

## Basic Jazz Cords and Chords Progressions

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**Abstract:** *Change is inevitable... Change in music is also inevitable, as with all things. However, most of the 20th century's musicians, noticed that this great wave of change touched also the musical world, with all sorts of (big) ideas being brought to life. The experimentation is great, the most of composers are set to creating the „new music”, to configurate their own (new) desires, rather than create music being written for specific performance, or condition. Everyone, musician/composer want to try in the new era of changes, to create the new sound.*

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### 1. Introduction

Like traditional common practice music, jazz chords are tertian, meaning they are built using minor and/or major thirds. While traditional music has the triad (three elements tertian chord) as his basic harmony unit structure, jazz uses the 7<sup>th</sup> chord (four elements tertian chord) at its basic unit. The 7<sup>th</sup> must be thought as triads with an additional third added on top (making a 7<sup>th</sup> from the root above).

### 2. 7<sup>th</sup> Chords and the scale harmonization of Petrucciani

While triads and 7<sup>th</sup> chords can be formed by formulas differently-combined thirds, it is also useful to recognize how notes separately by thirds within major or minor scales from these chords. When chords are derived from scales in this way, the chords may be designated with a roman numeral that corresponds to the specific scale degree (1 – 7). This process of extracting chords from a scale is also called *harmonizing a scale*. The result is the set of chords that are *diatonic*.

The harmonizing of a major scale with 7<sup>th</sup> chords gives us the following chords (see fig. 1):

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Fig. 1. *The harmonization of a major scale with 7th chords*

The harmonizing of a minor scale with 7<sup>th</sup> chords will give us the following chords (see fig. 2):

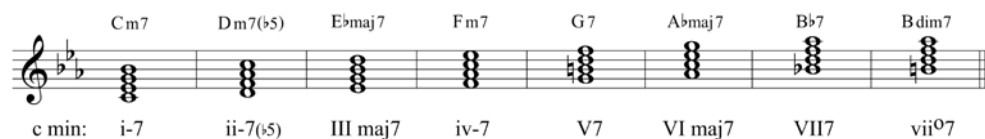


Fig. 2. *The harmonization of a minor scale with 7th chords*

Note that the V7 and the viio7 chords use the raised 7<sup>th</sup> scale degree (a B natural in this case) that comes from the harmonic minor mode and there are 2 types of VII7 and viio7.

For the sake of simplicity it's often abbreviated in the solo transcriptions the ii-7 V7 Imaj7 and ii-7(b5) V7 i-7 symbols to merely ii V I(i) (leaving out the 7ths and qualitative symbols). It's understood that these are usually 7<sup>th</sup> chords in spite of lack of notation.

## 2.1. Specific chord progression ii – V – I

Like traditional music, the chord progression in (many) styles of jazz are tonally driven, it means they are organized in a way to progress (lead to) a goal and stable resolution, which is almost always the tonic chord (I or i). Many jazz progressions approach the tonic in the same way like traditional progressions do: from the dominant or dominant 7<sup>th</sup> chord (the V or V7).

Similarly, the dominant chord (V7) is typically approached by a predominant chord (the ii in the major mode, or the iio in the minor mode). It results the pattern of ii – V – I which is a part of the *circle of fifth progressions* (Schönberg 1922, 253), where the roots moved up by a 4<sup>th</sup> (or down by a 5<sup>th</sup>).

Also, because this is a very common progression, might be considered (that) these three chords as a single unit or event, or even a sentence within the music.

## 2.2. The ii – V – I in context

In jazz context the most chords are 7<sup>th</sup> chords, especially in the predominant/double-dominant ii, dominant V and the tonic I/i.

In major keys: ii7 – V7 – Imaj7 (see fig. 3a, b)

Cmaj7    Dm7    Em7    Fmaj7    G7    Am7    Bm7(b5)

C:    IM7    ii7    iii7    IVM7    V7    vi7    vii<sup>o</sup>7

It means simply,

Dm7    G7    Cmaj7

ii7    V7    IM7

Fig. 3a, b. *The specific chord progression in major keys*

In minor keys: ii7 (5b) – V7 – i7 (see fig. 4a, b)

Cm7    Dm7(b5)    E<sup>b</sup>maj7    Fm7    G7    A<sup>b</sup>maj7    B<sup>b</sup>7    B<sup>o</sup>7

c (min):    i7    ii<sup>o</sup>7    IIIIM7    iv7    V7\*    VIM7    VII7    vii<sup>o</sup>\*7

Also it means,

Dm7(b5)    G7    Cm7

ii<sup>o</sup>7    V7    i7

Fig. 4a, b. *The specific chord progression in minor keys*

### 2.3. Substituting the tonic 7<sup>th</sup> chords with a 6<sup>th</sup> chord

Sometimes in a ii – V – I(i) situation, the I(i) 7<sup>th</sup> chord is replaced by a 6<sup>th</sup> chord it means that the chordal 7<sup>th</sup> is replaced with a major 6<sup>th</sup>. In the classical music it's called *sixte ajoutée* and well known by Rameau (d'Alembert 1757, 28). This especially happens when the melody note over the I(i) is the tonic, which is often the case at the end of the tune. The 6<sup>th</sup> version of a chord sound a little more stable than a 7<sup>th</sup> version, so that a ending can sound more stable with this harmony (Rameau 1726, 146).

In major keys : ii7 -V7-I6 (see fig. 5):

Fig. 5. The substitution of the 7<sup>th</sup> chord with a 6<sup>th</sup> chord, in major key

In minor keys: ii7(5b) V7- i6 (see fig. 6):

Fig. 6. The substitution of the 7<sup>th</sup> chord with a 6<sup>th</sup> chord, in minor key

### 2.4. Expanding the ii – V – I progression

The ii – V – I progression is based on the time tested *circle of fifth progression*, (also known as a *circle of 4th*) because the roots of the chords move by a descending 5th (or ascending 4th).

Considering that this is a pattern, it is often expanded upon to make a longer progression. The two chords that lead up to the ii V – I (i), which fall into the circle of fifths pattern are respectively the iii and the vi (in major keys). It means sequences of chord leading to the tonic like this: **iii – vi – ii – V – I** (all as 7th chords!) (Brauner 1976, 141). In the key of C major, the progression will be called *Cascade 5th fall* and will look like this: **Em7 - Am7 - Dm7 - G7 – Cmaj7 (or C6)**.

It is illustrated here in the last 5 measures of *Alice in Wonderland* by Fran Hillard (see fig. 7):

Handwritten musical notation for Figure 7. The staff shows a sequence of five chords: E-7, A-7, D-7, G7, and Cmaj7. Below the staff, Roman numerals are written: iii, vi, ii, V, I.

Fig. 7. “Cascade 5th fall” illustrated in “Alice in Wonderland”

Another possibility of combination/expansion will be the **vi – ii – V – I** progression, illustrated in *All the things you are* by Hammerstein /Kern, played also as standard by Michel Petrucciani (see fig. 8):

Handwritten musical notation for Figure 8. The staff shows a sequence of four chords: F-7, Bb-7, Eb7, and Abmaj7. Below the staff, Roman numerals are written: vi, ii, V, I.

Fig. 8. Typical progression in “All the things you are” by Hammerstein /Kern

The **ii – V – I** progression is such a pervasive musical unit in many styles of jazz and blues that often it need to be presented in its entirety to be effective. Portions of a tune where a sense of progression is desired, but not a resolution, might use like a sub-unit: the first two chords **ii – V**, (A minor 7th chord or m7b5) followed by a dominant 7th chord. Furthermore this may be done in any key, not just the main/original key of the song, as songs have the tendency to stray briefly into other keys.

The A section of Duke Ellington’s *Satin Doll* does this (see fig. 9):

Handwritten musical notation for Figure 9. The staff shows a sequence of chords: D-7, G7, E-7, A7, A-7 (A-7b9), D7, Ab-7, Db7, C, and E-7b9 A7(a). The word "FINE" is written below the staff.

Fig. 9. Typical progression in Duke Ellington’s “Satin Doll”

The D7 – G7 is like the ii – V in the key of C; the E7 – A7 is like the ii – V in the key of D; the A7 – D7 is like the ii – V in the key of G; the Ab7 – Db7 is like the ii – V in the key of Gb.

## 2.5. Identifying smaller units: ii – V – I fragments

In the above example a ii – V fragment in G, D also Gb were identified. While it is easy to identify the ii – V – I progression, how do we recognize the ii's and the V's where that are not a part of the main key, but they belong to other, temporarily-visited key?

The quality of a V is nearly always a dominant 7<sup>th</sup>. The quality of a ii is either a min7 or a min7b5. Just finding chords with these qualities in a song is not enough to designate them with specific roman numerals. But chords will be in a ii – V progression/relationship if a dominant 7<sup>th</sup> chord is immediately preceded by a m7 or a m7b5 chord which root is a 4<sup>th</sup> below (or 5<sup>th</sup> above). Then the two chords can be thought as a smaller but cohesive unit: the ii and V of a particular key whose tonic is a 5<sup>th</sup> below (or 4<sup>th</sup> above) the dominant 7<sup>th</sup> chord in question (Lemacher and Schroeder 1958, 101).

For example in a key of F major, if we encountered a Gm7 – C7, we should be able to discern quickly and easily that the Gm7 is the ii and C7 is the V. But if somewhere else in the tune we encountered an Am7 followed by a D7, can be heard as the V of G and Am7 is a 4<sup>th</sup> below D (and Am7 can also be heard as the ii of G). Figuring out ii – V units it will take some time, but the above process is fairly fail-safe. Referring to ii – V – I table and compare chords in a given row to consecutive chords in a song, will bring some experience to recognize faster and exactly the progressions and the keys.

## 2.6. Identifying ii – V fragments in other keys

This combination is so very common that jazz player spend a lot of time practicing these chord combinations in all keys (in terms of straight chord playing ability/recognition or also for improvisational purpose/ideas). In the actual jazz music, the players (the most of them), are able to encounter this small units of chords, they have already rehearsed them not just once at the time, but in two- and three chords patterns that they follow. Less processing and calculating is required on the spot, because much of it has been done ahead of time. Just apply all the knowledge you have for a good playing.

## 2.7. Ultra-modern jazz harmonisations

There are innumerable ways to harmonize the major scale. It may be made with conventional chords, as well as with altered 11th and 13th chords. Following are

several interesting modern harmonization of a C major scale, using major and minor chords. Of course, they are hundreds of additional possible variations, as we may see in fig. 10 (Pöhlert 1992, 134).

The image shows two lines of musical notation for a C major scale. The first line contains the notes C, D, E, F, G, A, B, C with chords C, Bb, Am, Fm, Em, D, Db, C written above. The second line contains the notes C, D, E, F, G, A, B, C with chords Ab, G, E, Db, C, A, E, Ab written above. Below the first line, the notes F, G, A, B, C, D, E, F are shown with chords Fm, D, C#m, G, Eb, F, Bb, Fm written above. Below the second line, the notes G, A, B, C, D, E, F, G are shown with chords Am, Eb, E, Bb, A, Dm, G#m, Am written above.

Fig. 10. *Several ways to harmonize the major scale*

Next possibility is the harmonization of the C major scale, using the 11th and 13th chords exclusively (see fig. 11). The scale is presented in the upper voice.

The image shows a musical score for a C major scale in 4/4 time, harmonized with 11th and 13th chords. The upper voice (treble clef) contains the scale notes. The lower voice (bass clef) contains chords: C11, F13, G11, C13, D11, E13, F11, C13, D11, E13, F11, C13, D11, E13, F11, C13.

Fig. 11. *The harmonization of C major scale (using 11<sup>th</sup> and 13<sup>th</sup> chords)*

Another possibility is the harmonization of C major scale, using the 9<sup>th</sup> chords exclusively (see fig. 12):

The image shows a musical score for a C major scale in 4/4 time, harmonized with 9th chords. The upper voice (treble clef) contains the scale notes. The lower voice (bass clef) contains chords: C9, F9, G9, C9, D9, E9, F9, C9, D9, E9, F9, C9, D9, E9, F9, C9.

Fig. 12. *The harmonization of C major scale (using 9<sup>th</sup> chords)*

There are a number of ways to harmonize/reharmonization a song, even a simple one. Traditionally the principal harmonies of a song are based on the tonic, dominant 7th and sub-dominant chords. But modern chord substitutions shows unlimited and new possibilities, achieving quite modern effects. Modern reharmonization of (old) songs has become the most common method for creating interesting really new sounds.

## 2.8. Atonality applied to modern jazz

Atonality, the 12 note system, follows strict rules concerning the use of all notes the composer may employ (Brubaker 1996, 619). The music is not based on any key (atonal) and strict adherence to this 12 tone system, limits the repetition of notes. Each one of this 12 notes in our chromatic scale, has to appear in the identical order repeatedly. The order of notes is established with the first 12 notes of the song/composition (see fig. 13), to the right hand melody.



Fig. 13. An atonal harmonization

## 3. Conclusions

The music of the 20th century becomes to be more interesting about sound, based on the contemporan musical thought, and knowledge. New visions, ideas, based (still) on classical harmony and counterpoint, will give a new constellation of lines, melody, harmony, with extended notes and other builded chords constructions, elements who creates the tensions – a very important oportunity for the modern music. The new methods of creating the contemporan music must be known, recognised and successfully appllied. The musical progress is that what we expect, is that what bring the (musical) world ahead, in a new (jazz) era.

## 4. References

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