

The logic of that same misplaced accidental then brought me to a musical homecoming of my own — through a 1°17 semitone, this time as a melodic interval defining a familiar 14th-century cadence.

Such is the copious nature of 17-WT.

8.6. A suspension-like “fusion” idiom

Another idiom, although not precisely a suspension, seems also to combine medieval and Renaissance elements:

1	2	1	2	&	1
D5	C#5	D5			
A4	G#4	Bb4	A4	G4	A4
F4	E4	D4			

The standard 14th-century progression of E4-G#4-C#5 to D4-A4-D5 is decorated with an ornament in the middle voice, which moves to the minor sixth in place of the expected fifth, and then gently settles into its anticipated goal (Bb4-A4-G4-A4). While the expressive resolution from minor sixth to fifth by oblique motion appears in 13th-century pieces, the figure Bb4-A4-G4-A4 evokes for me especially some cadences of around 1500, the era of Josquin des Prez.

From this perspective, the melodic diminished third G#4-Bb4 in the middle voice (2°17) seems a kind of bridge between medieval and Renaissance eras.

In 17-WT, the minor sixth (11°17) ranges from its smallest size near 9:14 (~764.92 cents) in the nearer portion of the circle, as here (D4-Bb4, ~771.78 cents), to a pure 7:11 (~782.49 cents) in the remote portion. A minor sixth around 9:14 or 7:11 has for me a pleasantly languid quality, here nicely contrasting with the outgoing and expansive qualities of the sonority with major third and sixth preceding it. Once again, 17-WT proves fertile ground for a cross-pollination of the centuries.

9. A short piece in 17-WT

HERE IS A SHORT PIECE which I originally composed in a just tuning itself a kind of “spinoff” of 17-WT. When I discovered that the 17-WT symmetrical tetrachord scale that George Secor and I had developed in our correspondence had a just counterpart in the writings of Ibn Sina, this led to the idea of a 12-note tuning combining a Pythagorean diatonic with Ibn Sina’s soft diatonic. The union of these two seven-note scales accounts for 11 notes, leaving an extra note available to adjust for a comma complication and produce an additional pure fifth. This is the tuning, with C as the note of reference for the two diatonic scales:

	128.30	266.87		470.78		830.25	968.83	
	14:13	7:6		21:16		21:13	7:4	
	C#	Eb		Fv		G#	Bb	
C	D	E	F	G	A	B	C	
1:1	9:8	81:64	4:3	3:2	27:16	243:128	2:1	
0	203.91	407.82	498.04	701.96	905.87	1109.78	1200	

The Pythagorean (C-D-E-F-G-A-B-C) and Ibn Sina (C-C#-Eb-F-G-G#-Bb-C) scales together give rise to a fifth Bb-F tuned at 32:21 (~729.32 cents), a 64:63 comma of Archytas wider than 3:2. The extra note mapped to the F# key, here notated as Fv, provides a pure fifth Bb-Fv, with a fingering which recalls for me the fifth A#-Gb on the upper manual of my 17-WT keyboard arrangement.

This scheme has some curious qualities which may help explain the evolution of my piece and the way in which it “translates” to 17-WT. While the seven natural notes are arranged in a usual Pythagorean tuning, remissive cadences such as Eb4-G4-Bb4-C5 to D4-A4-D4 and Bb3-D4-Fv4-G4 to A3-E4-A4 are in pure 7-based just intonation (14:18:21:24 to 2:3:4), a condition approximated in the nearer keys of 17-WT.

The intensive cadence E4-G#4-B4-C#4 to D4-A4-D4 is quite close to its intonation in 17-WT, or 17-ET for that matter, with the unstable sonority tuned at about 0-422.43-701.96-920.48 cents.

A striking feature of the system is that there is no F#, so that a usual intensive cadence is not available on G. However, as I quickly learned, there is a very effective remissive-like cadence available using the 14:13 step of G#-G, a large semitone or “2/3-tone”: F3-G#3-C4 to G3-D4, or G#3-C4-F4 to G3-D4-G4. The first progression involves a lower supraminor and upper submajor third at 63:52 and 26:21 (~332.21 cents, ~369.75 cents), while the second combines the latter interval with a submajor sixth at 104:63 (~867.79 cents).

Having composed a short piece in this 12-note tuning, I tried a mapping to 17-WT; the most notable change in notation is that the comma distinction of F/Fv is dispersed, with the single 17-WT version of F representing both steps. This makes the keyboarding less intricate.

The following score for this piece, *For Kathleen Schlesinger: Forms of Tonality*, shows in italics where a downward comma adjustment to Fv would occur in the original just intonation version. Notes are taken to be sustained until another note or rest occurs in the same part, or the piece or section concludes. Rests indicated by the symbol “r” are used in the next to highest voice to show a keyboard texture shifting freely between three and four voices, and apostrophe signs (') in the line showing rhythm mark pauses:

1	&	2	&		1	&	2	'		1		2	&		1		2	'	
Bb4	A4				G4	A4	E4			Fv4		F4			G4				
r												Eb4			D4				
Fv4		E4			D4		E4	C#4				C4			D4				
D4		C#4	C4		Bb3		A3	A3		Bb3	A3	G#3			G3				

[1st time, da capo]

1	2		1	2	:		
F4	F4		G4	F4			
r	Eb4		E4	F4			
C#4	C4		B3	C4			
A3	G#3		G3	F3			

[2nd time]

1	2		1	2		
F4	F4		E4	F4		
r	Eb4		D4	F4		
C#4	C4		B3	C4		
A3	G#3		G3	F3		