

George Russell's Forgotten Theory of Jazz Music - Postliterate - Medium

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The 70th anniversary of the publication of George Russell's 1953 book *The Lydian Chromatic Concept of Tonal Organization* seems to have come around in complete silence. This silence is not at all new.

Russell's book was once widely influential — Coltrane, Miles, and Bill Evans swore by its ideas, and *Kind of Blue* might not have been recorded at all without its ideas — but perhaps even a decade after its initial publication in the 1950s, discussions of the book all but disappeared. The influence that the book has exerted on jazz, both as music and as theory, must be indescribably large given the sheer mention of the musicians above who swore by its ideas — but popular knowledge of the book's existence remains close to zero.¹

This piece was originally set out to be a summary and evaluation of the book's content, with both sides in equal parts. In writing, however, I realized that my personal intrigue with regards to the book's ideas is both rather specific and constitutes the most robust part of this piece. As such, this piece will instead first provide a terse summary of the book's primary theoretical content (I), followed by an evaluation of its theory, particularly in the practical sense (II), then with the two most intriguing aspects of the book for me both as a listener and musician in the jazz tradition (III and

IV), and concluding with short remarks (V). In particular, the intriguing aspects of the book are what I believe make its content worthwhile to discuss, and make it a shame that the book has been almost entirely forgotten.

But first, a note must be made vis-à-vis the book's various editions. I will be quoting and referencing exclusively from the third and fourth editions. This is important to note because the first three editions of the book appear to be similar enough and have an identifiable continuity, but the fourth edition is almost an entirely other work. It appears that — with the book's ideas having been taken up by a cadre of fervently dedicated followers who were but well-intentioned — it was decided that the book's content should be completely rewritten with the intention of showing its “scientific” or otherwise intuitively sound conceptual basis. The fourth edition seems to be the result of such thinking, and its content is far from scientific and is even philosophically dubious.² I will present Russell's theory in the spirit of the first three editions, as I believe this to be the more honest and respectable form of presentation; however, recourse to the fourth edition will be made in the single instance where there is interesting content present only in that edition.³

I — The Lydian Chromatic Concept

Russell's theory essentially aims to present a unique system of scale derivation that is built upon a unique system of melodic conception. I will summarize the first system, followed by the second.

1. Russell's Scale Derivation System

Russell first aims to describe a system of scale derivation, applicable to any chord definable within the equal-tempered system. Each chord that can be analyzed has a “parent scale” which constitutes the most harmonically

sound set of tones that can be played over that particular chord, and Russell aims to show in his own unique way how these scales can be derived from the chords in question.

Russell's system essentially bases all scale derivation on the Lydian scale. For example, any major chord has as its parent scale the Lydian scale of its tonic; any dominant-7th chord has as its parent scale the Lydian scale of its dominant-7th; any minor chord has as its parent scale the Lydian scale of its minor-3rd; any minor-7 flat-5 chord has as its parent scale the Lydian scale of its augmented 4th, etc. Then, to account for chords which do not fit into the above defined structure, five more novel scales are constructed: the Lydian Augmented, Lydian Diminished, Auxiliary Diminished, Auxiliary Augmented, and Auxiliary Diminished Blues scale. A diagram and slide rule which come with the book illustrate their usage for certain chords not described above. For brevity I will not go through each scale derivation individually — Russell does not do so in the main body of the text either.

Any of the five novel scales can be also used alongside the typically derived scale of the given chord to provide different melodic colors; the combination of all of these scales produces the Lydian Chromatic Scale, a 12-tone chromatic scale beginning on the Lydian tonic of the chord in question, as derived above. The Lydian Chromatic Scale provides the final and most expansive possibilities for melodic color over a given chord.

2. Russell's Melodic Conception

Russell then informs us that the above system describes only one melodic aspect of jazz improvisation, namely, "Ingoing Vertical Melodies." Russell's conception of melody provides us with three more, four total:

1. Ingoing Vertical Melodies
2. Outgoing Vertical Melodies
3. Ingoing Horizontal Melodies
4. Outgoing Horizontal Melodies

“Ingoing” melodies are those which strongly base themselves on the harmonic center of either a given chord or a given phrase (such melodies can be “absolute” or “chromatically enhanced”); “outgoing” melodies do not base themselves on these harmonic centers. “Vertical” melodies base themselves on the harmonic center of the given scale; “horizontal” melodies base themselves on the harmonic center of the given phrase as a whole.

Therefore, the system of scale derivation which Russell first describes only encapsulates melodies that are ingoing in the absolute sense and are vertical. Two more scales — the traditional Major and Blues scales — are introduced as scales which can encapsulate melodies that are ingoing in the absolute sense but are horizontal. Thus, the Lydian scale would be preferred by Russell to be played over a single major chord (an example of vertical harmony), but the Major scale would be preferred to be played over a 2–5–1 chord progression taken as a whole (an example of horizontal harmony).

II — An Evaluation

Russell’s scale derivation system, taken by itself, is thoroughly uninteresting. It provides the same set of notes as the traditional system of jazz scale derivation (i.e., involving Mixolydian and Dorian scales), and speaking personally, the traditional system is already intuitive to me as a player and the former is not, making the traditional system the preferred one. Russell’s system is not more simplified than the traditional system either; while Russell’s system uses only the Lydian scale to derive scales from most commonly encountered chords, the traditional system always derives scales from the chord’s tonic. Both therefore have different conceptual advantages, and appear to be quite equal in value. Even Russell agrees on this last point (49–50).

Speaking personally again, Russell’s five additional novel scales, when used as melodic color for a given chord and not as the parent scale, have also provided me as a player with no particular practical interest

whatsoever. The scales do not provide an effective or intuitive system of chromaticism for the player or show how alterations of diatonic tones may add dissonance and melodic color. This second failure is an outgrowth of the fact that Russell's scale derivation system does not derive most parent scales from the tonic of the given chord. Notes are *ipso facto* harder to relate back to the chord in question.

III — The Lydian Scale and Major Chromaticism

There are aspects to the book, however, that are so interesting they wholly inspired me to write this piece. The first has to do with Russell's insistence on the use of the Lydian scale of the tonic over major chords, and the unique "proof" for this notion which appeared only in the book's fourth edition.

The basic assertion is that the traditional major scale is actually dissonant, due to the fact that the 4th of the major scale is uniquely dissonant over any major chord. By augmenting the 4th in a Lydian scale, this dissonance is largely resolved. The reasoning for this phenomenon that appears in the fourth edition of the book, is that the augmented 4 (the 4 in Lydian scale) is the 7th tone reached in an upwards movement of stacked 5th-intervals from the tonic. Thus, beginning with the tonic and moving upwards in 5ths a total of six times, the seven notes produced as a result are the seven notes of the Lydian scale. With the 5th being the most consonant interval aside from the octave, the augmented 4 resonating so closely to the tonic in this schema of 5th-stacking explains its harmonic resonance in major-chord settings. The normal 4 does not surface until one stacks 5ths another five times — making the normal 4 in fact the farthest possible consonant-resonating tone from the tonic in a equal-tempered system.

This schema also allows us to see where chromaticism can be added in a major-chord setting in an ordering outwards from the centrality of the tonic. The augmented 4 is the farthest tone which can still be called conso-

nant in relation to the tonic, but outwards from there, the minor 2, augmented 5, minor 3, minor 7, and finally the normal 4, can be played respectively as an outwards-going melodic movement from the tonic. In other words, each note in that set respectively constitutes increasing magnitudes of dissonance. I have personally found this idea extremely useful for my own playing, specifically over long major chords that may appear in ballads.

The only caveat is that the schema of upwards 5th-stacking cannot readily explain why the tonic in a major-7th chord in fact disappears and becomes semi-dissonant. The centrality (or as Russell calls it, the “tonal gravity”) of a major-7th chord in fact lies in the major-7th itself, and not in the tonic. Certainly the tonal gravity does not lie in the immediately following note in 5th-stacking system, i.e. the 5th itself. This the schema cannot account for, but regardless, as such I have yet to see a better explanation of the consonant sound of the Lydian scale in major-chord settings.

IV — Russell’s Analysis of Present Jazz History

The second interesting aspect has to do with Russell’s conception of four types of melody. His conception appears at first glance somewhat simplistic, but its practical application in the historical and particular analysis of jazz music proves uniquely fruitful.

In a 1960 article published in *Jazz Review* titled “Ornette Coleman and Tonality” which is included at the end of the book, Russell (along with Martin Williams) uses his conception of melody to explain the music of Ornette Coleman and the history leading up to it. To explain Ornette’s music as a historical product, Russell first boldly declares:

“Since the bop period, a war on the chord has been going on. You might characterize the whole era as the decline and fall of the chord” (xx).

Charlie Parker's complex and methodological reliance on chordal harmony — viz., “bebop” — represents an exploration of the possibilities offered by chordal harmony to an unprecedented degree; Russell asserts that this exploration is effectively the deepest such an exploration could possibly go. Charlie Parker's music is thus “*a kind of end, or the beginning of an end.*”

The real power of Russell's melodic analysis emerges in order to show how and why Bird's music was truly the last chord-based jazz music. Russell points out that, latent in bebop and chord-based jazz, is the reduction of melodic exploration to the chromatic scale. For example, in Coltrane's music from Russell's period, he was attempting to push the boundaries of chord-based melody to its limits by relating “*X number of chords upon one single chord*” (what was called “sheets of sound”), but in doing so, he ran up against chromaticism. This chromaticism is latent in Bird's music and crystallizes in Coltrane. By attempting to expand the melodic possibilities offered by the chord to their absolute limit, pure chromaticism — which is to say, completely unlimited melodic possibility within the equal-tempered system — is reached. Russell's analysis calls such chord-based melody “vertical” and sees that,

“the logical end of vertical playing is vertical chromaticism... the player utilizes the chromatic scale implied by the chord — and not just step-wise, he realizes the whole implication of the chromatic scale. He is relating to the chord, but he is relating to the chord chromatically.”

This precipitates the “war on the chord” in question. The emergence of Ornette's music is thus in the aftermath of this war, an attempt to free music from the constraints of the chord — “horizontal chromaticism.” “Horizontal” playing was present in jazz in as early as Lester Young (in contrast to Coleman Hawkins), and reaches its conclusion as horizontal chromaticism in Ornette. Russell anticipates many more horizontal-based

players in his future, who will utilize the overall “tonal gravity” of given passages to inform their playing, rather than the melody implied by any given chord.

This analysis is fruitful. It explains not only the emergence of free jazz but also the development of modal jazz which dovetails with the personal development in Coltrane’s sound to the end of his career; in fact, Coltrane is an exemplary case of Russell’s theory playing out in historical time. Furthermore, “post-bop” music in general — beginning with Freddie Hubbard and leading up to musicians like Ingrid Jensen — exactly follows the course which Russell’s theory lays out. The chromaticism of a player like Ingrid Jensen or of Michael Brecker certainly cannot be entirely explained by relating their music back to chordal harmony. Rather, by seeing their music in relation to the death of the chord which took place in the late 1950s, we can understand how their music is an attempt to work outside of the constraints of chordal harmony and establish chromaticism in “horizontal” space.

In the grand conclusion to Russell’s analysis, the death of the chords offers a philosophical bifurcation.

“So, there seem to be two schools of modernism: those people who believe in a tonal center [“pan-tonalists”] but also believe in chromaticism and those people who don’t believe in a tonal center [“atonalists”]. One thing we all have in common is the chromatic scale” (xxi).

An immense relativism is implied by this reality — “*there is no ‘right’ and ‘wrong’ in music, there’s only relativity*” (xxii) — but for Russell this is positive. The incredible music of Alban Berg and Webern was recognized only when a higher state of relativity in music was accepted — and in any case, “*somehow music survived.*”

By seeing jazz as a constant and evolving interplay between vertical and horizontal approaches, and in seeing the logical conclusion of these harmonic modes as chromaticism pure and simple, Russell was able to

explain and account for myriad music developments of his time. Moreover, his analysis could contextualize these phenomena, and its strength lies in its ability to be applied to music even today.

V — Concluding Remarks

Russell's work is largely a product of its time, a time when rapid innovation in jazz was the most important imperative. Russell's work emerged out of that culture and played its role in shaping what today is considered the quintessential jazz sound — 1959's *Kind of Blue*. The necessity to re-uncover this piece of history and remind the world of its existence and its value is not huge. Much of what Russell says, in some way or another, has already been incorporated into jazz pedagogy as second nature, and the fact that Russell has become an invisible name does not in itself constitute a tragedy.

Rather, I want to call attention to the book because there are scattered ideas and remarks, which I have illuminated here, that I find terribly interesting and even of potential didactic and practical use for musicians. These are aspects that perhaps were not so easily incorporated into mainstream jazz knowledge, but I believe are quite useful. My only sincere hope is that in learning about these concepts, more new and creative ways of analyzing and playing jazz emerge.

Russell, George. *The Lydian Chromatic Concept of Tonal Organization*. Concept Publishing Company, 1959.

Russell, George. *The Lydian Chromatic Concept of Tonal Organization, Volume One: The Art and Science of Tonal Gravity*. 4th ed., Concept Publishing Company, 2001.