15 Analysing jazz

THOMAS OWENS

> In reply to the . . . question, 'What is jazz, Mr Waller?' the late and great Fats is supposed to have sighed: 'Madam, if you don't know by now, DON'T MESS WITH IT!' [STEARNS 1956, 11]

Though Waller (if he actually made that remark) was speaking to a neophyte jazz fan, had he lived to see scholars 'messing' with jazz he probably would have disapproved of that activity as well. They spend lengthy amounts of time listening to it, reading and thinking about it, for they find the music fascinating, irresistible and sometimes mysterious. Ever curious, they examine it, using a variety of skills and approaches. Then they write about it in their spare time (no one makes a living analysing music), hoping to reach an interested audience with their insights into the music. Readership and book sales are minuscule by popular-press standards. But if the readership is small, jazz analysts still may take pride in providing informed alternatives to the pseudo-intellectual verbiage and scrambled terminology that sometimes characterises jazz writing for the general reader.[1]

Music analysts strive to describe or explain musical phenomena with some combination of words, musical notation and graphic representation. But while a jazz piece, like any other piece of music, may be a fixed object – an audio recording or written score – analyses may be dramatically different, as John Brownell has pointed out (1994, 23), depending upon what each analyst listens for and finds in a piece.

For example, in the 1920s the educators who published the first jazz teaching materials often illustrated their ideas with generic musical examples rather than with transcriptions of specific recordings. Though not usually regarded as analysts, they clearly had analysed the aspects of jazz that interested them in order to compose their examples. Glen Waterman, perhaps the first jazz educator to use triplet quavers in notating jazz rhythms, composed some idiomatic examples and made some cogent observations about improvising in his *Piano Jazz* of 1924; the following year Art Shefte added many more examples in a series of instruction books (1925).[2]

In general, the first jazz analysts were dabblers whose primary interests lay elsewhere. Roger Pryor Dodge, for example, was a dancer, choreographer and performing-arts critic who began writing occasional articles about jazz in the 1920s. In 1934, one such article included transcriptions

and a discussion of solos from four Ellington recordings of *Black and Tan Fantasy*.[3] In so doing, according to Wolfram Knauer (1999, 31), he became the first jazz analyst. Four years later, Winthrop Sargeant entered the field with his well-known book, *Jazz: Hot and Hybrid* (1938). Sargeant had been an orchestral violinist in major symphony orchestras in San Francisco and New York during the 1920s, and in 1934 began a long career as a classical music critic. In his book of 1938, he discussed jazz syncopation (it is mostly 'anticipative', not 'retardative', resulting from arriving early rather than late on a note that would otherwise be on a beat), a blues scale (the major scale plus the blue third and blue seventh), some aspects of jazz harmony and a few other topics. Though clearly enthusiastic about jazz, he apparently found no pieces worthy of extended discussion among the few jazz recordings he cited. His book is a general survey of the music, written for readers who, like himself, were interested primarily in the classical tradition of European concert music. To Sargeant, jazz was a foreign country that he visited occasionally; his book is a souvenir album containing his textual and musical 'snapshots'.

André Hodeir was more than a casual visitor to jazz when he wrote his *Hommes et problèmes du jazz* in 1954; he was a jazz violinist, jazz critic, editor of the journal, *Jazz Hot*, and a jazz-influenced composer. His daily involvement with the music gave him a far broader perspective than Dodge and Sargeant had; he knew, for example, the multiple takes of Charlie Parker's Dial recordings, which had only recently become available. This involvement led him to posit some terms that many analysts continue to find useful: 'theme phrase', 'variation phrase', 'paraphrase' and 'chorus phrase'. It also equipped him to make some pithy observations about eight of Armstrong's Hot Five recordings, and to write his centrepiece chapter on Duke Ellington's *Concerto for Cootie* (reprinted in Walser 1999, 199–212).

Among the musical analyses that strive to reveal the beauties within fine jazz recordings, Hodeir's chapter on Ellington's *Concerto* is surely one of the first great landmarks; no one before Hodeir had devoted 21 pages to a single three-minute jazz work. He enlivens his detailed description of the music with a contagious enthusiasm for both Ellington's composition and trumpeter Cootie Williams's performance; after reading the chapter it is hard to resist rushing to the recording that inspired remarks such as these (taken from the English-language version):

> Few records do more than the CONCERTO to make possible an appreciation of how great a role sonority can play in the creation of jazz. The trumpet part is a true bouquet of sonorities. The phrases given to it by Ellington, which have a melodic beauty of their own that should not be overlooked, are completely taken over by Cootie. He makes them shine

> forth in dazzling colors, then plunges them in the shade, plays around with them, makes them glitter or delicately tones them down; and each time what he shows us is something new. [Hodeir 1956, 93]

The one frustrating segment of the chapter concerns the modulation (from F to D♭) leading into the middle (C) section for open trumpet. Hodeir tells us the passage is extraordinary but does not illustrate it or describe it in any detail (*ibid.*, 84–5). Still, overall, the chapter holds up well; it is a classic analysis of a classic piece.

During the 1930s, 1940s and 1950s a scattering of analytical articles appeared, most often in jazz periodicals. In the 1930s, for example, *Down Beat* magazine began publishing musical transcriptions with accompanying descriptions. Though brief, these descriptions called the reader's attention to a few points of interest in the transcriptions. Leonard Feather, one of the magazine's writers at one time, followed the same tradition in the chapter entitled 'The Anatomy of Improvisation' in *The Book of Jazz* (1957). His transcription and discussion of Armstrong's 'Muggles' is particularly engaging and illuminating (*ibid.*, 216–19). Feather was capable of more writing of this kind, for he was an amateur pianist and had composed some jazz tunes. But he was primarily a jazz journalist, and evidently preferred to leave the analytical writing to others.

In 1958, four years after Hodeir's book first appeared, Gunther Schuller wrote perhaps the most famous jazz analysis of all: his article on Sonny Rollins's *Blue 7*. Schuller, a professional French-horn player, composer, conductor and educator, had recorded with Miles Davis and Gigi Gryce and had conducted a recording jazz ensemble by 1958. He shared with Hodeir a thorough and intense background in twentieth-century music, and a similar analytical perspective on jazz.

Early in the article Schuller states some of his criteria for judging a solo's worth:

> to a very great extent, improvised solos . . . have suffered from a general lack of over-all cohesiveness and direction – the lack of a unifying force . . . [They] have been the victims of one or perhaps all of the following symptoms: (1) The average improvisation is mostly a stringing together of unrelated ideas; (2) Because of the *independently* spontaneous character of most improvisation, a series of solos by different players within a single piece have very little chance of bearing any relationship to each other . . . (3) In those cases where composing (or arranging) is involved, the body of interspersed solos generally has no relation to these nonimprovised sections; (4) Otherwise interesting solos are often marred by a sudden quotation from some completely irrelevant material.
> [M. Williams 1962, 240–41]

While acknowledging that some improvisations may succeed solely because they are 'meaningful realizations of a well-sustained over-all feeling', Schuller clearly prefers something more. He is pleased to find that

> there is now a tendency among a number of jazz musicians to bring thematic (or motivic) and structural unity into improvisation. Some do this by combining composition and improvisation, for instance the Modern Jazz Quartet and the Giuffre Three; others, like Sonny Rollins, prefer to work solely by means of extemporization. Several of the latter's recordings offer remarkable instances of this approach. The most important . . . of these is his *Blue 7* (Prestige LP 7079). It is at the same time a striking example of how *two* great soloists (Sonny and Max Roach) can integrate their improvisations into a unified entity. [*Ibid.*, 241]

The core of the article is Schuller's illuminating explanation of how both Rollins and Roach ingeniously based their 17 improvised blues choruses on two motives each, a fact that Rollins was unaware of until he read Schuller's analysis (Blancq 1977, 102). Though Schuller does not mention pianist Tommy Flanagan's two solos and downplays the role of bassist Doug Watkins, we must be grateful that he led us to this 11-minute musical treasure.

A decade later, Schuller's book on 1920s jazz appeared (Schuller 1968), eclipsing all previous efforts at jazz analysis – including his own. Unlike earlier writers, Schuller listened to every available jazz recording made between 1917 and the early 1930s. One wonders how he found the time to hear all those recordings, much less write the book; during the 1960s he also composed a ballet, an opera, three sets of songs, five film and television scores and about three dozen other instrumental works (including two concertos and a symphony); he conducted frequently, at Carnegie Hall and elsewhere; he taught composition at Manhattan School of Music and Yale School of Music; and he began serving as president of the New England Conservatory of Music.[4] In the light of these numerous other obligations his fine book on jazz is indeed a remarkable achievement.

As with Hodeir, Schuller brings to his writing a contagious passion for the recordings he likes. But unlike Hodeir, who clearly preferred later styles of jazz, Schuller finds much to admire in earlier jazz, and with his numerous expert transcriptions and his keen perceptions, he delves deeply into his subject. It is hard to imagine anyone exploring the music of King Oliver, Louis Armstrong, Jelly Roll Morton, Bix Beiderbecke, Sidney Bechet, Johnny Dodds, Jimmy Noone, Jabbo Smith, Fletcher Henderson, Duke Ellington and others without first reading what Schuller had to say. There are many inspiring pages in this book; among the best are those devoted to Armstrong's 'West End Blues' (1928), Morton's 'Black Bottom Stomp' (1926) and the

chapter on Ellington (1968, 115–19, 155–61 and 318–57 respectively). In its sequel, *The Swing Era* (1989), Schuller brought his encyclopaedic approach to a much larger body of recorded music, and created another indispensable work.

Enter the musicologists

In the last decades of the twentieth century, musicologists specialising in jazz research dominated the field of jazz analysis. At first there were only a few graduate studies on jazz; I know of three in the 1940s, two in the 1950s and four in the 1960s (including the first PhD dissertation devoted to jazz analysis, Pyke's study of early jazz recordings [1962]). By the 1970s, the trickle of academic works began to grow. Encouraged by earlier efforts, aided by valuable discographical tools and inspired by an increased awareness of African-American contributions to American culture, scholars delved into a variety of topics. During that decade there were at least eight master's theses and twenty-seven doctoral dissertations. Five of these writers saw their work, or revisions thereof, published: Milton Stewart (1975, on Clifford Brown), Franz Kerschbaumer (1978, on Miles Davis), Dietrich Noll (1977, on free jazz), Lewis Porter (1985, on Lester Young) and Billy Taylor (1975, on the jazz piano tradition; internationally known pianist Taylor was, of course, not the typical jazz scholar of the 1970s). In the 1980s, at least 64 theses and dissertations appeared; seven were published. In the 1990s, the number far exceeded 100. In addition, during these decades numerous articles and several books appeared that were not linked to graduate studies.

As might be expected, these authors, trained to research and analyse a topic exhaustively, approach their subjects in ways that differ markedly from those of Hodeir and Schuller. Many reject the colourful descriptive style of Hodeir's essay on *Concerto for Cootie*, opting for a more impersonal dissection of the music according to one criterion or another. Many also reject the value judgement that guided Schuller to *Blue 7*, contending that he was too biased towards 'classical' musical criteria and ignored the true intentions of the jazz idiom. About half of them focus on over 60 individual musicians or ensembles,[5] and within these single-subject studies is a corresponding greater focus on detail. Stewart scrutinises the structure and performance refinements of a single recording by Clifford Brown; I look with much less individual scrutiny at about 250 solos by Charlie Parker (1974a); others use a sampling that falls somewhere between these numerical extremes.

Several studies – including Stewart, Owens, Simon (1978), J. Williams (1982), Elliott (1987), Larson (1987), G. Davis (1990) and H. Martin (1996) – draw upon reductive analysis to show underlying structural logic in themes

and/or improvisations. This analytical approach, developed by Heinrich Schenker (1933), Felix Salzer (1952) and others, looks beneath the surface features of melodic ornamentation and harmonic embellishment to show the structural melodic tones and chords that support entire pieces. Though used primarily to study European concert music of the eighteenth and nineteenth centuries, this method can also be helpful in understanding jazz solos (see Exx. 15.3 and 15.4 below). Some studies – including Owens, Howard (1978), Kernfeld (1981), Davison (1987) and H. Martin – de-emphasise the beauties of specific pieces and emphasise features common to many related improvisations (such as solos on the 'I Got Rhythm' chord structure in B♭). One such feature of Parker's solos that I studied intently was his vocabulary of favourite phrases and patterns ('licks'). I realised that, as an experienced jazz musician, Parker had developed a repertory of musical figures which he used while improvising. Thus, he actually pre-composed his solos to some extent. To my knowledge, however, he never repeated a solo notatim; instead he continually found new ways to reshape, combine and phrase his well-practised melodic patterns. An awareness of these patterns allowed me to listen with an increased insight into his improvising habits (Owens 1974a, vol. 1, 167–75). Henry Martin studied many of the same solos and found that those patterns often had subtle connections with the themes that preceded the solos. He found that 'Parker would often absorb the *underlying* foreground motives and voice-leading structures of the themes, then fashion his solos in light of that larger-scale thematic material. That is, Parker connects to the source material through middleground voice leading, and by abstracting, internalizing, then projecting essential, if sometimes less evident, qualities of the head [i.e., theme]' (1996, 3).

At least one analyst – Pressing (1982) – has applied set theory to jazz. In contrast, several writers – including Kernfeld (1981), Perlman and Greenblatt (1981), Smith (1983), Strout (1986), Floyd (1995) and Walser (1993) – have found useful the writings of scholars working primarily outside music, such as Parry and Lord in epic poetry, Chomsky in linguistics and Gates in African-American literary criticism. Noting analogies between spoken languages and musical languages, these writers have developed fresh concepts to illuminate jazz.

R. Bird (1976), Gushee (1981), Potter (1990) and Brownell (1994) have written thoughtful discussions of various approaches to jazz analysis. Brownell argues that analysts tend to view jazz improvisation either as product or process. In the former group are Hodeir, Schuller, Stewart and others, who look for notable recordings to single out and discuss at length. These superior performances, the writers find, contain features common to great works in the European concert-music tradition, such as melodic coherence gained through motivic development and/or discoverable underlying

structure. Those who view jazz as process, including Owens and Smith, downplay the importance of individual performances and look for the general patterns a player used in putting together solo after solo. Gushee, in his excellent study of Lester Young's various 'Shoe Shine Boy' solos, postulates four approaches: the 'motivic' (Brownell's 'product'), the 'formulaic' (Brownell's 'process'), the 'schematic' (also part of Brownell's 'product') and the 'semiotic' (Floyd, Walser, and others; a group, absent from Brownell's categories, that finds extramusical significance in musical gestures).[6]

Nearly every analytical writer, from Sargeant on, shares one common trait: they are jazz scholars first, players second. Though they may play jazz professionally or semi-professionally, few have spent years developing distinctive playing styles and earning a living as a player. Thus, when they listen, evaluate and analyse this music, they are outsiders to some degree. But the players they admire and study are (or were) jazz analysts, too, pondering and perfecting every nuance of their personal jazz language. Some concentrated largely on one particular role model; thus, alto saxophonist Sonny Stitt created an aural dissertation on Parker every night he performed. Others, such as John Coltrane, blended musical ingredients gleaned from several masters with their own ideas in the creation of unique *magna opera*. The difference, of course, is that they rarely wrote about what they did. (David Liebman's *Lookout Farm* (1978) and Todd Coolman's dissertation (1997) are exceptions.) Sometimes they did not even talk much to one another about their music. For example, Coltrane's sidemen report that there was scant verbal communication about musical matters, but, of course, the most intense and eloquent musical communication. When the players did talk to reporters or researchers, they often made only general remarks, using terms different from the technical language of analysis. Thus, there is a gap between players and scholars.

One scholar, Paul Berliner, has gone to monumental lengths to close that gap. His *Thinking in Jazz* (1994) delves deeply into the nature of improvisation as viewed by over 50 improvisers, whom he interviewed at length. By interweaving numerous musical examples with information provided by his informants, he has written vivid and perceptive descriptions of the processes these players followed to develop their musical vocabularies, construct solos and interact with one another. The 150 pages of transcription and description he devotes to rhythm-section players constitute the most extensive discussion in print of the harmonic, melodic and rhythmic procedures that are at the heart of the jazz process. Almost 900 pages long and filled with important information, Berliner's book is presently the Mount Everest of jazz ethnomusicology and analysis (see Peter J. Martin's comments on pages 141–3).

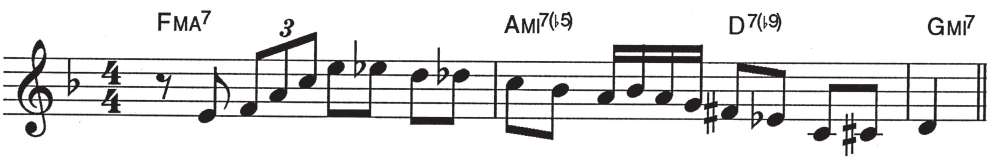
Transcription

Though the interviews and commentary are vitally important in Berliner's book, so are his excellent transcriptions. Indeed, almost any musical analysis is notation-dependent; and, since jazz is largely improvised, jazz analysts usually are also jazz transcribers. As such, they must grapple with sometimes formidable aural challenges, especially if the music is complex or the acoustical quality of the recordings is poor. The level of detail that they strive for in transcription depends upon what they want to examine in the music. Typically they have centred on melodic issues, especially those having to do with chorus phrases, where there is little or no connection with the original theme. In such cases, pitch shapes and patterns are the primary focus, so an uncluttered notation should be perfectly adequate, especially for a moderately fast solo passage (see Ex. 15.1). If, on the other hand, the analysis embraces small details of rhythm (such as swing quavers versus simple quavers), phrasing (often weak-to-strong) and articulation (often a mix of on-beat and off-beat accents), or dynamics and vibrato are germane, more refined transcriptions are necessary (see Ex. 15.2). To reach this level of detail, analysts may use tape recorders and slow the music to half, quarter, or even eighth speed; newer devices, such as the Digital Music Study Recorder, can reduce the speed without lowering the pitch.

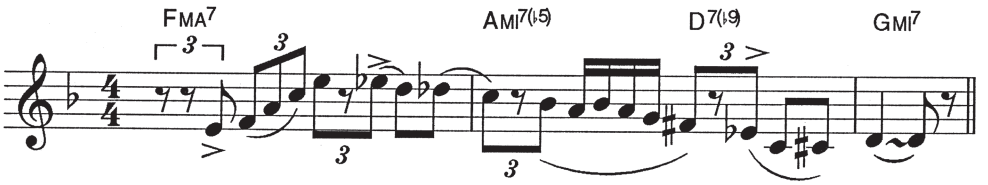
Master musicians in any tradition play in exceedingly subtle and complex ways, and the transcriber wishing to convey that complexity but still keep the transcriptions comprehensible faces difficult issues. Schuller bracketed two successive measures from Armstrong's recording of 'Weather Bird' with the ratios 5½:4 and 5:4, subsuming a half-measure triplet within the second ratio (1968, 125). Though few readers may be able to ideate this phrase, the notation serves at least two important purposes: it suggests Armstrong's rhythmic subtlety, and it encourages readers to listen to the recording for themselves.

As Frank Tirro (1974) and other analysts have pointed out, our notational system often fails us when we wish to represent pitches and rhythms accurately. Years ago I spent many hours trying to make a detailed and accurate transcription of the first complete take of 'Parker's Mood'. Then the sound technician in the UCLA ethnomusicology programme produced a frequency and amplitude graph of the piece with the now-defunct Seeger Melograph Model C, and I spent many more hours examining the graph, using a ruler and calculator. It was a humbling experience to learn how crude my aural transcription actually was. Parker's wonderfully expressive solo contained not only quavers, semiquavers, demisemiquavers, triplets and so on, but also fifteenth notes, nineteenth notes, twenty-first notes and other

Ex. 15.1



Ex. 15.2



lengths for which we have no precise symbols. Additionally, he employed a variable range of frequencies for many of the notes; he used, for example, a 'family of Fs' above and below the F on the piano (Owens 1974b). How can we show these things notationally?

If traditional notation is inadequate, perhaps a different approach is in order. Craig Woodson used a proportional notation for his transcriptions of Tony Williams's drum solos: a graduated series of dots (with diameters ranging from 0.055 inch to 0.125 inch) to represent loudness, with these dots placed proportionally along the staff to represent durations. It is an intriguing solution, but feasible only because he had graphs of the music available for study (from the Melograph again). Perhaps the solution is a linking of graphs and modified musical notation, though the large size of graphs makes long examples impractical.[7]

Other problems arise when the analytical focus is on group interaction rather than individual solo lines. Full-score transcriptions are often filled with educated guesses: was that note on the string bass or the bass drum? How many notes are in that pianist's soft, quick chord? Is that G in the piano part or in the guitar part? Is the drummer actually using the high-hat under those all-enveloping ride-cymbal sounds? Older recordings are particularly difficult; Launcelot Pyke decided to transcribe only wind parts plus chord symbols in his study of 1920s ensembles, partly because much of the rhythm-section playing is an indecipherable acoustic mush in recordings made before the introduction of the electrical process in 1925.

No matter how simple or complex the transcriptions, however, analysts must provide readers with legible transcriptions. Publishers no longer wish

to absorb the costs of transferring hand-written examples into camera-ready copy. Further, reproductions of handwritten music should no longer be acceptable, even for theses and dissertations, for with the versatile music-writing programs now available we can generate professional-looking examples on personal computers. Though some of these programmes are complex to learn and tedious to use, the end results can be impressive. Berliner's excellent, reader-friendly examples (1994, 513–757), and Franz Krieger's example-rich study of solo piano performances of 'Body and Soul' (1995), are models for all analysts to emulate. Both writers say much of importance in their texts, but the elegant notation of their fine transcriptions also speaks volumes.

Sometimes analysts avoid the use of transcriptions, perhaps for fear of discouraging the general reader, and sometimes, unfortunately, to avoid unpleasant copyright issues. Copyright laws say nothing about written transcriptions of recorded improvisations, but some attorneys and publishers feel that the rights of composers extend even to athematic improvisations on the harmonies of their compositions. A writer who has had to track down the current copyright owners of themes and then to negotiate permission fees may well reflect upon this strange exercise (what happened to the rights of the *improviser*?) and say 'never again' to the use of transcriptions.

The 'right' approach?

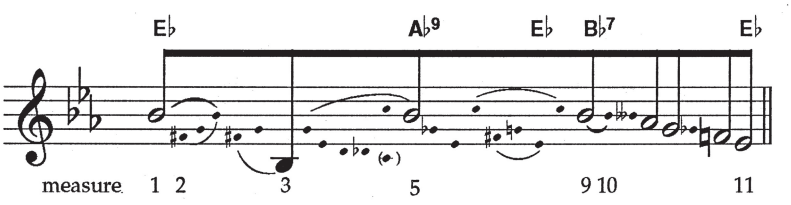
With so much analytical material currently available, the reader may find several different analyses of the same recorded performance. Ekkehard Jost (1999) has stated correctly that there is no single reliable method for analysing jazz. His observations on jazz analysis form the opening article in an array of papers on the subject, and the varied nature of these papers proves his point. A particular phrase might represent signifyin(g) or signifyin' to Floyd or Walser, an astonishing musical gesture to Hodeir or Schuller, a rapid scalar run in C minor that ends on the diminished fifth of chord ii to Owens, or a descending, direct, homogeneous, passing pattern elided with an ascending, direct, homogeneous passing pattern to Smith. Some writers argue forcefully that his/her approach is the most informed way in which to listen to the music, and argue just as forcefully that earlier analysts espoused erroneous, misleading or ambiguous theories. How does a reader decide which is the 'right' approach? In many cases there are no real conflicts among the various analyses; rather, different approaches often afford the reader complementary views of the same music.

Consider, for example, Armstrong's famous recording of 'West End Blues' (28 June 1928, Okeh 8597). Schuller, in discussing the final chorus, called it 'the perfect climax, structurally and emotionally', and used such adjectives as 'ecstatic', 'extraordinary' and 'astonishing' (1968, 118–19). The features that stimulated his enthusiasm are the long initial high B♭ (concert pitch) and the ensuing rush of notes, all of which add up to an 'impassioned finale'. His well-crafted transcription provides the reader with an excellent visualisation of these features. H. David Caffey, in an essay on Armstrong's style, includes his own transcription and discussion of the solo. He points out, among other features, that the four-note figure of bars 5–6 appears in Armstrong's unaccompanied introduction (1975, 90).

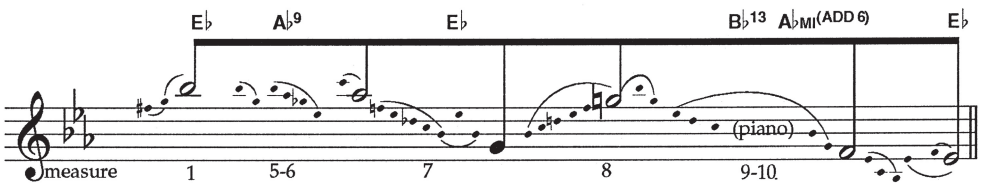
There are other noteworthy aspects of this solo chorus. For one, Armstrong's improvised melody maintains clear connections with the initial 'West End Blues' theme recorded by Oliver earlier that month (11 June 1928, Vocalion 1189); his initial motive, F♯–G–B♭, occurs in bar 2 of Oliver's theme, and that repeated four-note figure in Armstrong's bars 5–6 derives from bar 5 of the theme. Further, Armstrong's dramatically extended high B♭ is the ultimate summary of Oliver's first phrase, which is framed by two B♭s an octave apart.

The structures of Oliver's and Armstrong's melodies, though not easily heard at first, are similar as well. Both choruses begin by prolonging B♭, step 5 of the E♭ scale. Oliver maintains that structural pitch by emphasising it at the beginning of each four-bar section (bars 1, 5 and 9 of Ex. 15.3); then in bar 10 he descends chromatically, ending on E♭ when the tonic chord arrives in bar 11. Armstrong's diatonic descent from B♭ to E♭ (Ex. 15.4) is

Ex. 15.3



Ex. 15.4



more gradual, for he embeds the structural tones A♭–G (steps 4–3) in the ornate phrase after the long B♭, and presents the final F–E♭ descent only after a brief interpolation by pianist Earl Hines.

Of course, we do not treasure Armstrong's recorded performance because it adheres to a logical melodic structure (one, incidentally, which figures prominently in the European concert tradition), but because of its melodic and rhythmic details, many of which Schuller and Caffey discuss. None the less, just as a brilliantly crafted sentence has a structure dictated by the syntax of its language, and just as a beautiful building must have a solid foundation and superstructure, so we might expect a fine musical statement to have a structural underpinning. And if we listen for it as the music unfolds, we may well hear the music in a new way, enhancing our enjoyment and appreciation.

Is there any conflict between Schuller, Caffey and Owens? I think not. Are there things of importance to say about Armstrong's chorus that we have omitted? Probably so. Indeed, perhaps each analyst who continues to 'mess' with jazz, in defiance of Fats Waller's admonition, has a truth to reveal about the music. Each is, after all, saying the same thing: this music has value; let me show you why.