PANDIATONICISM IN THREE BALLETS BY
AARON COPLAND

THESIS

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By

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The term "pandiatonicism" first appeared in 1937 in Nicholas Slonimsky's Music Since 1900, and was used to describe an important twentieth-century harmonic device. Writers dealing with this subject are in general agreement with Slonimsky's basic definition of pandiatonicism—"the technique of free use of all seven notes of the diatonic scale in melodic, harmonic and contrapuntal combinations . . ." However, they are in disagreement as to its exact nature and function in such areas as tonality, tertian structure, and harmonic function.

In Billy the Kid (1938), Rodeo (1942), and Appalachian Spring (1944), Copland uses varied compositional devices in the construction of many of his pandiatonic passages. The purpose of this study is to identify these devices, to illustrate Copland's methods of using these devices, and to tabulate the frequency with which they are used.

The ostinato is used more frequently than any of the other devices used by Copland in his pandiatonic writing. The device can at various times be found in the bass, treble, or middle ranges of the orchestra.

The diatonic scale, either ascending or descending, is often used for its unifying qualities in certain pandiatonic passages. At times, the scale passage is employed as an accompaniment figure, and at other times it is used melodically.
Octave displacement is sometimes used in conjunction with the scale patterns.

Parallel thirds and fourths are an important device in Copland's pandiatonic writing. These thirds are created by the harmonization of a melody (either above or below) at the third. Parallel fourths are used in a similar manner in the harmonization of melodies and accompaniment figures.

Secundal sonorities (those that are built with two or more consecutive seconds) are often used in Copland's pandiatonic harmonies. These sonorities can be found containing from two to six consecutive members of the diatonic scale.

Copland's pandiatonic harmonies are sometimes arranged with bichordal spellings. These harmonies have the appearance of two chords of the diatonic key superimposed upon one another. There is no suggestion of two different keys.

A device that is found in several of Copland's pandiatonic passages is the pedal. This device occurs on the tonic, subdominant, and dominant. Double pedals are occasionally used, employing tonic and dominant.

The arpeggio is a device used in several different ways in Copland's pandiatonic writing. Arpeggios are sometimes employed pandiatonically with octave displacement.

Copland's ballets illustrate how effectively the canon may be used pandiatonically. The ballets contain a two-part canon at the octave and a three-part canon at the octave. Pandiatonic harmonies are also created by Copland's practice of joining different themes to each other.
The diatonic materials used by Copland in his pandiatonic writing are the major, minor, and certain church modes (Dorian, Mixolydian, and Lydian).
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CHAPTER I

MUSICAL BIOGRAPHY

Beginnings

Aaron Copland, born November 14, 1900, lived his first twenty years in Brooklyn on a street he described as "drab."\(^1\) His father, Harris Copland, a hard-working immigrant from Lithuania, successfully owned a neighborhood department store, above which the family lived. Sarah, his mother, who assisted with the family business, was more artistic in nature than her business-minded husband. It is likely that much of Copland's early musical interests were inspired by her. She had a pleasant voice and often would sing and accompany herself when the family gathered for informal "sings." However, Copland's main impetus in serious music study was his own desire. "Music as an art," he said, "is a discovery I made all by myself."\(^2\)

The piano was young Copland's first musical interest, and his first teacher was his older sister, Laurine. After giving her brother lessons for about six months, she declared that because of his rapid progress she could teach him nothing more. After working at the piano by himself for another year and a half, Copland decided he wanted to study from a professional teacher and persuaded his parents to let him.

\(^1\) Aaron Copland, Our New Music (New York, 1941), p. 212.
\(^2\) Ibid., p. 213.
The first formal training Copland received was piano lessons from Leopold Wolfsohn. While studying with Wolfsohn, Copland made his first public appearance and heard his first public concert. At this stage, his widening musical interests were beginning to include composition. "The idea of becoming a composer seems gradually to have dawned upon me some time around 1916."

Realizing that to compose one must have a knowledge of harmony, Copland asked Wolfsohn to find him a harmony teacher. Beginning in the fall of 1917, he went to Manhattan every week to study harmony, counterpoint, and composition with the noted Rubin Goldmark, who later served Juilliard Graduate School of Music as head of its composition department. Although unaware at the time of the momentous step he was taking, Copland began his career as a composer.

The Goldmark Years

The four years that Copland spent with Goldmark proved to be an excellent beginning for his compositional studies. Species counterpoint, fugue, song forms, variation forms, and especially the sonata form, which Goldmark considered the supreme vehicle for musical expression, were all part of his work. Looking back, Copland felt that the value of this training was that Goldmark

... had an excellent grasp of the fundamentals of music and knew very well how to impart his ideas. This was a

3Ibid., p. 213.
stroke of luck for me. I was spared the flounderings that so many musicians have suffered through incompetent teaching at the start of their theoretical training.  

During this period, Copland continued to make progress as a pianist. Since he had been with Wolfsohn for several years, Goldmark encouraged Copland to study with a second teacher, Victor Wittgenstein. By the winter of 1919, however, Copland had become disappointed with his results and at Goldmark's suggestion, left Wittgenstein to study with Clarence Adler.

It was through his studies in piano rather than composition that Copland became familiar with modern composers. The conservative Goldmark "actively discouraged this commerce with the 'moderns'," and felt a student's merit was measured by his ability to master sonata form. By contrast, Copland's first lesson with Adler was marked by the presentation of Ravel's *Sonatine*, which Copland thought a "revolutionary piece at the time," Through his exploration in new piano literature and his frequent attendance of opera and symphony concerts, Copland was discovering works by Debussy, Scriabin, Hugo Wolf, and other more modern composers.

Because of his interest in these composers, Copland was considered to be the *enfant terrible* of Goldmark's class and was often the butt of many good-humored jokes. This situation

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did not lessen his interest but instead increased it. Copland said, "The fact that this music was in some sense forbidden only increased its attractiveness." 7

Two of Copland's pieces during these years testify to his interest in contemporary music and his awareness of modern techniques. Smith states that both the Scherzo Humoristique: Le Chat et la Souris (The Cat and the Mouse) and the song Old Poem "reflect the French impressionist style, with the latter indicating . . . a beginning interest in a frequent change of meter." 8 Works such as these were too advanced for Goldmark's ears, and Copland was informed that his "experiments" would have to be done independently and that only works in the traditional vein would be acceptable for their lessons. It was evident to Copland that he could not fulfill his artistic desires under these limitations. Having decided to forsake college for the study of music, he felt that Europe offered the best opportunities for continuing his musical education. In June, 1921, Copland sailed for France.

The Years With Boulanger

As a young man of twenty-one, Copland threw himself into a world that was, both geographically and musically, a great distance from his home. Post-war Paris had succeeded Berlin as the cultural center of the world, and its innovative, stimulating atmosphere was precisely what made study in Europe a

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7 Copland, op. cit.
"must" for any ambitious young musician. The romanticism of the nineteenth century was being supplanted by new aesthetic concepts, including Stravinsky's dynamism, Schoenberg's expressionism, and Bartók's nationalism. The beginnings of the neo-classical movement, which would find more adherents in the middle of the decade, were being felt. It was into this exciting environment that Copland came to find a suitable composition teacher.

Copland's tour in Europe began with a summer's stay at Fontainebleau, a music school established for Americans. The summer there, he felt, would enable him to become more familiar with the language and to receive some intermediate instruction while looking for a teacher for the fall. His composition teacher at Fontainebleau was Paul Vidal, of the Paris Conservatoire, whom Copland soon discovered to be as conservative in musical matters as Goldmark. Copland conscientiously prepared his lessons for Vidal, but without the interest or enthusiasm he had hoped to gain from his stay in France.  

It was almost by chance that Copland found his teacher. Through his association with other students, he began to hear of an excellent harmony teacher, Nadia Boulanger, along with "ecstatic reports of her manner of presentation."  

Copland's initial reaction was only slight interest, since he felt his studies in harmony had been adequately covered under Goldmark.

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Finally, at the insistence of one of his fellow classmates, he attended one of her lectures, the subject of which was an analysis of a passage from Boris Godounoff. "I had never before," Copland later said, "witnessed such enthusiasm and such clarity in teaching. I immediately suspected that I had found my teacher."^1

As the summer continued, Copland visited Boulanger's classes whenever possible, becoming more certain that he should study with her. Despite earlier reservations concerning studying composition with a woman, in the fall he moved into Paris to begin his study.

Copland's lessons in composition, orchestration, and score reading took place in Boulanger's apartment in the late afternoon. His days were usually occupied with preparing assignments for his lessons, while the evenings were often spent at concerts or the theatre. Continuing his efforts as a pianist, he spent several hours a day in serious practice; his teacher was Ricardo Viñes, who had also taught Poulenc. Preferring to do his own serious composing in the evening, he often worked at the piano late into the night.

Copland found Boulanger's unpedantic style of teaching and her interest in modern music perfectly suited to his own musical temperament. She greatly encouraged his investigation of new music; for score reading practice she often had Copland read at the piano a movement from a Mahler symphony with which

^1Copland, op. cit., p. 218.
he was unfamiliar. When later asked to explain Boulanger's method of teaching, Copland said that she simply reacted to the efforts of her students instead of laying down rigid rules. She seemed to be able to inspire her students with confidence and a sense of worth. Copland maintains that when he brought her something he had composed, he always felt he was with someone who knew all the answers. Her "musical instinct was so sure that she could immediately point out the weak spot and tell you why it was weak . . ."\(^{12}\)

In addition to sharpening his various musical skills, the Paris years marked Copland's beginning as a writer of musical criticism. During 1924, he wrote and published "Gabriel Faure, a Neglected Master," appearing in that October's *Musical Quarterly*. He has since become as respected for his literary contributions to the musical world as for his compositions.

Shortly before Copland's stay in France was over, Boulanger was invited to make several concert appearances in the United States. As an organist, she asked Copland to provide her with a new work to perform on her tour. Copland accepted and soon left France for his return home with a commission from his former teacher.

The significance of the years Copland spent with Boulanger is great, as indicated by Copland's remark when asked later to cite the most important musical event of his life: "... my

\(^{12}\)Edward T. Cone, "Conversations with Aaron Copland," *Perspectives of New Music*, XIII (Spring-Summer, 1968), 61.
introduction to Nadia Boulanger and her acceptance of me as a pupil."\textsuperscript{13}

The Jazz Period

Upon his return to the United States, Copland felt he should begin supporting himself as his parents had helped finance his three-year trip abroad. Sending out cards announcing himself as a teacher of piano and theory, he took residence in his first studio. During this time, he continued to write and orchestrate his \textit{Symphony for Organ and Orchestra} for Boulanger. This work was premiered January 11, 1925, by Boulanger and the New York Symphony Orchestra. With this, his first orchestral performance, Copland scored an artistic success. Though some critics were certainly not as passionate in their praise as others (some, in fact, were rather cool), Copland's fame as a composer had begun.

Some of the materials Copland employed in the Jazz Period are found in the \textit{Organ Symphony}. Smith states that the middle section of the work "marks the first appearance of 'blues', as such, in any of Copland's music to date.\textsuperscript{14} The far-reaching significance of this section of the \textit{Organ Symphony} is that it is the first evidence of the blues element which, added to the fast jazz rhythmic mood (first encountered in the Finale of the \textit{Dance Symphony} \textsuperscript{[1925]}), was shortly afterward

\begin{footnotes}
\item[\textsuperscript{13}]Smith, \textit{op. cit.}, p. 45.
\item[\textsuperscript{14}]\textit{Ibid.}, p. 78.
\end{footnotes}
consciously adopted by Copland in order to make his music sound more American."\(^{15}\)

The jazz-inspired rhythmic aspect of Copland's music is certainly an important one. This is true not only of the works in the Jazz Period but also of the works in the different styles that followed. Berger states that rhythms suggestive of jazz "are still to be found today in Copland's music, but the developments to which they are subjected often remove them very far indeed from the character of their source."\(^{16}\)

Although his first "blues-type" melody appears in the \textit{Organ Symphony} and jazz rhythms were initially heard in the \textit{Dance Symphony}, his first consciously written jazz piece was \textit{An Immortality}, a work for women's chorus written in 1925. Some of its jazz components are a polytonal and polyrhythmic "riff" style bass, a syncopated major melody employing a flattened third, and a three-part jazz-canon at the unison.

After completing this first full experiment in the jazz idiom, Copland wanted to see what else he could extract from the jazz vein. The next work to follow was \textit{Music for the Theatre} (1925), which some musicians consider his best work.\(^{17}\) Some jazz devices appearing in this work are the use of a "riff" in the bass; a "hot blues break" played by the clarinet; the use of traditional jazz devices, such as the trumpet's use of the

\(^{15}\textit{Ibid.}, \text{p. 79.}\)

\(^{16}\textit{Berger, op. cit.}, \text{p. 50.}\)

\(^{17}\textit{Smith, op. cit.}, \text{p. 84.}\)
"wa-wa" mute; and jazz polyrhythms. Music for the Theatre occupies an important place in Copland's career as a composer and the evolution of his own style, and in the acceptance of jazz as an acceptable source of material for serious composition. It is an important work in the development of Copland's musical style because it marks a separation from the French, or European, manner of composing into a consciously American style with its new jazz idiom. As to its broader importance, Slonimsky states that Music for the Theatre possesses a certain historical significance inasmuch as it gives expression of jazz music in a classical dance form for the first time.

Copland's next major work of the Jazz Period, the Concerto for Piano and Orchestra, was not completed until the last months of 1926. Its first public performance was in Boston on January 28, 1927. Although the following day's reviews in the Post, Herald, and Transcripts were quite unfavorable, Copland accepted the criticism with his typical good nature. The worth of the work gradually was realized; fifteen years after the Concerto's premier, Oscar Thompson described it as "the most impressive symphonic work in the jazz idiom by an American or European composer." With the completion of the Concerto,

18 Ibid., p. 86
19 Ibid.
20 Ibid., p. 95.
21 Oscar Thompson, Great Modern Composers (New York, 1943), p. 44.
Copland felt he had said everything he could within the limitations of the jazz idiom. He now began to look for other materials.

During August of 1927, evidences of Copland's harmonic explorations were seen in the Song for soprano voice and piano. The materials used in this experimental work were later fully exploited in the works of his Abstract Period. Smith describes the work as

Contrapuntal in technique (without a trace of jazz), this short work (lento molto, 3/2) employs the serial techniques (a kind of tone row) without, however, actually destroying all sense of tonality.

Copland began his next major work, Symphonic Ode, about the same time as Song was composed. Written over a period of two years and in several countries, it was not performed until 1932. A five-sectioned work in one movement, the Ode has only one theme; however, an over-all design of slow--fast--slow gives it a feeling of exposition, development, and recapitulation. The form might be indicated as A-B-C-B-D, with A, C, and D the slow sections and B in faster tempo.

The retrospective importance of the Ode is in its pivotal relationship to the whole body of Copland's music; it completed the works that preceded it and foretold aspects of the works to follow. Jazz was still an inspiring element of the Ode, but the jazz influence was felt in more subtle ways and occurs beside

\[22\] Copland, op. cit., p. 220.
\[23\] Smith, op. cit., p. 99.
\[24\] Ibid., p. 115.
material that had nothing to do with jazz. The work's main kinship to the Jazz Period—a kinship shared by most of Copland's music—is its jazz-derived rhythms.

The *Ode* was certainly a turning point in Copland's evolving style. In it he "... was beginning to rid himself of such composer's paraphernalia as scales, arpeggios, fill-in sonorities, literal jazz references, and similar devices characteristic of the jazz-inspired works ..."\(^{25}\) Copland himself has remarked that the works that follow it are not as grandiose or fulsome.\(^{26}\)

Since Copland felt that the *Symphonic Ode* was a culminating work, he also felt the need to follow it with something different. Although he did not have the *Piano Variations* in mind at the time,\(^ {27}\) retrospective examination shows the stylistic bridge the *Ode* forms—on one side is the *Piano Concerto* at the height of the Jazz Period and on the other the *Piano Variations* and the Abstract Period.

The Abstract Period

Copland's second period of style produced abstract works that were appreciated and understood by only a limited audience. These works, *Short Symphony, Statements,* and *Piano Variations,* were not performed often because, in Copland's view, they are "difficult

\(^{25}\)Ibid.

\(^{26}\)Copland, *op. cit.*, p. 228.

\(^{27}\)Cone, *op. cit.*, p. 64.
to perform and difficult for an audience to comprehend." To many audiences, this type of music, in which the development of an idea is more important than traditional melody, is considered too coldly intellectual.

The absolute conception of these works was quite unlike the jazz-oriented compositions Copland had come to fame with. This, plus their advanced constructional techniques, caused the general music public, along with most musicians, to fail to realize the worth of these works. Today, many critics consider the efforts of this period to be Copland's best music.

The Piano Variations, written in 1930, is described by Berger as "a masterpiece of musical construction" and stands as a milestone in Copland's career. Not only did he write a piece that is masterful in itself, but in doing so he discovered that transparent texture that has since been so characteristic of his music. In fact, Flanagan states that it is in the Variations that "the 'Copland sound' is finally crystallized."

The theme and its twenty variations spring from a four-note motive, E-C-Eb-C#, which unifies the work. These notes are also the first four tones of Copland's row--E-C-Eb-C#-A-D-F#-G#-B-G-Bb-F.

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As the work develops, the row is transposed to begin on different pitches, with a return to the original row on E for the coda.

It is important to recognize that Copland, as any good composer, always shapes his material to suit his composition—his rows do not dictate the music. "His music," says Thompson, "does not yield the effect of having been composed in fulfillment of a creed." 33

Copland has always been in essence a tonalist. 34 By infusing his serially-oriented composition with his own personality, he emerges with what some would call a musical contradiction—a tonally-designed twelve-tone work.

Another departure from strict serial technique is the number of tones Copland uses in his rows. Both the Theme and Variation I use only ten notes of the row; the eleventh tone, Bb, is added in Variation II. The final tone F, although appearing briefly in Variation VII, finally comes into its own in Variation X when it becomes the basis for a new row transposition, F-Db-E-D.

The Piano Variations is different from the other works of this period in that, because of its polytonal-serial aspects, it is more sharply dissonant. Although it was not received well at its first performances, it has since become regarded as one of the important works in contemporary piano literature. 35

33 Thompson, *op. cit.*, p. 43.


35 Smith, *op. cit.*, p. 128.
The **Short Symphony** followed the **Piano Variations** in 1933. In addition to serial techniques, there appear polytonal as well as tonal passages. In this work, Copland increased his mastery of both the symphonic form and clean, transparent style of orchestration. The work was not heard in the United States until 1944. 36

Between 1933 and 1935, Copland worked on his **Statements**, the final work of his Abstract Period. The work consists of six movements entitled "Militant," "Cryptic," "Dogmatic," "Subjective," "Jingo," and "Prophetic." In this work, tonal, polytonal, atonal, and serial elements are combined to create a work that shows Copland at his best.

The works of the Abstract Period demonstrate Copland's maturation as a composer and his increasing ability to successfully meld diverse materials together. Moreover, the challenge of taking an absolute musical idea, extracting its essence, and expanding it to intellectually staggering proportions was met with Copland's characteristic sureness.

These works, however, did not enjoy wide public acceptance. Because the average American audience was not able to understand many contemporary works, Copland's aesthetic direction changed, and a new style period began.

**The American Folk Song Period**

The **American Folk Song Period** was a natural result of Copland's desire to involve the layman in an appreciation of

contemporary music and a decision to employ a simpler harmonic language. In an autobiographical sketch Copland remarks,

It seemed to me that we composers were in danger of working in a vacuum. Moreover, an entirely new public for music had grown up around the radio and the phonograph. It made no sense to ignore them and to continue writing as if they did not exist. I felt that it was worth the effort to see if I couldn't say what I had to say in the simplest possible terms.  

For this reason his abstract, serial themes were replaced by singable cowboy and Shaker tunes, and diatonicism, rather than the row, became the harmonic basis.

Although the situation of the day may have spurred Copland to action, this new musical development was not simply the result of an arbitrary decision. The diatonicism that did not fully assert itself until this style period can be found, though certainly not in a position of dominance, in his earlier works.

A typical Copland practice has been to interpolate non-diatonic tones upon a foundation that is basically diatonic. During the early stages of the Jazz Period, these interpolations were often polytonal. By the time of the Symphonic Ode, these piled-on dissonances no longer stand apart from the key of a given passage as a separate, polytonal superimposition. "They are fused somehow," says Berger, "into the prevailing texture." With this technique, Copland creates a dissonance more subtle and less conventional than straight polytonality.

Even at the height of the Abstract Period in the Piano Variations, a diatonic order can be found. At one point, unadorned

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37 Berger, Aaron Copland, p. 67.
38 Ibid., p. 68.
major triads enter the texture, a highly unusual procedure in traditional twelve-tone writing.

Stronger evidence of this earlier diatonic order is the use of passages that are purely diatonic, which contain no non-diatonic dissonance. Two examples are the opening trumpet canon in the Piano Concerto and the "Lento" from the Short Symphony.\textsuperscript{39}

With the composition of the works of the Folk Song Period, Copland's interpolations above his diatonic foundations became less dissonant. Subsequently, purely diatonic combinations appeared with greater and greater frequency.

A very important work in the development of Copland's style during this period is \textit{El Salon Mexico}, completed in 1936. In this work, the composer discovers two techniques that are basic to the music of this period—the quotation of folk music, and the use of a simpler, more easily understood musical language.\textsuperscript{40} Some of the Mexican tunes quoted are "El Mosco," "El Palo Verde," "La Jesusita," and "El Malacate." The work develops in G major and E major, and the harmonies, says Smith, "... are either triads or appropriate (to the folk tunes) polytonal combinations."\textsuperscript{41}

Three ballets, written between 1938 and 1944, constitute the backbone of this period. Several other large works were written during this time, but the ballets, the essence of the Folk Song Period, overshadow them.

\textsuperscript{39}Berger, "The Music of Aaron Copland," p. 437.

\textsuperscript{40}Smith, \textit{op. cit.}, p. 175.

\textsuperscript{41}Ibid.
It is in *Billy the Kid* (1938) that the style of this period becomes crystallized. Familiar cowboy tunes abound—"The Old Chisolm Trail," "Git Along Little Dogies," "Goodbye, Old Paint," and "O Bury Me Not on the Lone Prairie." To give these tunes an appealing freshness, Copland places them in polyharmonic and polyrhythmic settings.

While Copland employs many authentic folk songs in these works, they are seldom quoted literally. Usually they are modified melodically, rhythmically, or (one of his favorite practices) expanded by phrase extension. Occasionally a song is transformed to create a mood opposite its original; what once was frivolous becomes broad and tender.\(^{42}\) By taking the substance of folk songs and then transforming and shaping them, Copland's music "distills far more than it quotes."\(^{43}\)

In 1942, four years after *Billy the Kid*, Copland received a commission for a second cowboy ballet, which was entitled *Rodeo*. Just as its predecessor, *Rodeo* makes use of such folk and cowboy tunes as "Sis Joe," "Bonyparte," and "McLeod's Reel." Declaring the work to be one of Copland's most accessible and easily understood orchestral works, Smith terms it "Americana at its best."\(^{44}\)

The work for which Copland is probably best known, the ballet *Appalachian Spring*, was premiered in 1944 and was awarded

\(^{42}\) Berger, Aaron Copland, p. 60.

\(^{43}\) Frymire, *op. cit.*, p. 48.

\(^{44}\) Smith, *op. cit.*, p. 143.
the Pulitzer Prize for Music the following year. Much of the ballet has the flavor of Shaker hymns and dance songs but only one actual tune is used, the Shaker song entitled *The Gift to be Simple*. Although there is less quotation of folk tunes than in the other ballets, the diatonic trend of the entire period reaches its peak in this work. Flanagan states, "If the phrase 'Copland sound' has any meaning, *Appalachian Spring* [defines] it."46

Copland's compositional career has been marked by the original way he dresses familiar material. Whether that material is jazz or twelve-tone, the final Copland product is subtle and sophisticated refinement of the original. Thus, it is logical that in this period he would use diatonic harmony in a modern manner, a technique termed pandiatonicism by Slonimsky.47 Pandiatonic writing occurs in all of the ballets, as well as in some later film scores and incidental theatre music. An investigation of Copland's use of this technique will be undertaken in chapter three of this paper.

During this time, Copland was also engaged in writing several works of a serious and absolute nature. Among these are the *Piano Sonata*, the *Clarinet Concerto*, *Sonata for Violin and Piano*, and the *Third Symphony*. Many of these works are closer in harmonic content to the serially oriented works of the Abstract

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Period than they are to the diatonically conceived ones of the Folk Song Period. These serious works were not composed with the popular music audiences in mind but were written to satisfy the composer's need for a more serious creative outlet. As Copland alternated between the absolute and the folk song works, his attitude concerning the use of specific references to native American music began to change. Feeling that American composers were becoming more self-reliant, Copland stated, "... we can be certain that when our music is mature, it will also be American in quality. American individuals will produce an American music, without any help from conscious Americanisms." Although Copland has continued to employ "Americanisms" for his more popularly styled film and theatre music, he no longer does in his absolute works.

The past few years have seen Copland make a complete return to his earlier serial techniques. In 1962 there appeared *Connotations*, his first all-out orchestral twelve-tone work. It is based on three four-note chords heard at its outset, from which many lines are drawn. Evans states that while Copland's earlier serial works were "essays in a tentative serialism," *Connotations* is "the fully committed working out of a row."  

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48 Smith, *op. cit.*, p. 223.
49 Thompson, *op. cit.*, p. 46.
50 Peter Evans, "Copland on the Serial Road," *Perspectives of New Music*, II (Fall-Winter, 1963), 141.
51 Ibid.
52 Ibid., p. 149
The composer's feeling is that Connotations is the logical climax of his other serial works—the Piano Variations, the Piano Quartet (1950) and the Piano Fantasy (1957).\textsuperscript{53}

Copland's final work to date is Inscap, first performed in 1968. It is scored for large orchestra with varied percussion. Noting the presence of both serial and diatonic elements in the work, Henderson states that their combination produces "music of a stimulating independence of spirit."\textsuperscript{54}

Bernstein, however, suggests that Copland's latest ventures into serialism were not musically comfortable for the composer. When Bernstein asked why Copland bothered with such things as tone rows and rules of retrograde inversion, Copland replied, "Because I need more chords. I've run out of chords."\textsuperscript{55} Bernstein also feels that Copland's reason for no longer composing, aside from age, is that younger composers are leading the art down avenues which he could not or did not wish to go.\textsuperscript{56}

While the music world may not be certain as to the materials Copland may choose to work with in a particular instance, it can be sure the final product will bear Copland's own individual imprint. Bernstein says that although Copland's style ranges from

\begin{itemize}
  \item \textsuperscript{53}Flanagan, \textit{op. cit.}, p. 49.
  \item \textsuperscript{55}Leonard Bernstein, "Aaron Copland--An Intimate Sketch," \textit{High Fidelity/Musical America}, XX (November, 1970), 57.
  \item \textsuperscript{56}Ibid.
\end{itemize}
"New York jive to New Mexico twang . . . , so strong is the force of Copland's personality that it shines through all of his music."57

CHAPTER II

THE PRINCIPLE OF PANDIATONICISM

The term "pandiatonicism" first appeared in 1937 in Nicolas Slonimsky's *Music Since 1900*. The term was used to describe a harmonic device that had become an important feature in works of certain twentieth-century composers. Slonimsky's basic definition of pandiatonicism is "the technique of free use of all seven notes of the diatonic scale in melodic, contrapuntal and harmonic combinations . . ."\(^1\)

According to Blom, early approximations of pandiatonicism, as used by Glazunov and Tschaikowsky, were "progressions of perfect fourths (e.g., E.A.D.G.) and arpeggios of thirds (e.g., A.B. [sic] D.F.A.C.E.G.) . . ."\(^2\) Pandiatonicism itself did not emerge until the early twentieth century, Blom says, when it developed at first as a "modern white-key piano technique" and as a reaction against both the harmonic chromaticism of the nineteenth century and the "pan-chromaticism" of the twentieth-century atonalists.\(^3\) It became more fully established with the rise of the

\(^1\)Slonimsky, op. cit.


\(^3\)Ibid. Neither the term "pan-chromaticism" nor "modern white-key piano technique" is defined by Blom.
neo-classical movement around 1925. Some writers consider pandiatonicism to be an important technique of twentieth century composition. Others, such as Austin, deny it is any form of "principle of harmonic motion or structure" and is, at least in the hands of some composers, only "a temporary costume." Among those who consider it a legitimate technique, there is considerable disagreement concerning aspects of its structure and function. This chapter will consider some of these disputes.

**Tonality and Atonality**

An investigation of the tonal properties of pandiatonicism is fundamental to understanding it as a harmonic technique. Not all who have written about pandiatonicism have discussed its relationship to tonality, but among those who have, differing views are held.

One view, as expressed by Blom, is that pandiatonicism is "firmly rooted in tonal harmony." Apel does not comment as directly as Blom does, but he does state that the harmony usually

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5Ibid.


7In this study, a passage will be considered tonal if there is one tone to which all others are subordinate, and atonal if there is no such tone. An atonal passage, however, may be constructed of traditionally tonal materials (i.e., major and minor chords).

8Blom, op. cit.
has a "tonal staticity." Some tonality is implied in Hansen's assertion that the harmonic progressions "will ultimately end on tonic." Slonimsky, declaring it to be a "consolidation of tonality," further explains his position: "... the bass, the fifth from the bass, and the tenth from the bass determine the prevalent harmony." None of these writers states conclusively that pandiatonicism is tonal or atonal. Though one may lean toward a tonal viewpoint, an exact position is not stated.

Blom's discussion notes that "the perfect fourth on the fundamental is seldom if ever used," which is a view also held by Slonimsky. These two writers are the only ones to impose this qualification. To restrict the fourth, however, is to contradict the basis for the pandiatonic principle--"the free use of all seven notes of the diatonic scale..." It would re-define the term as the free use of six notes of the diatonic scale, with the avoidance of the other. For the purposes of this study, the use of the fourth above the fundamental will be unrestricted.

Slonimsky cites Casella's Eleven Children's Pieces as an example of pandiatonic writing. The pieces that employ

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9Apel, op. cit.
10Peter S. Hansen, Twentieth Century Music (Boston, 1967), p. 179.
11Slonimsky, op. cit.
12Ibid.
13Blom, op. cit., p. 534.
14Slonimsky, op. cit.
15Ibid.
16Ibid.
pandiatonicism are number three, "Valse Diatonique;" number eight, "Minuetto;" and number eleven, "Galop Final." Though it is at times obscure in the "Minuetto," all three pieces are tonal. The excerpt from "Galop Final" is in C major.

Fig. 1—Casella, "Galop Final," Eleven Children's Pieces, measures 4-7.

Fig. 2—Slonimsky, example of pandiatonic writing from Thesaurus of Scales and Melodic Patterns, p. 195.
In his Thesaurus, Slonimsky has written examples of different types of pandiatonic writing. The illustrations of four, five, and six part harmony all have tonal endings. (See Figure 2.)

Apel denotes several works that contain pandiatonic writing. The pandiatonic passages found in Stravinsky's Petrushka are tonal. The opening theme from the "Danse Russe" is in a Mixolydian mode in G major. (See Figure 3.)

Persichetti's statement that "the horizontal chord succession has no tonal direction" does not definitely pre-suppose a state of tonality. Neither do his illustrative examples and references totally clarify this area. The progressions in

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17 Apel, op. cit. The works referred to are Satie's Embryons desseches; Poulenc's Suite (1920); Debussy's "Doctor Gradus ad Parnassum," Coin des enfants; Stravinsky's Petrouchka and Serenade (1925).

Figure 4 show no clear tonal direction, but the final chord seems to establish Bb as the point of repose.

Fig. 4--Persichetti, example of pandiatonic writing from Twentieth Century Harmony, p. 224.

Some of the works cited by Persichetti as containing pandiatonic writing¹⁹ seem to uphold the tonal principle and some do not. The passage in Figure 5 is tonal (C major).

Fig. 5--Copland, Appalachian Spring, measures 372-375

¹⁹Ibid., p. 225. The works are Stravinsky's Duo Concertant for Violin and Piano, Dahl's Divertimento for Viola and Piano, Copland's Appalachian Spring, Hanson's Lament for Beowulf, and Honegger's Jeanne d'Arc.
The tonality of Dahl's *Divertimento* is not as clear, as seen in Figure 6.

![Musical notation](image)

**Fig. 6**—Dahl, "Coda," *Divertimento* for Viola and Piano, measures 18-22.

The passage from Hanson's *Lament for Beowulf* (see Figure 13) appears to have no definite tonality.

Of the writers surveyed, Miller's view is the most clearly stated. He says that "although pandiatonic music is not necessarily atonal, neither is it solidly tonal..."²⁰ This study will assume that pandiatonic music is neither tonal nor atonal by necessity, but may be either by preference of the composer.

**Bitonality**

Some pandiatonic chords, because of their vertical arrangement, have the appearance of being bitonal. In Figure 7, the second vertical structure appears to be the superimposition of

the IV and V triads in C major. Other similar combinations can be seen in Figures 7 and 8.

Fig. 7--Slonimsky, *Thesaurus of Scales and Melodic Patterns*, p. 195.

Fig. 8--Stravinsky, "Danse Russe," Petroushka, measures 111-112.

There is also an appearance of bitonality in passages where individual voices outline different triads. (See Figures 9 and 10.)

Fig. 9--Stravinsky, "Hymne," Serenade, measures 58-60.
Fig. 10—Copland, Appalachian Spring, measures 15-21

However, Blom states that these sonorities cannot be considered bitonal because there is no superimposition of key. He says, "The combination of the tonic chord with the sub-dominant or dominant triads, peculiar to pandiatonic usage, cannot be described as bi-tonality, as the notes are taken from the same diatonic scale." This will be referred to as bichordal sonorities.

Structure

Slonimsky describes the structure of pandiatonic chords as being of "... tertian harmony in the lower strata, in quartal harmony in the higher tones." Hansen's view is broader and claims "... the chords are not limited to structures built in thirds ..."
The pandiatonic chords in Figures 11 and 12 can easily be identified as being tertian. Others (see Figure 13) are non-tertian.

Fig. 11—Honegger, Jeanne d'Arc, Scene IV, measures 89-92.

Fig. 12—Hanson, Lament for Beowulf, measures 163-166
For this study, it will be assumed that pandiatonic harmony is built in thirds only when the composer prefers it and that it is non-tertian when that is his preference.

**Harmonic Function**

Slonimsky views pandiatonic harmony as functional\(^2\) and states that "the harmonic function of the principle triads remains strong."\(^2\) On three different occasions he describes

\(^2\)The succession of chords is determined by the traditional root movement by fifth relationship.

the ultimate harmonic function as being determined by the bass. In substantiation he writes, "A clear example of functional pandiatonic writing is found in the 'Waltz' on the white keys from Casella's Children's Suite for piano. The function of the tonic and the dominant is observed, but the melodic and harmonic flow is free."  

Vivacissimo (one beat to a measure)  

Fig. 14—Satie, "Valse Diatonique," Eleven Children's Pieces, measures 3-12.

The "Galop Final" (Figure 15) of the same work shows a similar tonic-dominant relationship in pandiatonic block chords.

An opposite view is held by Hansen, Persichetti, and Apel, who all assert that pandiatonic harmony is non-functional.

26 Slonimsky, Music Since 1900, pp. 46, 293, 345.
28 Hansen, op. cit.
29 Persichetti, op. cit.
30 Apel, op. cit.
Fig. 15--Satie, "Galop Final," Eleven Children's Pieces, measures 74-80.

Fig. 16--Stravinsky, "The Shrove-Tide Fair," Petrushka, measures 42-52.
Dallin even states that this absence of functionality is the only feature that makes pandiatonicism unique from other non-chromatic music.\textsuperscript{31} Figure 16 contains an example of non-functional pandiatonic harmony in which the triadic voices move in step-wise parallel motion. In Figure 17 the B-minor and C#-minor arpeggios in the left hand alternate in a non-functional manner.

For the purposes of this study, pandiatonic harmony may either be functional or non-functional.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure17.png}
\caption{Stravinsky, "Rondoletto," Serenade, measures 20-22.}
\end{figure}

**Pandiatonic Cadences**

Dallin contends that "traditional . . . cadence formulas are foreign to the style"\textsuperscript{32} of pandiatonicism. Slonimsky adds that "cadential pandiatonic formations favor the inclusion of the second, sixth, and seventh from the bass."\textsuperscript{33} Both Dallin's


\textsuperscript{32}Ibid.

\textsuperscript{33}Slonimsky, Music Since 1900, p. xxiv.
reference to *Appalachian Spring* (Figure 18) and Slonimsky's original examples (Figure 19) illustrate this characteristic absence of traditional chord spelling and voice leading.

![Figure 18](copland.png)

Fig. 18--Copland, *Appalachian Spring*, measures 370-375, cited in Dallin's *Techniques of Twentieth Century Composition*, p. 127.

![Figure 19](slonimsky.png)

Fig. 19--Slonimsky, *Thesaurus of Scales and Melodic Patterns*, p. 194.

**Modes and Scales**

All the pandiatonic writings previously quoted have been in the major mode. This fact substantiates Slonimsky's assertion
that "major tonalities are by far the most frequent in pandiatonic usage . . ."\textsuperscript{34} An example of minor mode pandiatonicism occurs in Copland's \textit{Billy the Kid}. The following example is in Bb-minor (natural form).

Fig. 20—Copland, \textit{Billy the Kid}, measures 41–43

The church modes are sometimes used for pandiatonic purposes—Figure 3 is Mixolydian and Figure 21 is Dorian on C.

Persichetti notes that to avoid tiring the ear with the continual repetition of the same scale, the mode of a pandiatonic passage is often changed. He illustrates this procedure

\textsuperscript{34}Ibid.
Fig. 21—Copland, *Billy the Kid*, measures 27-32

(Figure 22) by changing from what appears to be C major to Db major.

![Musical notation image]

Fig. 22—Persichetti, example of a change of pandiatonic mode from *Twentieth Century Harmony*, p. 224.

Expanding the original concept, Persichetti writes that any scale—even a synthetic one—may be the basis for pandiatonic writing. However, none of the literature surveyed reveals any pandiatonicism based on a synthetic scale.

**Accidental**

As Miller points out, pandiatonicism began as a revolt against chromaticism, and for this reason it "minimizes the

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\[35\] Persichetti, op. cit., p. 225.
use of accidentals."\textsuperscript{36} C-major, having no accidentals, is the favorite key.\textsuperscript{37} Even when other keys are used, the music often has a C-major appearance (see Figure 23); since all the notes are naturally found in the scale of the key, no accidentals are needed.

Fig. 23--Stravinsky, "Gigue," Duo Concertant for Violin and Piano, measures 66-68.

However, some composers avoid key signatures and place the accidentals at the point of each occurrence. This could result in a pandiatonic passage with several accidentals.

Fig. 24--Casella, "Galop Final," Eleven Children's Pieces, measures 47-50.

\textsuperscript{36} Miller, op. cit. \textsuperscript{37} Ibid.
Occasionally, even when key signatures are used, accidentals are added to effect a change of mode without a change of signature.

Fig. 25--Stravinsky, "The Shrove-Tide Fair," Petroushka, measures 59-67.

The number of accidentals, by itself, is not a determining factor in identifying pandiatonic writing. A pandiatonic passage may have many or few accidentals, and key signatures may be used or abandoned.

The Seven-Tone System

In one of his explanations of pandiatonicism, Slonimsky states, "The pandiatonic technique may be described by analogy
with the twelve-tone technique as the seven-tone system.  
This conception puts equal importance on all diatonic tones.  
However, it is contradictory to Slonimsky's earlier advocacy  
of the avoidance of the fourth scale degree. (See p. 25.)  

Slonimsky further identifies pandiatonicism with the  
twelve-tone principle by constructing pandiatonic serial rows.  
He names these rows pandiatonic progressions and defines them  
as "tonal rows composed of all seven different tones of the  
diatonic scale." Figure 26 contains some of Slonimsky's

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Fig. 26—Slonimsky, Thesaurus of Scales and Melodic Patterns, p. 192.

38 Slonimsky, The Book of Modern Composers, p. 15.  
39 Slonimsky, Thesaurus of Scales and Melodic Patterns,  
p. viii.
pandiatonic progressions. However, in none of the literature surveyed was there any evidence of these serial-type progressions. Neither does any other author refer to them.

Slonimsky states that the seven-tone system makes possible melodic pointillism (see Figures 26 and 27). Berger simply states that pointillism and "pan-diatonism" are the same term.  

![Musical notation](image)

**Fig. 27—Stravinsky, "Ecologue I," Duo Concertant for Violin and Piano, measures 32-34.**

**Summary**

Pandiatonism is a harmonic tool upon which differing viewpoints are held. For the purposes of this study, the following will be assumed:

1. **Definition.**—A sonority will be considered pandiatonic if its members are from the same diatonic mode but cannot be classified, according to traditional analysis, as diatonic triad members or properly approached and resolved non-harmonic tones.

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2. Tonality.--Pandiatonic writing may be tonal or non-tonal.

3. Bitonality.--Bitonality cannot exist in pandiatonic writing, but certain chord spellings may result in bichordality.

4. Harmonic function.--Pandiatonic chords may or may not contain functional root relationships.

5. Cadences.--Pandiatonic cadences employ non-traditional chord construction and voice leading.

6. Structure.--Pandiatonic sonorities may or may not be built in superimposed thirds.

7. Modes and scales.--Major, minor, and the church modes may be employed in pandiatonicism.

8. Seven-tone system.--The seven-tone system will not be considered as an organizing method for pandiatonicism.

9. Accidentals.--Accidentals may or may not be used.
CHAPTER III

COPLAND'S METHODS OF PANDIATONIC HARMONIZATION

An examination of Copland's ballets reveals the composer's use of certain compositional devices to create much of his pandiatonic harmony. In some cases these devices are pandiatonic in themselves. At other times pandiatonicism is the result of the device in combination with the rest of the texture. The purpose of this chapter is to investigate Copland's use of these devices.

Ostinato

The ostinato figure is frequently used by Copland as an integral part of a pandiatonic passage. A simply structured ostinato appears in Figure 28, in which only three tones are used. The tone F, occurring on beats one and three, alternates with the G (and its grace note E) on beats two and four. This ostinato is the sole accompaniment to the melody in C major.

Fig. 28--Copland, 
*Billy the Kid*, measures 103-107
The ostinato in Figure 29 is based on alternating thirds. The thirds are built on tonic and supertonic, with the upper note of each third harmonized by tonic. Pandiatonic harmony occurs in the trumpets, as well as between the ostinato and melody. Copland develops this ostinato into a more involved ostinato (see Figure 30) through extension, triadic harmony,

Fig. 29--Copland, *Appalachian Spring*, measures 240-243

Fig. 30--Copland, *Appalachian Spring*, measures 249-252
and octave displacement of the original thirds. Its combination with the melody results in pandiatonicism.

The ostinato in the bass voices in Figure 31 remains constant, while the pandiatonic chords above it continually change the harmony.

Fig. 31—Copland, *Billy the Kid*, measures 604–607

Fig. 32—Copland, *Appalachian Spring*, measures 69–73
In Figure 32, the arpeggios in the second violins are the basis for another ostinato. The violas and violincellos pandiatonically harmonize this ostinato, which is then combined with the melody in the flutes and first violins.

Multiple ostinatos are illustrated in Figures 33 and 34. In Figure 33, the four-note descending ostinato in the flutes

Fig. 33—Copland, *Billy the Kid*, measures 337-340
and piccolo is imitated one beat later by clarinets and oboe. The pandiatonic chordal ostinato in the French horns, trombones, and bass instruments is supplemented by a third ostinato figure in the piano. The violin and viola develop the opening motive from the cowboy song, "Goodbye, Old Paint."

In Figure 34, several ostinatos are played against the melody. These separate ostinatos are in (1) the first flutes and clarinets, (2) second flutes and clarinets, (3) oboes and trumpets, (4) second violins, and (5) the piano. The melody is in the first violins.

Fig. 34—Copland, Appalachian Spring, measures 541-546
Scale Patterns

Berger states that in Copland's canonic writing "a note may get in for its linear significance rather than for its euphony." This observation could well be made in regard to Copland's pandiatonic writing in general. In many passages, the linear aspects of the diatonic scale are of importance not only for the pandiatonic harmonies created by the individual notes in combination with the rest of the texture, but especially for the unifying quality of the scale itself.

Disregarding octave displacement, the pattern in Figure 35 is a continuous ascending scale for eight measures. Consequently, every note in the D major scale is at some point pandiatonically harmonized by each of the two chords above it.

Fig. 35--Copland, "Buckaroo Holiday," Rodeo, measures 331-336

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The following example shows the creation of pandiatonic seconds at various points by the combination of melody, arpeggios, and scale patterns.

Fig. 36--Copland, *Billy the Kid*, measures 373-375

Pandiatonic seconds are created by the combination of the duet and scale passage in Figure 37.

Fig. 37--Copland, *Appalachian Spring*, measures 563-570

The scale pattern from *Billy the Kid* (see Figure 38) is later developed by the extension of the scale and the progressive diminution of its note values (see Figure 39).

The pandiatonic sonorities in Figure 40 are underpinned by a descending scale pattern in C major.
Fig. 38--Copland, *Billy the Kid*, measures 438-441

Fig. 39--Copland, *Billy the Kid*, measures 451-455

Fig. 40--Copland, *Appalachian Spring*, measures 366-368
The scalar violin melody in Figure 41 is accompanied by an ascending scale encompassing three octaves.

Fig. 41—Copland, Appalachian Spring, measures 350-354

Parallel Thirds

Copland occasionally creates a pandiatonic effect by harmonizing a melody in strict parallel thirds. These thirds remain constant, without regard for the expressed or implied\(^2\) harmony.

In its first appearance in Rodeo, the following theme's first three measures are harmonized with the full tonic triad (see Figure 42 A). This diatonic harmonization is later replaced by a pandiatonic one (see Figure 42 B) in which the sixth scale degree (A) lies outside the implied tonic chord.

Authentic cadences are implied at several points in the flute melody in Figure 43. The parallel thirds (tenths) in

\(^2\)The harmony is implied by the chordal outlines and cadences in the melody and/or by previous harmonization of the melody.
Fig. 42 A--Copland, "Buckaroo Holiday," *Rodeo*, measures 180-185

Fig. 42 B--Copland, "Buckaroo Holiday," *Rodeo*, measures 270-274

the bassoon, however, occasionally result in tones not found in
the melodically implied tonic and dominant chords.

Fig. 43--Copland, *Appalachian Spring*, measures 505-509.
The clarinet accompaniment in Figure 44 is in constant parallel sixths to the piccolo. It also is pandiatonic because its strict, pre-determined movement results in tones foreign to the melodically-implied chords.

Fig. 44—Copland, Billy the Kid, measures 209-212

Parallel Fourths and Fifths

In a manner similar to his use of parallel thirds, Copland also employs parallel fourths and fifths pandiatonically. The illustration in Figure 45 demonstrates his melodic use of fourths.

Fig. 45—Copland, Appalachian Spring, measures 426-430
The doublings used in *Billy the Kid* (see Figure 46) result in parallel fourths and fifths.

Parallel fourths and fifths are also used as a pandiatonic accompaniment. The key in Figure 47 is F major.
In the opening of Copland's "Saturday Night Waltz," the spirit of a country fiddler is evoked by the use of parallel fifths stacked one upon the other. These pandiatonic sonorities (see Figure 48) each contain between two and five notes of the C major scale.

Fig. 48--Copland, "Saturday Night Waltz," Rodeo, measures 1-8

Secundal Sonorities

A practice that is used with some frequency in Copland's ballets to create pandiatonicism is the employment of secundal sonorities. These sonorities may be found in either melody or harmony and are sometimes built with octave displacement.

The brass chords on the first beats of the measures in Figure 49 are built in seconds (G, Ab, Bb); the chord in the fourth measure of this example is also secundal (Ab, Bb, C).

Secundal sonorities are those that are built with two or more consecutive seconds (i.e., G, A, B, C, D, etc.).
Fig. 49--Copland, *Billy the Kid*, measures 603-606

An accompaniment figure in *Billy the Kid* (see Figure 50) is constructed in parallel seconds (sevenths). Several measures later, Copland raises this figure two scale degrees and adds an additional second to create parallel secundal chords. (See Figure 51.)

Fig. 50--Copland, *Billy the Kid*, measures 289-292

A technique by which seconds are individually added to the texture is used in *Appalachian Spring* (see Figure 52). The excerpt's first measure contains two seconds (C, D), the
second measure adds another (C, D, E) and the last has one more (C, D, E, F).

A five-note chord (C, D, E, F, G) is used in Rodeo, occurring on the second and fourth beats.

A similar five-note chord (G, A, B, C, D) is illustrated in Figure 54.

The Lydian mode on F is the context in which the chords in Figure 55 appear. The half-notes on the third beats contain four consecutive seconds (D, E, F, G), and the final quarter-note chord contains six of the notes of the scale (C, D, E, F, G, A).
Fig. 53—Copland, "Buckaroo Holiday," Rodeo, measures 110-111

Fig. 54—Copland, Billy the Kid, measures 350-352
Bichoral Sonorities

Copland's pandiatonic harmonies sometimes are arranged with bichordal spellings. An example of bichordality occurs.

"George Thaddeus Jones, Music Composition (Evanston, 1963), p. 118. Bichordality is the superimposition of chords "from the same (seven-tone) scale with no suggestion of two keys."
in *Billy the Kid* (see Figure 56). While the strings and woodwinds sustain a C major chord (with the added sixth, A), the clarinet arpeggio outlines the notes of a G major chord. The thirty-second note is analyzed as a pandiatonic lower neighbor.

In the following example, Copland creates pandiatonicism through the simultaneous occurrence of the tonic and subdominant arpeggios.

![Musical notation](image)

Fig. 57--Copland, *Appalachian Spring*, measures 549-552

![Musical notation](image)

Fig. 58--Copland, *Appalachian Spring*, measures 673-682

*Appalachian Spring* is concluded with a bichordal construction. After the full tonic chord has been established,
the violins divide and add the dominant chord above the tonic. The viola melody in Figure 59 outlines the tonic chord of B major. The accompaniment in the bassoon, clarinet, and bass clarinet spells the sub-dominant chord, E major.

Fig. 59—Copland, "Saturday Night Waltz," Rodeo, measures 78-79

The overlapping of the tonic, sub-dominant, and dominant chords is illustrated in Figure 60.

Fig. 60—Copland, Appalachian Spring, measures 15-19
Pedal

A device that is found in several of Copland's pedal-tonic passages is the pedal. It is interesting to note that the pedal in Figure 61 is on a scale tone that is rather uncommon for a pedal tone (the fourth scale degree in C major).

Fig. 61--Copland, *Billy the Kid*, measures 106-111

A pedal on the dominant is found in *Appalachian Spring* (see Figure 62). Several measures later the pedal is transferred to tonic (see Figure 63).

Fig. 62--Copland, *Appalachian Spring*, measures 333-337
Fig. 63—Copland, Appalachian Spring, measures 366-368

An excerpt from Rodeo illustrates Copland's use of a double pedal on tonic and dominant.

Fig. 64—Copland, "Buckaroo Holiday," Rodeo, Measures 286-290
Arpeggios

The arpeggio is a device used in several different ways in Copland's pandiatonic writing. In *Appalachian Spring* (see Figure 65) Copland's melody is underpinned by the alternation of the arpeggiated subdominant and tonic chords. These arpeggios, which are pandiatonically harmonized themselves, are then pandiatonically combined with the melody.

![Fig. 65--Copland, Appalachian Spring, measures 69-71](image)

Pandiatonicism is sometimes created by the use of overlapping arpeggios. In Figure 66 the tonic, sub-dominant, and dominant arpeggios are sounded in quick succession. Since the ear groups these arpeggios together as chords, the aural effect, even though all of the chord tones are not sustained, is that of these primary chords (F major) pandiatonically overlapping.
This technique is further illustrated in Figure 67. The overlapping arpeggios (with some of the notes sustained) occasionally results in the overlapping of full chords.

The simultaneous sounding of tonic and dominant arpeggios creates pandiatonic harmony.
Arpeggios are sometimes employed pandiatonically with octave displacement. The following from Rodeo illustrates this practice. The C major arpeggio in the flute is pandiatonically harmonized by the horns and strings.
Canon

Copland's ballets illustrate how effectively the canon may be used pandiatonically. A theme from Appalachian Spring (see Figure 41) is later repeated with free imitation a fourth higher (see Figure 70).

![Canon example](image)

Fig. 70--Copland, Appalachian Spring, measures 394-397

The Shaker tune, "The Gift to be Simple," is developed in several ways. Figure 71 illustrates a canon at the octave.

![Canon example](image)

Fig. 71--Copland, Appalachian Spring, measures 531-537

On the following page, a strict three-voice canon is illustrated in Figure 72.
Combined Themes

In a manner similar to his construction of a canon (if the canon may be thought of as the combining of a theme with itself), Copland pandiatonically joins different themes to each other. A theme introduced early in Rodeo (see Figure 73) later is combined...
with a completely different theme, producing pandiatonic harmonies (see Figure 74).

Fig. 73--Copland, "Buckaroo Holiday," Rodeo, measures 114-116

A rhythmic, energetic theme of Appalachian Spring (Cf. Figure 5) is later combined with the broad, majestic one illustrated in Figure 75.
Fig. 75—Copland, *Appalachian Spring*, measures 80-83

*Modes in Pandiatonic Writing*

Although Copland uses the unaltered major scale for the basis of most of his pandiatonic writing, he does use other

Fig. 76—Copland, "Buckaroo Holiday," *Rodeo*, measures 310-315
modes to a lesser extent (see Appendix, Table V). Figure 55 is in Lydian mode, Figure 76 illustrates the Mixolydian mode transposed to D, and Figure 77 is Dorian transposed to F.

Fig. 77--Copland, Billy the Kid, measures 44-48
CHAPTER IV

Conclusions

In *Billy the Kid* (1938), *Rodeo* (1942), and *Appalachian Spring* (1944) Copland uses varied compositional devices in the construction of many of his pandiatonic passages. The purpose of this study is to identify these devices, to illustrate Copland's methods of using these devices, and to tabulate the frequency with which they are used.

The ostinato is used more frequently (see Appendix, Table I) than any of the other devices used by Copland in his pandiatonic writing. The device can at various times be found in the bass, treble, or middle ranges of the orchestra. In cases where a multiple ostinato is used, all the orchestral ranges may contain an ostinato. On occasion, Copland will create an ostinato for pandiatonic purposes and will then develop that ostinato into a more involved one. The diatonic scale, either ascending or descending, is often used for its unifying qualities in certain pandiatonic passages. At times, the scale passage is employed as an accompaniment figure, and at other times it is used melodically. Octave displacement is sometimes used in conjunction with the scale patterns.

Parallel thirds and fourths are an important device in Copland's pandiatonic writing. He uses parallel thirds, without attempting to make them conform to the prevailing harmony.
These thirds are created by the harmonization of a melody (either above or below) at the third. Parallel fourths are used in a similar manner in the harmonization of melodies and accompaniment figures.

Secundal sonorities (those that are built with two or more consecutive seconds) are often used in Copland's pandiatonic harmonies. These sonorities can be found containing from two to six consecutive members of the diatonic scale.

Copland's pandiatonic harmonies are sometimes arranged with bichordal spellings. These harmonies have the appearance of two chords of the diatonic key superimposed upon one another. There is no suggestion of two different keys. Bichordal sonorities occur as the result of overlapping chords, the simultaneous occurrence of different arpeggios, and other similar methods.

A device that is found in several of Copland's pandiatonic passages is the pedal. This device occurs on the tonic, sub-dominant, and dominant. Double pedals are occasionally used, employing tonic and dominant. The pedal can be found in the bass voices, treble voices, and as an interval pedal.

The arpeggio is a device used in several different ways in Copland's pandiatonic writing. At times, the melody is harmonized by the alternation of tonic and sub-dominant arpeggios. Pandiatonicism is sometimes created by the use of overlapping arpeggios. Arpeggios are sometimes employed pandiatonically with octave displacement.
Copland's ballets illustrate how effectively the canon may be used pandiatonically. The ballets contain a two-part canon at the octave and a three-part canon at the octave. Pandiatonic harmonies are also created by Copland's practice of joining different themes to each other.

The diatonic materials used by Copland in his pandiatonic writing are the major, minor, and certain church modes (Dorian, Mixolydian, and Lydian). Their frequency of use is illustrated in the Appendix, Table V.

Another writer says the result of Copland's artistic use of pandiatonicism provided "one of the few valid links between popular, diatonic music, and the much more complex intervallic procedures of 'serious' music."¹ It is a tribute to Copland's skill that he has been able to communicate with simplicity, without drifting into banality.

**TABLE I**

**DEVICES USED BY COPLAND IN PANDIATONIC PASSAGES**

| Device                  | Appalachian Spring | Billy the Kid | Rodeo | Total Combined***
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*The figures in the left side of each column represent the number of measures in which pandiaticonism occurred in conjunction with the device.

**The figures in the right side of each column represent the percentage of those measures to the total number of measures in the work.

***The figures in the last column represent the averaged percentage of measures of the three works in which pandiaticonism occurred in conjunction with the device.
### TABLE II

**Modes and Harmonic Framework Used in Appalachian Spring**

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### TABLE III

**Modes and Harmonic Framework Used in RODEO**

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### Table IV

**Modes and Harmonic Framework Used in Billy The Kid**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Pandiatomic Measures</th>
<th>Percent</th>
<th>Diatonic Measures</th>
<th>Percent</th>
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<td>A Major</td>
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<td>. .</td>
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<td>1.3</td>
</tr>
<tr>
<td>C Major</td>
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<td>8</td>
<td>1.3</td>
</tr>
<tr>
<td>Bb Major</td>
<td>23</td>
<td>3.8</td>
<td>23</td>
<td>3.8</td>
</tr>
<tr>
<td>F Major</td>
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</tr>
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<td>D Major</td>
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</tr>
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<td>. .</td>
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<td>A Mixolydian</td>
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<td>4</td>
<td>.7</td>
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<td>11</td>
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### TABLE IV--Continued

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<th>Chromatic Measures</th>
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<th>Polytonal Measures</th>
<th>Polytonal Per Cent</th>
<th>Totals Measures</th>
<th>Totals Per Cent</th>
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<td>2.4</td>
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<td>11.3</td>
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<tr>
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<td>1.3</td>
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<td>89</td>
<td>14.3</td>
<td>624</td>
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TABLE V
COMPARISON OF MODES USED IN COPLAND'S THREE BALLET

A. Appalachian Spring

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<thead>
<tr>
<th>Mode</th>
<th>Measures</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>679</td>
<td>99.6</td>
</tr>
<tr>
<td>Rest</td>
<td>3</td>
<td>.4</td>
</tr>
<tr>
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<td>682</td>
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</table>

B. Rodeo

<table>
<thead>
<tr>
<th>Mode</th>
<th>Measures</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixolydian</td>
<td>7</td>
<td>.9</td>
</tr>
<tr>
<td>Major</td>
<td>762</td>
<td>97.9</td>
</tr>
<tr>
<td>Rest</td>
<td>9</td>
<td>1.2</td>
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<tr>
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C. **Billy the Kid**

<table>
<thead>
<tr>
<th>Mode</th>
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<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixolydian</td>
<td>75</td>
<td>11.9</td>
</tr>
<tr>
<td>Dorian</td>
<td>67</td>
<td>9.2</td>
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<tr>
<td>Lydian</td>
<td>19</td>
<td>3.0</td>
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<tr>
<td><strong>Subtotal</strong></td>
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<td>24.1</td>
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<tr>
<td>Major</td>
<td>465</td>
<td>74.6</td>
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<tr>
<td>Rest</td>
<td>8</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>624</td>
<td>100.0</td>
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</table>

D. Combined Works

<table>
<thead>
<tr>
<th>Mode</th>
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<tbody>
<tr>
<td>Dorian</td>
<td>3.0</td>
</tr>
<tr>
<td>Mixolydian</td>
<td>4.3</td>
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<tr>
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<tr>
<td><strong>Subtotal</strong></td>
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<tr>
<td>Major</td>
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</tr>
</tbody>
</table>

*Percentages are the average of the combined percentages of the three works.
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