The Fixed Soprano Tour

By James Hober

My V-System discoveries quickly increased in the late 1980s when, in a lesson, Ted gave me a "fixed soprano tour." That's my name for it, not his. I had asked Ted, "How many of these V-1, V-2, V-3, … groups are there?" "Fourteen," he replied, and then wrote out the following for me:

You can see why I call it a "fixed soprano tour." The soprano is fixed, in this case, on the b7. The root and quality of the chord are also fixed, in this case, on G7. As always in the V-System, the number of distinct chord tones is fixed at four. What changes? For each voicing group, V-1 to V-14, the spacing of the chord changes.

Essentially, in a single line of staff notation, Ted gave me a complete overview of his V-System.

A little lower on the same page, I wrote:

So you can see I was starting to figure out the chord tone gaps soon after Ted gave me the fixed soprano tour on June 1, 1988. I can't remember why I crossed out the above. Perhaps it was when I wrote up more complete pages about the chord tone gaps.

I wasn't the only student who got a fixed soprano tour. Several other students received these souvenirs of the V-System. Here are a couple of them:

In both of the above examples, Ted only wrote out V-1 through V-10, perhaps considering the last four voicing groups less useful for the student at that time. In the previous example, Ted calls the fixed soprano tour a "manifestation of **1** chord type in **one** soprano position."

There is a fretboard grid version of the fixed soprano tour and some similar constructions in Ted's personal notes. Here is one for the maj7 chord with the root in the soprano, where Ted comprehensively explores the possible string sets:

(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.)

Below is an interesting early example where the bass, rather than the soprano, is fixed, first on the root, then on the b3, and finally on the 5. He uses his older terminology "density numbers" rather than "voicing groups." He also introduces a dash notation, as in 1 3 5 - 7, where the dash indicates an interval greater than an octave. At the end, he lists the possible string sets for four-note chords:

(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.)

And here is a fixed soprano "survey" for the maj9 chord with 9 in the soprano:

This last example shows how Ted might have taught his V-System, distilling down the numerous, mathematically generated possibilities to the most practical voicings.

I've always wondered how Ted wrote out the fixed soprano tour. How would you do it?
When Ted wrote mine, Method 2 and Method 3 did not yet exist, so he couldn't have used
them. He had to use either Method 1, his general familiarity with V-System chords, or
conversion. Perhaps he used all three but almost certainly he used conversion. On Ted's
page *V-System Conversion Methods, 1989-02-04*, posted in the "Ted's Comments on the V-
System" section of tedgreene.com, he identifies those conversions that keep the soprano
fixed and those that don't. Clearly the fixed soprano conversions would come in handy for
writing out a fixed soprano tour.

It's fun to speculate which particular conversions Ted used to write these tours. If he used the
fixed soprano conversions listed on his 2/4/1989 page, or those in his Method 1 Master
Formula Table, the following procedures could create a fixed soprano tour:

V-1 → V-2 Drop Alto
V-2 → V-3 Drop Alto
V-3 → V-4 Raise Tenor or V-2 → V-4 Swap Bass and Alto
V-2 → V-5 Drop Tenor
V-1 → V-6 Drop Bass
V-2 → V-7 Drop Bass
V-3 → V-8 Drop Tenor
V-8 → V-9 Drop Alto or V-2 → V-9 Drop Bass, Tenor, and Alto
V-9 → V-10 Raise Alto or V-2 → V-10 Drop Bass and Tenor or V-5 → V-10 Drop Tenor
V-5 → V-11 Drop Alto 2 octaves or V-4 → V-11 Drop Bass, Tenor, and Alto
V-2 → V-12 Drop Alto 2 octaves or V-11 → V-12 Raise Tenor or V-3 → V-12 Drop Bass
V-6 → V-13 Drop Tenor or V-1 → V-13 Drop Bass and Tenor
V-5 → V-14 Drop Alto or V-3 → V-14 Drop Alto or V-13 → V-14 Drop Alto or
                            V-1 → V-14 Drop Bass, Tenor, and Alto

Here's my best guess for the particular conversions Ted used at each step in the fixed soprano tour:

$$V\text{-}1 \to V\text{-}2 \quad \text{Drop Alto}$$
$$V\text{-}2 \to V\text{-}3 \quad \text{Drop Alto}$$
$$V\text{-}3 \to V\text{-}4 \quad \text{Raise Tenor}$$

$$V\text{-}2 \to V\text{-}5 \quad \text{Drop Tenor}$$
$$V\text{-}1 \to V\text{-}6 \quad \text{Drop Bass}$$
$$V\text{-}2 \to V\text{-}7 \quad \text{Drop Bass}$$

$$V\text{-}3 \to V\text{-}8 \quad \text{Drop Tenor or use Method 1 SATB}$$
$$V\text{-}8 \to V\text{-}9 \quad \text{Drop Alto}$$
$$V\text{-}9 \to V\text{-}10 \quad \text{Raise Alto}$$

$$V\text{-}4 \to V\text{-}11 \quad \text{Drop Bass, Tenor, and Alto}$$
$$V\text{-}11 \to V\text{-}12 \quad \text{Raise Tenor}$$

$$V\text{-}1 \to V\text{-}13 \quad \text{Drop Bass and Tenor}$$
$$V\text{-}13 \to V\text{-}14 \quad \text{Drop Alto}$$

He started by writing a V-1 chord, probably "top down," that is from soprano to bass. He would have wanted to write the first chord in a fairly high register so that when he got to V-11 and V-12, they would be reachable. Then he probably would have applied Drop Alto to get V-2, and again to get V-3, and so on.

Ted was always exploring different ways to teach and organize his material. There is little doubt that organization by soprano, such as in the fixed soprano tour or survey, would have been important in the book he planned to write on his V-System.

– James