

Schenker's Disservice to Schenkerianism: Three Bach Examples¹

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1. Introduction

My title may seem provocative or paradoxical: how could Schenker have made a disservice to a movement that is named after him and would not exist without him? There is nothing new, however, in that Schenker's followers, despite their indebtedness to him, will not accept uncritically all aspects of his work. Schenker's individual analyses have been criticized and amended even by those who closely abide by his theoretical principles (e.g., Laufer 1981). Schenker's ideological polemics have embarrassed Schenkerians to the extent that led to efforts to dispel this aspect through downright censorship from certain editions of his works.² Mainstream Schenkerianism has been propelled by the notion that Schenkerian principles bear descriptive power for music in a way independent of Schenker's person or ideology. Hence the principal mission of Schenkerianism can be understood as lying in the strengthening of this descriptive power, which entails that we also recognize defects in Schenker's work.³

Following previous Schenkerians, I shall criticize some of Schenker's individual analyses below (concerning Bach's little Prelude in D minor [BWV 926] and Fugue in D minor from *The Well-Tempered Clavier I*). More importantly, however, I shall present a general viewpoint on what I regard as the most crucial defect in Schenker's work. This defect can be formulated in terms of the division of theoretical concerns to *systemic* and *evidential* parts:⁴ Schenker cultivated the systemic but neglected the evidential. While he developed a rich systemic theory concerning the formation

and relationships of structural levels, his writings are less satisfactory in explicating the evidential principles that concern the relationship between such levels and actual music.

To be more precise, we can identify two evidential questions that Schenker left largely unanswered. First, on what evidence are musical events positioned within the Schenkerian system of structural levels, *if* we assume such levels to exist? Second, what evidence is there for this assumption itself? In the present article, I shall employ the terms *first-order evidence* and *second-order evidence* for referring to these two questions, respectively. First-order evidence concerns thus, for example, the determination of harmonies' prolongational spans or the location of *Urlinie* tones in a Schenkerian analysis. Second-order evidence concerns the justification of notions underlying such analysis, such as prolongation (or *Auskomponierung*) and *Urlinie*.

In my recent work on Bach (Väisälä 2008, 2009), I have sought to approach both evidential questions on the basis of musical features such as *design*, *register*, *meter*, and *gestural emphasis*. In the following, I shall call these four features *structural indicators* and suggest that they offer not only first-order evidence, or analytical criteria, for Schenkerian readings but also second-order evidence for the underlying theoretical assumptions. Such evidence can be given by the correlation between patterns supported by such indicators, on the one hand, and those privileged by Schenkerian theory, on the other. If such correlation goes beyond chance level,

¹ This paper is largely based on Väisälä 2010.

² A notorious document of such an effort is Schenker 1979, the American edition of *Der freie Satz*, in which passages removed by Oswald Jonas (the editor of the second German edition) and Ernst Oster (the translator and editor) were restored after Oster's death as a separate appendix.

³ I use thus the word "Schenkerian" for referring to a certain kind of multilevel organization, not to Schenker's work or person *in toto*. While some authors (e.g., Cook 2007: 301) have criticized such usage, we need some term for this kind of musical organization, and "Schenkerian" has the advantage of being well established in this meaning, also paying appropriate homage to Schenker's personal accomplishment in this respect. In my view, using "Schenkerian" in this sense, without getting involved with all aspects of his work, is no more problematic than, say, calling certain physical notions "Newtonian," with no consideration for Newton's theological views. Showing that this meaning of "Schenkerian" can be separated from Schenker's person and ideology is one of the main aims of this paper.

⁴ Brown (2005: 18 ff.) discusses such a division in connection with Schenkerian theory but has little to say about evidential questions that concern structural levels, the main topic of the present paper.

this suggests that such patterns pertained to composition.⁵ While I shall thus base my discussion of second-order evidence on the compositional pertinence of Schenkerian principles, it should be added that the four structural indicators are also crucial for musical perception. Consequently, building the evidential basis of Schenkerianism on such factors will also be concordant with the endeavor to make theory and analysis pertinent to the listener's experience.⁶

None of the four indicators is by any means new or revolutionary as an analytical criterion. They all are implicitly significant for numerous existing mainstream Schenkerian analyses and have also occasionally been explicitly discussed (e.g., register in Oster 1961 and design in Rothgeb 1971). However, as part of Schenker's heritage, Schenkerian research has been characterized by more or less unsystematic approach to its evidential basis, which has made it difficult to obtain a clear picture of the descriptive power both of individual analyses and of the theory in general. To be sure, building a fully systematic evidential theory for Schenkerianism would involve several hugely complex problems, which cannot be conclusively dealt with within the present article. Nevertheless, through the following analytical examples I hope to give a preliminary idea of the direction in which to proceed in order to gain a better illumination on the relevant evidential questions and on the descriptive power of Schenkerianism.

2. How Schenker Might Have Justified His Theory and Analysis: Bach, Fugue in C Minor from *The Well-Tempered Clavier I*

By way of an introduction to the four structural indicators and their evidential significance, I shall first consider the two fifth-descents ($\hat{5}-\hat{4}-\hat{3}-\hat{2}-\hat{1}$) that are featured in Schenker's (1996 [1926]: 31–54) analysis of Bach's Fugue in C Minor from *The Well-Tempered Clavier I*. Example 1 reproduces Schenker's (1996: 32 [Fig. 1]) overall graph of this fugue; the first fifth-descent (mm. 3–9) is shown in parentheses, indicating that it is structurally subordinate to the second (mm. 9–20).⁷ While I do not find Schenker's analysis as satisfactory in its entirety,⁸ these two fifth-descents prove to be strongly supported by the four structural indicators. Hence, even though Schenker's discussion falls short of explicating a satisfactory evidential basis for these readings, hypothetically these indicators provide an implicit basis. In this sense, I begin with a positive example of Schenker's analytical practice, so as to balance the critique of his analyses to which I shall turn in subsequent examples.

2.1. The First Fifth-Descent

The first fifth-descent spans the fugal exposition (mm. 1–9), the score of which is aligned with my analytical graph in Example 2. This graph deviates from Schenker's analysis in some details, but

⁵ Cf. the challenge that David Temperley (2007: 179) presents in his *Music and Probability*: "It seems to me to be incumbent on those who believe in Schenkerian theory as a model of the compositional process to show how it reduces the uncertainty of tonal music." I believe the four structural indicators are crucial for illuminating how Temperley's challenge can be met, even though it would be exceedingly difficult and quite beyond the scope of the present paper to apply exact probabilistic methods to the question.

⁶ Both compositional and perceptual pertinence have been identified as objectives of music theory. For example, Brown (2005: xvii) argues that Schenkerian analyses "model an expert composer's internalized knowledge of functional monotonicity," whereas Lerdahl and Jackendoff (1983: 1) "take the goal of a theory of music to be a *formal description of the musical intuitions of a listener who is experienced in a musical idiom*" (original emphasis). Insofar as the communication between the composer and the listener is successful, it is, of course, natural to assume that these two types of pertinence largely agree.

⁷ Since this analysis is relatively early (1926), the analytical notation differs somewhat from more "mature" Schenker, such as that in Schenker 1979 [1935].

⁸ The most significant defects in Schenker's analysis concern the subject and the overall structure. Schenker's (1996: 34 [Fig. 2]) reading of the subject allots inordinate significance to the sixteenth-note G and F at the end of m. 2 at the expense of the metrically supported G–(A_b–G)–F–E_b framework. Schenker's identification of the second fifth-descent as the structurally decisive *Urlinie* is also unconvincing in view of the great gestural emphasis on the subsequent harmonic events (the V⁷ in m. 25, the I⁶ in m. 28, the V–I cadence in m. 29). I discuss these features in greater length in Väisälä 2010.

Example 1. Schenker's graph of Bach's Fugue in C Minor (WTC I).

Fig. 1

Stufen als Tonarten: C m: | G m: | E s di: | I | VI | VI | I | III | III |

Tonal. C mi | V | I | V-I | I | III | III |

(Kürzer:) I

Example 2. Bach, Fugue in C Minor, exposition (mm. 1-9): score and voice-leading graph.

Subject

Answer

(Schenker: G)

Return episode

CS1

Subject

FGAs

prestage

G

Ab

I

IV

V

#IV7

(IV)

VII6

I

IV6

V2

I6

I

V8-

I

draws on it with respect to the fifth-descent and its harmonic background. The brackets above the score concern the first structural indicator, *design*, demarcating units of design on two levels. The upper brackets indicate two-measure units of fugal design: entrances and episodes. The lower brackets are based on changes of surface design within these two-measure units;⁹ they show a regular rhythmic pattern in which the midpoint of the first measure connects with the midpoint of the second measure, going over its downbeat. Above these two levels, one might, in principle, add a third one spanning the entire exposition, as this can be understood as a large unit in the overall design of the Fugue.¹⁰

While I shall address meter as a structural indicator more specifically below, it should be noted that meter is already taken into account in the brackets in Example 2 for determining the precise location of their framing points. While the elements that are determinative of design, such as the fugue subject, characteristically start at offbeat eighth-notes, these framing points are “rounded” to the nearest relatively strong metrical point, reflecting the significance of meter for short-span hearing.

The main structure-indicating significance of design is that elements of structural weight tend to occur at framing points in units of design, primarily at the beginning, secondarily at the end (that is, just before the beginning point of a new unit). In addition, structural connections can be supported by parallelisms of design; this consideration will be particularly significant for the discussion of the second fifth-descent. In Example 2, the two levels of the harmonic analysis correspond closely with the two levels of units of design. The framing points of the two-bar units display the following harmonic framework: the subject establishes the opening I, the answer leads to the tonicized V, the return episode (mm.

5–6) transforms it to V⁷, and the third entrance begins with the return of I and closes with a V²–I⁶ progression, the I⁶ concurrently beginning the next episode (mostly not shown in Example 2). Each harmony in the indicated framework, I–V–I–V²–I⁶ occurs at the beginning point of a two-bar unit of design, except for the V². As regards design, the structural weight of the V² is supported by the fact that the V²–I⁶ combination concludes not only the third entrance but the larger unit of design consisting of the entire exposition. It will also be easily seen that the V²–I⁶ progression is brought out by register, the structural indicator I shall address next.¹¹

The support of design (and of other indicators) for the I–V–I–V²–I⁶ framework offers our first example of what I identified as first-order evidence for an analytical reading. However, this support hardly involves any significant second-order evidence for Schenkerian theory. While such a harmonic framework is, of course, consistent with Schenkerian theory, it offers no specific confirmation for the theory’s predictions. The framework consists of simple tonic-dominant relationships, which might be explained through any conventional approach to tonal harmony (we do not need Schenkerian theory for predicting that fugue expositions typically proceed from the tonic to the dominant and back). Both in this and in subsequent examples, the distinctive predictive power of Schenkerian theory becomes more evident in the upper-voice events, in the study of which we must combine considerations of the structural indicators with the conventional criteria of harmonic support. As I shall be arguing below, the structural indicators offer considerable emphasis for the tones of the $\hat{5}-\hat{4}-\hat{3}-\hat{2}-\hat{1}$ descent above the harmonic framework. Since this descent is an archetypal Schenkerian pattern and less likely to emerge by chance, this offers second-order evidence for the notion that Bach’s composition

⁹ Rothgeb 1971 is a classic article discussing the significance of changes in design for Schenkerian analysis: “changes in surface design usually coincide with crucial structural points, and accordingly such changes must be given the most thoughtful attention in deriving or verifying an analysis.” (Rothgeb 1971: 231)

¹⁰ Schenker (1996: 32–33) also points out the correspondence between his reading and the large-scale design.

¹¹ As evident from Example 1, Schenker does not show this V² as participating in the harmonic framework, which reflects, in part, his reading of the subject, in which the F at the midpoint of the second bar bears surprisingly little structural weight (cf. note 8 above).

¹² Whether Bach was aware of such archetypes is secondary for considering their compositional pertinence. Their significance can be compared to syntactic rules of speech, whose validity obviously does not presuppose speakers’ awareness of them.

was guided by such an archetype¹² – even though assessing the strength of the evidence through precise probabilistics would be difficult and will not be attempted here. As regards design, it can be easily seen that the tones of the fifth-descent occur at the framing points (or close to them) of the two-bar units and are to this extent supported by design. For a more accurate picture of supporting features, however, we must enlarge our considerations to the remaining structural indicators.

The main significance of *register* is that relatively extreme register tends to indicate a relatively strong structural weight. This adds to the justification for including the V^2 in m. 8 in the harmonic framework, since the V^2-I^6 motion is underlined by a lower bass register relative to preceding events. The top-voice starting point, g^2 is brought out by its registral height, and the subsequent elements of the fifth-descent also consistently occupy the highest registral position above their supporting harmonies (except that the concluding $\hat{1}$ is immediately followed by the return of $\hat{5}$).¹³ Each top-voice element receives consonant support except for the $\hat{4}$ (f^2), which stands for a passing seventh in the retransitional V^{8-7} progression (in a local VII^6). As indicated by arrows in the graph of Example 2, the $\hat{5}-\hat{4}$ motion is clarified and reinforced by a registral coupling. The $\hat{5}, g^2$, reiterated at the beginning of the answer, leaves off towards its end, and can be understood as transferred to a lower octave (g^2-g^1). This is followed by the reciprocal transfer of $\hat{4}$ back to the high register (f^1-f^2) in the return episode. This registral coupling is a detail in my analysis that deviates from Schenker's; I shall return to its justification and implications presently.

Meter is a significant structural indicator especially for short spans, where our perception of meter is most vivid. The significance of meter at the eighth-note level is already taken into account in determining the framing points of the brackets in Example 2. At the quarter-note

level, it can be noted that the elements on the first and the third beat assume greater structural weight than those on the second and fourth beat, except for two registrally supported top-voice tones (f^2 and d^2 at the fourth beats of mm. 6 and 8, respectively). Furthermore, two-bar hypermeasures show a simple agreement with two-bar units of design, thus providing additional support for the downbeats of odd-numbered measures. On the other hand, the downbeats of even-numbered measures remain in structurally subordinate roles, since they occur in the midst of units of design, as the lower brackets indicate. This is a simple example of conflicting structural indicators; in Bach, design typically overrides a weak metric accent as a structural indicator.¹⁴ For another example of conflicting indicators, one may consider the top-voice figure in the second half of m. 8 ($b^1-c^2-d^2-b^1$), in which register favors d^2 and meter b^1 . The former alternative is given additional support by voice leading at the half-note level, since the e_b^2 of the passing downbeat $\frac{6}{4}$ moves normatively to d^2 , completing the parallel-sixth pattern of outer voices (cf. the 6s in Example 1). In general, conflicting indicators pose, of course, a major problem for the formulation of an evidential basis for Schenkerianism, but within the present article, this complex problem can be considered only with respect to a few individual cases.

By *gestural emphasis*, the last item in my list of structural indicators, I refer to widely variable features, including, most significantly, cadences. This fugal exposition contains no cadences, but the melodic figure at the end of m. 6 exemplifies another kind of emphasizing gesture, whose distinctive features are its deviation from surrounding rhythms and syncopation. The evidential significance of this gesture, underlining the f^2 , is noteworthy. As observed above, the f^2 occurs as a passing seventh and receives thus no consonant support from the harmonic framework. While such dissonant upper-voice

¹³ I do not suggest that such consistency is always characteristic of voice-leading progressions; register is relatively easily overridden by other factors. Moreover, once a certain register is established as structural, motions to a more extreme register are less likely to indicate structural weight.

¹⁴ This is also evident at the eighth-note level in the second half of m. 7 and first half of m. 8, as well as in analogous points of other entrances. The design of the two countersubjects indicates that the C-minor chords are, despite their relatively strong metrical position, passing chords within a VII^{o7} that governs the last three eighth-notes in each half-measure (not indicated in Example 2). The passing status permits these chords to be inverted to six-fours through triple counterpoint; see m. 11, beat 4, and m. 16, beat 2.

tones can participate in Schenkerian *Züge* (and even in the *Urlinie*), it is reasonable to assume that this presupposes that structural indicators offer especially strong support for the upper-voice tone, so as to compensate for the lack of consonant support.¹⁵ As regards this f^2 , it is strongly supported by register but less strongly by design – as it lies at the end of the two-bar unit instead of its beginning – and not at all by meter. Taken together, the first three indicators offer less than optimal support for the f^2 ; hence the special emphasizing gesture may be explained as necessary for ensuring its position in the voice-leading pattern.

The treatment of f^2 relates with a small but illuminating difference between Schenker's reading and mine. As Example 2 illustrates, I read the f^1 at the midpoint of m. 5 as beginning a passing figure $f^1-g^1-a_b^1$ and indirectly preparing the emphatic f^2 . Schenker (1996, Fig. 8a–c), by contrast, indicates a structural connection between the Gs at the downbeats of mm. 5 and 6. In my view, Schenker's reading neglects design: the g^1 at the downbeat of m. 6 lies in the midst of a sequence, which leads onwards to the a_b^1 at the third beat. As indicated by the lower brackets in Example 2, the design is also buttressed by its agreement with the regularly recurring rhythmic pattern in which units of design lead from midpoints of odd-numbered bars to midpoints of following even-numbered bars. If in the subject this pattern supports the $a_b^1-g^1-f^1$ passing figure – which Schenker (1996: 34) described with merit – one is analogously justified to read an $f^1-g^1-a_b^1$ figure in the return episode. It is also worth noting that this analogy links with a correspondence between surface figures denoted as “summary” and “presage” in Example 2; whereas the former summarizes the subject's A_b-G-F progression at

its end, the latter points in advance to the goal of the $F-G-A_b$ motion.¹⁶

The return episode gives foretaste of the kind of situation on which I shall focus in the analyses of section 3 below: structural indicators offer first-order evidence that suggests revising Schenker's analysis, but this strengthens rather than weakens the second-order evidence for his theory. Whereas Schenker's analysis shows the $\hat{4}$ as only occurring transiently at the end of m. 6, consideration of design and register shows a much stronger support for the opening $\hat{5}-\hat{4}$ motion of the first fifth-descent. This, naturally, strengthens the argument that Bach's composition was affected by his urge to realize such an archetypal voice-leading pattern.

2.2. The Second Fifth-Descent

As Schenker's graph (Example 1) indicates, the first fifth-descent functions as anticipatory prolongation of the opening $\hat{5}$ s of the second descent. The connection between the two $\hat{5}$ is concretized by a connection of figuration. As shown by circles in Example 2, the lower-neighbor figure $G-F_{\sharp}-G$, which articulates the first $\hat{5}$ at the beginning of the answer (m. 3), is resumed in m. 9 for starting the second descent.

The second fifth-descent is illustrated in its entirety by the annotated score in Example 3.¹⁷ This descent spans a large modulatory section (mm. 9–22) with tonicizations of III, V, and I, which, together with the opening tonic, form the harmonic framework I–III–V–I. As with the first fifth-descent, design offers straightforward support for the harmonic framework. As indicated by brackets, the fugal design proceeds again in two-bar units, except for the three-bar episode in mm. 17–19. The first unit, the sequential episode

¹⁵ I discuss this issue with respect to the *Urlinie* $\hat{4}$ in Väisälä 2009 (136 ff.).

¹⁶ To be sure, one can see a kind of conflict between structural indicators also in this case. Schenker's reading seems to have been motivated by his notion that the g^2 in the first half of m. 6 (reproducing the g^1 through a local voice exchange) is structurally connected with that of the answer (the $\hat{5}$), offering a delayed completion to its voice leading (Schenker 1996: 37–38). In support of this notion, one may cite both the high register of the g^2 and the connection of design created by the use of lower-neighbor figures ($g^2-f_{\sharp}^2-g^2$ in the answer, $g^2-f_{\sharp}^2-g^2$ in m. 6). I would suggest, however, that in determining harmonic structure, such upper-voice associations are insufficient to challenge the implications of clearly articulated bass lines, such as the present $f^1-g^1-a_b^1$ line, which points to a prolongation of a local F-minor chord. The re-establishment of the $\hat{5}$ in m. 6 lacks thus harmonic support, and the association between the two g^2 s should rather be characterized in terms of something like an unfulfilled striving for such re-establishment.

¹⁷ Example 3 shows some minor differences of interpretation with respect to Schenker's graph (Example 1). The comparison of these Examples is left to the reader.

in mm. 9–10, modulates rapidly to the III, which is then prolonged by the ensuing entrance. The subsequent episode (mm. 13–14) leads to a C-minor $\overset{6}{3}$ chord and is thus framed by 5–6 motion above $E\flat$ (a motion whose significance Schenker described with great merit). The next entrance, mm. 15–16, reinterprets the C-minor $\overset{6}{3}$ as the IV^6 in the dominant key and leads to the tonicized V through an authentic cadence. The episode of mm. 17–19 transforms the tonicized dominant into a V^7 (local V^2), and the subsequent entrance leads from I^6 to the root-position I through an auxiliary cadence.¹⁸ All in all, the framing points of these units are clearly at the service of the I–III–V–I framework. In addition, this framework is reinforced by a parallelism of fugal design, as each of its constituent harmonies is marked by a thematic entrance.

The I–III–V–I framework is further buttressed by the remaining structural indicators. The progression to the III in mm. 9–10 is underlined by an unprecedented surge to the lowest register (great octave). Moreover, the bass returns to this register, after intervening higher events, to mark the V (G) in m. 17. The closing I in m. 22 involves somewhat more complex registral circumstances. The V in m. 17 and the I in m. 22 are approached through parallelistic bass parts, in which the second countersubject is modified so as to incorporate authentic cadences. This parallelism would lead us to expect a great C to complete the structure, as shown in brackets in Example 3 (m. 22), but this is replaced by an octave higher c. This replacement is insufficient to question the position of the I as the closing tonic of the I–III–V–I framework, as this is secured by other indicators, especially the parallelistic cadences to the V and the I. However, this replacement is not without

significant structural implications. By attenuating the tonic, it is one of the factors that contributes to the impression that this does not yet complete the highest structural level, the *Ursatz* – one of the major points in which I disagree with Schenker's analysis (Example 1).¹⁹

Leaving aside the disagreement about the structural level at which it participates, there is thus plenty of first-order evidence for the I–III–V–I harmonic framework: *assuming* that Bach's large-scale organization was guided by the harmonic patterns Schenker described, structural indicators indicate that the pertinent pattern for this stretch of music was I–III–V–I. However, as with the first fifth-descent, it is questionable whether the harmonic framework involves significant second-order evidence for Schenkerian theory, since its predictions are relatively unspecific in the harmonic realm. We do not need Schenkerian theory to predict that the tonic and the dominant will play an emphasized role in tonal organization. It is also questionable, probabilistically speaking, whether the additional emphasis on the III as a "space filler" between the I and V offers significant confirmation for the theory's predictions, since it permits several alternatives for such "space fillers."²⁰ Besides, the emphasis on the III, V, and I might also be explained from a non-Schenkerian view on the basis of customary modulatory schemes.²¹

For illustrating the distinctive predictive power of Schenkerian theory, it is again necessary to turn to the upper-voice events. As observed above, the second fifth-descent begins by citing the thematic lower-neighbor figure ($g^2-f\sharp^2-g^2$), so as to re-establish the $\hat{5}$. This figure is then sequentially repeated above the harmonic progression towards the tonicized III, which articulates a $\hat{5}-\hat{4}-\hat{3}$

¹⁸ Schenker, who had not yet discovered the concept of auxiliary cadence at the time of this analysis (1926), shows a root-position tonic already in m. 20 (where none exists).

¹⁹ Since this analysis is relatively early (1926), Schenker might have revised his analysis after having gained more experience of the requirements of structural closure. I submit that the *Urlinie* descent starts from the V^7 in m. 25, emphasized by a rhetorical halt in the bass line, which supports the *Urlinie* $\hat{4}$. This is transferred to the bass of the V^2 in m. 28 and resolves to the $\hat{3}$ in the bass of the subsequent I^6 , likewise emphasized by a rhetorical halt. The concluding $\hat{2}-\hat{1}$ motion is supported by the cadence in m. 29, in which the low C finally appears. This account of *Urlinie* events agrees with Schachter 1996 (335–336).

²⁰ According to Schenker 1979, § 53 ff. (Fig. 14–16), the ascending I–V progression can be supplemented at the first middleground level by II, III (or I^6) and IV (II^6). The remaining scale degrees, VI and VII, become possible at later levels in the descending I–V progression (Schenker 1979, § 187, Fig. 67; on the VII–V progression, see also § 246, Fig. 111).

²¹ While Schenker tended to downplay the concept of modulation in his late output, there is no reason to consider Schenkerian structural levels and modulatory schemes as mutually exclusive (see Schachter 1987a).

Example 3. Bach, Fugue in C Minor, mm. 9–22: annotated score.

The annotated score for Bach's Fugue in C Minor, measures 9–22, is presented in three systems. Each system shows the treble and bass staves with various annotations. Fingerings (3, 4, 2) are indicated above notes. Measure numbers 10, 15, and 20 are circled. Labels 'Subject', 'CS1', and 'CS2 (variant)' identify specific musical elements. Below the staves, harmonic analysis is provided using Roman numerals: I -6, I, (Eb:II), V, VII, I, III, III, III⁵, 6(=g:IV⁶), V⁷, I=V, V^{b8}, I⁶, IV, V⁷, I. An auxiliary cadence is also noted: (Auxiliary cadence) → I.

top-voice motion ($g^2-f^2-e_b^2$). While this motion is rapid, its structural significance is underlined by features of design and register that depart radically from preceding events. Whereas the previous downbeats of even-numbered measures have been attenuated by their position within small units of design (see lower brackets in Example 2), the sequential design now works in agreement with meter. Moreover, the downbeat of m. 10 receives particular emphasis from the extreme

low F bass – much lower than any of the preceding metrically accented basses. These unprecedented features are crucial for supporting the structural weight of the f^2 in m. 10, occurring in the midst of a two-bar unit and lacking harmonic support from the main elements of the I–III–V–I framework.

Since Schenkerian theory grants a privileged status to voice-leading *Züge* or stepwise linear progressions, it permits one to predict that given the present harmonic framework the most

probable way to complete the $\hat{5}-\hat{4}-\hat{3}$ top-voice line is $\hat{2}-\hat{1}$ (d^2-c^2) above the concluding V-I. This prediction turns out to be fulfilled through a notable combination of structural indicators. During the large prolongation of the III, the top-voice $\hat{3}$ leaves off from the highest register and may be understood as transferring to the bass, as shown by an arrow in Example 3. As soon as the dominant is attained, in m. 16, the top-voice $\hat{2}$ not only pops up in the high register (d^2) but is articulated by the resumption of the lower-neighbor figure, which has been absent from the highest voice since the initial $\hat{5}-\hat{4}-\hat{3}$ motion. As illustrated by circles in Example 3, the elements of the fifth-descent are consistently bound together by parallelistic occurrences of the lower-neighbor figure. The concluding $\hat{1}$ (c^2) appears both above the I^6 in m. 20, where the lower-neighbor figure initiates another thematic statement, and above the eventual root-position I in m. 22, where it initiates a sequence that resembles the one that started this fifth-descent (another aspect of design that supports the unity of this progression). Bach's treatment of upper-voice material above the V and I is thus optimal for supporting not only the status of $\hat{2}$ (d^2) and $\hat{1}$ (c^2) as governing top-voice tones, but also their connection with the preceding $\hat{5}-\hat{4}-\hat{3}$ motion.

2.3. Conclusions

The above discussion of the two fifth-descents illustrates how Schenker *might* have approached questions concerning both first-order and second-order evidence. It also illustrates how Schenkerians can respond to the claims of a Schenker critic such as Lawrence Dreyfus (1996: 169–188), who, on the basis of this very analysis by Schenker, suggested that Schenkerian structures are “figments of the organicist imagination” without compositional relevance. The tones of the two fifth-descents are strongly supported by structural indicators above

the harmonic frameworks, which themselves are similarly supported. Moreover, the integrity of the second fifth-descent is buttressed by the parallelism based on the lower-neighbor figure. In several respects, Bach's treatment of upper-voice material seems ideal for sustaining archetypal Schenkerian patterns, which suggests that such patterns affected his composition, offering second-order evidence for Schenker's theory. It becomes thus apparent what kind of disservice Schenker made to Schenkerianism through his failure to explicate evidential principles for his theory and analyses, such as discussed above, and through his reliance on ideologically charged authoritarian intuitions. As a legacy of Schenker's attitude, the general awareness of the extent to which Schenkerian theory and analysis can be substantiated through empirically observable compositional features – as opposed to deriving from *a priori* ideological grounds – has remained regrettably vague, as Dreyfus's essay exemplifies.

Schenker's disservice is not, however, confined to his failure to explicate evidence for his intuitions. His intuitions are also by no means reliable. Unlike the fifth-descents just discussed, Schenker's readings are by no means always consistently supported by the structural indicators. Of course, one may question whether the four indicators form an adequate evidential basis for matching valid intuitions. To be sure, I do not maintain that my list of indicators is an exclusive one.²² However, their tendency to support Schenkerian patterns, as exemplified by the previous analysis (and by those in Väisälä 2008 and 2009), suggests that they are among primary compositional means of realizing such patterns and certainly should not be overlooked in the verification of them. And, as my next example will suggest, for some Schenker's readings it is difficult to find support not only from the four indicators but from any compositional features whatsoever. Such readings can, indeed, be justly called “figments of imagination.”

²² As the reader may have noted, my analytical examples contain at least one element whose indicated structural status is *not* strongly supported by the structural indicators. The Roman numerals in Example 3 indicate the VII (V of III) at the end of m. 10 as the structurally most significant harmony between the I and the III, even though the preceding F-minor chord (II of III) is both metrically stronger and has a lower bass (features that help to underline the concurrent top-voice $\hat{4}$). This reading relies largely on syntactic *a priori* principles: a bias for the local dominant, on the one hand, and against parallel octaves, on the other. The relationships between such *a priori* principles, on the one hand, and empirical observations of compositional features, on the other, pose a complex question that cannot be discussed here, even though my main argument is based on demonstrating the great significance of the latter for the determination of structure.

3. Why the Lack of Justification for Schenker's Analyses Does Not Imply a Lack of Justification for His Theory

3.1. Bach, Prelude in D Minor (BWV 926)

Example 4 reproduces Schenker's (2004 [1923]: 181) graph of the D-minor Prelude, and Example 5 shows an annotated score. Beneath the score are shown two superimposed annotations concerning harmonic hierarchy. The upper annotations, after "HS," depict Schenker's conception of the harmonic hierarchy at the beginning of the Prelude (up to m. 25). The lower annotations, after "OV," show my reading for the entire piece.

Determining units of design is more complex in this capricious Prelude than in the above-discussed Fugue. Guiding landmarks are given, however, by occurrences of the opening *arpeggio* figuration, denoted α in Example 5, which alternates with the descending β figure at the beginning of the Prelude. Perhaps the most striking feature of design is the large uniform α passage in mm. 21–38, framed by a root-position V and a V_5^6 . In Schenker's reading, the opening dominant of this span bears a curiously weak structural weight. It merely prolongs the dominant attained as early as m. 11, and the dominant as a whole is subordinate to a motion from the opening tonic to the VI harmony in m. 25.²³ It is difficult to find any feature in Bach's composition that would support such a structural weight for this VI, and neither does Schenker point out such features in his verbal comments.²⁴

Example 5 also shows the very beginning of Schenker's top-voice reading. This is indicated in brackets after "HS" in mm. 8–9; all other upper-

voice denotations illustrate my reading. According to Schenker, the structural upper voice starts from f^2 in m. 8, followed by an extended prolongation of e^2 (mm. 9–24). One might note that the f^2 is the highest note above the opening tonic and is thus, in some sense, supported by register.²⁵ However, the registral ascent goes on to the downbeat bb^2 in m. 9, which bears a readily perceptible neighboring-note relationship with surrounding As in mm. 1 and 13, and thus points to $\hat{5}$ rather than $\hat{4}$ as the governing top-voice tone. Even more dubious is the high status assigned by Schenker to the e^2 in m. 9. This e^2 is not supported by any of the structural indicators, except for the slight metrical stress at the eighth-note level. But even this feature has questionable significance in the present context, since the subsequent accented eighth-notes (c^2 , a^1 , $f\sharp^1$) clearly function as non-harmonic passing tones and since the preceding f^2 stands out as the starting point of the stepwise descent. As illustrated by slurs beneath the notes, these circumstances suggest reading the e^2 as a local passing note in analogy with the subsequent eighth-note figuration, in which case the f^2 resolves only to the bass e at the downbeat of m. 10. (All slurs in Example 5 are analytical annotations, not articulation signs.)

Suffice these observations to suggest that Schenker's analysis relies largely on figments of his imagination rather than features in Bach's composition. Such analysis has made a disservice to Schenkerianism in being likely to create the impression of its being concerned with hidden and esoteric phenomena, inaccessible to normal musical perception. In Schenker's defense, one might note that this analysis represents the very earliest stage (1923) in his efforts towards the

²³ The subordinate status of this V can be inferred from Schenker's slur that connects the top-voice f^2 in m. 7 with the d^2 in m. 25, which indicates that the function of the V is to support a passing e^2 .

²⁴ Since Schenker (2004: 180) features $a^1-g^1-f^1$ third-progressions both in verbal analysis and in Fig. 1 (not reproduced here), by placing arrows beneath the terminating f^1 s (mm. 7, 20, 25, 35, 39, 43, 48 [$f\sharp^1$]), one might speculate that his reading of the VI in m. 25 is motivated by its position at one of these terminating points. This may be doubted, however, since Schenker was content to show other such points, such as the one in m. 20, as subordinate to non-tonic harmonies (the large dominant prolongation). Hence one cannot speak of a consistently applied analytical criterion. Moreover, such a criterion would contradict one of the main virtues of Schenkerian analysis, namely, that it allows us to show how similar surface progressions relate differently with larger structure.

²⁵ For justifying his choice of the $\hat{3}$ as the starting point of the *Urlinie*, Schenker (2004: 180) does not appeal to register but to the position of f^1 as the concluding point of the third-progressions mentioned in Note 24. Schenker seems thus to suggest that the occurrence of small-scale $\hat{5}-\hat{4}-\hat{3}$ progressions – which are extremely common in Bach openings, as exemplified by the subject of the C-minor Fugue – points to the concluding $\hat{3}$ rather than the beginning $\hat{5}$ as the *Kopftön*. However, it is hard to find any kind of justification for such a principle, nor does Schenker apply it consistently in his analyses.

kind of comprehensive hierarchic interpretation of structural levels that we have become to know as “Schenkerian analysis.” For this very reason, however, it casts doubt on some Schenkerians’ claims that Schenker’s notions always arose empirically from his intimate experience with the musical masterworks.²⁶ To say the least, the truth seems to be more complicated. Besides, as my next example will suggest, Schenker’s ability to evaluate the empirical support for his readings remained unsatisfactory even in his latest output.

For approaching an empirically justifiable analysis of this Prelude, let us first take note of units of design, as shown by brackets in Example 5. At the beginning, the lower-level units are formed by combinations of α and β , which show a characteristic tendency of shortening prior to the large uniform α unit starting in m. 21. While these shortening units might be combined into a single large unit (mm. 1–20), the higher brackets in Example 5 show a division in m. 15, highlighting the IV harmony. Several features in the treatment of α and β support this division. First, the α figure is transferred (as a quasi-imitation) to the left hand m. 11 and back to the right hand in m. 15, from which point onwards α and β occur sequentially in the right hand; hence the IV is marked as the completion of the opening quasi-imitational events and as the starting point of a different kind of treatment. Second, while the two lower-level units that precede the IV (mm. 1–10, 11–14) are of different length, they can nonetheless be heard as parallelistic, especially because the β passages (mm. 9–10 and 13–14) are identical, whereas the subsequent units (mm. 15–16, 17–18) are obviously

parallelistic with each other.²⁷ Third, the IV is also marked by some new details of design, the most striking of which is the rhythmic treatment of the high g^2 .²⁸

Over the course of the prelude, the α figure makes four prominent appearances in the right hand, always initiating a significant unit of design. These occurrences highlight four harmonies, shown by large boldface Roman numerals in Example 5: the opening I, the IV in m. 15, the V in m. 21, and the concluding I in m. 45. Design offers thus first-order evidence, through both partition and parallelism, to a I–IV–V–I harmonic framework. The left hand’s octave leap gestures, which articulate the V (m. 21) and the concluding I (m. 45), form an additional aspect of parallelism, buttressing the V–I connection. These aspects of parallelism hold crucial implications for the structural roles of the tonics in mm. 39 and 45. Whereas strong parallelism binds the latter tonic with the preceding elements of the I–IV–V–I framework, the former tonic is marked by sixteenth-note figuration that completely deviates from its surroundings. This suggests that in some sense it is only the latter tonic which offers definitive completion for the framework, a point to be clarified presently.

As discussed above, considerations of second-order evidence cannot be based on the harmonic framework alone but presuppose allowing for upper-voice events. Do the structural indicators support an archetypal top-voice line above the I–IV–V–I framework? Above the opening I, one can see a conflict between register, that favors the fifth (a^1), and meter, which favors the octave (d^1). While,

²⁶ Consider, for example, Brown’s (2005: 76) assertion, that “We have seen that the explanatory laws underpinning Schenkerian theory were actually discovered empirically in the *Harmonielehre* and *Kontrapunkt I*, long before Schenker formulated his concept of a single tonal prototype. [...] After spending the next decade studying a broad range of functional monotonal compositions, Schenker discovered empirically that he could reformulate this set of explanatory laws in terms of prototypes, transformations, and levels.”

²⁷ If one considers merely the succession of chords, ignoring the aspects of design discussed here, one may identify a harmonic sequence starting from the dominant of V in m. 9, which might be cited as an argument for Schenker’s reading of a dominant prolongation in mm. 11–21. However, it should be regarded as another of the main virtues of Schenkerian analysis that it permits us to identify chord significance in a way that is not mechanically derivable from the succession of chords but allows for their compositional treatment. The parallelism between the motions from the opening I to the V in m. 11 and from this V to the IV in m. 15 suggests (among other factors) that the V is an intermediate element in a larger motion from I to IV (supporting the d^2 – c^2 – b^1 passing motion) even though the relationship between the V and IV already anticipates and helps to propel the subsequent descending sequence. (The indicated structural status of the $I\sharp^7$ [V⁷ of IV] in mm. 13–14, again, is supported by registral emphasis and by its position at the end of the unit of design.)

²⁸ Since the figuration in m. 20 deviates from the preceding events in the second large unit, one may question whether it is justified to include this measure within this unit or whether it should be indicated as a one-bar unit also at the upper level. Owing to the inordinate brevity of this unit, I have shied away from such an indication, even though it would support the present analysis by highlighting the *Urlinie* $\hat{3}$.

as noted above, a systematic treatment of such conflicts goes beyond the scope of this article, I would suggest that in these circumstances this conflict is clearly resolved in favor of the fifth, which is more strongly activated melodically ($\hat{5}-\hat{6}-\hat{4}-\hat{3}$ in mm. 7) and further reinforced by its transfer to the high register (a^2) in m. 13. Above the V in m. 21, we again encounter the fifth (e^2) as highest in register and becoming activated melodically. The concluding tonic (m. 45), by contrast, shows the α figure in a new guise which emphasizes the octave (d^2) through both register and meter. The right hand's registral events between the V (m. 21) and the concluding I (m. 45) also offer some corroboration for the view that these two harmonies are structurally connected: whereas these V and I support the high e^2 and d^2 , the intervening V_5^6-I motion (mm. 38–39) accompanies a lower g^1-f^1 motion, pointing to an unfolding figure e^2-g^1, f^1-d^2 . As shown by slurs above the score in Example 5, this figure is an enlargement of a motive that saturates preceding events starting from $b_4^2-d^2, c^2-a^2$ in mm. 9–13. This unfolding sheds light on the structural significance of the two tonics close to the conclusion: while the bass in m. 39 already represents the concluding I, the upper voice has yet to regain the top-voice $\hat{1}$, which is achieved during the remaining cadential events.²⁹

The harmonies of the I–V–I *Baßbrechung* support thus A, E, and D, or $\hat{5}-\hat{2}-\hat{1}$, as locally governing top-voice tones in accordance with the normal 5-*Urlinie* pattern. A crucial question is, however, whether the structural indicators support filling in the gap between the $\hat{5}$ and the $\hat{2}$ (*Leerlauf*). To consider this question, we have to focus on the events above the enlarged IV (mm. 15–20). While the α figure appears in its original guise in m.

15, its fifth, d^2 , appears now as an intermediate element between the metrically strong b_4^1 and the registrally highlighted g^2 . Both b_4^1 and g^2 hold a stepwise relationship with the opening $\hat{5}$. The g^2 , marked with a new rhythmic gesture, connects with a^2 , the registrally transferred *Kopftön*. The downbeat b_4^1 connects registrally with the original a^1 and leads sequentially to g^1 in m. 19, where the higher registral strand leaves off. At this point, we have thus been guided both by register and meter from A to G, or from $\hat{5}$ to $\hat{4}$. This is followed by the $\hat{3}$ (f^1) at the downbeat of m. 20, and then, in the next measure, by the $\hat{2}$ (e^2), the top-voice tone of the prolonged dominant.

Several indicators thus do support the filling-in of the *Urlinie* stretch between $\hat{5}$ and $\hat{2}$, if we compare Bach's composition to what would have been achieved by a more mechanical transposition of the α figure. While this suggests that there is considerable second-order evidence for the *Urlinie* concept, assessing the strength of this evidence is far from straightforward. It should be admitted that the evidence is less than maximal (and weaker than for the fifth-descents in the previous analysis). A weak spot in the *Urlinie* is the $\hat{3}$ (m. 20). While it is brought out by meter and design,³⁰ it governs only a short span and denies the ultimate clarification to registral events. One might easily imagine compositional solutions that provide a stronger support for the $\hat{3}$. To illustrate this, I have sketched one such solution in Example 6. In this recomposition, the *Urlinie's* transference to the higher octave is clarified through consistent couplings prior to the high $\hat{2}$ ($a^1-a^2, g^2-g^1, f^1-f^2, e^2, d^2$), whereas the real Prelude lacks f^2 .

The $\hat{4}-\hat{3}$ -*Urlinie* motion is an issue that I discussed extensively in my recent article on Bach's Inventions (Väisälä 2009: 132–148). To put

²⁹ As suggested by one of the anonymous reviewers, the ending can be compared with that of Prelude in C Major from *WTC I*, as analyzed by Schenker (1969). In both cases, the structural dominant supports a motion from *Urlinie* $\hat{2}$ to $\hat{4}$ above the dominant, which is answered by $\hat{3}-\hat{1}$ above the concluding tonic. In the C-major Prelude, Schenker identifies the high d^2 in the penultimate bar as representing the *Urlinie* $\hat{2}$ despite its position above the concluding tonic harmony, that is, as a suspension. As shown by the dotted tie with the question mark in the present Example 7, one might consider a similar interpretation for the e^2 (m. 45) that leads to the final $\hat{1}$ in the D-minor Prelude (m. 45). One major difference between these cases is that the conclusion of the C-major Prelude involves a tonic pedal, whereas the prolongation of the concluding I in the D-minor Prelude includes a cadential progression, whose structural significance is far from self-evident. Were it not for the features of design and upper-voice register that support the connection between the V in m. 21 and the final I (m. 45), one would be inclined to interpret the cadential dominant (m. 44) as the main structural dominant, coinciding with *Urlinie* $\hat{2}$ – as Schenker indeed does (Example 4). However, while cadential dominants often fulfill such a structural function, this is not always the case, as is suggested, for example, by Schenker's (1979, Fig. 21 and 24) later conception of interruption, in which the main structural dominant is that of the first branch.

³⁰ Design supports m. 20 both because of its position just before the large uniform unit of mm. 21–38 and because of the deviation of its "la" figuration from the preceding measures; cf. note 28 above.

Example 6. A recomposition of m. 20 in Bach's Prelude in D Minor.

it simply, I argued that when there is definite initial emphasis on the $\hat{5}$, clearly articulated $\hat{4}$ and $\hat{3}$ follow consistently, yielding strong second-order evidence for the notion of 5-*Urlinie*. In this Prelude, *Urlinie* articulation, and the concomitant second-order evidence, is somewhat weaker than what is typical of the Inventions, which raises complex questions about the significance of this feature. These questions cannot be discussed at length here, but for avoiding misunderstanding it should be noted that by Example 6 I do not wish to suggest that this is the way Bach "ought" to have composed. Rather, the weak $\hat{3}$ links with other characteristic features of this Prelude that over-emphasize the $\hat{2}$ in relation to the preceding events. The design shows a hastening pace of improvisatory, capricious events at the beginning (mm. 1–20), which sharply contrasts with the ensuing surprisingly large and uniform prolongation of the $\hat{2}$. From the motivic perspective, the events from the high b_4^2 (m. 9) onwards can be perceived as a restless search for a definitive statement of the unfolding motive (b^2-d^2 , c^2-a^2 ; a^2-c^2 , $b_4^1-g^2$, etc.; see slurs in Example 5), which is then overwhelmingly rewarded by the concluding prolongation of $\hat{2}-\hat{4}$ (e^2-g^1 , f^1-d^2). While the compositional alternative in Example 6 would

strengthen the *Urlinie*, it would also weaken the overwhelming effect of the $\hat{2}$, a key characteristic in this Prelude.³¹

Example 7 summarizes pertinent structural and motivic features, also adding some details not discussed above.

3.2. Bach, Fugue in D Minor from *The Well-Tempered Clavier I*

Whereas Schenker's analysis of the D-minor Prelude represents his earliest attempts towards a comprehensive interpretation of structural levels, my final example, the Fugue in D Minor from *The Well-Tempered Clavier I*, relates with his last major work, *Free Composition*, which includes a graph of this Fugue (Fig. 156). Example 8 reproduces Schenker's graph.

The issue of $\hat{4}-\hat{3}$ *Urlinie* motion is central also for this example. According to Schenker, the opening subject establishes $\hat{5}$ as *Kopftön*, which, of course, implies that $\hat{4}$ and $\hat{3}$ should be found somewhere. For assessing Schenker's reading of the $\hat{4}-\hat{3}$ motion, we should first note that the Fugue divides into two sections, the first section (mm. 1–21) modulating from the tonic to the

³¹ Another feature that adds to the prominence of the $\hat{2}$ (the e^2 in m. 21) is that the preceding motivic repetitions break off just at the point in which e^2 would have occurred (after $f^2-a^1-g^1$ in mm. 17–19); see bracketed notes in Example 7, highest stave.

Example 7. Bach, Prelude in D Minor: overall voice-leading graph.

Motivic statements: 9 15 21 39 45

(omitted) (saved until this point)

5 4 3 2 1

Cf.

1⁸⁻ 7⁻ IV⁸⁻ -7 V⁸⁻ (IV) -7 I V I

Reduction

(?)

Detailed description: This block contains a musical score for Example 7, which is Bach's Prelude in D Minor. The score is presented in three systems: a vocal line (treble clef), a piano line (treble clef), and a bass line (bass clef). Above the vocal line, five circled numbers (9, 15, 21, 39, 45) indicate specific measures. A voice-leading graph is drawn over the score, with lines connecting notes across staves. Annotations include '(omitted)' and '(saved until this point)'. Below the piano line, a series of numbers (5, 4, 3, 2, 1) are placed above the staff, with lines connecting them to notes in the piano part. A 'Cf.' (compare) bracket is placed under the piano line. Below the bass line, a sequence of Roman numerals and accidentals is provided: 1⁸⁻, 7⁻, IV⁸⁻, -7, V⁸⁻, (IV), -7, I, V, I. Below the main score is a 'Reduction' section, which shows a simplified version of the piano and bass lines. A question mark (?) is placed above a note in the reduction's piano line.

Example 8. Schenker's graph of Bach's Fugue in D Minor (*WTC I*).

156

m. 1 5 6 8 9 12 13 15 16 17 18 20

(subject) (answer) (a.) (a.)

I II V

m. 21 23 25 26 27 28 33 34 35 37 38 39 40 41 42 43

(s.) (s.) (s.) (s.) (s.) (s.)

I (V) I

Detailed description: This block shows Schenker's graph for Example 8, which is Bach's Fugue in D Minor from the Well-Tempered Clavier, Book I. The score is in two systems. The first system covers measures 1 to 20, and the second system covers measures 21 to 43. The notation includes a treble clef and a bass clef. A complex voice-leading graph is drawn over the score, with lines connecting notes across staves. Annotations include '(subject)', '(answer)', '(a.)', and '(s.)'. Roman numerals (I, II, V) are placed above the score. A large number '156' is written on the left side of the first system. At the bottom of the second system, the Roman numerals 'I (V) I' are written.

dominant and the second section (mm. 21–44) returning to the tonic. Since the $\hat{4}-\hat{3}$ *Urlinie* motion is, according to Schenker, supported by a passing dominant seventh that leads to the structural tonic return, the assessment of his *Urlinie* reading ties inseparably with the question of locating that return, in other words, determining how far the dominant prolongation extends.

Example 9 shows the beginning of the second part of the Fugue up to the beginning of the “rhyme” passage – a module that occurs in two transpositions, concluding the two sections of the Fugue (compare mm. 17–21 with mm. 39–43). Schenker locates the tonic return in m. 28, which, to be sure, contains a salient D-minor chord and is even marked by a statement of the subject at the original level. However, local design lays doubt on the structural decisiveness of the D-minor chord. As shown by brackets, the design is based on a *stretto* of all three voices. The statement of the original subject is sandwiched – both temporally and registrally – between the two other statements: an inversion in the highest voice and a varied inversion in the lowest. Harmonically, the *stretto* begins from a salient inverted V^7 (m. 27) – still prolonging the dominant attained at the end of the first section (in Schenker’s analysis as well as mine)³² – and proceeds then, through Schenker’s tonic, to the G-minor chord in m. 31. This chord is further underlined by the low register of its bass, connecting with the original dominant (m. 21). Design and register thus suggest that Schenker’s tonic functions as an intermediate element in a $V-(I)-IV$ progression, a progression that occurs frequently in the second part of Bach’s binary-form pieces. The statement of the original subject refers to the opening but fails to establish tonic return, and is thus comparable to the many instances in homophonic forms in which thematic and harmonic return do not coincide (as for Bach’s music, see, e.g., Schachter’s analysis of rondo returns in *Gavotte en Rondeaux* in Schachter 1987b).

As shown by the annotations above the score in Example 9, Schenker’s $\hat{4}-\hat{3}$ motion is actually one among several similar events which suggest but fail to establish a tonic return during the second section. Of these events, the first three (mm. 24–25, 27–28, and 33–34) are weakly supported by structural indicators in comparison to the last (mm. 38–39). The D-minor chords in mm. 25 and 34 are, to be sure, marked by a local change in design, but they are registrally attenuated, and eclipsed by subsequent returns to outer registers (mm. 27 and 37, respectively).³³ The final V^7-I progression in mm. 38–39, leading to the concluding “rhyme,” occurs in a more crucial juncture of design than any of the preceding ones, and involves both outer registers and considerable gestural emphasis. This suggests that the decisive tonic return only occurs at the beginning of the “rhyme” (m. 39), whereas the preceding D-minor chords appear as anticipatory foreground references to the structural goal. Such foreground references, which may be understood as manifesting a striving towards a structural goal prior to its attainment, are common in prolongational structures, and one of the virtues of Schenkerian analysis is that it allows us to make a distinction between the two. Schenker’s evidential understanding, however, seems to have fallen short of offering a consistent basis for making such distinctions.

If the tonic return only occurs in m. 39, this implies that the only logical alternative for an *Urlinie* $\hat{4}$ is the g^2 that immediately precedes it, that is, the third-to-last sixteenth-note in m. 38. This, however, raises the question whether this g^2 actually makes a satisfactory *Urlinie* tone. Not only is it inordinately short – even more inordinately than the $\hat{3}$ in the previous example – but there also seem to be no compositional features to support its connection with the original $\hat{5}$ (a^1) and the registral transfer involved (a^1-g^2).³⁴ Indeed, as suggested by my analytical graph in Example 9, the focal point for the preceding upper-voice events would seem to be e^2 rather than the $\hat{5}$ (a^1 or a^2). In

³² It is not self-evident what should be regarded as the governing bass tone in m. 27. Whereas Schenker shows the root A as governing (Example 8), which is certainly defensible on the basis of its registral position and temporal position just before the “I,” Example 9 regards $c\sharp$ as primary, because it is the resolution of the metrically stronger d appoggiatura and participates in stepwise relationships (admittedly a criterion outside the four structural indicators). This issue is not consequential for the main line of the present argument.

³³ In m. 25, the D-minor chord is attenuated by the right hand’s low registral placement between the prominent e^2 in m. 22 and the g^2 in m. 27. In m. 34, the arrival at the I^6 is attenuated by the left-hand’s relatively high register.

³⁴ Similar considerations apply to Schenker’s *Urlinie* $\hat{4}$.

Example 9. Bach, Fugue in D Minor, mm. 21–39: score and voice-leading graph.

Reduction

Example 10. Bach, Fugue in D Minor, mm. 1–17: voice-leading graph.

Cf.

I (IV) V[#] (II) -7 I

(voice-leading sketch continued)

I⁵⁻ -6 II⁶ V I⁷ IV II⁷ V

the present terminology, this seems to suggest that first-order evidence compels us to locate the *Urlinie* $\hat{4}$ at the end of m. 38, but this results in a lack of second-order evidence for the *Urlinie*, since the compositional treatment of this $\hat{4}$ hardly testifies to the kind of fundamental significance that the *Urlinie* notion assumes.

This conclusion would be premature, however, since it relies on Schenker's determination of the $\hat{5}$ as the initially established *Kopfton*. And, I would suggest, Schenker's reading of the opening is as questionable as the rest of his analysis. Example 10 depicts the opening. While the subject rises vigorously to the fifth (a^1 , m. 3), the ascent does not stop there but goes on to the octave (d^2 , m. 6), whose attainment is underlined by the entry of the lowest voice and by the concomitant completion of the opening I–V–I progression. As shown by "IN" markings and brackets in the graph, the unity of this ascent is enhanced by the parallelistic approach to each tone of the D-minor triad (f^1 , a^1 , and d^2) from an upper incomplete neighbor. The strongest parallelism, however, connects the fifth and the octave, since they appear within almost identical stretches of surface figuration, as can be

verified by comparing mm. 2–3 with mm. 5–6; see brackets above the score.

These considerations suggest that the fifth (a^1) functions as a transit point in a larger ascent, whose goal is the octave (d^2). The status of the octave as the governing top-voice tone is borne out by subsequent events, which, as sketched in Example 10, remain in touch with the d^1 , starting from the striking e_b^2 in m. 9.³⁵ If we recall that e^2 functions as a focal upper-voice point in the first part of the second section (as illustrated in Example 9), an alternative picture of the overall top voice emerges. As suggested by Example 11, the f^2 at the beginning of the concluding "rhyme" (m. 39) is not an intermediate stop in the *Urlinie* but a goal of an extended initial ascent (*Anstieg*) $\hat{1}-\hat{2}-\hat{3}$ ($d^2-e^2-f^2$), which is then followed by a brief *Urlinie* descent.³⁶ The preceding g^2 , whose satisfactoriness as an *Urlinie* tone was questioned above, plays the more modest role of an incomplete neighbor, embellishing the $\hat{1}-\hat{2}-\hat{3}$ ascent. Since such an incomplete neighbor is also characteristic of the fugue subject, the large-scale top voice can be understood as an enlargement of the very opening foreground figure.

Example 11. Bach, Fugue in D Minor, overall voice-leading sketch.

³⁵ A comparison between Examples 8 and 10 will reveal several further differences between my and Schenker's readings of the first section.

³⁶ While this paper concentrates on the evidential significance of objectively observable compositional features, it might not be out of place to add that conceiving of the f^2 in m. 39 as a large-scale goal rather than an intermediate stop also corresponds much better with its musical effect – at least in my subjective experience.

If the I–V–I progression of mm. 1–39 thus supports the $\hat{1}\text{--}\hat{2}\text{--}\hat{3}$ *Anstieg*, this offers, once again, some second-order evidence for Schenkerian theory, since the *Anstieg* is, of course, an archetypal Schenkerian linear pattern. However, a more precise assessment of the strength of the evidence would require greater precision in several aspects of the analysis, including the strength and unequivocality in which the structural indicators support each top-voice tone.³⁷

4. Summary and Conclusions

The above discussion is based on the hypothesis that the four structural indicators (design, register, meter, gestural emphasis) are among primary means through which composers such as Bach realized Schenkerian patterns. Through analytical examples, I have demonstrated how these indicators offer criteria, or first-order evidence, for Schenkerian analysis. Moreover, I have argued that these indicators support archetypal Schenkerian patterns – especially stepwise linear progressions – to the extent that offers second-order evidence for the above hypothesis and thus for Schenkerian theory.

As regards Schenker's readings, the C-minor Fugue exemplifies a case in which the structural indicators offer substantial support for them. The discussion of the D-minor Prelude suggests, however, that Schenker's readings also include features that lack support in these indicators and – as far as I can see – in any consistently applicable empirical criteria based on actual compositional features. Whereas Schenker's analysis of this Prelude is an early one, Schenker's graph of the D-minor Fugue in *Free Composition* is one of the examples that suggest that he remained without a satisfactory awareness of the ways in which such features can confirm or fail to confirm a reading. While I will not delve into speculations about the methodology and motivation behind Schenker's

readings, it would seem that his analytical practice was based on a complex mixture of genuine empirical observations and *a priori* ideas, which occurred to him for various reasons and which he often failed to test empirically. However, as I have attempted to demonstrate above, this failure does not mean that present-day Schenkerians cannot seek to test Schenkerian ideas empirically or that such a test cannot yield positive results. In the last two of the above Bach examples, I argued that while Schenker's readings lack empirical support, structural indicators do support Schenkerian patterns undetected by Schenker, thus yielding second-order evidence for Schenker's theory.

As I hope has become evident for the reader, the main aim of the present paper is not to diminish anyone's appreciation for Schenker. His contribution to the better systemic understanding of tonal music is enormous, his analyses are often extremely perceptive in comparison to previous analytical attempts, and his neglect of evidential questions may be understood as reflecting the idealist stance characteristic of the intellectual atmosphere in his time. Nevertheless, however highly we regard Schenker's merits, the cause of Schenkerianism is not promoted by ignoring the weak spots in his work. Schenker's neglect of evidential principles has had a harmful effect on Schenkerianism, since it has resulted both in bad, unsubstantiated analysis and in the defective understanding of the kind and extent of the descriptive power of Schenkerian theory. In particular, it has remained unclear whether and on what grounds Schenker's musical ideas can be separated from his ideological views. In fact, several authors have recently argued against the viability of such separation.³⁸ I submit that the most effective way to counter such arguments is to strengthen the evidential basis of Schenkerianism on the grounds of empirically identifiable compositional features such as the four structural indicators.

³⁷ In Väisälä 2009 I argue that Bach's Inventions show a significant tendency towards figure enlargements comparable to that shown in the present Example 11. Relying on this argument, one might regard such a tendency as another aspect of second-order evidence for the compositional pertinence of the structural levels on which such enlargements rely.

³⁸ See, for example, Cook's (2007: 301 ff.) critique of Forte, Rothgeb, and Schachter. According to Cook (*ibid.*: 317), "[analysis] is a process inevitably informed by our experiences of the personal, social, and cultural world in which we live, and so analysis becomes a site for the construction of music as socially meaningful." Such a statement seems to ignore that analysis is concerned with several complex questions that are syntactic rather than social by nature and that can be answered on the basis of compositions' internal properties, such as the four structural indicators.

The present ideas of such an evidential basis are, of course, sketchy and preliminary. While I hope to have illuminated what *kind* of evidence we can identify for Schenkerian theory in the discussed examples, I have not attempted to assess the precise strength of the evidence. For a more precise probabilistic assessment, we would have to face several difficult problems concerning both the precise application and mutual relationships of the structural indicators and the quantification

of the "Schenkerian archetypalness" of the supported patterns. Whether the Schenkerian community will have motivation, skill, time, and energy to proceed in the direction of a more systematic evidential theory remains to be seen. But any kind of progress in Schenkerians' awareness of evidential questions would be welcome for minimizing the effects of Schenker's *disservice* and for helping his invaluable *service* to musical understanding reach its true potential.

References

- Brown**, Matthew 2005. *Explaining Tonality*. Rochester: Univ. of Rochester Press.
- Cook**, Nicholas 2007. *The Schenker Project*. Oxford: Oxford Univ. Press.
- Dreyfus**, Laurence 1996. *Bach and the Patterns of Invention*. Cambridge (USA): Harvard Univ. Press.
- Laufer**, Edward 1981. Review of *Free Composition* by Heinrich Schenker. – *Music Theory Spectrum* 3, pp. 158–184.
- Lerdahl**, Fred and Ray Jackendoff 1983. *A Generative Theory of Tonal Music*. Cambridge (USA): MIT Press.
- Oster**, Ernst 1961. Register and the Large-Scale Connection. – *Journal of Music Theory* 5, pp. 54–71. (Reprinted in *Readings in Schenker Analysis and Other Approaches*. Ed. Maury Yeston. New Haven: Yale Univ. Press, 1977, pp. 54–71.)
- Rothgeb**, John 1971. Design as a Key to Structure in Tonal Music. – *Journal of Music Theory* 15, pp. 230–253. (Reprinted in *Readings in Schenker Analysis and Other Approaches*. Ed. Maury Yeston. New Haven: Yale Univ. Press, 1977, pp. 72–93.)
- Schachter**, Carl 1987a. Analysis by Key: Another Look at Modulation. – *Music Analysis* 6, pp. 289–318. (Reprinted in Carl Schachter 1999. *Unfoldings*. New York: Oxford Univ. Press, pp. 134–160.)
- Schachter**, Carl 1987b. The *Gavotte en Rondeaux* from J. S. Bach's Partita in E Major for Unaccompanied Violin. – *Israel Studies in Musicology* 4, pp. 7–26.
- Schachter**, Carl 1996. Schoenberg's Hat and Lewis Carroll's Trousers: Upward and Downward Motion in Musical Space. – *Aflame with Music*. Ed. Brenton Broadstock et al. Melbourne: Centre for Studies in Australian Music, pp. 327–341.
- Schenker**, Heinrich 1969. *Five Graphic Music Analysis* (photographic reprint of *Fünf Urlinie-Tafeln* [1932], with an introduction by Felix Salzer). New York: Dover.
- Schenker**, Heinrich 1979. *Free Composition*. Trans. Ernst Oster (German original *Der freie Satz*, 1935). New York: Schirmer Books.
- Schenker**, Heinrich 1996. *The Masterwork in Music*, Vol. II. Ed. William Drabkin, trans. Ian Bent, William Drabkin, John Rothgeb, and Hedi Siegel (German original *Das Meisterwerk in der Musik*, 1926). Cambridge: Cambridge Univ. Press.
- Schenker**, Heinrich 2004. *Der Tonwille*, Vol. I. Ed. William Drabkin, trans. Ian Bent, William Drabkin, Joseph Dubiel, Timothy Jackson, Joseph Lubben, and Robert Snarrenberg (German original in five volumes in 1921–1923). Oxford: Oxford Univ. Press.
- Temperley**, David 2007. *Music and Probability*. Cambridge (USA): MIT Press.
- Väisälä**, Olli 2008. Analyzing Bach – and How Bach Actually Wrote. – *The Journal of Schenkerian Studies* 3, pp. 160–210.
- Väisälä**, Olli 2009. Bach's Inventions: Figuration, Register, Structure, and the 'Clear Way to Develop Inventions Properly'. – *Music Theory Spectrum* 31, pp. 101–152.
- Väisälä**, Olli 2010. Schenkerin haitallinen vaikutus schenkeriläisyydelle. – *Säteitä 2010: Sävellyksen ja musiikin-teorian osaston vuosikirja* 2. Ed. Veijo Murtomäki et al. Helsinki: Sibelius-Akatemia, pp. 85–108. (Also available at <http://sate.siba.fi/fi/julkaisut/%2525252fsateita1.pdf>.)

Schenkeri karuteene schenkeriaanlusele: kolm näidet Bachi loomingust

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Kuigi Schenker osutas hindamatuid teeneid muusikateooria ja -analüüsi arengule, kirjeldades tonaalse muusika organiseerimisprintsipi tänapäeval „schenkeriaanluse“ nime all tuntud meetodil, ei ole tema tööd vabad puudustest. Põhiline viga, millele käesolevas kirjutises viidatakse, on asjaolu, et struktuuritasandite vastastikuste suhete detailselt väljaarendatud süsteem pole tal kooskõlas samavõrd adekvaatsete evidentsiaalsete printsipidega, mis määravad struktuuritasandite ja muusikaliste sündmuste vahelisi suhteid. See viga on osutanud schenkeriaanlusele karuteene, põhjustades ebarahuldavaid, põhjendamatuid analüüse ja tekitades ebaselgust Schenkeri põhimõtete deskriptiivse potentsiaali olemuse ja ulatuse suhtes. Eriti on jäänud lahtiseks küsimus, kas ja kuidas põhjendada väidet, et neil printsipidel on tonaalse muusika meistrite loomingu jaoks kompositsiooniline tähendus ka Schenkeri ideoloogiast sõltumatult.

Kirjutises on eristatud kaht keskset evidentsiaalsuse valdkonda. Esimest liiki evidentsiaalsus puudutab muusikaliste sündmuste struktuuralse asendi määratlemist analüüsis Schenkeri teooria eeldustest lähtuvalt. Teist liiki evidentsiaalsus puudutab neid eeldusi endid. Võib väita, et mõlemale valdkonnale võib läheneda nelja liiki kompositsiooniliste iseärasuste alusel, milleks on vormindus (*design*), register, meetrum ja muusikaliste žestide rõhutatus (*gestural emphasis*). Nende iseärasuste – struktuuriliste näitajate (*structural indicators*) – mõju on illustreeritud kolme näite varal Bachi loomingust.

Sissejuhatava näitena on vaadeldud fuuga C-duur („Das Wohltemperierte Klavier“ I) analüüsis Schenkeri kirjeldatud kaht ülahääle laskuvat kvindikäiku $\hat{5}-\hat{4}-\hat{3}-\hat{2}-\hat{1}$. Kuigi Schenkeri tõlgendus pole igas mõttes veenev, on need kvindikäigud struktuuriliste näitajate poolt selgelt toetatud, seda nii harmoonilise plaani kui ka ülahääle ehituse mõttes. Seega võib oletada, et Schenkeri tõlgendus lähtub vaikumisi neist näitajaist tingitud esimest liiki evidentsiaalsusest. Pealegi pole vist juhus, et need näitajad toetavad ülahääle astmelist liikumismalli, kinnitades teist liiki evidentsiaalsusena oletust, et Bach tundis oma loometöös vajadust just sellise vorminduse järele. Kompositsioonilisteks detailideks, mida võib seletada selle oletuse alusel, on näiteks ümbritsevast eristuv sünkopeeritud rütm, mis rõhutab esimese kvindikäigu teist heli (f^2 taktis 6, vt. näide 2) ja sekventsiliselt korratud alumisel abihelikäigul põhinev vorminduse paralleelsus, mis ühendab teise kvindikäigu helid ühtseks liiniks ($\hat{5}-\hat{4}-\hat{3}$ taktides 9–11 ja $\hat{2}$ taktis 17; vt. näites 3 ringidega märgitud noodid).

Kuigi vaadeldud näites toetavad neid kvindikäike selgelt struktuurilised näitajad, leidub Schenkeri analüüside seas ka tõlgendusi, mida on raske põhjendada nii nende näitajate kui ka mistahes muude empiirilisel leitud kompositsiooniliste iseärasustega. Selle kinnituseks on Schenkeri varane (1923. aasta) analüüs väikesest prelüüdist *d*-moll (BWV 926), kus muusikaliste sündmuste struktuuriline tähtsus näib meelevaldselt tõlgendatuna. Struktuurilised näitajad võimaldavad alternatiivset analüüsi (näited 5 ja 7), mis sisaldab ühtlasi teatud määral teist liiki evidentsiaalsust, sest ka siin toetavad mõningad kompositsioonilised iseärasused süvatasandi laskuvat kvindikäiku $\hat{5}-\hat{4}-\hat{3}-\hat{2}-\hat{1}$. Vaadeldava näite puhul tõstatab struktuuriliste näitajate uurimine küsimuse Schenkeri analüüsi deskriptiivsest potentsiaalset, kuigi samas kinnitab tema teooriat.

Viimane näide, Fuuga *d*-moll („Das Wohltemperierte Klavier“ I), mille graafiline analüüs leidub raamatus „Der freie Satz“, tekitab põhiliselt samu küsimusi, jättes mulje, et Schenkeri arusaamine evidentsiaalsusest jäi ka tema hilistes analüüsides ebarahuldavaks.

Kuigi neist näidetest ilmneb, et schenkeriaanluse evidentsiaalsed alused vajavad tugevdamist nelja struktuurilise näitaja põhjal, on käesolev artikkel vaid probleemi esialgne käsitlemine. Lahtiseks jäävad mitmed keerukad küsimused, mis puudutavad nende näitajate kasutamist, vastastikuseid suhteid ja tõenäosuslikku evidentsiaalset potentsiaali (nagu ka teisi tegureid).