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A STUDY OF SELECTED COMPOSITIONS FOR CLARINET-PERCUSSION DUO

By

Andrea Splittberger-Rosen

A DISSERTATION

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ABSTRACT

A STUDY OF SELECTED COMPOSITIONS FOR CLARINET-PERCUSSION DUO

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Andrea Splittberger-Rosen

Clarinet-percussion duos are compositions for two performers: one clarinetist and one percussionist. Armand Russell wrote the first clarinet-percussion duo, *Pas de Deux*, in 1958. It was published by Music for Percussion, Inc., in 1964. There are now at least 260 compositions for this combination and the repertoire is steadily growing. Since such a large body of worthy music now exists for this ensemble, the clarinet-percussion duo should be considered an emerging genre, rather than merely a miscellaneous chamber grouping. The repertoire contains works written in a wide variety of styles by composers from five continents and at least thirty countries and is representative of many compositional trends of the twentieth century. There are numerous instruments classified as percussion so there is much variety of instrumentation within the clarinet-percussion duo genre.

Historical aspects and new performance techniques of clarinet and percussion that led to the development of the clarinet-percussion duo are discussed in the dissertation. Practical performance and compositional suggestions are also included.

Andrea Splittberger-Rosen

The author is the clarinetist of the "Uwharrie Clarinet-Percussion Duo." Six duos which have been performed by the "Uwharrie Duo" are analyzed: *Pas de Deux* (1958) by Armand Russell, *Drawings: Set No. 3* (1961) by Sydney Hodkinson, *Sonata for Clarinet and Percussion* (1968/1972) by Frederick Lesemann, *Tombeau* (1971) by André Boucourechliev, *Wild Tales Told on the River Road* (1973) by Netty Simons, and *Variation Duos* (1979/1981) by Frank McCarty. These duos are representative of the wide variety of styles, instrumentation, performance difficulty level, and aesthetic orientation within the genre. One is scored for clarinet and marimba; another for clarinet and three drums. The remaining four are scored for clarinet and multiple-percussion setups ranging from modest to gigantic in size and complexity. These compositions exemplify the quality of the literature and the viability of the genre and it is hoped that more performers and composers will consequently be encouraged to participate in the performance or creation of clarinet-percussion duos.

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ACKNOWLEDGEMENTS

There are many people who have assisted me with this project and deserve thanks. I would first like to express my appreciation to the composers who have written duos and the performers with whom I have consulted. Henri Bok, bass clarinetist-saxophonist of "Duo Contemporain," has been particularly gracious in providing me with extensive information about his ensemble's repertoire.

My graduate committee has been patient and provided numerous good ideas toward the improvement of this paper. Thank you to Dr. Dale Bartlett, Dr. Conrad Donakowski, Professor Frank Ell, and Dr. Mark Sullivan. Additionally, I would like to thank Dr. Elsa Ludewig-Verdehr for her critique and for many years of inspiring teaching.

Thanks are also extended for permission granted for the reproduction of musical excerpts by publishers: Music for Percussion, Inc. for *Pas de Deux* © 1964 by Armand Russell and *Drawings: Set No. 3* © 1969 by Sydney Hodkinson, Merion Music Inc. for *Wild Tales Told on the River Road* © 1977 by Netty Simons, Alphonse Leduc for *Tombeau* © 1974 by André Boucourechliev, and Edition Peters for *Ballade* © 1982 by Georg Katzer; and by composers whose duos are in manuscript: Frederick Lesemann, James Marshall, Frank McCarty, Kazuto Miyazawa, Ivo Petrić, and Milan Stibilj.

Finally, I would like to thank my husband, Robert Rosen, for his fine musicianship and percussion playing as half of the "Uwharrie Clarinet-Percussion Duo" and, most of all, for his patience, support, and love during this project.

To Bob

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NOMENCLATURE

When pitches are referred to in the text, concert pitch is used unless "written pitch" is designated.

When excerpts of scores are used as musical examples, the clarinet and percussion parts use written pitch. The clarinet part is the uppermost part.

INTRODUCTION

Clarinet-percussion duos are compositions for two performers: one clarinetist and one percussionist. Armand Russell wrote the first clarinet-percussion duo, *Pas de Deux*, in 1958. It was published by Music for Percussion, Inc., in 1964. There are now at least 260 compositions for this combination and the repertoire is steadily growing.[1] Since such a large body of worthy music now exists for this ensemble, the clarinet-percussion duo should be considered an emerging genre, rather than merely a miscellaneous chamber grouping. The repertoire contains works written in a wide variety of styles by composers from five continents and at least thirty countries and is representative of many compositional trends of the twentieth century. There are numerous instruments classified as percussion so there is much variety of instrumentation within the clarinet-percussion duo genre.[2] This paper includes a general overview of the genre, historical perspective, performance practice, and the analysis of six clarinet-percussion duos.

---

[1]An extensive list of clarinet-percussion duos is found in the Appendix.

[2]Although the genres of string quartet or woodwind quintet music have a fixed instrumentation, genres such as band music, orchestral music, or music for percussion ensemble have a variety of instrumentations.

INTRODUCTION

Clarinet-percussion duos are compositions for two performers: one clarinetist and one percussionist. Armand Russell wrote the first clarinet-percussion duo, *Pas de Deux*, in 1958. It was published by Music for Percussion, Inc., in 1964. There are now at least 260 compositions for this combination and the repertoire is steadily growing.[1] Since such a large body of worthy music now exists for this ensemble, the clarinet-percussion duo should be considered an emerging genre, rather than merely a miscellaneous chamber grouping. The repertoire contains works written in a wide variety of styles by composers from five continents and at least thirty countries and is representative of many compositional trends of the twentieth century. There are numerous instruments classified as percussion so there is much variety of instrumentation within the clarinet-percussion duo genre.[2] This paper includes a general overview of the genre, historical perspective, performance practice, and the analysis of six clarinet-percussion duos.

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It is probable that most musicians, including clarinetists and percussionists, are unaware of the extent and quality of the clarinet-percussion duo repertoire; for example, clarinetist George Plasko reviewed *Timepiece* (for flute, clarinet, vibraphone, and marimba) by Murray Houllif, in the Winter 1980 issue of *The Clarinet*: "*Timepiece* is one of only a few compositions utilizing clarinet with percussion instruments, in this instance vibraphone and marimba."[3] Apparently he was not aware of previous articles in the same journal which had discussed numerous compositions for these instruments in duet and larger chamber music settings.

In the May 1975 issue of *The Clarinet*, Norman Heim wrote:

> It is this author's view that, although there is a rather extensive published repertoire of works for clarinet and percussion with additional instruments, the bulk of the literature written is unpublished, hopefully indicating that in the future, the available body of literature will increase significantly.[4]

In Part I of a two-part article, he discussed six duets for clarinet and percussion and one trio for clarinet, percussion, and piano. Part II examined three additional trios as well as three larger ensembles. Heim's concluding sentence states, "This repertoire is ever-expanding and needs performances."[5]

Further study was done by the author and percussionist Robert Rosen, who began performing together in 1974. They formed the "Uwharrie

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[3]George Plasko, review of *Timepiece*, by Murray Houllif, in *The Clarinet* 7, no. 2 (Winter 1980): 44.

[4]Norman Heim, "Sources III and Other Works for Clarinet and Percussion (Part I)," *The Clarinet* 2, no. 3 (May 1975):12.

[5]Idem, "Music for Clarinet and Percussion Instruments," *The Clarinet* 4, no. 1 (Fall 1976):14.

Clarinet-Percussion Duo"[6] after finding a surprisingly large number of duets for clarinet and percussion. An article by the author in the Spring 1978 issue of *The Clarinet* described the clarinet-percussion duo repertoire:

> In our search for repertoire, we have learned of forty duets for clarinet and percussion. . . . We have been delighted to find a number of high quality duos, very rewarding for both the performer and the audience.
>
> The possible combinations of clarinet and percussion seem practically endless if one considers the different clarinets, the wide range of clarinet sounds, and the great number of percussion instruments that exist. The present instrumentation varies from duos for clarinet and marimba, or, clarinet and two bongo drums, for example, to duos for clarinet and complex arrangements of many percussion instruments.[7]

The music discussed in this article was, of course, only the chamber literature written for the clarinet-percussion duo.

The Fall 1979 issue of *The Clarinet* announced the results of the Uwharrie Clarinet-Percussion Duo International Composition Contest.[8] This article noted that the repertoire for clarinet-percussion duo had by that date increased to over 120 compositions.[9] With the addition of the many outstanding works written as a result of this contest, the clarinet-percussion duo was on the road to becoming a significant chamber ensemble.

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[6]The Uwharrie Mountains, now actually mountain remnants, are located in central North Carolina. Andrea Splittberger-Rosen and Robert Rosen were residing in central North Carolina when they named their duo.

[7]Andrea Splittberger-Rosen, "Music for the Clarinet-Percussion Duo," *The Clarinet* 5, no. 3 (Spring 1978): 35.

[8]It is conceivable that Plasko's review referred to earlier, which appeared in the next issue, had already been submitted for publication.

[9][Robert Rosen and Andrea Splittberger-Rosen], "Yugoslavian Ivo Petrić wins Uwharrie Clarinet-Percussion Duo Composition Contest," *The Clarinet* 7, no. 1 (Fall 1979): 41.

The existence of ensembles specifically dedicated to performing and commissioning music for the clarinet-percussion duo is certainly one reason for the growth of the genre but it is only part of the reason for its development. For example, none of these performing ensembles existed in 1958 when Armand Russell wrote *Pas de Deux*. The importance of timbre in twentieth century music has brought percussion instruments from the background to the foreground. The development of multiple-percussion techniques has made it possible for one percussionist to produce a spectrum of timbres. New sounds such as multiphonics, microtones, note-bending, and flutter-tonguing have expanded the timbral resources of the clarinetist. Clarinet and percussion combine effectively because each has a large pitch, dynamic, and timbral range.

Six duos which have been performed by the "Uwharrie Duo"[10] will be analyzed in this paper: *Pas de Deux* (1958) by Armand Russell, *Drawings: Set No. 3* (1961) by Sydney Hodkinson, *Sonata for Clarinet and Percussion* (1968/1972) by Frederick Lesemann, *Tombeau* (1971) by André Boucourechliev, *Wild Tales Told on the River Road* (1973) by Netty Simons, and *Variation Duos* (1979/1981) by Frank McCarty. Although each is an excellent composition, they should not be presumed to be the author's "Favorite Six Clarinet-Percussion Duos." Much to the disappointment of the author, detailed discussion of many wonderful duos had to be omitted in order that this paper not be of mammoth proportions. The duos chosen for analysis are representative of the wide variety of styles, instrumentation,

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[10]The author is the clarinetist of the "Uwharrie Clarinet-Percussion Duo" and has been performing and researching this repertoire for fifteen years.

performance difficulty level, and aesthetic orientation within the genre.[11] One is scored for clarinet and marimba; another for clarinet and three drums. The remaining four are scored for clarinet and multiple-percussion setups ranging from modest to gigantic in size and complexity. These compositions exemplify the quality of the literature and the viability of the genre and it is hoped that more performers and composers will consequently be encouraged to participate in the performance or creation of clarinet-percussion duos.

In addition to studying selected duo compositions, this paper will trace historical aspects of percussion and clarinet as they relate to the development of the clarinet-percussion duo genre. Duos will be studied from the perspective of being a genre of western art music, however, their context within world music should be mentioned. Many twentieth century composers of western art music have been influenced by the music of other cultures, especially those of Asia, Africa, and Polynesia. Debussy, for example, was profoundly affected by the exotic sound of the Javanese gamelan which he heard at the Paris Exhibition of 1889. Technology, including developments such as the tape recorder, television, and airplane, continues to make the world "smaller;" consequently, in the latter half of the twentieth century sounds once thought to be exotic have become

---

[11]The international scope of the genre is not represented in this small sample of six duos. Clarinet-percussion duos have been composed by composers from 5 continents and at least 30 countries: Asia (Japan), Australia (Australia and New Zealand), Europe (Austria, Belgium, Bulgaria, Czechoslovakia, Denmark, East Germany, England, Finland, France, Holland, Hungary, Israel, Italy, Norway, Poland, Portugal, Romania, Russia, Spain, Sweden, Switzerland, West Germany, and Yugoslavia), North America (Canada and United States), and South America (Brazil and Colombia).

increasingly normal in western art music. The clarinet-percussion duo has evolved during this time.

World music manifests itself in numerous ways such as through parody or imitation of foreign musical elements, through the use of exotic instruments, and through the influence of oriental philosophy and religion upon composers. Although the six clarinet-percussion duos being studied herein do not have obvious exotic influences, most compositions of this era have been somehow effected by nonwestern music. Duos with obvious exotic influences also exist in the repertoire. An example is *Stedman Doubles* by Peter Maxwell Davies, which was composed in 1956 while Davies was working on his thesis about Indian music. Originally a quartet, *Stedman Doubles* became a clarinet-percussion duo when the composer reworked it in 1968.[12] Among the percussion instruments are Arab porcelain drums and the Indian drums tabla and mridangam, which require specialized playing techniques and are usually used in improvisation.

Older music has always served as an impetus for new music, sometimes functioning as a positive model and other times as a style to be rejected. Tutors for composers such as David Cope's *New Music Composition,* Charles Wuorinin's *Simple Composition,* and Reginald Smith Brindle's *Musical Composition* all encourage prospective composers to absorb the styles of the musical past through thorough study because, "In the ways of art music, we advance by stepping in each other's footsteps, following a path and then branching off on our own."[13] The musical past of present-day composers includes a multiplicity of diverse styles. Often

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[12]The duo version is published by Boosey and Hawkes.

[13]Reginald Smith Brindle, *Musical Composition* (Oxford: Oxford University Press, 1986), 1.

several seemingly unrelated styles from the broad categories of western art and folk music, nonwestern art and folk music, jazz, and popular music are combined on an equal footing. David Cope said, "The possible combinations are in the multibillions."[14] It, thus, seems that the greatest problem facing the contemporary composer is the development of a personal style. The composers whose clarinet-percussion duos are analyzed herein have successfully achieved a personal style.

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[14]David Cope, *New Music Composition* (New York: Schirmer Books, 1977), 311.

CHAPTER ONE

HISTORICAL BACKGROUND

Percussion in the Orchestra

The existence of percussion instruments can be traced to prehistoric times and since that time they have been used for dance accompaniments as well as in religious and military ceremonies. Their extensive use in western art music is quite recent. Percussion was first used in opera and symphony orchestras "in an accompanying capacity . . . to add color, folk qualities and/or [sic] added volume."[15] In the twentieth century percussion instruments have assumed roles in addition to those of accompanist, timekeeper, and noisemaker. Reginald Smith Brindle lists "the principal roles of percussion" as:

> percussion as melody, . . . in *Klangfarbenmelodie*, . . . as harmony, . . . in a harmony-obscuring role, . . . as counterpoint, . . . as orchestral colour, . . . as a fusing fact in orchestration, . . . as dynamic reinforcement, . . . ostinatos, . . .as a fourth orchestral dimension, . . . natural sound effects, . . . exotic and folk-lore effects."[16]

The clarinet-percussion duo is an ensemble which is barely three decades old. An important factor leading to its development has been the

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[15]Michael Rosen, "A Survey of Compositions Written for the Percussion Ensemble," *Percussionist* 4, no. 2 (January 1967): 106.

[16]Reginald Smith Brindle, *Contemporary Percussion* (Oxford: Oxford University Press, 1970): 178.

development of the percussion ensemble. Some historical background will illustrate how the percussion ensemble partially evolved from the orchestral percussion section which, itself, evolved from the Janissary bands.

The Janissary bands were "part of the regiments that served as bodyguards for the Turkish rulers (c. 1400-1826)."[17] These Turkish military bands and their novel sounds came to Europe by way of Poland and Austria.[18] Percussionist James Blades reports: "A full Janissary [also spelled "Janizary"] band could include a number of bass drums, numerous pairs of cymbals, small kettledrums, triangles, tambourines and one or more Turkish crescents (*chapeau chinois*)."[19] Percussionist James L. Moore describes their reception:

> Prior to the influence of Turkish percussion instruments, only the kettledrums were used in the symphony orchestra. . . . Today it may be difficult for us, who are accustomed to the many percussion sounds in the orchestra, to understand the newness and startling quality of these sounds in the orchestra of the early Classic period.[20]

Timpani first became part of the orchestra during the Baroque period. The next instruments to join the orchestra, during the early Classical period, were the bass drum, cymbals, triangle, and tambourine, percussive members which came from the Janissary bands. Gluck, Mozart, Gretry, and Boieldieu used these instruments in operas. Important

---

[17]James L. Moore, "How Turkish Janizary Band Music Started Our Modern Percussion Section," *Percussionist* 2, no. 4 (September 1965): 7.

[18]Sherman Hong, "Percussion in the Orchestra: 1750-1850," *Percussionist* 8, no. 4 (Summer 1971): 121-122.

[19]James Blades, *Percussion Instruments and Their History*, rev. ed. (London: Faber and Faber, 1975), 265.

[20]Moore, 7.

symphonic uses are also found in two movements of Haydn's *Symphony No. 100 ("The Military")* and in the finale of Beethoven's *Symphony No. 9.*

Beethoven wrote innovatively for percussion. He advanced timpani technique, used the Janissary instruments, and even used a ratchet, to imitate rifle fire, in *The Battle of Vittoria.* Berlioz was the next composer to make significant use of percussion instruments and to expand the field. He tastefully included instruments such as the anvil, whip, alarm bell, jingle, gong, several tambourines, castanets, bells, and tenor drum.

The snare drum is a staple of today's orchestras, concert and marching bands, and popular music ensembles. Although it was an important instrument in military bands, it was rarely used in orchestral music of the eighteenth century.[21] Rossini used it a great deal but this practice was not universal. Percussionist Gordon Peters wrote disparagingly of the use or, in his opinion, overuse of percussion instruments by Rossini and his contemporaries. Peters wished that they had followed the axiom: "The effectiveness of percussion instruments is in inverse proportion to their use."[22]

Another staple of today's orchestral percussion section, the xylophone, was not used in the orchestra until the second half of the nineteenth century.[23] Even Berlioz did not use the instrument in his music nor did he mention it in his famous orchestration treatise.[24]

The string and wind sections of the orchestra expanded as the Romantic Period flourished. Percussion instruments became increasingly

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[21]Hong, 124.

[22]Gordon B. Peters, *The Drummer: Man: A Treatise on Percussion* (Wilmette, Ill.: Kemper-Peters Publications, 1975), 30.

[23]Hong, 126.

[24]Blades, 306.

important and useful as the emotional range of music expanded. Blades described:

> During the latter half of the nineteenth century, we find that not only are composers making demands on an ever-increasing variety of percussion instruments, but that such instruments as the tambourine, triangle, castanets, hitherto regarded primarily as responsible for the introduction of local colour, are becoming an integral part of the orchestra structure. Certain instruments have already participated in the melodic structure, bells and glockenspiel, others are about to do so.[25]

More percussion instruments continued to join the orchestra during the eighteenth and nineteenth centuries but the burgeoning use of additional instruments and colors occurred largely in the twentieth century. According to the writings of numerous professional percussionists, Debussy, Nielsen, Sibelius, Mahler, Holst, Puccini, Bartok, Britten, and Stravinsky are turn-of-the-century composers who continued these trends and wrote skillfully for percussion in their orchestral works.

Percussionist Sherman Hong succinctly summarized percussion's orchestral evolution:

> Haydn and Mozart used "fashionable" (Turkish) percussion, but used them only as color instruments. Beethoven began incorporating percussion as an entity, for its own timbre, and as an integral segment of the aggregate texture. Berlioz went further by writing timpani parts as integral segments of the harmonic as well as textural structure.
>
> It was from Beethoven and Berlioz that romantic composers take their cues. Percussion writing during the balance of the 19th century became steadily improved, albeit slowly, until it has reached the 20th century level of equality with other instruments. It has been a long time coming, but now percussion literature *per se* has come of age.[26]

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[25]Ibid.

[26]Hong, 127.

This evolution of the orchestral percussion section was one of the impetuses for the formation of the first percussion ensembles. It also led to an expansion of percussionists' technique, which helped make solo and chamber percussion literature musically viable in the twentieth century.[27] Percussionist Karl Peinkofer described the evolution of the percussion section:

> The orchestral percussion section has by now become an absolutely essential ingredient of our era's musical sound palette. In fact, today's typical orchestral percussion section has become an entity of timbres and techniques so complete and complex that many independent, self-sufficient percussion ensembles with their own musical literature have arisen throughout the Western World.[28]

The Development of the Percussion Ensemble

The percussion ensemble, as we know it today in western art music, is a development of the twentieth century. Although such groups as the Indonesian gamelan, African drumming groups, Latin American marimba bands, rudimental drum corps, and novelty or "pop" groups are types of percussion ensembles and have influenced western art music, they are outside the focus of this discussion. Varèse's *Ionisation* (1931) is often considered to be the first real percussion ensemble but several earlier

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[27]Music for concert band lagged behind orchestral, chamber, and solo music in the innovative use of percussion. Traditional military or marching percussion instruments such as snare drum, field drum, bass drum, cymbals, and triangle were employed in their traditional roles as accompanist, timekeeper, and noisemaker in band music until the mid-twentieth century. Many band compositions since that time have made colorful and prominent use of numerous percussion instruments.

[28]Karl Peinkofer and Fritz Tannigel, *Handbook of Percussion Instruments: Their Characteristics and Playing Techniques, with Illustrations and Examples from the Literature* (Mainz: B. Schott's Sohne, 1969) trans. Kurt and Else Stone. (Mainz: B. Schott's Sohne, 1976): 8.

compositions figure prominently in the history of the percussion ensemble and merit mention before *Ionisation* is discussed.

The Futurists, led by artist-musician Luigi Russolo, felt "all art was being impaired by tradition."[29] Russolo also maintained that "musical sound was too limited in qualitative variety of timbre, and that the future of music lay in the subjugation and organization of noise."[30] His activities included the presentation of a concert in 1914 which used noise instruments or "intonaruomi" built by Russolo and his associates. The noisiness of these instruments can be imagined from their names: bumber, exploder, fracasseur, gurler, ruffler, snorer, stridor, thunderer, and whistler.[31] Needless to say, this concert was quite controversial. Although it was not literally a percussion ensemble concert, it did open the door for the eventual acceptance of percussion as an artistic medium and inspired the use of more timbres. Percussionist Larry Vanlandingham described the concert's effect on the percussion ensemble:

> By suppressing melodic instruments and granting a monopoly to percussion, futurism stressed the significance of rhythm and revealed the possibilities of timbre inherent in percussive devices. It brought the concept of the use of percussion to the attention of composers and the general public.[32]

Stravinsky's *Historie du Soldat*, written in 1918, also had a great influence on the development of the percussion ensemble and on percussion technique. *Historie du Soldat* is scored for violin, string bass, clarinet, bassoon, trumpet, trombone, and one percussionist who plays snare drum,

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[29]Larry Vanlandingham, "The Percussion Ensemble: 1930-1945," *Percussionist* 9, no. 3 (Spring 1972): 71.

[30]Ibid.

[31]Michael Rosen, 108.

[32]Vanlandingham, 71.

field drum, bass drum, tambourine, triangle, two tomtoms, and cymbal. This "multiple-percussion" or "multipercussion" part[33] has had a monumental effect on solo, chamber, orchestral, and band percussion literature; prior to this, percussionists traditionally played only one instrument per piece, or perhaps a cymbal attached to a bass drum. As percussion playing improved and composers wrote for the multiple-percussion technique, the result was the availability of an increased timbral palette with a minimum number of players. Stravinsky's decision to write a multiple-percussion part was influenced by the drumset of the new American idiom of jazz and by the scarcity of available percussionists during the war. Multiple-percussion setups have become standard procedure for percussion music of the twentieth century, including percussion ensembles.[34]

Ionisation (1931) was Varèse's only composition for percussion ensemble, although percussion was an important aspect of some of his other compositions: *Integrales* (1920) and *Hyperprism* (1926). In *Ionisation,* he employed thirteen players and thirty to forty instruments.[35] The conventional instruments used include drums, wood blocks, gongs, cymbals, cowbells, chimes, maracas, and piano. The less conventional ones include sirens, anvils, slapsticks, sleigh bells, and the lion's roar. These instruments were treated in different ways depending on whether they were of definite pitch, indefinite pitch, or "continuously moving pitch," e.g.,

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[33]A "multiple-percussion" part is a part in which the percussionist plays more than one instrument together or in quick succession.

[34]The technical details will be discussed in the next chapter.

[35]The exact number depends on one's counting method; for example, Michael Rosen said "over thirty" on p. 111 of his article while Gordon Peters counted "42" on p. 210 of *The Drummer: Man*.

sirens and lion's roar.[36] The latter were used to create a "polyphony of *glissandi*."[37] *Ionisation* was an important composition for percussionists and all other musicians. According to Blades it was "monumental in the history of the percussion ensemble."[38] Peters said it "immediately . . . set up a trend in percussion ensemble composition."[39] Musicologist H. H. Stuckenschmidt described its overall importance and Varèse's use of "sound mass":

> *Ionisation* is the first major work based on a new conception of music to be dominated by timbre and noise. . . . *Ionisation* also has a strictly-organized rhythmic and dynamic structure of a type that later became common in the serial works of the Darmstadt school.[40]

The use of new timbres, many of which had been previously classified as noise, and new and more complex rhythmic structures, primarily those adapted from foreign cultures, continue to be two of the most important developments in twentieth century music.

Vanlandingham described the following stages of instrumentation development of the early percussion ensemble:

> (1) the use of standard orchestral and indigenous percussion instruments; (2) a clear trend away from the use of standard percussion; (3) a return to the almost exclusive use of standard percussion.[41]

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[36]Vyvian C. Lawrence, "*Ionisation*--Edgard Varèse," *Percussionist* 7, no. 4 (May 1970): 123.

[37]H. H. Stuckenschmidt, *Twentieth Century Music*, trans. Richard Deveson (New York: McGraw Hill, 1969), 68.

[38]Blades, 433.

[39]Peters, 210.

[40]Stuckenschmidt, 68.

[41]Vanlandingham, "The Percussion Ensemble: 1930-1945," *Percussionist* 10, no. 4 (Summer 1973): 123.

Varèse used some standard instruments but had begun to move away from them by the time he composed *Ionisation.* Harrison and Cage "strongly de-emphasized orchestral percussion."[42] Cage used "various kinds of noise [which] he felt would ultimately culminate in the electronic production of all imaginable sounds."[43] Since these noises were often of indefinite pitch, rhythmic structure was emphasized in Cage's early compositions such as *First Construction (in Metal),* a percussion ensemble composed in 1939. Concurrently, Cage was experimenting with the prepared piano which Griffiths described as "a one-man percussion ensemble, with defined pitches largely replaced by noises and complex sounds."[44] Chavez, Cowell, and Hovhaness primarily used standard instruments but tried to use them in exotic ways evoking Latin America, Armenia, Africa, India, or the Orient.

The next period of percussion ensemble activity began in 1950. The important event of that year was the official acceptance of "Percussion Ensemble" into the curriculum of the University of Illinois.[45] The percussion ensemble became a standard ensemble with regular rehearsals and concerts like string quartets and woodwind and brass quintets. In addition to providing percussionists with chamber music experience and presenting concerts and clinics, the University of Illinois Percussion Ensemble, under the direction of Professor Paul Price, had the special

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[42]Ibid.

[43]Glenn Watkins, *Soundings: Music in the Twentieth Century* (New York: Schirmer Books, 1988), 559.

[44]Paul Griffiths, *Modern Music: The Avant Garde since 1945* (New York: George Braziller, 1981), 34. Griffiths also suggested on p. 34 that the prepared piano "was perhaps consciously developed as a home-made substitute for the synthesizer of the future."

[45]This program is discussed in detail in Walter Parks, "The Origin of the Percussion Program in the American University: The University of Illinois," *NACWPI Journal* 34, no. 3 (Spring 1986): 4-10.

mission of encouraging composition for percussion by serving as a performance workshop.[46] Price's promotion of the percussion ensemble also included "the establishment of a publishing firm devoted exclusively to the publication of percussion music [Music for Percussion, Inc.]."[47]

Shortly thereafter, percussion ensemble activity began at the Eastman School of Music. Gordon Peters founded the "Marimba Masters" ensemble in January of 1954, while he was a student at Eastman.[48] This developed into Eastman's percussion ensemble but, for the first several years, it was a student-run, non-credit organization. The percussion department began sponsoring annual percussion ensemble contests in 1955 and Music for Percussion, Inc., guaranteed to publish the winning composition each year.[49]

The composers of the first two clarinet-percussion duos, Armand Russell and Sydney Hodkinson, were students at the Eastman School during this time. Their duos were published by Paul Price's company, Music for Percussion, Inc., in 1964 and 1969, respectively. Russell and Hodkinson also became important composers for the percussion ensemble. Armand Russell's *Percussion Suite* won the 1956 Eastman contest[50] and an ensemble by Sydney Hodkinson won the 1958 prize.[51] Both composers have had several percussion ensembles published by Music for Percussion, Inc.

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[46]Jack McKenzie, *University of Illinois Percussion Ensemble* (Urbana, Ill.: The University of Illinois School of Music Custom Recording Series, 1962), record jacket notes, CRS 6.

[47]Peters, 211.

[48]Ibid., 220-226, 279.

[49]Ibid, 224.

[50]Ronald Keezer, "A Study of Selected Percussion Ensemble Music of the Twentieth Century," *Percussionist* 8, no. 3 (March 1971): 94.

[51]Publicity information of Sydney Hodkinson.

Post-1950 percussion ensemble composers had conventional and unconventional instruments at their disposal and also several good percussion ensembles to study as models. Percussionist Ronald Keezer described the development of a "middle-of-the-road, assimilatory vein"[52] of percussion ensemble music:

> Varèse and Cage/Harrison represent the left, or avant garde. The works of these men hold an intellectual appeal. Cowell and Hovhaness represent the right or ethnic approach. [Armand] Russell and Childs act the role of an assimilator. Both Russell and "left-leaning" Childs have drawn from each of the other two categories, yet their work is original and their third, or buffer zone, category is meaningful.[53]

There were many styles in this middle ground. Barney Childs generally used conventional instruments combined with "chance" procedures. Percussionist Michael Rosen described pieces written for the University of Illinois percussion ensemble as a "composition movement" that was more conservative than those of the "San Francisco" movement of Cowell and associates.[54] An even more conservative "movement" was that associated with symphonic percussionists such as Saul Goodman (New York Philharmonic) and Harold Farberman (Boston Symphony). These men used only conventional percussion instruments. Farberman's dislike of pieces with unconventional instruments is clear. He wrote that he "should like to see an end to pieces for percussion utilizing sirens, whistles, glass plates, etc., which are nothing less than a debasement of, and cause for

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[52]Ronald Keezer, "A Study of Selected Percussion Ensemble Music of the Twentieth Century," *Percussionist* 8, no. 4 (Summer 1971): 134.

[53]Idem, "A Study of Selected Percussion Ensemble Music of the Twentieth Century," *Percussionist* 9, no. 1 (Fall 1971): 22.

[54]Michael Rosen, "A Survey of Compositions Written for the Percussion Ensemble," *Percussionist* 4, no. 4 (May 1967): 190.

embarrassment to, percussion players."[55] Different composers valued different things and, just as there is a multiplicity of styles in twentieth century music generally, there is a similarly wide stylistic spectrum in the percussion ensemble repertoire. "The exploration of percussion ensembles, both traditional and exotic, has led to such a range of instruments and variety of techniques as to defy summary,"[56] said Watkins.

The percussion ensemble has become an ensemble of international participation. Blades mentioned the "Tokyo Percussion Ensemble," the "Percussion Ensemble of London," and "les Percussions de Strasbourg," as a few examples.[57] Current professional publications, such as *Percussive Notes*,[58] attest that this genre is international. Watkins described its possibities and consequent popularity:

> The range of expression of the modern percussion ensemble is perhaps the largest with respect to dynamics and timbre of any instrumental grouping, a fact that helps to explain the multiple functions it has served in the twentieth century, from the hushed quietude of some of Crumb's magical nocturnes to the ear-splitting climaxes of pieces too numerous to mention. Fascination for its potential shows no sign of abating.[59]

The History and Literature of the Clarinet

Although the clarinet is one of the youngest of the standard orchestral instruments, its solo and chamber music repertoire is two centuries older than that of percussion. Confusion exists over the actual

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[55]Harold Farberman, *Evolution-Music for Percussion*, Boston Percussion Group, record jacket notes, Boston B-207.

[56]Watkins, 625-626.

[57]Blades, 435.

[58]The official journal of the Percussive Arts Society, Urbana, Illinois.

[59]Watkins, 627.

date of the clarinet's birth, when it was officially named, whether it was developed or invented, and whether certain pastoral orchestral passages of around 1700 were intended for the clarinet or the chalumeau. The definitive answers to these questions, beyond the fact that the clarinet does indeed exist, are not crucial to the development of the clarinet-percussion duo. Suffice it to say that the clarinet was created around 1700 by Johann Christoph Denner, a respected woodwind maker of Nuremberg, Germany. His experimentation on and "improvement" of the chalumeau included the addition of the register key. This resulted in a significant upward extension of the range.

During the nearly 300 years of the clarinet's existence, a vast repertoire has developed giving today's composers a body of great clarinet literature in numerous styles to study. In the twentieth century, composers' increased interest in timbre has led to a proliferation of compositions for clarinet as well as other wind instruments.[60] The solo literature can be divided into concertos (accompanied by orchestra, band, and assorted chamber ensembles), music for clarinet and piano, and unaccompanied pieces. Standard chamber music ensembles employing the clarinet are clarinet quintets, i.e. clarinet and string quartet (where the clarinet tends to be a soloist in this otherwise homogeneous ensemble), and woodwind quintets (where the clarinet is an equal partner in a heterogeneous wind group). The chamber repertoire also includes music for many combinations of clarinet with keyboard, wind, string, and percussion instruments and voice. A large clarinet section serves as the backbone of the band,

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[60]For example, Stravinsky wrote innovatively for winds. His catalog of music for clarinet includes solos, chamber ensembles, and works for band and orchestra.

functioning similarly to the violin section of the orchestra. The orchestral clarinet section, which usually consists of two to four players, functions as an important timbre and solo voice. Additionally, clarinets are often used in jazz, folk music, and show music such as Broadway pit bands.

The first prominent use of the clarinet was as a solo instrument and the first pieces to feature the clarinet were six concertos for the two- or three-keyed D clarinet written by Johann Melchior Molter.[61] These were written during the 1740's, perhaps as late as 1747, and featured the upper register.[62] Other early concertos include one by Johann Stamitz, written sometime before his death in 1757,[63] and two by Franz Xaver Pokorny, written around 1765.[64] Vivaldi included two C clarinets in combination with various other instruments in several chamber concertos. Other early works for clarinet include an overture for two D clarinets and corno di caccia by Handel and six sonatas for clarinet, bassoon, and harpsichord by C. P. E. Bach.[65]

Clarinetists first became regular members of the orchestra around 1759, when the Mannheim Orchestra, an ensemble with an "immense reputation for sensitivity and refinement,"[66] employed two. These players

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[61]Many sources list four concertos by Molter. Richard Adrian Shanley documented two additional concertos in "The Fifth and Sixth Clarinet Concertos by Johann Melchoir Molter: A Lecture Recital Together with Three Additional Recitals" (D.M.A. dissertation, North Texas State University, 1976).

[62]Jack Brymer, *Clarinet* (New York: Schirmer Books, 1976), 31.

[63]Brymer said, on p. 31, that it was written in the 1760's but Stamitz died in 1757 according to p. 79 of Rendall, and other sources.

[64]F. Geoffrey Rendall, *The Clarinet*, rev. Philip Bate, 3d ed. (London: Ernest Benn Limited, 1971), 85.

[65]Oskar Kroll, *The Clarinet* (Kassel: Barenreiter, 1965) trans. Anthony Baines. (New York: Taplinger, 1968), 47.

[66]Rendall, 79.

probably doubled on oboe until around 1778. The clarinet became a member of the military band during the same era, "in 1763 or soon after," according to Rendall.[67] Bands substantially popularized the clarinet in the late eighteenth century and this trend has continued into the twentieth century.[68]

The late eighteenth century was the transitional period from the three-keyed to the five-keyed clarinet. The five-keyed instrument could play in all registers "juxtaposed with complete freedom," reports Brymer.[69] The previous literature and players should not be discarded as unimportant as Brymer states, "Even before it reached the five-key stage, the clarinet was a formidable instrument in the virtuoso field."[70]

Carl Stamitz, the son of Johann, was associated with the Mannheim Orchestra. He wrote at least a dozen clarinet concertos between 1770 and 1784. They made use of the full pitch and expressive range of the improved clarinet. Several virtuoso clarinetists of this era doubled as composers and wrote music to display their performing talents. This was the beginning of the "heyday" of clarinet soloists which lasted until approximately 1840.[71] The most important solo concertos written during this period were by Mozart, Weber, and Spohr. Mozart, Beethoven, Weber, and Schubert were among those who composed important chamber works for clarinet.

Two clarinets became a standard part of the orchestra at the end of the eighteenth century. Mozart and Haydn included clarinets in their last

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[67]Ibid.

[68]Many countries maintain professional military bands. In the United States, bands are also a vital part of the music education system in elementary school through college.

[69]Brymer, 31-33.

[70]Ibid., 29.

[71]Rendall, 92.

symphonies. Beethoven was the first major composer to use a pair of clarinets in all of his symphonies. Weber, Schubert, and Rossini also used the clarinet to great advantage in symphonic and operatic music. Once the wind section became standardized, including pairs of flutes, oboes, clarinets, bassoons, and horns, the woodwind quintet assumed importance, as the principal players had occasion to play chamber music.[72]

During the second half of the nineteenth century the clarinet, although no longer in the spotlight as a concerto instrument, was an indispensable member of the orchestra and frequently had prominent solo parts in the orchestral literature. Brahms' *Trio, Op. 114*, and *Quintet, Op. 115*, of 1891 and *Sonatas, Op. 120*, of 1894 began a resurgence of clarinet solo and chamber music writing that has continued to the present-day. A wealth of solo, chamber, band, and orchestral literature has been written for clarinet in the twentieth century.

Many different pitched clarinets appeared during the course of the instrument's history. Most of the clarinet's early literature was written for the C and D soprano clarinets. By the late eighteenth century, however, the slightly lower-pitched B$^{\flat}$ soprano clarinet had become the standard instrument and it remains so to this day. Mozart's *Quintet, K. 581*, and *Concerto, K. 622*, were two of the earliest compositions to use the A clarinet as a solo instrument. Berlioz, a master orchestrator, "was among the first to use various sizes of clarinet for their particular tone quality."[73] The devilish E$^{\flat}$ clarinet solo in *Symphonie Fantastique* is a good example.

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[72]David Pino, *The Clarinet and Clarinet Playing* (New York: Charles Schribner's Sons, 1980), 241.

[73]*Harvard Dictionary of Music*, 2nd ed., rev. & enl., s.v. "Clarinet family."

Other members of the clarinet family were developed around 1770. Mozart used the basset horn in several operas and in the *Serenade in B♭, K. 361*. Mendelssohn also wrote for the basset horn but its use then waned.[74] The bass clarinet was not used prominently until the mid-nineteenth century. Meyerbeer included important bass clarinet solos in *Les Huguenots* and *Le Prophete*. Wagner was the first composer to use the instrument extensively. He continued the trend of increasing the size of the orchestral clarinet section to more than two players as he expanded the orchestra and its respective sections generally. The symphonic poems of Richard Strauss employ varied combinations of auxiliary clarinets; for example, *Don Quixote* uses the bass clarinet, *Til Eulenspiegel* uses the D and bass clarinets, and *Ein Heldenleben* uses the E♭ and bass clarinets.

The bass clarinet had little solo literature until the mid-twentieth century and its emergence as a solo instrument is chiefly due to the efforts of Josef Horák of Czechoslovakia and Harry Sparnaay of Holland. Horák, the senior of these two artists, began his career as a soloist in 1955.[75] Much of the music written for him is for solo bass clarinet or bass clarinet accompanied by piano. He formed a duo, "Due Boemi di Praga," with pianist Emma Kovárnová in 1963 and they continue to concertize extensively to the present day. In 1962, Horák commissioned composer Zdenek Pololanik to write a work for bass clarinet and percussion. *Musica Spingeta III*, the first

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[74]In the early twentieth century, Richard Strauss wrote parts for basset horn in some of his operas. In the latter half of the twentieth century, the basset horn has been experiencing a revival. John P. Newhill, *The Basset-Horn and Its Music* (Cheshire, England: John P. Newhill, 1983), 16-17, 91.

[75]Norman Heim, "The Josef Horák Phenomenon, part VI," *The Clarinet* 8, no. 2, (Winter 1981): 40.

duo written for bass clarinet and percussion, was the result. It was published by Panton in 1966.

The bass clarinet as well as the B♭ and A soprano clarinets are the members of the clarinet family which currently have a repertoire of solo music. Some solos exist for other clarinets but not in great numbers. The E♭, and occasionally the C and D soprano clarinets, join the B♭, A, and bass clarinets in the orchestra. The family extends from the E♭ soprano to the B♭ contrabass clarinet used in bands and clarinet choirs.

The solo repertoire for the B♭ and A clarinet is widely varied ranging from unaccompanied works to sonatas, concertos, and works with piano. Unaccompanied clarinet music is largely a twentieth-century phenomenon. Although the first work for unaccompanied clarinet is probably Anton Stadler's *Trois caprices pour la clarinette seule*, published in 1810, Gillespie stated in 1973 that "nearly all works now in print for solo clarinet were composed in the last fifty-five years."[76] (Today, that statement could be updated to include the last seventy years.) Stravinsky's *Three Pieces for Clarinet Solo*, composed in 1919, seems to be the first work of this new era of composition for solo clarinet.

Although there have been some outstanding pieces written for unaccompanied clarinet, the masterworks of the solo repertoire are accompanied in some manner. Included in this list are the sonatas of Brahms, Reger, Poulenc, and Hindemith; the concertos of Mozart, Weber, Nielsen, Copland, and Corigliano; and other clarinet and piano pieces by Weber, Debussy, and Berg. Among the most important chamber music works

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[76]James E. Gillespie, Jr., *Solos for Unaccompanied Clarinet: An Annotated Bibliography of Published Works* (Detroit: Information Coordinators, 1973), 11.

written for clarinet and other instruments are: trios by Mozart, Beethoven, Brahms, and Bartok; quartets by Messiaen and Hindemith; and quintets for clarinet and strings by Mozart, Weber, Brahms, and Reger.

Heightened interest in timbre in twentieth century music led to repertoire in which the clarinet was combined with instruments other than the standard strings, winds, and piano. Music using percussion instruments heads the list of new colorful orchestrations. Some other colorful and uniquely twentieth century combinations are clarinet and pre-recorded tape, clarinet and live electronics, and clarinet in numerous diverse chamber music combinations.

Since 1950, increased interest in timbre has led to experimentation with new sound possibilities on the clarinet and other instruments. Flutter-tonguing, subtone, vibrato, note-bending, microtones, and multiphonics are some of the sounds which were once considered noises but are now colors being successfully integrated into many compositions for clarinet.[77] In addition, the trend toward increased virtuosity has continued to improve the technique of clarinetists and extend the range of the clarinet upward.

The Development of the Clarinet-Percussion Duo

The clarinet-percussion duo can be partially explained as a logical extension of the increased prominence and use of percussion in the twentieth century. Color is now an important musical parameter and sounds once considered noises are currently valued for their exotic qualities. Percussionists are increasingly asked to function as soloist, partner, and

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[77]These new techniques will be discussed in the next chapter.

accompanist, a range of roles usually reserved for pianists. The wide variety of percussion instruments, timbres, and techniques plus the ability of percussion to function as an effective accompanist has prompted composers to write for percussion and virtually every instrument. Some duet combinations have a sizeable repertoire.[78]

The clarinet-percussion duo repertoire is large and is increasing for several reasons. Clarinet and percussion is a highly effective combination. The clarinet is an agile instrument with immense possibilities for virtuosity. It has the largest pitch, dynamic, articulatory, and timbral range of the woodwind instruments. The entire family of clarinets has an enormous range of pitches. The clarinet has the dynamic potential for competing as a chamber music partner with extremely loud or soft percussion sounds and the articulatory capability to match the attack and decay of numerous percussive sounds.

Many duos have been composed for specific performers and ensembles. Shortly after the first clarinet-percussion duos had been written, certain ensembles and "new music" performers began specializing in the combination. In addition, many duos have been written for performers not members of a permanent duo ensemble because the composers considered the clarinet-percussion duo such an interesting and viable combination. Percussionist James Holland has proposed an additional reason

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[78]In addition to clarinet-percussion duos, there are, for example, a large number of flute-percussion and saxophone-percussion duos, and ensembles have been formed to specialize in this repertoire. "Tambous" is a flute-percussion duo composed of flutist Holly Stackhouse and percussionist Theodore Frazeur. Saxophonist and low clarinetist Henri Bok and percussionist Evert le Mair are the members of "Duo Contemporain."

for the existence of percussion chamber music such as the clarinet-percussion duo:

> Here I have to make a confession: though I am an ardent percussionist and have worked considerably for the percussion "cause", including helping to form the London Percussion Ensemble, I find an all-percussion programme, unrelieved by any other instrument or voice, can be something of a disaster. Blasphemy? Perhaps; but percussion-only programmes may be fine for the players concerned, but what of the audience? Continuous unrelieved percussion for a whole concert, to my mind, makes for a rather dull uninteresting programme. Further, comparatively few composers write effectively for percussion.[79]

Coincidentally, perhaps, four of the earliest clarinet-percussion duo performing ensembles were married couples. Each duo had a somewhat different focus. While marriage is certainly not a prerequisite for playing clarinet-percussion duo music, the desire to perform duets together was probably one reason why married couples who play these two instruments performed this "unlikely" repertoire in its embryonic days. With other instrumental duet and chamber music combinations, musicians often get together and sightread pieces which they are interested in performing. Since much of the clarinet-percussion duo repertoire is for multiple-percussion setups, casual sightreading is not an option. A great deal of setup time must be invested merely to try a piece out. Individuals who normally spend a great deal of time together, such as married couples, are more apt to investigate and have a commitment to perform such music. Now that the viability of this genre is evident, an increasing number of musicians are programming clarinet-percussion duos on recital programs.

Ron and Joan George of California began performing clarinet-percussion duos in 1967. They expanded their performances into multi-

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[79]James Holland, *Percussion* (New York: Macmillan, 1978), 262.

media events under the name "Music for Sound and Light."[80] Duos written for the Georges include *Wild Tales Told on the River Road* by Netty Simons,[81] *Options II* by Elliott Schwartz, *Essence of Ampersand* by Raymond Weisling, and *Flower Bells and Migrations* by Susan Palmer. Ron George composed *Music for a Favorite Person* for their ensemble. He is an innovator in the development of "percussion consoles," i.e., specialized, compact multiple-percussion setups.

Larry and Linda Maxey of Kansas perform duos for clarinet and marimba. *Inventions and Interludes* by Charles Hoag and *Prelude and Licks* by Chester Mais were written for them.[82]

"Clarinet and Friend," founded in 1974 after receiving commissioning grants, combines the talents of clarinetist Phillip Rehfeldt and composer-performer Barney Childs of the University of Redlands.[83] Although a pianist, Childs is able to masquerade as a percussionist and perform *Spirit Puck,* commissioned from Peter Racine Fricker, and *Duo Exchanges,* commissioned from Wendell Logan.[84]

Robert Rosen and Andrea Splittberger-Rosen, the "Uwharrie Clarinet-Percussion Duo," have performed together since 1974. The "Uwharrie Duo" performs duos for the entire range of clarinets and percussion instruments. Many compositions have been written for the

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[80]Correspondence with Ron George.

[81] *Wild Tales* is discussed in Chapter 7.

[82]Correspondence and conversations with Larry Maxey, Charles Hoag, and Chester Mais.

[83]H. James Schoepflin, "Clarinet and Friend," *The Clarinet* 5, no. 1 (Fall 1977): 32.

[84]Correspondence and conversations with Phillip Rehfeldt, Barney Childs, Peter Racine Fricker, and Wendell Logan.

"Uwharrie Duo" including duos by Jon Deak, Jere Hutcheson, Frank McCarty,[85] Paul Martin Palombo, and Michael Udow of the United States, Jozef Gahér and Alois Simandl Piňos of Czechoslovakia, Georg Katzer of East Germany, Enrique Raxach of Holland, Kazuto Miyazawa of Japan, and Ivo Petrić and Primož Ramovš of Yugoslavia. In addition to commissioning and premiering new works, the "Uwharrie Duo" sponsored an International Composition Contest in 1979 which produced many outstanding compositions, some of which have yet to be performed. The "Uwharrie Duo" is also an experienced presenter of new music to general audiences of all ages.

The most recent ensemble to commission and perform clarinet-percussion duos extensively is "Duo Contemporain" of Holland. Henri Bok plays bass clarinet, contra-alto clarinet, alto saxophone, and tenor saxophone. Evert le Mair is the percussionist, playing primarily mallet instruments. They have performed together since 1980. Their impressive list of internationally-commissioned duos includes works for one or more clarinets or saxophones with vibraphone or marimba as well as with large multiple-percussion setups. Bass clarinet-percussion duos commissioned and recorded by "Duo Contemporain" include *Meditation et Danse* by Piotr Moss of Poland, *Diason* by Eugen Wendel of West Germany, and *Wanton Wiles* by Frans Vuursteen of Holland.[86]

John and Beverly Floyd of Virginia have performed numerous duos but have not as yet commissioned works for the clarinet-percussion duo although John Floyd composed *Three Miniatures for Clarinet and Marimba*.

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[85] *Variation Duos* by Frank McCarty is discussed in Chapter 8.

[86] Correspondence with Henri Bok and publicity materials of "Duo Contemporain."

André Morin and Toshiaki Hamada of Quebec have performed together for several years. One of their commissions is *Vignettes* by John Cheesman.[87]

Some larger contemporary music ensembles have included clarinet-percussion duos on their programs. Donald Erb wrote his *Sonata for Clarinet and Percussion* for the "Boston Musica Viva," which premiered it. Jon Deak's *Sinister Tremors*, written for and premiered by the "Uwharrie Duo," has been programmed by "Speculum Musicae."

Duos have also been written for other reasons. Composer-clarinetist Sydney Hodkinson wrote for himself and Robert Myers, an accomplished percussionist at the University of Virginia. David Burge wrote *Sources ///* for his faculty colleagues at the University of Colorado, clarinetist Jerry Smith and percussionist John Galm. Duos, like other works, have been written to commemorate friendships and special occasions. Leo Kraft dedicated *Episodes* to Meyer Kupferman and Dennis Anderson wrote *Sage King Goes Hollywood* as a first (paper) anniversary present for Steve and Debra Moshier.

There is now such a large body of clarinet-percussion duo literature with such a broad range of styles and instrumentations that it is probable every clarinetist and percussionist of at least moderate ability can find satisfying music to perform. So much literature exists, in fact, that it seems nearly impossible to keep up with it all. Virtually every new issue of professional clarinet and percussion journals include mention of a duo unknown to the author. Additionally, inquiries about duos are addressed to the author with increasing frequency.

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[87]Correspondence and conversations with John Floyd and André Morin.

CHAPTER TWO

TECHNICAL DEVELOPMENTS FOR CLARINET AND PERCUSSION

The technical capabilities of instrumentalists have increased over time. Composers and performers have often worked together in an attempt to stretch the boundaries of what has previously been thought to be playable. Paul Griffiths states, "The history of music has repeatedly shown difficulty of performance to be a transitory quality of a work, evaporating as innovations become absorbed within the common practice of executants."[88] Some compositions written after World War II, such as *Le marteau sans maître* by Pierre Boulez, *Zeitmasse* by Karlheinz Stockhausen, and many works of Milton Babbitt, were so technically difficult that they "would appear to reach the border lands of the feasible."[89] Several decades later, these compositions are considered difficult but playable.

The clarinet-percussion duo is a post-World War II genre of a predominantly virtuoso nature. A recent review of a relatively easy duo prompted this reaction from the reviewer:

> At last--a piece for this combination which doesn't require unnatural acts from the clarinetist nor acrobatics from the percussionist! *Three Pieces* [by George Ferencz] is of moderate difficulty, accessible to two

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[88]Griffiths, 223.
[89]Ibid.

> mature college students, or possibly even two exceptional high school students.[90]

Music written for clarinet and percussion as a duo is similar in style and difficulty to the solo literature of both instruments. This being the case, some historical discussion of the solo repertoire is in order.

Music for Unaccompanied Clarinet

In his bibliography of solos for unaccompanied clarinet, James Gillespie states:

> Far too many of the works [for unaccompanied clarinet] may be played only by very advanced players, and it is hoped that composers will respond to the need for more intermediate-level pieces within the reach of student clarinetists.[91]

It would seem that this general virtuosity occurs in clarinet solos because of the difficulty inherent in sustaining interest throughout a composition using a one-line instrument.[92]

Ralph D'Mello described the growing repertoire for unaccompanied clarinet in an article published in 1971:

> In the twenty years that followed the Stravinsky pieces only about six pieces, including compositions by Cage, Karg-Elert, Pfeiffer, and Bentzon, were published. An equal number of pieces were printed in the decade of the Forties. Some of the composers represented in this era were Barati, Perle, and Sutermeister.

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[90]David Pickthorn, review of *Three Pieces for Clarinet and Percussion*, by George Ferencz, in *Percussive Notes* 25, no. 2 (Winter 1987): 52.

[91]Gillespie, 12.

[92]A "one-line instrument" is defined here as an instrument that traditionally plays only one note at a time rather than chords. Woodwind and brass instruments are one-line instruments.

> Judging from the many pieces for unaccompanied clarinet that were written by, among others, composers of the calibre of Krenek, Martino, Pousseur, Rosza, Tailleferre, and Wellesz, the Fifties could be considered as the golden era of solo clarinet music.[93]

This growth has continued through the 1960's, 1970's, and 1980's. Two reasons for the surge in composition for unaccompanied clarinet are the importance of color in twentieth century music and the development of new sound possibilities, which add timbral and contrapuntal capabilities.

New Techniques for Clarinet

Technical expansion of woodwind instruments and the use of new sonorities has been the focus of much research and experimentation since 1950. Catalyzed by advances in electronic music, composers and performers began searching for new color and pitch possibilities on acoustic instruments. Bruno Bartolozzi, a researcher into new sounds for woodwinds, saw three potential areas for progress:

> (a) the suitability of woodwind for the creation of single sounds with marked difference of timbre; (b) the ability of these instruments to play music which contains smaller intervals than those contained in the tempered chromatic scale; (c) the suitability of each instrument for creating polyphony, that is, not only the emission of chords, but the execution of a true and proper instrumental polyphony.[94]

The chief special effects that are now a standard part of advanced clarinet technique are flutter-tonguing, subtone, vibrato, note-bending and other timbre variations, microtones, and multiphonics. These effects appear in music for solo clarinet, clarinet and piano, band, orchestra, and the spectrum of chamber ensembles, including the clarinet-percussion duo.

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[93]Ralph D'Mello, "Music for Unaccompanied Clarinet," *Woodwind World* 10, no. 3 (June 1971):17.

[94]Bruno Bartolozzi, *New Sounds for Woodwind*, trans. and ed. Reginald Smith Brindle, 2d ed. (Oxford: Oxford University Press, 1982), 5.

Their use adds new dimensions to music in general and expands the compositional possibilities for clarinet as well as the other one-line instruments.

Clarinetist-composer William O. Smith experimented with new sounds in the context of jazz improvisation and was one of the first to research and codify multiphonics.[95] During the early 1960's, he collaborated with other composers in creating music that incorporated multiphonics and other new sounds for clarinet. The number of researchers into new clarinet techniques has increased significantly since Smith did his pioneering work. Books and dissertations, such as those by Ronald Caravan, Frank Dolak, Gerald Farmer, Phillip Rehfeldt, and Nicholas Valenziano,[96] and many articles, most published within the past fifteen years, are available to assist clarinetists with contemporary performance techniques.[97]

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[95]William O. Smith is also a fine jazz clarinetist and uses the name Bill Smith in that context.

[96]Ronald L. Caravan, "Extensions of Technique for Clarinet and Saxophone" (D.M.A. dissertation, University of Rochester, 1974); Ronald L. Caravan, *Preliminary Exercises and Etudes in Contemporary Techniques for Clarinet* (Oswego, N.Y.: Ethos Publications, 1979); Frank J. Dolak, "Augmenting Clarinet Technique: A Selective, Sequential Approach through Prerequisite Studies and Contemporary Etudes" (D.A. dissertation, Ball State University, 1979); Frank J. Dolak, *Contemporary Techniques for the Clarinet* (Lebanon, IN: Studio P/R, 1980); Gerald James Farmer, *Multiphonics and Other Contemporary Clarinet Techniques* (Rochester, N.Y.: SHALL-u-mo Publications, 1982); Gerald James Farmer, "Multiphonic Trills and Tremelos for Clarinet" (D.M.A. dissertation, University of Oregon, 1977); Phillip Rehfeldt, *New Directions for Clarinet* (Berkeley: University of California Press, 1977); Nicholas Jerome Valenziano, "Twenty-one Avant-Garde Compositions for Clarinet Published Between 1964 and 1972: Notational Practice and Performance Techniques" (D.M.A. dissertation, University of Missouri, 1973).

[97]Elsa Ludewig-Verdehr's article "A Practical Approach to New and Avant-Garde Clarinet Music and Techniques," *The Clarinet* 7, no. 2 (Winter

In a lecture titled "Contemporary Aspects of Woodwind Performance," clarinetist and new music specialist F. Gerard Errante divided the spectrum of new sounds into seven categories:

1. multiple sonorities
2. glissando and portamento
3. variations in initiating and terminating tones
4. microtones
5. alteration of timbre
6. percussive effects
7. alteration of instrument.

Most of these categories can be divided into subcategories; for example, types of timbre alteration are: vibrato, change of timbre while sustaining or repeating a pitch, subtone, timbre or key trills, use of mute, teeth on reed, air sounds, growl, and lip smacks.[98] Techniques of all seven categories and their subcategories are used in the clarinet-percussion duo repertoire.

Flutter-tonguing, subtone, and vibrato are coloristic devices. Note-bending is coloristic but, more importantly, also adds to the musical inflection. Flutter-tonguing is the "rrrr" sound that is produced by rolling the tongue or by producing gargling noises in the throat while playing. It was introduced by Strauss in 1897 in *Don Quixote*, a tone poem for orchestra.[99] An early example of flutter-tonguing in clarinet chamber music is found in Berg's *Vier Stücke für Klarinette und Klavier, Op. 5*, written in 1913. Clarinetist Gerald Farmer notes that "flutter-tonguing is

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1980): 10-15, 38-41, contains a thorough bibliography and systematically outlines a method for incorporating these new techniques into one's playing.

[98]F. Gerard Errante, lecture outline of "Contemporary Aspects of Woodwind Performance."

[99]Rehfeldt, 63.

not a particularly new device on the clarinet, having had great popularity among jazz performers for many decades."[100] It is a technique that can be used on all of the wind instruments.[101] Flutter-tonguing is used in many clarinet-percussion duos including three of the compositions analyzed in this paper: *Drawings: Set No. 3* (1961) by Sydney Hodkinson, *Tombeau* (1971) by André Boucourechliev, and *Wild Tales Told on the River Road* (1973) by Netty Simons.

Subtone and note-bending were first used in jazz. Farmer states:

> Subtone was first associated with the "cool" jazz style of the late 1940's, 1950's and early 1960's, exemplified by the minimal vibrato and subdued tone quality of saxophonists Lester Young, Lee Konitz, and Stan Getz. Its use in contemporary music for clarinet can usually be described as soft, dark, and dull, with a minimum of overtones.[102]

Clarinet-percussion duos which include subtone are numerous. It is used extensively in the duos of Hodkinson and Simons, for example.

Vibrato has been an item of debate for some time among classical clarinetists.[103] Use of vibrato in the pre-twentieth century repertoire is a decision to be made by each clarinetist. In many contemporary compositions, however, vibrato is required and is a standard coloring technique. Often its speed, size, and type are specified by the composer.

Another type of timbre variation involves the alternate use of fingerings which produce the same pitch but different timbres. These

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[100]Farmer, *Multiphonics,* 139.

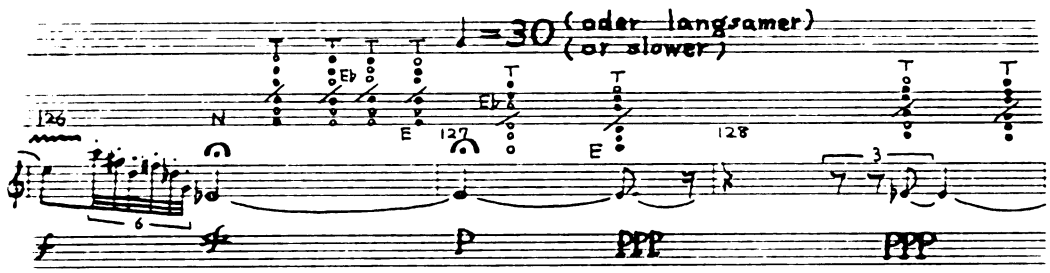
[101]Flutter-tonguing is only marginally successful on the double reed instruments.

[102]Farmer, *Multiphonics,* 140.

[103]For a thorough discussion of clarinet vibrato, see Paul Drushler, "Clarinet Vibrato: Terminology, Utilization, Aesthetics, Part I," *NACWPI Journal* 27, no. 4 (Summer 1979): 37-48, and ". . . Part II," *NACWPI Journal* 28, no. 1 (Fall 1979): 4-8.

undulations may occur slowly or quickly and with a regular or an irregular pace. Example 1 is from the clarinet-percussion duo *Bindung-Teilung* (1979) by Kazuto Miyazawa and illustrates the use of timbre variation on one pitch.

Example 1. *Bindung-Teilung* by Kazuto Miyazawa, mm. 126-128, timbre variation on one pitch.



● 1985 Kazuto Miyazawa
Used By Permission Of The Composer

Pitch bend, glissando, and portamento are some of the most common terms for the technique of note-bending. "Pitch bend" generally refers to small pitch changes that are achieved without changing fingerings. The pitch changes are caused by varying lip and jaw pressure and, sometimes, by changing the position of the throat.[104]

Undoubtedly, the most famous clarinet "glissando" is the beginning of *Rhapsody in Blue* (1924) by George Gershwin. Farmer points out that this wonderful upward smear of pitches is actually a "portamento:"

> There appears to be much confusion in the use of this term as applied to wind instruments. In the strict sense, the glissando does not involve lip bends or the pure portamento effect associated with the

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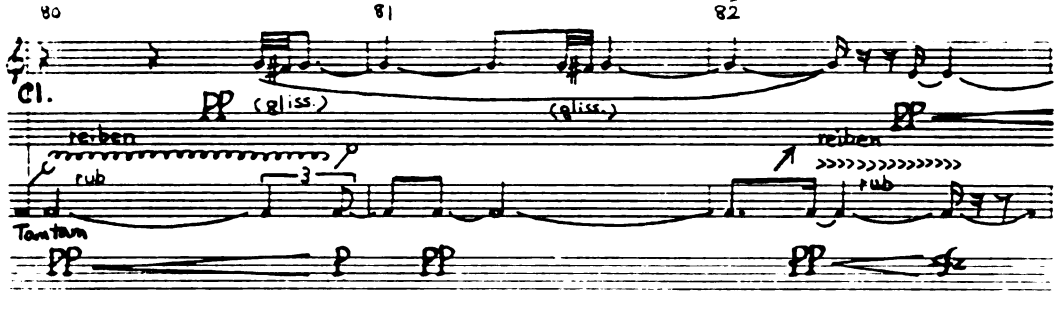
[104]Rehfeldt, 59.

> trombone, violin, or human voice. However, the term glissando has been used interchangeably with the word portamento, and many scores call for "gliss" when the desired effect is really portamento.[105]

Pitch changes, whether large or small or achieved by embouchure or finger change, are some of the experimental sounds which were first used in jazz and have now been used to expand the timbral resources of "classical" music. "Blue notes" are subtle pitch bendings of selected notes of the scale. This technique began as jazz singers sought to inflect their melodies and was adopted by jazz instrumentalists such as Ornette Coleman. According to Farmer: "Coleman's practice of lowering or raising certain pitches, which he calls 'emotional pitch,' is a deliberate attempt to give the music a human vocal quality."[106]

In the clarinet-percussion duo repertoire, note-bending ranges from subtle changes at soft dynamic levels, such as in *Bindung-Teilung* by Kazuto Miyazawa (Example 2), to loud smears with a range of more than an octave, such as in the climactic section of *Contacts* (1979) by Ivo Petrić which is illustrated in Example 3.

Example 2. *Bindung-Teilung* by Kazuto Miyazawa, mm. 80-82, small glissandi.



© 1985 Kazuto Miyazawa
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[105]Farmer, *Multiphonics*, 134.
[106]Ibid., 10.

Example 3. *Contacts* by Ivo Petrić, p. 4, line 2, larger glissandi.



© 1979 Ivo Petrić
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Microtones, the division of the whole-step into intervals smaller than the half-step, are related to pitch bends but use a change of fingering and are more exacting in the resultant pitch. Experimentation with quarter-tones was taking place at the end of the nineteenth century. Stuckenschmidt states:

> G. A. Behren-Senegalden patented a quarter-tone piano in 1892. But it was not until 1924 that the Czech firm of August Foerster actually constructed a quarter-tone grand piano of its own design.[107]

Composers Richard H. Stein of Germany, Ivan Vyshnegradsky of Russia, and Ferruccio Busoni, originally of Italy, wrote microtonal theories of music in 1909, 1933, and 1906, respectively. Stein and Vyshnegradsky used quarter-tones while Busoni proposed the use of third-tones, although he never composed using this system.[108]

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[107]Stuckenschmidt, 40.
[108]Ibid., 41.

The Czech composer Alois Hába (b. 1893) is the person most closely associated with microtonal theory and composition of the early twentieth-century. He encouraged construction of quarter-tone instruments and had a trumpet, guitar, harmonium, the Foerster piano, and two clarinets built for him. V. Kohlert's Sons of Kraslice, North Bohemia designed and built the two clarinets. The first, built in 1924, was a German-style clarinet and the second, built in 1931, was of the French style.[109] Hába wrote *Fantasy, Op. 22* for quarter-tone clarinet and quarter-tone piano in 1924 and *Suite, Op. 55* for solo quarter-tone clarinet.[110] The latter was probably written around 1931.

It is possible to perform quarter-tones on a regular, chromatic clarinet. Special fingerings are required. Extensive microtonal fingering charts are given by Caravan and Rehfeldt, however, these must be personalized for each player and the intonation and response idiosyncrasies of their instruments. In his training text for composers, David Cope states his opinion regarding the use of microtones:

> Possibly the most potential resides in existing instruments of set pitch tunings (e.g., piano, harp) and new instruments tuned or retuned, as the case may be, to microtonal ideals with which the composer wishes to work. This eliminates the problem of notation (which can indeed be completely traditional) and leaves the performer with little new to cope with except the resulting sound.[111]

Microtones appear often in new clarinet compositions but have not achieved universal use, probably for the above-listed reason. Perhaps composers feel that listeners would not be sensitive enough to grasp the

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[109]Milan Kostohryz, "Quarter-Tone Clarinet," *The Clarinet* 3, no. 3 (May 1976): 12.

[110]Ibid.

[111]Cope, *New Music Composition*, 88.

effect of microtones. Hába thought of quarter-tones as an evolutionary step "on the road from simplicity to complexity."[112] He wrote in an essay:

> We can assume that man's greatest desire, to bring natural phenomena under the most wide-ranging conscious control, will also induce musicians to bring under conscious control all the frequencies that the ear can distinguish.[113]

Although none of the duos analyzed in this paper employ specifically-notated microtones, other duos do use them. *Zoom* (1970) for clarinet and bongo drums by the Yugoslavian composer Milan Stibilj uses quarter-tones as an integral part of the melodic style. Approximately one-fourth of the pitches of the clarinet part are quarter-tones.[114] *Zoom* is bichromatic because the quarter-steps between each half-step of the chromatic scale are used. Stibilj uses the same symbols as Hába did for the quarter-tone higher (𝄲) and the quarter-tone lower (𝄳) and provides a fingering chart in the score for each quarter-tone.[115] Example 4 illustrates the use of quarter-tones in *Zoom*.

Ballade (1982), a duo by Georg Katzer, employs bichromatic scale segments on several occasions in the clarinet part. The quarter-tones are important in these sections but do not pervade the music as they do in *Zoom*. Katzer uses different symbols than Stibilj and does not include fingering charts. (Example 5.)

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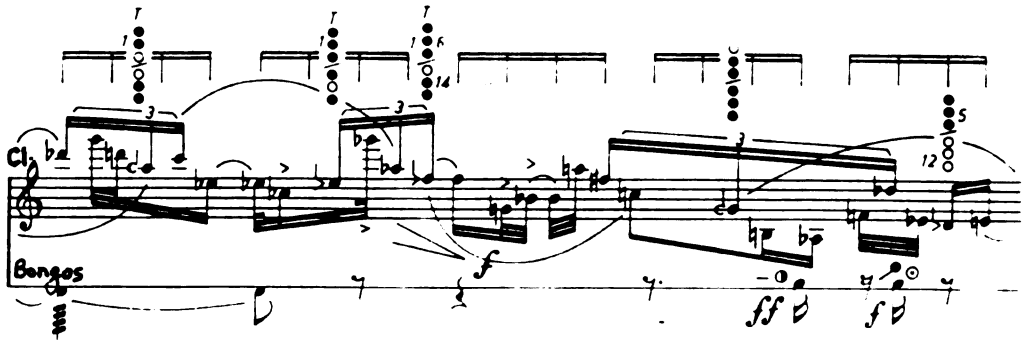
[112]Stuckenschmidt, 42.

[113]Ibid.

[114]Quarter-tones are also an integral part of the percussion part. The bongo drums are tuned to c^1 and $a^{\frac{d}{1}}$.

[115]Milan Stibilj, *Zoom* (Ljubljana, Yugoslavia: Skaldje, 1972); Stuckenschmidt, 42.

Example 4. *Zoom* by Milan Stibilj, line 24, quarter-tone use.



© 1972 Milan Stibilj
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Example 5. *Ballade* by Georg Katzer, p. 12, line 6, quarter-tone use.



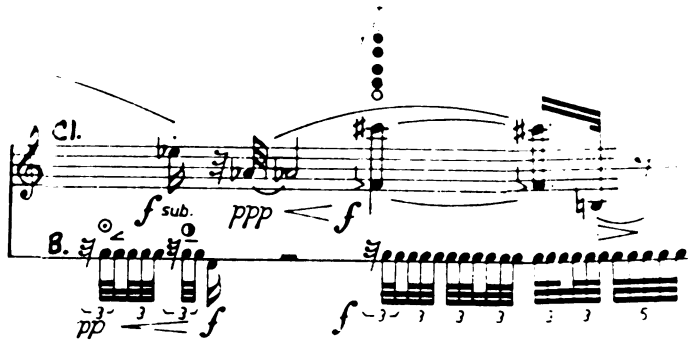
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Multiphonics, the performance of two or more tones at once on a woodwind instrument, is the most significant development in clarinet technique of the twentieth century. The clarinet, a monophonic instrument, has become an instrument with polyphonic possibilities. Multiphonics can be divided into three general categories: those produced by using standard monophonic fingerings and altering the embouchure or breath support (Example 6), those produced by using special fingerings, with or without altering the embouchure or breath support (Example 7), and those produced by humming and playing simultaneously (Example 8).[116]

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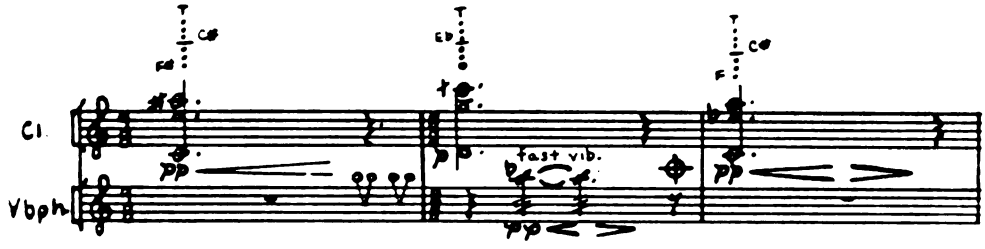
[116]Humming and playing is the only way that brass players can achieve multiple sonorities.

Example 6. *Zoom* by Milan Stibilj, lines 4-5, multiphonic with standard fingering for written c#3.



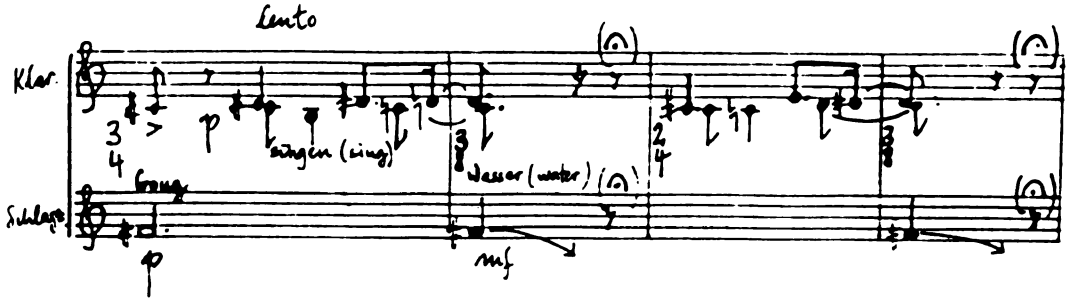
● 1972 Milan Stibilj
Used By Permission Of The Composer

Example 7. *Après Moi le Sommeil* (1974) by James Marshall, p. 2, line 1, multiphonics with special fingerings.



● 1974 James Marshall
Used By Permission Of The Composer

Example 8. *Ballade* by Georg Katzer, p. 12, line 1, humming and playing.



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Notation of multiphonics and other new sounds is not yet standardized and may never be. Multiphonics is the notational area that is the most problematic. Composers use multiphonics in such different ways that standard notation is not always appropriate; for example, some composers desire a specific chord while others desire a sound-mass of a particular character. Ideally, the composer interested in specific pitches will notate the pitches and fingering.[117] The composer desiring a sound-mass may tell the performer to produce a quiet and gentle multiphonic, for example, or a loud and harsh multiphonic.

Perhaps the best known of the early clarinet solos which include multiphonics is *Concert Music for Solo Clarinet* by John Eaton. It was written in 1961 as a result of his experimental collaboration with William O. Smith. Numerous compositions with multiphonics have been written in the last three decades. Two of the duos analyzed in this paper employ multiphonics. They have different notation and functions. Most of the multiphonics in *Variation Duos* (1979/1981) by Frank McCarty are notated with specific pitches and fingerings. In *Wild Tales Told On the River Road* by Netty Simons, the use of multiphonics is suggested in certain sections as a method of timbre variation. A pitch group is specified but the precise multiphonic is left up to the clarinetist.

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[117]The author prefers to see the multiphonic fingerings in the part because it tends to indicate that the composer has considered the practical matters of chord production.

Music for Multiple-Percussion Setups

The ability of percussionists to play several instruments simultaneously or in quick succession is perhaps the most important technical development of percussion music in the twentieth century. Multiple-percussion setups allow one player to produce multiple timbres that were previously produced by several players playing one instrument each. Many composers and performing musicians who are not percussionists are unaware of the technical and logistical difficulties inherent in music for percussion instruments and, especially, for multiple-percussion setups. Some knowledge of how percussionists work is valuable for composers and performers intending to collaborate with them.

As the Appendix shows, many clarinet-percussion duos are scored for multiple-percussion setups and a wide variety of instrumentation exists. The six duos analyzed in this paper are each written for a different "percussion instrument." *Variation Duos* by Frank McCarty is scored for clarinet and one percussion instrument, the marimba. This is not a multiple-percussion setup. The other five duos are each scored for a collection of instruments which must be arranged to form a specialized "percussion instrument" for the particular composition. The setup for *Drawings: Set No 3* by Sydney Hodkinson is not very complicated since it is scored only for three instruments (three drums of relative pitches high, medium, and low) and the instruments all use the same playing technique. The duos of André Boucourechliev and Armand Russell are scored for modest multiple-percussion setups. *Sonata* by Frederick Lesemann uses a very large percussion setup which is composed of many different types of

instruments and requires a variety of playing techniques.[118] *Wild Tales Told on the River Road* by Netty Simons uses an even larger setup with an even greater variety of instruments and playing techniques.

The concept of multiple-percussion setups started with vaudeville's "one-man band." The "trap-drummer," as Blades called him, of the early twentieth century used "drums, cymbals, and cunningly-controlled gadgets" to perform in "various forms of light entertainment, including the dance hall, the traveling show, the circus and the theatre pit."[119] Some of the gadgets that might have been included in the trap-drummer's "kit" or "trap" were slapstick, tambourine, triangle, washboard, castanets, sandpaper blocks, saucepan lids, tin cans, whistles, and wire brushes.[120] Blades described the talent and function of the trap-drummers:

> Despite such atrocities, and the frugal nature of the early equipment, the majority of these players were extremely skilful. The trap-drummer was not only the metronome of the band: his purpose was to colour it with every sound possible from the instruments at his disposal, and to give the combination style with his *ad lib* syncopation."[121]

Percussion was, once again, being used for coloristic, rhythmic, and accompanimental purposes.

The drum set of present-day jazz and rock bands is a descendant of the "one-man band." It is the most standard multiple-percussion setup but even these setups vary according to the style of music and the performance style and budget of each drummer.

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[118] *Sonata* is scored for marimba, vibraphone, 3 tomtoms, 2 bongo drums, bass drum, 2 suspended cymbals, triangle, tamtam, xylophone block, box chime, crotale, brake drum, and 5 temple blocks.

[119] Blades, 458.

[120] Ibid.

[121] Ibid.

Although its roots are in the entertainment industry, *Historie du Soldat* (1918) is an example groundbreaking use of the multiple-percussion setup in chamber music:

> Stravinsky exhibited a vast range of percussion effects by obtaining different timbres through the use of a snare drum, field drum, bass drum, tambourine, triangle, two tom-toms, and cymbals. Well-defined melodic implications were produced by the use of different sizes of drums. That the implications are significant is illustrated by the composer's statement that "the *pitch* of the drums is extremely important, and the intervals between high, medium, and low should be as nearly even as possible; the performer must also be careful that no drum exerts its own 'tonality' over the whole ensemble."[122]

Other early chamber works with significant multiple-percussion parts were *Facade* (1922) by William Walton, *La Création du Monde* (1923) by Darius Milhaud, and *Sonata for Two Pianos and Percussion* (1937) by Bela Bartok.[123] The latter is scored for two percussionists, each with a multiple-percussion setup.

Percussionist John Baldwin described what happened after the introduction of the multiple-percussion concept:

> Now that the concept of multipercussion has been realized and recognized by both composers and percussionists as legitimate and necessary, more and more multipercussion parts are being written and correctly performed and interpreted in the chamber music medium. The leaders in this use of multipercussion include the French composers, the younger American composers, and the "avant-garde" extremist composers.

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[122]Vanlandingham, 73.

[123]Richard Cheadle, "Development of the Solo Performance Media for the Percussionist," *NACWPI Journal* 35, no. 3 (Spring 1987): 26.

> Multipercussion in solo music has also seen an exploitation of the multipercussion concept, although later than, and not as freely as, the area of chamber music.[124]

These comments were made in 1968. Many solo multiple-percussion works have been written since then. According to percussionists Greg and Judy Murray of the "Rosewood Percussion Duo:"

> The twentieth century has witnessed percussionists assuming new responsibilities--those of soloists and chamber musicians. Up to this point, we have been accompanists and timekeepers, accorded only rare flourishes of glory.[125]

It is logical, therefore, that solo percussion works became prominent after chamber works. For years, percussion was not used or conceived of melodically so the idea of solo works would have been silly. As the melodic capabilities of unpitched as well as pitched percussion instruments have become increasingly apparent, more solo multiple-percussion solo works have been written.

One of the difficulties inherent in percussion performance is dealing with large volumes of percussion equipment. The non-artistic chore of carting equipment from place to place and then setting it up and taking it down is one of the burdens of being a "total percussionist." This significant drudgery is undoubtedly why there are few multiple-percussionists who pursue concert touring. Most touring "percussionists" specialize in playing the marimba or vibraphone. Those dedicated percussionists who do tour do so because of their deep love and appreciation of twentieth-century percussion music. Since the essence of the repertoire is for multiple-

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[124]John Baldwin, "Multipercussion in Chamber and Solo Music," *Percussionist* 5, no. 3 (March 1968): 287, 289.

[125]Greg Murray and Judy Murray, "Ensemble Insights: Programming," *Modern Percussionist* 2, no. 3 (June 1986): 44.

percussion setups, this involves moving equipment. After reviewing a concert by the "Uwharrie Clarinet-Percussion Duo," Ann McCutchan stated:

> One reason they perform *Zoom* [for clarinet and bongo drums] often is because it is so portable. Robert Rosen spoke of the time and labor involved in traveling with a truckload of large percussion instruments. Each composition requires a different combination of instruments in different set-ups. The clarinetist is quite fortunate in having all necessary equipment in a small black case![126]

The job of a multi-percussionist does not end after all the equipment for a particular composition has been accumulated into one room and assembled. Before the composition can be played, the instruments must be arranged carefully. James Holland suggests,

> As with many contemporary pieces, the main difficulties for the percussionist lie in setting up the instruments in a playable formation and having to move very rapidly from one to the other. . . .
>
> Before starting to attempt to play, the performer must look carefully through his part, note down all the instruments and equipment needed, and try to assess the best layout. Even so, having started rehearsal with the other members of the group, he may well find that his first assessment needs modification.[127]

Rehearsing with a percussionist is unlike rehearsing with any other instrumentalist. The non-percussionist must be patient and realize that rehearsal time must be taken for tinkering with the setup and many repetitions may be necessary for the sake of choreography.

Composer Reginald Smith Brindle wisely suggests that composers plan the number of percussionists and instruments that they intend to use

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[126]Review of a recital by the *Uwharrie Clarinet-Percussion Duo*, by Ann McCutchan, in *The Clarinet* 8, no. 3 (Spring 1981): 60.

[127]Holland, 229.

before beginning to compose. He gives the following advice about having a setup in mind:

> If the instruments are already "positioned" in the composer's mind when he writes the music, and the plan of this positioning is given to the player by being reproduced in the score and parts, the performer's "work-movement" problems are solved. Stravinsky did this as long ago as *Historie du Soldat*, and incidentally, by evolving an original instrument layout, wrote some ingenious percussion music which could hardly be played in any other way.
>
> It must be remembered that it is not sufficient for an instrument to be just within reach. The player must be able to put himself in a satisfactory playing position.[128]

The setup problems of the percussionist are not often solved as easily as Brindle makes it appear, i.e., by placing a drawing in the score, but it is certainly helpful to know what the composer was visualizing.

Some setups are more complex and intricate than others. One of the masterpieces of the multiple-percussion solo repertoire is *Zyklus*, written by Karlheinz Stockhausen in 1959. Max Neuhaus, one of the early exponents of *Zyklus*, spoke of the difficulty of creating a workable setup even though Stockhausen had provided a drawing:

> They [the difficulties] began with the problem of "constructing the instrument;" i.e. discovering the optimum position for each one of the instruments and finding the means to place them in such positions. Thus they would solidify into one instrument upon which the maximum number of versions of the piece would be possible.
>
> This solidification of the thirteen instruments, which the piece employs, into one is largely something that occurs in the performer's mind; he begins to think of the vibraphone or the drums not as individual instruments, but as different areas or "notes" in the color scale he has available to him. However, there is one physical condition concerning the instrument placement that, I believe, enables

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[128]Brindle, *Contemporary Percussion*, 18-19.

> the performer to achieve this conception. This is that the movement from any one instrument to any other involves no more than one step. As long as one foot remains in place (in a given passage) the kinesthetic orientation is not lost.[129]

The concept of each multiple-percussion setup being a different "instrument" is an important aspect of percussion performance. One of the difficulties of this field is the need to be able to play all the instruments classified as "percussion;" i.e., those that produce their sound by being struck, scratched, or shaken. Composer-percussionist Frank McCarty described the problem: "Unlike the musician who develops skills on a single instrument, the percussionist must acquire a multiplicity of techniques and apply them to many different instruments."[130] That which is considered standard technique on individual instruments is constantly changing; for example, the work of marimba virtuosos such as Keiko Abe and Leigh Howard Stevens has expanded the technical possibilities on that instrument. Experimental sound-producing techniques further expand the pool of timbral resources. Considering each multiple-percussion setup as an individual instrument makes the list of "instruments to be mastered" even longer.

Holland provides some perspective on progress in the art of percussion:

> Composers' demands on percussion, instruments and players, have of course changed rather dramatically over the past thirty years. Personally, I can remember very well being sent Boulez's *Le Marteau* around 1960, and thinking it was a poor joke, and quite unplayable. How many times since have I thought how dangerous it can be to judge works on current technical standards. Today I regard *Le Marteau* as

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[129]Max Neuhaus, "Zyklus," *Percussionist* 3, no. 1 (November 1965), 6-7.

[130]Frank McCarty, "Percussion Notation," *Percussionist* 15 (Winter 1978): 49.

technically very demanding, but no more, and probably in twenty years time that degree of technique will be regarded as the norm.[131]

One of the leading researchers in the area of multiple-percussion setup design is Ron George, who described his research:

> In an effort to expand the potentials of multiple-percussion performance and composition over the past several years, I have developed a new type of multiple-percussion instrument which I call the percussion console. The concept behind the multiple-percussion console is fundamentally different from that of the traditional multiple-percussion setup in that:
> 1. The instruments are mounted in racks and on heavy adjustable stands which enables the player to use not only the normal playing area but also the area directly in front of the player as well as the area directly above the head.
> 2. The individual instruments, when mounted in racks and on the heavy adjustable stands are extremely compact allowing the performer much more control over a large number of individual instruments than has been previously possible. As a result of this, new technical and timbral resources have opened up large new areas of multiple-percussion composition and performance.[132]

> The uniqueness of the percussion console and any multiple-percussion instrument for that matter, lies in the fact that it is an open system. Unlike other Western instruments such as clarinet, piano, violin, etc. which cannot be changed to any great extent, a multiple-percussion instrument can be constructed in any manner or form desired to meet whatever needs the performer or composer has. There are an infinite number of ways to combine individual percussion instruments and groups of instruments and each new combination always suggests, if one examines the results closely, new possibilities for expanding the instrument and new methods of working with and writing for the instrument.[133]

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[131]James Holland, "Performers Platform: Writing for Percussion," *Composer* (London), 76/77 (Summer/Winter 1982): 2.

[132]Ron George, "Research into New Areas of Multiple-Percussion Performance and Composition," *Percussionist* 12, no. 3 (Spring 1975):110.

[133]Ibid.,127.

These immense possibilities are both a blessing and a curse for the percussionist and the composer.

Much of the solo and chamber multiple-percussion repertoire is of a virtuoso nature if one merely considers the number and speed of the notes that must be played. Mastery of logistical, visual, and aesthetic problems is also required.

Notation, Terminology, and other Percussion Problems

Notation is another problem with which the percussionist must deal. All musicians who perform music of the twentieth century encounter some new symbology but the difficulties for the multiple-percussionist are much greater. Since each setup is a new instrument, each composition requires a different notational system. While there have been attempts to standardize the symbology[134] and these ideas can be applied on a general basis, total standardization is impossible due to the many possible combinations of percussion instruments; for example, each of the six duos analyzed in this paper use different systems. The older duos, those by Russell, Hodkinson, and Lesemann, each use a five-line staff and adapt it to the unpitched instruments that are employed but, since each piece uses different instruments, each notational system is different. The other duos use flexible combinations of the pitched five-line staff, the non-pitched five-line staff (or several of them, depending on the activity of the moment), one-line or two-line staves, and graphic notation. Pitched and unpitched

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[134]McCarty, 49-60; Frank McCarty, "Symbols for Percussion Notation," *Percussive Notes Research Edition: Percussionist* 18, no. 1 (Fall 1980): 8-19.

instruments are often written on the same five-line staff, with appropriate identification of instruments given.

Percussion terminology is another area of difficulty and confusion. Even if only considering the standard percussion instruments, there is a long list of instruments which may be named in the score in English, French, German, Italian, or a host of other languages. The multiplicity of other percussion instruments and the techniques of playing them is also encountered in an assortment of languages.

Knowledge and careful use of terminology is crucial for both the percussionist and composer. This area is so important that *Percussive Notes* has a regular column entitled "Terms Used in Percussion."[135] No such column appears in *The Clarinet,* nor is it necessary. No percussion reference book claims to be complete, and it would probably be an impossible task, but there are a number of helpful sources. *Handbook of Percussion Instruments* by Peinkofer and Tannigel and *Dictionary of Percussion Terms* by Lang and Spivack are among them.[136]

Once all the terms are known, terminology problems are still not totally solved. There have been changes in usage of terms and cases where the same term means different things in different languages. An excerpt from *Handbook of Percussion Instruments* illustrates a portion of the problem:

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[135]Michael Rosen is the column's editor.

[136]Karl Peinkofer and Fritz Tannigel, *Handbook of Percussion Instruments: Their Characteristics and Playing Techniques, with Illustrations and Examples from the Literature* (Mainz: B. Schott's Sohne, 1969) trans. Kurt and Else Stone. (Mainz: B. Schott's Sohne, 1976): 32; Morris Lang and Larry Spivack, *Dictionary of Percussion Terms* (New York: Lang Percussion Co., 1977).

> Among such misnomers falls, for example, the tamtam (Malaysian-African *tammittam* meaning "drum") which we, in our musical world, consider to be a gong with indefinite pitch, while "gong" generally is considered by us to be an instrument with definite pitch (domed gong). Further adding to the confusion is the fact that the small, high-sounding tamtam is sometimes called gong in order to differentiate it from the large tamtam.
>
> An especially graphic example is the name *tambourin* which for some reason is widely used as the name for the tambourine. Only in French-speaking areas is *tambourin* used to designate the cylindrical long drum of the Provencals, while the tambourine there is called *tambour de basque*.
>
> In Italian, the diminution of *tamburo* is *tamburino,* which explains why certain Italian scores of older vintage, to avoid confusion, use *tamburo piccolo* for the small drum. Often, the proper instrument can only be determined by examining the entire score.[137]

Finances is another problem of the "total percussionist." The accumulation of an adequate supply of instruments is expensive and to have a more than adequate inventory is even more costly. In addition, the percussionist must have space for practice and instrument storage. If each multiple-percussion setup is, indeed, an "instrument," it must remain setup for long periods of time. If several multiple-percussion compositions are being rehearsed, the practice space must be large enough to accommodate several "instruments" at once.

Composers writing for percussion should do so with great care. Prudence is advised if one expects their music to be performed. This does not mean that composers should stifle their imaginations, however. Books such as Holland's *Percussion* and Peters' *The Drummer: Man* offer insights into performance problems and how percussionists think. Reference books

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[137]Peinkofer, 32.

and articles are also available.[138] Consultation with players of percussion instruments is more crucial than with players of other instruments. Holland urges composers to ask for help:

> The pitfalls for the composer in writing for percussion are endless. While I am aware that a few of my colleagues may not take any interest in what is being written in the 1980's, most of us *are* interested and more than willing to help or advise. Some of the most famous twentieth century composers have been happy to come and ask "is this possible?", or "will that work?" Percussionists (mostly) are very willing to help.[139]

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[138]Examples include *Percussive Notes*; Brindle, *Contemporary Percussion*; Peinkofer; H. Owen Reed and Joel T. Leach, *Scoring for Percussion: And the Instruments of the Percussion Section* (Englewood Cliffs, N. J.: Prentice-Hall, 1969).

[139]Holland, "Performers Platform," 2.

CHAPTER THREE

PAS DE DEUX BY ARMAND RUSSELL

Background

Armand King Russell was born in Seattle, Washington in 1932. He received B.A. and M.A. degrees in composition from the University of Washington and the Ph.D. in composition from the Eastman School of Music. His composition teachers were John Verrall, George McKay, Bernard Rogers, and Howard Hanson. Russell has been Professor of Music Theory and Composition at the University of Hawaii since 1961. He has also taught at Eastman during several summer sessions and at North Dakota State College from 1958-1961.[140]

A prolific composer, Russell has published solo, chamber, orchestral, band, and choral music.[141] Writing percussion music, with or without other instrumentalists and voice, is something Russell has been particularly interested in throughout his career. He was a doctoral student at Eastman during the mid-1950's, the embryonic days of the percussion

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[140]E. Ruth Anderson, comp. *Contemporary American Composers: A Biographical Dictionary,* 2d ed. (Boston: G. K. Hall, 1982), 444; Armand Russell, letter of February 18, 1988, to the author.

[141]His music is principally published by Bourne, HaMar Percussion, Music for Percussion, G. Schirmer, and Seesaw Music.

ensemble. An exciting atmosphere of discovery and experimentation prevailed. Russell's response to questions as to why he scored *Pas de Deux* for clarinet and percussion describes his general feeling toward percussion:

> My decision to use percussion was influenced foremost by the fact that I was married to a percussionist. I frequently considered the various things that I might do with percussion. The interest of the Eastman percussionists in new music and various ensemble combinations was another important factor particularly since I had several friends among these percussionists at Eastman.[142]

Pas de Deux, apparently the first clarinet-percussion duo ever written, was composed during the 1957-1958 academic year after Noel Stevens, a clarinet student at Eastman, requested a composition for his recital from Armand Russell. Peter Tanner played the percussion part on this recital. *Pas de Deux* is frequently performed on collegiate and other recitals. A survey of college recital programs done by Merrill Brown revealed that *Pas de Deux* was clearly the most performed clarinet-percussion duo at that time.[143] An informal poll by this author indicates that, if someone knows of or has played a clarinet-percussion duo, it is usually *Pas de Deux*.

Russell has since written three other duos for clarinet and percussion, each with different instrumentation.[144] He has, therefore, written not only the first but also the greatest number of works for the

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[142] Armand Russell, letter of July 30, 1988, to the author.

[143] The survey studied approximately 4500 programs from the 1971-1972 concert season of 701 colleges and universities with wind and percussion faculty. Of the 15,607 compositions, 779 were ensembles which included percussion. *Pas de Deux* was performed 9 times and was the only clarinet-percussion duo cited. Merrill Brown, "Percussion Solos and Ensembles Most Often Performed in College Student Recitals," *Percussionist* 12, no. 1 (Fall 1974): 35.

[144] Russell, July 30, 1988.

genre to date.[145] *The Celonas* is scored for B♭ clarinet and marimba and was written in 1976. *Ephemerons* is scored for B♭ clarinet and two triangles, three suspended cymbals, five tomtoms, two high suspended bells, gong, and bell tree. It was composed in 1977 and awaits publication by G. Schirmer. *Prelusions* was written in 1981 and is scored for E♭, B♭, and bass clarinets (one player) and vibraphone.

Pas de Deux

Pas de Deux is a three-movement work of approximately seven minutes length. Each of the movements is in ternary form, although their internal schemes are different. The first movement, Prologue and March, consists of a slow introduction, Prologue, and a fast tripartite March. The untitled second movement is slow. The third movement is rather quick and titled Scherzo. This is a cyclic composition since Russell turns the theme of the March into the theme of the Scherzo by changing the time signature from 2/4 to 6/8. There is also some correlation of melodic cells between movements.

Each movement is scored for different percussion instruments in duet with the B♭ soprano clarinet. The March utilizes a small multiple-percussion setup of snare drum, tomtom, triangle, and suspended cymbal. The second movement is scored for four tuned drums and the Scherzo for xylophone. This duo could be played by good high school musicians since the

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[145]The Finnish composer Tauno Marttinen and the Colombian/West German composer Francisco Zumaqué have also written four duos. *Duo* (n.d.), *Duo, Op. 66/2* (1971), *Duo, Op. 220* (1983), and *Metamorfos-muodonmuutos, Op. 245* (1985) are the clarinet-percussion compositions by Marttinen. Zumaqué composed all of his four duos in 1988. They are entitled *Carrizo, Champigana, Improvisación,* and *Onamá.*

percussion equipment requirements and range of the clarinet part (written pitches e-e^{b3}) are modest and no special effects or notations are used.

Analyzing music for "unpitched" percussion can be problematic. Harmony and melody, the prime focus of traditional analysis, are supplanted by other more important elements. Comments from a lecture by Armand Russell are helpful for the analysis of *Pas de Deux* and as a general approach for analyzing much percussion music. Rhythm, relative pitch, timbre, dynamics, and form are elements that deserve prime consideration. Russell describes his method: "As a composer my conception of percussion writing really starts and hinges on line."[146] He shapes small rhythmic figures to include "focal points" and then joins several figures to create larger figures which, in turn, have focal points.[147] Focus and direction are the keys:

> This sense of direction and of motion toward goals is a very important thing in my mind when it comes to development of line and melodic treatment for percussion.[148]

Creating melodies with unpitched percussion instruments such as drums, cymbals, wood blocks, and triangles is one of the innovations of composition in the twentieth century. Snare drums, tomtoms, bongos, congas, and similar drums are tuneable to a small extent. These and other instruments can be arranged in order of size and relative pitch, thus making melodic writing possible. According to Russell:

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[146]Armand Russell, panelist on National MENC Panel Discussion: "Percussion Music - A Musical Experience," in *Percussionist* 7, no. 2 (December 1969): 70.

[147]Ibid.

[148]Ibid., 71.

> This means that we . . . must consider a fresh approach to pitch in which a relative pitch approach is used as opposed to an exact, absolute or determined approach to pitch. From this point of view, you can develop a kind of line, then, in a set of tom-toms and a line in temple blocks and then relate it to a similar line on xylophone.[149]

The dynamic range and timbre spectrum of percussion are enormous and should be exploited, especially when pitches are limited. Russell treats timbre as "monochrome" and "polychrome" when structuring melodic lines. A monochromatic line "resembles a shift of tonality in traditional terms. You can mix the colors in various ways with the predominance of one family or one part of a family in the percussion section."[150] On the other hand, Russell suggests variety through the use of what he calls " 'polychrome' lines, that is a single melodic line that shifts its colors as it moves from instrument to instrument."[151]

He also feels it necessary to treat form differently in percussion pieces:

> Percussion writing leads the composer, or I think it should lead him, toward a slightly different consideration of form. . . . Recapitulation is less exact and has the pressure of change forced on it because of the preceding situations. Phrases are variable units: they may be suggested, they may be clear, they may be unclear. There is a give and take waxing and waning, because of the nature of the resources used.[152]

Movement I

The Prologue is scored for clarinet alone and is a slow, **cantabile** introduction to the first movement. It is largely in 3/4 time thereby

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[149]Ibid.
[150]Ibid.
[151]Ibid.
[152]Ibid., 72.

contrasting with the 2/4 time signature of the main portion of the first movement, the March. The middle measures are in 4/4 and 2/4 time, respectively. The Prologue's sixteen measures are asymmetrically divided into three phrases of four, seven, and five measures length. The first and third phrases are soft and in the chalumeau register while the middle phrase is loud and uses the clarion register.

Eleven tones of the chromatic scale appear at least once in the Prologue[153] but the tonal center seems to be F, which begins the Prologue and occurs often. The dominant, leading-tone, and supertonic pitches point toward tonic and appear as frequently. The Prologue ends with a half cadence. When the March begins, this cadence can be retroactively viewed as an elided deceptive cadence which serves as an effective harmonic directional device. The harmony of the Prologue and March is melodically conceived because it consists of unaccompanied clarinet and, in the March, clarinet and unpitched percussion.[154]

The melodic style of the clarinet part can be described, to borrow a term from Leon Dallin, as "nonvocal style."[155] The melody, illustrated in Example 9, is highly disjunct and spans a range of nearly three octaves. Leaps are large, frequent, and would be difficult to sing. The melody could have been condensed to approximately one octave but the large leaps make the melody seem more expansive and expressive. Such use of "octave displacement" creates an angularity that is often used in twentieth-century music.

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[153]The subtonic is the omitted pitch.

[154]Melodically-conceived harmony occurs in all the duos when the clarinet is paired only with unpitched percussion.

[155]Leon Dallin, *Techniques of Twentieth Century Composition*, rev. ed. (Dubuque: William C. Brown, 1964), 31-34.

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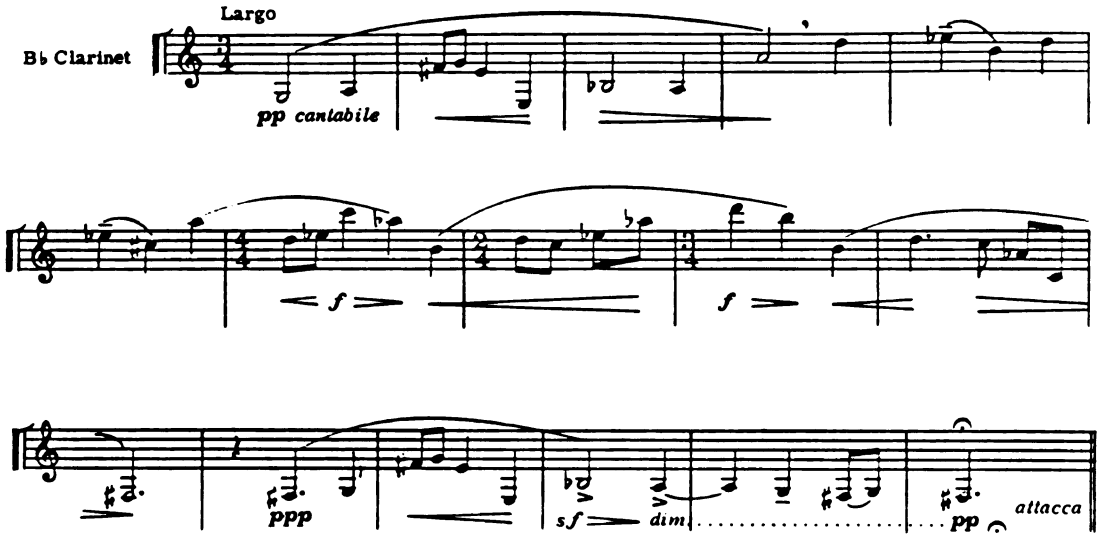
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[155]Leon Dallin, *Techniques of Twentieth Century Composition*, rev. ed. (Dubuque: William C. Brown, 1964), 31-34.

Example 9. Mvt. I, Prologue, mm. 1-16, clarinet solo.



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Although the Prologue serves as an introduction to the first movement proper, the March begins with its own fifteen-measure introduction. The overall form of the March is ternary, A-B-A' with an introduction. Section A begins in m. 32 with a three-measure percussion introduction to the march theme. Section B begins in m. 67 with a four-measure percussion introduction. This is followed by the clarinet melody, which contrasts the march theme of Section A. The final section, A', begins in m. 120 with a six-measure percussion introduction to the original march theme. Suspense is created by the successively longer introductions and the consequent increased wait for each appearance of the melody.

The introduction of the March (mm. 17-31) begins with the clarinet continuing to play alone as in the Prologue. The melody is in the key of D minor, the relative minor of F major. When the percussion finally enters, a

three-measure, two-stage sequence occurs. The sequential stages suggest the key centers of F and D, respectively.

Other key centers used in this movement, $E^{\flat}$, $B^{\flat}$, and C, can be consecutively related to F through the circle of fifths. The lydian mode, a major mode, is used frequently.[156] All of these major tonalities are closely-related to F except for $E^{\flat}$, which is the next-closest key to the "closely-related" group.

Section A (mm. 32-downbeat of m. 67) is in ternary form: Parts a (mm. 32-39) - b (mm. 40-55) - a' (mm. 56-67). It begins with a polychrome line; the tomtom, cymbals, and snare drum play alternate eighth notes and the clarinet enters with the first statement of the theme of the March in m. 35. (Example 10.) The theme is nine beats long, in F lydian mode, and ends with a half cadence. Derivative material, largely based on the rhythm of two sixteenth notes and an eighth note, ensues in Part b and the march theme returns in $E^{\flat}$ lydian mode with a slight rhythmic change.[157] Phrase extension begins the transition into Section B.

Section B (mm. 67-119), in binary form, is divided into a lively first part (Part c) and a lyrical second part (Part d). It is more harmonically ambiguous than the preceding parts of the March, which are clearly in the aeolian and lydian modes. Part c (mm. 67-91) of Section B uses eleven notes of the chromatic scale, omitting $C^{\sharp}/D^{\flat}$. $B^{\flat}$ acts as tonic, F as the dominant and both are prominent pitches. The fourth and seventh scale degrees

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[156]"Modes" are defined here as pitch material derived from intervals and will not include the medieval harmonic implications. The lydian mode is identified as a "major" mode because it begins like a major scale, i.e., with two whole-steps. Its fourth scale degree is an augmented fourth, not a perfect fourth as in the major scale, above tonic.

[157]The eighth and two sixteenth notes are reversed in m. 59.

Example 10. Mvt. I, mm. 32-39, polychrome percussion line and clarinet with march theme.



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fluctuate, creating modal ambiguity. The percussion accompaniment is confined to the two drums. Melodically, Part c consists of a seven-measure phrase which is repeated with a similar contour but some pitches (largely, the written pitches of C and G) remain the same and some pitches (largely, the written pitches of F and B) change through the use of accidentals. This can be clearly seen in Example 11. The second phrase (seven measures before "E") is extended and derivative material is used in the transition into Part d.

Part d (mm. 91-119) of Section B is almost as harmonically ambiguous as Part c. It uses all of the tones of the chromatic scale except two, C♯/D♭ and F♯/G♭.[158] C is the key center for Part d which is in harmonic minor but includes some split thirds.[159] F, now functioning as the subdominant, continues to be a prominent note. The percussion accompanies using the metallic sounds of triangle and cymbal. Six four-measure melodic

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[158]C♯/D♭ was omitted and F♯/G♭ was rarely used in the previous Part c.

[159]"Split thirds" are defined as superimposed major and minor triads; e.g. C-E♭-E-G.

Example 11. Mvt. I, mm. 69-85, seven-measure clarinet phrase repeated with similar contour.



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phrases, sometimes punctuated by an extra measure of percussion accompaniment, are grouped to form three periods with an a-b-a' scheme. This tiniest of "a" sections seems reminiscent of the Prologue.

The last large section of the March (mm. 120-142) is designated A' because of alterations to the primary melodic material, the march theme, and the polychromatic percussion accompaniment. This demonstrates Russell's previously-quoted statement that "recapitulation is less exact and has the pressure of change forced on it because of the preceding situations."[160] Section A' is based entirely on the F lydian mode. The march theme reappears in its original form in m. 126 but is interrupted and extended after three measures. The final statement of the march theme is next. It appears intact, however, it is an octave lower and has the slight rhythmic change used previously. A six-measure codetta follows.

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[160]Russell, MENC, 72.

Movement II

The second movement, marked **Andante resoluto**, is also in A-B-A' form. There is no introduction and a short codetta is incorporated into the final section. The clarinet only plays in Section B and the codetta. Since the first movement included a long solo part for the clarinetist, it seems appropriate that the percussionist should receive a similar opportunity. The solos for drums in this movement aptly demonstrate melodic writing for unpitched percussion.

The **Andante resoluto** is a typical slow movement in that a three-movement composition is often in a fast-slow-fast arrangement, but there is a considerable amount of activity within the slow beats. This is no doubt necessary because drums do not sustain sound except through the use of rolls. The mood is generally quieter, gentler, and darker than that of the surrounding movements and thus the function of a contrasting slow movement is fulfilled. Russell's indication to use "soft timpani sticks" contributes to the mood.

Although the composer the specified pitches of e, f, a*, and b for the tuning of the four drums, these pitches are primarily used to create relative pitch relationships between the drums. There is some pitch relationship to the four-note central cell of the clarinet part but the drum "pitches" do not effect the harmony of Movement II.[161]

Section A is twelve measures long and divided into three four-measure phrases of solo drum. While each phrase begins quietly, each one has a different dynamic contour. Sudden dynamic changes, including **fpp**, **sff**, and accents, are used as well as some gentle nuances. Drive to the cadence is present in each case. The first phrase ends loudly while the

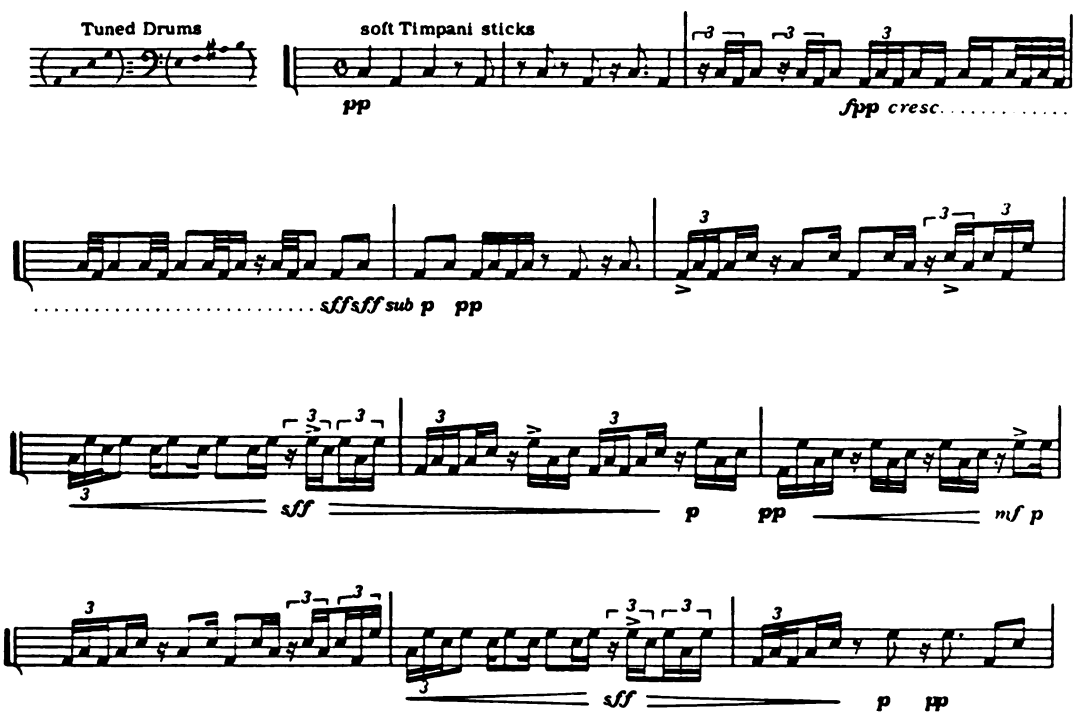
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[161]Russell, July 30, 1988.

other two end quietly. The end of the third phrase elides with Section B as a crescendo activates the clarinet.

The first two measures of Movement II establish the slow mood, using quarter notes and then eighth notes as the quickest notes. After the first two measures, Section A primarily consists of divisions of the beat into varied patterns of four, six, and eight parts. Several factors contribute to the sense of development through this section, which is illustrated in Example 12. The first phrase uses only the lowest two drums. The second phrase begins with the lowest two drums, adds the next highest, and finishes using all four drums. The third phrase uses all four drums with equal frequency.

Example 12. Mvt. II, mm. 1-12, Section A, drum solo.

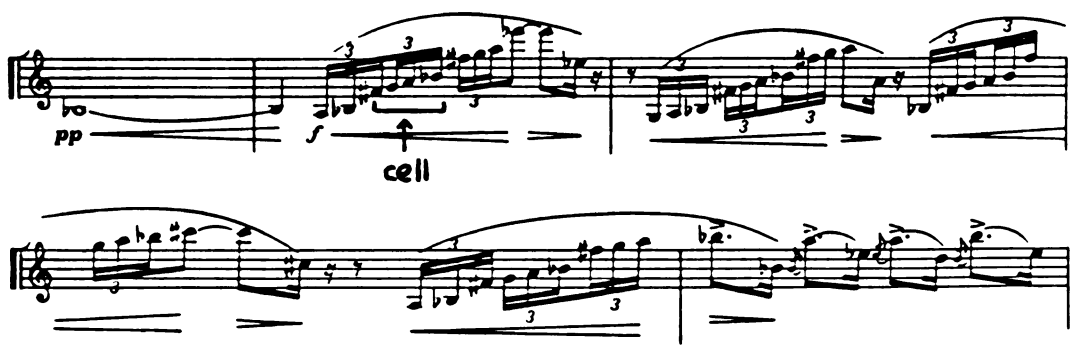


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The first measure of each phrase contains more activity than that of the previous phrase. The second and third phrases include two and one-fourth measures of identical material beginning in the second measure of the phrases (m. 6 and m. 10). The varied rhythmic fluctuation and drive adds to the drama of the lengthy drum solo.

The clarinet part revolves around two pairs of half-steps separated by a whole-step constituting a four-note central cell, E-F and G-A^{b}. This cell is the basis for most of the flurries of quick notes. (Example 13.)

Example 13. Mvt. II, mm. 13-17, clarinet part with four-note central cell, octave leap, and transformation.



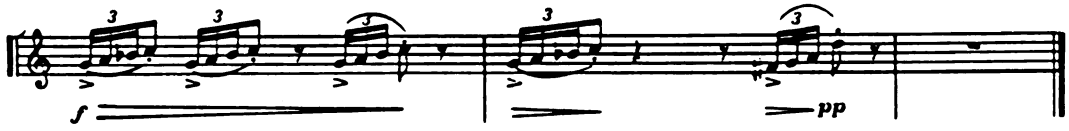
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The pitch D^{b} also occurs frequently but functions differently. It is used in prominent places, most often as the top note and focal point of phrases. C, although not used as often, functions similarly and seems to eventually function as tonic, since both Section B and the codetta end with the same pitches, E-F-G-C. Ten chromatic tones are used in this movement.[162] The codetta's central cell (Example 14) differs by one note from the original

[162] F$^{\#}$/G^{b} and A are omitted.

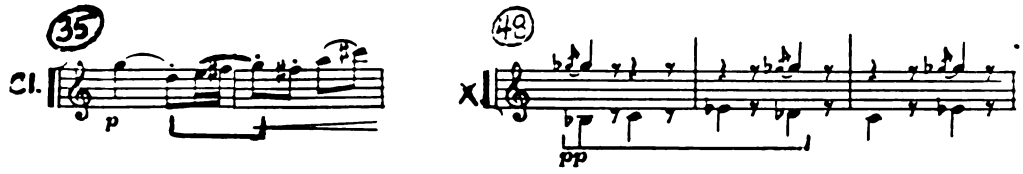
central cell and is an inside-out version, major second - minor second - major second. These and other versions (Example 15) of the four-note cell are found in other movements.

Example 14. Mvt. II, mm. 32-34, four-note cell of codetta.



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Example 15. Other versions of four-note cell: Mvt. I, mm. 35-36, march theme of clarinet part (same notes also found in scherzo theme of Mvt. III); Mvt. III, mm. 48-50, xylophone ostinato.



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The clarinet enters and joins the crescendo of the drums to begin Section B. The crescendo by the clarinet develops into a flurry of sextuplets followed by a dramatic octave leap downward. This pattern appears four times, starting on different notes of the four-note central cell and alternately on and off the beat. The pattern of octave leaps is transformed using grace notes and interval contraction. (Example 13.) Meanwhile the percussion part has become a slow, unobtrusive accompaniment for the clarinet. The only equal partnership of this movement begins with the

thirty-second notes in m. 18 and lasts for eight measures, until the end of Section B. This is marked by frenzied activity which gradually abates as the section draws to a close.

Section A' is only nine measures long. It is divided into two phrases of three and one-half and five and one-half measures length, respectively. The rhythm of the first phrase is exactly like that of the first phrase of Movement II except that two beats (beats 9 and 10) are omitted and the pitch succession of the drums is slightly altered. The last phrase incorporates a three-measure codetta and is composed of repeated sixteenth notes in the drums until the penultimate measure. The melodic contour of the drum part is similar to previous material, however, this is the only area in either Sections A or A' to incorporate such a long steady rhythmic pattern. Offbeat accents are used in the codetta serve to confuse the feeling of pulse and provide rhythmic interest.

Movement III

The third movement, Scherzo, is written for clarinet and xylophone. It is the only movement which uses a pitched percussion instrument and, thus the only movement in which tonality can be considered vertically and horizontally, that is, harmonically and melodically. The xylophone is not a resonant instrument, however. This fact, coupled with the high frequency of the pitches, makes the xylophone chords into rather fleeting experiences so, although vertical sonorities have been considered, a horizontal approach to tonality seems more appropriate.

A notational difficulty noticed during analysis should be mentioned. The problem found in the Scherzo effects the analysis of sounding chord

inversions and probably stems from a logical desire to avoid excessive use of ledger lines. In 1958 the standard written range of the xylophone was f^1-c^5.[163] Xylophones traditionally sound one octave higher than their written range, but the written range used in the xylophone part of the Scherzo is g-c^3, i.e., sounding two octaves higher than written. By notating in this fashion, Russell kept the notes close to or within the staff. Consequently the part must be analyzed as sounding two octaves higher than written. In general percussionists are accustomed to dealing with many notational systems and difficulties and fitting parts onto instruments, so would play the notes one octave higher than written in this situation.

The Scherzo is another example of ternary form and is in the mold of a typical dance movement. It includes a literal repeat, using the **dal capo** indication, so that the specific form is A-B-A, plus a composer-labelled coda of four measures.[164] The exposition of Section A comprises mm. 1-21 and the recapitulation is mm. 74-94. Section B includes mm. 22-73. The coda consists of four extra measures at the end. The time signature is 6/8, except for one 9/8 measure in the middle of the A section and a concluding 3/8 measure in both the A and B sections. This provides an interruption of the regular stress pattern and catches the listeners by surprise.

The vertical harmonies are a mixture of tertian and quartal sonorities and clusters. These result from fast-moving melodic lines and frequent pedal points and ostinati. The lydian mode, largely on F, prevails in

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[163]In 1989, the range can be extended down as far as c^1, giving a four-octave written range, however, xylophones with a variety of ranges are common.

[164]It seems that "codetta" might be a better term, because of its brevity, but the term "coda" was probably used for the convenience of the **D. C. al Coda** indication.

both melodic and harmonic contexts. An extended portion of Section B is in $B^{\flat}$ natural minor. Other tonalities are touched briefly and some chromaticism exists.

The march theme (mm. 35-39 of Movement I) appears the theme of the Scherzo in the first four measures of Movement III. While the pitches, rhythms, and articulations remain exactly the same, the time signature is changed from 2/4 to 6/8. The march theme is an eighteen-note theme, or actually, nine notes which are repeated exactly. (Example 16.) In the first statement of the scherzo theme, rests are inserted between the two sets of nine notes. (Example 16.) The only other rendition of the scherzo theme (mm. 15-17) occurs without rests.

Example 16. Mvt. I, mm. 35-39, march theme in 2/4; Mvt. III, mm. 1-4, scherzo theme in 6/8.



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A three-note cell provides melodic material for much of the movement. Although its first appearance in the Scherzo is as the first three notes of the upper line of the xylophone part, this cell is also found in notes three, four, and five of the march-scherzo theme. As Example 17 shows, the cell appears as three notes moving in the same direction (down in the

xylophone and up in the clarinet) with the intervals of a major second on the bottom and a minor second on top. The composite interval[165] of a minor third becomes prominent when the three notes are rearranged from scalewise order, resulting in a pattern with a change of direction. The rhythmic treatment of this melodic cell varies. For example, in mm. 10-14, the cell appears inverted, with the minor second as the lower interval in a two-stage sequence. The cell is transformed in a variety of other ways, such as through interval expansion of the three-note cell and by addition of another major second, yielding a composite perfect fourth and a four-note cell.

Example 17. Mvt. III, mm. 1-2, three-note cell (subset of four-note cell shown in Ex. 15).



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As in Movement I, Section A of Movement III is an example of internal ternary form, a (mm. 1-5) - b (mm. 6-14) - a' (mm. 15-21). The scherzo theme is found in the clarinet part in Parts a and a' of Section A. In Part a, the upper line of the xylophone part establishes a countermelody

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[165]"Composite interval" is defined as the interval between the outermost notes of the pattern.

based on scalewise use of the three-note cell while the notes of the lower line occur on the beats. This section is entirely in the F lydian mode. Part a' begins in F lydian mode with an ascending, scalewise xylophone countermelody and the same on-beat accompaniment. After the clarinet states the scherzo theme, four measures of harmonically volatile transition occur. The three-note cell appears with change of direction. Pedal points are an important feature. The section ends in F.

Part b (mm. 6-14) of Section A can be described as episodic, motivic, and harmonically active. The modes of E^{b} lydian, B phrygian, and $F^{\#}$ phrygian with chromaticism are passed through on the return to Part a' and the key center of F. The three-note cell is used in scalewise fashion by the xylophone in mm. 6-8 and with inversion and change of direction by the clarinet in the sequential mm. of 10-14. The xylophone part changes against the sequence of the clarinet part.

As in the March, Section B of the Scherzo is in binary form. The two parts are divided from each other and the A sections by double barlines. Part c (mm. 22-47) of Section B is in the lydian mode; A^{b} lydian lasts into m. 36 and then changes to F lydian. A stylistic change also occurs at this point. Mm. 22-36 are homophonic with melody and accompaniment alternating between the two instruments. There is some quartal harmony and when the xylophone takes up the melody, it is in imitation of the clarinet. Mm. 36-47 of Part c of Section B are in a contrapuntal style similar to the episodic second section of Section A (mm. 6-14). This passage begins with the clarinet temporarily using the whole-tone scale but then settles into F lydian mode. The three-note cell is used in its upright, inverted, scalewise, and changing-direction forms. Pedal tones reappear. In

mm. 41-43, the intervallic cell is expanded to a pair of major seconds in the xylophone part.

Part d of Section B (mm. 48-73) is in B♭ natural minor. A major second is added to the top of the three-note cell to create a symmetrical four-note cell with the composite range of a perfect fourth. This cell, when stated scalewise, has intervals of major, minor, and major second. It is the same configuration that appeared in the codetta of Movement II. It is based on the four-note cell with direction change (in the xylophone part's lower line), the three-note cell (in the clarinet part), and the pedal tone idea (in the upper line of the xylophone part). This can be seen in Example 18. Some slight alterations of this material occur; for example, the four-note cell is used by the clarinet in mm. 54-56 but the upper interval is expanded from a major second to a major third. The upper line of the xylophone part uses the four-note cell in mm. 60-65 but it has been reordered so that the major seconds are on the bottom and the minor second is on the top. The composite interval remains a perfect fourth. Diminution is used on the figure.

Rhythmic stratification is important here. The rendition of the cell by the clarinet is always quite slow. The xylophonist plays against it in approximate double time and, in mm. 60-65, in double and quadruple time. (Example 18.) The last several measures of Section B become increasingly chromatic and transitional. The section ends with a C chord (without the third) which serves as a half cadence for the return to Section A, which like the March, has F as the tonal center.

Example 18. Mvt. III, mm. 48-64, xylophone with four-note cell and pedal tones; clarinet with three-note cell; rhythmic stratification.



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Russell's compositional style in *Pas de Deux* can be described, to use a term of Reginald Smith Brindle's, as "free diatonicism."[166] There are definite tonal centers in this music. Scales of seven notes or less are used most often. Chromaticism also occurs at transitional points.

Polychrome can be observed when viewing the composition as a whole. Each of the movements is scored for different percussion instruments. The monochrome technique is used in Movement II with four tuned drums and Movement III with xylophone. It is also used in two ways (drums vs. metals) in the B section of the polychromatic Movement I.

Pas de Deux is not an avant garde composition, nor was it in 1958. Although clearly rooted in musical traditions of the eighteenth and

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[166]Brindle, *Musical Composition*, 92.

nineteenth centuries, it does not sound like an "old" piece because a host of variation techniques common to twentieth-century music are employed. Timbre is an important component. Phrases tend to be irregular in length and asymmetrical within periods and larger sections. Modal scales predominate over major and minor scales. Although ternary form is used exclusively, the movements are all constructed differently.

CHAPTER FOUR

DRAWINGS: SET NO. 3 BY SYDNEY HODKINSON

Background

Sydney Phillip Hodkinson was born in Winnipeg, Manitoba, Canada in 1934. His adult life has been spent in the United States. He studied at the Eastman School of Music (B.M. and M.M.) and the University of Michigan (D.M.A.). Hodkinson's career as a university professor began in 1958 and has included positions at the University of Virginia, Ohio University, the University of Michigan, and Southern Methodist University. He has taught composition and conducting at the Eastman School of Music since 1973 and directs Eastman's virtuoso new-music ensemble, "Music Nova."[167]

Hodkinson's list of published compositions,[168] commissions, recordings, and awards is extensive. His compositions include the genres of opera and oratorio, band, choral, and orchestral music as well as solo instrumental works and chamber music. He has completed commissions for a wide range of performers, such as organist William Albright, English horn

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[167]Anderson, 241; *Baker's Biographical Dictionary of Musicians,* 7th ed., s.v. "Sydney P. Hodkinson;" *New Grove Dictionary of American Music,* s.v. "Sydney Hodkinson," by James G. Roy, Jr.; publicity materials of Sydney Hodkinson; correspondence and conversations with Sydney Hodkinson.

[168]His principal publishers are the American Composers' Alliance, Associated Music Publishers, Music for Percussion, and Theodore Presser.

virtuoso Thomas Stacy, the "Blackearth Percussion Group," the "Verdehr Trio," the New York Philharmonic Orchestra, the Banff Centre for the Arts, as well as church choirs and public school ensembles.[169]

Hodkinson studied with an array of prominent composers who write in a broad range of styles. He has fused this background into a colorful and imaginative style in which "he explores with pragmatic coherence all resources of modern techniques."[170] His primary composition teachers were Louis Mennini, Bernard Rogers, Leslie Bassett, Niccolò Castiglioni, Ross Lee Finney, and George B. Wilson. He also studied briefly with Elliott Carter, Roger Sessions, and Milton Babbitt.

Many of Hodkinson's compositions have catchy titles: for example, *Edge of the Olde One* (for English horn, strings, and percussion), *One Man's Meat* (for double bass solo), *Another Man's Poison* (for brass quintet), and *Bumberboom: Scherzo Diabolique* (for symphony orchestra). His music is as free-spirited as the titles. Composer Elliott Schwartz spoke of Hodkinson's "great fondness for the musically bizarre, [and] the elegant becoming nightmarish."[171] The musical result is often "the eclectic juxtaposition of impossibly matched styles."[172] James Roy wrote:

> As a composer, Hodkinson is distinguished by his ability to write in idioms as dissimilar as jazz and electronic music with sensitivity and appeal, and by his grasp of instrumental capabilities.[173]

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[169] Ibid.

[170] *Baker's*, "Hodkinson."

[171] Elliott Schwartz, "The Gamut of American Music," *Music and Musicians* 21, no. 3 (November 1972): 22.

[172] Ibid.

[173] *Grove American Music*, "Hodkinson."

Drawings: Set No. 3

Drawings: Set No. 3 was the second composition written for clarinet-percussion duo. It was written in 1961 and commissioned by the National Association of College Wind and Percussion Instructors for a performance at the Southern Division Meeting of the Music Educators' National Conference. Composer-clarinetist Hodkinson and percussionist Robert K. Myers performed the premiere in April 1961 in Asheville, North Carolina.[174] *Drawings: Set No. 3*, like *Pas de Deux*, is published by Music for Percussion, Inc., and was published in 1969.

The dedication reads "to Charles Smith, artist and friend."[175] Smith was an early proponent of block lithography and specialized in miniatures.[176] He and Hodkinson were both teaching at the University of Virginia in 1961. The title and artistic dedication are probably interrelated. The title also aptly describes the sketch-like movements of *Drawings: Set No. 3*.

Hodkinson was in the midst of writing other percussion music at the time he composed this duo.[177] He knew Armand Russell and attended the Eastman School of Music at the same time but was unaware of *Pas de Deux* and it did not, therefore, provide an impetus for the creation of his own duo. Hodkinson's interest in percussion and the fact that an accomplished percussionist was in residence at the University of Virginia, led him to write for Myers and himself.[178]

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[174]Sydney Hodkinson, *Drawings: Set No. 3* (New York: Music for Percussion, Inc., 1969), inside front cover.

[175]Ibid.

[176]Conversation with Sydney Hodkinson, May 7, 1989.

[177]*Drawings: Set No. 1* (1960) is a percussion quartet and *Drawings: Set No. 4* (1961) is a percussion trio.

[178]Conversation with Sydney Hodkinson, May 7, 1989.

Drawings: Set No. 3, a five-movement work of approximately seven and one-half minutes length, is scored for B♭ soprano clarinet and three drums. The instructions read: "three drums of indefinite pitches should be used (high, medium, and low). Preference is given to open end instruments (single head timbales are ideal)."[179] The flexibility of instruments inherent in these instructions will continue to result in many performances because almost every percussionist has access to this equipment.

Although the instrumentation is less varied than that of *Pas de Deux,* the clarinet and drums combine to produce a wide range of timbres, effects, and styles within the monochromatic percussion setting. Various mallets and striking locations produce a spectrum of drum sounds. Brushes (open and half-closed), wool mallets (hard and soft), drinking straws, and timbale sticks are used in Movements I, II, III, and V, respectively. Special effects of flutter-tonguing, subtone, vibrato, note-bending, and glissandi expand the expressive range of the clarinet.[180] The drums are pitched in a relative arrangement from high to low and are used melodically at some time in each of the four movements in which they play. They imitate the contour of pitched melodies and their melodic role is evident when the clarinet and drums exchange lines or play imitatively. Harmony is implied melodically only in the clarinet part since the drums are unpitched.

Drawings: Set No. 3 is a twelve-tone composition that is not tonal but does not negate all tonal implications. The row appears throughout the composition. When condensed to its smallest possible range, it consists of the intervals of one minor third, one perfect fourth, and nine minor seconds.

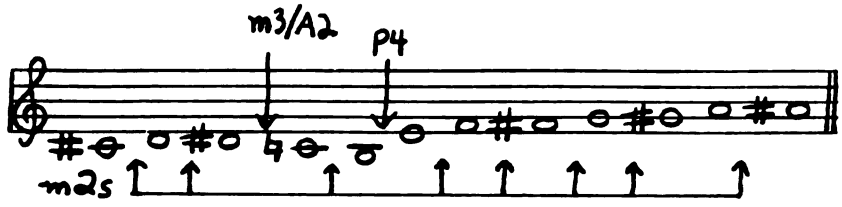
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[179]Hodkinson, *Drawings,* inside front cover.

[180]Multiphonics are not used. They were just beginning to enter concert music in 1961.

(See Example 19.) These intervals, especially the seconds, are frequently inverted in order to add interest to the melodic line.

Example 19. Intervals of the row.



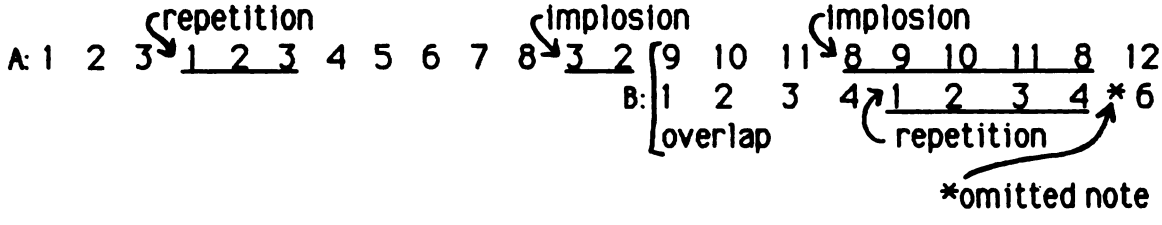
The row is all-combinatorial; for example, P^0 displays hexachordal combinatoriality with R^0, P^6, R^6, I^1, RI^1, I^7, and RI^7. The matrix is shown in Example 20.

The row is used flexibly and treated differently in each movement. Rows usually overlap. Notes or note groups are repeated and recur by way of implosion in every movement. Implosion is the embedding of extra notes or note groups into the row. (Example 21.) Notes are sometimes omitted or substituted. These alterations of the row are diagrammed in Example 21. The first and last movements use the row with the least regularity. A comparison of row treatments at the beginning of each movement is shown in Example 22.

Example 20. The matrix (concert pitch).

	I0	I1	I2	I11	I10	I3	I4	I5	I6	I7	I8	I9	
P0	C♯	D	D♯	C	B	E	F	F♯	G	G♯	A	A♯	R0
P11	C	C♯	D	B	A♯	D♯	E	F	F♯	G	G♯	A	R11
P10	B	C	C♯	A♯	A	D	D♯	E	F	F♯	G	G♯	R10
P1	D	D♯	E	C♯	C	F	F♯	G	G♯	A	A♯	B	R1
P2	D♯	E	F	D	C♯	F♯	G	G♯	A	A♯	B	C	R2
P9	A♯	B	C	A	G♯	C♯	D	D♯	E	F	F♯	G	R9
P8	A	A♯	B	G♯	G	C	C♯	D	D♯	E	F	F♯	R8
P7	G♯	A	A♯	G	F♯	B	C	C♯	D	D♯	E	F	R7
P6	G	G♯	A	F♯	F	A♯	B	C	C♯	D	D♯	E	R6
P5	F♯	G	G♯	F	E	A	A♯	B	C	C♯	D	D♯	R5
P4	F	F♯	G	E	D♯	G♯	A	A♯	B	C	C♯	D	R4
P3	E	F	F♯	D♯	D	G	G♯	A	A♯	B	C	C♯	R3
	RI0	RI1	RI2	RI11	RI10	RI3	RI4	RI5	RI6	RI7	RI8	RI9	

Example 21. Row alterations.



Example 22. Row use at the beginning of each movement.

Movement I

P^0: 1-2-3-(1-2-3)-4-5-6-7-8-(3-2)-9-10-11-(8--9-10-11-8)-12 RI^3: 1-

P^6:1--2--3--4-(1--2--3--4)--6-7-8--(3-2)-9-11-10-[no E=12] RI^9: [no E=4]-5--6---(5)--7-

P^9: 1-2-3-4-5--6-(3--2)-8-7-[no E=9]-(1-10-4-10-5-10)-11-(10)-12

Movement II

P^6: 1-2-3-(5)-4-5-6-7-8-(3-2)-9-10-11-------[no E=12]

P^0: 1--2--3-4-5-(3)-[noE=6]-7-8-(3)-9-(2)-10-11-12

P^3:[no E=1]-2-3--4--6--5--7--8--9--(3-6)-10-11-12

P^{10}: 1--2--3-4-5-6-7-8-(3-2)-8-10-

Movement III

I^5: 1-2-3-4-5-6-7-8-(3-2)-9-10-11-(8-7)-12

I^2: 1-2-3--4-5--6-7--8--(3-2)--9-10-11-(8-7)-11-12

I^8: 1--2--3--4-5--(3)-6-7-(2-1)-8-9-10-(7-3)-11-12

I^6: 1-2--3-4-5--6-7--8-(3-2)--9-10-11-[Bb=12,omit/sub]

I^3: 1-2--3--4-5--6--7-8-[Bb=9,omit/sub]-(3-2)-10-11-(8-

I^9: [Bb=1,omit/sub]--2--3--4-

Movement IV

RI^7: 7-8-9-(7--8-9)-10-11-12

RI^1: 1-(6-5)--2--3--4-(11-10)-5-6--7--8--9-10-11-12

RI^4: 1-(6--5)--2--3-4-(11-10)-5-6--7--8--9--10-11-12

RI^8: 1-2--3-(10-7)--4--5--6--7--8-9-10-11-12

RI^{11}:1--2--3--4-(6-10)-5-6--7--8--9--10-11-12

RI^2: 1-(6--5)-2-3--4-(11-10)-5--6--7-8-9-10-11-12

RI^9: 1--2--3--

Movement V

R^6: 7-8-9-10-11-12 R^2: 5-4--1--2--3--4-5-3-6-2-1-4 R^4: 3-2-4-1-5-6 R^3: 7-8-9-10-11-

R^0: 1-6-5--2--3--4-1-4 R^9: 7-8-9-10-11-12

R^9: 1-6-5-4-3-5-2-1 R^0: 7-8-9-10-11-12

Theorist Rudolph Reti's discussion of Schoenberg's development and subsequent use of the twelve-tone technique included this comment:

> Schoenberg . . . did not hesitate to omit notes in the row or replace them through [sic] others in instances where they did not suit his compositional intention. Although from a purist point of view this would appear as a cardinal sin against the spirit of twelve-tonism, it speaks strongly for Schoenberg as a composer. He was much too intense a musician not to follow his musical instinct in a contest between it and his theories.[181]

The same can be said of Hodkinson and his creative methods in *Drawings: Set No. 3*.

Drawings: Set No. 3 illustrates Hodkinson's eclectic style. Diverse elements of serialism, jazz, and pre-twentieth century styles are combined to create music that listeners find accessible. Obvious jazz influences are the use of brushes in Movement I, the bop style of Movement III, and the special effects found in the clarinet part. The first four movements are in ternary form, A-B-A', while the finale is a short, five-part march. Although the macro ternary forms are identical, the internal structures and methods of recapitulation vary in each movement. Imitative and motivic relationships are vital. Phrases are easily distinguishable but tend to be irregular in length.

The arrangement of the movements is fast-slow-fast-slow-fast, with **attacca** indications linking Movements I-II and IV-V. Timings and metronomic markings are provided for every movement. The odd-numbered movements are metered and use simple time signatures almost exclusively. Movements II and IV have no time signatures and no time line. In Movement

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[181]Rudolph Richard Reti, *Tonality in Modern Music* (New York: Collier Books, 1962), 69.

II, synchronization lines indicate where the clarinet and percussion parts should coincide.

Today, *Drawings: Set No. 3* would probably be perceived as a conservative composition. In 1961, it was considered a forward-looking composition because of the special clarinet effects and the type of ensemble for which it was written. The work is playable by today's young college students because the range is moderate and the special effects are no longer considered demanding.[182]

Movement I

Movement I, marked **Relaxed and quietly**, is a subtle piece that begins playfully but becomes melancholy at the recapitulation. The playful style is created through the use of flutter-tonguing, vibrato, note-bending, grace notes, and light staccato notes in the clarinet part and the swatting of the drums with brushes. These activities are not found in the melancholy section.

This is the only movement employing all four forms of the row. In the first half the prime form is used three times (P^0, P^6, and P^9); in the second half the retrograde inversion is used twice (RI^9 and RI^3) and the inversion (I^2) and retrograde (R^5) once each. Most of the seven rows are incomplete. P^0, the initial row, is stated in correct order and with three groups of imploded notes. (See the previous Example 22.) The other rows are irregular. All have imploded as well as reordered and omitted notes.

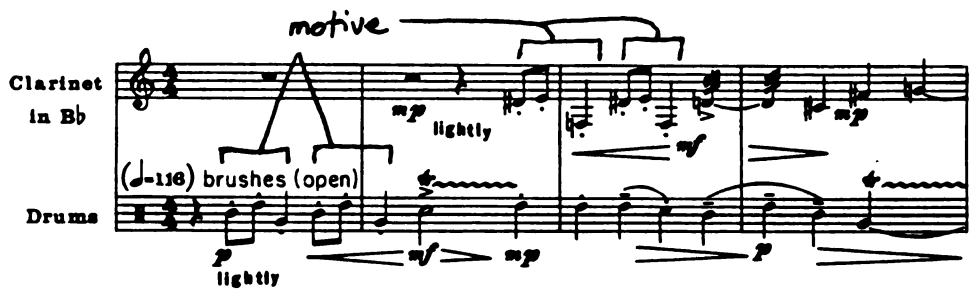
Rhythmic and melodic motives also organize the structural relationships. In m. 1, the drums present a three-note motive which is the

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[182]High notes are rare. The highest notes are the g^3-$a^{\flat 3}$ trill at the climax of Movement II and the last note of the finale, f^3.

basis for the movement. In m. 2, the clarinet enters in rhythmic canon. The rhythmic motive and first three notes of the row combine in the clarinet's entrance to give the motive a pitch identity. This is the first instance of melodic use of the drums. The first three notes of the row are chromatic. Inversion produces the more distinctive configuration of ascending minor second and descending major seventh. The motive is shown with its rhythmic and pitch identities in Example 23. It also appears augmented, contracted (under diminution), and with varied durations of the third tone.

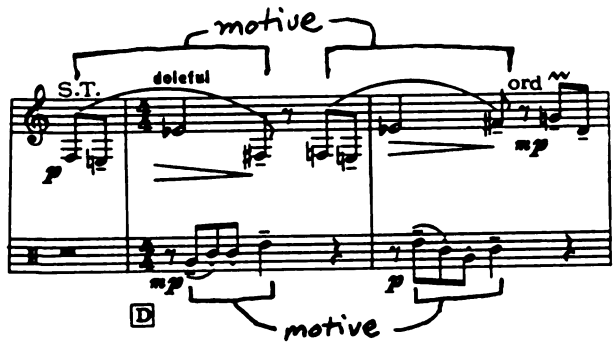
Example 23. Mvt. 1, mm. 1-4, three-note motive.



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Movement I is moderately fast but becomes slower as the melancholy final section approaches. It is primarily in 4/4 time. The form is best outlined as A-B-A' (mm. 1-6, 7-17, and 18-24). Although there is no literal recurrence, motivic transformation supports the existence of a recapitulation (A') which uses the inverted row as well as expanded versions of the pitch and rhythmic motives. Phrases are in four-note groups (Example 24), however, the clarinet and drums do not play imitatively as in the beginning of the movement since the three-note motive is transformed

Example 24. Mvt. I, mm. 17-19, four-note versions of the motive.



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differently in each part. The clarinet leads. The pitch motive is inverted and a note is added so that the first four notes of the row are used and repeated. This version of the motive evolved from mm. 7-8. The rhythmic motive is expanded in the drum part through the addition of a pickup note.

Movement II

Movement II, marked **Very freely**, is notated without time signature or barlines. It is performed **ad libitum**, according to the published guidelines, which include a suggested tempo for the quarter note, vertical dotted lines intersecting both staves to help synchronize the performers, and a variety of tempo, dynamic, coloristic,[183] and stylistic instructions. Pitches and approximate rhythmic proportions are notated. There are brief opportunities for improvisation at the climax. This is the only movement which includes improvisation.

Movement II portrays a competition. The drum and clarinet parts exchange melody and countermelody as if each is challenging the other to perform the same line better. The melody is presented first by the drums

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[183]Vibrato, non-vibrato, subtone, note-bends, and glissandi are used.

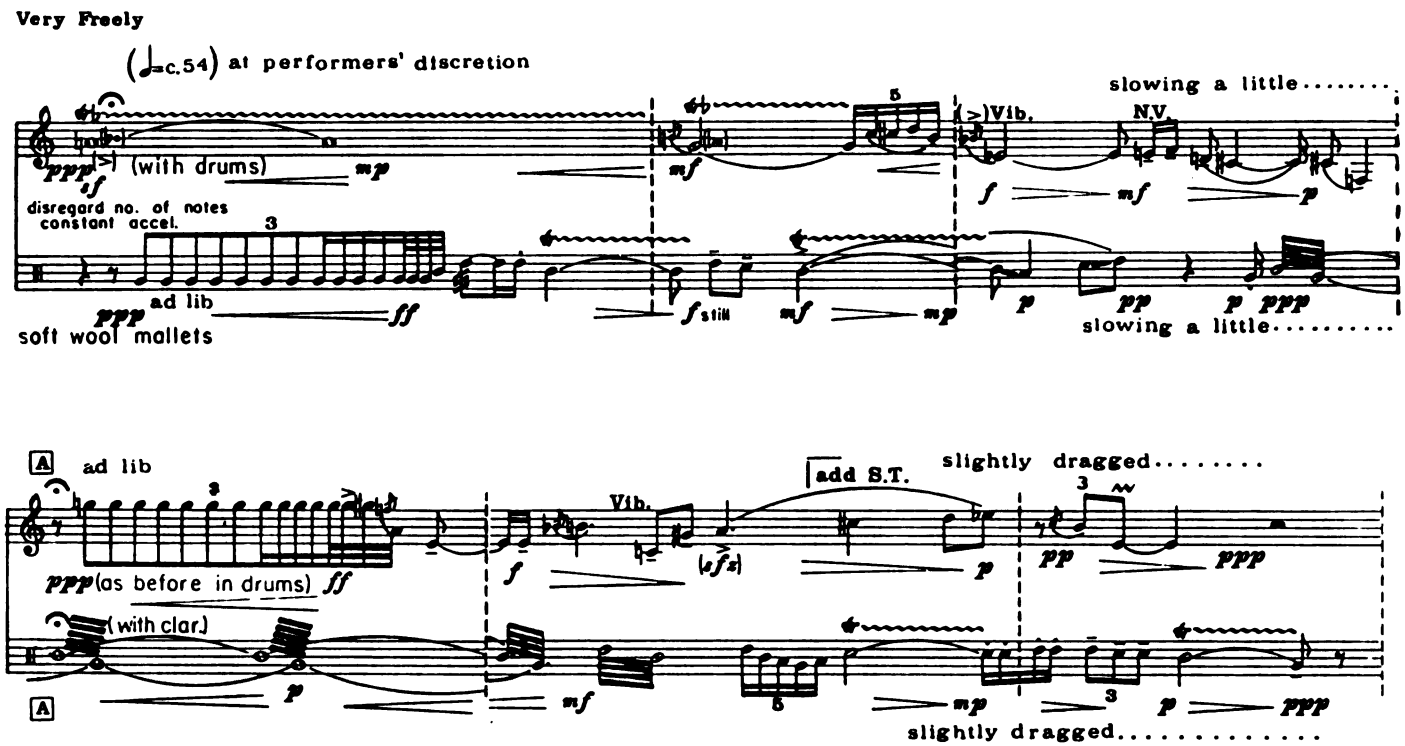
and begins with an accelerating repeated pitch. This is accompanied by a clarinet countermelody which begins with trills. The tiny exposition is repeated at letter "A," with the clarinet and percussion parts exchanged and inverted. This is shown in Example 25.

The competition begins quietly, builds up to a tremendous frenzy and volume, and calms down to **fade out completely**. Further evidence of a competition is found at the climax, where the composer has written in the percussion part: "improvise in an attempt to overpower the clarinet." To achieve the required frenzy, soft wool mallets are exchanged for hard mallets in the percussion part and the clarinet part climbs to g^3, trills to $ab3$, and descends with a passionate glissando.

The ternary form of A-B-A' is clearer than in Movement I. The return is signaled by an obvious restatement of the original clarinet line at letter "D." The drum part is closely related to that of the beginning. The clarinet line eventually changes rhythm and articulation while maintaining the row and then cadences on E. This pitch was missing from several versions of the row in the A section so its repetitive use at the end provides a fulfilling conclusion.

The prime form of the row is used almost exclusively in Movement II and the row is usually full length. Some notes are reordered, imploded, repeated, and omitted as illustrated earlier in Example 22.

Example 25. Beginning of Mvt. II, exposition and repeated exposition.



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Movement III

Drinking straws are used as the mallets in Movement III which is marked **Whimsically, but in strict time**. While discussing *Drawings: Set No. 3* a number of years after its composition, Hodkinson remarked that one of his most vivid memories of this duo was the wonderful sound produced by these unconventional mallets.[184] Improbable as it may seem, the "Uwharrie Duo" experimented with different drinking straws and noticed subtle sonic differences. The straws from MacDonald's Restaurants produced the best results.

The first twenty-seven as well as the last ten measures of the movement use the inverted form of the row. In Mm. 28-35 the prime form is used. Example 26 compares the beginning and letter "E" and shows almost five measures of exact inversion between the clarinet and drum parts. The first section (mm. 1-6) hints at a tonic of F♯ while the inverted section (mm. 28-33) hints at a tonic of A♭.

Row statements overlap in this movement. They are usually complete and in order. Several notes are systematically imploded as seen earlier in Example 22. Straying from the row occurs in mm. 7-9, where a B♭ is needed to make three overlapping rows complete, and in m. 28, where the G♯ grace note is either a note substitution for F♯ or a misprint.

Jazz influence is evident. Mm. 10-18 and 35-43 are to be played with a **slight bop feeling**. Written eighth notes must be converted to the characteristic long-short triplet style of bop. Section A (mm. 1-18) and Section A' (mm. 28-43) of this ternary movement are divided into two parts: non-bop and bop. Section B (mm. 18-22) features a thicker texture, double stops in the drum part, and a melody with multiple repetitions of e1 in the

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[184]Conversation with Sydney Hodkinson, July 1976.

Example 26. Mvt. III, mm. 1-6 and 28-33, inversion.



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clarinet part. Vibrato and note-bending are the only clarinet special effects used and they seem to enhance the whimsical and jazzy feeling of the movement.

A rhythmic motive of three eighth notes is prevalent. It is announced melodically by the clarinet in m. 1 and adopted by the drums in m. 2. (See Example 26.) This motive appears on and off the beat and with and without rolls, accents, and a grace note. After becoming well established, it also appears as a two-note motive.

Movement III is in 3/4 time. Its two tempos are to be performed **in strict time** and they are linked by a **tempo rubato**.[185] The majority of the movement is contrapuntal and imitative. Between letters "C" and "D" there is a brief section of rhythmic unison and, at times, unison accent-patterns. The final five notes of the movement are in rhythmic unison.

Although the dynamic marks range from **ppp** to **fff**, Movement III is usually quiet because of the volume limitations of the drinking straw drum mallets and the necessity for the clarinetist to balance with the percussion. The fact that the drummer is using drinking straws as mallets and producing such a special and tiny sound induces the audience to focus even more closely on their listening.

Movement IV

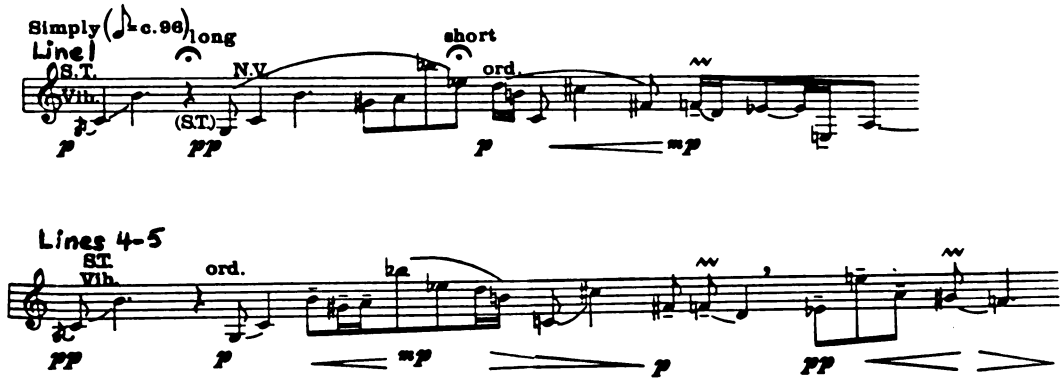
Movement IV, marked **Simply**, is for solo clarinet. It is a soulful piece in ternary form, A-B-A'. The opening melodic line returns, after a dramatic B section and long fermata, with the original eighteen pitches and

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[185]The beginning is marked quarter note equals 100 and letter "E" is marked quarter note equals 92.

octave registrations. The rhythm, articulation, and dynamics vary. Example 27 compares the A and A' sections.

Example 27. The opening of Mvt. IV and the recapitulation.



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The movement begins with the second hexachord of RI^7. The first three pitches are repeated immediately. Only the retrograde inversion form of the row is used. Notes are systematically imploded into the first hexachord and the row is usually uninterrupted from pitches five through twelve. This is illustrated in Example 22. A climactic note substitution, C* for C, occurs at the ff marking.

Tonal implications are strongest in Movement IV. $B^{\flat}$ is the key center. The first interval consists of the dominant and tonic pitches, F and $B^{\flat}$. Melodic phrases end with half cadences on B, C, C*, and A. The movement ends with emphasis on $B^{\flat}$; in fact, the final cadence is repeated, in different octaves and with augmentation.

Movement IV, like Movement II, includes a tempo marking but no time signature or barlines. The quasi-barlines used in the second movement for synchronization of parts are not necessary in this solo piece. The

dynamics range from **ppp** to **ff**, but, the volume is usually soft. Nuances are frequent. Special effects of subtone, vibrato, and note-bending are used to expressive advantage.

Movement V

Movement V, marked **Fairly quick, but decisive**, has the same tempo marking as Movement I (quarter note = 116) but its style is quite different. Timbale sticks, the first "real" drumsticks used in the duo, possess louder dynamic capabilities than the other mallets. This predominantly loud, characteristically finale movement starts very softly, beginning with an **attacca** entrance by the drums on the last note of the previous movement, and ends very loudly. The tempo remains steady except for relaxations at the cadences of the two lyrical sections. The prevailing 2/4 time signature occasionally changes to the asymmetrical meter of 5/8.

The style and structure of Movement V conform to the five-part march scheme:[186]

Introduction	mm. 1-6
March	mm. 7-15 ("A"-"B")
Trio	mm. 15-21 ("B"-"C")
March	mm. 22-32 ("C"-"E")
Trio	mm. 32-38 ("E"-"F")
March	mm. 39-49 ("F"-end)

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[186]"Marches are generally in simple, strongly marked rhythm and regular phrases. The standard form, derived from the minuet-with-trio, is that of a march repeated after one or several trios of a more melodious character: MTM, or MTMTM." *Harvard Dictionary of Music*, 2nd ed., rev. & enl., s.v. "March."

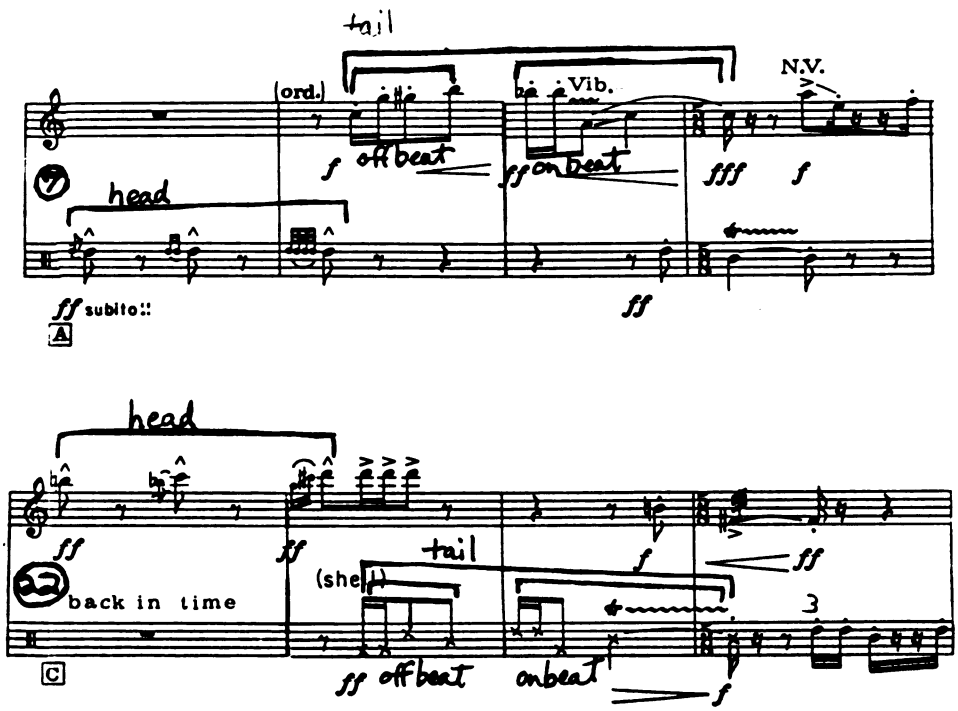
The trio sections are more lyrical and legato than the marcato march sections.

The row is used quite differently in Movement V. It is divided into hexachords and only the retrograde form is used. (See Example 22.) The first hexachord consists entirely of half-steps; the second includes the intervals of the third and fourth. When the chromatic hexachord is used, the pitches are variously reordered to provide intervallic diversity. The second hexachord occurs intact and with only one deviation; i.e., a note is substituted for the last pitch of the composition.

The motives of the march theme are included in the drum introduction (mm. 1-6). The theme can be divided into head motive (drum, mm. 7-8) and tail motive (clarinet, mm. 8-10) and is illustrated in Example 28. The head motive consists of three successive eighth notes that are separated by rests and approached by an increasing number of grace notes. It appears in mm. 1-3 of the introduction in an expanded version, with extra rests between the notes. The tail motive consists of a four-note figure (two sixteenth and two eighth notes) used twice in immediate succession. This rhythmic pattern occurs off the beat, then on the beat. It first appears, decorated with grace notes, in mm. 5-6 of the introduction. The last note of the tail motive is sometimes an eighth note and is sometimes longer than the original note value. Most of this movement is derived from the head and tail motives.

Melodic use of the drums is evident as the clarinet and drums trade the motives back and forth. Example 28 illustrates one instance of switched melodic lines. The prevailing contrapuntal texture is contrasted by several brief solo passages and others in which some or all of the theme is performed in unison. In mm. 44-45, the head has two-note chords in the

Example 28. Mvt. V, mm. 7-10 and 22-25, march theme with motives.



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drums and with two sixteenth notes in the clarinet, instead of the grace notes. They are stated together and create a deliberate final statement. This is followed by a stretto based on the tail motive.

The festive mood of the finale is enhanced by the particular special effects employed. Found in the drum part are note-bends, rim shots, and playing on the shell of the drum. Clarinet vibrato and note-bending are used in every movement. Subtone and glissandi are also used here.

CHAPTER FIVE

SONATA FOR CLARINET AND PERCUSSION BY FREDERICK LESEMANN

Background

Frederick Lesemann (b. 1936) is a native of Los Angeles. He received his B.M. degree from Oberlin College where he studied composition with Joseph Wood and Richard Hoffman. He studied composition with Ingolf Dahl and received his M.M. and D.M.A. degrees from the University of Southern California. Lesemann has been on the Theory and Composition faculty of the University of Southern California since 1966. He became the Director of the U.S.C. Electronic Music Studio in 1974.[187]

Lesemann has written compositions for a wide variety of genres. Most of his early works are chamber music. Since 1970, the year of his first composition for electronic tape, the majority of his compositions have been for this medium but he has continued to compose for diverse instrumental and vocal combinations. His work includes music for piano, prepared piano, piano and tape, string trio, string quartet, amplified string quartet, cello and woodwind quintet, orchestra, orchestra and tape, chorus, chorus and orchestra, voice and piano, voice and chamber ensemble,

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[187]Anderson, 314; correspondence with Frederick Lesemann.

percussion ensemble, synthesizer and percussion, trombone solo, and brass octet.[188]

Lesemann has written two clarinet-percussion duos. These and most of his other compositions are unpublished. *Sonata for Clarinet and Percussion* (1968/1972) is one of his earlier works. *Doubles* (1983-1984), originally a commissioned work for horn and viola, has a variable instrumentation of twenty-five possibilities. One version is for clarinet and marimba.

Sonata for Clarinet and Percussion

Sonata for Clarinet and Percussion was inspired by Lesemann's close association with the developing percussion program of the University of Southern California. Working with outstanding percussionists such as William Kraft[189] and Karen Ervin[190] had a major impact on the composer. The *Sonata* was written for Karen Ervin and is one of the few works of the clarinet-percussion duo repertoire available on a commercial recording.[191] On the record jacket, Lesemann described the stimuli for the composition:

> For myself, the response was a fascination with the virtuosity of the improvising percussionist. After all, it is the players who discover what they can do, and their experiments in this direction are essentially a form of improvisation. The challenge to the composer, then, was to write a piece with an idiomatic virtuosity equal of the *Sonata* in terms of how impressed one is with the performers, not with the piece itself.[192]

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[188]Ibid.

[189]Then, tympanist of the Los Angeles Philharmonic Orchestra and a U.S.C. percussion professor; now, an important composer.

[190]Then, a U.S.C. student; now, a highly respected percussion soloist.

[191]Frederick Lesemann, *Sonata for Clarinet and Percussion,* Karen Ervin and Mitchell Lurie, Crystal Records S641 (1973).

[192]Record jacket notes, Ibid.

Lesemann fulfilled his humble intention to showcase the performers and wrote a fine composition as well. A review by Ann McCutchan stated: "A well-crafted composition, the *Sonata* offered both players the opportunity to display virtuosity as well as subtly and sensitivity."[193]

Sonata for Clarinet and Percussion is a work of approximately eleven minutes length and is scored for B♭ clarinet and marimba, vibraphone, two bongo drums, three tomtoms, bass drum, two suspended cymbals, triangle, tamtam, five temple blocks, and four instruments pitched at A-440: box chime or tuning bar, crotale, brake drum, and xylophone block or bar. The clarinet part uses standard techniques and has an extensive range, d-b♭3. The percussion part is written on one five-line staff, with the pitched and unpitched instruments mingled as the music requires. The notational legend is illustrated in Example 29.

The percussion instrumentation is different in each section. Most sections employ a mixture of pitched and unpitched instruments. Three sections use unpitched percussion instruments exclusively.[194] The percussion part usually features single notes rather than two or more notes articulated together. The percussion line is treated monochromatically, polychromatically, and as a melodic line, an accompaniment, and with several layers. *Klangfarbenmelodie* on the tonic pitch is an important element in the coda.

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[193]McCutchan.

[194]Sections B', D', and C".

Example 29. Percussion legend.



Sonata is in sonata-allegro form. It is monothematic and uses the tonic and dominant relationships in the manner traditional to music of the eighteenth and nineteenth centuries. Lesemann describes the form as exposition (mm. 1-41), repeated exposition (mm. 42-97), development (mm. 98-217), recapitulation (mm. 218-274), and coda (mm. 275-339).[195] These sections divide into twelve smaller sections (A-B-C-A'-B'-C'-D-E-D'-C"-B"-A"-coda) and the composition can be dually described as a sonata and a theme-with-twelve-variations. Since there is only one theme, the analysis letters compare melodic activity, rhythmic activity, texture, and

[195]Frederick Lesemann, letter of April 27, 1980, to the author.

percussion orchestration. Lesemann's use of an array of percussion colors adds a contemporary sound to the standard sonata-allegro form. The form is:

THEME-AND-VARIATIONS FORM		(and) SONATA-ALLEGRO FORM	
A:	mm. 1-12		(tonic)
B:	mm. 12-29	exposition	(dominant)
C:	mm. 30-41		(dominant)
A':	mm. 42-55		(tonic)
B':	mm. 55-84	repeated exposition	(dominant)
C':	mm. 85-97		(dominant)
D:	mm.98-128		
E:	mm. 129-184	development	
D':	mm. 185-217		
C'':	mm. 218-230		(tonic)
B'':	mm. 230-263	recapitulation	(tonic)
A'':	mm. 264-279		(tonic)
coda:	mm. 280-339	coda	

The exposition and repeated exposition consist of three thematic sections. In Sections A and A', the theme is stated slowly. It is angular since most of the melodic intervals are quite large. Section B features the rearranged theme played quickly and at the dominant pitch level. In Section B', the pitches of the clarinet melody of Section B are inverted. Sections C and C', also at the dominant level, are slow versions of the theme that use octave displacement. Conjunct motion predominates and the clarinetist and vibraphonist perform the theme canonically.

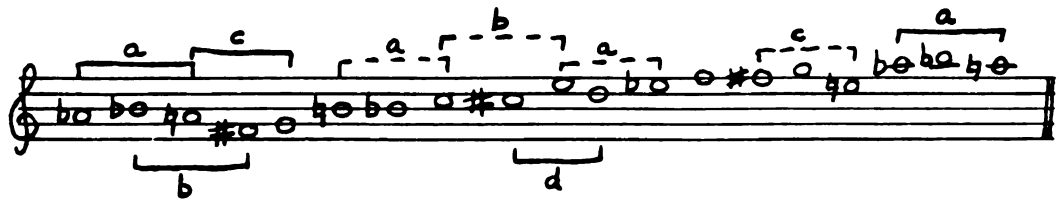
The development section is divided into three sections (D, E, and D'). Sections D and D' are lively, loud, and utilize asymmetrical time signatures

which change frequently. Section E uses a very fast tempo and several versions of the theme. It is the only pointillistic section.

If the disjunct (A) and conjunct (C) forms of the slow theme are used as the analysis criteria, the recapitulation can be described as Sections C", B", and A". All three sections are at the tonic pitch level. Canon, an important element in Sections C and C', is not used in Section C". Section B" uses the clarinet melody of Section B. The A version of the theme appears last. Its large melodic leaps are more dramatic than the small intervals of the C version of the theme and provide an effective conclusion for the recapitulation.

The theme is a nineteen-note row that uses all of the pitches of the chromatic scale. Notes 1-3 and 17-19 of the row are the same pitches, in the same order, and comprise motive **a**. The last note of motive **a** and of the row is A. This is tonic. The theme, condensed to its smallest simple intervals, and four primary motives (motives **a**, **b**, **c**, and **d**) are illustrated in Example 30. These motives appear throughout the composition in prime, inversion, retrograde, and retrograde inversion forms.

Example 30. Theme with motives **a**, **b**, **c**, and **d**.



The slow variations

The theme, in Sections A and C, is stated in a slow, stately, tension-filled manner and ascends to high notes near the final cadence. It is organized into four phrases of three, five, five, and six notes, respectively. All of the slow variations except Section A' have the metronome marking of quarter note equals 60. Section A' is slightly faster, with the marking of quarter note equals 78. All of the slow variations are in 4/4 time except Section C', which is largely in 5/4 time.

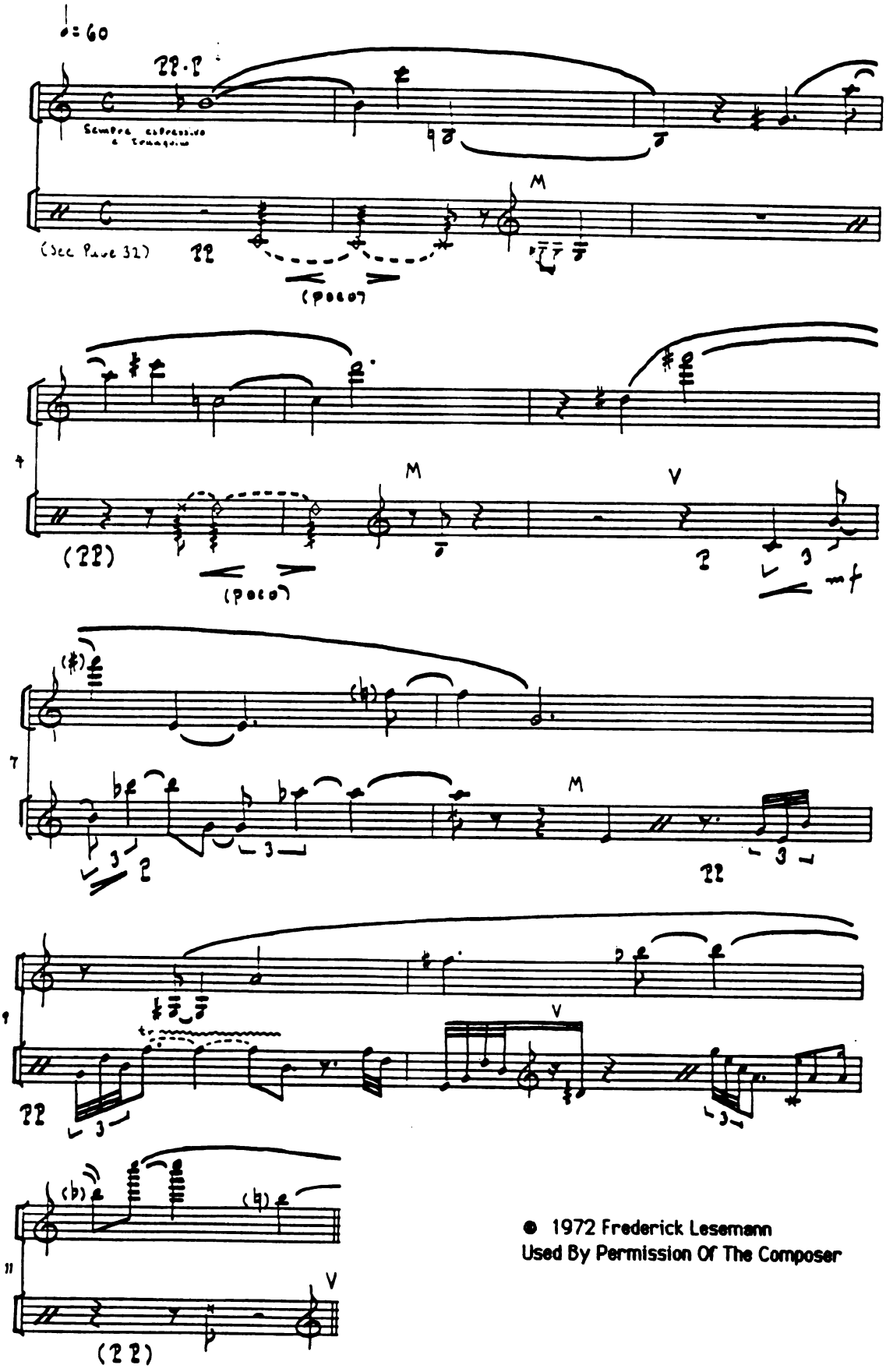
The theme is presented in Section A (mm. 1-11). This angular melody is performed in a legato style by the clarinetist and employs dramatic use of large intervals. Few of the melodic intervals are smaller than an octave. The climactic note is b^{b3}. This is a treacherous note for the clarinetist since it is very high, soft, and long and is approached and left by large leaps. The rhythm of the theme is slow and unrepetitive. Quarter notes are the quickest notes. The longest notes are five beats long.[196] Example 31 shows Section A.

The percussion part adds rhythmic and timbral interest. The tamtam, marimba, vibraphone, low suspended cymbal, bongo drums, and two highest-pitched tomtoms are used. The part is sparse but becomes more active toward the end of the section. The rhythm is irregular. This illustrates the improvisatory style that is evident throughout the *Sonata*.

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[196]The theme maintains its original rhythm, or distance between attacks, in all of the slow variations except C', where the time signature is different.

Example 31. Section A, mm. 1-11.

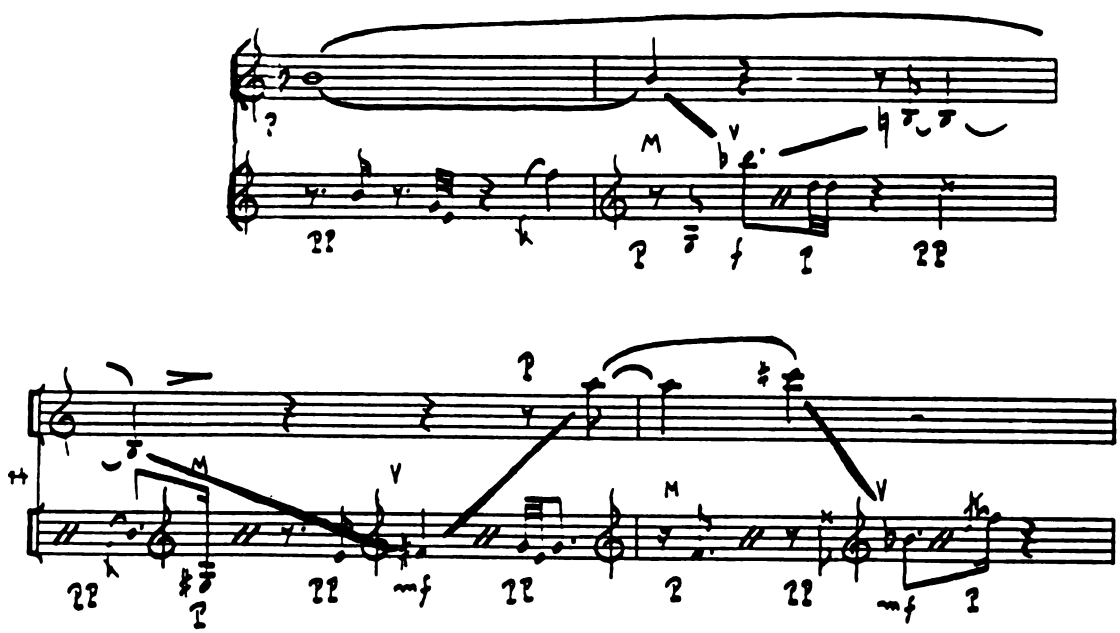


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The harmony is primarily melodically conceived. There are brief occasions when the vibraphone or marimba sound a note together with the clarinet. The resultant dyads, whether simple or compound intervals, are all minor seconds. When chords occur in the *Sonata,* they are usually dissonant dyads.[197]

Section A' (mm. 42-55) is the portion of the repeated exposition that is in tonic. The theme is split, hocket-style, between the clarinet and vibraphone. This is illustrated in Example 32. A quicker tempo is used. This helps the vibraphone notes resonate long enough to create a sustaining effect with the clarinet notes of the theme.

Example 32. Mm. 42-45 of Section A', theme in hocket-style.



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[197]Although Lesemann's sketches of June 4, 1968 (p. 6) show plans for using the theme in four-part harmony, this option was discarded before the composition was completed.

The other percussion instruments used in Section A' are temple blocks, marimba, suspended cymbals, bongo drums, and tomtoms. They are played softly and definitively but in the background. Although there is more rhythmic activity than in Section A, this polychromatic accompaniment is also sparse. Harmony occurs on only five occasions, when the marimba plays simultaneously with the clarinet. The dyads are usually dissonant.

The last appearance of the slow theme is as the clarinet melody of Section A'' (mm. 264-275), the section prior to the coda. The theme is legato, disjunct, and at the tonic pitch level. A wide dynamic range, including large crescendos and diminuendos, is required.

The polychromatic percussion accompaniment includes several layers and uses the vibraphone, low suspended cymbal, temple blocks, bongos, and tomtoms. The vibraphone notes are usually widely separated in time and are all **f** or **ff**. The cymbal is always played **pp**. The other instruments are usually soft. Example 33 shows the opening of Section A''.

Section C (mm. 30-41) features the theme stated a perfect fifth higher than it was in Section A.[198] The theme is legato, tranquil, and uses octave displacement to create conjunct motion. The resultant small intervals create a different kind of dramatic tension from that of Section A. Harmonic structure and the dissonant dyads are much more prominent. The vibraphone states the theme in melodic, but not rhythmic, canon with the clarinet. Both parts have the entire nineteen-note theme. The canonic lines are close together and produce harmonic intervals of seconds and thirds until they end in a perfect unison.

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[198]The theme ends on the pitch E rather than on A.

Example 33. Mm. 264-268 of Section A", wide dynamic range.



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The percussion part has three layers. The vibraphone shares the melodic foreground with the clarinet. The background consists of a **pp** roll played on the high suspended cymbal. This roll is sustained throughout the variation. The tamtam, bongo drums, and tomtoms are also **pp**. They add rhythmic and timbral vitality. The quarter note triplet is an important rhythmic figure. Section C is shown in Example 34.

Section C' (mm. 85-97) features the conjunct theme in double melodic canon, legato, and at the dominant level. The clarinet and vibraphone parts are both divided into lower and upper registers. The first canon uses the lower register and the inverted theme. The vibraphone leads and the pitch order becomes free toward the end. The second canon intertwines with the first. It uses a higher register and the prime form of the theme. The clarinet leads. There is no increase in activity toward the final cadence. The canons intertwine at a leisurely pace and with irregular rhythm. Tension is created by the predominance of close intervals (i.e., seconds and thirds) that resolve to a perfect unison at the final cadence. A portion of the double melodic canon is shown in Example 35.

The percussion part is exclusively for metallic instruments. The two melodic lines of the vibraphone make up the majority of the part. Two tamtam notes and a low suspended cymbal note add to the shimmer and spookiness of this variation. The soft cymbal roll at the conclusion of the variation is reminiscent of Section C. Reviewer Joseph Horowitz described Section C' when he wrote that it "effectively employs a vibraphone to surround the clarinet with a ghostly, oscillating halo."[199]

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[199]Review of a recital by the *Uwharrie Clarinet-Percussion Duo*, by Joseph Horowitz, in *The New York Times*, 17 February 1980, 68.

Example 34. Section C, mm. 30-41, canon.



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Example 35. Mm. 85-91 of Section C', double canon.



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Tied notes totalling five eighth notes appear frequently in the clarinet and percussion parts. (See Example 35.) These uneven divisions of the beat disguise the pulse and function similarly to the quarter note triplets of Section C.

The slow, legato version of the theme also appears at the recapitulation, beginning in m. 218. It is at the tonic level and is labelled C" because of the mostly-conjunct melodic intervals. There is no canon because the theme is accompanied by unpitched percussion, i.e., the bongo drums and tomtoms. This is the only section that uses continuous motion

throughout. The accompaniment consists of continuous thirty-second notes played softly on the drums. The heads and rims of the drums are struck, in alternate passages, with the rattan ends of the mallets. This creates small, non-resonant sounds. The theme, in the clarinet part, is marked **p** and **espressivo**. It features the altissimo range and contrasts the sterile-sounding, monochromatic drum part.

The fast variations

The theme or portions of the theme are used in a variety of configurations in the fast variations, i.e., Sections B, B', B'', D, D', E, and the coda. These sections feature motivic use of the theme and contrast the expansive use of the theme in the slow variations. Often various motives from the head of the theme are manipulated and derivative melodies are created.

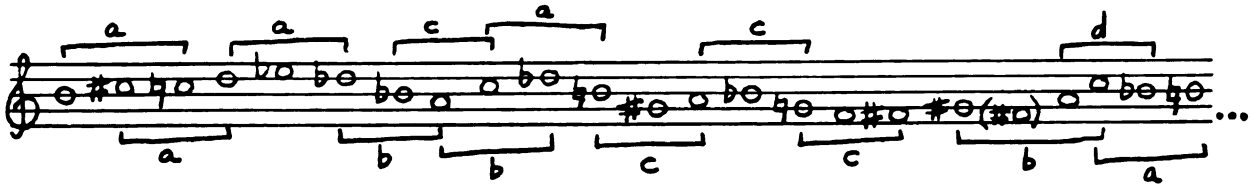
All three of the B sections (B, B', and B'') are **Allegretto** but the tempo gets faster in each succeeding section. The energy consequently increases as the composition progresses. The B version of the theme begins with motive **a** and consists of many overlappings and reorderings of motives **a**, **b**, **c**, and **d**.[200] Example 36 shows the beginning of the rearranged theme.

This melody first appears in Section B (mm. 12-29) in the clarinet part and consists of sporadic groups of sixteenth notes. Each group includes several small groups of slurred notes and staccato notes. The jagged melodic lines and the breaking of the theme into short groups of notes are reminiscent of Section A.

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[200]Although the *Sonata* is monothematic, this rearranged version of the theme will be referred to as the "B theme" for the remainder of this analysis. It will make the discussion more succinct.

Example 36. B theme (reduced to simple intervals) with overlapping motives.

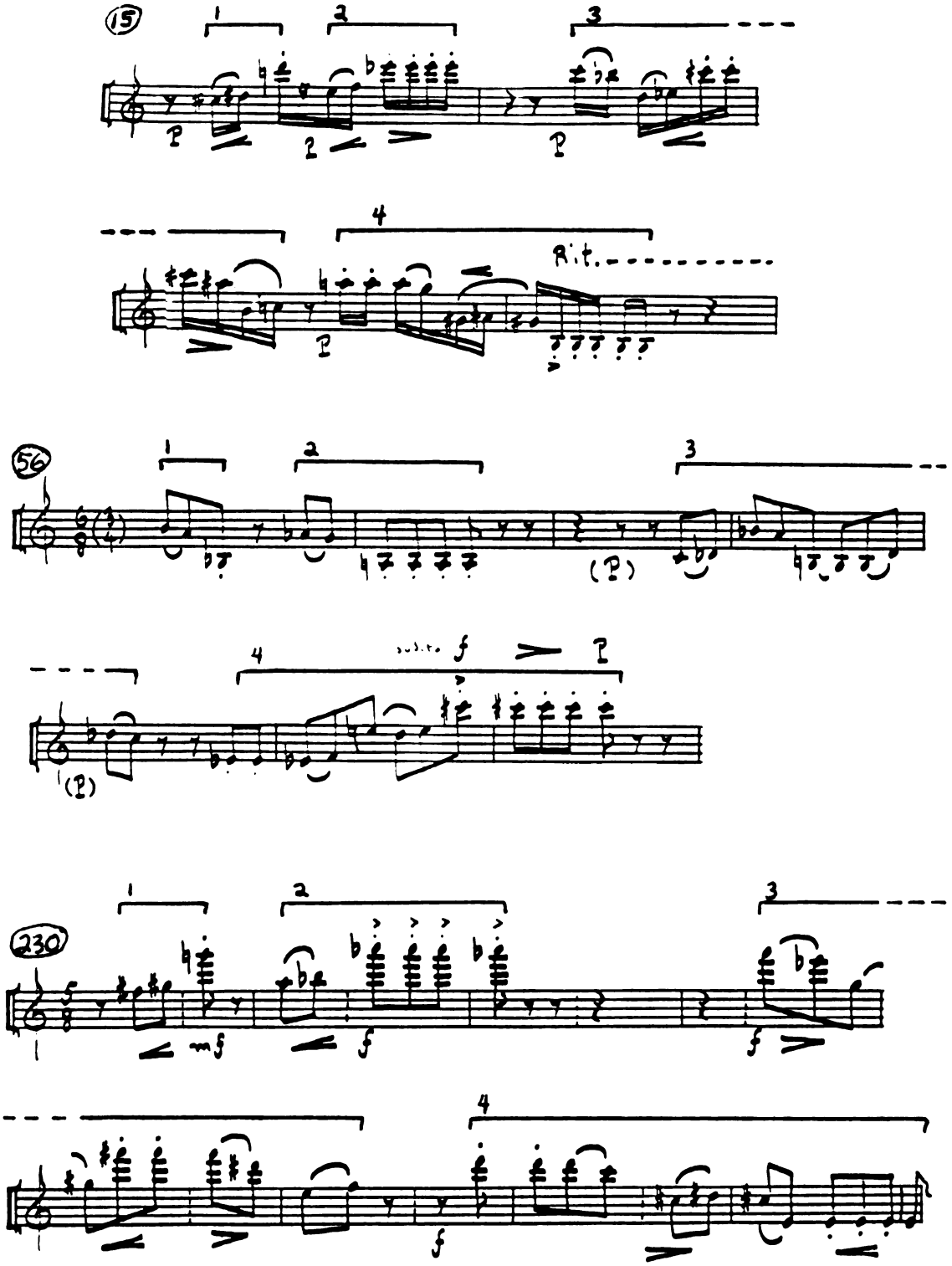


Although the time signatures are different in each of the B sections, the clarinet melody maintains identical phrasing patterns. The note values change with the time signatures but the pitch contour and relative note values remain constant. The beginning of each of these melodies is compared in Example 37.

Section B is in the dominant tonality. The modulation from tonic to dominant is camouflaged, however, because the theme is rearranged. Section B appears to be a transition to Section C, which is clearly in the dominant tonality. Comparison of Sections B and B" shows that the melody is a perfect fourth lower in Section B. Section B" (mm. 230-263), part of the recapitulation, is at the tonic pitch level. Section B is, therefore, at the dominant level.

Section B is in 3/4 time and begins with irregular alternation of the vibraphone and marimba. Although the melody is in the clarinet part, the vibraphone performs first, stating a countermelody. These entrances are shown in Example 38. The countermelody includes the rearranged head motive of the theme, large leaps, irregular rhythms, and phrasing in small note groups. The short phrases are separated by marimba pedal tones in the range of d^1-$f^{\#1}$. The juxtaposition of the percussion part, composed of many different note lengths, with the comparatively regular clarinet part give the impression of improvisation.

Example 37. Clarinet melody phrasing comparison, Sections B (mm. 15-18), B' (mm. 56-62), and B" (mm. 230-235).



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Example 38. Mm. 12-15 of Section B, vibraphone countermelody, marimba pedal tones, clarinet melody (B theme).



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The percussion part is scored for vibraphone and marimba, except for six fleeting temple block notes in mm. 16-17. This is one of two sections that uses pitched percussion instruments almost exclusively.[201]

Several aspects of Section B are changed in Section B' (mm. 56-84). The clarinet begins; the melody is inverted; and its beat divisions are triple. The clarinet part is marked "6/8 (3/4)," indicating alternate triple and duple groupings of eighth notes. Concurrently, the percussion part is marked in 2/4 time. Its quarter note beat equals that of the dotted quarter note of the clarinet part. The three-against-two relationship is, thus, exploited horizontally (clarinet vs. clarinet) and vertically (clarinet vs. percussion). This is illustrated in Example 39. A metric modulation, the

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[201]Section C' is scored for vibraphone plus four tamtam or cymbal notes. Unpitched percussion instruments are used exclusively in three sections (B', D', and C").

first of several in the work, is used in the transition from the previous section.

Example 39. Mm. 56-63 of Section B', three-against-two.



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Section B' is the first section scored only for unpitched percussion instruments. It is scored for bongo drums, tomtoms, bass drum, suspended cymbals, and temple blocks. Duple beat divisions predominate in the percussion part. The chief rhythmic motive, also featured in the coda, is the pattern of three triplet sixteenth notes followed by an eighth note. (See Example 39.) It is performed on drums and appears on and off the beat with varied accentuation. A short passage of **col legno on rims** foreshadows

more extensive use of these two coloristic techniques later in the composition.[202]

Section B" (mm. 230-263), in 5/8 time, is the only section to use an asymmetrical meter throughout. It is also the only B section where the two parts play in rhythmic coincidence rather than opposition. The clarinet part uses eighth notes and the percussion part uses complementary dotted quarter, quarter, eighth, and sixteenth notes, as shown in Example 40.

Example 40. Mm. 230-237 of Section B", asymmetrical meter.



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[202]**Col legno on rims** means to use the wooden handles, i.e. the rattans ends, of the mallets to strike the rims of the drums. These techniques, striking the rims and striking with the rattans, are used in mm. 209-230, in Sections D' and C".

The melody of Section B" appears in the clarinet part. It is the B theme without inversion and is at the tonic pitch level.[203] The vibraphone has a ten-note countermelody that begins and ends with motive **a** and the tonic pitch. Its internal notes are derived from the inversion of the descending intervals of the B theme. The countermelody is reminiscent of the slow theme because the notes are widely spaced in time. The harmony between the two melodies is a mixture of consonance and dissonance.

Additionally, the percussion part is scored for bongo drums, tomtoms, bass drum, and temple blocks. The clarinet and these unpitched percussion instruments provide the rhythmic interest and drive of Section B". The rhythmic figure of four sixteenth notes followed by eighth notes is expanded to include six sixteenth notes and is later contracted to include only two sixteenth notes. This figure, which is always played on the drums, links the short clarinet phrases.

Sections D and D' contain many accents and are usually loud and active. They begin identically, except for octave registration, but evolve differently after the first phrase. These sections of the development section are somewhat similar to the B sections due to their active nature, quick tempo, and motivic treatment of the theme.[204] They are the only sections with frequently changing time signatures. Section D begins in 5/8 time and uses a mixture of 3/4, 2/4, 4/4, 6/8, 3/8, 5/8, 5/4, 10/8, and 2/2 times. Section D' uses a mixture of 5/8, 3/4, 5/16, and 12/16 times.

Section D (mm. 98-128) is the most sectionalized of the variations. Nearly all of the percussion inventory is used. Different instruments or

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[203]The melody of Section B" is a perfect fourth higher than that of Section B, except for the d^{b1} in mm. 259-260.

[204]Sections D and D' are **Allegro**; the B sections are **Allegretto**.

groups of instruments are used in short sections: Mm. 98-107 include all of the drums (two bongos, three drums, and bass drum) and some of the temple blocks. The marimba and middle drum are used in mm. 111-114 and the vibraphone appears in mm. 122-123. The choked high suspended cymbal creates a special effect in mm. 124-126. The triangle, vibraphone, drums, and a temple block are employed in mm. 127-128, the transition into Section E.

Section D is the first section to give a strong feeling of pulse.[205] Its rhythmic, attention-getting opening is shown in Example 41. Although the variation is structured in small pieces by instrumentation and time signatures, its rhythmic flow is structured as one large section. Continuity is achieved with several metric modulations. Accents are frequent and sometimes disguise the meter.

The melodic style of this portion of the development section is that of a dialogue between the clarinet and percussion. The clarinet line features the head of the A theme, the head of the B theme, and motivic manipulations of motives **a**, **b**, **c**, and **d**. The marimba performs the A theme quickly with some reordering of the pitches. The vibraphone line is derived from the inverted head of the A theme.

Section D' (mm. 185-216) is in binary form. Part I (mm. 185-194) is similar to the beginning of Section D. Part II (mm. 195-216) begins in 5/16 time and consists of continuous sixteenth note motion, with the exception of a few silences. Continuous motion is created by alternating and

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[205]The previous sections all have distinct rhythmic identities but can be described as creating an ambiguous feel by dividing the beat into a wide variety of note values, using ties and cross rhythms, and avoiding the pulse with irregular note lengths.

Example 41. Mm. 98-105 of Section D, active and accented.



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overlapping the two melodic lines. (See Example 42.) The final variation of the development section sounds the most active and sets up Section C", which contains continuous thirty-second note motion in the drum part and underlies the recapitulated theme.

The melodic line of the clarinet consists of motivic manipulations of the A theme, the B theme, and the four motives. The percussion part is entirely unpitched and, after the opening phrase which includes the highest temple block, only uses the five highest-pitched drums. The rattan ends of the mallets are used to strike the drums beginning in m. 209.

Section E (mm. 129-184) is marked **Vivo**. It is positioned between Sections D and D' and is entirely in 6/8 time. Due to the pointillistic style, the very fast tempo, and notes sounding unpredictably on all beats and beat portions, the overall effect is that of randomly distributed notes rather than of notes arranged within a constant meter. The clarinet part is

Example 42. Mm. 195-204 of Section D', almost continuous motion.



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characterized by large leaps and sudden dynamic changes. The percussion part also has sudden dynamic changes.

Section E is scored for vibraphone, marimba, bass drum, triangle, and drums (the bongos and the highest tomtom). Each instrument has its own role to play and is not treated as part of one polychromatic percussion melody. The bass drum functions as an attention-getter and metronome. It introduces the section by playing five steady, on-beat notes that start **ff** and diminuendo in preparation of the soft entrance of the clarinet. The triangle is a high-pitched pedal point. The marimba plays low A's, establishing tonic as a low-pitched pedal point. The vibraphone enters in m. 150. It distributes one complete statement of the theme, at the subdominant level, across thirty measures. The high-pitched, non-resonant

drums play flam figures.[206] These various percussion elements combine to form a timbre mosaic. The clarinet melody is a variation of the B theme. A portion of Section E is shown in Example 43.

The coda (mm. 275-339) begins with a five-measure introduction of continuous thirty-second notes played on the drums. This leads to a loud bass drum note on beat one of the coda "proper." Three tamtam notes crescendo to a clanging metallic box chime, suspended cymbal, and brake drum passage which sets the tone of the loud and energetic coda. Lesemann's first page of sketches for the *Sonata* was his initial plan for its structure. Although the structure changed by the time the composition was finished, some of his colorful descriptive notes apply to the coda: "All hell breaks loose, maximum density, **ff**. Extreme diminution of prior elements of **a** and **b**."[207]

All of the percussion instruments chosen for the *Sonata* are used in the coda except the triangle and marimba. The brake drum, box chime, xylophone block, and antique cymbal only appear in the coda. These instruments are pitched at A-440 and combine with the vibraphone, which in the coda only plays the pitch A-440, to produce a clattering *Klangfarbenmelodie* on the tonic pitch. Their notation is illustrated in Example 44.

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[206]"Flam" is a term used in percussion music to indicate a note preceded by a single grace note.

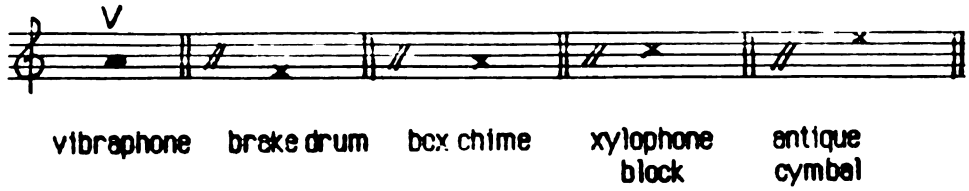
[207]Lesemann, sketches of June 3, 1968, 1.

Example 43. Mm. 129-144 of Section E, pointillistic style.



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Example 44. Percussion notation for instruments of *Klangfarbenmelodie*.



The coda is in 4/4 time and its tempo is quarter note equals 120, twice as fast as **Tempo I**. A strong feeling of pulse exists. Although neither part plays consistent rhythms, regularity of meter creates the strongest feeling of pulse of the entire composition. Two ideas predominate in the percussion part: a rhythm reminiscent of Section B' (see Example 45) and the *Klangfarbenmelodie* on the pitch A. Their use gives the impression that they are the basis for an improvisation.

Example 45. Percussion rhythm prominent in Section B' and the coda.



The clarinet part of the coda consists of extensive manipulation of the theme and motives **a**, **b**, **c**, and **d**. The coda begins with the first seven notes of the theme. Notes 11-14 of the theme, the intervallic pattern of minor second-major second-minor second, is used for an important repetitive scale fragment beginning is m. 296. (See Example 46.)

Example 46. Mm. 296-298 of Coda, scale fragments plus *Klangfarbenmelodie*.



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Longer scale passages evolve from these short passages. Transposed versions of mm. 195-196 of Section D' and mm. 230-231 of Section B'' are combined to form a new melody in mm. 309-312. This is shown in Example 47. After the clarinet part culminates with a **fff** b^{b3}, it joins the *Klangfarbenmelodie* to conclude the composition, as shown in Example 48.

Example 47. Coda, mm. 308-312. Melodic remnants of Sections D' and B'' plus *Klangfarbenmelodie*.



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Example 48. Mm. 330-339, the end of *Sonata*



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CHAPTER SIX

TOMBEAU BY ANDRÉ BOUCOURECHLIEV

Background

André Boucourechliev (b. 1925), a Bulgarian native who has resided in France since 1949, has pursued a many-faceted musical career. He began his career as a concert pianist and left his homeland to study at the Ecole Normale de Musique in Paris. After graduation, he served on that institution's piano faculty for eight years. Boucourechliev's long career as music critic and biographer includes books about Schumann, Chopin, Beethoven, and Stravinsky. In the mid-1950's, he became interested in avant-garde music and spent several summers at the Darmstadt courses.[208]

Boucourechliev's significant compositions, written after his Darmstadt study, are for electronic tape, instrumental soloists, and chamber ensembles.[209] He worked with Luciano Berio and Bruno Maderna at the Phonology Studio in Milan during 1957 and 1958. Additional work was

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[208] *Baker's Biographical Dictionary of Musicians,* 7th ed., s.v. "André Boucourechliev;" David Mason Greene, *Greene's Biographical Encyclopedia of Composers* (Garden City, N. Y.: Doubleday, 1985), 1308; Paul Griffiths, *The Thames and Hudson Encyclopedia of Twentieth-Century Music* (London: Thames and Hudson Ltd., 1986), 36; *New Grove Dictionary of Music and Musicians,* s.v. "André Boucourechliev," by Anne Girardot.

[209] His principal publishers are Leduc and Universal.

done at the studios of the Groupe de Réchereches Musicales in Paris. *Texte I* and *Texte II*, his most important compositions for electronic tape, were written in 1958 and 1960. Anonymous record jacket notes describe *Texte I*:

> Material, electronically supplied, is set in motion and after progressive elaboration, which is rigorously controlled, finishes as a large block of fundamental sound material, extremely mobile in its inner parts and in constant evolution.[210]

Although his non-electronic works far outnumber his electronic works, the latter are notable because the "highly refined conception of sound displayed in his instrumental works is a manifestation of sensibilities developed in the electronic environment."[211] Electronic and instrumental compositions both employ mobile form.[212]

Of his non-electronic compositions, Boucourechliev is best known for his aleatoric *Archipel* series. The *Archipels* were written for different instruments or instrumental combinations between 1967 and 1972 and employ a "road map" score.[213] The realization of each *Archipel* "depends on how one interprets a score that looks like a navigational map."[214] Paul Griffiths commented that, "the *Archipel* series . . . provides 'archipelagos'

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[210]André Boucourechliev, "Texte I," *Electronic Music/Musique Concrete: A Panorama of Experimental Music*, vol. 1, Mercury Stereo SR2-9123.

[211]Idem, "Archipel IV," *New Line Piano*, Idil Biret, pianist, notes by Ilhan Mimaroglu, Finnadar SR9021 (1978).

[212]Music in "mobile form" is music in which sound elements are defined by the composer but their implementation is variable.

[213]Such scores include one or several pages with musical elements or events variously distributed on the page, plus extensive written interpretational instructions for the performers. *Tombeau* is an example.

[214]Greene, 1308.

of material to be visited by the performers at will."[215] *Tombeau*, although not an *Archipel*, was written during the same period and uses a similar approach. It is scored for A soprano clarinet accompanied by percussion or piano. There are two separate accompaniment parts. The clarinet and percussion version will be discussed here.

Tombeau

André Boucourechliev's *Tombeau* is a poignant composition because of the tragedy that caused its creation. It is one of a collection of pieces "dedicated to the memory of the French composer Jean-Pierre Guezéc who died at the age of 37."[216] Boucourechliev described it as "the quintessence of a Requiem."[217] It was written in 1971 and premiered at the Royan Festival the same year.[218] It is typical of Boucourechliev's aleatoric compositions although it is shorter and less complicated.

The powerful emotional content of this three to four minute composition belies its short duration. Performance instructions describe the style as "gloomy and almost beyond time."[219] Boucourechliev chose the instrumentation well. The A soprano clarinet has a darker, mellower tone than the B$^{\flat}$ soprano clarinet. The percussion instruments used for most of the composition are dark-toned: snare drum with snares off, bass drum, and medium- and low-pitched tamtams. The glockenspiel and snare drum with snares on are used briefly in two dramatic situations. Other factors which help create the gloomy, funereal character are the use of very slow note-

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[215]Griffiths, *Encyclopedia*, 36.

[216]André Boucourechliev, *Tombeau* (Paris, France: Editions Musicales Alphonse Leduc, 1974), introductory notes.

[217]André Boucourechliev, letter of February 21, 1982, to the author.

[218]*Grove*, "Boucourechliev."

[219]Boucourechliev, *Tombeau*, introductory notes.

values in the clarinet part, the prevalence of soft dynamics, and the requirement that the clarinetist remain motionless throughout the performance, except when providing a few subtle cues for the partner.

The score is organized into three parts: a page of music for the clarinetist, a page of music for the percussionist, and extensive written instructions. The instructions are printed in French, German, and English and total two pages. The inclusion of three languages for these crucial instructions makes more performances likely since most prospective performers will not have to bother with the task of translation.

In performance, the clarinetist leads this collaboration while the percussionist reacts to the clarinetist's music and signals. Certain elements are to be played when the clarinetist gives small cues. Other elements are to be played between the clarinetist's phrases or while the clarinetist plays, but not exceeding the dynamic level.[220]

The clarinet part has two facets: the "central pitch-material" and a "circular diagram of phrases, durations and nuances which are meant to articulate this material."[221] The pitch-material consists of a cycle of fifteen notes with the range of $c^{\#}$-$f^{\#2}$. These pitches are played in normal order; i.e., from left to right. The pattern is repeated as necessary. This "melody" is notated on a staff in the middle of the page. The articulatory material is arranged in a circular manner around the staff. It consists of one to four notes of three to seven seconds length each. The dynamics range from **ppp** to **p**. Some of the minimal dynamic changes are gradual; others are sudden. Normal tone production is used except for one instance of flutter-tonguing and two of vibrato. Starting points within the pitch-

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[220]Ibid.
[221]Ibid.

material and circular diagram are chosen by the clarinetist at each performance. The clarinet part is shown in Example 49.

The percussion part includes several categories of "sound-elements" that are played in variable order. Sound-elements are labelled as **initiales/finales, consonnes/ponctuations, liasons ou noeuds, mixtures, structures, interventions**, and **clausule finale**.[222] Only the glockenspiel's **intervention**, marked **obligatoire**, and the snare drum's roll, marked **clausule finale**, must be played.[223] The instructions tell how and when each type of element should be performed. The percussion part is shown in Example 50.

The two obligatory percussion surprise-passages add to an imagined storyline of this programmatic composition. Both passages are loud and intended as surprise interruptions of the clarinet part. The glockenspiel part is played once during the second half of the work at "a freely chosen moment" between two clarinet phrases.[224] (See Example 50.) This is the only use of the glockenspiel and its sudden appearance serves as a contrast to the earlier slow, soft, and dark passages. The dynamic marking is **tutto fff** and hard xylophone sticks are specified to create this dynamic. The five phrases of this **interference** range in length from six to eleven notes. Each phrase is played as fast as possible. The flurry of activity and introduction of the bright glockenspiel sound into the gloomy and timeless atmosphere is a surprise which, at first impression, might be considered a

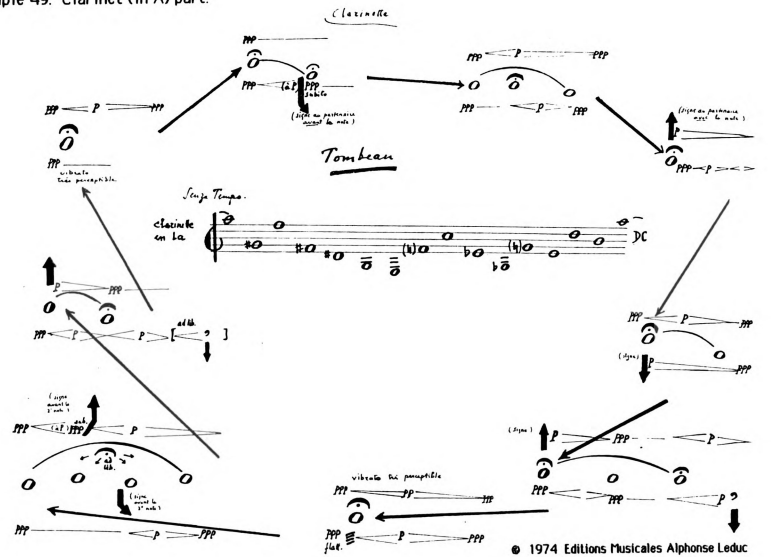
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[222]The English translation for these terms, which is found on the instructions page, is **initials/finals, consonants/punctuations, connections or knots, mixtures, structures, interferences**, and **final clause**.

[223]Boucourechliev, *Tombeau*, introductory notes.

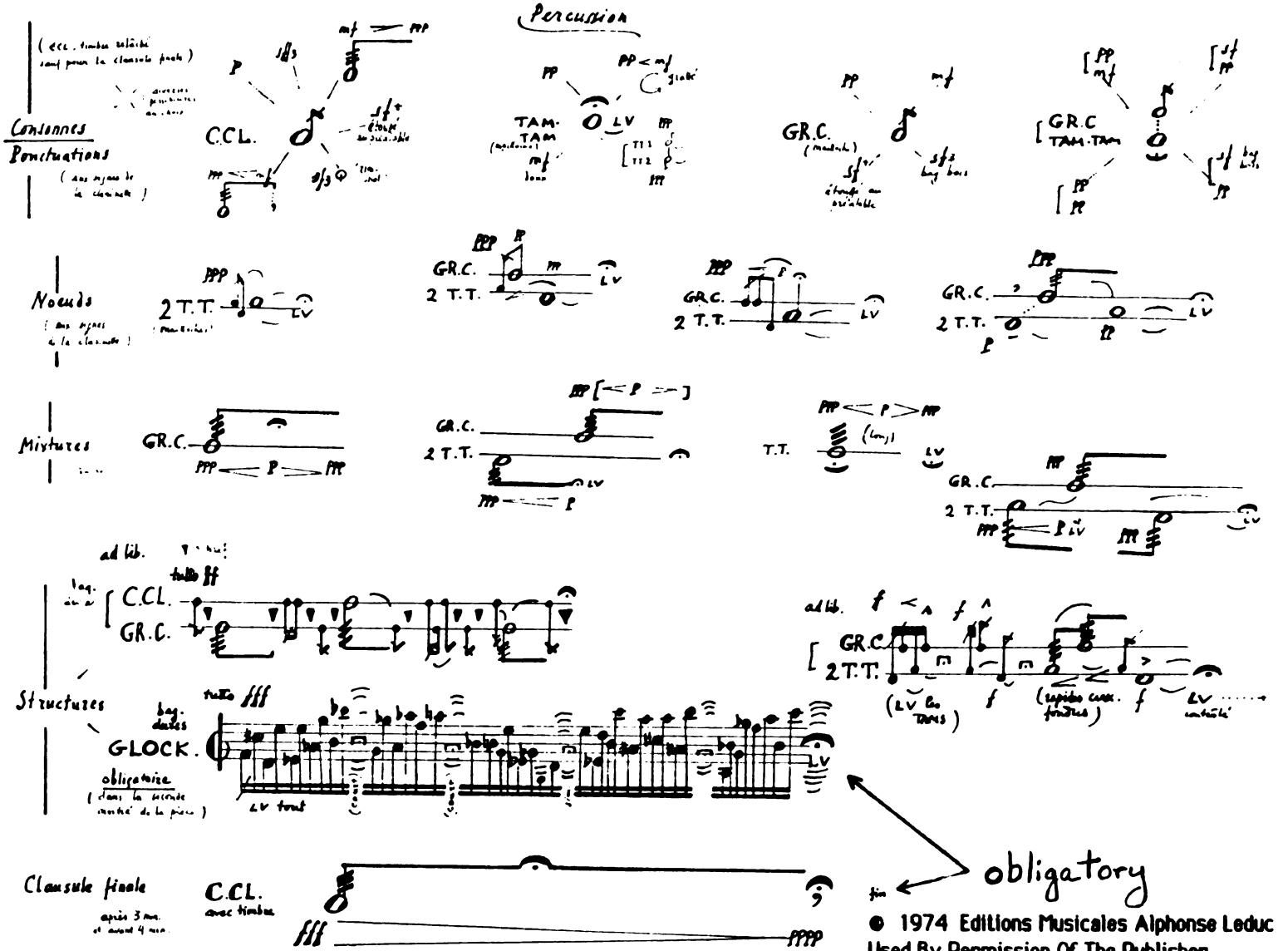
[224]Ibid.

Example 49. Clarinet (in A) part.



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Example 50. Percussion part.



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joyful recollection of life. Further contemplation, however, might suggest feelings of anger and shock because of the brittleness of the tone of the glockenspiel and the occurrence of highly dissonant clusters which result from the harmonic sounding of the notes of the five phrases.

The final clause of the percussion part provides another surprise. It consists of a snare drum roll that begins **fff**, rudely interrupts the clarinet and then diminuendos and "brings the piece to an end in absolute immobility and silence."[225] This slow, quiet composition gives the impression that it will continue forever but it is suddenly stops prematurely. This is an obvious allusion to Guezéc's untimely death. Perhaps the drum roll also serves as a funereal military tribute.

Tombeau is an atonal composition. Some atonal compositions lean toward one or more pitch centers, however, a tonic is not created in this work because of the order of the clarinet's pitches, the intervals chosen, and the extremely slow pitch changes.[226] Some of the "phrases" consist of only one note. The longest phrase is four notes in length and could last as long as twenty-eight seconds. Two notes of the chromatic scale are omitted and five are played twice, usually in different octaves. The melodic intervals involved are four minor thirds, a tritone, a perfect fifth, three major sixths, two minor sevenths, a major seventh, and three minor ninths.

The harmony is melodically conceived over an accompaniment of unpitched percussion. There is one brief section of pitched percussion, the five-phrase obligatory glockenspiel **interference**. It is played between the clarinetist's phrases. The passage is so fleeting and the glockenspiel is so

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[225]Ibid.

[226]Each of the notes lasts from three to seven seconds.

resonant that the impression is one of five dissonant blocks of sound, rather than five arpeggiated chords in harmonic progression.

The sensation of "almost beyond time" which Boucourechliev wished to evoke is created by playing slowly and quietly with many interspersed silences. The use of chance elements does not change or interrupt this sensation. Listening to *Tombeau* is synonymous with viewing a hanging mobile. The composer, in fact, used the term "mobile" in his general performance instructions. Cope described the phenomenon:

> When the timbre, structure, and dynamics of two sounds are so different as to avoid the traditional concept of melody, they become *events*. . . . Each is equal in importance and does not necessarily build to a climax or cadence. The introduction of silence as an integral part of a composition, and treated equally with sound, helps in identifying these events in time. As sounds move further and further apart, their order becomes less and less important. This reflects the same concept as a "mobile" in art: that is, the shape, color, and design of each part is fixed, with the order and angle constantly changing.[227]

Aleatoric compositions which use mobile form are often highly-controlled compositions.[228] The general style of *Tombeau* is established by Boucourechliev, who provided "comprehensive rules for the assembling of a performance."[229] The structure is mobile.

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[227]David H. Cope, *New Directions in Music*, 4th ed. (Dubuque: William C. Brown, 1984), 274.

[228]"Few composers other than Cage have made as much use of true aleatory composition," said Paul Griffiths in *Grove*, "Aleatory." "Aleatory music in Europe might, in general, be considered as a matter of choice rather than chance, and the most significant choices have usually remained with the composer, whether he exercises them in notating a score or in directing a performance." Cage, on the other hand, used "chance operations in composition" and "left options as open as possible."

[229]*Grove*, "Aleatory."

At times composers receive unsatisfactory performances of their compositions because either their notation or instructions are unclear. This has occurred with aleatoric pieces as well as with works of more traditional notation. Boucourechliev's notational system is very clear in *Tombeau* and might well serve as a model for other composers. No matter how clear the instructions are, this style of music is not to be read at sight. Time and patience are required to understand the instructions.

Inasmuch as *Tombeau* is a short piece and the instructions are not overly complicated, it might serve as a good introduction to the mobile style. It is technically a well-constructed work and and has a strong emotional impact upon the audience and the performers alike.

CHAPTER SEVEN

WILD TALES TOLD ON THE RIVER ROAD BY NETTY SIMONS

Background

Netty Simons was born in New York City in 1913. She was educated at New York University's School of Fine Arts, where her composition teachers were Marion Bauer and Percy Grainger, and at the Julliard Graduate School. She also studied composition privately with Stefan Wolpe. Early in her career, Simons taught and served as a vocal coach at the Third Street Settlement School. From 1965-1971 she produced radio broadcasts of contemporary music for the American Composers Alliance for WNYC radio of New York City and for WUOM radio of the University of Michigan.[230]

Simons' primary occupation, however, has been that of composer. Her list of published compositions[231] is extensive and reveals steady and individualistic creation since her opera, *The Bell Witch of Tennessee*, was completed in 1958. Several of her compositions have been recorded,

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[230]Anderson, 475; Aaron I. Cohen, *International Encyclopedia of Women Composers*, 2d ed., vol. 2 (New York: Books and Music, 1987), 644-45, 1129; Judith Lang Zaimont and Karen Famera, *Contemporary Concert Music by Women: A Directory of Composers and Their Works* (Westport, Ct.: Greenwood Press, 1981), 112; publicity materials of Netty Simons; correspondence and conversations with Netty Simons.

[231]Her music is published by Merion Music, Inc.

including the *Pied Piper of Hamelin* which "was a bestseller on CRI Records."[232]

Simons has written theater pieces, an opera, music for piano, band, orchestra, and a multitude of chamber groups. Some of her compositions are scored for a flexible number of players and variable instrumentation.[233] A number of her compositions are graphic scores.[234] Her early music is "characterized by an extreme economy of means and imaginative control of color."[235] In recent years she

> has become more and more involved with aleatoric principles--her aim being "to free the performer--to allow his imagination and inventiveness to take flight, bound only by indicated pitches and pitch relationships with the free choice of combined activities and dynamics." Under these controlled conditions within a framework of free choice, one and the same work can conceivably take on different shape and form in each performance.[236]

Wild Tales Told on the River Road

Netty Simons composed her fanciful clarinet-percussion duo, *Wild Tales Told on the River Road,* in 1973 as a result of a commission from Ron and Joan George. The programmatic focus of the work is underscored by the titles of the ten continuous movements. The titles are:

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[232]Zaimont, 112.

[233]For example, *Design Groups 1* is for one, two, or three percussionists. *Design Groups 2* is for a duo of one high- and one low-pitched instrument. *This Slowly Drifting Cloud* can be performed by a brass or woodwind quintet, numerous larger wind groups with optional percussion and string bass, or a band of any size.

[234]Graphic scores are notated with a preponderance of symbols other than those of standard musical notation.

[235]Netty Simons, "Design Groups #1," "Design Groups #2," and "Silver Thaw," *Bertram Turetzky, contra bass,* record jacket notes, Desto DC-7128.

[236]Ibid.

1. An Encounter Between a Nose and a Doorpost
2. Tale of a Distant Dream
3. Tale of the Bewildered Snout
4. Mating Waters
5. The Constant Knock on the Door
6. Tale of the Forever Lost
7. The Wanderer in the Deep Cavern
8. Caught Up in the Rushing Stream
9. Gently Fluttering--the Heavenly Bells Hang from a Cloud
10. Reflected in a Drop of Dew--Memories Floating

The movements depict "fantasies in the fashion of the 'singular adventures' of Baron von Münchausen."[237] The Baron is a legendary eighteenth-century German raconteur and literary figure to whom numerous "highly coloured mendacious stories" are attributed."[238] The titles of Simons' fantasies cannot help but incite one's "imagination and [cause one's] inventiveness to take flight"[239] and she undoubtedly had them in mind as she composed. The titles also make the music more vivid for the listener and are vital to performers attempting to realize the graphic score. This is similar to the interpretative information afforded a singer by knowledge of the text of a vocal piece.

Wild Tales, a work of approximately twenty-two minutes duration, is scored for B♭ soprano clarinet, bass clarinet, and a giant array of percussion equipment. Eight of the ten tales are scored for B♭ clarinet. The remaining two tales are scored for bass clarinet and can be played by a non-virtuoso bass clarinetist. The clarinet part is specifically notated except for the rhythm, which is notated with symbols of approximate duration. The percussion part uses graphic notation almost exclusively.

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[237]Ruth Uebel, press release, January 1980.
[238]*Encyclopeadia Britannica,* 14th ed., s.v. "Baron Münchausen."
[239]Simons, Desto DC-7128.

Composers who employ graphic notation have a wide variety of controls and results at their disposal. Brindle's instruction book for composers describes the spectrum of possibilities:

> The score "with instructions" may have as its objective a well-defined sound result, that [i.e., the score] "without" may be intended only as a stimulus to improvisation, which may follow a course suggested by the design.[240]

Although the percussion part of *Wild Tales* is primarily graphic, the musical results of the entire work are carefully structured. Each performance will not sound the same, as would a conventionally-notated piece,[241] but there are enough "constants" to make *Wild Tales* recognizable from performance to performance and to create ten tales of different styles as well.

Simons created contrast between the tales in a variety of ways: e.g., with staccato vs. legato, dynamics, pitch inventory, the speed at which the notes follow each other, prominence or lack of prominence of certain pitches, different types of graphically-indicated sounds, different instruments, timbres, cadential pitches, texture, and form. Different textures include use of an unaccompanied solo instrument, solos that are accompanied by the other instrumentalist, dialogue sections in which the clarinet and percussion play alternately but with material of equal importance, and duets in which the parts have equivalent material that is played simultaneously. The tales are generally short and their forms can be compared to songs in a song cycle.[242] Several tales are through-composed.

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[240]Brindle, *Musical Composition*, 157.

[241]Lesemann's *Sonata* and Russell's *Pas de Deux* are examples of conventionally-notated pieces.

[242]The tales average slightly over two minutes in length.

Others are set in binary and ternary forms but lack literal repetition of material.

Wild Tales uses every pitch of the chromatic scale but the seven-note "pitch group" of F♯/G♭ plus the six chromatic notes A♯/B♭ through D♯/E♭ is the backbone of the composition. These pitches are used in all ten tales and will be classified herein as "Pitch-group I." (See Example 51.)

Example 51. Pitch-group I.



"Pitch-group II", the pitches E, F, G, G♯/A♭, and A, are all used in the transition passage between Tales I and II. Various subsets of Pitch-group II are used in the other transitions. Pitch-group II is also used in two of the tales; i.e., in the percussion part of Mating Waters and in the clarinet part of The Wanderer in the Deep Cavern. The function of Pitch-group I is analogous to diatonic or consonant pitches; conversely, Pitch-group II has a function analogous to nondiatonic or dissonant pitches.[243]

Pitch-group I is treated differently in each movement. All seven pitches attain prominence at some time during *Wild Tales*. Prominence is afforded through length, repetition, and important placement, e.g., the first note or last note of a phrase. Each pitch has the opportunity to conclude at least one tale; F♯ ends four of the ten tales. "Resolution pitches" are created in several tales. This is achieved by infrequent or no use of a pitch

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[243]Specific examples will be cited later in this chapter.

until the time of resolution. Exact proportional relationships of pitch occurrences cannot be studied because the rhythmic notation is approximate; however, ignoring note lengths and counting the number of occurrences of each pitch clearly reveals that C is the most used and F♯ is the least used pitch of Pitch-group I.[244]

In some graphic compositions, instrumentation is unspecified. In *Wild Tales,* the percussion setup is extensive and somewhat variable. Sometimes percussion instruments or types of sounds are specified. At other times, because of the graphic notation, the choice of sound and instrument is left to the percussionist. Marimba, vibraphone, xylophone, glockenspiel, bass drum, piccolo timpano, large suspended cymbal, large triangle, small tamtam, and small tomtom are required. Specified instrument types are: "light sounding instruments in all ranges," "low-pitched instruments," "cymbal-type instruments," "small head drums," "glass-like instruments . . . including glass wind chimes," and "low pitched drums."[245] Additionally, the instructions state:

> If Vibraphone with low C is not available, use a Bass Metallophone in adjunct with the Vibe or, as another alternative, the Lujon (six metal tongues fixed on vertical resonating box). Use Bass Marimba in adjunct with the Marimba. If not available, the entire Marimba part should be transposed up an octave. . . . If using glass instruments, arrange them over a trough so as to catch shattered glass which in turn can be used as an instrument. High-pitched metallic instruments can be used in place of glass, but must be chosen for fortissimo and furioso possibilities.[246]

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[244]C's of various lengths appear approximately 270 times. F♯'s appear approximately 60 times. This is about half as much as A♯/B♭ and D♯/E♭, the next most infrequent pitches, appear.

[245]Netty Simons, *Wild Tales Told on the River Road* (Bryn Mawr, Pa.: Merion Music, Inc., 1977).

[246]Ibid, 2.

In addition to the large number of instruments specified,[247] amplification is also requested in certain sections. It is generally employed to add depth to particular soft sounds, such as in Tales II and VII.

The pitches of the clarinet part are specifically notated. The clarinet line is predominantly angular, using "nonvocal" style. This style, characteristic of much twentieth century music, is helpful for avoiding the monotony that stating Pitch-group I in order might bring. The highly disjunct lines also add some wildness to *Wild Tales*. Several tales include brief opportunities for improvisation by the clarinetist. These usually occur as tonal variations and may include multiphonics. The choice of particular multiphonics is left to the clarinetist but Simons' instructions to use Pitch-group I should be followed. Multiphonics are suggested in Tales II, III, VI, VIII, and X.

Detailed performance instructions are provided for *Wild Tales* because Simons seeks to guide the performers' interpretation of the graphic notation. There are three pages of explicit instructions: one page for the duo and one page each for the percussionist and clarinetist. Some of the symbols are standard while others are appropriate to Simons' personal style and this particular composition. The instruction pages show and define symbols for a variety of note lengths and pauses, from short to long, and the

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[247]Assembling all this equipment is a mammoth task and most percussionists do not have access to the full list of suggested percussion instruments, particularly the extended range vibraphone and marimba. This unfortunately limits to a certain extent the number of performances that *Wild Tales* might receive. Prospective performers must weigh the possibilities of slightly altering some passages by substituting similar percussion instruments and then determine if the music is still valid. The "Uwharrie Duo" made such adjustments and felt that *Wild Tales* proved to be most effective, well worth the challenge of dealing with the large percussion setup.

pacing of specific note groups, from **leisurely** to **as fast as possible**. There are also symbols for staccato or legato, for types of repetitious sounds, for accents, sound clusters, varied tone production and dampening. The symbols and their definitions are illustrated in Examples 52, 53, and 54.

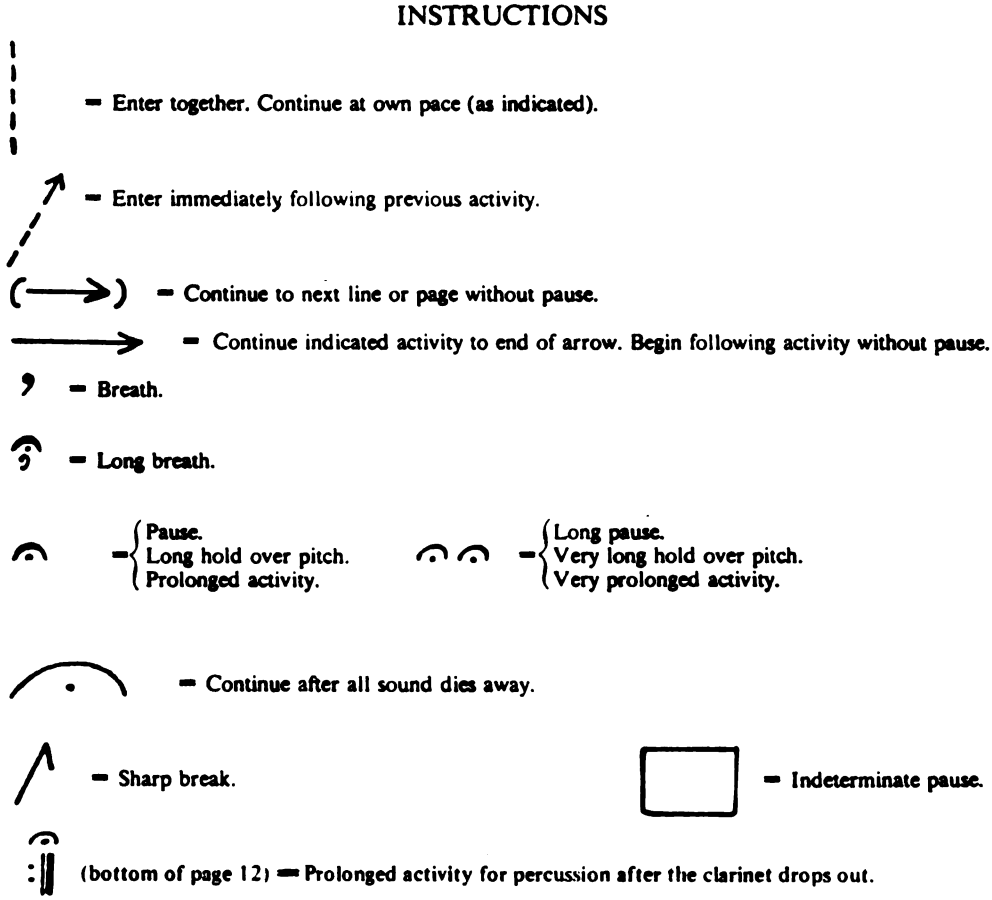
The Tales

Tale I: An Encounter Between a Nose and a Doorpost is scored for B♭ clarinet and "light sounding [percussion] instruments in all ranges." The clarinet part uses Pitch-group I, beginning with the core of B♭-B-C-C♯. C appears most frequently, but D and B♭ receive more agogic accent and the latter ends the tale. No pitches are specified for the percussionist.

Numerous types of musical gestures or events and graphic symbols are used to create this tale. The clarinet part includes flutter tonguing, sharply-accented notes, short single notes as well as single notes that are stressed and lingered upon or single notes that are held for a long time, and notes that are beamed together. The latter signifies groups of two to eight notes that are played **as fast as possible, legato** or with an **uneven, leisurely staccato**.

Tale I is predominantly soft but crescendos to **ff** three times. The pattern of events outlines a two-part form. Section A of the percussion part includes numerous graphic symbols. Example 55 shows the wealth of symbols used in the clarinet and percussion parts at the beginning of Tale I. Section B begins midway through line 4, at the **pp** marking. There is a moment of silence, a large drop in dynamic level and intensity of events, and a return to the mood of the opening. Section B builds to a more violent climax than Section A and uses fewer types of graphic symbols. Trills build

Example 52. General Instructions.



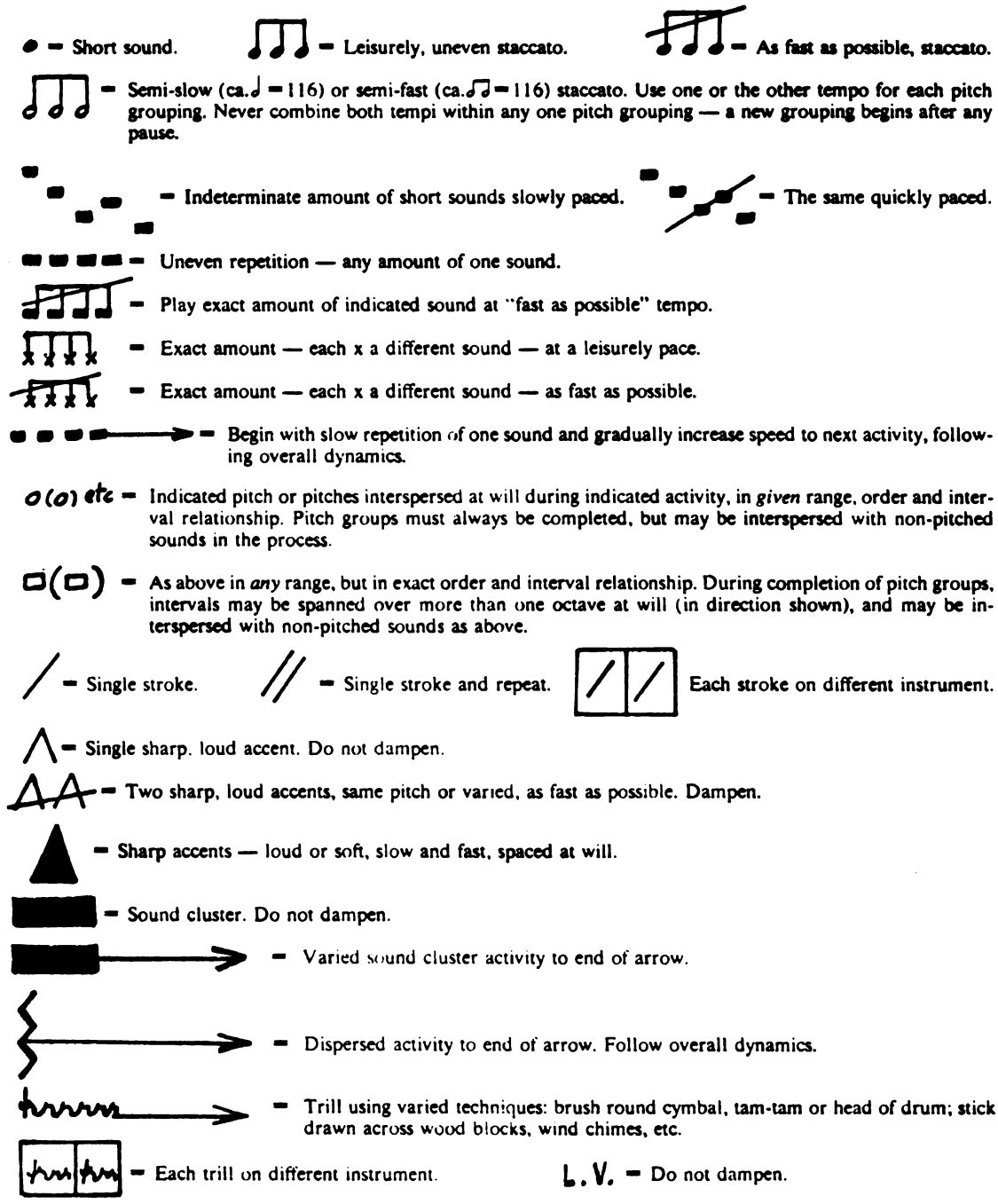
Sharps or flats are not continuous unless so notated.
All extended activities are indeterminate in duration.

Amplification: Speakers should preferably be placed in different parts of the hall.

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Example 53. Percussion instructions.

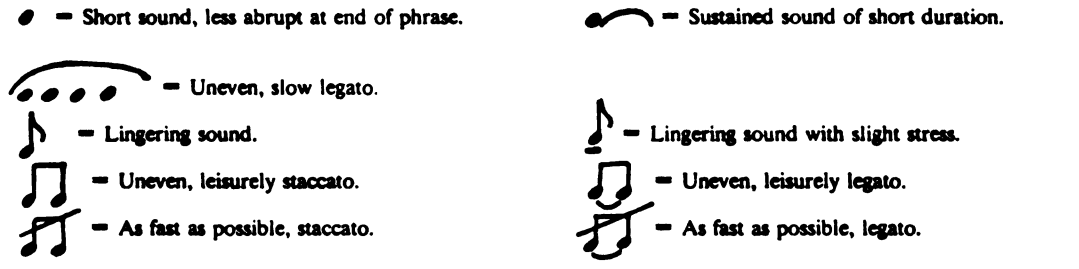
PERCUSSION



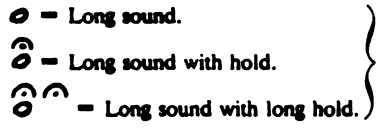
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Example 54. Clarinet instructions.

CLARINET



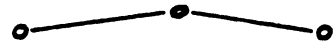
= Semi-slow (ca. ♩ = 116) or semi-fast (ca. ♪♪ = 116) staccato. Use one or the other tempo for each pitch grouping. Never combine both tempi within any one pitch grouping — a new pitch grouping starts after any pause.



With or without variation of dynamics.



= Without variation of dynamics.



= Variation of dynamics, inaudible break between pitches.



= Slow repeats — indeterminate amount. No variation in dynamics.



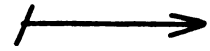
= Start slow, gradually increasing speed to flutter tongue.

Δ = Multiphonics. Limited to indicated pitches of particular numbered section (as below). Related quarter tones allowed.

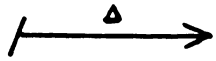
PITCHES
(actual sound)

II. Tale of a Distant Dream: C♯ D D♯ F♯ A♯ B C
III. Tale of the Bewildered Snout: A♯ B C C♯ D D♯ F♯
VI. Tale of the Forever Lost: C♯ D D♯ F♯ A♯ B C
VIII. Caught Up in the Rushing Stream: C♯ D D♯ A♯ B F♯ C
X. Reflected in a Drop of Dew — Memories Floating: A♯ B C C♯ D F♯ D♯

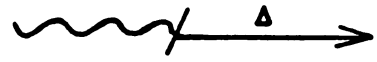
In improvisation areas, multiphonics are allowed.



= Use varied tone production.



= Use varied tone production with multiphonics interspersed (following the above instructions).



= Oscillate slowly at will using varied tone production, with multiphonics interspersed (as above).

Λ = Sharp accent.

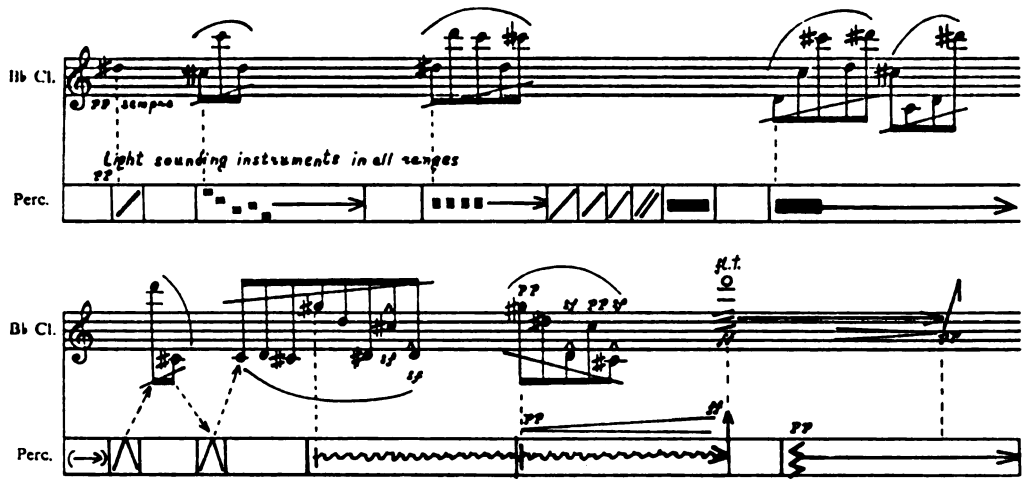


= Repetition of loud and soft attacks — indeterminate amount in varied speeds.

S. O. = Spit out loud accents.

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Example 55. Tale I, lines 1-2, many graphic symbols.



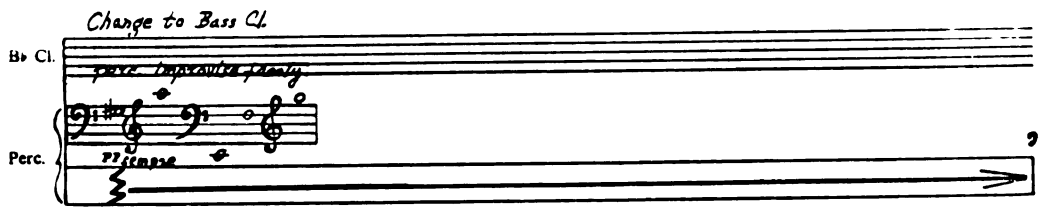
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toward the climax of four loud, sharp percussion accents and the clarinet's wailing reaction. The final group of notes is played **as fast as possible**.

The clarinetist and percussionist perform as equal partners in An Encounter Between a Nose and a Doorpost, often playing different material simultaneously. The "encounters" are dialogues in which the percussionist plays sharp accents and the clarinetist reacts immediately with a flurry of quickly-played notes.

The last line (line 9) of Tale I is the transition into Tale II. The percussionist improvises quietly using the **dispersed activity** graphic instruction and Pitch-group II, while the clarinetist changes to the bass clarinet. The transition is illustrated in Example 56. Its improvisatory style is typical of all of the transition sections.

Example 56. Tale I, line 9, improvised transition.



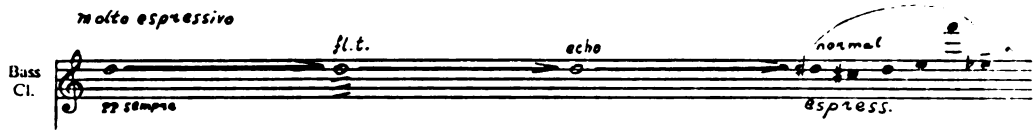
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Tale II: Tale of a Distant Dream is a slow, quiet bass clarinet solo entitled **molto espressivo** and is colored by percussion sounds. Low-pitched percussion instruments are specified. These are amplified and the drums are muffled. The bass clarinet part is most often scored in the clarion and altissimo registers where the tone tends to be less full. This range as well as the echo effect and the low-pitched percussion sounds contribute to the dreamy and distant character of this subdued tale. The tale is through-composed and interrupted by an agitated crescendo to the climax (line 7). The frenzy culminates in a short section with **spit out loud accents** (i.e., **S.O.**) where a group of notes are performed by the bass clarinetist **as fast as possible**.

The bass clarinet part primarily consists of **uneven, leisurely staccato, uneven, leisurely legato**, and long notes. The long notes are, perhaps, different stages of the dreaming process. They frequently use some type of timbral variety; e.g., flutter-tonguing, echo effects, and **varied tone production with multiphonics interspersed**. Tale II begins as a bass clarinet solo with a long note that is variously colored by flutter-tongue and echo effects. Stepwise motion is used until the end of the first phrase, where large, expressive leaps up and down occur. The first phrase is shown in Example 57. The melodic line continues using a mixture

of conjunct and disjunct motion as well as repeated notes. The percussionist colors the bass clarinet solo with a variety of slowly-moving sounds. Graphic symbols in both parts call for trills, **dispersed activity**, uneven repetitions of one sound, slowly paced short sounds, and sound clusters.

Example 57. Tale II, line 1, bass clarinet solo.



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The bass clarinet part uses Pitch-group I. While C is the most frequently used pitch, F♯ is the most important and is used for many long notes, including the final note. The percussion part is unpitched.

The last line of the movement (line 10) is the transition into Tale III. While the clarinetist returns to the B♭ clarinet, the percussionist improvises freely using **dispersed activity** and the pitches E and F from Pitch-group II. The improvisation crescendos to **fff** and concludes with the pitch E.

Tale III: Tale of the Bewildered Snout is the only tale with a clear pitch center. With the exception of the codetta, every gesture or event ends on C.[248] In the codetta, F♯ implies a half cadence and prepares the transition into Mating Waters. The B♭ clarinet part of Tale of the

[248]Seven of the ten tales, including the first five, use C most frequently. Tale III is the only tale where C is also the most important structural note.

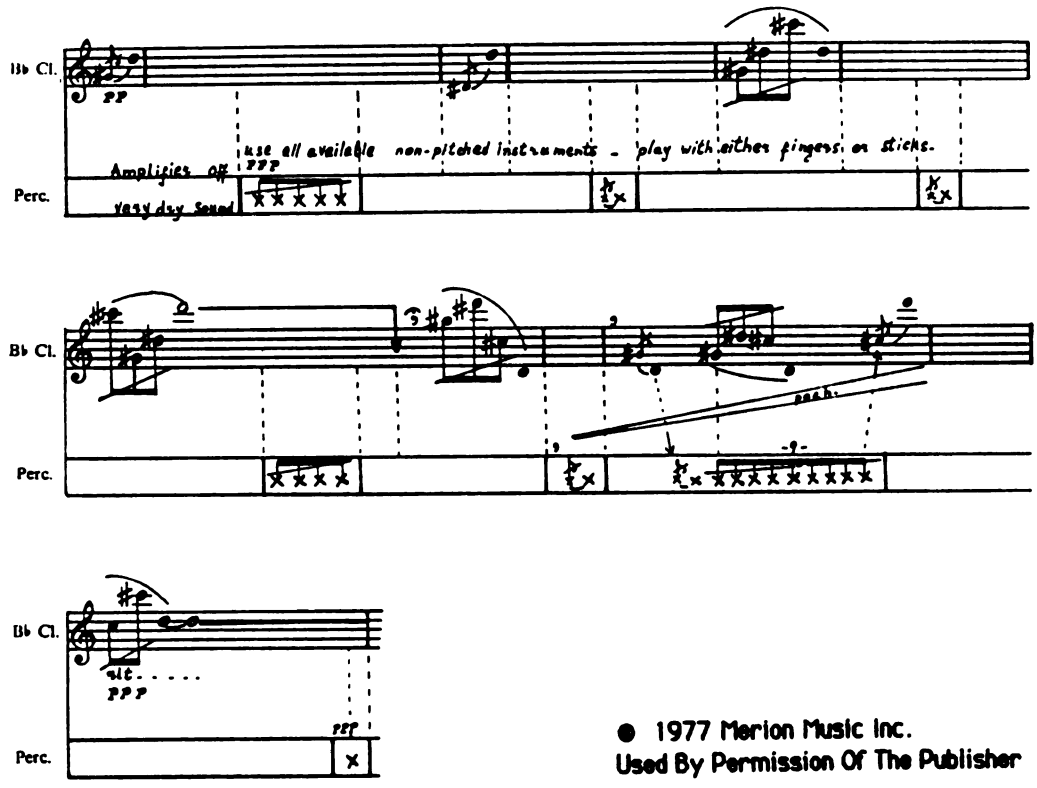
Bewildered Snout uses Pitch-group I. The percussionist is instructed to "use all available non-pitched instruments."

Tale III is in a conversational style. The parts alternate with each other. The form is ternary with a codetta. Section A extends into line 3. Section B begins in the middle of line 3 where the term **agitated** appears. Line 6, marked **same as beginning**, begins Section A'. The codetta consists of the clarinet part's final note, F# with echo tone, and reminiscent rhythms in the percussion part.

A limited repertoire of graphic symbols signal the production of very dry percussion sounds in the configurations of single notes, single notes approached by a grace note, and groups of two to nine notes that are played **as fast as possible**. The clarinet part has the same notes and symbols as are found in the percussion part as well as several long notes. The clarinet notes are slurred and contrast with the dry percussion sounds. Example 58 shows Section A and illustrates the types of graphic symbols used in Tale III.

In the transition to Tale IV (line 10 of Tale III), the clarinetist suddenly attacks f^3 at a **fff** dynamic level and the percussionist joins in an improvisation which includes the same pitch and dynamic level. This sudden change of dynamics comes as an immense surprise because Tale III to this point had been soft with the exception of two brief crescendos by the clarinetist.

Example 58. Tale III, lines 1-3, Section A, limited types of graphic symbols.



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Tale IV: Mating Waters, marked **ff sempre--furioso**, is the first loud and extremely agitated tale and also the first to use pitched percussion. The marimba part consists of Pitch-group II. These pitches are introduced in an improvised introduction that evolves out of the previous transition. The clarinet part continues to use Pitch-group I. Classifying Pitch-groups I and II as "consonant" and "dissonant" seems appropriate in this context. The different pitch groups behave like two rivers joining, i.e., mating, with a violent clash.

Additionally, harmonic dissonance is present in the quickly-passing vertical sonorities. The clarinet and marimba parts have three note-flurries marked **as fast as possible** which are played in rhythmic unison. These passages, shown in Example 59, contain some consonant intervals but

Example 59. Tale IV, lines 2-3, **furioso** note-flurries.



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the consonances are heard only fleetingly because of the fast-moving, **furioso** tempo. Selected pitches of other clarinet note-flurries are synchronized with one pitch or two- and four-note chords of the marimba part. The composite sonorities are always dissonant. (See Example 59.)

Although C occurs most frequently, the **furioso** character, rather than a particular pitch center, is the main focus of Tale IV. F♯ functions as the long-awaited resolution note and appears only as the last pitch.

Mating Waters is through-composed and is a duet with the clarinetist in the lead. During the clarinet's long notes, the percussionist improvises in accordance with the **dispersed activity** graphic instruction indicated in the score. Each improvisation uses an instrument of different

timbre; i.e., cymbals, small head drums, glass-like instruments, low-pitched drums, highest to lowest pitched instruments, bass instruments, and high instruments. Example 59 shows the first three such passages. The transition into Tale V consists of a percussion diminuendo to the **minutest sound** and also functions as a general cooling-off from this aggressive tale.

With humor is the prevailing direction for Tale V: The Constant Knock on the Door. Scored for B♭ clarinet and "all [percussion] instruments with a variety of mallets," it is in ternary form, A-B-A', with an introduction and codetta. The introduction is a percussion improvisation that sets the humorous mood and incorporates G♯ from Pitch-group II. This is the only pitch utilized by the percussion and it is found only three times in the body of the tale. Sections A and A' are characterized by an extremely soft dynamic level which is punctuated by single loud and sharply-accented notes played by the clarinetist. The abbreviation **S.O.** found in the score signifies the **spit out loud accents** technique. Section B features a long crescendo to **f**, led by the clarinetist, and a diminuendo back to the soft Section A'. The codetta is an unpitched percussion improvisation that tapers to **pppp** and leads into the soft Tale VI.

F♯ is the most prominent, although not the most frequently used, pitch in the clarinet part. Each of the five times it is stated, it employs the attention-getting **S.O.** technique. Three are played simultaneously with G♯'s of the marimba part, a fourth occurs simultaneously with a loud bass drum note, and the fifth is a clarinet solo. The contrasting use of G♯ in the percussion part of the introduction and Section A as well as the use of **S.O.** are illustrated in Example 60. The tension generated by the aggressive F♯'s is resolved at the end with a dominant to tonic relationship. The last note

Example 60. Tale V, lines 1-2, use of G♯ by percussion and **S.O.** by clarinet.



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of the clarinet part, B, is played very softly and is only used once in the tale, where it appears as the resolution note.

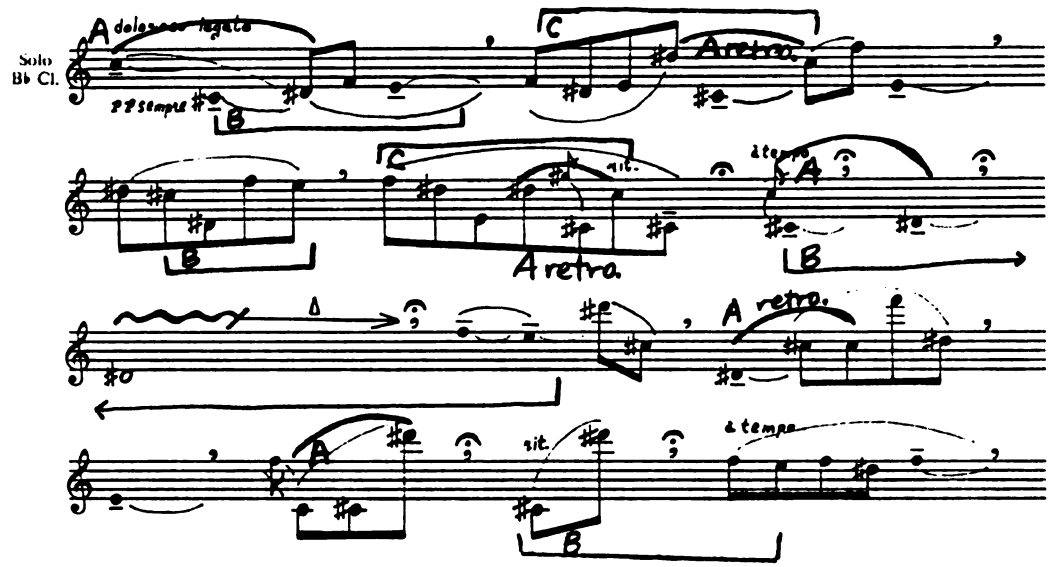
The clarinet part also consists of slurred groups of two to eight notes marked **as fast as possible** and, in Section B, several long notes. All of these notes are flutter-tongued. Flutter-tonguing is somewhat awkward to produce on the high notes but it is possible.

Tale VI: Tale of the Forever Lost, for unaccompanied B♭ clarinet, is one of two tales that is soft throughout. It is the only tale in which C is not the most or second-most used pitch; instead, C functions as the pitch of resolution, appearing only four times, all in the last line. B♭ and D, the pitches that are whole steps on either side of C, are important notes because of agogic accent.

Tale of the Forever Lost is through-composed but there are several recurrent pitch patterns, especially near the beginning. The octave registration and rhythms of these pitch patterns sometimes change and the

idea of a lost person retracing his or her path or part of the path and then searching out a new direction may be the reason for this melodic treatment. Some of the recurrent pitch patterns are shown in Example 61.

Example 61. Tale VI, lines 1-4, recurrent pitch patterns.



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Graphic notation is used to indicate a long note, a **lingering sound with slight stress**, an **uneven, leisurely legato**, and **oscillate slowly at will using varied tone production, with multiphonics interspersed**. The relative length of rests is also indicated. The instruction of **doloroso legato**, the wandering melodic style, and the aural stretching by the use of many large, slurred leaps all contribute to the "lost" feeling.

Tale VII: The Wanderer in the Deep Cavern is a percussion solo with intermittent bass clarinet accompaniment. It is scored for xylophone, piccolo timpano, large suspended cymbal, vibraphone, large triangle, small tamtam, and bass drum. Selected instruments are amplified. The entire percussion part is specifically, rather than graphically, notated. Only the exact durations of the pitches are left to the performer's discretion.[249]

Tale VII gives the general impression of leisurely wandering which is achieved through the varied pacing of the notes. **Semi-slow or semi-fast staccato**, as shown in Example 62, is the main component of both parts. In addition, the xylophone part includes some leisurely and uneven staccatos, long trills, and very fast climatic notes.

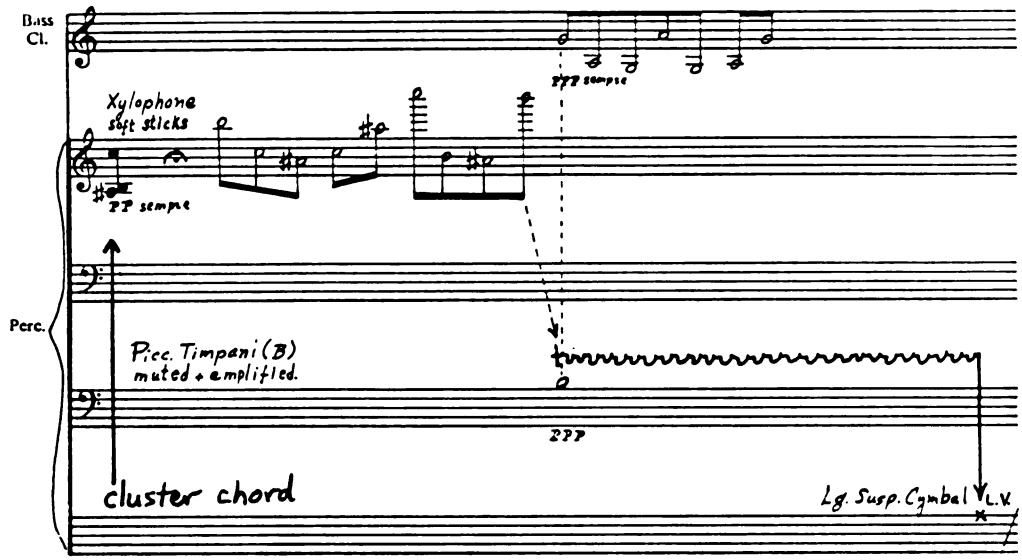
The cavern is portrayed in several ways. High sounds, such as xylophone and triangle, juxtaposed against low sounds, such as timpano, vibraphone, and bass clarinet, give the impression of a cavern with high ceilings. The short, high-pitched xylophone notes sound like droplets falling from imaginary stalactites.

Dissonant harmony in the form of cluster chords adds to the eerie atmosphere. The percussion part opens with a xylophone cluster chord; i.e., the half-step A♯-B and an additional ninth up to C. This chord, shown in Example 62, generates much of Tale VII's pitch material. The tale ends with four xylophone chords, played against the bass clarinet's flutter tongued D♯. All but the last chord include octave spacing, a cluster, and the pitches B, C, and C♯. The last sonority is the dyad C♯-D♯.

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[249]This kind of notation is consistently employed in the clarinet part.

Example 62. Tale VII, line 1, leisurely wandering style.



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"Dissonance" also occurs because the percussion part uses Pitch-group I and the bass clarinet uses four of the five pitches of Pitch-group II.[250] The bass clarinet part provides a sense of resolution for this dissonant tale because the last note, the long and loud flutter-tongued D♯, is a member of Pitch-group I. Although the final chord is the cluster of C♯-D♯, the bass clarinet's movement from nondiatonic to diatonic provides a cadential feeling.

The Wanderer in the Deep Cavern is in binary form. Section A consists of the first two pages of the score and is always soft. Section B begins with the xylophone cadenza on the third page. Section A begins slowly, speeds up near the end (line 4), and then slows down. Section B follows a similar pattern but it is exaggerated. There is a molto crescendo

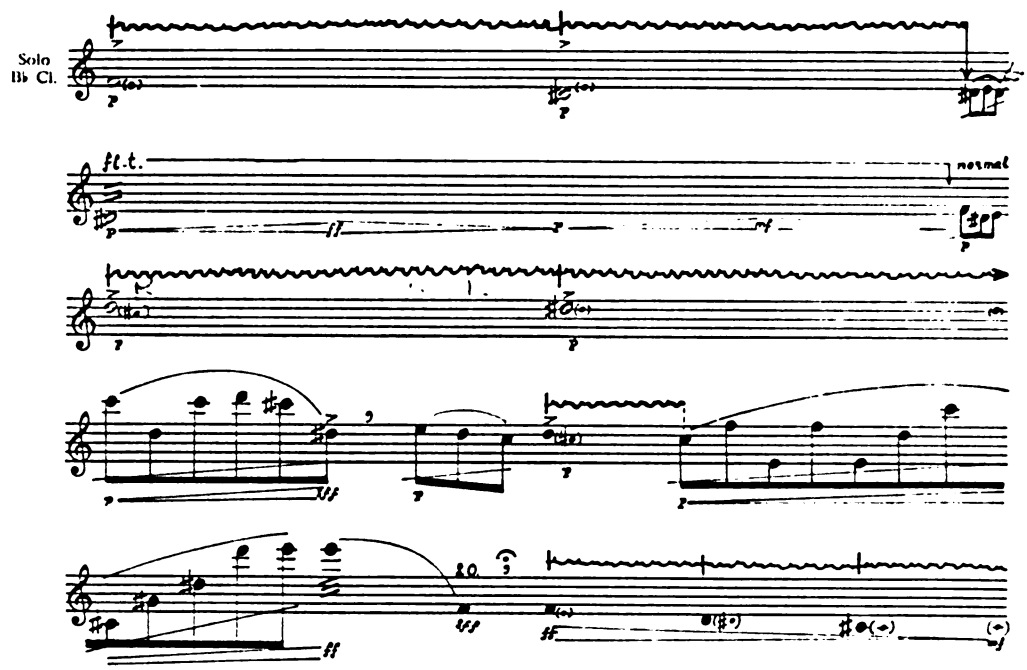
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[250]The pitch A is omitted.

and an accelerando from the xylophone cadenza into a din of bass clarinet flutter-tonguing accompanied by cymbal and vibraphone trilling. This precipitates an animated extension of the xylophone line which is capped by a bass clarinet **S.O.** A long bass drum roll tapers from **fff** to **pppp** to end Tale VII.

Tale VIII: Caught Up in the Rushing Stream is through-composed and is the second loud and energetic tale. It is primarily a clarinet solo. The image of a rushing stream is created by clarinet trills, flutter-tonguing, and numerous flurries of notes played **as fast as possible**. Dynamic fluctuation creates the image of waves and flowing water. (See Example 63.) The percussionist adds vital moments of volume building toward the climax, described as **complete pandemonium**.

Example 63. Tale VIII, lines 1-5, beginning of clarinet solo.

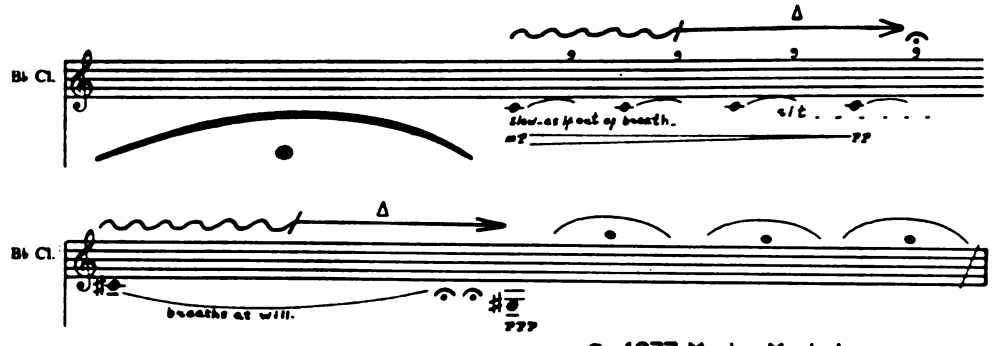


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Complete pandemonium is performed in duet with the clarinetist's **quasi scream--hold as long as possible** on the very high note of b^{b3}. This is such an intense moment that a lengthy rest is then required for the recovery of the performers as well as the audience. Following the rest, the clarinetist plays softly and breathlessly.

The clarinet part uses Pitch-group I. No pitch predominates, because of the intense activity, until after the long rest. B^{b} then achieves prominence as the note of recovery. The next, and final, two pitches are B and $F^{\#}$. Their subdominant-tonic relationship implies a plagal cadence which seems important in this context. Example 64 illustrates the use of these pitches.

Example 64. Tale VIII, lines 12-13, plagal cadence.



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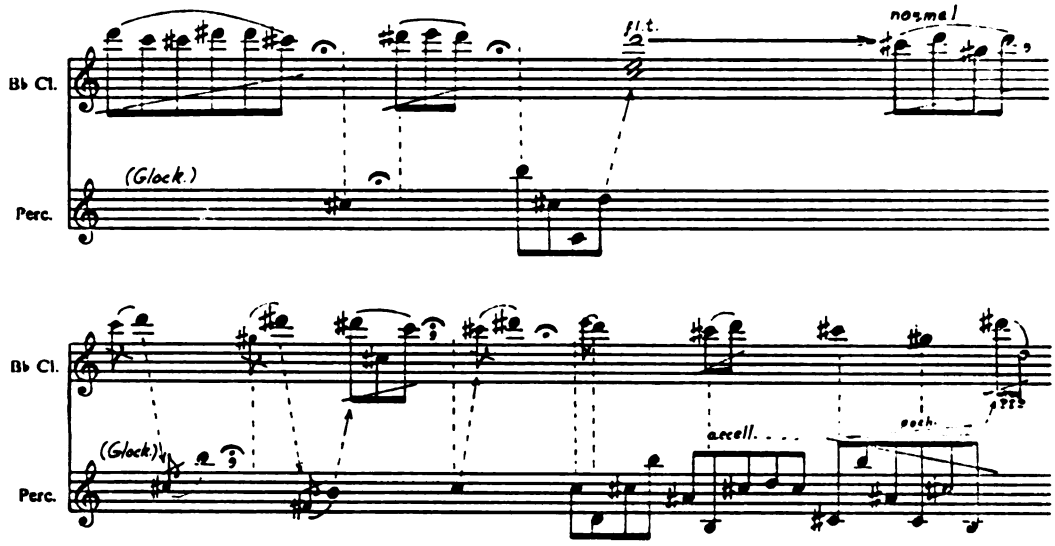
The improvised transition into Tale IX features continuous soft, dense, and low-pitched percussion sounds, which may include G from Pitch-group II.

Tale IX: Gently Fluttering - the Heavenly Bells Hang from a Cloud is scored for B♭ clarinet, glockenspiel, and "glass instruments including glass wind chimes." Most of the clarinet notes are in or near the altissimo register. The glockenspiel and glass instruments have high tessituras. These sounds can be interpreted as heavenly sounds. Gentle fluttering is the result of the sustained quiet dynamic level, groups of fast notes, flutter-tonguing, and grace notes.

Both parts use Pitch-group I but the clarinet omits D♯. This pitch only occurs at the beginning and end of Tale IX. It is the first pitch and also appears in the codetta, repeated five times, like a tolling bell. Several other pitches achieve prominence because of repetition or length. The clarinet has several lengthy C's and C♯'s. The glockenspiel uses the repetitive "tolling bell" idea with C♯ on three occasions.

The melodic style is often conversational, with the melody shared alternately by the percussion and clarinet. This is shown in Example 65.

Example 65. Tale IX, lines 2-3, conversational style.



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Tale IX is in binary form with a codetta. Line 5 begins Section B. The codetta begins at the end of line 10, after the clarinet part is finished. The tolling D#'s are featured against a background of dispersed activity using glass instruments.

Tale X: Reflected in a Drop of Dew - Memories Floating, the last tale, is the longest. This seems appropriate for the final movement of this lengthy, multimovement composition. Tale X is divided into three sections. Section A is atmospheric and lasts through the diminuendo at the end of line 5. Section B is similar to Section A but is less improvisatory and extends from line 6 through the fermata at the end of line 13. Section C consists of the clarinet-marimba duet of the final page. A simple codetta concludes *Wild Tales* and Tale X. It consists of a soft and lengthy flutter-tongued clarinet note with a high unpitched percussion accompaniment.

The last two tales are the only ones in which both the clarinet and percussion parts utilize Pitch-group I. Tale X begins, however, with a percussion-improvised introduction featuring the "nondiatonic" pitch A. It is the only "dissonance" used since Tale VII and dissipates soon after the clarinet enters. Following the introduction, no pitch predominates in Tale X. Pitched percussion parts for marimba and vibraphone are prominent and include specific pitches for use in the improvisations. It is the only tale to have done this.[251]

Trills are most important in this tale, creating the impression of shimmering water on which memories float. The clarinet and percussion

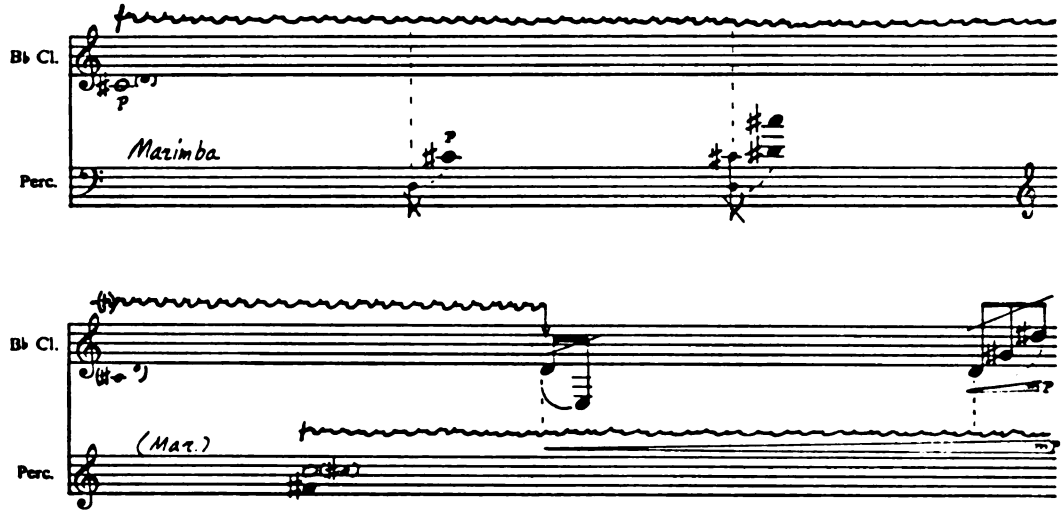
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[251]Specific pitches for improvisation were previously used only in the transition sections.

often change trilled pitches alternately, like waves in chain reaction, as Example 66 illustrates.

In Tale X, graphic and specifically-notated materials create an ethereal, floating atmosphere which changes through increasing intensity and the emergence of melodic lines. Several unison pauses add to the dramatic buildup to the culminating duet of the last page. In the codetta, the two voices fade off into the distance as the fantasy ends and "reality" returns.

Example 66. Tale X, lines 6-7, trills imitating shimmering water.



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CHAPTER EIGHT

VARIATION DUOS BY FRANK McCARTY

Background

Frank McCarty was born in Pomona, California in 1941. His college studies were accomplished in California where he received his B.A., M.M., and Ph.D. degrees from San Diego State College, the University of Southern California, and the University of California-San Diego, respectively. His composition teachers were David Ward-Steinman, Howard Brubeck, Ingolf Dahl, George Perle, David Raksin, Robert Erickson, Kenneth Gaburo, and Pauline Oliveros.[252]

McCarty has taught composition and electronic music and directed the new music ensemble at the University of North Carolina-Greensboro since 1976. His previous teaching positions were at California State University-Fullerton and the University of Pittsburgh.[253] He has extensive experience as a performer of woodwind, percussion, and electronic instruments, including ten years as a percussionist with the San Diego

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[252]Anderson, 344; Peter Christ, ed., *Composium: Annual Index of Contemporary Compositions* (Los Angeles: Crystal Record Co., 1972), 23; correspondence and conversations with Frank McCarty.

[253]Ibid.

Symphony and numerous concerts as a member of BIOME, "a mixed-media, live-electronic music ensemble."[254]

McCarty's research interests include acoustics, aesthetics, composer's theater, composition, computers, electronic music, new music notation, percussion, and woodwinds. He has published articles on many of topics. In 1974, he served as an American delegate to the International Conference of New Music Notation in Ghent, Belgium.[255]

His compositions are in a broad range of styles, are for numerous media, and include collaborative productions for dance, film, radio, television and theatre. Although *Variation Duos* is unpublished, some of McCarty's compositions are published by Artisan Music Press, J. Boonin, HaMaR Percussion, Media Press, and Soundlib.[256]

Variation Duos

Variation Duos is a timbre study for B^{b} clarinet and marimba, individually and in combination. It employs a variety of styles, as the title suggests, and "exploits the fact that both instruments share the same basic timbre, a wave-form with prominent odd-numbered harmonics."[257] This six-movement composition of over twenty minutes length was written for the "Uwharrie Clarinet-Percussion Duo." Variations I-IV were composed in 1979 and received the award of Honorable Mention in the Uwharrie Duo International Composition Contest of the same year. Variations V-VI were completed in 1981.

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[254]Frank McCarty, letter to the author, July 21, 1988.
[255]Two of his articles about notation are cited on p. 54 of Chapter 2.
[256]McCarty, July 21, 1988
[257]Ibid.

Many new performance techniques and "sound effects" are utilized in *Variation Duos*.[258] Multiphonics and timbre variations are the most prevalent new sound elements in the clarinet part. Dead-sticking and bowing are two of the new marimba techniques used.[259] Notation appropriate for these techniques appears in the score and is clearly explained in the instructions. All of the variations except Nocturne use a wide dynamic range.[260] Although the pitch range is relatively modest, this is not a duo for novice performers.[261] The new techniques are used extensively and tricky ensemble situations prevail.

The six movements (i.e., variations) are different in tempo and style but are unified by a pitch-series (Example 67) and the recapitulative final movement, Spondes. Some of the styles represented are pointillism, sound mass, chance, controlled improvisation, and minimalism.

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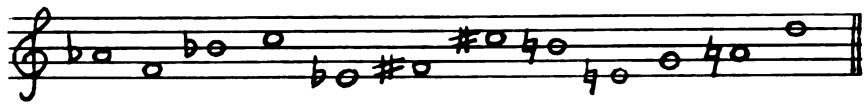
[258]McCarty's performance experience on clarinet and percussion was valuable because he was able to test the multiphonics, timbre variations, and new marimba techniques and effectively incorporate them. Composer-performers are often the individuals on the cutting edge in the expansion of instrumental technique; for example, William O. Smith was in the forefront of the development and musical use of multiphonics for clarinet and Michael Colgrass was an innovator in writing music for percussion.

[259]Dead-sticking is the technique of striking the marimba bar and not allowing the mallet head to rebound off the bar. Dead-sticking prevents the bar from resonating; therefore, a dry sound is produced. Standard striking technique allows the bar to resonate because the stroke includes a rebound.

[260]"**N**" is a dynamic mark found in all of the variations. It signifies the softest possible dynamic, "niente" or "nothing."

[261]The marimba part has a range of $c\text{-}a^3$, which fits the range of the standard marimba. Although the range of the clarinet part is $d\text{-}a^3$ (for Troches and the total composition), the altissimo range is not exploited. The clarinet part only extends upward to $b^{\flat 2}$ in some of the variations.

Example 67. Pitch-series.



The variations (Troches, Masque, Catch, Nocturne, Charm, and Spondes) are arranged as fast-slow-fast-slow-fast-fast.[262] The slow variations are pulseless. The fast variations each have a pulse, however, Charm is the only variation that uses a time signature. Only Charm and Spondes use barlines; they are metrically necessary in Charm and they organize the diverse elements of Spondes.

The clarinet and marimba perform as equal partners, playing simultaneously or alternately, in Variations I-III and VI. Variations IV-V provide contrast through use of a melody-plus-accompaniment style. In both of these variations the marimba plays almost all of the time. It provides the background in Nocturne and the foreground in Charm. These variations are paired as "intermezzo" and "divertimento" with the clarinet and marimba, respectively, in the lead.[263]

Variation I: Troches

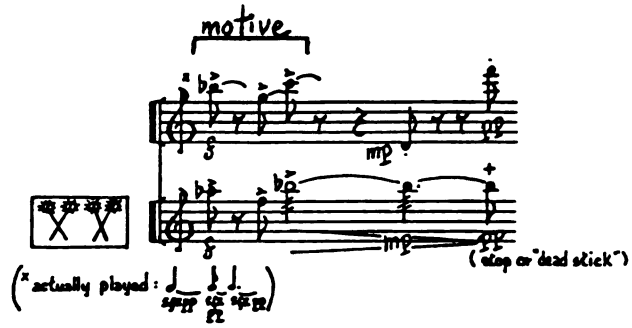
Troches is pronounced "trokes," which rhymes with "tropes."[264] These rhyming words describe two structural aspects of Variation I: the trochaic poetic meter and the technique of troping. The first three notes are stated in unison by the clarinet and marimba and comprise a motive

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[262]Catch has a slow introduction and Spondes has a slow coda.
[263]McCarty, July 21, 1988.
[264]Conversation with the composer.

(Example 68) which has rhythmic, accentual, and melodic identities. The motive is germinal for Troches and is also used in other variations.

Example 68. Troches, line 1, opening motive.



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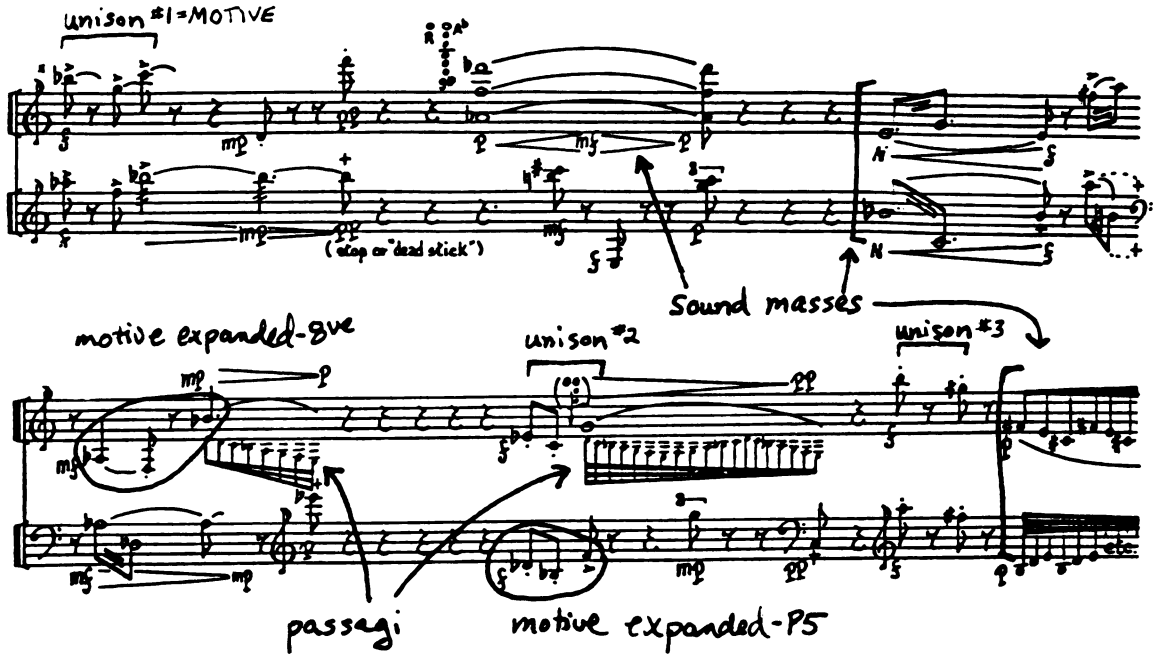
Traditional melodic lines and phrases are not present in *Variation Duos*. Motivic unity, rhythmic action, and timbre are the most important parameters in Troches. The melodic style is one of fragmentation. Rests are almost as important as notes. A wide dynamic range is required. Troches is notated without barlines or time signatures but the length of each note and rest is specifically indicated. "It is fast and energetic yet does not have a controlling, repetitive meter," said McCarty.[265]

There are four brief unison passages in Troches. The first three are shown in Example 69. They are focal points because of their monophonic texture and loud dynamic level. The unisons alternate with contrasting segments of contrapuntal and homophonic styles. These are the troped passages.

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[265]McCarty, July 21, 1988.

Example 69. Troches, lines 1-2, unison passages, troping, sound masses, and motive expansion.



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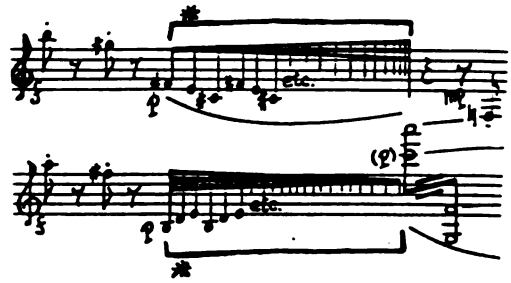
The rhythmic "stamp" of the motive is the long-short pattern characteristic of the trochaic poetic meter. Although the motive is notated with eighth notes and rests, a footnote in the score indicates that the pattern is performed as quarter note, eighth note, dotted quarter note, with a **sfzpp** on each note. (See the previous Example 68.) The dramatic **sfzpp** effect, stated in unison by the duo in a rather high tessitura, begins the composition with fanfare. On some occasions the trochaic rhythm pattern of the motive is used without accents.

The melodic shape of the motive is the intervallic pattern of descending minor third followed by ascending perfect fourth. Using set theory analysis, this group of three notes is identified as pitch class set

(0, 2, 5).[266] Troches evolves organically out of this motive. The head of the motive, the interval of a minor third, appears frequently.

The characteristic intervals of major second, minor third, perfect fourth, and their inversions are all derived from pcs (0, 2, 5) and are used harmonically in dyads, multiphonics, and trills or tremelos. Other melodic patterns are related as pcs (0, 2, 5); for example the tail of the motive, the interval of a perfect fourth, is expanded in several ways. It follows the minor third with a perfect fourth plus octave displacement (see Example 69) or a perfect fifth, with or without octave displacement (see Example 69). In the three-note, repetitive passage of clarinet accelerando with marimba ritardando that is shown in Example 70, the notes of the motive are rearranged into descending or ascending pitch order to produce melodic intervals of a major second and a minor third. The major second achieves "significant interval" status through its relationship to the opening motive.

Example 70. Troches, line 2, clarinet accelerando with marimba ritardando.



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Special effects of dead-sticking on the marimba and multiphonics and timbre variation on the clarinet are featured in Troches. McCarty

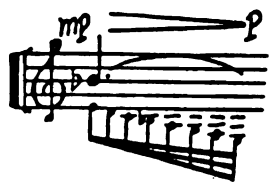
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[266]"Pitch class set" will henceforth be abbreviated as "pcs."

provides an adequate explanation of his symbology and considerately provides fingerings for the clarinet effects.[267] Dead-sticking transforms the resonant marimba into a nonresonant instrument. The relatively new technique of the one-handed roll is also used on the marimba. Although it does not produce a special aural effect, it expands what is playable on the instrument. Special effects transform the clarinet from its traditional role as a one-line instrument into a multivocal entity capable of producing harmony and counterpoint. This ability is, of course, somewhat limited.

Blocks of sound or "sound masses" are used in a variety of ways and are shown in the previous Example 69.[268] Tremelos are used as a homophonic marimba accompaniment to brief clarinet melodies and as clarinet-marimba chords. When the marimba plays brief melodies, the clarinet accompanies brief marimba melodies with two types of sound mass: (1) a multiphonic and (2) a more contrapuntal sound mass, i.e., a held note decorated with a "passagi"-like timbre variation.[269] (See Example 71.)

Example 71. Troches, line 2, "passagi" type of timbre variation of clarinet.



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[267]If all composers used such clear and thorough notation, fewer performers would be hesitant to approach compositions requiring new techniques.

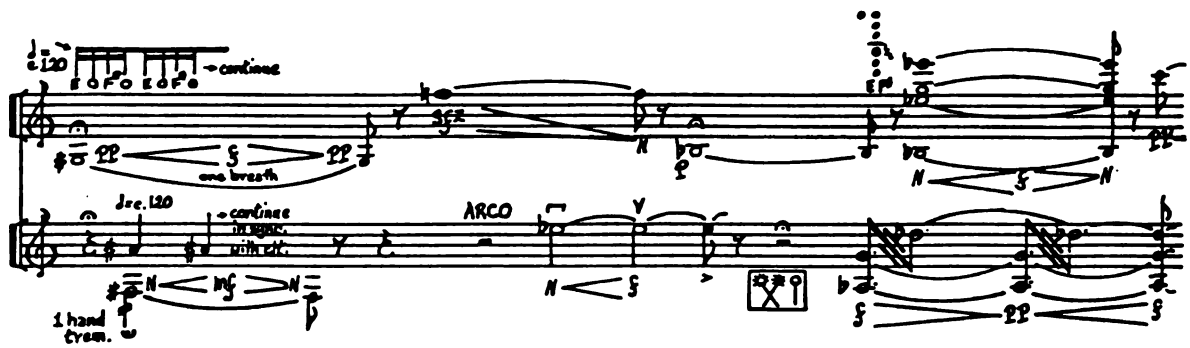
[268]"Sound mass" is a term often associated with Edgard Varèse.

[269]"Passagi" are fast, ornamental, and often scalewise ornaments that were added improvisationally to some music of the Renaissance and Baroque periods.

Variation II: Masque

Masque is not music for a sixteenth or seventeenth century English party; another definition of "masquerade," i.e., "to assume the character of another,"[270] does describe the activities of this variation. It is a study in *Klangfarbenmelodie,* i.e., color melody, and *Klangflachen-komposition,* i.e., "sound-mass which ebbs and flows through constant overlapping of timbre and spatial modulation."[271] The clarinet and marimba alternately assume the character of the other, trading off notes and chords and sneaking in and out of each others' sounds. The interchanging sounds of the duo usually start inaudibly or loudly and crescendo or diminuendo to the opposite extreme. This creates ever-changing timbres although only two instruments are used as sound sources. According to the composer, "neither instrument should be recognized as representing its conventional self and both meet in certain shared-areas."[272] The beginning of Masque is shown in Example 72.

Example 72. Masque, line 1, overlapping of pitches and sound masses.



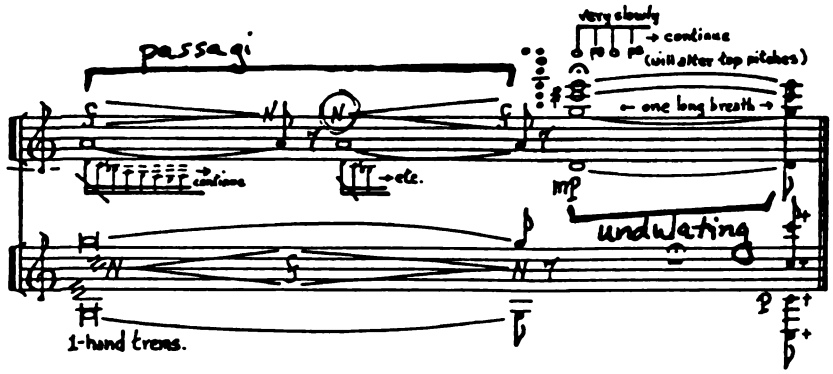
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[270]Random House College Dictionary, rev. ed. (1984), s.v. "masque."
[271]Cope, *New Directions,* 358.
[272]McCarty, July 21, 1988.

Single notes and sound masses are overlapped. Single sustained notes are produced on the marimba by bowing the bars with a string bass bow. This produces a lovely tone.[273] The single pitches, i.e., non-multiphonics, of the clarinet part occur with and without timbre variation. The timbre variations are of two types: (1) the "passagi" variety similar to those which appeared in Troches and (2) a simpler undulating variety. These are shown in Example 73. The sound masses are one-handed and two-handed tremelos on the marimba and multiphonics, with and without timbre variation, on the clarinet.

Example 73. Masque, line 3, timbre variations of clarinet part.



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The marimbist is instructed that "mallet combinations should be 'voiced' throughout for equal loudness." This is accomplished by using an array of four mallets, arranged in the hands from left to right, ranging from soft to hard. Each mallet is appropriate to the range of the notes played by the particular mallet.

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[273]It is quite different from the eerie tone produced by bowing the percussion instruments that are most likely to be bowed, those made of metal.

Various elements of "chance" are employed in Masque. There is no meter or time signature and duration is left to chance as well. The length of "one breath" or the amount of time the performers choose to spend on their long notes is not specified by the composer.

The climax of Masque illustrates chance with regard to pitch selection. It consists of four unison, **sfz** eighth note chords. The pitches are not specified but the directions state: "clarinetist selects a rich multiphonic capable of easily-controlled **sfz** attacks. Marimba plays the same pitches as in the multiphonic." It is curious that the composer, who had enough performance ability on clarinet to experiment with multiphonics, who notated the multiphonics and fingerings on all other occasions, and who used serial pitch techniques, would leave this to chance. The author has found the multiphonics of *Variation Duos* to be playable, but some are not overly responsive. Perhaps the composer wanted to be sure that this moment would be truly climactic, unspoiled by unresponsive or failed multiphonics.

Variation III: Catch

Elements of minimalism[274] and serialism are blended to create a virtuosic display of ensemble playing in Catch. Special effects, such as

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[274]"Minimal music" is referred to by a variety of names, depending on the source. Some of the names are "American minimal music," "minimalist music," "repetitive music," "phase music," "meditative music," and "acoustical art." The founders of this style, which has strong exotic influences (i.e., Eastern and African), were composer-performers La Monte Young, Terry Riley, Steve Reich, and Philip Glass who were the "first to apply consistently the techniques of repetition and minimalism in their works," according to Wim Mertens, *Minimal Music: La Monte Young, Terry Riley, Steve Reich, Philip Glass* (Belgium: n.p., 1980) trans. J. Hautekiet (London: Kahn and Averill, 1983), 11.

multiphonics, are not paramount as they are in the other variations. The only such effect used in Catch is a quickly repeated multiphonic at the end, which functions as a tiny codetta. The mesmerizing effect of phase-music is the principal feature of Variation III.

Catch is based on a nine-note row (Example 74) that is used in its original and inverted forms. The row is derived from note #11 followed by notes #3 through #10 of the inversion of the original pitch-series, which was illustrated in Example 67. When reduced to the smallest possible intervals, or their enharmonic equivalents, the melodic intervals of the row include one half-step, two whole-steps, three minor thirds, and two perfect fourths. These intervals are sometimes inverted. The row has one rhythm which is maintained throughout the introduction. This rhythm is slightly changed several times in the **Allegro Molto**.

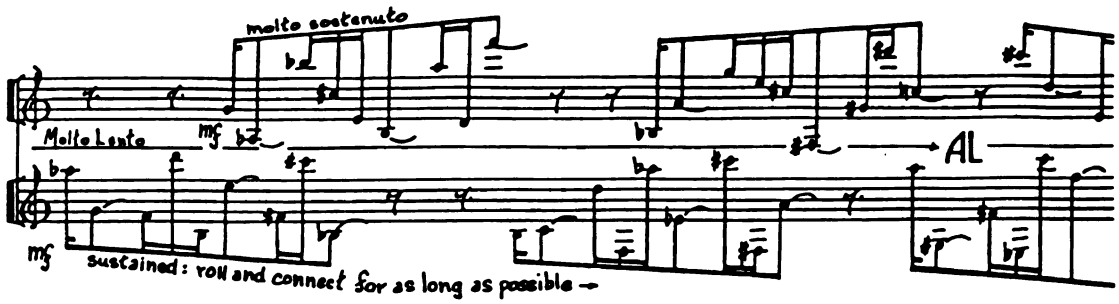
Example 74. Nine-note row used as basis for Catch.



Catch begins with a slow introduction and accelerandos to the **Allegro Molto**. The introduction has a range of approximately three octaves per instrument and most of the intervals are compound. The marimba plays first, stating the original form of the nine-note row. The clarinet answers with the inverted form of the row. This overlaps the first phrase of the marimba. (See Example 75.) The marimba alternately states the original and inverted row forms at various pitch levels six times. The

clarinet also states the row six times, alternating the inverted and original forms in the opposite order to the marimba.[275]

Example 75. Catch, line 1, the beginning of the introduction.



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Most of Catch, i.e., the **Allegro Molto**, is a chase in which the clarinet tries to catch the marimba, which always has one less note of the repetitive patterns. As McCarty describes it: "Catch is a kind-of canon, or (in French) a 'chaisse', in which the musical units are played and repeated at changing time-delayed intervals."[276] Steadiness of tempo is of utmost importance. The range is half the size of that of the introduction and the intervals are usually smaller than an octave. The melodic lines remain thoroughly disjunct, however.

The **Allegro Molto** is repetitive and subtractive music.[277] The clarinet begins with the nine-note row. Concurrently, the marimba plays the same row but the second pitch is omitted. The melodic patterns are

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[275]Three notes (numbers 1, 8, and 9) are omitted from the fifth clarinet statement so that the duo will reach the **Allegro Molto** at the same time.

[276]McCarty, July 21, 1988.

[277]Subtractive music is the opposite of additive music; i.e. notes are subtracted from rather than added to the pattern.

repeated until both instruments join in unison on the first note of the next pattern. In the first cycle of the repetitive patterns (shown in Example 76), the clarinetist plays its nine-note row ten times while the marimbist plays its shortened version, the eight-note row, eleven times. They are synchronized on the next downbeat, where the beaming of the notes coincides. At this point, each part drops a note and begins the chase again. This process of coming in and out of phase with each other continues until the parts are both reduced to one pitch.

Example 76. Catch, lines 2-4, the first chase cycle.



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There are eleven different cycles. Beginning with the third cycle, the clarinet always takes on the exact melodic line, i.e., pitches and rhythms, that the marimba had in the previous cycle. Slight rhythmic differences are necessary in the first two cycles.

The last three marimba cycles and the last two clarinet cycles include only the pitch d^1. As Example 77 shows, the rhythm changes in each cycle. A ritardando is created by the insertion of increasing amounts of rest between the notes. This final pitch is not a part of the original row of the **Allegro Molto**. It is introduced by the marimba in the fourth cycle. When d1 is added, a note is also dropped from the original row pattern, and the rhythm is altered.[278]

Minimal music uses a minimum amount of material, such as short, simple melodic patterns, repetitive schemes, a steady pulse, and "phase relationships . . . based on the idea of gradual nonsynchronization."[279] Minimal compositions are generally long so that the "musical statis" can be achieved. Catch clearly has elements of minimal music[280] but does not last as long as a full-blown minimal piece. The use of dynamic changes and the type of changing patterns, relate Catch most closely to the style of Steve Reich. Many minimal pieces are additive music. Catch is subtractive music; i.e., it begins with nine notes and diminishes to one.

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[278]The order in which the notes are dropped from the nine-note row (A-B-C-E^{b}-F$^{\#}$-C$^{\#}$-B-E-G) is numbers 2, 3, 4, and then 5. The new, shorter row consists of the original notes 1-6-7-8-9 with the D inserted as the second note of the new row (A-D-C$^{\#}$-B-E-G). The order in which the notes are dropped from this row is numbers 3, 4, 5, 6, and 1, respectively. The pitch d1 is the only note that remains at the end.

[279]Watkins, 572.

[280]Elements such as short, simple melodic patterns, repetitive schemes, steady pulse, and phase relationships are present.

Example 77. Catch, lines 9-10, disintegration of line to one pitch.



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Describing the overall scheme of *Variation Duos*, McCarty said,

> This is the mid-point of the piece. Catch acts as an internal finale. It is the fastest and most virtuosic . . . of the set. It also rounds-out the first half of the piece, conforming to an overall fast/slow/fast shape. From here on, the piece refers both forwards and backwards in form, thematic and expressive content.[281]

Variation IV: Nocturne

"Nocturne acts as a slow 'intermezzo' which is related to the Bartokian 'night music' style, but potentially, is somewhat more emotional and dynamic," according to the composer.[282] It is in an aleatoric style. The indeterminate form includes a chord progression which is played on the marimba, graphically-notated materials upon which the clarinetist improvises, and optional scale passages performed by the clarinetist with

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[281]McCarty, July 21, 1988.
[282]Ibid.

or without the marimbist. The marimba chords provide the background for the foreground of clarinet improvisation. The scale passages are ritornelli. Nocturne is notated on one page which is shown in Example 78.

Most of the clarinet part is notated with graphic symbols. The symbols consist of notes without staves, dynamic and articulation markings, and implied phrases which resemble multiphonics, timbre variations, tremelos, and accelerando patterns from Variations I and II. The events are randomly distributed around the page (Example 78) and will not all necessarily be used in each performance. The clarinetist is simply instructed to "improvise nocturnally on the graphic materials." The clarinet part also includes four scale passages which have several options for performance. Portions or all of the scales can be performed and may be repeated. If the clarinetist chooses to give a cue, the marimbist is invited to join in the performance of the scale passages.

The pitches of the marimba part are written out but their timing is left to the discretion of the marimbist. The marimba part includes a chord progression of twenty-eight chords and four optional scale passages. The extensive instructions discuss texture, dynamics, style, length of the chords, and length of the entire variation.

The chord progression (shown in Example 78) begins with a dyad, expands to two triads, and then uses quartads[283] exclusively until the

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[283]The terms "dyad," "triad," and "quartad" will be used here to designate chords of two, three, and four notes, respectively. "Triad," in this context, will simply mean a three-note chord, not the more familiar definition associated with tertian harmony of a three-note chord stacked in thirds. Four-note chords will be called "quartads" because the terms (1) "tetrachord" and (2) "quartal chord" traditionally refer to (1) a scalewise grouping of four notes and (2) chords stacked in fourths. These terms do not describe the sonorities which appear in the Nocturne.

Example 78. Nocturne.



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Clavinet: Improvise nocturnally on the graphic materials. Portions or all of the descending scales may be repeated: Cue the marimba if you wish it to join.

Nocturne ends with another dyad. The dyads, a minor third and a major sixth, are consonant. All of the triads and quartads include some dissonance. The dissonances are arranged with distant spacing so that the dreamy atmosphere characteristic of a nocturne is created. Changes between the chords are usually subtle since most adjacent chords maintain at least one common tone and the melodic motion is usually by step.

Analysis of all of the intervals within all of the chords, i.e., the intervals between adjacent and non-adjacent chord tones, reveals several trends. The dyads are consonant. The triads each have one dissonance so, since there are three intervals, are 33% dissonant.[284] None of the quartads are 100% dissonant or consonant. The pattern of quartad consonance-to-dissonance is one of nearly symmetrical frequency. This is illustrated in Example 79.

Quartads with an equal amount (50%) of consonance and dissonance are used most frequently. These chords establish an equilibrium of sonority against which chords of more or less dissonance are compared. The most dissonant chords, those with four and five dissonant intervals, are strategically placed. Two occur just before the midpoint of the progression; the others occur toward the end. The last five sonorities of the progression are, in order, quartads with four, five, four, and one dissonance followed by the final dyad, the major sixth. This culminating pattern of dissonance-towards-consonance (67%-83%-67%-17% dissonance) is equivalent to the "drive to the cadence" concept.

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[284]For example, in the first triad (b^{b}-f^{1}-a^{b1}), the adjacent intervals of b^{b}-$f1$ and $f1$-a^{b1} are consonant (P5 and m3) and the non-adjacent interval of b^{b}-a^{b1} is dissonant (m7). The score says that the pitches can be used in any octave. Possible inversion due to this instruction will not effect the consonance or dissonance of the intervals involved.

Example 79. Dissonance pattern of quartads.

number of quartads:	0	3	4	10	4	2	0
number of dissonant intervals in quartad:	0	1	2	3	4	5	6
amount of dissonance:	0%	17%	33%	50%	67%	83%	100%

If the clarinetist signals the marimbist to join in a scale passage, the core chord progression is interrupted. It is resumed after the playing of the scales. Each of the four scale passages (see the previous Example 78) consists of descending, conjunct motion with at least one leap upward, followed by another descending scale passage. The longest descent is twelve notes and the shortest is three notes. Each of the passages have a different number of notes, different harmonies, different melodic patterns, and different starting and ending points for the marimba in relation to the clarinet.

Parallelism is a prominent feature of the scale passages and is used differently each time. Passage A[285] consists of major and minor thirds

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[285]The scale passages have been labelled A, B, C, and D in Example 77 solely for ease of discussion. This does not imply the order in which the scales should or might be performed.

between the scales and results in the sounding of tertian triads.[286] Passage B evolves from clarinet alone, to parallel major seconds, to a parallel cluster of two major seconds, to minor seconds, and finally to a parallel cluster of two minor seconds.[287] The other two scale passages (C and D) consist, when three notes are sounding, of pcs (0, 2, 7) sonorities. Passage C has parallel perfect fourths or pairs of perfect fourths while Passage D evolves through perfect fifths, pairs of perfect fifths, major second above perfect fifth, and, finally, parallel major seconds.[288]

Once a nocturnal mood has been established by the marimbist, the success of Nocturne depends on the willingness and ability of the clarinetist to improvise. Improvisation in this context should be much easier for the "non-improviser" than jazz improvisation, for example, because it is more flexible. In jazz, the improvising performer must be concerned with the chord changes. In Nocturne, no theoretical specifics are required. Achieving the appropriate mood is necessary and is a more subjective task.

Variation V: Charm

The composer describes Charm as "a 'divertimento,' pairing backwards to the Nocturne on a formal level."[289] The marimba is the instrument featured in this "drumming piece" whose title is an anagram of "march." Three lengthy repetitive sections comprise the basic form: March I - Trio - March II. The Trio is a "drum solo" that is improvised on the marimba. The sections are highlighted by a three-measure introduction,

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[286]Passage A is dissonant 7% of the time, i.e., for one chord.
[287]The duo sonorities are dissonant 100% of the time in Passage B.
[288]The dissonance ratio of both Passages C and D is 75%.
[289]McCarty, July 21, 1988.

four breakup strains of different lengths, and a "stinger." The overall form is an asymmetrical arch form:

Introduction (3 measures)

MARCH Ia (marimba *Klangfarbenmelodie* plus clarinet)
Breakup strain I (4 measures)
MARCH Ib (marimba *Klangfarbenmelodie* plus clarinet)

Breakup strain II (2 measures)
TRIO (marimba solo)
Breakup strain III (8 measures)

MARCH IIa (clarinet hand popping plus marimba)
Breakup strain IV (2 measures)
MARCH IIb (clarinet hand popping plus marimba)

Codetta (the stinger)

Charm has elements of minimal music[290] and its repetitive patterns bear some similarity to those of Catch.[291] Charm is additive and subtractive music. Each of the five main sections (March Ia, March Ib, Trio, March IIa, and March IIb) begin with one pitch, expand to more timbres and pitches, and contract back to one pitch. Example 80 shows the plan for the Trio.

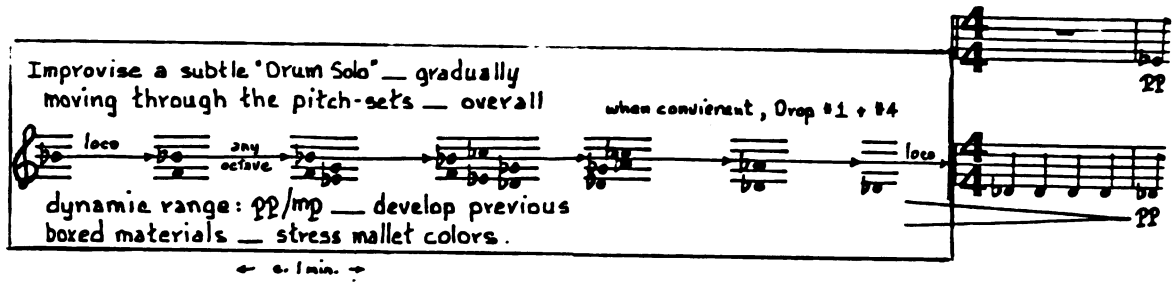
This is the only variation which uses time signatures. They are necessary for organizational and accentual reasons. A variety of compound, simple, and asymmetrical time signatures are used. The rapid pulse (eighth note equals 240) remains constant. Meter changes are frequent but are

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[290]The use of the "drumming" concept shows similarity to the style of Steve Reich.

[291]Catch is subtractive music. Its **Allegro Molto** begins with a nine-note pattern which is subjected to a disintegration process. The variation ends when the process has reduced the pattern to one pitch.

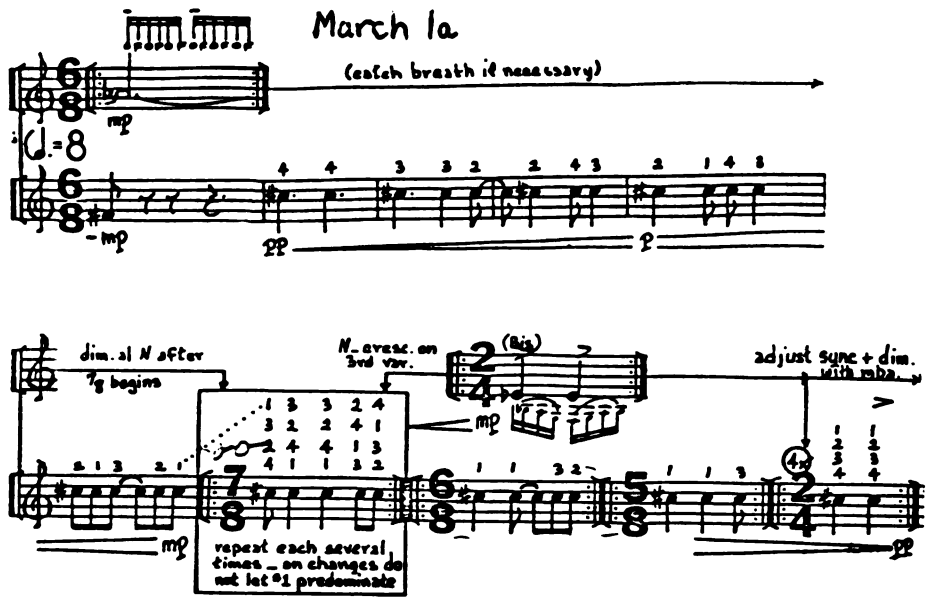
Example 80. Charm, lines 4-5, marimba solo (Trio).



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deemphasized in order to create the hypnotic atmosphere characteristic of minimal music. Hemiola and ties further confuse the sense of meter. These features are shown in Example 81.

Example 81. Charm, lines 1-2, March Ia, frequent meter changes.



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Time signatures are most aurally evident in the introduction and breakup strains. These short passages have rhythmic flair and function as fanfares. The introduction of Charm (Example 82) uses the trochaic rhythm of the motive from Troches. The breakup strains use a variety of rhythms. These passages evolve, through repetition of their tails, into the hypnotic repetitive sections (i.e., March I, Trio, and March II) that comprise most of the movement. Breakup strain I and the transition into March Ib are shown in Example 83.

Example 82. Charm, line 1, introduction with trochaic rhythm.



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Example 83. Charm, lines 2-3, Breakup strain I and transition into March Ib.



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Several special techniques are exploited in Charm. The marimba part uses dead-sticking, one-handed rolls, and pitch-bends.[292] The primary special marimba technique is concurrent use of four different mallets arranged to "produce equal gradation in color from semi-hard to dark." The different mallets[293] are used to play repetitively on one pitch for extended periods of time. They accentuate different acoustical properties of the marimba and produce *Klangfarbenmelodie*. The improvised "drum solo" includes the instruction "stress mallet colors."

Most of the pitches of the clarinet part are altered using the undulating and passagi timbre variation methods. Timbre variation is used melodically in the introduction and breakup strains and coloristically in the March I and Trio. The clarinet part sneaks in and out of the marimba texture, adding another dimension to the repetitive passages.

The final section, March II, is reminiscent of March I and features a popping (i.e., drumming) melody played on the clarinet. With the mouthpiece and barrel removed, the clarinetist strikes the right hand on top of the upper joint and fingers the clarinet with the left hand to produce six different pitches.[294] Example 84 shows the second phrase of the popping melody. The marimba uses dead-sticking to match the popping sounds of the contrapuntal exchange. As in March I and the Trio, March II begins and ends with one repeated pitch. Additive and subtractive pitch manipulation methods are used within each section.

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[292]The pitch-bends are accomplished by sliding the mallet head across the marimba bar to gradually deaden the pitch.

[293]The mallets are notated in the score as 1, 2, 3, and 4.

[294]McCarty included fingering charts and resultant pitches.

Example 84. Charm, line 7, second phrase of popping melody of clarinet.



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The harmony is structured around perfect consonances, particularly the perfect fifth. Virtually all passages, other than those with unisons or octaves, include a perfect fifth as part of the harmony. If the fifth is not present, its inversion, the perfect fourth, is. Structural relationships and more complex sonorities most often revolve around a major or minor triad, sometimes with the added second or sixth. Such simplicity of harmonic materials is often a characteristic of minimal music.

Variation VI: Spondes

The finale, Spondes, is a collage of recapitulated material from the previous five movements plus a new machine-like melody constructed of continuous eighth notes. Much of the recapitulated material is derived from Troches, the troped variation. Spondes is a trope within a trope. McCarty said, "I had a real sense of 'things within things within things' in writing it."[295] Example 85 illustrates the insertion of the new melody between the first four phrases of Troches.

The machine-like melody consists of a composite rhythm of continuous eighth notes and appears four times. The first time (Example 85), the marimba plays continuous eighth notes and the clarinet joins in an irregular pattern of unisons on every second or third note. The second time

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[295]McCarty, July 21, 1988.

(Example 85), they reverse roles. The third and fourth renditions use the hocket technique. All of these passages use the textures of clarinet alone, marimba alone, and clarinet-marimba in *Klangfarbenmelodie*.

The title refers to the spondaic poetic meter[296] and "to the fact that the movement reSpond(e)s to all the previous ones."[297] Spondes begins with the **sfzpp** motive of Troches.[298] A slight change in orchestration occurs within the first phrase. Five other quotes from Troches, all with slight changes, also appear. The other variations are quoted or parodied at least once; for example, the fourth phrase of Catch is quoted in its entirety. The scale passage composed of perfect fourths is quoted from Nocturne. Passages similar to the scales of Nocturne and the breakup strains of Charm are included as well. The mimicking does not occur in the original order of the variations; for example, the coda is based on the style of Variation II, Masque.

Spondes is filled with rhythmic excitement until the coda. In order to maintain this level of intensity and synthesize the recapitulated material, "up-tempo" passages from the previous variations are recalled. The diverse melodic styles use diverse tempos and are linked by the machine-like melody whose non-rubato style provides a constant around which the reminiscing can occur.

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[296]Spondaic meter is represented by notes of equal length. These appear in the machine-like melodies and in much of the recapitulated material.

[297]McCarty, July 21, 1988.

[298]There is a slight orchestration change in that the clarinet holds the third note while the marimba punctuates it with eighth notes. The roles have been temporarily reversed. The original scoring returns for the first multiphonic of the clarinet.

Example 85. Spondes, lines 1-3, trope within a trope.

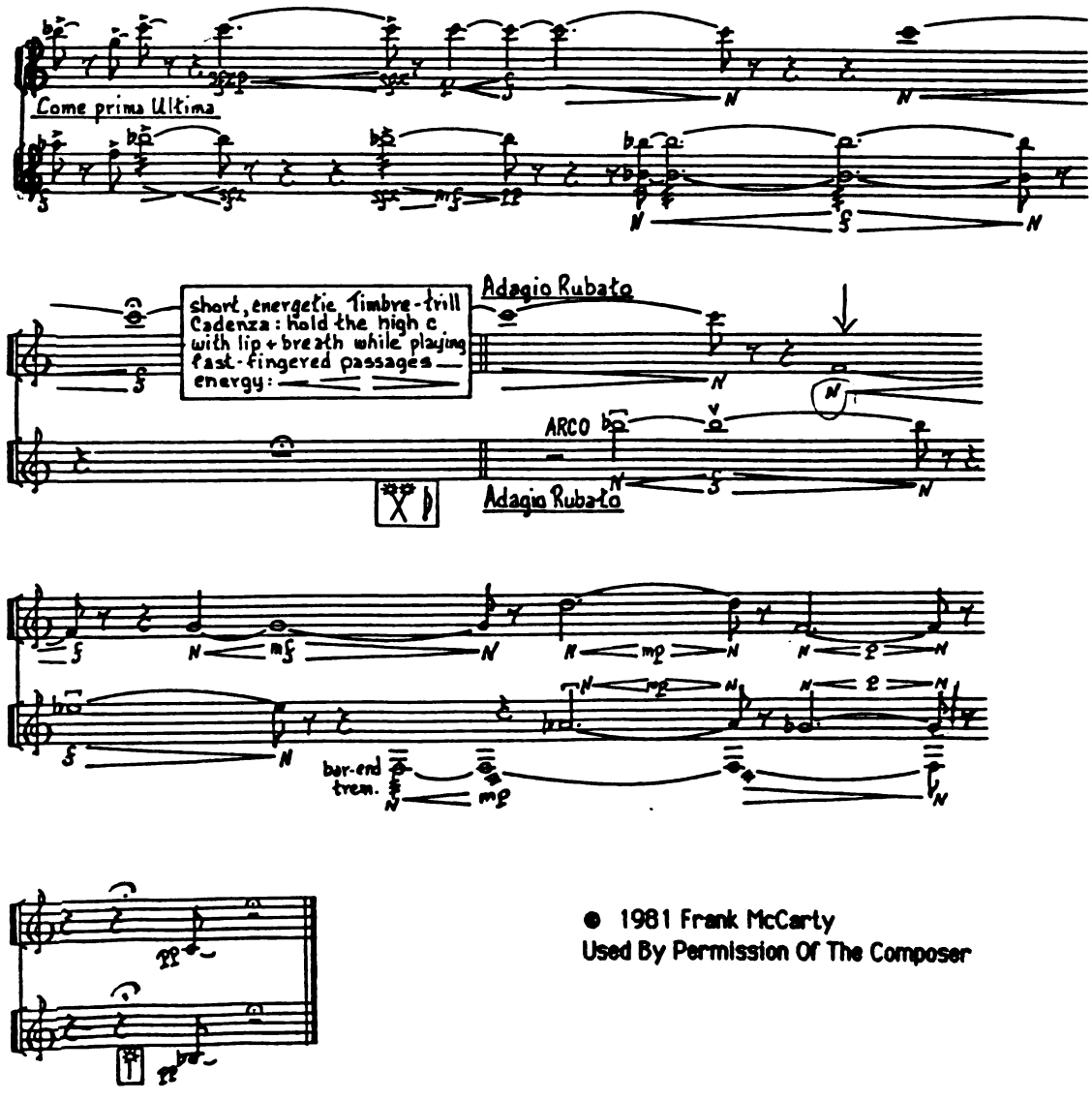


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The timeless style of Masque employed in the coda provides an automatic ritardando that bring *Variation Duos* to an effective conclusion. The texture fluctuates as one-handed rolls, bowed notes, and a combination of the two are used on the marimba. Neither instrument uses the sound mass technique. The pitch B^{b} is the focal point of the coda. It is used for *Klangfarbenmelodie*, for a dramatic, timbre-trill cadenza by the clarinet and, after some harmonic ambiguity in the **Adagio Rubato**,[299] for the final note of *Variation Duos*. The coda is shown in Example 86.

[299]There is an F minor chord and several dissonant sonorities.

Example 86. Spondes, lines 8-10, the coda.



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CONCLUSION

The clarinet-percussion duo is an ensemble born in and of the twentieth century. The importance of timbre in this century has resulted in new sounds and techniques for clarinet and has brought percussion from the musical background to the foreground. Western art music now employs a spectrum of timbres produced by traditional percussion instruments, exotic percussion instruments, i.e., those from other cultures, and sounds formerly considered to be noises. The development of the multiple-percussion technique has made possible the performance of music with many timbres by a single percussionist. Pitched and unpitched percussion instruments are now used in melodic as well as timbral and accompanimental roles.[300] The piano is the traditional chamber music partner of the clarinet. Percussion is capable of functioning in similar roles and providing more timbral interest. The agility as well as the wide pitch, dynamic, articulatory, and

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[300]For example, the first clarinet-percussion duo, *Pas de Deux* by Armand Russell, illustrates this expanded usage of percussion. Movement I employs a polychromatic collection of instruments (a triangle, cymbal, and two drums) in an accompanying role. The drums and metal instruments are used monochromatically and polychromatically to provide an accompaniment of timbral diversity. Movement II is scored for the monochromatic collection of four drums. Much of this movement features the drums, unpitched instruments not formerly thought capable of producing melodies, in a melodic capacity as a soloist. The xylophone is used in Movement III and functions as melodist, duet partner, and rhythmic and harmonic accompanist.

timbral range of the clarinet make it an effective chamber music companion for percussion.

Music of the twentieth century, especially the second half of the twentieth century, exists with a multitude of styles and aesthetic bases. Many of these are represented in the clarinet-percussion duo repertoire. The six duos analyzed in Chapters Three - Eight exhibit the breadth of style and instrumentation within this genre. They also represent many of the major stylistic innovations of the twentieth century.

Timbre is an important aspect of all six duos. Although *Variation Duos* (for marimba) and *Drawings: Set No. 3* (for timbales) are scored only for one percussion instrument or instrument-type, a wide range of percussion colors is produced on these instruments through the use of various mallets and special playing techniques. The other four duos have inherent timbral variety due to their multiple-percussion setups.

Much variety of rhythmic treatment occurs in these duos. *Pas de Deux* is metered throughout and makes slight use of changing meters. *Drawings: Set No. 3* alternates metered and unmetered movements. There is some use of changing meters. *Sonata* uses a variety of meters and metric modulations. *Tombeau, Wild Tales,* and most of *Variation Duos* are notated without meter. Each has a different aesthetic intent.

Aleatoric techniques are used for different reasons and in different amounts in the duos of McCarty, Simons, Boucourechliev, and Hodkinson. None of these duos is left entirely to chance. Hodkinson left the specific pacing of Movement II of *Drawings: Set No. 3* to the performers. He also suggested some improvisation at the climax. Boucourechliev notated all of the elements to be played in *Tombeau* but the moment at which they occur varies due to the mobile form. Simons left many items to chance by using

graphic symbols for the notation of most of the percussion part and a portion of the clarinet part of *Wild Tales Told On the River Road*. *Wild Tales* and *Variation Duos* require some controlled improvisation.

Pitch organization is different in each of the duos. *Pas de Deux* is freely diatonic. *Sonata* is chromatic but centered on the pitch A. *Tombeau* is atonal. In *Wild Tales,* Simons establishes two pitch groups which function analogously to diatonic and nondiatonic pitches. *Drawings: Set No. 3* and *Variation Duos* are based on twelve-tone rows. The row is of primary importance in the former and of secondary importance in the latter.

The clarinet-percussion duo repertoire continues to increase. It is now so large and varied that clarinetists and percussionists of all persuasions should be able to find music to perform. Although primarily a virtuoso medium, there are some clarinet-percussion duos which can be played by young college or advanced high school students.[301] There is great variety of instrumentation. Some duos have theatrical elements. There are duos which only employ standard clarinet techniques,[302] some which use special effects in a limited amount,[303] and others in which special effects

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[301] *Circus Parade* by Pierre Max Dubois, *Three Pieces* by George Ferencz, *Double Solo* by George Heussenstamm, *Journey* by Edmund Siennicki, and *Movements* by Marilyn Ziffrin are some examples of duos of moderate difficulty.

[302] *Twelve Preludes* by Jozef Gahér is a "book" of character pieces. A large percussion setup is required, however, each prelude has a different setup. Several preludes are unmetered. The clarinet part uses no special effects. The only special clarinet effects used in *Contacts* by Ivo Petrić are a few glissandi (see Example 3, Chapter 2). This duo uses a large multiple-percussion setup and an unmetered, arabesque-like lyrical style.

[303] *Bindung-Teilung* by Kazuto Miyazawa would be a excellent duo choice for a clarinetist interested in a gentle introduction to new techniques. A few multiphonics and timbre variations are incorporated (see Examples 1 and 2, Chapter 2). The percussion setup is moderate.

prevail.[304] Percussionists must consider playing techniques, the difficulty of the music, and instruments to which they have access when choosing music to perform. The duo repertoire includes great variety in these categories.

This variety is reflected in the six duos studied. *Pas de Deux* has modest instrumentation and technical requirements and is playable by college students. It uses only standard techniques in both the clarinet and percussion parts.

Drawings: Set No. 3 uses a small setup. It has more technical difficulties than Russell's duo but is also playable by college students. The clarinet part uses some special effects but no multiphonics. The percussion part requires standard but more varied techniques than *Pas de Deux* in order to produce timbral changes.

Sonata uses no special clarinet effects but the clarinet part is taxing with regard to range and control. The percussion setup is large and complex. The percussion part is quite difficult. The dual sonata-allegro and theme-and-variations form makes *Sonata* a good choice for those who wish to perform a difficult but traditional duo.

Tombeau requires a clarinetist with excellent control of soft playing and the ability to stand practically motionless for almost four minutes. The percussion setup and technical requirements are modest. Stylistic sensitivity and the proclivity to wade through the extensive instructions are required of both performers.

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[304] *Zoom* by Milan Stibilj features a plethora of multiphonics, quarter-tones, flutter-tonguing, and "hearable" inhaling. The rhythmic notation is complex and highly specific but logical and effective.

Wild Tales Told On the River Road is a work for advanced players. Both parts require the ability to decipher new notations and perform with new techniques. The percussion setup is gigantic.

Variation Duos is also a work for advanced players. It does not have percussion setup difficulties since it is scored only for marimba. Special effects abound and numerous styles are used in this duo.

Variety of instrumentation is one of the many appealing features of the clarinet-percussion duo repertoire. Balanced recital programming requires variety no matter what the style of the music. When performing programs consisting entirely of twentieth century music, especially music that is unfamiliar to the audience, variety is essential. The "Uwharrie Clarinet-Percussion Duo" always programs at least one duo with a large multiple-percussion setup. Such setups are visually as well as aurally interesting.

Factors which determine the programming of multiple-percussion pieces are the length of the pieces, the complexity of the setups, the amount of time it takes to setup, and the size of the concert stage. Compositions which use few instruments are very important with regard to logistics. Percussion compositions, including clarinet-percussion duos, which are not equipment-intensive are more apt to be frequently programmed, especially by touring ensembles. This is not to suggest that works should not be written for large percussion setups. Composers must balance the excitement inherent in using every noisemaker with valid musical decisions.

The most portable clarinet-percussion duos to date are *Zoom* for clarinet and a pair of bongo drums by Milan Stibilj and *Quiet Exchange* for clarinet and two suspended cymbals by Stephen Chatman. Both are fine pieces of music so they can be programmed for the best reasons. *Zoom* has

one of the most virtuosic clarinet parts in the duo repertoire. It is filled with multiphonics, quarter-tones, and complex rhythms. The bongo drum part includes much timbral variety created through the use of various mallets, portions of the hand, and striking locations on the drum heads.[305] *Quiet Exchange*, a duo of moderate difficulty, alternates sections in "swing" style with unmetered, more avant-garde sections. A variety of timbres are produced on the cymbals using brushes and knitting needles. In a review of *Quiet Exchange*, clarinetist John Mohler stated:

> *Quiet Exchange* has an immense amount of audience appeal. It is effective at any point on a program, even as a closer, and is relatively easy to put together. If it sounds ideal, it is only because it actually is.[306]

There are numerous compositions for clarinet and one of the basic mallet percussion instruments, i.e., marimba, vibraphone, and xylophone. These are easy to program since the percussion instrument is usually part of the large multiple-percussion setups of other works being performed. In most situations the instrument can be rolled in and out of the setup without disturbing it.

A detailed discussion of every style of clarinet-percussion duo is beyond the scope of this paper. One other category, duos with multi-media aspects, should be mentioned with regard to variety in programming. The addition of one or several elements to the duo of one clarinetist and one percussionist has many possibilities. *Après Moi le Sommeil* by James Marshall is performed in conjunction with the viewing of a slide of the Max

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[305]The "Uwharrie Duo" has performed *Zoom* approximately 250 times because it is a good piece and has a portable setup.

[306]John Mohler, review of *Quiet Exchange,* by Stephen Chatman, in *The Clarinet* 6, no. 2 (Spring 1979): 40.

Ernst painting of the same title. *Sources ///* by David Burge is performed by candlelight. Additionally, some theatrics are required and the clarinetist plays several percussion instruments.

There are a number of pieces for clarinet-percussion duo and recorded tape. *Options //* by Elliot Schwartz is an aleatoric work for clarinet, percussion, and prerecorded tape segments that are to be put in order by the performers. *Sinister Tremors* by Jon Deak is a quartet for two clarinetists and two percussionists, i.e. one live and one recorded clarinet-percussion duo plus many sound effects. Perhaps the biggest extravaganza in the repertoire is *A Dream Fantasy* by Merrill Ellis. The title page describes it as "A Ballet for Clarinet-Sax [sax is optional], Percussion, Prepared Tape and Visuals."[307] The visuals include two 16-mm films and optional slides projected at a "cloud" of material suspended from the ceiling. The use of dancers is another optional element.

There is a wealth of music for the clarinet-percussion duo. It is hoped that this study has given the reader a glimpse of the variety and quality within the genre so that clarinetists and percussionists will become interested in performing duos and composers will become interested in writing more duos.

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[307]Merrill Ellis, *A Dream Fantasy* (New York: Carl Fischer, 1976), title page.

APPENDIX

APPENDIX

CLARINET-PERCUSSION DUOS

Amman, Benno - *Frammento* (1983)
Bass clarinet - vibraphone.
(Switzerland; address unknown)

Anderson, Dennis - *Sage King Goes Hollywood* (1976)
B♭ clarinet - vibraphone.
(c/o Roger W. Anderson, 3289 Minnesota Ave., Costa Mesa, CA 92626)

Arma, Paul - *Resonance* (1975, p. 1981)
B♭ clarinet - xylophone, vibraphone, snare drum, 2 tomtoms, 2 suspended cymbals, 3 wood blocks .
(Dorn Publications)

Ayres, Thomas A. - *Suite for Clarinet and Percussion* (n.d.)
B♭ clarinet - xylophone, vibraphone, snare drum, 4 tomtoms, 2 bongo drums, conga drum, suspended cymbal, tambourine.
(School of Music, The University of Iowa, Iowa City, IA 52242)

Bäck, Sven-Erik - *Five Preludes* (p. 1971)
B♭ clarinet (or flute) - vibraphone, 2 bongo drums, field drum, tomtom, bass drum, 4 suspended cymbals, 2 triangles, tamtam, crotale, wood block, temple block, bamboo wind chimes.
(Edition Wilhelm Hansen)

Baguerre, Francis - *Weg* (1981)
Bass clarinet - marimba.
(France; address unknown)

Bakki, József - *Pas de Deux* (1969, p. 1973)
B♭ clarinet - chime note, 2 bongo drums, field drum, tomtom, bass drum, 2 suspended cymbals, triangle, temple block, 2 wood drums.
(Editio Musica Budapest)

Banzhaf, Kris - *Sonata for Clarinet and Drum Set* (1979)
B♭ clarinet - drum set.
(U.S.A.; address unknown)

Bargielski, Zbigniew - *Ikar* (1981)
B♭/bass clarinets (or bass clarinet/alto saxophone) - marimba, vibraphone.
(Pro Nova/Sonton)

Barkl, Michael - *Blues* (1986)
Contra-alto clarinet - marimba, vibraphone.
(Australian Music Centre, PO Box 49, Broadway NSW 2007, Australia)

Becerra-Schmidt, Gustavo - *Duo* (1987)
Bass clarinet- marimba, vibraphone.
(Kurt-Schumacher-str. 11, 2900 Oldenberg, West Germany)

Beerman, Burton - *Shadows Cast* (1979)
B♭ clarinet - glockenspiel, vibraphone, chimes, snare drum, 2 tomtoms, 2 timpani, 3 suspended cymbals, triangle, tamtam.
(American Composers Alliance)

Beerman, Burton - *Chamber Music II* (1986)
Bass clarinet - marimba, vibraphone.
(American Composers Alliance)

Bergsma, William - *Illegible Canons* (1968, p. 1973)
B♭ clarinet - xylophone, vibraphone, glockenspiel, snare drum, tenor drum, 2 bongo drums, wood block, 3 temple blocks, wind chimes.
(Galaxy Music)

Bertomeu, Augustin - ....*y despues* (1976, p. 1977)
B♭ clarinet - xylophone, glockenspiel, vibraphone, 3 bongo drums, 3 suspended cymbals, 3 triangles, tamtam, 3 temple blocks.
(Editorial Alpuerto)

Bialosky, Marshall - *Fragments* (1987)
Bass clarinet - vibraphone.
(Sanjo Music Co., Box 7000-104, Palos Verdes Peninsula, CA 90274)

Börjesson, Lars-Ove - *Interparolo, Op. 33* (1982)
Bass clarinet - marimba.
(Swedish Music Information Center, Sandhamnsgatan 79, Box 27327, S-10254 Stockholm, Sweden)

Boucourechliev, André - *Tombeau* (1971)
A clarinet - glockenspiel, snare drum, bass drum, 2 tamtams (or piano, instead of percussion).
(Alphonse Leduc)

Brandon, Sy - *Zodiac Suite No. 1* (1979)
B♭/bass clarinets - xylophone, marimba, vibraphone, 4 tomtoms, bass drum, 4 timpani.
(RD2, Box 150 A, Wrightsville, PA 17368)

Briggs, Thomas - *Motions* (p. 1982)
B♭ clarinet - marimba, 2 tomtoms, suspended cymbal, triangle.
(Needham Publishing Co.)

Buckinx, Boudewijn - *Verregend* (1985)
Bass clarinet - vibraphone.
(c/o BRT-3, August Reyerslaan 52, 1040 Brussels, Belgium)

Burge, David - *Sources III* (1967, p. 1968)
B♭ clarinet - vibraphone, 4 tomtoms, bass drum, 2 conga drums, sizzle cymbal, 3 triangles, large tamtam, lujon (or 8 cowbells), 3 wood blocks.
(Tetra Music Corp., Alexander Broude, Inc.)

Cabus, Peter - *Sonate* (1962)
B♭ clarinet - xylophone, drum with snares, drum without snares, bass drum, 4 timpani, 2 suspended cymbals, triangle, gong, wood block.
(J. Maurer Publisher)

Campo, Frank - *Dualidad* (p. 1982)
Bass clarinet - marimba, vibraphone, 2 timbales, 2 suspended cymbals, triangle, 5 temple blocks.
(Dario Music, 12336 Milbank Street, Studio City, CA 91604)

Chan, Francis Ka Nin - *Three Movements for Clarinet and Percussion* (1979)
B♭ clarinet - marimba, glockenspiel, vibraphone, chimes, snare drum, 5 tomtoms, bass drum, 5 timpani, 5 suspended cymbals, hi-hat, triangle, 3 gongs, 2 cowbells, octave of crotales, bell tree, 5 temple blocks, metal wind chimes, machine castanets.
(School of Music, University of Toronto, Toronto, Canada M5S 1A1)

Chatman, Stephen - *Quiet Exchange* (1976)
B♭ clarinet (or alto saxophone) - 2 suspended cymbals.
(Dorn Publications)

Cheesman, John - *Vignettes* (1986)
B♭ clarinet - marimba.
(64 Qeele, Toronto, Canada M6O 2J9)

Chiesa, Renato - *Lila 6* (1979)
E♭/B♭/bass clarinets - vibraphone, 4 tomtoms, 2 bongo drums, 4 suspended cymbals, gong, 4 wood blocks, 4 campanacci, campanelle a calotta.
(Italy; address unknown)

Childs, Barney - *The Day Sequence* (n.d.)
Bass clarinet - timpani.
(Withdrawn from publisher by Childs; School of Music, University of Redlands, PO Box 3080, Redlands, CA 92373-0999)

Cirone, Anthony - *Sonate #3* (p. 1976)
B♭ clarinet - vibraphone, 3 tomtoms.
(Cirone Publications, PO Box 612, Menlo Park, CA 94115)
Coban, Vincentiu-Cristian - *Metabole I* (1979)
B♭ clarinet - glockenspiel, vibraphone, 9 tomtoms.
(207 Magnolia Lake Drive, Longwood, FL 32779)
Coban, Vincentiu-Cristian - *Metabole II (Katabole)* (1979)
B♭ clarinet - snare drum, bass drum, 2 timpani, suspended cymbal, sizzle cymbal, 2 triangles, tamtam, crotale, sleigh bells, bell, maracas, crystal glass, plastic ruler.
(207 Magnolia Lake Drive, Longwood, FL 32779)
Cohen, David - *Ceremony* (1981)
B♭ clarinet - reciter/percussionist with temple blocks, tuning bars, tuned wine glasses, an illuminated glass object.
(c/o Barney Childs, School of Music, University of Redlands, PO Box 3080, Redlands, CA 92373-0999)
Colding-Jørgensen, Henrick - *Zweigesprach* (1983)
Bass clarinet - marimba.
(Rønnevangshusene 71, 2. Th., DK-2630 Taastrup, Denmark)
Collins, Philip - *Episodes* (1979)
B♭ clarinet - snare drum, military drum, tenor drum, bass drum, 3 timpani, suspended finger cymbal, suspended cymbal, suspended splash cymbal, tamtam, suspended pipe.
(700 Spring St., Santa Cruz, CA 95060)
Corcoran, Frank - *Lines and Configurations* (1982)
Bass clarinet - marimba.
(Schaichstr. 16, D-7447 Aichtal-Neuenhaus, West Germany)
Cornish, Glenn - *Clinamen* (1979)
B♭ clarinet - marimba, vibraphone, chimes, 5 tomtoms, triangle, small gong, 5 temple blocks, guiro.
(Music Department, Edison Community College, College Parkway, Fort Myers, FL 33907)
Cramer, Willem - *Zinc. D. C.* (1983)
Bass clarinet - marimba.
(Donemus)
Culbertson, D. C. - *Three Ritual Dances* (1978)
B♭ clarinet - snare drum, 4 tomtoms, suspended cymbal, maraca.
(6738 Glenkirk Rd., Baltimore, MD 21239)

Dana, Ramon - *Rhapsody for Clarinet and Percussion* (1979)
B♭ clarinet - vibraphone, glockenspiel, chimes, 3 tomtoms, bass drum, bongo drum, 3 timpani, suspended cymbal.
(1314 Warren St., St. Louis, MO 63106)

Davies, Peter Maxwell - *Stedman Doubles* (1956: quartet, rev. as duet: 1968, p. 1978)
A clarinet - snare drum, tenor drum, 2 bongo drums, bass drum, 2 tablas, mridangam, 4 small finger drums, 3 suspended cymbals, finger cymbals, tamtam, wood block.
(Boosey and Hawkes)

Deak, Jon - *Sinister Tremors* (1977)
E♭/B♭ clarinets - marimba, glockenspiel, bass drum, suspended cymbal, crash cymbals, tamtam, large metal plate gong, wood block, ratchet, flexatone, deer or moose call, police whistle, acme siren, closet crash - tape.
(215 West 98th Street, #4B, New York, NY 10025)

Deason, David - *Diatomaceous Earth* (1978, p. 1982)
Bass clarinet - vibraphone.
(Music for Percussion, Inc.)

Denhoff, Michael - *Lamento-Scherzo-Dialogo (3 Stücke für Bass-klarinette und Marimba)* (1984)
Bass clarinet - marimba.
(Ed. Gravis, Germany)

de Ruiter, Wim - *Variaties* (1988)
Bass clarinet - marimba, vibraphone.
(Rollandlaan 25, 2015 GB Haarlem, The Netherlands)

Desportes, Yvonne - *Un Choix Difficile* (1980)
Clarinet (or saxophone) - percussion.
(Dorn Publications)

Dhaine, Jean-Louis - *Coulours of Imaginary City* (1979)
E♭/B♭/bass clarinets - xylophone, vibraphone, chimes, snare drum, 4 tomtoms, bass drum, piccolo timpano, timpani, 3 suspended cymbals, 3 gongs, cowbells, wood block.
(6, rue Racine, F 91100 Corbeil Essonnes, France)

Dhont, Jan - *Miniatures* (1978)
B♭/bass clarinets - vibraphone.
(3525 AM Utrecht, The Netherlands)

Dimov, Bojidar - *Anixanter* (1985)
Bass clarinet - marimba.
(Mozartstr. 28, D-5000 Koln 1, West Germany)

Drazen, Patrick - *Sonata for Bass Clarinet and Percussion* (1979)
Bass clarinet - marimba, chinese blocks, hanging wind chimes.
(U.S.A.; address unknown)

Dubois, Pierre Max - *Circus Parade* (1964, p. 1965)
B♭ clarinet (or alto saxophone) - snare drum, 2 tomtoms, bass drum, suspended cymbal, triangle, wood block.
(Alphonse Leduc)

Eder de Lastra, Erich - *Klarimarimfonia* (1983)
Bass clarinet - marimba.
(Rochusgasse 13, A-1030 Wien, Austria)

Ellis, Merrill - *A Dream Fantasy* (1976)
B♭ clarinet with optional alto saxophone (or alto saxophone with optional soprano saxophone) - marimba, glockenspiel, vibraphone, chimes, bass drum, 2 or 3 timpani (or 5 tuned tomtoms), suspended cymbal, tamtam, 2 wood blocks, (optional) trap set - tape, 16-mm films, (optional) slides.
(Carl Fischer)

Epstein, Marti - *Clarimba* (1980)
B♭ clarinet - marimba.
(17 Highgate, #7, Allston, MA 02134)

Erb, Donald - *Sonata for Clarinet and Percussion* (1979, p. 1980)
B♭ clarinet - xylophone, marimba, glockenspiel, vibraphone, chimes, jazz set (4 tuned drums, pedal bass drum, 3 suspended cymbals, hi-hat), 2 bongo drums, 2 timbales, tamtam, 6 crotales, D harmonica, C harmonica - organ (may be prerecorded).
(Merion Music)

Erdmann, Dietrich - *Giuoco per Due* (1985)
Bass clarinet - marimba, vibraphone, suspended cymbal, tambourine, 3 wood blocks.
(Biesalskistr. 12, 1000 Berlin 37, West Germany)

Erdmann, Dietrich - *Duo* (1975, p. 1982)
B♭ clarinet - logdrum, snare drum, 3 tomtoms, 3 bongo drums, suspended cymbal.
(Breitkopf & Härtel)

Eyser, Eberhard - *Abbellimenti* (1983)
Bass clarinet - marimba.
(Swedish Music Information Center)

Farmer, Peter, R. - *Trio-Duo* (1977)
Clarinet - marimba, vibraphone.
(93 Cheever Street, Milton, MA 02187)

Fedele, Ivan - *Modus* (1988)
Bass clarinet - marimba, vibraphone.
(Via Ceradini 18, I-20129 Milano, Italy)

Fennelly, Brian - *3 Intermezzi* (1983)
Bass clarinet - marimba.
(2 Schryver Court, Kingston, NY 12401)

Ferencz, George J. - *Three Pieces* (1979, p. 1986)
B♭ clarinet - marimba, drum set (snare drum, 2 tomtoms, bass drum, suspended cymbal, hi-hat, triangle), 4 timpani.
(Ludwig Music Publishing Co.)

Fleischer, Tsippi - *War* (1988)
Bass/contra-alto clarinets - marimba, vibraphone, percussion.
(7 Sderot Bat-Galim, Haifa 35012, Israel)

Floyd, John M. - *Three Miniatures* (1980)
B♭ clarinet - marimba.
(85 Sara St. NW, Christiansburg, VA 24073)

Fontyn, Jacqueline - *Controverse* (1983, p. 1984)
Bass or B♭ clarinet (or tenor saxophone) - marimba, glockenspiel, vibraphone, snare drum, tomtom, bass drum with pedal, 2 bongo drums, 2 timpani, 3 suspended cymbals, triangle, 2 gongs, crotales, wood block, 3 temple blocks, piano or celesta (optional).
(Bote & Beck)

Frackenpohl, Arthur - *Duo for Woodwind and Drum Set* (1974)
Any clarinet (or piccolo, any flute, oboe, English horn, any saxophone) - snare drum, 2 tomtoms, bass drum, 2 bongo drums, suspended cymbal, hi-hat, cowbell, wood block, 5 temple blocks.
(Rochester Music Photocopy, Maiden Lane, Sodus Point, NY 14555)

Frazeur, Theodore - *Four Sea Fragments* (p. 1977)
B♭ clarinet - marimba, vibraphone, 2 suspended cymbals, triangle, 3 crotales, 5 temple blocks, 2 log drums.
(Permus Publications, PO Box 02033, Columbus, OH 43202)

Fricker, Peter Racine - *Spirit Puck, Op. 71* (1974)
B♭ clarinet - snare drum, bass drum, 3 timpani, suspended cymbal, triangle, gong.
(Dept. of Music, University of California, Santa Barbara, CA 93106)

Fulkerson, Christopher - *The Hyperidians and the Bailiff* (1987)
Bass clarinet - marimba, glockenspiel, vibraphone, triangle.
(1206 8th Avenue, San Francisco, CA 94122)

Gahér, Jozef - *Twelve Preludes* (1979)
E♭/B♭ clarinets - marimba, vibraphone, 5 tomtoms, 4 timpani, 2 suspended cymbals, 2 tamtams, 5 wood blocks.
(Solivarska 4, 82900 Bratislava, Czechoslovakia)

Garcia, Orlando - *3 Individual Migrations* (1985)
B♭ clarinet - glockenspiel, 3 suspended cymbals, maracas, guiro.
(5840 S.W. 57th Avenue, #105, Miami, FL 33143)

George, Ron - *Music for a Favorite Person* (1969/1974)
A clarinet - vibraphone.
(School of Music, California Institute of the Arts, 24700 McBean Parkway, Valencia, CA 91355)

Gilbert, Donald - *Percussinet* (p. 1971)
B♭ clarinet - glockenspiel, snare drum, 2 tomtoms, 2 timpani, suspended cymbal, triangle, tamtam, 4 temple blocks.
(Kendor Music)

Gils, Gust - *Zeven Haikoes* (1983)
Bass clarinet - marimba.
(Hoge Kaart 260, B-2130 Brasschaat, Belgium)

Girard, Anthony - *Duo* (1983)
Bass clarinet - marimba.
(85, rue Legendre, F-75017 Paris, France)

Glazer, Stuart - *Duo* (1975, p. 1979)
B♭ clarinet (or soprano saxophone) - vibraphone, 2 bongo drums, 2 suspended cymbals, 5 temple blocks.
(Shawnee Press)

Grahn, Ulf - *Images* (1981)
Bass clarinet - marimba.
(Edition Nglani, PO Box 871, Merrifield, VA 22116)

Grange, Philip - *Three Pieces for Bass Clarinet and Marimba after Drawings by M. C. Escher* (1983)
Bass clarinet - marimba.
(Trinity College, Cambridge, CB2, 1TQ, England)

Hamburg, Jeff - *Buk (Buckle)* (1986)
Bass clarinet - marimba
(Donemus)

Hames, Richard David - *Djurunga* (1985)
Bass clarinet - marimba.
(6/142 Culloden Road, Marsfield 2122, Australia)

Harada, Tomoatsu - *Arcturus* (1979)
B♭ clarinet - marimba, 3 timpani, 3 suspended cymbals, triangle, 2 tamtams, voice.
(1341, Sakuradai-danchi, 39, Sakuradai, Midori-ku, Yokohama-shi, Japan)

Harrison, Jonty - *Peaux (Bois) Métaux* (1979)
B♭ clarinet - snare drum, tomtom, high-pitched drum (e.g. one bongo), bass drum, 3 suspended cymbals, hi-hat, jingle bells, small bell, glass wind chimes.
(12 Balmoral Close, Westleigh Ave., London SW15, England)

Hasimoto, Sin - *Fall Away* (1979)
B♭/bass clarinets - vibraphone, sanza (on timpani), big gong, 2 tamtams, octave of crotales, 3 wood blocks, flexatone.
(Japan; address unknown)

Hazzard, Peter - *Sonata No. II, Op. 23* (1971, p. 1977)
B♭ clarinet - marimba.
(Seesaw Music Corp.)

Hegdal, Magne Gunnar - *Ghost Music: Concerto IV* (1982)
Bass clarinet - marimba.
(Norwegian Music Information Center)

Heim, Norman - *Collage* (1979)
B♭ clarinet - xylophone, marimba, vibraphone, chimes, snare drum, gong.
(7402 Wells Blvd., Hyattsville, MD 20783)

Heim, Norman - *Concertante* (1978)
B♭ clarinet - xylophone, marimba, vibraphone.
(7402 Wells Blvd., Hyattsville, MD 20783)

Heim, Norman - *Solisti, Op. 42* (1980, p. 1981)
B♭ clarinet - marimba.
(Dorn Publications)

Heins, John - *Sonata for Clarinet and Percussion* (p. 1985)
B♭ or A clarinet - small snare drum, 2 bongo drums, timbales, suspended cymbal, triangle, 5 temple blocks.
(Southern Music Co.)

Hekster, Walter - *Music for a Summernight* (1983)
Clarinet - percussion.
(Donemus)

Helberger, Heinzpeter - *Musik für Klarinette in B und Vibraphon* (p. 1978)
B♭ clarinet - vibraphone.
(Musickverlag Helbling Kg.)

Hendon, George - *Two Transferences* (1979)
E♭/B♭/A clarinets - marimba, vibraphone, 3 chimes, snare drum, tomtom, bass drum, 2 bongo drums, 2 conga drums, 3 suspended cymbals, tamtam, temple blocks, snare drum sticks tapped on floor.
(4902 Poinsetta Ave., Tallahassee, FL 32304)

Herbolsheimer, Bern - *Phoenix Variations* (1981)
B♭ clarinet - marimba, vibraphone, 5 tomtoms, bass drum, timpano, brake drum, suspended cymbal, triangle, wood block, 5 temple blocks.
(2309 Boyer Avenue East, Seattle, WA 98112)

Hervig, Richard - *An Entertainment* (1978)
B♭ clarinet - marimba, vibraphone.
(1822 Rochester Avenue, Iowa City, IA 52240)

Heussenstamm, George - *Double Solo, Op. 26* (1970)
B♭ clarinet - glockenspiel, snare drum, tenor drum, 2 tomtoms, bass drum, 25" timpano, 2 suspended cymbals, triangle, small tamtam.
(Seesaw Music Corp.)

Hiatt, Kevin - *Sidereal Liaisons II* (1986)
Bass clarinet - marimba, vibraphone, piccolo snare drum & snare drum (or 2 tuneable tomtoms), 3 suspended cymbals, sizzle cymbal, triangle.
(123 Santillane #3, Coral Gables, FL 33134)

Hoag, Charles - *Inventions and Interludes* (1973, p. 1976)
B♭/A clarinets - marimba, suspended cymbal.
(Paul Price Publications)

Hodkinson, Sydney - *Drawings: Set No. 3* (1961, p. 1969)
B♭ clarinet - 3 drums of indefinite pitches ("preferably open end - ideally: single head timbales")
(Music for Percussion, Inc.)

Hofmann, Wolfgang - *Bolema* (1983)
Bass clarinet - marimba, vibraphone.
(Hebelstrasse 13, 6800 Mannheim 1, West Germany)

Holmes, Reed - *Shapes for Clarinet and Percussion (Florestan and Eusebius)* (1979)
B♭/alto/bass clarinets, shock absorber, crowbar, crotale, triangle - marimba, vibraphone, 3 tomtoms, bass drum, 2 timpani, triangle, tamtam, crotale, cowbell, wood block, temple blocks, maracas, 3 brake drums, shock absorber, 2 crowbars.
(Music Dept., University of Texas, San Antonio, TX 78285)

Houllif, Murray - *Five for Two* (1978)
B♭/alto/bass clarinets - marimba, glockenspiel, vibraphone, 6 tomtoms, bass drum, 8 rototoms, 4 timpani, 3 suspended cymbals, 2 triangles, 3 small gongs, bell tree, 5 temple blocks, glass wind chimes.
(14 Mill Pond Rd., Stony Brook, NY 11790)

Hutcheson, Jere - *Duo Sonata for Clarinet and Percussion* (1979)
B♭ clarinet - marimba, 2 tomtoms, bass drum, bongo drum, 3 suspended cymbals, hi-hat, small gong.
(American Composers Alliance)

Ivey, Jean Eichelberger - *Pantomime* (1982)
B♭ clarinet - xylophone.
(320 West 90th Street, #3A, New York, NY 10024)

Jankowski, Loretta - *Daguerreotypes* (1979)
E♭/B♭ clarinets - vibraphone, snare drum, 3 tomtoms, bass drum, 3 rototoms, 4 timpani, 4 suspended cymbals, hi-hat, 3 triangles, set of crotales.
(291 Ravenswood, Mountainside, NJ 07092)

Katzer, Georg - *Ballade* (1982)
B♭ clarinet, low tomtom - marimba, glockenspiel, vibraphone, 3 tomtoms, 3 bongo drums, 4 small cymbals, 3 cymbals, water gong, tamtam, 3 cow bells, 3 wood blocks, assorted wind chimes, police whistle, assorted instruments at pitch of police whistle.
(Edition Peters, Leipzig, East Germany)

Katzer, Georg - *Moments Musicaux* (1985)
Bass clarinet (and, optional, contra-alto clarinet) - marimba, suspended cymbal, 2 triangles, gong, 2 wood blocks; glass, wood, and metal wind chimes.
(Weserstr. 5, 1615 Zeuthen, East Germany)

Kitazume, Michio - *Slapping Crossing* (1976)
Bass clarinet - marimba, vibraphone, tomtom, bongo, chinese gong, tamtam, 9 cowbells, 3 wood blocks, log drum, whip, sand glass, metronome.
(3-22-5 Igusa Suginami-ku, Tokyo 167, Japan)

Klein, Lothar - *Grand Duo Concertante for Clarinet and Timpani* (1979)
B♭ clarinet - 4 timpani.
(44 Wallingford Rd., Don Mills, Ontario, Canada M3A 2T9)

Košut, Michal - *Das Land der Verzauberten Sonne* (1982)
Bass clarinet - marimba, vibraphone, triangles.
(Triskalova 10, Brno 63800, Czechoslovakia)

Kovach, Jos E., Jr. - *Duet for Marimba and Bass Clarinet* (1984)
Bass clarinet - marimba.
(2104 Rhawn Street, Philadelphia, PA 19152)

Koyle, Gregg - *Kumbengo* (1986/1987)
B♭ clarinet (or soprano saxophone) - marimba.
(PO Box 4234, Ann Arbor, MI 48106)

Kraft, Leo - *Episodes* (1979, p. 1982)
B♭ clarinet - 3 snare drums, 2 suspended cymbals, 2 triangles, crotale, brake drum, 5 chinese blocks, claves, castanets, maracas.
(General Music Publishing Co.)

Kreutz, Robert - *Prisms* (1979)
B♭ clarinet - marimba.
(1090 Zinnia, Golden, CO 80401)

Kröll, Georg - *Schattenspiel, 5 Stücke für Bassklarinette und Vibraphon* (1986)
Bass clarinet - vibraphone.
(Cleverstr. 5, D-5000 Koln 1, West Germany)

Krzanowski, Andrzej - *Where the Rainbow Ends* (1985)
Bass clarinet - marimba.
(ul Zeromskiego 30, 43-322 Czechowice-Dziedzice, Poland)

Kurimoto, Yoko - *Relations* (1979)
B♭ clarinet - marimba, snare drum, 3 tomtoms, suspended cymbal, tamtam, maracas.
(18-18 Kamitokihazama Inuyama, Inuyama, Aichi 7484, Japan)

Kuźnik, Norbert Mateusz - *Cantabile* (1985)
Bass clarinet - marimba.
(ul. Lazurowa 6 m. 23, 01-315 Warszawa, Poland)

Kuźnik, Norbert Mateusz - *Bomakir* (1985)
Bass clarinet - marimba.
(ul. Lazurowa 6 m. 23, 01-315 Warszawa, Poland)

Kvam, Oddvar - *Sonata for Clarinet and Percussion, Op. 53* (1979, p. 1980)
E♭/B♭/A/bass clarinets - xylophone, marimba, glockenspiel, vibraphone, snare drum, tenor drum, 3 tomtoms, 3 conga drums, bass drum, 4 timpani, suspended cymbal, tamtam, 3 bicchieri.
(Musikk-Huset A/S, Oslo, Norway)

Laburda, Jiri - *Kasace Nr. 3 (Duo in G)* (1979)
Bass clarinet - marimba, vibraphone, snare drum, tenor drum, 4 tomtoms, 5 bongo drums, 3 suspended cymbals, triangle, piatto chinese, 6 campanaccios, 6 wood blocks, 5 temple blocks, flexatone.
(Seesaw Music Corp.)

Lejet, Edith - *Elans Imaginaires* (1986)
Bass clarinet - marimba.
(11/13 rue Cino del Duca, F-75017 Paris, France)

Lemos, Anne Edgerton - *Clarinet/Percussion Duo* (1979)
B♭ clarinet - vibraphone, 2 bongo drums, 2 brake drums, 5 temple blocks.
(36 Fairview Ave., Middletown, CT 06457)

Lerstad, Terje Bjørn - *Duo for Bass Clarinet and Percussion, Op. 139c* (1980/1981)
Bass clarinet - marimba, glockenspiel, chimes, snare drum, 4 tomtoms, bass drum with pedal, tamtam, tambourine.
(Norwegian Music Information Center, Toftesgt. 69, 0552 Oslo 5, Norway)

Lerstad, Terje Bjørn - *Variations on an Interval Signal, Op. 73* (1974/1977)
A clarinet - marimba.
(Norwegian Music Information Center, Toftesgt. 69, 0552 Oslo 5, Norway)

Lesemann, Frederick - *Doubles* (1984)
B♭ clarinet - marimba (or 25 other combinations).
(School of Music, University of Southern California, Los Angeles, CA 90089-0851)

Lesemann, Frederick - *Sonata* (1968/1972)
B♭ clarinet - marimba, vibraphone, 3 tomtoms, 2 bongo drums, bass drum, 2 suspended cymbals, triangle, tamtam, xylophone block (A 440), box chime (tuning bar - A 440), crotale (A 440), brake drum (A 440), 5 temple blocks.
(School of Music, University of Southern California, Los Angeles, CA 90089-0851)

Lewin-Richter, Andrés - *Duo for Bass Clarinet and Percussion* (1986)
Bass clarinet - marimba, vibraphone, 3 triangles, small Thai gong.
(Reina Cristina 1, Barcelona-3, Spain)

Loeb, David - *Drie Gezichten naar Nieuwekamp* (1982)
Bass clarinet - vibraphone.
(Mannes College of Music, 150 West 85th Street, New York, NY 10024)

Loeb, David - *Notturno e Due Scherzi* (p. 1975)
B♭ clarinet - vibraphone, snare drum, 3 tomtoms, 4 suspended cymbals, 3 cowbells, 4 wood blocks.
(Lang Percussion Co.)

Loevendie, Theo - *Duo* (1988)
Bass clarinet - marimba, 4 tomtoms, suspended cymbal, triangle.
(Joh. Verhulststr. 5, 1071 MP Amsterdam, The Netherlands)

Logan, Wendell - *Duo Exchanges* (1979)
B♭/bass clarinets - glockenspiel, vibraphone, 2 bongo drums, 2 timbales, timpano, 2 suspended cymbals, triangle, tamtam, log drum.
(167 S. Pleasant St., Oberlin, OH 44074)

Lopez, Dawn - *Duo for Clarinet and Tomtoms* (1979)
B♭ clarinet - 4 tomtoms.
(1391 Frank St., Honolulu, HA 96816)

Loudová, Ivana - *Duo Concertante* (1982)
Bass clarinet - marimba.
(Pod Strani 2/66, 100 00 Praha 10, Czechoslovakia)

Louie, Alexina - *Cadenzas* (1985)
B♭ clarinet - marimba, glockenspiel, vibraphone, suspended cymbal.
(Canadian Music Centre, 20 St. Joseph Street, Toronto, Ontario, Canada M4Y 1J9)

Luedeke, Raymond - *Fancies and Interludes IV* (1982)
Bass clarinet - marimba, vibraphone, 2 triangles, 2 wood blocks.
(Music for Percussion, Inc.)

Magnanensi, Giorgio - *Onda* (1987)
Bass clarinet - marimba, vibraphone.
(Via Paolo Costa 3, I-40137 Bologna, Italy)

Mais, Chester - *Prelude and Licks* (1975, p. 1982)
B♭ clarinet - marimba.
(Music For Percussion, Inc.)

Mangini, Marino Anthony - *Antiphony II* (1982)
B♭ clarinet - marimba.
(20 Vine Street, Naples, NY 14512)

Manneke, Daan - *Batterie* (1984)
Contra-alto clarinet - marimba, vibraphone.
(Donemus)

Manneke, Daan - *Gestures* (1981)
Contra-alto clarinet - percussion.
(Donemus)

Marez Oyens, Tera de - *Octopus* (1982)
Bass clarinet - marimba, vibraphone.
(Donemus)

Marshall, James - *Après Moi le Sommeil* (1974)
B♭ clarinet - glockenspiel, vibraphone, 3 triangles, 2 tamtams, bell plate - slide of Max Ernst painting.
(703 Valiant Circle, Garland, TX 75043)

Marttinen, Tauno - *Duo for Clarinet and Percussion* (n.d.)
Clarinet - percussion.
(Finnish Music Information Centre, Runeberginkatu 15 A, SF-00100 Helsinki 10, Finland)

Marttinen, Tauno - *Duo, Op. 220 for Marimba and Bass Clarinet* (1983)
Bass clarinet - marimba.
(Finnish Music Information Centre, Runeberginkatu 15 A, SF-00100 Helsinki 10, Finland)

Marttinen, Tauno - *Muodonmuutos (Metamorphosis), Op. 245* (1985)
Bass clarinet - marimba.
(Finnish Music Information Centre, Runeberginkatu 15 A, SF-00100 Helsinki 10, Finland)

Marttinen, Tauno - *Duo, Op. 66, no. 2 for Clarinet and Percussion* (n.d.)
B♭ clarinet - 3 bongo drums, bass drum, 3 suspended cymbals, triangle, tamtam, 3 temple blocks.
(Finnish Music Information Centre, Runeberginkatu 15 A, SF-00100 Helsinki 10, Finland)

Matsushita, Isao - *Sereragi No. . . . (. . . . . of a brooklet)* (1980, p. 1984)
A clarinet - marimba, 3 tomtoms, rototom, 3 suspended cymbals, 3 tamtams, 5 wood blocks.
(Ongaku No Tomo Sha Corp.)

Mazurek, Ron - *Meditation* (1978)
B♭ clarinet - vibraphone, 3 triangles, gong, metal or glass wind chimes.
(39 Ross Road, Wallington, NY 07057)

McBride, Marshall Wade - *La Marea* (1979)
B♭ clarinet - marimba, vibraphone, snare drum, 2 tomtoms, suspended cymbal, sizzle cymbal, triangle.
(940 Askin St., Maumee, OH 43537)

McCarty, Frank - *Variation Duos* (1979/1981)
B♭ clarinet - marimba.
(1347 New Garden Rd., Greensboro, NC 27410)

Michel, Paul-Baudouin - *Transparence* (1971, p. 1972)
B♭ clarinet - metal (vibraphone, 2 suspended cymbals, 2 triangles).
(CeBeDeM)

Miereanu, Costin - *Distance Zéro* (1988)
Bass/contra-alto clarinets - marimba, vibraphone, percussion.
(Edition Salabert)

Miranda, Ronaldo - *Images* (n.d.)
Clarinet -percussion.
(Brazil; address unknown)

Miyazawa, Kazuto - *Bindung-Teilung (Variationen ohne Thema)* (1979)
A clarinet - glockenspiel, vibraphone, timpano, 2 suspended cymbals, tamtam, 4 almglocken, 3 temple bells, bambusrohr.
(2-38-18 Tagara Nerima-ku, Tokyo, Japan)

Miyazawa, Kazuto - *Ström (Stream)* (1983)
Bass clarinet - marimba.
(2-38-18 Tagara Nerima-ku, Tokyo, Japan)

Morbo, Claudio - *Et-Con* (1988)
Bass clarinet - marimba, vibraphone.
(Via Novarea 2, I-10064 Pinerolo, (TO) Italy)

Morgan, David S. - *Voyage into Solitude, Op. 72, for a duo of 6 clarinets and multiple percussion* (1983)
E♭/B♭/A/bass/contra-bass clarinets/basset horn - xylophone, marimba, glockenspiel, vibraphone, tubular bell, snare drum, 3 tomtoms, pedal bass drum, large bass drum, 2 suspended cymbals, finger cymbals, hi-hat, triangle, 4 gongs, 3 tamtams, brass chimes, tubophone.
(Australian Music Centre, PO Box 49, Broadway NSW 2007, Australia)

Morton, John - *Sheaves* (1979)
B♭ clarinet - marimba, vibraphone.
(363 Canal St., New York, NY 10013)

Moss, Piotr - *Méditations* (1982)
Bass clarinet - marimba, vibraphone, 2 triangles, 5 wood blocks.
(Pro Nova/Sonton)

Müller, Ulrich - *Tanz die Maschine* (1986)
Bass clarinet - marimba.
(Rembrandtstr. 20, 8000 Munich 60, West Germany)

Mullins, Hugh- *Recital Music #3* (n.d.)
B♭ clarinet (or oboe) - xylophone.
(Music Dept., California State University - Los Angeles, 5151 State University Drive, Los Angeles, CA 90032)

Mullins, Hugh - *Recital Music #4* (n.d.)
B♭ clarinet - marimba.
(Music Dept., California State University - Los Angeles, 5151 State University Drive, Los Angeles, CA 90032)

Murray, Greg - *A Piece for Friends* (1980)
B♭ clarinet - marimba, vibraphone, 8" cymbal, 8" and 10" gongs, 3 triangles, chinese cymbal, crotales e1 - a2, mark tree, 3 stainless steel bowls.
(Music for Percussion, Inc.)

Nakamura, Shigenobu - *Invention II* (1979)
B♭ clarinet - marimba, glockenspiel, vibraphone, 3 tomtoms, 2 bongo drums, timpani, 2 suspended cymbals, triangle, tamtam, 3 cowbells, 2 wood blocks, 5 temple blocks, maracas, claves.
(Takatsuki-machi 12-1, Takatsuki/Osaka, Japan)

Nasveld, Robert - *Preparations for Coma* (1974)
Bass clarinet - typewriter.
(Donemus)

Neff, Jerome - *Pastoral Piece with Frogs* (1966, rev. 1979)
B♭ clarinet - suspended cymbal, tamtam, tambourine, rack of high bells, 5 temple blocks, metal wind chimes, castanet machine, flexatone, wind machine, noise makers (e.g. crow call, lionroar, slide whistle, taxi horns, police whistle, gunshots, ratchet) - tape.
(Music Dept., California State University, Hayward, CA 94542)

Nelson, Joseph - *Piece for Clarinet and Marimba* (1987)
B♭ clarinet - marimba.
(Department of Music, West Texas State University, Canyon, TX 79016)

Nelson, Larry - *Cadenzas and Interludes* (1975)
B♭ clarinet - glockenspiel, vibraphone, chimes, 4 tomtoms, bass drum, 3 suspended cymbals, 2 triangles, tamtam, 5 temple blocks.
(School of Music, West Chester State College, West Chester, PA 19380)

Nihashi, Junichi - *Visions Improvisees* (1983)
Bass clarinet - marimba, vibraphone.
(402 Tamura Building, 2-1-20 Honan, Suginamiku-Tokyo, Japan)

Obst, Michael - *Dialog* (1985)
Bass/contra-alto clarinets - marimba, vibraphone, percussion.
(von Grooteplatz 3, 53 Bonn 2, West Germany)

Ocker, David - *Incline Up* (1979)
B♭ clarinet - marimba.
(4313 Finley, Los Angeles, CA 90027)

Ocker, David - *Backward, Looking, Forward (VC)* (1977)
B♭ clarinet - vibraphone. (a set of four pieces for various combinations of B♭ clarinet, vibraphone, and piano)
(4313 Finley, Los Angeles, CA 90027)

O'Shea, Dennis - *Involvement for Clarinet and Marimba* (1979)
B♭ clarinet - marimba.
(626 Delaware Ave., Ridgewood, NJ 07450)

Ouzounoff, Daniel - *Phoniales 3* (p. 1985)
B♭ clarinet - vibraphone, 5 temple blocks.
(Billaudot)

Pallasz, Edward - *Two Reminiscences from Childhood* (1983)
Bass clarinet - marimba.
(Polish Music Information Center)

Palmer, Susan - *Flower Bells and Migrations* (n.d.)
B♭/bass clarinets - xylophone, marimba, glockenspiel, vibraphone, chimes, snare drum, 2 suspended cymbals, tamtam, almglocken, jingle bells, wood block.
(c/o ZCLA, 927 South Normandie, Los Angeles, CA 90006)

Palombo, Paul Martin - *Canto d'un Altra Volta* (1985)
B♭ clarinet - marimba, vibraphone, snare drum, 4 tomtoms, bass drum, 3 suspended cymbals, 2 triangles, 3 Vietnamese gongs, 2 tamtams, 4 crotales, 3 temple bells, 5 temple blocks, log drum.
(c/o Uwharrie Duo, 4320 River Drive, Plover, WI 54467)

Parker, Philip - *Five Bagatelles* (p. 1987)
B♭ clarinet - marimba, vibraphone.
(Southern Music Co.)

Patrick, André - *Cinquième Rhapsodie* (p. 1986)
B♭ clarinet - vibraphone.
(Alphonse Leduc)

Paul, Berthold - *Interplay, Op. 21* (1975, p. 1978)
B♭ clarinet - vibraphone.
(Edition Hans Gerig)

Pavlenko, Serge - *Duo a Tre* (1981)
Bass clarinet - marimba, vibraphone.
(Novoalekseevskaya, Str. 3 KV28, Moscow 129626, USSR)

Paynter, John - *The Laughing Stone* (1982)
Bass clarinet - marimba, vibraphone.
(Westfield House, Newton on Derwent, York Y04 5DA, England)

Petrić, Ivo - *Contacts* (1979)
B♭ clarinet (with optional bass clarinet) - xylophone, marimba, glockenspiel, vibraphone, chimes, snare drum, tenor drum, 5 tomtoms, bass drum, 3 suspended cymbals, triangle, gong, tamtam, 5 cowbells, wind chimes, bamboo chimes, maracas, slapstick, flexatone, guiro.
(Bilecanska 4, 61000 Ljubljana, Yugoslavia)

Petry, George - *Duo for Clarinet and Percussion* (1979)
A clarinet (and/or other clarinets) - snare drum, 2 suspended cymbals, triangle.
(152 Keyel Dr., Rochester, NY 14625)

Pierce, Alexandra - *After DuBuffet's "Limbour as a Crustacean"* (1979)
B♭ clarinet - marimba, snare drum, 3 tomtoms.
(126 E. Fern Ave., Redlands, CA 92373)

Piños, Alois Simandl - *Metadances* (1979)
B♭ clarinet - membranophones, metallic instruments, and wooden instruments of the performer's choice - tape.
(Borodinova 12, 6 23 00 Brno-Kohoutovice, Czechoslovakia)

Polin, Claire - *Vigniature* (1979)
B♭ clarinet - xylorimba (or marimba), vibraphone, small suspended cymbal, triangle, smallest gong, 2 crotales, kalimba.
(374 Baird Rd., Merion Station, PA 19066)

Pololanik, Zdenek - *Musica Spingenta III* (1962, p. 1968)
Bass clarinet - percussion.
(Panton)

Ponjee, Ted - *Third Themes* (1986)
Bass clarinet - marimba, vibraphone.
(Donemus)

Pratt, Moe - *Ohmi I* (1979)
B♭ clarinet - marimba, 3 conga drums.
(836 Isack, Windsor, Ontario, Canada N8S 3W7)

Pressl, Hermann Markus - *N.N. 2/2* (1986)
Bass clarinet - vibraphone.
(Korblergasse 9, A-8010 Graz, Austria)

Priest, J. Barnaby - *A Lovely Time* (1976, version for B♭ clarinet; 1986, version for bass clarinet)
B♭ or bass clarinets - marimba, vibraphone, chimes, 2 snare drums, 4 tomtoms, pedal bass drum, 4 suspended cymbals, rivet cymbal, 3 triangles, large tamtam, 3 gongs, 3 crotales, lujon, glass and wooden wind chimes.
(Via Giordano Bruno 13, I-04010 Roccagorga, Italy)

Quilling, Howard - *Meantoc (Theme and Toccata)* (1976)
B♭ clarinet - marimba, glockenspiel, vibraphone, snare drum, 2 tomtoms, bass drum, 2 suspended cymbals, 5 temple blocks.
(3001 Harmony Dr., Bakersfield, CA 93306)

Ramovš, Primož - *CLAR-PERC* (1988)
B♭ clarinet - piccolo snare drum, 3 tomtoms, 2 bongo drums, 2 suspended cymbals, 2 triangles, tamtam, 2 cowbells, sleigh bells, 5 temple blocks, ratchet.
(Kardeljeva 18, 61000 Ljubljana, Yugoslavia)

Raxach, Enrique - *Careful with that.....* (1982)
E♭/B♭ clarinet - 4 tomtoms, bass drum, 2 bongo drums, 2 conga drums, 2 suspended cymbals, low tamtam, wind chimes.
(Donemus)

Rebel, Meeuwis - *Adagio nr. 2* (1983)
Bass clarinet - marimba.
(Donemus)

Rechberger, Herman - *All'Ongarese* (1983)
Bass clarinet - vibraphone.
(Finnish Music Information Center, Runeberginkatu 15 A, SF-00100 Helsinki 10, Finland)

Rendón, Guillermo G. - *Pentamorposis en Marron y Argenta* (1983)
Bass clarinet - marimba.
(Ap. Aereo No. 76103, Zona 2, Bogata, Colombia)

Riedstra, Tom - *Duplex* (1986)
Bass clarinet - marimba, vibraphone.
(Donemus)

Riley, James - *Tangents* (1979)
B♭ clarinet - vibraphone, snare drum, 2 tomtoms, 2 bongo drums, conga drum, bass drum, 2-4 suspended cymbals, hi-hat, 3 triangles, temple blocks, glass chimes, maraca, piano with top off - tape.
(Music Dept., James Madison University, Harrisonburg, VA 22807)

Rimmer, John - *Emergence* (1981)
B♭ clarinet - xylophone, vibraphone, snare drum, 3 tomtoms, 2 bongo drums, 3 suspended cymbals, bell tree, 3 temple blocks, maracas, claves.
(Catena Press, 67 Marlborough Avenue, Glenfield, Auckland 1310, New Zealand)

Rodriguez, Robert Xavier - *Chronies* (1981, p. 1986)
Bass clarinet - marimba, tenor drum, suspended cymbal, gong, variable non-pitched instruments (e.g. bongos, conga, "table" tambourine, small tenor drum,etc....)
(Galaxy Music)

Roeder, Toni - *Habanera* (1975, p. 1976)
B♭ clarinet - vibraphone, 3 tomtoms, 2 bongo drums, 2 suspended cymbals, tamtam, 5 temple blocks, castanets, maracas, vibraslap.
(Gotthard F. Döring)

Rolin, Etienne - Visages et Masques (1986)
Bass clarinet - marimba.
(1, Bd Thiers, F-16000 Angouleme, France)

Romeo, James - *The Fall: 1831* (1979)
B♭ clarinet - glockenspiel, vibraphone, 2 tomtoms, bongo drum, 3 suspended cymbals, 2 wood blocks, metal wind chimes, glass wind chimes, brake drum.
(PO Box 8786, Rochester, NY 14624)

Rosen, Jerome - *Serenade* (1967)
B♭ clarinet - glockenspiel, vibraphone, at least 4 dumbegs, cymbal tree, 2 sets of cowbells or Pakistani bells (a total of 12 bells), sleigh bells, glass bowl (or crotale), lion-roar.
(American Composers Alliance)

Ross, Richard - *Sonatina for Clarinet Percussion Duo* (1979)
B♭ clarinet - glockenspiel, vibraphone, 5 tomtoms, 2 bongo drums, 2 timbales, 4 brake drums.
(365 Partridge St., Albany, NY 12208)

Rossé, François - *Mod'Son 4, micro-tragedie instrumentale* (1984)
Contra-alto clarinet - marimba, vibraphone.
(9, rue de Roland, F-33850 Leognan, France)

Ruggiero, Charles- *Studies for Clarinet and Vibe* (1979/1980)
B♭ clarinet - vibraphone.
(School of Music, Michigan State University, East Lansing, MI 48824)

Russell, Armand - *The Celonas* (1976)
B♭ clarinet - marimba.
(Music Dept., University of Hawaii, 2411 Dole St., Honolulu, HA 96822)

Russell, Armand - *Ephemerons* (1977)
B♭ clarinet - 5 tomtoms, 3 suspended cymbals, gong, 2 high suspended bells, bell tree.
(Music Dept., University of Hawaii, 2411 Dole St., Honolulu, HA 96822)

Russell, Armand - *Pas de Deux* (1958, p. 1964)
B♭ clarinet - xylophone, snare drum, tomtom, 4 tuned drums, suspended cymbal, triangle.
(Music for Percussion, Inc.)

Russell, Armand - *Prelusions* (1981)
E♭/B♭/bass clarinets - vibraphone.
(Music Dept., University of Hawaii, 2411 Dole St., Honolulu, HA 96822)

Sakurai, Kiyoshi - *Elsewhere III* (1979)
B♭/bass clarinets - glockenspiel, vibraphone, snare drum, 5 tomtoms, pedal bass drum, 2 timpani, 6 suspended cymbals, 2 tamtams, crotale, cowbell, 3 wood blocks, 3 temple blocks.
(Nerima ku Kouyama 3015-27, Tokyo, Japan)

Salazar, A'lvaro - *Periplos* (1988)
Bass/contra-alto clarinets - marimba, vibraphone, percussion.
(Av. Dr. Antunes Guimaraes 313, Porto, Portugal)
Salvatore, Caltagirone - *Duo Impressions* (1979)
B♭ clarinet - snare drum, 3 tomtoms, bass drum, suspended cymbal, triangle, wood block, 5 temple blocks.
(15, cite de Brouckere, 6240 Farciennes, Belgium)
Sampson, David - *The Endless Instant* (1978)
E♭/B♭/bass clarinets - xylophone, marimba, glockenspiel, vibraphone, chimes, 5 tomtoms, 30" timpano, suspended cymbal, 2 triangles, crotales, 2 cowbells, 2 wood blocks, 5 temple blocks, wind chimes, 2 anvils.
(166 W. Hanover Avenue, Morristown, NJ 07960)
Schietroma, Robert - *Dialogue* (p. 1982)
B♭ clarinet - marimba, vibraphone.
(Music for Percussion, Inc.)
Schröder, Hanning - *Musik* (1974, p. 1976)
B♭ clarinet - vibraphone.
(Edition Corona Rolf Budde)
Schwartz, Elliot - *Options II* (p. 1972)
B♭ clarinet - vibraphone, xylophone, 4 drums, suspended cymbal, 3 wood blocks or temple blocks - tape.
(Media Press)
Sciortino, Patrice - *Paraxyle* (1984)
Bass clarinet - marimba.
(49, rue Rouelle, F-75015 Paris, France)
Sermilä, Jarmo Kalevi - *Clockwork Etudes* (1983)
Bass clarinet - marimba, vibraphone.
(Finnish Music Information Center, Runeberginkatu 15 A, SF-00100 Helsinki 10, Finland)
Shackelford, Rudy - *"The Light Passages" - Variations on a Theme by Beethoven (Op. 101)* (1976)
B♭/bass clarinets - glockenspiel, vibraphone, snare drum, 5 timpani - grand piano (and pianist) or tape recorder.
(Severn Post Office, Gloucester County, VA 23155)
Shanahan, Ian - *Echoes/fantasies* (p. 1984)
Bass clarinet - vibraphone, tubular bells.
(Australian Music Centre, PO Box 49, Broadway NSW 2007, Australia)

Shiner, Kristen - *Three Pieces for Bass Clarinet and Marimba* (1982)
Bass clarinet - marimba.
(Music Department, Nazareth College of Rochester, 4245 East Avenue, Rochester, NY 14610)

Siennicki, Edmund J. - *Journey* (p. 1971)
B♭ clarinet (or bassoon) - 5 suspended cymbals, piano strings, other instruments "might include cymbals, woodblocks, bongos, various tomtoms, rototoms, triangles, cowbells, tambourine, snare drum, temple blocks, etc."
(Raymond A. Ojeda)

Simons, Netty - *Wild Tales Told on the River Road* (1973, p. 1977)
B♭/bass clarinets - xylophone, marimba (and bass marimba, if available), glockenspiel, vibraphone with low c (if a vibraphone with low c is not available, a bass metallophone or lujon is suggested in adjunct), large triangle, large suspended cymbal, small tamtam, glass wind chimes, assorted drums including: small head, low pitched, small tomtom, piccolo timpano. In addition, general types of sounds are called for, rather than specific percussion instruments - amplifier.
(Merion Music)

Singer, Andre - *Three Colloquies* (1979)
E♭/B♭/A clarinets - xylophone, marimba, snare drum, suspended cymbal, triangle, tamtam, temple blocks.
(138 Germonds Rd., West Nyack, NY 10994)

Sitsky, Larry - *Zuquerq* (1987)
B♭ clarinet - 3 bongo drums (or piano with lid down over keyboard)
(Seesaw Music Corp.)

Smith, J. B. - *In Light of Three* (n.d.)
B♭ clarinet - electronic drums.
(School of Music, Arizona State University, Tempe, AZ 85287)

Stalvey, Dorrance - *PLC-Extract (version for clarinet and percussion)*
(solo: 1968, p. 1975; duo: 1973)
B♭ clarinet - vibraphone, 2 bongo drums, sizzle cymbal, misc. metals and woods of indefinite pitch.
Stalvey has written a variety of accompaniments for the clarinet solo (*PLC-Extract*, which was taken from a larger ensemble work, *Points-Lines-Circles*).
(Clarinet solo published by: Editions Salabert, U.S. agent: G. Schirmer. Percussion accompaniment available from: Stalvey, 2145 Manning Ave., Los Angeles, CA 90025)

Stibilj, Milan - *Zoom* (1970)
B♭ clarinet - 2 bongo drums.
(Grabloviceva 28, 61000 Ljubljana, Yugoslavia)
Stock, David - *Starlight* (1979)
B♭ clarinet - vibraphone, chimes, crotales.
(American Composers Alliance)
Strømholm, Folke - *Music for Clarinet and Percussion, Op. 23* (1970)
B♭ clarinet - xylophone, vibraphone, snare drum, suspended cymbal, triangle, large gong, 3 wood blocks, whip.
(Langsetveien 4, Oslo 4, Norway)
Taliaferro, Lloyd - *Septem De Animiculis Carmina Cum Meditations Addita* (n.d.)
B♭ clarinet - marimba.
(U.S.A.; address unknown)
Tautenhahn, Gunther - *Sonata* (1972, p. 1973)
B♭ clarinet - marimba.
(Seesaw Music Corp.)
Tavernier, Jean-Claude - *Suda* (p. 1985)
B♭ clarinet (or flute, oboe, or alto saxophone) - tambourine or tomtom.
(Billaudot)
Theobald, Jim - *Mystery Music #4* (1979)
B♭/bass clarinets - marimba, vibraphone, chimes, tomtom, conga drum, bass drum, hi-hat, cowbell, wood block.
(545 W. 111th St., Apt. 9E, New York, NY 10025)
Thomas, Jay - *Penny Dance* (1979)
B♭ clarinet - 4 timpani.
(861 Cherry St., Oshkosh, WI 54901)
Tickmayer, Stevan Kovač - *Molto Semplice, Music in Memory of Andrey Tarkovsky* (1987)
Bass clarinet - marimba, vibraphone, gong.
(ul. Milete Jaksica 21a, 21000 Novi Sad, Yugoslavia)
Tittle, Steve - *Shadowplay* (1978)
B♭ clarinet - marimba, 2 tomtoms, suspended cymbal, tamtam, sleigh bells - tape.
(Boutilier's Point, Halifax County, Nova Scotia, Canada 5OJ 1GO)
Torres-Zuleta, Luis - *Estampas Precolombinas* (1983)
Bass clarinet - marimba, vibraphone.
(K 28 #90-41, Bogata, Colombia)

Turner, Kerry Drew - *Fantasy* (1979)
B♭ clarinet - marimba.
(5022 Crusade, San Antonio, TX 78218)
Tyssens, Albert - *Divertimento* (1979)
B♭ clarinet (or alto saxophone) - vibraphone.
(5 rue Louis de Brouckere, 4300 ANS, Belgium)
Udow, Michael - *Vistas* (formerly called *Where Are We?*) (1979)
Bass clarinet - marimba, 5 tomtoms, suspended cymbal, cymbal on timpano, timbrack (3 almglocken, 3 cowbells, 3 wood blocks, 3 temple blocks).
(Equilibrium Press, 1425 Creal Crescent, Ann Arbor, MI 48103)
van Beurden, Bernard - *7 Haikoes* (1983)
Bass clarinet & voice - marimba, vibraphone & voice.
(Donemus)
van den Booren, Jo - *Litany, Op. 64* (1987)
Bass clarinet - marimba.
(Donemus)
van den Booren, Jo - *Pas de Deux, Op. 56* (1986)
Bass/contra-alto clarinets - marimba.
(Donemus)
Vuursteen, Frans - *Wanton Wiles* (1985)
Bass clarinet - marimba.
(Donemus)
Walacinski, Adam - *Introspection* (n.d.)
Clarinet - percussion
(Artia)
Walker, Vanessa - *Three for Two* (1979)
B♭ clarinet - marimba, vibraphone.
(416 Clough St., Apt. D, Bowling Green, OH 43402)
Wallin, Peter - *Tre stämningar* (1984)
B♭ clarinet - marimba.
(Swedish Music Information Center, Sandhamnsgatan 79, Box 27327, S-10254 Stockholm, Sweden)
Weisling, Raymond - *Essence of Ampersand* (p. 1970)
E♭ clarinet - glockenspiel, snare drum, (optional) pedal bass drum.
(Media Press)
Wendel, Eugen - *Diason* (1982)
Bass clarinet - marimba, vibraphone, 4 tomtoms, gong.
(Sonoton, Schleibinger Strasse 10, 8000 Munich 80, West Germany)

Werder, Felix - *Auf- und Zugabe* (1982)
Bass clarinet - marimba.
(3/374 Auburn Road, Hawthorn, Vic. 3122, Australia)

Wilson, Eugene - *Sonata for Clarinet and Xylophone* (1979)
B♭ clarinet - xylophone.
(School of Music, University of British Columbia, 6361 Memorial, British Columbia, Canada V6T 1W5)

Yarber, Thomas - *Encomium* (1979)
B♭/bass clarinets - vibraphone, suspended cymbal, triangle, tamtam.
(U.S.A.; address unknown)

Yürer, Ahmet - *Forest Clearings in Wales* (1979)
E♭/B♭/bass clarinets - xylophone, marimba, glockenspiel, chimes, snare drum, 3 tomtoms, 2 bongo drums, pedal bass drum, 2 timpani, gamelan bonang (or wooden-drum), cymbals, suspended cymbal, gong, tamtam, 5 crotales, cowbell, wood block, temple blocks, chain, whip, anvil, bronze sheet, 3 clay pots, basketful of hay and hardboiled eggs - optional, recorded tape.
(U.S.A.; address unknown)

Ziffrin, Marilyn J. - *Movements for Clarinet and Percussion* (n.d.)
B♭ clarinet - marimba, 4 timpani, suspended cymbal.
(PO Box 179, Bradford, NH 03221)

Zuidam, Rob - *Skiamachia* (1986)
Contra-alto clarinet - marimba.
(Donemus)

Zumaqué, Francisco - *Carrizo* (1988)
Contra-alto clarinet - marimba, vibraphone.
(Mittelstr. 63, D-5300 Bonn 2, West Germany)

Zumaqué, Francisco - *Chapigana* (1988)
Contra-alto clarinet - marimba, vibraphone, snare drum, 2 tomtoms, 3 suspended cymbals, triangle, tamtam, wood block.
(Mittelstr. 63, D-5300 Bonn 2, West Germany)

Zumaqué, Francisco - *Improvisación* (1988)
Bass clarinet - marimba.
(Mittelstr. 63, D-5300 Bonn 2, West Germany)

Zumaqué, Francisco - *Onamá* (1988)
Bass clarinet - marimba.
(Mittelstr. 63, D-5300 Bonn 2, West Germany)

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