Compositional Devices Employed in Scoring for Voice and Brass Combination by Selected Contemporary American Composers.

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COMPOSITIONAL DEVICES EMPLOYED IN SCORING FOR VOICE AND BRASS COMBINATION BY SELECTED CONTEMPORARY AMERICAN COMPOSERS

A Dissertation

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The School of Music

by

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The primary purpose of this study was to investigate compositional devices used by selected contemporary American composers in writing for voice and brass combination. Analytical endeavors are centered in a phenomenological approach designed to reveal the source of unity in a selected composition.

In the selection of compositions, only a cursory presentation is attempted of the literature available for voice and brass combination. Specific delimitations concerning selectivity are discussed in the introductory chapter. The compositions analyzed deal exclusively with works scored for brass and voice combinations.

The analytical approach is the primary interest of Chapter II. The selected compositions analyzed and discussed form the bulk of Chapter III.

An original composition entitled "A Musical Setting for the Order of Holy Communion as Found in the Book of Common Prayer of the Episcopal Church in the United States of America," comprises the nucleus of Chapter IV. This composition represents an attempt to solidify the positive
elements of scoring technique as found from the results of the study.

In addition to the aesthetic goals of the composition, a concomitant purpose is to reify the unity concept presented as a theorem in Chapter II and as an operative demonstration of the analytical method employed in Chapter III.

A summary of factors determined from the phenomenologically generated investigation is noted in Chapter V. Certain conclusions and recommendations are also included in this final chapter which, hopefully, will motivate further research of the postulates presented.
In the compositions selected for analysis certain integrating devices, as has been demonstrated, are prevalent. These devices include the following:

Cellular properties, such as motivic development and transformation, which tend to solidify seemingly diverse elements of a composition.

An affinity for quartal oriented vertical structures that are particularly evident in the brass scoring.

Unifying relationships existing in the framework of the cadence that may suggest a potential resource for demonstrating Grundgestalt features in other types of compositions by a variety of composers.

Devices usually associated with serial procedures such as inversion, interversion, retrograde, retrograde of the inversion, segmentation, rotation, etc., are present in the scoring framework of the selected compositions. These devices are apparent regardless of the serial or non-serial intentions of the composer. It would seem that the influence of serial technique plays a more important role in works normally considered as being in the contemporary "traditional" stream, than what has previously been recognized.
With few exceptions contemporary composers have neglected the vast color possibilities of the many mutes available in scoring for brass instruments. Even when a muting effect is indicated in the score, a specific mute is not designated. It is suggested that specific mute designations become an established practice among composers, in order to prevent various interpretations of muting directions by conductors and varying degrees of timbre in the performance of a composition.

Through the delimitations effected, this investigation has demonstrated that few "major" composers have written for the exclusive combination of brass and voices. Also, composers who generally utilize non-conventional notation have shown little, if any, interest in writing for brass and choral combination.

The search for unity has demonstrated that a phenomenologically generated analysis is advantageous in viewing the diverse elements of a particular composition, as emanating from a single pervading cell or idea.
CHAPTER I

Introduction and Scope

This study serves to codify and define certain compositional procedures which occur in the music of selected twentieth century American composers. The works chosen for investigation employ the combination of voices and brass instruments. Analytical endeavors are centered in a phenomenological environment designed to reveal the implication that such devices as motive development, cadential factors, interversion, repetition, aggregate formations, and serially influenced procedures generate in the comprehension of a selected composition. It is hypothesized that these devices, and perhaps others, may demonstrate the Grundgestalt or source of unity of a composition. Investigations of this nature have traditionally concerned themselves with harmonic emphasis, formal considerations, and, in general, a descriptive-subjective account of musical events. It is proposed that the search for unifying devices in a selected composition may come closer to indicating a chosen composer's point of departure in the creation of a work (from the compositional viewpoint) than what has been previously
reported in some instances through a measure by measure description. The impetus of compositional thought, as discussed in the course of analysis, provides a variety of devices which are utilized as origins of unity.

In an attempt to solidify the positive elements of scoring technique, the writer has included his own composition for voice and brass entitled "A Musical Setting for the Order of Holy Communion as Found in the Book of Common Prayer of the Episcopal Church in the United States of America" (Chapter IV). In addition to the aesthetic goals of this inclusion, a concomitant purpose is to reify the unity concept presented as a theorem in Chapter II and as an operative demonstration of the proposed analytical method employed in Chapter III.

A summary of factors determined from the investigation of the particular compositional devices, found as a result of the analysis effected, is noted in Chapter V. Certain conclusions and recommendations are also included in this final chapter which, hopefully, will motivate further research of the postulates in the present study.

**Delimitations**

A survey of the following sources provided the music ultimately selected for analysis.
1. Catalogs of major publishers in the United States

2. Catalog of Published Concert Music by American Composers.  
   (Angelo Eagon, editor; published by the Scarecrow Press,  

3. The Brass World

4. Brass Quarterly (Brass and Woodwind Quarterly since 1967.)

5. American Composers' Alliance Bulletin

6. Contemporary Music Project (M.E.N.C.)
   (Publication of Composer's Works)

7. Music Division New York Public Library

8. Journal of Church Music

9. The American Society of University Composers

10. Current listing of works of the Southeastern Composers'  
    League

These sources yielded over three-hundred twentieth-
century compositions in the general category of voice and/or  
chorus with accompaniment including brass instruments. The  
following delimitations were then effected.

1. Composer to be American in terms of birth,  
education (college or university), and residence.

2. Compositions which list brass instruments as option­
al or "ad lib" to be eliminated. Compositions  
designated in this manner do not reveal the specific  
intention by the composer as to the instrumentation,  
and hence, do not meet the requirements of the  
present study.

3. Compositions listing any combination of instruments  
(e.g., organ, strings, etc.) other than brass and  
percussion are not considered.
4. Compositions investigated utilize conventional notation.

5. Compositions which list an alternate vocal scoring or instrumentation other than brasses are not included. One of the purposes of this study is to observe a particular composition knowing that all elements of the composition are specifically intended for brass instruments and voices.

6. Compositions which state in the score "brass instruments or piano" are not included in the study. This delimitation does not apply to a piano reduction of the brass score.

7. All vocal parts less than a four-voice texture are eliminated (i.e., S.A.; T.B.; solo; S.S.A.; etc.).

8. In order to insure adequate representation of a composer's adeptness in writing for voices and brass, it was decided to consider only those compositions represented by a minimum of four brass instruments.

9. Compositions in which brass or vocal parts, or full score are only available on a rental basis, are not considered. The impracticality of possible lengthy perusal of a score prior to and during analysis can be easily appreciated, in view of the comparatively short time allowed for investigation of music of this category. A concomitant disadvantage is the relatively high financial requirement.

10. Compositions published before 1950 are excluded from the study. It was decided that more valid evidence could be assimilated about the particular interest of this study within a restricting time span, which, potentially, could produce living composers, who are presently engaged in active composition.

After these delimitations were applied, approximately twenty-five compositions remained. The following delimitations have been applied in order to generate a higher degree of uniformity:
1. Compositions which do not normally come to the attention of some music directors because of a particular director's non-participation in various organizations of a specialized nature, (societies, etc.), are not included in the study.

2. Compositions which cannot be obtained because of excessive time lapse between ordering and receiving music, are not considered. A period of three months is considered by the writer to be excessive.

After all of the delimitations described were effected, six of the remaining fourteen compositions were selected for the phenomenologically generated analysis. Specific aspects of the analytical procedure employed in this study are discussed in Chapter II. It is conjectured that the six compositions analyzed are representative of present devices being used in compositions for four-voice chorus and brass instruments.

Method of Research

The approach of analysis in this study is discussed in some detail in Chapter II. The debt owed to several theorists and/or authors should be acknowledged. A composite of these ideas formulate the analytical method employed in this study. The published materials of Arnold Schoenberg, Rudolph Reti, Alan Walker, Heinrich Schenker, George Perle, Joseph Rufer, Vincent Persichetti, Jan LaRue, and Herbert Spiegelberg, have had a profound impact on the analytical portions of this investigation.
Definition of Terms

The terms defined below are not meant to be conclusive or exhaustive. The terms as listed are arranged in the order needed rather than alphabetically.

**Organum Effect.**—Spacing in intervals of a perfect fifth.

**Quartal Effect.**—Spacing in intervals of a fourth. (perfect, augmented, diminished).

**Aggregate.**—An alignment of tones vertically that usually implies serial connotations.

**Form.**—A pattern of relationships that gives unity to a complex of perceptual elements.

**Grundgestalt.**—The basic shape of a composition.

**Interversion.**—The exchange of one pitch for another in what would otherwise be a reiteration of an established set or sequence of pitch relations, (e.g., the motive $B^A A F G$ may appear as $G B^A F$).

**Inversion.**—(I) A mirror-like device which may occur in a linear, or vertical, or rhythmical environment. In this context, the melodic inversion of the ascending tones C D E may be C B A, C B^b A, C B^A, or similar permutations.

**Motivic Development.**—Transposition, repetition, sequence, verticalization, and Fortspinnung.

**Motivic Transformation.**—Modifications of the basic shape including elements of inversion, retrograde, and retrograde of the inversion.
**Original Cell (O).**—Statement of a series of tones, either predetermined or occurring in the course of a composition, which possesses thematic or organizing properties.

**Phenomenological Investigation.**—The treating of particulars in a composition in a manner which employs intuitive insight in the analytic process.

**Phenomenology.**—A discipline which endeavors to analyze the essence of possible and actual structures.

**Pitch Content.**—A specific grouping of tones within a particular time span, usually possessing interval relationships which manifest themselves in the course of a composition.

**Retrograde (R).**—Statement of a series of tones in cancrizans fashion from a pre-determined set or from a sequence of tones presented as a thematic idea.

**Retrograde of the Inversion (RI).**—The retrograde statement of an inverted series of tones: e.g., RI of the tones C D E may be A B♭ C, A♭ B♭ C, etc.

**Matrix.**—An array of the letter names of pitches so that at a glance one can determine the four basic orderings.

**Sub-conscious.**—Compartment of the mind that exists below the threshold of consciousness.
Unconscious.--A term with ambiguous meaning, dependent primarily upon whether the term is used by the psychologist, the philosopher, or the layman. In this study, the term is used in the context of quoted material and the meaning in these cases is proposed by the writer to be synonymous with the term sub-conscious as defined above.

Urkeim.--The kernel or cellular properties of a composition. In this study the term is frequently employed as a synonym for Grundgestalt. Choice of terminology is dependent upon the context of material being investigated.

Cadence.--The end of forward thrust; usually coupled with rhythmic elongation.

Quasi-cadence.--A cessation of rhythmic, melodic or harmonic movement which does not necessarily occur at all levels.

Traditional Symbolization.--A term which refers to the use of Roman numerals coupled with Arabic numbers as an attempt to reveal organic relationships in a particular composition.

Criticism.--The use of this term which occurs in the context of quoted material is to be interpreted as the third meaning of the word as found in Webster's International Dictionary, third edition, copyright 1961 by G. and C. Merriam Company, "The art of evaluating and analyzing with
propriety works of art."

**Hierarchy.**—An arrangement of tones, or series of tones into a graded or predictive succession.

**Segmentation.**—The process of dividing an original cell into other cells. The product of this division may assume either subsidiary, or relatively new points of departure compositionally, when compared to the original cell.

**Rotation.**—A circular, horizontal procedure that is applied to one or more tones in an original cell, aggregate formation, or other sequential relationships. e.g., in a four note cell, pitch one may become pitch four, pitch two may become pitch three, etc.

**Nesting.**—The prominence of tones, intervals, or aggregate formations, which are related to the Grundgestalt of a composition, usually appearing at moments of either stress or relaxation.

**Redundant.**—The repetition of a musical event, either as a progenitor of unity, or negatively as a superfluous reiteration.

**Permutation.**—The development of the relational properties of pitch content, original cells, aggregate formations, and other manifestations of the compositional process in various and infinite procedures, i.e., a logical change in order.
Idiomatic.—A term pertaining to the practicality of vocal and brass scoring, either separately or cumulatively. In the context of this study, the term further defined refers to the composer's ability to effectively utilize the brass both as a text-supporting medium and as a necessary element in presenting structural relations during interludes, cadences, etc., for the purpose of solidifying the Grundgestalt of a selected composition. The term is also applicable to the composer's treatment of vocal scoring in that he demonstrates through choice of spacing, grouping, tessitura, text painting, etc., the comprehension of fundamental vocal requirements while generating unifying procedures.

Staticism.—A quality in scoring characterized by a lack of movement rhythmically or harmonically. A state of quiescence is usually implied.

Juxtaposition.—An instance of placing two or more pitches in a close relationship; e.g., the pitches A B C as compared to A B C. Here, the intervallic content in the second group as related to the first group is juxtaposed.

Significance of Study

Endeavors pursued in the specific area of interest in this study have indicated that, to the writer's knowledge, the scope of investigation attempted has not been undertaken
up to the present time. It is hoped that the study will be relevant to various disciplines of the music profession, including composition, conducting, theory and arranging, and performance.
CHAPTER II

THE METHOD OF ANALYSIS

A Search for Unity

The point of departure in the analysis of the selected compositions chosen for study was instigated by some aspects of phenomenological investigation. It was considered by the writer that in order to approach each composition as an entity within itself without a priori considering the presence or absence of certain compositional devices as positive or negative factors, it was most important to view these compositions from some philosophical plane.

Certain aspects of phenomenology seemed to present a logical beginning in terms of the envisioned environment sought in analysis (i.e., no prior convictions about a particular composition because of associations with other works of the composer, etc.).

Ever since the inauguration of phenomenology (generally credited to Edmund Husserl 1859-1938), there have been disagreements as to exactly what phenomenology is, not only among its detractors, but also, and perhaps even more
vociferously, among acknowledged phenomenologists. This is
due, no doubt, to the nature of philosophy as a discipline.

The following statement by Morton White lends credence
to this idea.

... philosophy differs from the special
sciences simply by the generality of its problems
and by the fact that it sometimes speculates on
matters where conclusive evidence is absent. But
most of the other influential movements of the
twentieth century—even logical positivism—
reserve a more distinctive role for philosophy,
whether it be that of seeing the structure of
things by intuition as in the case of Husserl,
or that of analyzing rather than discovering
truths of science as in the case of Carnap. ... 1

The philosophy of phenomenology contains many elements
of twentieth-century thought, and because of this, diversi-
fication among its proponents is evident. The following
statement by Spiegelberg is significant in this regard:

Movements like logical positivism, philosophical
analysis, and pragmatism have enough in common-
with phenomenology to make an exchange not only
possible but profitable. In their latest devel-
opment these other movements have even taken up a
number of phenomenological motifs. 2

1Morton White, The Age of Analysis. (New York and

2Herbert Spiegelberg. The Phenomenological Movement.
The one aspect on which practically all phenomenologists agree is that which is referred to as the "phenomenological method." It is precisely this "method" which the writer has attempted to employ in the analytical process. "The first objective of the phenomenological approach is the enlarging and deepening of the range of our immediate experience."

The "method" consists of basically two concepts, one reflecting positive conditions, and the other expressing negative connotations. "Negatively, it expresses a revolt against an approach to philosophy that takes its point of departure from crystallized beliefs and theories handed down by a tradition which only too often perpetuates preconceptions and prejudices." 4

The positive steps of the phenomenological method are outlined by Spiegelberg as follows:

1. Investigating particular phenomena;
2. Investigating general essences;
3. Apprehending essential relationships among essences;
4. Watching modes of appearing;
5. Watching the constitution of phenomena in consciousness;
6. Suspending belief in the existence of the phenomena;
7. Interpreting the meaning of phenomena. 5

3Ibid., p. 656.
4Ibid.
5Ibid., p. 659.
Spiegelberg indicates that the first step only can be used in analysis, disregarding the other six.

These two concepts then, (1) a striving for no a priori conception and judgment of a composition, (2) investigation of a particular phenomenon, represent the essential approach by which each composition was analyzed.

The investigation of a particular phenomenon is given further clarification in Philip Batstone's synonymous term "ad hoc" analysis. The following statement is also pertinent in view of the diversification of compositions chosen for analysis in the present study. "Ad hoc analysis is practical and not theoretical, and these assumptions prove to be useful with music of a wide variety of styles and idioms."6

Batstone summarizes the purposes of musical phenomenology as follows:

1. It leads back to music as perceived relationships.
2. Composers compose that which they think is aurally relevant.
3. It allows one to analyze compositions as aural phenomena without concern for what he can, or thinks he can, hear.
4. It is objective without losing sight of relationships.

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5. It attempts to refine hearing through the music itself.

6. It strives for understanding of music and development of the ear.

Michel Philippot's impression of phenomenology lends support to the first positive step as outlined by Spiegelberg. "The object of phenomenology, as we know, is to study a chosen phenomenon, beginning with the data of consciousness which have determined or caused it or which were, on the other hand, determined or caused by it."

In a recent Ph.D. dissertation by Allen Wesley Tower, which utilized an objective phenomenological approach, (intervallic structure and analysis of selected works) the author basically supports the negative step as demonstrated by Spiegelberg.

The primary value of a phenomenological approach to musical analysis is the provision of a means for investigating new music without preanalytical conditions. The term 'phenomenology' in its strictest sense refers to the process by which actual phenomena are described and classified with avoidance of interpretation, explanation, and evaluation.

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7 Ibid., p. 110.


9 Alan Wesley Tower, "An Investigation of Melodic and Harmonic Formations Characteristic of Selected Contemporary
Near the end of the dissertation there occurs a most interesting statement in view of the content of the above definition of the term "phenomenology in its strictest sense."

"Sensitive and logical interpretation, comparison, and evaluation, the ultimate goals of musical analysis, are possible only when the objective reality of musical phenomena is accurately known." \(^{10}\)

There is obviously some element of confusion here. Since there is no documentation (footnotes, bibliography, etc.) it is impossible to determine which viewpoint is phenomenological in spirit.

It is certainly true, as was mentioned earlier, that there is some disagreement as to the role and function of phenomenology among philosophers. As a matter of fact, it would seem from the small sampling of material on the subject that this writer has perused (admittedly as an interested novice in the field), that the present advocates of phenomenology represent a radical departure from the mainstream of its innovator. The fact that there are points of disagreement does not mean that inconsistency of method should be allowed in

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\(^{10}\)Ibid., p. 268.
any investigation utilizing this discipline.

Alfred Pike, who has written quite a few articles on phenomenology and its relationship to music, states that emphasis is placed on the intrinsic values of music within a phenomenological environment.

The prime interest of phenomenology is directed toward the essential structure, the intrinsic relations, and the self-revelations of musical events, not their causes, nor their extramusical inferences. Phenomenology merely asks if a tonal event and its effect are phenomena in our actual experience, not what physics, psychology, or music theory say about its origins and structure. The phenomenological search for irreducible residue takes the form of intrinsic analysis.  

The word which is almost invariably mentioned in any discussion of phenomenology starting with Husserl is the word intuition, or intuitive. This is the word which forms the central thought in the phenomenological approach to analysis in the present study. The search for the "idea" of a composition forms the positive phase of the approach (i.e., investigation of a particular phenomenon). The "idea" of the composition can be likened to the truth or essence of the composition. Truth, in this instance, is an intuitive concept.

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"The philosophy of art is concerned with problems of art and truth. Truth here is neither the cognitive truth of science nor the practical truth of things, but rather the spiritual truth of being or existence in the phenomenological sense." 12

The intuitive aspect is clarified in the following statement:

On all levels the phenomenological approach is opposed to explanatory hypotheses; it confines itself to the direct evidence of intuitive seeing. A more positive character of the phenomenological approach is that it constitutes a determined attempt to enrich the world or our experience by bringing out hitherto neglected aspects of our experience. Besides, there may be an even deeper motive behind such an omnivorous desire for variety. It might be called: reverence for the phenomena.

Specifically, what the writer has attempted to extract from the compositions chosen for analysis is what has been referred to as the "idea" of a composition.

In searching for the basic shape or kernel of a composition, particular attention has been given to the devices


13 Spiegelberg, op. cit., p. 700.
of motive and texture.

Because of the nature of this particular goal of analysis, the philosophical connotations are more in keeping with what is known as hermeneutic phenomenology, which is trying to discover meanings and concepts which are not readily apparent to our intuiting and analyzing. This aspect of phenomenology indicates that the analyst must go beyond what is given superficially (i.e., tones, rhythms, dynamics, tessitura, etc.).

The following explanation of hermeneutic phenomenology defines succinctly the philosophical point of departure in the analysis of compositions in this study.

In order to defend its phenomenological character one would have to maintain that hermeneutic interpretation is a matter not of mere constructive inference but of an unveiling of hidden meanings, or at most of an intuitive verification of anticipations about the less accessible layers of the phenomena, layers which can be uncovered, although they are not immediately manifest.¹⁴

It is proposed that in the search for the basic cell or integrative element of a composition, there is represented within this context a more valid indication of the composing process than is usually presented in a descriptive-subjective manner. For example, in a hypothetical composition, the

¹⁴Ibid., p. 695.
aggregate F A C D could be analyzed in isolation as a tonic chord in the key of F with added sixth, the first inversion of a d minor seventh chord, or a four voice chord containing the intervals of major third, minor third, major second. No doubt, the reader can supply many other possibilities. The point of the matter is that this simple series of tones may be analyzed in whatever way or manner feasible, subject to the analytical orientation of the analyst at any particular time. This type of analysis is possibly meaningful if the analyst also includes functional relationships such as what appears before and after the aggregate, in order to substantiate the description. Regardless of which mode of description is chosen, (tonic with added sixth, first inversion minor seventh, etc.) the completed project may be less valid than analysis which employs Urkeim principles. From the composer's viewpoint, it is negligible whether an analyst chooses to call the pitch class in question a IV+6, I+6, Dm7 or whatever else may seem relevant. What is relevant is the possibility that the aggregate F A C D and permutations thereof, may represent the point of departure compositionally for the entire opus.

This group of tones may supply the Einfälle that govern the scope of the composition. Many possibilities present themselves. For instance, a melody line consisting of the
sequential tones D A F C Bb Ab Db --; this line represents
1 2 3 4 5 6 7
the original aggregate F A C D employing the devices of
interversion and inversion. [cf. the following diagram.]

3 2 4 1
F  A  C  D
7 Db
5 Bb
6 Ab

In this hypothetical composition, cadence points
could be significant in regard to the basic cell F A C D.
The first cadence point is, let us say, represented in a four-
voice texture by the vertical aggregate: A♭
    C
    F
    E♭

The second cadence point by: B♭
    G
    D
    F

the third cadence point by: G♯
    E
    B
    C♯

The relationship here is obvious . . . more obvious,
one may be inclined to observe, than encountered in "real"
music. Suffice it to say that at least one example of a similar device was employed throughout a composition included in the present study. [cf. Chapter III, p. 156.] All of these proposed cadence points represent the original motive in transposed and interverted form. The factor that is of major significance is that of the intervallic relationships of the cadential points. Cadence points no. 1, no. 2, and no. 3 contain exact interval duplication between outside and inside voices, i.e., perfect 5th or 4th depending on the origin of perception. The foregoing demonstrates two possibilities (one from the vertical realm, and one from the horizontal realm) of the permutational aspects of the cellular F A C D utilized as a compositional determinant.

A question may arise at this point as to the validity of such analysis if the composer be unaware of any such relationships as to the aggregates being used as a Grundgestalt, basic cell, source of unity, etc.

It is a truism that the composing process is as individual as the individual composer. It is the contention of this writer that the common denominator of all individual composers is the need for unity, for a means of integrating seemingly diverse elements. Whether this need is a conscious or sub-conscious process is irrelevant. The fact that integrative devices exist in most compositions recognized as
being of worth and value, is the single most important concept within an analytical framework.

The whole collection of themes in a work, though apparently independent of one another, can be traced back to a single basic idea ( ) whether or not one can recognize and demonstrate these relations in every case. This corresponds to the thesis that a work of art is a unity, the unity-existing even where it cannot be exactly demonstrated. 

The debate among composers as to the relative importance of conscious versus unconscious elements has previously been mentioned. It is recognized that both factors play an important role in varying degrees dependent upon the creative idiosyncrasies of the individual composer. Since one of the main tenents of this dissertation is that in most compositions what has been referred to as the Grundgestalt, Urkeim, basic cell, etc., is present in some form, whether consciously employed or not, the fact that organic principles of construction can be extracted from a particular composition seems to this writer to be the most significant observation in the analytical process. This essential concept of analysis can be likened to the composing process in retrograde. The composer proceeds usually from the "idea" of a work to the

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many manifestations of the basic shape which appears in various guises vertically and horizontally. The analyst then, should proceed from the diversified elements presented in the finished composition, back to the original kernel that is responsible for the diversity. An important consideration here is that the composer need not necessarily be totally aware of the inherent unity of his composition. "The 'technique' of a piece of music is essentially the affair of the composer; it is largely even subconscious, and composers frequently are confronted by perfectly real technical facts, present in their music, of which they had no conscious inkling."16

... in those works in which the composer's efforts towards integration have been confined merely to the conscious, theoretical mind, the results usually fail to be more than superficial and obtrusive; but where the sense of unity has grown up spontaneously within the actual conception it will be found to embrace all other aspects of the work, radiating life and significance throughout the whole.17

Whatever effect the music has on the listener is the result of an inherent causal relationship projected in the


composition by the composer. All too often the analyst interprets the effect of the music without recourse to the underlying unification. This type of "analysis" is merely indicating a personal reaction to the work in what is usually described as "melancholy," "joyful," etc. At best, this type of subjective reporting can only re-describe what is already apparent to anyone vaguely familiar with elementary theoretical concepts. A typical example of this condition is the notion that a Picardy Third included in the final chord of a composition regarded as basically in the key of $f$ minor will presumably dictate a feeling of "joyfulness" rather than the "melancholy" associated with a "pure" $f$ minor chord. It is not the purpose of this study to discuss the merits or demerits of analysis pursued along a similar manner in some elementary theory courses. It is the purpose of this study to suggest that, in any approach to analysis, describing the tones $C E G$ progressing to the tones $G B D$ in the key of $C$ as a tonic to dominant relationship may have little to do with the thought-process of the composer. The fact that one is capable of determining such relationships most certainly is a requisite of fundamental musicianship, just as a senior trombone major knows that fourth line $F$ in the bass clef is played in sixth position, as well as first. An obvious weakness is also apparent in any attempt to define
musical meaning using adjectives such as "melancholy" and "joyful." Within a musical environment, what is "joyful" to one listener may be "melancholy" to another. Furthermore, these same two listeners may exchange reactions to the composition upon subsequent hearings, depending upon what has transpired musically and personally in the interim of time.

It is recognized that not all musicians share the beliefs herein proposed. Some of these same musicians suggest that music as heard is entirely different from music as analyzed. The writer would hasten to add that, in the light of these musicians' concept of analysis, the music as analyzed is entirely different from the music as composed. The following seems to be typical of the "music as heard is different from the music analyzed" philosophy:

... we all recognize how the aural integrity of a musical piece need not necessarily correspond with a unity that can be discovered by analyzing the work. If we wish, then, to be clear about what a musical piece is, we must decide whether we mean the object as heard or the object as analyzed. ... Our pursuit of the musical piece might be aided somewhat if we knew what it is we were seeking—sound or idea.\(^\text{18}\)

The writer proposes that a composer creates a composition with the "idea" of the work simultaneously, or almost simultaneously, with the "sound" of the work. Even in compositions where a definite instrumentation or voicing is not specified, the composer is concerned with an audible rendition of his notated symbols. The exact experience that takes place in terms of audibility varies, of course, from individual to individual. What is generally not recognized, however, is that regardless of the wide spectrum of different capacities for hearing relationships in music, most musicians do perceive (perhaps only subconsciously) indications of unity during the listening process. Alan Walker states:

One can still experience a unity between contrasting ideas, yet fail to recognize what causes it. I would regard this as incontrovertible evidence that unconscious hearing plays an important role in our appreciation of music. At this level, we take in far more than we ever get to know about. 19

Opinions as to the validity of the concept of unity as outlined thus far range from strict adherence through theory and example (Schoenberg, Walker, et al.) to condemnation of

the entire idea as a theory or practice of composers. The following supports this latter premise when it is stated that proponents of the unity concept consider contrasts within a composition as "... a single, basic theme; and this is absurd. It implies that, say, the first theme of the Ninth Symphony expresses not only its own stormy nature, but also the serenity of the slow movement and the joyful affirmation of the last."^20

It will be noticed in the above quotation that the use of the terms "stormy nature," "serenity," and "joyful affirmation" categorize the author's sentiments in regard to previously described analytical practices. One is tempted to experiment with listening to symphonies designated "Number Nine" to determine how many would produce a first movement feeling of "stormy nature," a slow movement reaction of "serenity" and a final emotional outburst of "joyful affirmation" expressed in terms of a final movement. The descriptive elements as presented would of course imply that the author is describing the Beethoven Ninth, although this

Although, as has been demonstrated, detractors of the unity concept exist, this in no way minimizes the usefulness of the unity idea either as it has existed in the past, or as to the anticipated importance it will achieve in the future. It is perhaps, even fortunate that derogatory statements are voiced, since such verbiage re-affirms the "unity" position and leads to constant re-examination and re-evaluation by advocates of the philosophy. This is a most positive position reflecting a pragmatic viewpoint that is conducive to consistent, meaningful results.

A concomitant factor with the potentiality of viewing music in this particular way is that all music from any historical period can be compositionally understood, at least in regard to the aforementioned characteristics. The implication here is that although the music of J. S. Bach, Mozart, Beethoven and even Wagner can be analyzed in a traditional manner ($I_6\ II\_\#_6^b_3$, or similar symbolization), the result of this type of analysis has little to do with the music of the Second Viennese School or with Machaut, Palestrina, Ives, Penderecki, Cage, Stockhausen, or many other schools of various and sundry compositional thought. What is of utmost importance in this regard is the fact that all of these composers can be approached on the basis of a search for unity
in their compositions. Each composition may be viewed in the light of its possible individual worth, not because the composer happens to be a Bach, Webern, or a Josquin, but because the composition simply exists as a work of art, and therefore, only requires to be viewed in this manner. The phenomenological aspects of this approach are self-evident. Parenthetically, it is the writer's contention that far more insight could be gleaned from this means of investigation (in which the ultimate goal is to gain an historical perspective with regard to compositional style), than from what is usually a pre-judgement condition when analyzing the music of a recognized composer like J. S. Bach.

Fundamentally, then, the analytical concept can be reduced to extracting music's contrasts or diversities through the discovery of its basic cells, kernels, or unifying devices.

It is with each individual composition that criticism is vitally concerned—the relationships which exist inside the boundaries of a composition rather
than those which exist outside them. This crucial fact is the cornerstone on which all criticism rests.\textsuperscript{21}

The key word here is "relationships." Specifically, the relationships which the writer has attempted to reveal in the works chosen for analysis include such devices as inversion, interversion, cadential serialization, intervallic prominence, and motivic and textural structure. These devices, as well as others, represent the many manifestations of the compositional cell. The diverse elements of a composition (interversion, motivic permutations, etc.) are the result of a basic point of departure in the compositional framework. In other words, the elements of diversity are the result of a Grundgestalt.

Interversion is the result of a unifying force rather than its cause, and this quality will be felt even if the precise manifestation of its nature goes unrecognized. . . . We can only become aware of unity through diversity, without which all would be monotony.\textsuperscript{22}

In addition to the device of interversion, another relationship which may be considered as an outgrowth of unity is cadential treatment. Roger Sessions has referred


\textsuperscript{22}Walker, \textit{A Study in Musical Analysis}, pp. 74-75.
to the cadence as "the most important musical fact."

In discussing the significance of the cadence, Sessions remarks:

More than any other fact, it seems to me, it [the cadence] bears on the nature of what I shall call 'musical movement'; on it depends the appropriateness to their context of harmonies, of melodic intervals, and details of rhythmic elaboration.23

Cadential treatment is quite varied among composers of the twentieth-century. The investigator must therefore approach a composition with the realization that cadence points may take a form quite different from a functionally oriented hierarchy. It would seem that points of rhythmic elongation (when compared to prior durations) represent one way in which contemporary composers effect a cessation of movement. Tension created through the use of more concentrated dissonance, or relaxation engendered by utilizing consonance, also serve to define cadential shapes. The composer may additionally employ these elements in a vis-a-vis manner. In some instances the composer may choose to interrupt the forward thrust temporarily, thereby creating a quasi-cadential moment. In these cases, the music would

23 Roger Sessions, op. cit., p. 12.
generally be expected to develop a need for continuation. The continuity may be achieved either harmonically, rhythmically, or melodically. The possibilities for cadential effects are almost infinite. Vincent Persichetti lists some other ways cadences are employed in the contemporary compositional process.

Deceptive cadential progressions are also obtained through movement to a chord outside the established modal or key realm, or by chromatic root movement. Other cadences are created by the obliteration of all voices but one, or obliteration of all voices save a percussion note of indefinite pitch.24

A decided preference for certain intervallic relationships forms another point of departure within the present compositional spectrum. The prominence of one particular interval, or series of intervals, in a composition, presents a possible defining element with regard to intervallic preference as a unity concept. The aggregate F A C D referred to earlier, could function in

this realm as an intervallic cell, which, when employed compositionally, would reflect permutations of the intervals derived from the basic cell. George Perle states that the integrative element of a composition "... may operate as a kind of microcosmic set, of fixed intervallic content, forming either a chord, a melodic figure, or a combination of both."\(^{25}\)

The prominence of certain intervals is by no means relegated to compositions of the twentieth century. Such well known examples as the Fourth and Fifth of Leonin and Perotin, the Third of Dunstable, and the minor Seventh of Tschaikovsky provide obvious evidence of intervallic emphasis throughout history. It is in the twentieth century, however, that intervals are employed as characteristic features of a composition utilizing elements of statistics in order to solidify organization and unity. This idea is particularly evident in compositions that are generated from a cybernetic origin. Gyorgy Ligeti

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states as follows:

When, . . . a particular interval appears particularly prominent, it happens statistically, i.e., in every moment it is quite possible for other intervals to put in an appearance, but one interval simply occurs more often than the others and thus provides a specific tag for the group as a whole.26

It would seem that composers who utilize the twelve-tone row concept do not necessarily employ the basic set as an element of unity within itself. Various permutations of the basic set, however, may serve as unifying devices prior to the actual composing of the work, and during the course of the composition. Integrative elements may also be discovered by the composer or others upon completion of the work, which may have eluded any analytical endeavors pursued by composer and/or analyst previously.

In terms of interval preference, the pre-compositional aspects of serial technique, as well as post-compositional analysis, become possible sources for the demonstration of unity. "The preponderance of particular intervals in the structure of the set automatically assures a certain textural

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homogeneity."\(^\text{27}\)

It is quite plausible that interval prominence may become less definitive in succeeding years. This possibility is of course most readily apparent in the works of Ligeti, Penderecki, Lutoslawski, Xenakis \textit{et al.} The following statement by Ligeti is cogent:

Our decreasing sensitivity to intervals gives rise to a condition which, for want of a better word, we may call 'permeability.' This means that structures of different textures can run concurrently, penetrate each other and even merge into one another completely, whereby the horizontal and vertical density-relationships are altered, it is true, but it is a matter of indifference which intervals coincide in the thick of the fray.\(^\text{28}\)

The permutational possibilities of a chosen series are many and varied. Such common devices as segmentation, rotation, nesting, etc., indicate the wide spectrum from which the composer may select his compositional bases. Within the analytical environment, it could prove to be no little task to substantiate the use of row technique as a compositional factor. Cognizance of the phenomenological attitude is of prime importance in this regard, in that the music itself must always be the foremost provenance of


\(^{28}\)Ligeti, \textit{op. cit.}, p. 8.
investigation. David Lewin corroborates this premise when he states as follows:

Even in cases where we do not have sufficient harmonic information to "define" a row, I feel it is legitimate to conceive of several harmonic ideas as being collectively highly definitive or not very definitive in serial terms.29

Music exists, and is currently being written, which would have to be considered as "not very definitive in serial terms." The crux of the matter, however, is that, in the writer's opinion, most contemporary composers utilize organizational concepts of unity (i.e., serial "procedures") in their creative efforts, regardless of the serial or non-serial aspects and regardless of the musical media, or of the awareness by the composer that any such devices are employed. Even Rudolph Reti, a firm advocate of the conscious process compositionally, supports this latter idea (albeit unintentionally) when he states: "... two shapes which as such have nothing in common can none the less become organic parts of an architectural whole through a mediator, a third shape related to both."30


Essentially, the idea proposed thus far, (which forms the substance of this entire study) is that the many manifestations of the composing process such as interval prominence, cadential treatment, etc., may demonstrate an inherent unity, or contain the Grundgestalt of a selected composition.

In presenting the analytical method employed in this investigation, the writer has attempted to include some basic concepts of analysis which, hopefully, will motivate others toward further research in this most fertile field of inquiry. In the present study, the search for unity is governed by a phenomenological spirit, which, when activated is delimited to those particular aspects of phenomenology previously presented as applicable to selective investigation. The following statement by Philip Barford represents a synthesis of the phenomenological attitude employed in the analytical procedures of this study. "All we need in order to discover the unity of a particular work is in the work itself. No formal concepts need to be formulated in the mind first." 31

Possible compositional cells are quite numerous. Some of these cells, it is realized, have been introduced in a somewhat cursory manner. Although a detailed discussion of potential compositional relationships is beyond the scope of the present study, it seems relevant to briefly mention one other cellular determinant which may serve as an ingredient of the *totum divisum* methodology.

The relationship referred to is that of repetition. This device is closely associated with other tangents of the compositional stimulus such as motivic and textual structure, aggregate formation, dynamics, durations, and other integrating elements. Repetition possesses a unique quality in the sphere of contemporary composition that is most clearly demonstrated in the reluctance of some composers to acknowledge its existence in their creative endeavors. This is due perhaps to the fear that, if too much repetition of any element is present within the context of the work, analysts may place the composer in that category sometimes termed "highly redundant." In some instances this term (redundant) has created a derogatory impression. Obviously, certain aspects of redundancy are evident in most compositions, albeit within a micro-dimensional relationship. Redundancy is not necessarily a negative condition as seen in the following statement by Persichetti:
Repetition is one of the most important devices in musical composition. Repetition emerges as sequence, imitation, variation, ostinato, and in various other guises. Of the many techniques used by the composer to extend harmonic fabric, none is more trying than literal repetition. A strong sense of timing and a discriminating taste will determine when reiteration will not hinder musical flow.32

It is quite clear that the composer must be aware that over-emphasis of any device, from whatever compositional source, may create an inherent weakness in the composition due to the absence of maximum contrasts. As mentioned earlier, the diverse elements of a composition when employed with musical integrity, may also reflect organic unity. In the phenomenological sense, the composer should assume a positive attitude in regard to repetition as a device. Viewed in this perspective repetition or various degrees of redundancy are generated as an organizational force rather than as an element of possible deterioration.

It is not the purpose here to imply that, in order for a composition to be considered worthy, repetition (or any other device for that matter) be the sole criteria for individual evaluation of that composition. Like composing, evaluation is an individual matter. This same generic thought could also be applied to analysis per se, with the

32Persichetti, op. cit., p. 235.
hope that analysts consider the search for unity concept as a potential point of departure in any analytical endeavor. It has been the writer's experience that, when investigating works in the manner described, many relationships became manifest, which, it was felt at the time, would not have possibly been as lucid if the unity concept had not been in operation. A concomitant advantage in utilizing this approach is the increasing concern for self-examination and evaluation of structural principles formulated in one's own compositions.

There is possibly some merit in the belief shared by many composers that as an analyst, a composer operates at minimum efficiency when analyzing his own works.

It is proposed that the prime purpose of self-analysis, is to re-examine one's aesthetic purpose in composing, as well as to criticize constructively one's professional growth or lack thereof. The following comment by Hans Keller seems particularly apropos in this regard:

Previously, the only legitimate critical question was whether a composer succeeded in what he set out to do. Today, it may happen that we have to ask him whether his very intentions are valid. We may even have to implore him to fail instead of succeeding;
to fail at saying something instead of succeeding in saying nothing.\textsuperscript{33}

Billy Jim Layton substantiates the kernel of thought here as he makes the following observation:

What really matters is whether he [the composer] has a firm hold upon his aesthetic goal, consequently permitting these technical procedures to find their place in a total scheme which has flexibility and strength.\textsuperscript{34}

The device of repetition, then, can serve as a positive factor in composition, depending to some extent on the composer's point of view. The "techniques" of composition are all part of the public domain, and as such, can be applied dualistically; i.e., as elements of diversification, or as elements of unity. It is as an element of unity, that repetition as a relationship is of interest within the context of the present study. The reiteration of any dimension of a composition may serve as a means of integration. Conception of these repetitions could be formulated by the composer in various ways. Rhythmically and melodically, such a device as motivic development could function as the progenitor of unity. Harmonically, graphic

\textsuperscript{33}Hans Keller, "Principles of Composition (I)," \textit{The Score} (January, 1960), p. 42.

treatment of aggregate formations may produce unified ex­pression of the composition as a whole. In reference to the motif being used as a Grundgestalt, Rufer states:

Repetitions of the smallest formal element, the motif, have a unifying effect, and ensure that all parts of a work can be related to one another and thus create the necessary conditions for the build­ing of its form.35

As a unifying device, permutations of a motif may be employed in the usual sense, i.e., as derivatives of melodic and rhythmic elements, as well as being utilized within the vertical realm of a composition. Rufer further states:

... a certain sonority, among other things, can be regarded and treated as a motif, i.e., repeated several times during the course of a piece and thus have the effect of connecting the form. . . . 36

Repetition of a motivical concept within a composition is further clarified by George Perle:

Chords or melodic patterns derived through opera­tions upon a single intervallic cell are particularly useful in the formulation of unifying procedures, with respect to both immediate context and the work as a whole.37

35Josef Rufer, op. cit., p.25.

36Ibid., p. 105.

37George Perle, Serial Composition and Atonality, p. 16.
It would seem clear then that unity through repetition may be achieved from a vast array of musical relationships. These many and varied relationships may be constructed or deciphered regardless of whether the compositional environment be tonal, atonal, serial or whatever other designation be applied by composer or analyst. In regard to this latter premise Arthur Honegger states:

What gives unity to a piece of music is the totality of melodic and rhythmic relationships, elements much more powerful to affect the listener's spirit than the ties of tonality.\(^8\)

Further substantiation is given by Persichetti when he states:

The various elements in atonal music are tightly knit by extreme motivic concentration, and reference is constantly made to previous material.\(^3\)

In regard to the unity achieved by aggregate formations, the following statement by Zofta Lissa seems pertinent:

The essence of hearing the vertical aspect of music rests in one's ability to grasp several concurrently sounding sonic formations, each taken separately, but at the same time apprehending them as entities which make up a unified musical fabric.\(^4\)


\(^3\)Perschietti, op. cit., p. 261.

In addition to forms of repetition being regarded by the composer as possible unifying devices, it is significant that the opposite procedure, that of an attempt at non-repetition, is also pursued by contemporary composers. It will be remembered that the writer has mentioned previously the wide range of diversification in approaches to twentieth-century composition. Many of these approaches have yet to be codified as a corpus of theory and/or practice. The concept of unity, as presented, represents one segment of analysis in which music may be viewed in some of its referential aspects.

Apparently, if present-day activity is any indication, composers will continue to employ many and varied techniques within their compositions and sometimes within the same composition. That permutations of repetition represents just one phase of this aspect of contemporary composition is apparent in the following statement by George Perle:

Certain so-called "athematic" works are governed by the opposite principle, that of nonrepetition. Special elements may be emphasized and isolated by some of the devices described . . . not as a means of establishing focal points but for the opposite purpose. This procedure has sometimes been described as "perpetual variation."41

41Perle, Serial Composition and Atonality, p. 19.
The contemporary composer will, no doubt, continue to have at his disposal an enormous wealth of material from which to choose a potential compositional cell. Regardless of the point of departure in the composing process, it is proposed that these works may be defined in terms of their general essence by discovery of their essential relationships. The analysis of the compositions chosen for investigation in this study will be approached, as was mentioned previously, with a phenomenological attitude; i.e., utilizing an intuitive procedure qualified by as little bias as possible in the course of the investigation. The following statement by Spiegelberg clarifies the approach to the compositions analyzed in this study:

> What is all-important in phenomenology is that we consider all the data, real or unreal or doubtful, as having equal rights, and investigate them without fear or favor. The reduction will help us to do justice to all of them, especially to those which are under the handicap of initial suspicion as to their existential claims.\(^2\)

It is important to recognize that through the particular phenomenological analysis employed in this study, the ultimate conclusions about an isolated composition are

reported in as brief and definitive a manner as possible. The concept envisioned by the writer here can be likened to the "law of Parsimony" in logic, whereby it is only necessary to present those premises that are required to state a conclusion. No less than a logical conclusion will be acceptable in the phenomenological sense, as the music itself is the source of analytical investigation. It is anticipated that the results of the phenomenologically generated analysis will be meaningful to the composer, the theorist, the performer, and the listener. In regard to the last named category, Ben Johnston states the following:

To listen musically is to turn one's attention to details of the sound patterns and to interrelations of these patterns on different time scales.43

If analysis is to be considered valid, it must communicate audibly. The music itself shall always be the criteria by which a Grundgestalt, Urkeim, or any other integrative device will demonstrate the inherent unity of a selected composition. As mentioned previously, the perception of unity in a particular composition may occur either consciously or sub-consciously. Alan Walker has said that "from

the listening end, we observe far more than we know."\textsuperscript{44}

Walker further states:

> The notion that the complex demonstrations of unity sometimes revealed by analysis cannot possibly be heard unconsciously receives no support from depth psychology. What cannot be grasped unconsciously, cannot be grasped.\textsuperscript{45}

The method of analysis employed in this study, then, is an attempt to extract the basic cell, the compositional idea, the Grundgestalt, from the compositions chosen for analysis. Roger Sessions has illustrated this concept most succinctly:

> ...a musical idea is simply that fragment of music which forms the composer's point of departure, either for a whole composition or for an episode or even a single aspect of a composition.\textsuperscript{46}

An attempt has been made to demonstrate briefly a few ways in which composers may formulate the "musical idea" as a tangible expression of organic growth. The devices mentioned (repetition, cadential treatment, motivic and textural considerations, intervallic prominence, etc.) are by no means intended to be inclusive, nor necessarily

\textsuperscript{44}Walker, \textit{An Anatomy of Musical Criticism}, p. 45.

\textsuperscript{45}Ibid.

\textsuperscript{46}Sessions, \textit{op. cit.}, p. 52.
representative of the majority of composers active at the present time. The devices were presented in order to supply the reader with a possible point of departure in any analytical endeavors he should happen to pursue as a result of the premises explored in this study.

A focal point in the approach to analysis has been the realization that within the phenomenological context, any element within any isolated composition may serve as the cellular framework of the whole. George Perle states in this regard:

To the extent that a particular device is capable of integrating the melodic and harmonic content of a work it is also capable of organizing the over-all structural relations.47

The analytical framework employed in the analysis of the selected compositions has been provided by Alan Walker. The following statement is indicative of Walker's theorem, which has given impetus to the present study:

It should be the purpose of analysis to reveal the causes of unity. From the analytic standpoint an idea has not been "understood" when it has been described but only when enough evidence has been gathered to tell us why that idea belongs to its context.48

47 Perle, op. cit., p. 139.

48 Walker, A Study in Musical Analysis, p. 43.
It is recognized that another analyst employing similar procedures and using the same music, may derive entirely different results in terms of the search for unity. The important point here, of course, is that unity may be demonstrated in several different forms and still be related to the same Grundgestalt. The projected functionality of the unity concept is that the "method" of analysis employed may reveal more about the organic aspects of a composition than what has been referred to as "traditional symbolization." The adverse criticism that analysts, theorists, and composers have received in regard to modes of analysis, has prompted this writer to pursue the specific aspects of compositional investigation presented herein. The following statement by Jan LaRue, who, incidentally, was one of the first musicians to recognize the need for re-orientation in analytical procedures, reflects the attitude necessary to continue in the analytical direction proposed:

Progress depends on commitment, on the courage to risk an initial mistake, if necessary, rather than to take refuge in the safety of inaction.\(^{49}\)

\(^{49}\)Jan LaRue, "Basic Analytical Procedures," (unpublished document, New York, 1965, no page numbers.)
Finally, while it is true that any opinion of analysis and its conclusions is a subjective one, it is nevertheless quite relevant to this particular study that phenomenology as a philosophy critically acknowledges this fact. The following statement by Spiegelberg is germane to this issue:

[Phenomenology] . . . is of course no more and no less subjective than any approach based on "pure" uncensored experience. For all experience is basically "subjective" in the sense that it is our own experience. . . . Phenomenology deals with objective phenomena no more and no less than any genuinely empirical knowledge does. If it differs from it, this is due only to the open-minded generosity with which it accepts phenomena before asking them at once whether they are "subjective" or "objective." 50

50 Spiegelberg, op. cit., p. 668.
CHAPTER III

ANALYSIS OF SELECTED COMPOSITIONS

In the analysis of the selected compositions included in this study, the specific point of interest is delimited to an effort to determine the basic cell, the source of unity, the Grundgestalt of a particular composition.

The scope of the analytical approach has been presented in Chapter II. There are, of course, many avenues the analyst may pursue in an attempt to determine the essence of a composition. While there are numerous relationships that affect the ultimate conclusions concerning the Grundgestalt of a work, only those relationships that seem to have a direct bearing in the identification of the source of unity will be presented. Spiegelberg says in this connection:

... description, and phenomenological description in particular, can never be more than selective: it is impossible to exhaust all the properties, especially the relational properties, of any object or phenomenon.¹

¹ Spiegelberg, op. cit., p. 673.
Reiteration of a proposal presented in Chapter II seems pertinent at this point. In the phenomenological approach, elements may present themselves which were, from the inception of a composition, instigated either consciously or sub-consciously. It is irrelevant, in utilizing only the music itself as a vehicle of demonstration, which concept was in operation at the time of the composition's creation. It has been suggested previously that perhaps the subconscious plays a greater role in the composing process than has formerly been recognized. Rufer substantiates this premise (while reminding us of Schoenberg's stand on this issue) when he states:

Certainly the profounder and artistically more valuable inventions are the sole property of the subconscious. This is what Schoenberg means when he says that "the capacity to fulfill instinctively and unconsciously the demands of constructive lawfulness in music should be considered the natural condition of a talent."2 [Style and Idea]

In the analyses that follow, it was hypothesized that the music as it exists as an entity within itself, is the final product of a pervading cell, which is the manifestation of the generated unity. Any aspect of the music that directly affirms this hypothesis will be included in the

analytical discussion. Although many relationships have been deduced as a result of the search for unity, the reader will be spared any superfluous discussion that is not directly connected with the attempt to establish the progenitor of unity. It has been assumed, in analyzing the selected works, that the published form is the composer's final intentions. Walker states in this regard:

... psychologically speaking, everything within the framework of a composition is intentional, ranging from the most obvious to the most obscure details.\(^3\)

It may be profitable to the reader to consult the entire composition when considering the analysis of each work. The compositions analyzed appear at the close of the dissertation. The writer has attempted in each case, to present what seems to him to be the nucleus of the compositional idea, through presentation of selected excerpts of the composition which appear subsequent to a brief biographical sketch of each selected composer. These musical excerpts appear with gratitude to the publishers

---

acknowledged in each instance. Insofar as possible, an effort has been made to present these musical excerpts in a manner that will most readily convey the unity image to the reader. It is anticipated that these brief excerpts will not only be of benefit in interpretation of the analytical discussion of each composition, but will also be representative of the cellular properties of the entire work. Rufer states in this regard:

"... the original shape which a basic idea assumes already contains the characteristics of the whole piece, both directly and indirectly."

The compositions selected for analysis were chosen from the availability of compositions as effected by the delimiting procedures specified in Chapter I. The results of the phenomenologically generated delimiting procedures produced six compositions which, it is conjectured, demonstrate a cross-section of contemporary writing for voice and brass combinations. Additionally, it is proposed that the six selected compositions represent an approximate division, percentage-wise, of compositions written for a minimum four-voice texture employing brass instruments. This division consists of one composition for S S A A and

\[\text{Rufer, op. cit., p. 29.}\]
brass, one composition for T T B B and brass, and four compositions for S A T B and brass.

The compositions to be analyzed are:

1. "O Come, Let Us Sing" by Theron Kirk, S A T B (divisi) and 2 trumpets, 2 trombones, tuba, tympani, and cymbals. Published by Summy-Birchard Company, copyright 1959.


5. "Jubilate Deo" by Paul Fetler, S A T B and 2 horns, 3 trumpets, and 3 trombones. Published by Augsburg Publishing House, copyright 1965.

6. "In My Craft or Sullen Art" by Billy Jim Layton, S A T B and 2 horns, 2 trumpets, 1 tenor trombone, and 1 bass trombone. Published by G. Schirmer, Inc., copyright 1964.

Within the phenomenological context as specified, the analysis of each composition is approached with no a priori insight or pre-judgement of a work other than the attempt to utilize experience and intuitive procedures as dictated by the phenomenological operation.

The search for unity shall be the "particular" sought in the analysis of each work. The following statement by
Milton Babbitt reflects the phenomenological attitude engendered during the course of analysis.

... principles of relatedness, upon which depends immediate coherence of continuity, are more likely to evolve in the course of the work than to be derived from generalized assumptions.\(^5\)

1. "O Come, Let Us Sing" by Theron Kirk

**Biographical Sketch**

Theron Kirk was born in 1919 in Alamo, Texas. He attended Baylor University, Eastman School of Music, and Chicago Musical College of Roosevelt University. He has over 500 published works including compositions for chorus, symphony, band, and chamber groups. Commissions include a choral-instrumental salute honoring Lyndon B. Johnson, "Concerto for Orchestra" for the West Virginia Creative Arts Festival and many choral and chamber works for various organizations. Kirk is well known as a conductor, adjudicator and clinician. At present he is director of choral organizations at San Antonio College, San Antonio, Texas. In addition to maintaining a regular schedule of composing and directing the choral activities of San Antonio College, Mr. Kirk manages to rear four children (with the help of his pianist-organist wife) as well as serving as president of the 4,000 member American Choral Directors' Association.
Excerpts from "O Come Let Us Sing" by Theron Kirk

Figure 1

From O COME LET US SING by Theron Kirk:
All rights reserved. Used by permission.
Excerpts from "O Come Let Us Sing" by Theron Kirk

Figure 2

From O COME LET US SING by Theron Kirk:
All rights reserved. Used by permission.
Analysis of "O Come, Let Us Sing"

by Theron Kirk

At first glance it would seem that this composition might be classified as another example of typical choral-brass writing in the sacred festival tradition. That this is not the case is the basis for the following analysis.

The introduction by the brass is characterized by lean, sparse writing alternating between trumpets and trombones playing identical pitches at the octave. The scoring of the introduction provides the impetus for the textural treatment that permeates the composition as a whole. The fifths used vertically and the fourths used linearly forecast the primary spacing as used in subsequent sonorities vocally, as well as to provide the "organum" effect which is the structural basis for the entire composition. More specifically, the writer has determined that almost every aspect of the compositional process is generated by the "Tuba Mirum Spargens Sonum" of the Dies Irae sequence. The incipit of this figure (Tuba Mirum) forms the basic cell of the work. [cf. Figure 3.]

Schematically this is the "B" portion of the sequence which is usually represented as AA BB CC -------.

The brass and the choral parts employ this motive or permutations thereof independently and cumulatively. The
instruments are utilized very efficiently in terms of idiomatic writing as well as their contrasting color possibilities. The use of the introduction, interludes, and the effective use of interspersed *a cappella* sections by the chorus show an intimate understanding on the part of the composer concerning the musical requirements of the instruments and voices separately and together.

The "Tuba Mirum" hereafter referred to as the source \[S\] of the composition provides not only the motivic material but the verticalization choice as well. This factor is particularly evident in the pitch content chosen by the composer in addition to moments of emphasis in the composition as dictated by long harmonic rhythm points which create a cadential effect (pause).

The following charts demonstrate the organizing force of the composition.

\[
\text{Pitch content of } [S] = \text{A C B G A}
\]

This series of notes first occurs horizontally in a prominent position—measures 19-23 in the soprano and tenor (parts in octaves.) Since this is the first statement
melodically of the source transposed, this series of pitches shall be designated as the original form or [0] according to the key signature (three flats) used by the composer.

Therefore, \([0] = C E^b D B^b C -\) (Measures 19-23, Sop. and Ten).

[cf. Figure 1.1]

The following chart shows the possible transpositions of the basic motive. (Actually, the composer delimits the use of possible permutations as will be shown presently; however, the chart is shown in its entirety to demonstrate the method used.)

**CHART I**

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>[0]</td>
<td>C</td>
<td>E^b</td>
<td>D</td>
<td>B^b</td>
<td>C</td>
</tr>
<tr>
<td>C#</td>
<td>E</td>
<td>D^#</td>
<td>B</td>
<td>C^#</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>F</td>
<td>E</td>
<td>C</td>
<td>D</td>
<td>2</td>
</tr>
<tr>
<td>E^b</td>
<td>G^b</td>
<td>F</td>
<td>D^b</td>
<td>E^b</td>
<td>3</td>
</tr>
<tr>
<td>E</td>
<td>G</td>
<td>F^#</td>
<td>D</td>
<td>E</td>
<td>4</td>
</tr>
<tr>
<td>[0^5]</td>
<td>F</td>
<td>A^b</td>
<td>G</td>
<td>E^b</td>
<td>F</td>
</tr>
<tr>
<td>F^#</td>
<td>A</td>
<td>G^#</td>
<td>E</td>
<td>F^#</td>
<td>6</td>
</tr>
<tr>
<td>[0^7]</td>
<td>G</td>
<td>B^b</td>
<td>A</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>A^b</td>
<td>C^b</td>
<td>B^b</td>
<td>G^b</td>
<td>A^b</td>
<td>8</td>
</tr>
<tr>
<td>[S]</td>
<td>A</td>
<td>C</td>
<td>B</td>
<td>G</td>
<td>A</td>
</tr>
<tr>
<td>[O^10]</td>
<td>B^b</td>
<td>D^b</td>
<td>C</td>
<td>A^b</td>
<td>E^b</td>
</tr>
<tr>
<td>B</td>
<td>D</td>
<td>C^#</td>
<td>A</td>
<td>B</td>
<td>11</td>
</tr>
</tbody>
</table>
The pitch content (P.C.) which have been bracketed are the pitches employed by the composer in various permutations such as interversion and inversion, and in a few instances the exchange of a minor 2nd for a major 2nd. [cf. [0⁷].]

The composition may be reduced further to a three-note cell which is a form of segmentation utilized by the composer. This three-note cell and its transpositions are derived from either side of the "matrix" with D as a pivot note. For example [0] = C E♭ D B♭ C, three note cell = C E♭ D or D B♭ C.

These pitches can be juxtaposed and transposed just as occurs in the original motive; the composer, however, most often employs the cell in its basic shape. This economy of means presents an integrative subtlety which accounts for the felt inner organization in what superficially appears to be a rather "simple" composition.

The process of interversion, melodically and harmonically, is used quite frequently in the composition, but is delimited to the same P.C. employing only forms [0], [0⁵], [0¹⁰]. The following chart when compared to Chart I will reveal one possibility of the interversion process. The
series of P. C. as shown are used within the composition. In the following chart, \([0^{(1)}]\) and other bracketed figures are equivalent to permutations of the original motive.

**CHART II**

\[
[0^{(1)}] = \begin{array}{cccc}
E^b & D & C & B^b \\
E & D^# & C^# & B & C^# \\
F & E & D & C & D \\
G^b & F & E^b & D^b & E^b \\
G & F^# & E & D & E
\end{array}
\]

\[
[0^{5(1)}] = \begin{array}{cccc}
A^b & G & F & E^b & F \\
A & G^# & F^# & E & F^#
\end{array}
\]

\[
[0^{7(1)}] = \begin{array}{cccc}
B^b & A & G & F & G \\
C^b & B^b & A^b & G^b & A^b
\end{array}
\]

\[
[S^1] = \begin{array}{cccc}
C & B & A & G & A
\end{array}
\]

\[
[0^{10(1)}] = \begin{array}{cccc}
D^b & C & B^b & A^b & B^b
\end{array}
\]

Other possibilities may now be derived using only the P.C. that are used in the totality of the specific composition under analysis. The following chart when compared to Chart I and Chart II will make this sufficiently clear.
An interesting relationship now becomes apparent.

Whereas the analysis thus far has shown the manifestations of \( [0] \) as a motivic factor, the verticalization of \( [0] \) provides the framework for all of the harmonic considerations in the composition. Further, it will be seen that there exists an interrelationship of even greater proportions, and that is that the vertical and horizontal elements are all based on the same cell.

Reading down the \( [0] \) form of Chart I with regard to pitches used it is found that including \( [S] \) the following pitches are present:

\[
\begin{array}{c}
\text{C} & \text{This vertical aggregate accounts for the dominating spacing of} \\
\text{F} & \text{fifth and fourth texture inter-} \\
\text{G} & \text{vallically. (Compare this P.C.} \\
\text{A} & \text{with V, 0-4 Chart III).} \\
\text{Bb} & \\
\end{array}
\]

There are of course, various transpositions and permutations of this sequence of pitches. If the following
symmetrical numbering system is generated: 1
4
5
3
2

transposed a perfect fourth (the composer's favorite interval) the P.C. would be represented horizontally by:

F  Eb  D  Bb  C or (C) F = 1
(F) Bb = 4
(G) C = 5 = F  Eb  D  Bb  C
(A) D = 3
(Bb) Eb = 2

This procedure provides the **Inversion** of the original [0] motive, which in turn is the foundation of the harmonic vocabulary as created by the composer. The following chart will demonstrate this relationship when compared to Chart I, Chart II, and Chart III. **[[O^I]=original in inversion, etc.]**

**CHART IV**

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>[O^I]</td>
<td>F</td>
<td>Eb</td>
<td>D</td>
<td>Bb</td>
<td>C</td>
</tr>
<tr>
<td>[O^I5]</td>
<td>Bb</td>
<td>A^b</td>
<td>G</td>
<td>Eb</td>
<td>F</td>
</tr>
<tr>
<td>[O^I7]</td>
<td>C</td>
<td>Bb</td>
<td>A</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>[O^I1]</td>
<td>Eb</td>
<td>D^b</td>
<td>C</td>
<td>A^b</td>
<td>Bb</td>
</tr>
<tr>
<td>[S^I]</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>G</td>
<td>A</td>
</tr>
</tbody>
</table>

When the process of rotation is effected, the original cell will be the result. **[cf. Chart I.]** If the reader will exclude notes I0, I1, I2, I3, and I4 from the matrix, (same P.C. as II0, III0, IV0, V0) and visualize the matrix in the
shape of a cylinder the relationship will become quite clear. It is also interesting to note that with the exception of \([S^I]\) which is not in the composition as P.C., but is the source material, that if the pitches that are used in the composition are aligned in consecutive order beginning with initial pitch F (10), the modality of the composition is solidified; i.e., \(F \, G \, A^b \, B^b \, C \, D \, E^b \, F\)

(Dorian mode - ambitus F-F, key signature of three flats.)

[cf. the following charts:]

**CHART V**

\[
\begin{array}{ccccc}
1 & 7 & 6 & 4 & 5 \\
\hline
[S^I] & F & E^b & D & B^b & C \\
4 & 3 & 2 & 7 & 1 \\
[O^5] & B^b & A^b & G & E^b & F
\end{array}
\]

**CHART VI**

\[
\begin{array}{ccccc}
5 & 7 & 6 & 4 & 5 \\
\hline
[O] & C & E^b & D & B^b & C \\
[O^5] & 1 & 3 & 2 & 7 & 1 \\
F & A^b & G & E^b & F
\end{array}
\]
Figure 2, with the exception of the first soprano and first trumpet parts, demonstrates some of the less obvious cellular determinants. Numerous fragments of the composition reflect, perhaps, more obvious permutations of the source of unity than is apparent in Figure 2. This example is provided for the reader's consideration for the express purpose of convincing him that even under somewhat obscure circumstances, the progenitor of unity is present.

The following brief outline of Figure 2 is furnished the reader for his contemplation, and as an effort towards revealing the Grundgestalt of this composition.

<table>
<thead>
<tr>
<th>Measure Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>137-141</td>
<td>1st Soprano = Original motive transposed. (cf. [05] Chart I)</td>
</tr>
<tr>
<td>137-141</td>
<td>2nd Soprano = Original three-note cell with interversion (cf. [0] Chart I)</td>
</tr>
<tr>
<td>137-141</td>
<td>Alto = Original three note cell transposed (cf. [07] Chart I)</td>
</tr>
<tr>
<td>137-141</td>
<td>Tenor = Dyad of original three note cell transposed and inverted. (cf. permutations of [05] in Chart I, Chart II, Chart III, and Chart IV)</td>
</tr>
<tr>
<td>137-141</td>
<td>Baritone = Original three note cell juxtaposed (B♭ C D) (cf. Chart I)</td>
</tr>
<tr>
<td>137-141</td>
<td>Bass = Original three note cell transposed and juxtaposed. (cf. permutations of [07] in Chart I and Chart III)</td>
</tr>
</tbody>
</table>
Measures 141-144

1st trumpet = Original motive transposed. [cf. \[0^5\] Chart I.]

2nd trumpet = Original three note cell with interversion and addition of "lower neighbor" (cf. \[0\] in Chart I and note I - 1).

1st trombone = Dyad of original three note cell transposed and inverted. [cf. permutations of \[010\] in Chart I and Chart III.]

2nd trombone = Verticalization of pitch content used in composition. [cf. I, 0-3 Chart III and IV; 0, 3, 5, 7, 10, Chart I.]
2. "Fanfare for Christmas" by Lloyd Pfautsch

**Biographical Sketch**

Lloyd Pfautsch received his B.A. from Elmhurst College, Elmhurst, Illinois, in 1943; B.D. in 1946, and M.S.M. in 1948 from Union Theological Seminary. He has over 175 published works by approximately twelve publishing companies, including his own choral series published by Lawson-Gould. Pfautsch is in great demand as a guest conductor and clinician, having served twelve years at the Mid-Western Music Camp at the University of Kansas, the University of Indiana Music Camp, Pacific Music Camp, as well as conducting numerous all-state and regional high school choral festivals, church music workshops, choral conductors' clinics, and music conventions in thirty-three states and Canada.

Since 1958 Mr. Pfautsch has served at Southern Methodist University, where he is presently Professor of Sacred Music and Director of Choral Activities. Professor Pfautsch edits and supervises the SMU Chapel Choir Anthem Series published by Abington Press. Under his direction, the S.M.U. Choir has gained many honors, including being chosen to represent A.C.D.A. in concert before the M.E.N.C. convention
in Seattle in 1968, appearances before the National Convo-
cation of Methodist Youth, the Methodist General Conference,
and many other concert presentations. In addition to
membership in many honor societies and musical organizations,
Dr. Pfautsch frequently serves as guest lecturer in various
universities, and is also artistic director and conductor
of the Dallas Civic Chorus, organized in 1960 under his
leadership.
Excerpts from "Fanfare for Christmas" by Lloyd Pfautsch

Figure 4

From FANFARE FOR CHRISTMAS by Lloyd Pfautsch
copyright 1963 by Harold Flammer, Inc., International
Copyright secured. Used by permission.
Excerpts from "Fanfare for Christmas" by Lloyd Pfautsch

Figure 5

To the Lord, to the Lord

From FANFARE FOR CHRISTMAS by Lloyd Pfautsch, copyright 1963 by Harold Flammer, Inc., International Copyright secured. Used by permission.
From FANFARE FOR CHRISTMAS by Lloyd Pfautsch,
copyright 1963 by Harold Flammer, Inc., International
Copyright secured. Used by permission.
Excerpts from "Fanfare for Christmas" by Lloyd Pfautsch

Figure 7

From FANFARE FOR CHRISTMAS by Lloyd Pfautsch, copyright 1963 by Harold Flammer, Inc., International Copyright secured. Used by permission.
The composition is based on permutations of fifth relationships harmonically and falling third followed by rising second melodically. Although the composition as a whole tends to revolve within a tonal/modal framework within short statements of material, it is significant that all tones of the duodecuple scale are presented in what appears to be a well thought-out organizational plan. The basis of the composition is a motivic treatment vertically and horizontally utilizing a sequence of fifths. The composer has employed segmentation of the sequence in various ways. Some of the segments used are as follows:

In the above diagram the symbol or indicates the use of pitch content within a time span of a measure or more. The pitch content consists of a definite phrase grouping which indicates cumulatively a statement followed by devices (rests, long duration of notes as compared to other notes in the passage) causing the end of forward thrust.
The symbol B is equivalent to brass, V is equivalent to voice, 13-14 is equivalent to measures involved. Indications of employment of a particular segment are given at the top-left with the initial pitch (P.C.) The symbol (\[\text{\textbf{\textbf{\textbf{}}}}\]) or (\[\text{\textbf{\textbf{\textbf{}}}}\]) further indicates that notes designated (e.g., E\textsubscript{b}, D\textsubscript{b}, F, C, G, D) are inclusive but not necessarily sequential. [cf. Figures 4, 5, 6, 7,] The composer also employs inversion, retrograde, and other developmental elements within the selected sets chosen as a point of departure. He also segments the segments. For example, the segment D A E B is used in the brass from measures 14-19 in retrograde, interversion, and segmentation into Dyads, i.e., B E, E A, B A, E D, D B, A B, D E, or

\[
\begin{array}{cccc}
D & A & E & B \\
\end{array}
\]

This technique will become more lucid upon examination of the measures in question. [cf. Figure 6 measures 14 and 15,]

In this case the middle Dyad (A E or E A) of the segment D A E B, is used as a cadential point. As Figure 6 indicates, this motivic pattern starts with the retrograde of the segment, and is subsequently followed by various permutations of the segment. The complete phrase (measures 14-15) consists of course, of the pitch content of the segment (D A E B). The pitch content of the trumpets and trombones in one portion
of the composition consists entirely of the Dyad A-E or E-A. [cf. Figure 6, measures 16 and 17.] In measures 18 and 19, the entire segment appears again, providing a sort of tripartite form to this section of the brass portion of the composition. The form could be diagrammed this way:

[Diagram: Meas. 14 + 15 Meas. 16 + 17 Meas. 18 + 19

DAEB A E DAEB]

Measure 18 + 19 demonstrate this fact as well as the third type of cadential approach to the final pitch E in each two-measure portion. (Measure 14 + 15 --- B-E, measure 16 + 17 --- A-E, measure 18 + 19 --- D-E.) The foregoing illustrated that the chosen cadence point E is approached within the span of measures 14-19 by every pitch within the segment D A E B. Another interesting compositional device exists between measure 14 and measure 19 which lends credence to the strong inter-relationship of the common segment D A E B as used in the passage described. The following diagram illustrates that the sequence of tones in measure 14 is the inversion of the sequence of tones in measure 19 while containing the pitch content D A E B collectively.

Figure 8
As can be noted, the inversion principle is as follows:

<table>
<thead>
<tr>
<th>Measure 14</th>
<th>Measure 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ascending fourth</td>
<td>Descending fifth</td>
</tr>
<tr>
<td>Descending second</td>
<td>Ascending second</td>
</tr>
<tr>
<td>Descending third</td>
<td>Ascending third</td>
</tr>
</tbody>
</table>

The different approaches to the cadential pitch E has previously been discussed; however, it is most significant that the pitch content of the cadences and their approach, as well as measure 14 + 15, and its inversion, measure 19, is exactly the same, i.e., D A E B, the segment presently under analysis.

Figure 9

The interversion principle as shown in the bracketed figures reveals yet another manifestation of the symmetry of the segment as used by the composer.

The integrity of the compositional process is substantiated by the composer's use of typical trumpet fanfare figures,
which bear a close relationship to each other. These figures occur in measures 1 + 2, 3 + 4, 7 + 8 and represent the only example of solo writing for either brass of voices. The pitch content of the above measures is as follows:

The principle of inversion is also quite clear in this illustration.
SUMMARY OF MOTIVIC PERMUTATIONS OF "FANFARE FOR CHRISTMAS" BY LLOYD PFAUTSCH

Original motive
Sop.+Ten., m. 1-5

Cellular statements
(Interversion is employed, in some instances)

Inversion of motive

Cadence serialization
Sop.+Alto

Outside voices alternate between fifth and octave. Only exception is measure 21 which prepares the final cadence.
3. "Angelus ad pastores ait" by Daniel Pinkham

Biographical Sketch

Daniel Pinkham was born in Lynn, Massachusetts in 1923. Pinkham has a wide background of experience as a student and as a teacher. Having studied organ and harmony at Phillips Academy, Andover, with Carl Pfatteicher, he then attended Harvard University, where studies with A. Tillman Merritt, Walter Piston, Archibald Davison, and Aaron Copland led to the A.B. degree in 1943 and the M.A. in 1944. Pinkham has also studied privately with several well known musicians. He has studied harpsichord (perhaps his favorite performing medium) with Putnam Aldrich and Wanda Landowska; organ with E. Power Biggs; and composition with Nadia Boulanger. He has also studied composition at Tanglewood with Arthur Honegger and Samuel Barber. His teaching experience includes posts at Simmons College, Boston University, and visiting lecturer at Harvard University. Grants he has received include a Fulbright Fellowship in 1950 and a Ford Foundation Fellowship in 1962. Pinkham has composed numerous works for various vocal and instrumental combinations as well as a cappella choral music, and chamber and orchestral music. He is co-founder with Robert Brink of the Cambridge Festival Orchestra.
He is a Fellow of the American Academy of Arts and Sciences. At present, he is Music Director of historic King's Chapel in Boston, and serves on the faculty of the New England Conservatory of Music.
Excerpts from "Angelus ad pastores ait" by Daniel Pinkham

Figure 12

From ANGELUS AD PASTORES AIT by Daniel Pinkham:
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Excerpts from "Angelus ad pastores ait" by Daniel Pinkham

From ANGELUS AD PASTORES AIT by Daniel Pinkham:
copyright 1959 by Robert King Music Company, North Easton, Massachusetts. Used by permission.
Excerpts from "Angelus ad pastores ait" by Daniel Pinkham

Figure 14

From ANGELUS AD PASTORES AIT by Daniel Pinkham: copyright 1959 by Robert King Music Company, North Easton, Massachusetts. Used by permission.
Excerpts from "Angelus ad pastores ait" by Daniel Pinkham

Figure 15

From ANGELUS AD PASTORES AIT by Daniel Pinkham: copyright 1959 by Robert King Music Company, North Easton, Massachusetts. Used by permission.
Analysis of "Angelus ad pastores ait"

by Daniel Pinkham

The unity of this composition is achieved through the application of various linear and vertical combinations derived from a Lydian hexachord. The instrumental texture is governed by a decided preference for ostinato treatment, short statements of motivic material derived from the source material, pedal points, and quartally oriented vertical structures. The choral writing is apparently conceived as a functional entity. Scalar passages, second inversion triads, and third inversion seventh chords are predominant in the vocal scoring. Separately, the vocal and brass writing is idiomatic and appears to be quite simple. Cumulatively, however, many relationships that embody contemporary compositional procedures reveal themselves. Such devices as bitonality, inversion, retrograde, canonic devices, and interval prominence are all manifestations of the compositional cell. The following diagram shows the proposed cellular framework from which various elements of the composition may be traced to a common progenitor of unity.
This matrix presents many possibilities for compositional determinants, some of which are present in the composition presently being analyzed. The Lydian basis appears quite prominently in the composition, particularly the prime hexachord (P°) (cf. measures 17-18 vocal score, measures 92-96 brass score, and measures 64-65 vocal score). It will be noticed that RI is a dorian hexachord sequentially. This fact may account for the vertical choice, vocally, by the composer. Starting with P°, notes in the sequence 0, 2, 4, and 1, 3, 5 produce major triads a major second apart. This series would, of course, be applicable to P1, P2, P3, P4, and P5. Using the same system, notes 5, 3,1, and 4, 2,0, will produce minor triads a major second apart, viewing the matrix from RI. When permutations of the motive G A B C# D E
are not being employed (either sequentially or segmented), then dissimilar triads permeate the texture. An illustration of this device occurs in measures 24-26 where the voices utilize the following texture:

\[
\begin{align*}
D & \quad F & \quad D & \quad F & \quad D \\
B & \quad Db & \quad B & \quad Db & \quad B \\
G & \quad Ab & \quad G & \quad Ab & \quad G
\end{align*}
\]

Simultaneously, the trombones employ the following:

\[
\begin{align*}
G & \quad Eb & \quad G & \quad Eb & \quad G \\
D & \quad Cb & \quad D & \quad Cb & \quad D \\
Bb & \quad Gb & \quad Bb & \quad Gb & \quad Bb
\end{align*}
\]

As can be seen, this procedure amounts to the pitches 0, 2, 4, of P^0; or 1, 3, 5, of P^1; and 0, 2, 4, of P^3 as scored in the vocal part. The pitches 0, 2, 5, of P^5, and 0, 2, 5, of transposed P^4 (m 2nd) provide the pitch content for the trombones. This factor denotes the possibility that transposition of any segment is conceivable in order to enlarge the tonal spectrum. Transposition of all segments would, of course, produce a dodecaphonic orientation.

The major second is an important interval in the composition occurring as a unifying force in both the brass and vocal scores. [cf. measures 92-96, and 58-60:] Music of Figure 16 may, of course, be reduced to dyads of seconds.
When $P^0$ is connected to the first dyad of $P^1$, another interesting relationship develops: two diverse tetrachords are the result, $(G\ A\ B\ C^\# : \ D\ E\ F\ G)$. The first tetrachord is a lower Lydian tetrachord and the second tetrachord is an upper Mixolydian tetrachord. This device is found in measures 6 and 17. [cf. Figures 12 and 13.]

This particular matrix offers many other modal possibilities, as can be observed by considering the sequential pitch content of $P^5$ together with $R_I^5$ of Figure 16. These pitches should be viewed according to the following diagram.

```
   \( P^5 \rightarrow \)
   \( R_I^5 \)
```

The initial pitch of $P^5 (\underline{B}^b$ or $P^{50})$ sequentially progressing to the next $\underline{B}^b$ ($R_I^{53}$) will produce a Lydian "scale." The adjacent pitch $\underline{C}$ ($P^{51}$) progressing in a similar manner to the next $\underline{C}$ ($R_I^{52}$) is a Mixolydian scale. This same procedure will in turn demonstrate the Aeolian and Lochrian modes. It is evident then, that through imposing various segmentations, almost infinite modal configurations may be obtained from the matrix. A derivative of this process is found in the first seven measures of the composition, [cf. Figure 12 measures 1-7.] All of the elements in this time span
are based on $P^5$ plus pitch 4 of $RI^5$. This could also be viewed as $P^5$ plus the first dyad of $RI^5$. Additionally, the same pitch content is apparent when one considers as the source $RI^5$ plus pitch 4 of $P^5$. In other words, $P^5$ is equivalent to $RI^5$ with the exception of pitch 4 in each case. In all probability, the composer has chosen for a point of departure the two converging tetrachords as produced by $P^5$ plus the first three pitches of $RI^5$, $(b\,c\,d\,e : f\,g\,a\,b)$. This is, of course, the Lydian "scale" mentioned earlier, but because of certain tetrachordal properties which permeate the composition, it is hypothesized that the segmentation of the Lydian "scale" into a lower Lydian and an Ionian tetrachord is a compositional basis for establishing unity. [cf. Figure 15, measures 92-96. Cellular basis is $G\,A\,B\,C\# : D\,E\,F\#\,G$.]

It is also possible to view the source of the first seven measures from a slightly different angle, still utilizing the tetrachordal relationships mentioned. The tetrachords referred to are the pitches 2, 3, 4, 5, of $P^2$ of the matrix; pitches 2, 3, 4, 5 of $P^5$; pitches 2, 3, 4, 5 of $I^2$; and pitches 2, 3, 4, 5, of $I^5$. This procedure will produce the following symmetrical diagram:
As can be observed, it is possible to extract four sequential tetrachords from the procedure just completed. These are the Ionian tetrachord F G A B♭, the upper Mixolydian tetrachord G A B♭ C (or lower Dorian), the Phrygian tetrachord E F G A and the lower Dorian tetrachord D E F G (or upper Mixolydian). It is perhaps no coincidence that the pitch content of these tetrachords is exactly the same as the proposed source of unity, i.e., B♭ C D E : F G A B♭, or : P^5 plus 5, 4, 3, of RI^5. All of these tetrachords appear in the composition (sometimes transposed) primarily as elements of contrast with the predominating Lydian environment. Although it is believed that the Lydian mode is the basis for the cellular aspects of the composition, it has been the intention here to demonstrate that through segmenting the Grundgestalt of the work, many more interesting relationships are available for utilization by the composer. In other words, what appears superficially to be a diversity is essentially a product of unity, (e.g., the Mixolydian or Dorian tetrachord D E F G in
measure 6, Figure 12, is a small part of the primary Lydian complex.)

Perhaps closer inspection of Figure 12, measures 1-7, will more clearly reveal the devices presented. It will be remembered that it was proposed that the basic cell of the work is generated from P⁵ and pitch 4 of RI⁵, (or RI⁵ plus pitch 4 of P⁵). As the matrix demonstrates, these are the pitches B♭ C D E F G A. In observing Figure 12, it is evident that Trombone I starts the composition with the initial pitch of P⁵ - B♭, then Trombone III states the next pitch in the sequence C (Pitch 1 of P⁵). The tetrachordal aspects of the composition would naturally seem to suggest quartal harmony, and, of course, this is precisely what the composer has done, evoking a quasi-pedalpoint effect to the first cadence point. (The note chosen to accomplish the desired sonority is significantly pitch 4 of P⁵, stated, of course, by Trombone II). It is perhaps also significant that the first interval introduced (Trombone III via Trombone I) is the minor seventh. As has been mentioned previously, the matrix can be reduced to a series of dyads consisting of intervals of a major second. The reader can, no doubt, readily see how both the soprano and the alto parts are derived from the proposed source material.
Another device which is employed in the composition can be seen in the pitch content of the penultimate and cadential measures. The pitch content is equivalent to the generating cell already discussed (i.e., $P^5$ plus pitch 4 of RI or vice-versa). Most significant in this regard is the fact that the pitch content, in addition to establishing the horizontal dimensions of the composition also affirms the vertical dimensions. The quartal texture provided by the trombones and the widest leap of a fourth in the voices is solidified when it is recognized that the pitches used ($P^5$ plus pitch 4, etc.) are simply a series of fourths ($E\ A\ D\ G\ C\ F\ B^b$). Rotation of these pitches will of course produce the generating cell: $B^b\ C\ D\ E\ :\ F\ G\ A\ B^b$. The device just described may also be seen in measures 59-60, Figure 14.

The inversion principle is apparent in many sections of the composition. An illustration of this device can be seen in measures 20-22.[cf. Figure 13,] As can be noted, the sopranos state the first five notes of the generating hexachord ($P^0$) sequentially, (Measures 20-21). The altos simultaneously are stating the first five notes of $P^1$ employing what is to become, through repetition, the cell of the composition; i.e., tone, ascending or descending major second, return. It will be noticed that this figure ($G\ A\ G,$
G F G alto, measure 20) is introduced by the brass in measure 15 in augmentation, serving as an ostinato accompaniment. The remainder of the alto line is the retrograde of the five note sequence utilized as the pitch content of this section, (pitches 4, 3, 2, 1 of $P^1$).

Canonic imitation of the motives just described is easily seen in the brass accompaniment in measures 21 and 22. The inter-relationships established by the voices and brass throughout this composition are most noteworthy. Further evidence of the cellular aspects of the work as represented by the major second referred to, is seen in measures 18 and 19, where practically all possible relationships are based on this interval. Particular attention is to be given the formation applied to the word "ti-dings" or "vo-bis". The organizing cell of the major second is observable as a unifying device in each excerpt selected. [cf. Figure 13.]

Other characteristic intervals appear in prominent positions during the composition but are subservient to the second as a progenitor of unity. Intervals deserving special mention are the augmented octave (Trombone II particularly), the minor second, which occurs motivically as a mirror of the generating major second, and the minor seventh which is, of course, the unifying interval inverted.
The composer's predilection for certain intervals is only surpassed by his compulsion for pedal point and rhythmic and melodic ostinato. The most apparent use of these devices is found from measure 71 to measure 96 (final measure). The last portion of the ostinato may be seen by consulting measures 92-96 of the composition. [cf. Figure 15.] This reiterated rhythmic figure consists of the pitch content G A C# D in which the intervals G-D, G-A, G-C#, A-D, A-C#, A-D, C#-D, C#-G, C#-A are fully exploited. This represents all permutations of the pitch content with the exception of intervals derived from inversion. The composer utilizes an isorhythmic principle in scoring the ostinato for the two trombones, as perhaps can be seen in the excerpt under consideration. Various other devices are employed during the course of the ostinato, such as a fugato between sopranos and altos and Stimmtausch between first and second trombones.

The prime consideration here is the pitch content G A: C# D. Not only are these notes unmistakenly extracted from P0, but they also restate in an innovative manner the textural aspects of the beginning of the compositions' quartal orientation. It is evident that these pitches may also be viewed as A D G C#.

The symmetry of the foregoing relationship is self-evident.
One last symmetrical relationship should be mentioned as a member of the pervading cell of the composition. The device could probably be best described as "Stimmtausch-Inversion." An illustration of this device can perhaps best be seen through viewing the successive aggregates contained in measure 35 and comparing them with measures 92 and 93.

The aggregates in measure 35 are:

\[
\begin{align*}
I & \quad II & \quad I \\
D & \quad E & \quad D \\
B & \quad C^\# & \quad B \\
G & \quad A & \quad G \\
F & \quad G & \quad F \\
\end{align*}
\]

Sopranos

Altos

As can be seen in Figure 15, measures 92 and 93, the sopranos are now singing the F and G (I) formerly sung by the altos in measure 35, but inverted. The B and D formerly sung by the sopranos in measure 35 is now sung by the altos without juxtaposition. The bottom G sung by the alto (II) in measure 35 is now sung by the top soprano in measures 92 and 93. This procedure allows the first alto note (A) in measure 35 to become the second alto note in measures 92-93, the 3rd soprano note (C\#) to become the 1st alto note (C) and the 1st soprano note to become the 2nd soprano note (E).

Perhaps the most significant relationship of this operation is the substantiation of the major second in the context of the Lydian hexachord (P⁰) as the progenitor of unity.
4. "Shepherds, Rejoice" by Arthur Frackenpohl

Biographical Sketch

Arthur Frackenpohl was born in Irvington, New Jersey in 1924. Frackenpohl received his B.A. from the Eastman School of Music in 1947, his M.A. from the same institution in 1949, and his Mus. Doctorate from McGill University in 1957. He has studied privately with Darius Milhaud, the summer of 1948, and Nadia Boulanger at Fontainebleau, the summer of 1950. Since 1949, Dr. Frackenpohl has served as Professor of Music and coordinator of keyboard courses in the Crane department of music of the State University College at Potsdam, New York. Frackenpohl has been the recipient of various grants and commissions, including a Ford Foundation Grant in 1959-60 to serve as composer-in-residence for the Hempstead (N.Y.) Public Schools; Faculty Research Fellowships in 1965 and 1967 for large scale compositions; and a research grant from the State University of New York in 1959 for the purpose of writing a keyboard harmony text, Harmonization at the Piano, published by Wm. C. Brown Co.. Professor Frackenpohl is married to the former Mary Ellen Walkley of Leroy, New York. They have four boys who range in age from nine to fifteen years.
Frackenpohl is a member of various organizations, including M.E.N.C. and A.S.C.A.P. He has composed over 125 instrumental and vocal works which are published by various well-known publishing firms.
Excerpts from "Shepherds Rejoice" by Arthur Frackenpohl

Figure 17

From SHEPHERDS REJOICE by Arthur Frackenpohl, copyright 1958 by Robert King Music Co., North Easton, Massachusetts. Used by permission.
Excerpts from "Shepherds Rejoice" by Arthur Frackenpohl

Figure 18

From SHEPHERDS REJOICE by Arthur Frackenpohl, copyright 1958 by Robert King Music Co., North Easton, Massachusetts. Used by permission.
Excerpts from "Shepherds Rejoice" by Arthur Frackenpohl

Figure 19

From SHEPHERDS REJOICE by Arthur Frackenpohl, copyright 1958 by Robert King Music Co., North Easton, Massachusetts. Used by permission.
Excerpts from "Shepherds Rejoice" by Arthur Frackenpohl

Figure 20

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Analysis of "Shepherds Rejoice"

by Arthur Frackenpohl

The unification of this composition is achieved by employment of two solidifying compositional devices. These devices are: 1. Motivic Development and Textural Prominence; 2. Cadential Serialization; and Usage of Invertible Counterpoint. Both of these devices are interrelated as will be seen presently.

1. Motivic Development

Motivic development is provided by permutations of a basic three-note cell. The pitch content of this cell is based on juxtapositions of major and minor seconds. Compositional procedures such as interversion, retrograde, and inversion are applied in the formation of the motivic structure. An illustration of this process can be seen in the following motivic excerpts from the composition.

<table>
<thead>
<tr>
<th>Original Motive</th>
<th>Juxtaposition of Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>G A(b) B(b)</td>
<td>G A B(b) or G A B or G A(b) A (\text{e.g., Meas. 1 and 2}) 30, 36, 42.</td>
</tr>
</tbody>
</table>

The motive G A\(b\) A, or transpositions thereof, is not used as an integral part of the composition. All other juxtapositions and transpositions of a basic motive are used throughout the work.
Inversion of Motive  
\[ \text{Ab} \text{ G} \text{ Bb} \]  
(e.g., Meas. 8)  

Inversion of Retrograde of Motive  
\[ \text{Bb} \text{ C} \text{ Db} \]  
(e.g., Meas. 4, 5, 39, 40, 55)  

The following chart will demonstrate the motivic choices that appear in the composition. All motives, or their permutations, are present in the composition with the exception of the motives in brackets (\[\]) .  

Figure 21  

<table>
<thead>
<tr>
<th>X</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>[E^b \ E \ F^#]</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>G^b</td>
</tr>
<tr>
<td>3</td>
<td>[F^#</td>
<td>G</td>
</tr>
<tr>
<td>4</td>
<td>G</td>
<td>A^b</td>
</tr>
<tr>
<td>5</td>
<td>[G^#</td>
<td>A</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>B^b</td>
</tr>
<tr>
<td>7</td>
<td>[A^#</td>
<td>B</td>
</tr>
<tr>
<td>8</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>9</td>
<td>C</td>
<td>D^b</td>
</tr>
<tr>
<td>10</td>
<td>[C^#</td>
<td>D</td>
</tr>
<tr>
<td>11</td>
<td>D</td>
<td>E^b</td>
</tr>
</tbody>
</table>
As can be seen, Column X represents motives which are based on a minor second followed by a major second. Column Y represents motives based on major seconds only. Column Z represents motives based on a major second followed by a minor second. As mentioned above, consecutive minor seconds occur quite rarely in the composition. The only appearance of any prominence of this sequence is in the brass accompaniment in measure seventy-three. (G Gb F and D Db C) occurring in parallel motion).

Excerpts from the music (cf. Figure 17, Figure 18, and Figure 19) will illustrate some of the motives utilized.

Measure 58 - $x^{11}$, $y^2$, $y^7$, $z^4$
Measure 59 - $z^4$, $y^2$
Measure 60 - $x^6$, $x^{11}$
Measure 61 - $y^9$
Measure 62 - $x^1$, $y^4$, $y^9$
Measure 63 - $x^1$, $x^8$, $y^2$
Measure 80 - $y^0$, $z^6$ (A measure 81), $x^{11}$
Measure 81 - $x^6$, $y^0$ (Eb measure 80), $y^5$
Measure 82 - $y^{10}$, $z^0$
Measure 83 - $z^7$, $x^2$

Upon closer inspection it will be found that Figure 21, Columns X, Y, and Z, contain an interesting relationship other than the motivic factors presented. If the pitch content of
the motives not used in the composition (motives in brackets) are juxtaposed, a sequence of fifths or fourths is the result.

1st pitch in Column Y = D A
1st pitch in Column Z = E B F#
1st pitch in Column X = Gb Db Ab Eb Bb, or collectively: Bb Eb Ab Db Gb - F# B E A D

This operation indicates, of course, that the motives which are employed in the composition may also be viewed in this manner. It is proposed that this is indeed one point of departure compositionally, as this particular texture (fifths and fourths) permeate the composition vertically and horizontally. It is most significant in this regard, that the intervals of a fourth or fifth precede or follow most of the motivic figures. [cf. measures 58, 59, 60, and 61.]

Successive fourths are used also in the approach to motivic figures. [cf. brass score, measures 82 and 83.]

Quartal harmony, vocally and instrumentally, is employed frequently, particularly at cadential or quasi-cadential moments. [cf. vocal score, measure 82, brass score measures 58, 59, 60, and 61.]

The fifth relationship referred to can perhaps be more readily seen in the chart that appears below. Vertically, each column is a representation of motives used in the
composition according to intervallic content. Horizontally, the sequence of fifths provides the point of departure texturally. In other words, the vertical dimensions provide the horizontal aspects of the composition (motives, etc.) and the horizontal dimensions provide the vertical aspects, (prominence of fifths and fourths). The charts should be viewed as a cylinder. Bracketed cells ([]) indicate cells that are not used in the composition. All remaining cells are used in the composition. Compare this chart with Figure 21.

Figure 22

```
X
[ E♭ ] [ B♭ ] F
[ E ] B G♭
[ F# ] [ C♯ ] [ G♯ ]
G D A
[ A ] [ E ] [ B ]
[ B♭ ] F C
C G D
[ D♭ ] A♭ E♭

Y
[ E♭ ] [ B♭ ] F
[ E ] B G♭
[ F ] C G
[ G ] D A
[ A ] E B
[ A♭ ] E♭ B♭
B♭ F C
C G D
[ D♭ ] A♭ E♭

Z
[ E♭ ] [ B♭ ] F
[ E ] B G♭
[ F ] C G
[ G♭ ] D♭ A♭
[ A♭ ] E♭ B♭
A♭ E♭ B♭

2. Cadential Serialization

The following chart is intended to codify the symmetrical aspects of cadential treatment as found in the vocal scoring of the composition. This chart represents the first fourteen
cadence points after the brass introduction. U.V. = Upper Voice; L.V. = Lower Voice; M.V. = Middle Voice. If there is only one line, this indicates that the part is sung in octaves or as a unison. Pitch direction is indicated by \( \uparrow = \text{up} \) and \( \downarrow = \text{down} \); from the starting pitch, the arrows indicate tone direction to the nearest adjacent tone. (It is unnecessary to employ octave displacement). Measures indicated include the penultimate measure as well as the cadential measure.

**Figure 23**

<table>
<thead>
<tr>
<th>Cadence Point</th>
<th>Sequential Pitch</th>
<th>Rhythmic Motif</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Meas. 8-9</td>
<td>( A^b ) ( A^b ) ( G ) ( B^b ) ( F )</td>
<td>- ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow )</td>
</tr>
<tr>
<td>2. Meas. 12-13</td>
<td>( F ) ( G ) ( A^b ) ( B^b ) ( F ) ( G )</td>
<td>- ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow )</td>
</tr>
<tr>
<td>3. Meas. 16-17</td>
<td>( E^b ) ( G^b ) ( B^b ) ( G^b ) ( A^b ) ( G )</td>
<td>- ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow )</td>
</tr>
<tr>
<td>4. Meas. 20-21</td>
<td>( B^b ) ( A^b ) ( G ) ( F ) ( A^b ) ( E^b )</td>
<td>- ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow )</td>
</tr>
<tr>
<td>5. Meas. 25-26</td>
<td>U.V.G ( A ) ( F ) ( B^b ) ( G ) ( L.V.F ) ( E ) ( F ) ( C ) ( D ) ( E^b )</td>
<td>- ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow ) ( \uparrow )</td>
</tr>
<tr>
<td>6. Meas. 36-37</td>
<td>U.V.G ( A ) ( B^b ) ( C ) ( G ) ( L.V.G ) ( F ) ( E^b ) ( D ) ( G ) ( F^# )</td>
<td>- ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow ) ( \uparrow )</td>
</tr>
<tr>
<td>7. Meas. 44-45</td>
<td>C ( B^b ) ( A ) ( G ) ( B^b ) ( F )</td>
<td>- ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow )</td>
</tr>
<tr>
<td>8. Meas. 48-49</td>
<td>U.V.B( B^b ) ( B^b ) ( A ) ( C ) ( G ) ( L.V.E( B^b ) ( E_b ) ( F ) ( C ) ( G )</td>
<td>- ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow )</td>
</tr>
<tr>
<td>9. Meas. 52-53</td>
<td>U.V.G ( A ) ( B^b ) ( C ) ( G ) ( A ) ( L.V.G ) ( F ) ( E^b ) ( D ) ( G ) ( F^# )</td>
<td>- ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow ) ( \uparrow ) ( \downarrow )</td>
</tr>
</tbody>
</table>

**Rhythmic Motif**

- \( \uparrow \) : up
- \( \downarrow \) : down
- \( \uparrow \uparrow \) : up up
- \( \downarrow \downarrow \) : down down
- \( \uparrow \downarrow \) : up down
- \( \downarrow \uparrow \) : down up

- \( \uparrow \uparrow \uparrow \) : up up up
- \( \downarrow \downarrow \downarrow \) : down down down
- \( \uparrow \uparrow \downarrow \) : up up down
- \( \downarrow \downarrow \uparrow \) : down down up
- \( \uparrow \downarrow \uparrow \) : up down up
- \( \downarrow \uparrow \downarrow \) : down up down
- \( \uparrow \uparrow \uparrow \uparrow \) : up up up up
- \( \downarrow \downarrow \downarrow \downarrow \) : down down down down
- \( \uparrow \uparrow \downarrow \downarrow \) : up up down down
- \( \downarrow \downarrow \uparrow \uparrow \) : down down up up
- \( \uparrow \downarrow \uparrow \downarrow \) : up down up down
- \( \downarrow \uparrow \downarrow \uparrow \) : down up down up
- \( \uparrow \uparrow \uparrow \downarrow \downarrow \) : up up up down down
- \( \downarrow \downarrow \downarrow \uparrow \uparrow \) : down down down up up
- \( \uparrow \uparrow \downarrow \downarrow \uparrow \) : up up down down up
- \( \downarrow \downarrow \uparrow \uparrow \downarrow \) : down down up up down
- \( \uparrow \downarrow \uparrow \downarrow \uparrow \downarrow \) : up down up down up down
Several relationships are now apparent. Cadence 1 is exactly the same rhythmically and intervallically as the upper voice of Cadence 13, and the upper voice of Cadence 8. The cadential figure appears at Cadence 13 transposed a perfect fourth from the initial statement at Cadence 1. As mentioned formerly, this interval (perfect fourth, or its inversion, perfect fifth) apparently is quite significant in both the macro- and micro-dimensions of the composition. The upper voice of Cadence 8 is transposed a major second from the initial pitch of Cadence 1. The lower voice of Cadence 8 is also a derivative of the same cell transposed a fourth down. As can be seen, there is an exchange of a rising major second
for a falling minor second. Cadence 2 is a note for note inversion of Cadence 4 until the penultimate note. Inverting the final G in Cadence 2 with the penultimate F would produce an exact inversion in this case. Again, the transposition interval of the inversion process is a perfect fifth. Cadence 3 is the exact rhythmic equivalent of Cadence 10. These cadence points mirror one another in a tonal sense in that Cadence 3 outlines a major triad in the first three successive pitches, whereas Cadence 10 reflects a minor triad. In both instances the final note is approached by a major second. Cadence 5 is in every respect exactly the same as Cadence 12, employing invertible counterpoint at the octave. The lower voice of Cadence 5 is transposed up a major sixth in Cadence 12 becoming the upper voice. The upper voice of Cadence 5 is transposed down a minor third in Cadence 12 becoming the lower voice. Cadence 6 is the exact duplication of Cadence 9. Cadence 6 and Cadence 9 are in invertible counterpoint at the fourteenth with Cadence 11. The upper voice of Cadences 6 and 9 is transposed down a fourth in Cadence 11, which becomes the lower voice. It will be noticed that the composer has chosen to juxtapose the major and minor seconds in this instance. This is due, perhaps, to the motivic character of the basic cell which has been presented above. The lower voice of Cadences 6 and 9 is
transposed up a fourth in Cadence 11 which becomes the upper voice. The approach to the final cadence note is effected by an exchange of descending perfect fourth for descending minor second when the lower voice of Cadences 6 and 9 becomes the upper voice of Cadence 11. Cadence 7 is the same sequence of pitches as the upper voice of Cadence 11. Therefore, Cadence 7 is also equivalent to the lower voice of Cadence 6 and Cadence 9 in invertible counterpoint. Rhythmically, there is also a relationship, in that by applying interversion, the Cadences 6, 9, and 11, which are the same rhythmically, are also equivalent to Cadence 7.

Cadences 6, 9, 11 = \[ \text{Cadence 6, 9, 11} = \begin{array}{c}
\text{Cadence 7} = \\
\text{Cadence 7 with interversion} =
\end{array} \]

The process just completed suggests that the rhythmic features of the composition may also be conceived as unifying agents. It is proposed that the rhythmic figure is the cellular basis rhythmically for the cadence points, and possibly for the entire composition. Let us consider a possibility. The rhythmic motif of Cadence 1 is \( \text{Cadence 1} = \) The last portion of this figure (\( \text{Cadence 1} = \)) plus the cadence note (\( \text{Cadence 1} = \)) is exactly the same as the last portion of the proposed rhythmic unifying figure. This leaves \( \) or subdivided \( \) or \( \). This produces, of course, the
rhythmic figure\[\text{\textcopyright} \text{\textcopyright} \text{\textcopyright} \text{\textcopyright}\]. Investigation in a like manner by the reader will no doubt supply similar results. Suffice it to say that with only the evidence of the rhythmic treatment of the first fourteen cadences at hand, it is quite clear that aspects of rhythmic cohesiveness are an integral part of the compositional framework. The relationships existing between the cadences, as demonstrated thus far, have occurred in pairs or as a single statement. From the point of Cadence 13, (Meas. 72-73), a three-voice treatment is the predominating texture with a final four-voice cadence written in a comparatively high tessitura for voices. This particular scoring is perhaps employed as a means of generating climactic tension. [cf. Figure 20.] The upper voice of Cadence 13, as demonstrated above, is equivalent to Cadence 1 and Cadence 8. The lower voice of Cadence 13 is the same as the upper voice of Cadence 12 and the lower voice of Cadence 5. The syncopated quarter note is approached by a major second ascending in Cadence 13, whereas in Cadence 5 and Cadence 12 this same note is approached by a major second descending. The middle voice of Cadence 13 is simply a duplication of the first half of the lower voice joined with the last half of the upper voice.

The upper voice of Cadence 14 is the same as Cadence 2 transposed a perfect fourth. The middle voice is an exact
retrograde of the upper voice of Cadence 8 and a transposed retrograde of Cadence 1 and the upper voice of Cadence 13. The middle voice moves to the third of the chord in this instance because of the three-voice texture now in operation. The lower voice of Cadence 14 is the inversion with interversion of the upper voice of Cadence 2, Cadence 6, Cadence 9, as well as the lower voice of Cadence 11. These relationships are achieved, of course, by employing the various transpositions necessary. Whereas the lower voice of Cadence 14 is B♭ A♭ F E♭ G♭ F; employing interversion, the pitch content may equal E♭ F G♭ A♭ E♭ F, which, when transposed, is the exact sequence of intervals contained in the cadences described. It is now apparent that all of the cadences are related in some fashion. The presence of such devices as invertible counterpoint, inversion, retrograde, interversion, retrograde of the inversion, etc. certainly lends credence to the serial manifestations of the work. The unity achieved by the employment of these devices affects other dimensions of the composition. It is highly significant that the pitch content of the cadences is a series of fourths or fifths when the composer utilizes a minimum two-voice texture. For instance, the pitch content of Cadence 6 (same as Cadence 9) is E♭ B♭ F C G D A. The pitch content of Cadence 11 is also E♭ B♭ F C G D A.
When employing a three-voice texture, the composer effectively shifts to the "flat" side of the series, creating in this manner modulatory connotations. The pitch content of Cadence 14 illustrates this procedure quite clearly. The pitch content of Cadence 14 is $G^b$ $D^b$ $A^b$ $E^b$ $B^b$ $F$ $C$.

Perhaps the most integrating feature of the composition is the presence of the motivic cell within the cadential framework. Some of these relationships follow: (more than one voice part is indicated with symbols used previously.)

- Cadence 1 - Motive $X^4$
- Cadence 2 - Motives $Z^2$, $X^4$
- Cadence 3 - Motive $Y^3$
- Cadence 4 - $X^4$, $Z^2$
- Cadence 5 - U.V. - $Y^2$
  L.V. - $Z^9$
- Cadence 6 - U.V. - $Z^4$, $X^6$
  L.V. - $Y^0$, $X^{11}$
- Cadence 7 - $X^6$, $Z^4$

The remaining cadences continue in the same manner and are, of course, not only related to the cadences illustrated here, but also serve as these do, to solidify the Grundgestalt of the composition through permutations of the motivic cell. All of the devices discussed are also applicable to the brass. It should be mentioned that there seems to be an organic
pattern in the compositional treatment of the brass. This pattern appears to be based on an inversion process that is most clearly demonstrated in measures 58-61. [cf. Figure 17 and Figure 18.] The process involves rising major seconds in parallel fourths (measures 58-59) followed by falling minor seconds in parallel fifths (measure 59). This is followed by rising minor thirds in parallel fifths coupled with falling major thirds in parallel fifths (measure 60). This is followed by falling seconds in parallel fifths coupled with rising seconds in parallel fifths. This quasi-cadential point contains, as can be seen, a sustained F which acts as a solidifying agent of the fifth and fourth relationship established (measure 61). Obviously the pitch content here is a sequence of fifths, i.e., $A^b\ E^b\ B^b\ F\ C\ G\ D$ (measures 60-61).

It would seem that segmentation is effected in the compositional treatment.

Measure 60 = $D \rightarrow F$

\[\begin{array}{c}
G \\
E^b \\
C \rightarrow A^b
\end{array}\]

Measure 61 = $G \rightarrow F$

\[\begin{array}{c}
F, \ldots, \\
B^b \rightarrow C \\
E^b \rightarrow F
\end{array}\]

or: $D\ G\ C\ \rightarrow\ F\ B^b\ E^b\ A^b$

or: $A^b\ E^b\ B^b\ F\ C\ G\ D$

or: $A^b\ E^b\ B^b\ F\ C\ G\ D$

or: $A^b\ E^b\ B^b\ F\ C\ G\ D$
5. "Jubilate Deo" by Paul Fetler

Biographical Sketch

Paul Fetler was born in Philadelphia, Pennsylvania in 1920. His early education was received in Latvia, Sweden, and Holland. He was awarded the B.M. degree from Northwestern University in 1943, the M.M. degree from Yale in 1948, and the Ph.D. degree from the University of Minnesota in 1956. Dr. Fetler has been the recipient of numerous awards and commissions, including a Ford Foundation Grant, the Alice M. Ditson award, two Guggenheim awards, and a commission from the Minneapolis Civic Orchestra for the work, "Of Earth's Image," scored for full orchestra, 100 voice chorus, and soprano soloist. Fetler has written over one hundred instrumental and choral works and has received many performances in America and Europe. In addition to his published sacred and secular choral music, and orchestral music, Dr. Fetler has music for violin, as well as classical guitar, available. His composition "Contrasts for Orchestra" has been recorded by the Minneapolis Symphony Orchestra, on the Mercury label. Married, and the father of three children, Dr. Fetler is at present Professor of Music at the University of Minnesota.
Excerpts from "Jubilate Deo" by Paul Fetler

Figure 24

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Excerpts from "Jubilate Deo" by Paul Fetler

Figure 25

\[ \text{Allegro con spirito (f = ca. 144)} \]

\[ \text{all parts written in C} \]

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Excerpts from "Jubilate Deo" by Paul Fetler

Figure 26

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Excerpts from "Jubilate Deo" by Paul Fetler

Figure 27

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Excerpts from "Jubilate Deo" by Paul Fetler

Figure 28

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reserved. Used by permission.
Excerpts from "Jubilate Deo" by Paul Fetler

Figure 29

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Analysis of "Jubilate Deo" by Paul Fetler

The composition is derived from pitch content which, when generated, succeeds in exploiting many permutations of the fourth relationship. These relationships occur vocally and instrumentally, in both a linear and a vertical plane. A salient characteristic of this work, is the continual appearance of motivic statements which are usually presented in an imitative manner. The vocal scoring, when possessing this feature (motive imitation) appears most often in a two-voice texture. When this device is employed, soprano coupled with tenor, and alto coupled with bass is the usual arrangement. The composer establishes a hocket-like effect in many instances, particularly when the voices are singing "Sing and Rejoice" and "Alleluia". An illustration of the hocket effect and the devices mentioned above may be seen by consulting Figure 24, Measures 1-5.

The reification of the quartal permeation, as well as the source of motivic derivation may perhaps be seen more clearly in the following diagram.
The composer has managed to use substantially this representation of the extreme outside pitches of one-half of a matrix as a fundamental point of departure compositionally. The reader will notice that the pitch content of the vocal score, utilizes the first five pitches of the original "row," i.e., D, G, C, F, B♭, within the time span of the first cadence. [Cf. Figure 24, measures 1-5 of composition.]

The brass score (measures 3 and 4, Figure 25), essentially reiterates the motivic design presented by the voices, and at the same time, lengthens the quartal spectrum to include pitches 1 through 6 of [0]. This procedure would certainly suggest that segmentation of the basic cell is
feasible, [cf. Figure 30.] This device could, no doubt, be of major concern in a composition that appears limited in potential development as a result of mono-intervallic relationships. An investigation for the likelihood of such a procedure may be profitable in determining the validity of successive fourths as the progenitor of unity.

The following charts are designed to reveal the pitch content used from an initial statement to a culmination of a cadence or quasi-cadence in the composition. The cadences or quasi-cadences are inclusive to the "Alleluia" section, which is used as an extended coda in the work.

"O" designates the original form of the cell; "I" designates the inverted form of the cell. The arabic numbers following the designation of the cell indicate inclusive pitches of the particular cell used.

No doubt the segments extracted from the original cell can be easily seen in both the vocal and instrumental scoring. The operation performed by the composer in achieving the quartal orientation, can perhaps be more closely observed by examining an isolated cadence in some depth. [cf. Figure 26, measures 40-43, vocal score.]

The pitch content of measures 40-43 of the vocal score is E A D G C F Bb. As the preceding chart displays, these pitches are 0-4 of the "O" form of the cell, and 0-2
### Figure 31

<table>
<thead>
<tr>
<th>Pitch Content</th>
<th>Time Span</th>
<th>Vocal Scoring</th>
<th>Relationship to Cell</th>
</tr>
</thead>
<tbody>
<tr>
<td>D G C F B♭</td>
<td>Meas. 1-4</td>
<td>SATB</td>
<td>&quot;O&quot;, 0-4</td>
</tr>
<tr>
<td>D G C F B♭</td>
<td>Meas. 7-13</td>
<td>SATB</td>
<td>&quot;O&quot;, 0-4</td>
</tr>
<tr>
<td>A D G C F B♭  E♭ A♭</td>
<td>Meas. 14-27</td>
<td>SSATB</td>
<td>&quot;O&quot;, 0-6</td>
</tr>
<tr>
<td>G C F B♭ E♭ A♭</td>
<td>Meas. 28-34</td>
<td>SSATB</td>
<td>&quot;I&quot;, 1</td>
</tr>
<tr>
<td>E A D G C F B♭</td>
<td>Meas. 40-43</td>
<td>SATB + ST</td>
<td>&quot;O&quot;, 0-4</td>
</tr>
<tr>
<td>E A D G C F B♭</td>
<td>Meas. 45-53</td>
<td>SATB</td>
<td>&quot;I&quot;, 0-2</td>
</tr>
<tr>
<td>B E A D G C F</td>
<td>Meas. 60-63</td>
<td>SATB</td>
<td>&quot;O&quot;, 0-3</td>
</tr>
<tr>
<td>F♯ B E A D C B♭</td>
<td>Meas. 65-69</td>
<td>SATB</td>
<td>&quot;I&quot;, 0-3</td>
</tr>
<tr>
<td>B E A D G C F B♭</td>
<td>Meas. 70-76</td>
<td>SATB</td>
<td>&quot;O&quot;, 0, 2, 4</td>
</tr>
<tr>
<td>C♯ F♯ B E A D G</td>
<td>Meas. 76-79</td>
<td>SATB</td>
<td>&quot;I&quot;, 0-3</td>
</tr>
<tr>
<td>B E A D G C</td>
<td>Meas. 84-90</td>
<td>SATB</td>
<td>&quot;O&quot;, 0-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&quot;I&quot;, 0-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&quot;I&quot;, 0-3</td>
</tr>
</tbody>
</table>
### Figure 32

<table>
<thead>
<tr>
<th>Pitch Content</th>
<th>Time Span</th>
<th>Instrumental Scoring</th>
<th>Relationship to Cell</th>
</tr>
</thead>
<tbody>
<tr>
<td>G C F B♭ E♭ A♭</td>
<td>Meas. 3-7</td>
<td>Trumpets and Trombones</td>
<td>&quot;0&quot;, 1-6</td>
</tr>
<tr>
<td>G C F B♭</td>
<td>Meas. 12-15</td>
<td>Horns</td>
<td>&quot;0&quot;, 1-4</td>
</tr>
<tr>
<td>E A D C</td>
<td>Meas. 22-24</td>
<td>Horns</td>
<td>&quot;0&quot;, 2</td>
</tr>
<tr>
<td>&quot;I&quot;, 0-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F B♭ E♭ A♭</td>
<td>Meas. 26-28</td>
<td>Horns</td>
<td>&quot;0&quot;, 3-6</td>
</tr>
<tr>
<td>C F B♭ E♭ A♭</td>
<td>Meas. 30-32</td>
<td>Horns</td>
<td>&quot;0&quot;, 2-6</td>
</tr>
<tr>
<td>&quot;I&quot;, 0-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A D G C F B♭ E♭ A♭</td>
<td>Meas. 33-40</td>
<td>Full Brass</td>
<td>&quot;0&quot;, 0-6</td>
</tr>
<tr>
<td>&quot;I&quot;, 0-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G A</td>
<td>Meas. 41-43</td>
<td>Horns</td>
<td>&quot;0&quot;, 1</td>
</tr>
<tr>
<td>&quot;I&quot;, 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E A D G C F B♭</td>
<td>Meas. 43-44</td>
<td>Trumpets and Trombones</td>
<td>&quot;0&quot;, 0-4</td>
</tr>
<tr>
<td>&quot;I&quot;, 0-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E A D G C F</td>
<td>Meas. 46-50</td>
<td>Horns</td>
<td>&quot;0&quot;, 0-3</td>
</tr>
<tr>
<td>&quot;I&quot;, 0-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pitch Content</td>
<td>Time Span</td>
<td>Instrumental Scoring</td>
<td>Relationship to Cell</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------</td>
<td>----------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>B E A D G C F B♭ E♭ A♭</td>
<td>Meas. 51-60</td>
<td>Trumpets and Trombones</td>
<td>&quot;O&quot;, 0-6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&quot;I&quot;, 0-3</td>
</tr>
<tr>
<td>B E A D G C F</td>
<td>Meas. 63-65</td>
<td>Trumpets and Trombones</td>
<td>&quot;O&quot;, 0-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&quot;I&quot;, 0-3</td>
</tr>
<tr>
<td>D♯ G♯ C♯ F♯ B E</td>
<td>Meas. 67-69</td>
<td>Trumpets and Trombones</td>
<td>&quot;I&quot;, 2-7</td>
</tr>
<tr>
<td>B E A D</td>
<td>Meas. 76</td>
<td>Horns</td>
<td>&quot;I&quot;, 0-3</td>
</tr>
<tr>
<td>F♯ B E A D G C</td>
<td>Meas. 80-84</td>
<td>Trumpets and Trombones</td>
<td>&quot;O&quot;, 0-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&quot;I&quot;, 0-4</td>
</tr>
<tr>
<td>F♯ B E A D G C</td>
<td>Meas. 84-86</td>
<td>Trumpets and Trombones</td>
<td>&quot;O&quot;, 0-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&quot;I&quot;, 0-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&quot;I&quot;, 1-3</td>
</tr>
<tr>
<td>B E A</td>
<td>Meas. 88-90</td>
<td>Horns</td>
<td></td>
</tr>
</tbody>
</table>
of the "I" form of the cell. It will be noticed that another typical scoring device can be observed in the voicing arrangement. The soprano and tenor voices are singing together and the alto and bass are scored likewise. The pitch content of soprano and tenor is E A D G C, or the first five pitches of the segment extracted from the original cell. The pitch content of alto and bass is A D G C F B♭, or the last six pitches of the same segment. The pitches not used in soprano and tenor are F and B♭. The pitch not used in alto and bass is E. It is highly significant that these pitches (B♭ E F) are subsequently used as a basis for introducing the "Alleluia" portion of the composition, (Cf. Figure 28), as well as appearing in other nesting-like formations throughout the work.

Further investigation reveals that the sequence of pitches in both parts (S+T; A+B) are related, and that these pitches are, in turn, traceable to what is apparently the motivic cell of the composition. The motivic cell consists of permutations of the intervals of the fourth and second. An illustration of the cellular framework is stated at the beginning and at the end of the work, as well as during the course of musical events. (Cf. Figure 24, measures 1-5; Figure 29, measures 101-105; and Figure 27, measures 67-69.)
It will be noticed that in measures 1-4, the soprano and tenor motive is $F \ D \ C \ F$; the alto and bass motive is $B^b \ C \ G \ F$. Designating the soprano and tenor motive as Motive I, and the alto and bass motive as Motive II, let us consider the relationships existing between the two motives. Excluding the initial tone $F$ of Motive I, the pitches $D \ C \ F$ remain. Excluding the last tone $F$ of Motive II, the pitches $B^b \ C \ G$ remain. These pitches obviously form the kernel of motivic development excluding the common tone $F$ of Motives I and II. That is to say, Motive II is the inversion of Motive I, in that where Motive I descends a major second, Motive II ascends a major second. Where Motive I ascends a perfect fourth, Motive II descends a perfect fourth. The recapitulation of this device can be seen in the "Alleluia" part of the work, [cf. Figure 29, measures 101-105;]

The exact same treatment may also be observed in the brass transposed up a half step (i.e., the "I" form of the original cell: Cf. original cell) in measures 67-69, Figure 27. Some of the permutations of the generating cell ($C \ D \ F$ or $B^b \ C \ G$) can be extracted from what may seem, in this portion of the composition presently under investigation, the most unrelated section motivically, to former and subsequent events in the totality of the work, (i.e., Figure 26, measures 40-43, vocal score). The pitch content
and its relationship to the original cell has been established above. The sequence of pitches stated by the soprano and tenor is as follows:

\[
\begin{array}{cccccccc}
1 & 2 & 3 & 4 & 5 & 6 & 7 \\
C & D & G & E & C & D & A \\
\end{array}
\]

As can easily be seen, the first three pitches, as well as the last three pitches, are the motivic considerations formerly expressed, (major second and perfect fourth). Deletion of the two outside pitches of this sequence will produce the triad G E C. This triad has a counterpart in the alto and bass sequence, in that the second, third and fourth tones are the tonal inversion of the triad stated by the soprano and tenor. The sequence of tones stated by the alto and bass are as follows:

\[
\begin{array}{cccccccc}
1 & 2 & 3 & 4 & 5 & 6 & 7 \\
B^b & A & F & D & G & C \\
\end{array}
\]

This leaves the tones B^b G C in this particular sequence, which are, of course, the exact same pitch sequence (using interversion) as Motive II. The relationship of the alto and bass to the soprano and tenor, and, in turn, their cumulative relationship to Motives I and II of the original cell is now apparent.

The extraordinary motivic relationships can be further appreciated if one considers the close affinity existing
between the instrumental and vocal statements of the work. The most obvious illustration of this device occurs in the very beginning of the work. [cf. Figure 24 and Figure 25.]

The retrograde of Motive I is F C D. This motive appears in the soprano and tenor. The retrograde pitch sequence of trumpet I is B\textsuperscript{b} F E\textsuperscript{b} G. The motive structure of this sequence is B\textsuperscript{b} F E\textsuperscript{b}. This pitch sequence is, of course, the inversion of Motive I (soprano and tenor). Even if one were to include the pitch G of the trumpet statement, the inversion process would still be in operation. The following diagram will make this sufficiently clear.

\begin{align*}
\text{Retrograde of Soprano and Tenor} & \quad F \ C \ D \ F \\
\text{Retrograde of Trumpet I} & \quad B\textsuperscript{b} \ F \ E\textsuperscript{b} \ G
\end{align*}

As soprano and tenor descend a fourth, trumpet I ascends a fifth; soprano and tenor ascend a second, trumpet I descends a second; soprano and tenor descend a sixth, trumpet I ascends a third. Motive II appears in the alto and bass, (B\textsuperscript{b} C G F). The pitch sequence of trombone II is B\textsuperscript{b} E\textsuperscript{b} C F. Inversion will produce Motive II transposed down a perfect fifth (E\textsuperscript{b} F C B\textsuperscript{b}). The pitch sequence of trumpet III is B\textsuperscript{b} A\textsuperscript{b} F E\textsuperscript{b} (without repetition of the B\textsuperscript{b}). This is also Motive II interverted: i.e., A\textsuperscript{b} B\textsuperscript{b} F E\textsuperscript{b} (Transposed a major second). Trombone III answers trumpet
III and, therefore, is related to Motive II and the alto and bass.

The pitch sequence of trombone I is $B_b G E_b C$. One relationship is rather obvious in that pitches 1, 2, and 4 are Motive II in toto ($B_b C G$). This pitch sequence is also representative of Motive I. Deleting $G$ and placing the last pitch ($C$) first, will produce Motive I transposed a major second ($C B_b E_b$). The pitch sequence of trumpet II is $B_b E_b C$. Again, placing the last pitch first will succeed in displaying Motive I transposed a major second ($C B_b E_b$).

The procedure just completed demonstrates that all instrumental parts are related to the vocal scoring and vice-versa. This procedure further suggests that the progenitor of unity is indeed the fourth relationship vertically and the interval of the fourth and second horizontally.

An illustration of the exclusive use of the unitary relationships discussed is apparent in the scoring of the trumpets and trombones in the middle of the composition.

[cf. Figure 27 measures 63-65.]

The reader may now observe that each instrument states the interval of a fourth or second linearly, almost excluding any other interval. The only exception to the use of the fourth or second (or their inversions) is the one instance of a third in measure 64. This is done, no doubt, to
solidify the motivic concentration of the composition; e.g.,
trumpet I states in measure 64 the pitches F E B D.

This is, of course, Motive II, transposed and derived
in the same manner as the original motivic cell B^b C G,
(trumpet I is therefore equivalent, using interversion;
i.e., D E B).

Vertically, the progenitor of unity is even more ap­
parent. Consider the following:

<table>
<thead>
<tr>
<th>Pitch Content</th>
<th>Measure</th>
<th>Beat</th>
</tr>
</thead>
<tbody>
<tr>
<td>E A D, G C F</td>
<td>63</td>
<td>2</td>
</tr>
<tr>
<td>B E A D G C F</td>
<td>63</td>
<td>3</td>
</tr>
<tr>
<td>B E A D G C F</td>
<td>64</td>
<td>1</td>
</tr>
<tr>
<td>B E A D G C F</td>
<td>64</td>
<td>2</td>
</tr>
<tr>
<td>B E A D G C</td>
<td>64</td>
<td>3</td>
</tr>
<tr>
<td>B E A D G C F</td>
<td>65</td>
<td>1-1/2</td>
</tr>
</tbody>
</table>

This short excerpt perhaps summarizes the unification
devices employed in the entire composition quite tersely.
All elements are present, including imitation, motivic de­
rivations, inversion, interversion, retrograde and, of course,
quartal aggregates.
6. "In My Craft or Sullen Art" by Billy Jim Layton

Biographical Sketch

Billy Jim Layton was born in Corsicana, Texas in 1924. Prior to obtaining his B.M. degree from the New England Conservatory of Music in 1948, his primary musical activity revolved around participation in school bands, and arranging for and playing clarinet and saxophone in jazz combos. Layton subsequently earned his M.M. degree from Yale University in 1950, and the Ph.D. from Harvard in 1960. His principal teachers were Francis Judd Cooke, Quincy Porter, and Walter Piston in composition, and Otto Gombosi and Nino Pirrotta in musicology.

Among the awards he has received are the Rome Prize, the Alfred M. Hertz travelling fellowship from the University of California at Berkeley, the Brandeis University Creative Arts Award, a Guggenheim fellowship, and grants from the National Institute of Arts and Letters, and the Thorne Music Fund.

Organizations that have commissioned him to compose works include the Koussevitsky Music Foundation and the Fromm Music Foundation. Dr. Layton is a member of various societies including the American Society of University Composers,

He is married to the former Euro Zeniov (1949). They have two children, a son, Alexis Roy, and a daughter, Daphne Niobe. After teaching for several years at Harvard, he was appointed in 1966 as the first Chairman of the Department of Music at the State University of New York at Stony Brook, a position he holds at present.
Excerpts from "In My Craft or Sullen Art" by Billy Jim Layton

Figure 34

Soprano

dead With their night - in - gales and psalms But for the

Alto

for the dead With their psalms But for the

Tenor

With their night - in - gales and psalms But for the

Bass

dead With their psalms But for the

From IN MY CRAFT OR SULLEN ART by Billy Jim Layton. Copyright 1964 by G. Schirmer, Inc. Used by permission.
Excerpts from "O Make Me A Mask" by Billy Jim Layton

Figure 35

From O MAKE ME A MASK by Billy Jim Layton.
Copyright 1964 by G. Schirmer, Inc. Used by permission.
Excerpts from "Twenty-Four Years" by Billy Jim Layton

Figure 36

From TWENTY-FOUR YEARS by Billy Jim Layton.
Copyright 1964 by G. Schirmer, Inc. Used by permission.
Excerpts from "In My Craft or Sullen Art" by Billy Jim Layton

Figure 37

From IN MY CRAFT OR SULLEN ART by Billy Jim Layton. Copyright 1964, by G. Schirmer, Inc. Used by permission.
From IN MY CRAFT OR SULLEN ART by Billy Jim Layton. Copyright 1964, by G. Schirmer, Inc. Used by permission.
Analysis of "In My Craft or Sullen Art"

by Billy Jim Layton

This composition is the first in a series of musical settings of three Dylan Thomas poems. The three choruses are intended to be performed together, but individual performance is acceptable, according to the composer. The other choruses are "O Make Me a Mask" (1954), and "Twenty-Four Years" (1955). This particular chorus was chosen for primary analysis because of the fact that, although it is the first in the set, it was the last to be composed (1956). Perusal of the two remaining compositions substantiated the fact that all major compositional devices employed in the selected composition are also utilized in the rest of the set. Two short excerpts from "O Make Me a Mask" and "Twenty-Four Years" are provided in order to reaffirm the cumulative summation characteristics of "In My Craft or Sullen Art."

Predilection for certain intervals in both the linear and vertical design is prominent in all three compositions. These intervals are seconds and fifths. Various permutations of these intervals are exploited throughout the composition. For example, the interval of the second may be scored as a seventh (inversion), or as a ninth (octave displacement). The interval of the fourth (or fifth) is found most often in the choral scoring, particularly at cadential moments. The
composer demonstrates a particular preference for successive seconds.

Layton admirably retains the common bond of unification, i.e., seconds and fifths in each of the compositions. Seemingly diverse elements increasingly codify the cellular properties of this intervallic structure, i.e., permutations of seconds and fifths. Although various intervallic relationships have previously been discussed as contributing agents in revealing unity, many aspects of the Grundgestalt of this particular composition ("In My Craft or Sullen Art") seem to have greater significance in terms of specific intervals functioning as unitary elements. The tight integrating dimensions of the composition suggest that attention be drawn to this definitive frame of reference, which is apparently the primary progenitor of unity. Because the analytical connotations of these works take this specific course does not imply in the least that other devices within the cellular spectrum are non-existent. On the contrary, other devices such as interversion (compare last three notes of cadence in Figure 34, soprano part; and Figure 36, tenor part), motivic retrograde (compare last three notes of cadence in Figure 36, soprano part and Figure 35, bass part), and other devices, just as noteworthy, continually appear as manifestations of the proposed central Einfälle of the
composition. Investigation by the reader will, no doubt, confirm the foregoing as well as establish other relational properties to be discussed presently. [cf. Figure 34, measures 32 and 33 of "In My Craft or Sullen Art": Figure 35, measures 70-73 of "O Make Me a Mask"; and Figure 36, measures 72-74 of "Twenty-Four Years".]

It will be noticed that the soprano line excerpt of "O Make Me a Mask," and Twenty-Four Years," is rhythmically different, but is sequentially identical pitchwise, _vis_. C# D# E#, which is, of course, an example of successive seconds mentioned above.

The permeation of seconds (or their permutations) and fifths, or fourths, is quite apparent in the three compositions. Some of these are noted in the following excerpt from "Twenty-Four Years."

<table>
<thead>
<tr>
<th>Voice or Instrument</th>
<th>Measures</th>
<th>Pitches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soprano</td>
<td>72-74</td>
<td>D# C# D# E#</td>
</tr>
<tr>
<td>Alto</td>
<td>72-74</td>
<td>G# A# A# A</td>
</tr>
<tr>
<td>Tenor</td>
<td>72-74</td>
<td>E D B C#</td>
</tr>
<tr>
<td>Bass</td>
<td>72-74</td>
<td>A E E D C</td>
</tr>
<tr>
<td>Trumpet I</td>
<td>72</td>
<td>C# D# E</td>
</tr>
<tr>
<td>Trumpet I</td>
<td>72-73</td>
<td>F# F</td>
</tr>
<tr>
<td>Trumpet I</td>
<td>74-75</td>
<td>E F D♭ C</td>
</tr>
</tbody>
</table>
Comparison of this linear development of seconds and fifths with the excerpts from "O Make Me a Mask" and "In My Craft or Sullen Art" will substantiate the predominant use of these intervallic relationships in all three compositions. The verticalization of these intervals (second and its permutations, particularly seventh and ninth and fourth or fifth) is also observable in these excerpts. The excerpt from "O Make Me a Mask" demonstrates the device of employing the

<table>
<thead>
<tr>
<th>Voice or Instrument</th>
<th>Measure</th>
<th>Pitches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trumpet II</td>
<td>72</td>
<td>B A# G# F#</td>
</tr>
<tr>
<td>Trumpet II</td>
<td>73</td>
<td>A# B C#</td>
</tr>
<tr>
<td>Trumpet II</td>
<td>74</td>
<td>Db C Bb A Bb</td>
</tr>
<tr>
<td>Horn I</td>
<td>72</td>
<td>B C# D</td>
</tr>
<tr>
<td>Horn I</td>
<td>73</td>
<td>D C#</td>
</tr>
<tr>
<td>Horn I</td>
<td>74</td>
<td>C# D E</td>
</tr>
<tr>
<td>Horn II</td>
<td>72</td>
<td>F# E</td>
</tr>
<tr>
<td>Horn II</td>
<td>72-73</td>
<td>E B</td>
</tr>
<tr>
<td>Horn II</td>
<td>73-74</td>
<td>B A</td>
</tr>
<tr>
<td>Horn II</td>
<td>74</td>
<td>A G F</td>
</tr>
<tr>
<td>Trombone I</td>
<td>72-73</td>
<td>A A♭</td>
</tr>
<tr>
<td>Trombone I</td>
<td>73-74</td>
<td>A♭ B♭</td>
</tr>
<tr>
<td>Trombone II</td>
<td>72-73</td>
<td>A♭ B♭</td>
</tr>
<tr>
<td>Trombone II</td>
<td>73-74</td>
<td>B♭ C</td>
</tr>
</tbody>
</table>
intervals as aggregate formations. This device is also applicable to the other compositions in the set, as can be seen by investigation of the music at hand.

Aggregates Contained in Excerpt from "O Make Me a Mask"

M is equivalent to measure involved.
P.C. is equivalent to pitch content quality of the aggregate.
"O" signifies the interval of the outside voices (soprano and bass).
"I" signifies the interval of the inside voices (alto and tenor).
The interval indicated is reduced to simple if compound in spacing. [cf. excerpt from "O Make Me a Mask"]

Scoring of Vocal Aggregates in Excerpt from "O Make Me a Mask"

<table>
<thead>
<tr>
<th>M</th>
<th>P.C.</th>
<th>O</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>70, beat 1</td>
<td>major seventh</td>
<td>fifth</td>
<td>fourth</td>
</tr>
<tr>
<td>70, beat 2</td>
<td>fifth sequence</td>
<td>fourth</td>
<td>fourth</td>
</tr>
<tr>
<td>71, beat 1+2</td>
<td>major seventh</td>
<td>fourth</td>
<td>fourth</td>
</tr>
<tr>
<td>72, beat 1</td>
<td>second sequence</td>
<td>fifth</td>
<td>second</td>
</tr>
<tr>
<td>72, beat 2</td>
<td>major seventh</td>
<td>sixth</td>
<td>seventh</td>
</tr>
<tr>
<td>73, beat 1+2</td>
<td>fifth sequence</td>
<td>second</td>
<td>fifth</td>
</tr>
</tbody>
</table>
Scoring of Instrumental Aggregates in Excerpt from "O Make Me a Mask"

<table>
<thead>
<tr>
<th>M</th>
<th>P.C.</th>
<th>O</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>70, beat 1</td>
<td>major seventh</td>
<td>fifth</td>
<td>fifth</td>
</tr>
<tr>
<td>71, beat 2</td>
<td>minor seventh</td>
<td>fifth</td>
<td>fourth</td>
</tr>
<tr>
<td>72, beat 1/4 of 1</td>
<td>minor triad</td>
<td>plus major seventh</td>
<td>fifth</td>
</tr>
<tr>
<td>72, beat 1/2 of 1</td>
<td>second sequence</td>
<td>plus fourth</td>
<td>(E F# G# C#)</td>
</tr>
<tr>
<td></td>
<td>fourth sequence</td>
<td>plus seventh</td>
<td>(G# C# F# E)</td>
</tr>
<tr>
<td>73, beat 1/4 of 2</td>
<td>minor triad</td>
<td>plus major seventh</td>
<td>third</td>
</tr>
<tr>
<td>73, beat 1/2 of 2</td>
<td>fifth sequence</td>
<td>second</td>
<td>sixth</td>
</tr>
</tbody>
</table>

It is now evident that the three works share similar points of departure compositionally.

The remainder of the analysis deals primarily with the relationships of "In My Craft or Sullen Art."

One of the more interesting devices used in the composition is Layton's direction to the brass to "slur up to the note but do not actually sound it." [cf. Figure 37, measures 13-15.]
It is particularly noteworthy that in each instance that this device is used, another instrument simultaneously sounds the pitch notated. It will also be noticed that the instruments are stating the unification intervals of a seventh or a ninth in every instance. [cf. also Figure 38, measures 16, 17, 18.] In some cases, these intervals are implied but not articulated, as was pointed out above. It is evident that the composer is applying pointilistic effects in order to enrich the texture. The use of mutes is another indication of the composer's awareness of the color possibilities of brass instruments in combination (specific types of mutes are not designated). One might very easily gain the impression that the individual choral scoring and the individual brass scoring could each stand alone as a separate composition.

The kind of treatment where both the choral and brass writing are composed idiomatically, yet independent of each other, is the most demanding, but fulfilling, type of scoring. The cohesiveness of unity established through the employment of such scoring is a tribute to the creative ability of the composer.

Many typical choral devices are employed during the course of the composition, including text painting. The most notable example occurs in the passage "with all their
griefs in their arms." [cf. 1st beat, measure 13, Figure 37;]

It is significant that the soprano, alto, and tenor are singing their lowest note in the composition at this point, (the first beat of measure 13 represents the culmination of the syllabic setting of "griefs in their arms"). The spacing of this cadence also deserves attention, as it will be subsequently demonstrated that the cadential scoring is of prime importance in establishing the unity motif. Suffice it to say that the intervallic relationships are reminiscent of "O Make Me a Mask" and "Twenty-Four Years."

Another choral device frequently employed in the set is that of emphasizing the diction by elimination of one or more vocal parts. Figure 37, measures 14 and 15, and Figure 38, measures 17 and 18 illustrate this quite clearly.

There are many other idiomatic devices employed in the composition, both vocally and instrumentally. The area of most concern is the generating cell which is responsible for the Grundgestalt of the composition. It has been suggested that the intervals of the second and fifth, or their permutations, serve as unifying elements. The homophonic sections of the choral scoring employ these intervals almost exclusively. An instance of a purely homophonic setting occurs in measures 8 and 9 of "In My Craft or Sullen Art."
This point in the composition also functions as the first
definitive cadence. The pitches employed from the bass up
to the soprano are F♯ C♯ D B. Variations of these inter-
vallic relationships serve as progenitors of unity during
similar settings of cadential and quasi-cadential moments.

It is quite significant in this regard that the only
use of accent (>) in the choral scoring occurs in the
tenor part in measures 14, 15, 18, and 19. The pitches
accented are D ♯ A ♯ B ♯ G. The accented pitches are exact
intervallic duplications of the cadential--quasi-cadential
portions of the composition. No other parts are articulated
in any manner. One might be inclined to speculate that the
composer intentionally scored the accents in order to provide
a key to the cellular aspects of the composition.

The chart below demonstrates the generating cell
(permutations of intervallic content) in the vocal scoring
of the composition. The symbolization used in the chart is
to be interpreted in the following manner:

1. Q.C. is an abbreviation for quasi-cadence.
2. C. is an abbreviation for cadence.
3. W. is a symbol indicating a certain pitch relationship
   further defined in the chart and in discussion to
   follow.
4. \( W^m \) is a symbol indicating a modified version of \( W \). The pitches in this aggregate have the same intervallic relationships as those in \( W \) except major intervals become minor and minor intervals become major sequentially, when compared to \( W \).

5. \( X \) is a symbol indicating a certain pitch relationship further defined in the chart and in discussion to follow.

6. \( X^m \) is a symbol indicating a modified version of \( X \). The pitches in this aggregate have the same characteristics as \( X \) except for the employment of a major second inside instead of a minor second as in \( X \).

7. \( Z \) is a symbol indicating a pitch relationship consisting of pairs of fifths (e.g., \( \text{Ab Eb Bb F} \)). This sound formation is always related to the culmination of forward thrust. [Cf. symbol number 10.]

8. \( O \) is a symbol referring to the intervallic relationship of the outside voices. The intervals indicated are reduced to simple intervals, if compound, as this causes less confusion, and relational properties remain intact.

9. \( I \) is a symbol referring to the intervallic relationship of the inside voices.

10. \(-13-, -20+21, -25-, -40-\) indicate measures in the composition that possess connotations of separation and finality textually. The use of rests is the device usually employed in these instances.
Figure 39

Cellular Properties of Vocal Scoring

"In My Craft or Sullen Art"

<table>
<thead>
<tr>
<th>Staticism</th>
<th>Measure</th>
<th>Pitch Content</th>
<th>Aggregate Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q.C.</td>
<td>4</td>
<td>[W] A E♭ D G</td>
<td>0 = [m7] I = [M3]</td>
</tr>
<tr>
<td>Q.C.</td>
<td>7</td>
<td>[Wm] A B E G</td>
<td>0 = [m7] I = [P4]</td>
</tr>
<tr>
<td>C.</td>
<td>9</td>
<td>[X] F♯ C♯ D B</td>
<td>0 = [P4] I = [m2]</td>
</tr>
<tr>
<td>Q.C.</td>
<td>10</td>
<td>[X] E B C A</td>
<td>0 = [P4] I = [m2]</td>
</tr>
<tr>
<td>Q.C.</td>
<td>16</td>
<td>[Xm] E (C) D A</td>
<td>0 = [P4] I = [M2]</td>
</tr>
<tr>
<td>Q.C.</td>
<td>22</td>
<td>[X] E♭ F ♭ E♭</td>
<td>0 = [P4] I = [m2]</td>
</tr>
<tr>
<td>C.</td>
<td>-25-</td>
<td>[Z] E♭ F A♭ C</td>
<td>0 = [M6] I = [m3]</td>
</tr>
<tr>
<td>C.</td>
<td>33</td>
<td>[W] C♯ D F♯ B</td>
<td>0 = [m7] I = [M3]</td>
</tr>
<tr>
<td>Q.C.</td>
<td>34</td>
<td>[X] E B C A</td>
<td>0 = [P4] I = [m2]</td>
</tr>
<tr>
<td>C.</td>
<td>36</td>
<td>[W] C D♭ F E♭</td>
<td>0 = [m7] I = [M3]</td>
</tr>
<tr>
<td>C.</td>
<td>38</td>
<td>[X] E♭ D♭ C♭ A♭</td>
<td>0 = [P4] I = [m2]</td>
</tr>
</tbody>
</table>

Comparison of [X] and [W]

Examples - Measure 9 and Measure 33

Measure 9 ( [X] ) = F♯ C♯ D B
Measure 33 ( [W] ) = C♯ D F♯ B

The relationship of these two isolated measures can
readily be seen, because of the exact pitches employed by the composer. The process generated is that of a rotational concept which produces many permutations of the basic "set." As can be noted from the chart, the composer restricts the possibilities of this device to a particular preference of aggregate formations; namely the designations [W] and [X], (the aggregate [Z] is utilized as a sectional device). The transposition of these aggregates produces the remaining pitches as used at the various points of staticism.

Since measure 34 ([X]) and measure 36 ([W]) are in close proximity, the relationship can easily be seen in Figure 39. The P.C. E B C A ([X]) in measure 34 is the same as the aggregate C D^b F B^b ([W]) in measure 36 rotated and transposed.

\[
\begin{align*}
F & \quad C & \quad D^b & \quad B^b & = & \quad E & \quad B & \quad C & \quad A & \text{ at the interval m2 or } M7 \\
B & \quad C & \quad E & \quad A & = & \quad C & \quad D^b & \quad F & \quad B & \text{ at the interval m2 or } M7
\end{align*}
\]

The close relationship of [W] and [X] to the structure designated in the chart as [W^m] and [X^m] (a modified version of the original aggregate) can be perceived upon closer inspection. In the case of [W] and [W^m] the intervals employed remain constant, utilizing an inversion process, i.e., major becomes minor, minor becomes major, and perfect inverts.

It is significant that the outer voices maintain the same interval (m7). In the case of [X] and [X^m], a similar
process is effected except the interval of the fifth re-
 mains without inversion. The relationship of the outer 
 voices again remains exact, (P4). This point in the 
 analysis, ([Xm] measure 16) was considered in the category 
 established, even though the tenor pitch C starts a new 
 phrase. It is highly significant that the intervallic and 
 spatial relationships are present even in this slight depar-
 ture from the original texture considerations, hence the 
 inclusion of this measure as a factor in surveying the 
 particulars involved.

The repetitive characteristics of the intervallic 
 relationships (sevenths, ninths, fifths, fourths), found in 
 the brass scoring further substantiates the Urkeim principle 
 employed linearly.

The source of unity can be synthesized then, as a 
 concept of rotational arrays utilizing permutations of the 
 intervals contained in the aggregates designated as [W], [X], 
 and [Z].

It has been demonstrated that these aggregates ( [W], 
 [X], [Z] ), have relational properties and may be considered 
 as developing from the same organic cell.

The original cell contains the intervals of the second 
 and fifth. Derivations of the cell are applied in various 
 ways, including those permutations demonstrated.
The three Dylan Thomas poems represent a major contribution of the literature devoted to brass and choral combinations.
CHAPTER IV

ORIGINAL COMPOSITION

Analysis and Commentary

The musical setting of the Communion Service of the Episcopal Church was prompted by a number of factors. Some of these include:

1. The performance possibilities that such a composition provides.

2. The unwarranted neglect that some contemporary composers have shown towards scoring compositions which employ the combination of brass and voices for such a liturgical format.

3. The need for a contemporary setting of the Episcopal Communion Service because of the changing liturgy; and to provide a rendition of the Communion Service that may be performed for special occasions during the ecclesiastical year, or as a recurring, potentially viable force in the life of the Episcopal Church in the United States of America.

Brass Scoring

The instruments chosen represent various potential color combinations. The upper brass (two trumpets in C, two Flügelhorns in C) may be likened to the sopranos and altos of the vocal scoring. (Trumpets and Flügelhorns in B♭ may be used if specified instruments are not available.) The lower
brass (two $B^b$ tenor trombones, two $B^b$ bass trombones, and a four-valve $BB^b$ tuba) may be likened to the tenors and basses of the vocal scoring. These nine brass instruments are compositionally divided into various "choirs" or concertante sections as the Communion Service progresses. This is done in an effort to change effectively the texture as the result of textual considerations, and to prevent both a monochrome effect and problems concerning the endurance of the performers. These choirs of brasses periodically appear in kaleidoscope fashion. Some of these choir combinations include the following:

**Choir I**

A. Two trumpets  
   One Flügelhorn

B. One Flügelhorn

C. Two bass trombones

Tuba

**Choir II**

A. Two trumpets  
   Two Flügelhorns

B. Two tenor trombones

Two bass trombones

**Choir III**

A. Two Flügelhorns

B. Two tenor trombones

C. One bass trombone

Tuba
Choir IV

A. Trumpet  
   Flügelhorn  
   Tenor trombone

B. Tenor trombone  
   Bass trombone  
   Tuba

Choir V

Two tenor trombones  
Two bass trombones  
Tuba

Choir VI

(Tutti) Full Brass Choir

Choir VI is usually reserved for interludes, endings, and climactic moments occurring in the course of the composition. The remaining choirs periodically appear throughout the work, although representation of every choir is not necessarily present in each movement.

The use of mutes is another device employed in order to vary the texture and exploit the tonal spectrum available. Contrary to the practice of a majority of contemporary composers, specific mutes are designated in the score. The mutes indicated reflect a desired sonority at the particular musical moment of employment. At times, some instruments are muted and some are designated "open." This color combination provides a basic three-choir texture, i.e., I - instruments open, II - instruments muted, III - some instruments muted, some instruments open. The mutes utilized are the following:
Trumpet - straight mute, cup mute, Harmon mute.

In the case of the Harmon mute, the plunger should always be pulled out, except where designated otherwise in the score.

Flügelhorn - The Flügelhorn infrequently employs a mute, due to a desired open tone quality (which is quite mellow) and the practical consideration of the tapered, conical bore. The unique sound of the Flügelhorn, with its definite contrast to the brightness of the cylindrical trumpet, prompted the use of this neglected but valuable member of the brass choir.

Tenor Trombone - Straight mute, cup mute, solo-tone mute.

In the case of the cup mute, it is preferable that an aluminum type be utilized. This request is also applicable to the trumpet.

Bass Trombone - Cup mute, straight mute, solo-tone mute.

The same comments apply here as in the case of the tenor trombone. The tenor trombone with F attachment should not be used as a substitute for the bass trombone, as the particular timbre of the bass trombone (tenor-bass trombone) is the quality desired. Also, the tessitura in most instances is certainly not idiomatic for the tenor trombone with F.
attachment. In addition, a bass trombone possessing an E slide is absolutely necessary in order to sound certain pitches.

**Tuba - Straight mute.**

There is ample time for the tuba player to engage or disengage the mute in muted or non-muted passages. The four-valve model tuba (or five or six) is a vital necessity in order to render a performance relatively free of intonation discrepancies. It will be noticed in the score that in some instances, a specific fingering has been given for the benefit of the tuba player, in order that he be reminded of preferred fingerings for better intonation purposes. [cf. first page of "Kyrie",] The reader will, no doubt, notice that the tuba part is written 8va bassa. [cf. first page "Introit",] This is done in order to meet certain marginal requirements of the doctoral dissertation. It is hoped that the octave transposition down, in order to perceive the actual pitch, will not prove cumbersome if one is accustomed to the normal "sounding as written" notation.
Vocal Scoring

A syllabic setting of the text is generally employed in recognition of the fact that all indications of present and future liturgical practice point to the concept of brevity. This type of setting is, additionally, characterized by an aesthetic interest in suggesting, through choice of texture, the worshipful meaning of the words. The choral texture employed is largely dependent upon the particular text content as well as the comparative length of a specific movement. The reservoir of possibilities provided by the subject of Holy Communion made many choral settings feasible. Opportunities for isometric and polymetric treatment presented themselves, and are therefore utilized in accordance with liturgical and musical considerations. Various vocal combinations are derived from the basic SATB texture. These combinations include the following:

Choir I - Full SATB choir (Tutti)

This texture predominates because of balance considerations. The sonorous quality of a full SATB choir presents opportunities for isolated a cappella scoring, and an element of contrast with either the concertante brass scoring, or full brass choir. A choir of forty or
more members would ideally be suited to the aspects of balance.

**Choir II**  
A. Alto and tenor  
B. Soprano and bass

This combination is usually utilized in polyphonic settings, or the very few sections that employ repetitive textual phrases. [cf. "Introit"].

**Choir III**  
A. Tenor and bass  
B. Soprano and alto

This combination is similar to Choir II of the brass scoring, in which the contrast is simply upper voices versus lower voices. [cf. "Agnus Dei"].

**Choir IV**

Unison choir (octaves between soprano-alto and tenor-bass, or other octave-unison relationships).

This combination is employed whenever diction emphasis is required, or because of a particular texture desired, [cf. "Gloria"]; The direction in the "Gloria" movement which states "to be sung almost like Sprechstimme", is to be interpreted in the following manner: in order to provide an element of percussiveness, approximately one-third of the choir members should speak the words at this point in a crisp, chanting manner. Another one-third of the choir members should whisper loudly, emphasizing the
consonants rather than the vowels of the words. The remaining one-third of the choir should sing the pitches as notated, but in a recitative style. Each of the three choirs should have, as nearly as possible, an equal number of members, with a representative grouping of sopranos, altos, tenors, and basses participating in each choir. In the probable event of odd distribution numerically, the preferred emphasis should be placed on the speaking choir.

**Choir V - Divisi SATB choir**

This combination is used in only one instance, as the desired effect was the gradual condensing of the prevailing texture. [cf. "Alleluia"];]

**Order of Movements**

Although the text is based on the *Book of Common Prayer*, the movements represent the proposed order of worship of the new liturgy of the Episcopal Church in the United States. Thus there is present, in the formal aspects of the composition, a bond with the past as well as the future. The music is intended to serve either as part of the "old" liturgy, or in whatever direction the "new" liturgy may ultimately progress. In the latter instance, textual differences may be easily solved by application of
the principles of Anglican chanting known to all Episcopalian. Briefly, if an extra syllable is desired, subdivision of the particular note designated in the score will produce an adequate presentation of the text. By the same token, if a syllable is to be omitted, the opposite procedure should be generated.

The musical setting of the service of Holy Communion may then be utilized as a functional entity regardless of the particular liturgy practiced in various areas of the United States.

During the church year in seasons of penitence, the "Gloria" and "Alleluia" may be omitted. In the seasons in which a more jubilant mood is warranted, the "Kyrie" and "Agnus Dei" may be omitted. The remainder of the Order of Holy Communion (Credo, the Lord's Prayer, etc.) should either be spoken or intoned. If intoned, the "Sprechstimme" section of the "Gloria" may be utilized for this purpose. In this event, all parts should be sung as notated rather than performed as would be the case in a normal rendition of the "Gloria."

In a concert performance of the composition, all movements should be performed in the order listed on the title page of the work, with a slight pause between movements.
Source of Unity

The cellular basis of the Episcopal Communion Service is instigated by a twelve-tone row of which various permutations are derived, and then applied during the course of the composition. The row is semi-combinatorial in that the two hexachords of the prime set are contained in the inversion at the minor third, but in reverse order. This particular property is unique among combinatorial sets because of the exact sequence of pitches contained in the respective hexachords.

In addition to the combinatorial aspects of the row, certain intervallic relationships manifest themselves, which serve as points of departure in generating unitary cohesiveness. Segmentation of the prime set produces characteristic interval properties that form the nucleus of motive development and transformation. Segments that are used in the composition consist of four groups of three-note cells, three groups of four-note cells, two groups of six-note cells (hexachords), and a special grouping forming the Urkeim of the composition, which consists of the four inside pitches of each hexachord and the two outside pitches of each hexachord. This special grouping is responsible for the majority of aggregate formations and motivic nests which appear in each movement of the composition. A particular pair of row
forms are employed as a cellular basis for each movement of the work. This device may be readily perceived by consulting the set complex matrix of the composition accompanied by the specific row forms used in the various movements. [Cf. Figure 40.]

**Figure 40**

Set Complex Matrix for the Episcopal Holy Communion Service

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>0</td>
<td>E♭</td>
<td>B♭</td>
<td>A</td>
<td>F</td>
<td>G</td>
<td>A♭</td>
<td>F♯</td>
<td>B</td>
<td>C</td>
<td>E</td>
<td>D</td>
</tr>
<tr>
<td>1</td>
<td>A♭</td>
<td>E♭</td>
<td>D</td>
<td>B♭</td>
<td>C</td>
<td>C♯</td>
<td>B</td>
<td>E</td>
<td>F</td>
<td>A</td>
<td>G</td>
<td>F♯</td>
</tr>
<tr>
<td>2</td>
<td>A</td>
<td>E</td>
<td>E♭</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>C</td>
<td>F</td>
<td>F♯</td>
<td>B♭</td>
<td>A♭</td>
<td>G</td>
</tr>
<tr>
<td>3</td>
<td>C♯</td>
<td>A♭</td>
<td>G</td>
<td>E♭</td>
<td>F</td>
<td>F♯</td>
<td>E</td>
<td>A</td>
<td>A♭</td>
<td>D</td>
<td>C</td>
<td>B</td>
</tr>
<tr>
<td>4</td>
<td>B</td>
<td>F♯</td>
<td>F</td>
<td>C♯</td>
<td>E♭</td>
<td>E</td>
<td>D</td>
<td>G</td>
<td>A♭</td>
<td>C</td>
<td>B♭</td>
<td>A</td>
</tr>
<tr>
<td>5</td>
<td>B♭</td>
<td>F</td>
<td>E</td>
<td>C</td>
<td>D</td>
<td>E♭</td>
<td>C♯</td>
<td>F♯</td>
<td>G</td>
<td>B</td>
<td>A</td>
<td>A♭</td>
</tr>
<tr>
<td>6</td>
<td>C</td>
<td>G</td>
<td>F♯</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>E♭</td>
<td>A♭</td>
<td>A</td>
<td>C♯</td>
<td>B</td>
<td>B♭</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>D</td>
<td>C♯</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>B♭</td>
<td>E♭</td>
<td>E</td>
<td>A♭</td>
<td>F♯</td>
<td>F</td>
</tr>
<tr>
<td>8</td>
<td>F♯</td>
<td>C♯</td>
<td>C</td>
<td>A♭</td>
<td>B♭</td>
<td>B</td>
<td>A</td>
<td>D</td>
<td>E♭</td>
<td>G</td>
<td>F</td>
<td>E</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>A</td>
<td>A♭</td>
<td>B♭</td>
<td>E♭</td>
<td>G</td>
<td>F</td>
<td>B♭</td>
<td>B</td>
<td>E♭</td>
<td>C♯</td>
<td>C</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
<td>B</td>
<td>B♭</td>
<td>F♯</td>
<td>A♭</td>
<td>A</td>
<td>G</td>
<td>C</td>
<td>C♯</td>
<td>F</td>
<td>E♭</td>
<td>D</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>C</td>
<td>B</td>
<td>G</td>
<td>A</td>
<td>B♭</td>
<td>A♭</td>
<td>C♯</td>
<td>D</td>
<td>F♯</td>
<td>E</td>
<td>E♭</td>
</tr>
</tbody>
</table>

---

**Introit**

- Kyrie
- Gloria
- Gradual
- Sanctus

**Agnus Dei**

- Alleluia
It will be noticed that there is a pattern of intervallic content existing between the pairs of row forms chosen for each movement. P0 and I6, and I0 and P6 are a minor third or a major sixth apart. Moreover, P0 and P6 share this same relationship as well as I0 and I6. The symmetry here is obvious. This relationship (minor third) may then find fruition in whatever movement the pairs of row forms are employed, (in this instance, consult the "Introit" and "Alleluia" movements). The "characteristic interval relationship" is a device providing unification in an individual movement as well as the composition as a whole. The other "character intervals" are as follows:

<table>
<thead>
<tr>
<th>Minor Third or Major Sixth</th>
<th>Minor Second or Major Seventh</th>
</tr>
</thead>
<tbody>
<tr>
<td>P0 - I6</td>
<td>P1 - I7</td>
</tr>
<tr>
<td>I0 - P6</td>
<td>P2 - I8</td>
</tr>
<tr>
<td></td>
<td>P3 - I9</td>
</tr>
<tr>
<td></td>
<td>P4 - I10</td>
</tr>
<tr>
<td></td>
<td>P5 - I11</td>
</tr>
</tbody>
</table>

Other interval relationships may be derived from the pairs of row forms, notably the second, third, or fifth. It is significant that these intervals are the intervals chosen
as "character intervals." Rotation of the prime row will yield possible multi-interval combinations. This device is used sparingly in the composition. Certain moments, such as instrumental interludes and endings, are the recipients of this device. Generation of the odd and even isolated pitch members of the prime set will demonstrate a potential point of departure in this regard.

Figure 41
Odd Members of the Prime Set

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>3</th>
<th>5</th>
<th>7</th>
<th>9</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B♭</td>
<td>F</td>
<td>A♭</td>
<td>B</td>
<td>E</td>
<td>C♯</td>
</tr>
<tr>
<td>5th</td>
<td>m3rd</td>
<td>m3rd</td>
<td>5th</td>
<td>m3rd</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Even Members of the Prime Set

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>2</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E♭</td>
<td>A</td>
<td>G</td>
<td>F♯</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>dim.5th</td>
<td>M2nd</td>
<td>m2nd</td>
<td>aug.4th</td>
<td>M2nd</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Urkeim grouping mentioned previously also contains symmetrical intervallic relationships. The following diagram will perhaps enhance the concept presented.
Interpretation of above chart

X = Original cell motivically \([0^m]\)

\(X^I\) = Inversion of \([0^m I]\)

Z = Original cell vertically \([0^v]\)

\(Z^I\) = Inversion of \([0^v I]\)

\(X, X^I, Z\) and \(Z^I\) = Urkeim Grouping I

Y = Secondary cell motivically \([S^m]\)

\(Y^I\) = Inversion of \([S^m I]\)

W = Secondary cell vertically \([S^v]\)

\(W^I\) = Inversion of \([S^v I]\)

\(Y, Y^I, W\) and \(W^I\) = Urkeim Grouping II

The following chart displays the combinatorial aspects of \(P^0\) and \(I^6\), the pairs of row forms utilized in the composition; \(P^0\) and \(I^6\) segmented into four groups of three-note cells which reveal a characteristic intervallic relationship;
Figure 43

Original row and semi-combinatorial hexachord permutations

Pitches in order of row with motive omitted
PO segmented into three groups of four-note cells which reveal certain possible aggregate formations; and the cellular basis for aggregates that are predominant in the vertical dimensions of the work. Urkeim groupings I and II may be perceived more clearly. It will be profitable to compare the Set Complex Matrix (Figure 40) of the composition with Figure 43.

A comprehensive analysis of the "Introit" movement of the composition shall reveal the codification of the unifying procedures presented. Symbols used are those introduced previously. A similar analysis may be applied to succeeding movements.

**Figure 44**

Row Derivations Demonstrating Unifying Devices of "Introit"

\[ P_0 \rightarrow I6 \]

(Character Interval - m 3rd)

The terms in the chart indicate the following:

- **M.** - is equivalent to measure.

- **Choir** - indicates concertante division. (Refer to discussion formerly presented concerning symbolization.)

- **Texture** - indicates muting characteristics. (I is equivalent to "open" texture. II is equivalent to muted texture. III is equivalent to mixed texture.)
<table>
<thead>
<tr>
<th>M</th>
<th>Choir</th>
<th>Texture</th>
<th>Motivic Cell</th>
<th>Aggregate Cell</th>
<th>Urkeim</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I - C</td>
<td>I</td>
<td>[SM]</td>
<td>[OV]</td>
<td>I and II</td>
</tr>
<tr>
<td>2</td>
<td>I - C</td>
<td>I</td>
<td>P.C. O, 1, of po</td>
<td>[OV]</td>
<td>I</td>
</tr>
<tr>
<td>3</td>
<td>I - C, I - B, solo Flugelhorn</td>
<td>III</td>
<td>[OM]</td>
<td>[OV]</td>
<td>I and II</td>
</tr>
<tr>
<td>4</td>
<td>II - A, III - B, III - C</td>
<td>III</td>
<td>[SM]</td>
<td>[OV]</td>
<td>I and II</td>
</tr>
<tr>
<td>5</td>
<td>I - A, III - B, III - C</td>
<td>III</td>
<td>Odd member rotation of po</td>
<td>[OV]</td>
<td>I</td>
</tr>
<tr>
<td>6</td>
<td>II - B, III - A</td>
<td>III</td>
<td>[OV]</td>
<td>[OV]</td>
<td>I</td>
</tr>
<tr>
<td>7</td>
<td>III - A, I - A, tuba</td>
<td>I</td>
<td>[OV]</td>
<td>[OV]</td>
<td>I</td>
</tr>
<tr>
<td>8</td>
<td>I - A, III - A, B, C</td>
<td>I</td>
<td>[OMI] [SM] [OV] [W]</td>
<td>[OV]</td>
<td>I and II</td>
</tr>
<tr>
<td>9</td>
<td>VI (I - A, I - B, I - C)</td>
<td>I</td>
<td>[SM] [W]</td>
<td>[OV]</td>
<td>I and II</td>
</tr>
<tr>
<td>M</td>
<td>Choir</td>
<td>Motivic Cell</td>
<td>Aggregate Cell</td>
<td>Urkeim</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---------------</td>
<td>-----------------------</td>
<td>----------------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Silent</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>IV</td>
<td>[OM]</td>
<td>(unison)</td>
<td>I</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>IV</td>
<td>[OM] (continued)</td>
<td>(unison)</td>
<td>I</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>IV</td>
<td>[SM]</td>
<td>(unison)</td>
<td>II</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>IV, II - A</td>
<td>[OMI]</td>
<td>(unison)</td>
<td>I</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>II - A, II - B</td>
<td>[SM]</td>
<td>[SV]</td>
<td>II</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>II - A, II - B</td>
<td>[OMI] [SM]</td>
<td>[SV]</td>
<td>I and II</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>IV</td>
<td>[OMI]</td>
<td>(unison)</td>
<td>I</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>IV</td>
<td>[OMI]</td>
<td>(unison)</td>
<td>I</td>
<td></td>
</tr>
</tbody>
</table>
Motivic Cell - indicates basis for horizontal properties. Symbols are those introduced in the interpretations of the Urkeim grouping. [cf. Figure 42.]

Aggregate Cell - indicates the basis for vertical properties. Symbols are those introduced in the interpretations of the Urkeim grouping.

Arrow Direction - indicates a motivic cell vertically aligned or an aggregate cell horizontally aligned.

Urkeim - indicates grouping status, i.e., Urkeim grouping I or Urkeim grouping II. [cf. interpretation of Urkeim grouping.] [cf. Figure 42.]

P. C. - indicates pitch content.

The intent of the foregoing is to demonstrate several ways of approaching the analytical aspects of a composition, yet with the ultimate goal of extracting unity from the diversified elements of a composition. The measure by measure analysis just completed of the "Introit" is not meant to imply a suggested formal procedure in analysis. On the contrary, only after much deliberation was this approach deemed feasible, in light of the primary purpose of demonstrating the unity concept. The inclusion of this "method" should re-emphasize the proposal that unity may be revealed even in the utilization of what should be considered generally as a more limited procedure in analyzing music for the purpose of discovering the work's Grundgestalt. The important point here is that an individual analyst may
employ whatever "method" he deems necessary in order to extract what is considered by the writer the most relevant part of a composition—the Grundgestalt, Urkeim, or Source of Unity.
A MUSICAL SETTING

for the

ORDER OF HOLY COMMUNION

AS FOUND IN THE BOOK OF COMMON PRAYER
OF THE EPISCOPAL CHURCH IN THE UNITED STATES OF AMERICA

BY

JAMES E. STAFFORD

SCORED FOR

FOUR-PART CHORUS (SATB) 2 BB TENOR TROMBONES
2 TRUMPETS IN C 2 BB BASS TROMBONES
2 FLÜGELHORNS IN C BB TUBA (4 VALVE)

MOVEMENTS

Introit

Kyrie
Gloria

Gradual
Sanctus

Agnus Dei
Alleluia
INTROIT

Soprano

Alto

Tenor

Bass

Trumpets in C

Flügelhorns in C

Tenor trombones

Bass trombones

Tuba

J = 92

Al-le-lu-ia,

Al-le-lu-ia,

Al-le-lu-ia,

cup mute

cup mute

< >

< >

< >

< >

© 1971
James Edward Stafford
cresc. --------- mf

Lord, have mercy upon us.
Christ, have mercy upon us, upon us, upon us.
Christ, have mercy upon us.

Christ, have mercy upon us.

Christ, have mercy upon us.

Christ, have mercy upon us.
Lord, have mercy upon us.

(st. mute)

mf

legato

mf

st. mute

Cup mute

st. tone mute

st. mute

open
Gloria

And on earth, peace; good will towards men.

Glor-y be to God on high,

and on earth, peace; good will towards men.
we worship Thee. O give thanks,

We praise Thee, we bless Thee, we worship Thee. O give thanks.

We praise Thee, we bless Thee, we worship Thee, we glorify Thee.

Pull E slide
we give thanks to Thee for Thy great glory. O Lord God,
Heavenly King, God the Father almighty. O Lord, the only be-got-ten
Heavenly King, God the Father almighty. O Lord, the only be-got-ten
Heavenly King, God the Father almighty. O Lord, the only be-got-ten
Heavenly King, God the Father almighty. O Lord, the only be-got-ten

Faster *(see below chorus part)*

Faster

* Should be sung almost like Speeched theme, in recitative style.
way the sins of the world, have mercy upon us.

way the sins of the world, have mercy upon us.

way the sins of the world, have mercy upon us.

way the sins of the world, have mercy upon us.
Thou that tak-est a-way the sins of the world, re-ceive our

---. Re-
c e i ve our

Harmon mute

Harmon mute

Harmon mute

Harmon mute

Pull E slide

Pull E slide
For Thou only art holi-
y, Thou only art the Lord.
Thou only, O Christ, with the Holy Ghost art most high in the glo-
cresc.

Thou only, O Christ, with the Holy Ghost art most high in the glo-
cresc.

Thou only, O Christ, with the Holy Ghost art most high in the glo-
cresc.

Thou only, O Christ, with the Holy Ghost art most high in the glo-

Thou only, O Christ, with the Holy Ghost art most high in the glo-

Thou only, O Christ, with the Holy Ghost art most high in the glo-

Thou only, O Christ, with the Holy Ghost art most high in the glo-

Thou only, O Christ, with the Holy Ghost art most high in the glo-

Thou only, O Christ, with the Holy Ghost art most high in the glo-

Thou only, O Christ, with the Holy Ghost art most high in the glo-

Thou only, O Christ, with the Holy Ghost art most high in the glo-

Thou only, O Christ, with the Holy Ghost art most high in the glo-
ry of God the Father

ry of God the Father

ry of God the Father

ry of God the Father

ry of God the Father

ry of God the Father

(E slide)
GRADUAL

\[ \text{\textit{d} = 92} \]

\[ \text{\textit{d} = 92} \]

\[ \text{\textit{Tacet}} \]

\[ \text{\textit{Tacet}} \]

\[ \text{\textit{Tacet}} \]

\[ \text{\textit{Tacet}} \]
Hosts.

... are full of thy glory.

Hosts.

Heaven and earth are full of thy glory.

Hosts.

Heaven and earth are full of thy glory.
Glory be to Thee, oh Lord most high.

Glory be to Thee, oh Lord most high.

Glory be to Thee, oh Lord most high.
Lamb of God, take away the sin of the world. Amen.
Lamb of God, that taketh away the sins of the world,
have mercy upon us; O Lamb of God, that
cresc. —
have mercy upon us; O Lamb of God, that
cresc. —
have mercy upon us; O Lamb of God, that
cresc. —
have mercy upon us; O Lamb of God, that
cresc. —
f c

(things, the

the sins of the

the sins of the

that take away

of God, that take away—the sins of the

V.5

God, that take away—the sins of the
sins of the world,
grant us thy peace.
(rit.)
sins of the world,
grant us thy peace.
world, grant us Thy peace.
(rit.)

W. 6

(rit.)

(rit.)

(rit.)

(rit.)

(rit.)
CHAPTER V

Summary, Conclusions, and Recommendations

Summary

The purpose of this study has been twofold.

1. To instigate interest in compositions written for voice and brass combination, and to encourage more composers to engage actively in writing for this particular combination.

2. To create interest in the method of analysis employed in the selected compositions, with the hope that its use may be applicable to other types of composition, and additionally, serve as a pedagogical stimulus in university courses in theory and composition.

It has been assumed that the reader is cognizant of terminology used in any discussion concerning contemporary music, and possesses some knowledge of fundamental scoring techniques involving voices and brass instruments. The works chosen for analysis were selected only after the employment of delimitations designed to yield a functional,
yet representative, grouping. The fact that some of these composers may not be well-known, underscores the need for more compositional activity in the area of voice and brass combination.

Conclusions

1. In the compositions selected for analysis certain integrating devices, as has been demonstrated, are prevalent. These devices include the following:

A. Cellular properties, such as motivic development and transformation, which tend to solidify seemingly diverse elements of a composition.

B. An affinity for quartal oriented vertical structures that are particularly evident in the brass scoring.

C. Unifying relationships existing in the framework of the cadence that may suggest a potential resource for demonstrating Grundgestalt features in other types of compositions by a variety of composers.

2. Devices usually associated with serial procedures such as inversion, interversion, retrograde, retrograde of the inversion, segmentation, rotation, etc. are present in the scoring framework of the selected compositions. These devices are apparent regardless of the serial or non-serial intentions of the composer. It would seem that the influence of serial technique plays a more important role in works normally considered as being in the contemporary
"traditional" stream, than what has previously been re-
cognized.

3. With few exceptions contemporary composers have
neglected the vast color possibilities of the many mutes
available in scoring for brass instruments. Even when a
muting effect is indicated in the score, a specific mute is
not designated. It is suggested that specific mute desig-
nations become an established practice among composers, in
order to prevent various interpretations of muting direc-
tions by conductors and varying degrees of timbre in the
performance of a composition.

4. Through the delimitations effected, this investi-
gation has demonstrated that few "major" composers have
written for the exclusive combination of brass and voices.
Also, composers who generally utilize non-conventional
notation have shown little, if any, interest in writing for
brass and choral combination.

5. A phenomenologically generated analysis is ad-
vantageous in viewing the diverse elements of a particular
composition, as emanating from a single pervading cell or
idea.
Recommendations

1. It is recommended that the analytical techniques employed in the present study, i.e., those manifestations of the Urkeim principle, be applied to other twentieth-century compositions. Moreover, it is further recommended that the "method" as described be utilized in compositions not written in the twentieth-century, in order to assimilate greater evidence as to the validity of this means of analysis as an additional tool for the determination of the sometimes elusive qualities perceived in music.

2. It is recommended that composers utilize the resources that brass and choral combinations offer by devoting more attention to a composing vehicle that presents many opportunities for performance.

3. All indications of the study point to a clear invitation for other researchers to utilize a phenomenologically influenced departure in formulating concepts for the purpose of endeavors in either analysis or composition.
BIBLIOGRAPHY
BIBLIOGRAPHY

Books


**Periodicals**


Yearbook


Unpublished Documents and Ph.D. Dissertations


APPENDICES
APPENDIX A

464 Highland Park Drive
Baton Rouge, Louisiana 70808
March 1, 1970

Dear Sirs:

I am a Ph.D. candidate at Louisiana State University, and am in the process of completing my dissertation. I should like to know if you could send to the above address any biographical information you might have on the following composers:

________________________________________________________________________

______________________________________________________________________

I should also like to know their present location if that information is available.

Enclosed you will find a stamped, self-addressed envelope for your convenience. I should appreciate your reply by return mail. Thank you for your cooperation.

Sincerely yours,

James E. Stafford
Dear Sirs:

I am a Ph.D. Candidate in music at Louisiana State University, and am in the process of completing my dissertation, which concerns contemporary American music for brass and choral combinations. I should like to have your permission to quote the following: _______________________

______________________________

______________________________

______________________________

from your publication of ________________

______________________________

I should appreciate it if you would send your reply by return mail in the enclosed stamped, self-addressed envelope.

Thank you very much for your cooperation.

Sincerely yours,

James E. Stafford
VITA

James Edward Stafford was born August 20, 1933, in Summerville, Louisiana, the eldest son of James Jack and Anne Davis Stafford. The family moved to Elizabethton, Tennessee, soon afterward, where he attended grammar school and junior high school. He was graduated from high school in Jena, Louisiana, in 1951, and received his Bachelor of Music Education Degree from the University of Southwestern Louisiana in 1957, and Master of Music Education Degree from Louisiana State University in 1964.

His major instrument is trombone (tenor and bass), and he has participated in numerous band and orchestral organizations, including the Kingsport Symphony Orchestra, Kingsport, Tennessee. Also a singer, the writer has sung in and directed many church and school choral organizations.

Mr. Stafford has a wide range of teaching experience including all levels of education from elementary through college, in both instrumental and choral fields. At present he is employed as Assistant Professor of Music at East Tennessee State University, where he teaches theory, composition and arranging and is conductor of the University Brass Choir.
The writer is married to the former Sandra Ashley, a singer-pianist, and is the father of two children, ages four and two.

Professional organizations of which he is a member include the American Society of University Composers, Pi Kappa Lambda, Phi Mu Alpha, and the National Association of College Wind and Percussion Instructors. Mr. Stafford has served as a teaching assistant at L. S. U., and has been an adjudicator for instrumental and vocal festivals in the states of Louisiana, Kentucky, Virginia and Tennessee.
Candidate: James E. Stafford

Major Field: Music

Title of Thesis: Compositional Devices Employed in Scoring for Voice and Brass Combinations by Selected Contemporary American Composers

Approved:

Kenneth Klave
Major Professor and Chairman

Max Freed
Dean of the Graduate School

EXAMINING COMMITTEE:

Emmett Larmin

Michael Stecher

William McKenzie

Paul Louis Abel

Charlie W. Roberts, Jr.

Date of Examination:

July 10, 1970
PLEASE NOTE:

"O Come Let Us Sing", ©1959 by Summy-Birchard Co.;
"Fanfare For Christmas", ©1963 by Harold Flammer, Inc.;
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Three Dylan Thomas Poems, "In My Craft or Sullen Art",
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Available for consultation at Louisiana State University
Library.

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