THE SIGNIFICANCE OF SILENCE
IN THE STRING QUARTETS OF BEETHOVEN

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for the Degree Master of Arts

by
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CHAPTER I
INTRODUCTION

During the fictional dialogue in Martin Heidegger's book *On the Way to Language*, one character says that "... to talk and write about silence is what produces the most obnoxious chatter." Despite this admonition, the other character ingeniously retorts "Who could simply be silent of silence?"¹ In response to that seemingly rhetorical, but insightful, question, this study will examine some of the manifestations of silence, not in language, but in the art of music. The word "some" has not been used arbitrarily; the ways in which silence has been employed as a compositional device differ from epoch to epoch, from composer to composer, as well as in each respective appearance. As a result of this diversity, any attempt to survey silence comprehensively in all eras and styles would only end in a superficial examination.

The present study, rather than endeavoring to elucidate all the various functions that silence performs in all music, will work from a home base. This base will be the seventeen string quartets of Ludwig van Beethoven (1770-1827). In certain instances throughout this study, though, it will be necessary to cite examples from other works by Beethoven as well as works by other composers in order to illustrate certain points. But the overall concern of the study will be the appearance of silence in the quartets. Through the manifestations of

silence in these works, it is hoped that a solid understanding of the significance of silence to one composer will be reached, forming a foundation on which to build any subsequent examinations of silence in other composers' works.

The purpose of this study, then, is to attain a better understanding of the significance of silence within the confines of a musical composition. This understanding will be useful to the theorist, composer, historian, and performer. For theorists, the study will draw attention to a generally neglected aspect of a musical work and present a means through which one may analyze silence situations; for the composer, this study will show how silence is incorporated in the compositional process; for the historian, a stage in the development of the use of silence will be shown; for the performer, the study will offer descriptions of the silence situations which will aid in the interpretation of the particular passage. For all involved, the study will form a platform from which one will be able to interpret other occurrences of the phenomenon.

The method will be twofold, including an analytical approach to explain the purely musical nature of the particular instance, and an aesthetic approach to explain the affective nature of the situation. The employment of both approaches is intended not only to aid in reaching a better cognition of each example, but also to elucidate the subtle differences in nuances of the various examples in relation to each other. This would be impossible through the use of only one of the approaches.

The study is divided into three parts. The first is concerned with what silence is in music, its relationship with sound, and how it participates in the musical gesture. The second part treats what will be designated as normative silences. Normative silences include the
three most commonly encountered types of silences: pre-performance, post-performance, and structural. The third part presents a method to discuss non-normative silences. These are silences that appear anywhere in a musical composition and whose meaning can only be discerned through an examination of the immediate context. They are used differently by every composer in every appearance and are some of the most interesting manifestations of silence in music.

Limitations of Study

As stated above, due to the wide variety in the uses of silence, this study will mainly be limited to an examination of silence occurring in the String Quartets of Beethoven. Because examples of different types of silence are still so abundant within these works, the scope of this study must be further restricted. First, this study will be concerned with those silences that occur in all parts simultaneously. Second, these silences must be of a duration that makes one consciously aware of them. Most of the silences to be examined are of an entire measure's length, or quite near to it. Because of these stipulations, many other interesting manifestations of silence have been eliminated, such as: registral silence, the silence after a phrase, the silence after a staccato note, the short silences within a theme, and the effect of one or more parts falling silent. Also, although an overview of pre-performance and post-performance silences will be given, discussion of the silence which occurs between movements of a multi-movement composition will unfortunately have to be eliminated from this study.

The restrictions imposed upon this study, while eliminating many types of silences, will allow for a more focused goal and a more con-
centrated examination of the silences still included within the limita-
tions of the study.

A Note on the Quartets

"Beethoven's quartets may not be summed up . . . . There is
nothing else like them in the whole of music, . . . . they reveal . . .
that of all the composers he possessed the widest, deepest, most active
and most realistically hopeful genius."2 Certainly, as a whole, the
quartets are a musical monument. They can be approached at many differ-
ent levels and always yield something to those who make the attempt.
Yet, no matter how many times one encounters them, the next time there
will still be more to discover in them.

This is just as true when examining the silence situations in
these works. The silences in the String Quartets of Beethoven were
selected for this study because there are so many examples of them, and
these examples range from what might be designated as "typical" to
"unique". Through the examination of this wide range of examples it is
possible to gain insights of the significance of silence in this body
of works, and then extend those insights to other silence situations in
compositions by other composers.

Unfortunately, because of the vast amount of silence situations
in the quartets, it will be impossible to examine every occurrence.
While the appearances of silences which are not included here are also
interesting and enlightening, it has been necessary to choose examples

which would best illustrate the main points of this study.

An additional bonus to a systematic study of silence situations in the quartets is that a deeper understanding of some of Beethoven's stylistic characteristics will be reached. Throughout the study, it will be possible to present correlations between similar treatment of silence situations in different works, thus elucidating certain mannerisms in Beethoven's approach to silence.
CHAPTER II
SILENCE IN MUSIC

"Music is the science of sounds; therefore sound is the principle subject of music."¹ This is the opening statement of Rameau's famous Traité de L'harmonie. Its literal interpretation seems to stand in direct opposition to the purposes of this study as expressed in the opening section. If one accepts a definition of music as "the art and science of organized sound,"² he may wonder as to the validity of a study into the realm of silence, ostensibly the antithesis of sound.

While it is certainly true that silence is "the opposite and necessary coexistent of sound,"³ it must be understood that in music these silences are not simply empty space. In any silence situation, "the silent instant can be as full as the sonorous instant . . . : it is empty only materially, and if sound be absent, thought dwells in it."⁴ Riemann states that "Pauses are not valueless, but on the contrary, they are negative equivalents which exhibit a variety of effects according to

the significance of the positive values which they negate."\(^5\) In this quote, Riemann was actually referring to the pure metric value of a rest in a phrase rather than to the aesthetic value of any given rest. His observation is quite appropriate here, however, as it hints at the possibility of an aesthetic value, and this value will be explored throughout this study.

Silence in music, then, is not simply nothingness but, as every attentive listener realizes, a very important constituent in the presentation of ideas and of the work's overall development. "The alternation of sound and silence articulates a form, or Gestalt\(^6\) which determines the inner stuff of a composition. Cage simply, but eloquently, states that "the material of music is sound and silence. Integrating these is composing."

Hence, music consists both of organized sounds and organized silences, and these silences are not devoid of meaning but are the negative equivalents of sound. Rests, the notational manifestations of silence, are active agents in the overall temporal form and contribute to the musical statement. Certainly it must be determined how these silences participate in the presentation of a musical composition.

The basic tenet of this study is that silences in music participate in a symbiotical relationship with sound. The significance of

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\(^7\)Cage, *Silence*, p. 62.
these silences "stems from . . . bonds uniting them with the other elements operating within a work."⁸ Silence receives its significance from sound, usually the sounds directly preceding and/or following the silence. Silences are experienced "both as [being] meaningful and as adhering to the sounding portion of the musical object."⁹ Hence, Rameau's statement at the outset of this chapter is certainly applicable to the goals of this study, for in order to understand silence we must also understand sound. In the course of this study, particular attention will be given to the sounding ambiance of the particular example of silence.

As a result of these observations, it is necessary to modify slightly the Riemann quote on page 6. The simple negative-positive duality seems to suggest that silence and sound can enjoy a reversibility of function. This is not the case. It is more to the point to state that "the true being or essence of both sound and silence is attained in their union."¹⁰ Because each appearance of silence is encased by different sounding fabrics, it is to be expected that each silence situation will change "its mode of functioning depending on the sound structures surrounding it. Hence its content is altering along with the transformations taking place in the musical flow."¹¹ In other words, silences, in their symbiosis with sounds, change their meaning in relation to the specific sounding context. "A silence of itself is of no particular interest. Only as it is related to what goes before and what

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comes after does it have significance."\(^{12}\)

So, every silence situation has the potential for different meanings depending on its context, and each particular situation must be interpreted and evaluated on the basis of that context. There are patterns in the various uses, however, that will enable us to group them and then draw concrete conclusions.

Underlying the statement that silences do in fact participate in the temporal presentation of the composition, and whose various meanings are determined by the surrounding sounds, is the assumption that silences participate in the overall musical gesture. For the purpose of this study, gesture is considered to be active, expressive motion. It is active because it "directly puts significant events before us and gives us the straightforward stimulus of immediate experience."\(^{13}\) It is expressive because it is a making of sound "that reveals feeling or emotion."\(^{14}\) The participation in the gesture gives rise to meaning. The process through which meaning is imparted need not be discussed here as this will be done later. Suffice it to say that the musical gesture is "a complex stimulus to the response of composer, performer, and listener as well as to further musical development: it comprises a recognizable formal unit and consists of a selection and


organization of sonic and rhythmic properties in sonorous motion,\textsuperscript{15} which has significance. It is this significance which will be explored throughout this study.

\textsuperscript{15}Coker, \textit{Music and Meaning}, p. 18.
CHAPTER III

NORMATIVE SILENCES

As stated in the introduction, normative silences include silences which are the most frequently encountered in music. Specifically they are pre-performance, post-performance, and structural silences. The former two are encountered in every composition heard, and structural silences appear in almost all compositions. These silences are designated as normative because their use usually adheres to a standard pattern which might be regarded as typical. There are exceptions and variants from this use, though, and some of these will be pointed out in this chapter.

Following a brief overview of both pre-performance and post-performance silences together, each type of silence will then be treated in a separate section of this chapter. In order to illustrate certain points in these sections it will be necessary to cite examples not only from the quartets, but also from other works in the literature.

Pre-performance and Post-performance Silences

Any study that proposes to examine silence in its many manifestations in music will undoubtedly confront pre-performance and post-performance silences. Much of the substance of this category, however, is to be discerned only through philosophical or speculative inquiry into its essence which is not the intent of the present examination. By ignoring this particular category altogether, on the other hand, one would
neglect classes of silence which, by their very nature, are experienced by every person in every encounter with a musical composition. Thus, we will precede to survey these types of silences with the presupposition that this survey is by no means exhaustive.

"Sound is an event: by its coming it breaks an original silence, and it ends in a final silence. . . . A musical work, like all sonority, unfolds between two silences: the silence of its birth and the silence of its completion."¹

These two silences constitute what Cone refers to as the "frame"² of a musical composition. They separate "actual" (i.e., lived) time from "virtual" (i.e., musical) time.³ The silences do not totally belong to either the "outside" or to the "inside" of a musical composition, but rather to both simultaneously.

Pre-Performance Silence

"In that initial silence from which the musical work is born, it already announces its future, that future of its own self, which is as yet only pure possibility, and which it will change into reality."⁴

The pre-performance silence is a time for reflection, either consciously or subconsciously, on those possibilities. It is a silence that

¹Gisèle Brelet, "Music and Silence," p. 103
"is not pure nothingness: in it dwell an attentiveness and an expectation."\(^5\) It "is resounding with musical association fathered by the listener's subjectively oriented expectation,"\(^6\) which, in turn, is governed by the objective knowledge the listener brings to the composition.

Obviously this silence is incapable of being measured, and it is not important that this be done. For it is a silence in which every attentive listener participates to some degree in shorter or longer duration depending on the various circumstances surrounding the musical work encountered.

Normally, there is a clear demarcation between the end of pre-performance silence and the beginning of the composition. This phenomenon is clearly exemplified in the opening bars of Beethoven's String Quartet Op. 18, No. 5 (Ex. 1). We are abruptly thrust from our pre-performance contemplation into the "tönend bewegte Formnen,"\(^7\) --sounding forms in motion -- whose duration is "completely incommensurable with the progress of common affairs."\(^8\) In other words, we have entered the realm of musical time.

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\(^5\) Brelet, "Music and Silence," p. 104

\(^6\) Lissa, "Aesthetic Functions of Silence," p. 446.


\(^8\) Langer, *Feeling and Form*, p. 109.
Example 1. Ludwig van Beethoven, String Quartet Op. 18, No. 5, first movement, measures 1-5.

This type of procedure -- unequivocal delineation of silence and attack -- is very typical for most of the works prior to and many of the works following Beethoven. In the Ninth Symphony (Ex. 2), however, Beethoven is seen experimenting with an approach that grew in popularity throughout the nineteenth century: "the most imprecinctible growth of sound from silence."³ It is as if the "music may have been going on for some time, below the threshold of hearing, before it became loud enough for us to perceive it."⁴ If this notion is accepted, one realizes in retrospect that the pre-performance silence was a part of the composition and, hence, the edges of the frame have been obscured.

³Cone, Musical Form, p. 18.
⁴Ibid., pp. 18-19.
Example 2. Ludwig van Beethoven, Symphony No. 9, Op. 125, first movement, measures 1-8.

The development of this concept by later composers is illustrated in the following example from Liszt's Les Préludes (Ex. 3). Here, the "imperceptible growth of sound from silence" is incorporated within the notational scheme, where the rests are notated realizations of the pre-performance silence, from which the pizzicato notes in the strings gradually emerge and evolve into the piece. There is a sense of timelessness in that unless the listener is carefully following the conductor's beat pattern, it is nearly impossible to discern a meter for the material of the initial nine measures and then its sequence up a step in the following measures.

A point of interest is the "return" to the original silence in measure 9 with the woodwinds fading (smorzando) into a rest with a fermata. It is as if there has not been enough motion generated for the piece to start; as if the composition is not yet ready to disconnect itself from its original silence. This begins to approach one of the "foolish questions" that Cone raises: "Where is the beginning of a piece of music?"\footnote{Cone, \textit{Musical Form}, p. 12.} The answer to that question does not lie within the
scope of this study. It should be noted, however, that the entire introduction of the work may be seen as an upbeat for the section beginning at measure 35; a generator of motion, creating the image of a gradual emergence from its pre-performance silence.


I do not agree with Clifton, for whom every rest at the outset of a composition constitutes a notational manifestation of pre-performance silence, or in his terms, "the pure anticipation created . . . by
the totally impending presence of a work on the verge of becoming."12
For example, the opening eighth-rest of Beethoven's Fifth Symphony surely
is only there to indicate the metric completeness of the opening measure.
I doubt we feel it functioning as a "specific activity which illuminates
the general process of linking the occurrence of the piece to changes in
personal consciousness."13

Post-Performance Silence

"The work dies in silence . . . and the silence of its completion
is filled with its spiritual essence."14 Again, the silence is not empty,
but is "alive in the listener's mind with the last segments and a general
evocation of the entire work."15 Post-performance silence constitutes the
final stage of the work's occurrence, using Langer's term.16 At this
juncture, the work as an entity is revealed in toto. This is where musical
time is relinquished and "we need silence to cover our return to ordinary
time."17

The concept of silence functioning as a transition to "actual"
time is evident in much of the standard notational procedure during the
common practice era, where a composition will frequently end in an extra
measure of rest with a fermata, or even measures of rest. Hence, the
final sounds of the composition are actually in the penultimate or some-

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13 Ibid.
14 Brelet, "Silence in Music," p. 119
16 Langer, Feeling and Form, p. 121.
17 Cone, Musical Form, p. 16.
times antepenultimate measure. One only has to peruse the last measures of the Op. 18, Nos. 2, 3, 4, and 6, Op. 127, Op. 130, Op. 131, Op. 133, and Op. 135 String Quartets as well as the First, Second, Third, Sixth, Eighth, and Ninth Symphonies of Beethoven to find corroborating evidence of the frequent occurrences of this phenomenon. Beethoven, who was so arrantly meticulous in his notation, must have believed that these measures were components of the overall temporal form, and that the gesture, or active, expressive motion, extended beyond the final sounding notes. This idea of a composition ending not with its final sounds would make for interesting and fruitful speculation, although exploration of this tangent in this study has been obviated by limitations stated at the outset of this chapter. As was done with pre-performance silence, however, a few examples will be cited where the composer seemingly attempts to incorporate post-performance silence within the gesture of the composition so that the listener becomes aware of the attempt as such.

Some of the most well known examples of compositions incorporating their post-performance silences are those which fade into silence. While many compositions conclude in this manner, Mahler seems especially fond of the device. The effect is apparent in many of his works, but perhaps most poignantly in two of his later works, Das Lied von der Erde and his Ninth Symphony (the ramifications of the silence in the latter have been discussed by Leonard Bernstein in his Norton lectures\(^{18}\)). Both works, in their concluding sections, create the impression of time standing still, so to speak, through the use of long, sustained chords. The Ninth Symphony...

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in particular contains lengthy hiatuses before the close of the piece, which also contribute to the effect of a slow disappearance into the final silence. Also present in each of the works are indications of ersterbend in the score, which, putting aside all the implications the word may have in connection with Mahler's life, show quite definitively that Mahler desired the two compositions to imperceptibly melt into their concluding silence. In situations such as these, it is impossible to decide at what point the piece does indeed conclude. That factor, of course, is why performers "freeze" during the final silence. It is also the reason attentive listeners feel it such an onus to bring themselves to applaud. It is an infringement upon this silence which has become a part of the composition.

Another approach to the incorporation of post-performance silence into a composition appears in the final movement, "Alerte", from Mouvements Perpétuels by Poulenc (Ex. 4). The final chord of the piece is heard as a dominant-type chord in F. This chord, however, does not resolve to the tonic in the notated composition, rather, it resolves, if at all, in the imaginations of the listeners during that silence after the piece has presumably ended. Here again, the listener is made aware, in some way, of the gesture of the composition extending into the silence of its completion.

(next page)

It would be impossible to depart from this type of silence without examining the delightful pun on post-performance silence found in the final movement of Haydn's String Quartet Op. 33, No. 2 (Ex. 5). This, of course, is the pièce de résistance in imaginative, jocular conclusions (unparalleled except for perhaps Mozart's Sextet K. 522, Ein Musikalischer Spass), where "the main theme returns with protracted pauses between its phrases, to trick the listener into thinking the music is over." Only a single hearing is required to realize the clever manipulation of post-performance silence in contributing to the ending(s) of this work.

Through this overview, some of the importance of pre-performance and post-performance can now be comprehended. As previously stated, there is still room for further study. These types of silences, unfortunately, are too often overlooked and considered unworthy of in-depth study. Yet, as any conductor who has waited for the "right" moment to drop his baton,

and as every performer who has remained immobile at the conclusion of a composition knows, these types of silences are integral components of the "occurrence" of the piece, and as such, are very relevant and definitely warrant further examination.


Structural Silence

In the previous section, normative silences which formed the "frame" of an entire musical composition were explored. We now address ourselves to a normative silence which, in effect, forms the "frame" of different musical sections. These silences are the most common of the notated silences, employed to aid in the demarcation of a form inherent within a movement of a composition. They act as a type of musical punctuation mark, and can appear, for example, between the exposition and development, development and recapitulation, and/or between first and
second theme groups in the sonata-allegro form. These silences can also appear between minuet and trio sections, before the re-entry of the ritornello in rondo forms, and between different variations of a variation form, as well as between other sections. They are almost syntactical in their usage by composers as their raison d'être is their ability "to connect, or to indicate the relation of"\textsuperscript{20} certain sections or divisions to each other.

It must be noted that the break between the sections of a form will not always consist of silence. Many times, particularly before a return of the ritornello in the Rondo, the break will be composed out. Usually, in instances such as this, the harmonic rhythm will be still in the measures directly preceding the return and the melodic material will frequently consist of either repeated notes (often on the dominant) or scale figures which lead into the main theme. The concern of this study, however, is the instances where this break between elements of the form is silence.

The significance of this type of silence ought not be underestimated, although it often is. These rests "prepare the listener for the entry of a new section of the composition, and aid him in apprehending the architectonic design of a musical work."\textsuperscript{21} They are always a part of a cadence figure which defines "the ending quality of intensity and inflection that are meant by written question marks, commas, and such."\textsuperscript{22}

\textsuperscript{20}Coker, \textit{Music and Meaning}, p. 110.

\textsuperscript{21}Lissa, "Aesthetic Functions of Silence," p. 447.

\textsuperscript{22}Coker, \textit{Music and Meaning}, p. 113.
Their significance for music is in the ways they mark off the various sections of a form.

There are numerous examples of this type of silence in the quartets. For the sake of expediency, this study will discuss a few manifestations of the phenomenon that occur in the sonata-allegro movements of the quartets.

The break between the exposition and its repeat and/or development in Beethoven's Op. 18, No. 6 Quartet is a "textbook" example of this type of silence (Ex. 6), even though the textbooks that I have perused make no mention of the phenomenon in their discussions of the precepts of form. In the example, the exposition ends with a perfect authentic cadence in F major, the dominant of the original key center. This cadence sets up two events: 1) the repeat of the exposition in B-flat major, and 2) the move to the development which begins in F. This type of harmonic formula and the inclusion of silence at this juncture is very typical of Beethoven's early style and of the Classical period in general.

In the transition to the recapitulation of this movement, a less typical silence situation is encountered (Ex. 7). The actual beginning of the recapitulation is in measure 175. It is preceded by a V₇ chord in B-flat with a fermata. Certainly a slight caesura will occur in performance after the release of the fermata chord which will be instrumental in heralding the return and, hence, important in the delineation of the form. It is the full bar of silence in measure 172, however, that is particularly interesting from a compositional point of view. The hiatus acts almost as a built-in ritard. The motion of the preceding measure is subsiding, with the thematic motive fragmented to two notes and then to one. The rest is part of this ebbing effect, which helps to suspend the motion in preparation for its resumption at the forte-piano attack of the return of the main theme. The silence in measure 172 is not as important in demarcating the end of exposition-beginning of recapitulation as is the caesura, but it is a major participant in the subsidence of the motion that prepares this caesura.

Example 7. Ludwig van Beethoven, String Quartet Op. 18, No. 6, first movement, measures 168-75.
One might argue, perhaps, that the inclusion of this measure of silence imposes an eight measure pattern on the phrase, making it parallel to the two preceding eight measure phrases. Even if this is an argument against the explanation offered above, it is weakened by noticing that 1) regular phrase length is not a feature of this quartet, and 2) the fermata would destroy any attempt on the listener's part to hear these bars in terms of their phrase schema. The silence here is a part of the subsiding motion which is ultimately completed by the fermata, and its inclusion is a brilliant touch.

The "joint," as Baman would label it, between the exposition and its repeat and/or development in the Op. 18, No. 3 Quartet contains an unusual example of writing (Ex. 8). This transition is the most


\[\text{\footnotesize \text{23Baman, "The Use of Silence," p. 12.}}\]
dramatic event to this point in the movement. The abrupt introduction of the G-natural by the leap of a ninth in the first violin and the ascending chromatic half-steps in the cello contribute to the disconcerting effect inflicted by this almost operatic part writing. There is a sense of uneasiness during the silences because of the precipitant change of key. This uneasiness is not assuaged until the cello reaches its goal of D.

As previously stated, silence between the exposition and development of sonato-allegro form is almost a norm is all of Beethoven's early compositions in that form. With the advent of a more advanced and complex concept of sonata form, though, Beethoven tends to eliminate this characteristic, employing other means to move from one section to another. By a juxtaposition of two similar instances incorporated in two different quartets, it is possible, in a small way, to trace part of this development of a stylistic mannerism. The two situations provide an excellent opportunity to indulge in some speculation as to the importance of silence in structural situations.

At the end of the exposition, the Op. 18, No. 1 Quartet candences in C major, which is the dominant key center of the movement (Ex. 9). The two beats of rest help demarcate the end of the exposition—beginning of development and contribute to the completeness of this "typical Mozartean gesture." As the development commences, there is a harmonic jolt as the key abruptly shifts to A major, the III of F, and a minor third below C. Since the ending of the exposition was resolute in asserting its finality, the development must literally start anew. This is accom-

lished by thematically reaching back into the material just preceding the final cadence of the exposition.


At the comparable juncture in the Op. 74 Quartet, the same key relationship is manifested (Ex. 10). The exposition again closes in the dominant (here B-flat major) and after the double bar, the development begins in G major, which is III in the original key of E-flat major and also a minor third lower than B-flat. In this quartet though, there is no silence to separate the sections or the key movements. Also, the exposition is not cadenced in so determined a manner as in the Op. 18, No. 1 example. This is mainly because in the Op. 74, the melodic goal and harmonic goal has been reached in measure 74, four measures before the break. Measures 74-77 then, are subsiding repetitions of these goals which make the cadence less resolute. Thus, the development does not have the necessity to "begin" again.
Example 10. Ludwig van Beethoven, String Quartet Op. 74, first movement, measures 73-78.

It is of interest here to show some of the "evolution, concentration, and clarification" of the Beethoven creative process by citing an early sketch of this same passage as shown in Zweite Beethoveniana (Ex. 11). As can be readily seen, the change of key is not as abrupt and the regaining of motion is not accomplished as fast as in the final form.

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As has been stated, Examples 9 and 10 are very interesting because they possess equal key relationships. Each of them, though, has a different nuance in both the way they complete the exposition and the way in which the development is begun. The silence, and the lack of it, are components in those nuances inherent in the two examples. Through a simple rewriting of the above examples, it is possible to elucidate further how the silence does contribute (Ex. 12a and 12b).


Example 12a, of course, simply eliminates the silence in the original version, and Example 12b includes new silence. In 12a, the exclusion of the silence delicately undermines the completeness of the cadence in that the melodic rhythm becomes stilted. This example seems to make the move to the development smoother. In the second revision the converse is true. The addition of rests here bestows a slightly stronger sense of closure on the example, and hence the shift to the development is more abrupt than in the original version.

These observations certainly suggest very fine distinctions of basically subjective reactions. It would be difficult to explain why one example is harsher and the other smoother. Perhaps it is the fact that sound after a silence in this situation simply seems to be rougher, although that does not always hold true. The decisions of the creative imagination of a composer usually preclude pat, simplistic answers but, through the observations and experiments offered above, it is possible to examine and discuss some of the options that a composer has.

The examples in this section have shown some of the possible uses of silence in structural situations. These silences can demarcate the
sections of a form, aid in the subsiding of both melodic and harmonic motion, or add to the effect of a sudden modulation. All these uses are dependent on the particular context in which the silences are employed. The literature is filled with examples of silences participating in numerous structural situations in all forms. Even though the examples in this section were concerned only with structural divisions within the sonata-allegro form, it has been possible to discuss some of the overall significance of these types of silences to the compositional process.
CHAPTER IV

NON-NORMATIVE SILENCES

This chapter is concerned with silences that are not as standard in their use as the silences of the preceding chapter. Hence, these silences have been designated non-normative. Non-normative silences can be used anywhere in the musical composition, but in any appearance, their significance is totally dependent on the context. Thus, they have the possibility for a diversity of significance and use in the compositional process. Certainly, it would be inconsistent with a systematic study to simply examine appearances of these silences at random. Therefore, some form of logical order must be devised, through which a deeper understanding of the nature of the specific instance is revealed without losing sight of the overall totality of these types of silences. Such order, of course, necessitates the implementation of some type of categorization. As Meyer has pointed out, the key to "understanding is . . . grouping stimuli into patterns and relating these patterns to one another."\(^1\) With the formation of these patterns, we establish a set of criteria from which we gain a perspective and a solid base for assumptions and conclusions.

The method which will be employed to examine these silence patterns and their significance is based on the constructs of semiology (or semiology). The use of semiology will allow us not only to group appearances

of non-normative silences but also offer a means to adequately discuss their significance. It must be understood that the central purpose of this study is not the imposition of categories or classifications on the various manifestations of silences; rather, it is the description of a particular effect created, and how a silence participates in that effect. Hence the reader will find neither a critique nor a defense of semiology in the following discussion, for there has been ample literature throughout the years on the subject's merits and flaws. Certainly the fact that semiotics has been selected to aid in the presentation of this study belies the idea that this writer does not find the theory applicable nor workable. Suffice it to say that the theory is considered a tool to reach a better understanding of non-normative silences.

Silence and Semiology

"Semiotic [sic] has for its goal a general theory of signs in all their forms and manifestations . . . ."\(^2\) Semiology is the science of the study of signs and sign situations. According to Charles Morris, one of the early exponents of the theory,

Semiosis (or sign process) is regarded as a five-term relation \(- v, w, x, y, z\) - in which \(v\) sets up in \(w\) the disposition to react in a certain kind of way, \(x\), to a certain kind of object, \(y\) . . . . under certain conditions, \(z\). The \(v\)'s, in the cases where this relation obtains, are signs, the \(w\)'s are interpreters, the \(x\)'s are interpretants, and the \(z\)'s are the contexts which the signs occur.\(^3\)

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\(^3\)Ibid., p. 2.
Coker, in a less archaic setting, describes the same phenomenon as

... any stimulus \( [v] \) that calls out in some person or organism \( [w] \) a disposition to respond \( [x] \) in some way to another object or event \( [y] \) under certain conditions \( [z] \). 4

(The above alphabetizations are my substitutions for the numeration originally used by Coker so as to retain continuity with the Morris citation.)

Several observations concerning the formulation of semiosis have been pointed out by both Morris and Coker. Two of those pertinent to the present investigation will be summarized.

First, the formulation does not offer a definition of the term "sign," Only the conditions for recognizing certain events as sign situations are given. Morris, throughout his discussions, remains purposely non-committal with regard to an exact definition of the term. In this study, however, a workable definition is required and will be presented later.

Second, both objective and subjective (or, in Coker's terms, "mediated" and "immediate") stimuli are included within the formulation. This permits examination of two levels of perception: 1) those stimuli that are rationally perceived, and 2) those which are instinctually felt.

It is well worth noting that semiosis as described above bears remarkable similarity to many explanations of the process through which "meaning" is attained. Mead states that "meaning arises and lies within

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the field of the relation between the gesture of a given organism as indicated to another organism by that gesture."^5 This constitutes what has been labeled the "triadic relationship" between "a stimulus, the thing to which it refers, and the individual for whom the stimulus has meaning."^6

The affinity between semiosis and situations to which meaning is ascribed is made even more pointed when Morris' formulation of semiology is recalled in its incipient state as involving three factors: that which acts as a sign (the sign vehicle), that to which the sign refers (the designatum), and that effect on some interpreter (the interpretant).^7 Examined in this setting, semiology becomes a foundation for the study of meaning. As Coker asserts, "the whole concept of meaning as a property of signs must be understood as being the most fundamental -- the biological -- order of things."^8

To comprehend the significance (i.e., meaning) of any object, three possible avenues of approach, which directly correspond to the three dimensions of semiosis as outlined by Morris,^9 present themselves:

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^8 Coker, Music and Meaning, p. 3.

syntactics, semantics, and pragmatics. As Coker summarizes them, syntactics deal with the kinds of signs, their ordering, and their relationships to one another, semantics is concerned with the relation of signs to their contexts and to what they signify, and pragmatics treats the relationships of signs to their interpreters. All of these dimensions, in greater or lesser degree, will be employed in the present examination.

It is now necessary to define the term "sign". Although Coker in his definition departed from the original meaning of certain terms used by Morris, it is his definition that will be employed. He stated that a sign is "a stimulus that directs of influences some organism's behavior in relation to something that is momentarily but not necessarily the dominant stimulus in the situation."\(^\text{11}\) This definition is operative on the two different levels discussed on page 34. Subjectively, something (v) becomes a sign for something else (y) if an organism (w) responds (x) to y in a manner similar to y. Objectively, something (v) becomes a sign for something else (y) if v either accompanies, follows or directly refers back to y, thus rendering the situation perceivable in terms of empirical knowledge. (Here again, the alphabetization is in reference to the Morris definition). What is important in a sign situation is that "whatever acts as a sign in some way or ways causes an interpreter to take account of an object or event."\(^\text{12}\)

\(^{10}\) Coker, *Music and Meaning*, p. 2.

\(^{11}\) Ibid.

\(^{12}\) Ibid., pp. 2-3.
Therefore,

... any attitude - feeling, emotion, or desire - any anticipation, any action, or any state of consciousness is significant only insofar as it is a response or a disposition to respond to some stimulus within the internal or external environment of the organism. Stimulus-response, the physiological level of existence and experience: this is the essence of sign functioning and meaning.\(^{13}\)

It should be clear that the stimulus somehow "produces a tendency in the organism to think or act in a particular way,"\(^{14}\) and that because of this, meaning is imparted to the situation. We should also realize that all signification involves an emotional or affective component, because "all sensory perception, the cognition and recognition of stimuli as significant, brings attitudes and the affective process into play."\(^{15}\) Emotion "is significant itself . . . . Where there is emotion, there is meaning; where there is meaning, there is emotion."\(^{16}\) Viewed in light of those statements, it is now possible to see that the "primary function of any object as a sign is emotional, and all other significatory effects are dependent upon this prior activity."\(^{17}\)

\(^{13}\)Coker, Music and Meaning, p. 3.


\(^{15}\)Coker, Music and Meaning, p. 3.


\(^{17}\)Coker, Music and Meaning, p. 3.
It was stated in chapter one that silence is meaningful (however at that time no substantiation was offered) in that it participates in the gesture of the temporal form. Because of ideas discussed in this chapter, we can now place that concept on a more approachable and better defined level: silence becomes meaningful in that it is a participant in sign situations. In fact, it will be possible to cite situations where the silence itself acts as the sign. (The qualification that "meaningful" is a relative term must be added here. How and to what degree something is considered meaningful varies from interpreter to interpreter and even from time to time in the same interpreter. This dilemma is realized and the interpretations of the examples offered below are not intended to be dogmatic in their assertions.)

Before proceeding to specific instances of non-normative silences, it must be noted that in any given sign situation, the object understood as the sign will be affected by the temporal circumstances of the context. This becomes especially relevant here, since these silences exist within the temporal art of music. There are three temporal dimensions which Coker has attributed to a sign situation: predictive, retrodictive, and juxtadictive. It is possible for one or more of these dimensions to be operative on various levels in any sign situation. Each temporal dimension, though, will be treated separately in the following sections of this study and will form the classifications through which various appearances of non-normative silences may be examined.
Predictive Situations

The predictive dimension of a sign situation provides an efficient and practical approach for grouping silences that somehow are incorporated into material which points to the future. This dimension occurs in any situation where an interpreter is caused "to look forward . . . toward what is signified."\(^{18}\)

Several authors have attempted to design separate categories for each specific silence situation included in the overall grouping to be used here. Their categories are based on the specific effect present in the particular occurrence. Lissa, for example, attempted to distinguish between rests functioning as "suspense" devices and as "expectancy" pauses. The inadequate definition of both of the terms, however, makes the distinction nebulous. In fact, another passage refers to the employment of rests as "a suspense medium, intensifying the feeling of expectancy."\(^{19}\) At this point, it seems she has attributed both qualities to the same event, and expectancy has become a function of suspense. Later in the article, though, she attempted to attribute different functions to each.

Clifton also encountered difficulties in discussing silences which would be labeled predictive by this study. He began by grouping certain silences according to their temporal gesture. Clifton's temporal category, though, contains a silence "whose main indentifying trait is that of a


\(^{19}\)Lissa, "Aesthetic Functions of Silence," p. 447.
flat, undifferentiated, hard-edged object. This is a temporal silence not because it is in motion but because its principal task is ... cutting off a succession of events." 20 In light of our discussion of the way in which silence participates in the musical gesture, it can be seen that the use of the adjective "flat" to indicate the "silence's lack of significant shape or gesture" 21 is totally foreign to the conception of silence as presented in this study. It is Clifton's next step in examining these silences, though, that has some relevance to the present study.

Clifton divided these "temporal" silences into those that adhere to either the "outgoing or incoming sound event." 22 These terms are very similar to the terms predictive and retrodictive employed in this study. There are some fundamental differences, however, one of which being that Clifton stated that silences adhering to the "incoming sound event" are simply those silences that create a "pregnant, anticipatory" 23 effect. It appears then, that by definition, anticipation becomes the only standard for determining whether or not the silence is part of an event that points to the future. Lissa, even though unable to adequately define the terms, asserted that rests can also create suspense and expectancy. Also, both Lissa and Clifton indicated that somehow tension also permeates these silences.

Our problem, then, is to deal with a group of silences without

21 Ibid.
22 Ibid., p. 167
23 Ibid., p. 165.
becoming entangled in the almost insurmountable semantical perplexities of trying to define and separate basically subjective reactions, while at the same time, accounting for particular nuances that a situation may possess.

Semiology provides the means to examine these silences because it allows for the overall consideration of silences which participate in predictive sign situations. The definition of the predictive dimension of a sign situation can be viewed as the progenitor of the subjective terms used to describe those situations because the definition encompasses the temporal reference implied by the terms. Thus, it is possible to employ the terms without the burden of dogmatically defining them or making unequivocal distinctions between them, were that even possible. The terms are, to use an analogy, species of the genus, and the following examples are intended to clarify that relationship through specific occurrences.

Measure 88 of the first movement of Beethoven's String Quartet Op. 18, No. 1 is a complete measure of rest (Ex. 13). In the preceding measures, the two violins and viola move through a progression of chords in C major (the dominant of the original key of the movement) and end on the vii\(^0\) chord of C. On hearing this chord in this context, one would expect or anticipate a resolution to some type of C chord because of the inherent "univalence" of the vii\(^0\) chord, to use Schenker's term.\(^{24}\) In

other words, the significance of this sign lies ahead in its resolution.

Example 13. Ludwig van Beethoven, String Quartet Op. 18, No. 1, first movement, measures 84-89.

The bar of rest intensifies this expectancy by prolonging the time, both "actual" and "virtual," that the chord is experienced. Hence, the silence becomes a part of the sign, intensifying it. It is possible to see how much this silence contributes to the situation by a simple rewriting of the passage deleting the silence (Ex. 14). Here the effect of anticipation is appreciably minimized.

On the other hand, if Beethoven had decided to allow the vii\(^0\) chord to sound throughout measure 88 (Ex. 15), then the resolution would still be anticipated, but the overall effect would be terribly trite. Ignoring blatant compositional errors, such as the poor voice leading, the rewritten version does not attain the strong anticipation that the original does.

Hence, the silence in the original situation not only heightens the expectation of a future event, but at the same time it delays the event and so creates uncertainty or suspense since "in the moment of delay we become aware of the possibility of alternative modes of continuation."\(^{25}\) The C major chord in measure 89, then, is not only a resolution of the vii\(^0\) chord, but also a resolution of the silence.


\[\text{Example Image}\]

The true importance of this hiatus is experienced in the subsequent passage (Ex. 16), where the same device is employed. This time the instruments are voiced, for the most part, an octave higher. Again there is the vii\(^0\) chord and then a bar of silence. In light of the information presented in Ex. 13, a C major resolution is expected,

\(^{25}\) Meyer, Emotion and Meaning, p. 27.
perhaps an octave higher. But in this instance, the vii\(^0\) chord is resolved to C minor, and as if to emphasize that deviation, Beethoven has indicated sforzando under the chord of resolution. Here, one of the "alternative modes of continuation" has been employed to create an interesting compositional development of a silence situation.


In his discussion of these same silence situations, Braman simply labeled these occurrences "interruptions near close of exposition,"\(^{26}\) which says absolutely nothing. Actually, the vii\(^0\) chord points to a resolution in the future, which, in this context, would appear to be C major. The silences suspend the vii\(^0\) chord in time while simultaneously delaying the resolution, and thus intensifying the expectancy of its occurrence. These silences are certainly more than just mere "interruptions."

\(^{26}\)Braman, "The Use of Silence," p. 240.
The closing measures of the second movement of the Op. 59, No. 1 Quartet also contain an interesting use of silence in a predictive situation. Helm describes the overall context of the measures:

After the first lyric theme dies away peculiarly melancholic in E minor, it modulates to B-flat in a most unusual manner, pianissimo, in whispering sixteenth notes, where, amidst regular continuous movement, the first counter-subject is carried through the four voices and is finally suspended in air. Is the movement over? No, it still needs a stronger ending. A pizzicato chord in all four instruments moves towards the first drastic effect in the entire Scherzo. The basic motive, shortened at the eighth note, flies through the voices—again arco (first violin on G-flat, second violin on E, viola on F): one can imagine he sees the Master smilingly shaking his finger. Now a fortissimo entrance of the metamorphosed basic motive (not counter-subject), and, as if driven by a crushing blow to the ground, the final three measures assert the triad sforzando in thirds: Hercules has consumated his work, the movement has ended. 27

(Translation mine.)

The two eighth rests in measure 469 (Ex. 17) are quite important in the "drastic effect" perpetrated by the use of the G-flat.


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For eleven measures preceding the *pizzicato* chord, there has been an oscillation between the tonic (B-flat) chord and dominant (F) seventh chord. These eleven measures are more than mere repetitions because in their adamant assertion of the dominant-tonic progression they become very instrumental in exacerbating expectancy during those two beats of rest. After hearing the V₇ to I progression for those eleven measures there can be almost no doubt in the mind of an attentive listener that a I chord will follow the *pizzicato* V₇ chord.

In reality that resolution is interrupted and does not occur until three measures later. It is a case here of the listener being manipulated into expecting an antecedent, only to have that expectation thwarted by the following measures of the composition.

Directly following the two rests there occurs an event that is very disruptive to the tonal center and also to the expected cadential formula as described above. The G-flat and E could be interpreted as outward expansions of the note F, followed by a return to F in the viola.
(Ex. 18). Although this is certainly a plausible explanation of the phenomenon, we may better understand the selection of these particular notes and at the same time explore some other appearances of silence in the movement if we examine the G-flat (and to a lesser extent the E) in relation to the rest of the movement.

Example 18. Expansion line of measures 469-73.

In semiotical terms, the G-flat is a retrodictive sign. We need not encumber ourselves with a definition of the term here, as it will be defined in the following section of this study. In examining to what the G-flat refers, though, we will encounter silences that are part of the predictive dimension, which is the concern here.

G-flat is of considerable importance as a key center in this movement. Not only do some passages move through it (see mm. 394-401), but it is also the key for one of the returns of the "scherzando," to use Kerman's designation.\(^{28}\) (see Ex. 21 below.) Also, in this movement there is a total of four separate bars of complete silence notated in the score. Before each of these bars, a G-flat or F-sharp figure prominently. Moreover, preceding three of these G-flats or F-sharps is the note F, creating the same relationship mentioned in the "interrupted cadence" of

\(^{28}\) Kerman, *The Beethoven Quartets*, p. 106.
Ex. 17. The one bar of silence which is not directly preceded by an F to G-flat (F-sharp) relationship is followed by a modulation to E minor and the "peculiarly melancholic" lyric theme described above by Helm. There is also an E in the "interrupted cadence," and perhaps one might wish to label this E as a retrodictive sign for that particular event.

The first appearance of a complete bar of silence is in measure 170 (Ex. 19). The progression preceding it is quite a jolt as can be seen in the example. The G major-minor seventh chord sounds as a V₇


\[ C: \text{V}_7 \]
\[ (B: \text{IV}_6^3) \text{ V I} \]

chord in C minor since the key of the previous measures is unequivocally C minor. Instead of resolving as a V₇ in C minor, in which case the logical resolution would have been to i, the G major-minor seventh is resolved as an enharmonically spelled German augmented sixth chord coming "to an abrupt stop on F-sharp, dominant of B."²⁹ (Note the melodic

progression in the first violin of F to F-sharp.) Throughout the measure of rest it is impossible to know exactly what key the subsequent passage will be in, or for that matter, what key we are now in because the resolution of the G major-minor seventh chord was a tritone away from the anticipated resolution. This rest is permeated with ambiguity, tension, and the expectation (almost hope) of a resolution. Thus, the situation described by Helm is not the first "drastic effect" in the movement.

Once again, through the hypothetical exclusion of this silence, its importance in its present position can be understood (Ex. 20).


Here, the move to F-sharp is still a jolt, but without the silence the tension is not as intense. The quick resolution mollifies the ambiguity, so to speak. There is no time to puzzle over what key the passage is in, as B major places the F-sharps in perspective.

In the original situation, there is another level operative on this bar of silence which warrants some discussion. The uncertainty and lack of clarity could be "products not only of conflicting tendencies
but also of a situation which itself is structurally confused and ambiguous."\textsuperscript{30} The latter half of that statement is very applicable in this instance because the overall "form ... of this movement is 
 sui generis, an imaginative combination of elements familiar in themselves from the dance forms and from the more highly organized sonata forms, but never associated in just this way."\textsuperscript{31} Thus, within this situation, we are not only confronted with an ambiguity concerning a key center, but also an uncertainty as to where we are in the form. Both of these, as well as the expectation of some type of resolution, are heightened by the use of the measure of rest.

The same type of effect occurs in measure 238 (Ex. 21). Here the $V_7$ chord, this time built on F, resolves by only one note in the cello, F to G-flat, to form a $\text{vii}_4^{04}$ in B-flat. Both chords, in this context,


point to a resolution to a B-flat type triad, and as such are predictive signs for that resolution. The bar of silence adds to the desire in the

\begin{center}
\textsuperscript{30}Meyer, Emotion and Meaning, p. 16.
\textsuperscript{31}Kerman, The Beethoven Quartets, p. 106.
\end{center}
listener for that completion. In this instance, the key center is not as ambiguous during the silence as it was in Ex. 19, but the irony of the situation is that instead of resolving to the expected key, the vii\(^{04}\)\(^2\) resolves by common tone to G-flat.

To some extent, the two examples of silence above, and also the next examples, might be considered under Clifton's category of silence that adheres to the "outgoing" sound event. The only criterion he gives for this type of silence is "whether one's experience of silence is primarily that of surprise."\(^{32}\) Again, difficulties in the criteria are encountered. Surprise is experienced in the sound event preceding the silence and not necessarily in the manifestation of the silence itself. Hence, the experience of the silence is not necessarily that of surprise. In Ex. 19, surprise may still be experienced during the silence, but it is because of the preceding event and not because of the silence. In Ex. 21 and the examples to follow, the main reaction during the silence is that of anticipation. The chords before the silences are signs for their resolutions and they incorporate the silences in their gesture because these chords permeate the silences in the minds of attentive listeners.

The final example of complete bars of rest in this movement shares many similarities with the previous occurrences. Here also is the juxtaposition of the F and F-sharp (in the cello) and a move to a chord which demands resolution in the style (Ex. 22). This time the chord is a vii\(^{07}\) in G. Following this chord is the bar of rest. The subsequent measure

differs radically from the previous examples, however, in that it repeats material similar to that of measure 446, poco ritard and piano, after which follows another bar of silence. These added bars serve numerous functions, both aesthetic and compositional. Aesthetically, they create


\[ \begin{array}{c}
\text{\textcopyright 1972}\ 
\end{array} \]

a type of echo of the previous vii\(_7\) chord, as if the weight of the chord is felt in the silence of measure 447 and then is reflected in the sound of the chord in measure 448.\(^{33}\) Compositionally, Beethoven, in the repeated chord, changes the position of the chord tones in the voices to make the voice leading to the next chord in measure 450 smoother. He also enharmonically spells the E-flat of the vii\(_7\) of G as a D-sharp, forming a vii\(_7\) of E. As this notational alteration is impossible to hear, Beethoven explicitly realizes the E implication on the second beat where the second violin drops to a B, forming a V\(_5\) of E. The silence of measure 449, then, intensifies in the mind of the listener the anticipation of a resolution in E. In this instance, the resolution is to the expected key.

\[ \begin{array}{c}
\text{\textcopyright 1972}\ 
\end{array} \]

\(^{33}\)This is a concept suggested by Charles Rosen in The Classical Style, (New York: W.W. Norton, 1972), p. 91.
Beethoven's methodology concerning these silence situations is akin to a scientist's in that he explores possible avenues of approach to and departure from the silences. In Ex. 19, it is almost impossible to anticipate the resolution of the F-sharp octaves during the silence. As it turns out, though, the F-sharps resolve as a V to I. In Ex. 21, the resolution to B-flat is expected during the silence, but instead the subsequent passage is begun in G-flat. Finally, in Ex. 22, the chords gradually evolve into a V₇ of E, silence, and then the expected resolution. All of these situations, which appear so similar in notation, create very different effects. It seems as if Beethoven not only developed the motives of the movement, but also the silences themselves, imbuing each of them with different contents.

In all the silence situations, it was noted that the chord immediately preceding the silence was linked to its predecessor by the juxtaposition of F and F-sharp or G-flat. Hence, it is possible to view the G-flat after the silence and V₇ chord in the "interrupted cadence" of Ex. 17 as a sign for these earlier events. Further, the E in that same example might be viewed as a sign for the modulation to the "peculiarly melancholic" lyric theme. If one accepts this interpretation, then one will understand those two notes (especially the G-flat) as integral phenomena of the entire movement.

The fourth movement of the C-sharp minor Quartet, Op. 131 contains an excellent example of silence participating in a predictive sign situation (Ex. 23). The E major-minor seventh chord in measure 270 creates expectancy not only in its tonal implication, but also by the melodic and rhythmic motion governing it. All of these factors simultaneously point

A: I, IV, I

to a resolution which should occur in measure 271. But, a resolution does not come, it is supplanted by a measure of rest. This bar of silence is a very disquieting event because so many factors converge on it, the dangling sixteenth notes being the most obvious. This measure gains further significance in that it is really an amplification of the eighth-note rest in measure 270. Similar sounding material precedes both rests, but the complete bar of silence, because of its elongated value, obviously prolongs the anticipation.

After the beat of silence in measure 273, which is experienced similar to the previous rests, Beethoven allows the rhythmical motion to subside and finally, in measure 275, the A major resolution of the V7 chord is attained. The movement does not stay in A major long, though, as a G-natural and an F-natural are introduced. Reimann describes this whole last section as "A dur . . . wiederholt zerfließen"—A major repeatedly dissolving. We then reach the "celebrated final gesture of the movement . . . the repeated A in high, ethereal pizzicatos."

35 Kerman, The Beethoven Quartets, p. 337.
In the limitations of study, it was stated that this study would not be concerned with silences between movements. An exception to that statement is made with respect to the silence between the fourth and fifth movements of this quartet because a description of this silence is relevant to the predictive dimension. The break is notated with a fermata over rests as are the breaks between the first and second and between the fifth and sixth movements. This is not an uncommon practice in Beethoven. These particular breaks, however, were beautifully described by Kerman, and that description is certainly worth noting. He stated that

These fermata rests breathe high expectancy; they take next to no time at all. There must be no break of attention, no coughs or tuning or uncrossing of legs.  

In the fifth movement of this same quartet, a silence should be discussed not only because of its participation in a predictive event, but also because of its uniqueness in notation. The silence occurs a total of five times, counting its appearance in the repeat of the Scherzo. It is notated as a fermata over a bar line (Ex. 24), a type of notation that does not appear in any other quartet. The silence appears each time in exactly the same context as shown in this example. For about ten measures before the rest, the key center has been G-sharp minor, related by a third to the original key of E major. The chord directly preceding the silence is a $V_7$ in G-sharp minor, but in each occurrence, that D-sharp major-minor seventh chord is resolved to an E

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Kerman, *The Beethoven Quartets*, p. 326.

major chord after the silence. The deceptive resolution, of course, is an unexpected event (although, it is probably increasingly more expected by the fifth time the resolution is experienced).

In semiotical terms, the D-sharp major-minor seventh chord is a predictive sign for a signification. Hence, the chord points to a resolution in the future. The signification of this sign is in the closing material of the movement. In other words, the V7 chord is resolved at the octave G-sharps (Ex. 25). It is no accident that the key of the sixth

movement is G-sharp minor, and it is no accident that Beethoven employs such a powerful device to assert that key. The multiple silences in this section seem to insure that the connection is not neglected by the listener. (Notice here also the crescendo to piano from the silence at the outset of the sixth movement.)

The concept that "an earlier event may skip across intervening events in reaching its goal,"37 while corroborated by semiology was actually suggested by Kramer's article on time in music. (Many of his conclusions parallel those drawn in the following section.) The fact that an unresolved dominant in G-sharp is experienced five times has to make a strong imprint in the listener's memory. It is the task of the three fortissimo G-sharps to resolve that imprint. Perhaps this is the reason Beethoven chose the notation of silence as a fermata over a bar line. The silence is a sign for a resolution which is not actually part of this movement, but an event to come.

The final example of silence participating in a predictive situation to be examined here is in the Op. 59, No. 3 Quartet. The introduction to the first movement contains many silences and has been quoted in its entirety (Ex. 26). This introduction is unparalleled in the Beethoven literature. As can be seen, the quartet "begins in limbo—with immediate digression carried to the point of outright confusion... The listener is left completely in a fog... for many bars, an effect that is carefully compounded by melodic and rhythmic vagueness to go along with the harmonic obfuscation."38


38 Kerman, The Beethoven Quartets, p. 135.
The silences are an important component in this "atmosphere of mystery and suspense." The rests in measure 2 are preceded by a diminished seventh chord built on F-sharp (a tritone from the key of the


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movement). This diminished seventh chord, of course, creates high expectancy for a resolution and the silence intensifies that expectancy. It is interesting that Beethoven desired the F-sharp diminished seventh chord to diminuendo into the silence, melting into it. This creates the effect of sound merging into silence, and is similar to the effects that were discussed in the sections on pre-performance and post-performance silences. When the sound emerges again, pianissimo, it is not a resolution of the diminished seventh chord but a dominant seventh built on F, a chord which also is a predictive sign, and requires resolution. Again there is silence. The next chord is still not a resolution of either of the previous chords: in fact, a resolution of those chords is never reached and this is what contributes to the harmonic nebulosity of the introduction.

The next silences, bars 9 and 24-25, again follow diminished seventh chords. The silences in measures 24-25 are the longest of the introduction, and the diminished seventh chord preceding and following them is the vii\(^7\) of C, the key of the movement. This diminished seventh chord is experienced for a total of eight measures (22-29) with the anticipation of its resolution.

The entire introduction is searching for a key. The tonic of the movement has to be attained, so to speak (compare with the introduction of the First Symphony). In the process of searching for its key, the introduction employs all three of the possible diminished seventh chords found in equal temperament. Beethoven later uses the three possible diminished seventh chords in the Piano Sonata Op. 111, integrating them
in such a way as to form a skeleton for the entire first movement. In this quartet, though, the chords remain unresolved and do not form any foundation of the movement to follow. This introduction as a whole is looking for some resolution: that key which begins the exposition.

In this section, silences which participate in and contribute to predictive sign situations have been examined. While all are classified under this general category, the discussion of the sounding context and its relationship to the silences have shown that each example assumes a slightly different shading. There have been situations where the anticipation of an event was logically fulfilled (Ex. 13) and where it is purposely left unfulfilled (Ex. 26); situations where one is unsure about what to expect (Ex. 19); and even a situation where the silence itself could be a sign for a resolution (Ex. 24). All of the examples even though they possess their own peculiar nuances, are species of the predictive dimension of a sign situation.

Retrodictive Situations

The second temporal dimension of a sign situation to be examined is the retrodictive dimension. The concept of retrodictive signs has already been encountered in the discussion of the "interrupted cadence" in the Op. 59, No. 1 Quartet. At that time, though, no attempt was made to define exactly what was meant by the term "retrodictive." A retrodictive sign situation is where a sign causes "an interpreter to reach back in

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40 The way these diminished seventh chords are integrated is analyzed by Charles Rosen, *The Classical Style*, (New York: W.W. Norton, 1972), pp. 442-444.
memory to recall or recognize what is signified."\(^{41}\) This, of course, is the opposite function of the predictive sign. In a predictive situation, an interpreter looked ahead for the signification of a particular sign. Here, the signification will lie behind the sign, in the memory of the interpreter.

This category is very appropriate in that the comprehension of a musical composition depends a great deal on the memory of a listener. "Memory is the great organizer of consciousness."\(^{42}\) Meyer stated that "without thought and memory there could be no musical experience."\(^{43}\) He believed that "they are the foundation for expectation."\(^{44}\) Memory, however, is a phenomenon which the composer can use not only to create expectation, but also memory makes it possible for the composer to devise certain situations which recall in the listener's mind some past history of the work.

Silences are frequently employed in retrodictive situations, as if to give the listener an opportunity to reflect on the implications of that situation. The silence aids the listener in making the connection between the present event and its signification. Often, these retrodictive situations are among the most dramatic moments of the composition.

This study will be limited to the retrodictive situations found in two quartets. This will allow ample opportunity to examine a number of retrodictive situations without superficially passing over their

\(^{41}\) Coker, *Music and Meaning*, p. 4.
\(^{42}\) Langer, *Feeling and Form*, p. 263.
\(^{44}\) Ibid.
significations.

In the Quartet in E minor, Op. 59, No. 2, there are numerous examples of silence which could be included in any one of the temporal dimensions discussed in this study. The first example of a silence participating in a retrodictive situation appears in measure 20 of the first movement. In order to see the subtle brilliance of this bar of rest, an extended extract is required (Ex. 27). (The silence in the earlier measures will be treated in the next section of this study.)

At one level, the silence in measure 20 is part of a predictive situation instigated by the $V_5^6$ which points to a I. At another level though, this silence is a retrodictive sign. This is not incommensurate with semiology because, as was stated before, it is possible for more than one temporal dimension to be operative on any given sign situation. The silence in measure 20, then, is a retrodictive sign for the entire contents of measures 2-12.

This is certainly a strong assumption, but the possibility of such an interpretation has been alluded to by other authors. For example, de Marliave stated that the cadential passage in measure 18 "comes to an abrupt stop on the two chords that take one back to the introductory bars" (emphasis mine). Kerman, speaking of the same event, says "the cadence is interrupted brusquely, in bar 19, for a sort of compressed repetition of bars 1-18" (emphasis mine).

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46 Kerman, *The Beethoven Quartets*, p. 123.

The italicized words above are very important to the comprehension of the idea that measure 20 is a retrodictive sign for measures 2-12. It is obvious that the two chords of measure 19 constitute the same type of gesture as the chords at the outset of the movement. That opening material was quite dramatic and will not be forgotten in the intervening space. The contrast of measures 2-12 also will not be forgotten. The repetition of the content of measures 2-12 after measure 20, though, would have been ineffectual, destroying the motion of the section. Thus, Beethoven chose to begin in measure 21 with the material of measure 13 in inverted counterpoint. So, in measure 19, we have been presented with the material of measure 1, and in measure 21, with the material of measure 13. Because "the mind is constantly striving for
completeness and stability of shapes.\textsuperscript{47} The silence in measure 20 is able to represent in the mind the content of the material that has been deleted, i.e., measures 2-12. To use an analogy, it is as if measure 20 is a pronoun for the subject; measures 2-12. Hence, the continuation with the material of measure 13 in measure 21.

This interpretation of silence serving as a sign for sound events is very exciting and has many interesting ramifications. There are many examples of this type of situation throughout Beethoven's quartets, and for that matter, throughout the literature. This particular instance has afforded an opportunity to elaborate on a type of phenomenon at which other authors have only hinted.

In measure 6 of Ex. 27, the key shifts to the Neapolitan second degree "in the boldest possible manner,"\textsuperscript{48} i.e., parallel octaves. This "Neapolitan harmony colors the rest of the movement, and indeed acts as a cementing force for the quartet as a whole."\textsuperscript{49} The harmony appears again in the recapitulation of this movement and also as a key center in other movements (Ex. 28). Moreover, Kerman pointed out the importance of the F-natural in the melodic construction of the first movement.\textsuperscript{50}

\begin{flushright}{\footnotesize \textsuperscript{47}Meyer, \textit{Emotion and Meaning}, p. 87.} \\
\textsuperscript{48}Kerman, \textit{The Beethoven Quartets}, p. 122. \\
\textsuperscript{49}Ibid., p. 123. \\
\textsuperscript{50}Ibid., pp. 121-127.}

Near the close of the final movement, an event occurs that cannot help but conjure up in the minds of listeners the recollections of the Neapolitan step in the previous movements (Ex. 29). This abrupt move to the Neapolitan from E minor and then the bar of silence is extremely similar to the opening shift in Ex. 27, and it would be hard for an attentive listener not to realize the connection. In the space of that silence we have time to recall the previous Neapolitan area of the work before the final resolution in the following measures. Coker would label
this event as an "interfluent reference" because it is a sign whose signification is in another movement of the composition.51

The Op. 95 Quartet in F minor contains many atavistic relationships with the Op. 59, No. 2. In the F minor quartet, Beethoven "addressed himself all over again to expressive and technical problems broached there Op. 59, No. 2: to pain and violence and the raging alternation of feelings, to the minor mode and the Neapolitan step and the rationalization of rhythmic discontinuities."52 In addition, there is a striking similarity in the treatment of silence.

"As in the E minor Quartet, the initial outburst is cut off by a rest, and then answered by a sharply contrasted new idea. Also as in the E minor Quartet, the first theme theatrically offers to repeat itself up a step on the Neapolitan degree, G-flat."53 In the Op. 95, however, these early relationships are presented much more painstakingly (Ex. 30).

Example 30. Ludwig van Beethoven, String Quartet Op. 95, first movement, measures 1-7.

51 Coker, Music and Meaning, p. 62.
52 Kerman, The Beethoven Quartets, p. 169.
53 Ibid.
The last sounding note in measure 5 is a C, and then the movement abruptly moves to G-flat. The tritone relationship between the C and the G-flat becomes extremely important (as shall be seen in the following section of this study) but the half-step F to G-flat is even more salient in the unfolding of the composition. In fact, this half-step relationship is the basis for much of the material, both melodic and harmonic, of the quartet. We will first examine some of the developmental metamorphoses of this interval and then show the manner in which silence participates in the enunciation of this process.

An early appearance of the half-step relationship after those opening measures occurs in the melodic interval D-flat to C in measures 9-15 (Ex. 31). Kerman labels these particular notes "the upper reflection of the original Neapolitan step F - G-flat." The C to D-flat half-


step is strongly emphasized throughout this composition. Perhaps the need for development of this relationship stems the juxtapositioning of the C, D-flat, and D-natural in the opening motive (see Ex. 30). In any case, the C to D-flat is extensively developed and it will be helpful to briefly

54 Kerman, The Beethoven Quartets, p. 170.
discuss a few of the developments of those particular notes which, in effect, form a "subset" of the overall development of the half-step relationship.

In the first movement, the C to D-flat relationship is developed in the second theme group which enters in measure 24 (Ex. 32). This theme is in the key of D-flat (instead of the "normal" A-flat) and its first two notes are C and D-flat. The C to D-flat also appears in measure 75 in the first violin (Ex. 33). Harmonically, the relationship

Example 32. Ludwig van Beethoven, String Quartet Op. 95, first movement, measures 24-26.

Example 33. Ludwig van Beethoven, String Quartet Op. 95, first movement, measures 75-76
is evident in the sudden modulation which initiates the coda (Ex. 34). In fact, the first movement ends with the cello reiterating the C to D-flat (Ex. 35).

Example 34. Ludwig van Beethoven, String Quartet Op. 95, first movement, measures 127-29.

Example 35. Ludwig van Beethoven, String Quartet Op. 95, first movement, measures 147-51.

The C to D-flat relationship is also found in subsequent movements of the quartet. In the final movement, for example, Beethoven poignantly displays the distinctive interval in the melody (Ex. 36). (Notice also the tritone D-flat to G.)
Example 36. Ludwig van Beethoven, String Quartet Op. 95, fourth movement, measures 119-24

Returning to the half-step relationship as a whole, we find in measures 18 through 21 of the first movement a sequence of the opening motive by ascending half-steps (Ex. 37). This ascent is parallel with

Example 37. Ludwig van Beethoven, String Quartet Op. 95, first movement, measures 18-20.

the C, D-flat, and D-natural relationship discussed earlier. In measure 40 of this movement, a theme is built on the relationship of half-steps (Ex. 38).

(next page)
Example 38. Ludwig van Beethoven, String Quartet Op. 95, first movement, measures 40-42.

In the third movement, most of the key centers are related by the interval of a half-step. The first section of the Scherzo opens in F, but then the key very succinctly modulates to G-flat for the trio (Ex. 39).


This trio modulates to E-flat minor which then modulates to D major for a repeat of the material of the trio (Ex. 40).

(next page)
Example 40. Ludwig van Beethoven, String Quartet Op. 95, third movement, measures 61-65.

The half-step relationship is humorously summed up in the coda of the fourth movement, where Beethoven employs half-steps to form the basic motive for the final theme of the composition (Ex. 41).

Example 41: Ludwig van Beethoven, String Quartet Op. 95, fourth movement, measures 169-71.

After this synopsis of a few of the many manifestations of the developmental process with regard to the half-step, it is now possible to investigate certain silence situations which participate in other developments of the half-step relationship.
The first example of silence after the opening measures of the first movement is found in measure 39 (Ex. 42). Here, "the opening gesture of the movement is recalled by the fortissimo unison scale.

Example 42. Ludwig van Beethoven, String Quartet Op. 95, first movement, measures 38-39.

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\begin{align*}
&\text{D}^b: V \\
&\text{VII}
\end{align*}
\]

followed by the long rest."\(^{54}\) Harmonically, in the key of D-flat, the progression A-flat to A-natural (B-double flat) is equivalent to the C to D-flat half-step in the key of F. This sudden move is certainly reminiscent of the half-step ascent in Ex. 37, and also the modulation to the Neapolitan in Ex. 30. Hence, the situation is a retrodictive sign as its signification lies in the memory of the interpreter. The silence, as a part of the retrodictive reference, prolongs in time the relationship between the sign and its signification in the mind of the listener.

\(^{54}\text{Kerman, The Beethoven Quartets, p. 171.}\)
Similarly, in measure 50 of this movement, (Ex. 43), the half-step D-flat to D-natural (E-double flat) also serves as a retrodictive sign, again recalling the opening modulation to the Neapolitan.

Example 43. Ludwig van Beethoven, String Quartet Op. 95, first movement, measures 48-50.

In measure 83 (Ex. 44), which is near the beginning of the recapitulation, there is a silence which is very similar in effect to the bar of rest in measure 20 of Op. 59, No. 2 (Ex. 27). Here the silence is a contraction of the material in measures 2-18 of the exposition. The silence is a retrodictive sign for those measures that have been deleted in much the same way that bar 20 was a retrodictive sign for the deleted measures in the Op. 59, No. 2 quartet. The interesting aspect about this situation is that because of the deletion, the recapitulation of the main theme is only four measures long.
Example 44. Ludwig van Beethoven, String Quartet Op. 95, first movement, measures 82-85.

Our final example of a retrodictive sign situation incorporating silence is in measure 21 of the fourth movement (Ex. 45). The multiple

significations of the C to D-flat half-step should be obvious by now and certainly require no further explanation.

In this section, silences which participate in retrodictive sign situations as well as silences which themselves are retrodictive signs have been examined. The concept of a silence signifying measures of sound is particularly fascinating, and is not an uncommon device in Beethoven's works, as well as in works by other composers. This section has concentrated on those silences that participate in the retrodictive sign situations of two quartets and has examined the significations of these situations.

Juxtadictive Situations

In the two previous sections, sign situations with diametrically opposed references were examined. The present category consists of sign situations that usually incorporate temporal qualities of both the previous categories simultaneously, yet these situations cannot be unequivocally labeled one or the other. A juxtadictive situation occurs when a sign causes "an interpreter to take account of something that is present now but not necessarily earlier or later." These situations tend to assimilate both predictive and retrodictive qualities, but supercedes these qualities with its own character. The silences to be included in this category are probably, after formal silences, the most often encountered notated silences in the quartets.

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55Coker, Music and Meaning, p. 4.
It is worth noting that Coker's definition of the function of a juxtadictive sign gives no means of understanding the choice of the Latin root juxtā (which means "close by") for the labeling of this dimension. He seems to use the term "juxtadictive" to imply a simultaneity of predictive and retrodictive references in addition to the definition cited above. Perhaps a better name for this category would be "simuldictive," as this would incorporate all the facets of this particular sign and its reference.

In any case, the silences that will be included in this category are those which Beethoven employs to demarcate motives. They connect ideas to one another and also separate the groups of sounds so that these groups receive emphasis. The silences are predictive to the extent that they are part of situations which are moving ahead, and are retrodictive in that they emphasize the statement that has just preceded them. The primary purpose of these silences, though, is neither predictive nor retrodictive. Rather, these silences serve as separators, used as a type of rhythmic definer or "filler." They usually appear in the first statement of a motive but are absent when the motive returns or is developed.

The rests in the opening measures of the fourth movement of the Op. 18, No. 2 Quartet are very typical examples of silences in a juxtadictive situation (Ex. 46). The rests demarcate the motives of the principle theme of the movement, drawing attention to their thematic ambiance rather than to themselves. They neither heighten expectancy nor tension in the manner which the silences discussed in the previous
sections of this study did. The relative inconsequentiality of the rests with reference to pure meaning is evident in a later statement of the theme, where these rests are absent, their space occupied with sound (Ex. 47).


The rests in the opening measures of Op. 59, No. 2 constitute another example of silences in juxta dictive situations (see Ex. 27). The bar of rest in measure 2 is part of a predictive sign situation, yet it also is part of a juxta dictive situation because in the recapitulation of this section, this silence is absent (Ex. 48). Thus, the V₆ chord in measure 1 points ahead to its signification in measure 3, but it also points to the silence in measure 2 which is not present in the return of the material in measure 142.


The silences of measures 5 and 7 in Ex. 27 are also part of juxta dictive situations. They emphasize the Neapolitan relationship which becomes so important in the remainder of the composition, as was discussed on pp. 64-65.

It is interesting to note that the complete measures of rest in these opening measures were apparently afterthoughts on the part of the composer, as can be seen by an early sketch of the passage (Ex. 49).  

56 Cited in Nottebohm, Zweite Beethoveniana, p. 83.
Example 49. Ludwig van Beethoven, Sketch for Op. 59, No. 2.

The Op. 95 Quartet also contains silences which demarcate motivic content (see Ex. 30). Here, not only is the modulation to the Neapolitan underscored (its ramifications were discussed on pp. 66-76) but also the tritone relationship (between C in measure 5 and G-flat in measure 6) is emphasized. One of the many places this tritone is developed is measures 51-67 in the second movement (Ex. 50). (Notice also the predominance of half-steps.)

It should be noted that the return of the "halting portamento notes"\textsuperscript{57} in measure 65 is a diminished fifth (tritone) from the original statement of the theme.

As has been previously stated, these two quartets, Op. 59, No 2 and Op. 95, share many similar traits. The Piano Sonata Op. 57 ("Appassionata") also treats certain material in a manner similar to that of the two quartets. A few of these similarities can be seen in the opening measures of the sonata (Ex. 51). The piano sonata begins


with a longer motive than do either of the quartets, nevertheless, this motive is followed by a juxtadictive silence and a sequence of the motive up a half-step to the Neapolitan key, as in the two quartets.

The final example of a juxtadictive situation to be examined here is found in the delightful second movement of the Op. 130 Quartet (Ex. 52). The silence in measure 4 helps define the antecedent of the phrase and its motivic content. The silence of measure 8 helps define the consequent of of the phrase while at the same time serving as a structural silence

\textsuperscript{57}Kerman, \textit{The Beethoven Quartets}, p. 175.

separating the A section of the Scherzo from the B section.

In the return of the Scherzo later in the composition, both of these silences have been deleted, their space now occupied with sound (Ex. 53).

Juxtaposition silences, then, are silences which separate motives. The silences are usually present in the first statement of a motive, but then are deleted in subsequent appearances of the motive in lieu of developmental material. The function of these rests is to emphasize motives and the relationships between the motives. They aid in focusing the listener's attention on the material that will have developmental significance later in the composition.
CHAPTER V

CONCLUSION

In this study, silences in various contexts have been examined, ranging from normative silences (which included pre-performance and post-performance silences, and structural silences) to the non-normative silences which were studied through semiology. Most of the examples in this study were discussed at length in order to show the importance, both musical and aesthetic, of the particular situation and how silence contributes to that situation.

It has been shown that silences are not meaningless, but are active participants in the musical gesture and therefore have significance. The significance of any silence is in its relation to its sounding context. Many of the silences examined were significant in that they formed the borders, or frames, of a composition, of a section of that composition or even of a phrase or motive. The significance of other silences were seen through semiology, where silences participated in either predictive, retrodictive or juxtadictive sign situations.

The purpose of this study has been to provide a solid foundation for the study of silences, a foundation which would aid theorists, composers, historians, and performers. There has been no claim to exhaustiveness, but it is believed that a large enough number of silence situations have been examined and discussed to provide that foundation.
A knowledge of silence and its participation in a musical context, while constituting only one facet of a composition, is very beneficial, for by examination of these subtle touches in their many occurrences one may attain not only a deeper understanding of the particular instance, but also a deeper understanding of the thought processes of the composer, and idealistically, a deeper understanding of the art of music.
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