									ng Gra				ion			
/w	mazing) /g	$SW_{\Theta e t}$	Punos	S_{dVed}	Wretch			Zoid (پعر	/	,	AP)	p	4		
/t/pe	17. B.	$\frac{\partial r^{a}C_{\Theta}}{\partial r^{a}C_{\Theta}}$	/WS	/%	/g	Ž	$M_{\rm e}$	/	0,1/6	[†] \$0/	MOU	found	Pujiq	NOW	g_{Θ}	/
important melody notes	G, B	В	G, E	D	G	В	D		D, B	G	E, G	D	G, B	В	G	
scale degree	1, 3	3	1, 6	5	1	3	5		5, 3	1	6, 1	5	1, 3	3	1	
-	G	G	G	G	G	G	D	D	G	G	G	G	G	D	G	G
traditional harmonization	G	G	С	G	G	G	D	D	G	G	С	G	G	D	G	G
chord function	I	I	IV	I	I	I	V	V	I	I	IV	I	I	V	I	I
functional substitutions	G	Bm	Em	Bm	Em	Bm	D	D	G	Bm	С	Bm	G	F#dim	G	G
functional #	1	3m	6m	1	6m	3m	5	5	1	3m	6m	3m	2m	7dim	1	1
diatonic substitution	G	Bm	С	G	Em	Bm	D	D	Bm	Em	Am	Bm	С	D	G	G
diatonic #	1	3m	4	1	6m	3m	5	5	3m	6m	2m	3m	4	5	1	1
1	1	ı	ı	1	ı	1	ı	ī	ī	ī	ı	1	1	1	ı	
seventh chords	GM7	Bm7	Am7	GM7	Em7	Am7	D7	D7	GM7	Em7	Am7	Em7	Am7	F#º7	GM7	GM7
seventh #	1M7	3m7	2m7	1M7	6m7	2m7	5	5	1M7	6m7	2m7	6m7	2m7	707	1	1
secondary dominant	G	G7	С	G	G	A7	D7	D7	G	G7	С	G	A7	D7	G	G
		BØ7				C#07				BØ7			C#07			
non chord tone	CM7	CM7	Em7	Em7	CM7	CM7	D7/F#		C^7	C^7	Am7	Bm	Am7	D/F#	C9	С9
b5 substitutions	G	G	С	G	G	G	Ab7	D7	G	G7	С	G	G	Ab7	G	G
Mixed Reharmonization	G	BØ7	C9	Bm7	Em	Am7	Ab7	D7	Em	В7	Em	A7	Am7	D7	Cm7	G
Altered (ireal)	G^7	G#º7	Am7	Aº7	G^7	Em7	AØ7	D7+	Bm7	Bº7	C6	C#07	Am7	Aº7	G^7	G^7

Functional Substitutions			
Tonic	I	VIm	IIIm
Tonic	G	Em	Bm
sub-dominant	IV	VIm	IIm
sub-dominant	С	Em	Am
dominant	V	VIIm7	'b5
dominant	D	F#dim	1

b5 substitute
D7 (D. F#, A, C)
Ab7 (Ab, C, Eb, Gb/F#)

CADI	ENCE	- S			
IIm-	V-I	Am7	D7	G	G
IVm			D7	Cm	G
plaga	al		D7	С	G
dece	ptive		D7	Em	С
bII			Ab7	G	G

Strength of cadence:

a. strong V7, VII dim, bII. IIm7-V-I

b. medium: V, IIm7, bVII, IIm7b5

c. weak: V7sus, IV, IIm7

Amazing Grace Reharmonization © Zoidsongs (ASCAP)

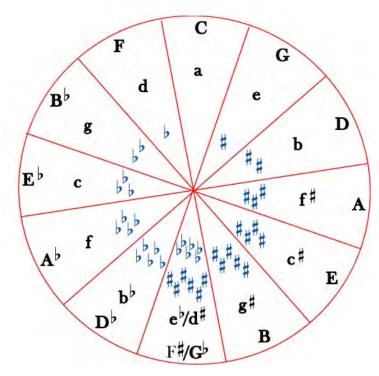
Modal

major	G	G	С	G	G	G	D	D	G	G	C	G	G	D	G	G
minor	Gm	Gm	Cm	Gm	Gm	Gm	Dm	D7	Gm	Gm	Cm	Gm	Gm	D	Gm	Gm
mixolydian	G	G	F	G	G	G	F	D	G	G	F	G	G	F	G	G
dorian	Gm	Gm	С	Gm	Gm	Gm	Dm	D	Gm	Gm	C	Gm	Gm	С	Gm	Gm
blues	G7	G7	C7	G7	G7	G7	D7	D7	G7	G7	C7	G7	G7	G7	D7	G7
phrygian	Gm	Gm	Cm	Gm	Gm	Ab	D7	D7	Gm	Gm	Cm	Gm	Gm	DØ7	Gm	Gm
lydian	G	G	C#Ø7	G	G	A7	D7	D7	G	C#Ø7	C	Bm	Em	D7	G	G

Symbols

maj 7 ^
m7b5-half dim 7th Ø7
augmented +
diminished 0

Circle of 5th's



Diatonic Scales and Chords

D

A

Е

В

F#

Е

В

F#

C#

G#

F#

C#

G#

D#

A#

G

D

Α

Е

В

A

Е

В

F#

C#

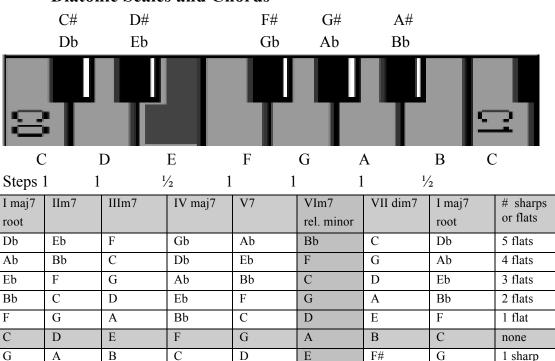
В

F#

C#

G#

D#



D

A

Е

В

F#

2 sharps

3 sharps

4 sharps

5 sharps

6 sharps

C#

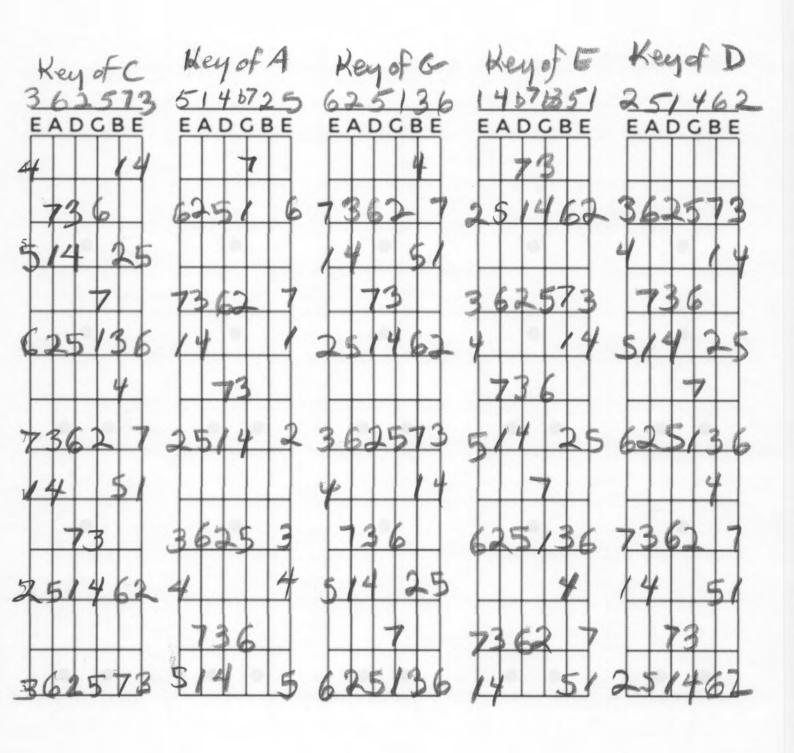
G#

D#

A#

E#





Harmony and Chord Substitution

Some Ways to Harmonize a melody:

Harmonic Functions :

Tonic: I, IIIm, VIm. The tonic chords have little tension and so don't have forward motion. They are at stable and don't contain the 4th of the scale which wants to resolve down the half step to the 3rd.

Sub-dominant: IV, IIm, VIm. The sub-dominant chords are the chords that prepare for the dominant sound. They have some tendency towards forward motion and the IV and IIm contain the 4th of the scale. You can also consider the V7sus4 as a sub-dominant chord in that the 3rd of the chord (7th of the scale) which has such a strong pull towards the tonic is replaced by the stable 1st of the scale. This removes the tritone from the chord and gives it a sub-dominant flavor. It also contains the 4th of the scale.

Dominant: V7, VII dim. Both of these contain the 4th and 7th of the scale and so have the insistence of the tritone. Most often the dominant chord resolves to the tonic family. Again the V7sus4 can be used as a substitute for the dominant but it does have less tension than the regular V7 chord.

- You can harmonize almost any melody using only two chords—the tonic (I) or dominant (V).
- The tonic chord (major or minor) can be used to harmonize the 1st, 2nd, 3rd, m3rd, 5th, major 6th and major 7th degrees of the scale.
- The dominant chord or V7sus can harmonize any note, diatonic or chromatic, except the augmented 4th

How to harmonize a melody:

Here's one way to harmonize a melody by creating a basic harmonic outline

- 1. determine mood and character and use that to determine if it is going to be harmonized in major or minor
- 2. determine key
- 3. decide how often the chords change (harmonic rhythm
- 4. locate cadences and harmonize cadence points depending on how strong a cadence you need
 - a. strong (V7, VII dim, or bII) to I
 - b. medium: (V, IIm7, bVII, or IIm7b5) to I
 - c. weak: (V7sus, IV, or IIm7) to I
- 5. find important melodic notes in each measure

Different Ways to harmonize

- 1. Diatonic—After identifying the important notes in the measure, harmonize by using triads that contain those important notes. As the notes are part of the chord, they will have less tension than using chords that don't contain the notes.
- 2. Functional—Identify the function (tonic, sub-dominant, dominant) and experiment with substituting by function.
- 3. Experiment with different harmonic possibilities where the important melody note can be a non-scale tone. These will have more tension.
- 4. 7th chords—Use 7th chords to create more color. You can expand this to use 9th, 11th and 13th chords using the notes in the scale.
- 5. Experiment with secondary dominants to give more weight to the following chord
- 6. Substitute a chord that contains 2 of the same notes as your original chord

- 7. Substitute a chord that contains one of the same notes as your original chord
- 8. Change the harmonic rhythm
- 9. Borrowed chords: You can borrow a chord from the parallel minor key. For example you could use a chord from the key of C minor in the key of C. C-Fm-G-C.
- 10. Change the inversion of the chord.
- 11. Pedal point: sustain a note through a passage. Ex. Beneath the Bridge

Secondary Dominants

To create a stronger movement into a chord, try putting a secondary dominant in front of it. The secondary dominant is the chord built on the 5^{th} note above the root of the chord you are going to. It's the equivalent of a V-I progression. Use the dominant 7^{th} version of the chord (a major chord with the 7^{th} a whole step lower than the root. Note that the target may be either major or minor.

Dominant	target	Dominant	target	Dominant	target
Bb7	Eb	G7	С	E7	A
F7	Bb	D7	G	B7	Е
C7	F	A7	D	F#7	В

Flat 5 substitute



Tension and release

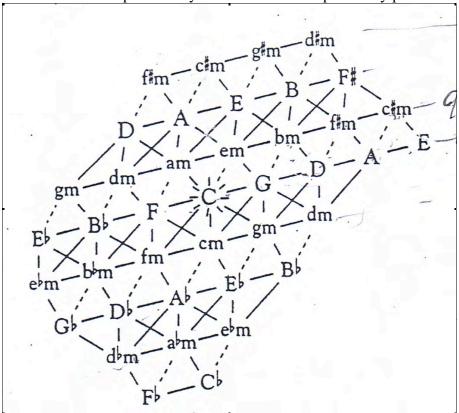


Melodic (relation to tonic)	unison	octave	5th	3rd	6th	2nd	4th	7th
Harmonic	1	Vim	IIIm	IV	lim	V	VII dim	
Rhyme (from P. Pattison)	perfect	family	additive	subtractive	assonance	consonance	alliteration	
Rhythmic	1st beat	3rd beat	2nd beat	4th beat	sub-divisions			E.

Tension

The Harmonic Lattice

from Harmonic Experience by W.A. Mathieu. Reprinted by permission of the author.



Rules for the journey through the lattice

- 1. Begin and end on C major and keep the tonality firmly in mind
- 2. Proceed along the connecting lines of the lattice. The dotted connections are not as strong as the solid ones.
- 3. You can leap up by two fifths to a major triad and then fall back a fifth to fill in the skip. For example: G, A, D. The upper 5th functions in a dominant relationship to the chord it falls back to.
- 4. Change modality (G to Gm) sparingly.
- 5. You'll notice that a number of chords appear in different places on the lattice. This harmonic ambiguity allows you to jump over to the other occurrences of the chord and continue on your journey. Notice, however, that the relationships around the chord are the same in both places.

The northeast quadrant of the harmonic lattice generates the most shapes and the southwest quadrant generates the most flats, are the most used quadrants. They seem to directly complement and encourage each other.

Borrowing chords from parallel minor

You can borrow chords from the parallel minor key. So in the key of C you could borrow from the key of Cm. In the minor key using the notes of the natural minor scale it's Im, IIdim, bIII, IVm, Vm, bVI, bVII.--Cm, Ddim, Eb, Fm, Gm, Ab, Bb.