Intertextuality and the Construction of Meaning in Jazz Worlds: A Case Study of Joe Farrell’s “Moon Germs”

Andrew J. Kluth

INTRODUCTION

In this article, I invoke the concept of intermusicality as defined by Ingrid Monson and develop its role in meaning-making in musical worlds. Her groundbreaking book, *Saying Something: Jazz Improvisation and Interaction* (1996) offers a sophisticated criticism of jazz improvisation and the construction of meaning therein. In doing so, it explores methods by which to nuance and/or rupture traditional historiographies that construct the jazz canon. More than intermusicality, though, I look to a more general intertextuality as a hermeneutic window disruptive to the “great man” histories that have so often heretofore constructed the jazz tradition. I argue that the notion of intertextuality is particularly useful in mediating questions of essentialism in jazz (racial or otherwise) with considerations of practical competency and an artist’s particular situatedness in that body of texts. Working against positivist taxonomies resultant in definitions of what is/is not jazz, this perspective leaves space for the refiguring work of novelty and experimentation requisite therein. This resonates with Steven B. Elworth’s (1995) claim: “Far from being an unchanging and an easily understood historical field, the jazz tradition is a constantly transforming construction” (58). In my suspicion of linear ideas of history and “progress” (and therefore, telos), I prefer to interrogate and ratify instead the complicated relationship of novelty to tradition. The negotiation of these meta-categories is at the heart of the work improvising musicians do; combining disparate ways of being in the world with musical ideas and practices to create new musico-sociocultural wholes.

After theoretical outings exploring ideas of intermusicality and intertextuality, I offer a case study examination of saxophonist/multi-instrumentalist Joe Farrell and his composition and recorded improvisation on “Moon Germs” (1973). My findings show it to be a work displaying recognizable elements of the jazz “tradition” that also displays a novel, imaginative use of quartal harmony.

and diminished material that work both to reference and push at the boundaries of what is/is not an exemplar of jazz improvisation. This case study suggests that developments in the jazz world may be understood (and celebrated) as manifestations of the work done by artists to acquire and synthesize theoretical, practical, and musico-sociocultural competencies while also pioneering novel, imaginative practices. As such, I suggest that one role of the artist is to be a multi-dimensional node in the matrix of symbols and practices that make up a culture’s social realities (Geertz 1973). Along with the musician’s use of imagination to evince new directions, the unique situation of each musician speaks to their role in the above-mentioned “constantly transforming construction” of the jazz tradition.

**INTERMUSICALITY**

In her interdisciplinary study of jazz improvisation, Ingrid Monson introduces the idea of intermusicality as a theoretical structure by which to consider the intertextual capacity of music as a communicative discourse, and its concomitant construction of meaning. Monson notes that “[t]he signs and practices through which musicians construct and represent themselves and others in musical terms are extremely powerful in African American music in general and jazz in particular” (121). This constellation of signifiers and practices that further complicate other taxonomizing factors such as genre and form helps to compose musical worlds and cultural memory and, furthermore, to situate new works therein (Keyes 2009, 13-4). Other helpful theorizations of musical disposition cultivated by these signifiers and practices include George Lewis’s neologism Afrological (1996) and Travis Jackson’s consideration of the blues aesthetic (2012, 109-35).

In his summation of Lewis’s term Afrological with regard to ideas of freedom, tradition, and legacy, David Borgo (2002) notes that the relevant signifiers referred to are not only musical. The “essential contrast [between Afrological and other subjectivities]…lies in how they arrived at and chose to express the notion of freedom…An Afrological perspective implies an emphasis on personal narrative and the harmonization of one’s musical personality with social environments, both actual and possible” (171).² There is here an implication that in spite of the freedom inherent in the field of musical improvisation, in the Afrological experimental sensibility, one’s personal narrative—that is further implicit of history—is important. This non-essentialist musico-sociocultural continuity might be referred to as a shared acculturation into the intertextuality of the jazz

---

² Borgo notes that Lewis’ term is not ethnically essential, but instead refers to historically emergent social and cultural attitudes.
aesthetic. In this way, regardless of what a musician’s current practice sounds like, their training and the familiarity with the corpus of recorded jazz music, performance practices, histories, and apocryphal anecdotes informs their place in the matrix of symbols (what I will call texts) that make up the jazz world.³ My interest in the intertextual—in addition to (or including) the intermusical—becomes relevant here. By taking an intertextual point of entry into any consideration of jazz histories (small- or large-scale), one can better recognize the manifold layers of signification inherent in the production and criticism of any cultural artifact and its position in the story of jazz. And moreover, to recognize the incredible work of collection, synthesis, and imagination that go hand in hand in the production of any artist’s contributions.

INTERTEXTUALITY IN GENERAL, AND IN JAZZ STUDIES IN PARTICULAR

As a contemporary critical structure, intertextuality got its start in poststructuralists writings of the 1960s and has held varying sway as it has developed. The idea of text in this critical landscape is not confined to those texts that are printed and read in the conventional sense. Rather, the idea of intertextuality avoids the strictly logocentric. “Texts” can be thought of as anything that signifies: colors, signs, textures, sounds (even those other than speech utterances), etc. Marko Juvan (2008) offers a general theory of intertextuality that, though long, bears reprinting here:

We may understand general intertextuality as a feature of all texts. It is not proper to literature or some of its genres or works. It affects the author, speech act, an utterance’s subject, the process of textualizing, the text itself, its reception, reaction to it, and the reader’s identity: it is a condition of producing texts, their existence, formal and semantic structure, and readability. Any text comes into being, exists, and is comprehensible solely through content and formal ties with other utterances, existing texts, and also sign systems (codes), types of discourse, linguistic registers, stylistic and genre conventions, presuppositions, stereotypes, archetypes, or clichés. A text presupposes or implies these elements and structures from past or contemporary sources, and by means of them can enter into yet other intertextual relations: from actualization of sign systems, paraphrasing, and quoting to derivations and transformations, referring and alluding. (44-5)

³ Consider contemporary musics that by many standards do not sound like “traditional jazz” (incorporating blues aesthetic, swing, acoustic instruments, etc.) but are regardless given the appellation “jazz”: recent recordings from Kneebody, The Bad Plus, Tigran Hamasyan, Ben Monder, Esperanza Spalding, and Louis Cole, for instance.
The idea of music as a text to be situated and interrogated for its meaning and complicity in structures of power has precedent in much of the work of the New Musicoology of the 1980s and 1990s. For example, in attacking the notion that meaning can only be instantiated by a truth claim, Lawrence Kramer’s *Music as Cultural Practice* (1990) trades on the idea that music is a text that resists fully disclosing itself. As such, an analyst may not exhaustively describe a work’s meaning but may indeed open a hermeneutic window “through which the discourse of our understanding can pass” (6).

More explicitly in reference to jazz, Frederick Garber (1998) argues that “the [jazz] solo is a text because it is full of traces and indexes—what it means when we say that the history of jazz is present in every improvised solo, that it appears in large part through the choices one makes at any one time. These are jazz’s *déjà-lu* [‘already read’], and they are among the reasons why we can speak of jazz’s inter texts and therefore of the solo as text” (73). It is, however, the work of musicians and listeners to become acculturated to the (inter) texts which are the scaffolding upon which the significance of jazz performances hang. The significant pleasure and meaning offered an acculturated listener in instances of recognition of contrafacts, quotes, types of harmony associated with particular innovative players, or more difficult to parse elements such as a player’s timbre, deployment of certain digital or harmonic patterns, etc., are much of what make up the joy of listening to jazz (as much as analogous lists could be made for any other cultural practice). An intertextual consideration of music focuses on how an artist situates themselves in this body of texts, works within it to stretch its bounds by artfully intertextualizing or juxtaposing heretofore familiar elements that might position the artist and their output in the constellation of cultural artifacts that make up social reality. To further quote Garber: “[O]ne cannot be original outside the conditions that define one’s originality; but it is also a way of saying that one creates within conditions, with and against those conditions. The primacy of improvisation is in no sense encumbered or compromised by an awareness of the frames of discourse. Our awe before the auratic [in the Benjaminian sense] is in no sense lessened because we acknowledge that aspect of the solo that has to be called text” (Ibid.).

As the musico-sociocultural practices that compose jazz continue to expand and become more difficult to parse in the traditional “great man” narratives here criticized, it may make more sense (and be more informative) to instead look to how a musician’s background and work may relate to the constellation of texts composing the jazz world and constructions of meaning therein. This attitude also alludes to the idea that the jazz tradition is not necessarily teleologically “going somewhere,” but rather that novel practices—whatever we may choose to call them—are the result of an artist’s innovation and personal situatedness with
regard to the corpus of texts that create their (and our) intertextually significant social reality. In the practical case study and transcription that follows this theoretical consideration, I will frame Joe Farrell’s *Moon Germs* as a virtuosic work of collection, synthesis, and imaginative creation within the culturally inscribed signs and practices which compose the jazz world—and furthermore as a more fruitful (if less tidy) consideration of how jazz continues to transcend itself from within. This intertextual approach regards the improviser not as a genius creating meaning from nothing, but as an artist who synthesizes extant surrounding elements into a unique voice tempered with labor and imagination.4

A WORD REGARDING METHODOLOGY

It seems to me the number of possible approaches to valid intertextual inquiry are so many (inexhaustible?) that rather than argue for a systematic best approach, one must choose instead a useful approach for one’s kind of inquiry.5 To that end, I choose to offer some historical perspective relating Farrell to the jazz world as well as a transcription. I offer a transcription not because I believe it offers a final description of Farrell’s performance in all its possible significance but because the limited, though useful, hermeneutic window it gives allows us to notice Farrell’s deployment of texts and sound terms from which useful deductions can be drawn.

JOE FARRELL AND INTERTEXTUALITY

In the case of saxophonist/multi-instrumentalist Joe Farrell, being considered by some to be competent but unoriginal, a Coltrane clone, an overly commercial player, or simply a “traditional-type tenor player,” may have limited the influence of his own legacy and degree of recognition in the jazz canon as traditionally

4 Ralph Waldo Ellison (1964) expressed a similar idea when he recognized the nature of the jazz improviser as a culturally situated social agent informed by their intertextual musico-sociocultural situatedness: “True jazz is an art of individual assertion within and against the group. Each true jazz moment . . . springs from a contest in which each artist challenges all the rest; as individual, as member of a collectivity and as a link in the chain of tradition. Thus because jazz finds its very life in an endless improvisation on traditional materials, the jazzman must lose his identity even as he finds it” (234).

5 A few possible analytic approaches that come to mind include: considering a historical and/or stylistic connection of Farrell to Coltrane through Creed Taylor’s Impulse! and CTI Records, connections between jazz fusion and Afrofuturism potentially drawn from the eponymous song’s title and sci-fi album art, experimentations with blues form and aesthetic throughout the record, the use of electric-acoustic instruments, possible economic factors in incorporating crossover rock/funk grooves, the popularity of these early 70s CTI records with hip-hop producers, etc.
constructed (Berliner 1994, 165). While not often recognized as a major influential figure in jazz history, Farrell is an example of a musician whose work to situate himself in the matrices of symbols and practices of many musical worlds allowed him to work with great practical competency as well as to push at the boundaries of the musical world he inhabited. I offer here a consideration of Farrell’s social and historical context as well as an analysis of his 1973 CTI release “Moon Germs” as evidence of his role not only as a great synthesizer, but as an innovator.

Tim Price—a saxophonist and friend of Farrell’s who was present at Van Gelder Studio for the 1972 recording of Moon Germs—shared an anecdote in a conversation with the author (November 29, 2014) that highlights Farrell’s awareness of himself as situated in the body of signifying texts that make up the world of jazz. Price recounts that after having recorded a take of “Great Gorge” during the Moon Germs sessions to which Price nodded enthusiastically, Farrell approached him saying, “[A]ll I wanted to do was play like Charlie Parker.” Farrell was not playing anything like bebop on this session (“Great Gorge” has a funk/rock-oriented head with a modal improvising section), but his recognition of and alignment not only with Parker’s knowledge of tradition, improvisational logic, and instrumental mastery, but also with his oft-noted openness to incorporation of musical texts outside the jazz tradition is revelatory. It speaks to Farrell’s understanding that the construction of meaning in a jazz performance lies not only in the extant world of jazz signifiers, but also in the attitude of experimentalism and the inclusive play of sounds and practices (texts) from other real and imagined cultural worlds.⁶

While undoubtedly well-studied in and inspired by the luminaries of the jazz world, Farrell possessed an original voice with virtuosic skill on several woodwind instruments and an extremely advanced harmonic concept. Prior to his death in 1986, Farrell was growing as an innovative musical thinker and performer as is well-displayed on his 1973 release. His third in a series of six records for Creed Taylor’s CTI label, Moon Germs is laced with accessible rock elements as well as post-bop and modal grooves. The record shows Farrell moving away from standard jazz quartet repertoire favoring compositions heavily influenced by the then-burgeoning fusion sound. This hybrid of jazz and rock music was at the time synonymous with pianist Chick Corea’s band Return to Forever, of which Farrell himself and Stanley Clarke (who filled the bass chair on Moon Germs) were members. Reinforcing the connection with Corea and the fusion style is the fact that two of the four tracks on the record, “Great Gorge” and

⁶ This attitude is similar to what has been termed—in the world of 1960s Euro-American musical experimentalism—The New Virtuosity (Salzman 1963).
“Times Lie,” are Corea compositions. Still, in comparison with Farrell’s other efforts for CTI, which include the heavily funk- and rock-oriented records *Penny Arcade* (1973), the oft-sampled *Upon This Rock* (1974), and *Canned Funk* (1975), *Moon Germs* is predominantly a jazz record. The title track, “Moon Germs,” is a minor-keyed twelve bar blues in E♭ concert key featuring Farrell’s soprano work which is “[o]bviously influenced by early ’60s John Coltrane but sounds like no one but himself” (Keresman 2002). The work is flush with the sort of rhythmic drive and kineticism which were de rigueur for any up-tempo, minor-keyed, and modally constructed composition from the early 1970s. But, while CTI’s early 70s offerings were sometimes criticized for their commercial bent, “Moon Germs” is not a rehashing of stale grooves and improvisational styles. Rather, it displays not only Farrell’s familiarity with and practical competence regarding the texts that make up the jazz world, but also his novel approach that worked to expand the borders of said world. The eponymous track features Herbie Hancock on electric piano, Stanley Clarke on electric bass, and Jack DeJohnette on drums, with Farrell on soprano saxophone with composer’s credit.

I offer evidence—by way of his historical and social context as well as through transcription and analysis of his composition and recorded improvisation on “Moon Germs”—that Farrell’s development of unique diminished and quartal harmonic vocabularies in particular show him to be an artist with great intertextual knowledge of the symbols and practices of several musical worlds and an imagination for the new. Before getting to the analysis of “Moon Germs” itself, I will offer a brief history of Farrell’s attitude toward the craft of music making as a woodwind specialist in the world of musical improvisation.

**INSTRUMENTAL INTERTEXTUALITY**

Differentiating himself from his contemporaries by his great flexibility and openness to musical styles, Farrell was a deeply gifted instrumentalist. In addition to his remarkable technical proficiency on the saxophone, he also excelled as a performer on the flute, clarinet, and double reeds. Tim Price ascribes this proficiency to Farrell’s treatment of each instrument as a unique challenge to be respected individually, to the serious study each instrument and its relevant body of literature deserved. For instance, Price (in discussion with the author, November 29, 2014) shared an anecdote wherein he was talking with Farrell about his own early study of the famed Joachim Andersen book of flute études. Upon mentioning the challenging book of études, Farrell began playing the études from memory with remarkable precision, almost glibly demonstrating his
mastery of the instrument not as just a woodwind doubler, but as a specialist. Regarding the difficulty of improvising on the flute, Farrell said:

...it's very demanding and you have to play it precisely. Now my concept of playing flute is that I like to get a so-called legitimate tone...In the final analysis, I feel, the flute should be played according to more exact standards. And I feel that if someone wants to play flute, they've really got to put some time in on that alone, without playing tenor and a few other things with it. (Hickock 1974, 40)

Farrell certainly did put the time in as, after all, he attended the University of Illinois where he majored in flute performance as a major in saxophone performance was not yet offered at the institution.

Additionally, perhaps due to his familiarity with various instruments and their significant histories and performance practices, Farrell understood instruments as having differing roles and degrees of appropriate “fit” in differing genres. Of the use of soprano saxophone in the jazz fusion music of the early '70s, he said, “I'll tell you, I think the soprano, for some odd reason, fits in with the times a lot more than the tenor does” (Ibid., 39). To make whatever he happened to be playing fit, Farrell endeavored to play each instrument in the correct style and with the best sound for each live engagement or recording job he might have. His estimation of many players’ careless approach to picking up the soprano saxophone due to its then–new popularity in the 60s and 70s was characteristically thoughtful. As one might expect, Farrell knew the history of the instrument and respected its eccentricities:

The soprano thing was in back in the ’30s because of Sidney Bechet and a few others, but after that it became like taboo, out of style. Nobody was playing it very well, anyway. But then John [Coltrane] popularized it with Favorite Things (sic), and after that, everyone felt they could pick up the instrument and play it. But it's not that easy to play; you have to work on it 'cause it has a lot of pitch problems. (Ibid., 40)

His success as a session musician performing for Top 40 singles, movie and television soundtracks, nightclub acts, show bands, and the biggest names in jazz speak to his success as a doubler of the highest caliber with knowledge of, and practical competency in, many musical worlds. It is likely that this competency is reflective of his musical education which—in terms of intentional critical listening, exposure to musicians, histories, and jazz practices—began early. As an Italian-American child growing up in Chicago, Farrell absorbed the music around him. “I would sit with my ear next to the radio, and my mother told me I had all the tunes memorized with all the Italian words” (Coryell & Friedman
1978, 237). His sister later married a saxophonist that gave Farrell a clarinet at the age of ten. In addition to his brother-in-law’s early influence as a player, he also aided in Farrell’s education by sharing Benny Goodman records and stacks of seventy-eights, to which he listened over and over (Ibid.). This habit of listening and synthesizing continued as Farrell grew as a musician and, as Price recounts superlatively (in discussion with the author, November 29, 2014), Farrell’s knowledge wasn’t limited to jazz standards. Rather, as Price characterized him, he was a “voracious listener who knew everything both old and new; and when possible, in all keys on several instruments.” While perhaps hyperbolic, Price’s estimation of Farrell’s attitude characterizes him as a serious student and natural synthesizer of musical styles.

The question of Farrell’s use of the soprano saxophone on “Moon Germs” is interesting with regard to its historical significance and perceived novelty. Did he play soprano solely because of John Coltrane? Is there a straight correlative line between the re-popularization of the soprano saxophone commonly attributed to Coltrane’s use of it in his 1961 recording *My Favorite Things*: In Farrell’s words:

Well, see, John popularized it; John Coltrane, in the late-'50s and early-'60s (you know, with *My Favorite Things*). And soon after that, every tenor player began to play it, and now everywhere I go, even the alto players are playing soprano. Everybody’s playing the soprano. It’s become like the latest thing in jazz. (Hicock 1974, 39)

But, though many authorized histories of jazz will state that the soprano saxophone was re-popularized by Coltrane to the occultation of all others, the instrument’s popularity was already ascending by the late 50s and early 60s. Before Coltrane, Johnny Hodges had notably performed on soprano. Steve Lacy, too, can be heard developing his voice on the instrument on Cecil Taylor’s *Jazz Advance* (Transition 1956) and as a leader on *Soprano Sax* (Prestige 1958). Farrell himself had been performing on soprano in various contexts and his employment of the soprano in 1972 could not have been just an imitation of Coltrane. In fact, Farrell can already be heard playing soprano saxophone on the Slide Hampton composition “The Pharaoh” from *Maynard ’61*, which features Farrell as soloist on three instruments: flute, soprano saxophone, and tenor saxophone. As one might guess from the title, this record was released in 1961, the same year as Coltrane’s famous release, and reveals Farrell as another early—if not yet well-known—innovator and proponent of the soprano saxophone.

In addition to his prowess on multiple instruments, Farrell’s work to appropriate and synthesize ideas from other musical worlds is notable. For instance, Tim Price (in conversation with the author, November 29, 2014) tells of Farrell’s
learning from and practicing with pianist Jaki Byard when the two worked with Maynard Ferguson’s band in the early 1960s. Price recounts that Farrell and Byard would study the music of Debussy, Ravel, and Catalan composer Federico Mompou (among others) and also practice diatonic fourths through all keys and chord types, as well as many permutations of pentatonics.

The consideration of more complicated webs of musical histories and practices in which a player such as Farrell was situated allows for a richer understanding of his relationship to the jazz world and his role(s) in its development. Seen in this light, while all musical improvisers may not be “important” innovators, they remain significant and justly celebrated as nodes in the web of musical, embodied, and eminently cultural symbols and acts. This attitude seems to reflect Farrell’s intertextual approach to jazz and improvisation as he stated: “The way I look at it, all that jazz does is incorporate the best from every world. So that now jazz even includes rock. So it takes the best of rock, the best of pop, the best of melodic music, the best of avant-garde, and it begins to take a shape of its own. I call it like a hybrid, a combination of all those things.”

“MOON GERMS” AS COMPOSITION, AND FARRELL’S RECORDED SOLO

In the up-tempo and minor-keyed blues form of “Moon Germs,” Farrell would have been entirely within “correct” idiomatic bounds—referencing “traditional materials,” as Ellison might have said—had he restricted himself to a modal improvisation consisting predominantly of Dorian scale-oriented material. Rather, while incorporating harmonic and melodic elements prevalent in texts already coded as jazz, Farrell brought his own personal background, years of listening, studies on different instruments, and working to incorporate novel harmonic devices with Byard and others to bear on “Moon Germs” to perform a logical and virtuosically executed improvisation. As an intertextual palimpsest, the composition and improvisation are not only clearly (and necessarily) influenced by others, but also display Farrell’s unique creativity and musicianship.

At the time of Moon Germs’ recording, musicians such as Wayne Shorter were incorporating new modal structures (in addition to the explicit compositional deployment of modal structures in Miles Davis’ Kind of Blue in 1959)

---

7 It is possible—though I’m unable to confirm my hunch—that some of the diminished patterns I will describe below may have been influenced by Farrell’s flute training. This suggestion comes from the aural and theoretical resemblance some of his diminished patterns bear to those in André Jolivet’s piece Chant de Linos (1944), which had become a standard piece in the flute repertoire by the time of Farrell’s studies at the University of Illinois. If true, it would help to confirm my thesis regarding relationship of intertextual competency to novelty in the continual adaptation of jazz as a musical “tradition.”
into their improvisations and compositions for more than a decade already, thereby growing the body of texts incorporated into the jazz world. The use of modes of the melodic-minor scale was growing in popularity, while the presence of blues harmony maintained its relevance to the jazz sound as displayed in then-contemporary recordings such as those of Art Blakey and the Jazz Messengers. A close analysis of Farrell's improvisation on “Moon Germs” shows that he incorporates the above-mentioned harmonic and melodic materials (texts) in addition to two that are unique to his improvisational vocabulary. The then-conventional harmonic and melodic texts deployed and referenced in Farrell's improvisation may act as familiar sound terms tethering the composition and improvisation to the aforementioned minor blues style while allowing Farrell to employ deviations without completely alienating the listener, or, put another way, to reference those symbols and practices familiar to the jazz listener from the body of texts making up the jazz world while still pushing at its boundaries. The deviations to which I refer are Farrell's novel use of the diminished scale and diminished scale-derived patterns and his use of quartal harmony. To support this claim, I now turn away from my discussion of Farrell's personal context toward a more technical discussion his novel applications of both.

DIMINISHED HARMONY

In what is sometimes termed bebop language, diminished harmony is deployed functionally in Dominant/Tonic chord movement. Extensive incorporation of diminished harmony can be heard clearly in the melodies and improvisations of such seminal jazz musicians as Charlie Parker, Dizzy Gillespie, Bud Powell, Sonny Stitt, Sonny Rollins, and John Coltrane. Farrell's improvisational style was certainly influenced by these texts, and as has been noted by others, especially those of Coltrane. Hence, for reference I offer an example of one of Coltrane's uses of diminished harmony from a trio reading of Cole Porter's “I Love You” from *Lush Life* (1957). This example demonstrates a then-common deployment of diminished harmony in bebop and highlights the originality and differentiation implicit in Farrell's applications thereof (Figure 1).

---

8 A veteran of Dizzy Gillespie's band (*Birk's Works*, 1951; *The Champ*, 1951), Coltrane was no stranger to bebop.
The harmonically ambiguous trio setting of bass, drums, and saxophone allows Coltrane to use inverted diminished vocabulary to weave melodies over the bass/drum groove introduction and coda as in the first eight measures of the introduction.

Though the harmony of the introduction to “I Love You” is static and built around the tonal center of C, Coltrane’s use of the C (Dominant) inverted diminished scale is entirely functional as it builds tension that is released in the opening bars of the melody, which are in the key of F (Tonic). The consistent use of diminished material throughout the improvisation which follows is also consistently functional and, in that sense, traditional. In his monograph Inside Outside, Reese Markevich (1967) points out that this functional use of the diminished scale superimposed over a dominant chord (or ii7 V7 I harmonic progression), functions as a cycle of harmonic substitutions. When jazz musicians play the diminished scale in a descending manner over a ii7 V7 I chord progression, as is common bebop practice, a tritone substitution cycle is created in place of the original chords (Figure 2). Both Coltrane’s improvisation over “I Love You” and the standard ii7 V7 I application in bebop trade on the aforementioned capability of diminished harmony to augment functional, diatonic harmony. I show in the analysis below how Farrell goes further to invent a para-functionality of diminished harmony that, while related to more standard jazz symbols and practices, goes beyond traditional bebop application and reimagines what these sounds can do.

<table>
<thead>
<tr>
<th>(Dm7</th>
<th>G7</th>
<th>G#m7</th>
<th>C#7</th>
<th>Cmaj7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dm7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cmaj7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2. The deployment of descending diminished scale over a ii V I implies a tritone substitution cycle in place of the original.
QUARTAL HARMONY IN JAZZ

The other compositional and improvisational element employed by Farrell that I analyze below is his unique use of quartal harmony. The snaking, diminished-inflection of “Moon Germs” melody is underpinned by stacks of perfect fourths in the electric piano, rather than explicit voicings of tertian chord tones. This perfect fourth interval and quartal harmony do appear prevalently in the jazz language of the 1960’s, particularly in the work of McCoy Tyner (famously an accompanist to John Coltrane), who “developed a particular type of voicing in fourths that was to characterize the sound of the (Coltrane) quartet…Chick Corea and many others emulated Tyner’s approach, and he [Tyner] has perhaps been underestimated by the critics as an influence on modern piano style along with [Bill] Evans” (Porter 1998, 182). Quartal harmony can also be explicitly heard in many compositions beginning in the mid 1960’s, notably in Wayne Shorter’s famous composition “Witch Hunt” (1965) and Eddie Harris’ “Freedom Jazz Dance” (1965). This type of harmony is prevalent in “Moon Germs” and acts as a subterfuge creating harmonic ambiguity. In his landmark book, Thinking in Jazz, Paul Berliner (1994) agrees stating, “[p]ractices like omitting chord roots, building chords around fourths, and increasing color tones result in enlarging the harmonic ambiguity of voicings” (334). Furthermore, by obfuscating the functionality of diatonicism, the use of quartal harmony may deny the listener commonly expected cues regarding a composition’s harmonic movement and thereby create tension. Farrell recognized this ambiguous nature of quartal harmony and incorporated it into his compositions and improvisations effectively—as I will show—to a remarkable degree.⁹

“MOON GERMS”: COMPOSITIONAL AND IMPROVISATIONAL CHARACTERISTICS

Compositionally, “Moon Germs” can be generally taxonomized as a minor keyed twelve-bar-blues form in the post-bop style. The composition is similar in construction to John Coltrane’s “Equinox” (1964) as well as countless similarly constructed minor-blues based jazz compositions. The form’s root movement is usually as follows: the first four bars on the tonic, measures five and six on the sub-dominant, seventh and eighth measures moving back to the tonic. Measure

---

⁹ Berliner makes direct reference to Farrell in an anecdote from trumpeter Benny Bailey discussing Farrell’s discipline in incorporating quartal harmony into his improvisations citing “…the case of Joe Farrell…who once reported that it ‘took him a year of studying those fourth patterns before he could work them into his solos’” (165).
nine is on the flatted thirteenth (a B natural in our case referring to E♭) falling to the dominant in measure ten with eleven and twelve back on the home tonic.\footnote{A few other compositions (texts) with which Farrell was no doubt familiar with that bear similar chord progressions include John Coltrane’s “Mr. P.C.” (1959) and Benny Golson’s “Hasaan’s Dream” (1956), though the potential list is very long.}

Upon close examination of “Moon Germs’s” melody, it should be no surprise that Farrell’s improvisation would contain diminished material. As can be seen in the accompanying transcription and analysis of the melody and improvisation, the melody includes what I will refer to as an inverted diminished saw pattern (as the note-heads that represent it create a saw-tooth pattern on the staff). An ascending inverted diminished saw begins by rising a major third, falling a minor second, ascending again a major third, falling a minor second, etc. An inverted diminished saw can also descend by descending a major third, rising a minor second, descending a major third, falling a minor second, etc. If this pattern is repeated four times, each note in the eight note diminished scale is used. This pattern is not new or unique to Farrell’s composition or improvisation and can be found in the improvisations of many jazz performers. What makes Farrell’s use of the inverted diminished saw novel is its lack of explicit functionality as in bebop’s most common context for diminished scales, as noted above, in a functional superimposition over a dominant seventh chord with a flatted ninth.

From the second note in the melody to the seventh (G♭ B♭ A D♭ C E), “Moon Germs’s” melody is an explicit inverted diminished saw. Another manifestation of Farrell’s diminished outlook for the composition is a specific chord, most easily understood as a C7 over an E♭ pedal, which appears in beat four of measure two as well as most of measure eight of the composition. A C7 chord consists of C, E, G, and B♭, all of which are found in an E♭ inverted diminished scale. This chord stands as an important compositional element in “Moon Germs” as it augments the four explicit tonal centers in the standard E♭ minor blues format featuring E♭, A♭, B♭, and A♭ tonal centers and begins asserting the unusual presence of the inverted diminished scale in this minor-blues form. In addition to the inverted diminished material, Farrell includes much of the aforementioned quartal harmony in his improvisation. This is also alluded to in the composition’s melody as the first and second notes of the melody are a perfect fourth apart and the melody comes to rest for all of measure four on the fourth scale degree (A♭) of the chord (E♭m7). The use of the inverted diminished saw and quartal harmony can be explicitly seen in the first four measures of “Moon Germs” as shown in Figure 3. This quartal implication occurs again in the sixth measure during which the melody note (D♭), held for three beats against an A♭7 chord, is the fourth scale degree. Farrell’s repeated use of the fourth scale degree during the
composition’s melody displays a relationship to the work of the Coltrane quartet featuring McCoy Tyner and the soon-after normalized but still-ambiguous sound of quartal harmony. The extended application and development of diminished and quartal harmonies from the extant jazz texts will be further explored in the analysis of Farrell’s improvisation.

![Musical notation](image)

Figure 3. The first four measures of “Moon Germs” bear both an inverted diminished saw and quartal harmony.

**FARRELL’S IMPROVISATION**

As has been noted above, Farrell had a deep knowledge of the various texts of the jazz world, and further appreciation for and familiarity with the texts of other musical worlds. His attitude of intentional listening and careful study no doubt carried over into the way he engaged with the work of his contemporaries, the music of John Coltrane in particular. Though Coltrane’s *My Favorite Things* was released in 1961, Farrell was also recording on soprano in 1961. Coltrane was (and remains) one of the most influential musicians of the twentieth century and, by the recording of *Moon Germs* in 1972, Farrell had undoubtedly studied and internalized many elements of his improvisational approach.\(^\text{11}\) To demonstrate my claim that Farrell had great practical competency navigating and invoking the dense intertextual world of jazz but also a well-developed and personal harmonic concept, I offer transcribed examples and analysis from the recorded improvisation in question.

The improvisation begins echoing the composition’s melody with an explicit inverted diminished saw and continues to use the pattern a total of ten times during his fifteen choruses.\(^\text{12}\) Though the inverted diminished saw pattern only

---

\(^{\text{11}}\) In a 1962 article on John Coltrane’s musical evolution, Barbara Gardner quotes Julian “Cannonball” Adderley who, even then, recognized Coltrane’s great influence and need to continue to push at the boundaries of his musical world: “He has a tremendous influence and will have on the young tenor players coming up now. He is a definite departure . . . John decided, all of a sudden, that though he was one of the most successful of these modern players, that wasn’t good enough for him” (Gardner 1998, 20).

\(^{\text{12}}\) mm 15, 18-20, 62, 63, 101, 150-151, 163, 172, 399, 402
occurs explicitly ten times, easily recognizable inverted diminished material occurs another twenty times. Additional diminished material occurs five more times for a total of thirty-five instances of inverted diminished and diminished material during Farrell’s three-minute improvisation. The sheer density of instances of diminished vocabulary clearly indicates Farrell’s commitment to referencing and developing material from his composition’s melody and overarching structure while exploring his novel and improvisational concept. This unusual and para-functional way in which Farrell deploys the diminished scale and its constituent notes implies the harmonic progression during the melody as well as Farrell’s improvisation. By this clever implication, the harmony and form of “Moon Germs” are still recognizable though often obscured.

An extrapolation of the standard bebop-type of tension and release (bearing conceptual resemblance to Coltrane’s introduction to “I Love You”) occurs in the beginning measures of Farrell’s improvisation as he uses the E♭ inverted diminished scale over the first four measures of the blues form which are voiced as an E♭ quartal chord. By superimposing the E♭ inverted diminished saw and scale material over the first four bars—voiced quartally by Hancock at the electric piano—Farrell creates a feeling of movement and tension. This, in spite of the ambiguous and static tendencies of the quartal harmonic underpinning, orients the listener’s ear and drives Farrell’s improvisation forward. This tension “wants” to be released by falling in a pseudo-perfect cadence to the A♭ tonal center of measures five and six of the twelve-bar form. Farrell’s originality is displayed as he creates more pseudo-perfect cadences by introducing inverted diminished vocabulary over the B7 of measure nine of the form falling to B♭7 in measure ten. This B♭7 then resolves via a pseudo-perfect cadence to the E♭ minor of the last two measures of the form. Ordinarily, a B7 chord does not have a dominant relationship to a B♭7 chord, but Farrell’s ingenious use of an inverted diminished scale over the B7 creates an implicit perfect cadence falling to the B♭7. This is because the inverted diminished scales associated with B7(♭9) and F7(♭9) are comprised of the same eight notes, thereby putting B7(♭9) in an implicit dominant relationship to B♭7’s tonic (Figure 4).

---

13 mm 22, 27, 31, 32, 40, 41, 46, 47, 55, 56, 67, 90-91, 99-100, 102-103, 124, 131, 134-137, 141, 161
14 mm 33, 39, 113-115, 132, 165-171
Farrell even succeeds in incorporating his inverted diminished vocabulary simultaneously with quartal structures at least twenty times throughout his improvisation in two unique and creative ways. The first can be seen in measures 72-73 (Figure 5) and includes an ascending pattern of quartal relationships wherein the last tone of each three-note group spells an A♭ diminished triad. Another incorporation of both diminished vocabulary and quartal structure occurs during measures 134-137 (Figure 6). Twenty-four of the twenty-six notes occurring in these measures are constituents of diminished scales while Farrell successfully incorporates the perfect fourth interval at eight times in the span of only sixteen beats.

CONCLUSIONS

Regardless of an artist’s position in the canon or authorized histories of jazz, it is clear that musical works and improvisations function intertextually to construct and reify the web of symbols and practices through which we make
meaning in the jazz world. I have offered Farrell’s “Moon Germs” as an example of a non-canonical work shot through with intertextual significance relating it to the jazz world, but one that also works to incorporate other new and/or appropriated texts to potentially increase its capacity for the construction of meaning. In addition to intermusical interpretation or analysis to which “Moon Germs” might be available, an understanding of Farrell’s life context as a collector and interpreter of musical (and otherwise) texts may enrich our appreciation of this particular work, and his overall contributions. By moving away from historically linear and idiomatically rigid conceptualizations of the jazz world, an intertextual critical approach respects said world’s complexity while allowing space for the refiguring of that world through the imaginative employment of novel and experimental practices.

Finally, I appeal to Bennett Hogg’s (2011) argument that, rather than continue to valorize any imaginary museum of musical jazz works, or a heroic nature of musical improvisation wherein an artist creates improvisations ex nihilo, the act of improvisation is—in addition, and perhaps primary to, its character as an act of spontaneous creation—a virtuosic practice of interpreting one’s cultural context in a novel way. Hogg suggest that we should

...stop ascribing too much significance to origins and the unprecedented, and to celebrate instead the cognitive virtuosity of any creative act. To think of improvising as a site where texts of all sorts coincide with the embodied and enactive consciousness of the improviser may be uncomfortable for some, insofar as it seems to unseat improvisation from any privileged claims to presence, naturalness, or origins. But returning it to its place as a creative practice that illuminates the workings of the culture of which it is a part—rather than something that claims a distance from that culture—should be more than adequate compensation. (90)

The virtuosic interpretive and creative act of musical improvisation, then, may be justly celebrated as the work the musician does to evince meaning in the texts that compose their, and our, social reality while simultaneously transcending it from within.

Please see the complete transcription and analysis of Farrell’s solo on “Moon Germs” available for download at ajkluth.com/read for further illustration of all examples mentioned herein.
REFERENCES


**RECORDINGS**


———. 1974. *Upon This Rock*. CTI

———. 1975. *Canned Funk*. CTI.


ABOUT THE CONTRIBUTOR

Andrew J. Kluth is a writer, saxophonist, and improviser whose research focuses on American musical experimentalisms, music of the African Diaspora, continental aesthetics, and contemporary theories of interpretation. As a saxophonist, Kluth has released two albums with OA2 Records, worked across musical genres in the Chicago, New York, and Los Angeles markets, and has contributed to jazz education as a teaching artist for the Herbie Hancock Institute of Jazz’s “Jazz in the Classroom” outreach program. He is presently a Visiting Assistant Professor in the department of music at Case Western Reserve University.