

Schoenberg – Schenker – Bach

A Harmonic, Contrapuntal, Formal Braid

Matthew Arndt

This article follows on the heels of one by Holly Watkins, who argues that music, “a subsystem of the social system of communication,” can evoke the organic (the bodily and the psychic) not by forming a self-contained unity of parts and whole but through the “internal recursiveness” of musical works, their external “recursiveness vis-à-vis other music,” and – crucially – “the knowingness the music displays toward its own operations.” I adopt the premise that music evokes the organic most vividly not through recursive processes in individual systems but through the as-if intentional integration of such processes in multiple systems, of which I concern myself particularly with the harmonic, contrapuntal, and formal domains (or, more precisely, the motivic). I offer correctives to the organicist theories of Arnold Schoenberg and Heinrich Schenker, which similarly concern these domains, and especially to their reception. And I explore this direction through an analysis of J. S. Bach’s Prelude No. 7 in E-flat major from book 1 of *The Well-Tempered Clavier*, BWV 852, a singular piece that billows forth like an unfathomable blossom.

Dieser Artikel folgt einem Essay von Holly Watkins, in dem die Autorin argumentiert, dass Musik, »a subsystem of the social system of communication«, das Organische (das Körperliche und das Psychische) nicht durch die Bildung einer in sich geschlossenen Einheit von Teilen und Ganzem, sondern durch die »internal recursiveness« von Musikwerken, ihre äußere »recursiveness vis-à-vis other music« und – was entscheidend ist – durch »the knowingness the music displays toward its own operations« hervorrufen kann. Ich übernehme die Voraussetzung, dass Musik das Organische nicht durch rekursive Prozesse in einzelnen Systemen, sondern durch die quasi-intentionale Integration solcher Prozesse in mehreren Systemen am anschaulichsten hervorruft, von denen ich mich insbesondere mit dem harmonischen, kontrapunktischen und formalen Bereich (oder, genauer gesagt, dem motivischen) beschäftige. Ich biete Korrekturen zu den organizistischen Theorien von Arnold Schönberg und Heinrich Schenker an, die diese Bereiche ebenfalls betreffen, und insbesondere zu ihrer Rezeption. Darüber hinaus erforsche ich diese Richtung durch eine Analyse von J. S. Bachs Präludium Nr. 7 in Es-Dur aus Buch 1 des *Wohltemperierten Klaviers*, BWV 852, einem einzigartigen Stück, das sich wie eine unergründliche Blüte fortreibt.

Schlagworte/Keywords: development and unravelling; Entwicklung und Abwicklung; Geste; gesture; motif; Motiv; musical idea; musikalischer Gedanke; Niklas Luhmann; organic; organisch

[...] indem wir dem Leben von unserem Leben geben,
das nur durch die geringe Verbindung, die wir mit ihm
haben, vorläufig für uns tot ist.
Arnold Schoenberg¹

Es ist somit nicht allein die Hingabe, der Genuß, den
wir vom Meisterwerk abziehen, wir empfangen darüber
hinaus Vorteile für die Kräftigung unseres Lebens.
Heinrich Schenker²

1. ONCE MORE ON THE ORGANIC IN MUSIC

After decades of standing for regressive or repressive ideology in the eyes of many music scholars,³ the notion of the organic in music has taken on new pertinence in light of recent research on non-human cognition and networks in biology, ecology, and philosophy. The organic in music “challenges us to think anew about what our bodies, our sociality, and our creativity share with other living entities and the ecologies in which they are enmeshed.”⁴ As Holly Watkins proposes, “the problem is not with the thesis that certain musical processes create a semblance of the organic, but with the models of the organism brought in to give content to that semblance.”⁵ Above all, the model of an organism producing itself out of itself and forming a unity of parts and whole, ubiquitous in nineteenth- and twentieth-century organicist discourse, is inaccurate and hence potentially repressive, because “the ‘parts’ of organisms [...] are not self-contained, independent units”; rather, according to Niklas Luhmann’s systems theory, “each so-called part of the body is a meeting place for interconnected but functionally independent systems,”⁶ and these bodily systems can be further coupled with psychic and social systems. All such systems operate and maintain themselves through *recursion*, the iterative looping of output back to input.⁷ From this it follows, as Watkins argues, that music, a “subsystem of the social system of communication,”⁸ can evoke the organic (the bodily and the psychic)⁹ through the “internal recursiveness” of musical works, their external “recursiveness

1 Schoenberg 1922, 507. An earlier version of this essay made an appearance at the Society for Music Analysis Annual Meeting in Nottingham in 2016. It has especially benefited from the criticism of anonymous reviewers, to whom I extend my sincere thanks.

2 Schenker 1956, 30.

3 On organicism and regression, see for example Watkins 2017, 97; on musical repression, Korsyn 1993, 92 and 100–101; on intellectual repression, Tischer 2009, 56–57. In light of my focus on a piece of German instrumental music and Joseph Kerman’s criticism that organicism serves to privilege this music (1980, 314), I wish to affirm with Holly Watkins that “music’s ability to create impressions of more-than-human vitality in the minds and bodies of its listeners is not the privilege of any particular style or tradition” (2017, 99).

4 Watkins 2017, 99.

5 *Ibid.*, 98.

6 *Ibid.*, 103 and 107.

7 *Ibid.*, 108.

8 *Ibid.*

9 This usage of ‘organic’ is slightly different than Luhmann’s (1993), but it is more in keeping with that of Edward T. Cone (1974, 5), John Covach (2017, 150), Watkins (2017), and others. Traditionally, the musical mind has been understood as some admixture of an “‘experiencing’ work-persona and a ‘controlling’ fictional composer” (Monahan 2013, 355). However, Watkins emphasizes the potential for music to simulate non-human minds (2017, 98). Following Seth Monahan (2013), I recognize a hierarchized

vis-à-vis other music” (that is, their intertextuality), and – crucially – “the knowingness the music displays toward its own operations,” as it were, by influencing its recursion from a particular standpoint.¹⁰

Despite Watkins’ recognition that life, even just bodily speaking, involves multiple systems, when it comes to interpreting music in terms of life, she analyzes only a single system of “melodic and rhythmic discourse,”¹¹ and – following the lead of other writers on musical discourse¹² – focuses on “referring back to and elaborating material already presented” or already existent as its mode of recursion.¹³ In a parallel way, Stefan Rohringer analyzes music in terms of a single Luhmannian system of tonality.¹⁴ By way of contrast, I adopt the premise that music evokes the organic most vividly not through recursive processes in individual systems but through the as-if intentional integration of such processes in multiple systems, of which I concern myself particularly with the harmonic, contrapuntal, and formal domains (or, more precisely, the motivic).¹⁵ For in a piece featuring these domains (especially in eighteenth- to early-twentieth-century music), every note generally has at least one coherence in at least each of these systems,¹⁶ somewhat as virtually every part of the body involves, say, the cardiovascular, musculoskeletal, and nervous systems. If Arnold Schoenberg is right that every detail of a work reflects the whole, just as wherever one cuts the body, blood comes out,¹⁷ then it is also generally true in such cases that the flesh is injured and pain ensues.

This study bears comparison with one by Ariane Jeßulat, who somewhat similarly finds that an impression of the organic arises through the interaction of counterpoint and form,¹⁸ but unlike Jeßulat I find it necessary to offer correctives to both the theories that I draw on and their reception. In particular, I build on and critique the organicist theories of Arnold Schoenberg and Heinrich Schenker,¹⁹ which similarly concern the harmonic,

multiplicity of agents in the evocation of experiencing and controlling, but following Watkins (2017), I wish to leave open the identity of these agents.

10 Watkins 2017, 112, 113, and 109. I want to underscore the intertextuality of organicism in this vein, since Matthias Tischer presents intertextuality as an *alternative* to organicism (2009).

11 Watkins 2017, 109.

12 See for example Hatten 2004; Spitzer 2004, 110; Lidov 2005, 11.

13 Watkins 2017, 111.

14 Rohringer 2009.

15 The harmonic, contrapuntal, and formal domains bear a certain resemblance to Dora A. Hanninen’s sonic, structural, and associative domains respectively (2012). However, only Hanninen’s structural domain involves particular theoretical frameworks, while harmony, counterpoint, and form are all interpretive and theory-dependent. For example, even at the granular level of identifying motive statements, it is useful to distinguish theoretically between several different methods of variation, categories of statements, and categories of coherence. See Arndt 2017, 122–130.

16 On coherence, see Schoenberg 1995, 146–160. On categories of coherence, with particular application to the motivic domain, see Arndt 2017, 128–130.

17 Schoenberg 1976, 5.

18 Jeßulat 2015.

19 Other studies building on Schoenberg and Schenker have focused on harmony (Cinnamon 1984), the motive (Cinnamon 1984; Moreno 2001), the *Grundgestalt* (Epstein 1979; Mathis 1996), other formal components (Schmalfeldt 1991; Whiffin 1996; Schmalfeldt 2011), development, i.e., developing variation (Smith 2005), and the musical idea (Boss 1999), but I understand these concepts rather differently than these authors. To be quite brief, for me, as for Schoenberg, the coordinating concept here is the musical idea, which in turn must be explained “aus einer *Unruhe*” (1995, 106). Only Jack F. Boss’s study comes close to this orientation (1999), and I will comment further on it.

contrapuntal, and formal domains.²⁰ And I explore this direction through an analysis of Bach's Prelude No. 7 in E \flat major from book 1 of *The Well-Tempered Clavier*, BWV 852, a singular piece that billows forth like an unfathomable blossom. Analysis of Bach's prelude concretizes and supports the proposal that a piece of music can evoke – perhaps even provoke? – the organic through recursive processes in the harmonic, contrapuntal, and formal domains not only individually but especially in combination.

2. HARMONY, COUNTERPOINT, AND FORM

Each of these domains has its own mode of recursion that focuses on a different dimension of an abstract musical space, as outlined in Example 1, such that a piece's logical paths of recursion knit together, helping it to fill out the form as if it were a body. The 'harmonic domain' is a world of abstract relations of tones, mediated explicitly or implicitly by generative 'ground tones' (*Grundtöne*) – fundamentals, roots, and tonics.²¹ That is to say, generated partials and tones in chords, scales, regions, and 'pitch fields' (*Tonfelder*) are recursively ground tones for other tones (sometimes cyclically).²² This domain focuses on the vertical dimension, or pitch. The 'contrapuntal domain' consists of voice-leading relations and recursive transformations. This domain operates in the dimension of depth, from background to foreground.²³ The 'motivic domain,' or – loosely speaking – the 'formal,' consists of association of parts through repetition and variation, especially development and unravelling, which I understand differently than many writers; I will say more about them later. (For now let me just clarify that unravelling involves 'polyphony,' which I am distinguishing for the present purposes from 'counterpoint.') This domain focuses on the horizontal dimension, or time, which is why its recursive associative processes are the most intuitive and historically the most commonly associated with organicist analysis,²⁴ as well as – ironically – the alternative of "'mechanist' analysis."²⁵

20 Schoenberg asserts that "man teilt den Stoff der musikalischen Kompositionslehre gewöhnlich in drei Gebiete: Harmonielehre, Kontrapunkt, und Formenlehre" (1922, 8). These areas are treated by numerous writings over his career. The first two volumes of Schenker's *Neue musikalische Theorien und Phantasien* are *Harmonielehre* and *Kontrapunkt*, and the third volume includes the treatise "Versuch einer neuen Formenlehre" (1956, 200).

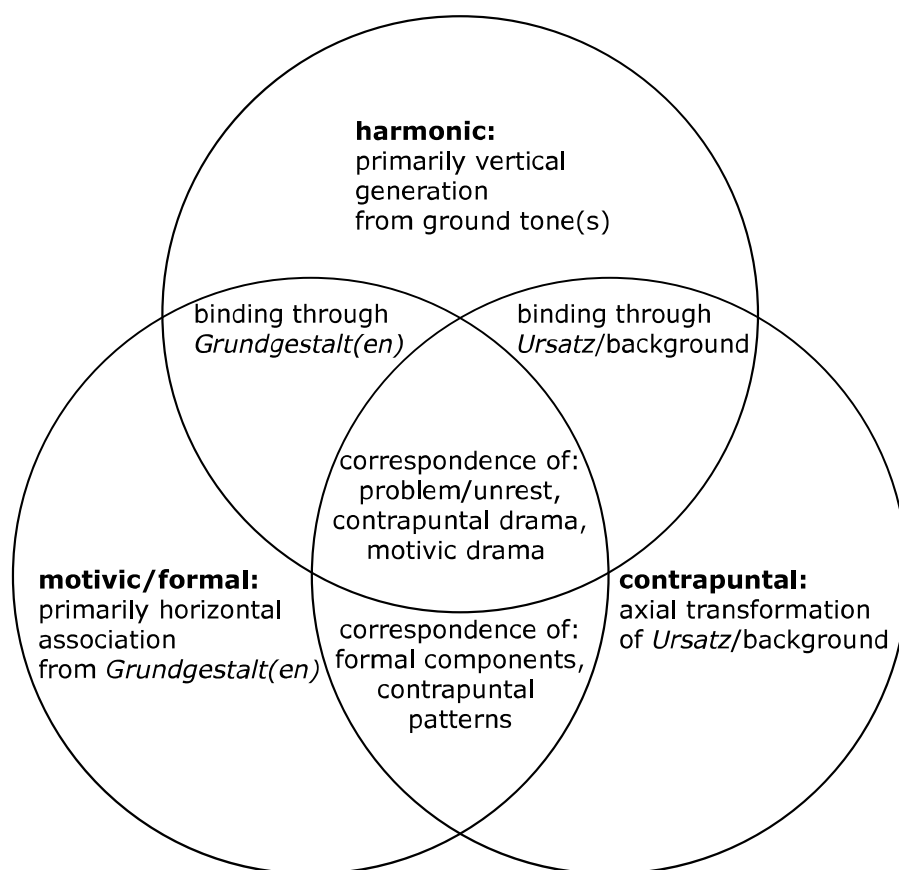
21 "Töne sind verwandt durch ihre gemeinsame Beziehung auf die Grundtöne, welche das Gleiche in ihnen representiert [*sic*]" (Schoenberg 1995, 146).

22 Pitch fields can be seen as generalizations and distillations of harmonic phenomena apart from any contrapuntal aspect. Indeed, the lessons of Albert Simon, who developed the theory of pitch fields, "were more like a course in harmonic theory" (Polth 2018, ¶2n1). However, it is possible that pitch fields may involve their own sense of depth (Rohringer 2009, 305n113; Polth 2018, ¶15). Not incidentally, pitch fields perhaps tend to supplant the *Ursatz* (see Rohringer 2009, 273).

23 Schenker 1956, 28.

24 On the association between melody and life, see especially Spitzer 2004, 276–341.

25 Dreyfus 1996, 10. Laurence Dreyfus opposes treating "musical works as organic matter – in short, like vegetables" – based on his unobjectionable theory that we should "at least pose the question: what might a composer have thought about a composition and its sense?" (*ibid.*, 171). His practice, however, answers this question in an equally reductive way, conflating "the idea behind a piece" with a concrete "thematic idea" (*ibid.*, 2 and 1).



Example 1: The harmonic, contrapuntal, and formal domains and their interpenetration

But each of these domains evokes the organic in its own way through its recursiveness: unrest, contrapuntal drama, and motivic character and drama. Contrapuntal drama is relatively well understood;²⁶ the other two are less so, and I will have much to say about them. Yet despite their separate principles, these domains are not quasi-“empirical” parameters, where one “should proceed one domain at a time” and then add a “dimension” of interpretation, as James Webster advocates with respect to “numerous different ‘domains.’”²⁷ Rather – and this is a key point – like all systems, they are intrinsically interpretive, and they are best understood in conjunction, because they ‘interpenetrate’: they mediate and condition each other’s recursion. Recursion “presupposes [...] not yet fully determinate possibilities,” and only the “interpenetration” of domains allows for “selections that can cut off other possibilities (more or less definitely).”²⁸ In music, such selection in interpenetrating domains can be understood as presenting a particular ‘musical idea’ – the content of the musical mind – somewhat as when a sculptor removes chips from all sides of a block or log to reveal a form.

26 See especially Schenker 1956, 29.

27 Caplin/Hepokoski/Webster 2010, 128 and 129.

28 “Setzt [...] noch nicht voll bestimmte Möglichkeiten [...] voraus”; “Interpenetration”; “Selektionen, die andere Möglichkeiten (mehr oder weniger sicher) ausschalten können” (Luhmann 1993, 300 and 302). This interpenetration of the harmonic, contrapuntal, and formal domains is similar to what Peter H. Smith calls “dimensional counterpoint” between “key scheme,” “tonal structure,” and “thematic design” (2005, 31). However, interpenetration of the three domains is not particular to “the tonal tradition” (ibid., 7), the harmonic domain is not limited to key scheme, and formal parts are not necessarily thematic, as I will explain.

Schoenberg and Schenker likewise conceive of music as presenting an idea or vision,²⁹ and they somewhat similarly call attention to the interpenetration of certain musical domains, as well as an “Abbreviationsgesetz,” whereby art selects from “alle denkbaren Fälle.”³⁰ However, their limited model of a musical organism as a self-contained unity of parts and whole prevents them from recognizing the full scope of this interpenetration,³¹ which is likewise outlined in Example 1.³² I cannot treat these matters exhaustively here, but if “ideological biases on both sides” are to “give way to a meeting on common ground,”³³ then we must try to find that common ground.

Schoenberg’s greatest insight (which will become clear when I explain unrest), is that the harmonic and formal domains are bound through ‘*Grundgestalten*,’ or basic shapes.³⁴ ‘Binding’ is “the determination of how [...] open possibilities will be used, through the structure of an emergent system.”³⁵ His greatest oversight is supposing that variation of *Grundgestalten* and their motivic components accounts for the entire contrapuntal domain as well. He defines ‘counterpoint’ in a traditional manner as “die Lehre von der Stimmführungskunst mit Rücksicht auf motivische Kombination,” and he says unequivocally “daß die einzige Veranlassung, der einzige Motor für die selbständige Stimmenbewegung nur die Triebkraft des Motivs [...] sein darf.”³⁶ Schoenberg does not recognize the dimension of depth as something altogether separate from the dimension of breadth, although he is too honest to reject the possibility altogether. Soon after studying Schenker’s writings, he speculates that “der musikalische Gedanke spielt sich im zweidimensionalen Raum der Höhe und Breite [...] ab,” but then he writes in the margin: “dreidimensionalen?”³⁷

Schenker’s greatest insight is that the harmonic and contrapuntal domains are bound through an ‘*Ursatz*,’ an originary statement – or, as revisionists have it, more generally a background of some kind.³⁸ For the *Ursatz* is itself a transformation of a *Klang* into a con-

29 See especially Schoenberg 1922, 346–347; Schoenberg 1995, 94–126 and 226; Schenker 1925–30, 3:20; Schenker 1956, 112. For an extensive historical-theoretical study addressing the musical idea or vision for Schoenberg and Schenker, see Arndt 2018b.

30 Schenker 1906, 20; Schoenberg 1995, 114.

31 On Schenker’s and Schoenberg’s organicism, see especially Hubbs 1991a; Hubbs 1991b; Arndt 2018b, 24–41.

32 Ideally, this diagram would show each domain contained within the “operational sphere” of the other (“Operationsbereich”; Luhmann 1993, 295), but this is impossible to illustrate.

33 Schmalfeldt 1991, 277.

34 Normally, a piece has a single *Grundgestalt*, but not always. See Schoenberg “Der musikalische Gedanke seine Darstellung und Durchführung” (6 July 1925), Arnold Schönberg Center, <https://www.schoenberg.at/index.php/en/archiv-2/texte> (26 Jan 2019), T37.08, 1 and 5; Schoenberg 1995, 168.

35 “Die Festlegung des Verwendungssinnes dieser offenen Möglichkeiten durch die Struktur eines emergenten Systems” (Luhmann 1993, 300).

36 Schoenberg 1922, 8 and 247. Although Schoenberg does not recognize the autonomy of the contrapuntal domain, he zeroes in on just this issue as a basic conflict with Schenker. While Schenker argues that in the “Identifizierung von Kontrapunkt und Kompositionslehre haben wir somit den ursprünglichen und grundlegenden Irrtum zu erkennen” (1910–1922, 1:3; emphasis removed), Schoenberg retorts, “*Unsinn!!!* Das ist der[?] Grundirrtum Schenkers: denn der Kontrapunkt war selbstverständlich ursprünglich Kompositionslehre.” Schoenberg, annotation of *Kontrapunkt*, Arnold Schönberg Center, Book S8 Bd. 2, 1:3.

37 Schoenberg, “Der musikalische Gedanke,” 8; emphasis removed. On Schoenberg’s study of Schenker in 1922–1923, see Dunsby 1977, 27.

38 On extensions of the concept of background, see especially Morgan 2014, 213–218.

trapuntal unit.³⁹ His greatest oversight is supposing that contrapuntal transformation of the *Ursatz* accounts for the entire formal domain as well. He posits the “Ableitung aller Formen als eines äußersten Vordergrundes von dem Hinter- und Mittelgrund.”⁴⁰ Schenker does not recognize the dimension of breadth as something altogether separate from the dimension of depth. He writes, “Der Tiefe-Zusammenhang vom Hinter- zum Vordergrund ist auch der Breite-Zusammenhang in der Horizontale des Vordergrundes.”⁴¹

The greatest insight in the reception of Schoenberg’s and Schenker’s work is that certain types of formal components theorized by Schoenberg and others, such as themes, correspond with certain contrapuntal patterns theorized by Schenker.⁴² The greatest oversight is supposing that there is nevertheless a “conceptual gulf” between a Schoenbergian “paradigm of association” and a Schenkerian “paradigm of derivation,” i.e., transformation, a stance that merely reproduces Schoenberg’s and Schenker’s own blind spots.⁴³ There is no such gulf, because association and transformation are entirely separate modes of recursion in different domains. They no more contradict each other than longitude contradicts latitude.⁴⁴ This error has needlessly constrained analytical inquiry and left Schoenberg’s and Schenker’s theories vulnerable to dismissal as overreaching formalist systems.⁴⁵ This error is closely related to a false characterization of the *Grundgestalt* and the *Ursatz* as an “initial idea” for Schoenberg and Schenker, respectively.⁴⁶ Schoenberg and Schenker strenuously reject such a conflation of elements of the idea’s presentation with the musical idea itself.⁴⁷ This exaggeration of the tension between Schoenberg’s and Schenker’s theories is also related to a gross misunderstanding of Schenker’s conception of motives, which I will address in due course.

39 Schenker 1956, 39.

40 Ibid., 200. On tensions and inconsistencies in Schenker’s theory of form, see especially Hooper 2011. See also McCreless 1989, 223.

41 Schenker 1925–30, 3:20.

42 Schmalfeldt 1991, 234–235; Rohringer 2016. A parallel discovery is the correspondence of certain contrapuntal configurations with certain schemata, which can be considered relatively abstract, generic *Gestalten*. On this correspondence, see Froebe 2015.

43 Moreno 2001, 91 and 99. See especially Dahlhaus 1973–74, 214; Schmalfeldt 1991, 233–234; Wright 2005, 51–57; Eybl 2006, 55.

44 William Rothstein’s protestation that “logically speaking, if *everything* in a tonal composition at all levels, must relate to a basic shape, then that shape can only be equivalent to the fundamental background progression [...]; otherwise the background itself would not be included in the purview of the *Grundgestalt*” (1981, 49), is like saying that if every place on the planet at all latitudes must relate to a prime meridian, then that meridian can only be equivalent to the equator; otherwise the equator itself could not be related to the prime meridian.

45 On this criticism of Schenker’s theories and analytical theories in general, see Schwab-Felisch 2005.

46 Eybl 2006, 55. Janet Schmalfeldt (1991, 233–234) and Jairo Moreno (2001, 98–99) have similar views.

47 Schoenberg 1995, 108; Schenker 1956, 48–50. Nor is it the case, as some have maintained, that for Schoenberg “die Darstellung des Gedankens ist [...] der Gedanke selbst. Der Gedanke existiert also nur in der Darstellung” (Stephan 1985, 131). While there are times in Schoenberg’s music where one can suppose that the idea is fully manifest in the presentation, he consistently declares as explicitly as possible that these are two separate things: “It is one thing to envision in a creative instant of inspiration and it is another thing to materialize one’s vision” (2010, 215). He says that they have different natures: the idea is in one respect “rein materiell,” rooted in the tone, while the presentation is in one respect “logisch,” rooted in musical coherences (Schoenberg 1994, 4). See Schoenberg 1922, 347; Schoenberg 1995, 144–160.

3. BACH'S PRELUDE AS ALLEGORY OF VITALITY

3.1 Overview

Bach's Prelude in E \flat major, BWV 852, is *exemplary* and *exceptional*, in both of the main senses of these words. It is the sole example in *The Well-Tempered Clavier* of a sectional *praeludium*, but "its sophisticated French harmony, glorious spacing, and density of contrapuntal argument" set it apart from Bach's earlier works of this type.⁴⁸ The most conspicuous design element is the development of the subject of the first section (mm. 1–10, a prelude) and the subject of the second section (mm. 10–25, a *ricercar*) into the subjects of the third section (mm. 25–70, a double fugue; Ex. 2).⁴⁹ *Gestalt*-form a^1 , the subject of the first section, made up of two statements of motive x , is developed into a^2 and incorporated into *Gestalt A*, the first subject of the third section. Meanwhile, *Gestalt*-form b^1 , the subject of the second section, made up of two statements of motive y , is developed into *Gestalt*-form b^2 , the second subject of the third section. It has been said that the prelude is "typical of Bach's maturity in creating a union of opposites."⁵⁰ Nevertheless, for this particular kind of union of *Gestalten*, "we possess no persuasive parallel compositions by Bach."⁵¹ Joseph Kerman catalogues the "many free, improvisatory, 'irregular' features" of this fugue and notes that "the tonal equivocation in this work becomes a nice problem for the music theorist who might wish to engage with its network of nuances."⁵²

Example 2: Motives, *Gestalten*, and development in Bach, Prelude in E \flat major, BWV 852

While most analyses of the piece have focused on its fugal techniques⁵³ or its form,⁵⁴ I take up Kerman's invitation to explore the network of harmonic nuances, and I examine its expressive connection to the other two domains. I will show that the fugue subjects in the third section are not simply *prefigured* by the earlier subjects; rather, *Gestalten a* and *b* *transfigure* and invigorate each other in tandem with the music's working out of its un-

48 Ledbetter 2002, 174.

49 *Gestalt*-form b^2 is prepared in the bass in mm. 18–21.

50 Ledbetter 2002, 175.

51 "Besitzen wir keine überzeugenden Parallelkompositionen Bachs" (Dürr 1988, 101).

52 Kerman 2005, 61 and 65.

53 See for example Ledbetter 2002, 174–176; Kerman 2005, 60–67.

54 See for example Dürr 1988; Zacher 1993. An exception is Engels 2006, which deals with musical symbols.

rest and dramatic unfurling of its tonic triad.⁵⁵ The music's recursive processes are thereby synthesized into an awe-inspiring allegory of vitality that betrays an apparent thought behind the music, a musical idea. Although I do not claim to exhaust either the musical idea or the music's meaning more broadly, I do believe that this unparalleled piece, with its flamboyant rhetoric and irregular syntax, invites an equally audacious interpretation.

3.2 Unrest

I begin with the crucial concept of a 'problem' (*Problem*) or 'unrest' (*Unruhe*). Both Schoenberg and, to a lesser extent, Schenker discuss problems.⁵⁶ A problem is broader than what Patricia Carpenter calls a "tonal problem," meaning a "challenge to the tonic."⁵⁷ Although Schoenberg at times describes problems this way, this description does not differentiate between different kinds and degrees of unrest, nor does it account for problems in non-tonal music.

Very briefly, I define a problem or unrest in a basic motive or at least in a *Grundgestalt* as a *new, remote, unclear* relation of tones that leads to movement aimed at "clarify[ing] this problem."⁵⁸ By "new," I do not mean irregular but marked, yet susceptible to accommodation.⁵⁹ These relations are primarily harmonic but also contrapuntal on account of the way the harmonic and contrapuntal domains are bound through the background. "Der Verlauf des Stückes dient dazu, alles, was beim ersten Hören nicht erfasst werden konnte durch oftmalige Wiederholung und mannigfaltige Darstellung dem Verständnis näher zu bringen," by means of either development or unravelling.⁶⁰ In other words, logical paths of generation (and transformation) leading out from a ground tone to the problematic tones are gradually reconstructed, together with logical paths of association leading out from a *Grundgestalt*, and this clarification quells the unrest. (This is what is meant by the binding of the harmonic and formal domains.) This profound principle applies to both tonal and non-tonal music, albeit in different ways.⁶¹ In tonal music, marked prob-

55 Hugo Riemann and others at least recognize a coherence between x^2 and y^1 , which I discuss below (1906, 51).

56 See especially Schoenberg 1995, 102–106; Schenker 1906, 379; Schenker 1956, 156. Besides the present author, only Boss (1999, ¶6) and Loretta Terrigno (2017) have addressed the concept of unrest or "opposition" in the context of the combined use of Schoenberg's and Schenker's concepts for analysis. Like Murray Dineen, Terrigno treats unrest as a strictly harmonic phenomenon, while Boss treats unrest in this context as strictly between motives. I treat unrest as a harmonic and contrapuntal phenomenon that is already "in the motive" itself or at least the *Grundgestalt* ("im Motiv"; Schoenberg 1995, 152; emphasis removed).

57 Carpenter 1988, 38. Dineen (2005), building on the work of Carpenter, presents a method of analyzing a problem in terms of its position in a space of chord tones, *Stufen* (scale degrees), regions, and tonalities. Dineen restricts unrest to the abstract "materials of tonality" and specifically excludes contrapuntal aspects (ibid., 71), while I regard problems as arising in both tonal and non-tonal music from the concrete "Verbindung von Tönen verschiedener Höhe, Dauer und Betonung" (Schoenberg 1995, 102), which has both harmonic and contrapuntal implications.

58 Schoenberg 2010, 123. See especially Schoenberg 1995, 226. For a historical-theoretical study of unrest in Schoenberg, see Arndt 2018b, 95–116.

59 On accommodation, see Schoenberg 1922, 386.

60 Schoenberg, "Zu: Darstellung des Gedankens" (November 12, 1925), Arnold Schönberg Center, <https://www.schoenberg.at/index.php/en/archiv-2/texte> (26 Jan 2019), T35.02, [3].

61 Arndt 2018b, 105–109. For an example of a non-tonal problem, see Arndt 2018a, 217–222.

lems often involve chromatic tones (marked with accidentals), and that is indeed the case in the Bach.

$D\flat$ in mm. 1–2 poses a problem (Ex. 3). In one respect, it is *unclear* whether $D\flat$ in m. 1 is an octave-displaced step from $E\flat$, as suggested by the middleground, thus an “independent ground tone” (fundamental),⁶² or whether, since $E\flat$ is sustained in the foreground, $D\flat$ is merely part of the resonance of $E\flat$ (that is, a missing fundamental an octave below the written bass). In this respect, $D\flat$ imitates the seventh partial of the ground tone $E\flat$, a *remote* overtone beyond the ken of the major-minor system.⁶³ To be sure, a compound minor seventh is almost a third-tone sharp from the seventh partial, but that is why Schoenberg, Schenker, and I all call such a note an imitation rather than the thing itself.

Example 3: Bach, Prelude in $E\flat$ major, BWV 852, section 1, mm. 1–4

In another respect, $D\flat$ is the subdominant degree of the subdominant region, which is touched on in mm. 1–2. If the subdominant degree of the tonic region, being the only tone not derivable by ascending fifths, is the “representative of an earlier system,”⁶⁴ i.e., the subdominant region, then the (recursive) subdominant of the subdominant is the representative of a still more “*remote*” system.⁶⁵ In this respect, $D\flat$ is *unclear*, because it obscures and undermines the tonic region and could draw the music “into a foreign region of still deeper underfifths.”⁶⁶ This “centrifugal” force (leading away from the tonic) is evident in mm. 1–3, where the accented notes in the upper voice form an apparent $D\flat$ -major triad.⁶⁷ I am aware that this triad is contradicted by the actual chords; that is why I call the triad apparent, and why I refer to a force rather than an actual movement.

Speaking of this contradiction, in a third respect, there is a juxtaposition of $D\flat$ in mm. 1–2 and D in mm. 3–4, such that it is *unclear* which is the rightful seventh degree.

62 “Selbständiger Grundton” (Schenker 1906, 42). See also Schoenberg 1922, 20.

63 See Schenker 1906, 37–39. See also Schoenberg 1922, 22.

64 “Repräsentan[t] eines zurückliegenden Systems” (Schenker 1906, 55).

65 Schoenberg 1969, 69; emphasis mine.

66 “In eine systemfremde Gegend der noch tieferen Unterquinten” (Schenker 1906, 57).

67 Schoenberg 1969, 2.

Although the subtonic has been part of the gamut since time immemorial, in the context of the major mode, the leading note has always had the upper hand, and to that extent, the subtonic remains *new*.⁶⁸

The reader may object that the allegedly unrestful $D\flat$ is simply part of a *quiescenza*, a schema with a $\flat\hat{7}-\hat{6}-\hat{7}-\hat{8}$ -scale-degree progression, which is a common opening ploy in early eighteenth-century preludes, toccatas, and the like.⁶⁹ It is indeed part of a *quiescenza*. But in a *quiescenza*, a leap from $\hat{1}$ to $\flat\hat{7}$ such as we find in the Bach is somewhat unusual, except as embellishment added to a stepwise $\hat{8}\rightarrow\flat\hat{7}$ motion.⁷⁰ This leap, which as I will explain shortly is extremely marked, calls attention to $D\flat$ as a thing in itself and not simply as a passing tone per the schema. Here Schoenberg's protestation comes to mind: "Man löst Probleme, um eine Unannehmlichkeit aus dem Wege zu räumen. Aber, wie löst man sie? Und daß man überhaupt meint, sie gelöst zu haben!"⁷¹

As I will show, the piece clarifies $D\flat$ in these respects by presenting it as (1) an independent ground tone (even a root), (2) the subdominant degree of the subdominant region, but channeled into a "centripetal" movement (toward the tonic), and (3) being "equal in rights" with the diatonic seventh degree D.⁷² And this "working out" of $D\flat$ versus D corresponds with the piece's motivic drama of *Gestalten a* and *b*.⁷³

3.3 Motives and *Gestalten*

According to Schoenberg, a 'motive' (*Motiv*) is "der jeweils kleinste Teil eines Stückes oder Teilstückes, der trotz Veränderung und Variation, als überall vorkommend erkennbar ist," while a '*Gestalt*' is a part of any size, but typically an immediately perceptible unit, that has a "charakteristische Eigenschaft" such as "ein auffallendes Intervall."⁷⁴ It has been entirely overlooked that Schenker makes a parallel distinction between "der Ableitung von Tonfolgen aus dem Einfachsten" and "sofort erkennbare[n] Wiederholungen."⁷⁵ On the one hand, many tone successions derived from the simplest element are entirely on the surface,⁷⁶ yet they have been discussed almost exclusively in terms of repetitions

68 See Schoenberg 1922, 22 and 22n.

69 Gjerdingen 2007, 228.

70 Another example of such a *quiescenza* is the beginning of the recitative "Gebenedeiter Mund" from *Herz und Mund und That und Leben*, BWV 147. Ariane Jeßulat, personal communication. There the leap to $\flat\hat{7}$ lends an exclamatory tone to the word "Gebenedeiter."

71 Schoenberg 1922, vi.

72 Schoenberg 1969, 2. "Gleichberechtigte"; Schoenberg 1922, 390; cf. Zacher 1993, 41.

73 "Herausarbeitung"; Schoenberg 1995, 96; emphasis removed.

74 Schoenberg 1995, 168. Schoenberg considers all motives except a 'basic motive' to be "more remote (contrasting) motive-forms" (1967, 25), so he avoids defining 'motive' in the plural. Nevertheless, he regularly refers to multiple motives, so a definition in the plural would be clearer. On motives, *Gestalten*, and their 'forms,' see Arndt 2017, 106–110 and 126–128.

75 Schenker 1956, 155.

76 See Schenker 1956, figs. 119.5b, 119.7, 119.12, 119.16a, 119.16b, 119.19a, and 119.19b.

beyond the surface.⁷⁷ On the other hand, Schenker – like many others to this day – refers to immediately recognizable repeated *Gestalten* as ‘motives.’⁷⁸

Indeed, Schenker distances his elemental, “mehr verborgene[] Wiederholungen” from what he calls ‘motives’ so vehemently,⁷⁹ that it has contributed to the widespread but erroneous beliefs that (1) there is a gulf between a Schenkerian paradigm of transformation and a Schoenbergian paradigm of association, and that (2) to discuss motives in a strict Schenkerian context, it is necessary to define them as fixed diminutions.⁸⁰ I have already argued that the first of these beliefs is unjustified. As for the second, regardless of what Schenker may seem to imply about entities needing to be diminutions,⁸¹ he also says quite plainly (and sensibly): “jede Art von Wiederholung ist an ihrem Platze gut und fördernd.”⁸² And in his analyses, it is not just that Schenker *sometimes* identifies motives that are not set diminutions.⁸³ Eighteen of his twenty-six examples of more concealed repetitions (Table 1) involve *variation of diminution* (sometimes slight, sometimes drastic) or even *no diminution*. Sixty-nine percent of his examples cannot be dismissed as aberrations. While ingrained and seemingly elegant, the notion that a Schenkerian motive should be a set diminution is undercut by his text and contradicted by his examples.

Figure	Description
118.1	Arpeggiations become incomplete neighbor motions
118.2	Part of passing motion becomes arpeggiated fourth, then sixth, then fifth
119.1	Repeated leap between voices (not diminution)
119.2	Arpeggiation from third becomes arpeggiation from root, then from fifth
119.3	Part of <i>Zug</i> becomes <i>Zug</i>
119.4	Passing motion becomes parts of passing and neighbor motions
119.5a	Repeated arpeggiation
119.5b	Repeated arpeggiation and passing tone
119.6	Repeated arpeggiation
119.7	Repeated passing motion
119.8	Repeated passing motion with substitution
119.9a–d	Boundary-play and sustained tone become arpeggiation and conjunct <i>Züge</i>, then single <i>Zug</i>, then conjunct <i>Züge</i>, then single <i>Zug</i>
119.10	Incomplete neighbor motion becomes part of passing motion, then part of complete neighbor motion
119.11	Repeated leap between voices (not diminution – cf. fig. 83.2)
119.12	Arpeggiated fifth from main note becomes third, then third to main note, then sixth (cf. fig. 74.2)

77 Charles Burkhart claims that “while [hidden] repetitions could take the form of simple rhythmic transformations on the surface, Schenker was much more interested in those that involved sub-surface elements” (1978, 146), and this is virtually the last that we hear of the former in the literature.

78 For example, Schmalfeldt equates the terms ‘*Grundgestalt*’ and ‘basic motive,’ which leads her to claim erroneously that “the term ‘motive’ in Schoenberg’s sense is what Schenker calls “motive” in the usual sense” (1991, 234).

79 Schenker 1956, 155.

80 See especially Boss 1999, ¶2; Moreno 2001, 95. See also the discussion in Cohn 1992, 152–155.

81 Richard Cohn (1992, 153–154) focuses on a passage in which Schenker rejects a theory of form based on the motive (read: *Gestalt*), because it relies on “falsche Einheiten” (1956, 205). However, it does not follow that immediately recognizable repetitions do not exist for Schenker, only that according to him they cannot be the basis of form.

82 Schenker 1956, 155. Patrick McCreless identifies this point as a “central logical flaw in *Free Composition*” (1989, 223).

83 Cohn 1992, 155–162.

119.13	Repeated arpeggiation
119.14	Repeated neighbor motion
119.15a–c	Boundary play reduced to pair of passing motions
119.16a	Repeated arpeggiation
119.16b	Part of neighbor motion becomes part of passing motion
119.17	Unfolded fourth and third become fourth and fifth, then seventh and fifth with passing tone
119.18	Unfolded fourth, third, fourth, and fifth become three fourths
119.19a	Unfolded fifth becomes seventh, then twelfth between outer voices (not diminution)
119.19b	Compound twelfth between outer voices becomes compound eleventh (not diminution)
119.20	Part of neighbor motion becomes step (not diminution)
119.21	Unfolded fifth becomes sixth

Table 1: More concealed repetitions in Schenker 1956. Those with variation of diminution or no diminution are highlighted.

For the most part, then, a Schenkerian motive (a more concealed repetition) is simply a Schoenbergian motive. The main differences are that (1) unlike Schoenberg’s motives, Schenker’s supposedly elemental repetitions are made up of still simpler repetitions in a couple of cases,⁸⁴ and that (2) unlike Schenker, Schoenberg is minimally interested in repetitions beyond the surface. I consider these differences to be oversights stemming from Schoenberg’s and Schenker’s preoccupation with association and transformation, respectively, and I look for both motives and *Gestalten* beyond the surface.⁸⁵

Robert S. Hatten advocates “expanding the concept of [...] *Grundgestalt*,” with its “emphasis on pitch and rhythm,” “by defining it in more comprehensive terms as a thematic gesture,” so as to allow “insight into [...] expression.”⁸⁶ However, Schoenberg’s definition of a *Gestalt* is already virtually identical with Hatten’s definition of an ‘aural gesture’ as a “significant energetic shaping of sound through time.”⁸⁷ Most importantly, *Gestalten* are “grounded in human affect,” for their features “können auch immerhin [Merkmale] des Ausdrucks, des Charackters, der Stimmung, der Farbe, des Klanges, der Bewegung etc[.] sein,” in addition to purely musical parameters.⁸⁸ As mentioned, *Gestalten* are typically “in the perceptual present (typically within two seconds)” but “may be hierarchically organized” or nested in the form.⁸⁹ And a *Gestalt* “may be marked as thematic” but “muss nicht notwendigerweise mehr als lokale Bedeutung haben.”⁹⁰

Because *Gestalten* are already gestures, Hatten’s ideas about the expressivity of gestures can supplement Schoenberg’s and (the early) Schenker’s principle that a piece of music is a *drama* showing the destinies of its *Gestalten* and motives (the smallest possible *Gestalten*) according to their *character*.⁹¹ Hatten shows that gestures can combine into ‘tropes,’ composite signs whose meaning emerges from the way their elements are blended. Tropes must meet three conditions: there must be “(1) two incompatible or contrasting gestures that (2)

84 Schenker 1956, figs. 118.1 and 119.15.

85 Because subsurface motivic statements generally lack rhythm, they might be considered mere ‘traces,’ statements that bear remote resemblance to other statements. On traces, see Arndt 2017, 126.

86 Hatten 2004, 290 and 3.

87 *Ibid.*, 95; emphasis removed.

88 *Ibid.*, 94; Schoenberg 1995, 170.

89 Hatten 2004, 94.

90 *Ibid.*; Schoenberg 1995, 168.

91 On motivic drama, see Schoenberg 1995, 94 and 270; Schenker 1906, 19–20. On motives as possible *Gestalten*, see Schoenberg 1995, 148.

‘come together’ in a single functional location, and (3) there [must be] a compelling reason to consider the trope as motivated by a higher-level expressive intent.”⁹² I will show that Bach’s prelude dramatizes one grand gestural trope, tying together the contrasting *Gestalten* *a* and *b* in the culminating third section for an expressive purpose that bridges the three domains: to allegorize vitality as relational, and as a synthesis of exuberance and endurance.

Gestalt a, the subject of the first section, is characterized by *exuberance*. This trait is projected especially by its characteristic feature: the large, ascending leap E_b-D_b in motive-form x^2 in m. 1 (please refer back to Ex. 3).⁹³ This leap is marked by pitch, harmonic, rhythmic, metric, registral, and textural accents, and it is emphasized by repetition and intensified through a rise in register. It is the most prominent element of the entire first section, and it invites interpretation. This unusual leap to a drawn-out dissonance is marked as impassioned in comparison with the features of *stile antico*,⁹⁴ which – as I will discuss momentarily – is referenced in the second section. More specifically, this leap projects a sense of impulsive, overextended movement, in that the leap lands on an unprepared dissonance and extends beyond the anticipated point of repose.⁹⁵ The music cannot even pass down from G to E_b in m. 1 without first burbling up to B_b , as it were – an instance of enlivening “*passagio*.”⁹⁶ The ebullient *Gestalt a*, being “an improvisation hand-shape figure,” is somewhat unsteady.⁹⁷ This unsteadiness comes through first of all in the variability of the ascending leap in x^2 , which ranges between a fourth (mm. 1–2) and an astonishing eleventh (m. 43, to be discussed).

This leap to the problematic D_b in m. 1 initiates a series of such impulsive, overextended movements on a large scale in the first section (Ex. 4). The upper voice delineates an initial arpeggiation from G in m. 1 through B_b in m. 6 to E_b ($\hat{8}$) in m. 7. But the upper voice first shoots up far above E_b to C in m. 5, the highest note in the entire piece, not least on account of the octave displacement of D_b in m. 1, which leads to a parallel displacement of A_b in m. 3. The expansive initial arpeggiation pushes E_b in the *Urlinie* out of alignment with E_b in the bass arpeggiation in m. 1 and onto a mere passing tone C in m. 7. The consequently top-heavy music comes crashing down like a wave on V in m. 8, and the thirty-second notes spill out like foam. Just as the centrifugal force of D_b requires counterbalancing, so the audacity of *Gestalt a* requires counterbalancing, which is initiated in the second section.

92 Hatten 2004, 221.

93 To be sure, *Gestalt*-form a^2 lacks this feature, but it still contributes to the larger overextended movements described in the next paragraph. *Gestalt A* lacks this feature because it is subject to the moderating influence of *b*, as discussed below. Compare the similar but more demonstratively exuberant *quiescenza* at the beginning of Schumann’s Piano Quintet, op. 44.

94 See Bernhard 1973, 105 and 111.

95 This leap in the inner voice also reaches over the upper voice (Ex. 4).

96 Bernhard 1973, 96.

97 Ledbetter 2002, 175.

Example 4: Harmony, counterpoint, and form in Bach, Prelude in E \flat major, BWV 852, section 1, mm. 1–10

Gestalt b, the subject of the second section, is characterized by *endurance*. While *a* features an immoderate, dissonant leap to the problematic D \flat , *b* features the opposite: a moderate, consonant leap to the tonic E \flat (Ex. 5). Like the former leap, the latter is marked by harmonic, rhythmic, registral, and textural accents, and it is emphasized by repetition and intensified through a rise in register, and it too invites interpretation. In comparison with the former leap, the latter projects a sense of determined, restrained movement. If *a* luxuriates by transgressing the limits of *stile antico*, then *b* perseveres by sticking to them.

Example 5: Bach, Prelude in E \flat major, BWV 852, section 2, mm. 10–14

The music evokes *stile antico* through the quasi-vocal texture, the longer note values, the constant oblique motion, and *b* itself with its leap of a fourth and gentle syncopation.⁹⁸ The further softening of the meter through the shift of *y*¹ to a weak beat in m. 12 also contributes to this effect.⁹⁹ Yet the music is also “untypical of true *stile antico* in being a solid, sustained block of counterpoint with no rests after the voices have entered.”¹⁰⁰ The music

98 On the music’s evocation of *stile antico*, see *ibid.*, 175.

99 The weak-beat suspensions in mm. 11–12 also soften the meter. Michael Eckert, personal communication.

100 Ledbetter 2002, 175.

does not actually embody *stile antico* but rather alludes to it for the sake of its comparative sense of restraint.

The section is both archaic and arc-shaped (Ex. 6): it prolongs $B\flat$ in the bass in m. 8 by means of a third progression $D-B\flat$ in mm. 19–24 with an incomplete neighbor note $E\flat$ in m. 12, a hidden repetition of b^1 . With these bass motions matched by parallel tenths in the upper voice (another hidden repetition of b^1), the section abides in $\hat{7}$ over V . Starting with $E\flat-G$ in m. 14, every tenth in the section is approached from a sixth in contrary motion.¹⁰¹ The reference to *stile antico*, the restrained harmony, and the steady intervallic alternation combine to give the music the feeling of a solemn procession, the antipode to the free-wheeling movement in the first section.

Example 6: Harmony, counterpoint, and form in Bach, Prelude in $E\flat$ major, BWV 852, section 2, mm. 10–25

Neither of these *Gestalten* alone, with their character traits of exuberance and endurance, can fulfill the calling, as it were, of the prodigious $\hat{8}-\hat{1}$ *Urlinie* (Ex. 7).¹⁰² For $D\flat$, associated with a , pulls away from the tonic with seditious intimations of its own triad and region, while D , associated with b , pulls back towards the tonic, threatening to prevent the *Urlinie* from descending any further than $\hat{7}$.¹⁰³ The third section shows these *Gestalten* overcoming this challenge by exchanging qualities, growing closer, and cooperating by means of development (into A and b^2) and unravelling (of c , the combination of A and

101 The 6–10 figures in Ex. 6 indicate only sixths moving to tenths by contrary motion; they do not signify a linear intervallic pattern.

102 My formal segmentation follows Dürr 1988, 99.

103 Overcoming this tendency of $\hat{7}$ is a special challenge that makes the $\hat{8}-\hat{1}$ form of the *Urlinie* relatively uncommon. The question arises whether such an uncommon reading is justified here. In this case, facing the challenge of $\hat{7}$ is appropriate, as it interacts with the problem of $D\flat$ versus D in ways that I have only begun to explain. I will also present motivic reasons for asserting $\hat{8}-\hat{1}$. For a comparable example of an $\hat{8}-\hat{1}$ *Urlinie* with motivic significance, see the Prelude from Bach's Partita No. 3 for Solo Violin, in Schenker 1925–30, 1:77–98.

linear, directed “backwards” toward earlier appearing formations.¹⁰⁹ Developing variation is often thought to be epitomized by the music of Johannes Brahms.¹¹⁰ But Schoenberg repeatedly stresses the omnipresence of development and unravelling in the entire bodies of homophonic and polyphonic music, respectively.¹¹¹ He also specifies that Bach, straddling a historical juncture between polyphony and homophony, uses not only unravelling but also developing variation to a certain extent.¹¹²

Analysis of development or unravelling should demonstrate not merely the derivation of all *Gestalten* from a *Grundgestalt*,¹¹³ nor a generic condition of “musical prose,”¹¹⁴ but the specific “logic of the whole image,” which “depends on the analogous and appropriate utilization of the musical coherences.”¹¹⁵ The development of *a* and *b* as melodic *Grundgestalten* into *A* and *b*² shows them to be coherent, while the unravelling of *A* and *b*² as a polyphonic *Grundgestalt* similarly demonstrates a coherence between them. These coherences are utilized in the gestural trope mentioned above, which gives a certain sense to the three-dimensional image of the piece as a whole.

At the beginning of the third section, *Gestalt a* takes on some of the restraint of *b* when it incorporates motive-form y^3 in *Gestalt A* in m. 26, tempering the leap in the overlapping x^2 (Ex. 8). Meanwhile, *Gestalt b* takes on some of the liveliness of *a* by sequencing y^1 in *b*². (In the abstract, the two leaps of a fourth in *b*² add up to a seventh, the leap in *a*¹.) Moreover, *A* and *b*² are complementary in contour, *A* being framed by <3120> and *b*² being framed by <0213>, the inverse (or retrograde).¹¹⁶ Thus, in a trope of gestures, *a* and *b* as transfigured by one another in *A* and *b*² acquire the shared character trait of *vitality*, the intersection of exuberance and endurance:¹¹⁷ they are energetic yet disciplined.

This exchange of qualities initiates a permanent partnership, in which *a* and *b* in the guise of *A* and *b*² continue to grow closer. For the unravelling of *c*, the polyphonic combination of *A* and *b*² in mm. 25–26, establishes a further coherence between them (Ex. 9). *Gestalt*-form *c*² in mm. 35–36 extends the original interval pattern 2–6 to 2–6–3 while substituting an additional statement of *b*² for *A*.¹¹⁸ *Gestalt*-form *c*³ in mm. 38–40 inverts

109 “Rückwärts” (Schoenberg 1995, 158). On backward development, see Arndt 2017, 102.

110 Frisch 1984, 19; Adorno 2004, 56.

111 On development and unravelling in homophony and polyphony, see especially Schoenberg 1976, 146; Schoenberg 2010, 115, 208, and 312; Neff 1999, 57–81. Notably, Schoenberg does not even use the term ‘developing variation’ in his essay “Brahms the Progressive” (1947), in Schoenberg 2010, 398–441.

112 Schoenberg 2010, 117–118. See Heneghan 2005, 99–102. To my knowledge, the only previous analysis of development and unravelling together is John Daverio’s study of Bach’s Fugue No. 6 in D minor from book 1 of *The Well-Tempered Clavier*, BWV 851 (1992). Daverio has a very different understanding of ‘motives’ in this context as measure-defined segments and of ‘developing variation’ as the continuous reshaping of material (ibid., 35 and 36).

113 Kohler 2001, 281.

114 Daverio 1992, 37.

115 “Logik des Gesamtbildes,” which “beruht auf der sinngemäßen und zweckmäßigen Ausnützung der musikalischen Zusammenhänge” (Schoenberg 1995, 148).

116 Cf. Zacher 1993, 33.

117 According to thesaurus.com (7 Jun 2018), the only shared synonym of ‘exuberance’ and ‘endurance’ is ‘vitality.’ ‘Vitality’ is similarly the top-rated shared synonym of ‘endurance’ and ‘exuberance’ at Power Thesaurus (www.powerthesaurus.org, 7 Jun 2018).

118 Schoenberg specifies that polyphonic combinations concern the underlying “principal notes” and their intervals (2010, 312).

this pattern to 7–3–6 and momentarily employs a variant of b^2 .¹¹⁹ *Gestalt*-form c^4 in mm. 41–43 adds A back to this combination. In a shocking turn of events, c^5 in mm. 47–48 and 49–51 (and again in mm. 68–70 in the codetta), removes one of the statements of b^2 and hands over its 7–3–6 pattern to A .¹²⁰ *Gestalt*-form c^6 in mm. 58–61 inverts this pattern back to 2–6–3. A restatement of c^3 in mm. 65–67 reverts to prototypical statements of b^2 , clarifying the chain of *Gestalt*-forms. The unravelling spells out how A and b^2 are coherent in that they can counterpoint b^2 in the same way. And this unravelling, we will now see, tracks with (1) junctures of the broader form, (2) stations in the descent of the *Urlinie*, and (3) the spinning out of tonal relations implicated in the problematic D_b .¹²¹

Example 8: Bach, Prelude in E_b major, BWV 852, section 2, mm. 25–28

In the *first elaboration* (*Durchführung*),¹²² mm. 25–35 (which introduce c^1), and the *first part of the second elaboration*, mm. 35–41 (which introduce c^2 and c^3 ; Ex. 10), the upper voice states a vast enlargement of b^1 in mm. 25–33, as it did in the second section of the prelude. But this time, an equally vast enlargement of the invigorated b^2 in the bass in mm. 24–36 instead of the staid b^1 provides consonant support for the *Urlinie* to descend from D ($\hat{7}$) to C ($\hat{6}$) in m. 37. However, this descent introduces the disturbing parallel fifths G – D in mm. 33–34 and F – C in mm. 36–37 in the deep middleground.¹²³ This disturbance is exacerbated by none other than the dissonant chromatic passing tone D_b , for “its temporary independence increases the value and power of the unity of both voices” in the consonant fifths.¹²⁴ The appearance of this D_b on the surface in mm. 36–37 is the most

119 On variants, see Schoenberg 1967, 8; Arndt 2017, 126.

120 This shift of A is called a ‘direct shift,’ not to be confused with invertible counterpoint. Another direct shift is used in mm. 53ff, but *Gestalt* A is divided up amongst three different voices. On direct shift, see Taneiev 1962, 34.

121 Only one other analysis of unravelling, Severine Neff’s supplementation of a classroom analysis by Carpenter of Bach’s Invention No. 1 in C major (1999, 73–80), has oriented itself to the principle of unrest. Like Dineen, Neff discusses the working out of abstract tonal relations, but unlike Dineen, she discusses concrete motives, both on the surface and “on a broader structural level” (ibid., 77), thereby addressing to a certain extent all three domains of recursion. The present study builds on Neff’s precedent while regarding problems as both harmonic and contrapuntal.

122 Strangely, there is no conventional English equivalent to ‘*Durchführung*’ as a group of subject entries. Schoenberg offers the translation ‘elaboration’ for ‘*Durchführung*’ as the second division in sonata form (1967, 200), and he draws a connection between *Durchführung* in sonata form and fugue (1995, 268).

123 On the disturbance caused by parallel fifths, see Schenker 1910–1922, 1:176–178.

124 “Steigert die vorübergehende Selbständigkeit den Wert und die Kraft der [...] Einheit beider Stimmen” (ibid., 1:247).

emphasized instance since the opening, bearing harmonic, rhythmic, metric, and registral accents. But in the near middleground, the parallel thirds $B\flat-D\flat$ and $A\flat-C$ in mm. 36–37 are first unfolded into sixths, which helps to break up the surrounding fifths.¹²⁵ Much as the recklessness of *Gestalt a* is sublimated into vigor for both itself and *Gestalt b*, $D\flat$ is turning out to be both a source of unrest and ultimately a means to a more harmonious whole.

Example 9: Unravelling in Bach, Prelude in $E\flat$ major, BWV 852

125 On such unfolding, see Schenker 1956, fig. 43.b.5.

The image shows a musical score for Bach's Prelude in E-flat major, BWV 852, section 3, divided into three parts: elaboration 1 (mm. 25-31), episode (mm. 32-34), and elaboration 2, part 1 (mm. 35-41). The score consists of two systems of piano and bass staves. Above the first system, the chord progression for $b^1: D$ is shown as G, F, E \flat , D. Above the second system, the chord progression for $b^2: B\flat$ is shown as E \flat , D, G, F. The piano staves feature various annotations such as '3-Zug', '5-Zug', and 'unfolding', along with notes like 'N' and 'b²'. The bass staves include figured bass notations like $\frac{4}{2} 6 6 (4) 6 \frac{6}{5} \frac{4}{2} 6 7-6 \frac{7-6}{\frac{5}{3}} 8-7 \frac{6-5}{4-\#3} 6 \flat 7 \flat 6 \frac{5-4}{3} \flat$. The score is marked with 'elaboration 1', 'episode', and 'elaboration 2, part 1' at the top.

Example 10: Harmony, counterpoint, and form in Bach, Prelude in E \flat major, BWV 852, section 3, elaboration 1 and elaboration 2, part 1, mm. 25–41

In the *second part of the second elaboration*, mm. 41–49 (which introduce c^4 and c^5 ; Ex. 11), the *Urlinie* descends another step from C ($\hat{6}$) to B \flat ($\hat{5}$) in mm. 47–48, as the bass concludes a prodigious arpeggiation through F in m. 36 (not shown) to B \flat in m. 49. This arpeggiation is mediated by the interpolated fifths C (from F) and E \flat (to B \flat) in the bass in mm. 41 and 42, which make the inner-voice passing seventh E \flat consonant. Mm. 41–49 unfold the thirds E \flat –G in the bass and G–B \flat in the upper voice and compose out these thirds with *Züge* (linear progressions), giving this passage the thickest diminution in the piece. Correspondingly, it also has the thickest polyphonic combination, c^4 in mm. 41–43, which is the crux of the piece’s unravelling.

Mm. 41–49 are also marked as the most impassioned, featuring elongated and unresolved dissonances, an unnatural leap, a chromatic step, and a cross-relation (Ex. 12).¹²⁶ Several of these features involve the problematic D \flat as an alternative to D. From now on, D \flat and D appear together in *A* when it is stated at its original pitch level.¹²⁷ The unnatural leap of an eleventh B \flat –E \flat in m. 43 places D in the same register as the preceding D \flat .

126 See Bernhard 1973, 33, 102–105, and 112.

127 Gerd Zacher observes that, more broadly, *Gestalt*-form a^2 substitutes D-flat for D in ten out of twelve of its restatements at the same pitch-class level as in m. 25 (1993, 41).

elaboration 2, part 2 interior episode elaboration 2, cont.

41 42 43 44 45 46 47 48 49

Example 11: Harmony, counterpoint, and form in Bach, Prelude in E \flat major, BWV 852, section 3, elaboration 2, part 2, mm. 41–49

elaboration 2, part 2 interior episode elaboration 2, cont.

41 42 43 44 45 46 47 48 49

Example 12: Bach, Prelude in E \flat major, BWV 852, section 3, elaboration 2, part 2, mm. 41–49

When $D\flat$ appears in m. 44, it pulls the music away from an unresolved minor ninth E–F, and the bass, as if dazed by this strange move, elongates and leaves the harmonic diminished fifth E– $B\flat$ unresolved, leaping instead to $A\flat$. F, the resolution of E, finally appears two measures later (in m. 46), but in the wrong octave. The upper voice is correspondingly waylaid in reaching $A\flat$, the parallel tenth of this F, and to do so, it has to lead four augmented fourths in parallel motion and induce a chromatic step and a cross-relation between $D\flat$ and D in m. 45, where “counterpoint loses hold and the voices coalesce into a singular outburst of regal passion.”¹²⁸ When the upper voice finally reaches $A\flat$ in m. 46, it forms a dissonance with $B\flat$ in the bass, which threatens to derail its ascent to $B\flat$. But a variant of *Gestalt*-form b^2 dutifully resolves the seventh itself with G in the bass in m. 46. This resolution allows *Gestalt*-form a^2 , with one last heave, as it were, to boldly reach over to $B\flat$ in m. 46, catching it at the last minute before the soprano tumbles, exhausted, into its original register. While $D\flat$ is implicated in a host of irregularities here, at the same time, by helping to tonicize F, it serves as a reminder that the F minor triad in mm. 36–49 is deeper than the interpolated $E\flat$ -major triad in mm. 42–49 (as can be observed in Ex. 7). In this respect, $D\flat$ actually helps to clarify the thicket of diminution that connects this passage to the background tonic triad. Once again, $D\flat$ is turning out to be a boon for $E\flat$.

In the *third elaboration*, mm. 49–61 (which introduce c^6 ; Ex. 13), the *Urlinie* descends from $B\flat$ ($\hat{5}$) in mm. 47–48 through $A\flat$ ($\hat{4}$) in mm. 58–59 to G ($\hat{3}$) in m. 59, as the bass completes a gargantuan arpeggiation from $E\flat$ in mm. 1–3 through $B\flat$ in mm. 8–10 to $E\flat$ in m. 59. The passing seventh $A\flat$ in mm. 57–59 is made consonant by the interpolated fifths F (from $B\flat$) and $A\flat$ (to $E\flat$) in the bass in mm. 56 and 58, just as the inner-voice passing seventh $E\flat$ in mm. 41–42 is made consonant by the interpolated fifths C and $E\flat$ in the bass in mm. 41 and 42.¹²⁹ The interpolated fifth $A\flat$ in m. 58 is secured by an auxiliary cadence involving $D\flat$ in m. 58, which finally comes into its own as the subdominant degree of the subdominant region, supporting its own major triad. But instead of being simply overlaid upon the tonic triad as its antithesis, as in mm. 1–4, here the $D\flat$ -major triad is plugged into a sequence of IV–V⁷–I in the subdominant and tonic regions in mm. 58–59, which redirects the centrifugal force of $D\flat$ toward $E\flat$.

The register transfer of $A\flat$ ($\hat{4}$) in mm. 58–59 is a special event that involves processes in all three domains. In the contrapuntal domain (looking still at Ex. 13), $A\flat$ in mm. 57 is unfolded from F in m. 56, which is reached via a fourth-*Zug* from $B\flat$ in mm. 47–48. Amazingly, $A\flat$ in this *Zug* in m. 52 is itself unfolded from F in m. 51, which is reached via another fourth progression from the same $B\flat$ in mm. 47–48. Within the broader fourth progression, the intervals C–G in mm. 52–53 and C–F in mm. 55–56 are unfolded, and C–G is simultaneously inverted into a fourth, which changes the register of the upper voice.

128 Kerman 2005, 66.

129 On such interpolated fifths, see Schenker 1956, fig. 134.4.

elaboration 3, cont. elaboration 4 codetta

59 60 61 62 63 64 65 66-67 68 69 70

3 2 1

1 b V 1

3 2 1

b¹ b² b² unfolding

6-6 3-3

6 6 7 6 6 4 3 6 5

8 7 b7 6 b7 8
 5 b6 5 3
 3 4 3

4-3 8 7 b7 6 b7 8
 5 3 4 3 4 b6 5 3

1 V 1

Example 15: Harmony, counterpoint, and form in Bach, Prelude in E_b major, BWV 852, section 3, end of elaboration 3 and elaboration 4, mm. 59–70

This parallelism becomes more obvious upon reviewing the *Urlinie* (Ex. 16), which, thanks to the elevation of A_b (4̂) in mm. 58–59, is arranged in a motivically and harmonically significant way that diffuses out contrapuntally into the rest of the piece. (The *Urlinie* is referenced in the bass in m. 65 as a shout of encouragement, so to speak, just before the final cadence.) Motivically, the *Urlinie* forms superimposed statements of x^2 and b^1 , emblemizing the partnership of a and b in the proclamation of the tonic triad. But as the reader may have noticed, only the stalwart *Gestalt* b saturates the piece from background to foreground. For example, a polyphonic combination of b^1 (or a variant) and b^2 is varied from section to section in the deep middleground (please refer back to Ex. 7).¹³¹

7 8 36 37 47 58 59 66 67 68

b¹ 8̂ 4̂ 3̂ 2̂ 1̂

D — D_b

x² 6 5 4

Example 16: *Urlinie* in Bach, Prelude in E_b major, BWV 852

131 Riemann somewhat similarly perceives a subsurface statement of b^2 at the beginning, apparently the segment G–D_b–C–F in mm. 1–3 (1906, 49).

Harmonically, $D\flat$ embellishes the first leg of the *Urlinie* as a chromatic alternative to D , while $G\flat$ embellishes the second leg by analogy (looking again at Ex. 16). The chromatic step $D-D\flat$, the most frequent chromatic relation in the piece, becomes more and more direct in the third section as *Gestalten a* and *b* similarly draw closer, appearing in the deep middleground in mm. 33–36, the near middleground in mm. 35–36 and 43–44, and finally the foreground in mm. 68–69, at the close of the *Ursatz*, where it hints at a completely chromatic tetrachord $E\flat-B\flat$. This last appearance unscrambles and clarifies the opening *quiescenza*, mm. 1–4, which it echoes (Ex. 17).¹³² The result of all these explanations is that $D\flat$ is an enrichment of the tonic major region rather than a threat, and the chromatic step $D-D\flat$ appears throughout the following jovial fugue.¹³³

Example 17: Instances of *quiescenza* in Bach, Prelude in $E\flat$ major, BWV 852

The development and unravelling of *Gestalten a*, *b*, and *c*, the transformation of the *Ursatz*, and the generation of the harmony: the weaving of these logical strands of recursion evokes the organic in the sense of a three-dimensional body and mind. This evocation entails a model of an organism not as a self-contained unity but as a plurality of systems – in this case, the harmonic, contrapuntal, and formal domains. Accounting for this plurality requires a revision of Schoenberg’s and Schenker’s theories and especially of how they are to be understood in the first place, specifically with respect to the musical idea or vision, unrest, motives, *Gestalten*, development, and unravelling.

Appropriately enough, the content of the music’s mind – the musical idea – includes a notion of vitality, of life, but not just in terms of interacting systems. It includes a notion of life as relational, as seen in the mutual transfiguration of *a* and *b*. Relationships involve trust in the personhood of the other: “the partner is conceived not simply as a sum of traits or qualities but as an individualized world-relationship” with his or her own “internally steered selection” of recursion.¹³⁴ In exchange, this “complexity of the other [...] is obtained as a moment of one’s own life.”¹³⁵ It is the same with music. One trusts that its

132 The counterpoint in mm. 1–4 is so tangled that it is virtually the last thing Bach himself works out; only mm. 3–4 are missing in the initial version of the prelude (Ledbetter 2002, 175).

133 Ledbetter remarks upon the prevalent chromaticism in the fugue and its relation to the chromaticism at the end of the prelude (ibid., 176).

134 “Der Partner [wird] nicht einfach als Summe von Merkmalen oder Eigenschaften begriffen [...], sondern als ein individualisiertes Weltverhältnis”; “innengesteuerte Selektion” (Luhmann 1993, 307 and 304).

135 “Komplexität des anderen, die man [...] als Moment des eigenen Lebens gewinnt” (ibid., 305).

inflected recursion reflects a certain specificity and particularity not unlike our own, and this individuality, perceived through close reading,¹³⁶ augments one's own life.

One is welcome to situate the prelude's allegory of vitality in whatever context is most meaningful, but I like to think of the free-wheeling *a*, found on the surface, as the association-focused Schoenberg, and the law-abiding *b*, found throughout the voice-leading layers, as the transformation-focused Schenker,¹³⁷ since Bach's music confirms that their estranged theories can interface for the greater good. It is a strength of Schoenberg's and Schenker's theories that they provide footholds for their own critique, and of Bach's music that it helps to turn theory back on itself.

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136 For a thought-provoking defence of musical close reading, see Blum 1993. Stephen Blum notes that "musicologists can learn to tolerate many varieties of love – including some those that may strike guardians of our morals as fetishism, idolatry, or some other 'perversion'" (ibid., 49).

137 On the impact of Schoenberg's and Schenker's contrasting temperaments on their theories, see Almén 2005, 42–54.

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