# **Straus Chapter 6**

# Part 2: Varieties of Twelve-Tone Music

Joseph N. Straus. 2016. Introduction to Post-Tonal Theory, 4th ed. (New York: Norton), pp. 318-38.

### **TERMS & CONCEPTS**

## **Webern and Derivation** (§ 6.5.1, p. 318)

Dervied series

A series in which "the discrete segmental trichords or tetrachords are all members of the same set class."

FOR STUDY:

Webern, Concerto, Op. 24 (1934), I

G–B♭–B	D#_D_F#	E-F-C#	C–A♭–A
<+4, -1>	<-1, +4>	<+1, -4>	<-4, +1>
P	RI	R	I

### Schoenberg & Hexachordal

**Combinatoriality** (§ 6.5.2, p. 322)

Aggregate (Agg.)

An aggregate is a "collection consisting of all twelve pitch classes" that is "the basic harmonic unit in twelve-tone music."

Hexachord (Hex.)

Combinatoriality (Comb.)

Schoenberg & I-comb.

$P_0$	$\mathbf{H}_{1}$	$H_2$
$I_x$	$H_2$	$H_1$
	Agg.	Agg.

Twelve-tone areas (A<sub>n</sub>)

### The 4 types of hexachordal combinatoriality

P-comb. –  $H_1$  maps onto its complement under  $T_n$  I-comb. –  $H_1$  maps onto its complement under  $I_n$ 

R-comb. – H<sub>1</sub> maps onto itself under T<sub>n</sub>

RI-comb. - H<sub>1</sub> maps onto itself under I<sub>n</sub>

#### FOR STUDY:

Schoenberg, Fourth String Quartet, Op. 37(1936), III

I	$P_0$	$C-B-G-A$ $\downarrow$ - $E$ $\downarrow$ - $D$ $\downarrow$	D-B -G -F-E-A	$R_0$
	$I_5$	F-G-B-A-D-E	E-G-B-C-D-A	$RI_5$

### Stravinsky and Rotational Arrays (§ 6.5.3, p. 328)

Four-part array (P, I, R & IR)

Rotational array

Verticals

FOR STUDY:

Stravinsky, Requiem Canticles (1966), II

### **Babbitt and Trichordal Arrays** (§ 6.5.5, p. 334)

Trichordal array (see also Mead 1994)

The 6 all-combinatorial hexachords (p. 324)

Α	6-1 (012345)
В	6-8 (023457)
С	6-32 (024579)
D	6-7 (012678)
Е	6-20 (014589)
F	6-35 (02468T)

FOR STUDY:

Babbitt, String Quartet No. 2 (1954)

# **Other Topics**

Second Viennese School; Darmstadt School

Tonal orientation (pp. 314-15)

Short series (p. 356)

Total serialism (Straus 2005, pp. 234-236)

Boulez and multiplication (Straus 2005, p. 235)

## **Further Study**

Bailey, Kathryn. 1991. The Twelve-Note Music of Anton Webern. New York: Cambridge University Press.

Mead, Andrew. 1994. An Introduction to the Music of Milton Babbitt. Princeton: Princeton University Press.

Morris, Robert. 2007. "Mathematics and the Twelve-Tone System: Past, Present, and Future." *Perspectives of New Music* 45/2 (Summer, 2007), pp. 76-107.

Perle, George. 1991/1991. *Serial Composition and Atonality*, 6th ed. Berkeley: University of California Press. Rahn, John. 1980. *Basic Atonal Theory*. New York: Longman.

Straus, Joseph N. 2022. The Art of Post-Tonal Analysis: Thirty-Three Graphic Music Analyses.

New York: Oxford University Press.

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