

# Elastic Form and Concrete Structure: the analysis of improvised music

DAVID CRILLY AND KEVIN FLANAGAN

Department of Music  
Anglia Polytechnic University,  
East Road, Cambridge,  
England

*Abstract:* - The jazz style of the bebop era normally consists of a theme (the 'head'), supported by a harmonic pattern supplied by a rhythm section. The significant musical argument, however, is an improvisation over the harmonic changes by one or more melodic instruments. The changes themselves are circular and self-perpetuating, resulting in a form which is infinitely extendable, even though the structure itself appears fixed. This paper considers the nature of form in improvised jazz from an intertextual, intratextual and 'inter-ethnic' stance, and considers the style of the bebop era as a kind of music-language-game, the understanding of which depends upon an awareness of both what is evident in any performance and, more significantly, what is implied beyond it.

*Key-Words:* - musicology, analysis, jazz, language-games, form, structure, Parker

Twentieth-century musicology has described musical form in terms of abstract structural paradigms, where melodic and harmonic constructs serve to articulate the structural boundaries within which the compositional endeavours take place. The traditional proof of, for example, a Classical sonata, refers to first and second subject groups, that is, discrete melodic and thematic fragments that have clear and unequivocal identities, and which are supported by a marked harmonic design. As all compositional aspects referring to pitch, harmony and rhythm of the work are predetermined, those elements of the work, at least, can be fixed in notation allowing them to be observed and analysed outside of their temporal context. Consequently, it has proved possible to study the micro-structural aspects of musical works with ever-greater sophistication and refinement, so that, in some instances, the pitches and motivic fragments of pieces need never be considered within the context of a temporally embedded realisation of the work.

This somewhat introspective stance encourages an essentially synchronic view of music to emerge, seeing, as it does, the artwork as a non-referential 'thing in itself', creating reductive conceptual boundaries which, because of the categorical nature of analysis, must exclude as they reduce. Emphasis is placed upon unity, and the need to demonstrate wholeness and autonomy in the artwork. Indeed, Thomas Christensen described as 'a formalist prejudice' the widely accepted position in much twentieth-century musicology that

'an artwork receives aesthetic value commensurate to the degree that it can be analysed as an autonomous entity'. [1]

This mode of analytical enquiry stems largely from the radical impact of positivistic thought at the start of the twentieth century, and particularly Wittgenstein's *Tractatus-Logico-Philosophicus*. [2] Wittgenstein's ontology describes the world as essentially atomistic, with the elements of signification combining to create facts or 'states of affairs'. It is an essential aspect of this philosophy that the relationships between elements can be directly and objectively specified. For Wittgenstein, states of affairs are logical, rational and limited, and meaning is fixed, exact and exclusive.

But what of music that does not share this mode of existence; music which relies upon, and is indeed defined by the moment-by-moment creative input of the performer? Jazz and other forms of popular musics have long been tacitly assumed to be the poorer cousins of Western art-music, since they do not possess the same kind of harmonic, melodic or structural complexity. Some supporters of jazz have sought to redress this imbalance by attempting a kind of legitimization of jazz, by analysing its constructs as though it were a piece of Western art music; focussing attention on pitch-class sets, 'labelling' chords and motivic types, and, in general, applying the methodology of positivistic analysis in the hope that the work may become 'justified' since it, like other pieces of Western

music, can be shown to display the characteristics of organic unity and motivic and structural coherence. However, these attempts to valorize jazz as a 'special case' of Western art music, or as Gunter Schuller *et al* have described it, 'American Classical music', only serve to highlight the inappropriateness of such an undertaking. Jazz is not Western art music, and I hope to demonstrate that the subject matter of jazz improvisation is dislocation rather than continuity, and immiscibility rather than structural coherence.

This paper presents a hypothesis concerning the relationship between music analysis and improvised music in jazz by suggesting how signification in jazz might arise and by quantifying the specific music-language-games that constitute this style. The appropriation of Wittgenstein's term suggests an analogy between music and language that is fraught with all kinds of difficulties, and which are widely discussed elsewhere. However, the idea of a specifically music-language-game can be employed in a more direct way here, since it seems clear that any listener must understand, whether intuitively or otherwise, the combinatorial rules of any musical system, not just to understand the game, but more

significantly, to be able to recognise the extent to which the 'player' deviates from those rules, which constitutes the 'strategy' s/he will adopt. This is particularly significant in jazz.

In many respects, of course, the structural aspects of some jazz styles seem eminently transparent. The strophic AAB structure of a twelve-bar blues progression, for example, using only the primary triads I, IV, V, is a concrete and immutable design. But since, as Kevin Korsyn says, 'naked abstractions need the clothing of particularity' it would be better to consider one such design in action; namely, *Parker's Mood*, a blues piece by Charlie Parker recorded in the 1940's.

One way we might begin to examine this piece is to consider the extent to which the harmonic design follows the fundamental blues model. Fig. 1. traces the harmonic changes over which Parker plays through each of the three choruses of the piece. One immediately evident aspect of the piece is that the harmonic vocabulary goes beyond the fundamental I, IV, V changes of the primary structure, and this merits some further comment.

Fig.1.

**Intro**

Em <sup>9</sup>	Am <sup>9</sup>	G <sup>9</sup>	Bb <sup>13</sup>	Eb <sup>ma9</sup>	Ab <sup>13(#11)</sup>
-----------------	-----------------	----------------	------------------	-------------------	-----------------------

<b>G (I)</b>	<b>C (IV)</b>	<b>G (I)</b>	<b>G (I)</b>
G <sup>9</sup>	C <sup>7</sup>	G <sup>9</sup>	G <sup>7</sup> Dm <sup>9</sup> G <sup>7</sup>
G <sup>7</sup>	C <sup>7</sup>	G <sup>7</sup>	(Dm <sup>7</sup> ) G <sup>7</sup>
G <sup>7</sup>	C <sup>7</sup> C# <sup>o7</sup>	G <sup>7</sup>	(Dm <sup>7</sup> G <sup>+7</sup> )

<b>C (IV)</b>	<b>C (IV)</b>	<b>G (I)</b>	<b>G (I)</b>
C <sup>7</sup>	C <sup>7</sup>	G <sup>7</sup>	G <sup>7</sup> Bbm <sup>7</sup> Eb <sup>9</sup>
C <sup>7</sup>	C <sup>7</sup> C# <sup>o7</sup>	G <sup>7</sup> G <sup>o7</sup>	(Bm <sup>7</sup> E <sup>7</sup> )
C <sup>7</sup>	C <sup>7</sup> C# <sup>o7</sup>	G <sup>7</sup> Am <sup>7</sup>	(Bm <sup>7</sup> Bbm <sup>7</sup> )

<b>D (V)</b>	<b>D (V)</b>	<b>G (I)</b>	<b>G (I) D (V)</b>
Am <sup>7</sup>	Am <sup>7</sup> D <sup>7</sup>	G <sup>7</sup> E <sup>7(#9)</sup>	Am <sup>7</sup> D <sup>7</sup>
Am <sup>7</sup>	D <sup>7</sup>	G <sup>7</sup> C <sup>7</sup> C# <sup>o7</sup>	G <sup>7</sup> /D D pedal
Am <sup>7</sup>	Am <sup>7</sup> D <sup>7</sup>	G <sup>7</sup> (C <sup>7</sup> C# <sup>o7</sup> )	G G <sup>7</sup> /D

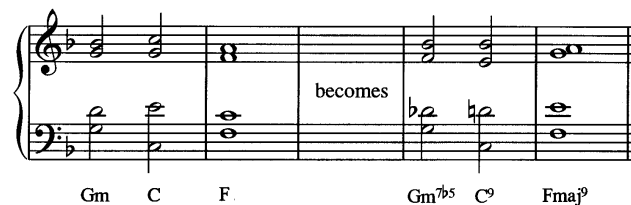
**Coda**

Em <sup>9</sup>	Am <sup>9</sup>	G <sup>9</sup> Bb <sup>13</sup>	Ebma <sup>9</sup> Ab <sup>13(#11)</sup>
-----------------	-----------------	---------------------------------	---

In jazz the basic triads can be modified in a number of ways. For example, in a II-V-I progression in F major the G minor chord could be played as a

Gm7(b5), whilst the C major chord could be played as a C9, whilst the F major chord could be played as a Fmaj9. So that,

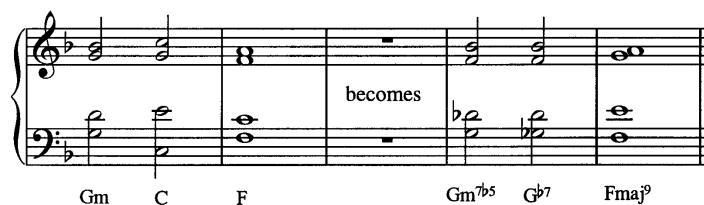
Fig.2



There is also the technique in jazz harmony of 'tritone substitution' whereby any chord can be substituted by a similar chord a tritone away. So

that, for example, in the following passage involving a progression from C7 to F, the dominant chord could be substituted by a Gb7 chord.

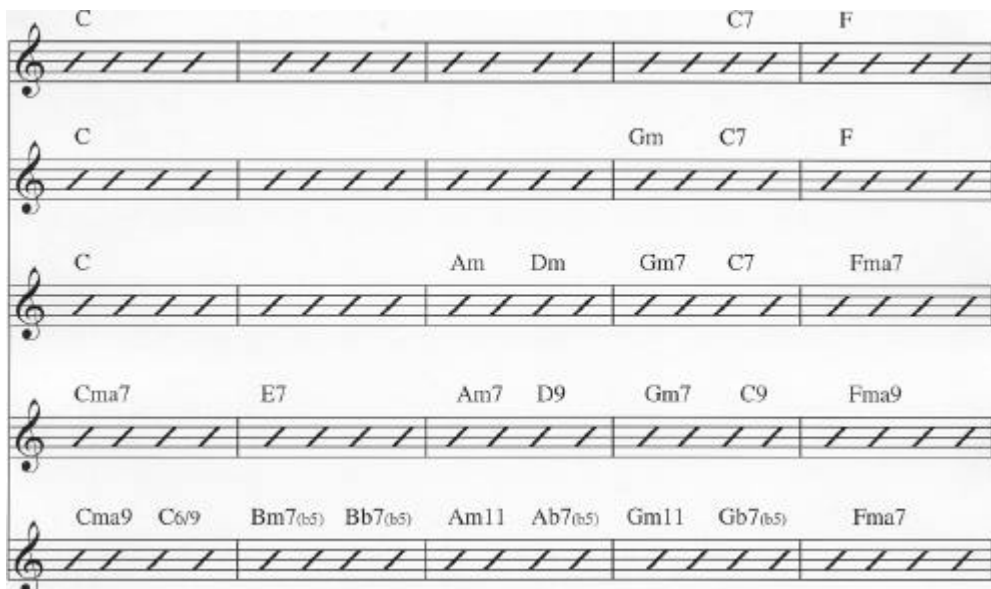
Fig.3



Employing this method of embellishment and substitution, together with the technique of adding harmonic interest via 'back-cycling' through the order of dominants, it is possible to achieve a highly

complex harmonic progression which is, in fact, based upon a simple, though long term, V-I shift. The following example should illustrate this process.

Fig.4.



If we return to the changes in *Parker's Mood*, it is clear that the harmonic design of the piece is an elaboration of the blues model which pulls against,

rather than articulates, the underlying structure. But what is equally clear is that both performer and listener are constantly referring back to the underlying model, and that to perceive the extent to which the form is stretched, the listener must place

the harmonic elaboration within a tradition, within a music-language-game which dictates the legitimacy of the moves within the game, for as Mikhail Bakhtin maintains,

‘There can be no such thing as an isolated utterance. It always presupposes utterances that precede and follow it. No one utterance can be the first or the

last. Each is only a link in a chain, and none can be studied outside this chain.’ [3]

The extent to which this piece is built upon the traditional blues model is clear if we isolate the bass line and compare it to the harmonic changes played by the pianist. Example 5 charts the bass line, and its harmonic implication, beneath the chord symbols which track the pianists route through the form.

Fig. 5.

The figure displays two musical staves. The top staff is labeled 'Piano comping' and features a treble clef with a key signature of two flats. Above the staff are chord symbols: B<sup>b</sup>7, E<sup>b</sup>7, B<sup>b</sup>7, B<sup>7</sup>, B<sup>b</sup>7, and Fm<sup>7</sup> E<sup>7</sup>. The bottom staff is labeled 'Bass line with implied chords' and features a bass clef with the same key signature. Above this staff are chord symbols: E<sup>b</sup>7, E<sup>b</sup>7, A<sup>b</sup>7 E<sup>b</sup>7, B<sup>b</sup>7, D<sup>b</sup>7, and D<sup>b</sup>m<sup>7</sup> G<sup>b</sup>7/D<sup>b</sup>. A measure number '5' is positioned at the beginning of the bass line staff. The notation includes various note values and rests, with some notes marked with a flat symbol.

What is immediately apparent is that the bass player is much closer to the standard blues format than the pianist, and that any deflections from it are concerned with local secondary dominant colourations. The pianist’s far greater range of harmonic vocabulary results in some particularly striking clashes and highlights the growing

emancipation of the rhythm section from its role as merely provider of accompaniment for the soloist.

But what of the improvised material that constitutes the substance of this piece? Figure 6 is a transcription of Parker’s solo through each of the three choruses, plus the introduction and coda.

Fig.6

The musical score for Figure 6 is presented in two columns. The left column contains the piano part, and the right column contains the guitar part. The score is in 4/4 time and features a variety of chords and melodic lines. Key annotations include:
 

- Intro:** Marked 'Rubato', featuring chords Em<sup>9</sup> and Am<sup>9</sup>.
- Piano Intro:** Marked 'piano intro', featuring chords C<sup>9</sup> and Bb<sup>11</sup>.
- Main Section:** Marked 'A Tempo', starting with chords E<sup>b</sup>ma<sup>9</sup> and A<sup>b</sup>(D<sup>11</sup>).
- Measure 1:** Features a G<sup>9</sup> chord and a triplet melodic figure.
- Measure 3:** Features a G<sup>7</sup> chord and a 'D pedal' effect.
- Measure 4:** Features a G<sup>7</sup> chord and a 'Piano solo for 10 bars' annotation.
- Measure 44:** Features a G<sup>7</sup> chord and a 'Piano coda' annotation.
- Final Section:** Marked 'Rubato', featuring chords Em<sup>9</sup>, Am<sup>9</sup>, G<sup>9</sup>, Bb<sup>11</sup>, E<sup>b</sup>ma<sup>9</sup>, and A<sup>b</sup>(D<sup>11</sup>), ending with a 'Fine' marking.

We might examine this material as though it were a piece of Western art music to determine the extent to which (as in, say, a Mozart piano sonata) the melodic and thematic material serves to articulate and reflect the harmonic structure. This is helpful to a certain extent, since several important features of style emerge. Firstly, the question and answer phrasing of the opening chorus, alternating between

a major pentatonic ‘question’ followed by a ‘blues-scale’ answer tells us something about the particular music-language-game that Parker is playing, since historically this refers to a relatively discrete improvisatory style. Figure 7 highlights the initial thematic element of the solo, this example being particularly associated with the stability of the tonic chord.

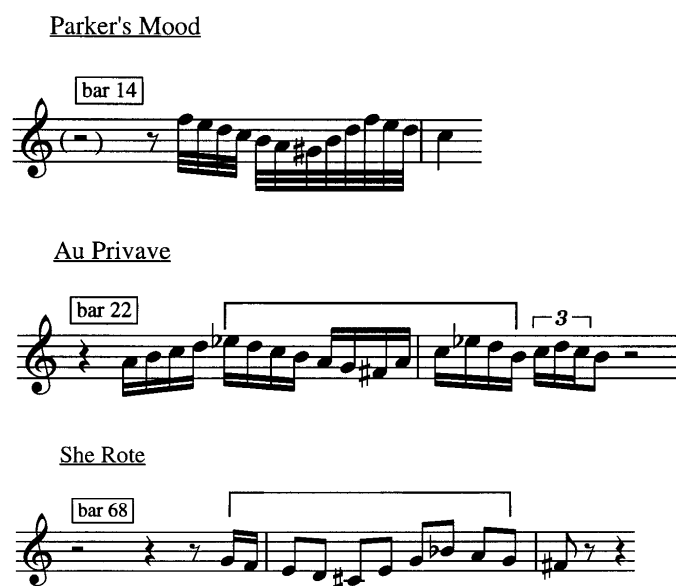
Fig 7.

The musical score for Figure 7 shows a single bar, labeled 'bar 7'. It features a G<sup>9</sup> chord and a triplet melodic figure consisting of three eighth notes: G, A, and B.

There is also a consistency about the phrases themselves, a family resemblance between them and

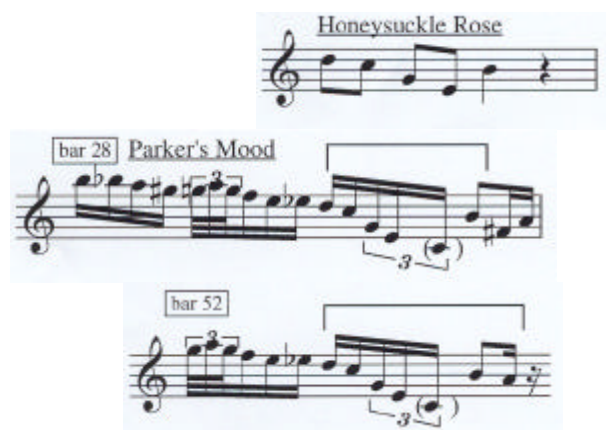
other phrases, not just in this piece but in other pieces by Parker.

Fig.8.



We can take this approach one step further, and illustrate the extent to which this piece refers to works by other composers, most obviously Gershwin's 'Summertime', in the introduction, but also 'Honeysuckle Rose'.

Fig.9.



These intra- and intertextual references serve to establish further the syntax which constitutes this particular music-language-game.

However, the most significant aspects of this material can not be described or accounted for with recourse to the traditional methodological tools of music analysis, since they involve elements of style which are largely gestural or rhetorical, and indeed do not originate in Western music at all. A.M. Jones in the 1950's, and more recently Thomas Brothers, have described the features of style found in the traditional music of the Ewe people of Ghana, which is important since, as Brothers says, it is clear that

'the musical cultures of West Africa... provided a basis for the various and distinctive African-

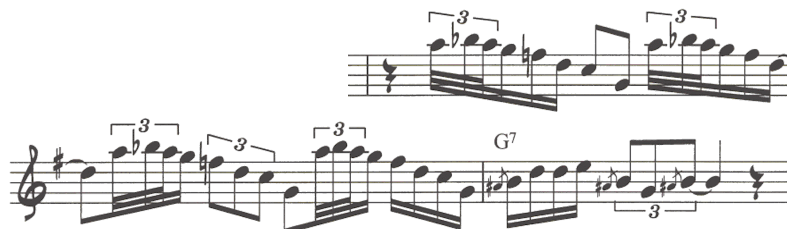
American idioms that evolved after the Civil War'. [4]

In the Ewe music of Ghana, the ensemble is divided into two groups, the first of which plays a fixed, rhythmic ostinato, whilst the material of the second group is both variable and improvisatory.

Within such a context the improvisatory aspects of the material are purely gestural and, more significantly, rhythmic in essence. Revisiting Parker's improvisation, those elements which pull most strongly against the underlying blues structure are rhythmic and are strategically placed at significant points in the cycle. This tends to be most striking over chord IV, as the following example shows:

Fig.10.

- (a) First chorus – bb.5-6. Sense of acceleration because triplet figure is ‘displaced’ and recurs earlier each time.



- (b) Second chorus – bb. 2-3. Sense of acceleration as melody increases within the beat from three-note grouping to four, five and then six.



- (c) Second chorus – bb. 5-6. Rhythmic underpinning dislocated again by off-beat placing of triplet figures.



- (d) Third chorus – bb. 5-6. Metrically displaced Bb and A, the notes from the triplet figures in choruses one and two.



One of the reasons that Parker is able to free himself from the immutable twelve-bar blues structure is that much of his material is modal (and largely pentatonic). Whereas earlier practitioners adhered more strictly to the principle of basing improvisations on chord tones, Parker’s modal approach means he is able to ignore the binary harmonic rhythms set up by the bassist and pianist and to produce a musical style which is both gestural and rhetorical. (Miles Davis was to develop this technique of slowing down the harmonic rhythm some years later by essentially playing above it.)

It seems, then, that this piece exists on a number of levels simultaneously. Firstly, it relates to a tradition of music that has a fundamental structure of rhythmic and harmonic simplicity. In fact, the simplicity of this structure is a stylistic prerequisite, since, as Brothers says,

‘... no matter how complicated the texture is and how many layers of distinct rhythmic activity are present, the entire polymetric fabric is interpreted with reference to the ostinato.’ [6]

The harmonic elaboration of that structure generates a musical syntax which is defined in relation to other examples of the style, so that a complex dialogic chain emerges which establishes the harmonic practice of jazz as a distinct music-language-game. The melodic content of this piece is both self-referential (or intratextual) whilst also absorbing, or 'misreading' (to use Harold Bloom's term) the syntax of Parker's precursors. Julia Kristeva suggested that,

'Any text is constructed as a mosaic of quotations; any text is the absorption and transformation of another... In the space of a given text, several utterances, taken from other texts, intersect and neutralize one another.' [7]

In jazz, however, a third level of meaning exists which we might describe as its 'inter-ethnic' component, in that its fundamental aesthetic is determined not merely through the interaction of those parameters of music which have assumed primacy in Western art-music, but also in the aesthetic of another race and culture, an aesthetic which is not determined by the extent to which its material can be assimilated into abstract structural paradigms, but rather, one which is defined by its ability to pull away from those structures. In such a music-language-game, the syntactical relations of its melodic and harmonic content establish the rules of the game, whilst its non-syntactic relations articulate its gestural strategy.

*References:*

- [1] Thomas Christensen, *Music Theory Spectrum*, 15, 1993, p.110.
- [2] Ludwig Wittgenstein, *Tractatus-Logico-Philosophicus*, tr. D.F.Pears and B.F.McGuinness, Routledge and Kegan Paul, London, 1961.
- [3] Mikhail Bakhtin, *Speech Genres and Other Late Essays*, tr. V.W.McGee, ed. C.Emerson and M.Holquist, Austin, Texas, 1986, p.136.
- [4] Thomas Brothers, *Solo and Cycle in African-American Jazz*, *Musical Quarterly*, Vol.78 No.3, Fall 1994, p.483.
- [5] *ibid.*
- [6] Julia Kristeva, *Desire in Language: A Semiotic Approach to Literature and Art*, ed. L.S.Roudiez, tr. T.Gora, A.Jardine and L.S.Roudiez, New York, 1970, p.36.