

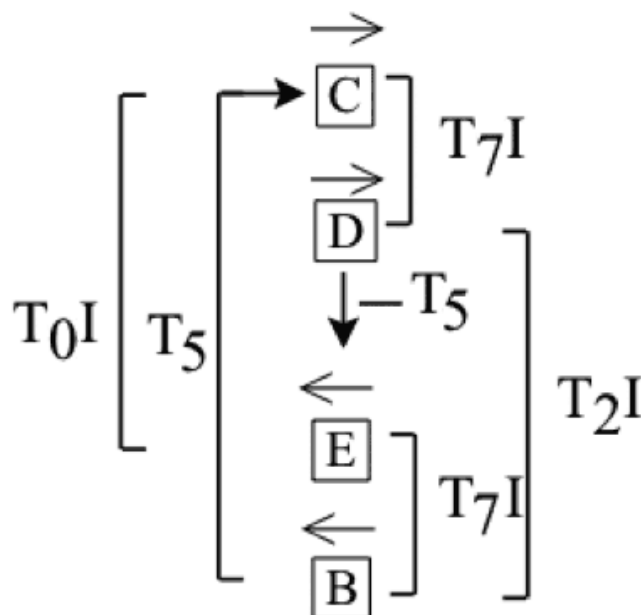
MTO 17.2 Examples: Scotto, What Do I Hear Now

(Note: audio, video, and other interactive examples are only available online)
<http://www.mtosmt.org/issues/mto.11.17.2/mto.11.17.2.scotto.php>

Example 1. Hexachordal area assigned to the pitch ranges of the string instruments.

Instrument	Pitch Range	All-Partition Array	Hexachordal Area
Violin	High	B	II
	Mid	E	III
	Low	B	I
Viola	High	E	I
	Mid	B	III
	Low	C	II
'Cello	High	C	III
	Mid	C	I
	Low	E	II

Example 2. Transformational relationships among all-partition arrays B, C, D, and E.



Example 3. Mapping of hexachordal area in array pairs B/E and D/C.

Array	Operation	Array	Array	Operation	Array
D	T_7I	C	B	T_7I	E
III		III	I		II
III		III	I		II
II		I	III		III
II		I	III		III
I		II	II		I
I		II	II		I

Example 4. The fifteen non-null subsets of four objects using all-partition arrays B, C, D, and E as objects.

B	B			B	B	B				B	B	B	
C		C		C			C	C		C	C		C
D			D		D		D	E	D	D		D	D
E			E		E		E	E	E		E	E	E

Example 5. Ordering of the fifteen subsets produced by the four all-partition arrays and the form that results from the ordering.

measures	1-27	28-60	61-103	103-135
All-Partition Arrays	Bviii Di	Bvii Ci	Bvi Dii Eviii	Evii
# of Parts	2	2	3	1

measures	136-70	171-202	203-242	243-267
All-Partition Arrays	Cii Evi	Diii Ev	Bv Ciii Eiv	Div
# of Parts	2	2	3	1

measures	268-297	298-338	339-367	368-397
All-Partition Arrays	Biv Eiii	Civ Dv	Cv Dvi Eii	Biii
# of Parts	2	2	3	1

measures	398-457	458-493	494-527
All-Partition Arrays	Bii Cvi Dvii Ei	Bi Cvii Dviii	Cviii
# of Parts	4	3	1

Example 6. Invertible contrapuntal array blocks.

Block	Inst.	1-2	3-5	6-8	9-13	13-16	17-20	21-24	25-27
Bviii	Vln: H/L Vla: M	58	57	56	55	54	53	52	51
		3-2 ⁴ -1	3 ² -2 ² -1 ²	4-2 ³ -1 ²	4 ² -1 ⁴	4-3 ² -2	4-3-2 ² -1	4-3 ² -1 ²	3 ³ -2-1
Di	Piano	1	2	3	4	5	6	7	
		4-3-2-1 ³	3 ⁴	6-4-2	6-2 ³ -1 ²	5-3-2-1 ²	7-4-1	6-2 ³	

Block	Inst.	455-57	458-62	463-69	470-74	475-89	481-84	485-89	490-93
Bi	Vln: H/L Vla: M		7	6	5	4	3	2	1
			6-2 ³	7-4-1	5-3-2-1 ²	6-2 ² -1 ²	6-4-2	3 ⁴	4-3-2-1 ³
Dviii	Piano	51	52	53	54	55	56	57	58
		3 ³ -2-1	4-3 ² -1 ²	4-3-2 ² -1	4-3 ² -2	4 ² -1 ⁴	4-2 ³ -1 ²	3 ² -2 ² -1 ²	3-2 ⁴ -1

Example 7. Quasi-symmetrical structure of the pairs of invertible counterpunal array- blocks.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Bviii Di													Bi Dviii	
	Bvii Ci												Bi Cvii	
		Bvi Dii										Cvi Bii		
			Eviii											Cviii
				Cii Evi								Bii Cvi		
						Bv Eiv			Civ Dv					
						Ciii Eiv		Biv Eiii						
							Div Biv							

Example 8. Paired invertible countrapuntal array-blocks containing large row-segments.

Block	Inst.	61-8	69-74	74-79	80-5	85-9	90-4	95-100
Bvi	Vln: H/L Vla: M	43	42	41	40	39	38	37
		6-5-1	7-2-1 ³	5-1 ²	8-2-1 ²	12	6-3-2-1	4 ² -3-1
Dii	Piano	8	9	10	11	12	13	14
		4 ² -2 ²	6-3-2-1	5-4-2-1	7-3-2	7-5	8-2 ²	6-3 ²

Block	Inst.	402-7	408-14	415-21	422-28	429-35	436-44	445-55
Bii	Vln: H/L Vla: M	14	13	12	11	10	9	8
		6-3 ²	8-2 ²	7-5	7-3-2	5-4-2-1	6-3-2-1	4 ² -2 ²
Cvi	Vla: L Vlc: H/M	37	38	39	40	41	42	43
		4 ² -3-1	6-3-2-1	12	8-2-1 ²	5-1 ²	7-2-1 ³	6-5-1

Example 9. Pitch-realization of partitions 40 and 11 from array blocks Bvi and Dii, respectively (for clarity, the example excludes pitch-class material from other array blocks in the violin part).

Pitch-class Material for Bvi Partition 40
 (8) F-C-A-Bb-E-D-Eb-Ab
 (2) F#-G
 (1) B
 (1) Db

Pitch-class Material for Dii Partition 11
 (7) A-G-Eb-Ab-B-Bb-E
 (3) D-C-F#
 (2) C#-F

The musical score is divided into two systems. The first system, labeled 'Bvi Partition 40' and 'Dii Partition 11', features a Violin I part with 'High' and 'Low' registers and a Piano part. The Violin I part includes a measure starting at measure 80. Annotations include '5:4^b' intervals and a '3' triplet. The Piano part includes a 'Motive y1' annotation and an '8⁶-----' interval. The second system, labeled 'Motive x1', shows the Violin I and Piano parts with '3:2^b' interval annotations. The score uses a 2/4 time signature and includes various musical notations such as slurs, ties, and accidentals.

Example 10. Pitch-realization of partitions 40 and 11 from array blocks Cvi and Bii, respectively (for clarity, the example excludes pitch-class material from other array blocks in the violin part).

Pitch-class Material for Bii Partition 11 (7) Bb-E-Eb-F#-B-G-F (3) Ab-D-C (2) A-C#	Pitch-class Material for Cvi Partition 40 (8) C#-Ab-G-A-Eb-D-F-Bb (2) C-B (1) E (1) F#
---	--

423

Bii Partition 11

High

Violin 1

Low

Med

Viola

Cvi Partition 40

High

Violoncello

Med

RT5 (Motive x1)

RT2I (Motive y1)

Vln. 1

Vla.

Vc.