Joseph N. Straus, *Introduction to Post-Tonal Theory* (W.W. Norton, 2016)

Straus Ch. 1 Outline

Basic Concepts and Definitions

In order of appearance…

	Terms	
pitch pitch notation staff notation octave equivalence (equivalence relation (equivalence class identity relation twelve-tone equal temperament (12TET) enharmonic equivalence pitch class, abbr. *pc* pc lettername notation pc integer notation pc staff notation fixed-zero notation, [C=0] movable-zero notation	pc clockface diagram mod12 arithmetic modulus arithmetical operations Johann Carl Friedrich Gauss's clock calculator pitch spaces pitch-class space *c-space* *u-space* *p-space* *m-space* *pc-space* traditional tonal interval names	intervals adjacent intervals non-adjacent intervals direction and magnitude signed number absolute value pitch interval, abbr. *ip* ordered intervals unordered intervals ordered pitch-class interval complement mod12 unordered pitch-class interval interval class, abbr. *ic* ic content ic vector unique multiplicity of ic

FOUR BASIC INTERVAL TYPES

In basic atonal theory, 12TET is (usually) assumed so the basic intervallic unit is the *semitone* = $\sqrt[12]{2}$:1.

	Interval Type	Straus Abbreviation	Bain Abbreviation	Description
1.	Ordered pitch interval	*ip*	opi	Distance between two pitches, direction and distance are indicated.
2.	Unordered pitch interval	*ip*	upi	Absolute distance between two pitches, only distance is indicated.
3.	Ordered pitch-class interval	*i*	opci	Distance between two pitch classes, number of units *clockwise* on the pc clockface diagram is indicated.
4.	Interval class An equivalence class created by collapsing opci's under intervallic inversion	*ic*	ic	Shortest distance between two pitch classes, shortest distance (*clockwise* or *counterclockwise*) on the pc clockface diagram.

"Which one we use will depend on what musical relationship we are trying to describe."
Joseph Straus, *Introduction to Post-Tonal Theory*

EXAMPLE

Interval	opi	upi	opci	ic
A4 to G#3	-13	13	11	1