Foss to form an improvisation ensemble; Foss had formed his group in Los Angeles in 1956, a time when Austin was experimenting with free jazz.

The Foss group worked from schemes and formats, graphic roadmaps to guide the performers, and they were intent on creating stand-up [i.e. improvised], classical contemporary music. Foss' group was one of the very earliest ensembles (if not the earliest) to work exclusively with improvisation. The composer bias, however, was still strong, as seen from the reliance on 'schemes and formats, graphic roadmaps.'

The idea that a group of musicians could create music without any kind of score or plan was still unthinkable, or at least would not have been considered "serious" music. As mentioned above, Austin found this to be the case when he took his recordings and ideas to Italy to show other composers; they literally thought it was impossible! And perhaps it was; the "language" of free improvisation was just beginning to develop.

Austin (1982) relates how electronic music began about this same time.

I think that the notion of making music without putting notes on paper happened both with improvisation becoming important since the late '50s and the emergence of electronic music as an important genre at about the same time... Merging these currents brought forth other forms: performance art, experimental music, and a new attitude that instant music is important...

It is curious that AMM was also utilizing electronics at first but essentially stopped doing so around 1972-73, as mentioned above, in an effort to get "back to basics." Electronic music, as Austin points out, shares much with free improvisation, primarily an essential reliance on sound as a basis of the music. The lack of notation (at least initially in electronic music) is a circumstance shared by both. Of course, these musics also differ from one another in significant ways. Electronic music (or 'tape music') is created by a single composer in a studio as opposed to being the product of collaboration; and, at that time, electronic music was not a "real

time" endeavor. Furthermore, electronic music obviously cannot be acoustic (i.e., it relies on speakers) (Note: John Silber (1982) relates how his improvisation group, KIVA, based at University of California, San Diego, extended their use of amplification by replacing speakers with output transducers (coneless speakers) attached to various objects which would then "filter" the resulting amplified signal according to the object's particular physical makeup. Additionally, Silber would feed the output normally going to speakers into his trombone making it a "giant mixer." He explains: "This was done by using a voice box [a commercial device popular for a time in rock music designed to utilize the mouth cavity to filter the output] and placing its tube into the tuning tube of the F attachment, thereby re-circulating the sound and adding it to the sounding fundamental and its now present partials." The idea here was to allow more tone control "or [to] shape the sounds on the second generation." Hence the speaker is but one of several possible output transducers), whereas improvised music can be acoustic, though it often includes amplification and/or electronic instruments (synthesizers, samplers, computers). In spite of these differences, however, electronic music has always been an important component of free improvisation and has extended the possible approaches.

* * *

As mentioned before, some early improvisation groups were overtly political, at least in the minds of the improvisers involved. To what extent they had political impact is hard to say, though probably little. Perhaps not only was there a political agenda about such expressions, but a fascination as well with the relationship between two different kinds of human interaction.

The Scratch Orchestra is probably the most overt example of improvisational music as a political statement. Indeed, Cornelius Cardew founded Scratch Orchestra on the basis of a communist ideology; not only did the members improvise, compose and play music, they formed the Scratch Ideological Group (consisting of some members). In his now famous book, Scratch Music (1974), Cardew describes the aims this sub-group,

whose tasks were not only to investigate possibilities for political music-making but also to study revolutionary theory: Marx, Lenin, Mao Tsetung. Another aim was to build up an organizational structure in the Scratch that would make it a genuinely democratic orchestra and release it from the domination of my subtly autocratic, supposedly anti-authoritarian leadership. (p. 12)

In the tradition of artist manifestos, Cardew began with a Draft Constitution written in May of 1969 by Cardew, Michael Parsons and Howard Skempton. The larger group, the Scratch Orchestra, was made up of "musicians, artists, scholars, clerks, students, etc. -- willing and eager to engage in experimental performance activities." The Scratch Orchestra did improvise, but improvisation was only one of several approaches it took to making music.

First, Scratch Orchestra is defined in the Draft Constitution as "a large number of enthusiasts pooling their resources (not primarily material resources) and assembling for action (music-making, performance, edification)." Cardew notes an extension of the meaning of the word "music" beyond sound and listening but "is flexible and depends entirely on the members of the Scratch Orchestra." The purpose of this group is to perform in public, with each member "(starting with the youngest) ... designing a concert."

Scratch music is the product of "Scratchbooks" that each member composes and keeps. The "rules" dictate that each member compose a number of "accompaniments" equal to or greater than the number of people in the orchestra, using any notations she or he wishes -- "verbal, graphic, musical, collage, etc. -- and should be regarded as a period of training..." And there are further "rules" such as not composing more than one accompaniment in any one day. The last "accompaniment" was supposed to function as a "solo;" whenever an accompaniment was added to the Scratchbook, the last was to be "the solo" that member played.

Popular Classics represents a rather bizarre aspect of the music of the Scratch Orchestra. What this group did to "popular classics" is indicative of the underlying effort to recontextualize music such that a listener might gain a completely new perspective on the familiar.

Particles of selected works [familiar to members] will be gathered in Appendix 1. A particle could be: a page of score, a page or more of the part for one instrument or voice, a page of an arrangement, a thematic analysis, a gramophone record, etc.

The technique of performance is as follows: a qualified member plays the given particle, while the remaining players join in as best they can, playing alone, contributing whatever they can recall of the work in question, filling the gaps of memory with improvised variational material... Strive to act concertedly rather than independently.

In a very political gesture, Cardew states, "These works should be programmed under their original titles." To those who hold authorship (i.e., composership) in esteem, this is reprehensible! Yet it belies an effort toward the dissolution of a power establishment controlling consciousness about what music is (i.e., who is in control and who gets the credit), which springs from the desire to grasp and "own" music that, in reality, belongs to all people. Popular Classics included Beethoven's Pastoral Symphony [No. 6], Mozart's Eine Kleine Nachtmusik, Rachmaninov's Second Piano Concerto, Cage's Piano Concerto, Brahms' Requiem, Schoenberg's Pierrot Lunaire, etc. It is easy to imagine how humorous this music must have been since many of the players had little if any musical background or training, and since the music was "particled." Again, however, there are those who find no humor in this but rather consider it an atrocity. Curiously, this idea has been given new impetus with the invention of the sampler. John Oswald, for example, has produced works comprised of extremely brief samples of other composers' music strung together to create an entirely different musical experience. Yet, he has had to deal with "the authorities" as a consequence. (See Oswald, John, "Plunderphonics, or Audio Piracy as a Compositional Prerogative," Musicworks, Vol. 34, pg. 5-8, 1986.)

* * *

Misha Mengelberg is one of the pioneers of free improvisation who came to it through jazz. As a conservatory student, he recorded with Eric Dolphy in 1963. That same year, he co-founded the Instant Composers Pool in Holland, which produced recordings of improvised music by its members. He was appointed president of the Society of Improvising Musicians (BIM) in that country in 1972. He states,

I have been playing since 55/56 with other musicians... we were playing jazz. In a way the improvisation opened up for me after I left the Conservatory since there was simply nobody I could play with [there]... About '64 or '65 there were people from similar backgrounds and various disciplines like Han Bennink who came onto the scene... There was also Willem Breuker coming up -- they were a new generation and they were open to play music that diverged from the jazz tradition. (Interview by Andrew Timar, Musicworks, Vol. 14, 1981)

Mengelberg confesses his dislike of bop music. He makes an interesting comment about the rut jazz found itself in around this time.

I thought it was all a kind of disease that Charlie Parker had spread around. Charlie Parker was a very fantastic player and although everybody tried to imitate him, it was all ridiculous... he mastered jazz saxophone playing to such an extent that right up to today it's impossible to imitate Charlie Parker. But that was what was mainly being done and it was all very dull; including Sonny Stitt, and all the others. Id.

According to Mengelberg, Ornette Coleman's influence in the 60's "was more human because he was not such a fantastic instrumentalist but he had new ideas and gave some clues to which others could add things." Timar asks him what influences he felt in the 60's. He states, "There were no influences. I consider myself being an influence on other persons from that moment. I figure out my line myself."

Other groups that have been known for their improvisations are FLUXUS, Musica Electronica Viva (an Italian group), Chicago Art Ensemble, and The Grateful Dead ("space jams").

* * *

Presently, there are a few notable improvisers that have had a tremendous impact on the practice, not as models for emulation as typical of jazz, but as highly unique, accomplished players with a keen sense of composition, who have shown that contemporary forms of improvisation are growing in popularity. Anthony Braxton is a good example. Emerging from the jazz world with an extraordinarily experimental, even intellectual, approach, Braxton has created a musical syntax for improvisation employing graphic "systems maps," for want of a better word. Braxton's music is now widely known, and his reputation as a premiere improviser is well established.

John Zorn is another improviser who has garnered widespread recognition. His "improvisational games" involving cue cards, hand signals and multiple isolated/non-interactive styles have been very effective in pieces such as "Cobra." Davey Williams and LaDonna Smith are exquisite veteran free improvisers based in Birmingham, Alabama, who have done much to galvanize the improvisation community through their annual

publication, The Improvisor. Other notable improvisers are mentioned in Chapter 6.

* * *

CONCLUSION

Free improvisation did not just suddenly spring up out of nowhere; it evolved out of the many and varied practices of jazz and classical new music. At the same time, it represents a fundamental departure from the historically recent mindset that has separated composer from performer by unifying these roles. This presents a sizeable challenge to audience listeners today, given the degree of unpredictability about the music, its vast repertoire of sounds, and the fact that too often, there is absolutely no familiarity with the music, much less any theoretical foundation. The following chapters attempt to address this situation by presenting a terminology and theoretical perspective useful in communicating about, and listening to, free improvisation.

CHAPTER 3

TERMINOLOGY

The terms defined and described below will be used in the next two chapters to illustrate and discuss the interrelational (integral and reciprocal) dynamics of specific Influences and Processes occurring as Context, Content and Perception in free improvisation. Each definition is accompanied by a brief commentary. (Note: The terms below use various capitalization, as do the charts presented in the next chapter. However, beginning with the Discussion in that chapter, the only terms completely capitalized are CONTEXT, CONTENT, PERCEPTION, INFLUENCE(S), and PROCESS(ES). All other important terms will have capital first letters.)

* * *

TERMS

FREE IMPROVISATION - 1. The practice of spontaneously creating music in real time without the aid of manuscript, sketches, or memorization. 2. Multiple, spontaneous processes of creating music in real time as a direct response to the INFLUENCES of CONTENT itself as perceived, and an indirect response to the ever-present INFLUENCES of CONTEXT.

The first definition acknowledges the larger sphere of improvisation as a practice. This definition utilizes a portion of that given in the Harvard Dictionary of Music (1966), which defines "improvisation" (not free improvisation, and also listed as "extemporization") as follows: "The art of performing music as an immediate reproduction of simultaneous mental processes, that is, without the aid of manuscript, sketches, or memory." (Note: The definition presented here uses the term "memorization" instead of "memory," because memorization implies preconception, whereas memory (as a verb) means, primarily, the ability to remember. Memory is most definitely a useful faculty in free improvisation, albeit utilized spontaneously.) The definition goes on to state: "In a more restricted sense, the art of introducing improvised details into written composition ... a more tangible phenomenon" (pp. 351-352). The definition includes an interesting brief commentary:

Today [1966], the recording machine would afford an easy means of fixation; unfortunately, the great art of improvisation is lost, since it is no longer practiced by the composers and survives chiefly among organ virtuosos.

As has been shown, in 1966, composers were improvising and incorporating improvisation into their written music; and jazz was at a high point of experimentation. Indeed, this was a germinal moment in history for free improvisation. This evidences the extent to which free improvisation was unknown, but existed nevertheless.

Improviser and author, Elizabeth Behnke (1986), points out that the word, "improvisation," stems from the Latin improvisus, im meaning not and provisus, the past participle of providere, to foresee. Thus improvisation is the unforeseen. However, rather than implying a failure to foresee, free improvisation is "a leap into uncertainty--without fear, even though I do not know in advance what will emerge or what form it will take." Id.

The second definition (multiple, spontaneous processes of creating music in real time as a direct response to

the INFLUENCES of CONTENT itself as perceived, and an indirect response to the ever-present INFLUENCES of CONTEXT) lays the foundation for the other specific terms used here. Though somewhat lengthy, this definition describes a scenario in which CONTENT, the musical sound, is constantly being shaped by INFLUENCES, the most immediate of which is CONTENT (i.e., the music itself). And obviously, every human experience takes place within a CONTEXT -- time, space, circumstance. In performances of written compositions, the INFLUENCE of CONTEXT, though definitely there and occasionally strong, is not nearly as great as it is in free improvisation. For example, because free improvisation is impulsive by nature, any accidental disruptive sound in the environment during performance will almost always be "taken up" by the music and made a part of it. This is standard operating procedure in free improvisation. And it is only one instance of how CONTEXT can affect the music; the presence of an audience and its collective expectations, the acoustics of the room, the temperature and humidity, the lighting, etc. each has a degree of INFLUENCE, sometimes quite minimal, but sometimes surprisingly great. Yet it remains that the greatest INFLUENCE on the PROCESSES of free improvisation is CONTENT itself. That is, the PROCESSES of free improvisation are essentially self-generating.

One last note about the term, "free improvisation." The word "free" can be misleading because it has so many common meanings. It may refer to political freedom, self-determination, choice, spontaneity, or exemption. It may represent the absence of: restriction, inhibition, obligation, obstruction, cost, etc. But when it is considered that the free improviser is least inhibited, least obligated, least obstructed, and the financial cost can be literally nothing (one can improvise drumming on a table or bench, singing or whistling), the word "free" does seem somewhat appropriate, if not perfect. Since the term "free improvisation" has been in common use since the inception of the practice, it is the term we will use here. (Note: The term "creative music" is also sometimes used, presumably referring to the creative process of the performance.)

* * *

SOUND - The Physical Medium of performance, implying the Mechanics of Human Hearing and Acoustics.

SOUND must be emphasized as the "starting point" of free improvisation (as opposed to a pre-existing style, theme, instrumental technique, etc.). This idea is historically linked to the revelations of the Dadaist composers, Charles Ives, George Antheil, Harry Partch, and, later, John Cage. (More will be said about this special relationship free improvisation has to sound in Chapter 5.) These composers shifted the emphasis away from strictly musical sounds to incorporate extra-musical sounds; and about mid-century, compositional strategies also shifted from an architectonic, such as serialism, toward more process-oriented approaches. Most of Cage's compositions are the result of specific, selected "random" processes. Christian Wolf's music is thoroughly based on interactive, improvisational processes. And the music of Yannis Xenakis is often the result of "stochastic" processes dealing with the manipulation of probabilities. But in all cases, so-called "musical sound" has been liberated from its prior shackles to encompass a broader meaning.

Components of SOUND

Mechanism of hearing - the processes of the human ear/brain.

Without describing the physiology of the ear/brain mechanism of hearing, not much need be said about this obvious condition; SOUND cannot be heard without it (though it can sometimes be felt by the whole body). It is important to recognize, however, that this complex mechanism involves the brain's cognitive interpretation of neuronal activity caused by the impact of soundwaves upon the ear. This implies that on some level, each of us hears differently. Hearing a SOUND is an experience, and experience cannot take place outside of some kind of CONTEXT. Our interpretation of a SOUND has, at times, as much to do with that CONTEXT as it has to do with that SOUND.

Acoustics - acoustics of the performance space.

Acoustics is a Contextual property of any SOUND that changes it (except in the case of the anechoic chamber). Soundwaves emit from a source and travel outward spherically, striking anything in their path and being reflected (if not absorbed by porous material). Unless the ear is extremely close to the source, a perceived SOUND is more than just the source. Since soundwaves radiate spherically from the source, only a small percentage of the SOUND the ear detects comes directly from the source(s), though the source(s) can

usually be pinpointed in space. The ear also picks up the reverberations of SOUND, i.e., the acoustics, and this becomes a part of the whole SOUND as we hear it.

* * *

INFLUENCE - A force that directly or indirectly impacts the creation and perception of free improvisation.

Manifestations of INFLUENCE

INFLUENCES upon free improvisation are many, varied and operate on all levels of CONTENT. The principal underlying INFLUENCES are those of CONTEXT, CONTENT and PERCEPTION. But each of these is comprised of a number of more specifically defined INFLUENCES, as will become apparent in the following discussions. An INFLUENCE may be relatively weak, being a "background" factor; it may also be completely dominating in its impact on the music at times. This depends on the particular INFLUENCE and the moment(s) in the music it may occur.

Reciprocal Influence - an interrelationship between/among INFLUENCES.

Some INFLUENCES can be seen as reciprocal to other INFLUENCES in that their effects cannot be distinguished from one another and/or where they are mutually codependent in their impact. (This will be discussed with reference to the Charts in the following chapter.)

* * *

CONTEXT - The circumstances of the performance.

CONTEXT is probably the most complex set of INFLUENCES upon free improvisation. Some of these INFLUENCES are external to the improviser and some are internal; some are immediate and some eventual; some are quite strong while others are weak. But what all CONTEXTS have in common is that they are constant, ever-present to some degree or another. The improviser responds to these CONTEXTS via the Intellect and what is called here "the Intelligent Body."

Components of CONTEXT

The Intellect - The educated, calculating, self-aware, imaginative mechanism of spontaneous creation. The Intellect responds to the Cultural Contexts of Education and Imagination within the limitations of the Physical Contexts of Acoustic Environment and Instrument(s).

The intellectual mind accumulates knowledge through Education and problem-solving, and extends its own bounds through Imagination. The intellectual mind, being self-aware, is also aware of its surroundings -- the physical environment and the society or culture it exists in. The Intellect is responsible for memory (though so is the body to an extent - Pavlov's dog), calculation, strategization, abstraction, and (through Imagination) invention. Some of these abilities are necessary in free improvisation to an extent. The degree to which the Intellect plays a part in spontaneous creation will vary from improviser to improviser, but the fact is that in free improvisation, there is little or no time to calculate, strategize, abstract, and the mind is so busy perceiving (actively listening) that memory is usually relegated to short-term. The Intellect can be likened to the manager of an operation, keeping an overall perspective and intervening when necessary, while the Intelligent Body functions as the workforce.

The Intelligent Body (Note: Deepak Chopra has made reference to Audous Huxley's term, "Physiological Intelligence," which seems remarkably similar to the concept of the Intelligent Body. See Chopra's Seven Spiritual Laws of Success, videotape lecture by Deepak Chopra. There are other remarkable similarities between principles Chopra discusses in his books generally and those presented here as applicable to music. See bibliography.) - The trained, experienced, non-self-conscious, impulsive mechanism of spontaneous creation. The Intelligent Body responds to the Personal Contexts of Training and Experience within the Biological Context of the Limitations of the Body and level of Instrumental Technique.

The human body is, of course, a marvelous instrument capable in motion of astounding speed that goes beyond its own perception (e.g. slight-of-hand), accuracy (e.g. olympic table tennis champion) and coordination (e.g. concert pianist). And this is not to mention the many complex functions it carries on

constantly to sustain itself! Educated and trained to its fullest potential, the human body is not only a physical instrument, it is also a fount of subconscious/subliminal thought, as well as the physical-action manifestation of that thought. In free improvisation, the human body and subconscious mind act as Reciprocal Influences and are called into action to respond impulsively. Sound waves are almost immediately processed and translated into human body action. The Intelligent Body is the name given this phenomenon.

Contexts of the Intellect:

Cultural Context - Cultural expectations of (or Psychosocial Influences upon) CONTENT are generated by Education and Imagination.

Education creates an intellectual Context that directly reflects the Culture, with both its lasting and contemporaneous values. The audience and improvisers exist within a Culture, and this impacts improvisers in multifarious ways. In music education, whether in the university/school of music or private instrumental lessons, free improvisation typically plays a small, sometimes non-existent, part. Of course, if a style and/or techniques being learned or studied exist as an improvisational practice (e.g., jazz, blues, alternative rock, experimental new music, improvisation in the Renaissance, organ extemporization, etc.), then it is likely that the student will learn something about improvisation. However, if free improvisation is used at all in education, it is most probably used as a "tool" rather than something studied for what it is. So although Education can be a strong INFLUENCE, it is generally not as direct as Experience.

Imagination is a vital property of the Intellect in free improvisation, so vital that it is taken for granted. Without Imagination, a free improvisation cannot "move forward," there are no ideas and no progression of meaning. Nothing is quite as boring as a free improvisation without Imagination! But where does it come from? Imagination is a creative property of the Intellect that is stimulated by the Culture. Imagination cannot happen in a vacuum; it requires material to work with in order to generate ideas. There often has to be a problem to solve. Or it may simply be a creative response to an emotion. The source of these problems and the stimulus of these emotions come from the individual's experience of the Culture, the informal aspects being family and friends, the formal being Education.

Physical Context - Physical environment of CONTENT as Acoustic Environment and Instrument(s) (i.e., construction).

Any musical performer will tell you that the acoustics of the performance space can greatly affect the performance. Bad acoustics can adversely impact a performance of any music, just as good acoustics can enhance it. Indeed, throughout history, composers such as Gabrielli and Monteverdi in the early Renaissance or, today, composers such as Henry Brandt, performers such as Paul Horn (Taj Mahal), and avant garde sight-specific composers have designed their music to take greatest advantage of particular performance spaces. Given the hypersensitive nature of a performance of free improvisation, acoustics will often be a dynamic factor in the music.

The most immediate Physical Context of an improviser is her/his Instrument. Most often, a free improviser relies heavily on instrumental technique acquired over several years. There is definitely an element of "virtuosity" about many performances. At the same time, however, in free improvisation the improviser also faces a mandate to expand the possibilities of the Instrument, to consider its pure SOUND-making potential as much as its technical potential. More is said about this below.

Biological Context - Biological limitations upon CONTENT in the form of Limitations of the Body and Instrumental Technique.

For all of the glorious things the human body is capable of, it has limitations, naturally. These limitations (e.g. only two arms, what if three?) directly INFLUENCE the design of musical instruments (ergonomics) and the techniques of playing them. At the same time, because we all have human bodies, and through Education and practice, certain probabilities become quite dominant over others. The strongest of these are called "licks," but there is always an artistic mandate to go beyond the most probable and to stretch the limits of Instrumental Technique when free improvising.

Personal Context - Personal expectations of CONTENT generated by Training and Experience.

The individual person who free improvises not only accepts and works within the Limitations of the Body and Instrumental Technique, but utilizes Training and Experience. There is no way to tell how much a given improviser calls upon Training (instrumental music lessons) versus Experience (practicing, "jamming," "rehearsing," performing, recording, promoting, producing, etc.). But both have significant INFLUENCE upon any given performance. Moreover, the impact of an improviser's personality (at least musical personality) is usually strong. There is a definite "social" component to group improvisation that demands mutual trust and respect, a certain behavioral code of "good manners" based on social as well as musical decorum. However, given the expansive and open nature of free improvisation, and where there is mutual trust among members in a group, complimentary interactions are often accompanied by aggressive, stimulating, challenging behaviors in which an improviser may intentionally "throw a curve" to the group to drastically change the musical character or direction.

* * *

IMPULSE - The psychophysical basis of performance action; having two components - desire and intent; the Psychological Medium of performance.

In performance of free improvisation, IMPULSE is the psychological medium of behavior based on hypersensitive listening. IMPULSE is responsible for very rapid decisions (a few milliseconds) made entirely without conscious thought.

Components of IMPULSE

Desire Impulse - Personal appreciation of the music and the will toward a good performance.

Though the idea of a "Desire Impulse" may seem suspect, it represents an emotional intent on the part of the improviser that plays a vital role in the individual improviser's motivation. The importance of this factor cannot be overstated. Performing requires a lot, and without this motivation, free improvisation doesn't have much of a chance.

Intent Impulse - Concentration on the moment in performance.

Any performance requires preparation of some kind, often quite a bit. A long-term effort is involved. There is intent. In free improvisation, this conscious intent is amplified in performance through a particular quality of concentration on the moment. This intent, as an INFLUENCE, manifests, in part, as IMPULSE and is the "conscious side of the coin" described above as Desire Impulse; it is a part of personal motivation.

* * *

IMPROVISATIONAL MILIEU - The exigencies of free improvisation; the musical circumstances of performance.

Free improvisation, considered in terms of probabilities, is in a class by itself. This is not to say that it is completely unpredictable; if it were, there would be no particular name for it! Indeed, the INFLUENCES and PROCESSES discussed here attest to a certain level of predictability, albeit a set of probabilities that has yet to be studied empirically. Yet, it is inevitable that a quality of "randomness" enhances the nature of this music. The "random" quality is a lively and important participant in the creation of the music. A free improvisation without it is dull; in fact, it shouldn't even be called a "free improvisation." So instead of avoiding the "random," it is thoroughly integrated into the fabric of free improvisation. Three terms are offered to describe the nature of this "random" quality.

Components of FREE IMPROVISATIONAL MILIEU

Potential Sonic Material - The unknown, unpredictable component of the musical material utilized in performance.

It is not unusual to find free improvisers using their instruments (even the human voice) more as sound-producing devices than their intended use as traditional instruments. This illustrates the strong INFLUENCE of

SOUND itself. Extended techniques, modifications or attachments, homemade or experimental instruments, and digital processing are all examples of ways improvisers seek to expand their sonic repertoire. This means the Potential Sonic Material for a free improvisation is enormously broad in scope. Just because an improviser is holding a violin doesn't mean she/he is going to play Paganini! (though she/he might).

Dissociative Flow (DF) - The unpredictable, "random" component in the linear progress of each "voice."

As much as one would like to say, as a free improviser, that each and every moment is "accounted for," this is actually not so. There are moments when the improviser's fingers are moving semiautomatically while the Intellect calculates, strategizes, etc. These moments are open to a degree of "randomness," though tempered by the Training and Experience of the Intelligent Body. And, of course, there are moments of intentional "randomness," or dissociation.

Dissociative Polyphony (DP) - The unpredictable, "random" component in the formation of relationships among "voices" in group improvisation.

The interactions among free improvisers in performance cannot even begin to be predictable, even by the improvisers themselves (if it's truly free). However, they can certainly be recognized as they occur.

Although these "random" qualities necessarily infuse the music of free improvisation, the art lies in dealing with them, incorporating and integrating them into the Flow (a term described below).

* * *

CONTENT - The temporal/acoustic phenomenon of a free improvisation performance. (Note: The use of the term "CONTENT" avoids the issue of the relationship of composition to free improvisation. That issue is taken up later; CONTENT is appropriately a more general term.)

CONTENT as Flow

The idea of CONTENT is an abstraction of temporal experience; music happens over time and has CONTENT. The nature of that CONTENT can be abstracted to words and charts, as done here, but its experiential nature remains temporal. Hence, the term "Flow" is offered to signify the temporal, experiential nature of CONTENT. When speaking of CONTENT as an experience (a product of Perception), the term Flow is used.

CONTENT is the most dynamic set of INFLUENCES in operation. That is, a free improvisation is, to a large extent, self-generated, as each moment is a response of some kind to the preceding moments. (The initial sound is functionally random.)

The first four components of CONTENT represent the Fundamental Reciprocal Processes -- Linear Functions, Relational Functions/Composites, Identities, and Transitions. These processes are considered reciprocal because they immediately and continuously impact one another and cannot exist apart from one another (phenomenologically). This is discussed in detail in Chapter 4. The last two components represent the results of these Processes -- Gestural Continuity/Integrity and Segmental Form -- and these can be heard as elements of Indigenous Style.

Components of CONTENT

Linear Functions - The intent to create CONTENT as a single "voice." Four Processes comprise Linear Functions:

Identificational Processes - Creating Identities (establishment).

Continuity Processes - Maintaining Identities (extension/development).

Relational Processes - Relating Identities to group (establishing Relational Functions)

Transitional/Cadential Processes - Leaving Identities (linear cadencing)

Identities - Anything about the CONTENT that identifies or draws perceptual attention to itself in some way

and maintains identity within the music for some time.

Linear Functions and Identities are intimately related, as described above, because it is necessarily the individual improviser who initially creates an Identity (though two or more improvisers may synchronistically do so at times). An Identity, of course, can be shared and maintained in numerous ways once presented. But, as with initiation, it is usually an individual improviser who terminates the Identity (whether consciously or not), though it need not be the one who initiated it.

Normally, one would describe music in reference to pitches and rhythms, harmonies, melodies, even timbre as a "coloristic" element. Although these traditional musical elements exist and function within free improvisation, they are not the starting point; SOUND is the starting point. And gesture is the nature of the activity. To designate, in a general way, the more important "gestures," the term Identity is used. Identities can then be described, in analysis, in terms of pitch, rhythm and timbre. But in the listener's perspective, whether improviser or audience, such details often go by far too quickly to contemplate; instead, the ear notices "something," is attracted to it, and focuses on it in some way. That "something" then becomes an Identity.

Relational Functions - The intent to create CONTENT through specific role relationships among "voices." (RF is the intent; the listener's perception of this intent is termed Composites.)

Two important qualifications need to be made here: First, although there is a somewhat psychic component within group improvisation, the improvisers, each one of them, individually act to create relationships with the others in the group. The individual's attention incorporates both self and group; it is hopefully not "split" or divided, but rather simultaneous. Second, in free improvisation, particularly group improvisation, intention is one thing and result is another; though they may be the same, they are certainly not always. For this reason, the "role" an improviser plays is described both in terms of intention (Relational Functions) and the result of perception (Composites). When a relationship intended by one improviser is misinterpreted by another, this could be considered a miscommunication, or a "mistake." However, mistakes (or miscommunications) can be contextualized, and the perception or interpretation of the intention becomes a reality for the improviser(s) to deal with.

Seven principal Relational Functions are now defined as Solo, Support, Ground, Dialogue, Catalyst, Sound Mass and Interpolation.

Solo - A single or dominant "voice."

The soloist (whether accompanied or not) determines the musical direction, and if accompanied, others provide some support of that direction. A Solo, however, need not be extensive in group situations. The function of Solo can, and often does, shift rapidly among players, sometimes so rapidly that a single line may appear to be shared among two, three or more players.

Support - The active underlayment to support other higher profile "voice(s)."

When a solo, duo or trio becomes dominant (obvious), the other players in the group might cease playing, or provide accompaniment which supports the musical direction of the Flow as determined by a Solo or Dialogue. An obvious example of Support is drumming that sustains a tempo and punctuates the phrases of other instruments. Indeed, the function of Support is to enhance not only rhythm and phrasing but other aspects of a lead voice such as timbre (articulation, register, dynamic) and, if appropriate, pitch (harmonically, melodically).

Ground - The static underlayment to support other higher profile "voice(s)."

Ground is an element of relative stasis which implies a lead voice(s) over it (though Ground may develop into a Sound Mass with no lead voice). How the Ground is articulated can vary a good deal. Examples include: sustained tone, chord or noise; rhythmically periodic sustained tone, chord or noise; periodic event or figure, chord or noise; arrhythmically periodic sound event or figure; etc. What defines the Ground as such is how it is perceived to function; the Ground may well include periodic or aperiodic silences, as well as complexity and textural/rhythmic interest, so long as it continues with a high degree of perceived stasis.

Dialogue - Back-and-forth, immediate interaction between/among players (not always just two).

More than two may be involved in Dialogue, but beyond three voices, the sense of interaction can easily shift toward an impression of Sound Mass. If several are participating, yet retaining a transparency, the effect is a contrapuntal texture. A part of the characteristic of Dialogue is a texture of voices sounding relatively short phrases in alternation, a call-and-response mode, termed in classical music antiphony. In free improvisation, however, the alternation of voices often overlaps in a very rapid exchange, and can even cloud the sense of Dialogue. Furthermore, a third voice can swiftly replace one of the voices in Dialogue and redirect it or establish a new Dialogue, or a new Composite. A particular kind of Dialogue that can sometimes be readily heard is imitation, where one improviser imitates certain aspects (rarely all aspects) of what another is playing. The imitation is usually relatively immediate and general in nature, often brief. The contour of a melodic phrase might be imitated, but not note-for-note. Or, only the rhythmic pattern of a figure or phrase might be imitated while the melodic contour is not. Imitation can also function on a larger, formal level of musical meaning. For example, an improviser might imitate the opening phrase of one section in a later section(s), or recall an Identity long after its natural demise. Likewise, a motivic Identity articulated by a player in one section might be imitated in some way by another player in another section. (Note: This evidences the role of memory in free improvisation, which is not to be confused with memorization, something predetermined.)

Catalyst - An action to stimulate change in the musical character.

A Catalyst does not continue or reiterate, but rather happens only once, signalling a change. How the Flow is changed is unpredictable, but the fact that a change occurs immediately after a dynamic sound event of some kind makes it evident that it was catalytic in function. A Catalyst can be the product of a conscious, formal decision to change the Flow, to change the music in some definite way. It can also be an impulsive gesture completely outside of consciousness, the product of the Intelligent Body's sense of a need for change.

Sound Mass - A collective complex sound made up of a number of "voices" that are roughly equal in contribution.

A Sound Mass is normally quite dense, complex and continuous, though it may also be soft while remaining dense or active. Essentially, Sound Mass is a homogeneous, rather static, texture of some kind. The object of listening attention is focused on the subtle but ever-changing details within the Sound Mass, articulated by minute shifts of balance, quickly emerging figures, occasional dynamic sound events, and often a high level of energy wherein the sound itself can be an exciting emotional stimulus.

Interpolation - The insertion or overlaying of utterly foreign material upon existing material wherein two (or more) independent musical characters coexist without affecting one another.

The material inserted, or interpolated, must remain unrelated to the present Flow. The Flow must likewise continue unaffected by the Interpolation to give the sense of "foreign" material inserted. If Interpolation changes the direction or nature of the Flow, it will function as Catalyst, and, if dense enough, Sound Mass. Interpolation also accounts for the not uncommon situation in which two or more improvisers are playing independently, with little or no apparent regard for one another, creating the situation in which relational tendencies may be intentionally ignored; emphasis is placed on Linear Functioning.

Transitions - The individual and/or collective PROCESSES of large-scale change in an improvisation leading to a perception of Segmental Form.

Transitions are vital to the perception of form in free improvisation. While the term could be applied on a minute scale (e.g., the "transition" from one phrase to another, or the timbral "transition" in a legato line becoming staccato in articulation), Transition, as used here, implies notable changes in the general character or direction of an improvisation. In most instances, Transitions are easily heard by improvisers and audience. In the analysis of written music, a "section" or "part" of a larger form is usually so designated according to its specific harmonic/rhythmic/thematic CONTENT, rather than how the music moves from one such section to another. In free improvisation, it is more likely to be the PROCESS of change itself that captures the listener's attention rather than the specific differences between the antecedent and consequent sections, though these, too, will have an impact upon the listener (i.e., will INFLUENCE PERCEPTION). Also, in large scale written

compositions, the various sections are often hierarchical, whereas in free improvisation, though there may be some kind of hierarchical impression, it is not likely to be heard as such in performance, but rather as a series of relatively equally important but unique sections, organically causally connected. (Note: Distinguishing "organic causation," something quite complicated, even subtle, from "linear causation," something quite abstract, and therefore innately simpler.) Hence, free improvisation is considered here to be inherently segmental in its formal nature; more is said about this below.

Seven types of Transition in free improvisation are defined here.

Sudden/Unexpected Segue - Unprepared, immediate change with unexpected continuation.

Transition is sudden and unexpected, yet there is no halting of the Flow (i.e. segue). Such a Transition may be dramatic (with highly contrasting consequent section) or subtle (implying a PROCESS that is perceived only in retrospect once it has begun). This is a non-closure type of Transition.

Pseudo-Cadential Segue - Implied cadence with sudden and unexpected continuation.

Transition is rapid, implying a cadence of the antecedent section (e.g., a slowing of tempo, lessening of dynamics, decreasing density, etc.), but does not allow silence to follow. Instead, the next section begins almost immediately (segue) and highly contrasts the previous section. This is a non-closure type of Transition (that originally implies closure).

Climactic Segue - Peak moment that stimulates unexpected change and continuation.

Transition is rapid, implying a climax of the antecedent section (e.g., increasing tempo, dynamics, density, etc.), but does not allow silence to follow. Instead, the next section begins almost immediately (segue) and highly contrasts the previous section. This is a non-closure type of Transition (that originally implies closure).

Feature Overlap - One feature of antecedent section is sustained and becomes part of the consequent section.

Transition may be sudden, rapid or gradual, but one feature of the antecedent section continues during the Transition while all others cease. This continuing element then becomes the basis for the following section. This is a closure type of Transition.

Feature Change - Gradual change of one feature that redirects the Flow (usually subtly).

Transition involves a significant (apparent) but gradual change in a particular feature (e.g., dynamics, tessitura, density, tempo, etc.) that redirects the Flow in a (usually) subtle way. This is a non-closure type of Transition.

Fragmentation - Gradual breaking up, or fragmenting, of the general texture and/or rhythm.

Transition is gradual, usually following a very dynamic section (intense rhythm, great density, etc.), and manifests as a breaking up, or fragmenting, of the general texture or rhythm through both arrhythmic, short groupings of sounds and the insertion of brief silences which get longer throughout the Transition PROCESS. This is a closure type of Transition.

Internal Cadence - Prepared cadence followed by short silence then continuation with new material.

This is a strictly formal type of Transition in that continuity is ceased entirely via silence. The sense of change from one thing to another is heard as a movement from one "large section" to another. The moment-to-moment flow is halted. An interesting dynamic about this type of Transition is the question in the mind of the listener as to whether the cadence is just internal or final. There is a moment of extreme unpredictability at these times, given the sectional nature of form in free improvisation. Just because one section concludes does not mean the piece is over. Given any number of such sections, actual endings (and durations) of improvisations are rarely predictable, though final cadences can sometimes be completely convincing in immediate retrospect.

Gestural Continuity/Integrity - The overall articulative, generative character of CONTENT in free improvisation which is structural in nature.

As mentioned before, free improvisation has an intensely gestural nature, being essentially an impulsive/responsive activity generated in response to the Flow directly by the Intelligent Body, with the "managerial guidance" of the Intellect. This is not to imply, however, that continuity is lacking. Continuity is vital, being the "connective tissue" within the structure of an improvisation. While continuity is achieved in written music melodically, harmonically, rhythmically, etc., in free improvisation, it is more appropriate to consider continuity as a linking of successive gestures through the ongoing implications of the moment. That is, continuity in free improvisation need not be expressed by specific musical elements, but rather by relative degrees of stasis/change in the PROCESSES within the Flow; it is thus less technical and more psychological by nature.

Gestural integrity implies the structural function of gesture in terms of the interrelationships of Identity on all levels of the music. Identity is temporally a "local" phenomenon when articulated in free improvisation. But as a real time response to the music, although it is "localized" in time, it has a causal (organic) connection to what came before, not just on the level of motive or rhythmic pattern or timbral space, etc., but also on the level of phrase and form. That is, the articulation of an Identity can be a response to the need for larger level changes in the music, as well as a focusing of the Flow. This causal connection is what integrates the various levels of an improvisation and contributes toward the gestural nature of structure.

Segmental Form - The overall formal characteristic of CONTENT, as a reflection of the structural character of Gestural Continuity/Integrity. [Other possible forms would be Minimalist and/or Conceptual, resulting in non-segmental forms, or traditional improvisational forms, but these are not considered indigenous to free improvisation, but rather to written composition and/or traditional practices.]

Segmental Form represents the formal aspect of Gestural Continuity/Integrity. Just as the smaller units of music are gestural by nature, so are the larger units of form. As such, a "section" can be thought of as a "formal gesture," which articulates a particular musical character. Together, these "formal gestures" tend to create Segmental Form -- numerous sections with specific musical character adjacent to one another via Transitions.

* * *

META-STYLE - A conglomerate of the specific possible components of style in a free improvisation.

Components of META-STYLE

A listener's search for meaning in free improvisation will probably begin with an effort to recognize or identify elements of style. Elements of familiar styles can be heard in free improvisation, but not the whole style itself. Since style has long been the way different musics have been identified and distinguished from one another, it is important to note how differently style functions within free improvisation. Although one can point to specific stylistic traits heard, the function of style cannot be limited to this. And the appearance of different stylistic traits in free improvisation is fundamentally different from "fusion music," which intentionally focuses on particular blends of particular styles. The function of style in this music is much less a product of conscious intent (though at times this approach is used) and more the product of IMPULSE utilizing learned Instrumental Techniques. Indeed, the free improviser faces a challenge not to rely upon style but to consider it primarily a byproduct. The components of style in this music can be identified, as below, but the many ways in which these components function is beyond definition.

Sound - Sound alone as stylistic component.

Virtually any sounds can be used in free improvisation. Even though most improvisers play traditional instruments, the attitude is generally one of seeking to fully realize the sound potential of the instrument. This not only includes the development of technical proficiency, but also extending what the instrument is capable of through special performance techniques, attachment of various physical objects to alter an instrument's sound, the utilization of electronic processing, and so forth. To the free player the instrument represents her/his universe of possibilities and field of probabilities.

Style Signs - Isolated, brief elements of "external" (non-free improvisation) styles (e.g., jazz, rock, ethnic,

etc.).

Sounds and musical ideas that arise in the course of free improvisation can occasionally have specific stylistic associations or implications in the mind of the improviser that may lend a degree of familiarity to the music at certain moments. Style signs are small elements of well known styles that appear within the Flow. They retain a certain signification even outside the CONTEXT of the original style by retaining a level of familiarity, and often are heard in many different kinds of music. In this sense, style signs are modular. Admittedly, this is difficult to reconcile with a traditional concept of style. How can elements of style be extracted from the style and still retain meaning, even if not the same meaning? The answer is, because styles are not immune to INFLUENCE and often "bleed" into one another. Furthermore, the listening attention, alone, will seek to construct meaning about the sound, even within an unfamiliar music. Hence, while there is a subtle level of recognition in style signs, new meanings are also constructed.

A style sign, being a small element or aspect of the sound with some degree of familiarity, may be typical of more than one style of music and thus already have multiple implications for its larger meaning in a free improvisation. Syntactical meaning is left open to interpretation in the moment, whether by improviser or audience. Any coherent sign of style will likely stand out to some extent the moment it is heard and thus will bring the listener (along with the improviser) to the brink of decision about its ultimate contextual meaning. Examples of style signs are innumerable and include: a tremolo on a stringed instrument; an arpeggio through the range of a trumpet; "exotic" sounds of modified instruments; a particular digital effect; a shift of meter from simple to compound; a fragment of thematic quotation; sounds with non-musical associations such as thunder or running water; a ritard (slowing) to a cadence; certain kinds of embellishments; and so on. The musical perception of sound is replete with various stylistic associations listeners may have that are easily triggered throughout a performance of free improvisation. These associations, however, are personal for each listener, and need not have even been intended by the performers.

Style Semblance - Longer segments of "external" style, often heard as parody or collage.

Style semblance incorporates larger elements of known styles such that there is definite recognition of a particular style and a retention of the expected syntax to a limited degree; for example, a walking bass line, a known melody, a blues progression, outright musical quotation, music concrete, sampling, etc. Some improvisers who play instruments associated with jazz (e.g., sax, guitar, piano, bass, drums) will at times interject actual known melodies for special effect, "charging" the moment with a kind of isolated familiarity. Style semblance can also take the form of parody, or collage as a result of Interpolation. But, as a semblance, these larger style units remain subject to extension and distortion -- that is, Contextualization to the music being made. Style semblance can be maintained for a time, but its effectiveness wears thin if continued for too long, too literally. In free music, there is a mandate to (at least eventually) deconstruct or re-contextualize known or familiar musical properties such that the attention of the listener is diverted away from issues of style recognition or historical identity, and toward both the real time compositional PROCESSES and emotional feelings evoked by the music of the moment.

Indigenous Style - Elements of style that appear to be indigenous to the practice of free improvisation.

A number of general style traits listed below can be heard as common to most free improvisation, broadly identifying it as a practice. These, however, are not necessarily exclusive to free improvisation, they do not account for all possible expressions within free improvisation, and they do not necessarily represent all such traits. They are, however, examples of traits to listen for.

Use of any tonal system and a mix of tonal systems (modal, diatonic, chromatic, pantonal and atonal).

Irregular rhythmic character and irregular phrase lengths that are oriented to physical gesture.

Compound "voice" texture, or multiple independent "voices".

Multiple stylistic INFLUENCES of different traditions.

Catalytic and cadential formal processes that function as cues.

Sectional nature, with each section defining a certain musical character or mood, and connected to the subsequent section via Transition.

Responsive and quickly changing interaction among "voices" to create various shifting role relationships in real time.

Personal/Group Style - Elements of style that have developed over time which stylistically identifies to some extent a particular individual improviser or group.

Free improvisation, by virtue of its open and incorporating nature, invites (indeed demands) the development of personal and group styles. As an improviser accumulates experience, a unique style develops naturally. Likewise, as groups develop rapport and players within a group become increasingly familiar with one another's musical tendencies (i.e., personal style traits), a general style peculiar to the group will usually develop.

* * *

CONTEXTUALIZATION - By Improviser: Creation of a musical context to imply meaning in retrospect (after the fact). By Audience Listener: Creation of musical meaning based on personal/cultural experience and preferences.

CONTEXTUALIZATION is a response to the Flow that places a musical context around what happens. The improviser does this through any number of performance actions; the audience does it through immediate and spontaneous reflection on past musical experience. In both cases, the listener is attempting to create a degree of familiarity about the moment in order to make more sense of it. An improviser, for example, might respond to an unaccompanied solo line or motive by supporting it in some way by creating, say, a rhythmic or harmonic Support or Ground. Or, the improviser may imitate the other's melody or motive, possibly creating a Dialogue. In both instances, the response is to create a musical context for what is heard. If a player makes what sounds like a "mistake," that "mistake" might be contextualized by repeating it, changing the listener's initial impression from that of a "mistake" to that of new material or a new idea. Often, unexpected "mistakes" will function as a Catalyst in the music, sending it in a new direction. CONTEXTUALIZATION illustrates the constantly shifting dynamic of consciousness about a performance, where first impressions are manipulated, and where the ultimate meaning of something becomes apparent only after the fact (though usually immediately after the fact). CONTEXTUALIZATION is akin to adaptation.

* * *

PROJECTION - By Improviser: Action upon the inherent potentialities of CONTENT to imply future direction. By Audience Listener: Expectation of future progress of the music.

PROJECTION is tantamount to quick glimpses of the immediate future. The improviser is not only responding to what happens and trying to make sense (contextualize) it, she/he is also inventing ideas and creating new possible directions for the music to take. A common example would be a motive that becomes, for a time, the basis of linear functioning, where the improviser expands or develops it. The improviser's response to the appearance of that motive is PROJECTION if the motive functions in the continuation of the music. The audience listener, likewise, is not only trying to comprehend meaning as the music progresses, she/he is also continuously experiencing a (fluctuating) level of expectation about the music. For example, a crescendo or other such cadential preparation may clearly signal an impending climax in the music -- one which, in free improvisation, may or may not actually happen. PROJECTION is akin to ideation.

* * *

FLOW PERCEPTION - The continuous, cumulative perception (by both improviser and audience) of the performance.

Music is easily thought of as a "flow of sound." The generating force behind the flow of liquids and gases is either gravity or pressure. To draw a parallel, in free improvisation, Flow is generated by the "gravity" of (attraction to) musical ideas and the "pressure" of the mandate to fill the performance time with music.

Furthermore, the PROCESSES taking place are not discrete; rather, they are in a constant state of flux and are interdependent, somewhat like interactions in liquid dynamics. Thus, the term "Flow" seems appropriate to generally designate the phenomenological/perceptual circumstances of free improvisation.

Components of FLOW PERCEPTION

Contemporaneous Flow Perception - consciousness of the music as it is happening.

Flow Perception by the improviser is, of course, a most direct INFLUENCE upon CONTENT, being the continuous stimulus to impulse in the "feedback loop" of responsive, self-generating action. This involves an intense consciousness of the moment, both what led up to it and where its implied direction lies. The author has described this as "momentary consciousness:"

a consciousness outside of time, where past, present and future are all one and the same as manifest in the moment. (Nunn, 1996, p. 76)

The sense of being "outside of time" is a psychological experience in which the INFLUENCES of CONTEXT, CONTENT, and PERCEPTION all come together. Even for the audience listener, time, or rather the psychological perception of time, is easily altered. A nine-minute piece can seem to be only five minutes, or possibly twelve minutes or more. The CONTENT will directly INFLUENCE this aspect of PERCEPTION.

In contrast to listening to music that is familiar, listening to improvisation involves a different sort of expectation on the listener's part (again, for both improviser and audience). Lacking a normally consistent or strong stylistic identity, free improvisation can be disorienting at first. But disorientation has a positive function in this music, challenging listeners by breaking down established sets of expectations. Expectations are not destroyed, but rather fragmented or deconstructed to eliminate syntactical determinants. Once disoriented or confused, the listener is in a properly vulnerable state -- the search for meaning, any meaning, begins. The listener is necessarily involved. How interesting and gratifying this search is will affect the listener's emotional and intellectual response to the music.

Cumulative Flow Perception - a consciousness of the performance as a whole upon completion.

The Perception of any music is, to some extent, cumulative. Of course, it is not entirely conscious -- no one can recall everything about a performance heard once, and many listeners can actually recall very few details. Cumulative Perception of Flow is not as much literal as it is psychological. It is a dynamic, additive process of Perception that occurs throughout a performance and, in the case of the improvisers, actually determines the ultimate formal shape the music takes.

* * *

IMPRESSION - Perception as a (short-term and long-term memory) INFLUENCE upon the significance of a performance.

At the end of a performance, there is usually an emotional response. This is true of most musical performances. The audience signals its appreciation by applause; and the improvisers will have some sense of satisfaction -- if nothing else, they get to rest for a moment! The initial IMPRESSION is thus an emotional one. However, there is also a lasting IMPRESSION that leads inevitably to categorization and criticism. IMPRESSION expands the scope of impact a free improvisation has; it is now "extra-performance" (outside of performance) and leads ultimately to reputation -- both that of the improvisers/group and that of free improvisation, itself, as a practice.

Components of IMPRESSION

Categorizational Impression - stylistic impression

Despite the fact that style functions in a unique and complex way in free improvisation, listeners will most likely attempt to categorize a performance by comparing it stylistically to other improvisation performances and groups they have heard.

Critical Impression - technical/compositional impression

Accompanying categorization is criticism -- how did the performance rate qualitatively? Assuming this question is not directed solely to style, it implies Critical Listening for the technical and compositional abilities of the improvisers.

* * *

A lot of information has been presented in the foregoing pages in a condensed way, with terms, definitions and very brief discussions of the terms. To put this into some kind of overall perspective, the following chapter offers five charts showing various relationships among the concepts these terms represent. A longer discussion follows to explain the nature of these relationships. Finally, the INFLUENCES of the PROCESSES upon themselves that make up CONTENT will be examined, at times using hypothetical examples.

CHAPTER 4

PERSPECTIVE:

CHARTING THE INFLUENCES AND PROCESSES

The terminology presented and discussed in the previous chapter lays a foundation for comprehending the different INFLUENCES and PROCESSES inherent in free improvisation. Unlike the specific theoretical concerns of traditional music, which are technical and deal solely with CONTENT, it is vital to acknowledge the significant INFLUENCES provided by CONTEXT and PERCEPTION in free improvisation, as they both directly and indirectly impact the formation of the music in performance. Also, these INFLUENCES do not happen just over the period of time occupied by the performance, but from one to the next. The degree of importance and specific functions of such INFLUENCES upon the music set free improvisation apart from all other kinds of music, though these INFLUENCES can also impact any music, if not to the degree and extent found in free improvisation.

Five charts (Figures 1 - 5) are presented for reference at the end of this chapter which graphically illustrate relationships among the terms presented in the previous chapter. Each chart is first explained briefly; then a detailed discussion follows which examines how the INFLUENCES and PROCESSES work in generating the music.

* * *

Reading the Charts

Each chart has a general orientation that conforms to the following: When represented, CONTENT is placed centrally in the charts (Figs. 1, 2 and 3). Time is read from left to right (Fig. 1). The poles of Individual Consciousness and Group Consciousness place the former at the bottom and the latter at the top (Figs. 1, 2, and 3). Contextualization is found on the left and Projection on the right (Figs. 1 (assumed), 2, 3, and 5). The Chart of Meta-Style, Relational Functions and Transitions (Fig. 4) illustrates general relationships among the components CONTENT which are group-oriented. The Chart of Identities and Linear Functions (Fig. 5) shows the components of CONTENT which are individual-oriented and the Processes associated with them.

Lines and arrows are used to indicate relationships among the INFLUENCES and PROCESSES. Arrows with a point at both ends indicate Reciprocal INFLUENCES.

* * *

FIGURE 1 - Chart of INFLUENCES and PROCESSES

Figure 1 illustrates most inclusively the basic INFLUENCES and PROCESSES at work in free improvisation. The four types of CONTEXT are seen in a column on the left. The Cultural and Physical CONTEXTS are shown to have a special relationship to SOUND in their INFLUENCE, while the Personal and Biological CONTEXTS are more related to IMPULSE in their INFLUENCE. SOUND is an INFLUENCE that is shared by all and is thus oriented to Group Consciousness. Impulse, on the other hand, is an INFLUENCE within the Individual and is

specifically different for each person. SOUND is considered the Physical Medium and IMPULSE the Psychological Medium. The vertical two-pointed arrow between shows them to be Reciprocal INFLUENCES. This chart also designates the general polarity of STASIS and CHANGE. Contextually, CHANGE functions in Group Consciousness as Musical Mandate -- the expectation by all present that music will be made (top left). STASIS is the Origin, or consciousness of the improviser as "No Mind" when a free improvisation begins (bottom left). All of these elements are INFLUENCES, through the Physical and Psychological Media, upon CONTENT, as indicated by the arrows.

CONTENT is central to the chart and is closely surrounded by components of the Improvisational Milieu -- Potential Sonic Material, Dissociative Flow (DF) (situated below as applying to individual lines or "voices"), Dissociative Polyphony (DP) (situated above as applying to the relationship among lines or "voices") -- and Meta-Style, which "surrounds" (actually permeates) CONTENT. Illustrated as "orbits" around CONTENT and Improvisational Milieu are Linear Functions below (individual) and Relational Functions above (group). The next "orbit" consists of Identities below and Transitions above. And the outer "orbit" has Gestural Continuity/ Integrity below and Segmental Form above.

The components of PERCEPTION are found on the right. IMPRESSION is seen to be Eventual and more an aspect of Group Consciousness. It is thus placed above FLOW PERCEPTION, an aspect of Individual Consciousness considered to be Personal and Immediate. The vertical arrow between shows FLOW PERCEPTION as a Cumulative INFLUENCE upon IMPRESSION. (Though not noted on the chart, IMPRESSION also eventually INFLUENCES CONTEXT in the form of future expectations of the group by audience listeners familiar with it, completing a "loop" of INFLUENCES that transcends the temporal performance.) Complementing STASIS and CHANGE within the CONTEXT, as a Perceptual matter, STASIS is shown to be Cultural Identity, while CHANGE represents Personal Development.

* * *

FIGURE 2 - Chart of CONTEXT

CONTEXT is an ever-present INFLUENCE upon free improvisation and represents the impact of culture, the physical environment, the human body and the individual person. Figure 2 illustrates the interaction of these INFLUENCES in relation to the INTELLECT and the INTELLIGENT BODY, with SOUND and CONTENT represented as a single phenomenon centrally on the chart. Again, Contextualization (an exercise of Adaptation) is depicted on the left while PROJECTION (an exercise of Ideation) is on the right; INTELLECT is at the top of the figure and the INTELLIGENT BODY below, with SOUND/CONTENT centrally located. The INTELLECT is considered closely related to Group Consciousness, and the INTELLIGENT BODY reflects Personal Consciousness. The Contextual INFLUENCE of Culture and the Physical Environment are aspects of the INTELLECT; Personal and human body Biological INFLUENCES are aspects of the INTELLIGENT BODY. As the arrows indicate, the Processes of both the INTELLECT and the INTELLIGENT BODY contribute to the creation of SOUND/CONTENT.

A matrix is set up here which illustrates Contextualization (Adaptation) of the INTELLECT (Ideation) in the form of Education and Acoustic Environment and of the INTELLIGENT BODY in the form of Training and the Limitations of the Body, and PROJECTION (Ideation) of the INTELLECT as Imagination and the Instrument itself and of the INTELLIGENT BODY as Experience and Instrumental Technique. The chart can thus be read as follows:

- Education is the Cultural Adaptational INFLUENCE upon the INTELLECT;
- Imagination is the Cultural Ideational INFLUENCE upon the INTELLECT
- Acoustic Environment is a Physical Adaptational INFLUENCE upon the INTELLECT;
- the Instrument itself is a Physical Ideational INFLUENCE upon the INTELLECT;
- Training, corresponding to Education, is the Personal Adaptational INFLUENCE upon the INTELLIGENT BODY;
- Experience is the Ideational INFLUENCE upon the INTELLIGENT BODY;

Limitations of the Body are a Biological Adaptational INFLUENCE upon the INTELLIGENT BODY; and Instrumental Technique is a Biological Ideational INFLUENCE upon the INTELLIGENT BODY.

* * *

FIGURE 3 - Chart of Perception

The Chart of Perception situates SOUND/CONTENT centrally, as in Figure 2. Closely hovering around SOUND/CONTENT are the four Contextual INFLUENCES and their reciprocal relationships of Cultural/Physical and Personal/Biological. Meta-Style is assumed. As before, Contextualization (here designated as FAMILIARITY) is on the left and Projection (UNFAMILIARITY) on the right, as basic expressions of Impulse (the Impulse to Contextualize the Flow in retrospect and the Impulse to Project new possible meaning upon the Flow). The PROCESSES noted in Figure 1 are illustrated here as an elliptical orbit around SOUND/CONTENT, again centrally placed. FLOW PERCEPTION is noted at the bottom and IMPRESSION at the top. The PROCESSES of Linear Functions, Identities and Gestural Continuity/Integrity are most proximal to FLOW PERCEPTION (being Individual Processes) and Composites, (Note: Composites, again, are the perceived result of Relational Functions.) Transitions and Segmental Form relate most directly to IMPRESSION (being Group Processes).

* * *

FIGURE 4 - Chart of Meta-Style, Relational Functions and Transitions

Figure 4 illustrates general correspondences among the elements of Meta-Style, Relational Functions and Transitions. Though not noted on this chart, the left-right/top-bottom orientation of the other charts is assumed; that is, CONTEXTUALIZATION (left), PROJECTION (right), INDIVIDUAL CONSCIOUSNESS (bottom), and GROUP CONSCIOUSNESS (top). The various elements are placed in approximate accordance to this matrix. The correspondences among the elements are thus:

Sound Sound Mass Climactic Segue (strong);

Style Signs Dialogue Pseudo-Cadential (weak);

Style Signs + Style Semblance Support Internal Cadence (strong);

Style Semblance Interpolation Fragmentation (strong);

Indigenous Style Catalyst Sudden/Unexpected Segue (strong);

Indigenous Style-Personal + Group Style Solo Feature Change (moderate); and

Personal/Group Style Ground Feature Overlap (moderate).

It must be emphasized that these correspondences are neither exact nor exclusive, and vary in relative strength. Other correspondences (e.g. Indigenous Style Sound Mass Fragmentation), which are not aligned on the chart, do exist and may well be stronger than some of those above.

Looking at the first example listed above, Sound (an element of Meta-Style) has a close relationship with Sound Mass (a Relational Function), which in turn is often heard at Climactic Segues (a Transition). This is a strong correspondence because it is relatively likely to happen. The correspondences of Style Semblance Interpolation Fragmentation and Indigenous Style Catalyst Sudden/ Unexpected Segue are also strong.

The primary reasons for situating these elements as they are, however, is not to illustrate the strong versus weak correspondences, but rather is generally determined by their relationship to the left/right-top/bottom (i. e., CONTEXTUALIZATION/PROJECTION-GROUP/INDIVIDUAL matrix described above.

* * *

FIGURE 5 - Chart of Linear Functions and Identities

Figure 5 illustrates the elements of the Individual Processes, LINEAR FUNCTIONS and IDENTITIES. The arrows indicate the direct INFLUENCES of PROCESSES upon themselves. Recall the definition of LINEAR FUNCTION: The intent to create CONTENT as a single "voice." The chart shows, first that LINEAR FUNCTIONS INFLUENCE the formation of IDENTITIES. LINEAR FUNCTIONS include: Identificational Processes (acknowledging IDENTITY or other PROCESSES), which express CONTEXTUALIZATION (affirming IDENTITY or other PROCESSES); Continuity Processes (sustaining interest in the Flow); and Transitional Processes (furthering change in the Flow), which express PROJECTION (Cadence or termination of IDENTITY or other PROCESSES). RELATIONAL FUNCTIONS are shown at the top to have Reciprocal INFLUENCES upon all the Processes of LINEAR FUNCTIONS; that is, what the individual is playing always has some relationship to what others are playing at the same time. If the individual improviser is trying to create an IDENTITY, for example, that Identificational Process must relate integrally to the Flow. How that is done is described in terms of RELATIONAL FUNCTIONS. (How it is perceived, remembered, is described as COMPOSITES.)

In terms of IDENTITIES, Cadence is a terminating INFLUENCE and is a function of CONTEXTUALIZATION.

(Note: The termination or Cadence of an IDENTITY is considered CONTEXTUALIZATION because the IDENTITY has been wholly presented and has created a musical CONTEXT for LINEAR FUNCTIONING. Through Cadence, the IDENTITY has been completely identified, thus corresponding to the Identificational Processes of LINEAR FUNCTIONS.) Maintenance is a sustaining INFLUENCE upon IDENTITY. And Creation (of new IDENTITIES) is a function of PROJECTION, i.e. the creation of new direction and probabilities within the Flow.

The PROCESS of creating, maintaining and cadencing IDENTITIES is key to what the individual does in free improvisation in LINEAR FUNCTIONING. A correspondence can be seen between Transitional Identificational Continuity Processes of LINEAR FUNCTIONS and Creation Maintenance Cadence of IDENTITIES. Each represents a cycle of beginning, middle and end.

* * *

DISCUSSION

The charts described above collectively present a picture of free improvisation that delineates not only the musical circumstances, but the social, psychological and perceptual circumstances as well. The INFLUENCES of CONTEXT and PERCEPTION are nearly as vital to CONTENT as are the PROCESSES themselves. This implies a sensitivity to those INFLUENCES which the improviser must have. But, attention now will be focused on the PROCESSES themselves.

The "big question" often asked by those about to try free improvisation for the first time is, "What do I play?", or, from the audience's perspective, "What do you do when you free improvise?" The easy answer, of course, is "Do anything!" And along with this usually goes the maxim, "You can't make a mistake in free improvisation." As explained earlier, however, these comments are more mythical than true.

Let's say three musicians who have never improvised before and who normally read music (and can play well) sit down and free improvise. What happens? Almost invariably, after trying to "sound like" free improvisation (and failing), the musicians will call on what they know how to play already, be it "licks" or quotations from "the literature." Actually, they don't have a clue as to what to do. This happens because they are under the misconception that free improvisers make the music. Therefore, they each feel personally responsible to make something happen, yet nothing happens as a group, nothing congeals. The music sounds either chaotic/random or collage-like. There is little or no interaction among the players.

In truth, free improvisation is not made, it is allowed to make itself. The free improviser allows INFLUENCES to work, allows the music to form itself through her/his body and mind, and just as importantly, the group mind. But what necessarily goes along with this is a certain kind of intense concentration on the music as it happens (as well as some level of technical proficiency). What the three novice improvisers (in spite of their technical proficiency) are failing to do is simply to listen. Each one is so focused on what she/he is "responsible for" individually that there is little or no attention to the potential music, itself. As elementary as this seems, it is perhaps the greatest hurdle, initially, in learning to free improvise.

A particularly helpful suggestion can be made to musicians frustrated by not knowing what to play when free improvising: play something very simple and listen to the sound of the group as a whole, then allow that sound to change as it will. The idea is to hear the music first as sound -- not style, not technique -- just

sound. Once the group sound is established (sounded and heard), the music can evolve naturally. The awareness of the group sound must be maintained while each individual improviser begins interacting with it (i.e., making conscious decisions). At this point, the musicians can begin to really hear and understand what free improvisation is about. Yet, like any music, to get good at it requires practice; in fact, years of practice. (Note: The nature of "practice" in free improvisation is discussed in a later chapter and incorporates both meanings of the term: to practice playing, and the practice as a whole. The role of free improvisation in education is discussed in Chapter 7.)

Being consciously aware of the INFLUENCES and PROCESSES of free improvisation can prepare the mind of the student improviser, provide a basic orientation. But the student cannot be provided the CONTENT of the music, as is the case in written music and, to an extent, traditional, stylistically defined forms of improvisation. The CONTENT must come from the moment of performance and must come from the performer(s).

In that period of silence just before a performance begins, the free improviser should ideally have nothing in mind, the first sound being entirely impulsive. (Note: Many improvisers will use some kind of very general plan or instructions or idea to help give a particular focus or character to an improvisation. The first sound might be predetermined in such instances, or predetermined cues for Transitions may be used.) The instant the sound is heard, the music begins; everything from here on is responsive, whether consciously or subconsciously. And being a performance, the response is necessarily spontaneous. The Intelligent Body goes to work, not only generating sound, but generating musical ideas as well, ideas which capture the attention of the Intellect. Perhaps the improviser's ear is attracted to something familiar in the music, either from her/his Education or Training, and the attention gravitates to that familiarity. Or perhaps the Intelligent Body articulates a particularly difficult technical gesture (implying Instrumental Technique and Limitations of the Body) that becomes the focus of the improviser's attention, always, of course, within the music's Flow. Maybe an extra-musical thought (an abstraction, a mood, a particular character, etc.) is evoked, the product of the Imagination, which becomes a strong INFLUENCE upon the improviser's actions and decisions for a time. Or the Acoustic Environment may suddenly present a sound, such as a distant siren or a passing truck, that thrusts itself upon the music unexpectedly and is "taken up" by the improvisers, allowed to be part of the performance. These are but four of an infinite number of possible Contextual and Perceptual INFLUENCES that can shape the music, if allowed to do so.

The INFLUENCE of CONTENT upon itself is one of the principal characteristics which set free improvisation apart from other forms of music, as mentioned before, and this INFLUENCE occurs as a real time "feedback loop" between Perception and Action. The improviser's attention is primarily focused on CONTENT, though Contextual and Perceptual INFLUENCES still function strongly within this attention. In terms of style, only occasionally will there be a conscious effort to invoke a particular non-free improvisation style (unless such a style is a dominant feature of the music, in which case it is not free improvisation in the strict sense, but rather an extension of a traditional practice). Relational Functions/ Composites are formed, dissolve and re-form, sometimes very quickly and at other times slowly, where either all are participating in a single group sound (Sound Mass/Interpolation) or where each has a specific, clear role to play (Solo, Dialogue, Ground, Support, Catalyst). As the music progresses, a consciousness of its form naturally develops, expressing the improviser's psychological sensitivity to timing on a larger scale. At a point, an improviser may do something to stimulate a significant change in the music (Catalyst), commencing a Transition of some kind (which, again, may be almost instantaneous or may be protracted).

* * *

The Complex Nature of Processes

Linear Functions, Relational Functions, Identities, Transitions, Gestural Continuity/Integrity and Segmental Form have been described as distinct PROCESSES, but they certainly do not occur individually; rather, they are intertwined as a single, whole PROCESS (something that can make listening a confusing experience at times). This can be seen in the reciprocal relationship between Linear Functions and Relational Functions, for example, which has already been described. Figure 5 shows that Linear Functions include Identificational Processes which ultimately create Identities, Continuity Processes which maintain (or support) Identities, and Transitional Processes which are, to varying extent, formal/structural articulations initiated by the individual but most often carried out by the group. So it is already clear that Linear Functions, Relational Functions, Identities and Transitions have much to do with one another. Likewise, the quality of Gestural Continuity and

Gestural Integrity (the gestural nature of structure) is reflected formally -- extended temporally -- as Segmental Form, gestures that represent longer segments of time.

* * *

Confounding Principles of Complexity

The nature of the relationships among PROCESSES is extremely complex. Four principles seem to account, in part, for this complexity: simultaneity, hybridization, kinesis and unpredictability. In other words, multiple PROCESSES typically occur at the same time, appear in hybrid combinations, change in some way, often quickly, and can be highly unpredictable how they occur and what relationship (Reciprocal INFLUENCE) they have upon one another.

Simultaneity: Much of free improvisation consists of a complex sound image (though certainly not all of it, or all of the time). Each improviser is functioning linearly to maintain an interesting (and appropriate) "voice" within a group. Compositional strategies (e.g. creation of Identities, initiation of Transition, affirmation of a Relational Function, etc.) will likely vary among the individual improvisers, as will the particular degree of "consciousness" (Intellect) about the performance while improvising. The audience listener hears a number of relatively independent "voices" happening at the same time. This might be heard as Sound Mass; or as Interpolation or as a dissociative moment within a Transition.

Hybridization: Examples of hybridization can be heard in Transitions. Although seven specific, typical kinds of Transition have been defined and described, the number of possible articulations of each is practically infinite; and, importantly, they can be combined as hybrids. For example, suppose a group is playing a dense, complex Sound Mass, and "the time has come" for a change -- a Transition. The group impulsively and collectively begins to break up the Sound Mass by playing less continuously, in shorter and shorter phrases that become brief figures with longer and longer silences between. This is clearly Fragmentation. (Note: Fragmentation can be initiated by a single improviser, or by the group as a whole.) But suppose one of the improvisers, while participating in the Fragmentation, chooses to repeat a short figure periodically. What is suggested is Feature Overlap -- one element is maintained alone as a "bridge" to the next section. If that improviser persists in playing that same figure, and if the others continue the Fragmentation to conclusion (i.e., stop playing), then the lone improviser left playing that figure repeatedly has articulated a Feature Overlap along with the Fragmentation. Hybridization is heard as the multiple Composite, Fragmentation/Feature Overlap.

Kinesis: Rapid, unexpected change is a hallmark of free improvisation. Indeed, the trick is to "ride the beast" so to speak and not let things get out of hand and go senseless. This requires a certain discipline of restraint and focus, without trampling the Impulse. Indeed, Kinesis is the most built-in confounding principle in free improvisation, and its co-conspirator is unpredictability. Sometimes, perhaps more often than one would expect, an improviser will even surprise herself/himself, the Intelligent Body at work. In terms of PROCESSES, any particular Relational Function can change to another "in a heartbeat." For example, two improvisers -- a string bass and a trumpet -- are playing highly interactively as a Dialogue, with short phrases similarly articulated and somewhat harmonically related. Suddenly, the trumpet screams a high, sustained tone and the bass drops out, implying a possible Catalyst/Solo; and to augment this PERCEPTION, the bass starts playing a walking bass line. However, instead of dropping into this jazz groove, after a few moments, the two players suddenly return to the Dialogue, since any over-dependence upon "grooves" or styles is unwanted.

The shear speed at which things happen can sometimes make it difficult to follow a free improvisation. Often, the individual lines or "voices" will be playing a great many notes rapidly (though again, not always). Relational Functions/Composites can change quickly, and even the Relational Function of each improviser within a Composite will shift, sometimes subtly, sometimes dramatically, but usually quickly. Transitions will happen at times unexpectedly, moving the Flow rapidly ahead. For those unaccustomed to this music, it can be puzzling at first.

Unpredictability: When this principle is functioning maximally, the result is Dissociative Flow and Dissociative Polyphony (DF/DP). As stated before, this is a highly "random" quality. It is important to note here, however, that the concept of "random" is, first, a mathematical one, and is currently being questioned by the investigations of chaos theory. Furthermore, randomness can never be "pure" where the human body and

mind is concerned. That is, producing truly random sound is, frankly, difficult. Any sense of pattern must be avoided. (The reader is invited to try to produce random sound for two minutes, without the slightest hint of pattern.) The reason it is difficult is because the human mind is always searching for order! Thus, the intention to play randomly goes counter to the natural tendency to create patterns. Of course, a surface sense of "randomness" can be achieved by avoiding listening, playing anything at all, and several players doing this at the same time. Still, however, that sense of "randomness" is belied by the likely appearance of patterns within the overall sound. Pattern-making is a natural function of the Intelligent Body. Most often, it is the Intellect that intends to articulate Dissociative Flow. Dissociative Polyphony, on the other hand, can be the product of inexperienced improvisers' inattention to the group sound, the Flow itself. Under the control of experienced improvisers, however, DP is usually a collective intention.

"Randomness" in the form of DF/DP is not the only component of unpredictability in free improvisation. The principle of unpredictability functions to some extent at all levels, even within the compositional strategies used, and affects the audience listener in terms of expectations. That is to say, the listener's expectations should be adjustable. The chapter that follows discusses the idea of critical listening and the different nature of expectation in free improvisation.

It should be apparent, given the principles of simultaneity, hybridization, kinesis and unpredictability, that free improvisation can be quite challenging to the listener. In an effort to unveil some of these complexities, what follows is an examination of how the six fundamental PROCESSES may INFLUENCE one another, and how the aforementioned principles might operate. With this orientation, the listener has a better chance of hearing out the fascinating interplay of PROCESSES and the many varieties of expression they take in free improvisation.

* * *

Linear Functions

Linear Functions can be difficult to hear out in group improvisation because of the principle of simultaneity -- two or more quasi-independent lines. Each "voice" is functioning linearly all of the time; each improviser must follow the implications of her/his own line, while listening to the musical context of that line provided by the other players. In the extreme, the end result can be "masking," where details are lost in a sound complex which, itself, is confused. However, when properly controlled, the effect of many complex "voices" heard simultaneously can be powerful. But there are also transparent moments in free improvisation that present clearly a melodic idea, or a rhythmic idea -- an Identity, or potentially so. When an improviser takes a Solo within a group performance, the audience listener is given a better opportunity to hear Linear Functioning, per se -- how that solo improviser sustains interest.

Though the Intelligent Body and the Intellect have a dual INFLUENCE on the actions of the individual improviser, just how, or to what extent, the Intellect interacts in consort with the Intelligent Body is very subtle, complex and unique to each improviser. The Intelligent Body, responsible for the underlying gestural nature of the music, makes lightning-fast decisions on a more or less ongoing basis. Even the most cerebral improviser will rely greatly on the Intelligent Body, simply because the conscious mind cannot perceive and digest that much information or make decisions that quickly and continuously. But the Intellect is also an important INFLUENCE. Traditional compositional strategies are possible products of the Intellect. An improviser could make a conscious effort to "work" a melodic idea through such basic PROCESSES as augmentation, diminution, retrograde, inversion, fragmentation, interpolation, or any number of indeterminate PROCESSES such as randomizing the order of a limited group of pitches, "blurring" a rhythmic groove with arrhythmic counterpoint; or imitate another's "motive" as accurately and as quickly as possible. The Intellect also remembers, and can, at times, recall Identities and restate them, lending more formal definition to the music. Some particular feature or aspect of the Flow may also be recalled, such as a particular rhythmic figure, and used later in an improvisation.

As shown in Figure 5, Linear Functions incorporate three sub-PROCESSES: Identificational, Continuity, and Transitional. The improviser recognizes (is attracted to) something in her/his own playing that calls attention to itself and merits focus; the improviser has identified something and is called upon to establish that Identity. Of course, as part of a group, the improviser must accommodate the music as a whole in establishing the Identity. This is an aspect of Relational Functioning. But assuming the Identity does fit, or the

Flow accommodates it and adjusts, the next step involves Continuity Processes, maintaining interest in the Identity. Relational Functions continue to serve to support it in whatever way. At some point, the Identity runs its course and Transitional Processes are called into play; how to cadence (terminate) the Identity and continue on. Again, Relational Functions play a part since the cadencing or termination of an Identity is often a group decision. At this point, the Linear Functioning of the improviser who created the Identity may well be focused on another aspect of the music.

* * *

Identities

The term, "Identities" can signify almost anything. Some may find this frustrating, but it is necessary to use such terminology that is not CONTENT specific. It is not, however, difficult to understand the idea of Identity when one thinks of a well known melody, for example. How many versions of the Star Spangled Banner have we heard, yet the Identity remains. Identity lies at the foundation of the concept of theme and variation. The composer's challenge is to see how far and wide the Identity of the melodic theme can be stretched without losing its Identity. (Ravel's "Bolero," for example, presents a melodic and rhythmic Identity ad nauseam!) The same holds true of the concept of development -- something is developed, and that something is an Identity, or Identities. The classical and romantic composers such as Mozart, Beethoven, Brahms, Wagner, etc., are known for perfecting the technique of development, expanding to the point of explosion the forms of symphony and opera.

One would normally think of an Identity as a "motive," a "theme," or a particular rhythmic figure. Traditional jazz, for example, (any number of styles) typically relies formally upon the presentation of a theme, which then becomes the basis of improvisation (sometimes quite "free"), and ultimately reintroduces the theme at the conclusion of the improvisation. In free improvisation, an Identity may well be a melodic or rhythmic motive, but it may be a number of other things, too. For example, say a solo improviser (alto sax) is playing chordal arpeggiations from the low to the upper register, repeatedly. The improviser may want to Identify the harmonic changes, so she/he can change the upward pattern of the gestures, the rhythmic character, articulation, length of phrase, etc., but retain the harmonic character or progression, articulating a harmonic Identity. However, the improviser may choose to Identify the upward sweeping shape of the gesture by retaining it while changing the harmonic character, perhaps even the kind of articulation (e.g., staccato vs. legato) used. So, even though the initial gesture clearly presented the potentiality of an Identity, the nature of that Identity could be any of a number of things -- harmonic, melodic, rhythmic, gestural shape, a texture, articulation, etc.

Identity is a product of PERCEPTION. Something is perceived, whether by improviser or audience listener, as having Identity, because some kind of musical emphasis has been placed upon it. From the perspective of the improviser, Identity is the product of Linear Functioning. From the perspective of the audience listener, Identity is a product of the search for meaning.

* * *

Relational Functions/Composites

Composites (the perceived results of Relational Functions) are normally more apparent to listeners than Linear Functions. Perhaps there is an attraction to this dynamic because we are inherently social creatures. A more likely reason, however, may be the fact that the group, as a whole, produces the music, as a whole. Though the listener's attention may be momentarily diverted to a particular improviser while all are playing, the attention is usually focused on the music as a single, complex, sonic image. How the individuals in a group relate to one another, and how they express that relationship musically is one of the more entertaining aspects of listening to (and watching) free improvisers at work.

An improviser's intention to create a particular relationship with another or other improvisers (Relational Function) may or may not be correctly interpreted by the others. But whether or not the original intention is actually realized, some kind of Composite will be, since anytime two or more improvisers are playing simultaneously, a Composite is formed. And if an improviser's Relational Function does not produce the expected Composite, that improviser should accommodate the Composite that does result.

Because Relational Functions are the intentions of individual improvisers and Composites are the collective results, Composites often appear as multiples. For example, a Solo may be accompanied by either Support (accompaniment) or Ground (underlying stasis, such as a drone). The Composite is thus Solo/Support or Solo/Ground, representing two individual (but complimentary) intentions that produce a single coherent sonic image. A Dialogue between two improvisers may be "invaded" by a third improviser playing something entirely independent, forming a Dialogue/Interpolation Composite. A Ground articulated by several improvisers may become so complex that the effect is more that of Sound Mass; these Relational Functions might be heard simultaneously as the Composite, Ground/Sound Mass, or as a gradual change from one to the other. Or a Dialogue might be "disintegrated" by a Catalyst, resolving to a Sound Mass; a Solo/Ground may become a Dialogue with a third player providing Support; and so forth. And again, composites can form, dissolve and re-form quickly and/or unexpectedly.

To make matters more complex, the character of a particular Relational Function can be "stretched" in a sense. For example, a Dialogue between two improvisers may be joined by a third, even a fourth improviser, and still maintain the impression of Dialogue, if the improvisers continue playing contrapuntally; that is, if the group sound remains interactive and does not become so dense as to create a Sound Mass Composite. Another example would be a Solo improviser that periodically interjects her/his own Catalyst to change the underlying Support without leaving the Relational Function of Solo; the Catalysts might be heard as just a part of the Solo. Indeed, sometimes Catalysts are extremely subtle, escaping the listener's awareness. This will often happen when the Flow is overripe for change but does not allow any large intrusion from "outside." The slightest gesture or change can trigger the impending Transition. (Note: This is somewhat like a super-saturated sugar solution which can recrystallize with the addition of a single sugar crystal.)

One cannot talk about Relational Functions/Composites without the subject of rapport coming up. A group with good rapport can give every impression of being literally psychic in their musical relationships with one another. Of course, sometimes overt, predetermined visual cues may be used to initiate Transitions. But in free improvisation, where no such predeterminations have been made, a quality of synchronicity takes over, and truly amazing things can happen. For example, two or more improvisers may suddenly land on a unison pitch or play a rhythmic pattern exactly together, and the effect can be like a lightning bolt to the music, bringing an immediate and intense focus to the Flow. As a common example, Sudden/unexpected Segue Transitions most often seem to happen "out of the blue" (though a subtle Catalyst may well have triggered the Transition). The improvisers would be hard put to tell you how, why, or anything else about it. It just happened, most likely the handiwork of the Intelligent Body. Suffice it to say that group free improvisation simply cannot happen without some degree of rapport among the improvisers. But the notion of rapport is not bound only to groups that have played together for a long time. When experienced improvisers play together for the first time, rapport is not the result of familiarity with one another, but rather a familiarity with the "language" of free improvisation and its inherent interactive possibilities and probabilities. And each improviser may have a completely unique understanding of these circumstances, yet the group functions quite well as a whole. This supports the idea of Indigenous Style. It also brings up the idea of communication among improvisers in a group, which is discussed at length in the following chapter.

Naturally, there will be those who say that such coincidences as two improvisers landing on the same pitch at the same time are just a matter of probabilities; they're going to happen. So what? There are two answers to this: it happens more often than one would expect, and these synchronicities frequently happen at "right" moments in the music. This is necessarily a retrospective perception, of course, since no one knows in advance it will happen; it appears without expectation. The musical significance of such synchronicities are usually quite immediate in the way they affect the formal evolution of the Flow; in this sense, they can function as a Catalyst. Any meaning as an Identity (assuming one develops), on the other hand, is more likely to be a gradual PROCESS of PERCEPTION. It is notable, however, that the synchronistic quality of rapport is not limited to surprising coincidental events; this quality permeates the whole fabric of group interaction. This is why phrases of unpredictable length and without a known meter, sometimes even without a definite tempo, are still highly synchronized and complimentary. The "psychic" nature of interactions among free improvisers will probably remain beyond any complete understanding, just as will free improvisation, itself, but the INFLUENCE it exerts upon the music is vital.

When a listener thinks of musical relationships among "voices" in an improvisation, she/he tends to identify

the "voice" with a particular instrument, or at least a particular improviser. However, it is common to hear the individual roles within a Composite shift without necessarily changing the type of Composite. That is, musical material does not necessarily determine an improviser's Relational Function. Here is an example (one which happened in a trio improvisation in which the author was performing): (Note: The improvisation described below is entitled "Untitled Afterthoughts" from the CD, "Off Chance" (1996), by the group "Off Ramp" (Jim Hearon, electric violin, Doug Carroll, electric cello, and the author using an electroacoustic percussion board called the Crab.)

At a point in the improvisation, the percussionist is heard to play muted bell-like sounds using only one note value (e.g., say an eighth note) at a moderate, walking pace, but the pitches sound random in their order. This "voice" is heard first alone. It is not immediately clear what the function of this "voice" is, but it tends to sound like a Ground because of the simple, regular rhythm (a static element), though it could become a Solo. Then the violin comes in as a Solo, confirming the original "voice's" Relational Function as Ground. The Composite is now Solo/Ground. But the violin's material is, itself, very complex; at first it comes in short figures, then the gestures are lengthened to the point of becoming continuous and at the same time, less complex. At this point, the cello joins the violin with an upper register sustained sound; the violin and cello then meld into something between a Dialogue and a Sound Mass while the percussion "voice" continues unaffected. Because of the density of the other two "voices," the percussion "voice" could be heard for a moment as part of a Sound Mass. The Dialogue/Sound Mass then cadences in response to the cello dropping to the lower register (a Catalyst), still leaving the simple, rhythmically static percussion line unaccompanied as a Solo. The Solo then articulates its own transition by ceasing the regular rhythmic pulse (Fragmentation). The percussion "voice" has thus functioned as Solo, then Ground, then Sound Mass, then Solo again, yet nothing changed about that "voice" at any point. What changed was the accompanying Relational Functions articulated by the other players.

* * *

Transitions

Transitions represent collective decision-making; it takes the whole group to make a Transition. This is why Transitions are such powerful formal PROCESSES, the Flow comes to a point of complete and obvious consensus. Because Transitions are formal changes, they happen only a few times within a performance, sometimes not at all in shorter improvisations. As such, they are more accessible, more immediately apparent to the listener, though there are also subtleties which require an attentive ear to appreciate.

The types of Transitions defined and discussed above, and found as the outer "orbit" of Figure 4, are archetypes which, in reality, manifest in complex, sometimes hybrid, ways. Internal Cadence is the most easily recognized; the Flow stops for a moment, and there is silence. Sudden/Unexpected Segue happens without warning, but is also often obvious, in retrospect. Climactic Segue and Pseudo-Cadential are PROCESSES that prepare the listener for a special moment. A climax builds the Flow to a peak of energy; or the intimation of an impending cadence within the Flow is made more obvious. However, the listener is fooled (expectations are denied) by the sudden change of direction or character, or an uninterrupted continuation of the Flow without full cadence. This is a common characteristic of free improvisation, an element of Indigenous Style, and an expression of unpredictability.

Fragmentation is a gradual PROCESS; sometimes the more gradual the more effective. If a group sound is Fragmented evenly, it could lead to an Internal Cadence (or the end of the improvisation); or whether evenly Fragmented or not, it could lead to the establishment of a new Identity, a new direction for the Flow, a new characterization of the music. Feature Overlap and Feature Change both, obviously, rely upon some "feature" about the Flow (ultimately, about someone's idea or a particular Identity) which acts as a "bridge" to the next section. Feature Overlap, as explained before, merely sustains one feature of the antecedent section which becomes part of the consequent section. What is interesting about this is how that overlapping feature is expressed and what part it plays in the following section. Such a feature would likely be an Identity, a potential Identity, or a ground, which invites a potential Identity. Feature Change is self-evident; a feature is subjected to its own transition, a transformation that becomes the focus of the Flow. How this transformation plays out expresses the character of the Transition and will strongly INFLUENCE the section to follow. Although most likely the articulation of a single "voice," Feature Change can be a collective PROCESS as well.

At times, Transitions are heard as hybrids of the types defined here. For example, in the midst of

Fragmentation, a particular feature may arise that becomes a focus; the result is a Fragmentation/Feature Change hybrid. Or, using the slightest bit of silence at the end of a Transition and continuing with completely different material, a Climactic Segue/Pseudo-Cadential hybrid Transition would result. For the most part, however, Transitions are fairly clear to hear, even if hybridized; the astute listener's interest is not so much on whether a Transition is happening, but rather on how it is happening. The types of Transition presented here seem generic and can be helpful in hearing the more subtle aspects of change in a free improvisation.

* * *

Gestural Continuity/Integrity

The idea of "gesture" comes from the body and its relationship to the instrument. Instruments (including the voice) require highly specialized physical manipulation, which takes training. These manipulations are normally associated with "notes" -- how to read and play the written "notes." Notes are written out and are read, sometimes eventually memorized, and these mentations drive the body to produce the music. But in free improvisation, the physical manipulation of the instrument is the product of Impulse in response to the Flow, even when the Intellect directly INFLUENCES Linear Functioning. Hence, the term "gestural" is used to describe the underlying nature of the performance actions of free improvisers.

Gestural Continuity is characteristic of free improvisation primarily because of the intimate involvement of the Intelligent Body in generating the music. Again, the Intelligent Body is not some automaton! It is an intelligence, or a corporeal manifestation of intelligence, functioning intuitively, responsively, spontaneously, impulsively, and one that, normally, has been trained to function in a certain way. But Gestural Continuity is not just a product of the Intelligent Body; the Intellect and, particularly, the emotions, are also involved. This is expressed in the individual improviser's conscious phrasing, recognition of, and impulsive response to, the timing and nature of changes within the Flow, and in the ideational continuity about her/his own "voice."

Gestural Integrity expresses much about the structure of a free improvisation. Structure is taken to mean the integration of PROCESSES within the Flow that manifests Form. The improviser's responses to the Flow, which are necessarily spontaneous but may be the action of either the Intelligent Body or the Intellect, are gestural by nature because of the impulsive nature of the activity, as explained above. Gestural Integrity is expressed by the fact that the improvisers' collective impulsive responses INFLUENCE every level of the music, from the next "note" to the next section.

* * *

Segmental Form

Free improvisation is, generally speaking, not a hierarchical expression of musical form. On the other hand, Transition PROCESSES which articulate form also operate within the developmental PROCESSES that create, maintain and cadence Identities. In this sense, a certain "hierarchy of change" could be considered similar to such musical structures. But, a fundamental nature of free improvisation being gestural, it is a logical progression that segmental form become characteristic. Each section of a multi-section improvisation is, in a sense, a gesture on the formal level. Occasionally, one will hear a free improvisation without any Transitions. This happens when the improvisation is extremely brief (a few minutes) or where a particular concept or musical character is the entire focus (most often, the product of pre-planning, or an excursion into realms of minimalism or some other conceptual driving force). But for the most part, Segmental Form is indigenous to free improvisation. (Note: Some groups, and some performances, will consist of several relatively short improvisations, each of which has a single musical character -- transitions are subtle, if at all. The collective PERCEPTION of the whole performance, however, may be similar to that of a long improvisation with several Internal Cadences. Nevertheless, the listening experiences remain essentially different from one another.)

There is a pitfall associated with Segmental Form which can be destructive to the continuity of the Flow. If there are too many Transitions, too many sections, the listener eventually tires of change; nothing is really established clearly or long enough to be fully expressed. Of course, if Transitions are difficult for a group, there may be the opposite problem of sustaining interest in the musical character and PROCESSES within a section. Working within a multi-sectional form can be a tricky business. The formal compositional challenge lies in balancing these sections in variety, intensity and relative duration, as well as the artful expression of Transitional PROCESSES. If all the sections of an improvisation, for instance, are about the same length, this

can eventually create expectations of change for the listener. If those expectations are always satisfied, the music will have a tendency to become boring. Likewise, if the various sections are not that different from one another, the improvisation will probably be quite dull, even though it may have started out as something intriguing.

It is helpful to understand that free improvisers are composers as much as they are performers. Composers constantly face the difficulty of creating a viable musical form (unless, of course, this has already been decided by tradition, and even then, the composer has a mandate to extend or vary that form to some extent). Free improvisers do not work in a medium in which time is allowed to reflect upon compositional decisions, as in written music. So the challenge is a bit different; nevertheless, music is being made and music has form. What is fascinating is how form (and structure) evolves in a free improvisation, how it springs from itself. It is very much an organic PROCESS. And the form that it generally takes consists of segments or sections connected via Transitions. What makes it interesting is the INFLUENCE of the confounding principles of Simultaneity, Hybridization, Kinesis and Unpredictability.

* * *

SUMMARY

Five charts have been presented which graphically illustrate concepts and relationships relative to the terminology presented in the previous chapter, to give a better idea of how INFLUENCES and PROCESSES work in free improvisation. The subsequent discussion centered on CONTENT and the PROCESSES therein. It was stated that free improvisation is not made, it is allowed to make itself, and this comes from active listening. And in free improvisation, there is no particular thought necessarily in mind when beginning. The many INFLUENCES of CONTEXT are constantly in operation. And it is apparent that the interactive and reciprocal INFLUENCES exerted on the evolution of the music by the PROCESSES within CONTENT itself are the primary source of self-generation. This takes place via the perception/action "feedback loop" PROCESS which each improviser experiences in responding to her/his own "voice" as well as to the group, i.e. the Flow.

PROCESSES were shown to be highly complex because of the confounding principles, Simultaneity, Hybridization, Kinesis and Unpredictability. Each basic PROCESS -- Linear Functions, Identities, Relational Functions/Composites, Transitions, Gestural Continuity/Integrity and Segmental Form -- were shown to exhibit these complexities in various ways through their relationships to one another.

What now remains to complete the picture is PERCEPTION, specifically FLOW PERCEPTION -- how a free improvisation may be heard. It is an easy fact to verify that most free improvisers consider listening as a major, if not the most important, skill an improviser can have. This skill goes beyond instrumental technique; it goes beyond compositional acumen. And for the audience listener, without some understanding of what to listen for, much of the meaning and interest of the music is lost. The next chapter will examine listening from different perspectives: the environment, all music, and free improvisation in particular. Some theoretical and philosophical issues will be discussed briefly to shed light on the broad nature of the activity of listening and how it relates to hearing free improvisation. The reader is encouraged to keep in mind the concepts discussed in this and the previous chapter. (The terminology and charts should be referenced as necessary.) Here is where the audience listener's role comes in. Here is where the "product" begins.

FIGURE 1:

FIGURE 1: Chart of Influences and Processes

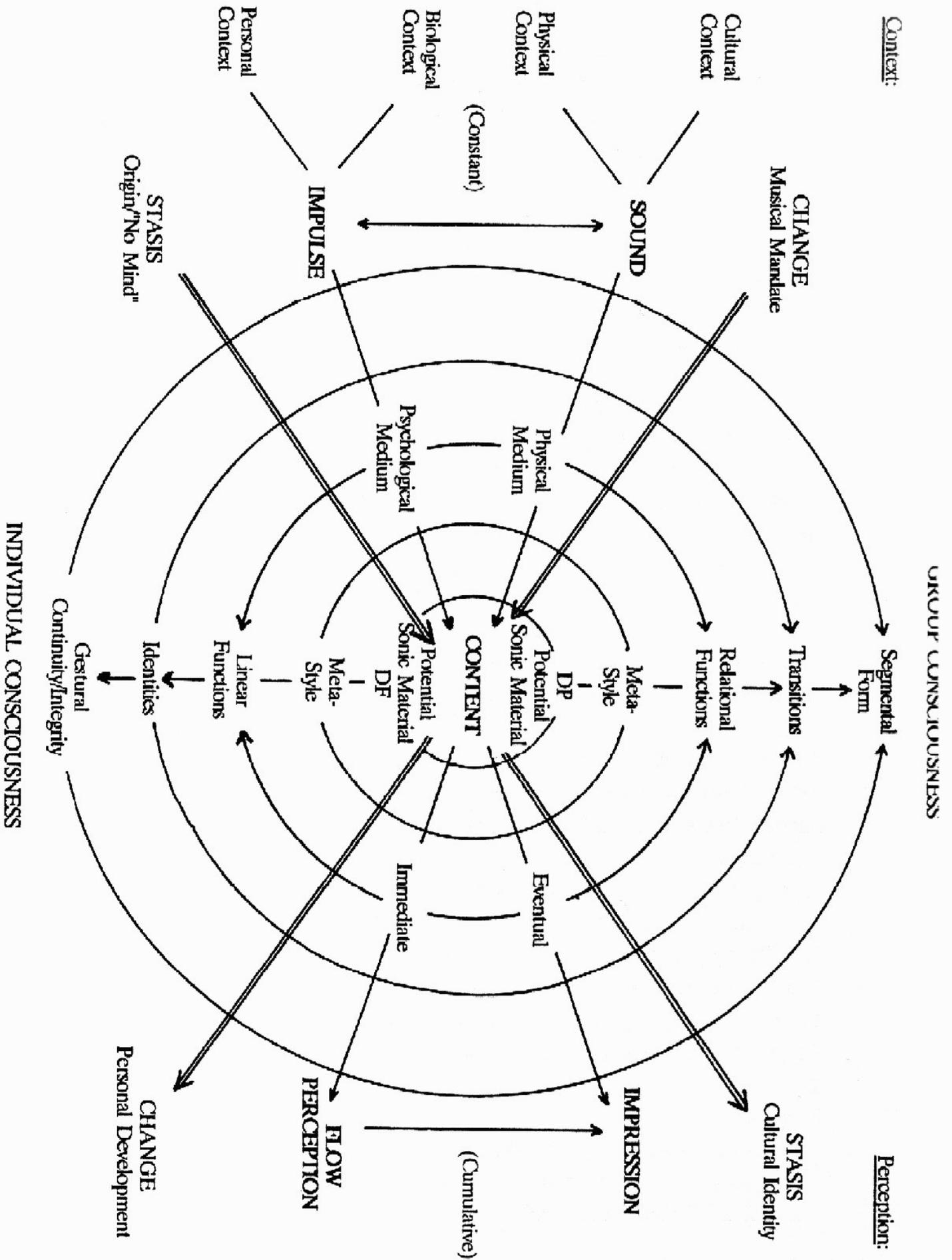


FIGURE 2:

FIGURE 2: Chart of Context

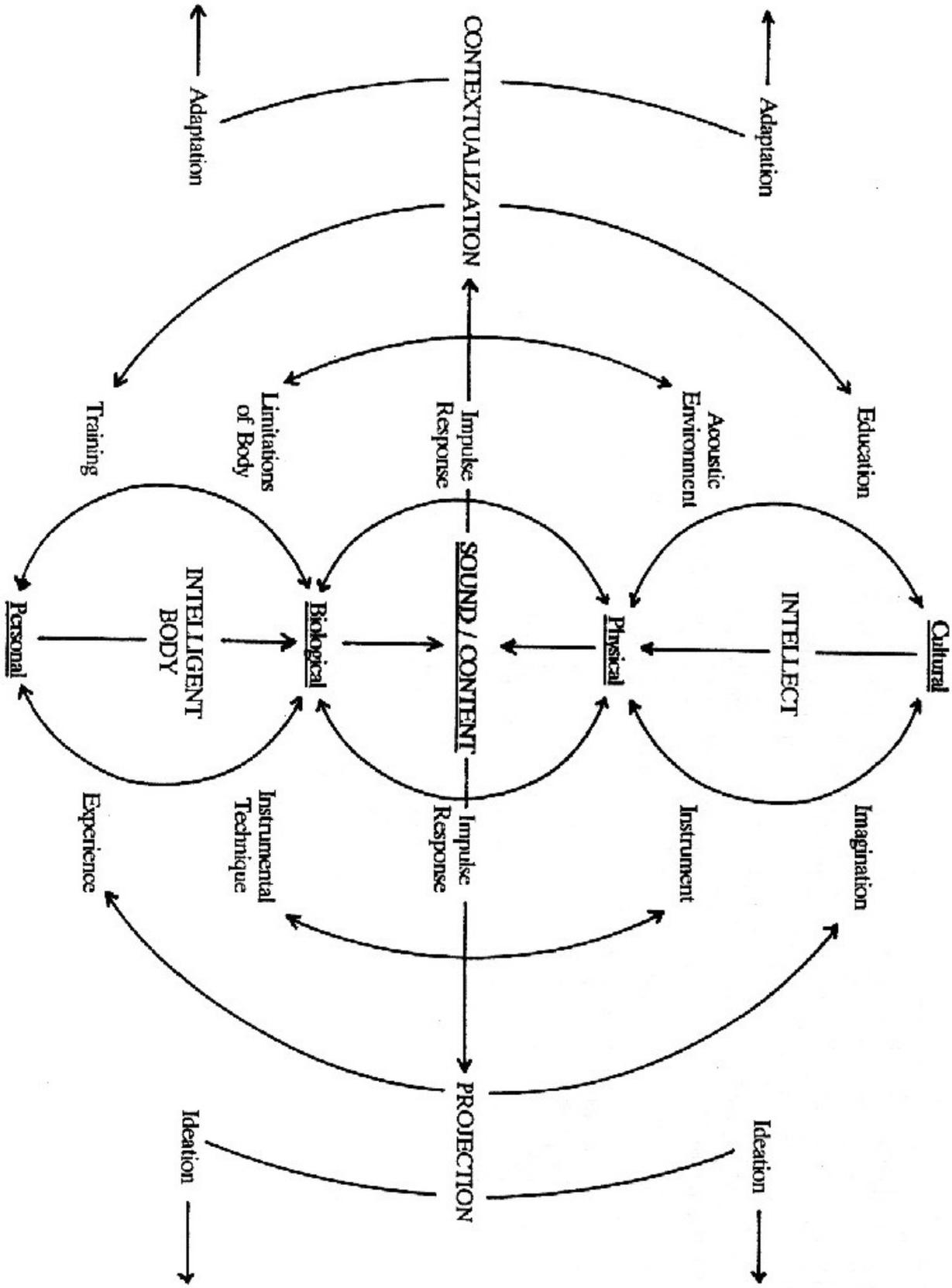


FIGURE 3:

FIGURE 3: Chart of Perception

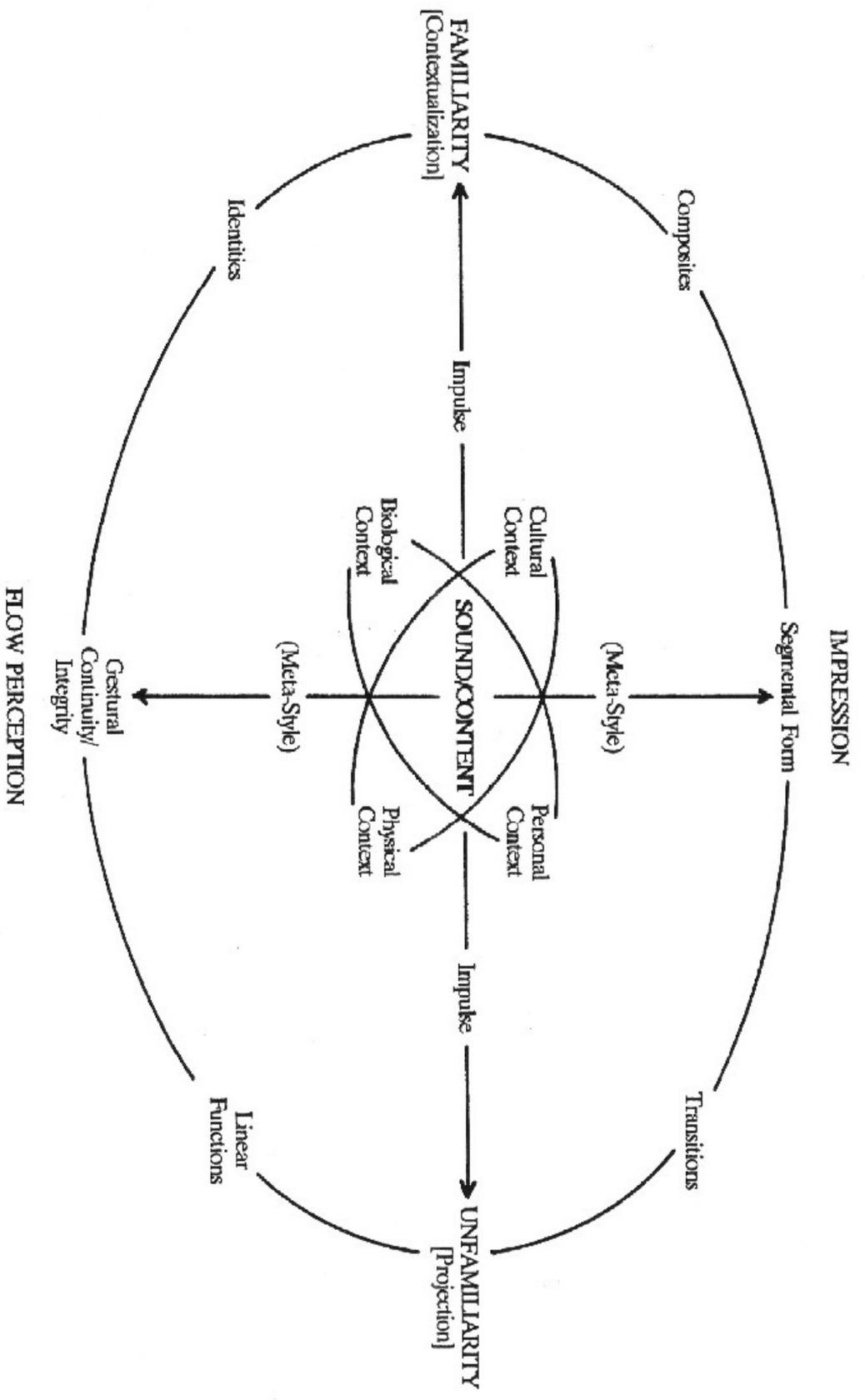


FIGURE 4:

FIGURE 4: Chart of Meta-Style, Relational Functions and Transitions

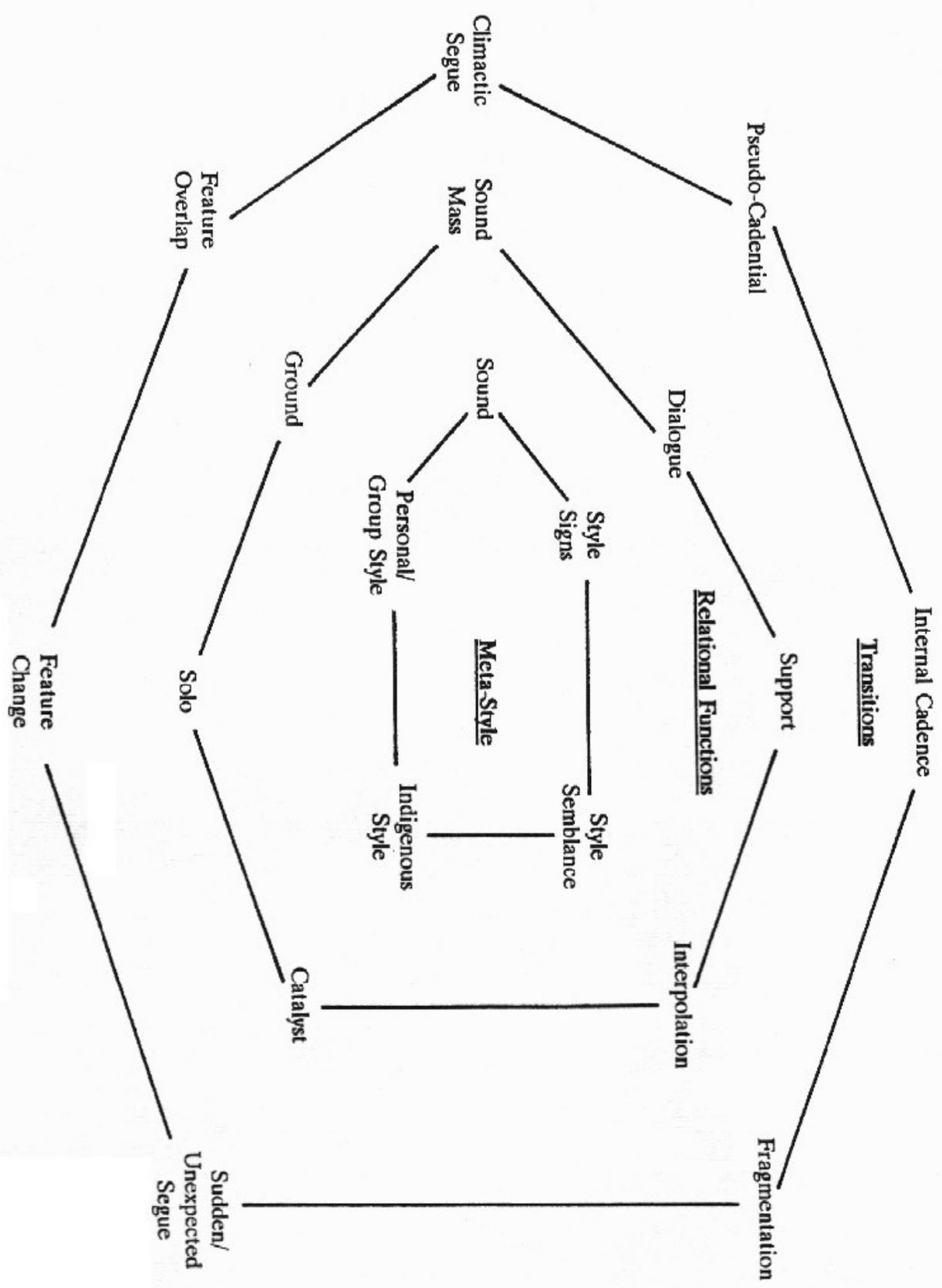
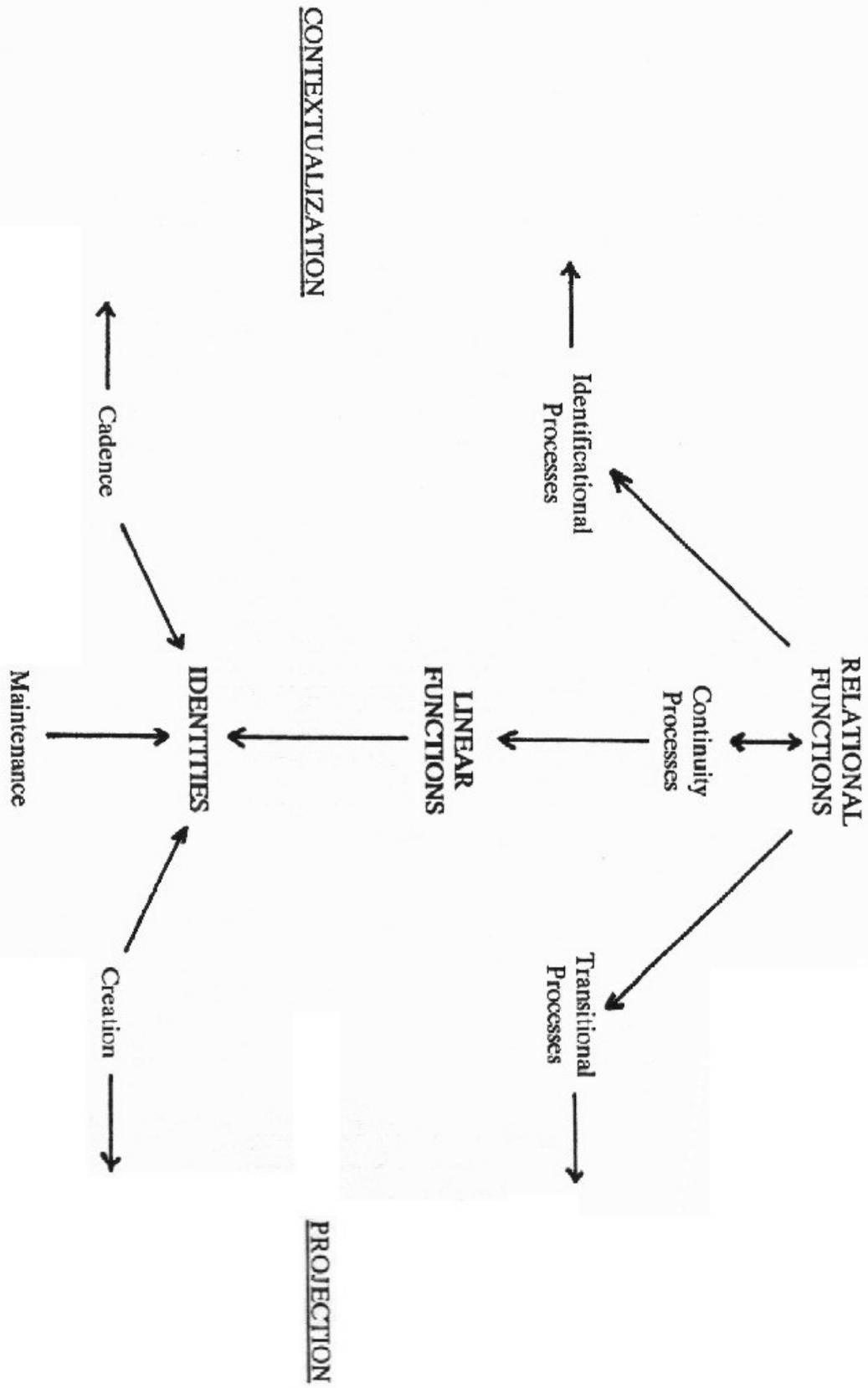


FIGURE 5:

FIGURE 5: Chart of Linear Functions and Identities



[...please see continuation in Part 2...]