

Beyond the Rhine: Harmonic Dualism in Vincent d'Indy's *Cours de composition musicale*

Eastman Theory Colloquium | 25 October 2019 | Rochester, NY

Stephanie Venturino (Eastman School of Music)

sventuri@u.rochester.edu

Figure 1. D'Indy's dualist chord construction and superposition of thirds ([1902] 1912, 101).

Résonnance supérieure.

Résonnance inférieure.

Figure 2a. D'Indy's generation of the major triad from the first six partials of the overtone series ([1902] 1912, 97).

Longueur de corde :	Entière	Moitié	Tiers	Quart	Cinquième	Sixième
Nombre de vibrations :	Simple	Double	Triple	Quadruple	Quintuple	Sextuple

Figure 2b. Riemann's generation of the major triad from the first six partials of the overtone series ([1893] n.d., 3).

I.

Figure 3. Registral placement for Riemann's overtone and undertone series ([1893] n.d., 3).

I.

2.

Figure 4. Riemann's major and minor triad generation ([1887] 1902, 2–3).



Figure 5. D'Indy's mirror-image major and minor triads ([1902] 1912, 97; 100).



Figure 6. D'Indy's major and minor scales ([1902] 1912, 101).

	Résonnance supérieure								Résonnance inférieure								
Intervalles:	1 ton	1 ton	$\frac{1}{2}$ ton	1 ton	1 ton	1 ton	$\frac{1}{2}$ ton		1 ton	1 ton	$\frac{1}{2}$ ton	1 ton	1 ton	1 ton	$\frac{1}{2}$ ton		
A																	
Degrés:	I.	II.	III.	IV.	V.	VI.	VII.	VIII.		I.	II.	III.	IV.	V.	VI.	VII.	VIII.

Figure 7. D'Indy's superior and inferior resonance combine to create the Chord and the Mode ([1902] 1912, 102).

Figure 7 illustrates D'Indy's concept of superior and inferior resonance. It consists of two staves of musical notation. The upper staff, labeled "Résonance supérieure" and "Accord majeur.", shows a series of notes in a major triad (C-E-G) and its overtones. The lower staff, labeled "Résonance inférieure" and "Accord mineur.", shows a series of notes in a minor triad (C-Eb-G) and its overtones. A central row of numbers from 1 to 16 is positioned between the two staves, with vertical dotted lines connecting each number to a specific note on both staves, demonstrating how the two series of overtones converge to form a single mode.

Figure 8. Riemann's melodic fundamental scales ([1893] n.d., 5).

Figure 8 presents Riemann's melodic fundamental scales. It is divided into two main sections. The first section, labeled "6.", shows "Sons 8-16 de la série harmonique supérieure" (Sons 8-16 of the upper harmonic series) on a treble clef staff, with notes marked with asterisks (*). Below it is the "Echelle fondamentale" (fundamental scale) on a treble clef staff, with a question mark (?) under the note corresponding to the 11th harmonic. The second section, labeled "7.", shows "Sons 8-16 de la série harmonique inférieure" (Sons 8-16 of the lower harmonic series) on a bass clef staff, with notes marked with asterisks (*). Below it is the "Echelle fondamentale" (fundamental scale) on a bass clef staff, with a question mark (?) under the note corresponding to the 11th harmonic.

Figure 9. D'Indy's combination of dualist chord construction with scales on D axis (1909, 29).

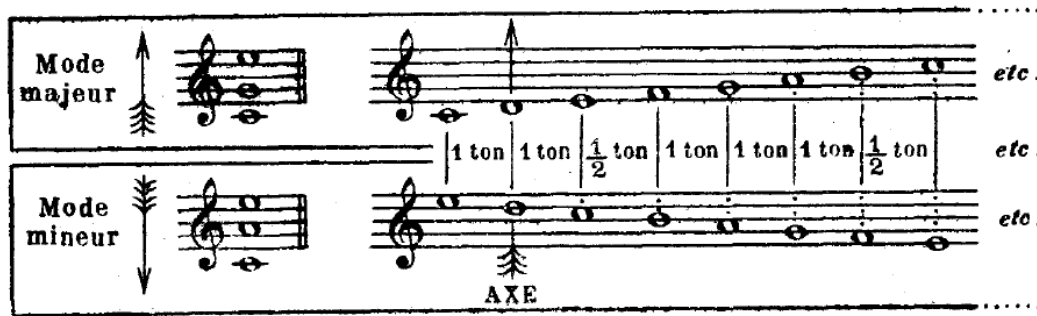


Figure 10. Oettingen's diatonic scales derived from tonality and phonality (1866, 66).

$$\begin{array}{cccccccc}
 & & & & & \longrightarrow & & \\
 c & - & d & - & e & - & f & - & g & - & \bar{a} & - & \bar{h} & - & c \\
 & & 9 & & 5 & & 4 & & 3 & & 5 & & 15 & & 2 \\
 1 & - & \frac{8}{8} & - & \frac{4}{4} & - & \frac{3}{3} & - & \frac{2}{2} & - & \frac{3}{3} & - & \frac{15}{8} & - & 1 \\
 \\
 c & - & \underline{des} & - & \underline{es} & - & f & - & g & - & \underline{as} & - & b & - & c \\
 & & 8 & & 3 & & 2 & & 3 & & 4 & & 8 & & \\
 \frac{1}{2} & - & \frac{8}{15} & - & \frac{3}{5} & - & \frac{2}{3} & - & \frac{3}{4} & - & \frac{4}{5} & - & \frac{8}{9} & - & 1 \\
 & & & & & & & & & & & & & & \\
 & & & & & \longleftarrow & & & & & & & & &
 \end{array}$$

Figure 11. Oettingen's C tonic and \bar{e} phonic scales (1866, 71).

$$\begin{array}{cccccccc}
 \text{ton. } c : c & - & d & - & \bar{e} & - & f & - & g & - & \bar{a} & - & \bar{h} & - & c \\
 & & 9 & & 5 & & 4 & & 3 & & 5 & & 15 & & 2 \\
 1 & & \frac{9}{8} & & \frac{5}{4} & & \frac{4}{3} & & \frac{3}{2} & & \frac{5}{3} & & \frac{15}{8} & & 2 \\
 \\
 \text{phon. } \bar{e} : \bar{e} & - & f & - & g & - & \bar{a} & - & \bar{h} & - & c & - & \bar{d} & - & \bar{e} \\
 & & 8 & & 3 & & 2 & & 3 & & 4 & & 8 & & \\
 \frac{1}{2} & & \frac{8}{15} & & \frac{3}{5} & & \frac{2}{3} & & \frac{3}{4} & & \frac{4}{5} & & \frac{8}{9} & & 1 \\
 \\
 \text{Dort haben wir den Ton } d & = & \frac{9}{8} \cdot c & = & \frac{9}{10} \cdot \bar{e} \\
 \\
 \text{hier } \bar{d} & = & \frac{8}{9} \cdot \bar{e} & = & \frac{10}{9} \cdot c
 \end{array}$$

Figure 12. D'Indy's circle of fifths with D as the axis of symmetry ([1902] 1912, 106).

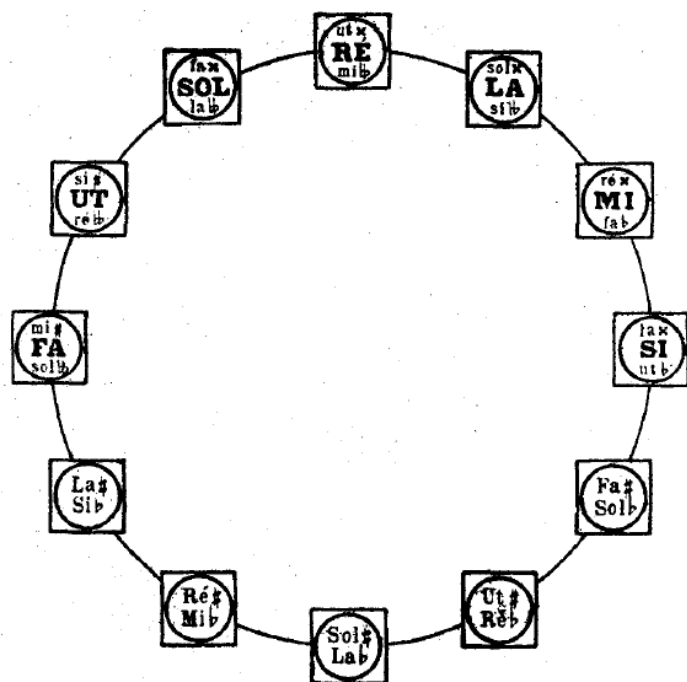


Figure 13. D'Indy's modified circle of fifths with "change of direction" ([1902] 1912, 114–115).

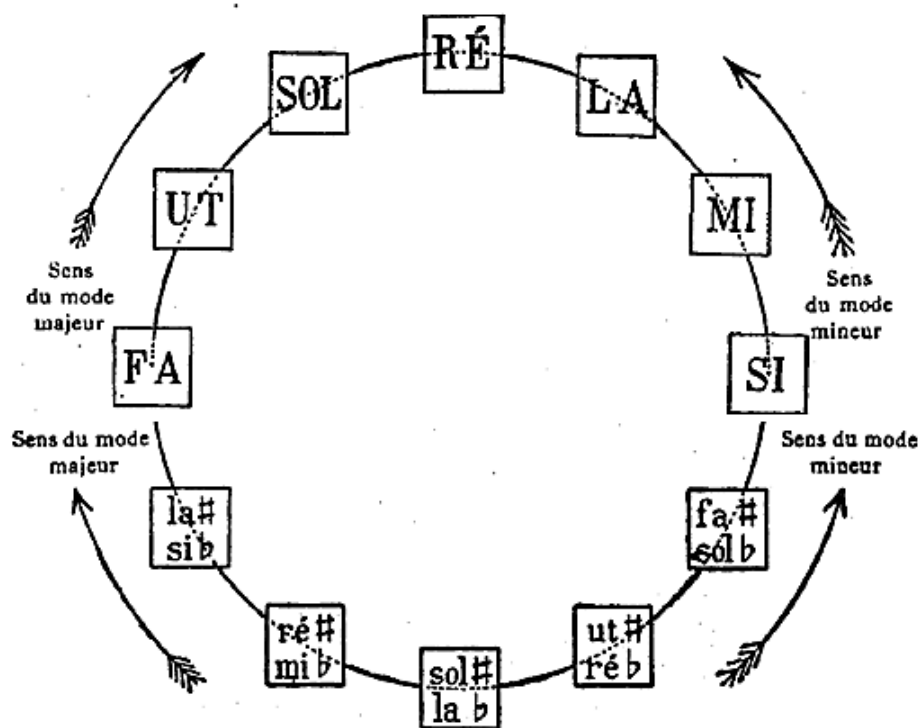


Figure 14. D'Indy's table of tonal functions ([1902] 1912, 110).

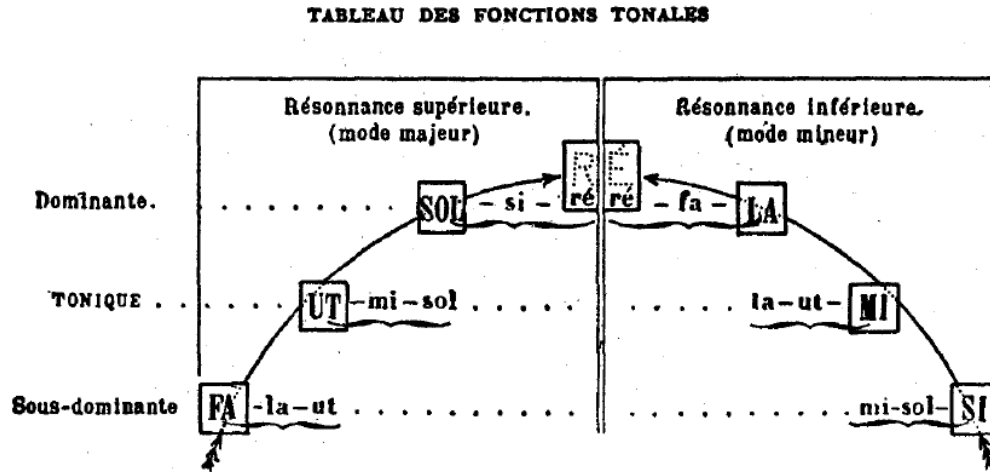


Figure 15. Riemann's minor mode functions ([1893], n.d., 8).

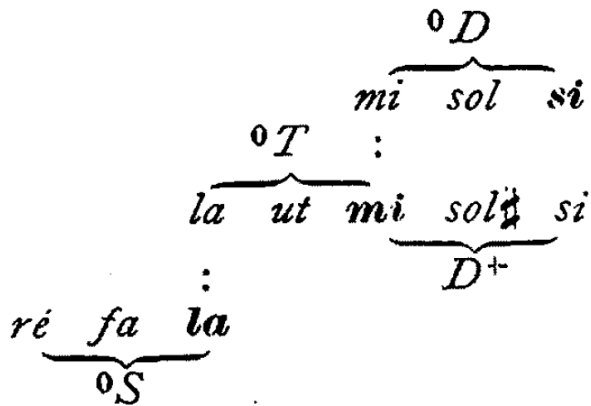


Figure 16. D'Indy's minor mode cadential figure ([1902] 1912, 111).

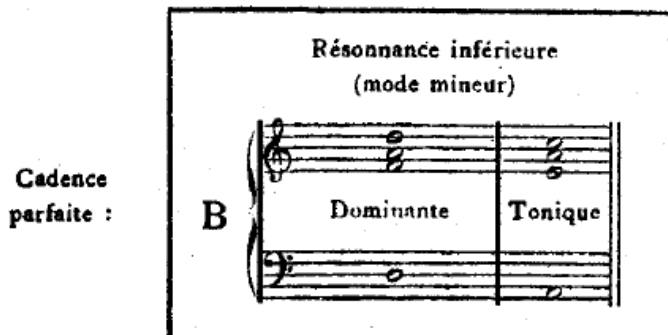


Figure 17. D'Indy's relationship of the three orders ([1902] 1912, 113–116).

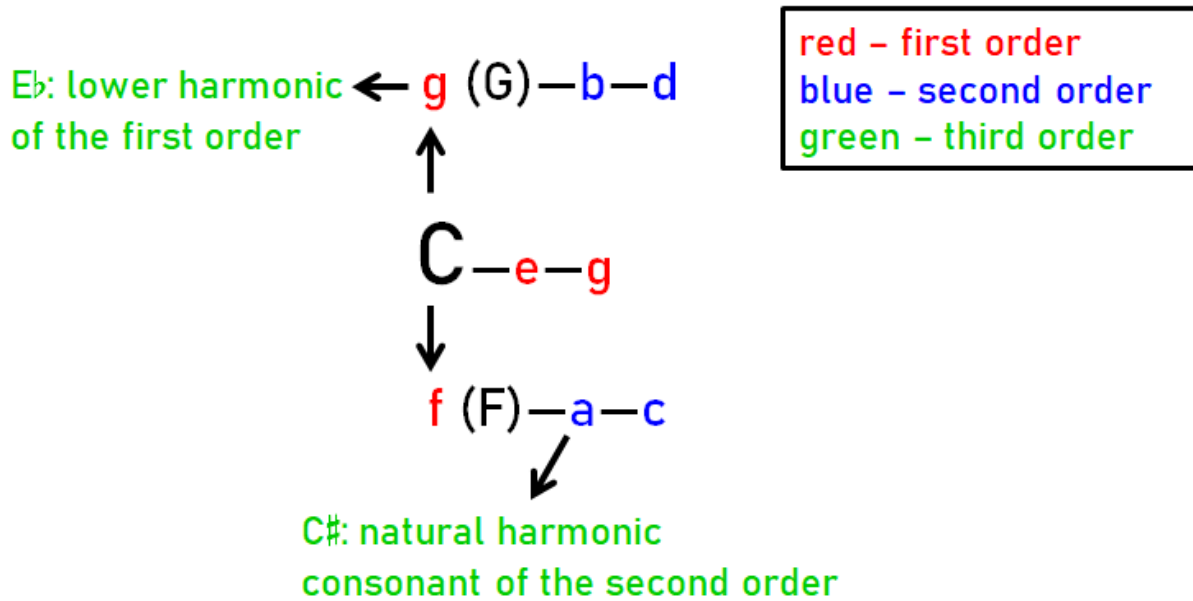


Figure 18. D'Indy's table of neighboring tonalities ([1902] 1912, 129).

TABLEAU DES TONALITÉS VOISINES

RÉSONNANCE SUPÉRIEURE	UT majeur	la mineur	RÉSONNANCE INFÉRIEURE
<p>:LAb- ut - mi_b :</p> <p>:ut_♯- mi - SOL_♯ :</p> <p>:MI - sol_♯- si :</p> <p>:mi - sol - SI :</p>	<p>LA_b majeur</p> <p>ut_♯ mineur</p> <p>MI majeur</p> <p>mi mineur</p>	<p>ut_♯ mineur</p> <p>LA majeur</p> <p>fa mineur</p> <p>FA majeur</p>	<p>:ut_♯- mi - SOL :</p> <p>:LA - ut_♯- mi :</p> <p>:fa - la_b- UT :</p> <p>:FA - la - ut :</p>
<p>FA - la - UT - MI - SOL - si - ré</p> <p>fa - lab - UT - MI - SOL - si - ré</p>	<p><i>Fonctions tonales</i></p> <p>SOL majeur ré mineur</p> <p>FA majeur mi mineur</p> <p>fa mineur MI majeur</p>		<p>ré - fa - LA - UT - MI - sol - SI</p> <p>ré - fa - LA - UT - MI - sol_♯- si</p>
<p>:la - ut - MI :</p> <p>:LA - ut_♯- mi :</p> <p>:ut - mi_b- SOL :</p> <p>:MI_b- sol - si_b :</p>	<p>la mineur</p> <p>LA majeur</p> <p>ut mineur</p> <p>MI_b majeur</p>	<p>UT majeur</p> <p>ut mineur</p> <p>LA_b majeur</p> <p>fa_♯ mineur</p>	<p>:UT - mi - sol :</p> <p>:ut - mi_b- SOL :</p> <p>:LAb- ut - mi_b :</p> <p>:fa_♯- la - UT_♯ :</p>

Selected Bibliography

- Catel, Charles-Simon. 1802. *Traité d'harmonie*. Paris: L'Imprimerie du Conservatoire de Musique.
- Clark, Suzannah. 2011. "Seduced by Notation: Oettingen's Topography of the Major-Minor System." In *Music Theory and Natural Order from the Renaissance to the Early Twentieth Century*, edited by Suzannah Clark and Alexander Rehding, 161–180. Cambridge, U.K.: Cambridge University Press.
- D'Indy, Vincent. (1902) 1912. *Cours de composition musicale*. Paris: Durand.
- . 1909. *Cours de composition musicale. Deuxième livre—première partie*. Paris: Durand.
- Gjerdingen, Robert. 1995. Review of *Harmonic Function in Chromatic Music: A Renewed Dualist Theory and an Account of Its Precedents*, by Daniel Harrison. *Intégral* 9: 91–98.
- Harrison, Daniel. 1994. *Harmonic Function in Chromatic Music: A Renewed Dualist Theory and an Account of Its Precedents*. Chicago: University of Chicago Press.
- Kieffer, Alexandra. 2016. "Riemann in France: Jean Marnold and the 'Modern' Music-Theoretical Ear." *Music Theory Spectrum* 38, no. 1: 1–15.
- Laloy, Louis. 1901. "Une nouvelle école de musique: Le cours de M. Vincent d'Indy." *La Revue Musicale* 1, no. 10: 393–398.
- . 1902. "Publications nouvelles." *La Revue Musicale* 2, no. 10: 443–447.
- Marnold, Jean. 1906. "Les sons inférieurs et la théorie de M. Hugo Riemann." *Le Mercure Musical* 2 (May): 399–408.
- . 1917. "M. Vincent d'Indy et l'Esthétique." *Mercure de France* 120, no. 452: 510–518.
- Mason, Daniel Gregory. (1910) 1921. "Vincent D'Indy on Composition." In *Music as a Humanity, and Other Essays*, by Daniel Gregory Mason, 95–101. New York: H.W. Gray Company.
- The Musical Times*. 1932. "Obituary: Vincent D'Indy." Vol. 73, No. 1067: 79–80.
- Oettingen, Arthur von. 1866. *Harmoniesystem in dualer Entwicklung: Studien zur Theorie der Musik*. Dorpat: Gläser.
- Pau, Andrew. 2016. "Plagal Systems in the Songs of Fauré and Duparc." *Theory and Practice* 41: 81–112.
- . 2018. "Common-Tone Tonality in Bizet's *Carmen*." *Music Theory Spectrum* 40, no. 2: 280–301.
- Rehding, Alexander. 2003. *Hugo Riemann and the Birth of Modern Musical Thought*. Cambridge, U.K.: Cambridge University Press.

———. 2009. “La à l’allemande ou la † à la française? Notes de la bas de page sur d’Indy, Riemann, et Beethoven.” Translated by Gilles Rico. In *L’Analyse Musicale, une pratique et son histoire*, edited by Rémy Campos and Nicolas Donin, 301–322. Geneva: Droz.

Riemann, Hugo. 1887. *Handbuch der Harmonielehre*. Leipzig: Breitkopf & Härtel.

———. (1887) 1902. *Manuel de l’harmonie*. Translated by Pierre Onfroy de Bréville. Leipzig: Breitkopf & Härtel.

———. (1891) 1921. *Handbuch der Akustik Musikwissenschaft*. Third edition. Berlin: Max Hesse.

———. 1893. *Vereinfachte Harmonielehre oder die Lehre von den tonalen Funktionen der Akkorde*. London: Augener & Company.

———. (1893) n.d. *L’harmonie simplifiée ou Théorie des fonctions tonales des accords*. Translated by Georges Humbert. London: Augener & Company.

Saint-Saëns, Camille. 1919. *Les idées de M. Vincent d’Indy*. Paris: Éditions Pierre Lafitte.