

## Schoenberg and Hexachordal Combinatoriality

“The *aggregate*—a collection consisting of all twelve pitch classes—is the basic harmonic unit in twelve-tone music”

“*Combinatoriality* is the general term for combining a collection with one or more transposed or inverted forms of itself (or its complement) to create the aggregate.”

Joseph Straus, *Introduction to Post-Tonal Theory*

### Series from Schoenberg *Variations for Orchestra, Op. 31*

Bb–E–F#–Eb–F–A–D–C#–G–G#–B–C

### Hexachordal Combinatoriality

$P_0$	(Bb, E, F#, Eb, F, A)	(D, C#, G, G#, B, C)
$I_9$	(G, C#, B, D, C, Ab)	(Eb, E, Bb, A, F#, F)
	<i>aggregate</i>	<i>aggregate</i>

Series forms  $P_0$  and  $I_9$ ,  $P_1$  and  $I_{10}$ , etc., and  $R_0$  and  $RI_9$ ,  $R_1$  and  $RI_{10}$ , etc. are said to be *hexachordally combinatorial*. The pairing of hexachordally combinatorial series forms allows the aggregate to be stated in the horizontal and vertical dimensions simultaneously.

### Theme (mm. 34-57)

	<i>m. 34</i>	<i>m. 39</i>	<i>m. 46</i>	<i>m. 51</i>
<i>Melody</i>	$P_0$	$RI_9$	$R_0$	$I_9$
<i>Accompaniment</i>	$I_9$	$R_0$	$RI_9$	$P_0$
				$P_3$

### Reference

Joseph Straus, *Introduction to Post-Tonal Theory*, Third Edition (Upper Saddle River, NJ: Prentice Hall, 2004), 222-230.