About the Rosetta Page By James Hober

In case you haven't noticed, I'm not Ted Greene. There's no doubt that Ted would have presented his V-System differently than I have. Instead of trying to be Ted, I have simply done my best to present my understanding of his system and explain some interesting related things. Most importantly, I've tried to explain the three methods for classifying and creating chords according to his voicing groups.

In this chapter, I'd like to further clarify what comes from Ted and what comes from me in the previous chapters. My primary source has been the Rosetta Page (my name for Ted's pivotal page, not his).

The Rosetta Page is the single most important sheet of paper about the V-System that Ted left in his personal notes. It is dated 5/25/1989 4:35 A.M., with later annotations written 4/1/1991 12:30 A.M. and 6/18/2003 late Wed. night. It is the only place in Ted's notes (with one exception discussed below) where he cryptically describes all three Methods of his V-System.

The historical Rosetta Stone was engraved with identical content scripted in three ancient languages and enabled historians to gain insight into those languages. Similarly, Ted's Rosetta Page enabled me to decipher and recreate Method 1 and Method 3 using my knowledge of Method 2. Ted wrote it in 1989 after he had received my pages describing the chord tone gaps (Method 2) and after he had conceived of Method 3.

I encourage you to read both the transcription and the facsimile original page in Ted's own multi-colored handwriting, posted together at <u>tedgreene.com</u>. The transcription, in printed type, is easier to read. The original conveys Ted's energy and enthusiasm. It's also the final authority because it's exactly what Ted himself wrote.

A related document is my 1988 *Chord Tone Gap Method* pages with commentary by Ted. These are the pages that Ted photocopied from me during a lesson in 1988. On them, Ted expresses his views on the chord tone gap method. He also writes a few sentences about his (preferred) Method 1 and Method 3. This document is the only other place, besides the Rosetta Page, where Ted discusses the three methods. A transcription is available at <u>tedgreene.com</u>. The transcription includes facsimiles of the two pages Ted kept with his comments, as well as facsimiles of the four original 1988 pages I kept that do not have his comments. (I never saw his comments until after his passing.)

Let's go through the Rosetta Page line by line. Along the way I'll discuss the hopefully minor ways that my explanation chapters stray from the Rosetta Page. I confess these discrepancies so that you can decide for yourself whether I have made things clearer (my intention) or whether I have misrepresented Ted (*not* my intention). Below I indicate Ted's words from the Rosetta Page in green.

Introduction Section

Voicing System(s) – V-1 through V-14

Apparently Ted was undecided here whether to write "Voicing System(s)" as singular or plural. The V-System or Voicing System is for four-distinct-note chords. Elsewhere, his notes show that he also was exploring ideas for organizing three-note chords and five-note chords. So he may have planned to use similar "Voicing System" concepts to create additional "systems" for three-, five-, and six-note chords. In any case, at this point he had settled on the voicing groups, V-1 through V-14, for his four-note chord system.

My pet system, he says in a 2003 comment on the page. It wasn't just that he had a strong affection for the system, like he had for certain furry cats. He considered the V-system a contribution he was making to music theory. As far as I know, in the history of music theory, no one before Ted created a systematic organization of chords based on their spacing. Perhaps a musicologist will dig up a historical antecedent to Ted's work. In any case, Ted felt, and I agree, that his work was groundbreaking. He took the known ideas of close position and open position chords and refined them into fourteen more precisely defined voicing groups for four-note chords.

Three Methods of Determining What Voicing Group Any 4-Note (non-doubled note type) Voicing Belongs to

Here Ted concisely describes what's on this page: three methods to determine a chord's voicing group. Pretty much any reachable four-note chord without doubling can be sorted into one of his voicing groups.

Throughout these chapters, I have used the word "quality" to refer to one of the 43 different four-note, non-doubled, systematically invertible chord types. I have said that Ted considered homonyms as **different** qualities on his Seven Basic Qualities sheets for each voicing group. On those sheets, F6 and Dm7 are different qualities because their harmonic usage is different even though they contain the same notes. But in counting the 43 four-note chord types without doubling, F6 and Dm7 are considered the **same** quality. In retrospect, Ted actually may have used the word "quality" only in the first sense, where homonyms are considered different qualities. In the second sense, Ted usually wrote something like, "four-note, non-doubled types," as he did here on the Rosetta Page. So I may have used the term "quality" slightly differently than the way Ted did. Nevertheless, the crucial idea is that homonyms together are considered as a single four-note, non-doubled type when counting the 43. That is, Eb6 = Cm7 is counted only once, when counting up to 43. I have stressed this point consistently.

All three developed independently, yet amazingly similar at their core....[love] it.

Method 1 was created by Ted at the outset. Method 2 was created later by me when I had a strong desire to know how to categorize a chord into one of Ted's voicing groups. I didn't know about Method 1 so I developed Method 2 independently. Method 3 was created last by Ted when he knew about Methods 1 and 2. It may have occurred to him independently or it may have been somewhat a reaction against Method 2. With Method 3, Ted wanted to explore the space between the voices, but by interval rather than by chord tone gap.

In any case, all three methods come from the voicing groups (earlier, "densities") that Ted created to organize four-note chords. There are indeed similarities and relationships between the three methods at their core. And it is a beautiful thing that three different approaches can be used to classify four-note chords.

This page: "How to Recognize" and "How to Build"

Here Ted concisely defines a method by its two functions. Understanding this definition is critical for decrypting the rest of the Rosetta Page.

The second most important page Ted left about the V-System is titled "How to Make" and is about Conversion procedures. It's dated 2/4/1989 with additional annotations on 6/19/2003. A transcription of it, *V-System_Conversion_Methods_1989-02-04and2003-06-19.pdf*, has been posted at <u>tedgreene.com</u>. When Ted says the Rosetta Page is "How to Recognize" and "How to Build," he is contrasting it with the Conversion page. On the Conversion page, he makes the same contrast in reverse. By referencing the pages to each other, he is highlighting their importance. I would say, of the two, the Rosetta Page takes the highest priority because it defines the voicing groups in the most fundamental way, using the three methods.

"How to recognize" means how to take any four-note chord and decide in which voicing group it belongs. "How to build" means how to create a four-note chord from scratch such that it belongs in a particular voicing group. I have explained these two vital ideas in my chapters, *Method 1 – How to Recognize, Method 1 – How to Build, Method 2 – The Chord Tone Gap Method*, and *Method 3*. These are verbose accounts of the very brief descriptions of the methods here on the Rosetta Page.

Method 1 Section

Next Ted introduces Method 1 with the words:

An early method of mine (early '70's) and the fastest method.

Which came first: Method 1 (from the "early '70's) or the fourteen voicing groups? As late as 1976 Ted was referring to "small, medium, and large density" chords. This was precursory terminology to "voicing groups." "Small density" would become V-2, "medium density" V-4, and "large density" V-5. At some point in the 1970s, Ted evidently realized that three densities were not enough. "Density" may have given way to "V-1 to V-14" sometime between 1976 and 1980 since his personal notes show the latter on a 1980 page.

Here's a quote from Ted during a January 21, 1985 lesson he gave to Paul Vachon:

So I started saying, "small, medium, and large density." But the thing is there are all these others. I knew that they were there, but I'd say, "They're not important." But they are important. I decided not to let them take a backseat anymore. So I ran out of terms for density: "large, but shallow density." [He laughs.] So I came up with the term, "voicing groups."

(See the entire quote in *TedGreeneLessonsWithPaulVachon_OnVoicingGroups_1985.pdf* posted at <u>tedgreene.com</u>.)

And here's an undated fragment from Ted's personal notes where he is considering various terminology:

Note into GROUPS (its will be V) Rew works) for "DENSOTY" Hon "INTER-ASSOCIATION" BELATION ("RELATIONS of BULGERATION")

As late as March 1992, Ted was still using the term "density" occasionally in his lessons with Mark Levy. But this was probably because Mark learned the earlier terminology in his 1970s lessons and continued to use it in 1992. Here's Ted: "You have 35. You have 43, to be exactly precise, 43 rows of four-note chords in voicing groups, 'densities' I used to say. That's it. That's all she wrote. There are only 43 of them. You'll have to ask the Maker why someday. I don't know why. That's it. Each one, though, has a plethora of names. So there are a lot of chords to work on. We could say, 'Let's work on m6/9/11.' And it can get pretty involved." (March 4, 1992 Mark Levy lesson at 18 minutes, 30 seconds.)

On the Rosetta Page, Ted introduces Method 1 as "an early method of mine (**early** '70's)." Therefore, Method 1 may have predated the fourteen voicing groups! He had the idea of using various orderings of B T A S from the 1970s on, and yet as far as is known, he never shared it with anyone. He must have considered it very important and worthy to be revealed only in his intended forthcoming book about the V-System.

He also considered Method 1 the fastest of the three methods. Frankly, I usually am faster and more secure using Method 2, but Method 1 strikes me as more visual on the fingerboard, and Ted always emphasized "seeing the board." For him, Method 1, which is observing the order of the voices according to which chord tone each holds, was primary and rapid.

When you first learn some chords, you remember their shapes made by dots on the fingerboard:

As your knowledge of chords and of the fingerboard deepens, you begin to see:

ŀ	ζ			
		7		
			3	

ŀ	2	b	7	
		5		3

		ŀ	2	b	7	
2	3		6	5	þ	

Ted took an additional step and observed, "Hey, if I look at the root, third, fifth and seventh **in that order**, they're in voices Bass, Soprano, Tenor, Alto! BSTA. What happens if I systematically invert these chords?"

\square]]	Ż				I	Ż				ŀ	2				ŀ	2
\square									6	3				b	3		
3					3												1
\square		4	2		6	7	1	5		b	7	4	5		b	7	
\Box	Ż																

"Now the order is ABST for all these chords, a rotation of the above order, BSTA." So Ted's epiphany was that he could organize four-note chords according to the chronological order of the voices encountered when inspecting the ascending chord tones.

The "Chord Tone Path"

Example:
$$1 \xrightarrow{5 \to 7} 3$$
; $3 \xrightarrow{7 \to 1} 5$; and so on.

It's not clear to me whether Ted intended "The Chord Tone Path" to be the title of Method 1, the overall concept of Method 1, or whether he intended it only to refer to his example diagrams. His ingenious diagrams are very much like little paths. And following the ascending chord tones on the fingerboard also creates a mental path through the voices. One or the other of these ideas seems to be what Ted meant by the "chord tone path."

I may have used the term "chord tone path" in my *Method 1 – How to Recognize* and *Method 1 – How to Build* a little differently than the way Ted does here. I used it in the sense of "rotatable chord formula," for example, $1 \rightarrow 3 \rightarrow 5 \rightarrow 7$. This rotatable chord formula is visualized as winding its way through the voices. In addition to using Ted's arrow diagrams, I created similar ones with staff notation and fretboard grids. I did this for clarity of explanation. My primary goal has been to describe how the methods really work in the most understandable way. Since it is not clear to me which meaning of "the chord tone path" Ted intended, I could not know which meaning to be strictly faithful to. So instead of rigidly adhering to Ted's usage, whatever that may have been, I tried to carefully and straightforwardly describe how Method 1 actually works.

1) Find which "Chronological Chord Tone" (or Letter Name) formula is happening in the chord, and check against the following Master Formulas for V-1 through V-14.

In this brief sentence, Ted describes Method 1. Unfortunately, there are a number of ambiguities here. Does "Chronological Chord Tone formula" refer to BSTA and the like? Or does only "Master Formula" refer to BSTA? Does "Chronological Chord Tone formula" refer to ascending chord tone formulas like 1 3 5 7, 3 5 7 1, 5 7 1 3, and 7 1 3 5? This sentence can be understood a number of ways. My job was to find a clear way to explain how Method 1 in practice works.

Instead of Ted's words "Chronological Chord Tone" formula, I referred to BSTA and the like as "Chronological Voice Formulas." It just seems clearer since the letters BSTA refer to the chronologically encountered voices, even though the chord tones are followed to determine the ordering of the voices. Ted himself was inclined to change his terminology as he worked toward a clear presentation.

Another point of confusion is whether Ted meant "Letter Name" to be an alternative way to refer to BSTA and the like, or whether he meant that instead of the numerical chord tones 1 3 5 7, you could think from the letter names of the notes, C E G B, for example. I'm fairly confident the latter was Ted's intention and therefore wrote the chapter, *Method 1 – By Letter Name*.

He used the word "chronological" because it's the order **in time** that you encounter the voices as you **inspect** the chord tones. The **structural** order of the voices never changes; it remains Bass, Tenor, Alto, Soprano from the bottom up. But the **chronological** order of the voices varies depending on the voicing group and inversion. In *Method 1 – How to Recognize*, I did my best to clearly convey this important, inclined to be puzzling, difference between chronological and structural voice order.

Next Ted lists all the voicing groups and their "Master Formulas":

V-1 = Chronological order from top down or \checkmark bottom up.

Ted originally wrote, "bottom up or top down," and later revised it to, "top down or bottom up." The eighth note symbol was a shorthand play on "note" that Ted used in his personal memoranda. Evidently it meant something like, "Take note," or "Explain this with a note."

Ted's initial approach was to look at chords from the bottom up. When you look at the fingerboard, the bass is closer to your eyes and the soprano farther away. So it makes sense visually to think of the bass first and soprano last. For V-1 spacing, you place the ascending chord tones in the ascending voices: Bass, Tenor, Alto, Soprano, or BTAS. For inversions, you can systematically move the chord tone in each voice up to the next higher chord tone (1 3 5 7, 3 5 7 1, 5 7 1 3, 7 1 3 5) or you can rotate the voices (BTAS, TASB, ASTB, SBTA). Either way, you're working bottom up, that is from low chord tone to high, and from low voice to high, with wrap around back to the lowest if necessary. Ted originally designed the V-System with such "bottom up" thinking.

But over time he began to visualize chords more from the top down. He realized that musically the soprano was more important than the bass. On the Rosetta Page, had Ted treated V-1 as he did subsequent voicing groups, he would have listed the bottom up formulas: BTAS, TASB, ASTB, SBTA. But from the top down point of view, all these letters would have to be reversed or the chord formulas would have to be reversed: 7 5 3 1, 5 3 1 7, 3 1 7 5, 1 7 5 3. Either way, confusion could easily result.

Without question, Ted, in his later years, increasingly eyed the fingerboard from the soprano down. He would have revamped his V-System to reflect such top down thinking. And yet it is natural and traditional to think from bottom up, at least for chord formulas: 1 3 5 7 rather than 7 5 3 1. For clarity of explanation, I have mostly described the V-System bottom up, as it is mostly described on the Rosetta Page. I also frequently have included soprano-oriented thinking, in particular where I felt it was helpful, important, and not confusing.

V-2 = <u>TABS</u> (Tenor then Alto then Bass, then Soprano), or \checkmark alternates: <u>Bass Sop T A</u>; STAB; ABST

For V-2, Ted lists here four master formulas (i.e., chronological voice orderings), which are rotations of each other. He spells out the full names of the voices at first for clarity. He writes "then" to indicate that they should be thought of in chronological order. He underlines TABS, perhaps favoring it because it spells out a word and is memorable.

e.g. 1 3 5 7 $V-3 = \underline{SABT}$, TSAB, ABTS, \underline{BTSA} C A Bb B \underline{BTSA} C Db D Eb

For V-3, Ted similarly provides four master formulas. This time he indicates above and below two of them how chord tones or note names could be placed into the voices. For the numerical chord tone example, he selects the most straightforward chord, the maj7. For the note names, he uses the most highly dissonant quality of three neighboring half steps. SABT and BTSA are underlined, perhaps indicating that he favored those two.

 $e.g. 1 \quad 3 \quad 5 \quad 7$ V-4 = TBAS, <u>BAST</u>, ASTB, <u>S T B A</u>

For V-4, Ted again provides the four formulas. This time the last one has maj7 chord tones shown above, indicating how these could be placed into the voices. BAST and STBA are underlined.

 $V-5 = \underline{TSBA}, \underline{BATS}, ATSB, SBAT$

V-5 is just a straightforward list of formulas. TSBA and BATS are underlined.

V-6 = Like V-1 but with extra octave between B and T V-7 = Like V-2 but with octave between B and T

Here V-6 and V-7 don't have four master formulas but rather are specified by conversion from earlier voicing groups. V-6 comes about by converting from V-1. V-7 comes about by converting from V-2. In both cases, you simply drop the bass an octave.

V-8 = <u>SATB</u>, ATBS, TBSA, <u>BSAT</u> ("<u>Descending Order" by luck</u>) "opposite of V-1"

V-8 is the last voicing group to get its own list of four formulas. When Ted writes "'Descending Order' by luck," I believe he means that it is just chance that V-8 formulas happen to have the reverse order from those of V-1. My guess is that this idiosyncrasy stuck with Ted and he remembered V-8 this way. SATB and BSAT are underlined.

- V-9 = Like V-2 but with octave between B and T
- V-10 = Like V-2 with octave drop of both the B and T (or raise A and S)
- V-11 = Like V-4 but octave gap between A and S (or even better: V-5 with Alto down 2 octaves)
- V-12 = Like V-3 with octave drop between T and B
 - (low V-5 with Tenor up 2 octaves...better)

V-13 = Like V-1 with octave drop of both B and T (or raise A and S)

V-14 = Like V-1 with octave gap between A and S)

V-9 through V-14 are each defined by conversion from a previous voicing group. The two instances where Ted suggests "better" conversions are dated later.

The test is always simple: less than an octave (S to B).

Although this 2003 annotation is at the end of the Method 1 section, it clearly applies to the V-1 voicing group at the beginning of his Master Formula Table. On the original, it looks to me like "(B to S)" is written over with "(S to B)." Again, Ted's self-correction reflects his later top down thinking.

Method 2 Section

The middle of Ted's Rosetta Page describes Method 2. As mentioned earlier, Ted also annotated my 1988 *Chord Tone Gap Method* pages with comments about Method 2.

2) Formulated by Jim Hober (a thinking student)

I'm grateful that Ted credits me with the creation of Method 2. He created the V-System. Later I discovered the pattern of chord tone gaps inherent in his system.

Ted characterizes me as "a thinking student." Ted tried to encourage some of his students away from only playing with emotion toward playing with increased mental understanding. Of course, he himself played with both feeling and thinking. When Ted describes me as "a thinking student," he's probably saying that my brain was working well when I figured out the Chord Tone Gap Method. If I had simply discovered a pattern he already knew about, there would have been no reason for him to credit me.

"Chord Tone Gap" Method between adjacent voices

I used the word "gap" when I presented Method 2 to Ted in 1988. I wrote, "Gap size = number of chord tones that could be played between two voices." Ted took this statement and came up with the concise name, "Chord Tone Gap" Method. It is a simple and clear description of Method 2.

About the Rosetta Page

The missing tones here are something I fell into naturally.

I believe Ted is saying that the chord tone gaps were there in his V-System waiting to be discovered. True. But, as I said, had he found them before I did, there would have been no reason for him to credit me in his notes. I'm grateful that I was able to make a contribution to his V-System. And I appreciate Ted's acknowledgment of that contribution. I'm also grateful for the opportunity to further clarify and explain his V-System in these chapters.

Best to explain the [chord tone gap] size to certain students.

Ted felt that the Chord Tone Gap Method would be useful to some, but not all, students. For him Method 1 and Method 3 were primary. The Method 2 approach was a little bit more supplemental. I don't believe this was only because he created Methods 1 and 3. I think for him, Methods 1 and 3 could be visualized on the fingerboard more easily and so he gave them priority. Nevertheless, there's a simplicity to Method 2. Personally, I favor it, and it's the easiest to use for me.

		[B-T	T-A	A-S]
V-1	=	0	0	0
V-2	=	1	0	1
V- 3	=	0	1	2
V-4	=	2	1	0
V-5	=	1	2	1
V-6	=	4	0	0
V-7	=	5	0	1
V-8	=	2	2	2
V-9	=	1	0	5
V-10	=	1	4	1
V-11	=	2	1	4
V-12	=	4	1	2
V-13	=	0	4	0
V-14	=	0	0	4

Ted writes out my chord tone gap table bottom up, listing first the bass to tenor gap size, then the tenor to alto, and finally the alto to soprano. He definitely preferred this layout and I have respected his wishes. When I wrote up the Chord Tone Gap Method and presented it to him in 1988, on one page I wrote the gap sizes as Ted does above. On another page I wrote the table top down, with gap sizes listed S-A, A-T, T-B. I wasn't wedded to either a bottom up or top down listing of the chord tone gaps. Ted took me to task in his comments for using the top down layout. Yet in his later years, he himself moved more and more toward top down thinking, emphasizing the soprano as the main point of reference.

As I said above, I have primarily used the bottom up approach in explaining his V-System, while including soprano-oriented thinking where I felt it was beneficial. Ted makes it clear in his notes that he wanted the Chord Tone Gap Table listed bottom up. It's not difficult to view the table right to left for top down thinking and that is exactly what I advocated for building chords from the soprano down in my chapter, *Method 2 – The Chord Tone Gap Method*.

Method 3 Section

[The **red** text below indicates completions I made March 18, 2010 to Ted's Rosetta Page Method 3 table.]

- 3) My latest method which I once began & never finished (but did here)
 - a) Largest & smallest possible REAL <u>INTERVAL</u> available between each adjacent pair of voices in each Voicing Group and
 - b) between the outer voices, \leftarrow This governing the overall range.



I've written extensively about Method 3 in my chapters, *Method 3* and *The Method 3 Computer Algorithm*. In the former, I quote the entire Method 3 section above of the Rosetta Page and thoroughly explain my understanding of it. In the latter, I explain the tricky computer algorithm I worked out to compute the interval content of four systematic inversions for a given voicing group. Here I mostly want to talk about the challenge I faced trying to figure out Method 3. Everything Ted left about Method 3 is right here on the Rosetta Page in text that is about 2 ½ inches by 8 inches. That's it! (He basically repeats his Rosetta Page description in his comments on my 1988 *Chord Tone Gap Method* pages).

The first puzzle I faced was that he says he never finished Method 3. Then in a later entry he says he did finish it. I wondered which it was. I looked down at his table and realized the outer voice intervals (to the right of the curly brackets) were completed, but the adjacent voice intervals (to the left of the curly brackets) were not. So apparently Method 3 wasn't completed. I started puzzling how it could be. If it had been important to Ted and he hadn't completed it, it was probably quite difficult to do. Eventually I figured out that the most dissonant of the 43 qualities, which contains half steps 1 - 1 - 1 - 9, has the most extreme interval content and could be used to complete the table. Then I did the work of calculating the interval content of 56 chords (4 systematic inversions of the most dissonant quality x 14 voicing groups). That's three adjacent intervals and one outer voice interval per chord.

But before I got that far, I was trying to work out other questions. What does "real interval" mean? How is that different than a plain old "interval?" Since he was writing intervals in his table, I concluded that "real" must be emphasizing **intervallic** gaps, as opposed to the chord tone gaps of Method 2.

The main puzzle for me was how Method 3 was supposed to work. And did it work? I could see it was about ranges of intervals. But how would that help you to recognize the voicing group of a chord? How would it help you build a chord? After a few hours of thinking hard about Method 3, I began to suspect that it wouldn't work for all four-note chords. I worried that even if I figured out how to complete the table, many of the ranges might overlap so that one couldn't always use the table to resolve a chord to a single voicing group. What would I do if Ted's table didn't work?

It was days later, after I completed the table, that I proved to myself that certain chords won't funnel through it to a single voicing group. Then it was a long time before I thought of creating multiple tables using the computer to supplement Ted's table. Finally, it was only just before I wrote the chapters on Method 3 that I worked out the exact computer algorithm I needed. Then I wrote two computer programs for solutions: one by quality and one by the outer voice interval. So Method 3 was a difficult nut to crack.

Full Circle

To this day, I look at the Rosetta Page Method 1 and Method 3 sections and wonder, "Did I miss anything? Do I really understand this?" Now you can examine the Rosetta Page for yourself and decide if I've done a good job of deciphering and explaining it.

I can't emphasize enough the importance of the Rosetta Page. It is by far the most significant page about the V-System that Ted left in his notes. Without it and the few comments that Ted wrote on my 1988 *Chord Tone Gap Method* pages, we wouldn't have Methods 1 and 3, which are central to Ted's V-System. The Rosetta Page is so cool! On a single sheet of paper, Ted briefly and somewhat enigmatically describes all three methods. It's the main document that I have relied upon in writing about the V-System, although of course, I have used everything I could find that Ted left about the V-System.

I never saw the Rosetta Page until after Ted's death. I don't think anyone did. Maybe his life companion, Barbara Franklin, did. Fortunately, Ted left it in his notes! He certainly felt the V-System was important for his legacy. The Rosetta Page is **the** key to unlocking his V-System.

When I first got the chance to examine the Rosetta Page, I was so excited. Here's what I wrote to Paul Vachon on March 9, 2010, immediately after he sent it to me:

Wow. The stuff you sent me was amazing and fascinating. Especially Voicing System Formula.pdf, Ted's master page with the three methods of classifying. I didn't know about the other two methods until today, which is why I was forced to figure out method 2 back in 1988. (Well, I read in Barbara's book that there were three methods but I didn't know what the other two were.) So I spent a few hours figuring out methods 1 and 3 today. Method 1 is fairly easy to understand. I can see why Ted liked it because with it you can kind of paint the chord tones onto the guitar neck. But it seems a little more complicated to me than method 2. Method 3 took me a couple hours to decipher. It's only partly sketched out on this master sheet but I think I get it. What's striking about method 3 is that it's oriented around how far apart the hand has put the soprano and bass. It's like a funnel. First you look at your chord's interval of the outer voices. That eliminates some of the voicing groups because it falls outside the range of permissible outer voice intervals for those voicing groups. Then you can look at either the A-S interval or the B-T interval and see if they fall in range. Finally you can look at the T-A interval if necessary. However, I'm not sure if method 3 would always work. In other words, I suspect, but haven't yet proven, that there might be some cases where method 3 wouldn't narrow down the possibilities to one. To find this out I'd have to finish Ted's table of largest and smallest real intervals. He just finished the outer voices. I'd want to check those, too. Is there any other material on method 3?

...Anyway, thanks for sending the stuff you sent. And I'm very touched and grateful for what Ted wrote about me. Until today, I had no idea about that.

Thus began my work on these chapters explaining the V-System.

- James