Spring 2003

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On the Influence of Jazz Rhythm in the Music of Aaron Copland

Existing studies of the music of Aaron Copland almost invariably make reference at some point to the composer's invocation of jazz.¹ By every account (including Copland's own) certain of his earlier works do use techniques associated with jazz;² these compositions include *Music for the Theatre*, the Piano Concerto, and *Four Piano Blues*. Among those "jazz techniques" commonly cited in these and other pieces are the use of "blue notes" (chromatically lowered scale degrees in close proximity to their diatonic versions), emphasis of certain timbres such as drum-kit-like percussion and brass with various styles of mutes, and the use of rhythmic materials common to jazz music.

This last element is the focus of the present study. There seems to be a general consensus about the presence of a jazz-indebted rhythmic approach in a substantial portion of Copland's output. However, less work has been done to describe the details of this approach or, for that matter, the ways in which this approach is related to jazz.³ Furthermore, some pieces may not exhibit these details, making comparisons to jazz rhythmic techniques problematic.

What does it mean to say that the rhythmic makeup of a Copland work is influenced by jazz? To explore that question, it is appropriate to survey contemporary scholarly views of jazz's rhythmic and metrical structure in the 1920s (at the outset of Copland's career), fo-

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cusing especially on the composer's own writings on the subject. Careful examination of selected passages from his Piano Concerto will illuminate its rhythmic kinship to jazz as described by Copland and others. Such analysis will provide the background needed to assess the problems of ambiguity surrounding the identification of jazz-rhythm influences in many later Copland works.

Before launching into the details of this study, the issues involved with the slippery definitions of "jazz" must be addressed. Over the past century this term has been used by performers, scholars, and the public to describe techniques used by musicians as distant in style and historical context as Scott Joplin and the Squirrel Nut Zippers. This study will focus upon Copland's perspective on jazz as he expressed it in the 1920s. As will become apparent in the following pages, the music designated as "jazz" even at this time was commonly understood to overlap with other semi-independent repertoires, including "ragtime," "popular music," and various dances like the fox trot and the Charleston. Copland refers to the musical practices of these genres in his writings from the 1920s (as well as in certain of his compositions), and it is to this music that he and most other critics certainly refer when discussing "jazz influence" in Copland's compositions, especially in regards to rhythm. In order to maintain that more-specific focus, throughout this paper I will also use *jazz* in this more limited—though admittedly still broad—way.⁴

Contemporary Descriptions of Jazz Rhythm

Jazz rhythmic techniques, as viewed by Copland in the 1920s, can be summarized as the organization of melodic patterns to produce metrical strata that move in and out of phase with an unchanging, periodic, simple-meter accompaniment. If we invoke for a moment Andrew Imbrie's distinction between "conservative" and "radical" listeners, we can conclude without much difficulty that Copland (as represented by his writings from the 1920s) was the latter.⁵ He readily interpreted repeated melodic patterns—which others might treat as syncopations—as metrical phenomena, even if the periodicity of these patterns breaks down after a short time. When we examine some passages from the composer's own jazz-influenced works, we will see how his views of jazz's metrical structures may have provided a source of inspiration as he developed his own musical language.

In order to understand the ways in which Copland consciously made use of jazz rhythms in some of his works, it is crucial to be familiar with his own conception of just what "jazz rhythm" is. Fortunately for us, he was a prolific writer on the subject. His earliest article discussing the rhythms of jazz (and their potential for use by

"non-commercial composers") was published in January 1927, the same month that his Piano Concerto—clearly jazz-influenced—was premiered. This article, which appeared in *Modern Music*, argues that "the essential character of jazz is its rhythm." Copland describes an evolution of rhythmic approaches and clichés, beginning "on some negro's dull tomtom in Africa" and "descend[ing] through the spirituals, some of which are as much jazz as Gershwin's newest song." He regards ragtime as jazz's "nearest ancestor," and defines its rhythmic makeup as "an unchanging $\underline{1} + 2 + \underline{3} + 4$ bass" over which

is carried invariably one of two rhythms, sometimes both: either the dotted eighth followed by a sixteenth:

or this most ordinary syncopation:⁶

The next step in this evolution of rhythmic practices was ragtime's shift away from "untied" syncopation (such as the rhythm

that Copland mentions in his description), which was more prevalent at the turn of the century, and its increasing reliance on "tied" syncopations as the style matured in the later 1910s and 1920s. (Fig. 1 displays some typical tied ragtime syncopations.)

As we shall see, these tied syncopations are (according to Copland and his contemporaries) the catalyst that spawned jazz's rhythmic techniques. Each measure in figure 1 represents a rhythmic dissonance that Copland reinterprets as a *metrical* phenomenon. This radical reinterpretation forms the crux of his conception of jazz rhythm, which has crucial ramifications for his method of introducing jazz rhythmic techniques into his own compositions.

Writers of the 1920s make a distinction between rags based upon tied and untied syncopations without calling either "jazz," though the distinction between "jazz" and "ragtime using tied syncopation" is not easy to discern. The fact is that composers, publishers, and authors of the late 1910s and 1920s interchanged the terms *jazz* and *ragtime* with enough freedom to have thoroughly muddled the entire

Figure 1. Three tied syncopations.

Copland goes on to cite a 1926 article by Don Knowlton which describes a musical practice Knowlton calls "secondary rag." This practice will prove essential to Copland's conception of jazz rhythm's development and makeup, as well as to much of the analysis presented later in this essay; it seems appropriate to examine it in some detail. Knowlton inherited the term "secondary rag" from "a Negro guitarist," according to whom "primary rag" refers to untied syncopation, while secondary rag is the "superimposition of *one*, two three upon the basic one, two, three, four."⁸ Knowlton includes a chart (see fig. 2) expressing this superimposition. Figure 3 illustrates two possible musical notations of Knowlton's diagram.⁹

1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1
1		2		3		4		1		2		3		4	

Figure 2. Knowlton's diagram of secondary rag.

Figure 3. Two musical realizations of figure 2 (secondary rag).

Berlin includes an extended discussion of secondary rag (and cites Knowlton's article as well) in which he points out that in practice "the pattern [of three eighths or sixteenths grouped together] is most often produced four times," after which the three-pattern is broken.

Figure 4. Secondary rag patterns "completed" after three measures.

Figure 5. An excerpt from *Black and White Rag* by George Botsford.

This break allows every second notated bar line to be uncontested by an overlapping "three group," thus giving rise to two- and four-measure groups.¹⁰

Here, as in most instances of secondary rag, the contour of the melody repeats a set of three sixteenth notes a total of four times. The fourth set of sixteenths, which begins with the second sixteenth note of the second measure, is altered and followed by new melodic material. This new material allows for the beginning of a similar pattern of repeating threes at the third notated downbeat of the example. The result at a higher level of all this manipulation of melodic groups is an ordinary pair of two-bar phrases. The interest lies in the play between the rhythmic patterns of the melody and the steady accompaniment. This interaction, according to Knowlton, is the element "that makes shoulder-muscles twitch, that bedevils hips, that provokes wiggles and twists on the dance floor, and causes blue-noses to cry out that jazz [and by implication, rag] is a great immoral influence."¹¹ To the conservative listener, the repeating threes of secondary rag's melodic patterns begin to present a challenge to perception of an unchanging simple duple meter. However, the periodicity of that meter is preserved when the series of melodic threes is broken, creating a novel (for the time) aural experience. The practice of secondary rag is thus crucial to the rhythmic development of jazz, in that this practice suggests the possibility of challenges to the simple meter's beat-to-beat supremacy without completely destroying the possibility to perceive it at the level of the measure.

Copland used secondary rag as a basis for his radical interpretations of melodic jazz patterns as metrical rather than merely rhythmic phenomena. He considered that

Modern jazz began with the fox trot. For this new dance the four-quarter bass was used as in ragtime . . . and miraculously improved by accenting the least obvious beats, the second and fourth—1 + 2 + 3 + 4. With this was combined another rhythmic element, which . . . is always written:

Copland describes here two rhythmic dissonances.¹² The first is a syncopation at the level of the half note, provided by the phenomenal accent of beats 2 and 4. Of much greater interest to Copland, however, is that this rhythm exhibits a tied syncopation, suggesting the practice of what Knowlton and others called secondary rag.¹³

The first measure of Knowlton's chart (fig. 2) bears a direct relationship to Copland's prototypical fox-trot rhythm (see quote above). The tied syncopation of the fox trot awards an agogic accent to the fourth eighth note, giving the stream of eighths a tendency to group into threes (as in fig. 4a). If one presumes that this one-measure fox-trot pattern starts over in the next measure (as it usually does in this repertoire), then the third set of three eighths is interrupted by the restarting of the fox-trot pattern when the next measure begins. The result is a repeating pattern of three sets of eighth notes that are three, three, and two eighth notes in length.

Copland continues:

This notation [as given in the previous quote], however, is deceptive, as Mr. Knowlton points out. His article reveals the practice followed by popular music publishers of writing extremely complex jazz compositions very simply so as to sell them more easily to the musically uneducated. He was the first to show that this jazz rhythm is in reality much subtler than in its printed form and is properly expressed thus:

Therefore, *it contains no syncopation*; it is instead a rhythm of four quarters split into eight eighths and is arranged thus: 1–2–3: 1–2–3–4–5, or even more precisely: 1–2–3: 1–2–3: 1–2. Put this over the four-quarter bass:

and you have the play of two independent rhythms within the space of one measure. It is the beginning, it is a molecule of jazz [emphasis added].¹⁴

Copland interprets Knowlton to mean that the repeating sets of three eighth notes each constitutes a metrical unit, and when placed above the 4/4 accompaniment, the result is a superimposition of two meters. Thus, there is to Copland no syncopation in secondary rag—agogic accents occur just as they would be expected *in their own distinct meters*.

In this repertoire the phenomenal accents of the melodic line are typically viewed as a series of syncopations that obfuscate (rather than annihilate) the regular simple meter laid down by the accompaniment (as expressed in the customary notation). Copland (and, according to his reading, Knowlton) regarded the periodicity of these syncopations as the basis for a second metrical stratum. This viewpoint constitutes a metrical superimposition: one metrical structure, albeit less regular, is placed atop another. When the top line of Knowlton's chart (fig. 2) is regarded as constituting its own regular 3/8 metrical pattern, then there is (according to Copland) nothing syncopated about it. Comparison of figure 6 to figure 4a illustrates the issue in musical notation.

If there *are* multiple metrical strata in this music, they are not entirely independent, as demonstrated by the paradigm represented in Botsford's rag. The melody's periodicity sometimes breaks down so that its downbeat can coincide with that of the accompaniment's meter, thus articulating cadences and/or phrase initiations. In the fox trot as described by Copland, this periodicity is broken at intervals that are themselves periodic (i.e., the pattern of three eighth notes is broken after its first repetition), making possible a recurring 3 + 3 + 2 pattern that begins anew with every 4/4 downbeat. This recurring pattern of eight eighth notes, while not subdivided into "beats" that exhibit the same length, constitutes its own metrical structure because its continued repetitions of 3 + 3 + 2 subdivisions come to be expected by the listener.

Figure 6. Secondary rag as a metrical superimposition.

Copland's decision to regard secondary rag's rhythmic patterns as quasi-independent metrical strata is radical, if not revolutionary. Even Knowlton focuses his discussion on the *interaction* between melodic and accompaniment groupings, strongly suggesting that the resulting effect can be described as intense syncopation of a single meter rather than the superimposition of multiple metrical patterns. By viewing these melodic groupings as metrical phenomena Copland grants them a higher degree of autonomy. In secondary rag and fox trot the melodic pattern of repeating threes always breaks down sooner or later, collapsing into the accompaniment's unchanging duple or quadruple meter—but it *need not do so* if this pattern is considered metrical rather than rhythmic. As we shall see later, the composer's evocation of this metrical autonomy is crucial to the relationship between his own compositions and the rhythmic practices of jazz and rag.

After his discussion of the fox trot, Copland goes on to describe "the next step" in the evolution of jazz rhythm,¹⁵ which

produced polyrhythms. In employing two rhythms within one measure [i.e., two metric strata with measures of the same length] jazz after all merely did something that had been done before, if we remember, for instance, the use by older composers of 3/4 against 6/8. But the next era in the jazz age—typified by the song *Stumbling*—saw independent rhythms spread over more than one measure, over a series of measures:

This phenomenon more closely resembles the rhythmic practice of secondary rag as described by Knowlton than that of the fox trot: the melodic line's periodic pattern has a different length than the accompaniment, but if the melody's pattern is stated enough times (four) the two rhythmic patterns will eventually share a downbeat. As with secondary rag, the shorter pattern is in practice often abandoned before such a shared downbeat is reached. Copland suggests that the reason such a superimposition was not maintained for long spans was that "it was so difficult for ordinary ears and so exhilarating to ordinary sensibilities that the jazz composers, always intent upon their public, dared not use it for more than a few measures at a time."¹⁶ He cites as a paradigm the first strain of Zez Confrey's *Kitten on the Keys* (fig. 7), which does in fact present a melodic triple-meter pattern four times before being interrupted as its downbeat coincides with that of the accompaniment.

Figure 7. *Kitten on the Keys* by Zez Confrey as rebarred by Copland.

The triple figure of the right hand is constructed as follows: m. 1 repeats as m. 2, and mm. 3–4 maintain the melodic contour and the metrical placement of tritones and their inward resolutions to thirds that were modeled in the first two “measures.” Meanwhile, the 4/4 accompaniment is demarcated for two bars by the motion between F and A flat in the left-hand thumb. This is followed in m. 3 by oscillating half-note harmonic motion in and out of a G dominant 7th chord. These very bars of *Kitten on the Keys* are also mentioned by Knowlton as an example of secondary rag—one can see the overlap of the application of the terms *ragtime* and *jazz* in these descriptions of the same composition placing it in both styles.

Finally, Copland designates as the last step in the evolution of jazz rhythm the abandonment of the strictly regular accompaniment. To this point, jazz’s rhythmic/metrical effects have hinged upon the play between the semiperiodic patterns presented in the melody and an unchanging, periodic simple-meter frame. Copland points out two ways in which this frame is broken. The first is in the prototypical Charleston rhythm, which

consists of the upper fox trot rhythm: $\underline{1} + 2 + 3$: $\underline{1} + 2 + 3 + 4 + 5$ used below as well as above instead of the formerly unflagging $1 + \underline{2} + 3 + \underline{4}$ bass:

Thus, the grouping pattern that gave rise to the upper metrical stratum in the fox trot is assumed by the lower stratum as well.¹⁷ The periodicity of the 4/4 measure is retained, but the articulation that subdivided that measure into two equal-sized parts disappears from the accompaniment.

Copland’s next example is related to the “prototypical Charleston” in the respect that the simple-meter pattern is replaced by a grouping pattern that reflects the melodic activity. He quotes four bars from George Gershwin’s *Clap Yo’ Hands* (see fig. 8).

Figure 8. *Clap Yo' Hands*, rebarred by Copland.

Here a melodic gesture is truncated from four to three quarters in length, and the bass line and offbeat accompaniment are altered to reflect the new length of that gesture. To Copland the value of this technique is that “from the standpoint of jazz it means an advance through the relief it offers from the old relentless 4/4 bass,” and he rebars the passage to emphasize that point.¹⁸ One feature of this passage from *Clap Yo' Hands* that Copland does not discuss, but would certainly bolster his view of ragtime and jazz history as an evolution, is visible only when the rest of figure 8's phrase is considered. Figure 9 starts at the same point as figure 8 (and uses Gershwin's original notation of the time signature).

The first two brackets above mm. 2–3 in figure 9 correspond to the pair of 3/4 measures notated by Copland in figure 8. The third bracket highlights a two-quarter-note-length gesture that allows the melody to return to rhythmic consonance with the notated measure. The result is a rhythmic organization of 3 + 3 + 2 quarter notes. This technique is paralleled in the Charleston and fox trot, as all these styles depend on a “3 + 3 + 2” rhythmic construction. These last examples from Copland's discussion do offer relief “from the old relentless 4/4 bass,” but the periodicity of the simple meter formerly outlined by that bass and accompaniment still remains.¹⁹

We have seen that Copland's conception of jazz's metrical structure consists of a periodic, simple meter frame articulated by an unflagging accompaniment, over which are superimposed melodic patterns that generate their own, less-regular metrical strata. Later jazz subgenres, such as the Charleston, alter the accompaniment so that it articulates the subdivisions suggested by the melody's organization rather than the ordinary periodic meter, though the latter's presence is

Figure 9. *Clap Yo' Hands*, first phrase of refrain.

never contradicted at the level of the measure. Copland's discussions argue for quite radical metrical interpretations of the melodic patterns, instead of regarding them as syncopations of the underlying simple meter's periodic structure. His view of this music's metrical makeup has important ramifications for the ways in which he attempted to evoke jazz's rhythmic style, as we shall see in an examination of excerpts from one of his *Four Piano Blues* and the Piano Concerto.

No. 2 of Four Piano Blues: A Preliminary Study

The temporal structure of Copland's Piano Concerto is complex and difficult, and teasing out and describing the jazz influences upon that structure is a challenging task. To understand how Copland imported the rhythmic practices of jazz into such complicated musical textures, it is worthwhile to dissect first a few measures from a simpler composition that also models the composer's infusion of jazz rhythm into his own works. Such an analysis will serve to illustrate clearly the rhythmic features we might expect to find in a jazz-influenced work.

Figure 10 displays the opening measures from the second of Copland's *Four Piano Blues*. The history of this movement is somewhat

Soft and languid (♩ = 108)

The musical score is presented in three systems. Each system includes a piano (left hand) and a right-hand part. The tempo is marked 'Soft and languid' with a quarter note equal to 108 beats per minute. The first system is marked *mp legato* and *p*. The second system is marked *mf*. The third system is marked *mp*. The music is in 3/4 time and features a mix of eighth and sixteenth notes, often beamed together, and rests, creating a syncopated feel. The key signature has two sharps (F# and C#).

Figure 10. *Four Piano Blues*, No. 2, opening. (© Copyright 1949 by The Aaron Copland Fund for Music, Inc. Copyright renewed. Boosey & Hawkes, Inc., Sole Publisher and Licensee. Reprinted by permission.)

complex. It was originally composed in 1926 (at about the same time as the Piano Concerto) and intended as a movement of an unfinished suite titled *Five Sentimental Melodies*. The music was recycled for use in the little-known 1934 ballet *Hear Ye! Hear Ye!* before finding its final resting place as the second of the *Four Piano Blues* when they were published as a set in 1949.

This movement's harmonic approach flaunts the influence of Debussy more than that of jazz. The first four measures consist of a pentatonic melody harmonized with planed major triads in the right hand, while the left hand marks out the notated meter with oscillating F-major and G-major chords. This opening two-bar phrase and its repetition exhibit a gentle syncopation in m. 2 and m. 4, but the rhythmic relationship to jazz becomes more overt beginning at m. 5. Here, the left hand divides the measure into 3 + 3 + 2 eighth notes for two bars to articulate the descent to E3 and the return to A3. Measures 7–8 reorder these subdivisions into 2 + 3 + 3. The right hand, meanwhile, continues to rattle off two-bar phrases (with one-beat anacrusis) as it has from the beginning.

The careful control of the rhythmic structure in mm. 5–8 to evoke a jazz influence is clear. Copland first introduces the 3 + 3 + 2 subdivision that typifies jazz rhythm as he understood it, while maintaining the potential for a continued background 4/4 through the absolutely regular phrase lengths in the melody. His next step grants the irregular metrical strata additional independence. The left hand taries on A3 for an extra two eighths at the beginning of m. 7 before again descending to E3 and returning to A3 at m. 9; this return is subtly elided with the return to the opening theme. Comparison of mm. 5–6 with mm. 6–7 suggests a metric shift in the left hand, illustrated by the brackets in figure 11. The effect is very subtle: despite the shift in m. 7, the beginning of m. 8 is still articulated by the initiation of a new note in the 3 + 3 + 2 stratum (m. 7). Thus, this shifted stratum does not completely obscure the 4/4 regularity that spawned it, and in fact eventually affirms it through the elision at m. 9.

These measures provide in miniature an example of Copland's approach to the evocation of jazz rhythm in his music.²⁰ The result typically includes:

Figure 11. Metric shift (left hand) in *Four Piano Blues*, No. 2, mm. 5–9. (© Copyright 1949 by The Aaron Copland Fund for Music, Inc. Copyright renewed. Boosey & Hawkes, Inc., Sole Publisher and Licensee. Reprinted by permission.)

- a rhythmic stratum that suggests secondary rag or its related practices (here 3 + 3 + 2 subdivisions are used); and simultaneously
- maintenance of at least the potential for continued positing of a strictly periodic simple meter. (That is accomplished in the present example through repeated use of two-bar melodic phrases that, until the new stratum starts in m. 5, are further entrained with the half-note harmonic gesture in the left hand and the quarter-note figures in the right hand.) The less-regular “rag” strata usually folds back into the simple meter without disrupting its regularity, as is typical in jazz (and in this excerpt).

Frequently, Copland will include some additional innovation on these practices, creating a more complex rhythmic structure that can still be readily viewed as jazz-derived. (In this case the metric shift of the 3 + 3 + 2 stratum and its use of an elision at m. 8 to collapse into the prevailing simple meter fulfills this role. Other such “innovations” appear in the Piano Concerto, and will be discussed later in this article.) Moreover, this analytic sample illustrates that a jazz rhythmic approach, as conceived by Copland, can be distinguished independently from other devices common to jazz (such as blue notes or particular timbres). This “blues” is indebted both to French-impressionist and jazz music—its original subtitle, “Hommage à Milhaud,” points obliquely to these dual influences.

The following investigation of selected passages from Copland’s Piano Concerto will follow a similar analytic tack. The goal of such analysis is to find the ways in which the work’s rhythmic/metrical structure might (or might not) be related to the composer’s own conception of jazz rhythmic techniques.

Jazz Rhythm and the Piano Concerto

Copland’s Piano Concerto is an appropriate vehicle for illustrating the composer’s own use of jazz rhythmic techniques for several reasons. One has already been mentioned: this work’s composition is roughly contemporary to Copland’s ruminations discussed in the first section of this study. Several parameters of the work besides rhythm and meter reflect the jazz idiom—melodies are often saturated with blue notes, and timbral selections such as muted brass, saxophone solos, and percussion writing that resembles that of a drum set evoke jazz even before rhythmic techniques are considered. Finally, Copland himself explicitly states that he intended in this piece to explore the possible applications and extensions of jazz rhythm to modern art music.

My primary aim was to explore new avenues in the area of poly-rhythms. I was also experimenting with shifting beats by introducing a variety of highly unorthodox and frequently changing rhythms—7/8, 5/8, 9/8, 1/8, etc., that made the music polymetric—the use of different time signatures one after the other. The challenge was to do these complex vertical and horizontal experiments and still retain a transparent and lucid texture and a feeling of spontaneity and natural flow. If I felt I had gone to the extreme of where jazz could take me, the audiences and critics in Boston all thought I had gone *too* far.²¹

The following paragraphs will examine a few selected passages from the Concerto with the purpose of highlighting the ways in which Copland incorporated the very jazz rhythmic practices he was cataloguing and describing in his 1927 article from *Modern Music*. Specifically, this music demonstrates a fascination with the creation and manipulation of metrical strata via repeating or gradually changing melodic patterns. These patterns interact with regular “background” periodic meters in ways that evoke jazz and rag techniques.

The music beginning at R31 (rehearsal number 31) from the Concerto’s second movement provides a clear demonstration of Copland’s assimilation of the jazz rhythmic techniques he outlined in *Modern Music*. Figure 12 displays the beginning of this section, which consists of six measures of music followed by an altered, quasi-sequential repetition.

The section opens with an ostinato (in muted trumpet and violin) that demarcates a “three eighths + five eighths” subdivision of the notated 4/4, thus creating the potential for an association with fox trot or Charleston. The piano’s entrance over this ostinato at R31 + 2 is obviously related to secondary rag. A pattern of cycling eighth notes in threes, each initiated by a registral accent on either D6/E-flat 6 or E6/F6, is given five times, then broken off so as to create an arrival at the downbeat of R31 + 4. The secondary-rag rhythmic technique is much the same as that described by Knowlton and Berlin and as was exemplified in *Black and White Rag* (fig. 5), but with two notable differences. The first of these differences is simply that, in these measures from the Concerto, the periodic simple meter is not marked out explicitly by a bass line or other accompaniment, as is suggested by Knowlton’s diagram (fig. 2) and the left hand of Botsford’s rag. The Charleston ostinato does underscore the piano’s entrance here, emphasizing the continued perception of notated measures without subdividing that measure evenly into quarter and eighth notes. The second difference is that the piano squeezes five statements of the three-

31 $\text{♩} = 104$
muted Tpt., Vln.

Orch.

Vla. *p*

Strings pizz. *mf* 8

W.W. *f*

Strings pizz. *f*

Piano

mp

muted Tpt. *p*

Vln., arco

Strings pizz. 8

32 W.W.

Strings pizz.

muted Tpt. *f*

Vln. arco

8

Figure 12. Piano Concerto, reduction of R31 to R32 + 3. (© Copyright 1929 by The Aaron Copland Fund for Music, Inc. Copyright renewed. Boosey & Hawkes, Inc., Sole Publisher and Licensee. Reprinted by permission.)

pattern into two notated bars before giving up its potential metrical independence and resynching with the ostinato's periodicity at $R31 + 4$. We have seen that a secondary rag pattern more typically gives up the ghost after only four cycles (again exemplified by the Botsford excerpt), but this passage demonstrates that five cycles are certainly possible in the span of two notated measures while still respecting the next notated bar line.

The metrical structure beginning at that next bar line ($R31 + 4$) is markedly different and somewhat more complicated. Each of the pianist's hands at this point might be regarded as constituting its own metrical $3/8$ stratum, each "measure" of which consists of an accented A, a B flat, and an eighth rest. The pianist's hands are separated by a single eighth note. (Copland's nonstandard beaming of these measures tends to reinforce a reading of each hand as metrically independent.) Working against these potential metrical strata are the rising string pizzicati that place a B flat on each beat of the $4/4$ measure. Taken together, the strings and the piano thus continue the relation to secondary rag, albeit in a more abstract way. As B flats are plucked on every notated beat for two measures, each of the pianist's hands cycles metrically dissonant threes (i.e., dissonant with the strings *and* with each other!). Rather than folding back into the notated simple meter, in $R31 + 6$ these secondary rag strata disappear into the stratosphere without ever being reconciled to that simple meter marked by the pizzicati (in contrast to the woodwind stratum, which will be discussed momentarily). By allowing these secondary rag strata to float away without being rejoined to the notated bar line, Copland has granted them a level of metrical independence unprecedented in the jazz practices he catalogued in his contemporaneous *Modern Music* article, though the metrical stratification itself is obviously derived from his interpretation of secondary rag.

Finally, the woodwinds' contribution to the metrical structure of these measures can also be easily related to these same jazz rhythmic practices by recognizing its own organization into units of three eighth notes' length (with one significant exception). If one regards the notated accents as beginning rhythmic units (as we did when considering the piano part of this passage), then the structure given in figure 13 results.

The E-major triad in $R31 + 4$ is sustained for an "extra" eighth note, thus creating a four-eighth "hiccup" in the stream of repeating three-eighth units that otherwise saturates these two measures. This hiccup is needed to create the potential for a strong downbeat at the beginning of $R31 + 6$, where the Charleston figure is resumed. Copland is clearly toying with the conventions of secondary rag practice in the rhythmic construction of the woodwinds' music. We have seen how

Figure 13. Rhythmic interpretation of woodwinds' music, R31 + 4 to downbeat of R31 + 6. (© Copyright 1929 by The Aaron Copland Fund for Music, Inc. Copyright renewed. Boosey & Hawkes, Inc., Sole Publisher and Licensee. Reprinted by permission.)

jazz composers might break off a series of repeating “threes” just before a notated bar line so that the metrically irregular melody might remain anchored to the more-regular meter laid down by the accompaniment—Copland himself did this in order to create the strong arrival point at the downbeat of R31 + 4. If we can introduce an interruption of the continuous threes *just before* the bar line to be emphasized with a moment of metrical consonance, then why not place that interruption earlier? The four-eighth unit shown in figure 13 allows for the three-eighth pattern to coincide with the downbeat of R31 + 6 without any further irregularities. This section of the Concerto thus far has maintained perfectly regular two-bar hypermeasures, and the expectation for another hypermetric downbeat at R31 + 6 is realized thanks in part to the woodwinds' four-eighth unit. Just as in *Black and White Rag*, the secondary rag pattern is tied to the notated bar line so as to create two-bar hypermetric units, despite the metrical complexities on the music's surface.

To describe the music of R31 + 6 to R32 + 1 as a sort of sequential repetition of the portion of the excerpt discussed thus far is certainly an oversimplification: the piano's next entrance and the woodwinds' entrance in R32 are a half-step higher than the corresponding moments in the first six bars, but the strata that previously depended upon alternation between the pitch classes A and B flat remain grounded on those pitch classes in this repetition. The rhythmic structure of these next six measures, however, bears only one difference when compared with the excerpt's first six measures. That difference is introduced by the piano's “early” entrance halfway through R31 + 7 (rather than at the beginning of R31 + 8, which would have corresponded to the entrance in R31 + 2). The result of this entrance is that the piano is also ready to cadence two beats early, and the Charleston ostinato is interrupted mid-statement by that cadence at R32. (This creates the necessity for the 2/4 measure notated just before R32.) The secondary rag pattern, coupled with its prototypical conclusion after eight quarter notes' time, actually wins out over the periodicity of the ostinato—the Charleston figure is altered to fit the secondary rag structure, not

(as was typical in jazz) the other way around! What might be perceived as an early entrance by the piano in R31 + 7 must be reevaluated as the determinant of the music's metrical structure by R32 as all other musical events shift two beats to match it. It is only by regarding secondary rag as a metrical phenomenon (and not merely a rhythmic one) that the composer could conceive this passage.

This section clearly demonstrates several ways in which Copland attempted to use jazz (specifically, secondary rag) rhythmic techniques "to explore new avenues in the area of polyrhythms."²² A more complex sample of the composer's efforts to infuse this work with jazz rhythm is given in figure 14. This passage actually appears towards

The musical score for Figure 14 is a reduction of measures R16-4 to R17 from Aaron Copland's Piano Concerto. It is written in 4/4 time and consists of three systems of music. The first system (measures 16-17) includes annotations for Tpt., Vln., Vla., + Woodwinds, - Woodwinds, + Woodwinds, Hrn., Vcl., - Vcl., and Piano. The second system (measure 17) includes annotations for - Vla., Tpt., + Fl., Tpt., + Vla., Vcl., + Tbn., Bsn., Cbsn., C.B., and 8ba. The third system (measure 18) includes annotations for + B. Cl., + Hrn., Vcl., - Bsn., Cbsn., B. Cl., + Tpt., and 8ba. The piano part is in the bottom system, the orchestra in the middle, and solo instruments in the top. The score is divided into measures 16, 17, and 18.

Figure 14. Piano Concerto, reduction of R16 – 4 to R17. (© Copyright 1929 by The Aaron Copland Fund for Music, Inc. Copyright renewed. Boosey & Hawkes, Inc., Sole Publisher and Licensee. Reprinted by permission.)

the beginning of the second movement, following a solo cadenza (linking this movement to the first) and a section that accelerates to the new fast tempo (half note = 104 at R16 + 2).

The music of figure 14 is characterized by two basic ideas. The first is a melodic gesture of a descending whole step followed by a descending third, harmonized by planed major triads. (The reader will recall that planed major triads also appeared in fig. 12 above.) The second idea is an accompaniment of steady quarter notes, which appears sometimes as a chromatic scale fragment, sometimes as a whole-tone scale, and sometimes as a whole-tone scale harmonized in parallel major sixths. Certainly, these musical elements do not evoke jazz in and of themselves; planed major triads and whole-tone scales are hardly typical of jazz of the 1920s. However, we will see that Copland's rhythmic treatment of this raw material makes it difficult to deny a jazz influence.

The perception of downbeats in the first four bars of figure 14 is essential to our discussion of this passage's rhythmic/metrical structure. Figure 14 begins with a loose canonic treatment of the three-note melodic gesture between the top orchestral line (strings, woodwinds, and trumpet at this point) and the soloist's right hand (a minor third lower and a bar later—more or less).²³ The entrance of the piano helps to orient the listener to the temporal location of the second downbeat, and a parallel metrical reading of the piano's first measure leads to the perception of the third downbeat of the figure as well. The restarting of the orchestral motive—after pausing for five eighth-note durations in the excerpt's second measure—also tends to reinforce the third downbeat.

Winthrop Sargeant has noted that one characteristic of jazz melody is "the distortion of repeated phrases" to create unpredictable syncopated effects.²⁴ That technique is certainly paralleled between R16 – 4 and R16, as the descending motive's repetitions each exhibit different lengths and different metrical identities. The brackets in figure 15 track this motive's various manifestations in the orchestral parts—Copland manipulates the motive so that it takes five, eleven, five, and nine eighth-note durations to complete in its respective transformations. Meanwhile, the quarter-note accompaniment gestures that saturate the entire excerpt in the lower line of the orchestral reduction and in the soloist's left hand make the melody's syncopations explicit.

The three-note motive changes length while the quarter-note accompaniment, working in tandem with the piano entrance, helps to maintain (for the moment) periodic 4/4 meter. Copland further amplifies the syncopated character of this passage with the piano's canonic imitation of the orchestral three-note motive. This is jazz syncopation with a new level of intensity!

Figure 15. Orchestral parts (reduced), R16 – 4 to R16 – 1. (© Copyright 1929 by The Aaron Copland Fund for Music, Inc. Copyright renewed. Boosey & Hawkes, Inc., Sole Publisher and Licensee. Reprinted by permission.)

The perception of the first beat of R16 as a downbeat seems certain for several reasons. The upper strings, woodwinds, and trumpet begin another motivic statement of length 5 (i.e., a statement as long as five eighth notes); the two previous length-5 statements in the orchestra also connoted downbeats. Further, at this moment the canon breaks down and the soloist begins a new idea: the entire piano part becomes homorhythmic, fusing the ascending harmonic sixths of the left hand with the planed major triads of the right hand into a simultaneity that is wrenched upward every three eighth notes.

In order to hear beat one of R16 as a downbeat, however, one must metrically reinterpret the descending chromatic quarter-note pattern (in solo horn and cellos) prior to R16. The irregular lengths of the melodic motive in the trumpet, violin, and viola actually cause the meter to “lose” a beat just before R16—the “5 + 11” that starts the excerpt allows for a 4/4 periodicity (which is articulated by the piano’s entrance). The “5 + 9” that follows is a shortening of the preceding “5 + 11” that allows for the perceived downbeat at R16. The horn/cello pattern moves from E flat to C in the first measure of the excerpt and is finishing a second repetition (a minor third higher) just as we arrive at R16—one beat too early for the repetition to be completed with the same metrical identity. To personify this musical strand for a moment: the stratum appears to know it is “lost,” for at R16 it immediately gives up the four-quarter pattern and begins a new whole-tone ascent. This ascent lacks strong metrical implications and serves to mark only a pulse. Most significant for the following discussion, in any event, is the acknowledgment of the beginning of R16 as a downbeat in light of the strong evidence for it.

The orchestral statement of the material R16 is immediately repeated twice. Significantly, these three presentations are *all* five eighth notes long. This compositional technique is an innovation on the method of secondary rag, in which a melodic pattern causes a metrical stratum to emerge consisting of units three-eighths the length of an underlying simple meter (see fig. 3 above). At R16, the new melodically generated stratum consists of “measures” of 5/8. The per-

ception of 4/4 at all is quite tenuous between R16 and R16 + 2—the whole-tone ascent in the lower orchestral instruments does not clearly delineate meter at all, and the piano certainly is not helping with the apprehension of 4/4. However, Copland breaks the melodic 5/8 pattern in such a way as to strongly mark beat one of R16 + 2 as a downbeat. We have seen in *Clap Yo' Hands* (fig. 9) that, even when musical phenomena marking a simple periodic meter are suppressed, the *periodicity* of that meter is maintained until the secondary rag pattern is interrupted. This passage of the Piano Concerto works in the same fashion. A melodic gesture is repeated, defining a new rhythmic stratum. Other musical evidence for a “background” simple meter is temporarily absent. When the new stratum breaks down, that breakdown dovetails into that background meter without breaking the background meter’s periodicity. Because the melodic pattern at R16 consists of repeated fives rather than threes, it must be interrupted after only three statements if the first beat of R16 + 2 is to be unambiguously strong. (Berlin and Copland both pointed out the tendency for secondary rag patterns to end after four statements, creating metrical consonance at the background meter’s next downbeat—we have already observed this tendency in the music from fig. 5.) The fact that Copland tethers these polyrhythms to a periodic simple meter belies this music’s relation to secondary rag.

The role of the solo piano further complicates matters. As already noted, the piano begins at R16 a new musical idea, combining planed major triads with ascending harmonic sixths. The reiterations of this dense simultaneity create yet another metrical stratum. This one consists of dotted quarters (length 3—suggesting strongly the threes of secondary rag). The combination of this stratum with the two orchestral strata at R16 already discussed certainly demonstrates Copland’s explicit interest in “complex vertical and horizontal experiments” with polyrhythms while “still retain[ing] a transparent and lucid texture.” (Whether this musical passage is successful by these criteria I leave to the reader’s judgment.) The composer has created in these bars a sample of secondary rag raised to the next level of complexity. The term “third-order rag” might describe it nicely!

The planed major triads receive a new rhythmic treatment beginning at R16 + 2. The length-5 statements of the motive are truncated here, removing the second quarter note from the 5/8 pattern. The repeating eighth note/quarter note pattern of the piano melody, taken against the four-quarter ostinato of the left hand, is once again strongly reminiscent of the techniques involved in secondary rag. Beginning at R16 + 2, the piano melody’s eighth/quarter pattern is stated four times before breaking off, only to repeat the process beginning at R16 + 4 and once more at R16 + 6. The result is a series of three two-measure

sure “phrases,” just as one would find in ragtime compositions such as *Black and White Rag* (fig. 5 above).²⁵ Even though this passage is not indebted to jazz’s timbral or harmonic characteristics, its relationship to the rhythmic techniques of contemporary jazz is clear.

I have shown that the rhythmic approach of figure 14’s music makes explicit reference to that of early jazz, without evoking jazz characteristics in other parameters. This excerpt sounds “jazzy” *because* of its rhythmic treatment; its planed major triads, whole-tone scales, and standard orchestral colors otherwise typify a great deal of Western art music of the early twentieth century that does not evoke jazz. The next passage we will discuss, which appears in the Piano Concerto’s slow opening movement, represents a different circumstance in this regard. This latter excerpt’s rhythmic techniques point to jazz with much less certainty, but consideration with other musical parameters that *do* evoke jazz makes the reference to this style quite explicit.

The excerpt in question begins at R6 – 3 (see fig. 16). Consideration of the orchestra’s role in this passage significantly complicates matters; for the moment this analysis will focus exclusively on the ramifications of the piano part.

In this passage we hear a steady, ostinato-like left hand that repeatedly outlines two harmonies (F major and A-flat major, both with added ninths); the harmonic pace is that of the half note. (The most recent tempo indication, shortly after R3, is quarter note = c. 58.) The steady oscillation between these harmonies, articulating four eighth notes apiece with a registral accent at each harmony’s beginning, suggests perceptually the 4/4 periodic meter that Copland has notated.

Floating above the 4/4 outline is a melody that exhibits a rhyth-

Figure 16. R6 – 3 to R6 + 4, piano only. (© Copyright 1929 by The Aaron Copland Fund for Music, Inc. Copyright renewed. Boosey & Hawkes, Inc., Sole Publisher and Licensee. Reprinted by permission.)

mic structure that has less and less to do with that accompaniment. At the excerpt's beginning it is not difficult to regard this melody as a heavily syncopated elaboration of 4/4. Its first two measures have parallel points of initiation on the second eighth of each bar, the second measure exhibits a 3 + 3 + 2 division of eighth notes (which, while bearing a relationship to jazz, also straightens itself out in relationship to the underlying 4/4 at measure's end), and the third measure reaches a point of repose on C for five eighths before beginning the phrase at R6 in the same metrical position. This first phrase's rhythmic structure, while far from consonant with the underlying 4/4 periodicity, does not contradict that meter with its own regular patterns (as was the case in the last excerpt, or in secondary rag).

Starting at R6 the melody begins more strongly to suggest metrical independence from the 4/4 ostinato. This stratification of a new, melodically generated metrical strand over a simple-meter accompaniment recalls jazz/rag practices in tunes like *Stumbling*, though these techniques' interrelationship is somewhat distant and ambiguous (as discussed below). Copland actually includes in the score itself an indication of his own ideas about how at least some portions of this melody are metrically organized. Figure 17 gives the melody at R6 (in one octave only) together with brackets that are included in the score by the composer to show the way he views the implied structure.

The first two pairs of brackets with the "6/8" indication are Copland's own notation; I have added the dashed lines following the brackets. Copland's brackets and beaming patterns draw our attention to the developmental treatment given the melodic gesture beginning at the downbeat of R6 + 1. The linear reduction (see fig. 18) further illuminates this development: an ascending whole-step pattern (F-G-A), shown with stemmed notes, is voiced over a "pedal" C5.²⁶ The rhythmic manifestation of each step of this ascent takes six eighth notes to complete.

Following the arrival at A at the end of R6 + 2, Copland extends the melodic pattern by two eighth notes, then repeats the "B-B-A" gesture. The result is the rhythmic unit that I have delineated with dashed lines (fig. 17), which might be regarded as a "measure" of 8/8

Figure 17. R6 to R6 + 4, piano only (doubled octave in r.h. omitted). (© Copyright 1929 by The Aaron Copland Fund for Music, Inc. Copyright renewed. Boosey & Hawkes, Inc., Sole Publisher and Licensee. Reprinted by permission.)

Figure 18. Linear reduction of motivic development beginning at R6 + 1.

to preserve the metrical identity of the B-B-A figure. Following this 8/8 “bar,” the developing motive breaks down completely (Arnold Schoenberg could have cited this as an example of “liquidation”) as the melody descends to E flat in R6 + 4 and trails off. By the time the end of this excerpt is reached, it is difficult to identify an independent metrical stratum still functioning in the melody.

It would be misleading not to mention that the entire rhythmic structure of this passage from the Concerto is more complicated than I have let on. The melody presented in the piano is actually treated in canon by woodwinds and horns—trailing the piano at first by a notated measure, then a half measure starting at R6. It is possible (and tempting) to explore in detail the metrical and perceptual ramifications of this canonic treatment, but so doing would be a lengthy undertaking. I will instead point out only that this canon reflects nicely the composer’s comments already cited above regarding his intent to “explore new avenues in the area of polyrhythms.”

The difficulty of relating this passage’s rhythmic approach to that of jazz is one of specificity. In Copland’s terminology, the music of R6 and following exhibits the use of polyrhythms, which is a characteristic of jazz rhythmic technique (illustrated in *Stumbling*, *Clap Yo’ Hands*, and other works already surveyed). In both cases, a regular 4/4 accompaniment is stratified with a melody that has its own metrical structure. Taken together, the two parts are metrically dissonant. Considered separately, patterns of periodicity emerge, though in both situations the periodicity of the melody is more fragile and malleable, and is eventually abandoned by being folded into the accompaniment’s metrical structure. (This occurs at R6 + 5, the next bar line following the passage of the Concerto discussed here.) However, the rhythmic similarities end there. The specific durational patterns of secondary rag and related jazz practice (e.g., 3 + 3 + 2) are not prevalent in this passage from the Concerto. Jazz certainly does not hold a monopoly on the use of polyrhythms; Stravinsky and other composers active in France in the 1920s, whose music Copland knew intimately, frequently engineered music with multiple metrical strata. Copland himself acknowledged that polyrhythms typify music as early as that of Renaissance madrigalists. It seems reasonable to ask, then, what it *is* about this music that makes it sound “jazzy,” if not (alternately, in addition to) its rhythmic organization.

The fact is that other parameters in the music of figure 16 reference jazz as well, strengthening the intuitive perception of a jazz influence. The melodic material is derived “from a traditional blues.”²⁷ Its modal flavor and tendency to hover around a tonic pitch (C) are general qualities shared with blues, but it may be even more significant to note that Gershwin based the second of his immensely popular *Three Preludes* on the same melody. These piano pieces were published in 1926, and Copland was likely familiar with them. The use of this thematic material makes one immediately think of jazz, via blues and Gershwin. Also, this passage includes the use of alto saxophone in the canonic imitation of the piano’s melody. Even though its tone color is mitigated somewhat by its doubling with solo bassoon and flute, this instrument’s association with jazz is almost inevitable. Finally, the power of extramusical psychological factors at work on the listener might be considered. It is extremely likely that anyone grappling with this music aurally has already been clued in that this work is “jazz-influenced” (through program notes, familiarity with Copland’s output of this period, or even familiarity with the Gershwin prelude). Once the suggestion of a jazz “hearing” has been made, listeners will naturally think of jazz when the other suggestive musical parameters come together in this passage. In contrast to the passage considered from the fast movement, this excerpt’s rhythmic approach references jazz only obliquely. It must be considered in light of other musical (and extramusical) evidence for the jazz connection to be made.

I have dwelled on these passages from the Piano Concerto to demonstrate, on a microscopic level, the rhythmic similarities between this music and jazz as conceived by the composer. In the first excerpts, jazz rhythmic techniques permeate the music and can be shown to inspire new kinds of rhythmic and metrical complexities, much as Copland claimed. In the last excerpt, the correlation between jazz rhythm and the Concerto’s rhythmic procedures is less precise, but other factors enter into the perception of a jazz influence in the Concerto. An interesting conclusion that follows from this detailed examination is that this issue is not as simple as claiming that the Piano Concerto uses jazz-derived rhythms and leaving it at that. Teasing out the implications of such claims is crucial to placing this music in the context of Copland’s output—a fact that will assume greater importance in his later works.

Issues of Influence in Other Works

Writing in 1953, Arthur Berger made the provocative statement that “jazz elements around this time [1932] in Copland’s development start to become screened behind more general musical devices and they

alternate with subject matter that has nothing to do with jazz. . . . [B]y the time of the *Piano Variations* . . . jazz in any strict sense is sifted out entirely, and what remains of it is idealized to a point where it is no longer recognizable."²⁸ This claim is certainly aimed at jazz's rhythmic characteristics as much as its other parameters. Much of Copland's output after 1930 (the date of the *Variations*) exhibits, in a most general sense, rhythmic and metrical techniques that can also be found in jazz. These techniques include syncopation, superimposition of conflicting metrical strata, and varying metrical periodicity to preserve a melodic figure's metrical placement as it is transformed durationally. The difficulty in drawing a direct link between the rhythmic approaches in jazz and Copland's later works is that these shared techniques are far from unique to these two bodies of music. All of them are common to the works of Stravinsky, Bartók, Milhaud, and other composers whose work Copland knew well. The bending of metrical periodicity to match changes in a motive's length, for instance, is typical of much of Stravinsky's early music (*L'Histoire du Soldat* comes immediately to mind). One could justly argue that when Copland employs the same technique in, say, his Piano Sonata, he is invoking the rhythmic spirit of that composer as much as that of jazz.

We have seen that it is sometimes possible to point quite directly to a jazz-rhythmic influence when compositional techniques are specific enough to explicitly connote jazz. An example might be a reliance upon a 3 + 3 + 2 division of eighth notes over an accompaniment of steady quarters. This is not merely a superimposition of different metrical strata, as can be seen in *The Rite of Spring* or early works by Antheil, but a *specific* brand of stratification that can be linked with secondary rag. For a modern scholar confidently to identify a jazz influence in the rhythm of a Copland work, enough evidence must be present to tease out that particular relationship from other possible influences. This issue gets to the heart of Berger's comment about jazz's elements "becom[ing] screened behind more general musical devices." In a later discussion of Copland's rhythmic approach, he continues the thought:

[B]y the time of the *Variations*, the [division of a 4/4 measure into 3 + 5 eighth notes], by extension of the principle, is abstracted from duple or fox-trot meter while preserving some of the aura of jazz syncopation. More general types of syncopation, equally suggestive of jazz, are still to be found today [1953] in Copland's music, but the developments to which they are subjected often remove them very far indeed from the character of their source.²⁹

I am suggesting that the relationship between some of Copland's later works and the rhythmic techniques of jazz are perhaps best

described as ambiguous. Examination of a few excerpts from other Copland compositions will help to clarify this distinction.

The *Vivace* movement of Copland's Piano Sonata (completed in 1941) typifies the ambiguity of the jazz-rhythm link to his later works. There exists no published analysis of this work containing much detail, but those paragraphs devoted to the Sonata in bio-bibliographies of Copland never fail to point out at least the potential of a relationship to jazz. Excerpted here are the comments several different authors have made about jazz (rhythm) in this movement.

The moods are alternately wistful and poetic, and, although the movement appears to be derived from jazz sources, no actual jazz themes are found.³⁰

The rhythms of this scherzo are striking; although the frequent changes of 5/8, 6/8, 7/8 and other meters recall earlier scores, the beats fly by remarkably quickly, this "vivace" movement calling for the highest metronome marking possible. The resulting rhythmic vitality, while still related to jazz, seems derived as well from Latin-American music, which Copland heard much of while at work on the sonata.³¹

The second movement, marked *Vivace*, is a scherzo of mercurial lightness, with hints of jazz.³²

These remarks suggest, in an abbreviated fashion, the issue of ambiguity regarding jazz's presence and/or influence in this music. No analyst is willing to state unequivocally that jazz (rhythmic) techniques play a role in the movement, but every one of them finds enough common ground with jazz to merit mentioning it even in their brief summaries of the work.

Figures 19a and 19b are offered to provide the reader a chance to become familiar with this movement's general rhythmic landscape. Figure 19a shows the work's opening; 19b is taken from a later developmental section.

It is not difficult to see why an analyst might be tempted to think of jazz rhythmic approaches when examining this music. The manipulation of motives' lengths to accomplish changes in meter (in 19a) and the groupings of eighth notes alternately in twos and threes to define the meter (in 19b) are both techniques already observed in jazz. On the other hand, the precise ways in which jazz exhibits these techniques are not present in the *Vivace*. The consistent, repetitive grouping of 3 + 3 + 2 eighths that typifies fox trot is not used (though a two-bar "vamp" of a 2 + 3 + 2 pattern appears in figure 19b, mm. 155–56). In jazz, a melodic unit might be altered so that its length is changed but its metrical identity is preserved, taking the accompani-

Vivace ($\text{♩} = 208$)
half stacc.
mp delicate, restless *p*

poco accel. *poco rit.* *a tempo*
poco accel.

Figure 19a. Piano Sonata, opening of *Vivace*. (© Copyright 1942 by The Aaron Copland Fund for Music, Inc. Copyright renewed. Boosey & Hawkes, Inc., Sole Publisher and Licensee. Reprinted by permission.)

ff *f*
f *half stacc.* (etc.)

Figure 19b. Piano Sonata, *Vivace*, mm. 151–58. (© Copyright 1942 by The Aaron Copland Fund for Music, Inc. Copyright renewed. Boosey & Hawkes, Inc., Sole Publisher and Licensee. Reprinted by permission.)

ment along for the ride and consequently bending metrical periodicity (this phenomenon was exemplified by Gershwin's *Clap Yo' Hands*). In figure 19a, the opening gesture is indeed rhythmically transformed (lengthened), but metrical periodicity is never established in the first place, and there is nothing like the accompaniment that typically lays out meter in a jazz composition. Moreover, these general rhythmic approaches are just as prominent in music by Stravinsky or Poulenc or (as Copland himself points out) Russian folk music.

In an interview with Leo Smit, Copland set forth perhaps the best way to describe the relationship of jazz rhythm to this movement:

That was a big pre-occupation of mine . . . The idea of writing a music—a serious concert music—that a European would recognize as having been written by an American. It seemed to me important, also, that we should have our own musical language, based on the great works of the past wherever they were created, but nevertheless, a music that reflected the life that we lived here and now. . . . I think the scherzo of the Piano Sonata had rhythms that I never would have thought of if I weren't familiar with jazz (I can't play jazz, but I certainly was familiar with it)—sufficiently so that it would have made a deep impression. It's a sort of dependence on the eighth note as a basic rhythmic element—different collections of eighth notes.³³

We need not look all the way ahead to the Piano Sonata to find examples of Copland "screening" jazz rhythm behind other rhythmic techniques—if, in fact, one can identify the use of rhythmic devices derived from jazz at all. Issues of ambiguity similar to those explored in the Piano Sonata surround the rhythmic influences of portions of the *Piano Variations*. Various authors writing about Copland's music have drawn attention to the issues of potential jazz-rhythmic influences in the work's seventeenth variation (beginning in m. 230). Berger, in his discussion of Copland's use of jazz rhythmic devices, cites a portion of this variation as an example when explaining that "general types of syncopation, equally suggestive of jazz, are still to be found today [1953] in Copland's music, but the developments to which they are subjected often remove them very far indeed from the character of their source."³⁴ While Julia Smith does not discuss this variation individually, she portrays variations 12 through 18 as a "scherzo-jazz-scherzo" formal design and describes how the work's main motive "appears in a cumulative rhythmic design worked out according to Stravinskian principles of changes in meter and later bears a blues aura in the allusions to restrained fox-trot and Charleston rhythms."³⁵ Carol Oja more recently has addressed the possibility of a relationship to jazz rhythm in the seventeenth variation:

Octave displacement and exploitation of register are critical to the work, and the syncopations of jazz—incorporated so literally in Copland's Piano Concerto of 1926—have been subtly integrated and personalized, as in the seventeenth variation, where a two-voice counterpoint is set up in octaves, grouped in shifting, cross-accented compounds of two and three.³⁶

On the other hand, in biographies of the composer by Howard Pollack and Copland himself the *Variations* are discussed in some detail without ever raising the issues of jazz or jazz rhythm. Neil Butterworth goes so far as to conclude that the *Variations* "introduced a radically new ascetic style that eliminated the earlier influence of jazz."³⁷

What is the nature of the seventeenth variation's rhythmic structure? This variation is presented as figure 20 ("quarter note = 176" is the most recent tempo indication).

We can see that this passage does consist of rapidly shifting groups of two and three eighth notes, as Oja's comments suggest. But, as was the case with the second movement from the Piano Sonata, these twos and threes are never aligned with any kind of simple-meter frame. This music does not maintain periodicity on any level higher than that of the eighth note; the repetitions of 3 + 3 + 2 (or any other recurring rhythmic pattern) that typify jazz metrical structure simply don't exist. Moreover, the potential for metrical stratification so essential for secondary rag associations is not present. Through most of the variation (with the exceptions of the two sixteenth-note interruptions and the *subito piano* passage beginning in m. 244), the texture essentially consists of a "very sharply" accented melody in the right hand whose rhythmic structure is reinforced by the left hand. The result of this texture is a single stratum of unequally sized beats.³⁸ The texture of the *subito piano* passage is much different—a major triad in the right hand, with oscillations between E and C in the left—but, as in the surrounding music, only a single, uneven metrical stratum can be posited in these four bars. (These are the measures Berger specifically cites when suggesting Copland is "preserving some of the aura of jazz syncopation"; the sudden use of a consonant triad over an active bass line may have as much to do with the jazz association here as the use of irregularly alternating twos and threes.) Jazz rhythms, for all their irregularities, are grounded in a periodicity that can be represented by regular bar lines. That description does not fit the rhythmic activity of this passage.

It is difficult to point unequivocally to the influence of jazz rhythm in the music of figure 20. While, as Berger suggests, it is possible to conceptualize this variation's rhythmic approach as an abstraction of fox trot, it may be just as easily compared to Stravinsky's rhythmic

Figure 20 is a musical score for the seventeenth of the *Piano Variations* (mm. 230–52). The score is written for piano and consists of five systems of music. The first system begins with a treble clef and a key signature of one sharp (F#). The tempo/mood is marked "very sharply" and the dynamics are "sempre ff". The score includes various musical notations such as eighth notes, sixteenth notes, and slurs, with a key signature of one sharp (F#). The second system continues the melodic line in the treble and the accompaniment in the bass. The third system shows a change in the bass line with more complex rhythmic patterns. The fourth system introduces a new melodic phrase in the treble, marked "very sharply" and "sub. ff". The fifth system concludes the passage with a final melodic flourish in the treble and a sustained bass line.

Figure 20. The seventeenth of the *Piano Variations* (mm. 230–52). (© Copyright 1932 by The Aaron Copland Fund for Music, Inc. Copyright renewed. Boosey & Hawkes, Inc., Sole Publisher and Licensee. Reprinted by permission.)

innovations (as Smith implies)—and Copland was certainly familiar with both musics. Berger is closest to the mark when he says that “what remains of [jazz] is idealized to a point where it is no longer recognizable.” Jazz’s relationship to this music is indeed ambiguous.

Figure 21 provides an example of a Copland passage that, while rhythmically similar to the excerpts from the *Piano Sonata* and the *Piano Variations* already discussed, comes from a score that is not typically identified as a jazz-influenced work: *Appalachian Spring*.

Figure 21 shows a musical score for measures 35 to 37 of the orchestral suite *Appalachian Spring*. The score is written for piano and includes a treble and bass staff. Measure 35 is marked "sub. Allegro" and features a piano introduction with dynamics *sfz*, *p*, and *mp*. Measures 36 and 37 continue the piano part with *sfz* and *p* dynamics. The score includes various musical notations such as accents, slurs, and dynamic markings.

Figure 21. *Appalachian Spring* (orchestral suite), reduction of R35 to R37. (© Copyright 1945 by The Aaron Copland Fund for Music, Inc. Copyright renewed. Boosey & Hawkes, Inc., Sole Publisher and Licensee. Reprinted by permission.)

These measures illustrate a metrical approach that echoes the earlier passages from the Sonata and the *Variations*. The texture is largely homophonic, with bits of counterpoint and punctuating chords. The music's metrical structure once again depends upon the lengths of motives and their temporal placements following brief silences. (As Copland described when discussing the Piano Sonata, there exists here the same "dependence on the eighth note as a basic rhythmic element.") Absent from this passage is the grouping of beats into the background periodicity that could be represented by a single notated time signature, as is essential to jazz rhythmic style. Direct comparison of this excerpt with those from the Piano Sonata and the *Variations* shows that, while jazz rhythmic influence cannot be teased out with certainty in figure 21, this music's rhythm is certainly not *more* distantly related to jazz than that of the other excerpts. The same ambiguous potential link to jazz rhythm that permeates the two piano works certainly can also be seen here.

To my knowledge, no writer has suggested that these bars of *Appalachian Spring* owe anything to jazz—in contrast to the Piano Sonata's second movement and the *Piano Variations*, both of which have been the subject of attempts by numerous authors to posit relations to jazz rhythm. This cannot be because *Appalachian Spring* has been

overlooked by analysts; it is arguably Copland's best-known work! It may be that, given this ballet's Shaker/Puritan associations and its setting in nineteenth-century frontier America, it never occurred to a critic to link it with a musical idiom typically associated with metropolitan America of the early twentieth century. We saw in portions of the Piano Concerto that, in places where the rhythmic structure does not specifically point to jazz, the association can be kept alive in the listener through other musical parameters (certain timbres and tonal procedures) and extramusical parameters (use of a tune associated with Gershwin and informing the audience in advance that the music is "inspired by jazz"). This passage from *Appalachian Spring* seems to exhibit the opposite situation. Despite exhibiting a rhythmic makeup just like those that led analysts to describe a jazz influence in the Piano Sonata and the *Variations*, other parameters (the ballet's plot and setting) may influence us *away* from searching for similarities to jazz. The counterexamples supplied by these three compositions demonstrate just how ambiguous the jazz-rhythm connection can be in Copland's music.

Copland claimed in his autobiography that "the Piano Concerto was the last of my works to make explicit use of jazz materials."³⁹ Those familiar with his music know that this assertion is at least an oversimplification; many of his later compositions are overtly jazz-inspired.⁴⁰ Speaking of the Clarinet Concerto (completed in 1948), which was commissioned by Benny Goodman, the composer himself said that

the second movement, a free rondo form, is a contrast in style—stark, severe, and jazzy. The movements are connected by a cadenza, which gives the soloist considerable opportunity to demonstrate his prowess. . . . The cadenza is written fairly close to the way I wanted it, but it is free within reason—after all, it and the movement that follows are in the jazz idiom. . . . I did not have a large battery of percussion to achieve jazzy effects, so I used slapping basses and whacking harp sounds to simulate them. The *Clarinet Concerto* ends with a fairly elaborate coda in C major that finishes off with a clarinet glissando—or "smear" in jazz lingo.⁴¹

The work's association with Goodman and the other jazz-related techniques mentioned by the composer are enough to create an unambiguous jazz association in any listener or critic, but the music contains specific rhythmic features that also contribute to that association. Examining an excerpt of the solo clarinet part from that coda provides a sample of Copland's assimilation of jazz rhythm into this concert work.

In figure 22 we can observe the clarinet ending nearly every phrase with a gesture of four descending eighth notes, the last of which is given an accent mark. This figure always begins either at a bar line

Figure 22. *Clarinet Concerto* (B-flat clarinet part only), mm. 443–73. (© Copyright 1949, 1952 by The Aaron Copland Fund for Music, Inc. Copyright renewed. Boosey & Hawkes, Inc., Sole Publisher and Licensee. Reprinted by permission.)

or exactly halfway through a notated measure. When this figure is considered with the simple-meter orchestral accompaniment (not presented in fig. 22 but clearly reinforcing the perception of periodic measures divided in four quarters), the syncopations created by the accented, off-beat phrase endings are clearly reminiscent of jazz.

If we remember, however, that Copland considered jazz rhythm a *metrical* phenomenon, we can also begin to make sense of the unusual dotted bar lines the composer has inserted into each appearance of the four-eighth figure just before its last note. Each time the phrase ends with this accented notated D4, Copland apparently intends the note to represent the beginning of a new “beat”—an interpretation that also implies grouping the first three eighth notes of the gesture into a single “beat” of three eighths’ duration. Figure 23 illustrates a possible rhythmic interpretation of mm. 448–52 that takes the dotted bar lines of m. 448 and m. 450 into account.

Note that, after skewing away from consonance with the notated meter (and the orchestral accompaniment that makes it perceptually salient), the stratum represented by the clarinet rejoins that simple meter with four quarter notes (in mm. 449–50) before moving into opposition again. As with the jazz and rag compositions discussed

Figure 23. Metrical interpretation of mm. 448–52. (© Copyright 1949, 1952 by The Aaron Copland Fund for Music, Inc. Copyright renewed. Boosey & Hawkes, Inc., Sole Publisher and Licensee. Reprinted by permission.)

in the first part of this essay, the irregular melodic stratum remains tethered to the background simple meter, alternating between pushing against it and returning to articulate it. Other rhythmic readings of this music that could still account for Copland's dotted bar lines are possible; I will not launch into a detailed discussion of their relative merits here. For our purposes, the significance of such interpretations rests in their invocation of groups of twos and threes over a steady, simple-meter accompaniment. Copland views the clarinet's rhythms as generating an independent, irregular metrical stratum of twos and threes instead of syncopations against the periodic accompaniment—thus constituting jazz's rhythmic structure as he described it in *Modern Music* some twenty-two years earlier.⁴²

Other later Copland works (and portions of works) can be shown to demonstrate specific jazz-rhythmic influences. Among these are *The Second Hurricane* (1936), the Third Symphony (1946; note especially the rag-like dance of the fourth movement beginning at R112),⁴³ No. 1 of *Four Piano Blues* (1948),⁴⁴ *Dance Panels* (1959; note the fifth *Con brio* movement), *Music for a Great City* (arranged in 1964 from the score for the 1961 film *Something Wild*), and *Emblems* (1964; note the fast middle section). The foregoing list does not presume to be exhaustive, but its contents (and my discussion of other works) clearly show that neither Copland's claim to have discarded jazz after the Piano Concerto nor Berger's comment suggesting that jazz-related rhythmic influences become impossible to tease out after the *Piano Variations* tell the entire story.

The problem of creating a music that was at once "serious" and "American" presented a unique compositional problem to Copland in the first part of the twentieth century. We have seen that one important element of his solution—whether employed explicitly or obliquely—is the adoption and adaptation of preexisting jazz rhythmic techniques. I have shown that early jazz's rhythmic features (such as metrical stratification) bear commonalities to other musics Copland admired, most notably those of Stravinsky and *Les Six*. In fact, Stravinsky and the native French composers with whom he associated also wrote jazz-based works. It makes sense that, in selecting a composi-

tional technique, Copland would resort to an Americanism that could foster comparison with the modern European “serious” music he held in the highest regard.

Because of the overlaps between the rhythmic styles of jazz, Copland’s works, and the art music he most esteemed, it is often difficult to impossible to tease out the influences one corpus may have had on another. The analyses presented in this essay bear testimony to that effect. It is clear, however, that the kinships between Copland’s and jazz’s rhythmic styles are strong—strong enough that the work by this “dean of American composers” cannot be placed in context without exploring them.

NOTES

1. For examples see Howard Pollack, *Aaron Copland: The Life and Work of an Uncommon Man* (New York: Henry Holt, 1999), 113ff.; and Julia F. Smith, *Aaron Copland: His Work and Contribution to American Music* (Ann Arbor, Mich.: University Microfilms, 1952), 66ff.

2. See Aaron Copland and Vivian Perlis, *Copland: 1900–1942* (New York: St. Martin’s/ Marek, 1984), 119.

3. One feature of some of Copland’s “jazzy” music that could be used to relate it to jazz is its use of dotted rhythms, though taken alone this element suggests as close a kinship to the French overture style as to jazz. The organization of units larger than a beat is the rhythmic factor that explicitly links Copland to jazz and will form the basis of this study.

4. I do not mean to argue that later jazz music had no influence on Copland’s output; he certainly professed great interest in jazz’s development throughout his compositional career. However, to tease out *rhythmic* influences that, for instance, were derived from later jazz artists and not from the music of the 1920s would seem a difficult, if not futile, task. Meanwhile, Copland maintained his views of jazz’s rhythmic structure as crystallized in the 1920s (and dissected in this essay) “for many years.” See Pollack, *Aaron Copland*, 113–20.

5. Andrew Imbrie, “‘Extra’ Measures and Metrical Ambiguity in Beethoven,” in *Beethoven Studies*, ed. Alan Tyson (New York: Norton, 1973), 45–66. A conservative listener is more likely to maintain perception of a preexisting periodic meter in the face of evidence that contradicts that meter, while a radical listener is more likely to abandon that periodicity and thus create the potential for more metrical irregularities.

6. Aaron Copland, “Jazz Structure and Influence,” *Modern Music* 4, no. 2 (1927): 9, 10. Rags are invariably in simple duple meter; in those rare instances where they are notated in alla breve rather than 2/4 these patterns are obviously notated using note values that are twice as long.

7. Edward A. Berlin, *Ragtime: A Musical and Cultural History* (Berkeley: University of California Press, 1980), 15, 16.

8. Don Knowlton, “The Anatomy of Jazz,” *Harper’s* 154 (April 1926): 581.

9. In virtually all jazz and ragtime music of this era, and especially the piano compositions and arrangements under consideration by Copland and Knowlton, melodic material is presented in the uppermost part (the pianist’s right hand) and accompaniment—including bass lines, off-beats, and other harmonic “filler”—appears below. Figure 3 (and all other such examples in this paper) are thus laid out to represent the rhyth-

mic patterns as they would actually appear in this repertoire: the accompaniment patterns represented by the music's actual notation always appear below the melodic patterns.

10. Berlin, *Ragtime*, 131. While it is true that Knowlton does not explicitly acknowledge that the upper line of his secondary rag ever suspends its pattern of threes, he does not rule out such a suspension—it certainly does typify the music he cites. Moreover, his prose is more focused upon the effects created during the secondary rag pattern than on how the composer gets out of it.

11. Knowlton, "The Anatomy of Jazz," 581.

12. Copland, "Jazz Structure," 10.

13. In fact, fox trots were often danced to rags, and a single piece might be labeled by its publisher as a rag, a fox trot, and jazz.

14. Copland, "Jazz Structure," 10–11.

15. *Ibid.*, 11.

16. *Ibid.*, 12.

17. *Ibid.*

18. *Ibid.*, 13.

19. It is difficult to speculate about Copland's motives in omitting the part of figure 9 that demonstrates the potential for a "background" 4/4. It seems certain that he was aware of the possibility for such a conservative hearing of the passage, which tends to work against the point he is trying to make about the bass's (and, by implication, the entire metrical structure's) newfound independence from periodicity. Unless the reader already knows how the music continues after the end of Copland's shorter excerpt (fig. 8), such periodicity cannot be posited—leading one to wonder whether this omission was intentionally devious.

20. An additional jazz device employed in this passage is the syncopated bass that begins in m. 9. This technique is mentioned in passing by Copland in his *Modern Music* article but generally does not impact his own compositions with the frequency or consequence of the other techniques described here.

21. Copland and Perlis, *Copland: 1900–1942*, 129–31. Howard Pollack points out that Copland exaggerates in his catalog of the time signatures used in the Concerto: "in fact, the work's dizzying polyrhythms largely unfold within the traditional [notated] meters of 2/4, 3/4, and 4/4." Pollack, *Aaron Copland*, 592 n. 29.

22. It might be argued that one of Copland's other goals for the Concerto—"to do these complex vertical and horizontal [rhythmic] experiments and still retain a transparent and lucid texture"—is not fulfilled by a passage such as this one. For instance, it is difficult for a listener to make out the competing "A/B-flat" strata in each of the pianist's hands and the pizzicato strings beginning in R31 + 4 and in R32 due to the timbral and registral overlaps between these strata. Copland and Perlis, *Copland: 1900–1942*, 129–31.

23. The roots of the chords used in the soloist's imitation are not a strict transposition of those in the orchestral material, and there are other differences that would be essential to an analysis that focuses upon the music's pitch content. For our purposes, it is enough to note that canonic imitation can be *perceived*, whether or not that canon is strict in its imitation.

24. Winthrop Sargeant, *Jazz: A History* (New York: McGraw-Hill, 1964), 78–79.

25. Beginning at R16 + 3, the orchestra's ascending whole-tone scale (harmonized with parallel sixths) reinforces the quarter-note pulse, but again does little else to define the meter. Its tendency to crescendo as the orchestration thickens points forward to the explosive tutti that immediately follows this excerpt.

26. It is also possible to trace a second whole-step ascent, G-A-B, if one awards these pitches structural significance. I have granted the F-G-A line structural primacy so as

to emphasize the metrical weight given to this line in the “6/8” hearing of figure 17. G, A, and B can thus be regarded as “neighbors” to the pitches of the F-G-A line.

27. Pollack, *Aaron Copland*, 135.

28. Arthur Berger, *Aaron Copland* (New York: Oxford University Press, 1953), 25.

29. *Ibid.*, 49–50.

30. Smith, *Aaron Copland*, 232.

31. Pollack, *Aaron Copland*, 353.

32. Neil Butterworth, *The Music of Aaron Copland* (London: Toccata Press, 1985), 85.

33. In *ibid.*, 208.

34. See n. 29 above.

35. Smith, *Aaron Copland*, 132.

36. Carol Oja, *Making Music Modern* (New York: Oxford University Press, 2000), 243.

37. See Pollack, *Aaron Copland*, 150–53; Copland and Perlis, *Aaron Copland: 1900–1942*, 180–83; Butterworth, *Aaron Copland*, 54.

38. The term “cross-accented,” employed by Oja in her description of this passage, does not reflect my hearing of the music. The term implies that there exists metrical periodicity against which a rhythmic phenomenon presents conflicting accents—but here there is no metrical periodicity (at higher levels than the eighth note). The accents themselves organize eighth-note durations into twos and threes; there is no other metrical structure against which they can be “cross-accented.”

39. Copland and Perlis, *Copland: 1900–1942*, 129–30.

40. Moreover, critical efforts to catalog Copland’s works by style or chronological period “usually run into difficulty at every turn.” Lawrence Starr, “Copland’s Style,” *Perspectives of New Music* 19 (1980–81): 70.

41. Aaron Copland and Vivian Perlis, *Copland Since 1943* (New York: St. Martin’s/Marek, 1985), 93.

42. This excerpt admittedly does not utilize the specific 3 + 3 + 2 pattern typical of fox trot and Charleston, but its rhythmic approach is certainly as close to that of jazz as was observed in the Piano Concerto earlier in this essay.

43. Pollack suggests that this music is related to the rumba—an association that further complicates the issues surrounding ambiguous rhythmic influences, for the rumba also depends upon a 3 + 3 + 2 metrical stratum. Pollack, *Aaron Copland*, 415.

44. Of the remaining *Four Piano Blues*, No. 2 has already been discussed, No. 4 was completed in 1926, and No. 3 (1948) uses parameters other than rhythm to create its association with jazz/blues.