

The (Early) Fixed Bass Tour

By James Hober

Ted Greene produced the following Fixed Bass Tour for himself in 1980:

RED NO'S are V-1, V-2, etc. MASTER SHEET ON VOICING & FINGERING POSSIBILITIES FOR ALL 4-NOTE CHORD TYPES (EX: AM7) P. 27-48
AM7 DENSITY NO'S (14) 4-11-29-80
① 1357 ④ 1357 ⑥ 1-357 ⑩ 1-375
③ 1375 USE 2 FRET NUMBERS IN CASES LIKE THIS ⑤ 1537
② 1573 ⑧ 1573 ⑨ 1573 ⑪ 15-73 ⑫ 1-573 ⑬ 1735
⑭ 1735 ⑮ 1735 ⑯ 1735
⑰ 1735 ⑱ 1735
⑲ 1735 ⑳ 1735
⑳ 1735 ㉑ 1735
㉒ 1735 ㉓ 1735
㉔ 1735 ㉕ 1735
㉖ 1735 ㉗ 1735
㉘ 1735 ㉙ 1735
㉚ 1735 ㉛ 1735
㉜ 1735 ㉝ 1735
㉞ 1735 ㉟ 1735
㊱ 1735 ㊲ 1735
㊳ 1735 ㊴ 1735
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㊽ 1735 ㊾ 1735
㊿ 1735

(A transcription of this extract from Ted's personal notes has been posted on tedgreene.com in the "Ted's Comments on the V-System" section.)

This is an early listing of all the voicing groups. Circled numbers in red indicate "density numbers," Ted's older terminology for "voicing groups." The title of this sheet begins with "V-1, V-2, etc." so here he also is using the later terminology that predominates his writing on the V-System. In the transcription, Paul Vachon has simply prefaced each circled "density number" with "V-" in keeping with Ted's later practice.

The chords are not in order by voicing group on this early page. Instead they are in order by a systematic rearrangement of the numbers 1357. Obviously these numbers represent the chord tones: root, third, fifth, and seventh. But also if you think of 1357 as a four-digit number, Ted begins with the smallest such number. Then he follows with insertion of the dash for every reasonably reachable chord with an octave skip. Then he moves to the next largest four-digit number, 1375. And so on. In this way, he methodically investigates the possibilities.

In accord with this pattern, the bass is held fixed first on the root, then on the third, and finally on the fifth. Had he completed the pattern, Ted would have included V-11 with the third in the bass (which he evidently overlooked), and he would have added additional chords with the fifth and the seventh in the bass. In Paul's transcription, he has provided all these additional chords in staff notation.

Since Ted is listing Am7 chords, “3” means “b3” and “7” means “b7.” For the “marginal” chords at the end, Ted does write “b7” according to his usual practice of referencing the major scale for chord tones. He probably used the shorthand “3” and “7” rather than the lowered versions because he was writing this fixed bass tour for his personal notes rather than for teaching. He knew what he meant. But perhaps he also wanted to indicate that a chord with a root and **any** kind of third, fifth, and seventh could be classified into a voicing group according to the ordering of 1, 3, 5, and 7 and the location of an octave skip, if any.

In his transcription, Paul has created a table (with a description that I wrote):

Chord Tone Orderings for V-1 through V-14
and Four “Marginal” Voicing Groups

As derived from Ted Greene’s “Master Sheet” 1980-08-24 document

Most common four-note chords are tertian harmony. That is, they have a root, and some kind of third, fifth, and seventh. Such chords include the maj7, dom7, m7, m7b5, dim7, and more. For each voicing group below, the bass to soprano order of the four chord tones (1357) is shown. A dash (-) indicates an octave skip. The first column for root position chords is derived from Ted’s original sheet where he writes a red circled number next to a chord tone ordering. The other three columns are calculated by systematic inversion: the root moves up to the third, the third to the fifth, the fifth to the seventh, and the seventh to the root. If there’s an octave skip, it remains in place between the same voices (i.e., between bass and tenor).

Voicing Group	Root Position	First Inversion	Second Inversion	Third Inversion
V-1 =	1 3 5 7	3 5 7 1	5 7 1 3	7 1 3 5
V-2 =	1 5 7 3	3 7 1 5	5 1 3 7	7 3 5 1
V-3 =	1 3 7 5	3 5 1 7	5 7 3 1	7 1 5 3
V-4 =	1 7 3 5	3 1 5 7	5 3 7 1	7 5 1 3
V-5 =	1 5 3 7	3 7 5 1	5 1 7 3	7 3 1 5
V-6 =	1 - 3 5 7	3 - 5 7 1	5 - 7 1 3	7 - 1 3 5
V-7 =	1 - 5 7 3	3 - 7 1 5	5 - 1 3 7	7 - 3 5 1
V-8 =	1 7 5 3	3 1 7 5	5 3 1 7	7 5 3 1
V-9 =	1 5 7 - 3	3 7 1 - 5	5 1 3 - 7	7 3 5 - 1
V-10 =	1 5 - 7 3	3 7 - 1 5	5 1 - 3 7	7 3 - 5 1
V-11 =	1 7 3 - 5	3 1 5 - 7	5 3 7 - 1	7 5 1 - 3
V-12 =	1 - 3 7 5	3 - 5 1 7	5 - 7 3 1	7 - 1 5 3
V-13 =	1 3 - 5 7	3 5 - 7 1	5 7 - 1 3	7 1 - 3 5
V-14 =	1 3 5 - 7	3 5 7 - 1	5 7 1 - 3	7 1 3 - 5

Marginal:

Additional, mostly unreachable voicing groups not assigned a number by Ted:

1 7 - 3 5	3 1 - 5 7	5 3 - 7 1	7 5 - 1 3
1 3 - 7 5	3 5 - 1 7	5 7 - 3 1	7 1 - 5 3
1 3 7 - 5	3 5 1 - 7	5 7 3 - 1	7 1 5 - 3
1 - 7 3 5	3 - 1 5 7	5 - 3 7 1	7 - 5 1 3

This table can, of course, be used to classify chords with a root, and some kind of third, fifth, and seventh. But it can also be used to sort other chords into their correct voicing groups. For example, a 6 chord has 1356 for chord tones. You can mentally replace the sevens in the table with sixes to classify any 6 chord. You could replace the threes with fours to classify 7sus chords. And so on. You just have to be careful to replace a chord tone number with a nearby number so that you don't cross into another number's territory.

Ted himself is doing this when he lists some "marginal" voicings at the end and says, "Some are better for 9ths with no 5ths." There he shows that R7-35 can be changed to R7-93 and remain in its own "marginal" voicing group. Similarly, he shows that R3-75 can be changed to R9-73, R37-5 to R97-3, and R-735 to R-793.

This "marginal" section near the end of the page is most interesting. Ted has a red circled number 15 next to it. Does this mean that there is a catchall extra voicing group, V-15, for all the leftover, mostly unreachable chords that don't fit into V-1 through V-14? Or does the 15 indicate the first of four different "marginal" voicing groups that should be numbered V-15, V-16, V-17, and V-18?

Also, the question arises: Does the Chord Tone Orderings Table above constitute an additional method? Why isn't it Method 4? Or Method 0 (zero) since it is based on early ideas Ted had?

I want to go into these questions carefully. As you will see, my view is that this table does not represent another method. I also feel that we should respect Ted's decision to have the V-System comprise fourteen voicing groups, while at the same time allowing for expandability.

Let's take the question of whether this is another method first. What is a method? In his personal notes, Ted said the methods serve two functions: how to recognize and how to build. With nearly any four-distinct-note, reachable guitar chord, we can recognize which of the fourteen voicing groups it fits into, according to its spacing, by using Method 1, 2, or 3. We can also use the methods to build a four-note chord so that it fits into one of the fourteen voicing groups. (You might argue that Method 3 cannot be used easily for building. But if you know the outer voice and adjacent voice intervals of a chord, which is the idea behind Method 3, then you can construct the chord.)

By Ted's definition, so far our table above is looking like a method. We certainly can use it to classify a chord that has a root, third, fifth, and seventh. We've also seen how, with a little shifting up or down of these basic chord tones, we can classify other chords. It's pretty easy and even handy to build chords using the above table, too.

But is this table substantially similar to one of the existing three methods? In fact, it is! It's basically Method 1 presented in a different way. The Chord Tone Ordering Table above is essentially the same as the Method 1 Master Formula Table but it shows different orderings of 1357 instead of different orderings of BTAS. Whether you keep the BTAS order fixed and rearrange the 1357 numbers or you keep 1357 fixed and rearrange the BTAS letters, you are by and large doing the same thing.

Let's see how this works with V-2, for example. The Chord Tone Ordering Table has 1573 for root position V-2. With 1 in the Bass, 3 in the Soprano, 5 in the Tenor, and 7 in the Alto, we have the master formula BSTA. So 1573 in the Chord Tone Ordering Table corresponds exactly to BSTA in the Master Formula Table of Method 1. Similarly, 3715, 5137, and 7351 correspond to ABST, TABS, and STAB respectively. The four entries in the Chord Tone Ordering Table have exact counterparts in the Master Formula Table. It's the same information expressed a little differently.

Further, the dashes indicating the octave skips match the Method 1 table descriptions of where extra octaves fall. V-14 (135-7) has the same ordering as V-1 (1357) but with a dash between the alto and soprano. The Master Formula Table says V-14 is V-1 with S an octave higher. Again, the exact same information is expressed a little differently.

The Chord Tone Ordering Table also has similarities to Methods 2 and 3 but not in the fundamental way that it does to Method 1. In Method 2, V-2 has chord tone gaps: 1 0 1. We can see that there's a skip, or a gap of one chord tone, between 1 and 5, no skip between 5 and 7, and another single skip between 7 and 3. You can observe that all of the 1357 orderings in the table follow their respective Method 2 chord tone gaps in how they skip. Similarly, you can find relationships between the Method 3 outer voice and adjacent voice intervals and the arranged 1357 chord tones of the Chord Tone Ordering Table. In a V-2 maj7, for example, Method 3 says that the bass to tenor interval will be a perfect fourth or a perfect fifth. Sure enough, 1573, 3715, 5137, and 7351 all demonstrate one of those two intervals between the first two chord tone numbers. So there is interconnectivity between all three Methods and the Chord Tone Ordering Table. But the Chord Tone Ordering Table is most closely related to Method 1 because it is a simple restatement of the Method 1 Master Formula Table. If anything, the Method 1 table, with arrangements of BTAS, is a more general expression, in that it can be used without having to convert a four-note chord formula to the closest values of 1, 3, 5, and 7.

Finally, there's the authority of the "Rosetta Page," the most important page about the V-System that Ted left in his personal notes. On it, Ted lists three methods. No more and no less. He clearly knew about referencing chords by 1357 orderings. He also clearly understood that this was not really different than Method 1. In fact, he shows different orderings of 1357 with arrows when illustrating "the Chord Tone Path" in his Method 1 section of the Rosetta Page. So this 1357 way of thinking is not another method but rather is part and parcel of Method 1.

Now let's discuss the "marginal" section of the 1980 Fixed Bass Tour. Although Ted puts a red circled 15 here on this early page, it's the only place in all his writing where he ever suggests there might be a V-15. All his later notes and pages refer to V-1 through V-14. On the Rosetta Page, he lists fourteen voicing groups and no more. Clearly, he considered additional voicing groups beyond his fourteen and ultimately rejected them because they contain mostly unreachable chords (in standard tuning without using open strings). There do exist a very few four-distinct-note chords outside of the fourteen voicing groups that are reachable in high registers. But only a few. (Even many V-11 and V-12 chords that Ted did include in the V-System are unreachable low on the neck.) Ted had to draw the line somewhere and he drew it at fourteen. In my opinion, we should respect his decision.

At the same time, it is clear that the V-System is expandable. I've pointed out in my *Method 2 - Further Insights* chapter how we can find the chord tone gaps for voicing groups beyond Ted's fourteen. And here on his 1980 Fixed Bass Tour, Ted is showing that he, early on, considered voicing groups beyond his fourteen. You can see that his "marginal" 17-35 and 1-735 voicing groups are based on V-4 (1735) with the octave break placed differently than V-11 (173-5). Similarly, you can see that his "marginal" 13-75 and 137-5 groups are based on V-3 (1375) with the octave break placed differently than V-12 (1-375). If you ever wondered, why the Method 1 Master Formula Table had three higher numbered voicing groups based on V-1 but with an extra octave, three based on V-2, but only one based on V-3 and only one based on V-4, you can now see that Ted considered these additional groups and set them aside as "marginal."

If we are faithful to the notes and pages Ted left, we must respect that Ted drew the line at fourteen voicing groups and no more. At the same time, we can see that it's possible to use Method 1, 2, or 3 techniques to expand the V-System to even more voicing groups. An expanded V-System could be useful for 7-string guitar chords, non-standard tuning guitar chords, keyboard chords, and chords orchestrated for multiple instruments. But let's leave numbering any additional groups to the future. Ted thought a lot about his fourteen voicing groups before settling on them. Let's honor that.

In Ted Greene's V-System, there are fourteen voicing groups. There are three methods. And here and there are peeks at the horizon, beckoning you to go further.

- James