Tonal Centers of Different Types of Tonalities Ted Greene, 1975-03-11

1) Organum С G# Bb В C# D Е F F# G А Eb ←Also sus's, (strict and free) Db D# Ab 2's 2) Dorian G#m Am Bbm Bm Cm C#m Dm Ebm Em Fm F#m Gm (with optional bVI) (I at cadences) 3) Aeolian G#m Bbm Bm Cm C#m Dm Ebm Em Fm F#m Am Gm (with optional ii, bII, V, and I at cadences) 4) Phrygian G#m Bbm Bm Cm C#m Dm D#m Em Fm F#m Gm Am (with optional bV, v, V, and I) 5) Aeolian С D Е F Ab Α Bb В Db Eb F# G with borrowed I G# C# D# Gb and/or bII С Е 6) Phrygian G# А Bb В C# D D# F F# G with borrowed I

Also apply all different rhythms to all applicable types of tonalities.

Also certain uses of major scales; random majors ala fanfares; horn 5ths. Also Spanish Gypsy (Mixolydian of Harmonic Minor); Harmonic minor with borrowed I. Also I₆, bII6, bIII₆, iv^o₆, v^o₆, bvi^o₆, vii^o₆; I, ii^o, iiv^o, iv, v, bVI, bVII

7) Baroque Major	Ab (G#)	Α	Bb	B (Cb)	C	Db (C#)	D	Eb	E (Fb)	F	Gb (F#)	G	Also lots of Secondary
8) Baroque Minor (Natural, Harmonic, and Melodic)	G#m (Abm)	Am	Bbm (A#m)	Bm	Cm	C#m (Dbm)	Dm	Ebm (D#m)	Em	Fm (E#m)	F#m	Gm	chords; Diminished 7th scales.
9) Baroque "Buffer" Scale – Mixolydian of Melodic Minor	G# (Ab)	А	Bb (A#)	В	C (B#)	C#	D	D# (Eb)	E	F (E#)	F#	G	

10) Romantic Major (from Mozart to Tchaikovsky and Wagner)	As in Baroque
11) Romantic Minor	As in Baroque

Also lots of Secondary chords; Borrowed chords, New Extended and Altered chords, Diminished 7 chords, Augmented chords, New Modulations, Mediant Relationships, Wandering and Chromaticism; Hungarian Minor.

12) Gospel,						As in Barc	aue							
American,							1							
"Barbershop"														
(major)														
13) Blues –						As in Baro	ane							
major						715 III Daile	que							
14) 9th Chord	Ab9	A9	Bb9	B9	C9	Db9	D9	Eb9	E9	F9	F#9	G9		
Pentatonic	A09	A)	D09	D7	0	D09	D9	L09	1.9	1.2	(Gb9)	U)		
and 9th with											(009)			
no Root														
15) Modern	Ab7	A7	Bb7	B7	C7	Db7	D7	Eb7	E7	F7	F#7	G7		
Mixolydian	AU7	Δ/	D 07	D7	07	D07	DI	L07	L7	1.1		07		
Based on ii7-											(Gb7)			
V7 or V7														
(or I-v7 or														
bVII7)														
or V13sus														
16) 20th				l		As in Baro								
Century						As in Dait	que							
Diatonic														
Major														
17)	As in Baroque													
Impressionistic	As in Daloque													
Major : 6, /9,														
6/9, (^Δ 7, ^Δ 9)														
and synonyms														
18)	As in Baroque													
Impressionistic														
Minor:														
m6, m6/9 and														
synonyms														
19)	Ab9b5	A9b5	Bb9b5	B9b5	C9b5	Db9b5	D9b5	Eb9b5	E9b5	F9b5	F#9b5	G9b5		
Whole-Tone	110905	11905	00000	(Cb9b5)	0,05	(C#9b5)	2705	20705	1000	1705	(Gb9b5)	0,05		
Dominants:	Ab+	A+	Bb+	B +	C+	Db+	D+	Eb+	E+	F+	Gb+	G+		
9b5, 9b5 no R,	G#+		(A#+)			C#+		D#+			F#+			
+, 7+, 9+, 7b5,														
etc.														
20) Overtone	Ab13#11	A13#11	Ab13#11	B13#11	C13#11	Db13#11	D13#11	Eb13#11	E13#11	F13#11	F#13#11	G13#11		
Dominants:	11010/11		11010#11	(Cb13#11)	010#11	(C#13#11)	210111	2010/11	210.11	110011	(Gb13#11)	010011		
13#11, #11,														
9b5														
21) Modern						As in Barc	nine							
(Secondary						ns in Darc	que							
Harmony)														
Major														
22) Modern						As in Baro	oque							
Borrowed														
Major														
Chords														
23) 20th						As in Baro	que							
Century							1							
Minor														
						A a in Da								
24) Minor						As in Baro	que							
Blues														

25) Whole-1/2 (1/2-Whole) Chords and Intervals	Ab7b9 G#7b9 Ab ^o 7 G# ^o 7	A7b9 A ⁰ 7	Bb7b9 A#7b9 Bb ^o 7 A# ^o 7	B7b9 B ^o 7 Cb ^o 7	C7b9 B#7b9 C ^o 7	Db7b9 C#7b9 Db ⁰ 7 C# ⁰ 7	D7b9 D ^o 7	Eb7b9 D#7b9 Eb ⁰ 7 D# ⁰ 7	E7b9 E ⁰ 7	F7b9 E#7b9 F ⁰ 7	F#7b9 Gb7b9 F# ⁰ 7 Gb ⁰ 7	G7b9 G ⁰ 7
26) Lydian Pentatonic (mb6/9, ^7#11)	G#m	Am	Bbm	Bm	Cm	C#m	Dm	D#m	Em	Fm	F#m Gbm	Gm
27) Lydian Mode	Ab	А	Bb	В	C	Db	D	Eb	E	F	Gb	G
28) Quartal Harmony	Ab	А	Bb	В	С	Db	D	Eb	Е	F	Gb	G
29) (Chromatic) Wandering	Ab	A	Bb	В	С	Db	D	Eb	E	F	Gb	G
30) Parallelism	Ab	А	Bb	В	С	Db	D	Eb	Е	F	Gb	G

Also Tri-tonic scale.

Also Modern Dorian: ii7 - iii7 or reverse (also IV^Δ7); 7/11 Pentatonic.

Also modern use of Ancient scales (#1-#6 above).

<u>Composite Impressionism</u>: Chord progressions using Impressionistic colors*, and modulation are essential.

* <u>Majors</u>: 6, /9, 6/9, (^Δ7, ^Δ9), ^Δ7/#11

<u>Minors</u>: m6, m6/9, mb6/9. M7, m7/11no root, m7/11 (m9, m11) <u>Dominants</u>: 7th, 9th no root, 9th, 13, (13 no root), 13sus family. 9b5 family, 13#11 family, + [augmented] family, (13b9, 7b9 family)

Also 4-note arpeggios like ^Δ7, 6, /9.

All applicable above in:

- 1) Streams
- 2) Chord Scales (diatonic or altered or mixed)
- 3) Pedals
- 4) Vamps (chains and reverses)
- 5) Chord Progressions
- 6) Modulation Not only changing keys, but also changing *type of tonality*.
- 7) Contrary Motion Sounds (and Pyramids)

				7	TON	AL	CE.	NE	<i>es</i> ,	of J	DIFF	ERE	ENT TYPES OF TONALITIES 3-11-75	
Also apply all different rhythms too all applicable types of tonelities														
 BAROQUE MAJOR BAROQUE MAJOR BAROQUE MAJOR BAROQUE MAJOR 	GG A°G G AG SAN HO	Am A A A A A	Bb Bb Bb Bb Bb Att	Brm Brm B B B B B B B B B B B B B	Cm C C C C C C C C C	なな ゆき せ しに ちぬ 中	D D D D D D	HERE EN ED H ED EN HE	Em E E (Fb) Em	Fm Fm F F	THE HO F OF TH	Gran Gran G G G G G G	also certain uses of MAJOR SCALES; RANDOM MAJORS ALA FANFARES; HORN 5445 also SPANISH GYPJY (MUXOUYDIAN OF HARMANING); HARM. minor with BORROWEDI also SPANISH GYPJY (MUXOUYDIAN OF HARMANING); HARM. minor with BORROWEDI also SPANISH GYPJY (MUXOUYDIAN OF HARMANING); HARM. minor with BORROWEDI also Lots of SECONDARY CHORDS; DIMUNSHED SEALES	
BROMANTIC MADOR (FROM MOZART TO TCHARROUSKYANDWAGNER) (D) ROMANTIC MINOR] e.	sún	BAR	roqu	E		-						CHORDS, OT CHORDS, HONOS, DURING CHORDS, MEDIATONS, MEDIANT RELATIONSHI CHORDS, OT CHORDS, + CHORDS, MEUN MODULATIONS, MEDIANT RELATIONSHI WANDERING + CHROMATICUSM; HUNGARIAN MINOR	ら
(2) GOSPEL, AMERICAN+ V BAR BERSHOP (MAJGR) (3) BLUES - MAJOR (4) CHORD PENTATONIC (4) MODERN MIXOLYDIAN BATED ON II, - J, OLJ, (5) MODERN MIXOLYDIAN BATED ON II, - J, OLJ, (7) (MODERNISTIC (1) (MODERSTONISTIC	469 A57	A9 47	849 867	89 87	C9 C7	D69 D67	D9 D7	Е Ц Ев7	E9 E7	F7	Г #0 (6 ⁴⁹) Г#7 (6 ⁴ 7)	67	also MODERN DARIAN: 117 1117 OREVERSE (also TI 3); 7/11 PENTISCALE also MODERN USE OF ANCIENT SCALES (Or Cabore) COM PASITE IMPRESSIONISM: CHORD PROFRESSIONS USING IMPRESSIONISTIC COLORS, AND MODULATION ARE	
MAJOR: 6, M, 6(9, (7, 9) + STRONSMIS (19 IMPRESSIONISTIC MINOR: m6/9 + STRONSMIS (19) WHOLE TOME DOMYS: 965, 965 manost, 4, 74, 94 765 etc.	Aby	At	5 Bbij Bb+	, ⁸⁷	¢15(C≠	Ctot	1	gre .			FIL	-		n
(D)OVERTONE DOM'S: 13+11, +11, 965 (D) MODERN (SECONDARY HARMONY) MAJOR	A1939	AB	F1 80134	CCBB	71)	(C#13+1	91341 9	ЕЫЗТ	EBH	1 F134	(G ^b /3+	1) G-131 14)	13, (130000+1), 13500 far 965 family, 13+11 family, + family, (359 family) + family, (359 family)	, '
3 MODERN BORROWED MAJOR CHORDS	11	ai	- B.	AROQ	UE				All Lands (Mark) Market	and the provided				
(3) 20TH CENTURY MINOR (A) MINOR BLUES (3) WHOLE, ± (+,WHOLE) CHORDS+INTERNALS	Abja G175	7 A79 7 A07	Bb7b Atter	3759 907	C769 8-769 C07	06769 (#769 Dba7	0769 D07	Eb767	E74 E07	F7by E#jo	F# 6676	9 G-01	29 72	
J LYDIAN MODE	GAS	Ann	Bb	Bm	Cm	Ctim	Dm.	DEM EG	Em E	Fm	F#O,	Gm	n	
3 QUARTAL HARMONY BOCHROMATIC) WAN JERING BARALLENISM	•••	· · ·								A	and a second la se a second la second		ALSO TRI-TONIC SCALE	
O CHORD PROSRESSIONS O CHORD SCALES (DIATOMI O PEPALS O VAMPS (CHAINST REVEI O CHORD PROSRESSIONS O MODILI ATION - NET CON	r or REI)	AL7												

MOBULATION - NOT ONLY CHANGING KEYS, BUT ALSO CHANGING TYPE OF TOWALITY O CONTRARY MOTION SOUNDS (+ PYRAMIDS)

Ted Greene's "Tonal Centers of Different Types of Tonalities" Commentary by James Hober

Ted Greene played convincingly in many styles, from Baroque counterpoint influenced by Bach, to gospel, blues, jazz, and more. How did he do this? Well, clearly he listened very closely to various kinds of music that he loved, he observed and analyzed the resources and characteristics of that music, and then he arranged and improvised employing those resources and characteristics. The fact that I can state this in a few sentences doesn't make it less jaw-dropping! There have been many great guitarists who played in different styles, but I cannot think of anyone who did it quite like Ted did.

Did Ted write any sheets on historical and contemporary styles? He did, especially in 1975. You'll find these in the <u>Harmony and Theory</u> section of tedgreene.com downloadable lessons. Look for: "<u>Modes, Scales, Tonal Resources</u>," "<u>Modern Classical Tonality and Rhythm Types</u>," "<u>Condensed Tonality</u>," "<u>Normal 18th and 19th Century Harmonic Vocabulary</u>," "<u>Other 'Major Type' Tonalities</u>," "<u>Tonality Types</u>," and "<u>Tonality Types for Solo Guitar</u>." The titles and contents of most of these sheets mention "Tonality" or "Tonalities," words that imply an underlying key and at least one scale resource. But for Ted, this word could indicate stylistic character, too. Anything of practical value to help him and his students play in a particular genre was of interest to him. These pages appear to be outlines, mere overviews with brief descriptions. No doubt they were reminders for Ted of matters that he could go into much more deeply, in lessons with interested students or in further explorations on his own. Or perhaps they may have constituted a plan for a future book. (He certainly had a number of ideas for books that unfortunately never came to be.)

We're going to look together at Ted Greene's sheet titled "Tonal Centers of Different Types of Tonalities." Ted is no longer alive to explain the page. So I'll share what I think about the page and why I think it. No doubt Ted would both disagree and agree with things I'll say.

This page, like the others listed above, was filed away with Ted's teaching materials. A good reason to think these are teaching overview sheets for students is that they are in neat, clear handwriting and have lines drawn with a ruler. Often when Ted wrote for himself, he did so quickly, not taking the time to make the handwriting presentable. But it's possible that some or all of these pages may belong with his personal studies. Why? Because they are extremely broad ranging and ambitious. They seem to be lists of historical and modern styles with a few comments to jog Ted's memory of myriad details. He tended to give his students bite-sized sheets that they could make progress on in a matter of weeks or months. By contrast, he sometimes gave himself a mountain of work that could take years, a vastness to explore and in which to find nuggets for himself, later to be whittled down and presented to his students.

You have to remember that Ted loved to pioneer, to explore guitar and music in ways that hadn't been done before. For example, Ted took a few lessons with George Van Eps. But did he carefully spend years and years working through all of the volumes of *Harmonic Mechanisms For Guitar*? I don't know, but I don't think so. He probably did study them some. But I think he was more interested in finding his own way. And this page, "Tonal Centers of Different Types of Tonalities," is a roadmap for a nice area of personal exploration. In 1975, when he wrote it, he may have already figured out quite a bit about the topic and gotten some of it under his fingers. But I think he was challenging himself to go further. For example, the statement at the top of the page, "Also apply all different rhythms to all applicable types of tonalities" is very ambitious and open ended. It's the kind of task he gave himself. For his students, he would break things down and be more specific.

Now let's look at the page in depth. What is a tonal center? The tonal center is the scale root note that feels stable, like home. It is one of the twelve possible pitches. Ted writes the twelve horizontally, after the vertical ruled line. But since he writes the small m for minor and other chord types here, he is specifying not only the note that is the tonal center but the chord that is. He is indicating the I or tonic chord. It is a bit strange to think of chords like A+ or A9b5, and so on as I chords. But in the case of certain 20th century tonalities, I think that is what he means. How can a dominant type chord, especially an altered dominant, have stability? There are a number of ways, but one way is just for it to be played repeatedly for a long time. At the bottom of the page Ted includes "vamps" in his list. A vamp can be just lingering on a chord for an indeterminate amount of time, possibly as an introduction. Stay on a chord long enough – even a dominant chord – and it begins to establish a tonality, a stability, for that stretch of music.

When a piece of music changes tonal centers, that's called a key change or modulation. Some key changes last for a relatively long time, and some are shorter. If they are very short, they can be called "tonicizations." (Ted's "Tonicization (Secondary Dominants)" goes into tonicization versus modulation.) An example of a tonicization is the use of "V of something." If, for instance, I play "V of VI" to VI, then I have very briefly "tonicized" the VI. This may be so short that it doesn't sound like a key change at all. Another name for a "V of something other than I" is a "secondary dominant." When Ted refers to "Modern (Secondary Harmony) Major" on this page, he means major that employs secondary dominants, also known as applied dominants. In addition, he is referring to other secondary chords such as "IV of," "ii of," etc. that can be employed in tonicizations.

What does Ted mean by "different types of tonalities?" This seems to refer to the titles down the left-hand column. This column includes modes like Dorian and Phrygian, Major and Minor in specific style periods, Blues and Gospel which are styles that use certain scale resources, and so on. As mentioned above, Ted seems to be talking about more than just the underlying scale. He's also talking about characteristics and practices. Without knowing exactly what Ted meant by all these tonalities, we can still get some idea from their names. You can be sure, however, that to Ted there was a big difference between a song *in* Dorian and *using* the Dorian scale to solo over a minor chord. On this page, I believe that he's referring to music that is *in* a tonality, including some strange 20th century tonalities.

The horizontal ruled lines on the page seem to separate the tonalities into historical periods. Tonalities 1 to 6 are the modal kinds associated with the Middle Ages and the Renaissance. Tonalities 7 to 9 specifically mention Baroque. Tonalities 10 and 11 mention Mozart, a Classic period composer, and "Romantic," the name for the style period from about 1820 to 1900. Tonalities 12 to 30 reference "Modern" and "20th Century" and therefore refer to more recent genres.

You may wonder, what is the difference between "Baroque Major," "Romantic Major," and "20th Century Diatonic Major?" Isn't "major" just major? But clearly a piece in major by Bach sounds quite different from one by Mozart or Tchaikovsky. No doubt Ted wanted to zero in on differences between how major was used in different epochs.

One very important distinction in historical style periods is the treatment of dissonance. Traditional music theorists talk about "the emancipation of the dissonance," how early on dissonance was treated very carefully, with preparation and resolution, and how gradually, over time, it was given greater freedom and increased prevalence. It has been compared to spicy food. We start out liking bland food without added spice. Over time we can accept more and more spicy additions until in the end we're happily eating the hottest habanera peppers. Music history over the long span can be seen the same way, perhaps a little simplistically. It has moved from the very consonant to the increasingly dissonant. I say "simplistically" because you can find remarkably dissonant exceptions in rare pieces of early music.

So back to major and minor usage in different eras. A traditional music theorist might point out that passing tones, nonharmonic tones that pass by step from one chord tone to the next, were common in the Renaissance. But it wasn't until the Baroque that *accented* passing tones became more frequent.

This is the kind of thing that Ted could radically question. Where a traditional theorist would see an accented passing tone, Ted might consider it to be a chord tone. Of course, he understood the point of view of passing tones, neighboring tones, etc. But sometimes he heard them as chord tones, not as nonharmonic tones embellishing a simpler harmony. Obviously, in jazz and other modern music, 9ths, 11ths, and 6ths often *are* chord tones. But Ted was more convinced than traditional theorists that these so-called embellishing tones could be harmonic tones in early music, too. (Ted is not alone in questioning the validity of nonharmonic tones. Arnold Schoenberg also expressed this opinion.)

Now how do I know this about Ted? 1) Because I talked about it with him during lessons, and 2) because of annotations in his books. You see, I would usually come early for my guitar lesson which meant that I would go into the back spare bedroom which was the library/waiting room. Sometimes I would do last minute practicing back there, trying to get a handle on the sheet that he had assigned me a month ago that I had ignored. But other times I would look at his books. Ted had tons of books. His bookshelves were two deep; you'd take down a book and there would be another interesting one behind it. In many of these books, Ted had written comments in the margins. In his music theory books, he often had running arguments in the margins with the authors. Particularly fascinating to me were Ted's comments scribbled in his copy of *Harmony and Voice Leading* by Aldwell and Schachter, the main music theory book (in two volumes) that I had studied in college. Ted frequently disagreed with the authors, including regarding nonharmonic tones.

Another book in Ted's library that was fascinating to me and which I discussed with Ted was: Bach's *Harmonic Progressions* (1,000 Examples) by Kent Gannett. It analyzed 1000 fragments from the music of Bach. The author compiled statistics on the excerpts. How often did Bach use functional progression, like ii V I? How often did Bach use retrogression, like V ii I? Obviously, Bach used pro-gression, like ii V I, much more often than retrogression but it was fascinating to both Ted and me that he sometimes used retrogression, too. And his use of it is the kind of thing typically ignored in a standard music theory text. So my point is that Ted, if he were alive to explain this paper on Types of Tonalities, would talk about differences between "Baroque Major" and "Romantic Major" and he would do so in both conventional *and* unconventional ways. He read and mentally argued with theory books. And he listened for himself and came to his own conclusions. Since he is no longer here, it's up to you to listen, research, and decide for yourself how the use of major in the Baroque differs from that in the Romantic. If that interests you. It *was* of interest to Ted.

Some comments on the tonalities listed in the left-hand column: (Be aware that Ted uses upper-case Roman numerals for major and augmented chords, and lower-case Roman numerals for minor and diminished.)

1) Organum (strict and free). Organum was a style in the Middle Ages where a second voice was added to the melody and moved in parallel with it. By "strict" Ted probably means that the second voice sticks to the mode of the melody. Free means it may deviate a little. Or strict and free might also have to do with how precisely the second voice tracks the rhythm of the first voice.

2) Dorian (with optional bVI) (I at cadences). The diatonic vi chord in Dorian is diminished. Ted is saying the root of this chord could optionally be lowered to turn it into a major chord. For example, in D Dorian the vi chord is B diminished. The Bb major chord could be used instead sometimes. The upper case "I chord at cadences" means that at resting points in the music the I chord could be major instead of minor. This is called using a "Picardy third." It's quite common at final cadences, but could happen at internal cadences, too.

3) Aeolian (with optional ii, bII, V, and I at cadences). The diatonic ii chord of the Aeolian is diminished. It can be optionally turned into a minor triad by raising up its fifth a half step. Or its root can be lowered, turning it into a major triad on bII. The diatonic v chord is minor. It can be converted into a major V triad by raising its third. This temporarily converts the underlying scale from Aeolian to Harmonic Minor. At cadences, a Picardy third can make the minor i chord into a I major triad.

4) Phrygian (with optional bV, v, V, & I). As above, Ted shows some optional modifications in parentheses. The diatonic v chord in Phrygian is diminished. Ted says it can be converted into a major triad on either bV or V. Or it can be converted into a minor triad v. A Picardy third can covert the tonic triad into major at cadences.

5) Aeolian with borrowed I and/or bII (also Mixolydian with borrowed bIII, bVI). "Borrowed" means taking a chord from another scale on the same root, usually the parallel major or minor. For Aeolian, borrowed I would be the major I triad from the major scale, and borrowed bII would be from the Phrygian (or much less likely from the Locrian). I don't see how this is different from tonality 3) except that the major I might occur in other places besides cadences. And if you replace the diatonic iii and vi of the mixolydian with bIII and bVI respectively, then you just have the Aeolian. So again, I don't see how this would be different from tonality 3) Aeolian above.

6) Phrygian with borrowed I. This would be the same as tonality 4) Phrygian unless you make the I triad major all the time. In that case, you have an underlying Phrygian Dominant scale (which Ted calls the "Spanish Gypsy" scale), also known as the fifth mode of the harmonic minor, whenever you have a I major triad.

7) Baroque major. In the Baroque period, roughly from 1600 to 1750, there was movement away from the modes toward the major-minor system. The basso continuo is important, which means that chordal instruments like keyboards and lutes semi-improvised their part from figured bass. Phrases tended to vary in length, unlike in the later Classical period when four bar phrases prevailed. Diatonic chords were common, with chromaticism being used for color.

8) Baroque minor (Natural, Harmonic, and Melodic). Minor pieces in the Baroque made use of all three forms of the minor scale, listed by Ted in parentheses. The forms were thought of as variations on the same minor scale. Ascending Melodic minor was used for both ascending and descending melodies. Minor v chords were less common, because usually a strong, functional drive of V to i was preferred. However, sometimes minor v was used by composers. For example, when harmonizing descending melodic minor melodies or for modulations to III, the minor v could make an appearance.

9) Baroque "buffer" scale (Mixolydian of Melodic minor). If we take the fifth mode of the ascending Melodic minor, we get a major scale with b6 and b7. For example, A ascending Melodic minor is: A B C D E F# G# A. If we make the fifth note of this scale the new root, we get: E F# G# A B C D E. That's an E major scale with lowered 6 and 7 scale degrees. Another way to say this is that it's the major scale with bVI and bVII borrowed from the parallel Natural minor scale. Yet another name for this scale is the Aeolian Dominant Scale. Ted's name for it was the "buffer" scale.

On tedgreene.com under Audio, you can find <u>recorded guitar lessons Ted gave to Mark Fitchett</u>. In <u>Mark's lesson of September 26, 1991</u> at about twenty-one seconds in, Ted describes and demonstrates the buffer scale for a rare two minutes. (Their guitars are tuned down a half step. So when Ted is talking about the Natural minor scale and the buffer scale on the root G, the sound is on the root F#.) He describes how Bach used the buffer scale at the end of a piece in minor to *gradually* transition to the final Picardy major chord. The reason Ted calls it the "buffer scale" is because it buffers between the preceding minor tonality and the ending major chord. To illustrate the usage, he plays a couple of short, beautiful Bachian passages.

10) Romantic major from Mozart to Tchaikovsky and Wagner. I do not know why Ted combines the traditional Classical and Romantic eras. Clearly as music history marched on, there was increased chromaticism and dissonance, modulation to more distant keys, and so on. Ted indicates some of this and more in the rightmost column of this "Romantic" section.

11) Romantic minor. As with the major, greater liberties are taken in the minor, too, than were taken earlier in history.

12) Gospel, American and "Barbershop" (Major). Blues, jazz, and gospel were all born in the United States. Were barbershop quartets also of American origin? Possibly, although scholars disagree about it. Ted certainly loved gospel and incorporated it into his blues style. I also remember talking with him about barbershop quartet music in a lesson. I had just gone to a barbershop quartet festival and was blown away by this music. I was surprised that Ted was hip to the style and immediately began showing me on guitar the kind of close harmony sung by barbershop quartets. In this category of tonality, Ted is definitely referring to stylistic character and not just the underlying scale. For example, gospel frequently uses "IV of," while maintaining a pedal tone bass. A gospel song and a Bach piece may both be in major but stylistically there is no way you could confuse them. So Ted lists them as different tonalities.

13) Blues Major. As you know, blues is sort of both major *and* minor. The 3rd is a blue note and can be major or minor (b3) or something in between. But if the I, IV and V chords are mostly dominant types, with major 3rds, then it's a major blues. Nevertheless, a minor pentatonic can be superimposed over these chords in a solo or in other parts. And one of the truly great things about the blues is all the chromatic and even microtonal possibilities. Certainly, blues in major is an important tonality in 20th century popular music.

14) 9th Chord Pentatonic & 9th with no root. What kind of tonality can this be? Well, a major pentatonic scale has the tones R, 2 (= 9), 3, 5, 6. Raise the 6th scale degree up a half step and you get: R, 9, 3, 5, b7, which is a dominant 9 chord arpeggio. So with the root as the tonal center and the other tones as "pentatonic" scale degrees, you could have some music "in" this tonality. Anyway, that's my guess about what Ted means here.

15) Modern Mixolydian based on ii7-V7 or V7 (or I v7 or bVII7) or V13sus. Here we have to carefully observe where Ted is using an upper-case V or a lower-case v. In the parentheses, it's lower-case meaning a minor v. The other ones are upper-case. The last one is sus (suspended 4) so it is ambiguous. The diatonic v chord is minor in Mixolydian. But clearly, Ted feels that major V chords can also be used in this tonality. So what makes it Mixolydian? Well, if you use I(dominant)7 instead of Imaj7, that gives it some "Mixo" flavor. Using bVII can definitely create a Mixolydian sound. And by using the b7 scale degree other ways, at least some of the time, you can generate a "mixo" feel in an otherwise major tonality.

16) 20th Century Diatonic Major. How is 20th century major different from that of the Baroque or Romantic? I would say, greater use of extensions like 9, 11, and 13 in chords, and greater freedom from voice leading rules like no parallel fifths and so on. Also, greater tolerance of dissonance, such as in Pandiatonicism. As to how Ted would distinguish them, he probably would include other differences.

17) Impressionistic Major: 6, /9, 6/9, (maj7, maj9), and synonyms. Debussy, Ravel, and other composers of the late 19th and early 20th centuries created a kind of music that included these chords. It sometimes had less forward drive than earlier music and chords were used more for their sensual quality than for their functionality.

18) Impressionistic Minor: m6, m6/9 and synonyms. As in the previous tonality but minor. In the rightmost column, Ted mentions "impressionistic color," again meaning chords used for their sound and feeling and less for their forward momentum. Then he lists many more chords with an arrow pointing to that term, suggesting that these chords also can be used for color.

19) Whole Tone Dominants: b5, 9b5 no root, +, 7+, 9+, 7b5, etc. These are chords diatonic to the whole tone scale. One begins to wonder: is Ted talking about chords or a tonality? In Whole Tone tonality, these are some of the chords that can appear. But in real music, how long does Whole Tone tonality really last? Eventually the feeling of instability demands a shift into some other kind of tonality. So we see that when Ted is referring to tonalities on this page, they may persist for relatively short periods, less than an entire song or piece.

20) Overtone Dominants: 13+11, +11, 9b5. The Overtone Dominant scale, also known as the Lydian Dominant scale, is R, 2, 3, #4, 5, 6, b7. It is used as a soloing resource over certain chords, including the ones Ted lists. But this page is about tonalities. At least I think it is. So how long a stretch of music can be grounded in a tonality based on the Overtone Dominant scale? Usually a quite short one.

21) Modern (Secondary Harmony) Major. As I mentioned above, Ted is referring to applied chords such as secondary dominants when he uses the term "secondary harmony." Secondary dominants are things like "V7 of ii," "V7 of vi," and so on. In this way, chromatic notes are introduced into the underlying major scale context to give drive into a diatonic chord.

On other sheets, "<u>Main Harmonic Resources in Contemporary Music</u>" and "<u>Secondary</u> <u>Subdominants</u>," Ted describes both secondary dominants *and* secondary subdominants. For the latter he includes various forms of bII, II, and IV. So here he using the word "subdominant" not only to describe IV chords but also other kinds of chords used to prepare and lead into V. And the fact that they are "secondary" means they are "bII of," "II of," or "IV of." In other words, these secondary chords are part of a brief tonicization, not an extended modulation.

22) Modern Borrowed Major Chords. Borrowed chords, also known as mixture (of major and minor), means things like playing bIII, bVI, and bVII in major. The chords are diatonic to the parallel Natural minor. Later, Ted decided that he disliked the term "borrowed" and he developed his concept of "Expanded Diatonicism," which had multiple levels. In any case, "borrowing," or using chords from the parallel minor if you're in major, or from the parallel major if you're in minor, is a way of expanding the possibilities and enlarging the tonality.

23) 20th Century Minor. As mentioned above in 20th Century Major, more extensions, more dissonance, more freedom from voice leading rules, etc., distinguish the 20th century from earlier centuries. Basically, earlier rules and norms were broken in searching for original sounds and expressions.

24) Minor Blues. Just as blues in major can incorporate minor blues ideas and scales, so blues in minor can incorporate major blues stuff. But in minor, the i, iv, and sometimes even the v chord tend to be minor. That's what makes it a minor blues. Often, the underlying scale is Dorian with an added #4.

25) Whole Half (half whole): chords and intervals. The scale that alternates whole steps and half steps is known as the Diminished scale. The scale that alternates half steps and whole steps is called the Eight-note Dominant scale. These scales are also called Octatonic, since they contain eight tones. They can be used as soloing resources. For example, the Diminished scale is used over dim7 chords. But again, this page is apparently about tonalities, which implies a somewhat extended stretch of music where the scale and its root predominate. In another words, music *in* octatonic tonality is different from using an octatonic scale to solo over a brief chord. Some classical composers such as Olivier Messiaen have composed music for long stretches using the Octatonic scale.

26) Lydian Pentatonic. What the heck is a Lydian pentatonic? I had to ask the Internet. Of course, "Lydian" implies the #4 scale degree. And "pentatonic" means five note scale. The Internet says it's R, 2, 3, #4, 6. That is logical because it modifies the major pentatonic scale (R, 2, 3, 5, 6) by changing the 5 to a #4. Maybe that is what Ted meant. I don't know.

27) Lydian Mode. Modern music in Lydian that comes to mind includes sci-fi film music and The Simpsons TV show theme. Debussy and the impressionists also made use of Lydian and other modes. Jazzers often use the Lydian scale to solo over major type chords, but it is also possible to write a stretch of jazz music *in* Lydian. Music in the Lydian mode stretches back into history, and includes Renaissance pieces, and pieces by Bach and Beethoven. So, it is very much an old and a new tonality.

28) Quartal Harmony. Traditional harmony is built using stacked thirds. Quartal harmony is built using fourths instead of thirds. It's also possible to have a couple of stacked fourths and another additional interval in a chord. Once I specifically asked Ted about quartal harmony in a lesson. He began showing me fourth chords in diatonic chord scales so that I could see how they used mostly perfect fourths but also augmented fourths. Then Ted started playing "So What" from the *Kind of Blue* album by Miles Davis. This is one of the most important jazz records of all time, known for its breakthrough modal playing and quartal harmony. The use of stacked fourths by jazz pianists and guitarists continues today. Again, this page is about tonalities, not just chords, so presumably Ted is talking about a span of music that is *in* quartal, in the sense that a lot of the harmony is fourth based.

29) (Chromatic) Wandering. What does Ted mean by chromatic wandering? I don't know. Chromaticism can become so strong that a sense of tonal center is lost. Some people say there really is no such thing as atonality, just rapidly shifting tonality. "Wandering" implies movement, instability, and a reduced establishment of a tonal center.

30) Parallelism. Also, known as "harmonic planing," parallelism is the same chord shifted to various roots. On the guitar this is easy: just move the same chord shape up and/or down the neck. When Debussy first did this, it was radical. Centuries of voice leading practice in classical music had emphasized avoiding parallel fifths and octaves in order to maintain polyphony. Debussy threw that out the window and delighted in moving the same chord up and down the piano keyboard. In a way, parallelism takes us full circle back to the ancient organum that involved adding a single parallel voice to a melody.

Next, Ted lists a number of musical devices or applications for the tonalities: "streams, chord scales, pedals, vamps (chains and reverses), chord progressions, and modulation (not only changing keys but also changing type of tonality)." I believe that he was tasking himself to further explore the tonalities in these ways. He liked to dream up very challenging work for himself on the guitar.

This commentary on Ted's page is somewhat speculative but I hope it gives you food for thought. Perhaps this page can help you explore tonalities and what they mean to you.

Thanks to Mike De Luca for reviewing this commentary and offering important and helpful insights and suggestions. Thanks also to David Bishop for his review and confirmation that, yes, there is a lot about this sheet by Ted that we simply don't know and don't understand.