

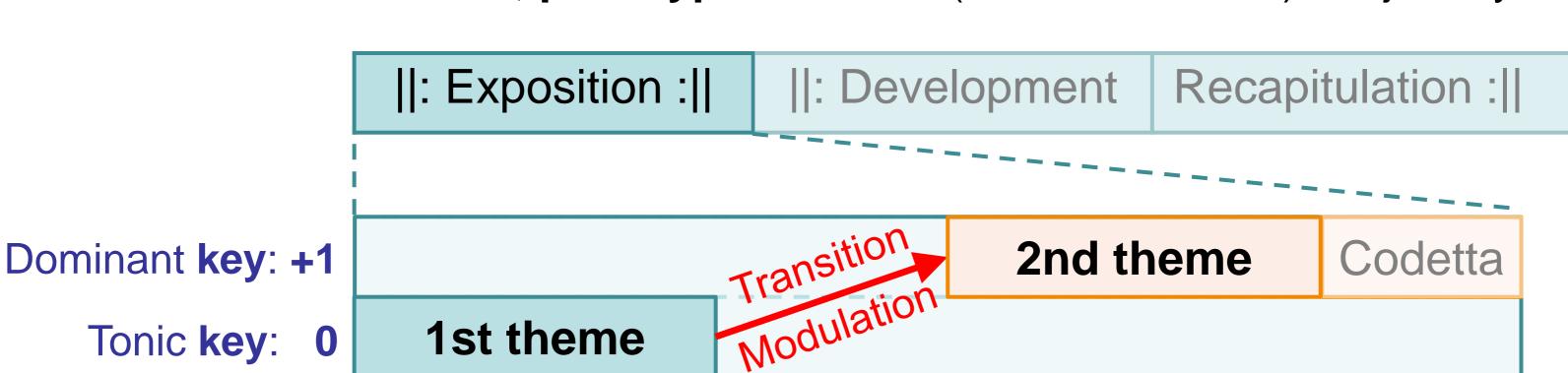
## Discourse Not Dualism: An Interdisciplinary Dialogue on Sonata Form in Beethoven's Early Piano Sonatas



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### 1. Introduction: Sonata form

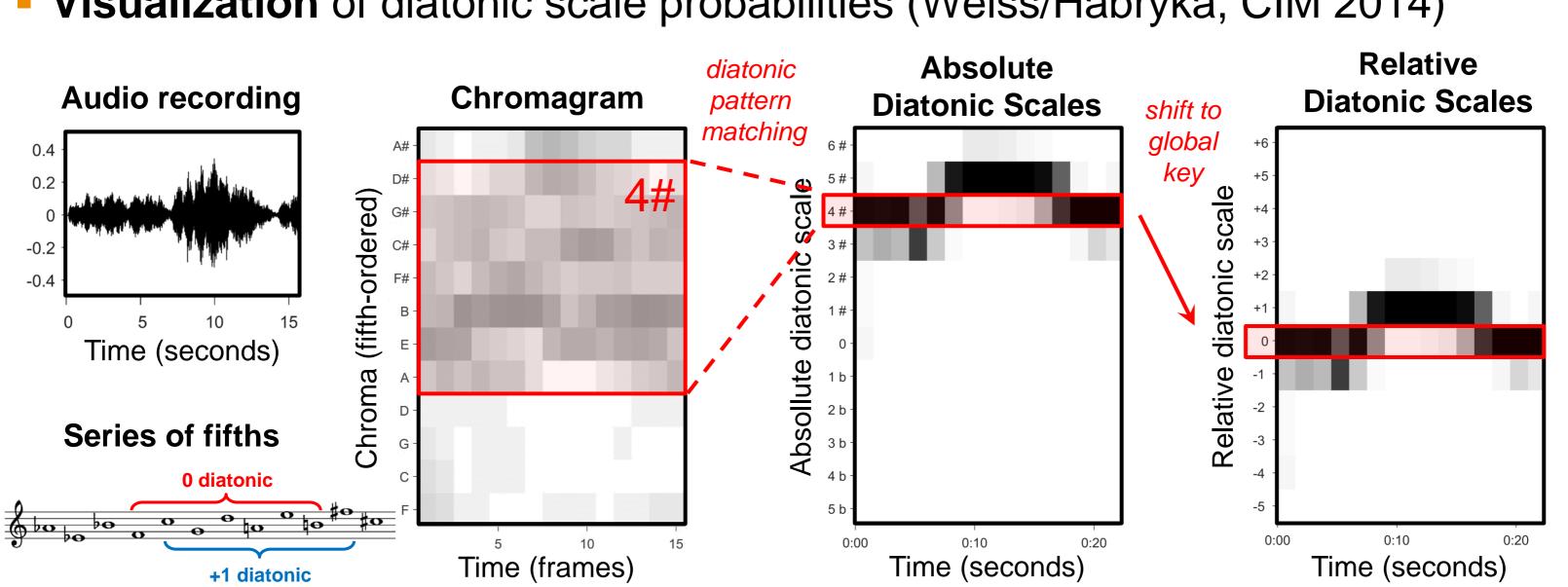
Sonata form: traditional, prototypical model (A.B. Marx, 1837), major keys



- **Dualism** between themes:
  - Contrast in theme (melody) "spirited" vs. "lyrical"
  - Contrast in key (tonality) fifth relationship
- Musicological question: Is this model appropriate for Beethoven's music?

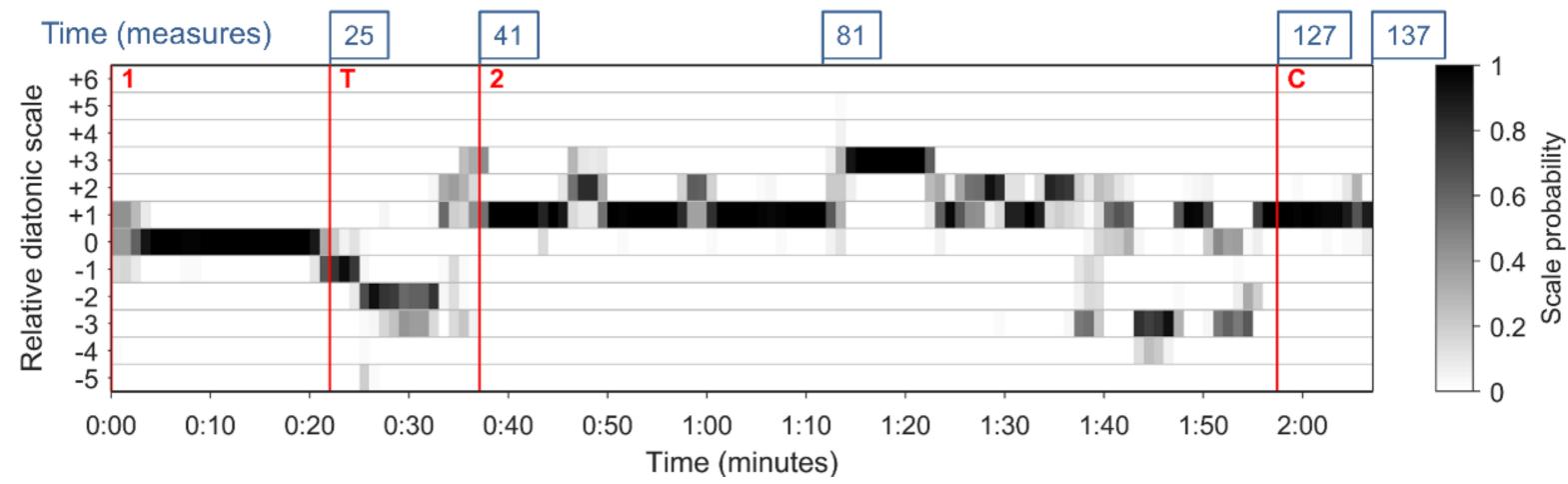
# 2. Method: Visualizing Diatonic Scales from Audio Recordings

**Visualization** of diatonic scale probabilities (Weiss/Habryka, CIM 2014)

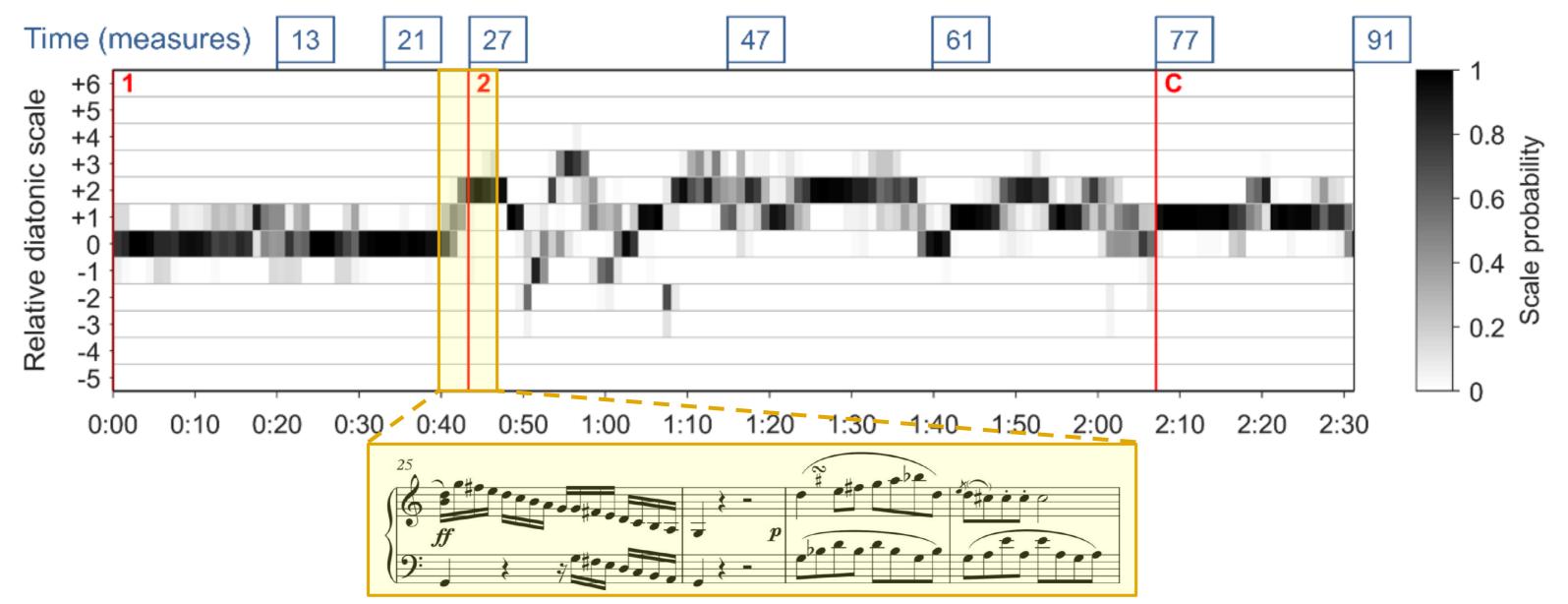


# 3. Results: Tonality & Form in Beethoven's Early Piano Sonatas

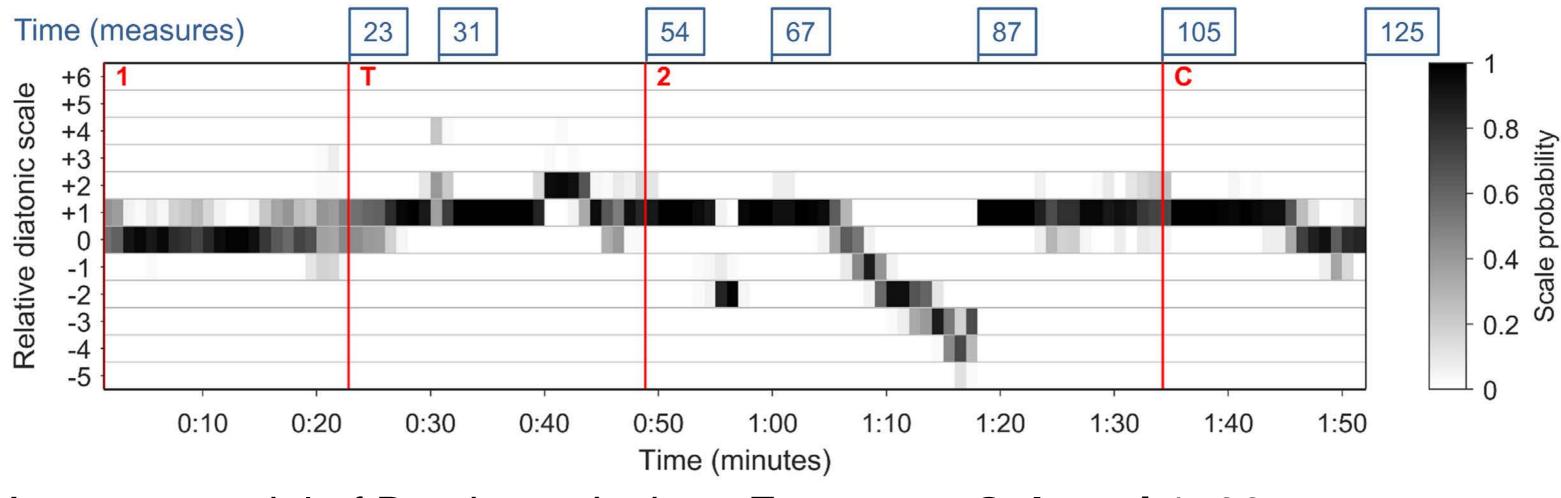
- Audio-based analysis of Beethoven's sonata expositions (Barenboim)
- Sonata op. 7 in Eb major, 1st movement, exposition



Sonata op. 2 No. 3 in C major



Sonata op. 10 No. 3 in D major



- A sonata model of Beethoven's time: Francesco Galeazzi 1796
  - 1. Prelude
  - 2. Principal theme 3. Second motive

  - 4. Departure to related keys
  - 5. Characteristic passage / middle passage (= traditional lyrical second theme)
  - 6. Cadential period
  - 7. Codetta (Schlussgruppe)

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- **Discursive** model: parts **not** opposed in a dualism but form a **series** Visualizations support this observation for Beethoven's early sonatas

[2] F. Galeazzi, *Theoretical-Practical Elements of Music*, Ed. Burton/Harwood, University of Illinois Press, 2012.

# [1] A. B. Marx, Die Lehre von der musikalischen Komposition. Leipzig, Germany 1837–1847.

- References
- [3] C. Weiß and J. Habryka, Chroma-based scale matching for audio tonality analysis. Proc. CIM 2014. [4] S. Klauk and R. Kleinertz, Mozart's italianate response to Haydn's opus 33. Music & Letters 2016.

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