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Twentieth Century Compositional Techniques Applied to Jazz: Pitch-Class Sets in Jazz Composition and Improvisation

ABSTRACT

Background

The research paper *Pitch-Class Sets in Jazz Composition and Improvisation* presents a creative method to coalesce traditional jazz with techniques and elements of post-tonal composition.

Since very early in the history of jazz, composers made numerous attempts to combine it with erudite music. Throughout the 20th century, classical composers came up with several aesthetic and conceptual developments but jazz, until very recently, did not move in the same direction. To maintain a fruitful collaboration between composers and improvisers, if the pallet of compositional techniques available to the jazz composer expands, I would argue that a similar development must occur in the field of improvisation. While the nature of this research paper is largely theoretical and eminently speculative, its outcome has compositional and performative impact and may be used as a creative stimulus for composers and improvisers, inside and outside the jazz idiom. For composers, this paper proposes creative processes stretching beyond the familiar tonal or modal schemes and, in the interest of coherence and unity with pre-composed material, it offers a complementary approach to soloists/improvisers.

Jazz tradition is respected and incorporated but this research has great potential to expand jazz in new directions and consequently become a great asset in the conceptual elaboration of new repertoires. Additionally, this method is of great pedagogic significance, as it presents improvisers with a set of tools that are usually not approached in jazz contexts. In general, jazz repertoire and its improvisational vocabulary conform to pitch-centricity, following western tonal or modal systems. However, jazz is all but confined to a single aesthetic approach and it has always combined a multitude of styles and idioms including, after the advent of Free Jazz, a progressive tendency towards atonality. The objective of this research is to take the first steps towards a “grand unified theory” to intelligibly systematize composition and improvisation, coalescing all these influences.

The contextual application of pitch-class sets seems to be a fitting tool that fulfills these criteria. Because pitch class set theory was proposed with atonality in mind, it would be superfluous and perhaps redundant to dedicate a large part of this research to explore pure atonality. Instead, I am interested to find relationships between pitch class set theory and common practice jazz language. If I am successful, at the end of this research project I will be able to propose an innovative perspective on jazz improvisation and one that can bridge the gap between “main stream” and *avant-garde* composition and improvisation.

Since a great part of this project’s application includes improvisation, a field where memory plays a crucial role to both the listener and the performer, the use and study

of pitch-class sets will be limited to non-ordered trichords and tetrachords.

Aims and repertoire studied

Standard jazz repertoire, excerpts of pivotal compositions and transcriptions of improvised solos. Original *études*.

Methods

Application of a model that organizes pitch-class sets by perfect fifths, according to parsimonious and tonally contextual voice leading.

Implications

Broad analytical and creative model applied to jazz composition and improvisation. Extended pedagogical implications.

Keywords

Pitch-class sets, jazz, improvisation, composition.

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