Abstract

Lakoff and Johnson (1980) have shown that we live by metaphors, i.e. we use metaphors to understand our physical, emotional, and social worlds. Extending that analysis to music, we argue that jazz saxophonist John Coltrane (1926-1967) used metaphors when he named his compositions. In particular, we propose that the titles Equinox, Fifth House, and Giant Steps can be seen as metaphors for musical structures found in those pieces. This extended use of metaphor interconnects verbal language and the language of music and has applicability in the realm of language learning and teaching.

Introduction

The idea of using music and songs to teach second languages is not new, naturally because they appeal to learners. Often, song lyrics are used as language input to teach vocabulary, grammar, pronunciation, or cultural references. Sometimes, music is also used to stimulate discussion (e.g., Helgesen & Brown, 2007, p. 48). What we explore in this paper is something rather different. Coming from linguistic and music interdisciplinary perspectives, we suggest that music titles may connect intimately with the composer’s life history, contemporary culture, and the structure of the music piece itself. As such, an investigation into music titles may enable language learners to go beyond learning language forms and to explore the target language and culture more deeply, as well as to develop a more profound appreciation of the music itself.

In this paper, we propose that the titles of at least three works by the late jazz saxophonist John Coltrane are metaphors for the musical structures in the pieces themselves. Of course we cannot say that Trane (Coltrane’s nickname) necessarily named his works using metaphors for structures in the pieces, but it is very likely that he did, given that he was “always playing with words,” “had a subtle sense of humor,” and was “often forming jokes by varying words and phrases” (Simpkins, 1989, p. 29, 32). He also had a keen interest in musical structure and analysis of classical music as well as jazz. The three Coltrane pieces that we will analyze are Equinox (recorded in 1960 on the album Coltrane’s Sound), Fifth House (recorded in 1959 on Coltrane Jazz) and Giant Steps (recorded in 1959 on Giant Steps). The three pieces belong to the period when Trane was recording his own group on the Atlantic label. These recordings were made shortly after the recordings on Kind of Blue, the famous 1959 Columbia album on which Trane plays tenor sax as a member of the Miles Davis quintet.

Before analyzing the Coltrane pieces, we would like to note the following. Metaphors are usually conceived of in a verbal language; for example, the metaphor ‘love is war’ is stated in one and the same verbal language, i.e. English. In this paper, we have extended the concept of metaphor to involve two types of language. A title is in a verbal language while what it corresponds to in a musical piece is in the language of music.

Equinox

The most obvious connection between the title of this piece and the music Trane composed for it is the fact that he was born on September 23rd (1926), the autumnal equinox, one of the two days during the year when the day and night are of equal length. One could just assume that he named a piece after his birthday, but we think there is more to be said than that.

First of all, as pointed out by Cole (1993), Trane was very familiar with astrology. “When
he started publishing his own music the names that he gave to specific pieces acknowledged this fact: Fifth House (1959), Equinox (1960), Crescent (1964), Sun Ship (1965), Cosmos (1965), Leo (1966), Mars (1967), Venus (1967), Saturn (1967), and Jupiter (1967)” (p. 23).

Simpkins (1989) has this to say about Equinox. “Equinox is a moving [minor] blues in which the note D-flat is at the center of the melody – equally distant from the lowest and the highest note of the melody. Speculation leads to the idea that D-flat represented the equinox” (p. 122).

We found this statement by Simpkins after we had independently discovered that the distance from the tonal center of the piece to the highest note is equal to the distance from the tonal center to the lowest note. For us, this is iconic for the night and day being of equal length on the equinox.

Example (1) is a transcription of Equinox from the original in Db minor to C# minor, which is the enharmonic equivalent of Db. In this transcription, C# is the tonal center. G# is the lowest note of the melody and F# is the highest note. G# and F# are both equidistant (exactly a perfect fourth away) from the tonal center. These three notes can be seen in the first two measures of the third line of the transcription.

Example 1: Equinox
Fifth House

As mentioned above, Fifth House is one of the Coltrane titles that can be analyzed as related to astrology. The fifth house is that of the sun and Leo. Ratliff (2007) states that the piece “Fifth House is based on Tadd Dameron’s Hot House” (p. 4), and Hot House itself “borrows from the chord changes of the standard What is This Thing Called Love” (p. 52). Simpkins (1989) also observes that the chord structure of Fifth House is similar to that of What Is This Thing Called Love and relates that song to the astrological fifth house by observing that the fifth house is the house of love, as well as other related phenomena (p. 105).

We do not reject the astrological explanation of Fifth House, but rather assert that, as in other cases of Coltrane numbers, it is very likely that there was more than one motivation for the title. In our analysis of Fifth House, we focus on the melody and interpret the title as relating to a “house of fifths,” more precisely to a piece of musical “architecture” in which the most basic component of the melody is the perfect fifth. Example (2) presents our analysis of the melody, which begins with the primary musical idea, which is followed by a melodic sequential repetition.

The harmonic implications of the melody show a compression of two perfect fifths: F – C and Gb – Db and strong perceived linear cadential motion from Gb to F and Db to C.

Example 2: Fifth House

Giant Steps

Simpkins (1989) claims that “…Giant Steps, derived its name either from its bass line or from the relationship of its chords” (p. 87). In the liner notes of the Giant Steps album, Trane himself said that “…the bass line is kind of a loping one. It goes from minor thirds to fourths, kind of a lop-sided pattern in contrast to moving strictly in fourths or in
half-steps” (as cited in Simpkins, 1989, p. 87). Simpkins also claims that Trane confided in his friend, trumpeter Calvin Massey, that a particular feature about the house in which he and his family were living in Queens had inspired the title. Simpkins (1989) states, “Between the last step, on the front of the house, and the street was a long distance compared to the previous steps” (p. 87).

Before discovering these observations by Simpkins, we had made our own observation about Giant Steps. In this, perhaps Coltrane’s greatest work, there are two kinds of structural features, melodic and harmonic, which can be seen as having to do with “giant steps”: in musical terms: (1) the distant relations between keys (and this is tantamount to Simpkin’s observation about the relationship of chords in the piece), and (2) the rising extended sequential steps in the melody, especially in mm 8 – 15. We begin with our observations about harmony then proceed to our analysis of the melody.

**The Harmonic Structure of Giant Steps**

The distant key relations defining harmony explain how this work has taken on a significant role among jazz players. Giant Steps is still a test piece for jazz musicians (Byron & Saylor, 1991). The work poses a formidable challenge to improvise lines over harmonies that shift frequently and radically.

According to traditional principles of musical harmony, ii – V progressions (a chord progression between chords built on the second and fifth degrees of the scale) establish or implicate musical keys. The strongest harmonic motion is the V – I progression. Notice the harmonic progression underlying the opening notes of the melody of “Giant Steps,” given in Example (3).

### Example 3: Opening notes of Giant Steps

![Example 3: Opening notes of Giant Steps](image)

C#min7(ii) – F#7(V) [turn-around chords] leading to opening chord Bmaj7(I)
D7(V) leading to Gmaj7(I)
Bb7(V) leading to Ebmaj7(I)
The key of the work itself is Eb major since the final cadence is a ii – V – I cadence in Eb.

Now if one observes the key relations between Eb major and the other two keys implicated in the work, B major and G major, clearly the tonality of Eb is centered between G, a major third above, and B [enharmonically equivalent to Cb], a major third below. The logical consequence of mediant key relations is that such keys are not closely related to the home key. What the title Giant Steps refers to for us, then, is the distant relations between keys a major third from the tonal center Eb.

According to traditional principles of music theory, keys are closely related through the “cycle of fifths.” So the distance between the key of C and the key of G is defined in terms of a difference of only one accidental, namely F#. In the classical music of Mozart and Haydn, the most typical kind of “close” modulation would be from tonic to dominant, which is a perfect fifth away from the tonic. Another type of close modulation would involve a major key and its relative minor, so, for example, it would not be a great leap or step to modulate from the key of C major to the key of A minor; since their key signatures are identical.

The harmonic profile of Giant Steps has been widely acknowledged in some of the
musical literature. In an interview mentioned in Ratliff (2007), Coltrane himself remarked: "Giant Steps, everything I did on that was harmonic exploration, harmonic sequences that I wasn't familiar with prior to that. I was working strictly from a chordal-sequential progression-pattern, and not melodically" (p. 53).

The Melodic Structure of Giant Steps

Despite Coltrane's words, the work does contain a melody, but it is unusual in the sense that such a melody is not the focal center of the work, rather it is understated, consisting of melodic sequences that resemble more a sequential musical exercise than a classical melody. (A melody in the classical sense is always the focus of attention with subordinate harmony used to support or accompany the melody.) In short, the notes of the melody are apparently quite incidental, especially in light of Coltrane's own remarks. However, we believe the significance of the melody is that it relates melodic structure to the song's title.

The first thing to notice is that the majority of notes in the melody occur on strong beats of the measure, i.e., beats 1 and 3. Another property of the melody is that the notes are of long duration: dotted quarter notes, half notes, whole notes, and tied whole notes. The musical metaphor relates the title's suggestion of heavy-footedness to the fact that the melody consists of notes of long duration occurring on strong beats.

The linear character of the melody also exemplifies the giant "musical steps" suggested by the song's title. The extended melodic sequence, mm. 8 – 15, builds to the climax, the last and highest note of the piece, Bb. See example 4.

Example 4: Giant Steps mm. 5 – 16:

![Giant Steps mm. 5 – 16](image)

The giant steps or leaps heard in this passage are defined by the interval of a perfect fourth preceded by a major second interval. Measure 8 begins the sequence with a statement of the motif that starts with the note G moving down by whole step to F and then taking a leap or giant step up to Bb. The first repetition of the motif comes in measure 10 where we see the note B moving down by whole step to A and then moving up to D.
The genius of Coltrane can be observed in the third and fourth repetitions of the motif. He avoids a literal repetition by altering the second note by simply repeating the first note, thereby creating a non-chord or suspended tone: in the 12th measure the first note is a D#, and instead of moving down by whole step to C#, the note the ear expects, the note D# is repeated before moving up to F#. Since the note D# is a suspended note from the previous chord, C#min9, the ear picks up the note of natural resolution, C#, before hearing the F# note, which is a perfect fourth from C#. The same logic applies to the final repetition of the motif: beginning with the note G in the 14th measure, the 9th of the Fmin9 chord, which is followed by a repetition of that note instead of moving down a whole step to F, which would be the note of natural resolution, but which the ear supplies. The climactic note of the work is the note Bb, a perfect fourth from the note F.

Schematically we see something, illustrated in Example (5), which graphically resembles an ascension by “giant steps.”

Example 5: Ascension by “giant steps”

Incidentally, there are three YouTube videos of Giant Steps. One allows the viewer to see a transcription of the music come to life note-by-note as Trane plays the music; another has a robot playing the music, and a third projects the step by step construction and later decomposition of a Lego-type building and city in step with Trane’s rendition of the piece.4

Conclusion

We have shown that the titles of at least three works by jazz saxophonist John Coltrane can be understood as metaphors for musical structures in the pieces themselves. Equinox exemplifies a symmetrical melodic framework that corresponds to a time of the year when night and day are of equal length. In the case of Fifth House, the melodic structure together with its harmonic implications can be understood as exemplifying the concept of a “house” or a piece of musical architecture consisting of fifth intervals. Giant Steps, interpreted as referencing “distance” in a musical sense, namely, melodic intervals and key relations, can be experienced in the music, in both the melody and the harmonic progression.

While working on this project, we realized that there may also be relationships between titles among the works of Coltrane. As pointed out above, Trane wrote several numbers that can be related to astrology. Equinox is among these, but this piece also fits a category of time units. Trane wrote or recorded several numbers that have to do with time units such as Summertime and My Shining Hour. In fact, a couple days before recording Equinox, he recorded Mr. Knight (albeit with a k) and Mr. Day. Trane also recorded Night and Day and The Night We Called it a Day.

There is also a recurring theme of building structures. Giant Steps (in a stairway) and Fifth House both have to do with structures, as do some other pieces that Trane recorded, namely Stairway to the Stars and Spiral (as in spiral stairway). There is also the possibility, worth exploring, that the musical structures of these pieces are related to each other in some way. For example, Equinox may be structurally related to Mr. Knight and Mr. Day. Such possibilities lie in the realm of future research.
The analysis above is largely a linguistic and music exercise. By bringing this analysis to TESOL readers, we hope to demonstrate how rich music titles are as a site for cultural, music, and language explorations. In addition to presenting music titles and song lyrics as what they are, ESOL teachers can also encourage students to investigate the possible reasons why titles are used in certain ways. In doing so, students can practice reading, listening, and discussion skills as well as combining their knowledge of and interest in music with language learning.

Notes

1 This paper was first presented with the title “Hidden Structures in the Music of John Coltrane” at the Conference on Music, Language, and the Mind, which was held at Tufts University July 10-13, 2008. We thank Merrill Barrett for finding several books on Coltrane and the Coltrane CDs listed below for us at branches of the Hawaii Public Library. We also thank Hanh thi Nguyen for helping us connect our musical analysis to language learning and teaching.

2 Tim Murphey has written a great deal about using music to teach language. See, for example, Murphey (1992).

3 See Lakoff and Johnson (1980, p. 49) for more on the ‘love is war’ metaphor and others that have to do with love.


References


