“Chord–Voice Leading Duality”

Paul Sherrill • paul.sherrill@utah.edu
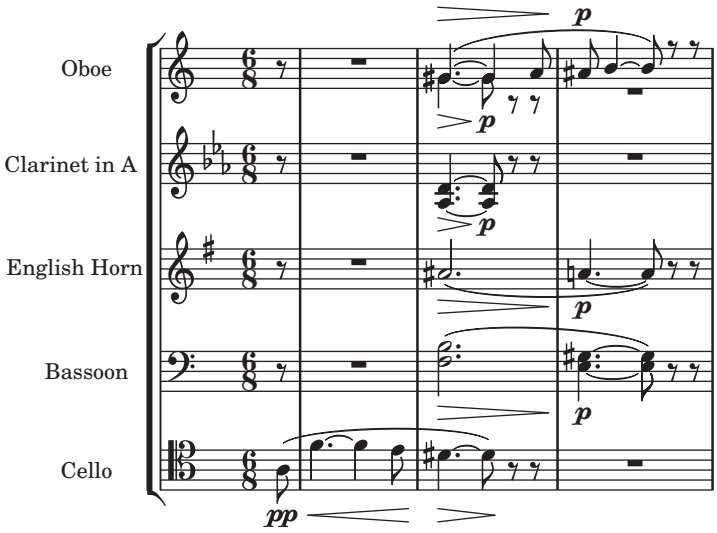
Society for Music Theory • 5 November 2026 • Milwaukee

See the software package **musicMCT**, which calculates the values in this paper:
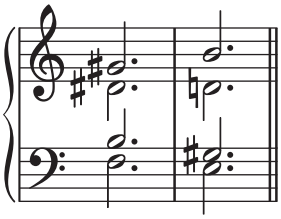
https://satbq.github.io/musicMCT/

Motivic voice leading complex in the Prelude to Wagner’s *Tristan und Isolde*

mm. 1–3, voice leading **α**:



SATB Reduction:
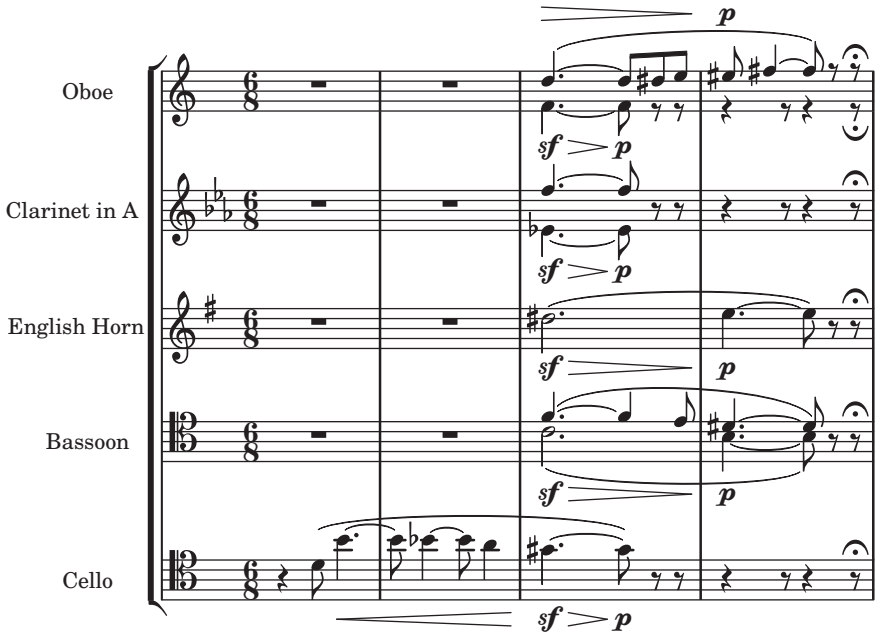


OPTC normal forms: (0258) (0368)

Sign Vector of **α**:
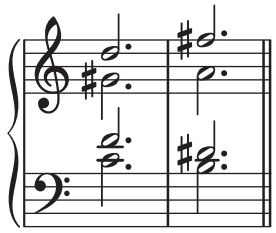
(-1, -1, -1, 1, 1, 1, 0, 1, -1, 1, 1, 1, -1, 1, 1, 1, -1, 1, 1, 1, 1)

---

mm. 8–11, voice leading **β**:



SATB Reduction:



OPTC normal forms: (0258) (0368)

Sign Vector of **β**:

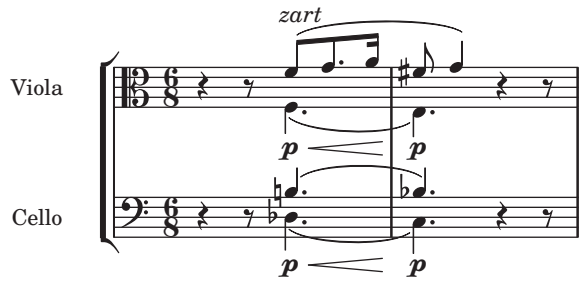
(-1, -1, 0, 1, 1, 1, 1, 1, -1, 1, 1, 1, -1, 1, 1, 1, 1, 1, 1, 1, 1)

3 differences
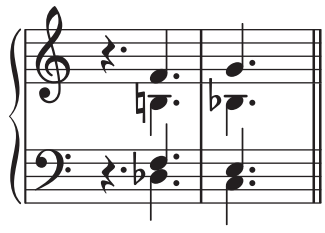
(-1, -1, -1, 1, 1, 1, 0, 1, -1, 1, 1, 1, -1, 1, 1, 1, -1, 1, 1, 1, 1)

Sign Vector of **α** for comparison

mm. 36–37, voice leading **γ**:



SATB Reduction:



OPTC normal forms: *(026)* *(0368)*

Sign Vector of **γ**:

(0, -1, -1, 1, 1, 1, 0, 1, 0, 1, 0, 1, -1, 1, 1, 1, 0, 0, 1, 1, 1)
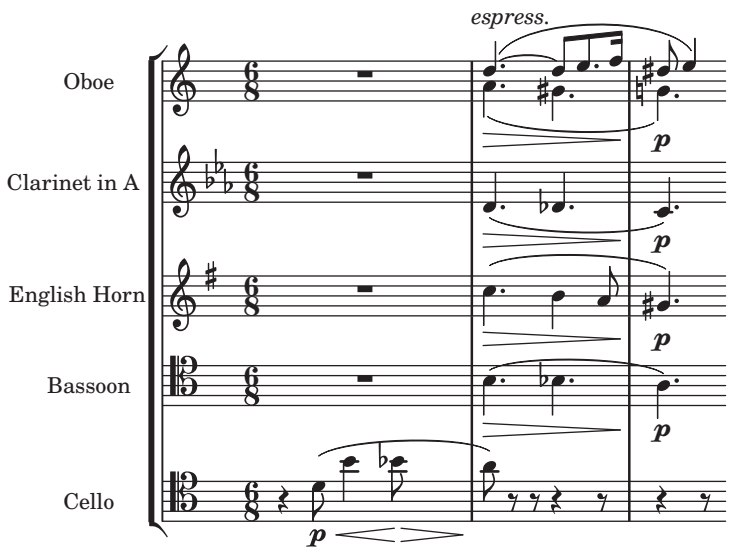
5 differences

(-1, -1, -1, 1, 1, 1, 0, 1, -1, 1, 1, 1, -1, 1, 1, 1, -1, 1, 1, 1, 1)
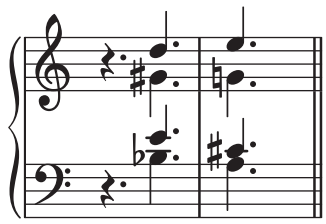
Sign Vector of **α** for comparison

---

mm. 88–90, voice leading **δ**:



SATB Reduction:



OPTC normal forms: *(0268)* *(0368)*

Sign Vector of **δ**:

(-1, -1, -1, 1, 1, 1, 0, 1, -1, 1, 1, 1, -1, 1, 1, 1, -1, 1, 1, 1, 1)
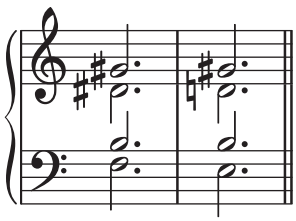
0 differences

(-1, -1, -1, 1, 1, 1, 0, 1, -1, 1, 1, 1, -1, 1, 1, 1, -1, 1, 1, 1, 1)
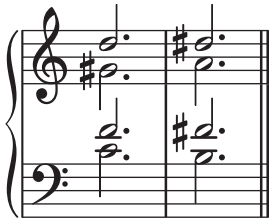
Sign Vector of **α** for comparison

What if Wagner had realized **α** and **β** parsimoniously?

parsimonious **α**:



parsimonious **β**:



(1, 0, -1, 1, 0, 1, 0, 0, 1, 1, -1, 1, -1, 1, -1, 1, 1, -1, -1, 1, 1)

10 differences

(1, 1, 0, 1, 1, 1, 1, 0, 1, 1, 0, 0, 1, 1, -1, 1, 1, 1, 0, 0, 1)