Modern Consciousness, Modulatory Space, and Chromatic Tonality

Miguel Ribeiro-Pereira

"If thirds and sixths [their inversion] are not admitted as consonance," sentences D. P. Walker (1978), "there can be no polyphony." A radically different kind of freedom and (self-)transformation was dawning with the mighty humanist impulse of early European Renaissance. This is the first moment of modern culture, a shift in human consciousness, correlated to a novel experience of (or feeling for) the musical third-interval. Mutable and ambivalent, either major or minor, the dynamic third-interval expresses subjective moods in music. Intuitively perceived in compositional practice long before being acknowledged and justified in theory, it was characterized by Zarlino (1558) in anthropomorphic terms, inwardly experienced as a world of feelings: joyful major (*allegra*), sad minor (*mesta*).

Tonal music is the aesthetic achievement of *modern* culture at the turn of the seventeenth century—the epitome of the humanist harmonic duality—interwoven with the emotional power of opera. It fully integrates the subjective feeling for the moody, temperamental third. But what kind of that major-minor polarity was then to be adopted: the modal C/d pattern, diatonic C/a, or chromatic C/c? And why at the turn of the nineteenth century, after the original rule of the relative-key pattern, did interchangeable parallel keys acquire a growing formal importance and fit the Romantic sensibility? My *modulatory* paradigm of tonal space (Ribeiro-Pereira 2005), developed from Aristotle's understanding of nature as "an inner principle of change and stasis," was meant to account for them both in cultural context.

Resorting to an age-old theoretical distinction concerning the phenomenon of change in tonal space—*modulation* as the transformation of context, *transposition* as the transference of content—I will tackle those issues in analytical terms. While Beethoven's piano sonata op. 90 (1814) is the epitome of the new chromatic tonality, raising to the highest level of the formal conception a two-movement layout, E minor then major, the traditional four-movement scheme of his very first sonata op. 2 no. 1 (1795) already displayed in regular alternation the opposed but complementary modes (and moods). From a close reading of the Allegro's exposition will eventually be drawn major theoretical as well as pedagogical implications.

Bibliography

Aristoxenus [ca. 300 BC]. *Elementa Harmonica*. Ed. Andrew Barker, *Greek Musical Writings*, vol. II: Harmonic and Acoustic Theory. Cambridge: Cambridge University Press, 1989, ch. 7.

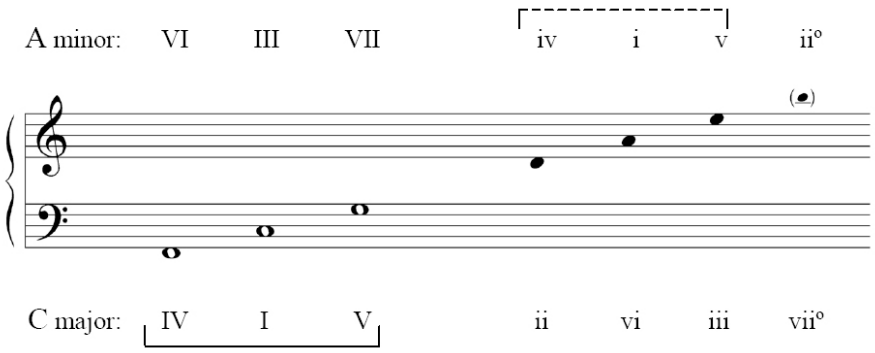
Rameau, Jean-Philippe [1722]. *Traité de l'harmonie réduite à ses principes naturels*. Trans. Philip Gossett, *Treatise on Harmony*. New York: Dover, 1971.

Ribeiro-Pereira, Miguel. 2005. *A Theory of Harmonic Modulation: The Plastic Model of Harmonic Modulation of Tonal Syntax and the major-Minor Key System*. Porto: Edições Politema, 2005.

Walker, D. P. 1978. *Studies in Musical Science in the Late Renaissance*. London: Leiden.

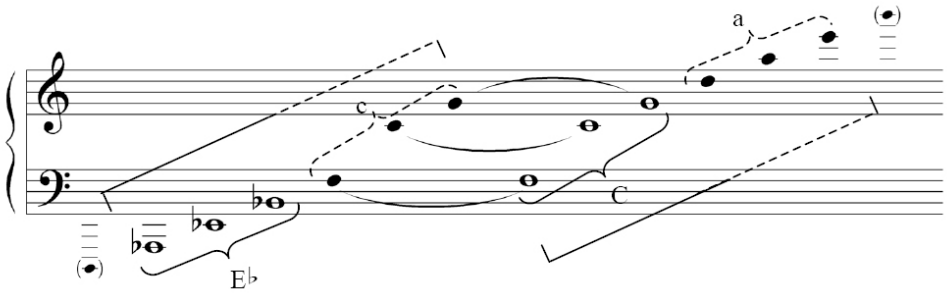
Zarlino, Gioseffo [1558]. *The Art of Counterpoint: Part Three of* Le Institutione Harmoniche. Trasn. Guy A. Marco and Claude V. Palisca. New Haven: Yale University Press, 1968.

Musical Examples



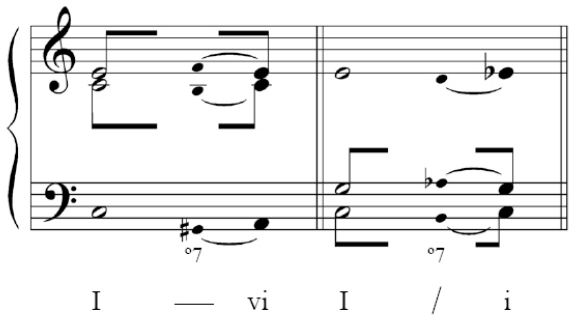
Ex. 1 Major-minor system: Diatonic circle of fifths (relative keys)

This represents the chordal roots of a diatonic continuum, a straightforward gamut by fifths of the original diatonic system, displaying the whole harmonic content of either C major or A minor, running alongside each other, as both pattern coalesce into a *whole* system of keys.



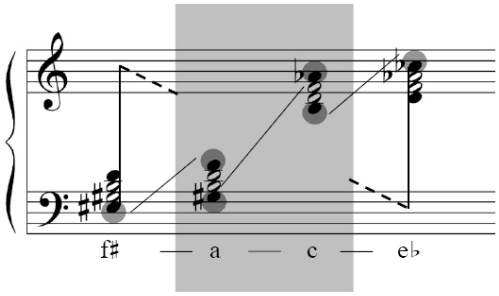
Ex. 2 Major-minor system: Chromatic circle of fifths (parallel keys)

Instead, the extended compass of chromatic tonality requires a double framework of root progressions by fifth. Parallel keys bring together two spheres of tonal activity, conflating their opposed matrices into
a *split* unity. As if embracing its own shadow, each primary degree can be drastically opposed in mode (and mood), with no real syntactic movement being necessarily assigned.



Ex. 3 Modulatory dyads: Diatonic third and chromatic fifth

The dual modulatory process of alternate diatonic relative and chromatic parallel keys is different in kind: the former retains the modal-defining third, recasting it in tonal context by the progress of a transitive root, the latter retains the tonal-defining fifth, wavering in modal identity within the frame of an intransitive root.



Ex. 4 Modulatory chord: Enharmonic diminished seventh

To be sure, their attendant diminished seventh chords are but superimposed images by enharmonic equivalence, extending further in opposite directions the crucial meaning of the original triton F/B.

Bio

Miguel Ribeiro-Pereira is professor and head of the postgraduate music theory program at the Higher School of Music and the Performing Arts (ESMAE); integrated researcher and associate director of the *Theory of the Arts Journal* at the Research Center for Science and Technology of the Arts (CITAR); author of the book *A Theory of Harmonic Modulation* (Politema, 2005).

His main research interests include the development and application of a new *modulatory paradigm* of music cognition defined as a transformative process of "harmonic plasticity"; a *holistic approach* to musical analysis which advances a gradual interiorization by means of "meditative listening"; an *evolutionary understanding* of modern Western culture manifested in, and homologous with, our "tonal consciousness".

He studied law at the University of Coimbra (Portugal), and philosophy at the University of Paris VIII-Vincennes, along with music (organ diploma, M.C. Braga; B.A. in music, U. Paris VIII); was awarded a *Premier Prix* in musical analysis by the Conservatoire National Supérieur de Musique de Paris; has received his M.A. and Ph.D. degrees in music theory from Columbia University in the City of New York; was appointed a visiting scholar to the Music Department at Yale University.

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