# What's Tonic in a Snare Drum Sonata?

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SCSMT 2019 mtg., Mar. 15-16, '19, Louisiana State Univ., Baton Rouge

Ex. 1a. Quotes from Tovey's (1956) "Harmony" article, repr. from the 1944 Encyclopaedia Brittanica.

#### Tonality is the element which groups a succession of musical sounds intelligibly round some centre. (51)

An aesthetically correct account of Palestrina's tonality is much more easily achieved by a description in terms of Beethoven's key-system than by any attempt to refer it to the orthodox modal theory [of medieval plainchant]. (51)

Palestrina's tonality is one of the most mature and subtle things in music, and later developments cannot lessen its truth to the nature of art. (52)

The B natural in Lydian tonality is so difficult to handle that the great masters almost always flattened it permanently and put the flat as a key-signature, thus producing an Ionian mode transposed, or plain modern F major. (52-53)

### **<u>Ex.1b.</u>** A couple other relevant quotes (out of <u>*LOTS*</u> of possibilities!):

#### Réti (1962, 18-20): [All "classical"s are added]

[Classical] tonality, during its undisputed reign of several centuries, was so taken for granted and became so entrenched in the musician's mind as the natural, the "eternal" concept of musical construction that when, because of its overlong use (and finally abuse) its abandonment became inevitable, the first slight signs of such an abandonment shocked the musical world to the core. [...] [T]oday we would certainly not call atonal the music of, for instance, Straus, Reger or Mahler, for which the term was originally often used, or for their French contemporaries Debussy or Satie. [...] [S]omething far more vital, something far more radical was in the making: a third concept, as different from [classical] tonality as it is from atonality, but no less different from the intermediary stages, such as extended [classical] tonality, modality, polytonality, and the like.

#### Schoenberg (1954/1969, 194-95):

One day there will be a theory which abstracts rules from these [12-tone] compositions. Certainly, the structural evaluation of these sounds will again be based on their functional potentialities.

Ex.2. "Information-processing" model of music cognition, simplified from Clarke (2005).

Psycho-cultural level(s)	Aesthetic valuations of musical phenomena (shimmering quality of <i>slendro</i> highly desirable in Bali; major/minor triads in Western music; etc.) Statistical learning experience (e.g., tonic inference cues) Style/form/genre preferences	
Psychoacoustic level(s)	Low level cognitive processes that implement Gestalt principles, most notably closure (tonic) and good continuation (e.g., linear polyphony) Acoustic dissonance ( <i>slendro</i> , ic-1, etc.) Auditory stream segregation (timbre, etc.)	
<b>N</b> 11 1/ \		
Physical level(s)	Waveform characteristics Physiology and biophysics of the auditory system	
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**<u>Ex. 3.</u>** One redefinition of basic music-theoretic terms to unbundle Gestalt structural function from repertoire-specific instantiations (esp. from pitch/sonority instantiations).

**Tonic**: An element (pitch[-class], sonority, timbre, rhythmic pattern, etc.) in a piece (or repertoire) of music that creates a sense of psychological closure, of "having returned to baseline," and against which most or all other like elements (pitches, rhythms, etc.) arrange in some system of functional relations.

(N. B.: not all other elements need have clear-cut, or even any, functional relations to a tonic.)

**Dominant**: An element in a piece (or repertoire) of music that creates a sense of being one step away from baseline (tonic) and which generates an expectation of imminent return to tonic.

**Tonality**: *Any system* of functional relations in a piece (or repertoire) of music which has a(t least one) tonic present.

Corollary: Classical Tonality—the particular system of tonality used in European music during ca. 1630–1830.

Semantic Type of Operands	Examples	Meaning of "A + B"	Result
Numeric	3; 4.2	addition	7.2
Character String	"Ron"; "Hermione"	$concatenation^{\dagger}$	"RonHermione"
Set	[ostrich, owl]; [puppy, owl, mouse]	set union <sup>†</sup>	[ostrich, owl, puppy, mouse]

**<u>Ex. 4.</u>** Operator overloading for "+".

<sup>†</sup> "+" not commutative for strings; commutativity not meaningful for set union

**<u>Ex. 5.</u>** [p. 3] Debussy, *Reflets dans léau*, mm. 1-3

**<u>Ex. 6.</u>** [p. 4] Copland, *Symphony No. 3*, 2nd mvt. (begins at ca.1'18").

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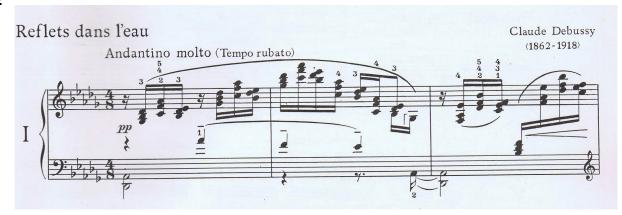
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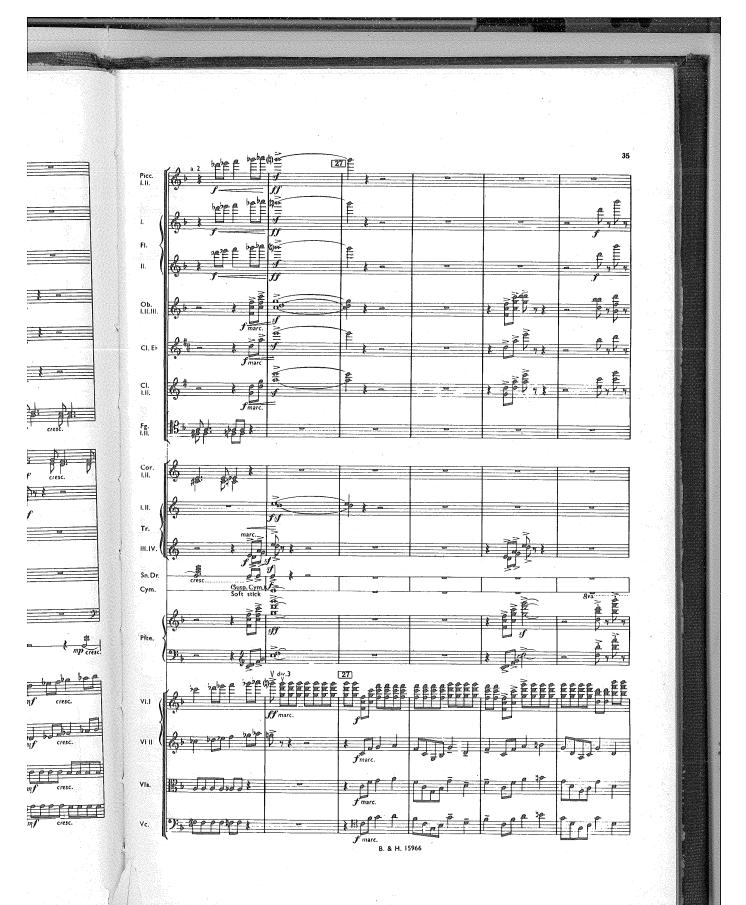
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Of particular importance: Clarke (Intro, Ch. 1, Concl.); Hanson; Hibberd; Huron; Réti; Tovey.

## <u>Ex. 5.</u>



<u>Ex. 6.</u>



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