I love chords. They add richness, clarity and emphasis to melodic lines. They are one of the four pillars of music; melody, harmony, rhythm and timbre. In classical music you can alter any of the four to help develop a piece of music. In church music, you are lucky if you can alter only one – the timbre. If you change the work from vocal to instrumental, from organ to piano to guitar, most people will give you the benefit of the doubt; maybe you know what you are doing. But try to change the melody, rhythm or harmony, and the roof, not to mention the bell tower, steeple, cross and assorted pigeons, will come crashing down on you. OK – I’ll give you the sanctity of the melody and rhythm. The melodic and rhythmic lines define the piece; that’s how we memorize a work. But the minute you try to change, enhance or embellish the harmony, you get the little-old-lady-litany. It goes like this:

*Why did you have to change the chords? They were fine the way they were. I like them like that. If the composers wanted the chords changed, they would have changed them.* *(go to top - repeat litany ad nauseum.)*

So – here’s my answer to the litany.

I changed the chords because I wanted to make the piece better. Yes, the original chords were fine the first six verses of the piece, but after a while they got b-o-r-r-r-i-n-g. You have every right to like the chords the way they are – after all, there’s no accounting for taste (OK – so I’m a little nasty). Oh, you want to talk about what the composer really wanted, huh? (This is where I really begin to shine.) Well, let me tell you about composers. I AM ONE. A composer, that is, of religious music; a composer of sufficient enough skill to have major publishers desire to publish my music. I talk with composers, work with composers, write with composers and argue with composers, and I will tell you, without hesitation, that composers like harmonic changes brought about by the arranger or instrumentalist. ~The eyebrows raise and the chin drops.~ *Then why don’t they write all these changes to their chord lines?* I can give you the answer in one word – MONEY!

Hymnals are meant to be sold. The more hymns you can pack in one hymnal, the better it is. If you can put an entire four verse hymn with a refrain on one page (rather than four pages) you can get more hymns in the book. You accomplish this by stacking verses, *i.e.* placing the words for all four verses one right above another. Then you need only one melody line. Even though you may sing the refrain five times, it is only written once with D.S. and repeat signs. And, the accompaniment part is only one page long. You can’t blame the publishers – they need to produce a viable product and turn a profit. That’s why you don’t find that many repeat signs or D.S. in classical music. The classical composers have complete control over their music and demand the right to develop their harmonies and themes without concern for length.

Take, for instance, the Catholic hymn “Joyful, Joyful, We Adore Thee.” It is a three verse, stacked hymn based on the main theme of the final movement of Beethoven’s 9th Symphony. It is 16 measures long and has one set of chords for the entire piece. Would Beethoven have approved this? NEIN! In fact, during the final movement of the symphony, Beethoven reharmonizes the theme 4 times; he also changes the melody, changes the rhythm, and changes the time signature back and forth from simple to compound meter.

Do I make my point clear enough? The melody is like a newborn – it must be nurtured and allowed to mature and grow. Changing the chords to fit the circumstances is one way to do this. That’s what this handout is all about - helping that melody mature and grow - ensuring that every time we hear the melody again, we are presented with something new. It might be a new chord, or a new style of accompaniment, or a new descant or instrumentation. We are keeping the music alive, feeding the human need for variety as well as stability. By the way, composers don’t always use the best of chords even on the first time thru a melody. Why not? Because some of them are not “chord savvy people.” Also, some are trying to keep it simple for rudimentary guitarists, or pianists. Anyway, are ya ready? OK, here we go.

Uh-oh – I forgot to ask. You know, we are going to be dealing exclusively with melodies and chord symbols. You *do* know how to read chord symbols, don’t you? If the answer is “No” or “I think so” or “Maybe” or “Pretty much,” you need to go over the next few pages. If your answer is “Are you kidding? I’m a wiz at chords,” then you should at least peruse the pages to ensure that we are using the same system. If you don’t know chord symbols, you are probably going to want to throw this handout away before you get to the bottom of the next page. Please don’t – I worked really hard on it. Remember – learning chord symbols is like learning how to read. At first it seems like there are a gazillion rules. But after a while, it’s second nature. Hang in there and read the whole section on chord symbols. If you don’t get it, read it again. If you still don’t get it, call me.
A Chord By Any Other Name Would Spell As Sweet

You can’t pen the great American novel unless you are literate; you can’t compose a symphony unless you can notate music; you can’t paint the Sistine Chapel ceiling unless you know how to draw; AND you can’t arrange music and uses chord substitutions unless you can read chord symbols. I don’t mean a general knowledge of the root and the third – I mean an exact spelling of a chord derived from a symbol. Complicating the process is the fact that different people use different symbols for the same chord. For instance, the symbol C$^9$ might be spelled C-E-G-D, or C-E-G-B-D, or C-E-G-Bb-D, or C-D-E-G. Well, it’s time to take a stand. The process is an exact science. Following my rules, you can spell, CORRECTLY, any chord given the chord symbol. I’m going to give you the ONLY correct way of spelling chords; it is based on the system taught at the Berklee School of Music and is used throughout the commercial, jazz, pop and film scoring world. If this sounds like I am being presumptive and dictatorial . . . you’re right – I am. Symbols must be uniform to be used throughout the musical world and, believe me, folks, this is THE system that is used. OK – let’s do it.

What is a chord? It is a root note followed by at least two more notes that define a harmonic system (triadic, quartet, quintal), a modality (major, minor, augmented, diminished) and a function (tonic, dominant, subdominant, etc.). Those two or more notes are based on the “natural notes” for any chord, which are derived from the overtones above the root. What are overtones, you ask? They are barely audible tones produced when a root pitch is sounded. You can hear them if you depress the damper pedal, strike a bass string on a piano and listen very carefully. Overtones are used by brass players and to some degree by string and wind players. (Keyboard types never deal with them – thus it only seems fair that the whole world of chords used by keyboard players is based on a system foreign to them, right?)

OK, let’s look at a chord. The root is C and the “natural notes” above the root are a major 3rd (E), perfect 5th (G), flat 7th (Bb), major 9th (D), perfect 11th (F) and major 13th (A). Thus, the most natural chord is: C E G Bb D F A.

Here comes the first rule of chord construction:

I. A BASIC CHORD IS A ROOT NAME + A WORD TO INDICATE THE MODALITY + A NUMBER TO INDICATE THE HIGHEST NATURAL NOTE IN THE CHORD.

Here’s some examples: C$^{\text{min}}$ = C E b G; C$^{\text{aug}}$ = C E G#; C$^{\text{dim}}$ = C E b G b; C = C E G.

Note that the major triad doesn’t use the symbol “maj,” it has NOTHING there. Thus, the lack of the modality word (min, aug, dim) means the triad is major.

Let’s look at a more complex chord – the 7th:

C$^{\text{min}7}$ = C$^{\text{min}}$ + flat7 = C E b G B b; C$^{\text{aug7}}$ = C$^{\text{aug}}$ + flat7 = C E G# B b; C$^{7}$ = C + flat7 = C E G B b (Remember that the lack of a modality word means “major” triad).

Wait a minute, you say. I’ve seen the symbol “maj;” what’s that for, you ask? The term “maj” refers to the 7, not the triad. It means the 7 is not flatted, but is a major 7 above the root. Thus,

C$^{\text{maj}7}$ = C + major7 = C E G B; C$^{\text{min(maj7)}}$ = C$^{\text{min}}$ + major7 = C E b G B;

Caug(maj7) = Caug + major7 = C E G# B (More about those parentheses later.)

Get the idea? The modality words (min, aug, dim) refer to the triad; the word “maj” refers to the 7.

II. UNLESS INDICATED OTHERWISE, ALL NATURAL NOTES LOWER THAN THE NUMBER GIVEN IN THE CHORD ARE INCLUDED IN THE CHORD.

Hard to explain but easy to show. Here’s some examples: C$^{\text{min9}}$ = C$^{\text{min}}$ + flat 7 + maj 9 = C E b G B b D.

Hold on, you say. There’s no 7 in that chord symbol. Remember Rule II. The 9 in the chord symbol means that the natural 7 (flat7) is also in the chord. To drive home the point, I’m going to jump ahead to 11ths and 13ths. Consider this chord:

C$^{\text{min11}}$ = C$^{\text{min}}$ + flat7 + major9 + perfect 11 = C E b G B b D F.

Remember Rule II. The 11 in the chord symbol means that the natural 7 (flat7) and the natural 9 (major9) are also in the chord. Here’s one based on the highest natural number:

C$^{\text{min13}}$ = C$^{\text{min}}$ + flat7 + major9 + perfect 11 + major 13 = C E b G B b D F A.

Once again, remember Rule II. The 13 in the chord symbol means that the natural 7 (flat7), the natural 9 (major9), and the natural 11 (perfect11) are also in the chord. More about the 11 and 13 later.

OK - Go back and read Rules I and II. If you understand them now . . . continue on.
The symbol for a weird chord - the diminished 7. When written as C\(\text{dim}^7\), you would think that this would break down as C\(\text{dim}^7 + \text{flat } 7 = C E^b G^b B^b\). But no, this has to be different. This C\(\text{dim}^7\) breaks down as C\(\text{dim}^+ + \text{dim } 7 = C E^b G^b B^b B^b\) or (enharmonically) C E^b G^b A. The reason is tied into classical harmony and not worth explaining. Just remember – C\(\text{dim}^7\) means C\(\text{dim}^+ + \text{dim } 7\). (C\(\text{dim}^9 = C\text{dim}^+ + \text{dim } 7 + \text{major } 9\))

Back to the real world. Time for a new rule.

III. IF YOU WANT TO CHANGE ONE OF THE NATURAL NOTES, INDICATE THE CHANGE WITH A \# OR b AND ENCLOSE THE CHANGE IN PARENTHESES.

Here are some examples:

You want a C\(^7\) chord but you also want a flat nine added - C\(7(b9)\). A C\(^9\) chord with a sharp 11 added – C\(^9#\text{11}\). A C\(^\text{11}\) with a flat 9 – C\(^11(b9)\). A C\(^\text{min7}\) with a flat 9 and flat 5 – C\(^\text{min7(b5b9)}\) = Eb G^b D^b. The natural notes that can be altered are 5, 9 and 11. The alterations are b5, b9, #9 and #11. There is no #5 (already covered by the aug) and no b11 (the same as a major 3\(\text{rd}\)). The maj7 is technically an altered natural note, but its frequent usage allows it not be placed in parentheses except if there is a modality word used. Example: C E^b G B = C\(^\text{min} + \text{maj } 7\); C E^b G B D = C\(^\text{min} + \text{maj } 7 + \text{major } 9\) = C\(^\text{min9(maj7)}\)

Timeout for a weird chord - the half-diminished 7. The notes of this chord are C E^b G^b B^b. It looks like a C\(\text{dim} + \text{flat } 7\). But we can’t call it a C\(\text{dim7}\) – that symbol is already taken (see the above “weird chord”). So here is how the half diminished chord is written. It is a C\(^\text{min7}\) i.e. C E^b G^b with the 5 flatted. The symbol is C\(^\text{min7(b5)}\).

Hang in there, we’re getting close to the end. We all know about the suspended 4 chord – the 3 is replaced with the 4, and the symbol is C\(^\text{sus4}\) or C\(^7\text{sus4}\) or C\(^9\text{sus4}\) (no C\(^\text{11sus4}\) because the 11 is the 4 one octave higher). Here’s an example; C\(^9\text{sus4}\) = C + flat 7 + major 9 + 4 replacing the 3 = C F G B^b D. Fair enough, but did you know there is a sus2 chord? The 2 replaces the third in the original chord; it is used to help define a moving internal line and is always followed by the original chord. Here’s an example. C\(^\text{sus2}\) = C + replacing third = C D G. This resolves to C = C E G or to C\(^\text{min}\) = C E^b G.

The last of the chord alterations is the add/omit chords. These are pretty simple – if you want to add a note not normally in the chord symbol, place “add” and the note number in parentheses; to omit a note, use the word “omit.” Add numbers are 2, 4, 9 and 11; omit numbers are 3 and 5.

Example: C\(^\text{min(2,4,9,11)}\) = C D E^b G; C\(^\text{min(4,9,11)}\) = C E^b G D; C\(^\text{min9(2,3,4,9,11)}\) = C E^b G B^b F;
C\(^\text{7(omit3)}\) = C G B^b; C\(^\text{min9(omit5)}\) = C E^b G B^b D; C\(^\text{7(omit3)}\) is sometimes labeled C\(^5\).

IV. ALL THE “ADD” OR “OMIT” SYMBOLS ARE ENCLOSED IN PARENTHESES. “SUS” IS NEVER ENCLOSED IN PARENTHESES UNLESS IT FOLLOWS A MODALITY WORD.

Timeout for a weird chord – the 6 and the 6/9. The 6 is easy – just add the major 6 to either the major or minor triad. For the 6/9, add the major 6 and major 9 to the major or minor triad.

Examples: C\(^6\) = C E G A; C\(^\text{min6}\) = C E^b G A; C\(^6/9\) = C E G A D; C\(^\text{min6/9}\) = C E^b G A D.

And now, two last little added features called slash chords. Sometimes, for the sake of making a chord easier to play, a simplified symbol is used. Look at this: C E G^b B^b D F^b = C\(^7(b5,b9)\). If we rewrite the E as an Fb and move it to the end of the note list, it becomes C G^b B^b D F^b. Note that G^b B^b D F^b is a G^b7 chord. Thus this entire chord could be called a G^b7 over a C bass note OR G^b7/C. The slash followed by a note means that the chord has an INDICATED BASS NOTE. Indicated bass is also used for inversions such as C/E or C/G or C/B^b. These bass notes are in the chord and would be called 1\(^{st}\), 2\(^{nd}\) and 3\(^{rd}\) inversion by the classical crowd. Sometimes indicated bass is merely outlining what a moving bass is doing. Assume you have C\(^\text{min}\) chord for entire measure and quarter note descending bass notes of C B^b A^b G. You could list the four chords as C\(^\text{min}\) B^b6sus4(add2) A^b7 G\(^\text{aug(sus4)}\) OR C\(^\text{min}\) C\(^\text{min}/B^b\) C\(^\text{min/A^b}\) C\(^\text{min/G}\).

Get the idea? Indicated bass makes life easier. Occasionally you might see this: G^b7/C\(^7\). This is a polychord; note that the second symbol is not a note, but a chord, a G^b7 chord played above a C\(^7\) chord.

Timeout for a few weird little rules. Just as in the sus4 chords, where the suspended 4 takes the place of the 3, the natural 11 chord doesn’t like the 3; remember that the 11 is a perfect octave above the 4. When you have an 11 chord based on a major triad, the 3 is left out. Example: C\(^\text{11}\) = C G B^b D F; this is sometimes written as C\(^\text{min7/C}\) or C\(^9\text{sus4}\) – they all have the same notes. If you have a #11 or min 3\(^{rd}\) in the chord, you can have the 3. Example: C\(^\text{9(11)}\) = C E G Bb D F; C\(^\text{min11}\) = C E^b G B^b D F. The 13 chord is the odd man out; by general usage, a C\(^13\) is C G B^b D E A. Notice that the 11 is missing and is replaced by the 10 (actually the 3 an octave up). This eliminates conflict between the 3 and the 11. Of course, using a sharp 11 solves this, as in C\(^13(11)\) = C E G B^b D F^b A. If you want an 11 in a 13 chord, do this: C\(^\text{min9/C}\) = C G B^b D F A.
Well . . . that’s it – how to read a chord symbol. There are some more complex symbols I could write about, but you’ll probably never encounter them outside of a recording studio or jazz club. So with your new knowledge, you are now ready to become a chord grabber, a giant among chord substitutionists. Go get ’em, tiger!

**A Short Digression About Progression and Retrogression**

We use chords because a bunch of monks in the Middle Ages got tired of singing in unison. They realized that the difference in the range between the tenor and bass voices was about a fifth. Each group started to sing the same melody, but in a comfortable range and parallel harmony at the fifth was born. Add an occasional baritone and triadic harmony of the Renaissance comes into being. Thank you, Brother Malcantus. The more this new harmony developed, the more musicians realized it was not a random collection of pretty sounding notes. Harmony had a tendency to move toward a point of rest. Called at various times the final, the stable tone, or the tonic, it represented the goal of the harmonic movement. The relationship of harmony and motion toward rest was codified in the 1700’s. Those who love the music of Wagner or those who play Heart And Soul on the piano both owe their musical fulfillment to Bach and the boys of the 18th century.

It was this crowd that best made use of that harmonic bugaboo of freshman theory class, the Circle of Fifths. While the circle is primarily used to teach key signatures, it is also the prime source for exploring harmonic movement. The circle tells us that key signatures go from F♯ to B to E to A to D to G to C to F to B♭ to E♭ to A♭ to D♭ to G♭ (which is the same as F♯). The circle is complete. Incidentally, we have also just written the basis for all we will learn from this point on about harmony. I could use the roman numeral analysis method, which says that the circle is #IV – VII – III – VI – II – V – I – IV – bVII – bIII – bVI – bII – bV. But, this gets cumbersome and I will try to refer to it only when necessary. Instead, I will base as much as possible on C major, the “people’s key,” and will try to keep it simple. Since my word processor does not type circles very well, I will flatten out the orb, as I did above, and rename it a progression line.

If we take C as our point of rest, we can move toward it (left to right on the progression line) with the following chords: F♯min7(b5) – B7 – Emin7 – A7 – Dmin7 – G7 – C. Notice that we use all seven roots in the same order as on the progression line. We don’t need to use all seven, but it is rather important that we continually move left to right. This fact, that we are moving left to right and getting constantly closer to the point of rest, makes this group of chords a PROGRESSION. It is progressing toward the tonic.

If we again take C as our point of rest, we can move away from it (right to left on the progression line) with the following chords: C – G – Dmin – A – Emin7 – B – F#. Notice that we use all seven roots in the reverse order as on the progression line. Again, we don’t need to use all seven, but, in this case, it is rather important that the chords are obtained from moving right to left on the line. This fact, that we are moving right to left and getting constantly further away from the point of rest, makes this group of chords a RETROGRESSION. It is retrogressing away from the tonic. Just as a point of interest, much of rock and roll (Elvis, 50’s and 60’s) is based on progression, and much of rock (80’s and 90’s) is based on retrogression.

Most of the music we will deal with, classical hymns and contemporary religious songs, are based on progression. But there is enough retrogression that it will constitute a valid reason for certain chord substitutions.

**The Rules of Harmony – Ta-Da**

Each of these rules of harmony and chord substitution will be numbered. This is not because I have a numerical fetish; it is because each of the chord substitutions that I have used on the pieces at the end of the handout has a little number by it that will refer to one of the rules. It’s pretty dumb to give you a chord substitution and not tell you why I substituted it. Don’t confuse these rule numbers with above listed rules for chord symbols. These rules will be listed with standard numerals. So hang on . . . here we go.

1. Progression rules the world. Follow the progression line from left to right. The chords generally should be major, minor, 7 or min7. The only requirement is that the end chord, the tonic, be major or minor. A progression is initiated when you start at the tonic, jump to any chord left of the tonic on the progression line and work your way back to the tonic (left to right).
2. Retrogression rocks the world. Follow the progression line from right to left. The chords generally should be major or minor. A retrogression is initiated in two ways: a. when you start at the tonic and move away, to the left, on the progression line, eventually working your way back to the tonic through progression; b. jump to any chord right of the tonic on the progression line and work your way back to the tonic (right to left).

3. A complete progression tends to be seven chords with different roots from the progression line, such as F♯/min7(6b5) – B7 – E♭min – A7 – Dmin – G7 – C. However, the tonic doesn’t always have to be at the end of the line . . . it can be in the middle; A7 – Dmin – G7 – C – F – Bb7 – E♭. The tonic is still C, but the progression starts with the F chord, continues to the E♭ which then goes to the A7 and back to the tonic. The progression (when played) is actually this: F – Bb7 – E♭ – A7 – Dmin – G7 – C.

4. Two consecutive chords whose roots are a tritone (aug 4th) apart make a strong progression. See the E♭-A7 chord progression in rule 3.

5. You can add a 2, 6, 6/9, Maj7 or Maj 9 to any tonic chord if the melody supports it.

6. Any chord can follow immediately after the tonic chord.

7. The most common chord to jump to from the tonic is the VI. C to Amin is strong.

8. When following the progression line, you can skip any one chord as long as you don’t skip two in a row. E♭min – Dmin – G7 – C; E7 – Am7 – G7 – C; F♯7 – Bmin – A7 – Dmin – G7 – C.

9. Parallel diatonic harmony. Take a melody line, such as, 1-2-3-6-4-5-1, assign a harmony to the first note (C), move the root of each chord parallel with the melody. The notes of the chords must be in the key signature. Thus, the melody is harmonized C – Dmin – E♭min – A♭min – F – G – C.

10. Parallel chromatic harmony. Take a melody line, such as, 1-2-3-6-4-5-1, assign a harmony to the first note (C), move the root of each chord parallel with the melody. Each chord must have the same form (major, minor, etc.) as the first chord. Thus, the melody is harmonized C – D – E – A – F – G – C.

11. If you have a tonic chord that goes on for more than 1 beat, you can enhance it by moving the bass note to the 3rd (1st inversion) or the 5th (second inversion) while retaining the tonic chord.

12. A second inversion tonic chord (chord with the 5th in the bass, such as C/G) is treated like a V chord. The second inversion tonic chord usually resolves to the V and can be preceded by variations of the II chord. C – Amin – D7 – C/G – G7 – C or C – Amin – bmin7(b5) – C/G – G7 – C.

13. A very long stretch of tonic chords (1 measure or more) with a melody of 1 or 3 can be replaced with these two patterns: Major key; C – Caug – C6 – C7 – C6 – Caug – C; Minor key; Cmin – A♭/C – Cmin6 – Cmin7 – Cmin6/A♭/C – Cmin.

14. Melody of 8-♭7-8 or ♭3-2-1 or ♭3-2-♭3 can be harmonized with ♭VI - ♭VII - I; A♭ – B♭ – C.

15. Major melody ♭3-4-5 or ♭7-6-5 harmonized with ♭III – IV – V or ♭III – IV – I: E♭ – F – G; E♭ – F – C.

16. Common minor chord progression: ♭VI – IVmin – IImin(b5) – V7 – I; A♭ – Fmin – Dmin7(b5) – G7 – Cmin.

17. At the end of a piece, over a melody note of 1, you can sub bVII – IV – I: B♭ – F – C.

18. Melodic patterns 3-2-1-7 and 3-2-1-5 can be harmonized with retrogressive I – V – VImin – IIImin; C – G – Amin – E♭min.

19. Melodic pattern 8-7-6-5 can be harmonized with retro VImin – IIImin – IV – I; Amin – E♭min – F – C.

20. Near the beginning or end of a song, the existing harmony can be played over a non-changing tonic or dominant bass note. Use your ear to see if it works. This is called Pedal Point.

21. If you have a chord that remains the same for some time, you can move the bass note in a descending pattern to give movement. C – C/B – C/A – C/A♭ – C/G.

22. Descending bass pattern can be harmonized with retro progression; C – G/B – Amin – E♭min/G – F – C/E

23. Harmonize a repeated/sustained one note with an ascending or descending bass line and chords to fit the melody note and bass: (melody is a long C note) C – Dmin7 – Cmaj7 – Fmaj7 – Gsus4 – C.

24. Move the bass line contrary to the melody and harmonize to fit the notes; Melody is 1 – 2 – 3 – 7 – 6. Harmony is C/E – G7/D – C – E♭min – F.

25. If the bass line has consecutive notes a 3rd apart, insert stepwise bass note between if melody allows; original line C – C/E – G; line with inserts C – G7sus4/D – C/E – F – G.


27. Any major or minor chord can be preceded by its dominant, dominant7, dominant7(b5) or aug7; G – C; G7 – C; G7(b5) – Cmin; Gaug7 – C.
28. Any dominant\(^7\) functioning chord can be preceded by its dominant, dominant\(^\text{min}\), dominant\(^7\), dominant\(^7\text{min}\), dominant\(^7\text{b}5\), or dominant\(^\text{min}7\text{b}5\). The \(G – C\) progression can become a \(D – G\) or \(D\text{min} – G\) – \(C\) or \(D – G\text{min}\) – \(C\) or \(D\text{min}7\text{b}5\) – \(G\) – \(C\). The \(G – C\) progression can become a \(D – G\) or \(D\text{min} – G\) or \(D – G\text{min}\) – \(G\) – \(C\) or \(D\text{min}7\text{b}5\) – \(G\text{min}\) – \(C\). The \(G – C\) progression can become a \(D – G\) or \(D\text{min} – G\) or \(D – G\text{min}\) – \(G\) – \(C\) or \(D\text{min}7\text{b}5\) – \(G\text{min}\) – \(C\).

29. Any dominant\(^7\) chord (in major key) can become a \(9\)th, \(11\)th or \(13\)th. Sub \(C\) or \(C\text{dim}\) for a \(C\text{min}\).

30. Any dominant\(^7\) chord (in minor key) can become a \(b9\) or \(11\text{b}9\). Sub \(C\text{min}\) or \(C\text{dim}\) for a \(C\).

31. Any dominant\(^7\) chord can be replaced with a dominant\(^7\text{min}\) or dominant\(^7\text{b}5\) that is built on a root that is \(\frac{1}{2}\) step above the tonic that the original dominant\(^7\) approached. This is called a chromatic dominant.

\[
\begin{align*}
D\text{min} – G\text{min} – C & \quad \text{becomes} \quad D\text{min} – D\text{b}7 – C \quad \text{or} \quad D\text{min} – D\text{b}7\text{b}5 – C. \\
\text{In place of tonic I chord, substitute a III\text{min}.} \quad D\text{min} – G\text{min} – C – G – C & \quad \text{becomes} \quad D\text{min} – G\text{min} – E\text{min} – G – C \\
\text{Major or minor triads can become sus2 or sus4 triads as long as they resolve.} \\
\text{II, II\text{min}, IV and IV\text{min} chords are interchangeable if the melody allows.} \quad D – G – C = D\text{min} – G – C = F – G – C = F\text{min} – G – C. \\
\text{When you have a IV or II\text{min} chord with 2 or 4 in the melody you can substitute a bVII chord.} \quad \text{The bVII} & \quad \text{is generally followed by a IV or V chord. Melody 5 – 3 – 1 – 2; Original harmony} \quad G – C – A\text{min} – D\text{min}; \\
\text{Substitute harmony} & \quad G – C – A\text{min} – B\text{b} – G – C. \\
\text{You can replace any chord between two I\text{min} chords with a IV if the melody allows.} \quad C\text{min} – F\text{min} – C\text{min} & \quad \text{becomes} \quad C\text{min} – F – C\text{min}; \\
\text{To achieve a modal sound, you can replace V – I with V\text{min} – I;} \quad G – C & \quad \text{becomes} \quad G\text{min} – C. \\
\text{For a deceptive cadence feel, substitute bVI or V\text{min} for I;} \quad D\text{min} – G\text{min} – C & \quad \text{becomes} \quad D\text{min} – G – A\text{b}. \\
\text{For two chords a whole tone apart, you may insert a diminished chord between them;} \quad C – D\text{min} & \quad \text{becomes} \quad C – C\text{dim} – D\text{dim}. \\
\text{Any 2\text{nd} inversion chord (especially I and V) can be approached by its IV\text{min}, VI\text{min} or bVI\text{7} chord with the} \quad A\text{min} – F\text{min}/A\text{b} – C/G; \\
\text{the bass note a half step above the bass note of the 2\text{nd} inversion chord.} \quad A\text{min} – F\text{min}/A\text{b} – C/G; \quad A\text{min} – A\text{b}7 – C/G. \\
\text{For IV or II\text{min} chords that resolve to III\text{min} or I\text{1} inversion I chords, insert a 3\text{rd} inversion V\text{7} chord (a V\text{7}} & \quad \text{chord with the 7\text{th} in the bass) between the chords.} \quad F – G\text{7}/F – E\text{min}; \quad F – G\text{7}/F – C/E; \quad D\text{min} – G\text{7}/F – C/E. \\
\text{The last rule is the easiest: BECAUSE IT WORKS.} \quad \text{Sometimes it is so complex to explain why a substitution works, that it is easier to just say “BECAUSE.” Hey . . . if it works – it works.}
\end{align*}
\]

Because everyone is not as enlightened as us, you will find a variety of symbols used to notate chords. Just so you know the options, here are the variations. The best symbol is the first one given:

\[
C\text{min} = C\text{min}, C\text{Min}, Cm, Cmi, C\text{;} \quad C\text{aug} = \text{Caug, CAug, C\text{;}} \quad C\text{dim} = C\text{dim, CDim, Cdi, C\text{O}} \\
C\text{min}7\text{b}5 = C\text{7(b5)}; \quad C\text{7(b9)} = C\text{7(b9)}; \quad C\text{maj7} = \text{CM7, Cma7, C\Delta7, Cmj7;}
\]

Chord grabbers, i.e., piano players and guitarists, sometimes like to see simplifications of chords. Here are some slash chord simplifications:

\[
\text{C9} = G\text{min}/C; \quad \text{C11} = G\text{min7}/C \text{or B\text{b}7/C}; \quad \text{C11(b9)} = B\text{bmin}/C; \quad \text{C13sus4} = B\text{bmaj7}/C; \quad \text{Cmin7(b5)} = E\text{bmin}/C
\]

**Chord Grabbers Hall of Fame:**

| If Today You Hear His Voice (Haas) | Night of Silence (Kantor) |
| Festival Canticle (Hillert) | This Day Was Made By the Lord (Walker) |
| Holy Darkness (Schutte) | Supper of the Lord (Rosania) |
| Gift of Finest Wheat (Kreutz) | Gather Us In (Haugen) |
| Center of My Life (Inwood) | Rain Down (Cortez) |
| Canticle of the Sun (Haugen) | Cry of the Poor (Foley) |
| No Greater Love (Joncas) | See Amid the Winter Snow (Keil) |

I encourage you to look-up the chords for these wonderfully crafted songs. They are top-notch.

And now, the most important part of this handout: The Songs. Each song has two chord lines; the lower line is the original chord scheme as notated in the standard accompaniment book; the upper line is my harmonization. Each chord substitution has a number that refers you to the rule of substitution that I used to change the chord or the progression. Many songs have a little note explaining something about the song.
A simple tune that is improved by stepwise bass motion and some diminished and half diminished chords.

Amazing Grace

Traditional

F

F

F/A

Dm

Bb6

F/C

C

F/Add2/A

Dm7

C7

F/C

F/A

Am

C

C7sus4

C7/Bb

Am

C7/Bb

Am

C7

F/C

Am

Bb

Gm

F

Bb/F

F

Dm/B

Am

Gm

F
This standard harmonization is made more lush by some halfstep bass motion.
This Christmas favorite benefits from some retrograde patterns

Angels We Have Heard On High

French Traditional
The key chord is the Cmin7(b5); its unexpected sound lifts the refrain.
Compare 1st 4 measures of line 3 with line 4 for 2 different ways to harmonize the same melody.
Old hymns sound good with one chord per melody note.

Come, Holy Ghost
This piece is one big retrogression. All I did was a little enhancement and change the bass notes. Compare mss. 1-3 with mss. 5-7. Same chords - different feel.
The sparkling accompaniment to this Gloria is so uplifting that I prefer to save it for the final refrain. I use these chords for the earlier refrains:

**Gloria - Mass of Light**

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David Haas
Here I Am, Lord - Refrain

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Each C-D-G pattern is played with a different note on top to build excitement.
Holy God, We Praise Thy Name

This piece was reharmonized by writing a bass line that ran sometimes similar and sometimes contrary but almost always stepwise with the melody. Then primarily diatonic chords were chosen for their compatibility with the melody and bass. It's too complex to number. Just enjoy!
The stepwise bass movement has a folk-like quality with the simple chords.

Let Us Break Bread Together

American Folk Hymn
Lots of bVII and stepwise bass in this one to enhance the folk character of the piece.
No Greater Love - Refrain

This is already one of the best written and harmonized pieces we have. All I can do is add some secondary dominants, pedal point and a chromatic dominant.
Pedal point and stepwise bass movement help this old hymn.

Now Thank We All Our God - 1st 8 measures

[Music notation image]
You can't improve much on perfection. The A chord lifts the 2nd phrase.
A study in how to enhance long sections under one chord

Prayer of St. Francis

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Sebastian Temple
3rd line, 2nd measure; a strange chord that really works. I stole it from a Paul McCartney cartoon about singing frogs.

**Sing A New Song**

Dan Schutte

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Great original chords. I did a lot of experimenting to come up with the chords of mss. 3, 4, 7, 8.

Sing Out Earth and Sky
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Marty Haugen
A study in fixed hand or diatonic parallel motion

Tantum Ergo

Gregorian Chant
I use a lot of I-V-I patterns in here because I originally wrote these chords for an arrangement that had timpani.

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The King Of Glory

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This harmony lifts this 3-chord guitar piece into an interesting chordal melody.
Though The Mountains May Fall - Verse

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Dan Schutte
We Are The Light Of The World

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Jean Anthony Greif
These chords, when played slowly add a richness to this favorite.
Strong V7-I progressions as well as contrary bass movement at the end of the refrain enhance this excellent harmony.

With The Lord

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Michael Joncas