

# Outside Forces: “Autumn Leaves” in the 1960s

By Keith Waters

Is there a problem of form in the jazz tradition? Does the reliance upon repeated 32-bar frameworks create an unavoidable formal, harmonic, and metric redundancy? How do jazz improvisers transcend or evade this cyclic regularity?

These are crucial questions. Jazz players have extended privilege to the 32-bar AABA and ABAC song form (along with 12-bar blues structures) since at least the 1930s, when the 32-bar song form replaced the 16-bar sectional forms of ragtime and early jazz. Yet repeated cycles of thirty-two bars result in a hypermetric consistency on several levels: single measures group into four-measure units, which then combine into eight measure sections; the four eight-measure sections comprise the 32-bar form, which becomes repeated, normally for the duration of the composition.<sup>1</sup> In the Western European tradition (with the occasional exception of the theme and variations genre and dance forms) form is typically not generated by regularly repeating structures, structures that are consistently built from measure groups of 4, 8, 16, and 32 bars. Yet this formal model, with its foursquare regularity and its repeated harmonic and metric organization, has been one of the primary vehicles for jazz improvisers and composers. Historically, jazz players have kept the structure, merely renovating it periodically through stylistic change. Thus, while stylistic development and evolution has rapidly taken place in the area of instrumental technique, harmony, and rhythm, the domain of form has remained relatively static.<sup>2</sup>

The manner in which improvisers overcome the limitations of a periodic structure varies, and players have developed a variety of strategies to mask this regularity. In the larger abstract sense—and in the hands of capable improvisers—improvisations may be goal-oriented and develop to one or more points of arrival, which may be articulated by a number of factors, such as a registral or dynamic high point, or a point of rhythmic or harmonic complexity. This development toward a climax then superimposes a linear dramatic design over the cyclic form.

On a smaller level, many improvisers attend to the problem of a repeated form by temporarily disrupting or altering the given harmonic and metric fabric. In the harmonic dimension, pitch resources may be expanded through techniques of harmonic alteration, extension, substitution, and insertion. Example 1 shows a characteristic harmonic substitution, one that subsequently became axiomatic in the approach to improvisation over the blues. It contains three excerpts of Charlie Parker’s solo

**Example 1:** Harmonic insertion in “Tiny’s Tempo” (1944).

2nd chorus, 3rd take

B $\flat$   
9 (Dm7)      D $\flat$ m7)      Cm7

3rd chorus, 3rd take

B $\flat$   
9 (Dm7)      D $\flat$ m7)      Cm7

3rd chorus, 1st take

B $\flat$   
9 (Dm7)      D $\flat$ m7)      Cm7

from his 1944 recording of “Tiny’s Tempo.” Each excerpt contains the eighth to tenth bar of the 12-bar blues form. In this B $\flat$  blues, the passage shows Parker’s conversion of the move to the ii chord. Typically the ii chord is preceded in the ninth measure either by the tonic B $\flat$  chord, or by a secondary dominant leading to ii (V/ii). Instead, Parker consistently inserts an arpeggiation of iii (Dmin<sup>7</sup>) to  $\flat$ iii (D $\flat$ min<sup>7</sup>) en route to ii.<sup>3</sup> Parker’s harmonic change here is significant, altering both the harmonic progression and the harmonic rhythm.

In addition to pitch techniques, players may disrupt the given rhythmic and metric structure, overriding the metric regularity of a composition. One early example comes from the stride piano tradition. By changing the standard left hand device of bass note on the first and third beat of the measure and midrange chord on second and fourth beat, pianists could overturn the perception of a regular meter. Example 2a shows a schematic left hand reduction for the standard stride formula which regularly alternates bass pitch (indicated by downward stems) and midrange chord (indicated by upward stems). Example 2b shows a reduction of the final eight measures from pianist James P. Johnson’s “Keep Off the Grass,” recorded in 1921. In Johnson’s passage, even while all four beats of the  $\frac{4}{4}$  measure are being articulated, the grouping structures in the left hand help overturn the perception of a regular  $\frac{4}{4}$  meter.<sup>4</sup>

Particularly through the 1950s, improvisers used these and other techniques for creating local alterations to the harmonic and metric structure, and these strategies helped overcome the limitations of periodicity in compositional frameworks. But by the late 1950s and early 1960s, questions of formal redundancy were answered differently in some corners. Players and composers offered differing solutions to the problem of form. For some, a reliance on standard forms was a weakness, and one solution

**Example 2a:** Left-hand stride piano pattern.

(Down stems = bass pitch, up stems = chord)



**Example 2b:** James P. Johnson, "Keep Off the Grass" (1921), final eight bars.



involved the cultivation of larger, extended formal structures: as pianist John Lewis of the Modern Jazz Quartet noted in 1958: "The audience for jazz can be widened if we strengthen our work with structure." Lewis's interest in merging the American jazz tradition with the forms and procedures of European classical music reflected the aesthetic trend commonly described by Gunther Schuller's term "Third Stream."<sup>5</sup> Free jazz—the "New Thing"—solved the problem of form differently around 1960. Ornette Coleman, Cecil Taylor, and others explored the possibility of abandoning pre-determined formal structures and their accompanying harmonic and metric schemes. Within this aesthetic of a freer collective improvisation, form, whether pre-determined or spontaneously generated, avoided hypermetric and cyclic regularity.<sup>6</sup>

But despite the third stream and free jazz attempts to enhance or eliminate standard forms, there remained a mainstream jazz tradition in the 1960s committed to deriving its material and structures from the standard-tune repertoire. For these performers who clung to the 32-bar templates of the jazz standard, the problem still remained of how to mask the formal, harmonic, and metric regularity within improvisation. Some of these players took their cue from the avant-garde free players, and imported some techniques of free playing into the context of standard-tune improvisation in what eventually came to be described as "outside" playing.

### Outside Playing

As it gained currency throughout the 1960s, outside playing typically applied to the dimension of pitch: the use of pitches outside the prevailing harmonic scheme in a hard bop or modal context.<sup>7</sup> The notion of outside playing also depended on its opposite, inside playing, in which pitch structure conformed to the harmonic scheme of the composition. Thus a soloist could develop and explore the continuum between inside and outside playing, at times adhering to and at other times avoiding the harmonic progression. Within the context of standard tunes, this represented

a tremendous expansion of materials and resources. It allowed the soloist to shift freely between inside and outside playing, permitting a wider sphere of operations, and generating possibilities for tension and release strategies within extended improvisation.

While the harmonic structure could be masked or obscured through outside playing in the pitch dimension, similarly the cyclic metric structure could be hidden by the superimposition of rhythmic structures that conflicted with the fundamental meter of the composition. This could be achieved through the use of polymeter, cross rhythms, and accentual and metric displacement.

Clearly these solutions differed in degree, not in kind, from the harmonic and metric strategies developed by players prior to 1960. However, the appropriation of avant-garde techniques into standard compositions allowed for larger-level disruptions of the form. The changing role of the rhythm section in the 1960s was also crucial. Rhythm sections often cultivated a freer accompanimental role, one that was able to suppress the regular harmonic and metric flow, while at the same time maintaining the underlying compositional form.

In the mid-1960s, both the Charles Lloyd Quartet and the Miles Davis Quintet responded strongly to these outside forces. Both groups made significant use of standard compositions; each had soloists who developed strategies for outside playing in both the pitch and the metric dimension. Importantly, both groups featured the early careers of two pianists—Lloyd's pianist Keith Jarrett and Davis's pianist Herbie Hancock—who were to become among the most influential jazz pianists for several decades. Jarrett and Hancock combined many of the techniques of the jazz avant-garde with more traditional approaches to improvisation.

Jarrett and Hancock each acknowledged the influence of the jazz avant-garde. For Jarrett, the influence of pianist Paul Bley was paramount.<sup>8</sup> Hancock cited a couple of early factors responsible for his own interest in outside playing. Prior to joining Davis's quintet, Hancock had played with Eric Dolphy, and he described his experiences on the bandstand with Dolphy:

I didn't know anything about avant-garde jazz and I had never played away from the chords . . . I didn't even know they played tunes. I thought they just got up and played. I got scared and said, "What do you want me to play?" He gave me some music and I said to myself, "He doesn't want me to play chord changes." So I said, "What do you want me to play?" He told me, "Play anything you want." I decided to break some rules I had been accustomed to using with rhythm, harmony, and melody. It seemed to be the right thing. (Townley 1974:14–15)

Hancock and drummer Tony Williams both joined the Miles Davis Quintet in 1963. Hancock also credited Williams with broadening his interest in the jazz avant-garde, and with using those techniques in the rhythmic and metric domain:

Tony Williams turned me on to different rhythms, overlapping this and that. Tony was really into Paul Bley, Gary Peacock . . . Ornette—like I never paid *that* much attention to Ornette when he first came out, but Tony got me interested in Ornette and got me to the point where I could get into it. (ibid.:15)

How did these players carry avant-garde techniques into the context of the 32-bar standard form? Following a presentation of terminology for metric strategies, the musical analyses will consider the standard composition “Autumn Leaves” and examine transcriptions of solos on the tune by both pianists. The first transcription is of Keith Jarrett’s solo from the Charles Lloyd Quartet recording *Dream Weaver* (Atlantic SD 1459). The second transcription is of Herbie Hancock’s solo with the Miles Davis Quintet, from the recording *Miles in Europe* (Columbia KCS 8983).

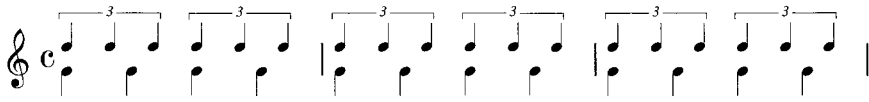
Jarrett’s and Hancock’s improvisations consistently maintain the repeated 32-bar form of “Autumn Leaves,” but the pitch and metric strategies of the solos frequently create conflicts with the composition’s underlying harmonic progression and meter. By these local alterations to the harmonic and metric structure, both Jarrett and Hancock deftly solve a number of the key problems of form and formal redundancy in popular-song form improvisation.

### **Metric Strategies: Some Terminology**

Hancock’s quote above, describing the use of “different rhythms” and “overlapping this and that”—although somewhat vague—provides some insight into rhythmic and metric strategies consciously developed by those players. The analyses here will provide terminology for two general categories: polymeter and accentual shift.

Polymeter in improvisation involves the superimposition of a meter or meters above the given meter of a composition. This is often achieved through one of two ways, distinguished here as either tactus-preserving polymeter or measure-preserving. Example 3 illustrates measure-preserving polymeter, in which  $\frac{6}{4}$  is stratified above  $\frac{4}{4}$ . With measure-preserving polymeter, the integrity of the barline is maintained, but the quarter note pulse is compromised. In contrast, example 4 demonstrates tactus-preserving polymeter. Again  $\frac{6}{4}$  is stratified over  $\frac{4}{4}$ , but now the larger metric organization is disrupted while the quarter-note pulse is maintained. Abstractly, these two types of polymeter are related—the conflicts of example 3 are

**Example 3:** 6:4 measure-preserving polymeter.



**Example 4:** 6:4 tactus-preserving polymeter.



stated in augmentation in example 4—but because they are composed out on different rhythmic levels, they are perceptually very distinct.

Polymeter arising from the conflict with smaller subdivisions complicates the issue somewhat since potentially neither barline nor tactus may be preserved. This is the case in example 5, which shows the conflict of  $\frac{6}{8}$  and  $\frac{4}{4}$ . In example 5, the eighth note value remains constant while both the quarter-note pulse and the barline are contradicted. Example 6 shows another realization of  $\frac{6}{8}$ ; here both the pulse and the barline are maintained. Given that there is no conflict at the level of pulse or barline, this may be considered “trivial polymeter.”

In addition to polymeter, a second tactic arises from accentual shift. With accentual shift, the prevailing meter may be maintained, but the perceptual downbeat moves to another place in the measure. This can come about through differing factors, but especially through conditions for accent that can give downbeat status to another pulse within the meter. Accent and accentual shift may come about through various musical cues, including pattern beginning, contour accent, durational accent, textural accent, or harmonic rhythm.<sup>9</sup> Example 7 shows three abstract realizations of accentual shift, labeled according to the new position of the perceived downbeat. Example 7a shows a “2-shift,” which moves the perceptual downbeat to the second beat, 7b shows a “3-shift” to the third beat, and 7c a “4-shift” to the fourth beat of the measure.

Finally, example 8 shows the potential for combining both metric shift and polymeter. In example 8,  $\frac{6}{4}$  is stratified over the  $\frac{4}{4}$  meter, and the pattern shifts over to the middle of the measure, creating a 3-shift.

### “Autumn Leaves”

“Autumn Leaves” remains a perennial standard among jazz players. While it has a number of conventional features, it also possesses some unusual formal elements. A 32-bar tune, it is not in the characteristic AABA

Example 5: 6/4.



Example 6: 6/4 "trivial polymeter."



Example 7a: Accentual shift: 2-shift.



Example 7b: 3-shift.



Example 7c: 4-shift.



Example 8: Polymeter and accentual shift.



or ABAC form of many standards. Instead, it is composed in an AAB form, in which two eight-measure A sections are followed by a sixteen-measure B section.<sup>10</sup>

A skeletal reduction of the melody and bass motion is given in example 9. The overall organization of the tune seems neatly to divide into two sixteen-measure halves, yet the voice-leading structure of the melody reveals some interesting correspondences that cut across the 16-measure symmetry. The harmonic progression of the A section is based upon a descending fifths sequence (C–F–B $\flat$ –E $\flat$ –A–D–G) in the key of G minor, beginning on the iv chord. The progression is made of a chain of interlocking seventh chords, and the skeletal melody and the bass forms a 10-7 linear intervallic pattern. The bottom staff of example 9 (marked A section) interprets the melodic motion as initiated by an upper neighbor  $\hat{6}$  to the fifth scale degree ( $\hat{5}$ ), which then descends stepwise to the third scale degree ( $\hat{3}$ ).<sup>11</sup>

The harmonic progression within the first half of the B section (mm. 17–24) redistributes that of the eight measures of section A. The harmony of the first four measures of the B section (mm. 17–20) repeats that of the previous four measures (Amin<sup>7b5</sup>, D<sup>7</sup>, Gmin<sup>7</sup>). The second four measures of B, mm. 21–24 (Cmin<sup>7</sup>, F<sup>7</sup>, B $\flat$ <sup>maj7</sup>, E $\flat$ <sup>maj7</sup>), restate the first four measures of section A. The bottom staff of example 9 shows that whereas the skeletal melody of the A section describes a descent from  $\hat{5}$ , to  $\hat{3}$ , the first eight measures of the B section reverses the direction and ascends from  $\hat{3}$  to  $\hat{5}$ . This inversional relationship is further strengthened by the lower neighbor  $\hat{2}$  which initiates this ascent, mirroring the upper neighbor  $\hat{6}$  which launched the A section descent. Additionally, the A section and the first half of the B section exhibit an exact inversional symmetry: the directed interval pattern of <-1 -2 -2> at mm. 1–8 is then mirrored by <+1 +2 +2> at mm. 17–24.

Example 9 further indicates that the final eight measures of the B section (mm. 25–32) begin by emphasizing the same pitches as section A. Like mm. 1–4, the upper neighbor E $\flat$  at m. 25 descends to  $\hat{5}$ , which appears two measures later. At m. 29, however, the descent is accelerated in order to reach the first scale degree and close the composition.

The melodic structure of the composition as shown in example 9 suggests that, in contrast to the two-part “temporal” symmetry of two sixteen-measure sections (AA and B), the overall melodic construction suggests instead a three-part design. These three parts consist of (1) the repeating eight measure A section, (2) its inversion at mm. 17–24, and (3) the final eight-measure section.

As performed by jazz players—perhaps to counterbalance the simplicity of the harmonic structure, which is based almost entirely on descending



Example 9: "Autumn Leaves"

Musical notation for measures 1-4. The key signature is B-flat major (two flats). The time signature is common time (C). The melody is in the treble clef, and the bass line is in the bass clef. Chords are indicated above the staff: Cm7, F7, Bbmaj7, and Ebmaj7. Fingering numbers 10 and 7 are shown below the bass line.

Musical notation for measures 5-8. The key signature is B-flat major. Chords are indicated above the staff: Am7(b5), D7, and Gm. Fingering number 10 is shown below the bass line.

Musical notation for measures 9-12. The key signature is B-flat major. Chords are indicated above the staff: Am7(b5), D7, and Gm.

Musical notation for measures 13-16. The key signature is B-flat major. Chords are indicated above the staff: Cm7, F7, Bbmaj7, and Ebmaj7.

Musical notation for measures 17-20. The key signature is B-flat major. Chords are indicated above the staff: Am7(b5), D7, Gm, (C7), and (Fb7) (Bb7).

Musical notation for measures 21-24. The key signature is B-flat major. Chords are indicated above the staff: Ebmaj7, D7, and Gm.

Musical notation for measures 25-32. The key signature is B-flat major. The melody is in the treble clef, and the bass line is in the bass clef. Fingering numbers 5, 4, 3, 3, 4, 5, 5, 4, 3, 2, 1 are shown above the treble staff. Section labels are provided below the staff: A section, B section (mm. 17-24) =Inversion/A, and mm. 25-32.

**Table 1**  
Standard chord progression (upper row) and chord substitutions  
for mm. 1–8 of "Autumn Leaves"<sup>12</sup>

m. 1	2	3	4	5	6	7	8
Cm <sup>7</sup>	F <sup>7</sup>	B <sup>b</sup> maj <sup>7</sup>	E <sup>b</sup> maj <sup>7</sup>	A <sup>∅</sup>	D <sup>7</sup>	Gmin	
C <sup>7</sup> #11	F <sup>7</sup> (alt)	Bmin <sup>7</sup> E <sup>7</sup> B <sup>b</sup> <sup>7</sup> Bmin <sup>7</sup> B <sup>b</sup> min <sup>7</sup> B <sup>b</sup> maj <sup>7</sup> Bmin <sup>7</sup>	B <sup>b</sup> min <sup>7</sup> E <sup>b</sup> <sup>7</sup> E <sup>b</sup> maj <sup>7</sup> E <sup>b</sup> <sup>7</sup> B <sup>b</sup> min <sup>7</sup> E <sup>b</sup> <sup>7</sup> E <sup>7</sup>	A <sup>7</sup> (alt) A <sup>∅</sup> A <sup>∅</sup> A <sup>∅</sup> E <sup>b</sup> <sup>7</sup>	D <sup>7</sup>	Gmin	G <sup>7</sup> (alt)

fifths—a number of harmonic additions and substitutions have arisen. These alterations embellish the original progression. Some of these substitutions for the opening eight measures are given in table 1. Note that some merely alter chord quality, such as the replacement of Cmin<sup>7</sup> by C<sup>7</sup>, or B<sup>b</sup><sup>7</sup> for B<sup>b</sup> maj<sup>7</sup>. Tritone substitution is also used when E<sup>b</sup><sup>7</sup> replaces Amin<sup>7</sup>(<sup>b5</sup>). Other alterations involve harmonic insertion: for example, Bmin<sup>7</sup>–E<sup>7</sup>–B<sup>b</sup>min<sup>7</sup>–E<sup>b</sup><sup>7</sup> replaces B<sup>b</sup> maj<sup>7</sup>–E<sup>b</sup> maj<sup>7</sup> in the third and fourth bar.

### Jarrett's Solo

Keith Jarrett's "Autumn Leaves" solo, taken from a 1966 recording with the Charles Lloyd Quartet entitled *Dream Weaver*, features Jarrett on piano, Lloyd on saxophone and flute, Cecil McBee on bass, and Jack DeJohnette on drums. The solo lasts four choruses; the analysis focuses on the last chorus and a half, beginning with the B section of the third chorus. (Measure numbers are given in the left hand measure of each system, followed by a slash and number of the chorus: for example, the first measure of the transcription (ex. 10) is labeled as 17/3, indicating the seventeenth measure of the third chorus.)

Within the first three measures of the B section (mm. 17–19/3), the pitches clearly outline the harmonic progression. The roots of the first two chords are approached chromatically: A, corresponding to the Amin<sup>7</sup>(<sup>b5</sup>) of the harmonic progression, is reached through G and G# (17/3, beats 3–4); D, corresponding with the D<sup>7</sup> harmony, is attained through C and C# (m. 18/3, beats 1–2). A comparison of example 11a with example 11b shows the melodic motion to be slightly out of phase with the harmonic progression—example 11b moves the motive one beat earlier—creating a slight accentual shift. As the asterisks in examples 11a and 11b reveal, this

**Example 10:** Keith Jarrett's "Autumn Leaves" solo. From Charles Lloyd, *Dream Weaver* (Atlantic SC 1459).

Am7(b5) D7 Gm7

m. 17/3

8: Tactus-preserving

m. 21/3 (Cm7) (F7) (Bbmaj7) (Am7b5)

m. 26/3 (D7) (Gm7) (Fm7 Bb7) (Ebmaj7)

m. 30/3 (D7) (Gm7) Cm7

F7(alt) Bbmaj7 Ebmaj7

m. 2/4

Am7(b5) D7(alt) Gm7

m. 5/4

Example 10 (cont.)

m. 9/4

Cm7 F7(alt) Bb7 Ebmaj7

m. 13/4

Am7(b5) D7(alt) Gm7

m. 17/4 (Am7b5) (D7) (Gm7)

T-2 (mm. 17-18/4)

m. 21/4 (Cm7) (F7) (Bbmaj7)

T-2 T-2

m. 25/4

(Am7b5) D7(alt) Gm7

m. 29/4

Am7(b5) D7(alt) Gm7 gva

altered version aligns the harmonically driven lines with the metric strong beats, and chordal roots fall on the third beat at m. 17/3 and on the downbeats of mm. 18–19/3.

However, this is a mild shift in comparison with what follows. Jarrett soon departs radically from both the harmonic structure and the metric structure of the composition. As the next melodic gesture carries over into m. 21/3, Jarrett asserts the pitches implying C $\flat$  major and then launches a series of related motives which carry over for the next twelve measures, until m. 32/3. During these measures—the remainder of the B section—the harmonic and the metric implications of Jarrett's solo are severely out of phase with the composition. Against the backdrop of the G-minor/B $\flat$ -major tonality of the composition, the solo asserts C $\flat$  major, using the first, second, third, and fifth scale degrees of the key between mm. 22–32/3. Here, rather than outlining and negotiating each of the harmonies of the composition, Jarrett instead freezes the pitch material on the implied tonality of C $\flat$ .

By itself, the limited pitch material (G $\flat$ , C $\flat$ , E $\flat$ , D $\flat$ ) might be considered banal, but it richly conflicts with the harmonic structure of the original composition. In addition to moving outside of the composition's tonality, the repeated motive likewise moves outside the composition's  $\frac{4}{4}$  meter. The G $\flat$  at m. 21/3 receives a registral accent (it is the highest pitch up through m. 32/3), and in subsequent appearances of G $\flat$  (mm. 23, 24, 26, 27, and 29) the pitch class is stated in octaves, reinforcing the registral accent with a textural accent. The textural and registral accent repeatedly emphasizes the G $\flat$ , shifting the perceptual downbeat to each instance of G $\flat$ . The entire passage then groups into a series of seven motives, numbered one through seven in the transcription and indicated with dotted slurs.

With these seven statements of the motive, Jarrett stratifies  $\frac{6}{4}$  above the  $\frac{4}{4}$  meter of the composition. This then coincides with the tactus-preserving polymeter earlier presented in example 2, but with a crucial difference. In example 2, the groupings of  $\frac{6}{4}$  are initiated either on the first or the third beats of the measure; in Jarrett's solo, the groupings are instead begun on the fourth and second beats of the measure. As long as the motives are preserved, they are unable to align with the barline, uprooting both the composition's  $\frac{4}{4}$  meter and undermining the metric hierarchy of strong (one and three) and weak (two and four) beats.

The motive is somewhat altered between each statement, however. In its first three iterations—mm. 21, 23, and 24—the motive's rhythmic identity is consistent, but Jarrett reconfigures the limited pitch material between motives 1 and 2. Additionally, motives 4 and 6 are each truncated by an eighth note, allowing motives 5 and 7 to begin with an eighth-note anticipation. Yet, since the  $\frac{6}{4}$  meter has gained repetitive power through

**Example 11a:** Accentual shift, mm. 17–19/3.

(\*=Chordal Roots)

M. 17/3 Am7(b5) D7 Gm7

**Example 11b:** Mm. 17–19, rhythmically normalized.

M. 17/3 Am7(b5) D7 Gm7

the first four statements of the motive, these pitches at the beginning of motives 5 and 7 operate *as anticipations*, playful upbeats to the downbeat of the prevailing  $\frac{6}{4}$ . Only within motive 7 is the motive altered sufficiently to dissolve the  $\frac{6}{4}$  polymeter.

The harmonic and metric conflicts of mm. 21–32/3 having played themselves out, a large-scale pitch resolution takes place by the end of motive 7: the  $G\flat$  which initiated each of the seven motives yields to  $G$  directly before the beginning of the fourth chorus (m. 32/3, final quarter note).<sup>13</sup> In addition, Jarrett articulates the formal division at the new chorus (m. 1/4) by abandoning the  $\frac{6}{4}$  of the previous twelve measures. We may read the shift to triplet subdivisions at this new chorus as a metric transformation down a rhythmic level. With this interpretation, there occurs a move from the  $\frac{6}{4}$  to the  $\frac{6}{8}$  “trivial” polymeter earlier modeled in example 6, and thus the shift from one polymeter to another generates a relationship between different rhythmic levels. Particularly since Jarrett’s solo operates primarily with eighth-note subdivisions, this move to triplet subdivisions is striking.

Moving ahead in this final chorus, Jarrett again uses the B section to move outside the harmonic progression. At mm. 17–18/4, Jarrett’s right hand outlines the pitches of a C-major triad, played above a left-hand statement of perfect fourths a whole step apart ( $A-D$ ,  $G-C$ ). The left-hand transpositional move of T-2 within mm. 17–18/4 is then subsequently transferred to the *entire* motivic structure: mm. 19–20/4 transposes the material from mm. 17–18/4 down a whole step.

Arguably, in these four measures between mm. 17–20/4, Jarrett still alludes to the harmonic progression of “Autumn Leaves” by projecting the whole-step move of the original composition. In this reading,  $Amin^7$  is stated between mm. 17–18/4 and  $Gmin^7$  between mm. 19–20; thus Jarrett

ignores the original descending fifths progression at the measure level (A–D–G), but traces the composition's A to G whole-step progression at the two-measure level. (The original progression is indicated in parentheses between the staves.) But now the T-2 transpositional scheme takes over and subsequently overrides the harmonic progression of "Autumn Leaves." At mm. 21–22/4, the motive is transposed down another whole step, a process repeated again at mm. 23–24/4.<sup>14</sup>

Thus, the T-2 move introduced in the left hand at mm. 17–18/4 is magnified onto the entire eight-measure passage, providing its transpositional scheme at the two-measure level. This motion is summarized in example 12. But does this transpositional operation relate to the composition, or does it merely flout the harmonic progression? We may hear these eight measures as cyclically reinterpreting the diatonic structure of the original composition. Example 13 indicates that these eight measures reinterpret the melody of the A section of "Autumn Leaves." Example 13a shows that the skeletal voice-leading of the melody of the A section of "Autumn Leaves" describes a descent in diatonic space, moving downward by step each two measures. The compound melody, indicated by downward and upward stems, creates a motion in parallel sixths. By comparison, example 13b shows the melodic move from mm. 17–24/4 of Jarrett's improvisation descending cyclically each two measures by whole step. Again, parallel sixths create a compound melody, and a comparison of examples 13a and 13b shows that while the same name classes are retained, the specific pitch classes are sometimes altered for the cyclic transformations in 13b: at mm. 17–18/4 E $\sharp$  replaces E $\flat$ , and at mm. 23–24/4 D $\flat$  replaces the D $\sharp$  of the original.<sup>15</sup>

Thus the final chorus and a half of Jarrett's solo shows several disruptions of the harmonic and metric scheme of "Autumn Leaves." Within the B section of the third chorus, the solo moves outside both the harmonic and the metric framework of the composition, juxtaposing C $\flat$  major and  $\frac{6}{4}$  meter; and in the B section of the fourth and final chorus, Jarrett uses a T-2 transpositional scheme which negates the harmonic progression. Nevertheless, despite these disruptions, both Jarrett and the rhythm section maintain the integrity of the composition's overall form.

### Hancock's Solo

Herbie Hancock's solo is taken from the album *Miles in Europe*, recorded live at the Antibes Jazz Festival in 1963. In addition to Miles Davis on trumpet and Herbie Hancock on piano, the group consists of tenor saxophonist George Coleman, bassist Ron Carter, and drummer Tony Williams. Hancock's solo (ex. 14) lasts six choruses; the analysis will focus on Hancock's last chorus and a half.<sup>16</sup>

**Example 12:** T-2 transpositional scheme (mm. 17–24/4).

m. 17/4 (Am7b5) (D7) (Gm7) (Cm7) (F7) (Bbmaj7) (Ebmaj7)

**Example 13a:** A section, “Autumn Leaves.”

m. 1

**Example 13b:** Reinterpretation, Jarrett mm. 17–24/4.

m. 17/4

At the onset of the B section of the fifth chorus, beginning at m. 17/5, it is possible to trace the melodic course of the solo through stepwise connections, indicated in the transcription above the score. The surface disruptions between mm. 17–19/5 organize a four-note descending arpeggio into groupings of eleven. Here, the accented  $C_7$  of mm. 17–19/5 yields to the octave  $B\sharp_4$ , which anticipates m. 20. In each of the subsequent measures, we can hear in the right hand the embellishment of a whole-step gesture which continues to descend: m. 21/5 embellishes  $A_5$ – $G_5$ , m. 22 elaborates  $A\flat_5$ – $G\flat_5$ , m. 23/5  $F_5$ – $E\flat_5$ , and m. 24 connects  $E\flat_5$ – $D\flat_5$ .

Within the following eight bars, the final measures of the B section, Hancock abandons his clear allegiance to the harmonic progression. Instead, the section is dominated by the  $\langle 0147 \rangle$  tetrachord, stated in chromatic ascent in a series of seven motives, numbered one through seven in the score. Not only does the chromatic planing here stymie the harmonic progression, but the quarter-note triplet value also stratifies a  $\frac{6}{4}$  polymeter over the  $\frac{4}{4}$  of the composition. In these measures, the  $\frac{6}{4}$  polymeter is measure-preserving.<sup>17</sup>

Following the motive's first two appearances at mm. 25–26/5, Hancock shifts the motive to the middle of the measure. For the remainder of the



**Example 14:** Herbie Hancock's "Autumn Leaves" solo. From *Miles Davis in Europe* (Columbia KCS 8983). From Hancock (1992).

The musical score is presented in two systems, each with a piano (B) and bass line. The key signature is B-flat major (two flats), and the time signature is 4/4.

**System 1 (Measures 21/5 to 25/5):**

- Measures 21/5 - 22/5:** Chords Eb9 (labeled gva) and D7(alt). The piano line features eighth-note runs with accents.
- Measures 23/5 - 24/5:** Chords Gm7 and G7(alt). The piano line continues with eighth-note runs.
- Measures 25/5:** Chords C7(#11), F7(alt), Bbmaj7, Bbm7, and Eb7(#9). The piano line features a triplet of eighth notes.

**System 2 (Measures 29/5 to 5/6):**

- Measures 29/5 - 30/5:** Chords A7(b9) and D7(b9). The piano line features a triplet of eighth notes.
- Measures 31/5 - 32/5:** Chords G7(b9) and F7(b9). The piano line features a triplet of eighth notes.
- Measures 33/5 - 34/5:** Chords Eb7(#9) and D7(#9). The piano line features a triplet of eighth notes.
- Measures 35/5 - 36/5:** Chords G7(b9) and F7(alt). The piano line features a triplet of eighth notes.
- Measures 37/5 - 38/5:** Chords Cm7 and Bb7(sus). The piano line features a triplet of eighth notes.
- Measures 39/5 - 40/5:** Chords F7(alt) and Bb7(sus). The piano line features a triplet of eighth notes.
- Measures 41/5 - 42/5:** Chords G7(alt) and Eb7(sus). The piano line features a triplet of eighth notes.
- Measures 43/5 - 44/5:** Chords A7(b9) and D7(alt). The piano line features a triplet of eighth notes.
- Measures 45/5 - 46/5:** Chords G7(alt). The piano line features a triplet of eighth notes.

**Annotations:**

- Measure 21/5:  $\frac{6}{4}$ : Measure-preserving
- Measure 22/5: 1. A7(b9)
- Measure 23/5: 2. D7(b9)
- Measure 24/5:  $\frac{6}{4}$  + Accentual shift
- Measure 25/5: 3. G7(b9)
- Measure 29/5: 4. F7(b9)
- Measure 30/5: 5. Eb7(#9)
- Measure 31/5: 6. D7(#9)
- Measure 32/5: 7. G7(b9)

## Example 14 (cont.)

C7(#11) F7(alt) Bm7 E7  
 m. 9/6

A7 D7(alt) Gm(#7)  
 m. 13/6

Eb7 D7(alt) Gm7  
 m. 17/6

Cm7 F7 Bb7 Eb7  
 m. 21/6

Am7(b5) D7(alt) Gm7 Fm7 Bb7  
 m. 25/6

Eb7 D7(alt) Gm7 Cm7  
 m. 29/6

passage, between motives 3–7, each of the motives begins in mid-measure, initiated with an eighth-note upbeat in the left hand. Motives 3–7 thus create two levels of conflict with the  $\frac{4}{4}$  meter of the composition. First, these motives assert a  $\frac{6}{4}$  polymeter above the primary  $\frac{4}{4}$  meter of the composition; second, the pattern beginnings of motives 3–7 create an accental shift to the third beat of the measure, creating a 3-shift. Hancock here achieves the double level of conflict initially shown in example 8.

With its  $\frac{6}{4}$  polymeter, 3-shift, and chromatic planing, the eight-measure section at mm. 25–32/5 strongly disrupts the harmonic and metric fabric of the composition. However, while the analysis above presents the passage as moving both outside the metric and the harmonic structure, the chromatic planing is not completely independent of the composition's harmonic structure. The asterisks in the score between mm. 25–32 (marked between treble and bass clef) indicate where Hancock's <0147> harmonies allude to the harmonies of the composition. The left-hand eighth-note upbeats to each motive offer a clue, too, by providing the root or fifth of these implied harmonies. Nevertheless, the chromatic planing of the <0147> tetrachord throughout the section strongly suppresses the harmonic structure of "Autumn Leaves."

In the sixth and final chorus, Hancock abandons the  $\frac{6}{4}$  meter and the chromatic planing. Between mm. 1–4/6, the melody forms a clear melodic ascent to  $B\flat_5$  and  $C_6$ . The metric identity of the solo here is ambiguous, particularly in comparison with the  $\frac{6}{4}$  polymeter discussed above, and these four measures lack a strong commitment to *any* meter.

In order to highlight this metric ambiguity, table 2a indicates the eighth-note intervals between all of the chordal attack points at mm. 1–4/6. The first chord, the anticipation of m. 1/6, is set at zero, and the upper line of table 2a contains the eighth-note intervals between the first chord and all subsequent chords. The second line in table 2a calculates eighth-note intervals between the second chord and all subsequent chords, the third between the third chord and all subsequent chords, and so on. Table 2b is a vector which tallies all the eighth-note intervals between attack points.<sup>18</sup>

A time-point vector can indicate the dominance of one or more rhythmic values. Those rhythmic values used extensively—the higher cardinalities in the vector—suggest one or more implied metric strands. A larger metric hierarchy may be implied when multiples of a rhythmic value similarly accumulate: for example, higher cardinalities of three, six, and nine eighth notes may imply a higher metric organization of  $\frac{9}{8}$ ; similarly, higher cardinalities of two, four, eight, and sixteen eighth notes might suggest a meter of  $\frac{4}{4}$ .

The time-point vector in table 2 shows an uneasy coexistence of several contending metric strands, none of which organize readily into a larger

**Table 2a**  
Time-point intervals in eighth notes for all chords (mm. 1-4/6)

1st Chord:	0	3	6	10	14	18	21	23	25	26	28	29	31
2nd:		3	7	11	15	18	20	22	23	25	26	28	
3rd:			4	8	12	15	17	19	20	22	23	25	
4th:				4	8	11	13	15	16	18	19	21	
5th:					4	7	9	11	12	14	15	17	
6th:						3	5	7	8	10	11	13	
7th:							2	4	5	7	8	10	
8th:								2	3	5	6	8	
9th:									1	3	4	6	
10th:										2	3	5	
11th:											1	3	
12th:													2

**Table 2b**  
Time-point vector for all eighth-note values

Eighth-note ints.	1	2	3	4	5	6	7	8	9	10
Cardinality of:	2	4	7	5	4	3	4	5	1	3
Eighth-note ints:	11	12	13	14	15	16	17	18	19	20
Cardinality of:	4	2	2	2	4	1	2	3	2	2
Eighth-note ints.	21	22	23	24	25	26	27	28	29	30
Cardinality of:	2	2	3	X	3	2	X	2	1	X
Eighth-note ints.	31									
Cardinality of:	1									

metric hierarchy. The highest value in the vector, three eighth notes, is heard seven times. On the surface, this implies one metric strand of  $\frac{3}{8}$ , and this strand is the strongest due to its highest cardinality. But beyond this surface level, at multiples of three, the high cardinality of triple groupings quickly evaporates. Thus, despite a relatively high cardinality of the primitive rhythmic value of three eighth notes, a higher-level triple metric organization is denied.

Triple groupings:	3	6	9	12	15	18	21	24	27	30
Cardinality of:	7	3	1	2	4	3	2	X	X	X

The next-highest value appears at four and eight eighth-notes, implying a metric strand of  $\frac{2}{4}$ , a meter that conflicts with the  $\frac{3}{8}$  discussed above. However, beyond these first two quadruple groupings of four and eight eighth-notes, a higher-level metric organization is again unfulfilled.

Quadruple groupings:	4	8	12	16	20	24	28
Cardinality of:	5	5	2	1	2	X	2

In addition to these competing metric strands of  $\frac{3}{8}$  and  $\frac{2}{4}$ , notice, too, the consistency of quintuple groupings, implying  $\frac{5}{8}$ .

Quintuple groupings:	5	10	15	20	25	30
Cardinality of:	4	3	4	2	3	x

Thus at least three competing metric strands operate in mm. 1–4/6, contributing to the metric ambiguity in these measures. Nevertheless, the triple grouping of three eighth notes is dominant, and the promise of those triple groupings between mm. 1–4/6 becomes fully realized in the following four bars, at mm. 5–8/6. The triple groupings of mm. 1–4 have generated enough potency to dominate the succeeding four-bar section, and mm. 5–8 coalesce into  $\frac{6}{8}$  meter, expressed through the repeated eighth note/quarter note grouping. The upper pitch of the right hand oscillates between D $\flat$  and F, clearly organizing the  $\frac{6}{8}$  polymeter. At mm. 5–6, the D $\flat$  is supported by A<sup>13(69)</sup> and the F by D<sup>7(49)</sup>; mm. 7–8 finds both D $\flat$  and F harmonized by the altered G<sup>7</sup> chord.

I've indicated the move to  $\frac{6}{8}$  meter at mm. 5–8 as being generated by the implied triple groupings of the previous metrically ambiguous section. Taking a slightly larger view, we can see a process of metric transformation at work, and metrically, the solo traverses a path which shifts between differing levels of polymeter. The final eight measures of the previous chorus (mm. 25–32/5) clearly established  $\frac{6}{4}$  meter; after passing through the metrically ambiguous mm. 1–4/6, the solo then sifts down to  $\frac{6}{8}$ , moving down a rhythmic level.

Interestingly, this metric transformation—the move from  $\frac{6}{4}$  to  $\frac{6}{8}$ —occurred in the Jarrett solo as well, but in comparing Jarrett's solo to Hancock's, we see different qualities of polymeter at work. Example 15 indicates the difference. In the Jarrett solo, the  $\frac{6}{4}$  tactus-preserving polymeter in the B section of the penultimate chorus (mm. 21–32/3) moved to the  $\frac{6}{8}$  "trivial" polymeter at the beginning of the final chorus. By com-

**Example 15:**  $\frac{6}{4}$  to  $\frac{6}{8}$  metric shift.

Jarrett, B section (mm. 21ff./3):  $\frac{6}{4}$

A section:  $\frac{6}{8}$

Hancock, B section (mm. 25ff./5):  $\frac{6}{4}$

A section (mm. 1-4/6)  
Metric strands, incl.  $\frac{6}{8}$

parison, in the Hancock solo the  $\frac{6}{4}$  measure-preserving polymeter in the B section of the penultimate chorus (mm. 25–32/5) moved to a “non-trivial”  $\frac{6}{8}$  in the final chorus (mm. 5–8/6). The metric strategy for both solos is similar but composed out through differing qualities of polymeter. In addition, the formal placement is strikingly similar. In each solo, the  $\frac{6}{4}$  occurs in the B section of the penultimate chorus, changing to  $\frac{6}{8}$  within the A section of the final chorus. This says much about the similarity of formal development and dramatic design: in both solos, the soloists place the point of highest metric conflict at the juncture between the penultimate and final chorus before winding down.

But Hancock’s solo does not wind down immediately. Although the  $\frac{6}{8}$  polymeter ceases, the solo continues to build dynamically and registrally. Having committed to the ascending third motive  $D\flat$ – $F$  in the upper voice of the  $\frac{6}{8}$  passage at mm. 5–8/6, the solo continues to ascend, stating another ascending third motive of  $F\sharp$ – $A$  in the upper voice for the entire second A section (mm. 9–15/6). Hancock uses a number of harmonic substitutions here to support the  $F\sharp$ – $A$  third:  $C7\sharp^{11}$ ,  $B^{13}$ ,  $B\text{min}^7$ ,  $E^7$ ,  $A^7$ ,  $D^7$ ,  $G\text{min}\sharp^7$ . Furthermore, the line continues its ascent at the beginning of the B section:  $F\sharp_6$ – $A_6$  of mm. 9–16 connects with  $B\flat_6$  at m. 17 before reaching its registral peak at  $C_7$  in mm. 17–18.

This position of  $C_7$ , the registral high point of the solo, shows a remarkable control of register at work, and this control ties in with both the formal and the dramatic pacing. This is summarized in example 16, which shows the solo’s overall directional design. The B section of the previous fifth

**Example 16:** Directional design from m. 17/5 to m. 17/6.

The musical score for Example 16 is presented in five staves, labeled B, A, B, A, and B from top to bottom. The key signature is B-flat major. The first staff (B) begins with a  $C_7$  chord at measure 17/5. The second staff (A) features a chromatic ascent starting at measure 25/5 in a  $\frac{6}{4}$  time signature, with the word "etc." indicating continuation. The third staff (B) shows a chromatic descent starting at measure 9/6. The fourth staff (A) shows a chromatic ascent starting at measure 1/6, with a  $\frac{8}{8}$  time signature indicated at measure 5/6. The fifth staff (B) returns to the  $C_7$  chord at measure 17/6.

chorus (m. 17/5) was initiated by the same  $C_7$ ; this then launched an overall descent for the next eight measures. The chromatic planing in  $\frac{6}{4}$  between mm. 25–32/5 attempts a corresponding ascent, but the actual ascent starts at the beginning of the sixth chorus. Stepwise between mm. 1–4/6, the ascent yields to the ascending third motives,  $D\flat$ – $F$  at mm. 5–8/6 and  $F\sharp$ – $A$  at mm. 9–16/6, before ultimately reclaiming the  $C_7$  at mm. 17–18. Significantly, the return of  $C_7$  at mm. 17–18 occurs at the beginning of the B section, the identical point at which it was initiated in the previous chorus.<sup>19</sup>

This overall motion from and to  $C_7$  arches from the B section of the fifth chorus to the B section of the sixth chorus, revealing the large-scale formal and dramatic pacing that is an important component of Hancock's improvisational style. Perhaps more significantly, it also shows the seamless interaction of inside and outside materials within a larger design. The superimposed materials outside the harmonic and metric environment of the composition—the chromatic planing of the <0147> tetrachord, the  $\frac{6}{4}$  and  $\frac{8}{8}$  polymeter—are all nested within a larger directional design, and this design moves effortlessly between inside and outside playing. Hancock opens wide the window between inside and outside.

For the remainder of the solo, between mm. 21–32/6, the solo winds down dynamically and registrally. Additionally, the rhythmic identity of the final measures aligns very clearly with the notated barline, moving to quarter note values at mm. 21–23 and 31, as well as the two-note groupings which support the quarter-note pulse at mm. 25–30.

## Coda

Certainly much of the jazz tradition and repertoire has been predisposed toward generating form from regular metric and hypermetric groupings, particularly four-, eight-, sixteen-, and thirty-two-bar segments. In quadruple meter, this results in what Richard Cohn (1992) has described as a "pure metric complex," in which metric groupings multiply evenly. Exceptions occur, but these frequently appear as ad hoc formal solutions and innovations in the works of jazz composers such as Duke Ellington, Charles Mingus, or Wayne Shorter. Nevertheless, jazz evolution and development is often guided by the creation of improvisational strategies that overcome the limitations of a regularly recurring formal structure.

Both Jarrett's and Hancock's solos appeared at a crucial historical juncture. Within the context of 32-bar standard compositions, the two pianists merged traditional improvisational techniques with those of the jazz avant-garde, expanding widely the musical resources available for improvisation. These improvisational resources operated in both the domain of pitch and meter, allowing both pitch and metric materials that align or conflict with the primary harmonic and metric scheme of the composition.

The recordings of "Autumn Leaves" are from the first albums of both Lloyd's quartet (with Jarrett, Jack DeJohnette, and Cecil McBee) and Davis's quintet (with Hancock, Ron Carter, and Tony Williams). Lloyd's group was to last for three years, from 1966–69, while Davis's group remained together between 1963–68. Both groups continued to use standard compositional frameworks and further explore techniques of outside playing. But this particular path seemed rather short-lived, and within the next several years these performers and groups had moved away decisively from 32-bar standards. By 1965, much of Davis's repertoire was composed by tenor saxophonist Wayne Shorter, many of whose compositions provided alternatives to 32-bar structures; after 1968 Davis's electric groups were working with different formal frameworks altogether. Very possibly, once having worked out many of the implications of outside playing in the standard tune 32-bar context, the stresses placed on standard compositional structures led these players to other formal and harmonic designs for their improvisational strategies.<sup>20</sup>

By the following decade, innovative approaches to standard tune improvisation seemed less plausible. Thirty-two-bar structures were abandoned with the rise of fusion and the continuation of the jazz avant-garde. Hancock and Jarrett's work in the 1970s reflected these two aesthetic positions, with Hancock's work taking place in the realm of jazz-rock fusion, and Jarrett's quartet (with Ornette Coleman's sidemen Charlie Haden and Dewey Redman) aligning with the jazz avant-garde. Yet since 1983, Jarrett's "Standards" Trio has been devoted solely to standard-tune improvisation, showing a resurgence of interest in standard-tune improvisation over 32-bar forms



and a connection back with improvisational solutions that emerged in the 1960s. Since the 1960s, techniques for outside playing have been absorbed into improvisational strategies. Meanwhile, 32-bar forms have shown themselves to be both highly pliable and remarkably sturdy structures.

#### Notes

1. For discussion of hypermeter, see Lerdahl and Jackendoff (1983), Rothstein (1981, 1989), and Schachter (1976, 1980, 1987).

2. There are exceptions. Introductions, interludes, and codas may be appended to the form, but these might not be included within the improvisational frame. Radical alternatives to 32-bar song form appear in some of the music of Duke Ellington: see Schuller (1989) and Rattenbury (1990). Other notable exceptions include Charles Mingus's "Fables of Faubus" (1959), which has a 71-bar theme, and Horace Silver's "The Outlaw" (1958), which contains a 54-bar theme made up of measure groups of 13 + 13 + 10 + 18. For a discussion of trumpeter Booker Little's unusual formal solutions, see Waters and Diamond (forthcoming).

3. Three takes of "Tiny's Tempo" were recorded at the session; in at least seven choruses from these takes, Parker makes the same iii–biii–ii harmonic move between mm. 8–9. For a further discussion of the solo, see DeVeaux (1997:376–80). DeVeaux also has an interesting discussion of the role of harmonic *deletion* in the solos of Lester Young (ibid.:112–14).

4. Example 2b is taken from Schuller (1968:218). Schuller discusses the passage in greater detail and provides a metric interpretation to the passage.

5. Lewis's quote continues: "I do not think, however, that the sections in this 'structured jazz'—both the improvised and the written sections—should take on too much complexity. The total effect must be within the mind's ability to appreciate through the ear" (Lewis 1958; see also Ostransky 1977). Schuller's term "Third Stream" was first given during a 1957 talk at Brandeis University; Schuller's own writings on third stream music are well summarized in several of his essays, including "Third Stream," "Third Stream Revisited," and "The Avant-Garde and Third Stream," all collected in Schuller (1986).

6. For an overview of the music created by the central figures of free jazz, see Jost (1994). With his 1949 recordings "Intuition" and "Digression," Lennie Tristano's experiments with free collective improvisation predated Ornette Coleman's by a decade.

7. Outside playing seems to have been associated early on with the recordings of Eric Dolphy and Booker Little, whose album titles *Outward Bound*, *Out to Lunch* (Dolphy, 1960 and 1964), and *Out Front* (Little, 1961) toy with the term. Dolphy, having participated on Ornette Coleman's *Free Jazz* recording, was associated with the free jazz movement, but he also frequently recorded standard compositions.

8. "A record I've listened to a thousand times is *Footloose* by Paul Bley" (quoted in Carr 1991:28). Bley (b. 1932) led a group that contained Ornette Coleman and Don Cherry between 1956–58; his album *Footloose* was recorded 1962–63. Bley has been profoundly influential on a number of musicians but has received scant attention in writings on the jazz avant-garde.

9. These accentual conditions are discussed extensively in Lester (1986), especially chapters 2–4.

10. This AAB form is perhaps more closely allied with bar form than with the characteristic AABA standard-tune framework.

11. Applications of Schenkerian analysis to jazz composition and improvisation can be found in Strunk (1975, 1985), Larson (1987), and Stewart (1974–75).

12. These substitutions are taken from Hancock's and Jarrett's solos, which will be analyzed below. See Bill Dobbins's complete transcription of Hancock's solo in Hancock (1992).

13. This resolution to the pitch class G at the end of m. 32/3 is reinforced an octave higher in the following measure, where  $G_6$  (m. 1/4, third beat) becomes the highest pitch of the gesture.

14. Jarrett also introduces a lower bass note:  $B\flat$  between mm. 21–22/4, and  $A\flat$  between mm. 23–24/4.

15. *Name class* refers to equivalency based upon retention of pitch name independent of chromatic alteration: C,  $C\flat$ , and  $C\sharp$  all share the same name class. The notion of name class is derived from Brinkman (1990:124–26).

16. The transcription is taken from Hancock (1992).

17. It is interesting to note that the upper melodic pitch that ends each of the first two statements— $C\sharp$  at m. 25/5 and  $E\flat$  at m. 26/5—revisits the  $E\flat$ – $D\flat$  whole-step melodic motion of m. 24.

18. Tables 2a and 2b are indebted to Lewin (1981). Lewin, however, does not provide metrical interpretations, but observes implied downbeats through a statistical tally of attack-point intervals.

19. It is worth noting that, despite the metric and harmonic disruptions, Hancock adheres to the four-bar and eight-bar hypermeter throughout these measures:

mm. 17–20/5: C–B

mm. 21–24: stepwise dyads

mm. 25–32:  $\frac{6}{4}$  polymeter; <0147> tetrachords

mm. 1–4/6: stepwise ascent

mm. 5–8:  $\frac{6}{8}$  polymeter;  $D\flat$ –F

mm. 9–16:  $F\sharp$ –A

mm. 17: return to C

20. Henry Martin (1997–98) discusses further harmonic and metric liberties that Davis's group takes with a standard composition.

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