Mart Humal

The Voice-Leading Matrix as an Archetype of Tonal Counterpoint

From the very beginning of the development of counterpoint, one of its essential aspects has been the hierarchy of structural levels. In the theory of counterpoint, this becomes evident when comparing the "first-species" counterpoint ("punctus contra punctum") with the second- to fifth-species ("diminished") counterpoint. Whereas the first-species counterpoint is restricted to consonances, the "diminished" counterpoint contains both consonances and dissonances. The latter, known as passing or neighbouring tones, suspensions etc., are subordinate to consonances and represent the lower levels of the contrapuntal structure, unlike consonances representing the higher levels. Contrapuntal analysis (including the Schenkerian theory) arranges all the structural elements of a theme or a composition, from the lowest level of detail through the highest level of an entire work, into a hierarchy of structural levels. In this hierarchy, certain typical high-level structures are projected onto lower levels.[1] These high-level structures can be regarded as archetypes of tonal counterpoint.

In Schenkerian theory, such an archetype is represented by one of the three forms of the two-part *Ursatz* (fundamental structure) and its upper voice *Urlinie* (fundamental line), which have its roots in the "species counterpoint" of Josef Fux's *Gradus ad Parnassum*, codifying the 16th-century strict counterpoint. According to William Pastille, "[t]he ultimate significance of the *Ursatz*, then, is that it functions as the archetype for all musical pitch relations because it encapsulates symbolically both the horizontal and the vertical aspects of pitch relations. It is at the same time the universal model of both melody and harmony."[2]

Unfortunately, there has been always a mystical aura hovering over the concept of *Ursatz*. Schenker himself claimed: "Every religious experience and all of philosophy and science strive towards the shortest formula; a similar urge drove me to conceive of a musical work only from the kernel of the *Ursatz* as the first composing-out of the tonic triad (tonality); I apprehended the *Urlinie*, I did not *calculate* it."[3] Ironically, had he "calculated" it, he perhaps would have avoided some of the contradictions inherent to the concept of *Ursatz*.

However, the *Ursatz* is not the only possible high-level archetype of tonal counterpoint. Since the high-level contrapuntal structure consists harmonically only of the initial tonic, prolonged throughout the form and leading to the concluding cadence, the high-level contrapuntal structure of a theme or a composition can be interpreted also on the basis of another archetype – a four-part *voice-leading matrix* (VLM),[4] representing the cadential model of the 18th- and 19th-century functional harmony.

As we know, Schenker warned against the identification of the *Ursatz* and the cadence:

> The forms of the fundamental structure must not be confused with the cadences of the conventional theory of harmony. In the case of such cadences as shown in Fig. 8 [Example 1], the greatest importance is attached to the harmonic progression of the bass; the upper voice can have various forms. <...> This contrasts most significantly with the fundamental structure, whose upper voice, the fundamental line, knows only the descending direction. Therefore, at 1, the similarity of the illustrated cadence with the form of the fundamental structure <...> is merely external.

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1 "Schenker assumed that whenever a prototype is transformed, the resulting material will always conform to the same laws as the prototype itself. This idea of preserving laws through transformation is known in mathematics as recursion" ("Matthew Brown, "Rothstein's Paradox and Neumeyer's Fallacies," Intégral 12, 1998, 95–132, 117).

2 William Pastille, "The Development of the *Ursatz* in Schenker's Published Works" (*Trends in Schenkerian Research*, edited by Allan Cadwallader, New York: Schirmer, 1990, 71–85), 82.

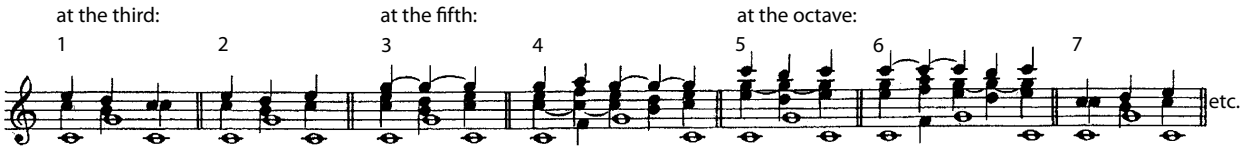
3 Heinrich Schenker, *The Masterwork in Music*, ed. William Drabkin, vol. II, trans. Ian Bent (Cambridge [England]; New York: Cambridge University Press, 1994), 18–19.

4 The term is used, for example, by William Renwick. According to him, a *voice-leading matrix* as "a fundamental expression of tonal voice-leading, a primal basis for unlimited expansion and development", "works out in full the voice-leading implications of Schenker's $\hat{3} - \hat{2} - \hat{1}$ fundamental structure, utilizing root motion in the bass and scalar and common-tone connections in the upper parts." (William Renwick, *Analyzing Fugue*. – New York: Pendragon, 1995, 81).

Furthermore, in the fundamental structure, the upper voice (the fundamental line) is the source of all the voice-leading transformations, a role that the upper voice in the cadences of customary harmonic theory never plays.

Finally, in the cadences of harmonic theory the voices are led mechanically, according to the rule that common tones are to be retained. Since this rule is no longer valid even in thorough-bass, how much less must it apply to a fundamental structure where the inner voices are subordinate to the outer voices, that is, to the fundamental line and the bass arpeggiation.[5]

Example 1



However, these arguments can be better used in favour of the cadence rather that against it. Particularly, it seems to be impossible to analyse adequately the *tonal* counterpoint (unlike some earlier forms of counterpoint as, for example, the 15th-century practice of successively composed voices with its discant-tenor framework[6]) without the equal status attached to its voices.[7] The similarity of the first cadence of Example 1 with one of the forms of Schenkerian *Ursatz* is by far not external – this cadence, identical in its outer voices with our VLM, also corresponds to the "basic form" of Fred Lerdahl. According to him, "Unlike the *Ursatz*, which it superficially resembles, the basic form is not an a priori generating structure but a description of a common reductional state, reflecting the trajectory from structural beginning to cadence."[8] Similarly to Fred Lerdahl's "basic form", our VLM as a background structure is a typical "framing" pattern described by Richard Littlefield and David Neumayer as follows: "The outcome is a simple but powerful narrative structure directly reflecting Aristotle's dramatic model of beginning-(continuation)-ending, where "beginning" and "end" are the most readily definable corresponding structural functions and "continuation" is the collection of events occurring between them."[9]

I

Structurally, cadences can be divided into:

1) Unprolonged cadences (without the pre-dominant chord; I–V–I);
2) Prolonged cadences (with the pre-dominant chord), the latter being either of Paradigm zero (I–VI–$V\,^{6-5}_{4-3}$–I or I–G^6–$V\,^{6-5}_{4-3}$–I), etc., of Paradigm *a* (I–IV–V–I), or of Paradigms *b* and *a/b* (I–II^6–V–I or I–V/V–V–I);
3) Expanded cadences where the initial tonic is prolonged by means of and interrupted (deceptive) or evaded cadence.[10]

Tonally, cadences can be divided into:

1) Non-modulating cadences (concluding in the initial key);
2) Modulating cadences (concluding in a new key).

In the present study, only non-expanded non-modulating cadences will be discussed.

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5 Heinrich Schenker, *Free Composition* (New York: Longman, 1979), 17.

6 Carl Dahlhaus, *Studies on the Origin of Harmonic Tonality*. Trans. Robert O. Gjerdingen (Princeton: Princeton University Press, 1990), 85.

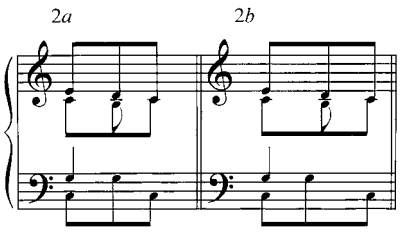
7 See also David Neumeyer ("The Three-Part *Ursatz,*" *In Theory Only* 1987/1–2, 3–29) and Geoffrey Chew, "The Spice of Music: Towards of Theory of the Leading Note," *Music Analysis* 2/1, 1983, 35–53). In the latter, especial emphasis is laid on the lower-neighbour figure embellishing the tonic (usually in the "alto" voice) by means of the leading tone.

8 Fred Lerdahl, *Tonal Pitch Space* (Oxford and New York: Oxford University Press, 2001), 25.

9 Richard Littlefield and David Neumayer as follows: "Rewriting Schenker: Narrative – History – Ideology" (*Music Theory Spectrum* 14/1, 1992), 61.

10 See Mart Humal, "The Expanded Cadence as Deep-Middleground Structure" in Mart Humal, *Studies on Tonal Structures: Introduction and Fourteen Analytical Studies* (Tallinn: Eesti Muusika- ja Teatriakadeemia, 2007), 140–143.

Example 2



In the unprolonged cadence (Example 2a) there are three possible melodic patterns for the three upper voices of the VLM:

1) The Mediant descent (MD) $\hat{3} - \hat{2} - \hat{1}$ (normally in the "soprano" voice);
2) The Tonic Lower-Neighbour Figure (TLNF) $\hat{8} - \hat{7} - \hat{8}$ (normally in the "alto" voice),
3) The Dominant Pedal (DP) $\hat{5}$ (normally in the "tenor" voice).

The three upper voices are supported by the Bass Arpeggiation (BA) $\hat{1} - \hat{5} - \hat{1}$ creating the simple harmonic progression I–V–I, in which the dominant (V) can be elaborated by means of interval pattern V^{6-5}_{4-3} (Example 2b).

These melodic patterns constitute four continuous (or structural) voices of a tonal counterpoint.

The concept of VLM is connected with that of *chordal scale* and *imaginary continuo* proposed by William Rothstein. According to Rothstein, "Lerdahl's concept of the 'triadic scale' might be extended into a *chordal scale* by relating it not only to the tonic p[itch] c[lass] but to any chordal root, and by including chords other than triads, especially seventh chords... A further degree of abstraction may be introduced by considering not only the basso continuo but also the *imaginary continuo* <...> Briefly, the imaginary continuo is a continuo 'accompaniment' abstracted from a composition that does not actually call for one. The imaginary continuo generates enormous numbers of implied tones, since every chord calls forth its entire chordal scale – all of its constituent p[itch] c[lasse]s in all registers between bass and soprano, and to a lesser degree in outlying registers as well."[11] In lower levels of structure, these implied tones create possibilities for various doublings and octave transfers of individual voices of the VLM. To put it simply: prior to the structural $\hat{2}$, every $\hat{3}$ belongs potentially to the MD, every $\hat{1}$ – to the TLNF, and every $\hat{5}$ – to the DP (except for those belonging to the bass line).

In addition to these continuous voices, a tonal composition exhibits a great number of brief lower-level progressions, connecting like stairs the continuous voices. These progressions fill basically the interval of a third. A fourth-progression will be analysed as a combination of a third-progression and a neighbour figure (or that of two neighbour figures), a fifth-progression – usually as a combination of two third-progressions. These third-progressions will be referred to as ascents (ascending third-progressions) and descents (descending third-progressions).

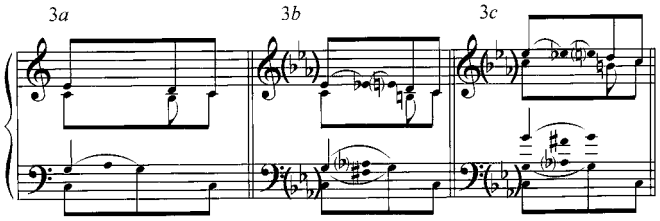
Prolonged cadences – those of Paradigm zero (Example 3), Paradigm *a* (Example 4a), Paradigm *a/b* (Example 4b) and Paradigm *b* (Example 5) – arise from the unprolonged cadence as a result of the elaboration of melodic progressions of its individual voices[12]:

1) $\hat{5}$ of the BA can be preceded by the Dominant Lower-Neighbour Figure (DLNF) $\hat{5} - \hat{4} - \hat{5}$, conceptually belonging to an inner voice (Examples 4–5a), or it can be elaborated by the Dominant Unfolding (DU) $\hat{2} - \hat{5}$ (Example 5b).

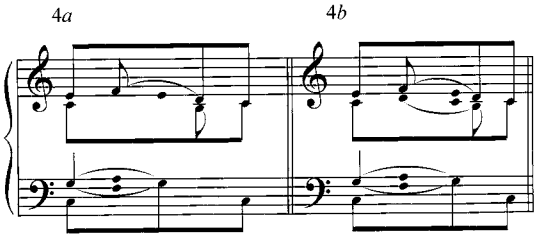
[11] William Rothstein, "On Implied Tones" (*Music Analysis* 10/3, 1991, 289–328), 296–98.

[12] There are many instances of Paradigm *b* in *Free Composition* (see Figures 7a, 12, 13, 39.1, 40.3, 42.2, etc.). On the other hand, in cadences of Paradigm *a*, Schenker interprets $\hat{2}$ as a *complete* rather than incomplete neighbour note, and the subsequent $\hat{3}$ (supported by the cadential six-four) – as a returning primary tone (see *Free Composition*, Figures 35.2, 40.7, and 44.2). An abstract example of Paradigm *a* with $\hat{4}$ as an incomplete neighbour but without the cadential six-four is provided by Felix Salzer (Felix Salzer, *Structural Hearing: Tonal Coherence in Music*, New York: Dover, 1962, Figure 146a). The reading of $\hat{3}$ as a passing tone supported by the cadential six-four (as in our Paradigm *a*) is probably not to be found in the literature until 1970ies. See, for example, Carl Schachter, "Rhythm and Linear Analysis: A Preliminary Study" (*The Music Forum IV*, New York: Columbia University Press, 1976), 292, Example 6, and ibid., "Rhythm and Linear Analysis: Durational Reduction" (*The Music Forum V*, New York: Columbia University Press, 1980), 212, Example 8f.

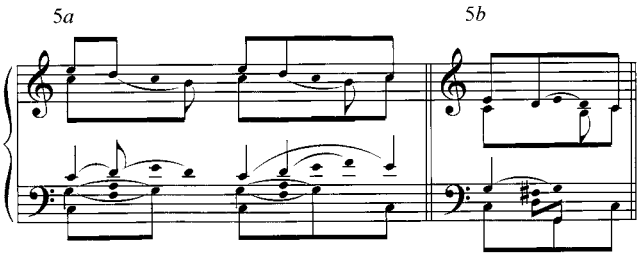
Example 3



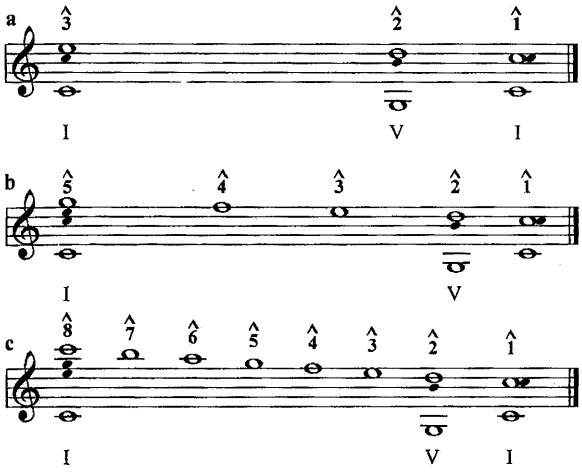
Example 4



Example 5



Example 6



2) The sustained $\hat{5}$ (DP) can be embellished by means of the Dominant Upper-Neighbour Figure (DUNF) $\hat{5} – \hat{6} – \hat{5}$ (Examples 3–5) or, in the case of the V/V as the predominant chord, by means of the DLNF $\hat{5} – \hat{\sharp 4} – \hat{5}$ (Examples 3b, 2c and 5b).
3) The second tone of the MD $\hat{3} – \hat{2} – \hat{1}$ can be preceded by the embellishing lower-level third-progression – Subdominant Descent (SD) $\hat{4} – \hat{3} – \hat{2}$ (Example 4) or $\hat{4}$ as an incomplete neighbour. The second tone of the TUNF $\hat{8} – \hat{7} – \hat{8}$ can be preceded by the embellishing lower-level third-progression – Supertonic Descent (STD) $\hat{2} – \hat{1} – \hat{7}$ (Example 4b).
4) MD can be in inverted ($\hat{1} – \hat{2} – \hat{3}$) in an inner voice, resulting in a voice-exchange (Example 5a). This inversion will be referred to as *mirror doubling*. The second tone of the MD $\hat{3} – \hat{2} – \hat{1}$ can be followed by an embellishing lower-level third-progressions – Supertonic Descent (STD)[13] $\hat{2} – \hat{1} – \hat{7}$ (Example 4), and that of and its mirror doubling ($\hat{1} – \hat{2} – \hat{3}$) – by the Supertonic Ascent (SA) $\hat{2} – \hat{3} – \hat{4}$ (Example 5a, second part).[14] The second tone of both MD and its mirror doubling can be embellished by means of the Supertonic Upper-Neighbour Figure (STUNF) $\hat{2} – \hat{3} – \hat{2}$ (Example 5a, first part, and Example 6b).

Omitting the final tonic, all types of full cadences can be turned into half cadences.

Except for the unprolonged cadence (Example 2a) without interval pattern $V^{6–5}_{4–3}$, the paradigm-a cadence without cadential six-four and some cases of the Paradigm-zero cadence (with the characteristic parallel fifths), $\hat{5}$ of the BA and $\hat{2}$ of the MD never arrive simultaneously.

Unlike the unprolonged and Paradigm-zero cadences where the cadential six-four and dominant arise from the initial tonic as a result of interval pattern 3–6–5 (for example, $^{E–E–D}_{C–G–G}$), in the Paradigm-a, Paradigm-a/b and Paradigm-b cadences, the cadential six-four arises as a passing chord (Examples 4–5a), except for the case of V/V as the predominant chord (Example 5b) where the cadential six-four arises as a neighbour chord.

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13 *Leittonterzzug*, according to the terminology of Karl-Otto Plum (Karl-Otto Plum, *Untersuchungen zu Heinrich Schenkers Stimmführungsanalyse*. Regensburg: Gustav Bosse Verlag, 1979, 47).

14 Because the MD ends with an unresolved seventh, it is not usable in the case of a half cadence.

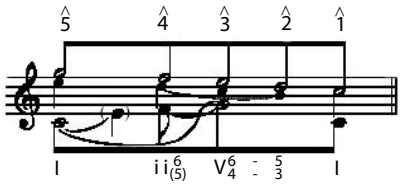
II

An analytical theory of tonal counterpoint based on the VLM, rather than the Schenkerian *Ursatz*, possesses a number of advantages, compared to Schenkerian theory. Whereas there is essentially only one form of the highest-level VLM, harmonically consisting only of three chords: I–V–I (provided the normal tonal structure beginning with a prolonged tonic harmony and ending with a perfect authentic cadence), the *Ursatz* has three basic forms.

Similarly to the VLM, the bass voice of a Schankerian *Ursatz* consists of the bass arpeggiation $\hat{1}-\hat{5}-\hat{1}$. The upper voice consists of an *Urlinie* in the form of a diatonically filled-in descent $\hat{3}-\hat{1}$ ("third line"), $\hat{5}-\hat{1}$ ("fifth line") or $\hat{8}-\hat{1}$ ("octave line") (Example 6).[15] The fundamental line $\hat{5}-\hat{1}$ (as well as the fundamental line $\hat{8}-\hat{1}$, practically almost not used nowadays) is characterised by an *unsupported stretch* (*Leerlauf*).[16] According to Allen Cadwallader, "[A] $\hat{5}$-line may exhibit one of two possible unsupported stretches: $\hat{5}-\hat{4}-\hat{3}$ or $\hat{4}-\hat{3}-\hat{2}$..."[17] The former is suggested by Carl Schachter as follows: "The analyst must keep in mind the possibility that the fundamental line might begin on $\hat{3}$ and that the line from $\hat{5}$ to $\hat{3}$ might be a prolongation belonging to a later level. Some recent theorist, going much further than Schenker, conclude that a fundamental line from $\hat{5}$ is an impossibility or at least a great rarity."[18] Unlike the fundamental line $\hat{3}-\hat{1}$ which is always entirely involved in the cadence, the fundamental line $\hat{5}-\hat{1}$, when containing the unsupported stretch $\hat{5}-\hat{4}-\hat{3}$, is only partly – without its first two tones – involved in the cadence (usually constituting the Paradigm-*a* or Paradigm-*a/b* cadences). These two upper tones, being part of the prolongation of the initial tonic, have a lower structural status than the last three tones, and, therefore, do not belong to the background level of structure.[19]

In the case of the unsupported stretch $\hat{4}-\hat{3}-\hat{2}$, the situation is quite different: here the *Urlinie* is entirely involved in the cadence, constituting, with its bass support, a special kind of cadence, which I have elsewhere labelled as the "Paradigm-c cadence" (Example 7).[20]

Example 7



Here the *Urlinie* tones $\hat{4}$, $\hat{3}$ and $\hat{2}$ are supported by the pre-dominant, cadential six-four and dominant, respectively.[21] The passing status of the cadential six-four, similar to that of the Paradigm-a or Paradigm-*a/b* cadence, makes this cadence as a *background* structure very questionable. According to Joel Lester, "I believe a background structure (including a fundamental line) should contain melodic and harmonic interactions that are fully complementary – a melodic pitch qualifies for inclusion in a background structure not only because it is part of a descending line, but also because it is supported in a manner appropriate to

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15 Quoted from Matthew Brown, *Explaining Tonality: Schenkerian Theory and Beyond* (Rochester, N.Y.: University of Rochester Press, 2005), 73.

16 "[T]he $\hat{4}$ is dissonant as it passes over the root. <...> In this context the first part of the fundamental line $\hat{5}-\hat{4}-\hat{3}$ has more the effect of a transiently filled space of a third; it is not quite like a linear progression of a third that is worked out with the help of a counterpointing bass progression. This creates a certain void, of unsupported stretch, at the very outset of the fundamental line of a fifth, and occasionally gives rise to the question whether the form of the fundamental structure is not actually $\hat{3}-\hat{2}-\hat{1}$." (Heinrich Schenker, *Free Composition*, 19–20).

17 Allen Cadwallader, "More on Scale-degree Three and the Cadential Six-four" (*Journal of Music Theory* 36/1, 1992, 187–198), 190.

18 Carl E. Schachter, "A Commentary on Schenker's *Free Composition*" (*Journal of Music Theory* 25/1, 1981, 115–142), 125.

19 See *Free Composition*, Figures 20.1–3; 40.8–9; 42.1; 48.1; 62.9; 73.2; 74.2; 76.3; 76.5; 88.4; 89.2; 95b.7; 100.1b; 103.6; 109b; 110a1–2; 119.1; 119.11; 121.2; 128.6b; 135.2; 136.2; 150; 152.4; 154.3–4; 156.1.

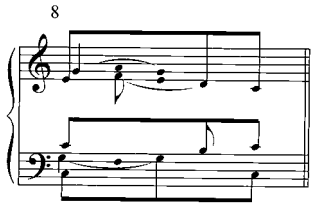
20 See Mart Humal, "Counterpoint and Musical Form: Some Remarks about Schenkerian Backgrounds" in *Principles of Music Composing. Aspects of Historical Dispersion* (Vilnius: Lietuvos muzikos ir teatro akademija, 2004), 55–56.

21 See *Free Composition*, Figures 39.3 (= 120.6a); 76.3; 83.2; 87.3b; 87.5 (= 132.6); 88.4, Ex. b; 100.2b; 104.3; 119.9d; 121.1; 124.6a; 132.1; 136.4; 148.1; 149.1; 154.1.

a background pitch."[22] The most serious objection against the Paradigm-c cadence (or, for that matter, the fifth-line) is that in this case, the cadence cannot be reduced to its unprolonged form, without destroying the upper-voice line. To put it simply: this line contains too many notes.

It seems that the Paradigm-*c* cadence arises from the Paradigm-*a* or Paradigm-*a/b* cadences, as a result of the voice exchange, the DP being temporarily placed to the upper voice and the MD – into an inner voice. Frequently the tones of the DUNF $\hat{5} – \hat{6} – \hat{5}$ are divided between two octaves (Example 8).

Example 8



An examination of cadences in Mozart's piano sonatas shows that, in the case of the non-modulating Paradigm-a and Paradigm-a/b cadences, there is usually (at least in figuration) either a descending second $\hat{6} – \hat{5}$ above the second $\hat{4} – \hat{3}$ of the MD,[23] or at least one of its tones – either $\hat{6}$ above $\hat{4}$ [24] or $\hat{5}$ above $\hat{3}$.[25] This fact suggests another interpretation of the upper-voice $\hat{5}$: it is essentially a cover tone, embellished by means of the DUNF $\hat{5} – \hat{6} – \hat{5}$, with its last tone possibly transferred into an inner voice, rather than the *Kopfton* of a fundamental line $\hat{5} – \hat{1}$. This register transfer suggests that it is an inner, rather than the upper voice that is the "proper" place of this DUNF.[26]

The unsupported stretches can be avoided by rejecting the fundamental line $\hat{5} – \hat{1}$ and the Paradigm-c cadence as structural models. In this case, all the types of prolonged cadences can be interpreted as the prolongation of basically one single type of unprolonged cadence (provided by the normal tonal structure, beginning with a prolonged tonic harmony and ending with an authentic cadence) containing in any voice only scale degrees $\hat{1}$, $\hat{2}$, $\hat{3}$, $\hat{5}$ and $\hat{7}$ – those contained in the triads of I and V (Example 2).

Among other things, the rejection of the fundamental line $\hat{5} – \hat{1}$ (and the Paradigm-*c* cadence) presupposes a reinterpretation of the structural upper voice (for example, the use of the concept of the *initial descent* along with that of the *initial ascent*). One of the greatest advantages of this rejection is that, by analysing polythematic forms (including the sonata form), it makes it possible to avoid conflicting background structures of their themes.[27]

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22 Joel Lester, "Reply to David Beach" (*Journal of Music Theory* 36/1, 1992, 199–206), 203.

23 See K. 279, I, bars 9–10 and 11–2, III, bars 45–46; K. 280, II, bars 19–20; K. 181, I, bar 37, III, bars 65–66; K. 282, III, bars 29–30 and 33–34; K. 283, I, bar 42, II, bar 13; K. 284, I, bar 43, II, bar 16, III, bar 16; K. 309, III bar 130; K. 310, I. bars 33–34 and 44, II, bar 21; K. 331, III, bars t54–55; K. 332, II, bars 17–18; K. 457, I, bar 66, III, bars 6–7 and 14–15; K. 570, III, bars 55–56; K. 576, I, bars 39–40.

24 See K. 279, I, bars 15–16; K. 181, II, bars 33–34 and 37–38, III, bars 3–4; K. 284, II, bar 8, III, bars 3–4; K. 309, II, bars 7–8 and 15; K. 310, II, bar 7; K. 311, II, bars 3–4 and 7–8, III, bars 47–48; K. 330, II, bar 35, III, bars 6–8; K. 331, I, bars 17–18, III, bars 22–23; K. 332, III, bars 30–31, 63–64 and 72–73; K. 333, I, bar 37, II, bar 20; K. 457, II, bar 3; K. 545, II, bars 7–8; K. 570, II, bar 2; K. 576, I, bars 50–52.

25 See K. 283, I bar 9, III, bar 71; K. 576, II, bar 38.

26 In some analyses, $\hat{6}$ is regarded as "substituting for $\hat{4}$" of the *Urlinie* $\hat{5} – \hat{1}$. See, for instance, Example 11.1. (p. 305) in Allen Cadwallader and David Gagné, *Analysis of Tonal Music: A Schenkerian Approach* (Oxford: Oxford University Press, 1998), where $\hat{6}$ (bar 13) not just "substitutes" for $\hat{4}$ but also is followed by $\hat{5}$ in the next bar, concluding the DUNF.

27 According to Peter H. Smith, when analysing the *recapitulation* of the major-mode sonata form (with the third-line in the first group and the fifth-line in the second group), "[t]he analyst must retain the fifth-progression only on the second middleground level and graph its upper two members as part of a prolongation of $\hat{3}$" (Peter H. Smith, "Brahms and Schenker: A Mutual Response to Sonata Form", *Music Theory Spectrum* 16/1, 1994, 84). Such a reading is especially questionable in the case of Paradigm-c cadence in the second group, having the unsupported stretch $\hat{4} – \hat{3} – \hat{2}$, rather than $\hat{5} – \hat{4} – \hat{3}$. The same problem arises in a minor-mode sonata *exposition* (with the tonal plan i–III), having the fifth-line in *both* the first and second groups. On the other hand, in sonata expositions with the tonal plan I–V or i–v and the fifth-line in *both* groups, this problem generally can be avoided only by graphing the interruption at the end of exposition in an inner voice, as proposed by Ernst Oster in his commentary on § 316 of *Free Composition* (Heinrich Schenker, *Free Composition,* 139). Ironically, whereas the *exposition* of the minor-mode sonata (with the tonal plan i–III) having the fifth-line in the first group and the third-line in the second group, is favoured by Carl Schachter because here "the unsupported stretch, $\hat{5} – \hat{4} – \hat{3}$, might lead to a tonicisation of III <...> and integrate into the unfolded tonic of the background structure the potentially disruptive tendency of minor to gravitate to III" (Carl E. Schachter, "A Commentary on Schenker's *Free Composition*", 126), no general solution has ever proposed for the background structure of the *recapitulation* in this case.

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According to Matthew Brown, "[H]e [Schenker] reformulated his new laws in a procedural form as a system of prototypes (*Ursätze*), transformations (*Verwvandlungen*), and levels (*Verwvandlungs-Schichten, Stimmführungs-Schichten*, or *Schichten*). This system allowed him to reach two important conclusions: 1) all functional monotonal pieces can be derived from a single prototype; and 2) there are only three possible prototypes for all functional monotonal compositions."[28] Matthew Brown regarded Schenker's concept of the *Ursatz* as his main contribution to music theory.[29]

However, it seems that unlike such essential principles of tonal counterpoint as the transformations and structural levels, the concept of individual forms of *Ursatz*, and particularly that of the *Urlinie*, are flawed. As such, these are fictions, although undoubtedly there does exist a kind of prototype in the tonal counterpoint. Rather than the *Ursatz*, it can be imagined as the VLM discussed above. And what is more: insisting on the erroneous concept of *Urlinie*, Schenker was not able to develop consequently, up to the end, his idea of structural levels. This resulted in some arbitrary prescriptions[30] and in confusion of structural levels at the highest background.

According to David Neumeyer and Julian L. Hook, "<...> so long as the *Ursatz* – the heart and soul of Schenker's ideology – remains, the specter of compromise will hover over every practitioner and pedagogue. The only solution is to reject the assumptions that gave rise to the paradox in the first place: either abandon the *Ursatz* or abandon the notion that Schenker's method constitutes a theory."[31] In this study, we chose the first option. It is doubtful, whether "[t]he costs of abandoning the *Ursatz* and of severing Schenker's analytical methods from his main theoretical tenets are enormous; they amount to giving up the first recursive theory of tonality," as Matthew Brown put it.[32] According to David Beach, "[t]here is common thread among all the attempts to formalize Schenker's work, namely that his ideas are inadequate as presented and thus require some modification to rid them of any ambiguities and inconsistencies."[33] Replacing of the concept of *Ursatz* as the background structure by that of VLM can be one of these modifications.

Santrauka

Balsavados matrica kaip tonaliojo kontrapunkto archetipas

Nuo pat kontrapunkto ištakų vienas iš pagrindinių jo aspektų yra struktūrinių lygmenų hierarchija. Kontrapunkto analizė (neišskiriant ir H. Schenkerio teorijos) klasifikuoja visus struktūrinius temos ar kompozicijos elementus, nuo žemiausio (elementų) lygmens iki aukščiausio (viso kūrinio) lygmens, į struktūrinių lygmenų hierarchiją, kurioje tam tikros tipinės aukšto lygmens struktūros konstruojamos žemesniųjų lygmenų pagrindu. Šios aukštojo lygmens struktūros gali būti laikomos tonaliojo kontrapunkto archetipais.

H. Schenkerio teorijoje tokiam archetipui atstovauja viena iš trijų dvibalsės *Ursatz* (pirmapradės struktūros) formų, kurios šaknys glūdi Josepho Fuxo veikale „Gradus ad Parnassum", apibendrinusiame XVI a. griežtąjį kontrapunktą. Kadangi aukštojo lygmens kontrapunkto struktūra harmoniškai susideda tiktai iš pradinės tonikos, prolonguojamos per visą formą ir vedančios į kadenciją, kontrapunktinė temos ar viso kūrinio struktūra gali būti interpretuojama taip pat ir kito archetipo pagrindu – keturbalsės *balsavados matricos*, atstovaujančios XVIII–XIX a. funkcinės harmonijos kadenciniam modeliui.

Tonaliojo kontrapunkto analizės teorija, pagrįsta balsavados matrica (bet ne *Ursatz*), turi tam tikrų pranašumų, lyginant su Schenkerio teorija. Kadangi *Ursatz* turi tris pagrindines formas, tai iš tikrųjų joje yra tik viena aukštojo lygmens balsavados matricos forma, harmoniškai susidedanti tik iš trijų akordų: I–V–I (jei tik yra normali tonaliosios struktūros pradžia, tonikos harmonijos prolongacija ir tobuloji autentinė kadencija pabaigoje). Tai leidžia išvengti tokių problematiškų Schenkerio teorijos aspektų, kaip „nepagrįsti epizodai" (būdingi kai kurioms *Ursatz* formoms) arba konfliktuojančios antraplanės struktūros (daugiatemėse formose).

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28 Matthew Brown, *Explaining Tonality: Schenkerian Theory and Beyond*, 66.

29 "Matthew Brown, "Rothstein's Paradox and Neumeyer's Fallacies", 97.

30 "[H]e [Schenker] preferred not to compose out a $\hat{3}$-line with a preliminary descent from $\hat{5} - \hat{3}$ since that transformation would create a $\hat{5}$-line descent at the deep middleground. (Matthew Brown, *Explaining Tonality: Schenkerian Theory and Beyond*, 87.

31 David Neumeyer and Julian L. Hook, "Review: *Analysis of Tonal Music: A Schenkerian Approach*, by Allen Cadwallader and David Gagné" (Intégral 11, 1997, 205–222), 219.

32 "Matthew Brown, "Rothstein's Paradox and Neumeyer's Fallacies", 132.

33 David Beach, "The Current State of Schenkerian Research" (*Acta Musicologica* 57/2, 1985, 275–307), 297.