3.3 Invertible Counterpoint at the Tenth

This interval of transposition results in the following inversions:

1	2	3	4	5	6	7	8	9	10
0	9	8	7	6	5	4	3	2	1

Here it is the imperfect consonances that require special treatment: because they invert to perfect consonances, they may be approached only in contrary or oblique motion. Similar motion is thus nowhere possible.

To achieve a fully invertible counterpoint, avoid intervals greater than the Tenth, and do not allow the voices to cross. The major Sixth f'+d" above the cantus firmus, which inverts to the diminished Fifth b+f', must either be treated as a dissonance, or have its inversion converted to a perfect Fifth b + f'.

Question—Why must upward leaps of a minor Sixth, and all leaps involving 'D' and 'A' be avoided above the cantus firmus?

Because all perfect consonances here invert to imperfect ones, it is impossible in this type of counterpoint to observe the custom of opening with a perfect consonance. For the same reason, cadences are problematical—as you will quickly discover if you try to write an exercise in 'D', 'F', 'G', or 'A'. Stick to cantus firmi in 'E' and 'C', and end on the Octave above and the Third below.

Note that a diminished Fifth (b+f' or $g^{\sharp}+d'$) will occur in fourth-species cadences below the cantus firmus, $\lfloor 4 5 \mid 3 \parallel$. This is the only instance in two-voice counterpoint where that interval may be treated as a consonance.

Sample Workings

/						0							\sim	>		
		\sim		_	0			•			-		0	P	0	0
10		-						-		-		•				
	+ 0															
l D		1			1					1	l '			l '	1	
	2	Q	2	1 2	5	Q	6	Б	2	Λ	6	ζ.	6	7	6	Q
	5	0	~	1 2	5	0	0	5	J	4	0	J	0	1	0	0
10	1		-0		0		0				0					
	A				U		~				0			0		
h	VV															

(HP	60		0		0		0				•		ο			
Ъ	ψu		-							+						
10	8	5	9	10 9	6	3	5	6	8 7		58	5	4	5		3
						0	20	-			-		<u>ار ا</u>	п		
J	v	0	0		0			-			· .	-	P	10		
<u> </u>	0					I		I					1	NB	3	

/		<u> </u>							
	0	- 6	0 6	$\Gamma_{0} \rho$	F 6 0 - 0	6.0.0	00	0	
			-				0 2	- 0	
nv		-							
				1		1 1			
0	10 0	0 5 0	7 0	0 4	6 5 4 9 4	6 5 4 0	E C	7 6	0
8	10 9	8 3 8	1 0	34	0 3 4 3 4	10543	5 0	0	Ö
_			-	-				-	-
10									
				~					
b A				U	0	0			
JU			0			0	0	•	
0	0	0					-	0	
	0								

~ IIN																						
								0														
						0		~		U				-0-								
		~		- 0		v								~			- U		 -0-		ile si	
~	3	1	23	6	3	4	5	8	7	5	67	8	7	56	57	8	6	5	4	5	3	
0.1																						
·/· @ =	-	0			6	0	-	-	0					-			_		-		ilectil	
- γ	0	-			-	- F	<u> </u>	2	-				•	- (0	0	φ	0		
<u> </u>			-									-		-	-	-	-		-	-		
`					1				•	-										NB		

An intriguing property of this type of double counterpoint is that a third voice can always be added to it simply by shadowing one of the voices in Thirds:



