The Function of Non-Functional Harmony

by Patricia Julien

The terms “functional harmony” and “non-functional harmony” are used frequently in jazz analysis and casual conversation and are generally well-understood by seasoned jazz musicians and educators. Students new to these terms may be less certain of what such labels mean, and it’s difficult to find an explicit definition of either term in jazz or classical sources. As non-functional harmony is a trademark characteristic of modal jazz, hard bop, jazz-rock fusion, and other post-bop styles, it would be useful to fashion its definition and illustrate some aspects of its use. But before looking at non-functional harmony, let’s review what it means for a chord to be functional.

Functional Harmony

Functional harmony participates in directed motion toward a goal (such as a phrase ending or a target of tonicization) that affirms either a temporary tonic or the overall tonic of the composition. It usually does so through a combination of root movement by fifth (as advanced by Jean-Philippe Rameau in his theory of the fundamental bass) and the tendency of the key’s active scale degrees (such as 2, 4, and 7) to move to more stable scale degrees (such as 1, 3, and 5). For example, in the progression I–vi–ii–V–I (Example 1), the root movement is primarily by fifths; and melodic tendencies (such as the potential for the leading tone, present in the dominant chord, to convey a sense of resolution by moving to the tonic pitch in the following tonic chord) are satisfied.

However, I–vi does not involve root movement by fifth. The relationship between the first two chords in a progression is less strictly controlled because the initial chord represents a starting point; and any other chord may follow this initial chord (the starting point alone not dictating which of many possible directions will follow). It is often the second chord that begins the progression toward the next goal, with harmonic direction not determined until the second chord is presented; this is analogous to the fact that tempo is not defined in music until at least two points in time have been established. (Additionally, in this example, vi may be considered a substitute for I, transforming the tonic to submediant so that it may progress to the following supertonic chord via root movement of a fifth.)

The goal toward which directed motion is aimed is one that has an identifiable meaning in the overall harmonic context of the composition; that goal may be global (as in the structurally important final tonic of the piece) or quite local (as in the target of tonicization). For example, the subdominant chord in the progression ii/IV–V/IV–iv/IV–V7–I (Ex. 2) represents both a local goal (as the target of tonicization) and relates in a useful, global way to the overall key of the piece through its participation in a cadential gesture that affirms tonic. The harmonies in succession create a harmonic progression in which they are understood to relate to the overall key of the composition.

In addition to directed motion toward a goal via root movement by fifth and the resolution of active scale degrees, the idea of functional harmony incorporates Hugo Riemann’s theory of function, whereby chords fall into certain categories based on their standard role as a type of tonic, subdominant, or dominant chord. Tonic chords tend to represent a harmonic resting place; subdominant chords act as dominant preparation and, when paired with a dominant chord, help to clarify the key (for example, the pairing of IV with V or ii with V [Ex. 3] contains both fa and ti, translating to pitches that belong exclusively to one key); while dominant chords generate harmonic motion and tend to progress to a tonic chord.

Jazz expands greatly on this concept through substitution, where functional categories include not only diatonic chords based on scale degrees of the key but also chromatically altered substitute chords, each of which is understood to function in the same manner as the chord for which it substitutes. For example, one of the most well-known and widely used types of substitution is the replacement of a dominant-seventh chord with a substitute major chord with minor-seventh (thus a dominant structure) whose root is a tritone away from the root of the original dominant seventh (Ex. 4). There are two common tones in this substitution (the third and seventh of the original chord remaining as the seventh and third of the substitute chord); and the remaining notes (root and fifth) of the substitute dominant consist of chromatically altered, non-diatonic pitches. The tritone substitute dominant replaces root movement by fifth with root movement by half-step. In both cases, the dominant functioning chord expresses compelling motion to the tonic chord.

The inclusion of chromatically altered pitches raises an important question: what is indicated by pitches that are non-diatonic? The mere presence of non-diatonic pitches does not mean that a harmony necessarily weakens the authority of the prevailing key—or that the harmony is non-functional. The substitute dominant, as described above, functions as a true dominant chord and

Example 3

\[ \begin{array}{c}
\text{C: IV} \\
\text{V} \\
\text{F: ii} \\
\text{V} \\
\text{I} \\
\end{array} \]

Example 2

\[ \begin{array}{c}
\text{G: ii/IV} \\
\text{V/IV} \\
\text{IV} \\
\text{V7} \\
\text{I} \\
\end{array} \]
surrounding context provides the necessary information to recognize that the first two chords function not in the key of Db but in Eb major. Understanding this, an improviser might choose to play blues figures in Eb during the first four measures rather than generating, in the first two measures, a drive toward Db.

Of utmost importance in making the distinction between functional and non-functional harmony is understanding a chord's purpose. If its purpose is to support the establishment or the continued influence of the key in some useful way, it is functional. If its purpose is decorative (thus not offering the start of the motion, the basic progression toward a goal, or the goal itself), it is non-functional.

**Non-functional Harmony**

The expression "non-functional harmony" refers to the use of chords in such a way that their horizontal association is more aptly referred to as a *succession* rather than a progression. A single chord may be considered non-functional if it does not interact with its fellow chords in a key-defining, goal-oriented manner.

Non-functional harmony is certainly not devoid of purpose, function, or direction; rather the motion that it expresses is generally linear and does not rely on root relations of a fifth or the traditional resolution of active scale degrees. Non-functional harmony may be used simply because a composer has a preference for a particular chord; or it may reflect the compositional abandonment of the traditional roles of functional harmony, thereby creating new meaning for the relationships between harmonies in a composition. This harmony generally consists of traditional tertian chord structures—familiar sounds—used in unexpected ways. While functional harmony is expressed through chords with consistent relationships to one another and establishes a context of expectation and fulfillment, non-functional harmony does not presuppose specific relationships that culminate in prescribed ways.

It is useful to note that although quite accurate in a strict use of the terminology, the expression "non-functional" generally is not used to refer either to harmonies in compositions that avoid establishing either tonic or another centric sonority (a sonority which, although not a tonic chord in the traditional sense, acts as the primary structure to which all other chords may be related) or to unusual chord structures (such as the clusters played by Cecil Taylor).

In some cases, a departure from root movement by fifth is a signal that chords are relating to each other in non-functional manner. In other cases, a change in the expected chord quality above the root (e.g., Gm7, rather than G7, in the key of C major) is a signal that chords are relating to each other in non-functional manner.

Context is critical in determining whether or not a succession of chords is a functional harmonic progression. For instance, in "Sincerely Diana" by Wayne Shorter (*A Night In Tunisia*, Art Blakey and The Jazz Messengers, Ex. 7), an apparent ii–V–I is included in mm. 12-13 (Abm7–Db7 of m. 12, followed by Gbm9 in m. 13) and mm. 14-15 (Gm7–Cb7 of m. 14 followed by Fm7 of m. 15). The apparent ii–V pairs of m. 17 (Dm7–G7) and m. 18 (Dbm7–Gb7) do not progress to I and thereby (along with measures that do not contain apparent ii–V pairs) reveal the true purpose of the entire series: a large gesture ranging from m. 12 to m. 19, where the structurally significant connections are in the stepwise motion from basically one downbeat to the next: Abm7, Gbm9, Fm7, Ebm9, Dm7, Dbm7, Cm7. The V chord of the relevant pairs, occurring in the second half of the
measure, is a suffix, spinning out a reference to traditional ii-V pairs.)

Although mm. 12-13 and mm. 14-15 contain functional ii-V-I chords expressing a pre-dominant to dominant relationship which then progresses to a tonicized chord, the overall function of the series is in the linear, non-functional, almost entirely stepwise motion from Cm7 of m. 11 to Cm7 of m. 19: the Cm7 goal is the centric sonority of the piece. The ii-V pairs, particularly those of m. 17 and m. 18 which do not conclude the series with a ii-V-I culmination to tonic, are simply apparent functional fragments operating in a non-functional fashion.

While non-functional harmony might indeed be used in a composition where the establishment of a key by traditional means is avoided (for example, “Sincerely Diana” by Shorter being in the overall key of C minor and yet not containing a single V-i to confirm the tonic in a traditional fashion), it may be used just as readily in a conventional, tonal composition. Non-functional harmonies, as embellishment or perhaps in a series of harmonic sequences, may be employed within an otherwise functional progression; and many compositions make use of both functional and non-functional harmonies.

“Peace” by Horace Silver (“Blowin’ the Blues Away, Horace Silver Quintet, Ex. 8) is in the key of Bb major, which is well-established through cadential confirmation, overall structure of the composition, melodic activity, and harmonic relationships. As shown, m. 2 consists of ii-V (Gm7-C7) preparation for the dominant seventh chord (F7), which then progresses to the tonic (BbM7) that ends the phrase in m. 4. However, F7 does not immediately appear at the downbeat of m. 3; the surprising BM7 appears instead (notably a major-major-seventh chord, not a major-minor-seventh chord, so as not to be mistaken for the tritone-substitute dominant). The BM7 is thus a non-functional embellishing chord; its non-functional disposition contributes to its fresh and unexpected character.

Harmonies that act as embellishment (such as neighboring chords, passing chords, and incomplete neighboring chords) are non-functional; such chords, which are fundamentally linear, may emphasize functional chords in a progression but do not themselves contribute to the motion of the phrase as essential components of the progression. In some cases, the entire structure of a composition is based not on a functional, key-defining progression (or series of such progressions) but on non-functional relations; clear examples of such construction exist in the modal jazz and hard bop styles.

Although based on a non-functional succession of chords, a piece may still project the establishment of a centric sonority. For example, “So What” by Miles Davis (Ex. 9) establishes Dm7 as the centric sonority: Dm7 begins and ends the piece, governs 75% of the composition (harmonically and melodically via D Dorian), and influences the chord structure and scale type of the only other sonority of the piece, Ebm7. There is no functional (for example, ii-V-I) progression used to establish D minor as the home
chords in a key-defining, goal-oriented manner; it conveys a decorative purpose (though it may be vital to the character and/or structure of the composition) and thus does not offer the start of motion, the basic progression toward a goal, or the goal itself.

Functional & Non-Functional Harmony in Improvisational Practice

Many jazz musicians learn to improvise through an understanding of chord-scale correspondence whereby note choices are made according to the function of a chord in a progression. For example, Dorian is an appropriate scale choice for improvisation during a chord functioning as ii in a ii-V progression; Mixolydian is an appropriate scale choice for improvisation during the V chord. One of the most important aspects of chord-scale correspondence is that it requires recognition of the function of a chord in its surroundings: a Dorian scale is not necessarily appropriate for every minor seventh chord that comes along (other scale choices for such a sonority possibly including Phrygian, Aeolian, and Locrian); but it is appropriate for the minor seventh chord that functions as ii. Understanding of function and assessment of context provides perspective in making a choice between scale resources.

Training in functional harmony also heightens an improviser’s awareness of compelling voice-leading. Sensitivity is sharpened regarding the tendency of certain scale degrees to move to certain other degrees: for example, scale-degree 4 as the seventh of a dominant seventh chord has the tendency to resolve down by step to scale-degree 3, the third of the tonic chord. Concern for voice-leading also encompasses the idea of avoiding certain pitches either to heighten their impact when they make an appearance in the following chord (for example, avoidance of the 13th on the ii chord in a ii-V progression because it is the important 3rd of the following V chord) or to lessen conflict with pitches more important to the structure and function of the chord (such as avoidance of the diatonic fa during the major tonic chord so that it does not divert attention from the more important chord members, mi and sol).

With non-functional harmony, traditional voice-leading concerns are diminished. Non-functional harmony frequently involves a feeling of stasis, a suspension of the sense of pro-
gression, and a freedom from the relatively prescriptive tendencies inherent in tonal relationships. Although chord structures are generally familiar ones (tertian chords such as major-minor-seventh, major-major-seventh, minor-minor-seventh, or the like) and the familiar scale shapes are available, there is greater freedom in the meaning that is conveyed by the placement of harmonies in a succession of chords. With greater freedom comes greater responsibility: the improviser must invent new means of coherence and musical logic—and new ways to create a sense of forward drive (if desired) and shape to the solo (perhaps depending more on such devices as motivic development or rhythmic treatment). The composer may create new associations (melodic and rhythmic, as well as harmonic) that convey a sense of tension and release and participate in generating the composition’s phrasing and form. It is up to the improviser to observe and make use of such new relationships unique to the individual composition.

Thus although it may be easy (from the standpoint of maneuvering through chord changes) to start improvisers with such tunes as “So What” by Miles Davis where only one scale type, transposed to one additional pitch level, may be required (providing a young soloist freedom from the constant mental calculations required when learning to play the changes of, for example, harmonically dense, up-tempo bebop tunes), great challenges exist in the performance of compositions with non-functional harmony because non-functional harmony removes the pre-existent reason for an appearance of a certain chord at a certain time. This provides an excellent forum for teaching students not only about the function of non-functional harmony but also about the importance of attention to rhythm, ensemble interaction, and listening to and developing one’s own ideas in the solo. Non-functional harmonic succession, particularly when combined with a slow harmonic rhythm as generally found in modal jazz, demands much of the performer in the creation of imaginative and compelling musical ideas and the ability to sustain a level of inventiveness and expressiveness through an entire solo.

Improvisers must be aware of the role of both functional harmony and non-functional harmony. Awareness of the reason for a chord’s existence will inform an improviser’s choices and will deepen his or her understanding of the compositional relationships upon which the improvisation is based.

End Notes
3 Linear does not necessarily equate to stepwise, and neither linear nor stepwise equates to non-functional. For example, IV–V involves stepwise root movement—as well as potential stepwise motion between other chord members—and yet is functional, when acting as a pre-dominant followed by a dominant; a tritone substitute dominant chord followed by tonic replaces harmonic root movement of a fifth with stepwise root movement (e.g., G7–C becomes Db7–G so that although stepwise root movement is involved, the relationship between the chords is functional.
4 Quartal voicing of harmonies is frequently used for non-functional chords. Although they are of non-tertian construction (thereby contradicting the earlier claim that non-functional harmony generally consists of traditional chords built in thirds), such structures may be aptly named “non-functional” because the chord symbols supplied by the composer continue to indicate familiar tertian structures: quartal voicing generally is an artistic choice made by the performer. (When used for a functional chord, voicing the harmony in fourths lends ambiguity to its role, taking a step away from typlical functional harmony by departing from tertian construction.)

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