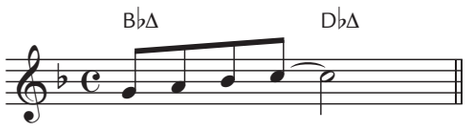
Or we could perform both of these operations concurrently to render it "upside down and backwards" (or in *retrograde inversion*).

Ex. 2.4:

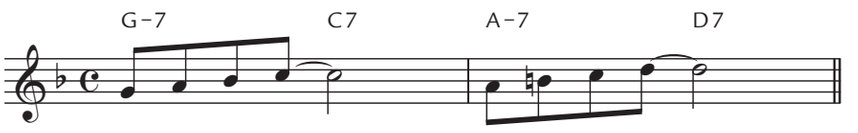
We can *reharmonize* it.

Ex. 2.5:



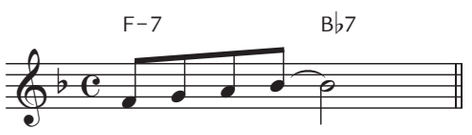
We can repeat it *sequentially*.

Ex. 2.6:



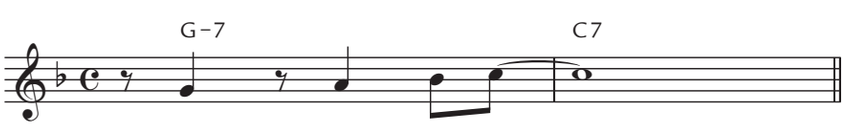
We can *transpose* it.

Ex. 2.7:



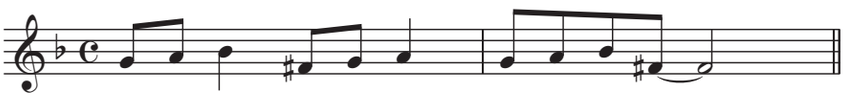
We can *displace* it rhythmically (i.e. change its relationship to the beat, the rhythmic analogue of *reharmonization*).

Ex. 2.8:



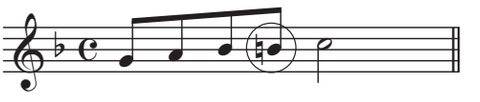
We can *fragment* it (i.e. break it down into smaller component parts which can then be subject to all of these same manipulations).

Ex. 2.9:

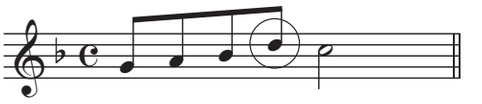


It can be "embellished" (decorated melodically), either chromatically or diatonically, or both.

Ex. 2.10a

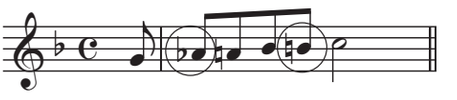


Ex. 2.10b



Embellishment or melodic alteration may also be blues-based ("bluesified").

Ex. 2.10c



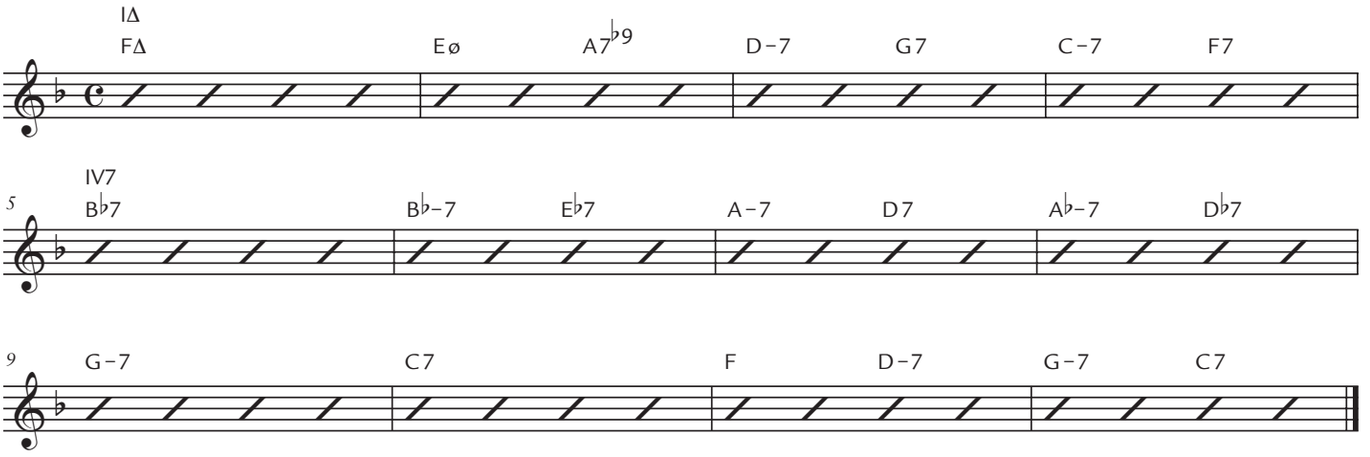
Here are some examples of the various techniques listed above from the real world. "Satin Doll", by Duke Ellington and Billy Strayhorn is illustrative of many of them, reinforcing the following notions:

1.) Not *every* technical device need be used in every composition (just as every improvised solo need not contain every technique or device) and, conversely;

2.) It is rare to find a single compositional technique used in isolation.

Ex. 3.4

"Blues for Alice" chord changes[8]



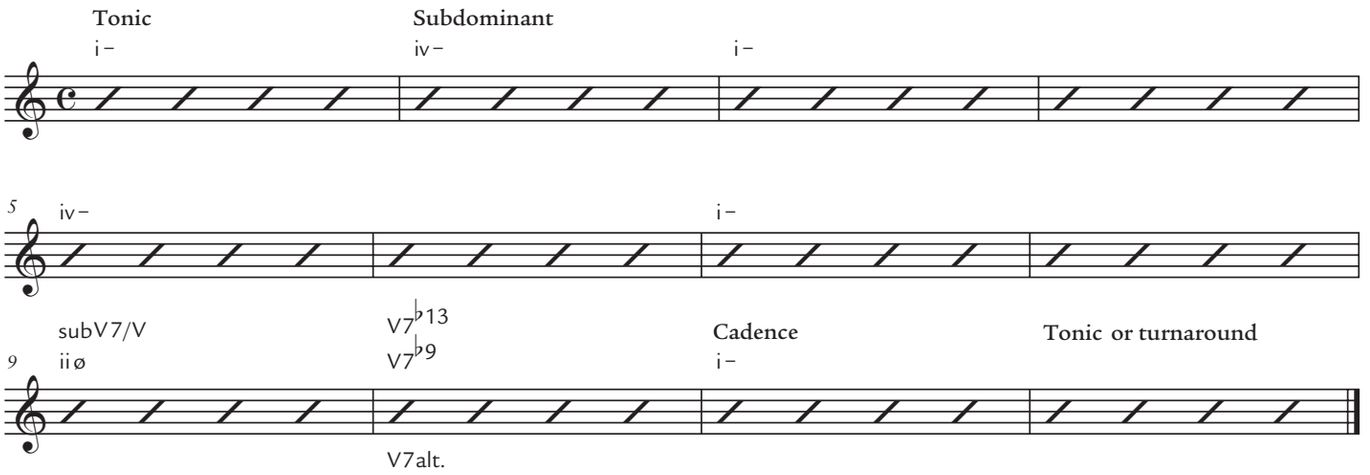
Of course, many other harmonic variations are possible within this basic framework, and it would be incorrect to state that Parker's tunes or improvisations demonstrate a universal reliance on harmonic content (listen also to "Au Privave" or "K. C. Blues" for example), or that the reverse was necessarily true of Armstrong.

Minor Blues

Minor Blues is also a common form, differing from its major counterpart in that its tonic chord and iv chord are of minor quality, while its cadential options are those found in minor tonality (most commonly either iiø in measure 9, followed by V7♭9 or (♭9, ♭13) in measure 10, or ♭VI7 in measure 9, followed by the minor key dominant in measure 10):

Ex. 3.5

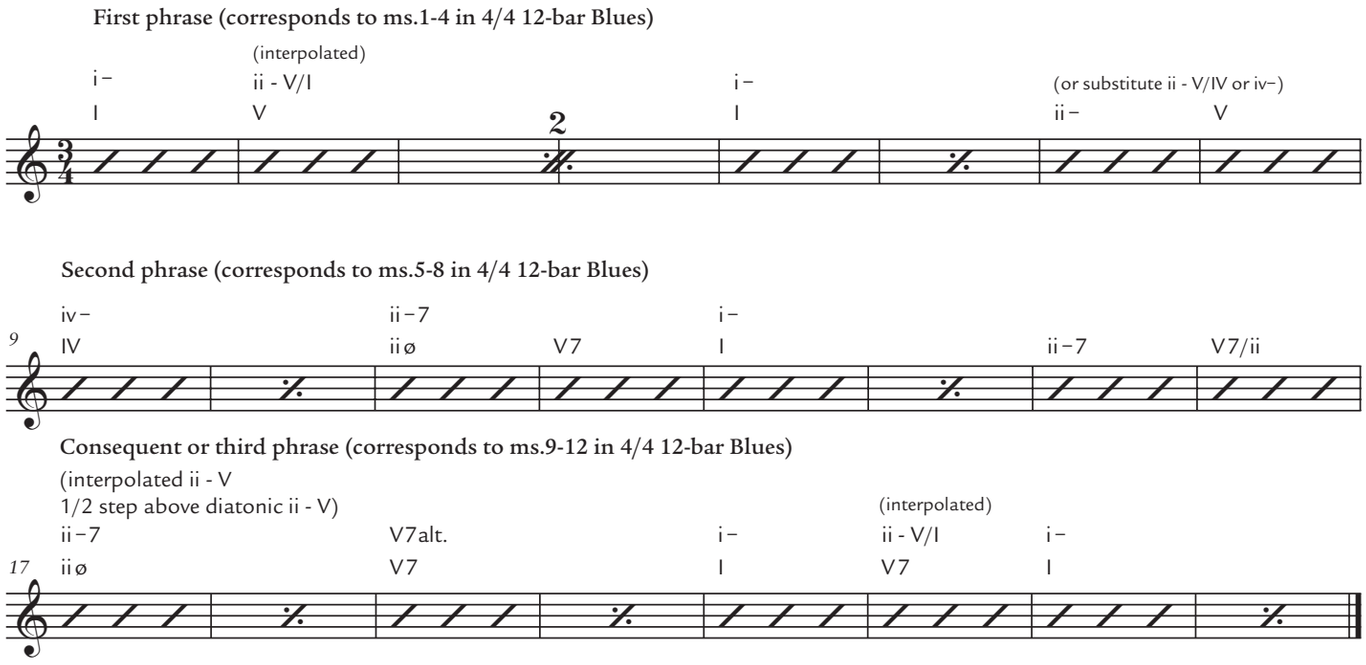
Minor Blues schematic



[8] ibid., p. 144

Ex. 3.7

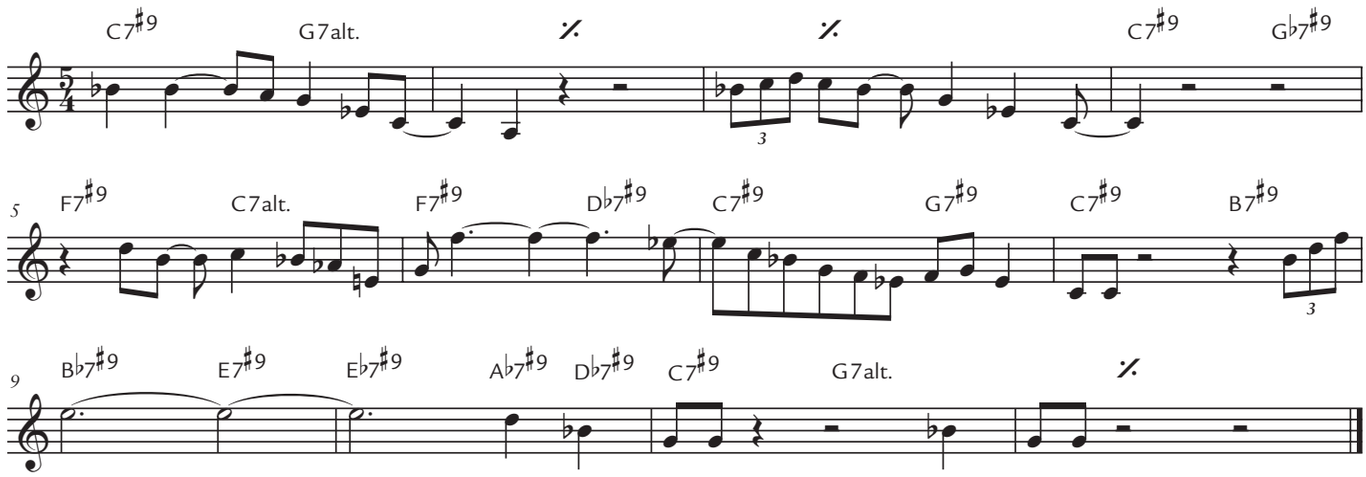
Triple meter Blues form schematic



Thad Jones' "Ahunk, Ahunk" is an example of a Blues in 5/4. (Be sure to review this piece again when you are reading the upcoming section on "Phrase Structure".) The modernity of this piece is evidenced not just in terms of its meter, but also in its angular melodic contour (unsurprisingly Monkish, given that Jones had previously worked with Monk) and *through-composed* melody (again, with regard to the phrase structure, this piece is neither AAB, AA'B, nor riff-based):

Ex. 3.8

"Ahunk, Ahunk"[9]

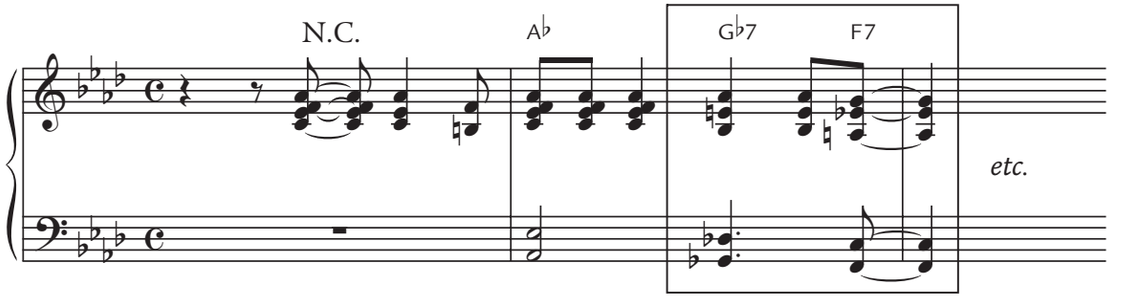


[9] Jones, Thad. pub. Kendor Music, Delevan, N.Y., 1974

It is worth reiterating that most of these devices were in use from the very beginnings of the music (even though they may be generally associated with later styles), and that the tonal resources available to the jazz composer had not changed appreciably from the beginnings of the music through the 1950's.

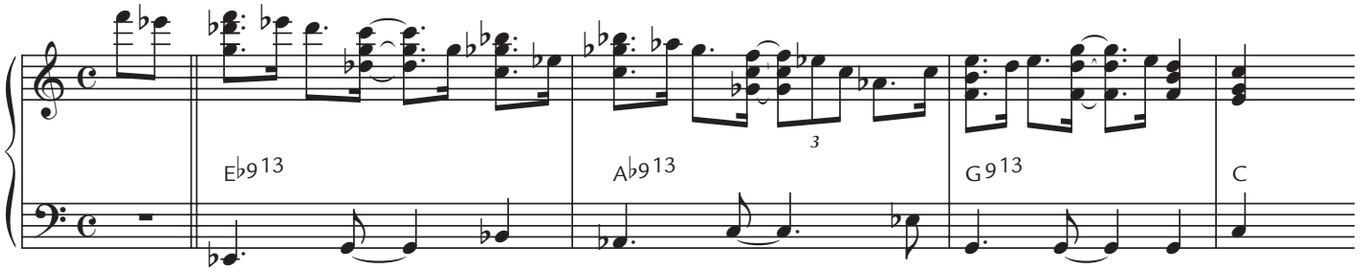
Consider Jelly Roll Morton's "King Porter Stomp", in which the opening bars employ the "♭VII7" chord (G♭7) preceding the V7/ii chord (F7):

Ex. 4.8



The coda of James P. Johnson's "Carolina Shout" (1918) illustrates the use of substitute dominant seventh chords (compare with the "Ladybird" cadence, shown in Ex. 4.7 above):

Ex. 4.9

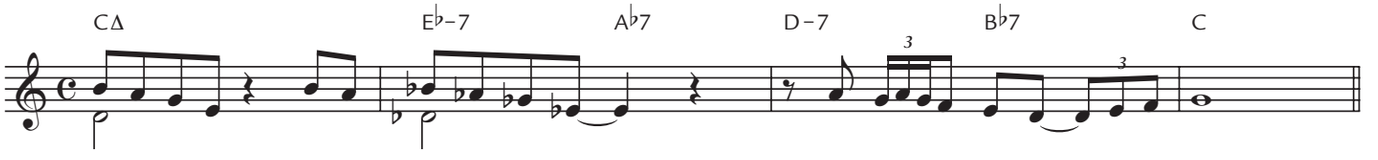


Substitute Dominant Harmony and Sideslipping

Of course in later years such harmonic practice was unquestionably more commonplace. It can be found frequently in the work of both Ellington and Monk.

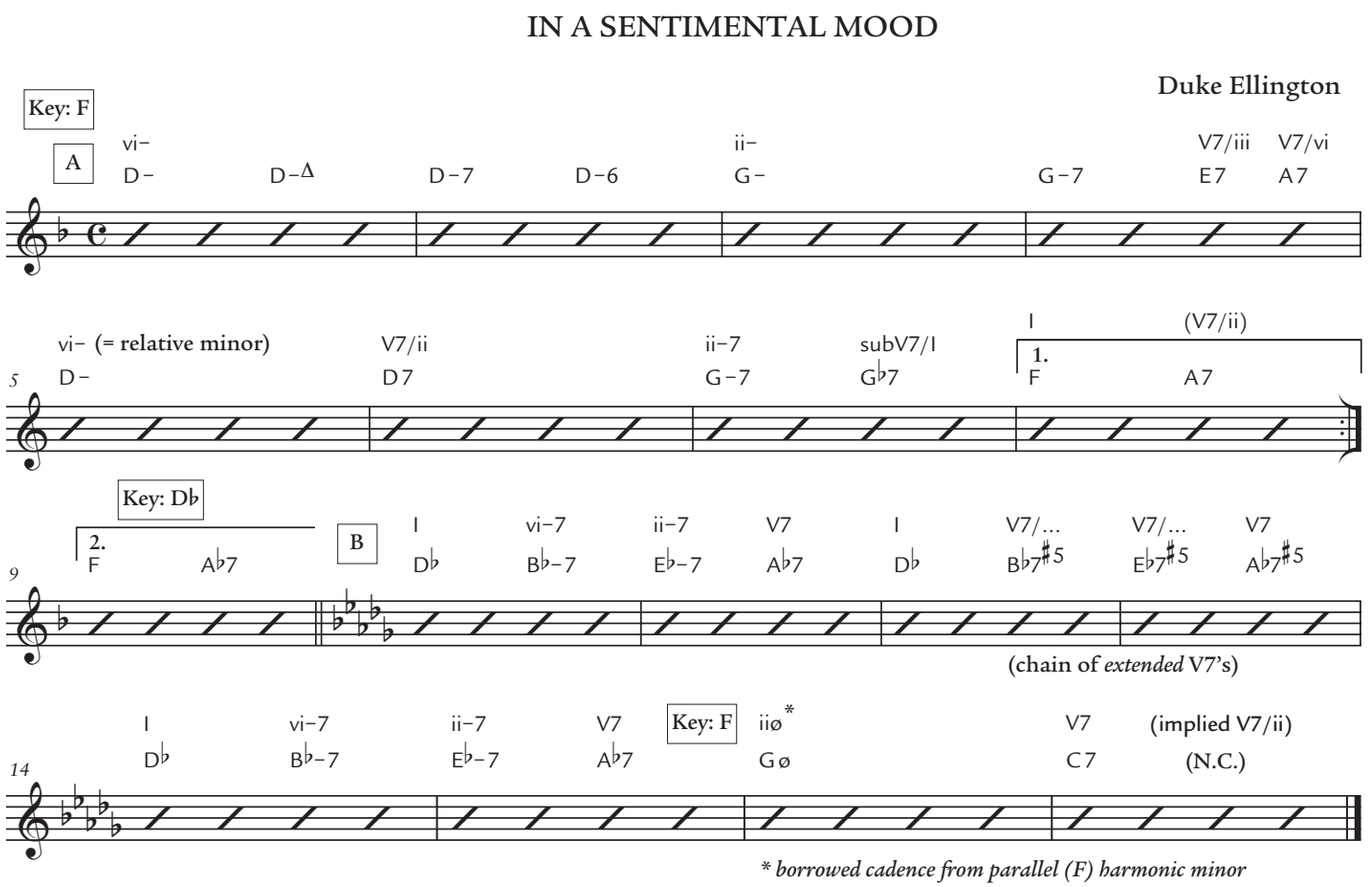
Ex. 4.10

Opening bars of Monk's "Pannonica"



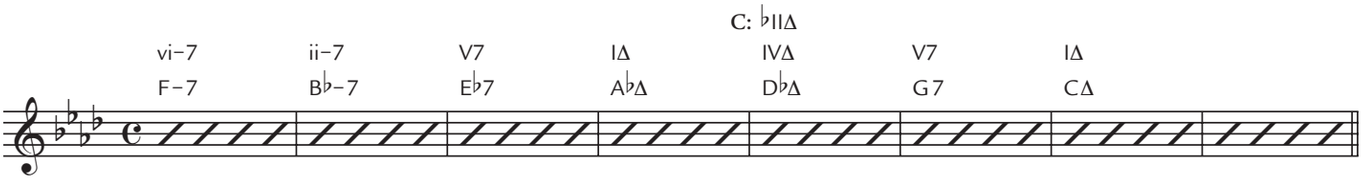
Ex. 4.19

"In a Sentimental Mood" analysis of changes



Another type of modulation, based on the concept of the *pivot chord* (or chords), works based on the potential for a given chord or cadence to work in both the old and new keys. "All the Things You Are" works in this manner, for example, exploiting the fact that the D♭Δ chord in measure 5 is at once the diatonic IV chord in the primary key (A♭) and the ♭IIΔ in the new key C.

Ex. 4.20

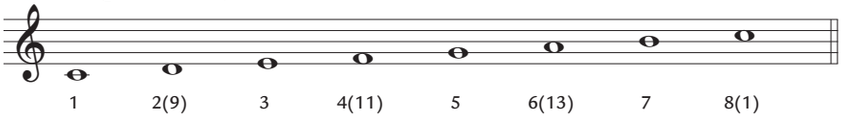


To begin this discussion, let's review the basic "church modes" of the diatonic major scale[4].

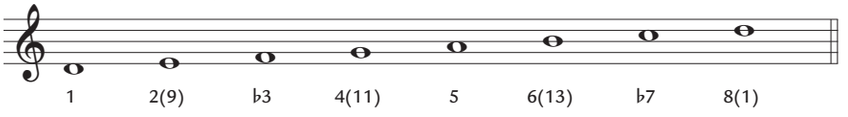
Ex. 4.26

Diatonic modes of a major scale (C major)

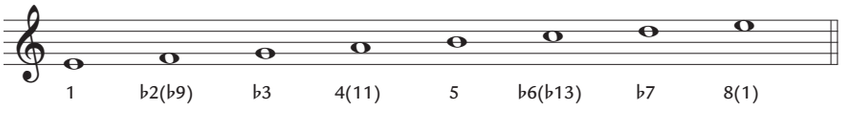
C Ionian (parent scale)



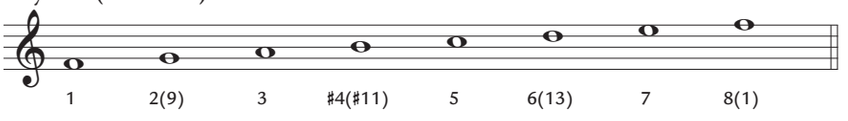
D Dorian (2nd mode)



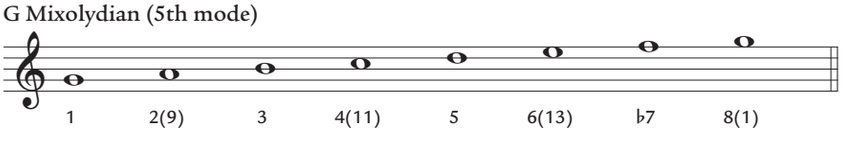
E Phrygian (3rd mode)



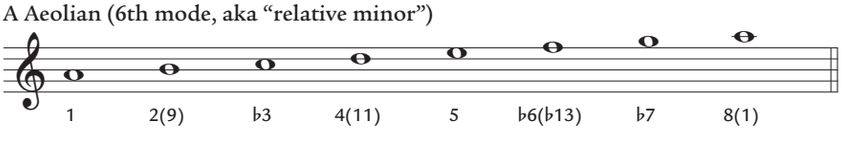
F Lydian (4th mode)



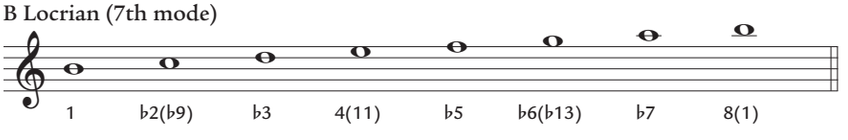
G Mixolydian (5th mode)



A Aeolian (6th mode, aka "relative minor")



B Locrian (7th mode)



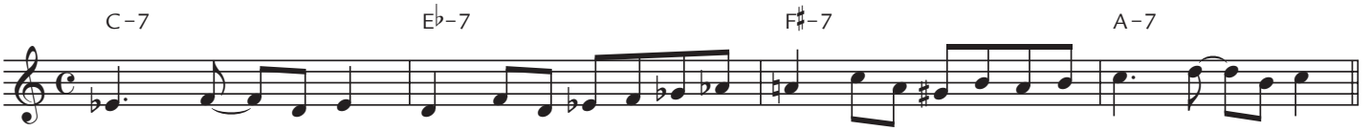
Some important notes:

- Each mode obviously represents the parent scale, displaced to each make each of its successive degrees the "root".
- Note use of compound interval nomenclature (i.e. 9, 11, 13) were appropriate.

[4] Jaffe, Andy. *Jazz Harmony, Second Edition.* Advance Music, Rottenburg, Germany, 1996, p.21

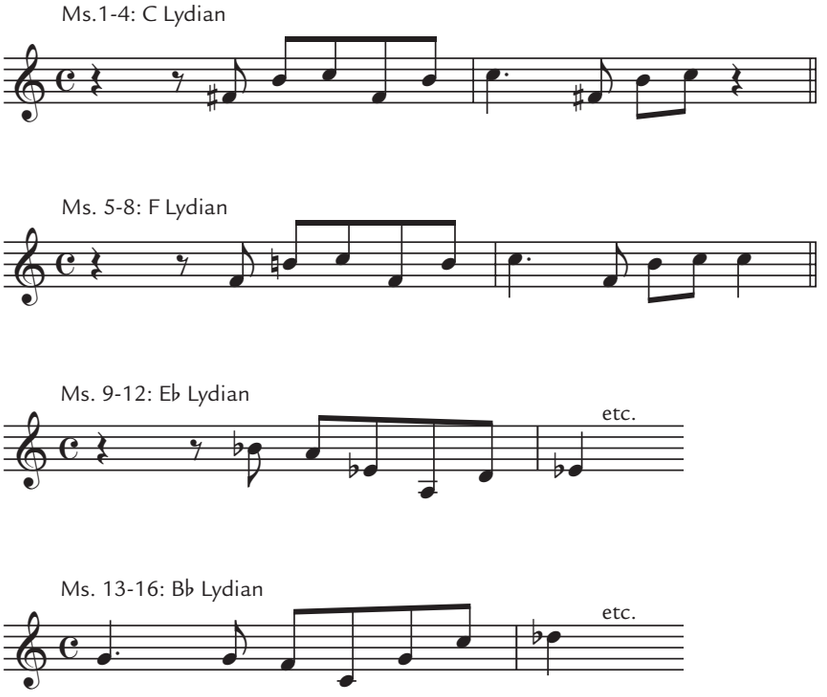
Ex. 4.34B

Example of variable melodic and harmonic modal sequence



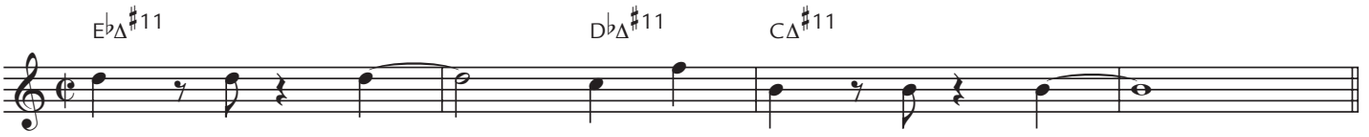
We see this latter device at work in Joe Henderson's "Inner Urge" also, which is based on transposed lydian sounds. Note that unlike "Forest Flower", which is more like Ex. 4.33 above, "Inner Urge" features more variability in the contour of the various melodic expressions of the mode.

Ex. 4.35



"Un Poco Loco" by Bud Powell, referred to earlier, also illustrates the use of parallel lydian sonorities (the descending chromatic bassline adds further harmonic implications not considered here).

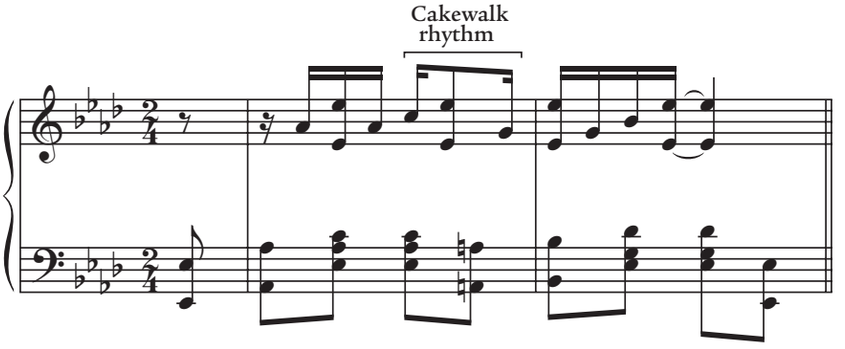
Ex. 4.36



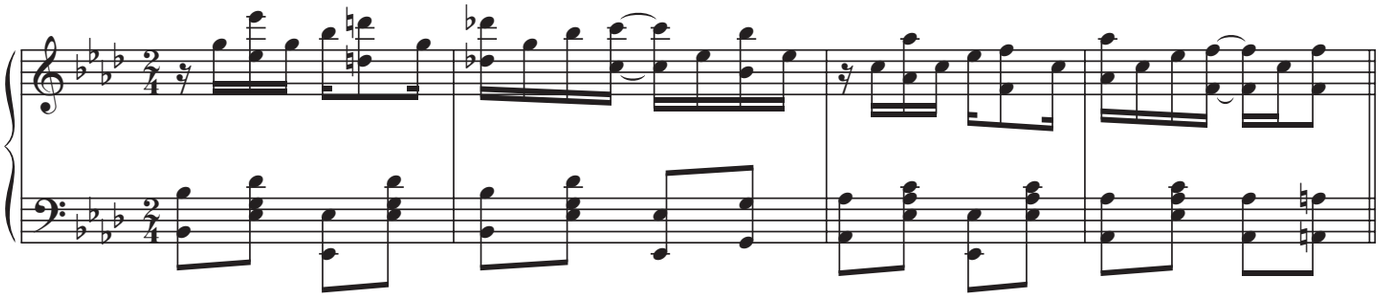
Joplin's illustrious "Maple Leaf Rag"[10] from 1898, illustrates these various characteristic elements:

Ex. 5.1

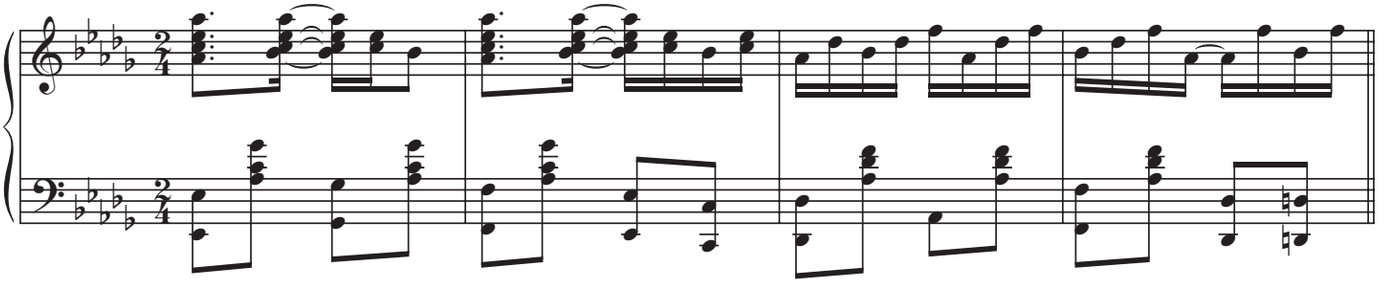
The cakewalk rhythm in the A theme (labeled "Tempo di Marcia")



The cakewalk rhythm in the B theme

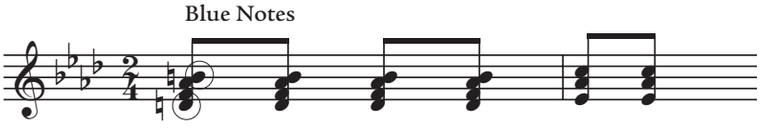


The cakewalk rhythm in the C theme (note the modulation), labeled "Trio"



Ex. 5.2

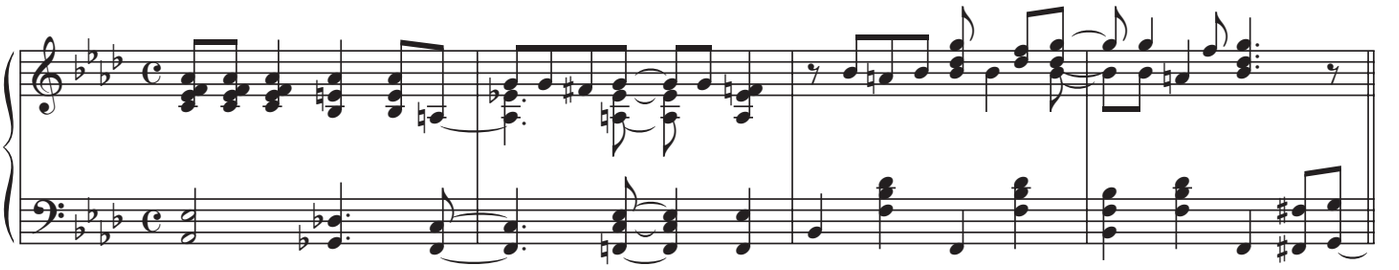
Use of Blue notes



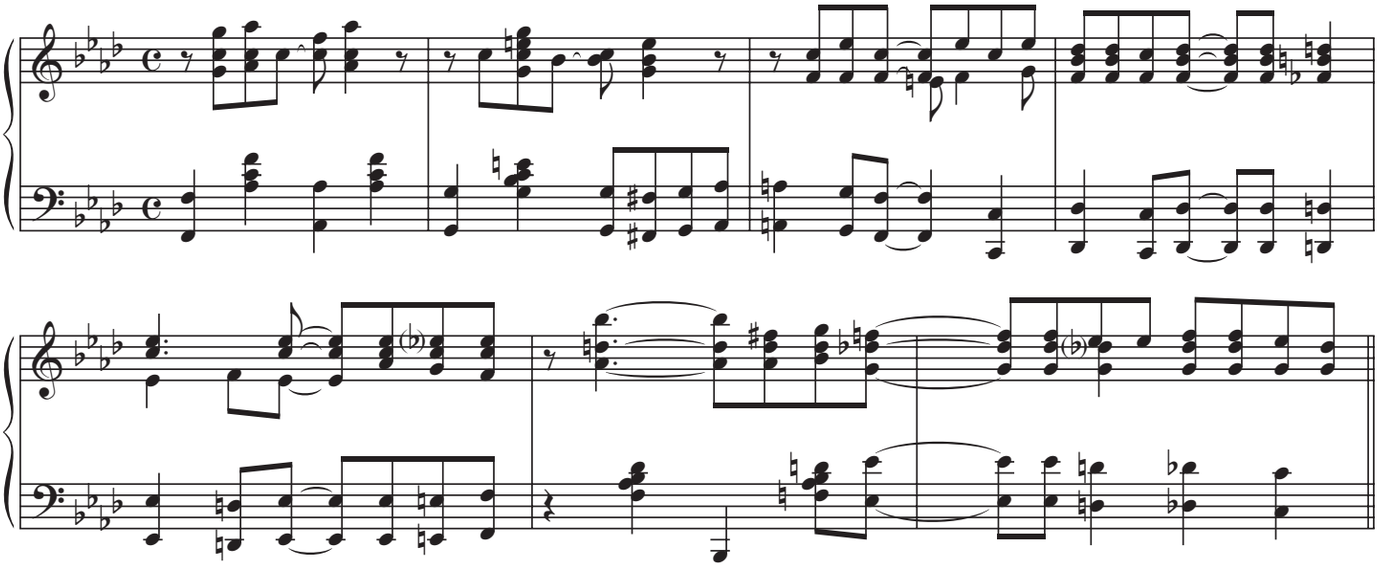
[10] Joplin, Scott. The Best of Scott Joplin. Charles Hansen, New York, 1972, pp. 6-8

Ex. 5.6

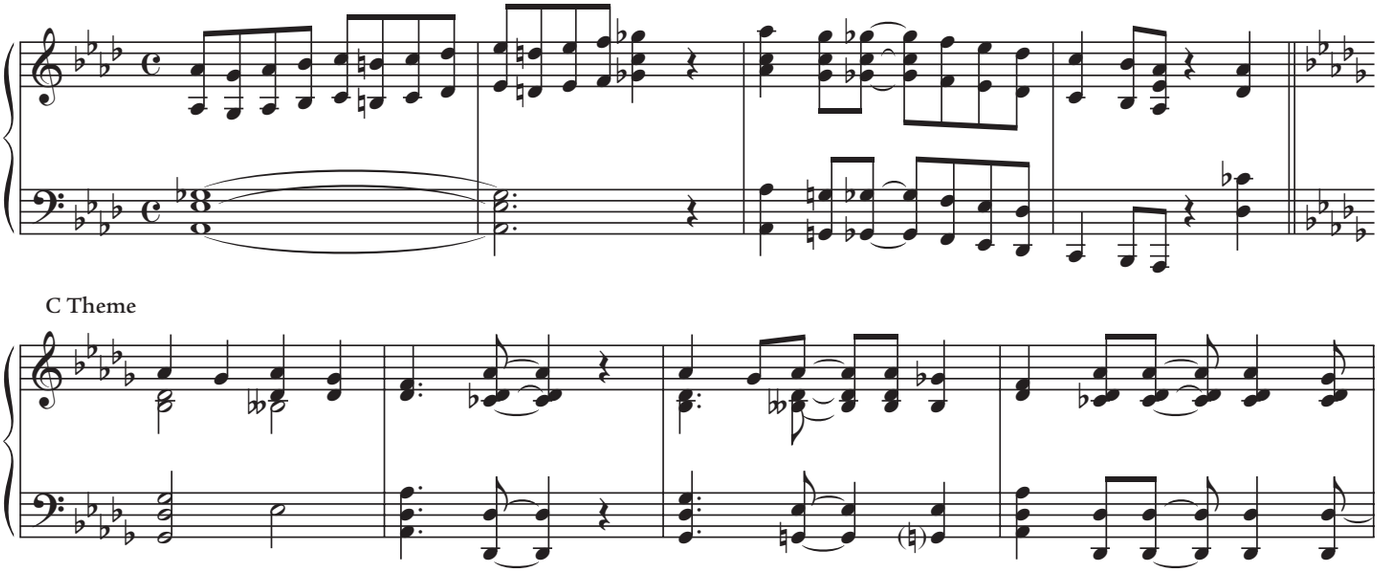
A theme of "King Porter Stomp"

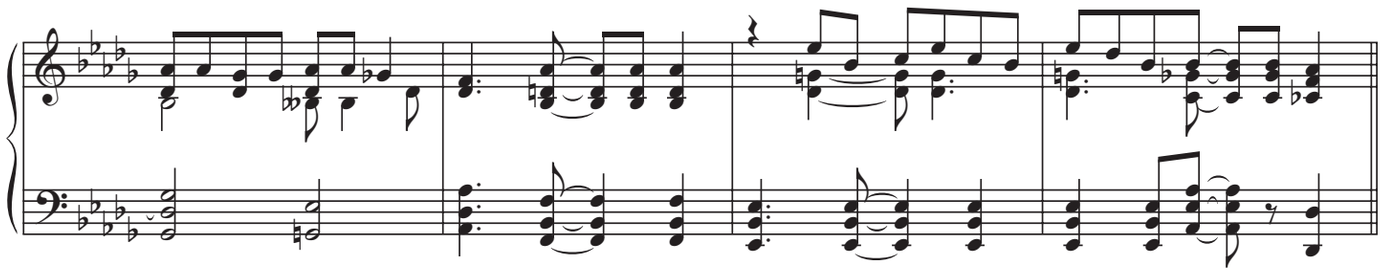


B theme of "King Porter Stomp"



Modulatory transition and C theme of "King Porter Stomp"

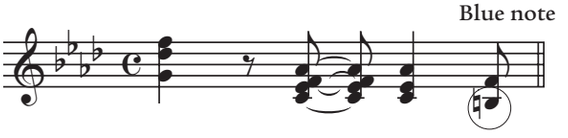




Note the use of "Blue notes" and "call and response" as well, similar to the "Maple Leaf Rag"

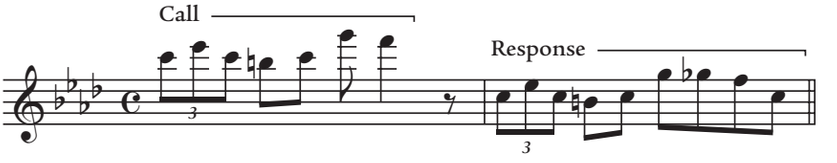
Ex. 5.7

Blue note ("♭3") in "King Porter Stomp"



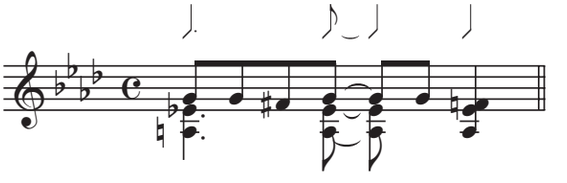
Ex. 5.8

Call and response in "King Porter Stomp"



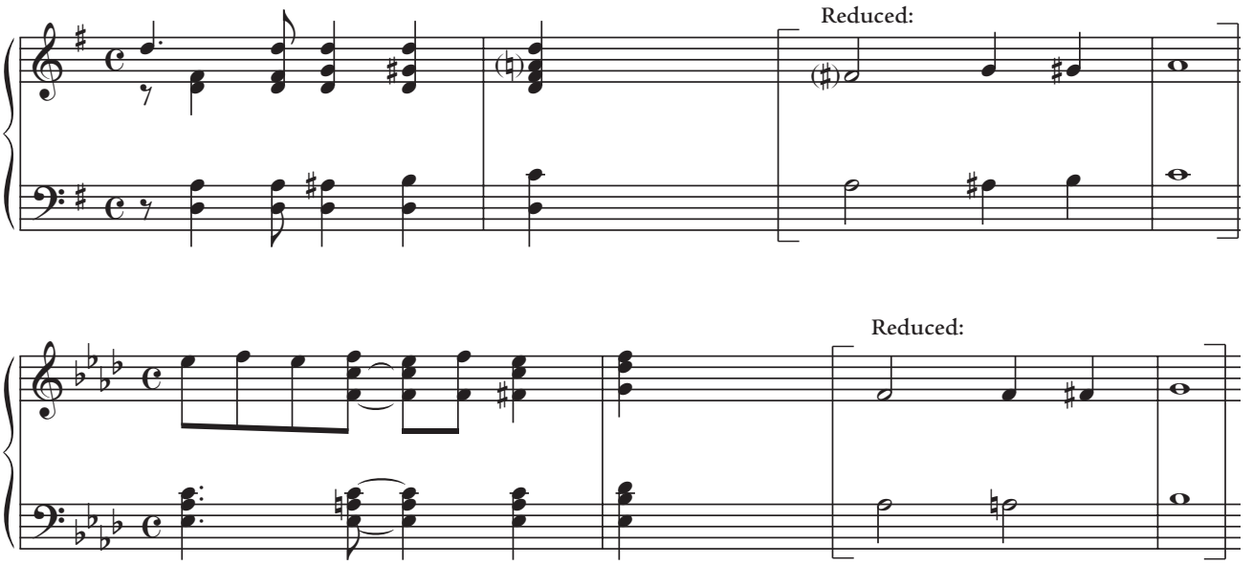
Of course, the "clave" based rhythm, famously described by Morton as the "Spanish tinge", is pervasive as well.

Ex. 5.9



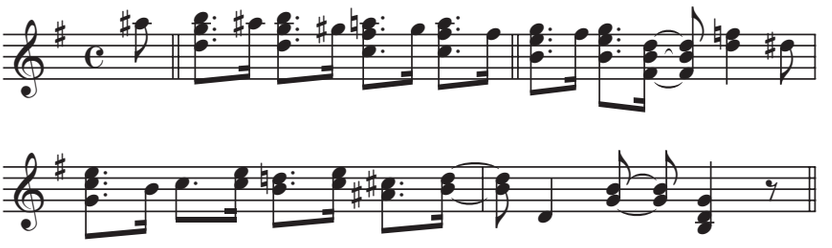
Comparison of the 3rd measure of the respective introductions of "Carolina Shout" and "King Porter Stomp" – consilience or signification?

Ex. 5.11

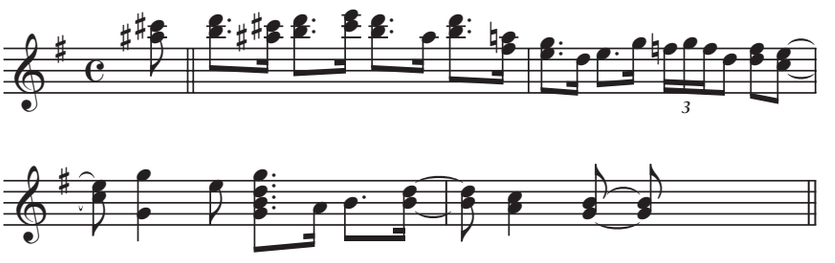


Ex. 5.12

A theme #1 of "Carolina Shout"

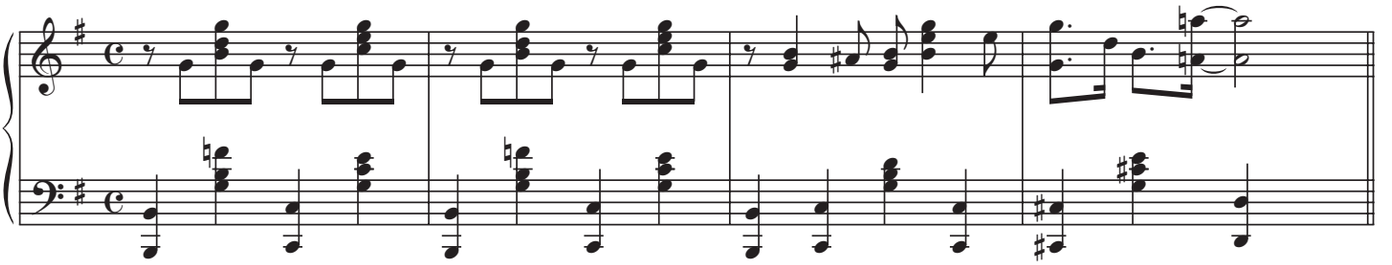


Variation of A (same harmony but with embellishment and featuring the "secondary ragtime" rhythm in accompaniment):

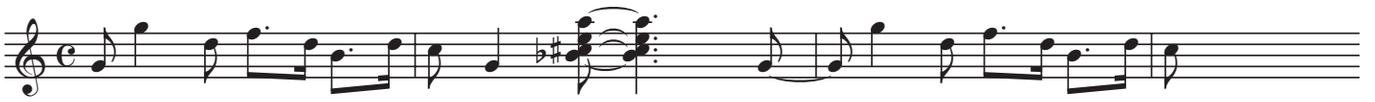


Ex. 5.13

The B theme of "Carolina Shout"



The C theme

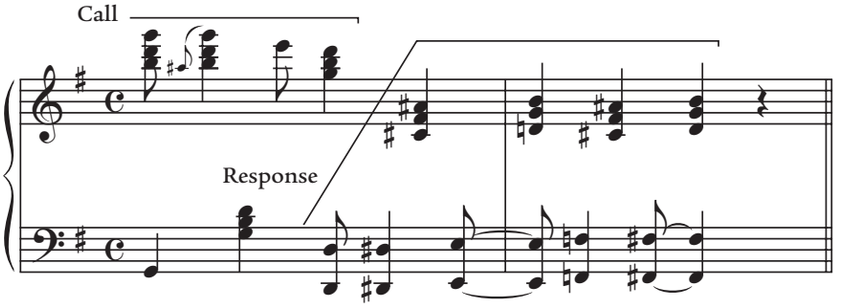


Ex. 5.14

Blue notes in "Carolina Shout"

Ex. 5.15

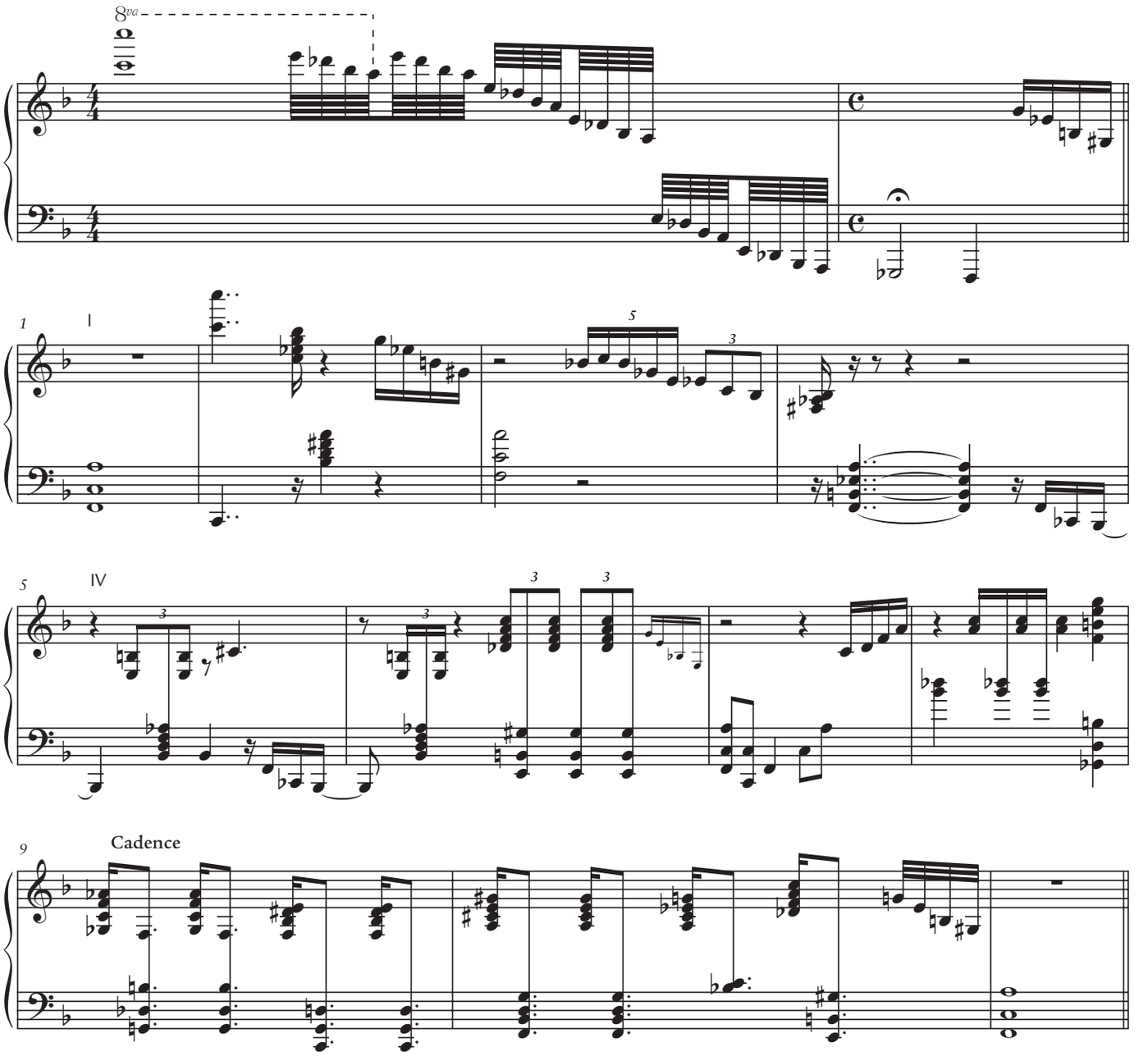
Call and response in "Carolina Shout"



Finally, as mentioned in Chapter 4 (see Ex. 4.9), The coda of "Carolina Shout" contains *substitute dominant* root motion similar to that found in much later compositions such as "Ladybird" and "Satin Doll".

Ellington's 1947 composition "The Clothed Woman" is another piece in which he uses variations on the Blues, appropriated materials, and even an angular, Monkish interlude (though, interestingly, Ellington had not yet acknowledged having heard Monk's music[19]). The piece begins with what seems to be an atonal multi-octave run, that upon repeated listening reveals a Blues form cloaked in extreme *dissonance*.

Ex. 5.31a:

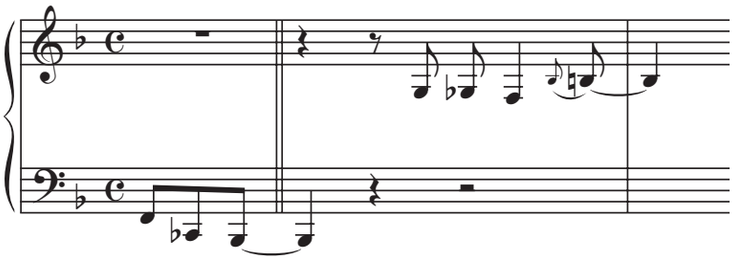


(based on the Ellington manuscript score found in the Smithsonian collection).

19 Dance, Stanley. *The World of Duke Ellington.* C. Scribner's Sons, New York, 1970, p.139)

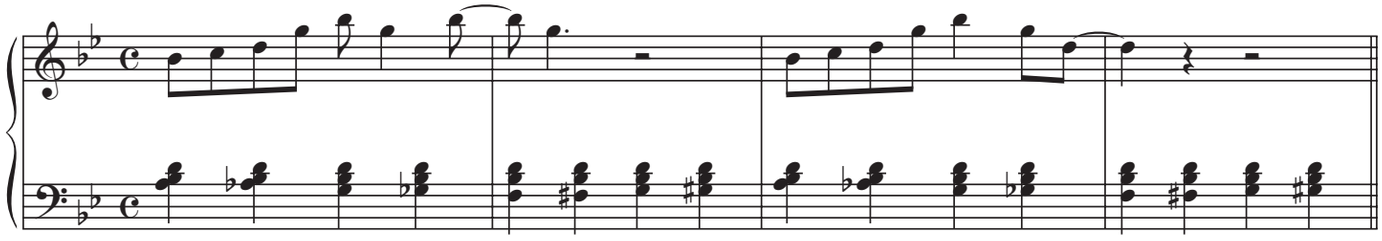
Following this Blues form, the Monkishly spare, riff-based interlude, establishes a medium bounce tempo.

Ex. 5.31b



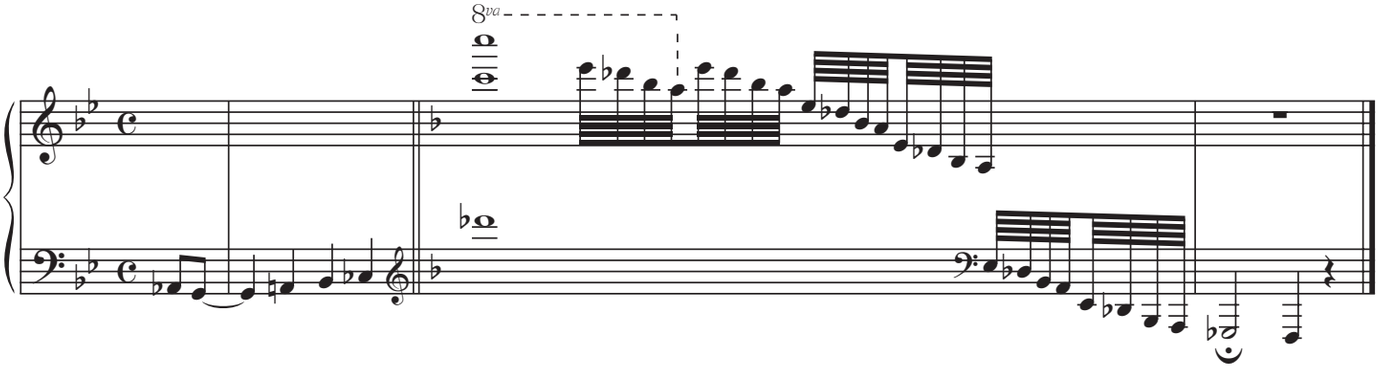
This abruptly leads to an appropriated Willie "The Lion" Smith (one of Ellington's mentors) stride piano piece[20] in AABA form, the theme of which follows.

Ex. 5.31c



Finally the original distorted Blues theme returns, adding a common practice ending before reiterating the initial run of the piece for its coda.

Ex. 5.31d



Don Redman's "The Stampede", as recorded by Fletcher Henderson, is another example of an early Big Band composition that created *compound* form by combining discrete *songforms* within the same piece, while retaining the use of modulatory interludes and other such signature stylistic devices of its time as the *whole tone scale*, duple time feel, and *call and response* between the instrumental sections. ("The Stampede" may be heard on the Smithsonian Collection of Classic Jazz.)

[20] Hasse, *Beyond Category*, p. 301

Ex. 5.32

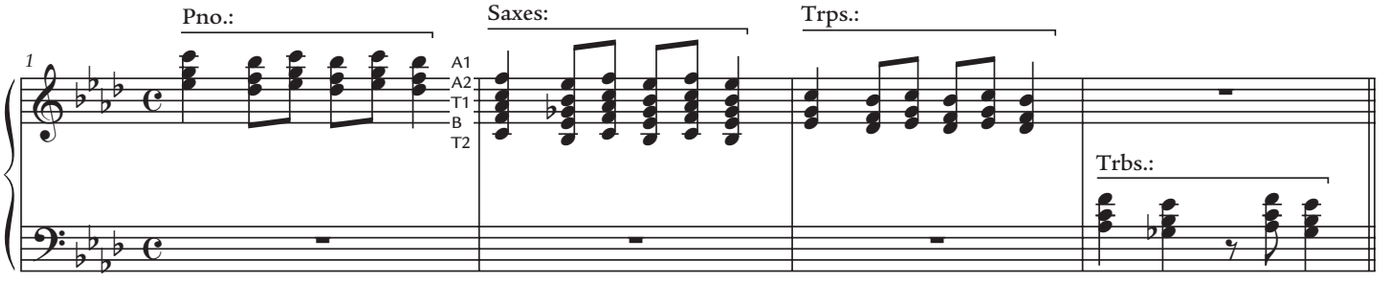
The formal outline of "The Stampede"

Introduction	Call and response between sections (ms.1-4). Trumpet solo over rhythm section (in "2" feel ms.5-9). The resultant first 8-bar phrase repeats, but this does **not** turn into the first two A sections of a songform.
1st chorus	ABAC songform (32 bars) in A♭.
2nd chorus	ABA form repeats for tenor solo with simple backgrounds. Then reiterates the C from the first chorus to conclude the solo chorus.
Interlude	4-bar whole tone passage.
4th chorus	ABAC songform (30 bars) in relative minor key (F−), truncated to enable the *elision* of the previous Interlude beginning in ms.31 of the minor key form (see also Chapter 6).
Final chorus	Reprise of the initial ABAC songform, with some variation, notably the final 4 bars, which deftly *recapitulate* both the opening and closing figures of the 1st chorus to create the coda.

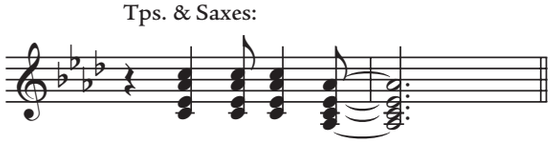
The following examples illustrate some of the interesting points in the form described above.

Ex. 5.33

The call and response between sections in the first four bars



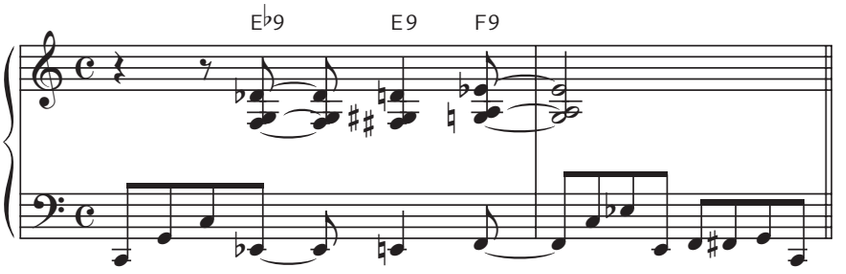
Use of retrograde "cakewalk" rhythm in background riff figures responding to the trombone theme in the first chorus



Therefore it is not surprising to find arrangements or compositions using this basic rhythmic vocabulary that make use of this concept. Clare Fischer's "Gaviota" includes a distinctive *vamp* that functions initially as an introduction, but is actually included in the form.

Ex. 6.16

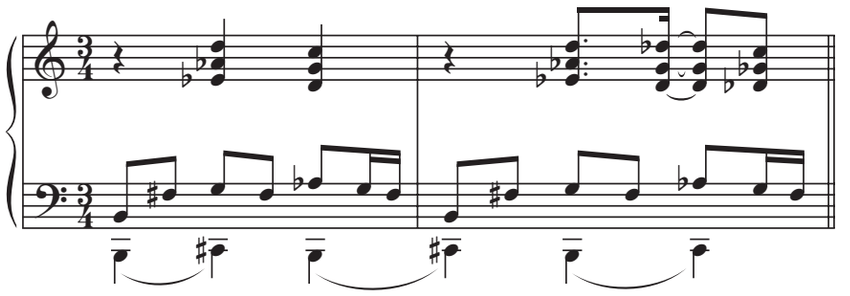
The vamp from "Gaviota"



Of course there are numerous other examples of layered *ostinato* to be found in arrangements and compositions of virtually all style periods. Consider the coda vamp from the famous Gil Evans arrangement of "Will O' The Wisp", from Miles Davis' "Sketches of Spain".

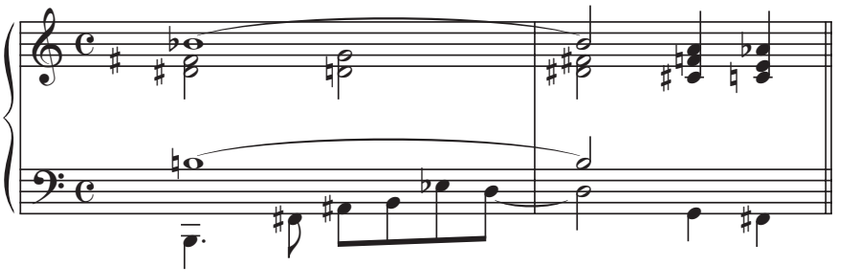
Ex. 6.17

Concluding vamp from "Will O' The Wisp"



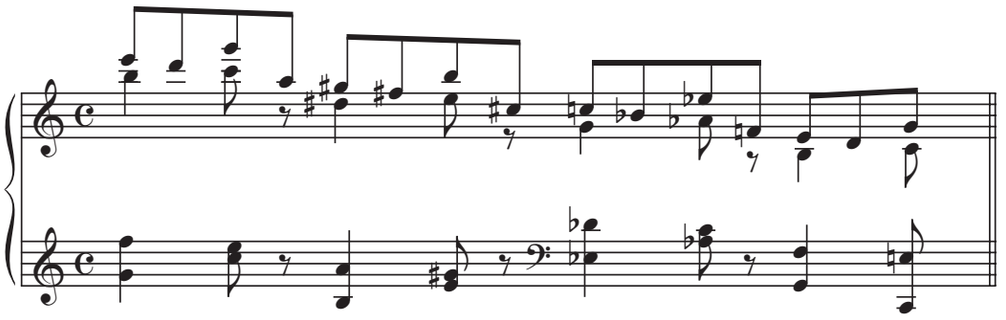
Ex. 6.18

An example from Mvt. 3 of "Portaculture", by the author, showing a 12-tone vamp produced from complementary hexatonic scales (see also Chapter 8):



Ex. 7.10a

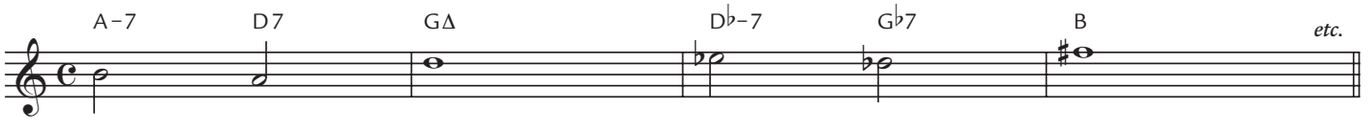
Example from Slonimsky Introduction referred to above



The A phrase of "Giant Steps" is constructed from the *hexatonic scale* (of which there are four, produced by the alternation of 1/2 steps and minor thirds, also described by some jazz theorists as the "Augmented" Scale). This *symmetric scale* was also used frequently by Bartók, another composer whose work was surely familiar to Coltrane[11].

Ex. 7.10b

"Giant Steps" melody



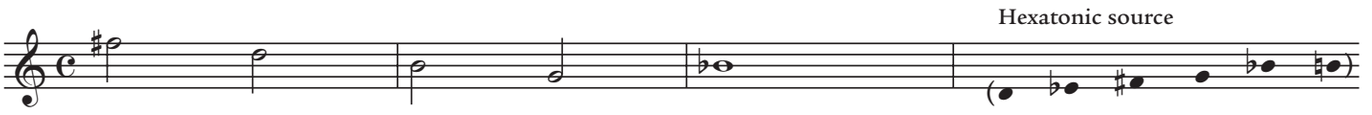
Although the "hexatonic scale" is not so named per se by Slonimsky, it does appear in his book[12]:

Ex. 7.11a

Example of a Hexatonic Scale, as found in Slonimsky (see "Ditone Progression" #181 in The Thesaurus of Scales)[13]

Ex. 7.11b

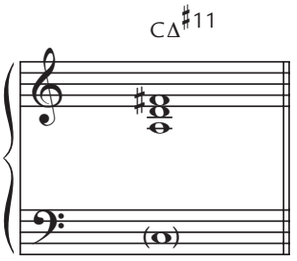
"Giant Steps" melody showing hexatonic relationships



[11] Porter, p. 125
[12] Slonimsky, p. 27
[13] ibid.

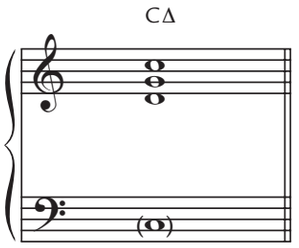
Ex. 7.38

Example of the use of an inverted triad; CΔ$^{\sharp 11}$ voiced with a D major triad



Ex. 7.39

Example of a quartal (fourth) voicing

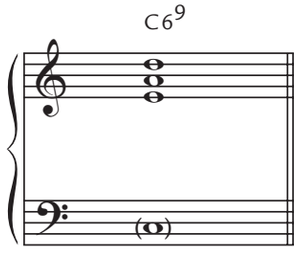


(Note that these voicings are both harmonically incomplete in and of themselves.)

The variety of available harmonic settings for these last two examples is such that it is nearly pointless to attempt to list them all systematically. Suffice it to say that in some of these cases, the result will define the chord...:

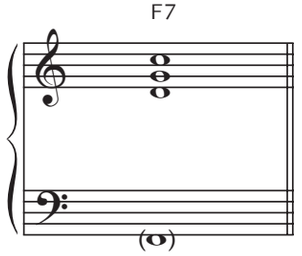
Ex. 7.40a

Quartal voicing used to express the 3, 6, 9 of a major chord



...while in other cases it may yield a sound that includes a combination of chord tones and color tones, necessitating rhythm section support to complete the chord sound:

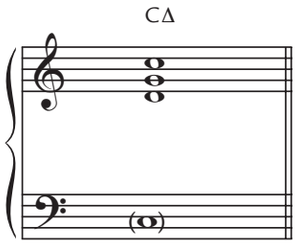
Ex. 7.40b



In the A section of Slide Hampton's arrangement of the standard "What's New" from the Dexter Gordon recording "A Day in Copenhagen" (a tour de force for Hampton's three horn writing), we see a combination of the above sounds being used.

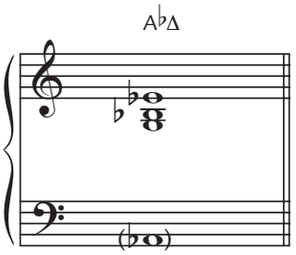
Ex. 7.4IA

Ms. A-1 illustrates the use of a voicing in perfect 4ths that does not define the chord sound



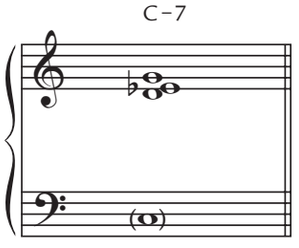
Ex. 7.4IB

Ms. A-3 shows the use of an inverted triad in an incomplete chord sound



Ex. 7.4IC

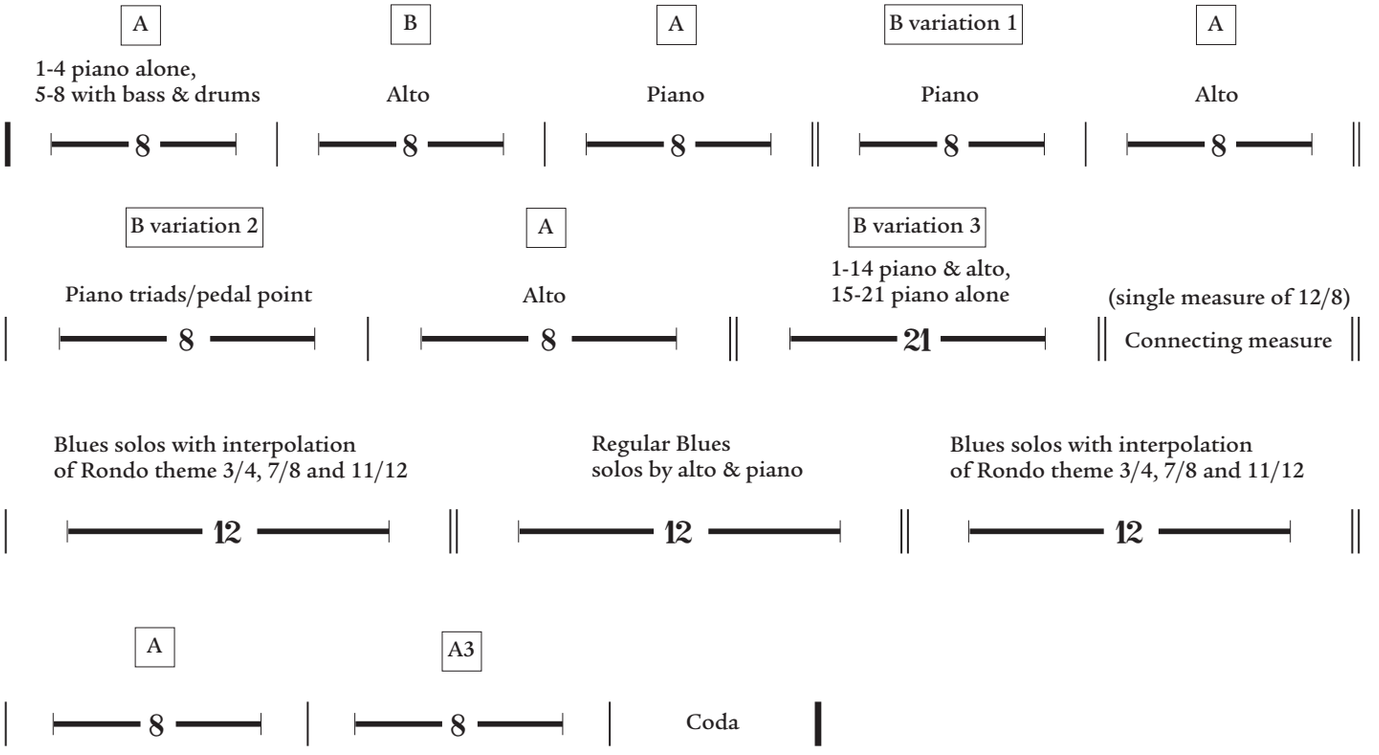
Ms. A-5 illustrates the use of the major 3rd and 1/2 step voicing



By making use of these characteristic three horn sounds the composer/arranger is placing the value of intervallic timbre above that of harmonic completeness. In other words, choosing sound over function as a means of harmonic organization.

Ex. 8.12

The formal structure of "Blue Rondo à la Turk"
(based on "The Great Concerts", Columbia CD 44215)

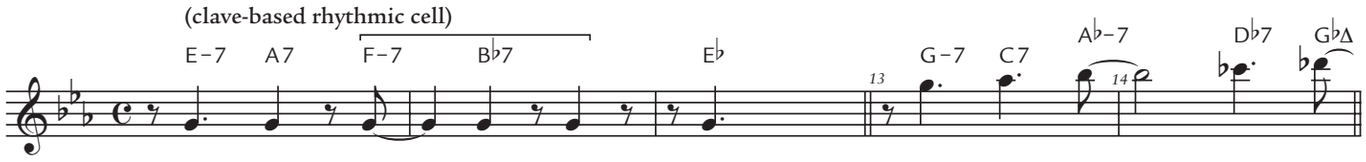


It is interesting to note the adaptability of the Blues to yet another seemingly incongruous setting. The Blues has proven itself to be a favorite foil of Jazz composers, regardless of their compositional goals. This is at least in part due to the implicit potential for contrast and coexistence between major and minor thirds in the Blues. The resolution of the conflict between the major and minor harmonic elements of this particular piece is an important part of its dramatic resolution. So even though there may be a great deal of distinction aesthetically between the music of Ellington, Coltrane, and Brubeck, we find that there is an important communality to be found in their use of the ubiquitous Blues-based resource of major and minor third relationships, both melodic and harmonic.

Moment's Notice

"Moment's Notice" begins with the standard device of playing the second half of its ABAC songform as an introduction. Following this, its "clave"- based melodic motif recurs throughout the form, with two notable harmonic landmarks. The first is a secondary key of G♭. The opening motif and the modulation are juxtaposed below for purposes of comparison:

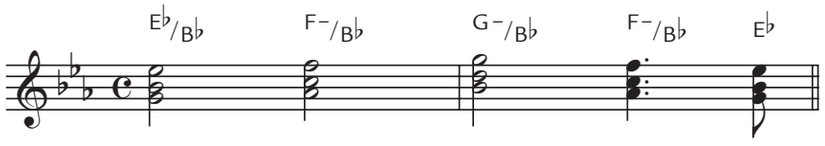
Ex. 8.36a



The second is its *coda*, which features parallel diatonic chords over a dominant pedal preceding the break that leads to solos.

Ex. 8.36b

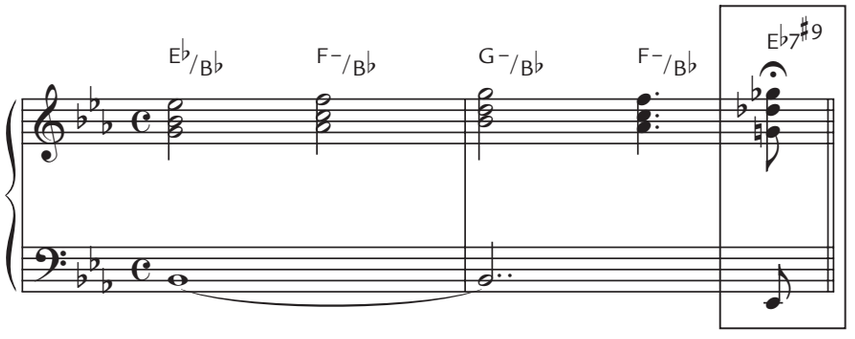
Coda of first chorus



Of note is the variation in the coda that concludes the piece, in which the familiar ♯9 sound from "Blue Train" is reiterated.

Ex. 8.36c

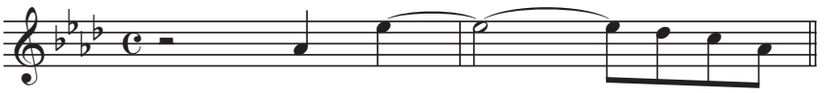
Coda of "Moment's Notice"



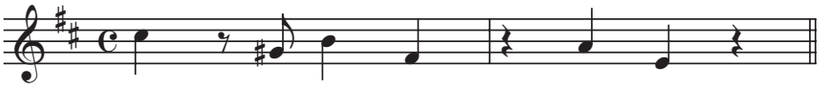
Ex. 8.43

Pentatonically-based intervallic similarities between themes of "The Queen's Suite"

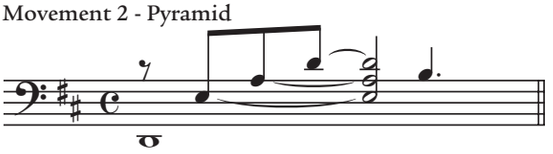
Movement 1 - Theme



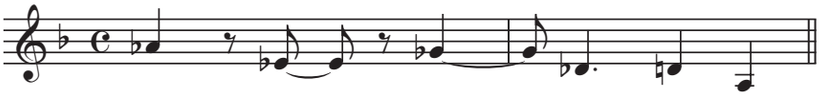
Movement 2 - Theme



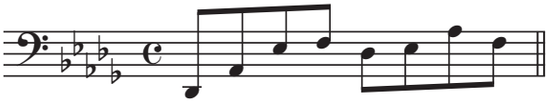
Movement 2 - Pyramid



Movement 4 - Tenor sax theme



Movement 5 - Theme excerpt



Movement 3 - Theme