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# Waltz for Debby: Nested Structural Modes and Prolongation

#### **ABSTRACT**

### **Background**

The concept of structural modes aims to describe tonal organization in terms of underlying patterns of the structural bass. The structural bass (Noll and De Jong 2011) is an interpretation of the fundamental bass, whereby real (or virtual) bass notes are identified as scale degrees of the underlying structural modes. Voice-leading schemata are abstractions of compositional building blocks, which appear in common-practice tonal music in numerous individual elaborations. In studying their possible combinations, one should focus on their inner melodic, contrapuntal, and harmonic constitution. Although the term *voice leading* nominally includes the study of the bass voice, not enough attention is yet paid to its constitutive role for the *inner life* of schemata and their combinations.

## Aims and Repertoire Studied

This paper will investigate the tonal organization of Bill Evans' *Waltz for Debby* in terms of structural modes, interruptions and prolongations, and the interaction of structural modes with known voice-leading models (Gjerdingen 2007). Through the analysis of this piece and a few secondary examples, I shall examine different modal constellations, focusing on how they relate to and are coordinated with known voice-leading models. Furthermore I intend to present a preliminary list of combinatorial types and appropriate ways to annotate them.

### Methods

Two elementary types of bass patterns are distinguished: structural and linear. The most typical structural bass patterns (T-S-D-T with tonic are directed C) flat-wards (descending fifths), deriving from the two modes C-F-G-C and C-D-G-C of the *structural* 3-note *scale*. They can be further reduced to the authentic division C-G-C (T-D-T) of the octave and extended by the structural augmented prime (# = a sharp-ward minor third): C-F-D-G-C (T-S-#S-D-T) and C-A-D-G-C (T-#T-S-D-T). In addition there are sharp-ward progressions, with a reversed cycling order.

#### **Implications**

I have found that most typical linear bass patterns are fillings of tetrachords (4–3–2–1, 8–7–6–5) and trichords (4–3–2, 8–7–6, etc.). Prolongations and interruptions can be achieved by nesting structural bass patterns. Linear patterns are diminutions of structural intervals. An underlying relation of these basic structures with many of our known voice-leading sche-

mata becomes visible, and promises that further insights can be gained from this type of analysis.

#### **Summary of Analysis and Conclusions**

The aforementioned *inner life* of the applied schemata consists largely of prolongations and interruptions guided by the structural bassnotes of the functional modes. We can observe three situations:

- A mode 'applied' to any other scale degree than the tonic (often on the dominant);
- 2. A standing fundament. This can be a pedal, but also the prolongation of a single harmony. (See bars 29–33: a prolongation of the fundament A, with stepwise diverging lines between melody and bass);
- 3. A harmonized internal 'filling' between two structural fundaments of different modes (for example in bar 63). Very often with parallel harmony, or a rule-of-the-octave type harmonization.

With regard to voice leading we see a frequent use of chromatic lines. These are supported in a coherent way by the structural modes: first and second modes support descending lines, a *monte* sequence supports ascending lines.

# Keywords

Tonal Schemata, Music Analysis and Music Theory, Music Analysis and Cognitive Sciences, Structural Modes, Partimento, Common-Practice Tonality, Harmony, Jazz.

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