

Self-Perpetuum Linear Row Pitch-Matrices

In the interest of reproducible process, matrices for each of the five linear strands of pitch-material (rows) are listed below:

Flute (Primary) Matrix [Nonachord 9-11]: Complement to P0: G – B – D (7E2) (047) [Forte 3-11b, Major Chord]: Complement pitches can be found in the clarinet row.

	I0	I1	I3	I4	I5	I6	I8	I9	I10	
P0	C	D ^b	E ^b	E	F	G ^b	A ^b	A	B ^b	R0
P11	B	C	D	E ^b	E	F	G	A ^b	A	R11
P9	A	B ^b	C	D ^b	D	E ^b	F	G ^b	G	R9
P8	A ^b	A	B	C	D ^b	D	E	F	G ^b	R8
P7	G	A ^b	B ^b	B	C	D	E ^b	E	F	R7
P6	G ^b	G	A	B ^b	B	C	D	E ^b	E	R6
P4	E	F	G	A ^b	A	B ^b	C	D ^b	D	R4
P3	E ^b	E	G ^b	G	A ^b	A	B	C	D ^b	R3
P2	D	E ^b	F	G ^b	G	A ^b	B ^b	B	C	R2
	RI0	RI1	RI3	RI4	RI5	RI6	RI8	RI9	RI10	

	I0	I1	I3	I4	I5	I6	I8	I9	I10	
P0	0	1	3	4	5	6	8	9	10	R0
P11	11	0	2	3	4	5	7	8	9	R11
P9	9	10	0	1	2	3	5	6	7	R9
P8	8	9	11	0	1	2	4	5	6	R8
P7	7	8	10	11	0	2	3	4	5	R7
P6	6	7	9	10	11	0	2	3	4	R6
P4	4	5	7	8	9	10	0	1	2	R4
P3	3	4	6	7	8	9	11	0	1	R3
P2	2	3	5	6	7	8	10	11	0	R2
	RI0	RI1	RI3	RI4	RI5	RI6	RI8	RI9	RI10	

Clarinet (Complement) Matrix [Nonachord 9-9]: Complement to P0: A^b – B^b – E^b (9T3) (027) [Forte 3-9 'mirror-set', Quartal Trichord]: Complement pitches can be found in ALL other pitch-rows.

	I0	I1	I2	I4	I5	I6	I7	I9	I11	
P0	C	C [#]	D	E	F	F [#]	G	A	B	R0
P11	B	C	C [#]	E ^b	E	F	F [#]	A ^b	B ^b	R11
P10	B ^b	B	C	D	E ^b	E	F	G	A	R10
P8	A ^b	A	B ^b	C	C [#]	D	E ^b	F	G	R8
P7	G	A ^b	A	B	C	C [#]	D	E	F [#]	R7
P6	F [#]	G	A ^b	B ^b	B	C	C [#]	E ^b	F	R6
P5	F	F [#]	G	A	B ^b	B	C	D	E	R5
P3	E ^b	E	F	G	A ^b	A	B ^b	C	D	R3
P1	C [#]	D	E ^b	F	F [#]	G	A ^b	B ^b	C	R1
	RI0	RI1	RI2	RI4	RI5	RI6	RI7	RI9	RI11	

	I0	I11	I2	I4	I5	I6	I7	I9	I11	
P0	0	1	2	4	5	6	7	9	11	R0
P11	11	0	1	3	4	5	6	8	10	R11
P10	10	11	0	2	3	4	5	7	9	R10
P8	8	9	10	0	1	2	3	5	7	R8
P7	7	8	9	11	0	1	2	4	6	R7
P6	6	7	8	10	11	0	1	3	5	R6
P5	5	6	7	9	10	11	0	2	4	R5
P3	3	4	5	7	8	9	10	0	2	R3
P1	1	2	3	5	6	7	8	10	0	R1
	RI0	RI1	RI2	RI4	RI5	RI6	RI7	RI9	RI11	

Oboe Matrix [Nonachord 9-7]: Complement to P0: D – E – B (24E) (029) [Forte 3-7]: Complement pitches can be found in the clarinet row.

	I0	I1	I3	I5	I6	I7	I8	I9	I10	
P0	C	D ^b	E ^b	F	G ^b	G	A ^b	A	B ^b	R0
P11	B	C	D	E	F	G ^b	G	A ^b	A	R11
P9	A	B ^b	C	D	E ^b	E	F	G ^b	G	R9
P7	G	A ^b	B ^b	C	D ^b	D	E ^b	E	F	R7
P6	G ^b	G	A	B	C	D ^b	D	E ^b	E	R6
P5	F	G ^b	A ^b	B ^b	B	C	D ^b	D	E ^b	R5
P4	E	F	G	A	B ^b	B	C	D ^b	D	R4
P3	E ^b	E	G ^b	A ^b	A	B ^b	B	C	D ^b	R3
P2	D	E ^b	F	G	A ^b	A	B ^b	B	C	R2
	RI0	RI1	RI3	RI5	RI6	RI7	RI8	RI8	RI10	

	I0	I1	I3	I5	I6	I7	I8	I9	I10	
P0	0	1	3	5	6	7	8	9	10	R0
P11	11	0	2	4	5	6	7	8	9	R11
P9	9	10	0	2	3	4	5	6	7	R9
P7	7	8	10	0	1	2	3	4	5	R7
P6	6	7	9	11	0	1	2	3	4	R6
P5	5	6	8	10	11	0	1	2	3	R5
P4	4	5	7	9	10	11	0	1	2	R4
P3	3	4	6	8	9	10	11	0	1	R3
P2	2	3	5	7	8	9	10	11	0	R2
	RI0	RI1	RI3	RI5	RI6	RI7	RI8	RI8	RI10	

Bassoon, Piano & Cello (Coordinated Pulse) Matrix [Nonachord 9-9]: Complement to P0: E – A – B (49E) (027) [Forte 3-9, Quartal Trichord]: Complement pitches can be found in the clarinet row.

Note: G – C[#] – D can only be found in the right-hand piano chords, G – D only appear in the fifth cycle. These pitches can also be found in the clarinet row.

	I0	I1	I2	I3	I5	I6	I7	I8	I10	
P0	C	D ^b	D	E ^b	F	G ^b	G	A ^b	B ^b	R0
P11	B	C	D ^b	D	E	F	G ^b	G	A	R11
P10	B ^b	B	C	D ^b	E ^b	E	F	G ^b	A ^b	R10
P9	A	B ^b	B	C	D	E ^b	E	F	G	R9
P7	G	A ^b	A	B ^b	C	D ^b	D	E ^b	F	R7
P6	G ^b	G	A ^b	A	B	C	D ^b	D	E	R6
P5	F	G ^b	G	A ^b	B ^b	B	C	D ^b	E ^b	R5
P4	E	F	G ^b	G	A	B ^b	B	C	D	R4
P2	D	E ^b	E	F	G	A ^b	A	B ^b	C	R2
	RI0	RI1	RI2	RI3	RI5	RI6	RI7	RI8	RI10	

	I0	I1	I2	I3	I5	I6	I7	I8	I10	
P0	0	1	2	3	5	6	7	8	10	R0
P11	11	0	1	2	4	5	6	7	9	R11
P10	10	11	0	1	3	4	5	6	8	R10
P9	9	10	11	0	2	3	4	5	7	R9
P7	7	8	9	10	0	1	2	3	5	R7
P6	6	7	8	9	11	0	1	2	4	R6
P5	5	6	7	8	10	11	0	1	3	R5
P4	4	5	6	7	9	10	11	0	2	R4
P2	2	3	4	5	7	8	9	10	0	R2
	RI0	RI1	RI2	RI3	RI5	RI6	RI7	RI8	RI10	

Coordinated Pulse Matrix [Hexachord 6-33]: Complement to P0: C[#] – D – E – G – A – B (12479E) (01368T) [Forte 6-33]: Complement pitches can be found in the clarinet row.

	I0	I3	I5	I6	I8	I10	
P0	C	E ^b	F	G ^b	A ^b	B ^b	R0
P9	A	C	D	E ^b	F	G	R9
P7	G	B ^b	C	D ^b	E ^b	F	R7
P6	F [#]	A	B	C	D	E	R6
P4	E	G	A	B ^b	C	D	R4
P2	D	F	G	A ^b	B ^b	C	R2
	RI0	RI3	RI5	RI6	RI8	RI10	

	I0	I3	I5	I6	I8	I10	
P0	0	3	5	6	8	10	R0
P9	9	0	2	3	5	7	R9
P7	7	10	0	1	3	5	R7
P6	6	9	11	0	2	4	R6
P4	4	7	9	10	0	2	R4
P2	2	5	7	8	10	0	R2
	RI0	RI3	RI5	RI6	RI8	RI10	

Trombone and Horn Matrix [Heptachord 7-35]: Complement to P0: D – E – F[#] – A – B (2469E) (02479) [Forte 5-35 'black key' Quartal Pentamirror]: Complement pitches can be found in the clarinet row.

Trombone and horn share an E^b Major/C minor scale as a 7-note unordered row, but tend to favour A^b, therefore playing A^b Lydian. This row/scale is contained within the oboe and 'coordinated pulse' pitch-rows.

	I0	I1	I3	I5	I7	I8	I10	
P0	C	D ^b	E ^b	F	G	A ^b	B ^b	R0
P11	B	C	D	E	F [#]	G	A	R11
P9	A	B ^b	C	D	E	F	G	R9
P7	G	A ^b	B ^b	C	D	E ^b	F	R7
P5	F	G ^b	A ^b	B ^b	C	D ^b	E ^b	R5
P4	E	F	G	A	B	C	D	R4
P2	D	E ^b	F	G	A	B ^b	C	R2
	RI0	RI1	RI3	RI5	RI7	RI8	RI10	

	I0	I1	I3	I5	I7	I8	I10	
P0	0	1	3	5	7	8	10	R0
P11	11	0	2	4	6	7	9	R11
P9	9	10	0	2	4	5	7	R9
P7	7	8	10	0	2	3	5	R7
P5	5	6	8	10	0	1	3	R5
P4	4	5	7	9	11	0	2	R4
P2	2	3	5	7	9	10	0	R2
	RI0	RI1	RI3	RI5	RI7	RI8	RI10	

Note: The individual rows are initially juxtaposed horizontally (stacked above and below each other) in linear strands, but start to interact and overlap vertically, forming harmony (links and chains) across the ensemble. Shared pitches between the pitch-rows and the complement subsets served as primary vehicles for harmonic function. The string quartet provides increasing vertical (and timbral) stability as the opening cycles (and the movement) progress.