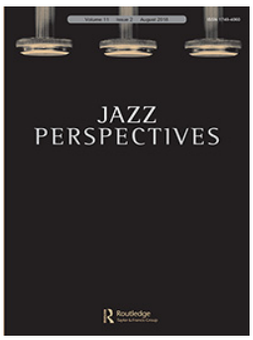

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The Blues Scale: Historical and Epistemological Considerations

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ABSTRACT

Today, the blues scale is familiar to most people who have studied music formally. Although there has been since 1967 a broad consensus as to what that scale is, for the first half of the twentieth century there was actually a good deal of disagreement on that point. A close look at the history of the blues scale reveals that disagreements over its content are bound up with widespread ambiguity concerning its epistemological status. This paper seeks to illuminate that epistemological confusion, proceeding in two ways: first, it historicizes today's blues scale by laying out the main blues scales proposed between 1938 and 1967, attending to the role these scales played in the institutionalization of jazz education; second, it demonstrates that these scales differ not just in content and attitude but also in epistemological orientation. Because of its social overtones and political implications, disagreements over the nature (and even existence) of the blues scale have frequently been heated. This paper argues that these disagreements derive in part from a persistent epistemological confusion that has characterized much of the discourse surrounding this musical idea.

Introduction

In his 2014 study of the culture of college jazz programs, *School for Cool*, anthropologist Eitan Wilf recounts a classroom scene in which a highly regarded professor voices frustration with the blues scale:

> I just had an argument with somebody whose name I won't mention about blues scales. He wrote a book about blues scales. As far as I'm concerned there's no such thing … I told him, I said, "There's no such thing as a blues scale!" He put up the book anyway. He wanted me to do an endorsement. I showed him an endorsement! I don't have a PhD, but I know what I've heard! … Listen, how are all those people who played the blues first – they didn't know anything about the scale – the field people and all that. I mean, why try to confuse it and make it all technical by saying what scale it is? If you can't get it from listening to it, leave it alone.[1]

This professor's opinion, which is occasionally echoed in scholarly writing[2], raises many themes central to Wilf's broader investigation. It invokes the

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[1]Eitan Y. Wilf, *School for Cool: The Academic Jazz Program and the Paradox of Institutionalized Creativity* (Chicago: University of Chicago Press, 2014), 102.

[2]Gerhard Kubik recalls, for example, arriving at the "sacrilegious" conclusion that Western concepts are applied in vain to blues music. See Gerhard Kubik, "Bourdon, Blue Notes and Pentatonicism in the Blues: An Africanist

apparent contradiction (or "paradox," as Wilf has it) of teaching jazz music in the academic environment. It hints at the jazz world's oft-expressed anxiety about students that learn from professors who never had true performance careers, as well as cultural dynamics internal to the jazz world about the relative prestige of jazz and blues. It suggests that one way in which academia seeks to resolve these paradoxes depends on the personal charisma of professors with acknowledged links to canonized figures in the history of jazz, and which has the distinct trappings of mystical thinking. Moreover, it reflects the resentment felt by many jazz musicians at being told by outsiders what their "scale" is, a notion made all the more insulting by the fact that many of the greatest artists in the history of African-American music were systematically excluded from the kinds of institutions where scales form part of the curriculum.[3]

In all probability, the professor in Wilf's book had in mind the blues scale that most jazz musicians today agree on.[4] If he encountered it in one of the many pedagogical texts published in the wake of Jamey Aebersold's 1967 *How to Play Jazz and Improvise*, he would have been instructed never to play it too literally or too frequently. Texts that employ it, in other words, tend to share at least some of his reservations about its utility and authenticity. Nevertheless, this professor is correct that, at least insofar as some of the most celebrated blues musicians could never have known of the blues scale, there is in a basic sense "no such thing." It is also probably true that a student who learns to think of the blues scale in the same way she thinks of other chord-scale relationships in the Aebersold program will tend to sound mechanical, academic and square. This is a critique frequently lodged against the chord-scale method in general, but in the case of the blues scale, with its instantly recognizable sound and affect, and its inexorable role as an index of the whole problem of institutionalized jazz, the danger of sounding rigid and inauthentic – "studied" in the pejorative sense – is made much more vivid.

Once we hear the blues scale as the sound *par excellence* of Wilf's "paradox of institutionalized creativity," we are confronted with a familiar litany of its failures: it reduces a complex virtuoso tradition to a trivial musical doodle; it does not account for the challenge the blues idiom represents to Western music theory; instead of documenting an attempt on the part of Western music theory to grapple with this challenge, the blues scale appears in the Aebersold text frictionlessly alongside the familiar Greek modes, a black sheep from some eighth region in the Mediterranean, a mode whose parentage may be

Perspective," in *Ramblin' on My Mind: New Perspectives on the Blues*, ed. David Evans (Urbana: University of Illinois Press, 2008), 16.

[3]It is, however, important to acknowledge the possibility that many blues musicians, even the early figures, actually did study scales; in many cases, there is simply no way to know, even though many people, like the professor Wilf cites, assume that they did not.

[4]In the key of C: C, Eb, F, F#, G, Bb. Referred to throughout this essay as the "Aebersold" scale, not because Jamey Aebersold invented it (he didn't), but because his 1967 *How to Play Jazz and Improvise* is the first citation in print I know of, and because I suspect that his method books, more than any others, have been responsible for disseminating it.

uncertain but which is nevertheless completely legible to the Western system.[5] In this respect, the blues scale clearly misleads, and it is probably this shortcoming the professor is attempting to correct by reminding us that there is no such thing.

Still, it is a very restricted sense in which this professor is correct about the non-existence of the blues scale. Insofar as the blues scale has been widely written about, taught, performed and recorded – and insofar as he is able to assume his students' familiarity with it – it clearly does exist. This is the fundamental ambivalence at the core of this ubiquitous pedagogical tool; even though everyone studies the blues scale, the jazz community as a whole cannot make up its mind whether or not it even exists. In this regard the blues scale seems to offer a concentrated version of the ambivalence surrounding the codification and institutionalization of black American music in general, and an inquiry into the origins of that ambivalence may have implications beyond the history of music theory in America.

It is the contention of this essay, first, that writing about the blues scale is characterized by a latent epistemological ambiguity, and, second, that this is partly responsible for disparities with respect to content among the various versions of the scale proposed over the course of the twentieth century. This paper, therefore, does not take a position on whether or not the blues scale exists, nor on what notes it should contain. In a sense, rather than asking "what is the blues scale?" in this paper I am more interested in the question "what would it mean if the blues scale did exist?" And more than that, I am interested in the fact that various theorists of the blues have implied different answers, or incoherent answers, to the latter question. If the blues scale were in some sense "real," would it be merely taxonomic or a generative device? A pedagogical point of departure? An entire idiom distilled to one essential textual germ? A retrospective deduction or a new musical innovation? Or, even, part of a theoretical model of the blues on a cognitive level? Crucially, these are questions about types of knowledge, questions that demand some attention to epistemology; on the broadest level, it is my contention simply that they have largely gone unasked about the blues scale, which in turn has had harmful results for discourse about the blues (as ignoring epistemology does in general).

In an interesting and potentially instructive coincidence, something similar happened with respect to the evolution of scales in the history of European music. As in jazz, European theorists of the 9th century sought to bring together a living musical tradition and a theoretical apparatus to which they were, for one reason or another, intellectually committed. In both cases, the resulting confusion had to do with whether or not a piece can be said to be "in" a mode, and the degree to which a mode obtains an *a priori* existence apart from its

[5]Ironically, as a mode with a tenuous relationship to the ethnic group whose essence it purports to capture, the blues scale is perfectly at home alongside the Greek modes of major. The provenance of the latter is convoluted and the familiar Greek names taught today have little to do with their homonymous predecessors in European theory.

utility as a classifier or descriptor. The alignment is not complete, but the comparison, developed toward the conclusion of this essay, offers a useful angle to illuminate the epistemological questions that are my main focus.

This essay has three main goals:

(1) To historicize the blues scale. The Aebersold scale, though ubiquitous today, is only attested in print as of 1967. Although by then it had probably been in wide circulation, there is an enormous amount of disagreement among the various blues scales proposed by scholars and critics in the first several decades of the twentieth century. This diversity has never, to my knowledge, been set out in one place and analyzed methodically; thus the first section of this paper alone may be of interest to a generation of jazz musicians who grew up knowing just one version of the scale, or to musicologists interested in thinking critically about a musical concept that has hardened into accepted fact. It is significant that the crystallization of the blues scale coincides with the arrival of jazz music in the accredited college curriculum. The complex relationship of jazz to academia is familiar territory in jazz history; the history told here is an important (and so-far unacknowledged) part of that relationship. This history is told in sections two (scales proposed) and three (scales denounced) of this essay.[6]

(2) To demonstrate the degree to which Jeff Titon's 1977 *Early Downhome Blues* represents a truly original contribution to thinking about the blues. It is not simply that his blues scale is grounded in more detailed empirical work than anyone else's (though it is), nor even that it is Titon more than any other author who points toward the epistemological confusion that has handicapped the bulk of thinking about blues and music theory (though he does). In addition to these merits, Titon's work shares with Noam Chomsky, whose generative grammar serves as his explicit model, the conviction that there are some modes of investigation that simply do not meet the criteria for knowledge production. Whatever we may think of the generative model of blues song Titon arrives at, its embedded assumption (that work on the blues can be either merely descriptive or genuinely

[6]The closest thing to a history of the blues scale I know of is William Tallmadge, "Blue Notes and Blue Tonality," *The Black Perspective in Music* 12, no. 2 (1984): 155–65, whose focus is the true nature of "blue tonality" rather than the historiographical or epistemological questions arising from attempts to theorize the blues idiom. Gerhard Kubik, "The 'Flatted Fifth'," in *Africa and the Blues* (Jackson: University Press of Mississippi, 1999), 146–52. traces the blues scale to Africa, while Eddie S. Meadows, "Africa and the Blues Scale: A Selected Review of the Literature," ed. Jacqueline Cogdell DjeDje and William G. Carter, *African Musicology: Current Trends – a Festschrift Presented to J.H. Kwabena Nketia*, 1988 critiques the prevailing methodologies for positing the blues scale as an African retention. Travis Jackson, "Jazz Performance as Ritual: The Blues Aesthetic and the African Diaspora," in *The African Diaspora: A Musical Perspective*, ed. Ingrid Monson (Garland Publishing, n.d.) casts the blues aesthetic, writ large, as a form of ritual underlying contemporary jazz practice, but takes no position on its possible scalar derivation. There is also Kubik, "Bourdon, Blue Notes and Pentatonicism in the Blues", which looks back at the history of blues theory through an Africanist lens. In this text, Kubik proposes a blues scale that builds on Jeff Titon's (discussed at length below) for which reason it is not included in my survey. None of these authors, however, casts a critical (epistemological) eye on the concept of scale itself with respect to the blues.

"philosophical," depending on the orientation of the investigator) is central to this essay's thesis. Titon's work, and its relationship to generative grammar, is examined in section four of this essay.

(3) To combine the two points above into an argument about epistemology in the history of the blues scale. Namely, that epistemology has largely been ignored, and that disagreements about the content of the scale are tied to latent disagreements about its epistemological standing. For this part of the argument, it is useful to imagine three epistemological tiers for the blues scale:
   (a) *Descriptive*: the blues scale as a distilled set of behaviors from an extant corpus.
   (b) *Prescriptive*, or to use Chomsky's word, "legislative" – the blues scale as a thing blues *should* contain, or a test for determining whether a piece of music is in fact a blues.
   (c) *Philosophical*: the blues scale as the diagnosis of what is really happening in the blues, or even, a cognitive model of what is taking place within the mind of a blues musician.

These categories are not, of course, exhaustive, and it is definitely not the case that every theorist of the blues can be said to occupy just one of them. Indeed, a central part of the problem this essay seeks to clarify is that most theorists of the blues occupy more than one tier at a time without ever saying so explicitly. Thus my aim with these three labels is not actually to taxonomize theories of the blues, but rather to situate the history of the scale in a framework that engages with questions about different types of knowledge. Encountering the history of the blues scale while attending to the different ways various authors have construed the idea of the scale can, I hope, help us to understand (and move beyond) some of the resentment that has accrued to it since 1938.

A History of the Blues Scale in Scholarship

Winthrop Sargeant, Jazz, Hot and Hybrid *(1938)*

Predictably, the scattered attempts from the nineteenth century to reckon theoretically with African American music tend to emphasize its racial alterity and incompatibility with Western notational convention.[7] Although it too is full of odious racial essentialism, Winthrop Sargeant's 1938 *Jazz, Hot and Hybrid* is in many ways the first systematic attempt in American intellectual culture to

[7]See, for example, Thomas P. Fenner, *Cabin and Plantation Songs as Sung by the Hampton Students* (New York: GP Putnam; Sons, 1886), or Abbe Niles's well-known preface to WC Handy's 1926 *Anthology of the Blues*. Interestingly, some of them also point to precisely those musical features that would later constitute the common ground of all the various "blues scales" of the 20th century: a characteristic pitch play and major/minor ambiguity, especially at the intervals of the third and seventh. See, e.g. William Francis Allen, *Slave Songs of the United States* (New York: Peter Smith, 1867).

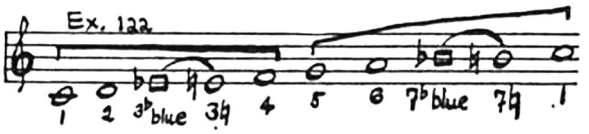
account theoretically for black American music. Sargeant seems aware that he is the first to approach the subject so rigorously: in the preface to his 1975 third edition, he claims that at the time of his 1938 first publication, "it was the only serious musicological study of its type in existence … an analysis of Jazz considered as a form of music differing from other forms was badly needed."[8] Even today, much of Sargeant's study holds up, and it is Sargeant who, in a chapter called "The Scalar Structure of Jazz" first posits a "blues scale," termed as such (Example 1). It is interesting to note that this discovery is, for Sargeant, the result of the consideration of the relationship, in jazz music, of chords and scales:

> Are the intonations of Negro music to be considered as independent, in their relationships, of the harmonic system on which they have been grafted? Sometimes it seems possible to consider them in this light and to speak of such a thing as an Afro-American scale. Elsewhere the derivation from harmonic sources is so obvious that one is constrained to consider the melody as a variety of, or aberration from, Western melodic usage – that is, as governed by a harmonically-dominated "scale" in the Western sense of the term.[9]

The "negro" scale, in other words, would be an original musical object only if it could be shown to exist apart from the harmonic system of jazz which, Sargeant holds, is thoroughly European. But it is important to emphasize that it is not just that the blues scale would have to be a different one from, say, the major, but that it would represent a different "sense of the term," one less "harmonically dominated." It is an epistemological distinction – one with an embedded claim about the relationship of chords to scales – but also one that he seems almost unaware of making. Since he smuggles in this crucial epistemological question but does not pursue it, the reader is left to wonder in what "sense of the term" we are to understand the blues scale at which Sargeant will eventually arrive. Rhetorically, Sargeant seems to know that the blues scale is his book's signal theoretical achievement, and it is one to which many subsequent theorists would in one way or another refer. Yet its epistemological status – in what "sense of the term" it is a scale in the first place – is basically left undetermined.

Sargeant's essay on the scalar structure of jazz is complex. Hearing the basic anatomy of jazz as a repeating harmonic "ostinato" over which solo figurations occur, and understanding its central theoretical problem to be the manner in which such figurations and ostinati can be made to "accord," he details more than one scalar strategy widely employed by "hot jazz" players: the major pentatonic scale in various flavors, for example, or "the harmonic minor with or without an optional alteration of the fourth degree, forming a so-called 'gypsy' scale."[10] These kinds of scales, Sargeant tells us, are all common enough in

[8]Winthrop Sargeant, *Jazz: Hot and Hybrid* (New York: Da Capo Press, 1975), 7.
[9]Winthrop Sargeant, *Jazz, Hot and Hybrid* (McGraw-Hill, 1938), 72.
[10]Ibid., 153.



Example 1. Sargeant's blues scale in *Jazz, Hot and Hybrid* (1938).

"hot jazz" improvisation, but in themselves do not constitute an original "Negroid" musical contribution. Jazz harmonies, he argues, are essentially borrowed from Europe, "arranged according to time-honored European laws."[11] Improvizations can and do adhere to these conventional chord tones, but when they do they are not expressing the essence of the "purely Negroid melodic instinct." This instinct asserts itself only under certain conditions of greater freedom, namely "breaks" and other musical contexts in which European harmony predominates less. At such times,

> The improviser momentarily frees himself from the confining formulas of the European harmonic pattern, and gives way to ecstatic abandon … and a number of purely Negroid scalar characteristics enter into the scheme.
>
> The result is a more authentically "African" type of utterance, an utterance quite consistent in its own structural peculiarities, and one whose scalar relationships may be traced … deeply into the well-springs of racial musical habit.
>
> That we can speak of a purely Negroid musical scale in this connection there can be no doubt.[12]

What, then, is this "Negroid" scale? Sargeant presents the "tones comprising this scale" as a traditional gamut (See example 1. "We will call it the blues scale," says Sargeant.[13]) but, crucially, he notes that it is "in the melodic behavior of the individual tones that its principal interest lies." After an almost peremptory presentation of the notes in the gamut, Sargeant turns his energy to cataloging and analyzing these behaviors, distilled from a representative sample of "particularly hot passages." The level of detail is too great to reproduce here (and the precise methodologies employed are kept from the reader, supposedly out of politeness), but three important facts bear mention:

(1) For Sargeant, the melodic inclinations of blues players are more significant than the gamut itself.
(2) Sargeant sees the "negroid scale" as tetrachordal, that is, composed of two twin tetrachords with largely parallel behaviors (refer below to Example 8).
(3) Sargeant explicitly denies the existence of the "blue fifth."

[11] Ibid., 157.
[12] Ibid., 158.
[13] Ibid., 160.

Leonard Bernstein, "The Absorption of Race Elements into American Music" (1939)

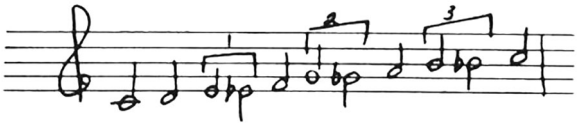
Winthrop Sargeant was responding to the deficiencies he saw in the state of scholarly work on jazz music. Leonard Bernstein, in his 1939 undergraduate thesis, set himself a much more ambitious task: he sought nothing less than to describe the content of a genuinely American musical aesthetics. This is to be done, to put it bluntly, by copying black music (euphemized in his writing as "absorption" and "race"). As Geoffrey Block has argued, the route to an authentically American musical aesthetics Bernstein proposed in 1939 as an undergraduate at Harvard – and with which he remained surprisingly consistent throughout his career – was never actually supposed to sound like jazz (although he seems to have valued Afro-American music, Bernstein took a hard line on the distinction between it and "serious" music).[14] Instead, in order to develop an authentic American sound, the music of the Negro should be "absorbed." The goal is not to understand what "elements" combine to sound like jazz, but rather to determine how to use jazz "elements" to sound American. One of the most important elements is Bernstein's "Negro scale," which, to my knowledge, is an original invention (Example 2).

Bernstein's scale differs from Sargeant's in three important ways:

(1) It has no tetrachordal character, but is, instead, defined negatively as the diatonic scale with "flatted" or "blue" elements at the third, fifth and seventh. The idea that the blues scale could be construed as a natural major scale with certain aberrations would emerge as a common theme in later theories of the blues.[15]
(2) Unlike Sargeant's scale, it does include a flatted fifth.
(3) Although he does discuss some melodic behaviors associated with the gamut, they are not nearly as detailed as Sargeant's, and the scale itself emerges as the focal point of his discussion.

It is probably because Bernstein's treatment reifies the scale itself that he is inclined to be ungenerous toward it. Its "highly characteristic flavor" creates "such stereotyped formulae that it becomes almost unlistenable after a while." It is, furthermore, "entirely limited to diatonic music," and therefore can have little lasting influence on American music, with the exception of "such conservative composers as George Gershwin."[16]

[14]Geoffrey Block, "Bernstein's Senior Thesis at Harvard: The Roots of a Lifelong Search to Discover an American Identity," *College Music Symposium* 48 (2008): 52–68.
[15]See, e.g. Avril Dankworth, *Jazz: An Introduction to Its Musical Basis* (Oxford and New York: Oxford University Press, 1968).
[16]Leonard Bernstein, "The Absorption of Race Elements into American Music" (Senior Thesis, Harvard University, 1939), 54.



Example 2. Leonard Bernstein's "negro scale" from his Harvard senior thesis (1939).

Beyond the gratuitous insult to Gershwin, it is important to note how offensive Bernstein's language would have been to a contemporary jazz or blues musician. Here is a white classical musician at Harvard using racist language to assert a scale of his own invention as black music's essential theoretical feature, declaring his intention to "absorb" it, and in the same breath dismissing it as unfit for absorption. Especially because this is probably what passed for racially progressive thinking at Harvard in the 1930s, it should come as no surprise that the certain sectors of the jazz community have remained suspicious of the blues scale and academia in general.

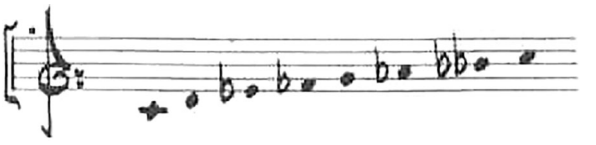
Rudi Blesh, Shining Trumpets: A History of Jazz *(1946)*

Jazz critic Rudi Blesh shares with Sargeant the sense that jazz music needs a serious book in order for it to take its rightful place on the American cultural landscape, as well as the conviction that careful study of its aesthetic system will help us see the difference between real jazz and the "half dozen kinds of music bearing no structural relation to jazz" that are nevertheless "accepted by the vast public" as the real thing. Blesh, who had more literary than musical training, is stronger as an interpreter and commentator than as a theorist, but he does venture into the domain of musical theory, and offers a scale that differs from both Sargeant's and Bernstein's.

Blesh follows Sargeant by noting the importance of the major pentatonic and hexatonic in "Afro-American melody," and even goes so far as to say that "a very large part of all truly Afro-American melody can be approximately notated" using these two scales.[17] These scales are "definitely major," as is, he tells us, "the bulk of African and Afro-American music." Still, there is the matter of the flattening of the third and seventh, a musical practice familiar in black music from the nineteenth century onward; Blesh accounts for this with a scale that he calls "the full, or extended *blues scale*" (Example 3).[18]

This scale exhibits a number of interesting features. First of all, its blue notes are the third and sixth; in omitting the flat seventh, it appears to stand in contradiction not only to what must have by 1946 been common wisdom, but also to Blesh's own words, which do mention that interval. The augmented 2nd with

[17]Rudi Blesh, *Shining Trumpets: A History of Jazz*, 2nd ed. (New York: Albert Knopf, 1958), 106. Originally published in 1946.
[18]Ibid., 106, ex. 14-c.



Example 3. Rudi Blesh's blues scale in *Shining Trumpets* (1946).

which the scale concludes is so strange that it could almost be an error, but for the fact that the composer Lou Harrison, whom Blesh credits with having assembled the scale while working as Blesh's assistant on this project, is known to have employed it in a 1949 "blues" of his own, "Blues for the Trouville Bathing Beauty."[19]

We can assume, then, that the scale appears as Blesh and Harrison intended it. With its stilted spelling and remoteness from actual blues music, it is the clear product of a Euro-American classical musician (Lou Harrison), one who, according to Alves and Campbell, was not even interested in jazz in the first place. And yet the scale cannot simply be dismissed as the careless product of a literary scholar of modest musical attainment and a classical musician whose heart was not in his work; not only does the scale appear in one of the few "blueses" of one of America's most celebrated composers, but *Shining Trumpets* itself was an important contribution to the nascent field of jazz history and criticism, and is often cited by respected jazz historians.

André Hodeir, Hommes et Problèmes du Jazz *(1950)*

French violinist and author André Hodeir construes the blues scale largely as the product of the confrontation of African (which he sees as essentially pentatonic) music with European (which he sees as diatonic). This turn enables him to posit the blues as something quintessentially African American, and to rebuke the "purists" who crave less Europeanized jazz:

> Compared with the singers of the Dark Continent, the most authentic of the blues singers would be considered "Europeanized." Don't the blues themselves, with their blue notes, represent quite a deviation from African songs? As we know, these blue notes resulted from the difficulty experienced by the Negro when the hymns taught him by the missionaries made him sing the third and seventh degrees of the scale used in European music, since these degrees do not occur in the primitive five-note scale.[20]

It is pointless to speculate as to why Hodeir is so certain that the origin of blue notes was the confrontation of a "primitive scale" with the thirds and sevenths of

[19]B. Alves and B. Campbell, *Lou Harrison: American Musical Maverick* (Bloomington: Indiana University Press, 2017), 145.

[20]Andre Hodeir, *Jazz: Its Evolution and Essence*, trans. David Noakes (New York: Grove Press, 1980), 42. Originally published in French; English translation first published in 1950.

the hymnal repertoire. It is interesting to note, though, that this certainty can take on two different rhetorical charges: (1) it can serve the familiar narrative of jazz as quintessentially American, the paradigmatic product of a cultural melting pot, and (2) by repudiating jazz "purity" in general, it can serve to rebuke the chauvinistic American jazz enthusiast reluctant to accept the contributions of a European musicologist and musician (Hodeir was both).

Despite what appears to be a sincere affection for some jazz, Hodeir can also be glibly dismissive of what he sees as its shortcomings. Thus "jazz musicians, with a few rare exceptions, do not have strict enough standards of harmonic beauty to know how to avoid certain chords or progressions" and they "spoil their gifts by a systematic harmonic sugar coating."[21]

Standing out against the prevailing vapidity of jazz harmonic creativity is the blues, which, for Hodeir, is "the exception that proves the rule." Particularly remarkable for Hodeir is the blues scale: "melodically and harmonically, jazz offers only one innovation, the blues scale." Like Sargeant, Hodeir recognizes the authentic blues scale only in the moments where the derivation from European harmony is most remote; like Sargeant, he sees the blues scale as black American music's most important contribution. And yet, in an apparent contradiction, "the theoretician might claim that the blues scale is none other than that of the mode of D, designated by some historians as the Dorian."[22]

It is not clear why Hodeir supposes that the "blues scale" – any version of it – would be easily confused by "theoreticians" with the Dorian. He does maintain that it is *not*, in fact, the Dorian, but fails to explain clearly what the differences are, or why theoreticians would be so easily misled:

> The third or seventh degrees are lowered or not depending on how open or how disguised an allusion to the major scale is desired. Frequently, blue notes and unaltered examples of the same degrees occur within a single phrase.[23]

But if the blues scale varies according to the degree of desired allusion to major tonality, as clearly implied here, why would it be easily confused with the *Dorian* mode? Or, if it is simply a matter of "suspended appogiatura" and "alteration" of the major, why then is it the signal innovation of jazz music, as Hodeir maintains? It is difficult to know what to make of these flagrant contradictions, but the real confusion comes when Hodeir revisits the question of the centrality of the blues scale to the jazz tradition. This time, his answer appears to be different. Where previously the blues scale was jazz's "one innovation," now he argues unambiguously that it is not part of the "essence of jazz." Here his reference point is Coleman Hawkins, and a lengthy passage argues simply that, because the blues scale does not figure in his famous improvization on "Body and Soul," it follows that either (1) "Body and Soul" is not jazz or (2) the blues

[21]Ibid., 140–42.
[22]Ibid., 154.
[23]Ibid., 155.

scale is not essential to jazz. "Common sense indicates which of these choice is the one to make."[24] The argument is apparently now that the blues scale is *not* part of jazz music. A third possibility – that whatever is stylistically salient in the Hawkins example (or in the blues or jazz style generally) cannot be reduced to a scale – is tellingly and conspicuously absent.

George Russell, Lydian Chromatic Concept of Tonal Organization *(1953)*

The central argument of this influential work of music theory is that while "traditional music theory" upholds the major scale as the ultimate justification for harmonic movement, the Lydian scale, around which Russell elaborates a complex theoretical apparatus of "vertical tonal gravity," can also serve just as well. It does so, in fact, "in a way that is far more objective, expansive and logical, without subjecting musicians' essence to small laws of rights and wrongs."[25] Olive Jones, in an extended interview with Russell, emphasizes the philosophical and ethical dimension of "The Concept," as well as the ways in which it is not a theory "for jazz," even if most of its examples are drawn from that tradition.[26] It is, rather, a work intended to give all musicians creative freedom with more logical consistency than is possible under the traditional system of functional harmony, which by comparison does feel rule bound and oppressively normative. Russell offers concrete strategies for transcending these norms while simultaneously unseating the major/minor system as the sole arbiter of harmonic logic. Readers who take the time to absorb the whole of this work's approach emerge not just with a new set of tools to navigate tonal space, but an emancipated consciousness concerning the traditional harmonic logic and a heightened awareness of the ways in which theory and practice can be mutually influential. This text is an ambitious, idiosyncratic work, and to take the full measure of its relationship to African American music and its contribution to American culture is well beyond the scope of this essay. For our purposes, there are four important points to make note of in connection with Russell's work, and its treatment of the blues scale:

(1) As noted above, it is a theory mostly (not wholly) *from* jazz, but it is deliberately pan-stylistic. Far from addressing itself to any particular genre, the text as a whole is assiduously non-normative: "There are no rules, no do's or don'ts. It is therefore not a system but rather a view or *philosophy of tonality* in which the student, it is hoped, will find his own identity" (emphasis added).[27]
(2) Accordingly, its proponents see it as a major contribution to music theory – not just to jazz theory.

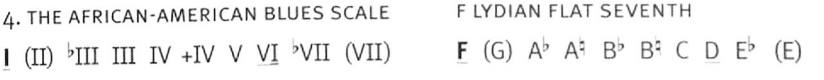
[24]Ibid., 156.
[25]George Russell, *Lydian Chromatic Concept of Tonal Organization* (Brookline, MA: Concept, 2001), 235. Fourth edition. Originally published in 1953.
[26]Olive Jones and George Russell, "A New Theory for Jazz," *The Black Perspective in Music* 2, no. 1 (1974): 63–74.
[27]Russell, *Lydian Chromatic Concept of Tonal Organization*, 1.

(3) Nevertheless, it is generally credited with inaugurating "chord-scale theory," that is, the idea that a scale can somehow *embody* a chord, and that the diligent study of such relationships can form the basis for an education in musical improvization. This idea, and its many extensions and elaborations, has been central to most schools of jazz pedagogy ever since.
(4) Its insights about chord-scale identity and tonal gravity are bound up with its musical-political commitments to non-normativity and freedom; this feature, though absolutely central in the original, has been largely forgotten by a subsequent generation of chord-scale jazz methods.

Russell's text proposes two blues scales, both of which are totally anomalous from the perspective of the authors we have so far examined. Where most theorists of the blues attempt, in one way or another, to reconcile the features of "blue" performance practice with the European theoretical construct of the gamut, Russell simply postulates two "blues" scales, without any reference to the idiomatic functions they might have or musical behaviors they might approximate, and mobilizes them in service of his broader music-philosophical project. These two scales are the "Auxiliary Diminished Blues Scale" (Example 4) and the "African American Blues Scale" (Example 5).

It is consistent with Russell's non-dogmatic approach that he does not insist on any single blues scale. This alone is one of the text's most interesting insights; why, after all, should there be just one in the first place? By comparison with the other scales examined so far, moreover, both of these admit of far more chromaticism than is customarily associated with the blues. Exactly why Russell seems willing to tolerate chromaticism in his blues scales, like several other similar questions – in what respect the first scale is "inverted diminished," how (or if) the scales are derived from the blues – is never addressed specifically as a music theory problem. Ultimately, though, the decisions Russell makes with respect to pitch content are less significant than the relationship that obtains between his larger emancipatory project and his choices as a theorist. In a text devoted to liberating modern musicians from the "do's and don'ts" of major/

Example 4. George Russell's "Auxiliary Diminished Blues Scale" in *The Lydian Chromatic Concept.*



Example 5. George Russell's "African American Blues Scale" in *The Lydian Chromatic Concept* (1959).

minor harmony, to asserting a less teleologically determined harmonic baseline for creative music, Russell posits a pair of blues scales that, far more than their cousins from elsewhere in the music theory world, exude this open-ended ethos. This ethos is the text's main contribution, but for our purposes it is more important to take note, first, of the existence of two more blues scales, and second, that the unique orientation of the author informs his decisions about what notes they should contain. It is not only a different set of pitches from, say, Sargeant's, but it is also very clearly a different order of concept.

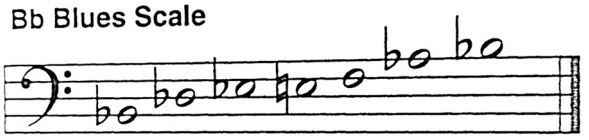
Jamey Aebersold, How to Play Jazz and Improvise *(1967)*

As noted previously, the blues scale that appears in this landmark method book is the one universally recognized among jazz musicians today (Example 6). The fact that it is introduced without fanfare in a section on "the blues scale and its uses"[28] suggests that Aebersold did not invent this scale, but was simply setting down what was already circulating in the growing community of professional jazz educators.[29] Nevertheless, I have been unable to turn up an earlier citation of this scale, and it is surely in association with the Aebersold series that most jazz musicians of the latter half of the twentieth century would encounter it. Three important points bear mention in connection with this notorious scale:

(1) Aebersold's scale embeds virtually no information about blues behavior. Like the other modes that comprise the heart of the Aebersold method, it is an educational tool rather than a musicological insight. It is prescriptive, pedagogical – or, in the Chomskian terminology that we will encounter shortly, "legislative" rather than scientific.
(2) In spite of his dutiful disclaimers that the blues is more complicated than just the scale, his text does run the risk of reducing the blues to a bare pitch set, especially because the method book is intended for beginners.
(3) The above is especially true given the way Aebersold's text encourages students to think of improvisation as a series of chord-scale problems – if such a chord pops up, deploy such a scale.

It is also worth noting that the blues scale is not the only ethnically inflected scale in the Aebersold method. The complete "scale syllabus" that students encounter at the end of the Aebersold method book also offers a "Spanish or Jewish scale" and a "Hindu" scale.[30] Example 7 shows the blues scale alongside scales with other ethnic designations in Aebersold's "Scale Syllabus."

[28]Jamey Aebersold, *How to Play Jazz and Improvise* (New Albany, IN: Jamey Aebersold Jazz, 1967), 40.
[29]I confirmed this impression in a correspondence with Aebersold.
[30]Jamey Aebersold, "Jazz Handbook," n.d., 14, https://www.jazzbooks.com/mm5/download/FQBK-handbook.pdf.



Example 6. Jamey Aebersold's blues scale in *How to Play Jazz* (1967).

2. DOMINANT 7th SCALE CHOICES	SCALE NAME	W & H CONSTRUCTION	SCALE IN KEY OF C	BASIC CHORD IN KEY OF C
C7	Dominant 7th	W W H W W H W	C D E F G A B♭ C	C E G B♭ D
C7	Major Pentatonic	W W −3 W −3	C D E G A C	C E G B♭ D
C7	Bebop (Dominant)	W W H W W H H H	C D E F G A B♭ B C	C E G B♭ D
C7♭9	Spanish or Jewish scale	H −3 H W H W W	C D♭ E F G A♭ B♭ C	C E G B♭ (D♭)
C7+4	Lydian Dominant	W W W H W H W	C D E F♯ G A B♭ C	C E G B♭ D
C7♭6	Hindu	W W H W H W W	C D E F G A♭ B♭ C	C E G B♭ D
C7+ (has ♯4 & ♯5)	Whole Tone (6 tone scale)	W W W W W W	C D E F♯ G♯ B♭ C	C E G♯ B♭ D
C7♭9 (also has ♯9 & ♯4)	Diminished (begin with H step)	H W H W H W H W	C D♭ D♯ E F♯ G A B♭ C	C E G B♭ D♭ (D♯)
C7+9 (also has ♭9, ♯4, ♯5)	Diminished Whole Tone	H W H W W W W	C D♭ D♯ E F♯ G♯ B♭ C	C E G♯ B♭ D♯ (D♭)
C7	Blues Scale	−3 W H H −3 W	C E♭ F F♯ G B♭ C	C E G B♭ D (D♯)

Example 7. Aebersold's "scale syllabus" in *How to Play Jazz* (1967).

Gunther Schuller, Early Jazz *(1968)*

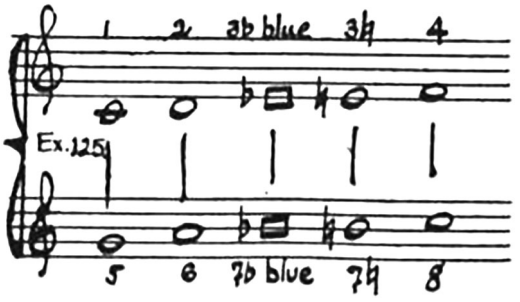
By 1968, American music schools were beginning to embrace jazz.[31] Even by these standards of greater acceptance, though, Schuller's *Early Jazz* is remarkable for its rigor and insight. Schuller's approach is generally similar to Sargeant's 1938 study, and it is to Sargeant's text that Schuller looks, more or less exclusively, in his own discussion of the blues scale. Schuller, like Sargeant, bemoans the "generally amateurish approach" of most jazz writers, and claims that for this reason the blues scale remains poorly understood. Sargeant is the one exception for Schuller, and he congratulates him for being "entirely on the right track." Sargeant, however, was "prevented from finding the final pieces of the puzzle by the absence at that time of the voluminous field-recording documentation and exhaustive scholarship that has taken place in the interim."[32] Schuller particularly applauds Sargeant's insight about the blues scale's tetrachordal nature, a feature that no other author had mentioned since 1938. The two pairs of tetrachords, however, are not identical[33] (compare Examples 8 and 9).

Sargeant's tetrachords appear on two separate staves, with one beginning on the root and one on the fifth. Schuller labels them A and B, with one beginning on the sixth below the root, and one on the third above. This is a puzzling discrepancy, but the two authors agree on almost everything else. The blues scale, as notated by Schuller, is in fact exactly Sargeant's, reproducing even the square

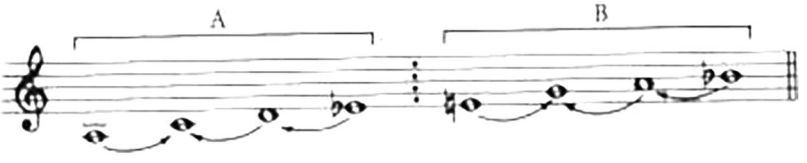
[31] Although it was not until 1979 that the National Association of Schools of Music began to make recommendations for college Jazz Studies programs, colleges had begun offering jazz courses for credit as early as the 1940s (beginning, of course, with North Texas and Berklee), as detailed in Walter Barr, "The Jazz Studies Curriculum" (Ph.D. dissertation, Arizona State University, 1974).

[32] Gunther Schuller, *Early Jazz: Its Roots and Musical Development* (Oxford and New York: Oxford University Press, 1968), 47.

[33] Sargeant, *Jazz, Hot and Hybrid*, 163; Schuller, *Early Jazz*, 44.



Example 8. Blues scale tetrachord from Sargeant, *Jazz Hot and Hybrid* (1938).



Example 9. Blues scale tetrachord from Schuller, *Early Jazz* (1968).

note head[34] with which Sargeant represented the blue third and seventh (Example 10).[35]

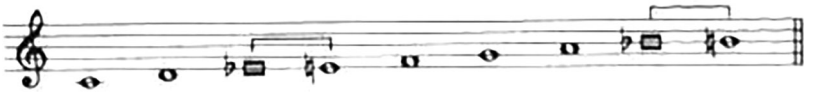
In spite of the prevailing similarity, there are two important differences to note between the two authors:

(1) Whereas Sargeant explicitly denies the existence of a "blue fifth," Schuller explicitly asserts it, although the note itself does not actually appear when he notates the scale.
(2) Whereas Sargeant emphasizes the importance of musical behaviors over pitch content in theorizing the blues scale, Schuller spends most of his discussion attempting to derive the blues scale from African music, relying primarily on the scholarship of A. M. Jones.

Objections and Critical Voices

The relationship of jazz music to educational institutions has been a complex and provocative topic since well before jazz programs were common. The most egregious example of racially inflected resistance to jazz education is Harry Feldman's often-cited 1964 article in *Music Educator's Journal*, "Jazz: A Place in Music Education?":

[34]It is possible that the square note head may be a notational convention inherited from medieval practice, where it is frequently used to represent psalm tones and the finalis.
[35]Schuller, *Early Jazz*, 45.



Example 10. Blues scale from Gunther Schuller, *Early Jazz* (1968).

> Training a boy to blow a horn no longer insures that he will not blow a safe. It may well blow him into delinquency, for who can deny the close association between jazz and delinquency?[36]

But since the explosion of jazz education programs starting in the 1960s, and the attendant rise of a jazz method book industry, trepidation about institutionalized jazz education has come mostly from within the jazz community itself. At the core of this debate, which is still lively today, is the legitimacy of an aesthetic tradition surviving on institutional patronage alone, disconnected on the one hand from its traditional venues of performance and apprenticeship, and on the other from the listening public at large.

At many universities, some version of chord/scale theory forms a central part of the curriculum. Even though the blues scale inevitably appears somewhere in the chord/scale curriculum, there are some respects in which the two do not go together. Unlike the modes of major and melodic minor that abound in jazz theory books, the blues scale cannot be "assigned" to a chord or subjected to the regimen of transposition and patterning that typified jazz pedagogy in the late 1960s.[37] Moreover, because it so plainly represents an attempt on the part of mainstream American institutions to systematize and codify the complex performance practice of a marginalized subculture, the blues scale can easily serve as an emblem for the political stakes of jazz pedagogy in general. It seems, in other words, to take everything that is problematic about the institutionalization of jazz and concentrate it in a single 6-note pitch collection. This is one reason various theorists of black American music have objected strenuously to it.

Leonard Feather, The Book of Jazz *(1957)*

Leonard Feather's 1957 book, from the outset, situates itself in the context of institutionalized jazz pedagogy. With at times striking vitriol, Feather rails against "academically equipped" musicians and declares his work to be the first analysis of its kind, "grounded in experience as a jazz composer and player."[38] It is clear from Feather's work that in 1957, the contours of the jazz pedagogy debate – with its rhetoric of insiders and outsiders, authenticity, and definite racial overtones – had already taken the shape familiar today. Feather's

[36]Harry Feldman, "Jazz: A Place in Music Education?" *Music Educator's Journal* 50 (1964): 60.
[37]Robert Witmer and James Robbins, "A Historical and Critical Survey of Recent Pedagogical Materials for the Teaching and Learning of Jazz," *Bulletin of the Council for Research in Music Education*, no. 96 (1988): 12.
[38]Leonard Feather, *The Book of Jazz* (New York: Horizon Press Publishers, Ltd., 1957), i.

work, then, is significant not only for being the first book about jazz to deny the existence of the blues scale, but also for doing with an unambiguous moral charge:

> Academically equipped classical musicians examining jazz have tended at times to adopt the benign attitude of a deity inspecting the human animal from a haven in Olympus.
>
> A similar misconception, prevalent among musicians academically equipped to know better, is that jazz has its own scale. The manner in which the flatted third and flatted seventh are used in jazz certainly gives them a special status, but the scales used in all tonal jazz are the normal major and minor diatonic scales.[39]

It is hard to miss the snarl in the Olympus reference; Feather's is probably the first book to set down in print the resentments inevitably produced by the abject condescension of jazz and blues scholarship from the very beginning. It is interesting, moreover, that Feather's indignation over the way the jazz tradition has been treated by outsiders leads him not to assert that jazz is to be credited with a novel and ingenious innovation (which is how many other commentators have imagined the blues scale) but, on the contrary, to argue explicitly against the idea of any such innovation. Feather in effect argues for total parity with the European tradition by insisting on jazz music's right to its (Europe's) categories:

> The nonjazz musician, who tends to think of the flatted third and seventh as if they were part of a "jazz scale," overlooks certain basic values. The diatonic scale is, after all, merely part of the chromatic scale, bearing to it the same relationship as that of the vowels to the alphabet. *All* the notes in the diatonic and chromatic scale are fully used in jazz, as in most European music; the status of the flatted third and seventh might be compared with that of the letters W and Y, which in certain areas and contexts may be considered vowel members of the alphabet.
>
> Nor is it mandatory, as has been implied in some diagnoses of jazz, to employ quarter tones. If it were, jazz would be unplayable on the piano.
>
> If the jazzman hits an E Flat while improvising in the key of C, and if the rhythm section is playing an F 9th chord, there will be no social, racial or mystical implications in his playing the note halfway between E flat and E.[40]

Even if the alphabet analogy may not be tenable in every particular, most of Feather's argument is clear and sensible. At least since 1938, "nonjazz musicians" had monopolized discourse on this music. Even where that discourse had been sober, diligent, and respectful, much had still been racist. Virtually all of it had insisted on the fundamental alterity of black music, its incompatibility with European theory, and the existence of a racially essentializing "scale" supposedly underlying a century of diverse creative output. And to make matters worse for Feather, universities were now beginning to grant degrees in jazz performance,

[39]Ibid., 209.
[40]Ibid., 211.

where the art form found itself threatened by the glib pronouncements of "academically equipped musicians" who had never really learned much about jazz. It is easy to see, then, how the blues scale could seem to be just one more harmful concession to the theoretical apparatus of the cultural colonist. In a clear attempt to resist this theoretical apparatus, Feather presents not just another example of disagreement in the *content* of the blues scale, but also an example of the way epistemological orientation and content work together to influence how an author approaches this topic.

Like George Russell, Feather deploys a version of the blues scale as part of a larger ethically engaged musical project. Where Russell arrives at a pair of scales, each with an equal claim to bluesiness, the nature of Feather's project leads him to deny the existence of the blues scale in the first place. It is easy to spot the ways in which these two theories of the blues differ. Less obvious is that Feather's version also implies a fairly well-defined epistemology for the blues scale: if it *were* to exist, it would affirm the consensus view about the irreconcilability of black and white music. It would be the *kind* of thing that would demonstrate conclusively the alterity that so many of the "nonjazz" musicians take for granted. We can note what he *uses it to do* (he denies the existence of the scale) but equally important is what he *takes it to mean*: a scale, for Feather, represents not just a collection of pitches, but a meaningful statement about the generative process at work in a musical idiom.

Other Critical Voices

Feather's resentment of the blues scale is emblematic of a wide range of quarrels with jazz education, but such quarrels are by no means the only way to think about formalized jazz education. It is also implicated in the feud between "traditionalism" and "progressivism" in jazz music, a now-familiar debate played out most conspicuously at the institution of Jazz at Lincoln Center starting in the late 1980s. There, jazz education represents either the level of commitment and rigor appropriate to "America's classical music" (to use the turn of phrase long associated with Dr. Billy Taylor and Grover Sales[41]) or its sterilization and the final phase of its alienation from living American culture. Living through these feuds, career jazz educators like David Baker and Jerry Coker grew accustomed to skepticism from, on the one hand, university administrators suspicious of their music's legitimacy, and on the other, a jazz community wary of academia.

Some more recent scholarship argues that the apparent contradictions of jazz and academia have been overstated. Thus Kenneth Prouty, for example, has argued that any history of jazz education that extends solely from the narrative of its "institutionalization" will inevitably repeat assumptions about the

[41] see, e.g., G. Sales, *Jazz: America's Classical Music, African American Music Reference* (Da Capo Press, 1984).

incompatibility of the two – assumptions which often distort the history of jazz.[42] Similarly, David Ake argues that, whatever we may make of the politics of its institutionalization, colleges and universities are today an important site not only of jazz learning, but also of jazz practice; any account of contemporary jazz that insists on dismissing these institutions can only be willfully out of touch.[43]

As the debate around jazz education has taken so many different turns, it is interesting to note that the blues scale – about which, as we have seen, there was no consensus for most of the twentieth century – seems to have crystallized around the same time jazz made its way into academia.[44] By about 1967, the blues scale would mean, simply, Aebersold's blues scale.

As already observed, most pedagogy that uses the blues scale seems at least vaguely aware of its problematic status as a representation of the blues idiom itself, an awareness that usually appears as a practical warning not to overplay it (e.g. Aebersold's practice of adding tones to the blues scale and his warning to "always use the blues scale with taste").[45] One text that points simultaneously to the emerging hegemony of this scale, as well as a subtle desire to subvert it, is Leroy Otransky's 1977 *The Anatomy of Jazz*. With much less vitriol, Otransky picks up the thread initiated by Leonard Feather, and reminds us that

> It is easy to lose sight of the fact that the practice of jazz preceded the construction of the blues scale. Early jazzmen probably saw little distinction between major and minor modes and used the major and minor thirds interchangeably.
>
> In any event, if the blues scale needs further to be characterized, it would not be improper to refer to it as being in the major-minor mode, or, more simply, bimodal.[46]

Although he is not as indignant as Leonard Feather, it is clear that Ostransky harbors suspicions about the blues scale. His formulation also seems to reflect the prevailing consensus about what the blues scale is, and why it matters; it is probably this consensus that makes it "easy to forget" that nobody had ever heard of the blues scale before 1938, and his subtle "if" regarding further theorizing about blues music can be read as a reaction to the explosion of

[42]Kenneth Prouty, *Knowing Jazz* (Jackson: University Press of Mississippi, 2012).
[43]David Ake, "Rethinking Jazz Education," in *Jazz Matters: Sound, Place, and Time Since Bebop*, 1st ed. (Berkeley: University of California Press, 2010), 102–20.
[44]There are too many examples to list, but a few texts that illustrate the emerging consensus are D. Baker, *Jazz Pedagogy, for Teachers and Students: Revised 1989, Music Workshop Publications* (Van Nuys: Alfred Music Publishing, 2005), Arnie Berle, *Complete Handbook for Jazz Improvisation* (Logan, IA: Amsco Music Publishing Company, 1972), Deborah Brener, "Around the World at the Piano: Becoming Multicultural in Today's Piano Studio," *American Music Teacher* 60, no. 5 (2011): 22–7, Elisa Koehler, "Jazz and the Trumpet," in *Fanfares and Finesse: A Performer's Guide to Trumpet History and Literature* (Indiana University Press, 2014), 150–57, as well as David Huron's empirical study of its consonance from a psychoacoustics perspective. See David Huron, "Interval-Class Content in Equally Tempered Pitch-Class Sets: Common Scales Exhibit Optimum Tonal Consonance," *Music Perception: An Interdisciplinary Journal* 11, no. 3 (1994): 289–305.
[45]Aebersold, *How to Play Jazz and Improvise*, 40.
[46]Leroy Ostransky, *The Anatomy of Jazz* (Seattle: University of Washington Press, 1977), 140.

pedagogical materials using the blues scale that formed the backdrop to his 1977 book.

Jeff Todd Titon, *Early Downhome Blues* (1977) and the Epistemology of the Gamut

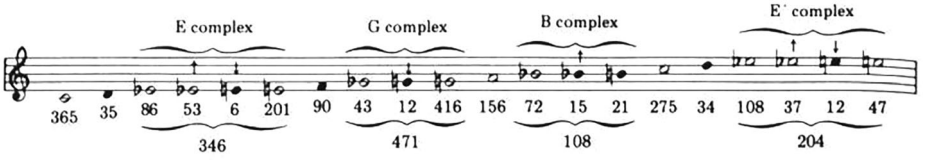
Titon's exhaustive study of the blues genre does not have its roots in the polemics of mid-century jazz pedagogy. It is, instead, merely an attempt to elaborate a comprehensive theory of a musical idiom. In this regard Titon's approach has something in common with that of Sargeant, whose work he cites approvingly. It is, indeed, tempting to read the two as the first and last word in a four-decade conversation about the blues scale. Titon's musical analysis is just one chapter in an ambitious work that also covers the blues as a literary genre and topic in American history. Still, as a work of musicology it is far more ambitious and quantitative than Sargeant's, and in some ways in constitutes the first truly original statement on the blues scale since Sargeant's 1938 study. Recall that Sargeant distilled, from a corpus of carefully selected recordings, two different things: (1) a collection of pitches, and (2) a collection of behaviors. Titon improves upon Sargeant with a larger sample size and far more nuance and precision in his pitch tabulation (and by telling the reader what his actual methods were), but a more profound contribution is the way in which he takes up an epistemological distinction that Sargeant had only gestured at: scale vs. mode.

Like Sargeant, Titon is able to distill a scale from painstaking attention to a blues corpus, and although it reflects a far more detailed methodology, the two scales are in many ways consistent (Example 11).[47]

In this scale, Titon explicitly revises the traditional notion of a "blue note," replacing it with what he calls "complexes," defined as "pitch sequences around the third, fifth, seventh and tenth of the downhome blues mode." These, he tells us "are used in specific but characteristically idiosyncratic ways."[48] The numbers above the note heads indicate "weighted frequency of appearance," and as such have something to say about behavior, but Titon's real insight is to delimit the kind of knowledge represented in a gamut. That is, Titon's is the first theory of the blues to disambiguate the ideas of "scale" and "mode": "While a *scale* simply identifies the pitches in a group of songs, a *mode* indicates their potential uses."[49]

This crucial distinction, confusion about which affected writing about the blues for most of the twentieth century, is actually a commonplace in the

[47] Jeff Todd Titon, *Early Downhome Blues: A Musical and Cultural Analysis* (Urbana: University of Illinois Press, 1977), 154.
[48] Ibid., 154.
[49] Ibid., 156.



Example 11. Blues scale in Jeff Todd Titon, *Early Downhome Blues* (1977).

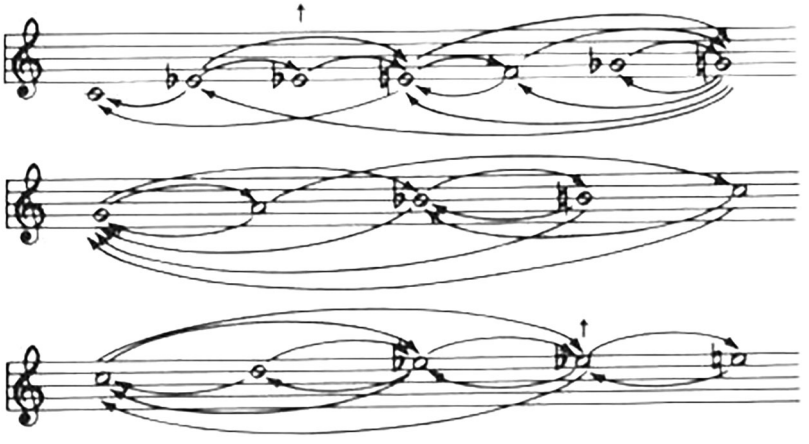
discipline of ethnomusicology.[50] It is also (as noted above) one that Sargeant had already suggested on his own in 1938. Neither fact detracts from the momentousness of Titon's contribution here. Combining the quantitatively derived scale (see Example 11) with listening "carefully and continuously to the sample," Titon is able to construct a "downhome blues mode," which is a concept of a different order from the scale and which gets its own diagram (Example 12).[51]

The mode is a shorthand for a set of musical behaviors, essentially a summary of voice leading tendencies in the blues idiom. The blues scale and blues mode, for Titon, together constitute a "tonal lexicon." This framework is significantly more refined than Sargeant or Schuller, but essentially the three authors so far share the same approach: pitches are tallied and ranked by relative frequency, and behaviors are systematically cataloged. Where Titon parts company with Sargeant (and indeed with virtually every other theorist of the blues), is in extending this "tonal lexicon" to the domain of a "model" in the sense in which that word is used in generative grammar:

> Conventions of customary use makes consequent tones probable, just as it makes consequent words probable. When a listener becomes aware that certain musical tones imply other tones, he operates on a musical probability associated with a particular musical style. Tones, therefore, do not merely imply tones which are consequent in temporal sequence. They also point to a set of related tones, whose organization as a whole accounts for the musical style; and that musical style exists as an abstraction – a model – apart from any single piece of music in that style.[52]

In extending his work to the generative domain, Titon effectively divides thinking about the blues scale into three epistemological tiers: (1) a collection of pitches, (2) a set of associated behaviors, and (3) a "musical grammar" or "set of instructions for creating complete performances" from the first two tiers. The first two tiers we have seen (the blues scale and the blues mode, Examples 11 and 12). The third tier is wholly novel, as Titon's orderly ranking of different kinds of knowledge about the blues. The goal, Titon tells us, is a "set of instructions" for "acceptable" blues songs. As the terminology

[50]See, e.g. Bruno Nettl, *Theory and Method in Ethnomusicology* (New York: The Free Press of Glencoe (Macmillan), 1964). and Charles Seeger, "Prescriptive and Descriptive Music-Writing," *The Musical Quarterly* 44, no. 2 (1958): 184–95. for foundational ethnomusicology texts that make this distinction.
[51]Titon, *Early Downhome Blues*, 159.
[52]Ibid., 139.



Example 12. Titon's "downhome blues mode" from *Early Downhome Blues* (1977).

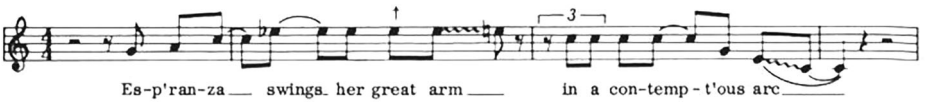
suggests, this is all on the model of a Chomskian transformational grammar, and, while Titon admits that his model is not exhaustive, it is serviceable enough to test on a randomly selected line of text (Example 13).[53]

This is very ambitious work. Not only does Titon surpass all other theorists of the blues in detail and breadth, but he strives to create an empirically verifiable "model" of the style itself. Whatever we may make of the adequacy of Titon's blues grammar, the difference between what Titon has in mind and what Aebersold has in mind (or any of the authors who take the Aebersold scale for granted) is not a trivial one. It is, in fact, the difference at the core of Chomsky's rejection of behavioralism in favor of the "biolinguistic" approach, one that, he argues, is essentially already formed in the eighteenth century. As Chomsky characterizes this difference,

> The contrast, then, is not between descriptive and prescriptive grammar, but between description and explanation, between grammar as "natural history" and grammar as a kind of "natural philosophy," or, in modern terms, "natural science." A largely irrational objection to explanatory theories as such has made it difficult for modern linguistics to appreciate what was actually at stake in these developments and has led to a confusion of philosophical grammar with the effort to teach better manners to a rising middle class.[54]

The difference is between "philosophical grammar," which discovers scientific facts about the language faculty, and grammar as "natural history," which either describes how people talk, or tells them how they should talk. In the texts we have examined, we have seen blues discourse take place at various levels; meticulous cataloging from Sargeant, imperious prescriptions from Hodeir, an explicit attempt at philosophy from Russell. Taking the body of

[53]Ibid., 174.
[54]Noam Chomsky, *Language and Mind* (New York: Harcourt, Brace & World, 1968), 13.



Example 13. Titon's blues scale applied to text, from *Early Downhome Blues* (1977).

scholarship as a whole, however, what we have seen above all is confusion and latent disagreement about the intellectual standing and purpose of the blues scale. This confusion is analogous to the one Chomsky goes to such lengths to dispel. In aligning himself with the Chomskian project, Titon finds himself in a similar role to the one Chomsky played in challenging the behavioralist consensus. Here is Chomsky describing his position with respect to that consensus:

> Philosophical grammar, very much like current generative grammar, developed in self-conscious opposition to a descriptive tradition that interpreted the task of the grammarian to be merely that of recording and organizing the data of usage–a kind of natural history.[55]

The above is Chomsky describing the oppositional stance he found himself taking; it is not hard to imagine that Titon sees himself as doing something similar. Since 1938, writers had been debating the provenance and content of a thing called the "blues scale." They had done so in a way that was either "descriptive" or "legislative" in Chomsky's sense – they were interested in what it should contain, how or whether it should be used, why it was offensive, but they were not interested in it, to use a Chomskian word, *philosophically*. For Titon, taking a Chomskian perspective on the blues, these scholars were not just arriving at the wrong answers, but were asking the wrong questions. As Chomsky maintains, "the facts of usage are what they are, and it is not the place of the grammarian to legislate."[56] Nor, then, would it be the place of the grammarian (or music analyst working in a Chomskian paradigm) merely to "describe." Instead, for such a thinker, in order for the study of music to be truly philosophical, it must seek to discover a system of rules and the principles governing them (a philosophical grammar). And this is what Titon tries to achieve with respect to the blues.

There are certainly gray areas in Titon's model. For one thing, it is not entirely clear that it is possible to apply his transformational rules in a way that really preserves experimental objectivity; are not the criteria for aesthetic "acceptability" vastly more elusive than in language? On another level, there seems to be a degree of non-parallelism in that, where linguistics studies the language faculty, marshaling experiential data only in the service of general arguments about the biological endowment itself, Titon's argument appears to reach no further than a single idiom (the idiom of the blues). If the transformational grammar of the

[55]Ibid., 13.
[56]Ibid., 13.

blues is intended to have implications for the human capacity for musical thought, he never says so; the other alternative, that humans have an innate "blues faculty," while intuitively satisfying, is likewise never advanced explicitly.

Nevertheless, Titon's study is most valuable for our purposes simply because it represents a preliminary step toward remedying the persistent ambiguity that has silently attached itself the study of the blues for a century. Revisit the various blues scales advanced between the years 1938–1967 and you will find not only very little agreement among them in terms of content (before 1967), but also an unwillingness to answer basic epistemological questions about the nature and purpose of the scale in question. For Sargeant, the scale was an element of a "scientific" approach to the study of black music, but one that, he tells us, is less important than certain blues behaviors – behaviors which he could easily have tabulated without postulating a scale at all (something that, in a rudimentary way, is actually what the earliest notaters of negro spirituals attempted by their frequent reminders about black musical practices not amenable to Western notation, even before the blues scale was born). For Bernstein, the "Negro Scale" is a genuine musical technology, a quintessentially American invention whose best destiny should be "absorption" into American elite music, where it can and should cease to sound like jazz at all. For Russell, a scale *is* the chord, and the two exist in a music-theoretical symbiosis that can open new musical horizons beyond the normative shackles of traditional, functional harmony. For Leonard Feather, the scale is a fabrication arrogantly thrust upon black music from academic musicians who should know better. For Aebersold and countless others, it is simply a decent place to start improvising, imperfect but pedagogically convenient.

The crucial thing to notice about all these theories of the blues scale is that they differ not only in content but epistemologically as well. Table 1 diagrams the various epistemological orientations implied by the authors discussed in this paper.

It is likely, moreover, that the two issues – the content and the epistemology – are related; what we think we know when we know a scale will influence what we think belongs in it, and vice versa. In many ways the discrepancies among them with respect to content make more sense when we attend to their discrepancies with respect to kinds of knowledge.

Revisiting Objections to the Blues Scale

Table 1 employs the three epistemological tiers proposed at the beginning of this essay (descriptive, prescriptive, and philosophical). And there are indeed some ways in which these labels can be applied reasonably. Sargeant's scale, in being distilled from a small representative body of recordings, is largely descriptive. Aebersold's, as part of a method book, is plainly prescriptive. Titon's scale is avowedly philosophical. But to group these scales according to epistemological

Table 1. Blues authors of the twentieth century and their various implied epistemological stances.

Author	Epistemological orientation
Sargeant (1938)	Explicitly *descriptive*, although in referring to "wellsprings of racial musical habit," hints at a more ambitious epistemological tier.
Bernstein (1939)	*Descriptive*; the blues scale is a racially essentializing musical technology, more complete than Sargeant's but not suitable for "absorption."
Blesh (1946)	Unclear, but probably *descriptive*.
Russell (1953)	Avowedly *philosophical*, albeit in a different way from Chomsky. The blues scales proposed make no attempt to describe, but are motivated by a broader musical-political emancipatory agenda.
Feather (1957)	*Prescriptive* in his enthusiastic denunciation of the scale, but *philosophical* in that if the scale were to exist, it would represent the fundamental building blocks of blues and jazz, as letters do for words.
Aebersold (1967)	Unambiguously *prescriptive*, but with more nuance and qualifications than is often acknowledged.
Schuller (1968)	Clearly *descriptive* on the model of Sargeant, but also *philosophical*; the scale not only describes extant practices, but unites them with African musical retentions.
Otransky (1977)	Unclear; blues scale cast as epistemologically equivalent to other "modes."
Titon (1977)	*Philosophical*; the blues scale is one part of a tonal lexicon which, in combination with transformational rules, models a blues grammar.

tier in this way is also, in a sense, both artificial and contrary to the argument I am pursuing; more than anything else, these authors are marked by their epistemological heterogeneity and inconsistency. It is easily possible to read Sargeant as philosophical, Schuller as prescriptive, or Aebersold as descriptive. Since most of these authors ignore epistemology altogether, it is possible to read most of them in any way you like.

Epistemological concerns aside, there is no doubt that the central contradictions and inadequacies of the blues scale stem from the fact that it is a European concept applied to a non-European music. Cast as an artifact of this basic act of cultural colonialism, the blues scale can seem to represent some of the most chauvinistic tendencies in Euro-American musical thought, tendencies that are no less grating for being much bemoaned in critical musicology. It seems to presuppose that the European theoretical apparatus is necessarily adequate to any and all forms of music; it exnominates European cultural norms, casting them instead as a neutral, normal backdrop against which a musical other can be isolated and analyzed for its titillating alterity; it is, in a general way, the presumptuous hypothesis of an elite cadre of white non-jazz musicians who deigned to offer an opinion on how black music works without ever really studying it.

And there are indeed plenty of ways in which the blues scale fails as a theory of the blues. By ignoring the element of rhythm (as every scale necessarily must), it repeats the traditional, and frequently racialized, European preference for pitch over rhythm as an analytical category and musical practice. Simply by virtue of being written down, moreover, the blues scale ignores the pedagogical value of learning by ear, discouraging the kind of musicianship without which it is impossible to play the blues well. One could go on, easily, with many more such technical quarrels (as, for example, Leonard Feather did as early as 1957,

and which Gerhard Kubik did from the vantage point of African music scholarship in 2008).[57] And, as the professor cited in Wilf's book at the beginning of this essay suggests, both the scale itself and indignation over this kind of inadequacy continue to be common today.

But even if the scale is widely taught in a way that does no favors to the blues tradition, to object to the idea of the blues scale altogether, or to object on the familiar grounds outlined above, forms something of an argumentative dead end. Few people today would actually maintain the outmoded notion that Western theory and notation is value-neutral or capable of objectively representing anything, and even the most heavy-handed presentations of the blues scale are characterized by reservations about its authenticity and completeness. Its shortcomings are so obvious and familiar, in other words, that they do not really require our attention. Indeed, to polemicize the blues scale is often to commit the same error as to proffer it as a totalizing theory of the blues: both tend to run roughshod over the epistemological nuance that should inform all responsible music theory.

Yet polemics like the one voiced by Wilf's professor are still common and, in a way, alluring. This essay has attempted to make a case for epistemological nuance in the various scales posited over the course of the century. A larger question remains, the one around which the vast majority of arguments about the blues scale actually center, and to which the allure of that polemic directs us: is "the blues scale" ever a useful concept? And if not, does a better one exist?

By way of an answer, let us consider the objection itself in greater detail. What would it mean to maintain that the blues scale is *never* a useful concept? The reflex to dismiss the blues scale, rooted as it is in the desire to do justice to a music that has, historically, not been always been treated fairly, is often characterized by an epistemological confusion that perfectly reciprocates the one at which the majority of this essay takes aim. I conclude by looking closely at a handful of ways one might construe this outright rejection. The blues scale appears, under close inspection, to be as hard to reject as it is to define.

- The blues scale doesn't exist because the original blues musicians didn't know of it.

As a matter of historical fact, this statement might not be as transparently true as many assume. Of course, many blues musicians did not have the kind of education in which scales featured prominently. Still, it is possible that some did. To take one obvious example, it is well known that many Creole musicians in New Orleans were educated in the European tradition and would absolutely have known scales; is it so hard to imagine that the well-documented exchanges between Uptown and Downtown music cultures in New Orleans would have

[57]Kubik, "Bourdon, Blue Notes and Pentatonicism in the Blues."

brought the concept of "scale" to the oral tradition in the early part of the twentieth century? Given that the generic boundary between jazz and blues is largely a product of the marketing strategies of the recording industry in later decades,[58] it may be most accurate to imagine a spectrum of musical literacy in early black American music, where many musicians, perhaps including some of the ones Wilf's professor had mind, could indeed have conceived of their work in explicitly scalar terms.

Even granting the historical accuracy of the conventional wisdom, however, there is more to be said about this truism. Imagine, for example, Robert Johnson getting a lesson from Son House. What does the pedagogy look like, such that we can insist that it employs no concept of scale? Perhaps the teacher performs a selection and the student imitates. The student learns to play with intonation in certain ways, at certain times, on certain scale degrees. Perhaps he experiments with intonation in a way that sounds wrong to his teacher; perhaps his teacher corrects this mistake. Neither party relies on notation in any way or mentions a scale. This is a pedagogy of mimesis and orality, we might say, rather than abstraction and linearity. Only a theoretical account derived from these practices would do this tradition justice.

Yet are we really so confident that there exists no "scale" in this hypothetical lesson? And what would our terms be if we derived them strictly from orality? And what then would be the difference between these two accounts, such that the latter would be so much more responsible? The answers all depend, of course, on what we think a scale is. If a scale is necessarily something notated, or something that is run up and down for the purposes of cultivating manual dexterity, it is manifestly absent here. If a scale refers merely to some account of idiomatically appropriate behaviors, is that not precisely what is enacted in the most narrowly mimetic blues pedagogy imaginable?

At the risk of re-stating the central claim of this essay, what this thought experiment shows is that there are different tiers on which we can imagine the blues scale to exist. On one extreme, we can imagine a version of the scale as maximally explicative, the sole generative element from which all blues derives and to which all blues can be reduced; this is a version of the blues scale that nobody endorses. On the other extreme, there is the thinnest possible conception of the blues scale: merely a way of referring to that which somehow delimits, in the mind of the imagined teacher, at least one set of parameters in the blues idiom. However elusive the *contents* of this thing may be, it is hard to imagine anyone maintaining that it does not, at some level, exist.

Probably there lies somewhere between these two extremes, one of which is plainly ludicrous and the other too minimally explicative to be useful, a version of the blues scale that is both useful and responsible. This brings us to

[58]As Elijah Wald puts it, jazz and blues must be thought of as "one tradition that has been marketed in different ways to different audiences" E. Wald, *The Blues: A Very Short Introduction* (Oxford and New York: Oxford University Press, 2010), 93.

an interesting question: which version of the blues scale does Wilf's professor have in mind? Recall that his complaint targets the institution specifically: "He wrote a book about blues scales … I don't have a Ph. D, but I know what I've heard!" Especially bearing in mind the history of jazz in academic programs, it seems reasonable to surmise that what frustrates him is that he thinks of the blues scale as too epistemologically "thick" – as something that presumes to explain the blues thoroughly and educate students of the blues completely. Further complicating matters is the unmistakable resentment for the institution, a resentment (as we have seen) that carries with it a complex and painful history of inequality.

Given the complexity of that history, it seems fair to surmise that, like so many of the people who *proposed* blues scales, this professor's focus lies outside the fine-grained epistemological terrain in which I have tried to locate the blues scale. It may be that resistance to the blues scale is in many cases a reflex, one that tells us important truths about the social and political dynamics of music in American culture but relatively little about how blues music works. Suppose American history were different, more decent; suppose ours was a culture where elite musicians did not always feel comfortable handing down reductive and essentializing pronouncements about black music. Suppose the history of the blues scale was such that, when the professor thought of this musical idea, he recalled a gentler concept; a phrasebook for the interested traveler rather than a racist account of barbaric customs. Would he have more room to think about what kind of thing it really was? And would he then be as inclined to reject it?

- The blues scale is useless because it teaches bad blues playing. It is a concession to pedagogical convenience, an artifact of jazz in the institution rather than a living musical practice.

Let us grant that a blues scale recognizable as such in performance does broadcast inexperience.[59] Does it follow from this that the blues scale actually leads to wrong playing? Here we should think of the historiography of jazz in the academic institution, as discussed in the work of Prouty and Ake, cited above. A generation of musicians grew up with the blues scale as an important part of their early musical lives. The days when we could point to a class of professional jazz musician innocent of the blues scale, if they ever existed, are definitely over. Where are the harmful results promised by those who warn us against this simple pedagogical expedient? To insist that the blues scale leads the student astray is, more or less, to insist that role of the institution in jazz

[59]Although sometimes that might be the point, for seasoned professionals; see e.g. Benny Green's piano break (2:08) on "Don't be 'Shamed," from his 1992 release *Testifyin'*, which is a long continuous run of the unvarnished Aebersold scale from the top of the keyboard to the bottom.

music is necessarily injurious in every case – a position that is hard to maintain for all but the most determined traditionalist.

- The blues scale doesn't exist because the whole idea of a scale in the first place is a Western theoretical construction that can say nothing meaningful about real blues music.

Again, taken as a matter of historical fact, there is something dubious about this kind of claim. To acknowledge the blues as the remarkable expression of African culture in the face of unimaginable cruelty and oppression is not necessarily to insist that the music culture of the oppressor contributed nothing to the art form; the blues, that is to say, is at least in part a Western music. Very few would deny this much; and yet many would nevertheless insist that the Western category "scale" can not be responsibly applied to it. In a way the blues scale rehearses the question raised by the concept *note*: since there is an irrefutable empirical sense in which the idea of discrete pitch itself is artificial, to speak of notes in non-notated music is, in a basic sense, meaningless. So much more so for the scale, we might argue, especially where it is brought to bear on a music remote from its own point of origin.

And yet in the case of the blues, however insulated the music culture of the early blues musicians may have been, the theory of the note (and, by extension, possibly even the gamut) is physically built into the instruments themselves. Even the Banjo, the most unambiguously African instrument commonly played in the early blues, was eventually fretted; thus in the case of the strongest historical connection to Africa, almost any sound the instrument can produce can be coherently plotted as a note and located in a scale. Notes and scales were acoustic facts both of the dominant musical culture in nineteenth century America and of the instruments on which the music was innovated. The claim that these concepts can describe nothing meaningful about the blues, while it may come from a place of ethical rectitude, ignores the fundamental way in which the blues has always been multicultural.

Scales and Modes on their Native Soil

Apart from the question of the applicability of the notion *scale* to a non-European music, however, it is interesting to note that even within the history of European music, on its own native soil so to speak, the concept of a *scale*, like the related concept of *mode*, is by no means unambiguous. The fact that these were never frictionless or totally coherent concepts to begin with should give pause to the polemicist indignant to see African American music forced into conformity with them. A full treatment of this complex history is well beyond the scope of this paper, but a few words to highlight the epistemological

ambiguity of scales and modes *within* the history of European music theory will form a useful concluding thought.[60]

Starting in the 9th century, European theorists, intellectually committed to the newly prestigious classical tradition of music theory in a Pythagorean vein, sought to reconcile the living practices of the liturgical *cantus* tradition with the diffuse and often poorly understood classical tradition. It is to this moment – the reconciliation of what David Cohen calls the "harmonics tradition" with the "cantus tradition"[61] – that we can basically trace the contemporary notion of a "scale," as it would have been understood by Sargeant when he applied it in 1938.

The initial problem to which the idea of a mode would have been addressed was the difficulty of theorizing the modes of Gregorian chant; eventually, they would be applied to European polyphonic music as well. There is profound disagreement, intellectually and terminologically, among medieval and Renaissance theorists working out the relationship of scale, mode, and living musical practice. The result was a general epistemological disorientation centering on (1) the degree to which (and means by which) a piece could be said to be "of" a mode, and (2) the question whether a mode is an *a priori* compositional object in the mind of the composer or merely an *a postiori* classificatory tool.

As Harold Powers notes, the result of all this for contemporary musicologists is an "unwitting confusion" of emic and etic categories which "seems to be one principal epistemological obstacle to an understanding of the tonal structure of Renaissance polyphony."[62] This in turn has led to a troubling predicament for contemporary commentators (quoting Powers again):

> The terms "mode," "modal," and "modality," in fact, have come to be used so broadly and so loosely that they have lost their usefulness for musical scholarship of many kinds, not just for Renaissance polyphony, but just as egregiously in discussions of music outside the sphere of European art music.[63]

Theorists of Renaissance Europe, when they applied to a contemporary practice a concept imported from a musical tradition understood to occupy a higher position of intellectual prestige, produced an epistemologically confused system of modal and scalar theory that our own generation has largely inherited. And it is this system, with all its confusions intact, that has been brought to bear on African American music, preeminently in the guise of the blues scale. The scale may be distinctly equivocal in what it can tell us about the blues; it is

[60]This line of thought owes much to Harold S. Powers, "Tonal Types and Modal Categories in Renaissance Polyphony," *Journal of the American Musicological Society* 34, no. 3 (1981): 428–70, Harold S. Powers, "Is Mode Real?" in *Musical Theory in the Renaissance*, ed. Cristle Collins Judd, 2013, and Claude Palisca, *Music and Ideas in the 16th and 17th Centuries* (Urbana: University of Illinois Press, 2006).

[61]David E. Cohen, "Notes, Scales, and Modes in the Earlier Middle Ages," in *The Cambridge History of Western Music Theory*, ed. Thomas Christensen (Cambridge, UK: Cambridge University Press, 2002), 307–64.

[62]Powers, "Tonal Types and Modal Categories in Renaissance Polyphony," 466.

[63]Powers, "Is Mode Real?" 172.

worth remembering, however, that the germ of this equivocation is present in the idea of *scale* well before it was applied to music outside its original compass.

It is much to his credit that Harold Powers recognized in this kind of epistemological ambiguity a danger for music scholarship in general, beyond his own rarefied subdiscipline. In a sense, much of what this essay argues is merely that Powers was right to spot this danger, and that the blues scale is one place where we can actually see it materialize.

…

In the case of the blues scale, though, there is something more immediate and emotionally resonant at stake than the proper understanding of Renaissance polyphony and Gregorian chant. The blues is an influential and beloved music, but much of the early writing about it ranges from paternalistic (on the generous side) to downright hateful (on the other). In the way the blues scale forces a black musical idiom to conform with a white theoretical apparatus, it points back to the long history of racial crimes in this country; the way it evokes, and sometimes threatens to perpetuate, those kinds of injustice, is above all what is so offensive about it. It is completely understandable, given this complex range of associations, that its epistemological contours have been consistently overlooked. There are very good reasons, in other words, why discussions of the blues scale have kept issues of fine grained epistemological nuance at bay. Yet the epistemological question is an important one, all the more so for being consistently unaddressed.

The notable exception is Jeff Titon, who, by way of attempting nothing less than a generative model of blues melody, raises the crucial difference between *mode* and *scale*. Like Harold Powers with respect to Renaissance polyphony and Chomsky with respect to the science of language, Titon does the meticulous work of parsing the emic and etic elements whose confusion has handicapped his discipline. This insight appears more or less in passing, however, and Titon does not connect it to a detailed historiography of the blues scale. If he had, he would have noticed that *mode* and *scale* are just two among several different orders of concept variously connoted by "the blues scale." Beyond its tendency to slide back and forth between an identity as scale and mode, it is also invested in a general way with the ambiguous affective dimension of "blue," the complex ideological baggage attending the transit of jazz pedagogy into the university, and a considerable measure of the enormously contentious racial politics of music in American culture.

That last item is, without a doubt, the most important one. To argue, as I have in this essay, that disagreements about the blues scale derive in part from epistemological laxity, is not to deny that basic truth. We can, I believe, acknowledge both at once: its problematic ethical implications *and* the way in which these implications have tended to obscure useful epistemological distinctions. Making these distinctions, in fact, seems to me to be a preliminary step

toward sorting out and mending some of the wounds associated with this scale – or at least making it possible to use it more responsibly in the future. Somewhere between the polar extremes, between the blues scale as exhaustively (arrogantly, offensively) and minimally (uselessly, meaninglessly) explicative, there exists a version of it worth endorsing. The history of the blues scale, a history that for the most part comprises a series of blithely categorical pronouncements, militates against epistemological nuance in the first place; to render the blues scale meaningful and useful, the first step is to acknowledge this part of its problematic genealogy.

Comparing the epistemological ambiguity of the jazz tradition with the strikingly similar confusion surrounding the mode in European history, it seems likely that modes, chords and scales (like so much of music theory) simply engender confusion by their very nature; that, just as there can be no definitive answer to the question "What is the blues scale?, " the same may be said of the questions "What is a scale?," "What mode is this piece in?" or, to quote the title from Harold Powers's landmark 1992 essay, "Is Mode Real?" Whatever version of the blues scale we choose to believe in, acknowledging the epistemological limitations set on the latter questions may help to soothe passions when inevitably we disagree on the first.

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