Chord Substitution - Part 1

Chord Construction (Formulas) & Substitution

Ted Greene - 1973, November 16

Your musical life will be much easier if you look for systems and ways to organize large clumps of knowledge into more easily digestible forms. The idea of chord construction can be simply broken down into 3 groups of sound, each of which has its own subdivisions; these groups are based on three main chords: the **MAJOR** chord, the **MINOR** chord, and the **DOMINANT** 7th chord

As you know by now, chord construction can be, and is most often viewed in relation to *major scales*. For instance, any major chord is built by combining the 1, 3, and 5 (Root, 3rd and 5th tones) of its own major scale — like a G major chord has the notes G, B, and D which are the 1, 3, and 5 of the G major scale. With this in mind, here is a listing of the most common chords in the three categories:

Don't let this list frighten you. With patience you will know all these before too long.

The major, minor, and dominant 7th chords will be referred to as the *parent* chords of the three *families* of sound; all other chords are called *extensions* of these.

Not all notes need be played in most chords. Quite often, the 5th or root are left out; sometimes both; also the 3rd is omitted occasionally. However, rather than trying to *build* these chords on your own, you should save the time and energy by learning the chords that have already been worked out for you on the *Essential Chords Lists* and analyzing these chords to spot the above principles at work.

[Also see Ted's page on *Chord Construction Formulas* in the Fundamentals section of this website. That page is dated 1976-05-26 and is an updated/revised version of the below chart. ~ Editor's note]

<u>MAJOR</u>	MINOR	
Major (triad) — 1,3,5	Minor (triad) — 1,b3,5	1
Major 6th $-1,3,5,6$	m7th — 1,b3,5,b7	· ·
Major 7th $-1,3,5,7$	m7/11th — 1,b3,5,b7,11	
Major /9th — 1,3,5,9	m9th $-1,b3,5,b7,9$	
Major 9th $-1,3,5,7,9$	m11th — 1,b3,5,b7,9,11	
Major 6/9th — 1,3,5,6,9	m/9th — 1,b3,5,9	
Major 13th — 1,3,5,7,9,13		
Major 6/9#11 — 1,3,5,6,9,#11	m7b5 — 1,b3,b5,b7	(2)
Major 9#11 — 1,3,5,7,9,#11	m7b5/11 — 1,b3,b5,b7,11	
Major /#11 — 1,3,5,#11	m7+ — 1,b3,#5,b7	
Suspended — 1,4,5	m6 -1,b3,5,6	(3)
2 — 1,2,5	m6/9 — 1,b3,5,6,9	U
	m6/7 — 1,b3,5,6,7	
	m6/9/7 — 1,b3,5,6,7,9	
	m6/11 — 1,b3,5,6,11	
	m6/9#11 — 1,b3,5,6,#11	
Major 7+ — 1,3,#5,7	m7 — 1,b3,5,7	4
Major 9+ — 1,3,#5,7,9	m7/9 — 1,b3,5,7,9	U

DOMINANT [red circled = Group number]

	DOMINANT [IEU	circled – Group Humber]			1000
(1)	Dominant 7	— 1,3,5,b7	Dominant 7b9	— (1),3, 5,b7,b9	4
	Dominant 7/6	— 1,3,5,b7,13	Dominant 7#9	— 1,3, 5,b7,#9	\circ
	Dominant 9	— 1,3,5,b7,9	Dominant 7b9+	— 1,3,#5,b7,b9	
	Dominant 13	— 1,3,5,b7,9,13	Dominant 7b9b5	— 1,3,b5,b7,b9	
		, , , , ,	Dominant 7#9+	— 1,3,#5,b7,#9	
(2)	Dominant 7sus	— 1,4,5,b7	Dominant 7#9b5	— 1,3,b5,b7,#9	
	Dominant 7/6sus	— 1,4,5,b7,13	Dominant 13b9	— 1,3,5,b7,b9,13	
	Dominant 11	— 1,5,b7,9,11	Dominant 13#9	— 1,3,5,b7,#9,13	
	Dominant 13sus	— 1,5,b7,9,11,13	Dominant 13b9b5	— 1,3,b5,b7,b9,13	
(3)	Dominant 9b5	— 1,3,b5,b7,9	Dominant 11b9	1,(3),5,b7,b9,11	(5)
O	Dominant #11th	— 1,3,5,b7,9,#11	Dominant 11b9+	-1,(3),#5,b7,b9,11	0
	Dominant 13#11th	— 1,3,5,b7,9,#11,13	Dominant 7/11	— 1,3,5,b7,11	
	Dominant 7b5	— 1,3,b5,b7	Dominant 7/6/11	— 1,3,5,b7,11,13	
	Dominant 9+	— 1,3,#5,b7,9			
	Dominant 7+	— 1,3,#5,b7	Diminished 7th	— 1,b3,b5,bb7 (6)	(6)
	+	— 1,3,#5			\odot

Chord Substitution

- I. In theory, any extension in one of the three families above may replace its parent chord (like $A\Delta 7$ or $A\Delta 13$ for A) or (Am7 or Am6 for Am) etc. However, much experimentation and listening will be required to effectively utilize this concept and some general guidelines should help.:
- 1) All the major extensions will pretty much fit as substitutes for any major triad that is *not* functioning as a dominant or dominant of a dominant (VofV, etc.). Another way of saying this is that the extensions all lie pretty well on I, IV (in major, not minor keys). bII, bIII, bVI, and bVII; also more rarely on bV. Some other major substitutes: a) /9, 2, on II, V, VI. b) sus on all degrees. c) 6 or 6/9 rarely on other degrees. Be careful with altered 5th or #11 type major chords; they are not as easily substituted as the others. (See dominant

7th substitutes, next page [part 2]. Continued on Part 2.

Chord Substitution - Part 2

Ted Greene - 1973, November 16

I. 2) The minor extensions fall into four main groups as you can see [in Part 1].

Group 1 – can all usually be used to replace any minor or minor 7 chord.

Group 2 – are used to replace minor 7's and are most common on ii of a minor key (vii of major).

Group 3 –

- a) Used in place of i's, iv's, and bvi's like if you were given C E7 Am F G7 C, you could use Am6 or Am6/9 for Am because Am is functioning as i temporarily (remember those principles of tonicization?)
- b) For an altered effect, this group also can replace dominant 7th types whose roots are 1/2 step lower (like Am6 for G#7)
- c) Also, this group has the same notes as Group 2 chords whose roots are a m3rd lower like Am6 = F#m7b5.

These principles are only given to increase your awareness of inter-relationships. You will arrive at the same notes through other means that will be given.

d) Minor 6 and minor 6/11 chords are used on ii; Group 3 also works rarely on biii, vi, and bvii.

Group 4 – Are used most often in moving line progressions such as Am, Am Δ 7, Am7, Am6, or are used when the Δ 7 is on top for the melody effect this creates. Your best bet to learn about these chords would be to eventually explore the following tunes: *Michelle, My Funny Valentine, More, Embraceable You, Taste of Honey, Volaré, The Summer* of '42, Something, and Blue Skies.

I. 3) The dominant 7th extensions are a truly vast world of sound, and because of the frequency of the V7-I (i) progression in Western music, this compounds the issue even more. However, as mentioned before, systems can speed up the learning process considerably:

- 1) Group 1 consisting of 7/6, 9, 13 (and the 7th itself) have a "pretty sound" (these definitions are just one man's opinion make your own judgments also) on some degrees, and a "bluesy" or "modern" sound on others. Through trial and error you will determine on which degrees of the scale you favor these sounds. However, the top note (melody note) in these chords plays a big part in your ears' acceptance or rejection of these sounds, so watch closely what is going on with the melody and *listen*.
- 2) Generally, wherever Group 1 works, Group 2 will also.
- 3) Group 3 is a unique group of sounds all these sounds have a strong affinity to one of the two whole-tone scales and also to a melodic minor scale. There are different types of sound within this group: one type includes the + [augmented], 7+, 7b5, and 9+. This type can often be used to replace a dominant 7th functioning as a V7 (or V of V, etc.).

The other type includes the 9b5, #11, 13#11, and 7b5 again. These all have notes which are within a melodic minor scale whose root is a 5th higher (like A13#11, #11, 9b5, 7b5 are in the E melodic minor scale). These chords work well on the following degrees:

On I – as ending chords

On bII as substitutes for V7

On II (in major keys usually) for II7

Occasionally for bIII (in major keys usually for VI7

On IV for IV7

On #IV (bV) for I7,

Rarely on V for V7

On bVI for II7 and bVI7

On bVII for II7 and bVII7

- 4) Group 4 are used to replace 7th's functioning as V7's.
- 5) Group 5 are used almost exclusively on V for V7 (also rarely on I, II for I7, II)
- 6) The diminished 7th will be discussed later. It is unique.
- 7) Group 1 chords (and occasionally Group 2) are commonly used to replace dominant 7th types whose roots are a b5th higher (like C7 for Gb7, C13 for Gb7).
- 8) Try $\Delta 7+$, $\Delta 9+$ for 7+ for an unusual quality; also m7+ for 7#9+.

Chord Construction (Formulas) + Substitution 11-16-73 Your musical life will be much easier if you look for sufstems and ways to organize large clumps of knowledge into more sufstems digestible, forms. The idea of chord construction can be easily digestible, forms. The idea of chord construction can be simply broken down into 3 groups of sound, each of which has simply broken down into 3 groups are based on 3 main chords: its own subdivisions; these groups are based on 3 main chords: the MANOR, chord, the MINOR chord, and the DOMINANT THICHOID. Asyon know the MANOR, chord, the MINOR chord, and the DOMINANT THICHOID. by now, chord construction can be, and is most often viewed in relation to major scales - for instance, any major chord is built by combining the 1, 3, + 5 (Root, 3rd tone + 5th tones) of its own major scale - like a the 1, 3, + 5 (Root, 3rd tone + 5th tones) of its own major scale - like a chord has the notes 6, B + D which are the 1, 3 + 5 of the 6 major scale. with all this in mind, here is a listing of the most common chords in with fatience, you will know all these me before too long. the 3 categories: DOMINANT 7th Dominant 7th-1,3,5,67 11 7/6-1,3,5,67,13 11 9-1,3,5,67,9 The major, minor, to dominant thechords MINOR MAJOR Minor - 1,63,5 Major - 1,3,5 will be referred to as the m7th - 1,63,5,67 812-1,3,5,6 11 13- 1,3,5,67,9,13 rasent chords of the 3 m7/11 - 1,63,5,67,11 m9 - 1,63,5,67,9 11 子化- 13,57 families of sound, all 11 75ws - 1,4,5,67 4 /9th- 1,3,5,9 11 7/6sw - 1,4,5,67,13 other chards are called mil-1,63,5,67,9,11 11 - 1,45,67,9 119 - 1,3,5,39 m/9-1,63,5,9 " 13540-1,4,5,67,9,13 extensions of these. 16/9-1,3,56,9 m 765-1,63,65,67 11 965 - 1,3,65,67,9 m765/11-1,65,67,11(63) " 13th - 1,3,56,34 11+19,767,67,9,+11 m7+- 1,63,#5,67 1 6/4+11 - 1,35,6,9,+11 " 9+11-1,3,5,6,7,9t11m6-1,63,5,6 11 13+11 - 1,3,5,67,9,+11,13 m619-1,63,5,6,9 11 9+ -1,3,45,67,9 1+11-1,3,5,+11 m6/7-1,63,5,6,7 Sua - 1,4,5 ++(9+) 7+ - 1,3,#5,67 + - 1,3,#5 m6/9/7-1,63,5,6,79 2 - 1,2,5 m619+11-1,63,5,6,9,+11 7+- 1,3,5,7 m6/11 - 1,63,56, 11 769-(1),3,5,67,69 m7-1,53,5,7 9+- 1,3,45,7,9 m719-1,63,5,7,9 7,49- 1,3,5,67,49 1 769+ - 1,3,45,67,69 1 76965- 1,3,65,67,69 1 749+- 1,3,75,67,49 Notallustes need be played 11 769+- 1,3,#5,67,69 in most chords, Quite of tany the 5 thor root are laft out; " 1369-1,3,5,6769,13 " 1349-1,3,5,67,49,13 Sometimes, both; also the 3id may be omitted occasionally. However, rather than trying to build these chards on your own, 1136965-1,3,65,67,69,13 1169-1,3,5,67,69,11 1169+-1/3)#5,67,69,11 11 7/11- 1,3,5,5,7,11 you should gave the time of your own, you should learning the chords that have already been worked 7/6/11-1,3,5,7,11,13 DIMINISHED - 1,63,65,667(6) out por you on the Essential chord fists and analyzing these chords to spot the above principles at work. I. In theory, any extension in one of the 3 families above may replace its

I. In theory, any extension in one of the 3 families above may replace the parent chord (like 47 or A+) for A) or (Am7 or Am6 for Am) or (A769+ for A) etc.

Therefore much experimentation of listening will be required to effectively rever much experimentation of quidelines should help it the for any interest this concept + some general quidelines should help it the for any interest the major extensions will pretty much fit as substitutes for any major trial that is not functioning as a dominant or dominant. On all the major extensions will pretty may operaging this is that the extensions of a dominant (Y of Y, etc.) — another way operaging this is that the extension of a dominant (Y of Y, etc.) — another way operaging this is that the extension of all lie pretty well on I. IV (immosfor) keys 1 bII, bIII, bVI + bVIII; also more rarely on bY, all lie pretty well on I. IV (immosfor) keys 1 bII, bIII, bVI + bVIII; also more rarely on bY, all lies and lies are not as easily substituted charles, they are not as easily substituted charles, they are not as easily substituted charles, they are not as easily substituted charles, (see dominant the bubble, next page 2.

I. 2) The minor extensions fall into 4 main groups as you can see on Page 1.

Troup 1 can all usually be used to replace duy mor michord for major).

Thoup 2 - are used to replace m7's and demost common on ii obaminor key (vii of major).

Throup 3 - Jused in place of 1's , ivs , + bvis-like if you were given C E7 Am F G7C,

Throup 3 - Jused in place of 1's , ivs , + bvis-like if you were given C E7 Am F G7C,

Throup 3 - Jused in place of 1's , ivs , + bvis-like if you were given C E7 Am F G7C,

Throup 3 - Jused in place of 1's , ivs , + bvis-like if you were given C E7 Am F G7C,

Throup 3 - Jused in place of 1's , ivs , + bvis-like if you were given C E7 Am F G7C,

Throup 3 - Jused in place of 1's , ivs , + bvis-like if you were given continuent 7th

Throup 3 - Jused in place of 1's , thus group also can replace dominant 7th

Through 4 - are used most often in moving line progressions such as Am, Am 7, Am 7, Am 7, Am 4, Am 4. Are used most often in moving line progressions such as Am, Am 7, Am 7, Am 7, Am 9, Am 4 are used most often in moving line progressions such as Am, Am 7, Am 7, Am 7, Am 9, Am Chard Substitution - Page 2 Hroup 4 - are used most often in moving line progressions such as Am, Am7, Am7, Am7, Am6 or are used when the 7 is on top for the melocky effect this creaties; How or are used when the 7 is on top for the would be to eventually More, your best bet to leasn about these chords would be to eventually More, your best bet to leasn about these chords would be 7 January Valentine, More, explore the following times: Michelle, My Jump Valentine, and Blue Embraceable Jon, Joste of Honey, Volare, The Summer of 42, Something, and Skies. I. 3 The dominant 7th extensions are a truly wast world of sound and because of the frequency of the ∇ 7- I(i) progression in Western music, this compounds the issue even more. However as mentioned before, systems can speed up the learning process considerably the 7th tall) have a "pretty sound" (these of the process considerably the 7th tall) have a "pretty sound" (these of the process considerably the 7th tall) have a "pretty sound" (these of the process considerably the 7th tall) have a "pretty sound" (these of the process considerably the 7th tall) have a "pretty sound" (these of the pretty sound of the pret definitions are first one manie spinion - make your own Judgments also) on definitions are first one manie spinion - make your own Judgments also) on some degrees and a "bluesey" or "modern" sound on others; thru trial and some degrees and a "bluesey" or which degrees of the scale you favor these error you will determine on which degrees of the scale you favor to work the top note (melody note) in these chords plays a hig part in your However the top note (melody note) in these sounds so watch closely what is ease acceptance or reflection of these sounds so watch closely what is going on with the melody and lister, group 2 will also.

There 3 is a unione group of sounds - all these sounds have a strong of sounds - all these sounds have a strong Trong 3 is a unique group of sounds - all these sounds have a strong of Hrong 3 is a unique group of sounds - all these sounds have a strong one type of the 2 whole tone scales and also to a melodic minor affinity to one of the 2 whole tone scales of sound within this group: one type affinity there are different types of sound within this group: one type affinity there are different types of sound within this group: one type affinity the used to replace a dom, includes the +, 7+, 765, +9+ This type can often be used to replace a dom, includes the +, 7+, 765, +9+ This type can often be used to replace a dom, includes the +, 7+, 765, +9+ This type can often be used to replace a dom. uncludes the +, 7+, 765, +9+ This type can often be used to replace a dom, the functioning as a Trontoft step); +11, 13+11, and 765 again; these all have notes the functioning as a Trontoft step (like A13+11,+11,965,765 are which are within a melodic minor scale). These chords work well on the following degree: in the Emelodic minor scale). These chords work well on the following degree: in the Emelodic minor scale) that for T7; on T(in major keys) for T7; or to T on T(in major keys) for T7; on by T on by T (by) for T7, rarely on Tfor T7; on by T on by T (in major keys) for T7; on Ty for T7; on try (by) for T7, rarely on Tfor T7; on by T for T17 + by T7; on by T7 for T17 + by T7; on by T7 for T17 + by T7; on by T7 for T17 + by T17; on by T17 for T17 fo Description of are used to replace 7th's functioning as \$\frac{175}{5}\$, (also ranky on \$\frac{1}{5}\$, If for \$\frac{17}{5}\$).

Thought are used almost exclusively on \$\frac{1}{5}\$ for \$\frac{17}{5}\$ are used almost exclusively on \$\frac{1}{5}\$ for \$\frac{17}{5}\$ are used almost exclusively on \$\frac{1}{5}\$ for \$\frac{17}{5}\$ are used almost exclusively on \$\frac{1}{5}\$ for \$\frac{17}{5}\$. (5) From are an amos les discussed later it is unique.

(6) The diminished 7th will be discussed later it is unique. 6) The deminished 170 were a manuface ester it is unique.

(6) The deminished 170 were a manuface (ster it is unique, used to replace of the description of the commonly used to replace of the proof of the commonly used to replace of the description of the commonly used to replace of the description of the descriptio Dry 7+, 9+ for 7+ for an anusual quality; also m7+ for 7#9+,

11-16-73