ANALYTICAL PRACTICES IN WESTERN MUSIC THEORY

A Comparison and Mediation of Schenkerian and Post-Riemannian Traditions

> Thomas Jul Kirkegaard-Larsen PhD Dissertation Aarhus University 2020

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ANALYTICAL PRACTICES IN WESTERN MUSIC THEORY

A Comparison and Mediation of Schenkerian and Post-Riemannian Traditions

A dissertation submitted by Thomas Jul Kirkegaard-Larsen in partial fulfillment of the requirements for the degree of Doctor of Philosophy

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Notes to the reader

STYLE GUIDELINE AND REFERENCES.

The citations in this dissertation follow the guidelines of the Chicago Manual of Style, 16th edition, chapter 15, with the following exceptions:

- References to Schenker's letters and diary entries at Schenker Documents Online follow their guideline. Hence, OJ 3/6, 2692–2693 means Oswald Jonas Memorial Collection, box 3, folder 6, leaf 2692–2693. In in-text citations, Schenker Documents Online is abbreviated SDO.
- For translated texts or new editions, in-text citations refer to the publishing year of the translation or edition, as per the guideline, but often supplemented with the original year in square brackets. To avoid redundancy in an extended discussion of an item, the first reference may contain both publishing years—for instance Riemann (1917b [1903])—while the following references may contain only the publishing year—Riemann (1917b).
- In-text citations from vol. 1 of Schenker's *Free Composition* (1979 [1956/1935]) are cited with page numbers, occasionally with added paragraph numbers in square brackets: Example: Schenker (1979, 65 [§178]). When referring specifically to a musical example from vol. 2, Schenker's figure number is given instead. Examples: Schenker 1979, fig. 84; Schenker 1979, fig. 87-1a; Schenker 1979, fig. 95-c1; Schenker 1979, fig. 95-c2-α.
- References to editions of scores do not appear in the main text, but can be found in a separate paragraph by the end of the dissertation's list of references. The list is structured alphabetically after composer, title or genre (such as "Symphony," "Piano Sonata," and so on), the number of composition within that genre, and movement, and subsequently lists bibliographic information on the edition.

• In quotations, *Sperrsatz* will be reproduced in italics throughout the dissertation without further notice, as will the use of latin letters in texts otherwise written in Gothic letters.

LANGUAGES.

German quotes appear untranslated. In cases where there is an official English translation of a German source, this will sometimes be used instead. All translations from Danish, Norwegian, and Swedish are mine, and the untranslated originals appear in footnotes.

MUSICAL ISSUES.

I follow David Damschroder's (2018) practice of referring measures and beats: for instance, m. 5_2 means beat 2 in m. 5. Time signatures 2/2 and 6/8 are regarded as having two beats. Upbeats may sometimes—for example in cases where a structurally significant event occurs in the upbeat—be mentioned, set apart with a vertical line. Thus, mm. 0 | 1–2 means mm. 1–2 plus upbeat.

For technical reasons, figured bass will be represented not by vertically aligned numbers, but in the following manner: ⁶/₄ means six-four, etc.

Also for technical reasons, an incomplete function (most typically an incomplete dominant, the triad on the seventh degree on a major scale) will be represented with a horizontal, rather than diagonal, slash in the main text (\mathbf{D}), while analytical examples will employ the traditional, vertical slash.

Throughout the dissertation, "*Parallel*" will be used in its German/Scandinavian sense, denoting the relation between C major and A minor (and vice versa). To reduce the risk of misunderstandings, this is always marked as a capitalized German word in italics.

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Ebenso wie es keine Polyphonie gibt, die nicht auch die Zusammenklänge berücksichtigt, so gibt es auch keine nur einigermaßen entwickelte homophone Musik, für die das kontrapunktische Moment der Stimmführung keine Rolle spielt. Gute Harmonik fordert gute Stimmführung. Die Akkorde dürfen deshalb nicht, wie bei der klassischen Harmonielehre der Fall war, nur statisch und als Absolute betrachtet werden. Sie sind Relativitäten, die ganz vom ihrem Zusammenklange dependieren, vor allem von der Stimmführung. Eine jede neue Harmonielehre müßte dies in erster Linie ins Auge fassen.

Knud Jeppesen (1951)

Introduction

The colorful artwork which decorates the cover of this dissertation is entitled Neue Harmonie and was painted by Paul Klee in 1936. It may serve to illustrate the purpose of the present work. Notice how one side of the artwork is an inversion of the other: the upper left rectangle has the same color as the lower right rectangle; the rectangle just below the upper left one is reflected in the rectangle just above the lower right one; and so on. If one navigates through the artwork in this manner, one is surprised to find that the middle rectangleswhich, according to the logic of the composition, should have been the same color-are different colors. The artwork thus seems to be about both similarities and opposites, and about a conflict where the two sides were supposed to meet. Even though the title's "Neue," the inversional symmetry, and the exact amount of twelve colors in the composition allude more to dodecaphonic music than to the tonal music explored in the present study, Klee's abstract depiction of two conflictual sides that fail to reconcile is appropriate for present purposes.

PROBLEMS, PURPOSES, AND HYPOTHESES

This dissertation is a study of two of the most influential branches of twentieth- and (thus far) twentyfirst-century Western music theory and music analysis: Schenkerian theory¹ and different adaptations of Riemann's function theory. Both focusing on harmony and tonality, the Schenkerian and post-Riemannian² approaches have been in a conflictual relationship ever since they were established as two separate and geographically demarcated *traditions*: Schenkerian theory dominates in Anglo-American music scholarship, post-Riemannian in

¹ I will discuss the relation between theory and analysis later in this introduction; for now, I use "theory" as a colloquial umbrella term.

² More on the term "post-Riemannian"—which does *not* include neo-Riemannian theory—below.

INTRODUCTION

much of Europe.³ Even in today's increasingly internationalized research practices, there is still a tangible "antagonism" between the theories. This has many negative consequences. Rather than letting the two perspectives enrich and enlighten each other, international conferences still see counterproductive quarrels and heated debates.⁴ Knowledge dissemination is impeded because research conducted with one method in one tradition is seen as either incomprehensible and inaccesible, or as faulty, misguided, and esoteric in the eyes of the other.⁵ On top of this, fundamental epistemological questions remain unanswered: how is it that one tradition "knows" that something is correct and acceptable, when the other tradition "knows" that it is not? How did these disparate knowledge systems evolve historically? And are the two perspectives really mutually exclusive, as the antipodean relationship would have us believe, or is it possible to bring the two harmonic theories into a Neue Harmonie (to invoke Klee's painting again)?

The above-sketched circumstances, that Western music theory is dominated by two influential and apparently irreconcilable approaches to tonal harmony, comprises the fundamental problem from which this study takes its starting point. The assumptions that this starting point entail—that there *is* an conflictual relationship at all, and that it makes sense to study the two approaches in tandem—are documented thoroughly later in this dissertation, especially in Part II, which takes a fundamentally comparative approach. But I imagine that the reader well versed in music theory will undoubtedly recognize the schism in one way or the other: either by having experienced the clash of perspectives at conferences, by following discussions in the literature, or by being annoyed that some analysis in some journal of music theory

³ To avoid many lengthy and convoluted precisions, "Europe" and "European" will throughout the dissertation *not* include Great Britain, because British music theory became a part of the Schenkerian tradition during the 1980s, as discussed in Chapter 2.

⁴ See, for instance, the conference reports Kraus (2015, §6), Kirkegaard-Larsen (2016, 113), and Kirkegaard-Larsen and Holme (2017, 7–8).

⁵ Examples from the literature which express such views are legion and will be studied in depth in Chapter 3.

is too difficult to follow or reaches puzzling conclusions on obscure premises.

The purpose of the dissertation is to investigate, chart, and provide a path beyond the "antagonism" of the two music-theoretical and music-analytical traditions. Divided into three main parts, the dissertation seeks to accomplish these purposes by providing 1) a thorough historical study of the theoretical traditions since Schenker and Riemann (with a special focus on the relatively uncharted territory of post-WWII history); 2) a comparison of these traditions' theoretical assumptions and analytical practices; and 3) a *via media* between the two approaches to tonal music.

With this tripartite division, I hope to answer a plethora of questions, which may also be divided into three groups. The first group of questions is *historical* in nature: how did the theories establish themselves as traditions, and as separate traditions? How did these traditions evolve historically, and how have central theoretical concepts and analytical practices been defined and redefined in these historical processes? How did the antipodean relationship between the traditions develop? Which events, ideologies, and agendas fueled this development? The second group of questions concerns comparison: on what premises have the theories and analytical methods hitherto been compared? To what extent do the theories correspond or contradict each other? Are the many obvious terminological overlaps (terms such as "function," "dominant," "harmony," "tonality" occur in both traditions) synonyms or homonyms? What are the larger ramifications of the opposing perspectives for music historiography-and music theory historiography-and what are the analytical consequences when a work is approached from each perspective? The third and last group of questions is arguably the fuel that drove me to engage with the other questions in the first place. Even though these questions are treated at the end of the dissertation, they take a central place: how might one mediate between the traditions? Is it possible to construct a new analytical tool which would, to some extent, reconcile the approaches-a tool that is acceptable in both traditions, while at the same time enabling the perspectives to interact and enlighten each other?

INTRODUCTION

There are two central hypothesis of this study. The first is that such a mediation is both possible and viable, and that it is not necessary to distort core principles in either theory to achieve this. The second is that one can only arrive at a successful mediation if one considers the theories and methods in their larger, historical and social contexts. This entails that one must go beyond the comparison of "Hugo Riemann" and "Heinrich Schenker" as representatives of theoretical traditions, and instead scrutinize—as the primary research object—the traditions, theories, and analytical methods that they gave rise to.

OBJECT OF STUDY

To grasp how these ambitions are approached, the following pages introduce exactly how I conceptualize my object of study, and from what theoretical and methodological standpoint I approach this object.

The object of study in this dissertation is best understood as consisting of two 'complexes': one Schenkerian complex and one function-theoretical complex.⁶ Each of these complexes are comprised of four distinct but deeply related areas: Theory, analysis, tradition, and practice. Example 1, to which I shall return repeatedly throughout the dissertation, formalizes this relation.

The first three areas, *theory*, *analysis*, and *tradition*, are represented by the vertices of the two triangles in Example 1. Each triangle is encompassed in a dotted circle representing *practice*, and the circles partially overlap. The double arrow in the middle of the figure represents the basic comparative and mediating procedure of this study.

⁶ It is a recurring issue that one tradition—the "Schenkerian"—is traditionally identified by the name of its founding father, while it would be misleading to call the other tradition "Riemannian" inasmuch as it developed more as correctives to Riemann's theories, than as an adherence to his writings. I follow different strategies: the tradition is identified as "function-theoretical" or "post-Riemannian" depending on context. The most accurate denominator would be "the post-Riemannian functiontheoretical tradition" because "function theory" need not have much to do with Riemann, and because "post-Riemannian" distinguishes it from "neo-Riemannian" and "paleo-Riemannian" approaches, as Steven Rings' has called it (Rings 2011a).

OBJECT OF STUDY

I shall focus on elaborating the concepts in the triangles first. Theory, analysis, and tradition are reciprocally related to each other, which is represented by the edges of the triangles. The reciprocal relationship between theory and analysis is well-known and often discussed in the literature.



Example 1: The dissertation's object of study as two similar, but separate complexes.

There are different opinions as to how sharply one can distinguish between them. David Lewin, for instance, famously criticized Edward T. Cone for conflating the two concepts in his article "Beyond Analysis" (Cone 1967):

[A] theorist who wants to validate his ideas by making [an empirical appeal to the practice of great composers] is naturally going to point out passages from the literature as support for the putative pertinence of his notions. He may, indeed, dig pretty hard at such passages in order to focus his readers' ears on what he is interested in. But, TO THE EXTENT HE APPROACHES THE MUSIC WITH THAT AIM, HE IS NOT ANALYZING IT! Or, rather, he is making a partial and selective analysis, to indicate how his theoretical conceits can provide a useful tool for analysis. (Lewin 1969, 62)

INTRODUCTION

Lewin's all-caps emphasis points to the widespread idea that analysis focuses on the singular work—"the music itself, rather than external factors" (Bent and Pople 2001, 1)—while theory focuses "on musical materials per se, in order to explain (and/or offer generalizations about) their various principles and processes" (Berry and Solkema 2014, 1), as the entries on "analysis" and "theory" in *Grove Music Online* formulate it.⁷ But often, and especially in the cases of Schenkerian theory and function theory, one may question to what extent it makes sense to maintain this sharp distinction. The Schenkerian approach is often described as an "analytical theory" (Schwab-Felisch 2009, 35), a "theoretically based approach" (Drabkin 2002, 838), or "ein Modellfall eines Verfahrens, das sowohl Theorie als auch Analyse ist" (Dahlhaus 1970, 16); a similar relation exists between function theory and function anaysis.

As a thought experiment testing Lewin's sharp distinction between theory and analysis, one may try to think of a *purely* analytical statement, free of any theoretical underpinnings.⁸ While one may conceive of purely theoretical statements such as "there are six perfect fifths in the diatonic scale," it is almost impossible to create a purely analytical statement. "The melody of this piece repeats the same pitch many times" is not an analysis that says a lot, but nonetheless one that alludes to very basic music theory: it takes for granted that sound waves with identical frequencies occurring in immediate temporal succession may be referred to as being one and the same "pitch," and that this pitch can furthermore be elevated to having the hierarchical status of "melody."

The point of this brief thought experiment is not only to underline that theory and analysis are in a reciprocal relationship, but to underline that this relationship is so intimately embedded in the way music scholarship talks and thinks about music, that the two can only

⁷ *Die Musik in Geschichte und Gegenwart* (henceforth MGG) has similar definitions but also underlines the reciprocity of theory and analysis (Gruber 1994, 579).

⁸ I thank Professor Joseph Straus for a stimulating discussion on theoretical and analytical statements in one of his lectures in spring 2018 from which I take some points here.

be sharply distinguished *in theory*. Or, as the Grove entry on "theory" says:

Although conceptually separate from theory, in that analysis often focuses on the particulars of a given composition whereas theory considers the broader systems that underlie many such works, in practice the two have a reciprocal relationship. (Berry and Solkema 2014, 1)

Arguably, the reciprocity has different expressions in the Schenkerian and functional realms. It is noteworthy that analyses of actual, published works play a comparatively smaller role in the post-Riemannian output than in the Schenkerian (the historical backgrounds and explanations for this circumstance for this will be examined in Part I).

Returning to Example 1, the edges connecting "theory" and "analysis" are, as mentioned, meant to symbolize their reciprocity. The edges that connect "theory" and "analysis" to "tradition" furthermore emphasize that the reciprocal relationship between theory and analysis does not occur in a vacuum, but always in a *historical* context where the traditions of the field play an active role in shaping *how* one theorizes and analyses music (and vice versa). This tenet is an important part of the dissertation's DNA, and is part of the reason that the two complexes are seen as comparable at all (as elaborated in Part II).

The two dotted circles represent *practices*. Rather than conceptualizing "practice" as a fourth, interrelated vertex—in what would amount to a tetrahedron instead of a triangle—the circles are meant to illustrate that theory, analysis, and tradition are not just interrelated, but that they also *exist as* practices. My specific use of "practice" is connected to the formidably large scholarship referred to as "practice theory." Practice theory informs basic methodology and procedures throughout my dissertation. It therefore needs to be introduced in greater detail.

THEORY AND METHODOLOGY

Due to the large scholarship around practice theory, it impedes any concise definition. Put as succinctly as possible, practice theory focuses on "a 'shared knowledge' which enables a socially shared way of ascribing meaning to the world" (Reckwitz 2002, 246)—or, in this case, a socially shared way of (1) ascribing meaning to music through theory and analysis, and (2) accepting a theory and analytical method as meaningful. In Andreas Reckwitz' words, practice theory is distinct from other types of cultural theories such as culturalist mentalism, textualism, and intersubjectivism in that it "does not place the social in mental qualities, nor in discourse, nor in interaction" (ibid., 249), but, as the name suggests, in practices.⁹ He continues:

A 'practice' ... is a routinized type of behaviour which consists of several elements, interconnected to one other: forms of bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge ... A practice is thus a routinized way in which bodies are moved, objects are handled, subjects are treated, things are described and the world is understood. (Reckwitz 2002, 249–250)

Obviously, the point here is not that a Schenkerian understands the world in an utterly different way than a function theorist; practice theory recognizes that "there are diverse social practices, and as every agent carries out a multitude of different social practices, the individual is the unique crossing point of practices" (ibid., 256), which indicates that music theorists of whichever convictions share many prac-

⁹ In Reckwitz' terms, culturalist mentalism posits that human behaviour is caused primarily by inner, cognitive structures; the social is thus placed within the mind. Structuralism a la Saussure and Lévi-Strauss are examples of the objectivist branch of mentalism, while the phenomenology of Schütz and Husserl represent a subjectivist branch. In contrast, culturalist textualism places the emphasis on external discourses, signs, and texts, such that "'mental' qualities ... turn out to be nothing more than very specific *concepts* within discourse *about* something which is described as mental" (248). Reckwitz places Foucault and Luhmann in this category. Culturalist intersubjectivism works in the middle point between pure mentalism and textual antisubjectivism by way of understanding the social primarily as speech acts between interacting agents, and is represented by philosophers such as Popper and Habermas (Reckwitz 2002, 247–249).

tices. Rather, practice theory offers a heuristic means of situating the abstract theory-analysis-tradition gamut of Example 1 in the concrete world:

Compared to mentalism, it [i.e. practice theory] does not invite the analysis of mental phenomena 'as such', but the exploration of the embeddedness of the mental activities of understanding and knowing in a complex of doings. (Reckwitz 2002, 258)

This focus on "doings," as well as the above-cited focus on bodily activity, may at first seem incongruent with the subject of music theory, a field of seemingly incorporeal thinking, contemplating, and scrutinizing. Here, two things are worth mentioning: first, that bodily and mental patterns constitute practices in tandem; and second, that the bodily focus includes acts such as writing, reading, talking-acts that are obviously integral to scholarship of any kind (ibid., 251). In the present context, practice theory is thus useful because it acknowledges that, for instance, classroom interaction, conference papers, email writing, and the very act of doing an analysis, are all integral parts of the Schenkerian and function-theoretical "practices." And though practice theory is seldom, if ever, seen in direct connection with music theory, the analytical act is indeed thematized in several texts on Schenkerian pedagogy.¹⁰ Benjamin K. Wadsworth, for instance, speaks of "Schenkerian analytical routines" (Wadsworth 2016, 180), thus aligning himself well with practice theory.

Given that this dissertation focuses on rather specialized professional societies, I am particularly inspired by Etienne Wenger's account of *communities of practice* (Wenger 1998).¹¹ Wenger first pre-

¹⁰ See Beach (1989; 2014), Rothstein (1990a), Slottow (2005), and Cadwallader and Gagné (2006). Stephen Slottow cites Charles Burkhart's keynote address at the 1995 metting of the Society for Music Theory: "Schenker is not just a theory; it is also a practice. You have to get your hands dirty" (Slottow 2008, 259). As for the functional counterpart, I have not found texts on the "analytical act," although occasionally, functional analytical *practice* is distinguished from its written-down theory (Holtmeier 1999, 76).

¹¹ There is also a certain affinity between my work and the so-called *sociology of scientific knowledge*, and especially Karin Knorr-Cetina's (1999) concept of *epistemic cultures*, a term that I will also occasionally apply. However, for various reasons, I find Wenger's *communities of practice* to be more directly applicable in this context.

sented the concept in Lave and Wenger (1991), and he subsequently devoted a monograph to the purpose of making the concept "more useful as a thinking tool" (Wenger 1998, 7), which is how I intend to use it here. Taken alone, Wenger's concept of practice is close to the one described above, but in coupling it with *community*, he creates a more distinct concept. First of all, it underlines that one individual partakes in several communities of practice (the circles in Example 1 may interact with each other, and with many other circles not displayed); second, it becomes clear that not every community has a shared practice: "A residential neighborhood, for instance, is often called 'the community' but it is usually not a community of practice" (Wenger 1998, 72). In a community of practice, practice is what makes the specific community coherent, to put it somewhat tautologically. This coherence occurs through mutual engagement, a joint enterprise, and a shared repertoire (ibid., 73). Mutual engagement, Wenger emphasizes, is not intended to indicate that a community of practice is necessarily completely homogenous-differences and tensions can also exist within the communities (ibid., 77)-but simply that practice exists not in the abstract, but "because people are engaged in actions whose meanings they negotiate with one another" (ibid.). Likewise, the joint enterprise of a community of practice need not entail agreement: "The enterprise is joint not in that everybody believes the same thing or agrees with everything, but in that it is communally negotiated" (ibid., 78). The shared repertoire concerns the tools for negotiating meaning that has been created over time in the community:

The repertoire of a community of practice includes routines, words, tools, ways of doing things, stories, gestures, symbols, genres, actions, or concepts that the community has produced or adopted in the course of its existence, and which have become part of its practice. (Wenger 1998, 83)

The verb "to negotiate" is a recurring one in Wenger's practice theory. This springs from Wenger's stance toward the concept of "meaning," the central thing that is negotiated in communities of practice: Meaning is always the product of its negotiation, by which I mean that it exists in this process of negotiation. Meaning exists neither in us, nor in the world, but in the dynamic relation of living in the world. (Wenger 1998, 54)

This stance is in agreement with my own and is an important feature of this dissertation's methodological framework: if neither Schenkerian, nor functional approaches are capable of extracting the true "meaning" of the music—or rather, if they are equally correct—it is because there is no pre-determined, inherent meaning in a musical work; rather, the approaches represent specific practices of producing and negotiating meaning, a negotiation that is only meaningful because it occurs within a community of practice. When that negotiation is observed from outside the community of practice, it may appear less obviously meaningful: "To the non Schenkerian, this school with its esoteric and seemingly speculative approach to musical understanding is at once attractive and frightening," as one Danish account of the Schenkerian "school" sounded in 1975 (Levy 1975, 20).

QUESTIONING PRACTICE THEORY

With regard to three aspects, the applicability of practice theory in this dissertation may be questioned. The first has to do with the central idea that practices include the "implicit, tacit or unconscious" (Reckwitz 2002, 246); the second concerns the (already discussed) assumption that in communities of practice, there is coherence and agreement between individuals; the third relates specifically to the problem of viewing European function theory as a community of practice (there is a similar but, so I will argue, less urgent problem in viewing Anglo-American Schenkerism as one community of practice, which will also be discussed below)

The first and second concerns are interconnected: Is it a valid claim that music-theoretical and music-analytical practices contain the implicit, tacit, and unconscious, and is it safe to assume that these tacit practices are shared among individuals in the community of practice? After all, this dissertation is examining practices in academia, and one of academia's main practices must be—or, at least, should be—to regularly critically re-evaluate any habitual

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assumptions of the field and to consciously reflect upon one's own and others' approaches, theories, methods, etc. Analytical choices are seldom unreflected and the role of the individual analyst should not be underestimated or confused with the method she uses, or the tradition to which she belongs. Indeed, one often finds divergent analyses of the same work, even though both have been conducted with a Schenkerian approach; and two function theorists may strongy disagree on aspects of function theory.¹² Nevertheless, keeping these modifications in mind, the concept of communities of practice is still valid: it is important to underline that for Wenger, "practice includes both the explicit and the tacit," and that "practice is not inherently unreflective" (Wenger 1998, 47-48). Hence, a community of practice may critically and consciously reflect on its practice in an effort to make the implicit explicit. Furthermore, Wenger points out that even the activities of academia's ivory tower is inherently social, and thus that the work of the critical and independent analyst is only meaningful if she speaks into a social context:

Our engagement with the world is social, even when it does not clearly involve interactions with others. Being in a hotel room by yourself preparing a set of slides for a presentation the next morning may not seem like a particularly social event, yet its meaning is fundamentally social. Not only is the audience there with you as you attempt to make your points understandable to them, but your colleagues are there too, looking over your shoulder, as it were, representing for you your sense of accountability to the professional standards of your community. (Wenger 1998, 57)

Besides, as will be substantiated in (especially) Parts I–II, communities of practice is a useful concept in this dissertation because there *are* assumptions in Schenkerian and functional theory that are held as common knowledge in one community of practice but *not* in the other. For instance, the very idea that a harmony may be prolonged in

¹² See for instance Claus-Steffen Mahnkopf's critique of de la Motte (Mahnkopf 1995), and the debate between Rummenhöller (1975; 1977), Claus Ganter (1976), Walter von Forster (1976), and Mathias Spahlinger (1977). In a Danish context, this is evident in the debates between Jan Maegaard (1971a; 1971b; 1971c) and Jørgen Jersild (1971a; 1971b) and more recently between Svend Hvidtfelt Nielsen (2015) and Jens Rasmussen (2017).

time through voice leading and subordinate harmonies is as fundamental a tenet in Schenkerian theory as it is foreign to function theory.

As an alternative to Thomas Kuhn's idea of irreconcilable and incommensurable paradigms (Kuhn 2012 [1962]), the concept of communities of practice is a helpful way of thinking about the two complexes in Example 1. Since individuals belong to several communities of practice, it is simultaneously possible that they disagree on fundamental tenets on harmony and tonality while still being able to partake productively in professional activities such as conference attending, peer-reviewing, etc. As a concept, community of practice also makes room for changes, doubts, and disagreements within the community: "Practice must be understood as a learning process and ... a community of practice is therefore an emergent structure, neither inherently stable nor randomly changeable" (Wenger 1998, 49).

The third problematic aspect is that it can be questioned whether it makes sense to view European function theory as one coherent community of practice. I consider this problem to be more pertinent for function theory than for Anglo-American Schenkerism, first of all because the latter is characterized by sharing a common language—if one disregards its Austrian origin, of course. This is not to suggest that Anglo-American Schenkerism is a static unity where everyone agrees on everything. On the contrary: Chapter 2 will reveal a long list of debates in the Schenkerian community. But the different strands of Schenkerism, and the mutual engagement and discussion between these strands, are meaningful exactly because they function in a community of practice with a (literally and metaphorically) common language.

The situation is very different for Continental-European function theory. It is well known that function theory spread far beyond the boundaries of the German language, and there are surprisingly diverse practices of function theory all over Europe—Chapter 1 will make this abundantly clear. It follows that it would be dubious to stubbornly stick to the proposition that each and every of the European adaptations of function theory can be viewed as constituting *one* coherent community of practice; but on the other hand, practice

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theory and the concept of communities of practice foregrounds the tacit and common-sensical, the exact areas where there *are* commonalities between the different national and linguistic adaptations of function theory (common features are summarized in section 1.5, page 108). Furthermore, it is also clear that the diverse national versions of function theory to some extent share a common *history* and origin, and that it is thus meaningful to view them as being part of one "tradition."

The importance of the interrelationship between practice and tradition comes to the fore here.¹³ Practice theory and the concept of communities of practice becomes *a heuristic mode of thinking* about the traditions, a mode that foregrounds the tacit and commonsensical. The word "tradition," on the other hand, draws attention to past practices from which current practices spring. For instance, it is widely held that Schenkerian practice is rooted in Viennese thoroughbass theory,¹⁴ while function theory is rooted in Leipziger/Prussian dualistic theory (Klumpenhouwer 2002, 14; see also Holtmeier 2005c).¹⁵ This is widely held even though few actually practice harmonic analysis in the style of the Viennese Simon Sechter (1788–1867), and few—if any—current adaptations of function theory adhere to harmonic dualism a la Riemann and his predecessors Moritz Hauptmann (1792–1868) and Arthur von Oettingen (1836–1920).

¹³ The interrelationship is present as well in Adele T. Katz' *Challenge to Musical Tradition*, in which she defines tradition as "a custom or usage that has functioned for so long a time that it has become a precedent, an unwritten law" (Katz 1945, xxii). Practice theory provides a way to talk about those "customs," "usages," and "unwritten laws."

¹⁴ Robert Wason opens his influential book *Viennese Harmonic Theory from Albrechtsberger to Schenker and Schoenberg* thus: "For the American theorist a historical study of Viennese harmonic theory should require no justification, since a continutation of that history is unfolding in America today" (Wason 1985, ix). In his review of this book, William Caplin writes that Wason's historical study represents the reinterpretation of history that often accompanies a Kuhnian change of paradigms—and furthermore notes that Riemann's function theory, accompanied by Riemann's reassesing of the history of music theory (Riemann 1898a), is another example of this mechanism (Caplin 1986, 140).

¹⁵ Klumpenhouwer notes that "a third major tradition, the fundamental-bass theory emanating from the work of Rameau, was more international in scope and influence" (Klumpenhouwer 2002, 14).

When one belongs to a tradition, it means that one (consciously or unconsciously) draws on certain canonized texts and certain historical theorists, thus inscribing oneself into the tradition.

An additional (fourth) concern regarding practice theory is a very general one: inasmuch as music theory and cultural theory were sharply contrasted in some of the foundational texts of "New Musicology," the coupling of the two could appear dubious. However, I am far from the first one to argue for such a coupling.¹⁶ For instance, it is a central objective in *The Schenker Project*, Nicholas Cook's monograph on Schenker, to "consider the relationship between music theory and social context" (Cook 2007, 4). Indeed, the book's concluding chapter is entitled "Music Theory as Social Practice," and here Cook writes that

[f]or us, to whom Schenker is one theorist among many, analysis is ... a matter of making choices, of deciding what there is to hear, of construing music as an object of thought ... It 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.¹⁷ (Cook 2007, 317)

Similarly, Robert Snarrenberg's book *Schenker's Interpretive Practice* states that "[t]he practice of interpreting artworks is a social phenomenon, a form of culture" (Snarrenberg 1997, 139). He continues:

When the interpreter of a musical artwork asks herself "What do I hear?" she engages in the activity of reporting to herself; even if her self-reporting is not made public, it still depends upon a social practice for its forms of representation, for just as there can be no private language, there can be no private interpretive practice. (Snarrenberg 1997, 139)

¹⁶ A related example is the surge of research in global histories of music theories in the light of theories of cultural transfer and postcolonialism (see Christensen 2018; Cohen et al. 2019).

¹⁷ Importantly, Cook later adds: "Of course, nobody would want to claim that music has meaning only because of analysis in the academic sense, let alone that it has meaning only for analysts. But if the social meaning of music depends on the correlation of musical and other social patterns, then it is based on those construals of music as thought that are presented in an explicit and discussable manner in music theory" (Cook 2007, 317).

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Though Snarrenberg does not engage with a specific theory of practice, the affinity with some of the points from above is striking. More recently, John Koslovsky has argued that "music analyses are culturally-situated acts that involve a complex and dynamic interplay of historical, social, and intellectual forces," and furthermore that this position is becoming commonplace (Koslovsky, forthcoming, 1).¹⁸

The intention with the preceding pages has been to emphasize the complex and reciprocal relation between theory, analysis, tradition, and practice, and to flesh out how my conception of their relation informs the theoretical foundation and methodological approach in this dissertation. It should be repeated, however, that practice theory is used as a heuristic thinking tool; I will often explain some of my findings in a practice-theoretical light, but certainly, this dissertation inscribes itself more into the practice of music theory than into the practice of practice theory—to put a simple matter rather convoluted. This said, I believe that any music theorist will be able to see how the practice-theoretical foundation governs many of my choices and procedures and distinguishes my study from previous comparative ones.

Delimitations

A study that adhered closely to practice theory, instead of using it heuristically, would likely conduct field work in the music theory classrooms of Western universities and conservatories to take oral

¹⁸ A note in this context: It is striking that in Christopher Small's (1998) nearly allinclusive concept of "musicking"—a concept that spans from the act of cleaning the floors before a concert to playing, listening, and dancing to music—the acts of analyzing and contemplating music mentally and scholarly are seemingly excluded (see, for instance, his somewhat sarcastic rendering of the anecdote about Brahms, who would rather stay home and read the score than experience a performance of Mozart's *Don Giovanni* [Small 1998, 5]). This is not surprising, since one of Small's objectives is to argue for an ontological shift away from music as an "object," the structure of which may be subject to analysis, and toward a conception of musicking as an act. However, I regard as a part of musicking the very reification that he objects to (in congruence with Wenger's [1998, 57–63] ideas about reification as a constituent part of communities of practice): theory and analysis viewed in context are, in other words, also musicking, even if only in the abstract.

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dissemination, social interactions, and physical practices into closer consideration. This, I have not done—for practical as well as scholarly reasons, the main one being that this dissertation focuses on the *history* of music theory (from roughly 1893 to today)¹⁹ and that the present-day schism of traditions is to be seen in this historical light. Therefore, like many other music theory histories, I primarily study *texts* produced in each tradition. In this area, practice theory nevertheless influences delimitations and methodological choices: generally, I focus on the most influential and widely shared aspects of post-Riemannian and Schenkerian practices. I am not always interested in (what I assess as) the most intellecutally stimulating or "best" versions of each theory. I acknowledge that it is often the pedagogical and simpler versions of a theory that makes the largest impact on a community, and I believe that it is worthwhile to study such versions nonetheless.

It is often problematical to asses which texts and authors are "influential" and which are not. Generally, a text may be taken as "influential" when it makes contributions which are clearly traceable in later texts by other authors, or if the established historiography already regards the text as important.²⁰ This does not mean that I will discuss every single "influential" text, of course—this is beyond my scope—but it means that I will primarily consider texts and authors who are already "canonized" in the two traditions.

I will devote special attention to *textbooks*. This is a choice also influenced by the practice-theoretical orientation, for it is usually these books which are integrated into classroom teaching, thus being widely shared in a community of practice. Often, they exemplify the traditions' accepted knowledge rather than the new, cutting-edge and groundbreaking research published in academic journals. I will also discuss many articles along the way—but I will especially do so when

¹⁹ Riemann's *Vereinfachte Harmonielehre* came in 1893; a 1891 prolegomenon to the function theory that he proposed in this widely disseminated book is discussed in Chapter 1. The most recent textbook I discuss (in Chapter 2) is Wen (2019).

²⁰ For more on the selection of specifically Scandinavian theories, see Kirkegaard-Larsen (2018, 79).

they make contributions which are subsequently integrated into other articles and textbooks.

Because my object of study, the two complexes in Example 1, is comprised of two very large fields, it follows that I must further narrow my focus somewhat. As per my focus on textbooks, I focus mostly on "mainstream" function theory and Schenkerian theory. This prevents me from engaging thoroughly with controversial extensions of each theory which aim at encompassing pre- and post-tonal music within their respective frameworks. The musical repertoire studied in this work is centered around the classical-romantic period with only few digressions—but it will be an important point (fleshed out in section 4.1.3.3, page 284), that the traditions do not define this tonal repertoire in completely similar ways.

DEFINITIONS OF TERMS AND CONCEPTS

Any study of more than 100 years of theoretical and analytical development in two separate traditions necessarily becomes heavy with technical terms and specialized symbols. I presume some familiarity with each method, but as an aid to the reader, Appendix 1 (page 455) provides an explanatory list of terms and symbols in the historical sources-that is, terms and symbols found in Parts I and II of the text. Appendix 2 (page 531) provides a list of symbols found in the new analytical models proposed in Part III. The majority of these are already found in Parts I and II, but the models do use a number of new symbols. These are introduced and explained in the main text as well, but Appendix 2 provides an easy-to-find register for the reader. Finally, Appendix 3 (page 537) is a typology of function theories. This typology is based on earlier work of mine (Kirkegaard-Larsen 2017a; 2018), but it is updated and refined in this new version. The types of function theory are introduced in Chapter 1, but because the typology becomes relevant again in (especially) Chapters 4-7, this appendix should also function as an aid to the reader.

The theory-historical and practice-theoretical orientiation entails that I will not define "Schenkerian theory," "function theory," "harmony," "function," or other very central concepts and terms here. It is a central and crucial point of this work that all of these terms are historically contingent, and that their meaning is continually negotiated within the communities of practice. Therefore, these terms will be introduced as they become relevant in the historical overview of Chapters 1–2, and they will especially be discussed and compared in Chapters 3–4.

The reader may find information about style guideline, conventions about musical notation, and other information of that sort, in the "Notes to the reader," preceding the table of contents.

Finally, a note on the central term "post-Riemannian." Although it has already been used in passing in the literature (cf. Holtmeier 2005d, 238; 2011, 11), it has not asserted itself as a common term-and I would like to argue that it should. It is the most accurate denomination for the tradition that has been so influential for more than 100 years in European music theory. As briefly indicated in footnotes above, I use this term for two reasons: first, to avoid the term "neo-Riemannian," which I consider to be a tradition, theory, and analytical practice separate from the post-Riemannian, for reasons that are more fully discussed in section 1.4.3 (page 104ff.). Second, I avoid the general term "Riemannian" because this could entail too large and imprecise an amount of theoretical approaches (dualist and monist, harmonic and metrical). The theories and traditions I focus on arose as active responses against many of Riemann's tenets, most fundamentally his theory of harmonic dualism; "post-Riemannian" acknowledges Riemann's central but nonetheless often limited and indirect role in an appropriate way.

STRUCTURE OF THE DISSERTATION

The tripartite division of the dissertation has already been introduced. The following overview sketches the line of argument through these three parts and their constituent chapters.

Part I of the dissertation provides a thorough historical account of post-Riemannian and Schenkerian traditions. It takes up a large part of the dissertation because it is, on the one hand, an independent contribution to reception-historical research in both traditions, and because it, on the other hand, lays several stones in arguments pursued further in Parts II and III.

Chapter 1 focuses on the post-Riemannian tradition of function theory. A brief, contextualizing account of Riemann's own function theory is provided in section 1.1, before the chapter goes into detail with its reception. Section 1.2 focuses on the German reception; first, on the early reception-that is, before WWII-and then the later reception, after WWII. There is a remarkable difference between preand post-war function theories, as has already been documented in the existing historiography; however, I also engage critically with this historiography, arguing that it has neglected the study of post-war theories. Section 1.3 focuses on function theory in other (primarily European) countries. I devote special attention to the reception and development of function theory in Scandinavia, and I present a typology of function theories. Section 1.4 concerns the reception of function theory in North America, and I discuss to what extent this theoretical current is connected to the European post-Riemannian theories. Finally, section 1.5 summarizes the findings of this chapter.

Chapter 2 is devoted to the Schenkerian tradition. As in Chapter 1, a brief introduction of Schenker's theory in section 2.1 contextualizes the following discussion. Section 2.2 discusses Schenker's limited, but often overlooked reception in both pre-war and post-war European musicology. Section 2.3 takes up the bulk of the chapter. This section concerns the dissemination of Schenkerian theory in the United States, its establishment as a tradition, and the developments of theory and analytical practice that this process entailed. Section 2.4 is a summary of the main findings in Chapter 2.

Part II takes a fundamentally comparative approach to the many theories and theorists discussed in Part I. Keeping in mind that tradition, theory, and analysis are fundamentally intertwined and exist as practices, Part II discusses these areas one at a time.

It begins with "tradition" in Chapter 3. Chapter 3 is, first, a critical assessment of previous comparative studies of Riemann and Schenker (section 3.1); second, a clarification of the ground on which I compare the two "complexes"; and third, a comparison of the traditions *as traditions* (collected in section 3.2). One simple but very im-
portant point is that previous comparative studies have focused on (as just mentioned) Riemann and Schenker, while they have said virtually nothing of their subsequent traditions. Considering that Riemann's and Schenker's theories evolved so much in post-Riemannian and Schenkerian traditions (as documented in Part I), this makes for a significant lack in current research.

Chapter 4 compares aspects of post-Riemannian and Schenkerian *theories*. Section 4.1 discusses concepts which are central to both theories—concepts such as "function" and "tonality." I argue that several of these common terms are used in similar, but not identical ways in the two tradition, and I illustrate how this explains several theoretical disagreements. I also examine to what extent the conceptions of these terms are contradictory or make claims about different phenomena—thus laying some stones for the mediation in Part III. Section 4.2 considers some deep-rooted differences between fundamental ideas revolving around musical temporality, logic, and coherence.

Chapter 5 examines the analytical consequences of the two modes of thought by considering three works (by Haydn, Schubert, and Mendelssohn) from the perspective of each analytical method, and by comparing the results. All in all, Part II provides the yardstick from which it is to be evaluated whether the mediation in Part III is successful or not.

In Part III, two new analytical models, meant to provide a *via media* between the two traditions, are presented and applied.

Chapter 6 opens up (in section 6.1) with some general considerations about the act of "reconciling," "synthesizing," or "mediating" between theories, and argues for the approach I take. I then introduce my two analytical models, in sections 6.2 and 6.3, respectively. Section 6.4 explicates how the content of Parts I–II have contributed to their design.

Chapter 7 revisits the works by Haydn, Schubert, and Mendelssohn with the new analytical tools, and explores how these might help to overcome some of the issues observed in Chapter 5's comparative analyses. Finally, a conclusion summarizes the findings and results of Parts I–III.

PART I: TRADITIONS

Chapter 1:

The post-Riemannian tradition

This chapter is an account of post-Riemannian function theories in their historical contexts-as well as a critique of certain parts of this field's historiography. Set before the task of writing such an account, one is immediately faced with one large problem: there is no one function theory (just as there is no ultimate version of Schenkerian theory). As the introduction argued, the theories are not fixed entities, but exist as practices in traditions, emerging through continuous negotiation, refinement, critique and revision, culturally transferred, adopted, adapted, and so on.²¹ One cannot hope to encapsulate the essence of, say, the idea of *representation* in function theory in a way that corresponds equally well with both German, Danish, and Czech adaptations of function theory. Plenty of studies document that it is difficult enough to agree upon the meaning of "function" in Hugo Riemann's theoretical output alone-broadening the perspective to post-Riemannian function theory greatly complicates the question.²² One can only aim to give a general and accurate account of large portions of shared knowledge within the tradition. In this chapter, I aim to do just that, based on a selected corpus of core texts that are representative of each tradition.

It goes without saying that the selection of "representative texts" have posed another problem; as was already clarified in the

²¹ Indeed, recent studies in the global history of music theory draw on theories of cultural transfer and postcolonialism to emphasize that "the migration of a music theory across cultures [is] a more dialogical process in which notions of hybridity and agency play important roles" (Christensen 2018, 15).

²² Examples of accounts of Hugo Riemann's function theory are Seidel (1966), Dahlhaus (1990 [1968] 47–59), Harrison (1994, 265–292) Kopp, (2002, 61–102), Bernstein (2002, 796–800), Rehding (2003, 67–112 et passim), Motte-Haber (2005), and Hyer (2011).

introduction, and as will appear in the discussion of the respective texts, they have been chosen either because they have had a notable and traceable influence on later function theories and analytical practices, or because they hold a special place in post-Riemannian theory's historiography. It is a point in itself that these two reasons are of quite different natures, as this circumstance will give rise to critiques of the established historiography along the way.

Because it is the declared intention of this study to address function theory as it has actually been used in post-Riemannian traditions, the following differs from other accounts of function theory in a number of ways. Most notably, my focus is not Riemann's dualistic theory, but on the many subsequent *monistic* function theories.²³ Section 1.1 accounts for Riemann's own dualistic function theory with the utmost brevity, and only for the sake of context for the following sections. Already in the early Riemann reception, it was suggested that function theory might work perfectly well without the dualistic foundation that Riemann held on to until the very end (Capellen 1901), and whether one agrees with this or not—for neo-Riemannian voices have defended dualism (Klumpenhouwer 2011)—the monistic position has been the most widely held in the European reception of function theory.

Section 1.2.1 is an account of early adaptations of Riemann's function theory. "Early" is here roughly (but not completely) correspondent with "before WWII." When one views the writings on function theory's (and Schenkerian theory's) reception history through a historiographical lens, WWII is often *the* pivotal event around which many of these accounts are centered or somehow focused on. For instance, several accounts (examples are provided below) of function theory's reception history simply stop at the outbreak of WWII, or have only few (and almost always negative) words to say about postwar function theories. As we will see, post-war theories were radically

²³ According to Ludwig Holtmeier (2005d, 231), the term *monistic* (see Appendix 1) allegedly stems from Georg Capellen, who is well known for his critique of Riemann's dualism (Capellen 1901). "Monism" or "monistic" refers to a type of function theory where minor chords are not read "from the fifth down," but "from the root up," in congruence with conventional musical practice and intuition.

different than the pre-war ones. However, since the primary concern of this dissertation is exactly this "changed situation," in which Schenkerian and functional approaches had become established as geographically distanced traditions with increasingly different practices of music theory and analysis, my account of the early reception in section 1.2.1 provides the historical backdrop to this situation, and does not stand alone. After a critical "historiographical interlude" in section 1.2.2, it will be followed by what is—more or less—the first serious engagement with the post-war theories of the hugely influential Hermann Grabner, Wilhelm Maler, and Diether de la Motte in section 1.2.3.²⁴

Section 1.3 broadens the perspective to post-Riemannian function theories outside of Germany. While the section on Riemann reception in Russia, Czech Republic, China, The Netherlands, France, Italy, and elsewhere (section 1.3.1) is meant as a cursory overview that briefly demonstrates the numerous and quite diverse adaptations of function theory-and their common denominators-the sections on function theory in Scandinavia and North America (sections 1.3.2 and 1.4) are of more fundamental importance to the dissertation's overall aims, and consequently takes up more space. The section on Scandinavia is important because Danish, Swedish, and Norwegian function theories embody three fundamentally different types of function theory: progressional (and, as a sub-type, processual), keyrelational, and interval-relational function theories.²⁵ This typology of function concepts (which I first presented in Kirkegaard-Larsen 2017a; 2018, 81-87) is not only a useful tool when discussing the vast amount of different function theories, but also has significance for the choices made in Part III of the dissertation. The section on Anglo-American function theory is the first step in a larger-and very

²⁴ Hanno Hussong's dissertation *Untersuchungen zu praktischen Harmonielehren seit* 1945 (Hussong 2005) engages thoroughly with post-war theories and is the notable exception—although, of the mentioned theorists, Hussong only accounts for Diether de la Motte, probably because both Grabner and Maler began their theoretical careers before the war. Their almost hegemonic status is, however, a post-war phenomenon, as discussed in section 1.2.3.

²⁵ See Appendix 3 for an explanatory overview of the typology.

central—argument that "function" and "Funktion" are not the same phenomena. By this, I mean that the English commonplace term "function" does not necessarily mean the same thing as other, European, post-Riemannian uses of the term; an argument that will be further fleshed out through Chapter 2 and finally in section 4.1.1.

Section 1.4.3 is a brief excursus on neo-Riemmanian theory that clarifies why this dissertation does not discuss this influential branch of Riemann reception in detail, and section 1.5 summarizes the findings of the chapter.

1.1 **RIEMANN'S FUNCTION THEORY**

One customarily refers to Hugo Riemann as the creator of *Funk-tionstheorie*, and it is undoubtedly true that it was him who created function theory *as such*. There is general agreement that Riemann's theory connects to Jean-Philippe Rameau's identification of three pillars of tonality, but there is agreement, as well, that Rameau's theory does not amount to a function theory, and certainly not to the analytical tool now known as function analysis. Recent research nuances the picture in suggesting that the idea of three harmonic functions, of which secondary chords were to be seen as derivatives, was gradually evolving in the time from Rameau to Riemann, slowly becoming commonplace—also outside of the German-speaking world (see Pau 2018; Raz 2018a; 2018b).

If more or less pronounced ideas of harmonic function circulated in late nineteenth-century music theory, it was Riemann who coined the important term *function* and succeeded in formulating and popularizing an actual *Funktionstheorie* in his *Vereinfachte Harmonielehre* (Riemann 1893). But in fact, already two years before this book—which is customarily taken as *the* introduction of function theory—Riemann published an often overlooked article in Leipzig's *Musikalisches Wochenblatt* entitled "Die Neugestaltung der Harmonielehre (Riemann 1981). This article includes almost all the components of his later function theory. Riemann writes that "es gibt nur dreierlei Functionen der Harmonien: die der Tonica, Unterdominante und Oberdominante; Modulation entsteht durch Vertauschung (Umdeutung) dieser Functionen"²⁶ (Riemann 1891, 514). While acknowledging Johann Friedrich Daube's Generalbass in drei Accorden from 1756 as a historical predecessor, Riemann explicitly takes authorship of this idea (ibid., 539). He also introduces the abbreviations T for "Tonic," S for "Subdominant," and D for "Dominant," writing that these are the only "eigentliche wirkliche Harmonien jeder Tonart" (ibid., 530). To this he adds that the minor subdominant may appear in major keys and the major dominant in minor keys. A "o" to the left of a function letter may indicate that the mode of the function is minor, and a "+" to the right indicates that it is major. Riemann furthermore touches on the concept of characteristic dissonances, writing that it is customary to add a sixth to the subdominant, a seventh to the dominant, and an "underseventh" to the minor subdominant (ibid., 530).²⁷ Riemann does not write about applied dominants or subdominants in the 1891 article. This entails that, in his analysis of the model composition shown in Example 2, Riemann interprets the last chord of m. 5, F#-D-C-A, as a subdominant with added sixth and *raised root*, abbreviated $S_{1<}^{6}$ (ibid., 543).



Example 2: A model composition by Riemann (1891, 542).

His later and more well-known analytical practice would have taken it to be a special member of the class of applied dominants, namely the double dominant seventh in first inversion (DD). With regard to the upcoming comparison between function theory's "subdominant"

²⁶ "Function" is an older German spelling of the current "Funktion."

²⁷ The "underseventh" is to be measured from the *dual root* and downwards; i.e. in C major, the minor subdominant with underseventh would be C–A^b–F–D (in current terms either an F minor chord with an added sixth in the bass, or a D minor half diminished seventh chord).

and Schenkerian theory's "predominant," (see section 4.1.1, page 246) this little detail in Riemann's early function theory is worth noticing: at different stages in the development of his theory, he interprets the functional identity of this chord in fundamentally different ways.

Also in the 1891 article, Riemann introduced a core concept of function theory, the concept of Scheinkonsonanz. Usually translated to "feigning consonance" (Riemann 1895, 22 et passim) or "apparent consonance" (Rehding 2003, 55 et passim), Scheinkonsonanz refers to the central stipulation that it is only T, S, and D that are true consonances in a key.²⁸ All other chords may have a consonant appearance in themselves, but since they are to be seen as modifications of the three main functions, they are dissonant in a broader sense. Riemann here extends the logic behind his Fétisian conception of dissonance, which he defines in his "Neugestaltung"-article: "Dissonante Harmonien entstehen duch Hinzufügung zu oder stellvertretende Einfügung fremder Töne in consonante Harmonien (Fétis)" (Riemann 1891, 514). As per the logic of this definition, Riemann regards an E minor chord in a C major key as a Scheinkonsonanz because it is a modification of the tonic or dominant: a C major with added major seventh and removed root, abbreviated $\pm^{7<}$, or a dominant with added sixth and removed fifth, abbreviated D⁶₅.

While these were the symbols he used in his 1891 article, they were replaced in *Vereinfachte Harmonielehre* (Riemann 1893) with the far more influential terms *Parallel* and *Leittonwechsel.*²⁹ Renate Imig has shown that explanations underlying these terms evolved over the course of Riemann's writings, as seen in Imig's overview in Example 3. The overview shows that changes in the conceptions of the *Parallel* are very subtle. To the conceptions listed in Example 3, Imig also adds an important passage from *Handbuch der Harmonielehre* (Riemann 1917a, 89) in which the *Parallel* relation between chords is a derivative of the *Parallel* relationship between *keys* (Imig 1970, 75).

²⁸ Note that the term "consonance" is here describing entire chords rather than simply intervals.

²⁹ The term *Variante* was not introduced before 1914 (Riemann 1914–15) and incorporated into function theory in the sixth edition of *Handbuch der Harmonielehre* (Riemann 1917a [1887/1880], 73).

- 1891 (Die Neugestaltung der Harmonielehre): Sextakkord mit ausgefallener Quinte, z.B. $S_{\sigma}^{6} = f a \notin d$.
- 1893 (Vereinfachte Harmonielehre): Sextakkord (entstanden durch Hinzufügung der charakteristischen Dissonanz zum Dreiklang) mit ausgefallener Quinte (S^b), aber chiffriert durch ein an die Hauptfunktion angehängtes kleines p: Sp
- 1906 (Elementar-Schulbuch der Harmonielehre):
 "Zufällig" entstandener und "nebensächlicher" Klang; statt der Quinte eines Akkordes tritt seine Sexte ein.
- 1918 (Handbuch der Harmonielehre, 6. Auflage):
 a) Ein aus zwei Dreiklängen gegenteiligen Klanggeschlechts zusammengesetzter Klang: faceghd.
 b) Zu einer gemeinsamen Terz werden Ober- und Unterquinte hinzugefügt: aceg.

Example 3: Renate Imig's overview of the changing explanation and conception of the *Parallel* (Imig 1970, 75).

As discussed further in section 1.3.2 (page 89), some Danish and Norwegian theorists have regarded this as a failure to distinguish methodologically between the level of harmonies and the level of keys, a position which led to changes in the functional vocabulary with far-reaching ramifications and significance for the models proposed in Part III of this dissertation. In other words, the subtleties of Imig's above-shown list are quite relevant when looking at the later development of post-Riemannian function theories, for it is characteristic of these developments that they conceptualize the relation between the main functions and their Scheinkonzonanzen in a myriad of different ways. If post-Riemannian theorists looked to Riemann to find a justification for the Parallel-or the Leittonwechsel-they would be able to find different explanations. And when many of the theories simultaneously disposed of Riemann's dualistic foundation, this created the soil from which function theory could potentially branch out in many different directions.

It is, indeed, a point in itself that despite of the simplicity and pedagogical usability of Riemann's function theory, aspects of it was blurry or evolved over time. Nowhere is this more clear than when it comes to the very term *function*. The many studies of Riemann's function theory clearly document that it is difficult to ascertain what exactly Riemann meant by "function."³⁰ In his article "What *is* a function?" Brian Hyer (2011, 93) highlights Riemann's definition of *Funktionsbezeichnung* (functional designation) from the seventh edition of his *Musik-Lexicon*:

Funktionsbezeichnung der Harmonien ist die Andeutung der verschiedenartigen Bedeutung (Funktion), welche die Akkorde nach ihrer Stellung zur jeweiligen Tonika für die Logik des Tonsatzes haben. (Riemann 1909 [1882], 441)

It is not Hyer's intention to point to the near-circular nature of this definition, but for current purposes, it is worth underlining that the relation between the terms "Funktion," "Bedeutung," "Harmonien," "Akkorde," "Tonika," (itself the name of a certain function) and even "Logik" is obscure. A brief survey of some of the published research that attempts to explain Riemann's "function" goes to prove this: Brian Hyer brings this quote to highlight the more or less synonym relationship between "function" and "meaning," supported by the fact that "Funktion" appears in parentheses after the word "Bedeutung." Alexander Rehding (2003, 61) has argued that Riemann's analytical practice sometimes fails to distinguish between "function" and "chord"-and indeed, this is a frequent critique of Riemann, which fundamentally questions the relation between these two terms. His definition furthermore begs the question if there is any difference between "Harmonien" and "Akkorde," as is sometimes the case in Schenkerian theory. Indeed, if all of these terms have a more or less synonym relationship, one might reformulate Riemann's definition as (original words are provided in square brackets):

The functional notation [*Funktionsbezeichnung*] of functions [*Harmonien*] concerns the designation of the differing functions [*Bedeutung*] (functions [*Funktion*]) functions [*Akkorde*] acquire in compositional logic according to their positions [relative to] the prevailing tonic function [*Tonika*].³¹

³⁰ To take but a number of such studies: Seidel (1966); Dahlhaus (1966; 1975); Harrison (1994, 34–42, 265–292); Kopp (1995); Nowak (2001); Motte-Haber (2005); Hyer (2011).

³¹ I here paraphrase Brian Hyer's translation (2011, 93).

Now, the point here is not that Riemann's definition is as flawed as the crude reformulation above, but simply that it is a considerably unclear and blurry definition. But, as Brian Hyer importantly notes: "Judging from its enormous historical success, readers appear to have had little trouble with the neologism; it must have seemed to them that 'function' merely named a concept the contents of which were familiar musical entities" (Hyer 2011, 93).

Implying a phenomenon very similar to the concept of "tacit knowledge," this point is of fundamental importance in light of the practice-theoretical framework of the current dissertation. Though scholars have certainly been eager to unpack the meaning of the word "function," the vast majority of practitioners of function analysis—of which only a minority are academic scholars—accept the term as a given. Even if practitioners would be hard-pressed to pinpoint a definition of the term, their mutual understanding of the term would, in practice, very often align—by which I mean that they are able to use the concept for a shared purpose in a shared practice (cf. Wenger 1998, 73), as history has so clearly shown.

The present purpose, therefore, is not to unpack the true meaning of Riemann's "function," but to underline its double character as unclear concept on the one hand, and intuitive term on the other. The interesting question is not (only) what Riemann meant by function, but how the concept was used later—in practice. If this approach of mine stands in contrast with music theory's traditional aspirations for labels and definitions, I hope to show that its focus on the actual usage and afterlife of Riemann's term is nonethess a necessary and constructive strategy in the study and comparison of the post-Riemannian and Schenkerian traditions.

Finally, among the factors that obfuscate a simple account of Riemann's function theory is that, since Riemann developed it over a number of years, his function theory often has an explicit relation to the development of his other music theories: his theory of harmonic dualism; his theory of *Harmonieschritte* and *Tonnetz*-representations of tonal space; his ideas of musical "logic" and "syntax," both closely related to, perhaps even indistinguishable from function theory; his late turn to psychology and *Tonvorstellungen*, which affected how

fundamental tenets in his dualism and function theory were to be understood; and his theory of rhythm and meter.³²

For reasons of space, I will not engage thoroughly with Riemann's metrical theory, but in this context it should be mentioned that, even though his theory generally relied more on melody and motive, he did pay some attention to harmony's role in meter. In fact, Riemann was interested in the interaction between harmony and meter from his very first publication, the article "Musikalische Logik" (Riemann 1872), published in *Neue Zeitschrift für Musik* under the pseudonym Hugibert Ries when Riemann was only 22 years old. Here, he writes (in Kevin Mooney's English translation): "Harmony and meter go hand in hand, one conditioning the other" (Riemann 2000 [1872], 108). The exact nature of this hand-in-hand relationship developed throughout Riemann's career, as documented by William Caplin (2011).

His ideas of *Harmoniewirkung* and the locution *Träger der Harmoniewirkung* influenced, as we will see, some of the early German function theories. This idea was connected to his perhaps most well-known metrical theory, the *Auftakttheorie* which stipulates that in a group of two measures, the initial measure is always an unaccented "upbeat" to the following accented measure. In a fourmeasure phrase that ends with a cadence, then, metrical accent would be on the second and fourth measures, thus accentuating the *Schlusswirkung* of the cadence (Caplin 2011; see also Mooney 2000, 89). This often creates some rather strange analyses, in which the im-

³² In the theory of *Harmonieschritte*, Riemann developed a vocabulary able to designate any conceivable root motion (roots conceived dualistically). A very direct relation between function theory and the theory of *Harmonieschritte* can be seen in his *Handbuch der Harmonielehre* in its third and later editions (Riemann 1898b [1887/1880]). Earlier editions of the book (first entitled *Skizze einer neuen Methode der Harmonielehre* [Riemann 1880], retitled *Handbuch der Harmonielehre* in its second edition from 1887) was devoted solely to the theory of *Harmonieschritte*, and each chapter accounted for a type of *Harmonieschritt*. Following the formulation of function theory in *Vereinfachte Harmonielehre* (1893), the third edition of the *Handbuch* retained its *Harmonieschritte* was added. Since the functional explanations for each of the *Harmonieschritte* are always dependent on their musical context, this demonstrates how function theory adds an interpretative layer to the analytical act.

portance of, say, the initial tonic of a phrase is downplayed in what seems a musically unmotivated way. In Part III of this dissertation, I suggest a mediation between function theory and Schenkerian theory that, importantly, discards the *Auftakttheorie* and instead frames harmony's interaction with meter and phrase structure on the basis of Schenkerian and other Anglo-American metrical theories (see especially section 6.2.3, page 373ff.).

1.2 GERMAN RECEPTION

The state of research in the history of German reception and development of Riemann's function theory looks very different today than it did just 20 years ago.³³ The turn of the millennium saw a considerable surge of publications on this history.

Michael Arntz' Riemann biography from 1999 (Arntz 1999) was followed in 2001 by the anthology *Hugo Riemann (1848–1919): Musikwissenschaftler mit Universalanspruch* (Böhme-Mehner and Mehner 2001). In the same year, the journal *Musiktheorie* published a special issue entitled "Für und wider die Funktionstheorie" which, viewed as a whole, contained more critiques of function theory than defenses of it. Among the most notable scholars who eventually brought about a radical reevaluation of function theory's history and current practice was Ludwig Holtmeier. Beginning with the critical article "Ist die Funktionstheorie am Ende?," Holtmeier questioned core principles of function theory, while at the same time defending it on the ground that "in der Praxis ist der Funktionstheorie moderner als sie in ihrer schriftlich fixierten Form erschienen mag" (Holtmeier

³³ The perhaps most important contribution to the history before then was the 11th volume of Carl Dahlhaus' *Geschichte der Musiktheorie* (Dahlhaus 1989). As the volume's title *Die Musiktheorie im 18. und 19. Jahrhunderts. Zweiter Teil: Deutschland* indicates, however, Dahlhaus does not reach far into the twentieth century and only touches briefly on some of the theorists that demand prolonged attention in the current presentation (such as Johannes Schreyer, and Rudolf Louis and Ludwig Thuille; cf. Dahlhaus 1989, 100–102). Renate Imig's (1970) book-length study on different adaptations of Riemann's function theory is also important, but it focuses primarily on terminology and function symbols, and less on the theories' connection to historical events.

1999, 76).³⁴ In 2002, Holtmeier returned with his own vision of an improved function theory in his article "Der Tristanakkord und die Neue Funktionstheorie" (Holtmeier 2002). Here, Holtmeier brought attention to the vast difference between function theory *before* and *after* the rise of Nazism and WWII:

Es war die 'völkische' Musiktheorie Wilhelm Malers, Hermann Grabners und Paul Schenks, die die deutsche Musiktheorie der Nachkriegszeit nachhaltig prägte und ihr das enge Korsett der deutschen, praktischen, 'antilinearen' Funktionstheorie überzog.³⁵ (Holtmeier 2002, 361)

Holtmeier's improved function theory was thus one that "von der historisch dominanten Entwicklungslinie Maler/Grabnerscher Provenienz abwendet und abgebrochene Entwicklungsstränge (wie zum Beispiel die dialektische Funktionstheorie Rudolf Louis') wiederaufgreift" (ibid., 361)—in other words, it was a function theory that returned to its pre-war state.

This article of Holtmeier's anticipated his important receptionhistorical work "Von der 'Musiktheorie' zum 'Tonsatz': Zur Geschichte eines geschichtlosen Faches." This was first presented as the opening speech to the first congress of the newly established German *Gesellschaft für Musiktheorie* in Dresden, 2001, later published in the first issue of its journal *Zeitschrift der Gesellschaft für Musiktheorie* (Holtmeier 2003), and eventually published in an English translation in the journal *Music Analysis* (Holtmeier 2004a). To quote a conference report that highlighted Holtmeier's opening speech in Dresden as a decisive event:

Holtmeier took action with one of the really raw nerves, namely twentieth century German music theory, which, after its proper heydays until 1939 (with names such as Riemann,

³⁴ In light of the practice-theoretical framework of this presentation, Holtmeier's defense is an important reminder that the focus on *schriftlich fixierten Formen*, which will dominate the current chapter, is incomplete and only a rough indicator of practice.

³⁵ On Paul Schenk's influence, see footnote 55 on page 70.

$1.2 \cdot \text{German reception}$

Schenker, and Kurth), suffered a national socialistic fracture from which it has never fully recovered.³⁶ (Hansen 2001, 115)

Following this pivotal opening speech—which in many ways marked the beginning of a new era of critical German music theory historiography—Holtmeier's findings influenced several of his contributions to the monumental second edition of *Die Musik in Geschichte und Gegenwart* (cf. Holtmeier 2004b; 2005a; 2005b), and furthermore resulted in the central reception-historical article "Grundzüge der Riemann-Rezeption" (Holtmeier 2005d), which was later translated to English in *The Oxford Handbook of Neo-Riemannian Music Theories* (Holtmeier 2011).

Holtmeier's work, as well as the work of other scholars of the same era (see for instance Diergarten 2003–05), amounts to a crucial and valuable contribution to the field, and my following presentation naturally draws heavily on it. Indeed, my historical overview of the Riemann reception is divided into "early" and "late" periods, and the event that marks the fluid boundary between these two periods the rise of Nazism and the Second World War, as accentuated by Holtmeier. I stress that the boundary is fluid: some publications of the "later" German reception occurred in their first edition before the war (Grabner 1923; Maler 1975 [1931]), but only gained real influence in new editions after the war.

However, Holtmeier's (and others') influence will be most clear in my writings on *early* function theories in section 1.2.1 and its subsections—and already when it comes to the later reception (section 1.2.3, page 70), his influence will fade (but still be considerable). This is because Holtmeier's narrative—convincing as it is—has had an unfortunate historiographical side effect, namely the neglect of research on post-war theories. This historiographical critique of mine is performed in more detail in section 1.2.2, but one may notice that once again, the practice-theoretical framework of this study entails a focus

³⁶ "Holtmeier [tog] således fat på et af de rigtig ømme punkter, nemlig det 20. århundredes tyske musikteori, som efter sin egentlige glansperiode indtil 1939 (med navne som fx Riemann, Schenker og Kurth) fik et nationalsocialistisk knæk, som den aldrig siden er kommet sig helt over." Author's translation.

on established practices and traditions, which may not be synonymous with the "best" theories.

In later sections on the reception history in other areas (sections 1.3 and 1.4), the current state of research is much poorer, and Holtmeier disappears from my presentation. When it comes to the specifically Scandinavian and North American reception histories, the presentation will be based almost solely on my own research into a large corpus of textbooks and articles.

1.2.1 EARLY GERMAN RECEPTION

The following presentation discusses a series of notable early function theories—those of Johannes Schreyer, Rudolf Louis and Ludwig Thuille, Eugen Schmitz—drawing on primary sources as well as the work of especially Ludwig Holtmeier and Robert Wason. The decision to focus on exactly these theorists is one I owe to the current historiography led by Holtmeier, as described above. Johannes Schreyer's call for an analysis-centered approach to harmony was influential for several subsequent textbooks, and Louis and Thuille's *Harmonielehre* is an automatic choice because of its sheer influence and wide dissemination. Eugen Schmitz is less well known, but it is discussed as just one example of a direct and traceable impact from Schreyer and Louis and Thuille in the contemporary function theory, and as a theory which took Riemann's *Harmoniewirkung* as central.

Another important reason that I choose to focus on these theorists is that their versions of function theory have influenced my decisions in Part III of the dissertation (this is fleshed out in section 6.4, page 403). Especially their treatments of passing and neighboring chords have informed Part III, and I will thus grant special attention to these matters in my presentation.

1.2.1.1 Johannes Schreyer

Among the very first textbooks that were inspired by Hugo Riemann was Johannes Schreyer's (1856–1929) Von Bach bis Wagner from 1903 (Schreyer 1903)—a book that was republished in new editions in 1905 under the title Harmonielehre (Schreyer 1905) and again in

1911 as Lehrbuch der Harmonie und der Elementarkomposition (Schreyer 1911). The latter came in several additional editions. Riemann's influence is discernible already in the subtitle of the 1903 textbook, Ein Beitrag zur Psychologie des Musikhörens. In the preface, Schreyer praises Vereinfachte Harmonielehre (Riemann 1893) "die an streng systematischen Ausbau alle ähnlichen Lehrbücher überragt und besonders eine logisch und musikalisch einwandfreie Analyse moderner Kompositionen ermöglicht" (Schreyer 1903, 10). A central thesis of the book is the following:

Es ist möglich, mit der schlichten Formel S⁶ D⁷ T die kompliziertesten modernen Kompositionen zu analysieren und den Nachweis zu führen, daß alle in der Musik gebrauchten Zusammenklänge nur Absenker dieser Stammklänge sind. (Schreyer 1903, 18)

However, he also emphasizes that he departs from Riemann in a number of ways. For instance, he briefly, and without further comments, rejects Riemann's dualism, the necessity of which he is not convinced (ibid., 13). Second, he offers a general critique of conventional *Harmonielehren*, Riemann included, for their use of constructed examples, their emphasis on chorale harmonization, and their reliance on the eyes rather than the ears (ibid., 2–3). Situating music history as a history of the development of "der Kunst des Hörens" (ibid., 4), he instead argues that the primary purpose of the study of harmony should be

die subtile Schulung der Harmoniegefühls ... die wie kaum andere Disziplin imstande ist, vielseitig anzuregen und zu bilden, da sie Gehör und Verstand, Phantasie und Formsinn gleichmäßig kultiviert. (Schreyer 1903, 3)

This goal is not achieved through mechanical part-writing and the conventional but artificial opposition of *Harmonielehre* and counterpoint, but through an integrated approach based on the analysis of "real" music (ibid., 11–12). As Felix Diergarten (2003–05, 165) has noticed, "Analyse" for Schreyer is not just the application of function letters; it is first and foremost the creation of reductive sketches, which may then be analyzed with function symbols. An illuminative example is his analysis of the famous introduction to Mozart's "Dis-

sonance" Quartet, which he explains as a bold but "streng logisch sich entwickelnder Orgelpunkt auf *G*" (Schreyer 1903, 64). Schreyer's reductions are shown in Example $4.^{37}$

The first part of the reduction, Schreyer's example 309, provides an interpretative score reduction. Small noteheads indicate suspensions, appogiaturas, and neighbor tones, while the larger noteheads indicate the harmonic scaffolding, which is further clarified with Riemann's *Klangschlüssel* in a monistic variant.³⁸

His example 310 further reduces the music in order to illustrate that in essence, mm. 1–12 are an ornamentation of a descending row of first-inversion chords, while the remaining measures constitute a relatively straightforward cadence; and his example 311 finally shows the *faux-bourdon* framework of mm. 1–12 in its simplest form—in Schreyer's words, a "Folge von Sextakkorden (im Sinne der General-baßterminologie)" (Schreyer 1903, 64).

Though no function letters are provided in his reduction, the prose text suggests that it is all to be seen as one long elaboration of the dominant function over an "imaginary" pedal point:

Dadurch erklärt sich die Tonart der Einleitung in der einfachsten Weise: Sie ist zu verstehen im Sinne der Dominante von C dur, als ein zwar kühner, aber streng logisch sich entwickelnder Orgelpunkt auf G. (Schreyer 1903, 64)

Schreyer explicitly contrasts his own analysis, in which no modulations are posited, with Riemann's, in which three occur (from C minor [m. 1], to B^{\flat} minor [m. 5], to A^{\flat} major [m. 9], cf. Riemann 1902, 493). (Riemann regards m. 9's F minor as an A^{\flat} with 6–5 suspension; the A^{\flat} functions first as S in E^{\flat} major and initiates the modulation back to C minor.)

³⁷ For reasons of space, and because I imagine that this music is familiar to many readers, I do not include a score here.

³⁸ Schreyer himself attributes this monistic chord labeling method, in which the minus-sign designates minor chords instead of Riemann's "o," to Franz Marschner presumably Marschner's *Die Klangschrift: Beitrag zur einheitlichen Gestaltung der Harmonielehre* from 1894. However, Ludwig Holtmeier notes that the minus-sign as an indicator of minor harmony originates with Otto Kraushaar's *Der accordliche Gegensatz und die Begründung der Skala* from as early as 1852 (Holtmeier 2011, 42– 43).



Example 4: Johannes Schreyer's examples 309–311, a reductive analysis of Mozart's String Quartet No. 19 in C major, K. 465, "Dissonance," I, mm. 1–16 (Schreyer 1911, 54).

Though Eric Wen does not propose such a pedal point in his recently published Schenkerian analysis of the piece (cf. Wen 2019, 93–106), and though Wen's and Schreyer's analyses are separated by a whopping 116 years, the similarities between them are striking. These analyses illustrate and confirm what several scholars have noticed, namely a striking kinship between Johannes Schreyer's adaptation of Riemann's theory and Schenker's concept of the *Stufe*—which only begun to develop after Schreyer's *Von Bach bis Wagner* (Schreyer 1903), namely in Schenker's *Harmonielehre* (Schenker 1906).³⁹ Felix Diergarten has documented that this kinship was already noticed in an obituary on Schreyer by the German composer Alfred Stier in 1929 (Diergarten 2003–05, 165–166; see Stier 1929, 175).

Schreyer's kinship with Schenker is indeed striking: Schreyer is less willing than Riemann to take any vertical entity as an actual harmony, and frequently speaks of *Scheinharmonien*. Though this term may be inspired by Riemann's concept of *Scheinkonsonanz*, it does not denote a third-related representative of a main function, but a simultaneity that may appear as a chord, but which is not an actual chord. Another good illustration of this is his analysis of Chopin's Mazurka in A minor, which is, as he writes, "besonders reich an Scheinharmonien, die mehrmals die Harmoniebewegung verdunkeln und der Komposition einem sehr fantastischen Charakter geben" (Schreyer 1911, 153). The analysis is provided in Example 5, and consists of two levels: Schreyer's example 322A and B, each of which is subdivided into a- and b-levels.

Level A-a shows the composed introduction, and level A-b shows Schreyer's analytical interpretation of it. His use of larger and smaller noteheads again suggest that some of the tones are primary, while others are neighbor tones and passing tones. The introduction therefore reads as a composed-out ⁶/₄-suspension of the tonic—a horizontalization, so to speak, of the first chord in his level B-b. Supporting this reading of Schreyer's analysis is the fact that he suggests an implied resolution of the suspension at the last beat of lev-

³⁹ I am not implying that Schenker should be inspired by Johannes Schreyer and I know of no evidence that either one knew of the other.



Example 5: Johannes Schreyer's example 322, an analysis of Chopin's Mazurka in A minor, Op. 17, No. 4, mm. 1–14 (Schreyer 1911, 56).

el A-b, the "actual identity" of the chord. Level B-a shows Chopin's music from m. 5 as composed, and level B-b again shows Schreyer's interpretation of it (notice the "equals" sign). There are several "apparent harmonies" (*Scheinharmonien*) here: The apparent D minor of m. 5 is really a 6/4-suspension of the tonic (as already mentioned); the chord of m. 6 is not an F major in first inversion, but simply a disguised tonic A minor; and the apparent E minor of m. 8 is really a C major, implied by the preceding dominant G⁷.⁴⁰

⁴⁰ Interestingly, a more literal function analysis has recently been suggested (as part of a larger argument) by Daniel Harrison (2016, 96).

Though function theory only lurks in the background of the discussed analyses, it is also often put more overtly to use. Schreyer's combination of his own reductive approach with Riemann's functions yields interesting results, as seen in another Chopin analysis of his, mm. 63–73 from Nocturne No. 15 in F minor, Op. 55, No. 1. The score is provided in Example 6, and Schreyer's analysis in Example 7.

As a first step, numbered "325" in Example 7, Schreyer provides a reduction with chord labels—already an interpretative move, as can be seen, for instance, in the labeling of the chord in m. 65 as a D^{\flat} in six-four position rather than a G^{\flat} -chord, and the diminished chord of m. 67 as a C⁷, though D^{\flat} is in the bass. In Schreyer's subsequent reduction, numbered "326" and importantly beginning in m. 65 instead of m. 63, he shows how these measures all project a large S–D–T cadence, the D (m. 67) being embellished by its own dominant ("D der D" in mm. 69–70). The myriad of chords in mm. 71–72 is nothing but an embellishment and harmonization—a "geistreiche Umschreibung" (Schreyer 1911, 155)—of the melody he shows in the example "327."⁴¹

Carl Dahlhaus (1989, 100) has written that Schreyer transformed the "Harmonielehre" from a poetics of rules to a course in analysis, and Ludwig Holtmeier has noted that Schreyer's call for an analysis-focused approach to the study of harmony became a "vielgelobten und zitierten Standardfloskel des musiktheoretischen Diskurses" in the beginning of the twentieth century (Holtmeier 2005d, 241).

According to Felix Diergarten, this is to be seen in the light of a larger trend in the contemporaneous cultural milieu, the so-called *Reformpädagogik* and the related movements known as *Jugendbewegung*, *Lebensreformbewegung*, and *Kunsterziehungsbewegung* (Diergarten 2003–05, 166). A common feature of these currents was a turn toward the artwork, an emphasis on concrete experience and engagement with the artwork rather than abstract theory (ibid.; cf. also Holtmeier 2005d, 241).

⁴¹ Schreyer is bold enough to posit that Chopin's spelling of the D^{b7}-chord (with C^b instead of B^b) in mm. 69–70 is a "Schreibfehler" (Schreyer 1911, 155).

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Example 6: Chopin's Nocturne No. 15 in F minor, Op. 55, No. 1, mm. 63-73.



Example 7: Johannes Schreyer's analysis of Chopin's Nocturne No. 15 in F minor, Op. 55, No. 1, mm. 63–73.

Robert Wason, too, has identified a shift in epistemology in *fin-de-siécle* Austro-German theory, a shift to a "new empiricism." The term underlines not a natural-science approach (such as Hermann von Helmholtz'), but the fact that harmony textbooks turned from constructing norm-abiding examples and exercises toward employing musical analyses in an effort to foster the student's awareness of typical musical patterns, rather than to subject the student to constraints and norms.

1.2.1.2 Rudolf Louis and Ludwig Thuille

One hugely influential textbook that explicitly took the empirical standpoint described above was Rudolf Louis (1870–1914) and Ludwig Thuille's (1861–1907) *Harmonielebre*, published in its first edition in 1907, and according to Walter von Forster, still the most widely used textbook in German music schools by 1966 (Forster 1966, 259).⁴² In their preface, they explicitly write that they take a "streng *empirischen* Standpunct" and emphasize that they employ numerous music examples from written compositions instead of constructed examples—in contrast to approaches that sets "willkürliche Gedankenconstructionen an die Stelle der realen Dinge," as they write (Louis and Thuille 1927 [1907], IV).

Louis and Thuille use Roman numerals and not function letters. Nonetheless, the influence from Hugo Riemann's function theory is

⁴² Owing to a complex publication history, a few comments are necessary. First, the publication year of the *Harmonielehre* is sometimes set to 1906 (for instance in Wason 1985), but because the preface of Rudolf Louis' shortened version *Grundriss der Harmonielehre* sets the publication to "Frühjahr 1907" (Louis 1914 [1908], III), I will follow this year. Second, I have not been able to acquire the first edition of the *Harmonielehre*, but have consulted the third (Louis and Thuille 1910 [1907]) and ninth (Louis and Thuille 1927 [1907]); this is worth mentioning because notable changes occured in the later editions (as fleshed out shortly). Third—and indicating the success of the *Harmonielehre*—a number of other supplements were later published by Louis alone: apart from the already mentioned *Grundriss*, these were a book of exercises (Louis 1927 [1911]), and a book of solutions to exercises in the *Harmonielehre* and the book of exercises (Louis 1912). Exact publication years are not printed in any of these supplements, and secondary sources do not agree; I rely on the years provided in *Music Theory from Zarlino to Schenker* (Damschroder and Williams, 1990, 172–173).

unmistakable; see, for instance, the following quote which sums up the core of their theory:

Nur Tonica, Dominant und Unterdominant sind Träger wahrhaft ursprünglicher *Grundharmonien*. Alle übrigen in der Tonart vorkommenden Zusammenklänge haben wir uns als von diesen Grundharmonien abgeleitet oder doch wenigstens auf sie bezogen zu denken. Sie sind entweder bloß unselbständige Bildungen (Vorhalts- und Durchgangsaccorde) oder aber sie müssen, sobald sie selbständiger auftreten, als *Stellvertreter der Grundharmonien* aufgefaßt werden: auf jeden Fall also als deren *Modificationen*. Jeder mögliche selbständige Accord hat entweder *Tonica- Dominant- oder Unterdominant-Bedeutung* (-"*Function*" [sic]). Mit andern Worten: I, V und IV sind die einzigen eingentliche *Fundamente* (tonalen Harmonieträger) die es gibt.⁴³ (Louis and Thuille 1910 [1907], 92)

Even though, as we shall see, their mention of "Vorhalts- und Durchgangsaccorde" has far-reaching ramifications which differentiate their theory greatly from Riemann's, the Riemannian influence was especially unmistakable for Riemann himself, who accused Louis and Thuille of plagiarism in *Süddeutsche Monatshefte* (Riemann 1907).⁴⁴ Because Ludwig Thuille passed away shortly after the finishing of the *Harmonielehre*, Rudolf Louis was alone in his defense. In a later issue of *Süddeutsche Monatshefte*, Louis denies that their *Harmonielehre* is dependent on Riemann but acknowledges a certain theoretical concordance. Louis argues that this concordance is greatly exaggerated by Riemann, in that he ignores important differences such as the fundamentally "monistic" (though Louis does not use this term) approach of Louis and Thuille (Louis 1907, 617, 620).

⁴³ Notice that I quote here from the third edition, which (as discussed shortly) may be more obviously "Riemannized" than the first version, which I have not been able to acquire.

⁴⁴ For example, he writes: "Bei der sehr großen Abhängigkeit des Buches von meinem Arbeiten durfte ich wohl erwarten, daß die Vorrede auf mich Bezug genommen hätte oder doch im Text selbst darauf hingewiesen würde, daß die Methode die meinige ist. Das ist aber nur bezüglich der Antiparallelen (S. 18) geschehen. Kein Wort verrät z. B., daß die gesamte Stellvertretungslehre der Nebenharmonien für die Hauptharmonie mit samt den sich aus ihr ergebenden veränderten Regelstellungen für das Verdoppelungswesen von mir herrührt. Das ganze Buch ist aber durchsetzt mit *Termini technici*, die von mir stammen, ohne daß das gesagt wird. Statt dessen finde ich hie und da die Wendung 'Man hat' (statt Riemann hat)" (Riemann 1907, 502).

Whether it amounts to a relation of dependency or correspondence, a common feature of Riemann's and Louis and Thuille's theories is the fundamental idea that *Hauptharmonien* (I, V, and IV) may be represented by *Nebenharmonien* (iv, iii, and ii).⁴⁵ Furthermore, Louis and Thuille propose the concept of *Auffassungsdissonanz*. One may be inclined to read this as a simple renaming of Riemann's *Scheinkonzonanz*, but both Robert Wason and Ludwig Holtmeier have argued that the *Auffassungsdissonanz* is more than a new name for the same phenomenon. Wason cites, in his own translation, Louis and Thuille:

Such chords entering under the guise of consonance have been called "feining consonances," for their consonance is merely apparent. Perhaps the term *interpretation-dissonance* would be more indicative of their individual nature, to the extent that a chord which is always consonant outside of musical context can, under certain circumstances, become dissonant for harmonic *interpretation.*⁴⁶ (Louis and Thuille, cited in Wason 1985, 126)

Though I would prefer to translate *Auffassungsdissonanz* to *perception-dissonance* or *conceptual dissonance* (as in Holtmeier [2011, 35]) rather than *interpretation-dissonance*, I use Wason's translation because he cites from the book's first edition. As Wason notices (1985, 182), the first sentence was changed to include Riemann's name in the *Harmonielehre*'s third edition, which possibly indicates that Riemann's critique did have the desired effect (cf. Louis and Thuille 1910

⁴⁵ In his response to Riemann's accusations of plagiarism, Louis does acknowledge Riemann's role in the codification of this: "Dagegen gebührt zweifellos Hugo Riemann der Ruhm, die ganze 'Stellvertretungslehre' konsequent ausgebaut und vor allem auch die einschlägige Terminologie um einige, zum Teil sehr glückliche Ausdrücke bereichert zu haben" (Louis 1907, 615).

⁴⁶ Translation by Wason (1985, 126). Original: "Man hat solche unter der äusseren Gestalt von konsonierenden Akkorden auftretende dissonierende Harmonien *Scheinkonsonanzen* genannt: denn ihre Konsonanz ist nur scheinbar. Noch bezeichnender für ihre Eigenart wäre vielleicht der Ausdruck: *Auffassungsdissonanz*, insofern nämlich ein solcher ausserhalb des musikalischen Zusammenhangs jederzeit konsonierender Akkord unter gewissen Umständen für die harmonische *Auffassung* dissonant werden kann" (cited after Wason 1985, 182).

[1907], 46).⁴⁷ In any case, Wason notes that the *Scheinkonsonanz* and *Auffassungsdissonanz* are not synonyms "since they are based upon opposing assumptions" (Wason 1985, 126). Holtmeier has put precise words to the difference:

"Appearance" is the *effect* for Riemann, which obscures the true (theoretical) essence of the *Klang*, while for Louis it is the (context-free) *structure*, which blocks the effect of the *Klang*: "apparent consonances" [*Scheinkonsonanzen*] sound consonant but are dissonant; "conceptual dissonances" [*Auffassungsdissonanzen*] sound dissonant but look consonant. (Holtmeier 2011, 35)

For Wason and Holtmeier, this subtle but important difference points to the great asset of Louis and Thuille's *Harmonielehre*, namely that it can be seen as a synthesis of Simon Secther's fundamental-bass theory and Hugo Riemann's function theory (Wason 1985, 115–116; Holtmeier 2011, 39).

It is indeed true that Louis and Thuille combine the Riemannian idea of third-relations with a horizontal view that might be called "Sechterian." Already early in the book, they write that sixth chords may sometimes be explained as resulting from melodic suspensions instead of chord inversion (Louis and Thuille 1927 [1907] 43–45). This is, of course, nothing more than the argument that also underlies the common idea of the cadential dominant six-four—that the I chord in second inversion is really a dominant with melodic suspensions but it is emphasized enough to stand out as a noteworthy aspect of the book.

Extending the argument that some simultaneities have a melodic, rather than harmonic, origin, the authors not only theorize about suspensions, but also at length about neighbor notes and passing notes and the harmonies that may result from linear voice leading motions. This leads to many interesting analyses in which ideas of tonal hierarchy is implied to different extents.

For instance, it leads them to interpret the chord marked with * in Example 8 as "ein *durchgehender Sextaccord*, den man gänzlich

⁴⁷ Wason also notes that the *Harmonielehre*'s tenth edition was "heavily Riemannized" (Wason 1985, 116).

falsch verstehen würde, wenn man ihn als *Umkehrung des Dominantdreiklangs* auffassen wollte" (Louis and Thuille 1927 [1907], 50). Particularly interesting is the following sentence which explicates the consequence of this view: "Es handelt sich auch hier *nicht* um *zwei Harmonieschritte* (I–V–IV), sondern nur um *einen einzigen* (I– IV)" (ibid.).



Example 8: Reproduction of Louis and Thuille's example 44b, on passing chords (Louis and Thuille 1927 [1907], 49).

In a similar vein, the harmonies in Example 9 amounts to only one real harmony, namely I.



Example 9: Reproduction of Louis and Thuille's example 44c, on passing chords (Louis and Thuille 1927 [1907], 49).

In a later example, they show an even longer "horizontalization" not a term they use themselves—of I, this time using two analytic layers (see Example 10).

Ludwig Holtmeier has argued that "man könnte behaupten, daß die ganze Schenkersche Theorie eine Verabsolutierung dieses Durchgangsbegriffs ist" (Holtmeier 2005d, 248). Thus, apart from Louis and Thuille's literal references to Simon Sechter (Louis and Thuille 1927 [1907], 50, 238, 318), it is examples like the above ones



Example 10: Reproduction of Louis and Thuille's example 196, on passing chords (Louis and Thuille 1927 [1907], 184).

that have resulted in their being framed as the synthesis of Sechter and Riemann—and thus in a sense, of (aspects of) Schenkerian theory and function theory.

1.2.1.3 Eugen Schmitz

Eugen Schmitz' (1882–1959) Harmonielehre als Theorie, Ästhetik und Geschichte der musikalischen Harmonik (Schmitz 1911) is yet another book in which the theoretization of passing and neighboring harmonies makes for an interesting expansion of function theory. Once again, for modern readers, the kinship with Schenkerian ideas is notable, but once again, there is no evidence of any connection between Schmitz and Schenker (who had published his Harmonielehre before Schmitz, in 1906).

In the preface, Schmitz frames his book as an alternative to the theories of Richter and Jadassohn,⁴⁸ still influential at the time, and as a continuation of the work of Riemann, Schreyer, and Louis and Thuille (Schmitz 1911, IX). All chords, even the complex harmony of "modern" music, he writes, is to be understood as projecting one of the three main functions (ibid., 56). Following the example of Louis and Thuille, Schmitz uses Roman numerals instead of function letters, but a footnote clarifies that the numerals designate the *functions* tonic, dominant, and subdominant (ibid., 23), and he writes that second-

⁴⁸ Schmitz' reference is imprecise, probably because further precision was unnecessary at the time: in all likelihood, he refers to the widely disseminated Richter (1853) and Jadassohn (1883), both books entitled *Lehrbuch der Harmonie*.

ary chords are *Scheinkonsonanzen* carrying these functions (ibid. 40). Schmitz' own additions to the theory primarily concerns his focus on chords that result from suspensions, passing motions, and neighboring motions—much as in Schreyer and Louis and Thuille—combined with his focus on harmony's interaction with meter. Schmitz' theory of meter relies on Riemann's and largely stipulates that "Träger der Harmoniewirkungen sind also die *schweren*, die betonten Zeitwerte; eine auf leichten Zeitwert eintretende Harmonie wirkt nur durchgehend und kommt erst durch eventuelle Repetition auf dem folgenden schweren Zeitwert zur Geltung" (ibid., 110).

Many of his examples of this are uncontroversial; for instance, a passing ⁶/₄-chord appears on a weak beat while a cadential ⁶/₄-chord appears on a strong beat. In some examples his stipulation leads to analyses in which entire chords are subsumed hierarchically under another. For instance, according to Schmitz, the chord maked with * in Example 11 is only an apparent dominant, its actual function being a suspension of the tonic. In Schmitz' words:

Hier erwarten wir bei * den Eintritt der abschließenden G-dur-Tonika, statt dessen wird die Oberdominantharmonie nochmal wiederholt und die Tonika wird erst nachschlagend auf unbetontem Zeitwert gebracht. Durch den rhythmischen Zusammenhang wirkt hier die Oberdominante trotz ihrer konsonanten Fassung ganz ausgesprochen als *Vorhalt* der Tonika, mithin als ("Auffassungs-)Dissonanz." (Schmitz 1911, 111)



Example 11: Reproduction of Eugen Schmitz' example of an entire chord as suspension of the governing tonic function (Schmitz 1911, 111).

When other harmony textbooks write about similar suspensions, it is usually in cases in which the bass has moved to the tonic note (as in Example 12, marked with *)—but Schmitz analyzes a full D major chord as a suspension of the actual "Träger der Harmoniewirkung," the tonic G major.

$1.2 \cdot \text{German Reception}$



Example 12: Suspension of the tonic in the fourth movement of Haydn's Symphony No. 100 in G major, "Military," mm. 7–8 (reduction after Caplin 1998, 50).

It is the invocation of Louis and Thuille's concept of *Auffassungsdissonanz*, rather than Riemann's *Scheinkonsonanz*, that allows Schmitz to take this step, in which some chords "mehr dem Fluß der Stimmführung als dem harmonischen Ausdruck dienen" (Schmitz 1911, 110); Schreyer's and Louis and Thuille's importance for the early Riemann-reception—and, one might say, Riemann-rejection—is clear in this concise textbook.

1.2.2 HISTORIOGRAPHICAL INTERLUDE

I arrive here at the more fundamental historiographical critique that I wish to exercise, and which I have hinted at several times. Holtmeier's and Wason's (and, as discussed shortly, Harrison's) coronation of the pre-war theorists discussed in the above section have led, as already mentioned, to an unfortunate historiographical neglect of post-war theorists.⁴⁹ The most influential theorists in Austro-German post-Riemannian function theory *after* the war have been Hermann Grabner and Wilhelm Maler (see Becker 2002, 1449; Holtmeier 2004b, 907; Rathert 2005, 74) and, in more recent times, Diether de la Motte (Huber 2004, 547). They also represent three generations of post-Riemannian function theory: de la Motte was a student of Maler's, and Maler was a student of Grabner's.⁵⁰ Even though it is commonly held that they have been very influential and thus crucial parts of

⁴⁹ In all fairness, Wason's study does not proceed further than to the theories of Schoenberg, and does not aim to account for any theories after WWII—but the narrative culminating with Louis and Thuille as a synthesis is clear enough.

⁵⁰ Starting from Riemann, these represent five generations of teacher-student relationships: Hugo Riemann–Max Reger–Hermann Grabner–Wilhelm Maler–Diether de la Motte (Menke 2005, 261).

function theory's reception history, research on the three theorists is limited, especially outside German-speaking musicology. It is perhaps telling that Daniel Harrison, in his *Harmonic Function in Chromatic Music*, entitled his chapter on the reception of Riemann's function theory "The Devolution of Riemann's Theories" (Harrison 1994, 293), and wrote the following about Hermann Grabner:

In many ways, Grabner's treatment of Riemann's theories throws baby out with the bathwater. Just as Hauptmann's ideas became more and more a mere formal presence in Riemann's work, so Riemann's ideas became in Grabner's. Grabner's pedagogical practicality ensured that his formulations would survive, but the loss of Riemann's theoretical enthusiasm and imagination, as well as of analytic power, is largely responsible for the perception in North America that function theory is something brittle and useless. (Harrison 1994, 307)

In German research, too, Grabner and Maler have received little attention.⁵¹ Even though there is general agreement that Grabner and Maler developed the modern function theory used to this day "an vielen Hochschulen, Konservatorien und musikwissenschaftlichen Seminaren in Deutschland" (Holtmeier 2005d, 260), their theories usually receive only a few words. Holtmeier's "Grundzüge der Riemann-Rezeption" (2005d) is an excellent article on the early Riemann reception—my many references to it in the previous section tells as much—but Grabner and Maler only receive a brief paragraph centered on the decline of German music theory:⁵²

Mit Blick auf die erste Jahrhunderthälfte fällt es schwer, in dieser Entwicklung etwas anderes als einen Niedergang musiktheoretischer Reflexion zu erkennen. Tatsächlich könnte man behaupten, daß der musiktheoretische Diskurs nach 1945 in Deutschland zum fast vollständigen Stilstand gekommen ist und mit ihm natürlich auch die Fortentwicklung des Riemann-

⁵¹ The most extended study on Grabner is the rather recent monograph *Hermann Grabner: Pädagoge, Musiktheoretiker und Komponist* (Pelster 2015). Even this concludes with a call for more research on these theorists: "Der bedeutende Einfluss Grabners und seiner Schüler [i.e. Maler and Hugo Distler] auf die gesamte deutsche Musiktheorie ist bislang aber erst teilweise wissenschaftlich erforscht worden" (Pelster 2015, 168).

⁵² This is also true for Holtmeier 2011, an edited English translation of Holtmeier 2005d.

$1.2 \cdot \text{German reception}$

schen Denkens. Die Funktionstheorie, so scheint es, hat in Rudolf Louis einen nie wieder erreichten Höhepunkt gefunden. (Holtmeier 2005d, 262)

Even in Johannes Menke's article "Harmonielehren 'nach' Hugo Riemann," immediately following Holtmeier's above-cited contribution to the anthology *Musiktheorie* (Motte-Haber and Schwab-Felisch 2005), Grabner and Maler are only mentioned in passing, while prolonged attention is given to Bruno Weigl, Hermann Erpf, and Alois Hába (Menke 2005).⁵³

It seems that there are two reasons for this neglect. The first is that there is some truth to both Harrison's and Holtmeier's accounts: Grabner and Maler radically simplified Riemann's ideas, and postwar function theory is, from a certain standpoint, less sophisticated and intellectually stimulating than pre-war theories. The second reason is political and concerns the fact that the success and wide dissemination of Grabner's and Maler's function theories can be at least partly explained by Nazism's effect on German music theory:

Die an die monistischen Funktionszeichen orientierten Harmonielehren Malers, Grabners und anderer erfuhren während und insbesondere nach dem Sturz des NS-Staates eine enorme Verbreitung. Sie verdrängten praktisch sämtliche vor 1933 in Deutschland etablierten Harmonielehren, von denen insbesondere diejenigen von Heinrich Schenker und Louis-Thuille erwähnenswert sind. (Pelster 2015, 139)

Nevertheless, there is reason to research the post-war theories: while they may mark an unfortunate break with the German *Harmonielehre* tradition, they established a new and lasting one nonetheless. Furthermore, as appears from the quote, they are important actors in the complex history that resulted in the segregation of Schenkerian theory to a geographically distant tradition. Neglecting the study of Grabner, Maler, and de la Motte would, in short, mean neglecting the study of a significant chapter of 20th century European music theory.⁵⁴

⁵³ An entire chapter, however, is devoted to Diether de la Motte (Huber 2005)

⁵⁴ I write "European" and not just "German" because several of Grabner's, Maler's and de la Motte's ideas spread to other European countries; all three have had a particularly big influence in Sweden (see Kirkegaard-Larsen 2018, 80; 2019a; 2019b), and the latter of them even appears in a Swedish translation (Motte 1981 [1976]).

1.2.3 LATER GERMAN RECEPTION

Even though other notable theorists such as Hugo Distler and Paul Schenk have been widely used as well, the following account focuses (in the interest of space) only on Grabner, Maler, and de la Motte.⁵⁵ Together, they form the core canon in the Austro-German function-theoretical tradition, and furthermore, they suitably sum up the evolution of German-speaking function theory at large.

1.2.3.1 Hermann Grabner

Hermann Grabner (1886-1969) was born in Graz in Austria. He graduated from law school at the University of Graz in 1909 before commencing on his music studies at the conservatory in Leipzig, where he studied under Riemann's former pupil, the composer Max Reger. While also working as a composer, Grabner later taught music theory and composition at several German institutions, most notably at the Leipziger Landeskonservatorium 1924-38, and as a professor at the Staatlichen Akademischen Hochschule für Musik in Berlin from 1938-45 (Becker 2002, 1448; Pelster 2015, 5). Because of his earlier membership of the Sturmabteilung (SA) 1933-35, and because of his activity as a composer of national socialistic music, he was dismissed in 1946, and struggled to make a living until the Entnazifizierungskommission agreed on his rehabilitation request in 1950. He then taught theory at the Städtischen Musikschule Berlin for a year before retiring; his activities as both composer and theorist declined radically after the war (Pelster 2015, 145-151), but his textbooks remained widely disseminated successes.

During his lifetime, he published several books on music and music theory, many of which are focused on function theory. Grab-

⁵⁵ Paul Schenk became "just as influential in East German music theory as Wilhelm Maler was in West German music theory" (Holtmeier 2004a, 255). Though his "combination of primitive Nazi ideology with Karg-Elert's sophisticated and multi-faceted functional theory" (ibid.) thus seemed to be no problem for his post-war success in East Germany—indeed, Holtmeier writes that "Schenk hat eine ganze Generation von Musiktheoretikern in der DDR entscheidend geprägt" (Holtmeier 2005b, 1285)—it does seem that his influence has decreased in recent decades. In any case, the history of function theory (and other music theory) in East Germany remains to be thoroughly researched.
ner's first theoretical works predate the war (as does Maler's) but will be discussed here as examples of "later" Riemann-reception because they laid the foundation to his post-war popularity. *Regers Harmonik* (Grabner 1920) presents Max Reger's "five laws of tonality,"⁵⁶ which is in essence a function theory.⁵⁷ Grabner's first extended writing on function theory, however, is his *Die Funktionstheorie Hugo Riemanns* (Grabner 1923), which elaborates on the five laws. The aim of this book is to propose "einer für die Praxis möglichen Formulierung [Riemanns] Funktionstheorie," which is to say, a *monistic* formulation (Grabner 1923, V). Grabner clarifies that "der Hauptzweck des theoretischen Unterrichts nur die Analyse sein kann" (Grabner 1923, 2). Here, he quotes Johannes Schreyer, applauding his position that the most important task of the *Harmonielehre* is "die Einführung in das Verständnis der Meisterwerke" (Schreyer 1911, III; quoted in Grabner 1923, 3).

In the second of Grabner's (and Reger's) five laws of tonality (on third-relationships), Grabner introduces an influential new term, *Gegenparallelklang*, to function theory. The background for Grabner's neologism is not only that he disagrees with Riemann's dualism, but also that he disagrees with Riemann's concept of *Scheinkonsonanze*. Grabner argues that it is a contradiction in terms when Riemann on the one hand establishes that the *Parallel-* and *Leittonwechsel-*chords are to be seen as first inversions of the primary functions with omitted fifth (they thus appear to be consonant chords, but are in fact *Vorhaltssextakkorde* and thus *Scheinkonsonanzen*), and on the other hand notices—in *Handbuch der Harmonie- und Modula-*

⁵⁶ The five laws are as follows. 1) There are only three *Klänge* (T, S, and D) and any harmonic entity can be traced back to one of these. 2) Chords may carry the meaning of their third-related T, S, or D. 3) A chord may be a secondary dominant to another chord. 4) Any chord can follow another chord, and unexpected progressions are to be explained by mediating harmonies. 5) Secondary key areas and modulatory processes may be achived through pivot chords, augmented-sixth chords and more (Grabner 1923, 20–42).

⁵⁷ Philipp Pelster's Grabner biography documents that Reger taught a monistic version of function theory to Grabner in Leipzig in 1910–1912 (Pelster 2015, 14–15; 30) and that Grabner himself taught a monistic version during his employment as *Lehrer für Theorie* at the conservatory of Strasbourg as early as 1913–1914 (Pelster 2015, 19).

tionslehre (Riemann 1920 [1906/1890], 70) and Handbuch der Harmonielehre (Riemann 1917a [1887/1880], 88)58-that they may appear as actual consonant, independent chords with doubled roots; the root here being the actual dissonance.59 Repeatedly emphasizing the importance of clarity and practical-pedagogical usefulness, he distinguishes not between Parallel- and Leittonwechsel-chords, but between Parallel- and Gegenparallel-chords (the latter also dubbed Antiparallelklänge and Gegenklänge) (ibid., 29). His reason for preserving the Parallel term is important: "Parallelklänge are the third-related chords whose roots are simultaneously the roots of *paralleler* [relative] major and minor keys"⁶⁰ (ibid.). Grabner thus intends to free the Parallel term of its inherent dualism: chords are in a Parallel relationship simply because they are the tonics of keys that share the same tone material. The Gegenparallelklang, defined as the third-related chord that lies in the opposite direction of the Parallel, is then Grabner's attempt to create a monistic alternative to the dualistic Leittonwechselklang.61 The Gegenparallelklang would become a standard part of terminology in German function theory to this day.

Another striking aspect of Grabner's elaboration on the five laws is his frequent references to other theorists than Riemann. He mentions Schenker's concept of *Tonikalisierung* (tonicization) as an alternative to the idea of secondary dominants (Grabner 1923, 31– 32);⁶² he criticizes Riemann's labels °Sp and (D)Tp for the chords A^{\flat}

⁵⁸ Grabner refers only to their titles—editions and page numbers are my additions, indicating where the interested reader may find these claims of Riemann's.

⁵⁹ Grabner summarizes: "Akkorde, die wie Konsonanzen aussehen, dennoch dissonant sind—aber doch konsonant mit Verdopplung der Dissonanz gebraucht werden können!" (Grabner 1923, 28).

⁶⁰ "Parallelklänge sind jene terzverwandten Klänge, deren Grundtöne gleichzeitig Grundtöne paralleler Dur- und Molltonarten sind." My translation.

⁶¹ Even though both Riemann's *Parallel* and *Leittonwechsel* are dualistic, Daniel Harrison is right to note that Grabner was forced to invent the *Gegenparallel* relationship, while he could more easily keep the *Parallel* term: "The *Leittonwechsel* relationship was unavailable because it was *clearly* a dualist construct, defined as the replacement of the prime of an over- and underchord with its leading tone—below the prime in an overchord [major chord], above in an underchord [minor chord]" (Harrison 1994, 306).

⁶² Referring to Schenker's reliance on Simon Sechter, Holtmeier takes this as an example that Grabner was "ganz sechterianisch" (2005d, 238). Indeed, Grabner explic-

and E in C major, respectively, instead following the lead of Louis and Thuille's notion of extended third-relationships (Louis and Thuille 1910 [1907], 346 et passim). On this background, Grabner suggests another new functional suffix "t" (for *terzverwandt*) to denote any mediant (Grabner 1923, 37–38).⁶³ In fact, Grabner's entire book makes heavy reference to numerous theorists, confirming Holtmeier's assessment that the Grabner of 1923 was "firmly anchored within the musicological discourse of the day" (Holtmeier 2004a, 248). All in all, Grabner refers to and explicitly draws on ideas from Sechter, Riemann, Reger, Capellen, Schreyer, Schmitz, Louis and Thuille, Kurth, Schoenberg, and Schenker. The early Grabner, then, fits perfectly in the history of theory in pre-war Germany sketched in the above section: a milieu in which analysis-oriented theories combining different elements of several theorists thrived.⁶⁴

While several of Grabner's early publications show this commitment, it would radically change during Grabner's career, as implied in the "historiographical interlude" above (section 1.2.2).⁶⁵ Holtmeier's comparison of different editions of Grabner's most influential work *Allgemeine Musiklehre* (Grabner 1924) tellingly illustrates Nazism's influence:⁶⁶ *Allgemeine Musiklehre* went from a book

itly writes that "this little book is an attempt to mediate between Sechter and Riemann" ["Die Tendenz dieses Büchleins ist ein Vermittlungsversuch zwischen Sechter und Riemann"] (Grabner 1923, 6; translation in Holtmeier 2004, 250).

⁶³ Grabner does not comment on Riemann's late admittance of new function symbols for these exact chords (cf. Riemann 1917a, XVII); this is discussed again in connection with Example 75, page 264.

⁶⁴ His 1925 publication *Lehrbuch der musikalischen Analyse*, for example, argues that theory courses should be organised so that "die Analyse in den Mittelpunkt des theoretischen Unterrichts gestellt wird" (Grabner 1925, IV), and he aphoristically claims: "Das beste Lehrbuch wird immer das Kunstwerk selbst sein" (ibid., V).

⁶⁵ The following does not go into detail with Grabner's short book *Die wichtigsten Regeln des funktionellen Tonsatzes* (1935); suffice it to say that this extremely condensed review of function theory and voice-leading rules is so simplified that it only introduces T, S, and D, but neither the *Parallel* or *Gegenparallel*. Third-related chords are described simply as *Nebenfunktionen* and *terzverwandte Vertretungsklänge* (Grabner 1935, 10–11).

⁶⁶ Allgemeine Musiklehre counts among Graber's most influential works. Pelster (2015) lists no less than 25 editions of Allgemeine Musiklehre, the latest from 2011, in his bibliography.

in which the theories of Ernst Kurth played a prominent role and in which musical examples from Mendelssohn, Mahler, Schoenberg, Schreker and other composers of Jewish descent appeared—to a book completely devoid of any Jewish trace in the third and fourth editions of 1942 and 1943 (Holtmeier 2004a, 251–252; Pelster 2015, 137). In post-war editions, some of the deleted music reappears, but Kurth is no longer at the center.⁶⁷ Likewise, the neglect of theory and analysis for the benefit of practical *Tonsatz*-craftmanship can be seen in Grabner's *Handbuch der Harmonielehre* (1944)⁶⁸ that was commissioned as the new standard *Reichsharmonielehre*.⁶⁹ Its preface demonstrates this well:

Dieses Buch mit dem Untertitel 'Praktische Anleitung zum funktionellen Tonsatz' ist eine ausgesprochene Handwerkslehre, bestimmt, den Studierenden in die logische Zusammenhänge der tonalen Harmonik einzuführen. Seine Nutzanwendung erstreckt sich zunächst auf den Tonsatz als Grundlage für die heute oft an der Musiker herantretenden Anforderungen von *Bearbeitungen* verschiedener Art (Volkslied-, Continuobearbeitung, Spartierung, Aufführungseinrichtung u. dgl.), dann aber auch auf die Analyse von Werken der funktionsbedingten Musikepoche des 17.–19. Jahrhunderts. (Grabner 1944, I:I)

⁶⁷ In fact, after being primarily concerned with Riemann and Reger, Grabner turned to see Ernst Kurth as the absolutely most important theorist, hugely influential in both Grabner's theoretical writings (most notably in the first edition of *Der lineare Satz* [Grabner 1930]) as well as in his own music (Holtmeier 2004a, 251; Pelster 2015, 37–54); but under the Nazi regime, any trace of Kurth was eradicated, and he never regained the same status in Grabner's post-war writings. In the second edition of *Der lineare Satz* (Grabner 1950 [1930]), for instance, an entire chapter built on Kurth's theories was omitted—as Phillip Pelster documents, possibly because Grabner started working on this edition already during the war, in 1943 (Pelster 2015, 154).

⁶⁸ Handbuch der Harmonielehre (Grabner 1944) was revised and republished several times, eventually gathering the two volumes of the first edition in one volume retitled *Handbuch der funktionellen Harmonielehre* (see Grabner 1974 [1944]).

⁶⁹ Holtmeier cites a letter from Grabner to Felix Krüger in 1941 or 1942 (Holtmeier's prose text and endnotes give different dates): "I have ... been commissioned by a leading publisher to write a theory of harmony to point the (new) way for all of the conservatories in the Reich, and which, in particular, should bring unity to the various methodological approaches. At present there exists a veritable Babylonian confusion in this regard: monism, dualism, thorough bass, Weber's notation and Riemann's notation, wild confusion everywhere!" (Letter of 2 June 1941/1942; cited in Holtmeier 2004a, 256).

While still mentioned, analysis clearly no longer plays the leading role in Grabner's work. The ultimate goal is to enable the student to harmonize folk songs: the theoretical chapters lead to chapters on "Homophone Bearbeitung des jüngeren Volksliedes," "Homophone Bearbeitung des älteren Volksliedes," "Anwendung der harmoniefremden Töne bei der Volksliedbearbeitung," "Die Modulation im Volkslied," and so on.

Among the new and interesting theoretical aspects in the *Hand-buch* is that Grabner exemplifies how chords a third *above* the main function may substitute, in a manner that goes beyond Riemann's usual use of the *Leittonwechsel/Parallel* pair (see Example 13).



Example 13: Grabner's examples of *Oberterzklänge* as substitutions, marked with * (Grabner 1974 [1944], 93).

There is an implicit stress on the *metrical* and *cadential* position of the chord: the S-substitution in his example a could have been Tp, but is seen as an overthird of S because of its strong metrical position and its place in the T–S–D–T cadence; the S of his example b is analyzed as such to underline its plagal effect. Apart from such exceptional cases—the occasional consideration of different aspects of chord context such as metrical position—Grabner's function theory is as simple as can be: there are T, S, and D, and *Parallelle* and *Gegenparallelle* of these. In so-called "extended tonality" (*erweiterte Tonalität*) chords from the *Varianttonart* may appear as well, such that a D^b chord in the key of C major—the Neapolitan—is labeled °Sg.

One curious part of *Handbuch der funktionellen Harmonielehre* is its very first chapter in which Grabner asks what the relation between melody and harmony is. He provides the example shown here as Example 14.



Example 14: Grabner's example 8a and 8b (Grabner 1974 [1944], 19).

His explanatory text is as follows:

Hier faßt man die Folge C-dur — F-dur — C-dur (Beispiel 8 a) als einheitlichen C-dur-Komplex auf, innerhalb dem ein melodischer Wechsel e-f-e und g-a-g stattfindet (Beispiel 8 b). (Grabner 1974 [1944], 19)

However, this very vague hint of the idea of linearity (note the horizontal line extending from the C in his example 8b) and contrapuntally derived chords is not elaborated in his book.⁷⁰ On the contrary, any connotation of Schenkerian ideas seems to be refuted when he writes that the leading tone and the melodic c–b–c "*Kleinsekundenwechsel*" is a fundamental part of voice leading, then adding the footnote: "Dem Verfasser liegt es ferne in diesem Wechsel eine 'Urlinien-formel' hinstellen zu wollen, wie es manche Theoretikern tun" (Grabner 1974 [1944], 29).

It should be mentioned that after the war, it seems that Grabner attempted to return to his earlier ideals of an analysis-oriented music theory in his *Musikalische Werkbetrachtung* (Grabner 1950), a book that never gained the same success as *Allgemeine Musiklehre* and *Handbuch der Harmonielehre* (Holtmeier 2004a, 263). Holtmeier (2004a, 247) quotes from an unpublished article of Grabner's from 1944, in which Grabner laments the loss of work-oriented theory and analysis for the benefit of the craftmanship-oriented *Tonsatz* or *Satzlehre*; Holtmeier then notes that "this critical text is particularly interesting because its author was himself responsible for the decline he is mourning" (ibid.).

⁷⁰ In a brief discussion of *Durchgangs-* Wechsel- and Vorhaltsakkorde, it is mentioned again as a "Wechselquartsextakkord" (Grabner 1974 [1944], 53).

$1.2 \cdot \text{German reception}$

Not mentioned in Holtmeier's and Pelster's above-cited writings is the fact that, when comparing the first with later editions of the *Handbuch*, it seems that, despite Grabner's aspirations of a return to his earlier ideals, the book only became *more* simplified and devoid of theoretical speculation after the war. Many footnotes with theoretical reflections and elaborations have been deleted in later editions, such as one about the significance of using functional letters instead of Roman numerals that discusses the relation between the "symbol" and the "symbolized" (Grabner 1944, 13).⁷¹

1.2.3.2 Wilhelm Maler

Wilhelm Maler (1902–76), who was a student of Grabner's, is another formative theorist in 20th century German music theory.⁷² Holtmeier has proclaimed Maler's *Beitrag zur durmolltonalen Harmonielehre* (1975 [1931])—initially just entitled *Beitrag zur Harmonielehre* (1931)—to be "the most influential German harmony book in the twentieth century," (Holtmeier 2004a, 252–253). In Holtmeier's critique of post-war theories, he allocates considerable space to *der Fall Maler*: his textbook and its revisions serve as an illustration of the overall development and decline of 20th-century German music theory. The first edition of Maler's *Beitrag* appeared in 1931, a book that was very much in line with contemporary ideas in German music theory: "a modern and forward-looking work," according to Holtmeier (2004a, 253).⁷³ It consisted of three volumes (textbook, examples, and exercises), of which only the third was republished in the second

 $^{^{71}}$ This is the reason that the more widespread later editions have been consulted in the above.

⁷² In a 1941 letter from Grabner to Maler, Grabner seems eager to cement his own role in Maler's theory: "Du brauchst selbstverständlich nur einen Hinweis zu bringen, dass Du Dich der Funktionsbezeichnung bedienst, die Du als mein ehemaliger Schüler in meinem Unterrichte kennen gelernt hast und die ich in meiner Studie 'Die Funktionstheorie Hugo Riemanns' festgelegt habe zum Zwecke der Vereinfachung und praktischen Nutzbarmachung der Riemannschen Funktionsschrift" (cited in Pelster 2015, 138).

⁷³ As I have only been able to acquire certain editions of the book, the following overview of its editions relies partly on Holtmeier's account of these (Holtmeier 2004a, 253).

edition from 1941. Commentary as well as all musical examples had been removed, and a new songbook with folk songs, SA-songs and NSDAP-songs had been added. The third edition from 1950—in which the book "took the shape known to nearly all recent German music scholars" (ibid.)—did not return to the three-volume structure, but was instead based on the *Übungsheft* which now integrated the folk songs (without the Nazi songs) into one volume. In 1957 and 1960, a fourth edition and a revised fourth edition added the original *Übungsheft* and the musical examples. Holtmeier's judgment of this publication history is as follows:

His [Maler's] assertion in the preface that "the original collection of examples could not be re-published between 1933 and 1945 because of the many 'undesirable' and 'intolerable' quotations" does not explain why a second (and distinctly regressive) version appeared 15 years after the end of the war. (Holtmeier 2004a, 253)

To rehearse my historiographical argument, the following takes the later editions as the point of reference because they have been despite of (or as a result of) the deplorable societal and political circumstances that they arose from—the most influential editions. Their impact on the German practice of music analysis is traceable first and foremost in its subtle revision of function symbols, which was suggested already in its first edition (Maler 1931): Maler uses Grabner's symbols (that is, he includes the *Gegenparallel*), but uses upper-case function letters to designate major chords, and lower-case to designate minor chords, a practice that came to completely replace the old one in Germany.

The advantage of the system is that it becomes easier to infer the mode of the designated chord. In Riemann's and Grabner's system "Tp" in the key of C major designated A minor, while "Tp" in the key of A minor designated C major; in the first case, the chord in question is a minor chord, and in the second case, it is a major chord, despite the fact that the symbols are identical. In Maler's system, a "Tp" in the key of C major is again A minor, but in the key of A minor, one must write "tP" to yield C major; in an A minor-key, then, "Tp" would designate F[#] minor—the *major* tonic's (A major) *minor Parallel* (F[#] minor).

Here, we might notice that Grabner's and Maler's function theories imply slightly different conceptions of functional relations. Grabner's is a key-relational theory, and Maler's is a mode-relational theory. This typology of function theories is further elaborated below, and a full overview of the typology relevant for this dissertation can be found in Appendix 3.

The extended system of third-relationships that the moderelational theory implies is explicitly utilized in Maler's book:

Auch die <u>terzverwandten Klänge</u> (Medianten) der <u>Moll</u>tonika und Mollsubdominante treten—als entfernte Terzverwandte eigentliche Medianten—in den tonalen Organismus der <u>Dur</u>tonika. (Maler 1975 [1931], 48)

With this condition, Maler is able to present a comprehensive system of mediant designations shown in Example 15.⁷⁴



Example 15: Functional symbols in Wilhelm Maler's expanded third-relationships (Maler 1975 [1931], 49).

Apart from the introduction of the analytical symbol "L" for "freie Leittoneinstellungen" or "free leading-tone constructs"⁷⁵ (Maler 1975 [1931], 56), Maler's function theory is very similar to Grabner's. For instance, as in Grabner, a vague idea of linearity and hierarchy between functions can be observed in Maler's ideas on *Wechsel-quartsextakkorde*, as demonstrated in Example 16.

⁷⁴ In this edition Maler omitted an illustration (found in Maler 1931) of the network of functional relations that his system implies; this illustration will be discussed in the discussion sorrounding Example 77 on page 266.

⁷⁵ Maler's definition is: "Klänge, die zum folgenden Akkord nur leittönig sind und eine eindeutige dominantische Klangwurzel oder entfernte Tertzverwandtschaft nicht mehr erkennen lassen, heißen "<u>freie Leittoneinstellungen</u>" (Maler 1975 [1931], 56). Maler cites a series of examples from Wagner's music.



Example 16: Wilhelm Maler's *Wechselquartsextakkord* in two analytical levels (Maler 1975 [1931], 10).

The example suggests two analyses, of which the second seems to communicate a sort of linear prolongation of T (in m. 1) and D (in m. 2). That the linearity is not carried out to a very large extent is demonstrated by the same example: the last chord of m. 2 is not seen as a neighboring chord partaking in the prolongation of the dominant, but a fully-fledged subdominant chord that either forms a local T_{/5}–S–D-progression (in Maler's upper analysis) or a seeming "violation" of the convention that S does not follow D (in Maler's lower analysis). But of course, the word "prolongation," used in the last couple of sentences, is not Maler's at all, and any resemblance of Schenkerian theory-or even function theory in the style of Schreyer or Louis and Thuille-is vague. Maler, Grabner, Louis and Thuille, Schreyer, and more share the general idea that passing entities (tones or chords) connect "zwei melodische oder harmonische Stützpunkte ohne das harmonische Geschehen wesentlich zu beeinflussen," as Maler formulates it, continuing: "sie sind für das harmonische Gerüst von sekundärer Bedeutung" (Maler 1975 [1931], 16). But for Maler (as for Grabner) neighboring and passing harmonies occur only above a steady bass voice:

Bei Durchgangsharmonien sind es nicht einzelne Töne, die einen Akkord verlassen, sondern ganze Klänge, die *über liegenbleibendem Baßton* weiterschreiten, ohne die Funktion zu ändern. (Maler 1975 [1931], 16; my emphasis) The great difference between this conception of "linear motions" and the conception seen in Schreyer, Louis and Thuille, and (most of all) Schenker, is that the latter extends to progressions in which the bass voice moves.

1.2.3.3 Diether de la Motte

Diether de la Motte (1928–2010), who studied with Maler, is best known for his first book *Musikalische Analyse* (Motte 1968) and especially his *Harmonielehre* (Motte 1976), which has been translated to several languages (see, for instance, Motte 1981; 1991). His *Musikalische Analyse* is a series of analyses aiming to demonstrate different musical phenomena or analytical techniques. A unique feature of the book is that each chapter is concluded by critical remarks by Carl Dahlhaus.⁷⁶ As Annegret Huber notes, this artifice can be seen as part of de la Motte's lifelong commitment to reforming German music theory and analysis teaching:

Spätestens wenn die Studierenden die Plausibilität der auf Seiten vorgebrachten Argumente überprüfen, müssen sie erkennen, daß zwei unterschiedliche Sichtweisen [i.e. de la Motte's and Dahlhaus'] sich nicht zwangsläufig ausschließen und darüber hinaus noch Spielraum geben für weitere – nämlich die jeweils eigenen. (Huber 2005, 479)

In 1972, Diether de la Motte co-authored an article entitled "Plädoyer für eine Reform der Harmonielehre" together with Renate Birnstein and Clemens Kühn (Motte, Birnstein, and Kühn 1972), and de la Motte's *Harmonielehre* (1976) reads as a realization of the reform sketched in that article. Characteristic for the "Plädoyer" and the *Harmonielehre* is de la Motte's aim toward a historically informed view of harmony: "Historischer Blick statt Tonsatzsystem," as Annegret Huber calls it (Huber 2005, 481).

De la Motte is critical of the "sogennanter *strenger Satz*" (Motte 1976, 9) that the *Harmonielehre* tradition is built on for two reasons. First, *der strenge Satz* is an artificial construct, an abstraction

⁷⁶ One can only speculate whether this served as a model for the Dane Orla Vinther's very similar *Musikalsk Analyse* (Vinther 1992) which contains critical remarks by Erik Christensen.

of general rules based on a corpus of compositions. Second, this corpus of compositions typically spans roughly 1600-1900, in consequence depriving the strenge Satz of any noteworthy historical sensibility. For example, he notes, the diminished seventh chord is traditionally seen in function theory as an incomplete Dominantseptnoneakkord (dominant ninth chord); but the complete version of this chord does not appear before the music of Robert Schumann. In Bach's music, it often appears as 9-8 suspensions over the dominant in minor keys, but not as an actual independent chord. To use the \mathbf{D}_{7}^{9} label for Bach-style chorales is thus nonsensical: it is an incomplete version of a chord that did not exist as a chord in musical practice (Motte 1976, 9, 92-97). Instead, noting that the diminishedseventh chord contains tones of both the dominant seventh chord and the minor subdominant with added sixth (see Example 17), he suggests that it has a double function "s + D im verminderten Septakkord" (ibid., 97). Its functional label (a superposition of D and s with the suffix v for verminderten) can be seen in different contexts in Example 18.77



Example 17: Illustration of a D^7 and s^6 in a diminished seventh chord (Motte 1976, 96).

For the same reasons, de la Motte describes a diminished chord rooted on [#]IV as an amalgamation of the minor tonic and the double dominant. Example 19 shows how he arrives at this conclusion by displaying three levels of analysis: In the lower level, the basic progression DD-D-t is shown; in the middle level, a t-D-t progression is shown, emphasizing how elements of t appear in both the diminished

⁷⁷ Considering de la Motte's assertion of historical awareness in analysis, he has—as might be expected—been criticized for using function analysis for Bach's music at all (Daniel 2001, 326).



Example 18: The diminished seventh chord as a double function chord with D and s (Motte 1976, 97).



Example 19: The diminished seventh chord as a double function chord with DD and t (Motte 1976, 129).

chord and the cadential six-four chord; and in the upper level, his own mixture of symbols is shown, representing an amalgamation of the two lower levels.

De la Motte's historical perspective thus affects his terminology as well as the entire structure of the book.⁷⁸ It is not organized as a presentation of different and increasingly complex theoretical concepts, nor as a series of rules for chorale harmonization, but as a series of chapters focusing on different composers at different times, each chapter introducing the harmonic principles relevant to the study of their music.

⁷⁸ As Annegret Huber has noted (2005, 482), the English translation of the book accentuates the historical perspective: *Harmonielehre* is not translated as 'Harmony' or 'Theory of Harmony' (as is common), but as *The Study of Harmony* with the subtitle *An Historical Perspective* (Motte 1991). The Swedish translation also accentuates this with the title *Epokernas harmonik* ('Harmony of the epochs') (Motte 1981).

Apart from the above-mentioned 'neologisms' in the functional vocabulary, de la Motte builds his theory closely on that of Wilhelm Maler. But his idea of double functions leads to analyses in which de la Motte seems to intricately incorporate a more horizontal view of harmony. In his analysis of an unnamed Bach-example, shown in Example 20, he juxtaposes his amalgamation of DD and t (below the score) with a Hör-Analyse (above the score), supposedly communicating what one actually hears or experiences. De la Motte never elaborates on the purpose of his Hör-Analyse, but the analysis clearly reads as if the minor tonic is being prolonged through a series of hierarchically less important functions, until it reaches an important dominant. Here, one can see that the idea of a mixture of DD and t is, in fact, quite radical when compared with the tradition de la Motte is part of: in Riemann's, Grabner's, and Maler's analyses, it is unthinkable that the chromatic penultimate chord could be seen as carrying any kind of tonic function. Coincidentally, a plausible Schenkerian reading of the passage would confirm the penultimate chord as a prolongation of the tonic because of a voice exchange (see Example 21).79

This vague sense of prolongation is present in many of his analyses. Numerous examples show a T being prolonged by a S or D in a lower hierarchy, communicated visually:

 $T_{--}^{s}_{--}^{T}_{--}$ or $T_{--}^{D}_{--}^{T}_{--}$

Importantly, however, in most of these examples—though not exactly in his *Hör-Analysen*—there is, just as in Grabner and Maler, a *pedal point*. The horizontal line symbolizes a pedal point, not prolongation.

Grabner–Maler–Motte represents the most influential line of function theorists in Germany—though, it goes without saying, numerous publications by other theorists have not been discussed in the previous pages.⁸⁰

⁷⁹ In this analysis, octave displacements have been made to better communicate voice leading. The high A in the penultimate chord is seen as the superposition of an inner voice, while the C is given priority because it is an 'active' voice, seeking downward resolution.

⁸⁰ A more comprehensive account is provided in Hanno Hussong's dissertation (2005).



Example 20: Diether de la Motte's analysis of a Bach excerpt (Motte 1976, 131).



Example 21: The author's Schenkerian reading of the same passage.

As for the status of function theory in more recent times, it seems to hold its place as the go-to method for harmonic analysis in practice, while at the same time being subject to more scholarly critique—as indicated at the very beginning of section 1.2 (page 49).

1.3 EUROPEAN RECEPTION —OUTSIDE OF GERMANY

With German as the musicological *lingua franca* for much of the 20th century, the above-sketched German reception history is to some extent representative of the *European* reception history. But not completely: In many countries, local traditions quickly established—traditions in which theorists sometimes refer less (if at all) to Riemann and his German successors, and more to their local or national colleagues. One cannot hope to account for all of these more or less independent traditions, numerous as they are. Section 1.3.1 seeks therefore only to give a broad overview of function theory's international dissemination in Central and Eastern Europe as well as Russia and China, before going into more detail with the specifically Scandinavian receptions.

1.3.1 CENTRAL AND EASTERN EUROPE, RUSSIA (USSR)—AND CHINA

Holtmeier notes that function theory's influence "remained by and large confined to Central Europe. It never became an 'international' theory, such as Sorge/Vogler/Weber's Stufentheorie" (Holtmeier 2011, 43). Indeed, function theory seems to have played a considerably smaller role than Stufentheorie and fundamental bass theory in countries such as France and Italy. As Alexandra Kieffer has documented, Riemann's theories "enjoyed a brief surge of popularity" in France before it was denounced in several articles by Jean Marnold (Kieffer 2016, 1). The Cours de compositions musicale by French composer and theorist Vincent d'Indy (1912) proposed ideas of harmonic function and dualism similar enough to Riemann's that he has "occasionally been accused of simply copying Riemann" (Rehding 2003, 31). According to a 1954 PhD dissertation by Robert Carson Lamm, both d'Indy's and Riemann's ideas inspired the Italian theorist Giulio Bas, who in his Trattato d'Armonia from 1924-25, used functional letters in his analyses (Lamm 1954, 46). Though one finds several later traces of function theory in both France (cf. Gut 1986;

1996) and Italy (cf. Azzaroni 1989; 1991), it seems not to have gained the hegemonic status it had elsewhere. Riemann did have a large following, however, in "the Netherlands and the Flemish parts of Belgium (...) spearheaded by Emil Ergo" (Holtmeier 2011, 42).⁸¹

In a text of which the main purpose is to trace the influence of Schenker in the Czech/Czechoslovakian areas-but which quickly concludes that despite the geographical and historical proximity of the Austro-German and Czech cultures there are practically no traces of influence-Lubomír Spurný documents that function theory has been dominant in Czech music theory since Otakar Šín's (1881–1943) Nauka o harmonii na základě melodie a rytmu (which he translates to "Harmonielehre aufgrund Melodie und Rhythmus") from 1922 (Spurný 2003-05, 249). Šín published another harmony textbook in 1933 in which the "phrygian" and "lydian" chords (the major or minor triad on ^bII and VII, respectively) takes a more prominent place. In Emil Hradecký's (1913-1974) and Karel Janeček's (1903-1974) harmony textbooks from 1960 and 1965, respectively, this results in a system with five, and not three main functions (ibid.). A more recognizable three-function theory, however, is used in the textbook Učebnice harmonie [Harmony textbook] by Jaroslav Kofroň (1921-1966), first published in 1961 but used in harmony classes at conservatories in Prague to this day (Kofroň 2015 [1961]).82

Whether Czech theory was influenced by function theory's success in the Soviet Union remains unclear, but it is Ludwig Holtmeier's

⁸¹ Holtmeier (2005d, 248–250) frames Ergo, who wrote in German and was published by Breitkopf und Härtel in Leipzig, as being part of the linear pre-war function theories represented by Schreyer, Louis and Thuille, and Schmitz. However, Holtmeier chooses only one analytical example to support this claim, Ergo's analysis of the opening eight measures of Richard Wagner's *Tannhäuser* (Ergo 1914, 28–30). But even though this analysis surely does show a linear perspective on harmony, and even though Ergo criticizes Riemann's tendency of analyzing too vertically (ibid., 16), the linear perspective is conspicuous by its absence when reading through the rest of Ergo's *Ueber Richard Wagner's Harmonik und Melodik*. A good example is his chord-by-chord analysis of the opening of Beethoven's *Waldstein* sonata; the only other analysis with a linear perspective is a very brief example from Beethoven's Symphony No. 5, fourth movement (Ergo 1914, 29).

⁸² I am thankful to Anna Hustedová for providing me with this information, and for help with translation.

assessment that function theory has "above all" (Holtmeier 2011, 43) been influential in Russia. Though the Russian reception history remains to be written in detail, recent years' research has begun to provide some of these details (cf. Cheong and Hong 2017; 2018; Ying and Komatović 2017; Schröder 2017; Bitzan 2018). Apart from the numerous Riemann-translations that apparently circulated in Russia throughout the 20th century (cf. Khlybova 2003, 316), and Georgij Katuar's [Catoire] (1861–1926) *Teoretičeskij kurs garmonii* [Theoretical harmony course] from 1924, to which the establishment of Riemannian function theory in Russia is attributed (Bitzan 2018, 27), one very important publication is *Uchebnik garmonii* [Harmony textbook] co-authored by Igor V. Sposobin (1900–1954) and three other theorists and published in the Soviet Union in 1937–38 (Cheong and Hong 2018, 45).

This book, known as the *brigade textbook*, "soon became one of the most widely used harmony textbooks throughout the communist world"; it "won official approval from the Soviet authorities at the outset, and it remains in use in Russia to this day" (ibid.). The book became a standard work in China as well, but since Riemann's name was completely deleted from the second version of the book, on which the Chinese translation from 1957 was based, "Chinese readers were not informed that functional harmony stemmed from Hugo Riemann and was thus German rather than Soviet in origin" (ibid., 46–47).⁸³ As can be seen by a quick glance at Example 22, the functional signs used in the brigade textbook is yet another new system that combines function letters and Roman numerals, apparently explicating that III and VI may carry different functions.



Example 22: Functions in the major scale according to the *brigade textbook* (from Ying and Komatović 2017, 4).

⁸³ The brigade textbook continued to exert its influence in China: according to Cheong and Hong (2017, 3) it was pressed in more than 250.000 copies by 2010 and is still used today.

Today, there seems to be agreement that the most influential Russian publication next to the brigade textbook is Yuri Kholopov's (1932–2003) Гармония ('Garmonija' i.e. "Harmony") from 1988 (a second volume came in 2003). Building on de la Motte's historical perspective, Kholopov suggests two functional systems. One is aimed at the classical era and contains only the well-known T, S, D, and their modifications. The other is meant for analysis of romantic music and is a thoroughly modified functional system that incorporates aspects of Sigfrid Karg-Elerts (1877–1933) function theory. Here, Kholopov proposes a series of new main functions apart from T, S, and D, such that all of the twelve chromatic steps receive its own function letter (Lyshow and Lebedew 2017, 87–89).

1.3.2 SCANDINAVIAN RECEPTION

In several ways, the Scandinavian⁸⁴ reception history stands in contrast to German and other reception histories.⁸⁵ Swedish theory, influenced as it is by Hermann Grabner, Wilhelm Maler and Diether de la Motte, is the only Scandinavian theory that is close to the German. But both Norwegian and especially Danish theory differ in interesting ways.

For much of the twentieth century, Norwegian theory was dominated by Ernst Richter's *Lehrbuch der Harmonie* (Richter 1853), adapted to Norwegian in *Praktisk harmonilære* [Practical harmony] by Gustav Fredrik Lange (Lange 1897). Only in 1948—quite late, compared to function theory's Danish and Swedish debuts in 1933 (cf. Høffding 1933; Svensson and Moberg 1933)—did Thorleif Eken (1900–1954) incorporate aspects of function theory in his *Harmoni*-

⁸⁴ In this text, "Scandinavia" only refers to Denmark, Norway, and Sweden. These three countries have interconnected reception histories because of their linguistic similarities. The reception history in Finland (in which Swedish is one official language) remains to be researched.

⁸⁵ This section is a shortened version of previously published and forthcoming material (Kirkegaard-Larsen 2017a; 2018; 2019a; 2019b; forthcoming). The entire corpus of Scandinavian function-theoretical texts on which it is based can be seen in an overview in Kirkegaard-Larsen (2018, 109–110).

lære (Eken 1948).⁸⁶ Eken's theory is still based on Roman numerals, which he calls "function numbers" [*funksjonstall*] (Eken 1948, 9), and the influence from function theory is limited. It was Eken's student, Anfinn Øien (1922–2018), who came to establish the lasting tradition of function theory in Norway in his 1975 *Harmonilære* (Øien 1975).⁸⁷ Øien bases his system on the function theory that the Dane Povl Hamburger (1901–1972) proposed in his 1951 *Harmonisk analyse* [Harmonic analysis] (Hamburger 1951).⁸⁸ The primary difference between this system and the others discussed above is summarized by Øien:

The perhaps most far-reaching terminological initiative is the adherence to the designations Ts, Tm, Ss, Sm, Ds and Dm for the temporary tonic of a secondary cadence, while Tp, Sp, and Dp are only used as symbols for the secondary keys.⁸⁹ (\emptyset ien 1975, 7)

That is, the notion of the *Parallel* is reserved to instances in which there is an actual modulation to the *Parallel* key. In other instances, be it in deceptive cadences or simple I–vi progressions, the mentioned symbols are used: the suffix "m" means (over)mediant and "s" means submediant. I have described this as an *interval-relational* function theory (Kirkegaard-Larsen 2018, 82–87) because the relations between the primary function and the respective secondary triads are conceptualized as directed invervallic relations, independent of the mode of the key: an "m" function is always above the referential main function, an "s" function is always below. The progressions I– VI and V–VI⁹⁰ are thus T–Ts and D–Ts in both major and minor

⁸⁶ In the preface, Eken recommends Louis and Thuille's *Harmonielehre* (in an unspecified edition) as well as the Danish *Harmonilære* by Povl Hamburger and Hakon Godske-Nielsen (1939); he seems to be particularly influenced by the latter (Hvidtfelt Nielsen forthcoming, 73; Kirkegaard-Larsen 2018, 81).

 $^{^{87}}$ Øien also published an unedited and incomplete draft of this book in 1971 (Øien 1971).

⁸⁸ Øien's preface points directly to Hamburger (1951) as the primary source of inspiration (Øien 1975, 8).

⁸⁹ "Det kanskje mest vidtrekkende initiativ på terminologiens område er fastholdelsen av betegnelsene Ts, Tm, Ss, Sm, Ds og Dm for den midlertidige tonika i en bikadens, mens Tp, Sp og Dp bare brukes som tegn for bitoneartene."

⁹⁰ In the following examples, the Roman numerals represent diatonic chords regard-

keys. This stands in contrast to the German and Swedish *key-relational* function theory, in which the relation is mapped out on the basis of the secondary triad's scalar *position* in the relevant key. This way of conceptualizing referential relations *is* dependent on the mode of the key: I–VI and V–VI in major keys are thus T–Tp and D–Tp; but in minor keys, they are T–Tg and D–Tg. Where VI was labeled "Ts" in the inverval-relational theory in both major and minor keys, the key-relational theory labels VI as Tp in major keys, and Tg in minor keys.⁹¹

Øien's Hamburger-based system continued to dominate Norwegian function theory and has only seriously been challenged by Petter Stigar (2004), who interestingly moved toward vaguely Schenkerian ideas, especially as they are used by Robert Gauldin (2004 [1997]), Stigar's most frequent reference.

In Denmark's history of function theory, two other important types of function theory evolved: the *progressional* and the *processual* conceptions of function (cf. Kirkegaard-Larsen 2018, 83–87, 94). Though practices vary significantly between Danish theorists, as has recently been documented by Svend Hvidtfelt Nielsen (2018–19), progressional function theory became the dominant type of theory since Svend Westergaard's (1922–1988) *Harmonilære* from 1961 (Westergaard 1961). Here, secondary triads refer to main functions by virtue of the paradigmatic progression in which they partake. In both major and minor keys, I–VI is thus T–Taf, while V–VI is D–Tst. "Taf" means *tonikaafledning*, Danish for "tonic derivation." "Tst" means *tonikastedfortræder*, Danish for "tonic substitution."⁹² As in the interval-relational function concept, the progressional theory is thus not dependent on the key's mode; but unlike the former, the lat-

less of the key, such that "I–VI" refers to both "I–vi" in major, and "i–VI" in minor.

⁹¹ Wilhelm Maler's (1931) mode-relational theory can be seen as a sub-type of the key-relational (this is explained more in detail in Appendix 3). Here, VI in major is Tp, and VI in minor is tG. Maler's system was adopted in Sweden through the work of Martin Tegen (1974) and especially Sune Smedeby (1978).

⁹² Despite the linguistic hodgepodge, this dissertation thus far preserves the label "Taf" in the meaning "tonic derivation." In Part III, a more internationalized version will be suggested, using "Ta" in the meaning "tonic *Ableitung*," and "Ts" in the maning "tonic substitution" or "tonic *Stellvertreter*."

ter differentiates between VI's role in different progressions. Taf and Tst are both fundamentally tonic, of course, but the nature of their "tonicness" is conceived in different ways.

The second conception of function that evolved in Denmark, the processual function concept, is not as widespread. It originates from the 1981 textbook Indføring i romantisk harmonik [Introduction to romantic harmony] by Teresa Waskowska Larsen (1945-) and Jan Maegaard (1925-2012) (Larsen and Maegaard 1981), and the term processual function theory was coined in 2011 by Jens Rasmussen (2011, I:114-115, et passim).93 I conceive of the processual function concept as a subcategory of the progressional, applicable in progressions based on (often chromatic) third-relations. A hypothetical chain of *Parallelvariante* relations, C–A–F[#]–E^b, is analyzed as T–Tpv– Tpvpv–Tpvpvpv. The connection to neo-Riemmian analytical procedures, in which the relation between adjacent chords takes precedence to a degree that sometimes suspends conventional ideas about tonality, is obvious. The important difference is that the processual function theory "still suggests a tonal interpretation, because the respective chords are claimed to be derived from a referential tonic (or another main function) through a process" (Kirkegaard-Larsen 2018, 94).94

One interesting concept from processual function theories is that of *neapolitanization*.⁹⁵ In most function theories, the Neapolitan chord is described as just that: a chord, a fixed entity on ^bII, usually representing the subdominant function and carrying the label "Sn" for "Neapolitan Subdominant."⁹⁶ Danish theorist Povl Hamburger used the verbal noun *neapolitanization* in his 1951 textbook (Hamburger 1951, 17), but this was only picked up again by Larsen and

⁹³ As Rasmussen does not use my typology of function theories (progressional, keyrelational, interval-relational), I use his term in a slightly different meaning.

⁹⁴ A similar point is made by Hvidtfelt Nielsen (2012, 216–217).

⁹⁵ The following elaborates on Kirkegaard-Larsen (2018, 93–94) where I define *neapolitanization*.

⁹⁶ Exceptions have already been mentioned in the above paragraph on Czech theory in which the Neapolitan, by some theorists, was taken as an independent function. This is also found, though as an exception, in Scandinavian function theory (cf. Fernström 1951, 5, 12; I discuss Fernström's theory in Kirkegaard-Larsen 2019b, 145–146).

Maegaard (1981, 38–39, *et passim*). Larsen and Maegaard extend the logic that connects S and Sn to the other main functions: the chord's fifth is exchanged for its minor sixth while (if necessary) its mode changes to minor. Example 23 illustrates this procedure as well as the fact that Larsen and Maegaard stipulate that the "minor sixth" may serve as the root—that is, the neapolitanized chord can appear both as chord in first inversion and a chord in root position.⁹⁷



Example 23: Neapolitanization of the main functions (Kirkegaard-Larsen 2018, 93).

The typology of function theories—key-relational, interval-relational, progressional, and processual function concepts-is useful as a tool for grasping the differences between the many different adaptations of Riemann's original theory, and useful as a means of categorization and characterization in the discussion of them. For present purposes, they are of fundamental importance because the progressional and processual conceptions of function are particularly easily compatible with Schenkerian theory. This will be demonstrated in Chapter 6, where these types of function theory will serve as the basis for the suggested mediation between function theory and Schenkerian theory. That it is not the more widespread key-relational (German and Swedish) type of function theory that serves as basis is a heuristic choice: the integration of a heightened analytical sensitivity toward a chord's progressional context is a prerequisite if one wants function theory to "move closer" to Schenkerian theory; it is a necessary step in this process, and in progressional function theories, this has been achieved without violating any core principles of function theory. Because the

⁹⁷ For analytical examples showing neapolitanizations I refer to the discussion of the finale of Anton Bruckner's Symphony No. 8 (second edition) in Kirkegaard-Larsen (2018, 99–101). See also Hvidtfelt Nielsen (2012, 219–221). The concept is applied again in section 5.2 (page 323ff.), section 6.3.2 (page 396ff.), and section 7.2 (page 417ff.) in this dissertation.

typology of function theories suggested in the preceding pages is important for later stages of the dissertation, a briefer overview can be consulted in Appendix 3.

Lastly, another point with ramifications for Part III is the following: as I have documented elsewhere (Kirkegaard-Larsen 2019b; 2019c), some of the characteristic traits of early German function theory-the almost Schenkerian notions of passing and neighboring chords-are also found in Swedish function theories, although in Sweden, these ideas only take root in *later* function theories. 1968 saw the publication of a through-and-through Felix Salzer-inspired publication, Det musikaliska hantverket [The musical craft] (Edlund and Mellnäs 1968), in which one chapter is almost a translation of Salzer's Structural Hearing, chapter 2. The book seemed to have no immediately traceable impact on Swedish harmonic theory, but in publications from 1995 and 2008, it suddenly appears in the list of references in textbooks that are noticeably "horizontal" in their approach to harmony (Jansson and Åkerberg 1995; Ingelf 2008). The latter, Sten Ingelf's Lär av mästarna [Learn from the masters] (published in English in Ingelf 2010), contains a very short chapter-just two pages-on Schenkerian theory, while the former, Traditionell harmonilära [Traditional harmony], sets out with an analysis in which the harmony's interaction with phrase structure leads to different lavers of reduction, and ultimately to a T-D-T fundamental structure.⁹⁸ The integration of linear approaches into a function-theoretical framework that these and many German pre-war theorists represent have influenced some of my proposals in Part III (see section 6.4, page 403, for further discussion of these historical precedents to Part III's "Model 1").

⁹⁸ Indeed, the authors explicitly use this very Schenkerian notion of fundamental structure [*grundstruktur*]: "On the basis of the cadences, we can describe the fundamental harmonic structure of the entire piece as T–D–T (with the golden section around D)." (Jansson and Åkerberg 1995, 14) ["Med utgångspunkt från kadenserna kan vi beskriva den harmoniska grundstrukturen för hela stycket som T–D–T (med det gyllene snittet omkring D)].

1.4 NORTH AMERICAN RECEPTION

In the large section 1.2 on the German reception history, I drew heavily on Ludwig Holtmeier and the surge of research that bloomed around the turn of the millennium. In the shorter section 1.3, I drew on a series of different reception-historical texts-many of them of a quite recent date-and on my own work on twentieth-century Scandinavian music theory history. When it comes to function theory's reception in North American music scholarship, things get more complicated for two reasons: first, a body of research on this history simply does not exist yet; and second, it is more debatable if and how the American "function theory" is comparable and connected to the European. Surely, the idea of harmonic "function" and the expression "functional harmony" is commonplace in Anglophone music theory. That at least some theorists therefore see a connection between Riemann's function theory, German post-Riemannian function theories, and various American conceptions of "function" can be seen in an article by David Bernstein in which Renate Imig's (1970) study on post-Riemannian function theories is mentioned in tandem with articles by Fred Lerdahl (1988), David Lewin (1982), and Charles J. Smith (1986) as examples of function theories with some connection to Riemann's (Bernstein 1992, 32). However, the extent to which these American theories are connected to European post-Riemannian function theory-by reception history or by theoretical orientationneeds further elaboration. The following thus represents my own contribution to this underresearched area.

1.4.1 EARLY NORTH AMERICAN RECEPTION

It is worth noticing, first, that the mere fact that Riemann's *Verein-fachte Harmonielehre* (1893) was published in London in an English translation by Henry Bewerunge already two years after the German version (Riemann 1895) suggests a certain influence—or at least the possibility of an influence—in Anglophone music theory, but it is difficult to ascertain whether this British publication "crossed the pond"

and how far into the 20th century any Riemannian influence went. Daniel Harrison writes of the reception in North America:⁹⁹

The ascendancy of Schenkerian theory in America in the 1960s did not displace a previous Riemannian episteme, for Riemann's ideas had already lost whatever purchase they had on American theory long before, the decisive event likely being the First World War. Before that calamity, Americans seeking advanced training in composition (and, therefore, theory) generally sought it in Germany (e.g., MacDowell, Chadwick) and brought back German methods of instruction. As Riemannian ideas began to be widely adopted in Germany in the years before the war, they started to show up on these shores. (Harrison 2005, $\S2$)

Harrison here refers to Dirk Haagmans' *Scales, Intervals, Harmony:* (*Revised Method Harmony Instruction*) Eliminating the Old Figured Bass System from 1916 (Haagmans 1916), book one in a two-volume publication of which the second volume was never published.¹⁰⁰ Haagman's book builds closely on the third edition of Riemann's Handbuch der Harmonielehre (1898b) of which the preface is full of praise:

"Tonal Function" is the magic word which Riemann has introduced; and, it is Riemann's wonderful theory of the "Tonal Functions of Chords" which converts his Manual of Harmony [i.e. *Handbuch der Harmonielehre*] into a work saturated with music. (Haagmans 1916, vi)

Interestingly, Haagmans simply adopts the German term *Parallel* instead of the English "relative" (ibid., 30), unlike the later English translation of Diether de la Motte's *Harmonielehre* in which the Tp is designated Tr, that is, tonic relative (Motte 1991 [1976]). Haagmans acknowledges that the third-relation between I and iii is similar to

⁹⁹ Note that tellingly, and as always, Riemann's theory is situated as the antithesis of Schenkerian theory.

¹⁰⁰ Harrison possibly overlooks the American John Fillmore's *New Lessons in Harmony: to Which is Added The Nature of Harmony by Hugo Riemann* from as early as 1887. I have not been able to acquire this book, but according to Robert Carson Lamm (1954, 146), it is based on Riemann's theories and includes (as indicated by its title) a translation of Riemann's essay "Die Natur der Harmonik" (Riemann 1882)—more recently translated to English in Steege (2011).

that between I and vi, but in a peculiar way proves that the latter relation is stronger, as a way of—so it seems—avoiding the introduction of the *Leittonwechselklang*: by combining I and vi and stacking them in thirds, one achives a "mild" dissonance (a–c–e–g); while by stacking I and iii in a similar manner, one achieves a "sharp" dissonance (c–e–g–b). "Therefore," he writes, "this is proof that the degree of relationship between [I and vi, and IV and ii] is much stronger harmoniously than that between [I and iii, and IV and vi]" (Haagmans 1916, 142).

After this publication, there are very few traces of function theory in American literature for quite some time. At some point, American function theory seems to split into two branches: one that Leonard Ratner's *Harmony: Structure and Style* (1962) initiated, and one that gradually emerged before it was codified by Marion Guck (1978). One early predecessor to both branches seems to be William Mitchell's *Elementary Harmony*, which includes a chapter on "primary triads" and "associated triads" whose roots "lie a third apart" (Mitchell 1939, 64–66)—but Mitchell does not use the term "function" or elaborate his ideas to a very large extent. What is more, branches of both function-theoretical and Schenkerian history seems to converge in this book (as in several of the ones discused below).¹⁰¹

1.4.2 LATER NORTH AMERICAN RECEPTION

While tonic, subdominant and dominant functions play central roles in Leonard Ratner's *Harmony: Structure and Style* (1962) it is in a completely novel way in which function is assigned to single-tone *scale degrees:* $\hat{1}$ represents tonic function, $\hat{4}$ represents subdominant function, and $\hat{7}$ represents dominant function (Ratner 1962, 38). It is on this melodic basis that I and VI share a common tonic function, IV

¹⁰¹ In the preface of *Elementary Harmony*, Mitchell writes: "I am particularly grateful to Dr. Hans Weisse who, better than anyone else could have done, introduced me to and clarified the writings of Heinrich Schenker, undoubtedly the greatest theoretician of our time" (Mitchell 1939, viii). Hans Weisse, who is further introduced in section 2.3.1, page 139, was a student of Schenker's. Mitchell furthermore published the article "Heinrich Schenker's Approach to Detail" (Mitchell 1946) and edited the Schenkerian journal *The Music Forum* (cf. Drabkin 1984–85, 180).

and II a subdominant, and V and VII a dominant-though it contains the leading tone, III is left out because this tone is part of the stable interval of the perfect fifth (ibid., 42). With the idea of representation thus present in Ratner's theory, it is arguably a kind of function theory, but apart from that, there are no obvious links to Riemann or his European successors.¹⁰² Ratner's focus on function as residing in characteristic scale degrees in certain voice-leading contexts¹⁰³ sowed the seeds that Daniel Harrison later reaped in his Harmonic Function in Chromatic Music (Harrison 1994). Though Harrison's historical chapter situates the theories of Hauptmann, Helmholtz, Oettingen, and Riemann as predecessors of his own, his theory is better understood as a theory in its own right than as one connected to the European post-Riemannian function theories discussed above-though in his writings on "double functions," Harrison does draw on Hermann Erpf's (1891-1969) post-Riemannian harmony treatise of 1927 (Harrison 1994, 65-72). The degree to which Harrison's work is distinct from European post-Riemannian function theories became especially clear in Diether de la Motte's (1995) brief and extremely dismissive review (a review whose main flaw is that it assumes that Harrison's theory strives for the same goals that German function theory does). Harrison's scale-degree functions have been somewhat influential, for example in the work of Kevin Swinden (cf. Swinden 2005a; 2005b).

If Ratner–Harrison–Swinden represents one line of American function theory with a more or less overt connection to Riemann, the works of (among others) Marion Guck, Charles J. Smith, Eytan Agmon, and Steven Laitz represent another. In her article "The Functional Relations of Chords: A Theory of Musical Intuitions," Marion Guck codified what would become a rather influential model of

¹⁰² In Ratner's influential *Classic Music: Expression, Form, and Style* (1980), he also presents his idea of "functional tones" in a short paragraph on harmonic functions and cadential formulas, but here, he does not explicate any relation between third-related chords (Ratner 1980, 51–52).

¹⁰³ Interestingly, Ratner uses the metaphor of *chemical affinity* between tones (Ratner 1962, 43), a metaphor that I have otherwise only come across in the Dane Finn Høffding's *Harmonilære* in which it is the central theoretical concept, even replacing the notion of "function" which Høffding criticizes (Høffding 1933, 4–5)—a curious but most likely coincidental commonality between these two theorists.

American function theory (Guck 1978). Though I attribute this codification to Marion Guck, she builds on the work of some important predecessors, but it is difficult to ascertain their exact influence on her theory. It is notable that some of these predecessors are Schenkerian in origin. For instance, Guck's formulation of the "dominant preparing" functional category seems to have a longer prehistory: Felix Salzer used the term *intermediary harmony* to designate the mediating step between the Schenkerian Bassbrechung's I and V (Salzer 1952, I:15, 95 et passim). Svend Hvidtfelt Nielsen (forthcoming, 54) has noted that the term dominant preparation occured in Allen Forte's Tonal Harmony in Concept and Practice (Forte 1962, 91, 100). The term intermediate harmony is also important in Aldwell and Schachter's Harmony and Voice Leading (1978, 109 et passim). Thus, when Marion Guck highlights Forte (1962) and Aldwell and Schachter (1978; 1979) as sources of influence, this is worth noticing-just as it is worth noticing, from a practice-theoretical viewpoint, that she introduces these sources as representatives of contemporary and commonplace knowledge, disseminated in oral as much as written form.¹⁰⁴

Other important predecessors are the articles that Guck's is a critical response to, namely two articles by Allan Keiler (Keiler 1977; 1978), in which he "applies a linguistic conception of syntax to the formulation of tonal harmony" (Guck 1978, 29). Keiler does so by employing a Chomskian tree-structure method, in which the fundamental tonic is divided into Tonic Prolongation and Tonic Completion, and in which Tonic Completion further divides into Dominant Prolongation and Final Tonic (see Example 24).¹⁰⁵

¹⁰⁴ Guck writes: "My sources might be understood to include the current status of harmonic theory as represented in tonal harmony books and observations of musical common knowledge as evidenced in discussions with colleagues and students" (Guck 1978, 33–34).

¹⁰⁵ Keiler's linguistic approach to harmony may have been inspired by—and may have, in turn, inspired—Lerdahl and Jackendoff's "generative theory of tonal music." Keiler (1977, 16) refers to this theory's preliminary formulation in the, at the time forthcoming, article "Toward a Formal Theory of Tonal Music" (Lerdahl and Jackendoff 1977). Conversely, Lerdahl and Jackendoff acknowledge Allan Keiler in both this article and in their later, seminal book *A Generative Theory of Tonal Music*



Example 24: Allan Keiler's syntax of prolongations (Keiler 1978, 214).

Guck's fundamental move is to introduce a third "functional category" (beside tonic and dominant), the Schenkerian prehistory of which I suggested above (Guck 1978, 30).¹⁰⁶ Guck's tenet is this:

Tonal pieces can be heard as successions, on various levels, of a four-place pattern of functions which I will call initial tonic (T_1) , post-tonic/plagal/pre-dominant (P), domininant (D), and closing tonic (T_2) . Most basic to this pattern are the tonic-dominant and dominant-tonic relations; thus what might be understood as a complete pattern need not always contain a P.... In general, root progression [sic] between functions is by fifth or second whereas root-progression [sic] within a function is usually by third. (Guck 1978, 34)

Though Guck does not work with functional suffixes such as *Parallel*, *Leittonwechsel*, *Gegenklang* etc., this stipulation is sufficient to establish that third-related chords may share the same function. A crucially important footnote adds:

Some common means of prolongation, e.g. neighboring and passing chords, are considered not as functional but rather as linear succesions and are not considered here. (Guck 1978, 34)

What were innovative and important considerations about linear motions, demanding thorough elaboration for Schreyer, Louis and Thuille, and others of the pre-war theories discussed in section 1.2.1,

⁽Lerdahl and Jackendoff 1977, 169; 1983, xii). Lerdahl and Jackendoff will be discussed in Chapter 2 as a part of America's Schenker reception. The receptionhistorical connection between Chapter 1 and Chapter 2 at this point is thus worth noticing.

¹⁰⁶ The "dominant preparing" function is arguably a part of Keiler's "dominant prolongation," but Guck is the first to codify it as a "functional category."

is, for Guck, a brief remark about common knowledge, placed in a footnote.

What I wish to stress with this is that core Schenkerian ideas are very obviously an integral part of Guck's function theory and of every succeeding American function theory of this type, even though they would not count as "Schenkerian theories" as such. The division of harmony into three "functional categories"-of which the middle one (termed predominant, dominant preparation, intermediate harmony, or the like) is a vastly inclusive one-instead of simply three "functions," seems therefore not only to be a renaming of the subdominant, but a logical development of the Schenkerian concept of Stufen in which the mediatory step between the Bassbrechung's I and V may be realized by several different scale steps, all sharing the "dominant preparing" or "intermediate" function. Schenkerian ideas of linear motions and what constitutes a functioning harmony are implicit and presupposed in the American function theories of the "Guck-type." This may be a barely noticeable and self-evident detail of common (nearly tacit) knowledge within the Schenkerian or Anglo-American community of practice, but it is blatantly obvious and noteworthy for theorists outside this community of practice. This much should be obvious in the comparison of Guck's theory with any of the European theories discussed thus far.

Guck's approach is directly discernible in Charles J. Smith's article "The Functional Extravagance of Chromatic Chords," which holds a single reference to her (Smith 1986, 111). Smith's article was met with an ardently critical response from the Schenkerian David Beach (1987), to which Smith also responded (1987). I will not go into the controversy here, but limit my focus to Smith's presentation of his approach and the way he connects it to Riemann. On this, Smith writes:

The three functional categories central to this strategy are derived ultimately from the three well-known *Funktionen* of Hugo Riemann; I shall refer to them as tonic, dominant, and dominant preparation. The pivot of this system of categories is best considered to be the relationship of a single scale step, the leading tone ($\hat{7}$), to the focus of any diatonic arrangement, the tonic—both pitch ($\hat{1}$) and triad (I or i). The basic membership rule is simple: any chord containing a leading tone is a dominant, if it has any clear function at all. All other functioning chords, except for the tonic triad, are normally considered dominant preparations; this weak definition by exclusion reflects the fact that their functional impact is weaker than that of either dominant or tonic. (Smith 1986, 110)

As was the case with Guck, Smith's function theory is very notably different from any European function theory. With the locution "*derived ultimately*," Smith is careful to accentuate the distance between his and Riemann's theories. Nonetheless, David Beach's classification of the theory as a "quasi-Riemannian" theory promoting "misconceptions about tonal syntax prevalent at the turn of the century, but apparently still alive today" (Beach 1987, 173), tells that it was received as a more or less Riemannian *Funktionstheorie*.

As I have argued in the preceding pages, the article, or at least the approach to harmony that it proposes, might as well have been called quasi-Schenkerian. Alone Smith's above distinction between "functioning" chords and (as implied by this) "non-functioning" chords is enough to question whether his theory is a "function theory" in the same sense that Riemann's theory and European post-Riemannian theories are—for it is a central tenet of these that *all* chords carry a function—and it is enough to decidedly situate him within the Anglo-American community in which Schenkerism's influence reached far beyond Schenkerian theory per se.

An article that, in a very similar vein, prompted a fervent Schenkerian critique was Eytan Agmon's "Functional Harmony Revisited: A Prototype-Theoretic Approach" (Agmon 1995; criticized in Rothgeb 1996; response in Agmon 1996). Agmon approaches tonal harmony from the standpoint of so-called *prototype theory*, a branch of cognitive science. He refers, among others, to Guck and Smith. Interestingly, in his examples of "modern accounts of traditional harmony which incorporate one version or another of functionalism" (Agmon 1995, 197), he writes:

One conspicuous counterexample would seem to be Aldwell and Schachter's *Harmony and Voice Leading*, where the idea of harmonic functions is never explicitly endorsed; yet careful study of this text reveals that beneath the surface there is more than a trace of functionalism in its approach. (Agmon 1995, 197-198)

If this is in line with my my above-sketched theory of a latent Schenkerism in American "functionalism," it does not mean that Agmon's own theory is particularly close to Aldwell and Schachter's.¹⁰⁷ Agmon proposes that I, V and IV are the *prototypes* of the tonic, dominant, and subdominant functions, respectively. Based on the amount of common tones, Agmon then presents the model shown in Example 25 to illustrate how some triads are more or less close to the prototypes.



Example 25: Eytan Agmon's prototype-theory of harmonic functions (Agmon 1995, 201).

Agmon engages critically, but rather thoroughly, with Riemann's *Funktionstheorie*, explicitly dissociating himself from the theory of *Scheinkonsonanze* and the theory of dualism. The most notable difference between other post-Riemannian function theories and Agmon's theory is, as seen in the above example, that II can represent V, and VII can represent IV. Despite these differences, Agmon acknowledges "significant connections ... between the proposed theory and the historical *Funktionstheorie*, usually attributed to Hugo Riemann" (Agmon 1995, 202). His approach does not seem to have been of any traceable influence, but it is a noteworthy moment in the history of American function theory, which seems to have run as a constant

¹⁰⁷ Agmon's approach is more focused on the immediate foreground, and furthermore, it is "stripped of any chord-progressional connotations" (Agmon 1995, 202).

current beside—or rather, when considering its impact, beneath— Schenkerian theory.

Traces of function theory are also discernible in more recent textbooks by Robert Gauldin (2004 [1997]), Steven Laitz (2003) and Poundie Burstein and Joseph Straus (2016). The common denominator of these different approaches to "function" is that they all propose a system of three categories, typically tonic, dominant, and predominant. They all seem to emanate from the "Guck"-type of function theory, typically with more or less Schenkerian undertones, perhaps originating, as suggested, from Guck's predecessors Forte (1962) and Aldwell and Schachter (1978; 1979), and before them, Salzer (1952).

In conclusion, one may well speak of an American theory of functions, but it is debatable whether any of the theories amounts to a "function theory" in the same sense as Riemann's theory and European post-Riemannian theories. I have tried to demonstrate the Schenkerian origin of many American conceptions of "function," conceptions that seems to be withheld even when theorists situate themselves as closer to Riemann than usual (such as Smith and Agmon). This, as well as Chapter 2's account of Schenkerian theory, naturally leads to questions about what a harmonic function is. This question will be at the center of section 4.1.1, page 246ff.

1.4.3 EXCURSUS ON NEO-RIEMANNIAN THEORY

One branch of theory in Anglophone literature that contains many explicit references to Hugo Riemann's function theory has been treated in silence thus far, namely the far most influential one: the so-called neo-Riemannian theory, beginning with David Lewin's transformational theory (Lewin 1987). Given that neo-Riemannian theory has become such an active research field—influential especially in Anglo-American music theory, whence it originated, but increasingly present in European music theory as well—a few comments on why this theoretical branch is *not* part of the present dissertation is due.¹⁰⁸

¹⁰⁸ I have written about the relationship between post-Riemannian and neo-Riemannian theory at length in my unpublished Master's thesis (Kirkegaard-Larsen 2017a), and I have discussed it in the article "Transformational Attitudes in Scandi-

There are, to put it briefly, two main reasons that I do *not* regard neo-Riemannian theory as a part, a branch, a subfield, or as related in any substantial way to post-Riemannian function theory.

The first concerns neo-Riemannian theory's origin and reception history: it originates from David Lewin's transformational theory which became popular first and foremost through the wide dissemination of his seminal work *Generalized Musical Intervals and Transformations* (Lewin 1987). Building on this book and its re-reading of Hugo Riemann, a series of American scholars such as Brian Hyer, Henry Klumpenhouwer, and Richard Cohn developed the branch of transformational theory that came to be known as neo-Riemannian theory.¹⁰⁹ While they engage directly with Riemann's writings, there is no contact to the line of theorists that have been discussed on the previous pages, and from the perspective of reception history, there is thus no reason to see these two ramifications of Riemann's writings as representing a joint tradition.

The second reason concerns the theoretical content of neo-Riemannian theory. Here, things get a bit more tricky, for as discussed in section 1.1, it is notoriously difficult to pinpoint exactly what Riemann meant with "function"—consequently, it is possible to frame his function theory as having always been fundamentally "transformational," and his function concept as originating from the mathematical concept of function (cf. Hyer 2011).¹¹⁰ Furthermore, certain Scandinavian function theories share certain traits with neo-

navian Function Theories" (Kirkegaard-Larsen 2018). The following is a brief summary of some of my arguments in these texts. See also Kirkegaard-Larsen and Holme (2017, 7–8) and Kirkegaard-Larsen (2019d, 4–5).

¹⁰⁹ Important texts in the early establishment of neo-Riemannian theory are Hyer (1989; 1995), Klumpenhouwer (1994), Cohn (1996; 1997; 1998; 1999). Cohn's 1998 text "Introduction to Neo-Riemannian Theory" was brought in a special issue of the *Journal of Music Theory* devoted to neo-Riemannian theory, and thus solidly marked the theory's status as an established field.

¹¹⁰ Alexander Rehding's contention that "as Brian Hyer reminds us, harmonic function is not a chord but something one *does* to a chord" (Rehding 2003, 61) serves to illustrate that the tendential neo-Riemannian reading of Riemann's writings (which seems to be based on confirmation bias), even found its way into the most important Anglophone works on Riemann (Rehding here refers to a 1990 conference paper of Hyer's).

Riemannian theory, most notably the Danish, processual approach (cf. Kirkegaard-Larsen 2018). But the transformational attitude is not characteristic for Scandinavian function theory on whole, and it *sure-ly* is not characteristic for German function theory. And importantly, the break with Riemann's dualism is a defining characteristic of near-ly every European reception of function theory, something that is diametrically opposed to the embracing of dualism found in neo-Riemannian theory (although this is a different kind of dualism that does not propose an undertone series).

When neo-Riemannian theory is still worth mentioning, if only in an excursus, it is because it brought about a revival and reappraisal of (aspects of) Riemann's ideas in North American academy—in strong contrast to the vehement criticisms by Schenkerians. Daniel Harrison wrote in 2005:

The transformation of Hugo Riemann from obsolete pedant to influential thinker has been one of the most remarkable developments in North American music theory within the past twenty years. Those who have been intellectually and musically formed by Schenkerian ideas have likely not welcomed this development, since the views of Schenker on Riemann—the great Un-Ohr—were strong and unambiguous. Indeed, the relegation of Riemann's theoretical ideas to risible futility was a kind of recreational activity among ardent Schenkerians. (Harrison 2005, \$1)

The publication of the Oxford Handbook of Neo-Riemannian Music Theories (Gollin and Rehding 2011) not only cemented neo-Riemannian theory as an important branch of theoretical thinking challenging the hegemonic status of Schenkerian theory, but also demonstrated the wide scope of topics collected under the neo-Riemannian banner: it contains texts on the reception of function theory, texts on Riemann's theories of rhythm and metrics, translations of Riemann's writings, discussions of dualism and *Tonnetze*, and much more.

Indeed, the very breadth of the term "neo-Riemannian" seems to have become its problem. In a review of Dmitri Tymoczko's *A Geometry of Music* (2011)—a book that unmistakably springs from a neo-Riemannian vein—David Headlam criticizes that Tymoczko does
not list the term "neo-Riemannian" in the book's index (Headlam 2012, 126). Tymoczko's defense is that the term is "deeply ambiguous—comprising a grab-bag of dualist, transformational, harmonic, and contrapuntal ideas" (Tymoczko 2012, 148). He refers to the fact that Richard Cohn—one of the founders and important proponents of neo-Riemannian theory—had recently abandoned the term: in the introduction to his 2012 book *Audacious Euphony*, Cohn writes that he is "not comfortable with all of the views that have been attributed to [neo-Riemannian theory] or with all of the practices that have been performed under its name" (Cohn 2012, xiii). Importantly, he continues by arguing that the term "gives too much credit to Hugo Riemann. It was David Lewin's reading of Riemann's harmonic writings that constituted the originary moments for this branch of theorizing" (ibid.). A similar point was made by David Kopp in his 2002 book *Chromatic Transformations in Nineteenth-Century Music*:

Given his adaptation of the original sense of Riemann's functional terms, perhaps Lewin's Riemann systems should more properly reflect their real inventor: they might better be called Lewin systems (Kopp 2002, 150–151).

To conclude, neo-Riemannian theory is not only part of a completely different genealogy extending from David Lewin and *his* own reading of Riemann—extending Kopp's argument above, it might better be called neo-Lewinian theory—but is also a completely different theory making completely different claims, and though it uses analytical methods that does show aspects of similarity with processual function theories (cf. section 1.3.2), it operates (first and foremost because of the radical neglect of traditional ideas of tonality) on fundamentally different ground. Its relation to post-Riemannian and Schenkerian approaches is interesting but beyond the scope of this dissertation.

1.5 SUMMARY: THE POST-RIEMANNIAN TRADITION

That function theory was disseminated far and wide beyond the boundaries of the German-speaking world is, as indicated in the above pages, well-documented—and hardly a surprise.¹¹¹ Surveying the many adaptations of his theory reveals a series of common characteristics.

First, they all take as their basic proposition that tonal music consists of T, S, D, and secondary chords which are all related to these three primary functions. Second, the most influential systems are those of Hermann Grabner and Wilhelm Maler, who conceptualize such relations through the terms *Parallel* and *Gegenparallel* (in practice, some theorists even work with the term *Parallel* alone), although many other systems have evolved, all conceptualizing third-relations differently. Third, almost all post-Riemannian function theories, with the exception of very few, are monistic. Fourth, and as a counterpoint to the simplification represented by Grabner/Maler, numerous adaptations (even including Grabner and Maler themselves) extend the theory to better accommodate late romantic harmony, most notably by integrating ideas of extended third-relationships.

Analytical practice underwent a significant change after the war. Pre-war analysts showed some signs of a hierarchical and linear view on harmony in which some chords had harmonic functions and other chords served as voice-leading connections of these functions. Generally, this analytical attitude disappeared in post-war practice. Post-war analytical practice roughly represents that of a first-time listener, who (concretely or in a more abstract sense) assigns function labels to more or less each and every chord as it appears. This points to an "in-the-moment" temporal attitude, which will be an important point for upcoming discussions in Part II of this dissertation.

¹¹¹ More surprising, perhaps, is the 2018 article tracing Riemann's and above all Hermann Grabner's apparently large impact in Brazil (cf. Almada et al. 2018).

For present purposes, it is of special interest that some versions of function theory show a heightened analytical sensitivity toward a chord's progressional context. This analytical attitude is represented by both German pre-war theorists', recent Swedish theorists, as well as the progressional and processual conceptions of function in Danish function theories.

Chapter 2:

The Schenkerian tradition

This chapter is an equivalent to Chapter 1: an account of Schenkerian theory in its historical contexts accompanied by certain historiographical remarks. This poses the same problems as encountered in the previous chapter, namely that there is no ultimate and authoritative version of Schenkerian theory-although, the picture is not exactly the same. As indicated by the very name "Schenkerian theory" (as opposed to "function theory"), Heinrich Schenker holds a much more authoritative position than does Riemann for the tradition of function theory. If many of the developments in the international Riemannreception arose as the results of "Riemann-rejections," then it is still an integral part of Schenkerian practice to look to the primary sources of Schenker. This said, it is characteristic for the Anglo-American Schenker-reception that it was first and foremost certain "purely music-theoretical" parts of Schenker's theory that gained influence, while Schenker's political and ethical leanings were disposed of, problematical as they are in the eyes of most people. Indeed, as discussed later, one may speak of a certain censorship in the American adaptation of Schenker's theory.

The practice-theoretical foundation of this study is again of fundamental importance for the following because it shapes the chapter's structure and determines which aspects I focus on. First, in section 2.1, I provide a brief account of Schenker's own theory. The purpose is to provide some context for the primary concern of the study, the *tradition* of theory that Schenker posthumously gave rise to. The purpose is furthermore to direct the attention to aspects in Schenker's writings which are of special interest to this study, as for example his early ideas of the *Stufe*, which (in tandem with some of the early function theories discussed in section 1.2.1) inform parts of Part III's analytical models. The purpose is by no means to be comprehensive or to give an introduction to Schenker's theory to those unacquainted with it; however, certain Schenkerian terms and graphic symbols are explained in Appendix 1.

More attention will be devoted to Schenker's reception, and the Schenker*ian* theory that arose from this. I italicize the *-ian* to point to the important fact that, even though Schenker does hold an authoritative position, there are notable differences between Schenker's theory and Schenkerian theory (aside from the already mentioned fact that the latter is deprived of—or is, at least, intended to be deprived of—Schenker's political positions).

Where the bulk of the previous chapter was divided into sections of "early" and "later" German receptions of function theory that is, before and after WWII—such a structure is not as meaningful in this chapter. Surely, it was the rise of Nazism and the outbreak of WWII that caused Schenker's Jewish pupils to flee to the USA and eventually establish a tradition of American Schenkerian theory—but this also means that Anglo-American Schenkerism is almost exclusively a post-war phenomenon, although it took its first important steps already in the early 1930s.

Therefore, section 2.2, on the European reception, will be divided once again into an early and late period corresponding to before and after the war. As for section 2.3, on the Anglo-American reception, Nazism and WWII marks the beginning of this narrative, and compared to Chapter 1, this chapter will therefore have disproportionally much more to say about post-war music theory. This section is therefore divided into two periods of 1930–1980, and 1980 to the present day, for reasons that shall be discussed further below.

2.1 SCHENKER'S THEORY

After a series of music critical writings,¹¹² some editorial work with keyboard works of C. P. E. Bach at the Viennese publisher Universal Edition, and the related book *Ein Beitrag zur Ornamentik* (Schenker

¹¹² Hellmut Federhofer has collected the early writings in *Heinrich Schenker als Essayist und Kritiker: Gesammelte Aufsätze, Rezensionen und kleinere Berichte aus den Jahren 1891–1901* (Federhofer 1990).

1908 [1903]),¹¹³ Heinrich Schenker's *Harmonielehre* of 1906 gave the first hints at a theory that differed significantly from contemporary tonal theories. If contemporaries such as Schreyer and Louis and Thuille (see sections 1.2.1.1 and 1.2.1.2) showed ambitions of developing a more horizontal view on harmony, Schenker took this ambition to a level that none of these authors did (though some of Schreyer's analyses came close). This is most clear in his theory of the *Stufe*, which brings the motto-like stipulation: "Man darf nicht jeden Dreiklang für identisch mit einer Stufe halten und muß daher sehr wohl zwischen C als Grundton des Dreiklanges und C als Stufe unterscheiden" (Schenker 1906, 181).

Stufentheorie, or the theory of scale-steps, had until then been dominated by the practice of assigning Roman numerals to virtually every simultaneity. Schenker sees this practice as misguided, and cites an example from Ernst Richter's *Lehrbuch der Harmonie* (1853)—arguably the most influential textbook in Europe before the advent of function theory and Schenkerian theory¹¹⁴—which he fervently criticizes across several pages (Schenker 1906, 223–228, 235). In Schenker's conception, a *Stufe*¹¹⁵ is not any chord to which one could, if one wished, apply a Roman numeral, but a more abstract idea. A *Stufe* is a fundamental tonal point of arrival and/or departure in *concrete pieces of music*;¹¹⁶ entities toward which the contrapuntal voice-leading motions move and from which they are projected in time. In these voice-leading motions, simultaneities which look like *Stufen* may occur, but they may nonetheless be subordinate to a governing *Stufe*. To quote his definition at length:

¹¹³ At Schenker Documents Online, Ian Bent and Hedi Siegel note that the *Beitrag* is "widely and incorrectly dated '1904'" (Bent and Siegel, n.d.).

¹¹⁴ According to Holtmeier (2005c, 227–228; see also Kirkegaard-Larsen 2019a; 2019b, 137).

¹¹⁵ Following Schenkerian practice, I will use the German *Stufe* here, to distinguish a Schenkerian *Stufe* from a conventional scale-step

¹¹⁶ One of the main points of his critique of Richter is that Richter's constructed examples are nonsensical, amounting neither to a theory of harmony or of counterpoint because they do not portray how music is actually composed in free composition. Therefore, Schenker's concept of *Stufe* is by definition only applicable to actual compositions (of the tonal repertoire), not pedagogical exercises.

Denn die Stufe bildet eine *höhere abstrakte Einheit*, so daß sie zuweilen mehrere Harmonien konsumiert, von denen jede einzelne sich als selbständiger Dreiklang oder Vierklang betrachten ließe; d. h. wenn gegebenenfalls mehrere Harmonien auch selbständigen Drei- oder Vierklängen ähnlich sehen, so können sie unter Umständen nichtsdestoweniger zugleich auch eine Dreiklangssumme, z. B. C E G hervortreiben, um derentwillen sie dann alle unter den Begriff eben des Dreiklanges auf C, als einer Stufe, subsumiert werden müssen. So bewahrt denn die Stufe ihren höheren Charakter dadurch, daß sie über Einzelerscheinungen hinweg ihre innere Einheitlichkeit durch einen einzigen Dreiklang—gleichsam ideel—verkörpert. (Schenker 1906, 181)

Schenker makes no rules as to how one recognizes a *Stufe* because it is, by very definition, dependent upon its context in the musical artwork. Instead, he discusses a series of examples. The first examples are rather simple and relatively uncontroversial while some of the later examples are quite radical, seen in the context of his contemporaneous milieu. To begin with one of the first examples, Schenker argues that the chord marked with an asterisk in Example 26 is not a *Stufe*, even though it amounts to a full-fledged diminished triad; it is so obviously a neighbor-motion to the more fundamental IV-*Stufe* that it does not reach the rank of an actual *Stufe*.



Example 26: Schenker's analysis of J. S. Bach's Organ Prelude in C minor, BWV 546 (Liszt's transcription, S. 462, No. 3), mm. 8–10.

In the next example (see Example 27), the B-seventh chord of m. 2's downbeat, is interpreted not as a dominant *Stufe*, but as a pure voice-leading phenomenon, even though it has more metrical accent than the diminished chord in the previous example. This is partly because its bass note, F^{\ddagger} , is a passing note between the more fundamental E minor's E and G; and partly because the tone E is retained in the left hand's second and fourth eighth notes. The chord is a "kontrapunkti-



Example 27: J. S. Bach's Organ Prelude in E minor, BWV 448 (Liszt's transcription, S. 462, No. 5), mm. 19–21.

scher Zufall" (ibid. 188)—a byproduct of voice leading—in the temporal expansion of the I-*Stufe*.

In a later, and more radical example (see Example 28), he extends his idea of *kontrapunktischer Zufall* to the extent that the first 11 measures of Chopin's E minor-prelude is seen as comprising one large I–IV–V-progression of *Stufen*, despite the many chromatic chords in between these points; these arise only as by-products of voice leading, and are thus subsumed under the governing *Stufen*. Schenker supports his analysis by emphasizing Chopin's unconventional spelling of the chord in m. 2_2 :

Hier will Chopin offenbar die ersten vier Takte lediglich vom Standpunkt der ersten Stufe allein empfunden wissen, da er, wie man sieht, mit Absicht meidet, im zweiten Takt Dis statt Es zu schreiben; dadurch entfällt auch schon optisch die Erscheinung der fünften Stufe in E-moll, und die Breite der ersten Stufe wird nicht unterbrochen. (Schenker 1906, 193)



Example 28: Schenker's analysis of Chopin's Prelude in E minor, Op. 28, No. 4, mm. 1–11.

The rationale behind this concept of *Stufe* is the central idea that free composition is an extension of the contrapuntal rules of strict composition—which is to say, that harmony and voice leading are inseperable and interdependent in free composition. The vertical *Stufen* are spun out in time by contrapuntal means.

The contrapuntal foundation of tonal music is treated in greater detail in Schenker's second part of his *Neue musikalische Theorien und Phantasien*, entitled *Kontrapunkt*, and published in two volumes (Schenker 1910; 1922). To some extent, the books are "classical" introductions to the theory of species counterpoint a la Johann Joseph Fux (1660–1741), but the interesting aspect is Schenker's aim to reveal the "Zusammenhang zwischen dem Kontrapunkt … und dem

wirklichen Kunstwerk" (Schenker 1910, 15). The nature of this relation is rather complex: on the one hand, Schenker sees it as "Grundirrtum" (fundamental error) of conventional counterpoint theory that it equates the rules of counterpoint with free composition (Schenker 1910, 2); on the other, counterpoint is clearly foundational in Schenker's theory of tonal music, guiding the linear extension of vertical *Stufen* in free composition. Joseph Dubiel (1990) has made a striking observation, helpful in understanding this complex relation: Schenker begins the first volume of *Kontrapunkt* with the contention that too many teachers are unable to explain the apparent violation of a contrapuntal rule in (for example) Beethoven's music—to which these (hypothetical) theory teachers answer: "Yes, when you are a Beethoven, you too may write that way" (Schenker 1987, I:1).¹¹⁷ Dubiel's observation concerns Schenker's ensuing reaction:

The teacher would have to be reprimanded for his impudence in giving the impression that Beethoven had composed *poorly*! No, it is a thousandfold lie: Beethoven never composed poorly, and has no need of indulgence from a teacher who is not able to hear.¹¹⁸ (Schenker 1987, I:1)

Why, Dubiel asks, does Schenker presuppose that the hypothetical teacher's answer implies that Beethoven composed poorly? "Who ever said that Beethoven composed poorly—that is, when did anyone ever mean such a brushoff to denigrate anything but the rules?" (Dubiel 1990, 292).

The example goes to show the kernel of Schenker's theory: the rules of counterpoint *do* govern free composition, but in a more abstract way. According to Schenker, the rules of counterpoint are "prolonged" in free composition. Here, "prolonged" does not denote exactly the same thing as in the modern English usage, that is, it does

¹¹⁷ "Ja, bis Sie ein Beethoven sind, können Sie auch so schreiben" (Schenker 1910, 1). Because Dubiel discusses the English translation, the following discussion cites the translation in the main text while providing the German original in footnotes.

¹¹⁸ "... wie müßte doch der Lehrer für den Mutwillen selbst bestraft werden, mit dem er den Schein erweckt, als hätte Beethoven gar schlecht geschrieben! Nein, das ist tausendmal eine Lüge: Beethoven hat nie schlecht geschrieben und bedarf für seine Schreibweise wahrhaftig nicht erst der Nachtsicht irgend eines noch nicht hören könnenden Lehrers" (Schenker 1910, 2).

not denote the temporal prolongation of *Stufen*; it refers to the extension or transformation of a contrapuntal rule. In later works, when Schenker's concept of *Schichten* (structural levels) evolved (beginning from the *Meisterwerk* volumes and fully realized in *Der freie Satz*, both discussed shortly), "prolongation" means that the laws of one *Schicht* "governs," "controls," or "determines" the next, more elaborated *Schichten*.¹¹⁹

The underlying determinism of the idea of "prolongation" is demonstrated in the following quote:

In this study, the beginning artist learns that tones, organized in such and such a way, produce one particular effect and none other, whether he wishes it or not. One can predict this effect: it *must* follow! Thus tones cannot produce any desired effect just because of the wish of the individual who sets them, for nobody has power over tones in the sense that he is able to demand from them something contrary to their nature.¹²⁰ (Schenker 1987, I:14)

The artist, then, is one who is not only able to compose in line with the nature of the tones (or, as per the German original, following their *Voraussetzungen*), but one who, perhaps unconsciously, follow the will of the tones.¹²¹

¹¹⁹ In the German original, it is indeed the German (and relatively uncommon) word "Prolongation" or "prolongieren" that Schenker uses (see for instance Schenker 1922, 1).

¹²⁰ "Der künftige Künstler überzeugt sich hier davon, daß die Töne, so und so gestellt, ob er selbst nun will oder nicht, diese bestimmte und keine andere Wirkung effektuieren. Man kann diese voraussagen, sie muß eintreffen! Somit können die Töne nicht einfach nur nach Wunsch dessen, der sie setzt, eine beliebige Wirkung hervorbringen; denn niemand hat Macht über die Töne in dem Sinne, daß er auch ein anderes von ihnen fordern könnte, wo die Voraussetzungen ihrerseits keine danach sind" (Schenker 1910, 21).

¹²¹ My reading of this passage differs slightly from Dubiel's who interprets it as setting norms for how one ought to *hear* or *understand* a piece. In my reading, this passage of Schenker's is less concerned with hearing, and more concerned with art's absoluteness and independency from listeners—indeed, this passage is even metaphysical in nature in that it anthropomorphizes tones as self-reliant entities, independent of their *composers*, too: "Even tones must do what they must do!" he writes, following the above quote (Schenker 1987, 14) ["Auch die Töne selbst müssen, wie sie eben müssen!" (Schenker 1910, 21–22)]. This reading is more along the lines of Drabkin (2002, 832).

With the idea of the "will of tones"¹²² we arrive at the title of Schenker's *Der Tonwille*, a periodical published between 1921 and 1924. This series, as well as the subsequent three yearbooks *Das Meisterwerk in der Musik* contains several very interesting analyses in which one can trace the gradual development of Schenker's concept of the *Ursatz* (cf. Pastille 1990a).¹²³ A more thorough discussion of some of these analyses will be saved for the comparative studies in Part II of this presentation (see section 3.1.1, page 200).

After the first two volumes of his Neue musikalische Theorien und Phantasien, Harmonielehre and Kontrapunkt, Schenker's synthesis of these two foundational subjects followed in Der freie Satz (Free Composition), published posthumously in 1935.¹²⁴ It is above all this book that codified what evolved into "Schenkerian" theory. Divided into three parts, entitled Hintergrund (background), Mittelgrund (middleground), and Vordergrund (foreground), the book is structured after the idea that music is divided into a hierarchy of Schichten (structural levels).¹²⁵ It is characteristic that Schenker begins from the background and the Ursatz (fundamental structure), and goes into increasing detail with foreground events. Rather than inductively teasing out the background, then, Schenker takes it as a starting point: the composition is generated from the Ursatz.¹²⁶ Already at this general level, Der freie Satz frames an important part of later Schenker-

¹²² The obvious kinship with Schopenhauer's *Die Welt als Wille und Vorstellung* has been discussed by, among others, Diego Cubero (2017a).

¹²³ Retaining its German title, *Der Tonwille* is available in a two-volume English translation (Schenker 2004a [1921–23]; 2005 [1923–24]). The three volumes of *Meisterwerk* are available in English as *The Masterwork in Music* (Schenker 1994a [1925]; 1996a [1926]; 1997a [1930]).

¹²⁴ I have only been able to acquire the second edition, edited by Oswald Jonas (Schenker 1956 [1935]). The complex publication history of the work, not least in its English translation, will be outlined in section 2.3.1.2 (se especially page 154ff.).

¹²⁵ The following pages will present a plethora of Schenkerian terms. The first time a term is used, I will present it in both its original German wording and in its English translation; subsequently, I will use the term that is most frequently used in Schenkerian theory today, which may (in the case of "*Ursatz*") be German or (in the case of "foreground") English. The reader is adviced to consult the list of terms and symbols in Appendix 1 when necessary.

¹²⁶ Many scholars have pointed out that Goethe's *Urpflanze* undoubtedly influenced Schenker's thinking (cf. Pastille 1990b).

ian practice: the act of confirming an *Ursatz* is a prerequisite, not the analytical aim. Nonetheless, as discussed in upcoming sections (especially page 156ff.), the overall generative design of *Der freie Satz* is seldom adopted in American textbooks.

The background as a general concept is introduced in terms of grandiloquence and transcendence, not delimited to the sphere of music alone:

Bezeichne ich Ursprung, Entwicklung und Gegenwart mit Hinter-, Mittel- und Vordergrund, so ist mit ihrer Verbindung die Einheit eines in sich geschlossenen selbständigen Lebens gegeben.... Im Menschen, der solche Zusammenhänge lebendig empfindet, ist auch eine Idee, sie heiße Religion, Kunst, Wissenschaft, Staat oder Recht, Teil eines wirklichen Lebens, deshalb gilt auch vom Leben der Idee in uns das Gesetz von Ursprung, Entwicklung und Gegenwart als Hinter-, Mittel und Vordergrund. (Schenker 1956 [1935], 25)

The tripartite division of the book, then, is one that permeates life at large. With the words "der *Hintergrund* in der Musik wird durch einen kontrapunktischen Satz vorgestellt, von mir *Ursatz* benannt" (Schenker 1956 [1935], 27), Schenker presents the musical manifestation of this transcendent concept of background (see Example 29).



Example 29: Schenker's Ursatz (Schenker 1979, fig. 1).

The upper part of the *Ursatz* (fundamental structure) is called the *Urlinie* (fundamental line), and the lower part is called the *Bass-brechung*, or simply *Brechung* (bass arpeggiation). The *Urlinie* may descent from the *Kopfton* (primary tone) $\hat{5}$ or $\hat{8}$ as well.¹²⁷ At the

¹²⁷ In *Der freie Satz, Kopfton* actually means any "first" tone in a *Zug* (linear progression), whether it be ascending or descending: "Der Urlinie-Ton kann ein beliebiger sein, er ist Kopfton, wenn der Zug fällt, Zielton, wenn der Zug steigt" (Schenker

slightly more detailed level, i.e. the middleground level, the *Brechung* may have different subdivisions or "paths" from I to V, for example in motions through II, I⁶, III^{\sharp #}, II⁶, IV, or through a complete stepwise filling of the space between I and V with passing tones (cf. Schenker 1979, figs. 15, 16, and 18). Examples of deep middleground structures with *Kopfton* $\hat{5}$ and different bass arpeggiations are shown in Example 30.



Example 30: Excerpt of Schenker's examples of middle ground divisions of Ursätze with Kopfton $\hat{5}$ (Schenker 1979, fig. 16,4–6).

The example demonstrates how Schenker visualizes the hiearchy between the "deep" I–V–I-Stufen and the "shallower" steps toward these Stufen with a system of graphic notation. This system, crucial for Schenker's theory and subsequent Schenkerian analytical practice, is a sort of modified musical notation developed for the purpose of communicating structural layers and connections in a musical piece. In Schenker's publication *Five Graphic Music Analyses*—originally published simultaneoulsy in Vienna and New York in 1932 with the bilingual title *Fünf Urlinie-Tafeln (Five Analyses in Sketchform)*—one

^{1956 [1935], 80).} It is later Schenkerian practice, then, that reserves the term *Kopf-ton* solely for the primary tone in the *Urlinie*. I thank William Rothstein for pointing this out to me.

even sees Schenker's apparent ambition to communicate anlyses in graphic notation alone, without explanatory commentary, thus replacing the written word with a system based on music's own "language" (Schenker 1969 [1932]).¹²⁸

In a very general overview, Schenker's graphic notation communicates increasing structural significance (or "depth") with increasingly longer note values; the half notes in Example 30 thus signify that these tones are of deep structural significance, while filled-in notes indicate a relatively shallower position in the hierarchy. Notes may be connected with beams or slurs to identify, for instance, a linear progression (as discussed shortly). Eighth note flags may signify a variety of things in Schenker's own writings (cf. Schenker 1997a [1930]), but most commonly—and traditionally in post-Schenkerian practice—they signify complete or incomplete neighbor notes or, as in the case of Example 30's bass lines, they signify a middleground point in the *Auffüllung* (filling out) of the *Bassbrechung*.¹²⁹

In the course of *Der freie Satz*, Schenker demonstrates in numerous examples how the *Ursatz* determines the course of tonal music. The procedures he identifies are all interrelated and interdependent, but in this context, only a few of them will be discussed. William Drabkin has noted that "if one were to attempt to reduce Schenker's understanding of music to a single concept, 'hierarchy' would perhaps be the best choice" (Drabkin 2002, 816). Indeed, it is central that the many voice-leading procedures may all work on several levels, and that "a harmony might be essential at one level but transitional at another, a passing note at one level might be the start of an important 'linear progression' at another" (ibid.). The *Ursatz*, as well, may occur at different levels; there is only one actual *Ursatz* in a piece, but its structure may be transferred to middleground and foreground lev-

¹²⁸ For a discussion on the place of visual representation in Schenker's theory, see Hedi Siegel's article "Looking at the *Urlinie*" (Siegel 2006).

¹²⁹ This *Auffüllung* has *since* Schenker—but not explicitly in Schenker's writings been called a predominant or intermediate harmony. I have already touched lightly upon these concepts in section 1.4 (page 95ff.), and will return to discuss their origin in section 2.3.1.1 (page 139ff.). They will be of fundamental importance for discussions in Chapter 4.

$2.1 \cdot \text{Schenker's Theory}$

els (*Übertragung der Ursatzformen*); in Example 31, for instance, a complete *Ursatz* structure is posited in mm. 1–24 of the first movement of Beethoven's Piano Sonata Op. 90—a structure that, from the perspective of the larger-scale middleground or background, is only a prolongation of the I-*Stufe* in a deeper *Ursatz*.¹³⁰



Example 31: Schenker's analysis of Beethoven's Piano Sonata No. 27 in E minor, Op. 90, I, focusing on the transference of the *Ursatz* (Schenker 1979, fig. 109,a1).

The "linear progression" that Drabkin mentions in the above quote is another very central concept, perhaps as basic as the idea of hierarchy. With the concept of the linear progression (*Zug*), Schenker goes beyond the common idea of the passing tone and posits that the space between two tones of a *Stufe* may be filled out stepwise by linear progressions; in this way, a vertical interval is *Auskomponiert* (composed-out) horizontally.¹³¹ In many ways, the idea of linear progression epitomizes Schenker's joining of the vertical and the horizontal aspects of music.

Not all stepwise motions are linear progressions; rather, the motion but must span a meaningful interval of the composed-out *Stufe*. If C major is the governing *Stufe*, for instance, a descending

¹³⁰ The reader may look ahead to Schenker's analysis of Waltz No. 1 from Johann Strauss II's *An der schönen Blauen Donau* (Example 33, page 127) to se another transference of the *Ursatz* in the piece's first 32 measures. This analysis does not visually identify these measures as an *Ursatz* transference, however, thus exemplifying the hierarchical idea that what may be of deep structural significance at one level may be a shallower event at another—here, the *Ursatz* is pictured as a simple linear progression, filling out the space of the tonic's $\hat{3}$ to $\hat{1}$.

¹³¹ Whereas Drabkin highlighted the idea of "hierarchy," and I now highlight the *Zug*, Schachter highlights *Auskomponierung*: "One could argue that *Auskomponierung* ... rather than structural levels, is the central concept in Schenker's thought" (Schachter 1981, 119). In the end, this underlines a central fact: that the concepts are interdependent and ultimately inseparable.

linear progression from E to A does not form a meaningful interval but if an A minor *Stufe* governs, it would fill out the *Tonraum* (tonal space) between its fifth and root and thus assist in its composing-out, or perhaps even resemble a transference of the *Ursatz* to an A minorsection of the work. A linear progression, then, may be found at several structural levels, and the *Ursatz* is itself a linear progression (harmonically supported by the *Brechung*) of the fundamental tonic *Klang* from which the entire composition is generated.

As indicated by the importance of the Ursatz, outer voices have a certain priority; it is hence an important presupposition to Schenker's ideas that tonal music is structured in voices of a more or less abstract character-i.e. voice-leading phenomena (for instance a linear progression) may occur in the same actual "part" (same register, same instrument, as written in the actual composition) but may also be a more conceptual entity identified through a voice-leading analysis. One may, for example, identify one conceptual voice that spans and switches between several instrumental parts and several registers, a procedure called "transfer of register" (Höherlegung or Tieferlegung). Likewise, one and the same actual voice-for instance, the melody-may ascend from a conceptual inner voice to a conceptual outer voice, a procedure called "motion from an inner voice" (Untergreifen); or it may, conversely, proceed from the conceptual outer voice and move *above* it in a "reaching-over" (*Übergreifen*) in which case, the conceptual *inner* voice is transferred *above* the conceptual outer voice at the foreground level, after which it descends, normally by step (cf. Schenker 1956, 85 [§129]; 1979, fig. 41).

In the concept of "unfolding" (*Ausfaltung*), an interval is composed-out horizontally by changing back and forth from *conceptual* outer and inner voices. Example 32 illustrates the procedure; the adjacent verticalities on the left hand are unfolded in different ways in the measures marked "1" and "2."

In an analysis, an unfolding is often signified by a diagonal beam connecting two notes whose stems are in opposite directions, signaling that they belong to different voices.¹³² This is shown in the

¹³² Another means of signification are the diagonal lines used in Example 32.

bass voice of Example 33. After the initial tonic D, the bass' E (in a $V^4/_3$) is connected to the subsequent A, implying that even though A only enters later, A is "already" the structural bass note, because E belongs to a conceptual inner voice.¹³³



Example 32: Excerpt of Schenker's examples of unfoldings (*Ausfaltung*) (Schenker 1979, fig. 43b–e).

The Strauss analysis in Example 33¹³⁴ comprises a number of the voice-leading phenomena discussed thus far: unfolding, *Höherlegung*, and the connection of linear progressions with slurs. The dotted slurs signify the conceptual retention of a tone from its point of departure, to the point where it returns in the foreground. Both the voice-leading

¹³³ On the central concepts of rhythmic displacement and normalization that underlies this argument, see Rothstein (1990b).

¹³⁴ It should be possible to follow the analysis of this well-known piece without the score; however, the reader may also look ahead to Example 39 (page 167) for an easier-to-follow analysis of the same piece by William Rothstein.

graphs and the *Stufen* analysis beneath it are displayed in several levels and supplied with a general formal segmentation (a_1-b-a_2) at the bottom.

The relation between this formal segmentation and the topmost (and structurally deepest) voice-leading analysis deserves a short comment. As can be seen, two vertical lines interrupt the *Urlinie*descent at 2. Such an "interruption" (*Unterbrechung*) is frequently found in Schenkerian analyses, and ultimately intersects with (and challenges) traditional conceptions of form. While interruptions will be identified in several analyses in this dissertation, the concept's implications for musical form is a subject beyond its scope. Suffice it to say that the relation between Schenker's conception of form and traditional (as well as newer) *Formenlehren* was a significant impetus for a large portion of Schenker studies, and that "interruption" is key to understanding basic analytical procedures. Interruption at multiple levels, for instance, are found in Schenker's analysis of Beethoven's "Ode to Joy" theme (see Example 34).









2.2 EUROPEAN RECEPTION

To the extent that there is a history of European Schenker reception at all, it is primarily a history of Austro-German reception. Current research on Schenker's reception history focuses in large detail on the relatively large success his ideas enjoyed in Europe (Austria and Germany) before World War II-relatively large only in comparison with the ideas' virtual disappearance after the war. Understanding this part of Schenkerian reception history is crucial to understanding the early American reception, for it was Schenker's Vienna-based private students who, upon fleeing from Nazism and immigrating to the USA, initiated the American tradition. It must therefore be underlined that the normal and probably most sensible narrative is one that begins in pre-war Vienna and continues to New York in the 1930s. However, in keeping with the focus on geography in this presentation, section 2.2.1 discusses the "early" European reception-which is to say, the reception before WWII (as in Chapter 1). Section 2.2.2 (page 133) very briefly discusses the later European reception, that is, after WWII. The history of the Anglo-American reception, beginning from the 1930s, is then taken up in 2.3 (page 137)-but it is underlined that the most straightforward chronological line begins in section 2.2.1, skips section 2.2.2, and proceeds to section 2.3.

2.2.1 EARLY EUROPEAN RECEPTION

Though the brief account of Schenker's theory in section 2.1 leaves much to be explained, it should be clear that his theory stands in glaring contrast to both Riemann's (cf. section 1.1) as well as most other contemporaneous tonal theories (cf. section 1.2.1). I save the task of comparison for Part II of the dissertation, but this basic observation is surely one among several factors that influenced Schenker's early reception in Austro-German music theory—for Schenker was a notorious outsider. He stood "outside" the most widespread ideas on harmony, but more significantly, he stood outside the established music-theoretical milieu, in that he had no institutional affiliation. Apart from from his many writings—as a theorist, critic, and editor of musical manuscripts—he earned his money as a private teacher (Eybl 2003, 6; Fink 2003, 18). Schenker's early Austro-German influence is therefore one that primarily runs through particular persons, rather than through insitutional dissemination.¹³⁵ Indeed, Schenker wrote in a diary entrance from May 29, 1914, that Hans Weisse (1892–1940)—a student of Schenker's since 1912 and at the time also a student of Guido Adler's at the *Universität Wien* (Fink 2003, 29)—had claimed that Guido Adler proscribed Schenker's writings from the university library (Federhofer 1985a, 50). A more fitting metonym for the exclusion of Schenker from the institutionalized European musicology is difficult to imagine.

Though Schenker's direct impact was thus more or less limited to his private students, the impact of these students is remarkable. The above-mentioned Hans Weisse, for instance, would become the first of Schenker's Jewish pupils to emigrate to the USA, and one of a few pivotal figures in the establishment of American Schenkerism. And already in Schenker's lifetime, Schenkerian ideas were in fact disseminated relatively widely in Austro-German music theory—and possibly even beyond: in a letter to his student Felix-Eberhard von Cube (1903–88), Schenker wrote in 1927 that

the effect [of my teachings] continues to be felt more widely: Edinburgh (also New York), Leipzig, Stuttgart, Viènne (myself and Weisse), Vrieslander in Munich (he is writing a long monograph about me), you in Duisburg, and [August] Halm, etc. (letter from Schenker to von Cube, June 1 1927; cited from Drabkin 1984–85, 182, in Drabkin's translation)

Although one cannot rule out the possibility that Schenker exaggerated his own influence in this letter, it is not entirely misleading. Already in 1919, the mentioned Otto Vrieslander (1880–1950) had apparently expressed plans to establish a *Schenker-Institut* in Munich (cf. Federhofer 1985a, 215; Fink 2003, 18). Though this plan was

¹³⁵ These persons were—to name but a few notable ones among many others—Carl Bamberger, Felix-Eberhard von Cube, Otto Erich Deutsch, Angi Elias, Wilhelm Furtwängler, Anthony van Hoboken, Oswald Jonas, Ernst Oppel, Felix Salzer, Moriz Violin, Otto Vrieslander, Hans Weisse, and Victor Zuckerkandl (cf. Fink 2003, 29), of which some are discussed more in detail in the following.

never realized, the city of Hamburg did see the opening of a *Schenker-Institut* in 1931, on the initiative of Schenker's student Moriz Violin (1879–1956). The recipient of the above-cited letter, Felix-Eberhard von Cube (1903–1988), joined Violin as a teacher at the institute.¹³⁶

The Hamburg *Schenker-Institut* was a very short-lived one, however. Already in 1933, as a result of the increasing antisemitism and Hitler's rise to power, Moriz Violin was forced to leave Hamburg (returning to Vienna, as discussed below, before finally emigrating to San Francisco in 1939). After being run solely by von Cube, the institute finally closed in 1934 (Fink 2003, 19).

Another *Schenker-Institut* opened in 1935 in Vienna, as a part of the *Neue Wiener Konservatorium*. Among the teachers were the founder of the Hamburg *Schenker-Institut*, Moriz Violin, as well as Oswald Jonas (1897–1978) and Felix Salzer (1904–86) (Fink 2003, 19–20). Jonas had studied with Schenker, and Salzer had first studied with Hans Weisse and then (when Weisse moved to New York in 1931) with Schenker (Berry 2003, 109). A student of both Jonas and Violin was Hellmut Federhofer, who became "eine der wichtigsten Persönlichkeiten für die Schenker-Forschung im deutschsprachigen Raum" (Fink 2003, 20).¹³⁷

Salzer and Jonas were both of greatest importance to the early American reception and dissemination of Schenker's ideas, but before they both emigrated to the USA, they set a Schenkerian fingerprint on German-speaking soil as well: Jonas with *Das Wesen des musikalischen Kunstwerks* (Jonas 1934), and Salzer with *Sinn und Wesen der abendländischen Mehrstimmigkeit* (Salzer 1935).¹³⁸ While Jonas' book perhaps gained some much belated influence after the war—it was revised and republished in 1972 (Jonas 1972 [1934]), but prob-

¹³⁶ For a thorough article on Felix-Eberhard von Cube, see Drabkin (1984–85). See also Susan Tepping's interview with von Cube as well as her personal account of her private studies with him (Tepping 1982–83; 1988).

¹³⁷ Federhofer's work is discussed in detail in section 3.1.3, from page 212.

¹³⁸ In spite of clear Schenkerian underpinnings, in that the concept of *Auskomponierung* is central (cf. Koslovsky 2009, v–vi), Salzer's book is mostly about medieval and Renaissance music.

ably more influential in its English translation¹³⁹ (Jonas 1982 [1972/1934])—Salzer's *Sinn und Wesen* seemed to have been ignored by his musicological peers (cf. Koslovsky 2009, 162). Furthermore, in 1937, Jonas and Salzer established the monthly Viennese periodical *Der Dreiklang* devoted to the dissemination of Schenker's teachings.

Any influence that the Viennese *Schenker-Institut*, Jonas' and Salzer's books, their periodical, and even Schenker's own *Der freie Satz* of 1935 could have enjoyed in German-speaking music theory was eventually, as we know today, interrupted. The *Anschluss* of March 12, 1938 radically changed the situation. After nine issues, *Der Dreiklang* suddenly announced the following notice: "We inform our subscribers and readers that this periodical will cease publication with the current volume" (cited after Bent, Drabkin, and Siegel, n.d.). In April 1938, the *Neue Wiener Konservatorium* (hosting the new *Schenker Institut*) replaced much of its staff, according to Evelyn Fink "aus 'rassichen' Gründe" (ibid., 21), but already in October, it closed for good. Jonas emigrated to Chicago in 1938, and Salzer left for New York in 1939.¹⁴⁰

The final outbreak of WWII set a sudden stop to any Schenkerian dissemination on European soil—and simultaneously began the American. In 1940, the *Lexicon der Juden in der Musik* was published (Gerigk and Stengel 1940). In this, readers were warned that Heinrich Schenker was the

Hauptvertreter der abstrakten Musiktheorie der jüdischen Philosophie, die einen seelischen inhalt im Tonwerk ableugnet und sich darauf beschränkt, durch willkürliche Kombination aus dem Zusammenhang einzelner Sonatensätze Tonreihen zu bilden, aus denen eine "Urlinie" ("Substanzgemeinschaft") gelesen wird. (Gerigk and Stengel 1940, 239)

¹³⁹ In a 2006 reappraisal of Jonas' book, John Rothgeb wrote that to appreciate Jonas' achievement, one must keep in mind that he "organized and presented the basics of Schenkerian thought *before* Schenker himself had done so in *Der freie Satz*" (Rothgeb 2006, 115)

¹⁴⁰ Several sources claim that Salzer emigrated in 1940 (cf. Berry 2003, 104); I rely here on John Koslovsky's account that Salzer left Vienna in July 1939, and arrived in New York December 1939, after having stayed in both Paris and London (Koslovksy 2009, 44).

2.2.2 LATER EUROPEAN RECEPTION

As is well known, Schenker's teachings never really returned to Europe after the war.¹⁴¹ Felix-Eberhard von Cube, who had been involved in the Hamburg *Schenker-Institut*, attempted to revive it after the war, in 1947 (Tepping 1982–83, 80). As evidenced by his letter to Knud Jeppesen (see a copy in Example 35), who was at the time editor of *Acta Musicologica* and president of the International Musicological Society, von Cube worked actively—and under the letterhead of the *Schenker-Institut*—on raising awareness of Schenkerian theory.¹⁴² In 1951, the *Schenker-Institut* changed its name to *Schenker-Akademie* and worked under the new Hamburg *Hochschule für Musik* (Tepping 1982–83, 80). At the time of Susan Tepping's 1982 interview with von Cube, he was still credited as "director of the Heinrich Schenker Academy of Music in Hamburg" (ibid., 77), but the academy seems to have consisted of von Cube (and his students) alone.

To a much higher degree, Schenker's home town Vienna became the center of European Schenkerian research and teaching. Franz Eibner (1914–86) taught a course on Schenkerian analysis at the *Wiener Musikakademie* in the 1950s (Fink 2003, 24). Oswald Jonas returned to Vienna to teach this course in the 1960s (ibid., 25), but eventually settled as adjunct professor in Riverside, California until his death in 1978. Eibner continued as "Leiter des Lehrgangs" on a Schenkerian analysis course 1974–84. This role was taken over by Peter Barcaba (1947–2017) in the years 1984–1994; by Martin Eybl (b. 1960) in 1994–2006; and by Patrick Boenke from 2006 until

¹⁴¹ Studies that concretely discuss Schenker's presence or absence in European postwar music theory include Holtmeier (2003; 2004a), Spurný (2003–05), Schwab-Felisch (2005), Boenke (2006), Wozonig (2018), and Kirkegaard-Larsen (2019c). To emphasize but one notable quote from these studies, Oliver Schwab-Felisch wrote in 2005: "Es wundert daher nicht, daß, sofern man dem *Arts and Humanities Citation Index* glauben möchte, herausragende Forscher wie Carl Schachter, Charles Burkhart oder Allen Cadwallader zwischen 1975 und 2000 kein einziges Mal in einer deutschsprachigen Zeitschrift zitiert wurden" (Schwab-Felisch 2005, 243). The named scholars are all discussed in upcoming sections of the current presentation.

¹⁴² In subsequent letters from 1949, von Cube sent an article manuscript and inquired whether Jeppesen would be interested in reading his still unpublished *Lehrbuch der musikalischen Kunstgesetze*, which was later published in two volumes (1953 and 1954). I am grateful to Thomas Holme for providing me with these letters.

CHAPTER 2: THE SCHENKERIAN TRADITION

Schenker-Institut X 6/849 (24 a) Hamburg 13, Louisenallee 2, I. Stock Ruf 44 27 70 vate höhere Lehrschungsanstalt für Musil 31. 1. 49 Direktion : Felix-Eberhard v. Cube du/Je Jehr geehrter Hen Prof. Jeppesen, In der Zerhing " die Welt", Hambing, lese ich einen Besicht von dem Kongress für infeinationale Missik forschung in Basel, nach welchen Lie dort ann geführt haben, dass es bisher memouden gelingen sei, alle in der Praxis aufhetenden har. monischen Erscheinningen auf einige menige Grund begriffe gunick guführen. Wei sind der Ausicht, dass bereits Hernich Ichenken in seinem Werke "Neue nunsikalische Theorien", III. Band " Der freic Salz", Wien, Universal - Edition 1936, diese Jumick fichning gelingen sist, worm die beiliegende Photokopie ein Beispice gikt. Darüker hindus ist es mi gelüngen, die Ichenken schen Érgebuisse lindkeulos bis auf die Tonguauteureihe (Oberboureihe) gurick grift hen (in meinem "Lehn hid der missikalischen Kunst. gesetze", usch ungedrickt) und dawit eine exakte physikalische gründlage für die Beürleilung aller vertikalen and horizonhalen Every wirden Missile (Raim-feit-gesety) zu schaffen, die elle inderiduellen Dechings ressiche (Windemith) inherfling macht. Es winde moch in ferenieren, zu en fahren, ob Tie Tchenken gut kennen, und ob Sie Underese au dem Ergetus sten haben, die asi inserenseits in der Zert nuserer Modation, unhemerket vom finse lande, erzielt haben. -Mit vor gijerche Hochechting! Felos- Epahand in ube

Example 35: Letter from Felix-Eberhard von Cube to Knud Jeppesen, dated July 31 1949 (Cube 1949).

today. To this day, a website on "Analyse nach Heinrich Schenker" hosted on the homepage of *Universität für Musik und darstellende Kunst Wien* remains active, and the staff is cooperating with *Schenker Documents Online*, as it has done for several years. Nicholas Cook wrote in 2007 that

it would be fair to say that until 1991, when Martin Eybl was appointed to the University of Vienna, the only postwar Schenkerian scholars in the German-speaking countries to attract international attention were Hellmut Federhofer ... and perhaps the less prolific [Franz] Eibner and Karl-Otto Plum.¹⁴³ (Cook 2007, 275)

Indeed, before Eybl's activities-among which the publication of Schenker-Traditionen with contributions from German as well as American Schenkerians (Eybl and Fink-Mennel 2006) is noteworthy-the most notable acolyte of Schenkerian theory in post-war Europe was Hellmut Federhofer (1911-2014). More than anyone, Federhofer questioned and contested the hegemony of function theory in his contemporary milieu, and he published several articles as well as an entire monograph (Federhofer 1981) devoted to the project of proving Schenkerian theory's superiority over function theory. Federhofer's contribution to Schenkerian research is remarkable, and many of his works enjoy frequent citations in Anglo-American Schenkerian research (demonstrating that the geographical divisions I make in this study are not always clear-cut).¹⁴⁴ However, because so much of his research output discusses Schenkerian theory and function theory with a fundamentally comparative approach, this section only briefly mentions him, while he will be discussed in depth in Part II.

¹⁴³ Karl-Otto Plum is discussed in tandem with Federhofer in section 3.1.3 (see especially page 222ff.).

¹⁴⁴ One important book was *Heinrich Schenker: Nach Tagebüchern und Briefen in der Oswald Jonas Memorial Collection* (Federhofer 1985a), the first study of (some of) Schenker's *Nachlass*. According to William Rothstein "it might be described as a prolegomenon to an eventual biography" (1988, 233), but to some extent, it has functioned as a biography; indeed, Rothstein later described it as such (1990c, 195; see also Eybl 1995, 11). As late as 2007, Nicholas Cook called Federhofer's "the standard biography of Schenker" (Cook 2007, 15).

When looking beyond the German-speaking countries, there are also certain scholars with a Schenkerian orientation. Finland's Sibelius Academy has become something of a Schenkerian outpost with the acknowledged work of Lauri Suurpää and Olli Väisälä. Nicolas Méeus has worked to disseminate Schenkerian analysis in France at least since the publication of his *Glossaire et bibliographie de l'analyse schenkerienne* (1989), he has written an introduction to Schenkerian theory (1993), translated *Der freie Satz* into French (Schenker 1993 [1935]), and he continutes to contribute to Schenkerian scholarship to this day (cf. Méeus 2018).

Despite these single scholars' Schenkerian leanings, the general picture, of course, is one of European reluctance or even indifference toward Schenkerian theory. To some extent, Carl Dahlhaus was responsible for this—certainly, in his position as one of the most important European musicologists, his dislike of Schenker cannot have been without influence.¹⁴⁵ Time and again, Dahlhaus uttered fervent critiques of Schenkerian theory, notably in his review of Oswald Jonas' second edition of *Der freie Satz* (Dahlhaus 1959),¹⁴⁶ and later in a heated debate with Federhofer and Plum, discussed in section 3.1.3 (page 222ff.).

It was in these years that the antagonism of traditions seriously began to be established. At the height of Schenkerian theory's American popularity in 1975, the Danish scholar Morten Levy wrote:

To the non Schenkerian, this school [of American Schenkerian analysis] with its esoteric and seemingly speculative approach to musical understanding is at once attractive and frightening. Turning to Schenker's own work, one can easily be even more taken aback. His cocksure and arrogant style of writing, the viewpoints on arts and politics which lard his books – the wor-

¹⁴⁵ Nicholas Cook writes: "In Germany, partly as a result of sustained hostility from the highly influential Carl Dahlhaus, there was a lengthy hiatus un the study of Schenker" (Cook 2007, 274).

¹⁴⁶ Some influence from function theory is traceable in Dahlhaus' contention: "Zwar ist der Vorrang der II. vor der IV. Stufe in der Kadenz eine historische Tatsache, doch darf die Subdominante der funktionalen Harmonik nicht der IV. Stufe in der Kadenz gleichgesetzt und zur sekundären Stufe degradiert werden" (Dahlhaus 1959, 524).

ship of geniuses and "heroes" among the composers, as well as his chauvinistic and semi-fascistic attitude to the "nation" and to the "masses", and, finally, his ridiculous inability to see anything worthwhile in music outside the Austrian-German tradition from Seb. Bach to Brahms, - - all this makes the acquisition of the essential in his musical thought a somewhat burdensome undertaking.¹⁴⁷ (Levy 1975, 20)

A study of the historical development of this antagonism of traditions is offered in Chapter 3. For now, I shall focus on Schenker's Anglo-American reception.

2.3 ANGLO-AMERICAN RECEPTION

Echoing the beginning of section 1.2 on the German reception of function theory (page 49), it is worth commencing on the following section on historiographical note: the current state of research on the Schenkerian reception history in Anglo-American music scholarship looks very different today than it did 20 years ago. The very first signs of an American awareness of its own discipline's historicity is perhaps to be found in the seminal essay "The Americanization of Heinrich Schenker" by William Rothstein, published in the journal In Theory Only in 1986, and widely known through its inclusion in the 1990 anthology Schenker Studies (Rothstein 1986; 1990c). But more thorough investigations of the American establishment and development of Schenkerian theory only seriously followed in the beginning of the 2000's. Here, David Carson Berry holds a position similar to that of Ludwig Holtmeier: he has meticulously investigated the early establishment of Schenkerian theory in the United States in a long series of articles, and will thus be frequently cited in the following pages.148

However-and once again echoing the corresponding section on the German reception of function theory-the vast majority of research focuses in detail on Schenker himself or the early American

¹⁴⁷ Levy continues to discuss Schenkerian ideas that he believes is of value—though sustaining his critical tone.

¹⁴⁸ Important reception-historical texts by David Carson Berry are: Berry (2002; 2003; 2005a; 2005b; 2006; 2011; 2016). Other important contributions are Grünzweig (1993) and Boenke (2005).

reception, that is, approximately from the 1930s to the 1950s, when Felix Salzer published his *Structural Hearing* (Salzer 1952). As for the 1960s and 1970s, the research focuses more generally on the establishment of "Music Theory" as an independent discipline in American academia—with certain institutional centers and pivotal journals and the cause-and-effect relationship between these events and the wide dissemination and institutionalization of Schenkerian theory. These are important events to be sure, but less research has focused on *how* Schenkerian theory evolved in these years, and especially in subsequent years, in textbooks and articles. The main reason for this is not a scholarly neglect, but simply that the corpus of relevant texts is insurmountable. The 2004 publication *A Topical Guide to Schenkerian Literature* testifies this clearly (Berry 2004). A very useful and general overview of some dominant research topics (based on Berry 2004) is included in Berry (2005b, 114–117).

My contribution to this area of research is therefore focused on textbooks, and, moreover, directs attention to the less well-researched history of Schenkerian theory post 1980. Where the focus on textbooks was almost an automatic choice in Chapter 1's investigation of function theory's reception history, this is not the case for Schenkerian theory. Arguably, the bulk of Schenkerian scholarship occurred and occurs in academic journals, not in the relatively few textbooks that have been published over the years. However, as already mentioned in the introduction, insofar as textbooks often represent the current state of research and the relatively widely established knowledge, suitable for inclusion in the classroom-rather than groundbreaking or provocative ideas which are more suitable for thorough argumentation in an academic journal-they also align with the practice-theoretical orientation of this presentation. This is not to say that I have consciously overlooked important and indeed groundbreaking journal articles. Rather, an extensive-though by no means comprehensive-series of articles are discussed along the way (and many more will, of course, be discussed in Parts II and III of this presentation). Articles have been judged especially relevant for the current discussion if their impact is directly traceable in subsequent textbooks.¹⁴⁹

2.3.1 1930s to 1970s: Establishing the tradition

In the decades from the 1930s to the 1970s, Schenkerian analysis went from being something promulgated by a few immigrants, to being a nation-wide and firmly established tradition. This period is foundational for Anglo-American Schenkerian theory, for many of its characteristics and departures from Schenker's own theory were developed in this era. Moreover—as I have mentioned and will further substantiate below—it was only in the 1980s that American Schenkerism began to question its own history and practices.

2.3.1.1 Hans Weisse, Adele T. Katz, Felix Salzer, and their reception

The establishment of American Schenkerian theory took its first steps in the 1930s with Schenker's student Hans Weisse who played "a crucial and unparalleled role during that first decade" (Berry 2003, 107).¹⁵⁰ Hans Weisse had already moved to New York City in 1931 where he was appointed teacher of "composition, theory, analysis, and interpretation" (Berry 2006, 93) at the *David Mannes School of Music*. At Mannes, one of Weisse's notable students was Adele T. Katz (1887–1979). When Weisse died in 1940, Felix Salzer took over his position. It was these two students of Weisse's, Katz and Salzer, who would publish the first English-language books devoted to

¹⁴⁹ For instance, William Rothstein introduced the concept of the "imaginary continuo" in 1990 (Rothstein 1990b), and the concept became an important part of Allen Cadwallader and David Gagné's later *Analysis of Tonal Music* (Cadwallader and Gagne 2011 [1998], 66).

¹⁵⁰ Even before this, a few Schenkerian currents can be traced in the USA: David Carson Berry has argued that the American George A. Wedge (who had not studied with Schenker or his pupils) represents "the *earliest* attempt at 'Americanizing' Schenker" (Berry 2011, 143). Wedge worked at New York's Institute of Musical Art (later the Juilliard School) and taught "something about Schenker" (ibid.) already in 1925. Furthermore, while still in Vienna, Weisse taught the visiting Americans William J. Mitchell and Victor Vaughn Lytle (Berry 2005a, 92–93).

Schenkerian theory—although their relation to Schenker's own theory remains controversial.

Adele Terese Katz (virtually always dubbed "Adele T. Katz") authored not only the first English-language article on Schenkerian theory¹⁵¹ (Katz 1935), but also the first book (Katz 1945). This book, *Challenge to Musical Tradition: A New Concept of Tonality*, may not be held today as neither a very influential, nor a very accurate account of Schenker's theory, but in the history of Schenkerian theory in the United States, it nonetheless takes the place as the first book— and the first steps toward small changes in the theory.

One reception of Katz' book is worth highlighting here. It appears not in a review, but in an editorial to *The Musical Quarterly* by Paul Henry Lang (1901–1991). Lang compares Donald Francis Tovey's book *Beethoven* and Katz' *Challenge* (both from 1945) and greatly prefers the former. He refers somewhat sarcastically to Katz as one of Schenker's "fervent disciples" (Lang 1946, 300). In an informal interview, Allen Forte has called Paul Henry Lang "the main person against Schenker analysis" (Allen Forte Electronic Archive 2017, 23:40), and indicated that Lang's antagonism against Schenkerian analysis was a main reason that it never settled as a tradition at Columbia University to the degree it did at other universities and music schools in New York City (Hans Weisse did hold weekly graduate seminars at Columbia until his death in 1940; see Berry 2005b, 106).¹⁵²

In her work, Katz frequently uses the linguistic metaphor that chord labeling is equivalent to grammar, while Schenkerian analysis is equivalent to an actual understanding of a sentence. This is echoed in Salzer's *Structural Hearing*. Salzer distinguishes between chord grammar and chord significance, and writes that "composers, like poets, speak in sentences" (Salzer 1952, I:39). He also puts considerable emphasis on the idea of music as having a *direction* and always

¹⁵¹ Or, at least, the first "*substantive* English-language distillation of Schenkerian concepts" (Berry 2002, 103; my emphasis).

¹⁵² Forte further speculates that the one person who could have taught it at Columbia, William Mitchell (student of Weisse), was afraid of upsetting Lang, who held a more powerful position as full professor at the university.

striving toward a *goal* to explain that "the significance of tones and chords and the functions they fulfill depend upon this goal and the direction the motion takes to attain it" (ibid., 11–12).

Notice Salzer's use of the word "function" here (the extent to which this differs from Schenker's writings will be assessed below). An important passage in *Structural Hearing* elaborates on the idea of "function":

A chord thus demonstrates a harmonic function if it is a member either of the fundamental progression I–V–I or of one of the following progressions: I–II–V–I, I–III–V–I, I–IV–V–I... II, III or IV exercises its harmonic function only if it appears in connection with I and V, elaborating the fundamental harmonic progression [i.e. the *Bassbrechung*]. In other words II, III and IV are not automatically harmonic chords; only if one of them is a member of a progression coming from I and proceeding to V, serving as an intermediary station in the fundamental harmonic movement from tonic to dominant, has it a harmonic function. In spite of their separation, the ear grasps their structural connection because they are equal in structural function and none of the other chords are on a par with them. (Salzer 1952, I:15)

The passage not only elaborates on Salzer's idea on "function," but also introduces the term "intermediary station," elsewhere dubbed "intermediary harmony" (Salzer 1952, I:95 et passim). That this term seems to have a connection to the later North American concept of the predominant has already been discussed in section 1.4.2 (page 97ff.), but is worth restating at this point.¹⁵³ The passage furthermore implies a distinction between "harmony" and "chord," on which Salzer elaborates in the following paragraphs. "Harmonies" are equivalent to Schenker's *Stufen*, while "chords" are the by-products of horizontal motion between harmonies. As the quote indicates, the ear is able to connect temporally distant harmonies (through "structural hearing") because there is a "structural" connection between them.

¹⁵³ Furthermore, as seen in section 2.3.2.3 (from page 167) below, it is integrated in Allen Cadwallader's and David Gagné's *Analysis of Tonal Music* (1998), in which the concept of "intermediate harmony" is central, rather than just an informal description.

One area on which Salzer put a lasting fingerprint is exemplified by this passage as well as the book's very title—namely, on the English Schenkerian terminology in which the prevalence of the word "structure" is striking. Certainly, Salzer was not alone in this feat: the word appears frequently in Katz (1945), but since Katz thanks Salzer in her preface, while Salzer thanks Katz in his, it remains impossible to determine with certainty which English terms originate from Katz, Salzer, or their common teacher, Hans Weisse. Schachter speculates that the word "structure" originates with Weisse, possibly with help from Katz (Schachter 2006a, 107).

It is, whoever came up with it, remarkable that "structure", so central a term in Schenkerian thought today, is not to be found in its German equivalent "*Struktur*" in Schenker's writings—and if the word appears here and there, it is certainly not a technical and pivotal term as it became in later Anglo-American Schenkerian writings. Schenker's writings are much more focused on organic metaphors of life and growth than the rigidity of "*Struktur*" allows.

Another core concept that the Weisse-Katz-Salzer triad introduced was "prolongation"; as discussed in relation to Schenker's *Kontrapunkt* (1910; 1922) in section 2.1, *Prolongation* for Schenker meant (in the early writings) that contrapuntal rules were extended, and came to imply (in the later writings) that the tonal laws of one *Schicht* determined the more elaborated *Schichten*. Schenker used the word *Auskomponierung* to describe the temporal or "horizontal" extension of a vertical *Klang*, and as such, Katz and Salzer's publications conflated the terms *Prolongation* and *Auskomponierung* into the now widely used "prolongation" (cf. Schachter 2006a, 107).

When it comes to the word "function," the situation is more complex: it is not the case that Schenker did *not* use "Funktion" at all. However, I will argue that Schenker did not use the word nearly as much as Salzer did, and he did not use it in the meaning that Salzer did. I will support this argument below, in section 2.3.1.2, where I discuss the English translation of *Der freie Satz* (see especially page 152ff.). For now, it suffices to notice that in *Stuctural Hearing*, "function" is clearly a technical term, and not simply a casual expression and it should be noted that this observation points back to section
1.4.2 above, in which I touched on the connections between Salzer's "function" and Marion Guck's "functional categories," and points forward to section 4.1.1 below, where I will further trace the ramifications of this Salzerian conception of function and its significance for the conflict between post-Riemannian and Schenkerian traditions.

To take a short leap to practice theory, the establishment of English terminology by Weisse, Katz, and Salzer, is not a small detail. By naming a phenomenon and making it a central part of a shared vocabulary, a process of reification takes place, and this process is central to communities of practices and their cohesiveness (Wenger 1998, 57–63).¹⁵⁴ The reification is all the more concrete when it, in this case, recasts Schenker's organic ideals as *structures*, that is, as almost architectural objects which one must approach as such.

The reception of Salzer's Stuctural Hearing tells an interesting history of the emerging American Schenkerism. Salzer defines his purpose as follows: "My purpose is to mold his [Schenker's] concepts into a workable, systematic approach for use by teachers, students and performers, as well as by anyone seriously interested in the problems of musical continuity, coherence and structure" (Salzer 1952, I:xv). In this statement, one sees not only an endorsement of Schenker's ideals, but also the explicit aim to "mold" it into something "workable" and "systematic." In a sense, Salzer here sets the program for the general American development of Schenkerian theory, while, on the other hand, also pinpointing the aspects of his presentation that have received much criticism. Today, Structural Hearing is not held as an accurate account of Schenker's theory or even what eventually became known as Schenkerian theory. Indeed, already in the early reception of Salzer's book, it was criticized in a perceptive review by Milton Babbitt (1916-2011)-who would himself become an important part of Schenkerian history. Babbitt spends the majority of his review accounting for Schenker's theory to make the point that "it

¹⁵⁴ We saw this in Chapter 1, too: Hermann Grabner's (1923) launching of the term *Gegenparallel* as a monistic alternative to the dualistic *Leittonwechsel* was one among several factors that allowed a community of practice centered on monistic function theory to grow—even though one could easily argue that the *Parallel–Gegenparallel* pair is no less dualistic than the *Parallel–Leittonwechsel* pair.

cannot be emphasized too strongly that Dr. Salzer's volume is not, and is not intended to be, a substitute for Schenker's own work" (Babbitt 1952, 263).

Another noteworthy review is the brief and largely dismissive one by Oswald Jonas, with whom Salzer had co-edited *Der Dreiklang* and co-taught at the Vienna Schenker-Institut (see section 2.2.1, page 129ff.). Because Schenker's works were unavailable in English and hardly available in German, Jonas regarded it as a great responsibility to present Schenker's theory as faithfully as possible. Jonas argued that Salzer failed to meet this requirement and that the book was blemished by omissions, misreadings, and dilutions of Schenker's basic concepts (Jonas 1953, 439). It is interesting that Jonas' review was published alongside Norman Lloyd's (1909–80) completely different and very positive review. Lloyd writes that "Schenker's theories have not been available in one systematic presentation in English until the publication of *Structural Hearing*" (Lloyd 1953, 438)—whereas, in Jonas' view, Salzer's presentation is neither systematic, nor a presentation of Schenker's theories at all.

Jonas thus reveals himself as someting of a Schenkerian "purist," and indeed, already at this early stage of the Schenker reception, one sees the germ of what would evolve into two main strands of Schenker reception, a "purist" branch, and a "revisionist" branch. Salzer (and perhaps Katz) represents the beginning of a revisionist branch, whereas Jonas represents the beginning of a purist branch. Jonas' student Ernst Oster (1908–77) apparently adopted the purist view, as indicated by an interview with Edward Laufer (another influential theorist, discussed below):

What Oster resented was that Salzer was promoting his own work before that of Schenker, so that before *Der freie Satz* was translated and published, *Structural Hearing* by Salzer had been out for a long time, and Oster didn't like that in principle. He didn't like the kinds of revisionist tactics that Salzer had taken, [such as] certain notational features. (Edward Laufer, in Slottow 2016, 339)

Laufer also discusses Oster's reply to Roy Travis' (1922–2013) article "Toward a New Concept of Tonality?" published in *Journal of Music* Theory (Travis 1959). Here, Travis writes that Schenker "initiated certain principles and techniques of analysis" which are "still in the process of evolution," and goes on to extend Schenkerian ideas to the analysis of post-tonal music (Travis 1959, 261). Oster's reply is a heated demonstration that Travis' "readings contain grave errors."

Yet, he condescendingly describes Schenker as one who just 'initiated' and 'attempted.' This attitude of egotistical effrontery speaks for itself and needs hardly any further rebuke. Again we witness the familiar spectacle of someone who, unable or unwilling to cope with a creative idea from an original mind, tries to put himself into the foreground by tampering with that idea in various ways. (Oster 1960, 96)

It is notable that it was Oster's student William Rothstein, who later coined the influential idea that Schenker had been "Americanized" (Rothstein 1986).¹⁵⁵

Returning to *Structural Hearing*, and resuming the chronology, it must be underlined that despite its lukewarm reception, it did become influential. As Carl Schachter accounted in 2006:

However it might have originated, it was through Salzer's rather than Katz's book that this neo-Schenkerian approach began to occupy an important niche in American musical education.... Certainly the abridged English-language edition of Schenker's *Harmonielehre*, which came out two years after *Structrual Hearing*, made no comparable impact despite the importance of the book and the very interesting commentary added by its editor, Oswald Jonas. The much more favorable reception that Schenker's writings received in the America of the 1970s and 80s was surely due in large part to the preparation their readers had got through familiarity with Salzer's book.¹⁵⁶ (Schachter 2006a, 107)

¹⁵⁵ That the purism exists in varying degrees is showed by Felix-Eberhard von Cube's comments about Oswald Jonas' editing of *Der freie Satz* (Schenker 1956 [1935]), which are as dismissive as Jonas' comments about Salzer, and Oster's comments about Travis: "What Jonas did goes far beyond what he actually should have done. He should have corrected the few printing errors; rather than that, he got rid of things that Schenker wrote, and added things which were not Schenker's. There is a word for that—forgery" (von Cube in Tepping 1982, 91).

¹⁵⁶ The abridged *Harmonielehre* that Schachter refers to is *Harmony* (Schenker 1954 [1906]), translated by Elisabeth Mann Borgese (who was, on a completely unrelated note, the daughter of the famous author Thomas Mann). Jonas not only added com-

Schachter furthermore notes that *Structural Hearing* was not only translated into German and Spanish, but apparently also into Mandarin Chinese, albeit in an unpublished translation at the library of the Shanghai Conservatory (Schachter 2006a, 107–8). In my own research, I have exposed that one chapter of a 1968 Swedish textbook is a near-translation of the first pages in *Structural Hearing's* Chapter 2 (Edlund and Mellnäs 1968; Kirkegaard-Larsen 2019c).¹⁵⁷ Whether one would prefer to label *Stuctural Hearing* as "Schenkerian" or "Salzerian" theory today, it seems to be an undeniable fact that Salzer did influence the historical development of Anglo-American Schenkerian theory to a considerable degree—perhaps more so than "purist" historiography would like to admit.¹⁵⁸

2.3.1.2 The Institutionalization of Schenker

In the broad overview of Schenker's American reception history, it seems that there must be an entire century, rather than only 30 years, between Salzer's 1952 *Structural Hearing* and the next American textbook on Schenkerian theory, Allen Forte and Stephen Gilbert's 1982 *Introduction to Schenkerian Analysis*. In the 1960s and 1970s, the dissemination of Schenkerian analysis accelerated and gained a success that is remarkable. One important factor that contributed to its dissemination was music theory's institutionalization. In this section, therefore, I briefly digress from my main focus on Schenkerian textbooks and sketch some of the important events of the 1960s and

ments, but also edited the book and removed certain parts in what could be seen as an act of censorship (as per von Cube's criticism in the above footnote 155).

¹⁵⁷ Importantly, this Swedish textbook by Lars Edlund and Arne Mellnäs (1968) does not represent a turn to America and its emerging Schenkerian tradition—they adopted the theory from the German translation *Strukturelles Hören* (Salzer 1960). I have further argued that Edlund and Mellnäs' Salzerian theory (in their peculiar adaptation in which they continue to use function letters rather than Roman numerals) have had a much belated influence on Swedish function theories from approximately 1995 to today (Kirkegaard-Larsen 2019b, 151, 154–158; 2019c).

¹⁵⁸ In the previously mentioned informal interview, Allen Forte recalls that several publishing houses were not interested in publishing the English translation of *Der freie Satz* (*Free Composition*, Schenker 1979). When contacting possible publishing houses "we always got the same reply; the reply was 'there is already a book on Schenker,' and that was Salzer's book" (Allen Forte Electronic Archive 2017, 30:53).

1970s. I then devote some attention to the nearly-Schenkerian textbooks of Salzer and Schacther (1969) and Aldwell and Schachter (1978; 1979), and finally to the important event that concluded these decades, namely the publication of the English translation of *Der freie Satz*, *Free Composition* (Schenker 1979 [1956/1935]).

During the 1960s, American music theory went from being an integrated part of musicology to being institutionalized as its own discipline. The first step in this development was arguably the foundation of academic journals devoted to music theory. *Journal of Music Theory (JMT)* was established in 1957 at Yale.¹⁵⁹ Its first Schenkerrelated article was Allen Forte's "Schenker's Conception of Musical Structure" (1959). In this, Forte compares Schenker's achievement with "a particular kind of high-level achievement in science," namely the discovery of a "fundamental principle" which makes way for new insights (Forte 1959, 3). (Notice the word "science," of which more below.)

Several Schenkerian articles followed in *JMT*—Travis (1959) and Oster's response (1960) have already been commented on above (for a comprehensive overview of *JMT*'s early Schenkerian articles, see Berry 2005b, 109–110). *The Music Forum*, edited by Felix Salzer and William Mitchell, was established in 1967 and was published sporadically until 1987. Before this, the journal *Perspectives of New Music* was founded at Princeton in 1962, and though it focused on new music, it also did contain articles with "some degree of Schenkerian content" (ibid., 110). David Carson Berry speculates that this was perhaps due to the Schenkerian "Princeton School," which I have gone over in silence thus far. To briefly sketch the emergence of this school, the American composer Roger Sessions (1896–1985) had encountered Schenkerian theory while living in Europe around 1926 (ibid., 105). He began teaching in Princeton (New Jersey) in 1936; Milton Babbitt studied with Sessions and joined the faculty in 1938;

¹⁵⁹ As David Carson Berry has noted, prior to this, "Schenker-related articles were published wherever authors could place them" (2005b, 109); for instance, the short-lived journal *Musicology* (1945–49) had published three articles on Schenkerian theory (Mitchell 1946; Oster 1947; 1949).

later, they worked elsewhere, but returned to Princeton (ibid., 107–108).

Milton Babbitt worked mostly with twelve-tone theory, but his impact on American music theory at large is pronounced, and he is an important figure in its institutionalization. Joseph Straus has stated that "it is with him that the field of music theory, in its modern North American incarnation, begins" (cited in Berry 2016, 174).¹⁶⁰ Babbitt is associated with aspirations for rigor and objectivity-"science," to put it briefly.¹⁶¹ Recalling Allen Forte's above-mentioned comparison of Schenker's achievement with the discovery of fundamental scientific principles, one can see that Babbitt was not alone in these aspirations.¹⁶² Babbitt and Forte, and the scientific image of music theory, contributed greatly to the American turn to "structure" (as discussed above) and to the "American abandonment of Schenker's organicism" (as an article by Robert Snarrenberg is entitled [Snarrenberg 1994]; cf. also Rothstein [1986]). It was also at Babbitt's Princeton that the first PhD in composition "with strong underpinnings of theory" (Berry and Solkema 2014, §5.i) was offered in 1962, while Forte's Yale offered the first actual PhD program in music theory in 1965.

Doctoral programs, professional societies, and music theory journals continued to be established throughout the 1970s. The Music Theory Society of New York State was the first regional music theory society, and by 1975, it began publishing its journal *Theory and Practice*. In 1977, the national Society for Music Theory (SMT) was established, and its official journal *Music Theory Spectrum* was

¹⁶⁰ The quote comes from the Society for Music Theory's Newsletter of August 1996, page 3, and comes in the context of the awarding of the first Life-Time Membership Award to Milton Babbitt and Allen Forte (Berry 2016, 174).

¹⁶¹ Relevant essays by Milton Babbitt in this context are "The Structure and Function of Musical Theory" (1965) and "My Vienna Triangle at Washington Square" (2011 [1999]).

¹⁶² In an article entitled "Conservatory Schenker vs. University Schenker," William Rothstein has traced the different conceptions of Schenker that different demands of theoretical and "scientific" rigor entail. "In its purest form," writes Rothstein, "university Schenker flourished at Princeton" with Babbitt and more. He frames Forte's "brand of Schenker" as a compromise between Princeton (university Schenker) and Mannes (conservatory Schenker—that is, a more loose and intuitive than rigorous attitude to Schenkerian analysis) (Rothstein 2002, 240).

first published in 1979. As David Carson Berry notes, this "even opted for an oblong page format to better accommodate figures such as Schenkerian graphs" (Berry 2005b, 111).

One of the notable doctoral programs was the one offered at the Graduate Center of the City University of New York (CUNY). As Nicholas Cook has written, CUNY is, together with Mannes "the leading international centre for work on Schenker today" (Cook 2007, 276). Felix Salzer began teaching at Queens College (which became part of CUNY in 1961) and taught, among others, Carl Schachter, who has been called "the world's leading practitioner of Schenkerian theory and analysis" (Straus 2016, vii). Together, Salzer and Schachter published the book Counterpoint in Composition in 1969 (Salzer and Schachter 1969). Though not a textbook on Schenkerian analysis as such, it provides a markedly Schenkerian (or rather, Salzerian) alternative to traditional contrapuntal theory. Perhaps most notably, in discussing the relationship between "strict" and "free" composition-between the theory of species counterpoint and music-they frame their book as an alternative to the widelydisseminated Counterpoint by the Dane Knud Jeppesen.¹⁶³

The context is as follows: They write that Johann Joseph Fux designed his exercises as a means of attaining the ideal style of counterpoint, namely that of Palestrina. Fux did not attain this because his exercises "show some elements characteristic of eighteenth- rather than sixteenth-century style" (Salzer and Schachter 1969, xvi). Jeppesen did attain exercises "that are quite Palestrinian in appearance" (ibid., xvii)—but only in appearance, apparently. They continue with barely concealed patronization:

The surface similarities between these modal exercises and Palestrina's music have convinced many teachers that the answer to old and vexing problems had been found. Jeppesen's presentation of the species approach seems to have elevated the "academic ritual" into a theory of composition. To many of the teachers and students who had become confused about the

¹⁶³ Salzer and Schachter (1969, xvii) refer to 1931 as the publishing year; but according to Jeppesen-researcher Thomas Holme Hansen, the English translation came in 1939, and the Danish original in 1930 (Hansen 2011, 28, 32).

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method to follow, a book such as Jeppesen's must have come as a profound relief. (Salzer and Schachter 1969, xvii)

But Jeppesen's central idea, "that counterpoint must be studied in connection with a specific musical style" to attain "the greatest possible correspondence between written exercise and composition" is a flawed idea that "results from several basic misunderstandings," writes Salzer and Schachter (ibid.). As might be expected, they turn to Schenker's *Kontrapunkt* (1910; 1922), which was not available in English at the time. They rehearse the argument that I reproduced in section 2.1: that the relationship between counterpoint and composition is abstract, and that "counterpoint cannot serve as a method of composition in any style whatever" (Salzer and Schachter 1969, xvii). Rather, composition represents a "prolongation" of the rules of counterpoint (ibid., xviii).

Thus, the Schenkerian underpinnings of their book are pronounced. In the book's second part "The Techniques of Prolonged Counterpoint" (ibid., 117), several Salzerian graphs are presented. The graphs are recognizably "Salzerian" rather than "Schenkerian" because they contain several notational procedures which are markedly Salzer's, and not Schenker's, such as the label "EM" for "embellishing" tone or chord, and the so-called dotted beams.¹⁶⁴

A decade after the 1969 Counterpoint in Composition, Carl Schachter would co-author another book, Harmony and Voice Leading (2 vols.), with Edward Aldwell (Aldwell and Schachter 1978; 1979). Like Counterpoint in Composition, Harmony and Voice Leading is not a book on Schenkerian theory as such, but rather an elementary introduction to its titular concepts. It focused more on theory than on analysis—but once again, the book's Schenkerian under-

¹⁶⁴ It seems that for some, Salzer's dotted beams became a token of his revisionist (rather than purist) approach to Schenkerian analysis. In an interview with Stephen Slottow, Edward Laufer recalls that Ernst Oster had strong opinions about the dotted beam and never used it "because it's ugly" (Slottow 2016, 344). In another interview, William Rothstein "reports that Oster compared the dotted beam to a machine gun," and Poundie Burstein—who studied with both Salzer, Schachter, and Burkhart exclaims: "The dotted beam! I know people who get fussy about this. People get so excited about this dotted beam! I don't really use dotted beams any more. I just avoid the issue" (Slottow 2008, 268–269).

pinnings are pronounced,¹⁶⁵ and due to its success in American music scholarship, it deserves mention in this historical overview.¹⁶⁶

One aspect in which its Schenkerian underpinnings are clear has already been briefly mentioned in section 1.4.2 (page 97ff.), in which I observed that it—together with Allen Forte's *Tonal Harmony in Concept and Practice* (1962)—was a predecessor to Marion Guck's formalization of an American theory of functions. It is important to notice that Aldwell and Schachter use the term *intermediate harmony* (1978, 109 et passim) which is obviously a revival of the *intermediary* harmony that Felix Salzer used in *Structural Hearing* (as per the discussion around page 141). It is even more important to notice that they do so in a text that is *not* a textbook on Schenkerian theory, but an introduction to elementary harmony and voice leading.

Felix Salzer's usage of the term "harmonic function" in connection with the "intermediary harmony" (Salzer 1952, I:15, 95 et passim) began as an explicitly Schenkerian/Salzerian idea—an attempt to communicate Schenker's ideas on divisions of the *Bassbrechung* to Anglophone readers. But the idea would "spill over" into more general and elementary American ideas on harmony and thus influenced both Marion Guck's function theory, Forte's as well as Aldwell and Schachter's introduction to harmony and voice leading—and, later, the Schenkerian textbook by Allen Cadwallader and David Gagné (1998). In general, it affected the English-language conception of what "function" means. As has been mentioned several times now, this will be further explored in the comparison of function-theoretical and Schenkerian conceptions of "function" in section 4.1.1.

It seems that by the end of the 1970s, the American conception of "function" even found its way into the translation of *Der freie Satz.* In the English translation, the word "function" is mentioned six times, but in the five of these, Schenker does not write "Funktion." See the comparison in Table 1.

¹⁶⁵ Stephen Slottow, too, has characterized *Tonal Harmony in Concept and Practice* and *Harmony and Voice Leading* as "written from a Schenkerian perspective" (2018, 81).

¹⁶⁶ Harmony and Voice Leading came in its fifth edition in 2018, indicating its sustained success (Aldwell, Schachter, and Cadwallader 2018).

Paragraph	Free Composition	Der freie Satz
§91	"Passing note" and "neighboring note" are entirely different func- tions.	Durchgang und Nebennote sind ganz verschiedene Begrif- fe.
§93	To appreciate this prin- ciple of the primary tone, that is, to recog- nize its dual function based on voice leading 	Das Gesetz des Kopftones nachzuempfinden, d. h. seine beiden Wirkungen für Wirk- lichkeit der Stimmführung zu nehmen
§272	In instrumental music the legato slur fulfills the same function as does the human breath in the articulation of both speech and vocal music.	An die Stelle des menschli- chen Atems, der in der Spra- che und in der vokalen Musik Darstellungsmittel der Arti- kulations ist, tritt in der In- strumentalmusik der <i>Bogen</i> <i>des Legato</i> .
§273	The new slurs function as syncopes in that they carry over into the sub- sequent diminution.	Die neuen Bogen walten syn- chopisch, indem sie in die jeweilig nächste Diminution einhaken.
§296	The upbeat generally leads to the first mea- sure that is metrically strong. However, the composer occasionally contradicts this func- tion of the upbeat if he imbeds the upbeat within this first mea- sure.	Der Bestimmung des Auftak- tes, zu metrisch betonten ers- ten Takt hinüberzuleiten, tritt der Komponist mitunter dadurch entgegen, daß er den Auftakt dennoch in den ers- ten Takt einbettet.

Table 1: Comparison of Free Composition (Schenker 1979 [1956/1935])and Der freie Satz (Schenker 1956 [1935]).

In a footnote at the end of §295, Schenker does write of "thematische Funktion" (Schenker 1956 [1935], 191)—however, Schenker here quotes his earlier *Erläuterungsausgabe* of Beethoven's Piano Sonata No. 30 in E major, Op. 109 (Schenker 1971 [1913]). And it seems that "Funktion," like "Struktur," mostly occurred in Schenker's earlier writings.¹⁶⁷

None of these cases regard specifically *harmonic* function (in Salzer's, Riemann's or any other conception), but a more informal use of the term. Nonetheless, the idea of function as used in the English translations goes hand in hand with the more obvious Americanism, the word "structure." It instills the basic presumption that musical phenomena fulfill structural functions.¹⁶⁸ To be sure, this idea is not far removed from Schenker's theory in *Der freie Satz*. For instance, he speaks of "goal tones" [*Zieltöne*] (Schenker 1979, 102; 1956, 159), and it is natural to assume that certain phenomena *function* as means of achieving such goal tones.

Nonetheless, I would argue that his organic metaphors of growth imply a subtly different presumption, namely that the musical phenomena are the necessary results of the prolongation of structural levels (prolongation here used in its original, German meaning); they are the *end-product*, the outcome of a generative process, not primarily *means* of achieving the end-product.

The word "function" may seem a small detail in the English translation of Schenker. A similar point has been made about the English translation of *Der Meisterwerk in der Musik* to *The Masterworks in Music*, vol. 1 (Schenker 1994a [1925]; see Snarrenberg

¹⁶⁷ It occurs, for instance, in *Ein Beitrag zur Ornamentik*: "Dem Vorschlag ist eine doppelte Funktion zu eigen: Die eine tritt im Harmonischen zutage … gleichzeitig aber dient die andere Funktion dem Melodischen" (Schenker 1908 [1903], 25), and several times in *Kontrapunkt* vol. 1, for instance: "Außerdem wird der Gebrauch der sekund im C[antus] f[irmus] durch ihre besondere Funktion in der melodie gerechtfertigt …" (Schenker 1910, 116). Schenker explicitly criticized the function theory of Louis and Thuille in *Kontrapunkt* (see also section 3.1.1, page 200ff.).

¹⁶⁸ It is perhaps worth mentioning that this phrase echoes Arnold Schoenberg's *The Structural Functions of Harmony* (Schoenberg 1969 [1948]), which became influential in the US after Schoenberg's death—though the relation of Schoenberg's and Schenker's theories is a topic beyond the scope of this study (however, see footnote 235, page 226; as for Schoenberg's relation to function theory, see Bernstein 1992).

1994), but, to the best of my knowledge, not about the translation of Schenker's *magnum opus*, *Der freie Satz*.¹⁶⁹ And even though Snarrenberg's main point is the same as mine—that the concepts of structure and function do not correspond completely to Schenker's theory—it is notable that Snarrenberg himself uses "function" in many of his corrective comments.

If Snarrenberg and I share the same main point, we do not have the same intentions in bringing attention to this point. My above comments are not a critique of the translation, but one stone in three larger arguments: first, the argument that "structure" and "function" are parts of the Americanization and instrumentalization of Schenkerian theory, and that this fact contributes greatly to disagreements between function-theoretical and Schenkerian conceptions of "function," as discussed further in section 4.1.1 (page 246ff.). The second argument is that, in the study of a tradition, what are normaly secondary sources may become primary sources; this is why I criticize previous comparisons of Schenker and Riemann in Chapter 3 and take another approach throughout this dissertation. The third argument serves to confirm one of the central hypotheses presented in the introduction, namely that a successful mediation between the traditions must take actual practice as its starting point, not Schenker and Riemann themselves.

A more intricate complex of problematics surrounds the editing of *Free Composition* and its publication history. I will avoid the attempt to formulate this bewildering history more precisely and concisely than Nicholas Cook has done, and instead quote him here at length (adding my own commentary in footnotes along the way):

In the case of *Free Composition* (the English translation, or maybe one should say version, of *Der freie Satz*) it is necessary to disentangle the work of Schenker—and Jeanette [Schenker], of whom Schenker wrote in a codicil to his will "my work was her work as well"¹⁷⁰—from that of [Oswald] Jonas (who revised Schenker's text for the second German-language edition

¹⁶⁹ For instance, Snarrenberg notes that in one place, Rothgeb translates "nur die Bedeutung ... zukommt" as "functions ... as" (Snarrenberg 1996, 327).

¹⁷⁰ Indeed, due to Schenker's failing eyesight, much of his work was written down by his wife Jeanette Schenker.

[Schenker 1956], eliminating certain passages and adding some footnotes of his own together with a preface), [Ernst] Oster (who edited and translated Jonas's text,¹⁷¹ again making some deletions and adding footnotes and a preface of his own), and John Rothgeb (who following Oster's death in 1977 translated most but not quite all of the deleted passages, relegating them to the notorious appendix 4, checked Oster's translation, and added further footnotes), not to mention he series editor (Gerard Warfield, who added a note explaining the above, though not quite accurately), and Allen Forte, who added an introduction to complement Schenker's own introduction.¹⁷² (Cook 2007, 250)

The "notorious appendix 4" that Cook refers to came from a disagreement among the many people involved in the publication. Jonas' and Oster's deletions were made of fear that Schenker's political and other digressions would distract the reader from the main (that is, "purely" music-theoretical) point. John Rothgeb, sensing an unethical censorship in this decision, then collected the deleted passage in an appendix. The result was that, on the one hand, the text could be read without the distractions, but that, on the other hand, it was now very easy to find all the problematic passages.

The publication of *Free Composition* in 1979 was, in short, a collective effort of key persons in the Schenkerian community that marked a milestone in American Schenkerian theory, while at the same time marking the tentative beginnings of a new awareness in the American academy: an awareness of the differences between its own version of Schenker and Schenker's Schenker—in short, consciousness of its own having-become a tradition of its own.

¹⁷¹ Here, Cook adds another detail in a footnote: "Oster's translation actually had its origins in a 'rough draft' Allen Forte had prepared but had not been able to place with a publisher; Forte handed it over to Oster in 1962" (Cook 2007, 250).

¹⁷² One might add to Cook's overview the early translation found in Theodore Howard Kruger's PhD dissertation (Kruger 1960). As Jennifer Auerbach has noted, "most scholars consider Kruger's translation to be inelegant and problematic" (Auerbach 2009, 1).

2.3.2 1980s to the present day: Reflecting on the tradition

In the 1980s, this self-awareness became more pronounced, first and foremost with William Rothstein's seminal article "The Americanization of Heinrich Schenker" (Rothstein 1986; a slightly revised, and more well-known version, is Rothstein 1990c). Rothstein argued that Schenker's American success was contingent on its having been distorted to fit the ideals of the American academy (Rothstein 1990c, 194). Among several examples, he describes Allen Forte (and Forte and Gilbert [1982], discussed below) as "neither prophet nor poet, he is the cool taxonomist, concerned above all with rationalism and clarity" (Rothstein 1990c, 199). Rothstein's often-cited essay was a significant event that manifested the discipline's self-awareness, and propelled critical research on Schenker in context for the next many years. By the end of the decade, Nicholas Cook wrote the perceptive articles "Music Theory and 'Good Comparison': A Viennese Perspective" (1989a), and "Schenker's Theory of Music as Ethics" (1989b) in which he basically argued that the suggestiveness of an analysis is more important than its scientific verifiability (in the former article), and defended the analyst's right to apply Schenker's methods without adopting his epistemology and world view (in the latter article); one can see these texts of Cook's as early impulses of what resulted in The Schenker Project from 2007, by far the most thorough attempt to understand Schenker in his context (Cook 2007), and in a sense the culmination (thus far) of the new research agenda that William Rothstein's "Americanization" brought about.

Textbooks from the 1980s to the present day are different from pre-1980 textbooks in that they are *conceived of* as textbooks on Schenkerian theory and analysis. Katz and Salzer took Schenker's theory as a starting point but greatly extended his principles, and their books were not conceived as *textbooks*, that is, books with a certain pedagogical aim. Allen Forte and Stephen Gilbert's 1982 *Introduction to Schenkerian Analysis* was the first book intended to "serve as a basic textbook on Schenkerian analysis," and it is explicitly "addressed to college students of music theory"¹⁷³ (Forte and Gilbert 1982, 1). Indeed, David Beach has called Forte and Gilbert's *Introduction* "the first real textbook on the subject [Schenkerian analysis]" (Beach 1985, 276).

Research that outlines these decades of Schenkerian theory's disciplinary history is limited, compared to research on the early establishment of Schenkerian theory in America. In the above-quoted article from 1985, David Beach assessed the "current state" and recent developments in Schenkerian theory, and notes that "there is evidence of growing interest in Schenker's theories in Great Britain" (ibid. 280). Already five years later, in the 1990 anthology *Schenker Studies*, Jonathan Dunsby could write of a firmly established tradition in Great Britain (Dunsby 1990); it is, in truth, only from the 1980s that Schenkerian theory became an Anglo-American phenomenon, rather than just a North American one.

The limited research on the decades following 1980 means that the following discussion is primarily based on my own research into a corpus of Schenkerian textbooks as well as some articles. I purport that the history runs in two simultaneous, but, strictly speaking, contradictory currents. The first is prompted by the above-mentioned self-awareness and is reflected in an increasingly pronounced "purism," and a return to Schenker as a main source in the textbooks. The second is prompted by the sheer volume of research on Schenkerian analysis and the increase of Schenkerian practitioners that its wide dissemination entailed; it is reflected by an ever-increasing vocabulary and conceptual toolkit, new extensions of Schenkerian theory into other domains of music theory, and, in the end, an amplification of the "Americanizing" tendencies-an outgrowth, as it were, of the "revisionist" pre-1980 development of Schenkerian theory, but, importantly, still within the confines of what is considered "mainstream" Schenkerian theory.174

¹⁷³ Indicating that Schenkerian analysis was not an elementary course, it is further explicated that it is intended for "college students who have had a year of instruction in tonal harmony and counterpoint" (Forte and Gilbert 1982, 1).

¹⁷⁴ Indeed, David Beach's 1985 account of recent Schenkerian research epitomizes the contradictory currents, ending with a critique of the "scientification" of Schenker,

Because this presentation focuses only on more "mainstream" Schenkerian practices, it should be briefly noted here that Salzer arguably gave rise to his own tradition which will not be discussed in detail. To quote from Carl Schachter:

A few important music analysts—among them Edward Laufer, Robert Morgan, and James Baker—still follow in Salzer's tradition by doing Schenkerian analyses of twentieth-century music, including repertory further removed from traditional tonality than any Salzer attempted. Their work is thoughtful and very interesting; it lies, however, outside the mainstream of contemporary analytic practice and remains controversial. (Schachter 2006a, 109–110)

This line of research is certainly worth mentioning as a significant development of particularly Anglo-American Schenkerian practice as opposed to Schenker's own, but as Schachter notes, it remained controversial in 2006—and so it does in 2020.

Edward Laufer (1938-2014) studied Schenkerian analysis privately with Ernst Oster, and also studied composition with Milton Babbitt and Roger Sessions at Princeton (Ford 2007). Though he did not study with Salzer-and though his analyses of the Bach-Brahms repertoire resembles Oster's rather than Salzer's graphing style-Schachter highlights him as one of the notable exponents of "Salzer's tradition" in the above quote. In any case, Laufer is also worth highlighting because of the way in which he influenced American Schenkerian theory: as Nicholas Marston has noted, Laufer was reluctant to publish and thus "restricted his principal influence to those he directly taught" (Marston 2019, 333). Still, Laufer's name remains among those that are more or less always mentioned in listings of important Schenkerians (cf. Forte 2006, 86; Rothstein 2006, 122; Cook 2007, 276). Furthermore, following Laufer's death in 2014, the anthology Explorations in Schenkerian Analysis was published as a "Gedenkschrift for Edward Laufer" (Beach and Mak 2016, xii), and both the 2016 and 2017 issues of the Journal of Schenkerian Studies

and a defense of the view of "music analysis as an art" (Beach 1985, 299). "Mainstream" are those theorists and analysts that confine their studies to the Bach–Brahms repertoire, as discussed below.

were devoted to Laufer *in memoriam*. Laufer exemplifies a very important aspect of the Anglo-American Schenkerian tradition: namely that oral transmission, often through a "family tree" of only a few distinguished scholars who studied with Schenker, Jonas, or Oster, play a significant role—to an even higher degree than in the German family tree of Riemann–Reger–Grabner–Maler–de la Motte (as was discussed in Chapter 1). Certainly, there are aspects of the traditions which the focus on written sources cannot capture.

2.3.2.1 Allen Forte and Stephen Gilbert

"Now that Schenker's ideas have been quite broadly disseminated, especially in the United States, and his concepts have gained wide acceptance, it is not necessary to offer an apologia for them" (Forte and Gilbert 1982, 2). Thus reads one of the first paragraphs in Allen Forte and Stephen Gilbert's *Introduction to Schenkerian Analysis*. If Katz's and Salzer's books were attempts at disseminating the teachings of their master (whether it be Schenker or Weisse), Forte and Gilbert's book is an attempt at creating a pedagogical account of teachings that were already firmly established. And if Katz's and Salzer's works are not seen as valid examples of "Schenkerian" theory today, Forte and Gilbert's book is.

The book is divided into three parts. In the first part, basic concepts such as melodic diminutions (the neighbor note, passing note, arpeggiation), species counterpoint, figured bass, linear intervallic patterns, and harmonic relations—including harmonic functions—are discussed. The second part, "Reductions of small to moderate dimension," introduces Schenkerian fundamentals such as "fundamental structure" and "prolongation," and presents analytical reductions of excerpts of works. The third part, "Reductions of larger dimension," extends the concepts to a larger scale, entire works, and discusses the relation between different form types and structural levels.

Already in the first part covering "basic concepts," the authors introduce a new and influential concept and term to Schenkerian theory, namely the *linear intervallic pattern*, sometimes abbreviated LIP. The term was first coined by Allen Forte in the second edition of his Tonal Harmony in Concept and Practice (Forte 1974 [1962], 340ff.)—the term does not appear in the first edition.¹⁷⁵ Although the concept is clearly extracted from and traceable in Schenker's writings, this is a good example of the process of *conceptualization* that, just as was the case with the "intermediary harmony" and the very idea of "structure," is characteristic of the Anglo-American Schenker reception. By *conceptualization* I simply mean *the making of something into a concept*—into a recognizable "entity" with distinct features and with a name. It is, to refer back to the practice-theoretical background of my project, an example of the *reification* that, according to practice theory, is a fundamental tool in creating meaning within a community of shared practices (Wenger 1998, 57–63).

The authors define a LIP as "a voice-leading design made up of successive recurrent pairs of intervals formed between the descant and bass (outer voices)" (Forte and Gilbert 1982, 83). Such pairs may form two imperfect consonances (10–10), two perfect consonances (8–5), an imperfect and a perfect consonance (6–5), or a dissonance and an imperfect consonance (7–10) (Forte and Gilbert 1982, 83). As an example, they provide the analysis shown in Example 36; level a shows Bach's composition, and level b shows Forte and Gilbert's reduction and analysis. The analysis displays the LIP 10–10 between the staves; notice that the figured bass numerals do not display the LIPs, which occur between the outer voices.¹⁷⁶ The concept is significant for Schenkerian analytical practice because it is used as a means to distinguish between *harmonic progressions* and *non-harmonic successions*.¹⁷⁷

¹⁷⁵ The fact that this term migrated from Forte (1974) to Forte and Gilbert (1982) supports my claim that there is a significant connection between American books on elementary (functional) harmony and Schenkerian practices.

¹⁷⁶ LIPs may also occur between, for instance, an inner and an outer voice, which is often the case above pedal points (Forte and Gilbert 1982, 86–87).

¹⁷⁷ There is an interesting parallel between the idea of LIPs as non-harmonic phenomena, and Fétis' idea that "the mind suspends any idea of tonality" in sequences (Fétis 2008 [1844], 252). In following (and extending) Fétis' concept of tonality, Riemann largely follows Fétis on this point (see Sprick 2018, §11ff.). Importantly, Sprick notes that "the concept of tonality is completely different in this [Schenkerian] context," (ibid., §10), than it is in the Fétisian (and Riemannian?) context: "A Schenkerian understanding of tonality certainly integrates a linear intervallic pattern within



Example 36: Forte and Gilbert's analysis of J. S. Bach's *Die Kunst der Fuge*, Contrapunctus IV, mm. 19–23 (Forte and Gilbert 1982, 84).

A LIP is per definition a non-harmonic phenomenon, according to the authors. One may be tempted to conceive of mm. 19–23 in Example 36 as I–IV–I⁶–V⁴/₃–I, but the excerpt should instead be seen as one long prolongation of I, prolonged by a LIP. One may argue that this specific example is susceptible to both modes of analysis, but the authors do provide examples in which a traditional harmonic analysis would be more unequivocally problematic (in both Roman numeral theories and function theories). Such an example is the excerpt of Beethoven's Sonata for Piano and Cello shown in Example 37.

As their reduction in level b suggests, this passage serves to connect I and V; in a Roman numeral analysis, the passage would amount to a I-ii-iii-IV-V progression with intervening secondary leading-tone diminished seventh chords (and one augmented-sixth chord). Such an overall stepwise succession is the hallmark of linear rather than harmonic forces, goes their argument:

tonality and not as something extratonal" (ibid.). I shall return to discuss ideas of "tonality" in section 4.1.3 (page 261ff.), and "sequence" in section 4.1.3.2 (page 277ff.).



Example 37: Forte and Gilbert's analysis of Beethoven's Cello Sonata No. 1 in F major, Op. 5, No. 1, III, mm. 32–35 (Forte and Gilbert 1982, 86).

It is important to point out that the linear intervallic pattern 6– 6 is not a succession of triads in first inversion. An interpretation of this kind leads to the most mechanical of romannumeral labeling, which designates as "harmonic progression" a succession that is not a progression at all. (Forte and Gilbert 1982, 85)

The concept of LIP is similar to, but not the same as, a sequence. The above Example 36 and Example 37 contain sequences in all voices, while the excerpt in Example 38 breaks the sequence in m. 13_2 even though the 10–7 LIP continues.¹⁷⁸

In the book's second part, the authors introduce the *Ursatz* and the concept of prolongation. Here, prolongation adheres to Weisse/Katz/Salzer's conflation of Schenker's *Prolongation* and *Auskomponierung*: "Prolongation refers to the ways in which a musical component—a note (melodic prolongation) or a chord (harmonic prolongation)—remains in effect without being literally represented at every moment" (Forte and Gilbert 1982, 142).

¹⁷⁸ Notice the Salzerian heritage throughout the Forte and Gilbert-examples, such as the markings N (neighbor), and P (passing); CS, though, means "consonant skip," not "contrapuntal-structural chord," as in Salzer (1952 II:xiv). In addition, their distinction between "harmonic function" and "contrapuntal function" is reminiscent of Salzer.



Example 38: Forte and Gilbert's analysis of J. S. Bach's Sinfonia No. 15 in B minor, mm. 11–14 (Forte and Gilbert 1982, 36).

Apart from the introduction of the LIP to Schenkerian analysis, Forte and Gilbert's feat consists in formalizing Schenkerian analytical procedures and exemplifying them with a plethora of analytical examples (well over 300 of them). The book meticulously accounts for different voice-leading phenomena such as unfolding, coupling, transfer of register, voice exchanges, and so on. This is not unlike the structure of Schenker's *Der freie Satz*, but where Schenker's work has an almost encyclopedic character with only rough analyses of (often) deep levels—with little or no explanation of the analytical procedures that led to the uncovering of these levels—Forte and Gilbert's book is much more pedagogical in explaining how one gets from actual composition to middleground to background in the analytical act. A fundamental difference between Schenker's generative approach (proceeding from *Ursatz* to foreground) and Forte and Gilbert's analysiscentered approach (proceeding from the smallest melodic foreground diminutions to entire works) can be observed here.

References to paragraphs in *Free Composition* occur throughout the book, and the references function mostly as substantiation to support claims, or they indicate places where readers may find more on the relevant topic. In contrast to some later textbooks, the cited passages in *Free Composition* are rarely commented on or explained in depth. It shows *Free Composition*'s character as an important reference work in the, by then, established Schenkerian tradition, but it also shows that engagement with Schenker's actual writings were not the primary purpose of Forte and Gilbert's textbook.

According to David Carson Berry, "after Allen Forte's and Stephen Gilbert's *Introduction to Schenkerian Analysis* was published in 1982, it effectively had the textbook market to itself for a decade (a much older book by Felix Salzer [1952] and a new translation of one by Oswald Jonas [1982] not withstanding [sic])" (Berry 2012, 159). Though Forte and Gilbert's impact was therefore considerable, noteworthy developments in Schenkerian thought proceeded already the year following the publication of their *Introduction*.

2.3.2.2 Fred Lerdahl, Ray Jackendoff, and William Rothstein: Rhythm, Meter, and Hierarchy

This noteworthy development is found in Fred Lerdahl and Ray Jackendoff's *A Generative Theory of Tonal Music* (Lerdahl and Jackendoff 1983), henceforth *GTTM*. The significance consists in the fact that Schenkerian principles here extended beyond their previous domain and into the area of generative linguistics and cognitive music theory. This process began at least as early as 1977, when Lerdahl and Jackendoff published the preliminaries of what would evolve into their seminal book *GTTM*. In this article, they pinpoint their Schenkerian heritage while also emphasizing that their own theory differs in terms of scientific rigor:

Our way of thinking about music is patterned after the methodology of linguistics in that we demand strong motivation, formal rigor, and predictive power for every part of the theory.... Previous theories of tonal music have not met such demands of rigor and prediction. Even Schenker's theory, which can be construed as having much in common with the generative approach to linguistics, is at bottom inexplicit. (Lerdahl and Jackendoff 1977, 112)

Throughout the article, they note the similarities between their own deep reductions and Schenkerian background structures, and they even adapt the term prolongation as "the closest equivalent in our theory to Schenkerian analysis" (Lerdahl and Jackendoff 1977, 115).

Despite some Schenkerian leanings, Lerdahl and Jackendoff developed a theory in its own right, and I will thus not provide a thorough account of it here.¹⁷⁹ It will suffice to emphasize two aspects of *GTTM*. First, its mixture of Schenkerian principles with completely "foreign" theories, primarily generative linguistics, represents the same "spill-over" phenomenon that I have identified in American function theories: Schenkerian principles, once established as a strong tradition, extended far beyond the domain of strictly "Schenkerian" theory and affected very basic presumptions and presuppositions about tonal music, profoundly influencing music-theoretical thought in the large-scale picture. Second, *GTTM* was not only hugely influential for later branches of cognitive music theory,¹⁸⁰ it also provided a feedback in the further development of Schenkerian thought, especially with regard to rhythm and meter.

William Rothstein's formative *Phrase Rhythm in Tonal Music* (1989) was one of the studies that further contributed to theories of

¹⁷⁹ There are notable differences between Schenkerian theory and *GTTM* as well. The latter theorizes about the (expert) listener, while it is more debatable what Schenker's theory is a theory of (cf. Cook 1989a; Brown 1998).

¹⁸⁰ Niels Christian Hansen has accounted for this in his article "The Legacy of Lerdahl and Jackendoff's *A Generative Theory of Tonal Music*: Bridging a significant event in the history of music theory and recent developments in cognitive music research" (Hansen 2010–11). The article provides documentation of the extent to which Schenkerian principles inform fundamental presumptions in Lerdahl and Jackendoff's theory: in regard to *GTTM*'s "Reduction Hypothesis," Hansen points out that "although shared by aspects of Schenkerian theory, the validity of this tenet is not obvious," because "numerous theories of music cognition are based on consecutive violation and confirmation of expectancy," such as in the theories of Leonard B. Meyer, Eugene Narmour, and David Huron (Hansen 2010–11, 38).

rhythm and meter.¹⁸¹ The book was based on his PhD dissertation (1981) which was, in turn, mostly based on Schenker's own writings—although there were also clear impulses from more recent works on rhythm and meter, such as Lerdahl and Jackendoff (1977), and, according to the author himself,¹⁸² especially Victor Zuckerkandl (1896–1965), who distinghuished between phrase and meter in his book *The Sense of Music* (Zuckerkandl 1959, 132).¹⁸³ Rothstein's *Phrase Rhythm* profoundly influenced the treatment of phrase and meter in Schenkerian practice, and its recent inclusion in the *Lexicon Schriften Über Musik* (Heilgendorff 2017) testifies to its influence. It is traceable, for instance, in David Beach's *Advanced Schenkerian Analysis* (2012), whose subtitle includes Rothstein's term "phrase rhythm" (the book is discussed below in section 2.3.2.4, page 176ff.). More significant, perhaps, is the fact that numerous later texts explicitly or implicitly base their definition of "phrase" on Rothstein's.

In all conciseness, Rothstein's definition of phrase relies on tonal motion: "*If there is no tonal motion, there is no phrase*," as he emphasizes (Rothstein 1989, 5). "Tonal motion" is here understood in a fundamentally Schenkerian sense: a motion from the tonic *Stufe* to the dominant *Stufe*—and, potentially, back to the tonic *Stufe* again—is an example of tonal motion. The four-measure segments of Johann Strauss II's famous tune *An die schönen blauen Donau*, which are obvious to any listener, are not "phrases," but subphrases. The first sixteen measures are "ultimately static, ending where they began, with only minimal motion along the way" (Rothstein 1989, 9). Only the full 33 measures comprise a "phrase," as indicated by Rothstein's

¹⁸¹ In "The Current State of Schenkerian Research," David beach also construed *GTTM* as a ramification of the Schenkerian tradition, and proceeded to account for Rothstein's treatment of rhythm (Beach 1985, 294). I perceive significant conceptual connections between, on the one hand, Lerdahl and Jackendoff's distinction between grouping structure and metrical structure as well as their distinction between metrical accent and structural accent (1983, 14–35), and, on the other hand, Rothstein's distinction between phrase, subphrase, meter, and hypermeter (1989, 1–15).

¹⁸² Private correspondence with the author, March 2020.

¹⁸³ Other recent works on the topic were Edward T. Cone (1968), Peter Westergaard (1975), Maury Yeston (1976), and Carl Schachter (1976).

Schenkerian analysis shown in Example 39.¹⁸⁴ The "tonal motion" is summarized by Rothstein's Roman numerals: two shallower I–V–I-motions are encompassed in one deep I–II–V–I-motion.



Example 39: William Rothstein's analysis of Waltz No. 1 from Johann Strauss II's An der schönen blauen Donau, mm. 1–33.

As was the case with *GTTM*, this section will not provide an account of *Phrase Rhythm in Tonal Music*—for reasons of space, and because it is not a textbook on Schenkerian theory and analysis as such. When *GTTM* and Rothstein's *Phrase Rhythm* are emphasized nonetheless, it is both for the reasons rehearsed above, *and* because their views on phrase, meter, and hypermeter greatly inform the way I approach a mediation of Schenkerian and function-analytical procedures in Part III of this presentation. It is particularly Rothstein's contention that harmony is an integral part of the definitions of phrase and meter which informs Part III. This is further discussed in section 6.2.3 (page 373ff.).

2.3.2.3 Allen Cadwallader and David Gagné

Allen Cadwallader and David Gagné published the first edition of their Analysis of Tonal Music: A Schenkerian Approach in 1998.¹⁸⁵

¹⁸⁴ Rothstein's analysis largely aligns with Schenker's, as shown earlier in Example 33, page 127 (Schenker 1979, fig. 43, for a).

¹⁸⁵ This presentation will not account thoroughly for David Neumeyer and Susan Tepping's *A Guide to Schenkerian Analysis* (Neumeyer and Tepping 1992). Compared to the impact of Forte and Gilbert (1982) as well as Cadwallader and Gagné (1998) and Beach (2012), the book was relatively unsuccessful—the main reason perhaps being that it was "mangled ... by a lack of copy-editing attention from the pub-

To this day, the textbook is frequently used: in 2012, David Carson Berry called it "the dominant text" (in its third edition from 2011) (Berry 2012, 159), and a fourth edition, co-authored with Frank Samarotto, came as late as 2019. The following discussion centers on the first edition (Cadwallader and Gagné 1998) and discusses changes made to the third edition of 2011 (Cadwallader and Gagné 2011 [1998]).¹⁸⁶

In addition to Forte and Gilbert's concept of "linear intervallic pattern," Cadwallader and Gagné integrate two concepts into their textbook which are distinctly American in origin: "intermediate harmony" and "imaginary continuo" (the latter only appears in the third edition; the two concepts and their origins are discussed further below). Although one could construe the very introduction of these concepts as signs of further "Americanization" of Schenkerian theory, at the same time, Cadwallader and Gagné's book often points to paragraphs in Free Composition where the reader may find more about the current subject. In the preface to the first edition, Cadwallader and Gagné even describes their book as "an introduction to Schenker's work" (Cadwallader and Gagné 1998, v). Free Composition, they write, is of great importance, but "presents many difficulties in style and content for the beginning student" (ibid., vi). Therefore, the authors do not proceed from background to foreground, as does Schenker; instead they proceed from foreground details to deep background structure. In this, they follow Forte and Gilbert and, according to the following quote, "tradition":

Schenkerian analysis has traditionally been taught through a 'hands-on' approach: learning by doing many analyses We follow this approach and begin with a series of chapters devoted to basic principles, which set the stage for the analyses of phrases, phrases in combination, and finally complete movements. The well-known precepts of Schenkerian theory are therefore developed and explained through the analysis of spe-

lisher," as co-author Neumeyer himself wrote in a later text (Neumeyer and Hook 1998, 208).

¹⁸⁶ I have thus not consulted the fourth edition which was published late in the process of producing the current presentation.

cific pieces, an approach that parallels the evolution of Schenker's work.¹⁸⁷ (Cadwallader and Gagné 1998, vi)

One may observe that the book aspires to be more "true" to Schenker, while at the same time molding the approach to his theory for the sake of pedagogy and (American) tradition. One review interpreted this dual effort as a paradox. This review, and the debate in the Schenkerian milieu that it sparked, will be discussed further below.

First, a look at the two new concepts which, as mentioned, are American in origin: "intermediate harmony" and "imaginary continuo." The former of these has been mentioned several times now in this presentation: I first mentioned it in the discussion of Marion Guck's version of function theory in section 1.4.2 (page 97ff.); I then further traced its origin in the discussion of *Structural Hearing* in section 2.3.1.1 (see especially page 141ff.), and noticed its recurrence in Edward Aldwell and Carl Schachter's *Harmony and Voice Leading* (1978; 1979) in section 2.3.1.2 (see especially page 151ff.). With Cadwallader and Gagné's *Analysis of Tonal Music*, the concept's entrance into *Schenkerian*—rather than Salzerian or elementary harmonic—theory was cemented. In connection with an analytical example (which need not engage us here), they introduce and define the "intermediate harmony" thus:

The IV chord on the next downbeat [of the analytical example] functions as part of the authentic cadence (IV–V–I) that ends the phrase. Like the IV chord in bar 7 [of the analytical example], this subdominant chord connects the initial tonic prolongation with the dominant. Chords that connect the initial tonic (prolonged or otherwise) with the structural dominant are called *intermediate* (or *pre-dominant*) *harmonies*. Among the many chords that can function in this manner are II, IV, VI, and III (the II and IV chords often appear also in inversion). (Cadwallader and Gagné 1998, 51)

This definition is highly relevant for the comparison of theories in Part II of this dissertation: notice that the authors use the terms "subdominant," "predominant," and "intermediate harmony" in the course of two sentences. Though one could easily misread the three

¹⁸⁷ Though it is never explicated, it is safe to assume that the authors rely on William Rothstein's (1989) definition of "phrase."

terms as synonyms, clearly, "subdominant" is *not* designating a function here, but rather the chord on the "subdominant" scale-degree, IV—it is a descriptive, positional term, like "supertonic" for II. A range of chords, such as the subdominant, may *function as* a "predominant" or "intermediate harmony"—these two latter terms are construed as synonyms in their text.¹⁸⁸

In the book's third edition, the concept of intermediate harmony was further "conceptualized." The authors now write of "classes" of harmonies: tonic class (T), Intermediate class (Int) and dominant class (D). The labels "T," "Int," and "D" are now added as a new analytical layer in some examples. Compare, for instance, the analyses of J. S. Bach's chorale "Wach' auf, mein Herz" mm. 1–4 in Example 40 and Example 41. Because it is only the deepest reduction that differs (level d), Example 41 displays only this level.¹⁸⁹

The difference is subtle, but the analytical "utterance" of the two analyses are quite different. The 2011-version in Example 41 better displays the deepest level, whereas the student might be tempted to view the five *Stufen* in Example 40d as residing on the same level (despite the prolongational line that connects I and I⁶).

Construing the intermediate harmony as a "class" of several harmonies also makes it clearer that, for instance, III and II⁶/₅ in succession may belong to one prolonged class. Compare Example 42 from the first edition with Example 43 from the third edition (I provide only the background bass structure here). It seems that the idea of classes arose from pedagogical considerations:

A practical way of evaluating harmonic structure is through a general framework that will help you determine how individual chords function—through contrapuntal means—within broader *classes* of harmonies. The framework we use throughout this book is symbolized "T–Int–D–T" (Cadwallader and Gagné 2011 [1998], 42)

¹⁸⁸ White and Quinn notice that "the Schenkerian concept of intermediate harmony includes a wider range of chords than we traditionally assign to the subdominant and predominant categories" (2018, 315).

¹⁸⁹ One may also observe that "avoided cadence" has been renamed "evaded cadence," perhaps as a result of the intermediate success of Caplin (1998).



Example 40: Cadwallader and Gagné's (1998, 52) analysis of J. S. Bach's chorale "Wach' auf, mein Herz," mm. 1–4.



Example 41: Level d of Cadwallader and Gagné's (2011, 50) revised analysis of J. S. Bach's chorale "Wach' auf, mein Herz," mm. 1–4.



Example 42: Cadwallader and Gagné's (1998, 61) analysis of the structural bass in J. S. Bach's chorale "Ihr Gestirn, ihr hohen Lüfte."



Example 43: Cadwallader and Gagné's (2011, 60) analysis of the structural bass in J. S. Bach's chorale "Ihr Gestirn, ihr hohen Lüfte."

Once again, one may notice the word "function"—a verb and not a noun in this context—and its juxtaposition with the terms "chords," and "classes" of "harmonies." Section 4.1.1 (page 246ff.) compares this and other conceptions of "function."

The other distinctively American concept that Cadwallader and Gagné integrates in the third edition of their book-allegedly again for pedagogical reasons-is "imaginary continuo" (Cadwallader and Gagné 2011 [1998], 66ff.). As the authors point out themselves, this term was introduced to Schenkerian theory by William Rothstein, in his article "Rhythmic Displacement and Rhythmic Normalization," collected in the 1990 anthology Trends in Schenkerian Research (Rothstein 1990b).¹⁹⁰ The concept is pivotal again in the influential article "On Implied Tones" (Rothstein 1991). In the former article (1990b), Rothstein is-in comparison to many of his American peers-remarkably careful in emphasizing exactly which ideas originate in Schenker's writings, and which ideas are his own (ibid., 87). Though clearly extracted from basic analytical procedures in Schenker's and Schenkerian practice, the "imaginary continuo" is his own. It designates a kind of harmonic-rhythmic reduction that normalizes rhythmic displacements such as syncopes, appoggiaturas, and suspensions, to clarify the underlying harmonic-rhythmic framework. Cadwallader and Gagné show the pedagogical potentials of this analytical procedure throughout the book; for reasons of space, examples will not be provided here, but it deserves mention as an American addition to Schenkerian analytical practice.

As mentioned earlier, a debate arose in the aftermath of Cadwallader and Gagné's textbook. In a review co-authored with Julian Hook, David Neumeyer—it is explicated that only Neumeyer, and not Hook, wrote these parts of the review—argues that American Schenkerian pedagogy is caught in what he calls the "Rothstein paradox" (Neumeyer and Hook 1997).¹⁹¹ He argues for the paradox as follows: In comparison with John Rothgeb's (1981) proposal that

¹⁹⁰ The article is based on Chapter 5 of Rothstein's PhD dissertation (1981).

¹⁹¹ Probably provided with a review copy, Neumeyer and Hook's published their review in 1997, even though *Analysis of Tonal Music* only appeared in 1998.

pedagogical instruction in Schenkerian theory followed only after two full years of instruction in strict counterpoint, figured bass, and elementary harmoy—a proposal in correspondence with Schenker's own ideas—Neumeyer accuses, among others, Forte (1962) and Aldwell and Schachter (1978; 1979) of showing "the weakening of Schenkerian resolve that Rothstein describes so well" (Neumeyer and Hook 1997, 206); Neumeyer then quotes the following passage from "The Americanization of Heinrich Schenker," in which Rothstein—rather sarcastically—characterizes how America molded Schenker in its picture:

Once an arcane and difficult thinker, quite beyond the reach even of most university professors of music, [Schenker by 1985] had become a "flavor," a whiff of which would help to sell textbooks to undergraduates. Of course, I didn't really need this little epiphany to see what was going on with Schenkerism in America. It is one of the glories of American culture that it so readily absorbs foreign influences.... But those foreign elements that it adopts, it adapts in the process, often changing them in essential ways.¹⁹² (Rothstein 1990c, 194; quoted after Neumeyer and Hook 1997, 206)

Neumeyer's suggestion is that elementary harmony textbooks such as Forte (1962) and Aldwell and Schachter (1978; 1979) succumb to this tendency. On the other hand, argues Neumeyer, Forte and Gilbert's design of their *Introduction to Schenkerian Analysis* (1982), in which they begin from the foreground rather than with the background (as would Schenker), seems to "predict Rothstein's prescription for an adequeate compromise between the traditions of the American college music curriculum and the principles of a properly Schenkerian pedagogy" (Neumeyer and Hook 1997, 206). Another extended Rothstein-quote follows, and Neumeyer's contention is, that it stands in a contradictory relationship with the former quote:

...the potential for winning many more skeptical musicians would appear to be almost unlimited, if only we go about it in the right way. The right way, in my opinoin, is never to force more of Schenker's approach onto anyone than can be truly ab-

¹⁹² At the end of the penultimate sentence, Neumeyer omits Rothstein's not unimportant addition: "—at least, some foreign influences" (Rothstein 1990c, 194).

sorbed and truly heard. If this means that most students and non-theorists generally are taught only how to interpret the foreground, well and good.... Backgrounds and even middlegrounds are not for everybody. (Rothstein 1990c, 201; quoted after Neumeyer and Hook 1997, 206)

In a final quote, Neumeyer notes that even though Forte and Gilbert seem to "predict Rothstein's prescription," Rothstein asserts that "Forte and Gilbert have surrendered completely to the academic status quo in suggesting that, after only one year of basic harmony and counterpoint, analysis itself can be taught in just one year" (Rothstein 1990c, 203; quoted after Neumeyer and Hook 1997, 207).

The "Rothstein paradox," according to Neumeyer, is a "fundamental contradiction between fixed ideological principles and the compromises needed for more general acceptance" (ibid., 218) that any Schenkerian textbook—and thus also the one under review by Cadwallader and Gagné—must inevitably find itself caught in. Even though Cadwallader and Gagné "have produced a perfectly usable volume," trapped in the paradox "no textbook can be successful" (ibid.). Neumeyer proceeds to suggest that the only solution is to "either abandon the *Ursatz* or abandon the notion that Schenker's method constitutes a theory" (ibid., 219).¹⁹³

Matthew Brown later responded to Neumeyer's review in a lengthy article that argues that the *Ursatz* is an "empirically testable theory of functional monotonality" (Brown 1998, 118). In other words, one must dispose of neither the *Ursatz*, nor the notion of Schenker's work as constituting a theory. William Rothstein himself reacted to the matter in a 2002 talk at the Mannes College of Music in New York, published in the Dutch journal *Tijdschrift voor Muziektheorie*:

¹⁹³ In my own opinion, Neumeyer's critique does not function on Schenkerian premises; I agree with Matthew Brown that "the first drawback with Neumeyer's argument is that it seems to treat *Ursätze* as directly audible phenomena rather than abstract prototypes" (Brown 1998, 125). That Neumeyer's view on the *Ursatz* is different from that of mainstream Schenkerism is also seen in his articles suggesting that *Urlinien* from $\hat{8}$ are middleground phenomena, and that rising *Urlinien*, $\hat{5}-\hat{6}-\hat{7}-\hat{8}$, are possible as well (Neumeyer 1987; 1988).

I repeat, and will continue to repeat, what David Neumeyer has dubbed 'Rothstein's paradox': Full-strength Schenkerian analysis, with its complete panoply of levels and, even more important, its peculiar combination of the intellectual and the intuitive, is for the few and not for the many. The rare school that, like Mannes, requires Schenkerian training of all its students, has no alternative but to take Chesterton's advice to heart: If a thing is worth doing, it is worth doing badly.¹⁹⁴ (Rothstein 2002, 240)

In my brief discussion of Milton Babbitt above, I mentioned this article of Rothstein's, "Conservatory Schenker vs. University Schenker" (see page 148). Rothstein identifies two cultures of Schenkerian study in America, both of which spring from Schenker: "Conservatory Schenker" designates a musically intuitive and less rigorous way of approaching Schenkerian analysis, while "University Schenker" designates the rigorous approach promulgated by, for instance, Milton Babbitt.

Whatever one's own position in this debate is, the debate itself goes to show that around the millennial turn, Schenkerian pedagogy and practice was something of a hot potato. The two contradictory currents that characterize post-1980 American Schenkerian theory are clear in this debate, as well as in Cadwallader and Gagné's very book. And the simultaneous efforts toward making Schenkerian analysis pedagogically feasible and theoretically plausible, while also striving toward a better understanding of Schenker with warts and all would, so I will argue, continue into the new millenium.

2.3.2.4 David Beach

Following Cadwallader and Gagné's successful textbook, two markedly simplified introductions to Schenkerian analysis were published: Steven Porter published the textbook *Schenker Made Simple* in 2002 (Porter 2002) and Tom Pankhurst published *SchenkerGUIDE* in 2008 (Pankhurst 2008). Of these two, only the latter, which was published by Routledge, seems to have been somewhat influential, perhaps owing to its companion website and its integration of the new

¹⁹⁴ Rothstein here refers to a saying by the English author Gilbert Keith Chesterton (1874–1936).

pedagogical possibilities that digital tools offered. Simplified as they are, the books introduce no new aspects to Schenkerian theory, which is why they will only be mentioned in passing here. However, they do manifest the tendency which was discussed above, namely the tendency of prioritizing pedagogical aspects.

With respect to this tendency, the title of David Beach's Advanced Schenkerian Analysis (2012) points in another direction. In the preface, Beach states:

It is not an introductory text; there are already good options available for use. It is aimed at those with some background in this approach to understanding tonal structure, possibly an advanced undergraduate course or more likely a graduate-level class. (Beach 2012, xv)

Beach points to Cadwallader and Gagné (2011 [1998])¹⁹⁵ and Forte and Gilbert (1982) and adds "see also Tom Pankhurst, *Schenker-GUIDE* (Routledge, 2008)" (Beach 2012, 300).

Beach begins with an account of what he calls "three basic premises of Schenker's approach to musical structure" (ibid., xv). The three principles are:

1) melodic motion by step at levels beyond the musical surface; 2) the proper treatment of dissonance, specifically the resolution of the dissonant seventh; and 3) the distinction between chord and harmonic scale-step (*Stufe*). (Beach 2012, xv)

One may observe that the three principles and their ordering are closer to—if not completely the same as—John Rothgeb's abovementioned (cf. page 173ff.) vision of a Schenker pedagogy (Rothgeb 1981).

The book's subtitle is *Perspectives on Phrase Rhythm*, *Motive*, *and Form*. These three subjects are in focus for the rest of the book, and they are exemplefied by thorough analyses—in fact, the book revolves around these analyses, and there are few if any theoretical discussions that are not supported by often lengthy analyses.

¹⁹⁵ In fact, Beach refers to the publishing year as 2010, but I presume he intends to refer to the third edition published in 2011.

It is interesting that the three subjects in focus are phrase rhythm, motive, and form, because all three represent areas in which American Schenkerian theory has developed Schenker's ideas. At the same time, Beach argues that because these aspects are important parts of Schenker's theory, the fact that they have "generally been ignored in texts on Schenkerian analysis," has resulted in "an incomplete picture of his approach to music" (Beach 2012, xvi). The concept of phrase rhythm stems from William Rothstein's *Phrase Rhythm in Tonal Music* (1989) and concerns "the interaction of hypermeter and phrase structure" (Beach 2012, xvi). The topic of form is famously discussed in the last chapter of *Free Composition*. Motivic parallelism is a feature of Schenker's theory that is found sporadically in his writings, but only thoroughly treated in Charles Burkhart's article "Schenker's 'Motivic Parallelisms'" (1978), and subsequently in a plethora of articles by different authors.¹⁹⁶

In the decade 1978–1988, then, questions of motive's place in Schenkerian analysis were at the center of research. In 1992, Richard Cohn even suggested that the analysis of motives had become "autonomous" in Schenkerian practice, that is, motives guided analytical decisions. In an interesting argument that aligns with the overall practice-theoretical framework of the present work, he wrote that "the standard Schenkerian account of the relationship between motive and 'structure' is insufficient to account for the complex analytical practice of most Schenkerians" (Cohn 1992, 151). In theory, the *Ursatz* is the source of all motivic unity, but in analytical practice, the motive itself had become a source of unity. What is more, Cohn pointed to the fact that even "Schenker's analytic practice is not always based on his theories about what constitutes acceptable analytic practice" (ibid., 162).

¹⁹⁶ Some notable ones are Rothgeb (1983) and Kamien (1983). Allen Cadwallader's PhD dissertation (1982) focused on "multileveled motivic repetition" (a certain kind of motivic parallelism on multiple structural levels), and it was at the center of a series of subsequent articles (Cadwallader 1983; 1984; 1988a; 1988b). Though it has a somewhat different purpose, Carl Schachter's "Motive and Text in Four Schubert Songs" (1983) is also worth noticing as an excellent example of the analytical potential in integrating considerations of motive (and text) in a Schenkerian framework. See also Kirkegaard-Larsen (2017b).
What actually comes into sight in this article is the "Conservatory Schenker vs. University Schenker," which I discussed above, and which Rothstein wrote about in 2002. Both emanate from Schenker, as Rothstein wrote, and both impulses can be found in Schenkerian theory. In the end, whether one regards it as an unacceptable breach with Schenkerian core principles when motives achieve autonomy in analytical practice, or whether one regards it as an approach that might be a feasible way to achieve the best, most insightful, and musically most intuitive reading of a particular piece—it all depends on one's general attitude toward the opposing currents of post-1980s Schenkerian theory.

The autonomy of motives is somewhat traceable in Beach's book. Beach argues that there are intra- as well as inter-movement connections in Mozart's Piano Sonata in B^b major, K. 333. He identifies a descending arpeggiation of the tonic triad (F–D–B^b) as a motive in the first and third movements. Space does not allow for a full account of these analyses, but it should be noted that the proposed motive affects his reading of the development section of the first movement. This analysis is shown in Example 44 (note that measure number 97 is a mistake; it should read 87).



Example 44: Beach's (2012, 29) bass-line reduction of Mozart's Piano Sonata in B^b major, K. 333, I, mm. 64–94.

Beach claims that the overall bass-line (i.e. sequence of *Stufen*) in the development section of the first movement is also structured on the basis of the F–D–B^b motive. It is very clear that this is justified by the notion of motivic unity, rather than by traditional *Ursatz*-derived unity—in Cohn's (1992) words, motive becomes "autonomous" in Beach's analysis. It would be very much in line with traditional Schenkerian analyses of sonata form movements to take the F major that governs mm. 87–94 as a structural dominant, connected to the

one in m. 64. Beach has instead gone for the less generalized and more work-specific analysis which proposes that the tonal organization of the development section is an enlargement of the opening motive. This analysis also allows for the III[#] *Stufe* to achieve a more prominent structural position (alternatively, it would have to be subordinate to the prolonged V, perhaps an upper neighbor to the $4/_3$ -chord of m. 87 [97 in Beach's graph]). That this is not the case in Beach's analysis is a sign that the rigor that might be expected from textbooks could, by 2012, be supplemented by a more "Conservatory Schenker"-like prioritization of interesting and suggestive readings.

Generally, Beach's book can also be read as the first textbook attempt at bringing Schenkerian theory into a closer dialogue with non-Schenkerian approaches to form and foreground considerations of motive. Following an introduction to the Schenkerian conception of "motive," he writes:

I want to make it clear that this [Schenkerian] conception [of motive] does not deny the importance of our understanding of surface motivic manipulation any more than his [Schenker's] ideas on structure and form deny the value of traditional formal analysis. They just deal with different aspects of musical organization. (Beach 2012, 236)

Whether there is also a value in traditional *harmonic* analysis, which may also be said to deal with a different aspect of musical organization, is a question not addressed in Beach's book—but in its absence, one is reminded of Beach's (1987) fervent critique of Charles J. Smith's (1986) revival of function theory that was discussed briefly in section 1.4.2 (page 97ff.)

Interestingly, the second edition of the textbook, which was published in 2019, is no longer entitled *Advanced Schenkerian Analysis*, but simply *Schenkerian Analysis*. The reason is, as David Beach explains in the preface, that

it was at the insistence of the original readers of my manuscript that the title include the word 'advanced.' I have never been comfortable with this description, in part because of its connotation, but also because it is not entirely accurate. (Beach 2019, xvi) The book is now explicitly directed at both beginners and advanced students. Changes are especially clear in the more pedagogical introductory chapters. What is more, the alleged connection between the first and third movements of Mozart's K. 333 is now removed (for reasons unexplained). In any case, if *Advanced Schenkerian Analysis* (2012) pointed in another direction than the increasingly simplified textbooks of Porter (2002) and Pankhurst (2008), this is still the case in *Schenkerian Analysis* (Beach 2019)—though, less obviously so.

2.3.2.5 Two recent textbooks: David Damschroder and Eric Wen

At the time of writing this presentation, it is remarkable that any challenge that Schenkerian theory's hegemonic status might have experienced from transformational theory, neo-Riemannian theory, schema theory, or other recent and successful theories, it has not resulted in a traceable decline in the Schenkerian book and textbook market. 2016 saw the publication of *The Art of Tonal Analysis*, a collection of some of Carl Schachter's last lectures at the Graduate Center, CUNY (Schachter 2016), and 2017 saw the publication of *Structurally Sound*, a collection of Schenkerian analyses by Eric Wen of these are conceived as *textbooks*, and as Joseph Kraus writes of the former, "neither should it be" (Kraus 2017, 211). One review of Wen's book does suggest that it "could serve effectively as a supplemental reading for introductory and intermediate studies in Schenkerian analysis" (Baker 2018, §1).

But no less than two actual textbooks appeared in the course of 2018 and 2019—in addition to the second edition of David Beach's textbook discussed above, from 2019, and the fourth edition of Cadwallader and Gagné's *Analysis of Tonal Music*, co-authored with Frank Samarotto and published in 2019. The two new textbooks are David Damschroder's *Tonal Analysis: A Schenkerian Perspective* (2018) and Eric Wen's *Graphic Music Analysis* (2019)—which, in contrast to *Structurally Sound* (2017) *is* conceived of as a textbook. This subsection discusses these two textbooks and analyzes how they fit into the trajectory of the history of Schenkerian practice.

Following a long series of monographs that first dived into historical theories of harmonies (Damschroder 2008), and then studied the harmony of Schubert (2010), Haydn and Mozart (2012), Chopin (2015), Beethoven (2016), and finally Mendelssohn and Schumann (2017) from a markedly Schenkerian perspective—though one that had been somewhat tainted by the historical perspective of his 2008 historical study—David Damschroder finished his publishing spree with a textbook on Schenkerian analysis (2018). If his composer monographs showed clear Schenkerian tendencies in its approach to harmony, on the other hand, his Schenkerian textbook shows clear impulses from the Damschroderian approach to harmony that he developed through the 2008–2017 monographs.

Nowhere are the simultaneous presence of the opposite currents-which I have now mentioned several times-more clear than in Damschroder's Tonal Analysis. On the one hand, the version of Schenkerian theory that he outlines is one that is (as just mentioned) deeply influenced by his own, unique approach to harmony. On the other hand, it is a distinctive feature of the book that every chapter is concluded with a section entitled "Reading Schenker's Graphs," in which the procedures discussed in the relevant chapter are traced in Schenker's own graphs from Free Composition. As the backside blurb says, Damschroder's is the "only text inviting students to engage with Schenker's analyses." Though this might be a stretch, it is certainly true that the previous textbooks do not guide the reader to an understanding of Schenker's analyses to the degree that Damschroder's does (Forte and Gilbert as well as Cadwallader and Gagné, in comparison, have many references to Free Composition, but they remain mostly references).

Despite the turn toward Schenker's own analysis, the most notable features of the book are the ones that are decidedly Damschroder's. Damschroder's Schenkerian theory is a rather rigid theory and in the analyses he presents, everything seems to fall within just a few paradigmatic "models" that Damschroder proposes. Perhaps the most significant of these models is the 5–6 shift which forms the foundation of an astounding number of Damschroder's analyses and theoretical considerations.¹⁹⁷ While the 5–6 shift is a familiar concept in Schenkerian theory, in *Tonal Analysis* it seems to be ever-present. Example 45 and Example 46 show the idea in its simplest form: the motion from an apparent D major to B minor (through a passing chord) is really a contrapuntal extension of I. The I^{5–6} allows for a progression to II⁶/₅ without any parallel fifths (between D–A in I and G–D in II⁶/₅), and is thus a voice-leading extension of the tonic. Damschroder launches the terms "5-phase chord" for the D–F[#]–A sonority and "6-phase chord" for the D–F[#]–B sonority. To explain that the latter sonority appears in root position as B–D–F[#] (rather than as a literal 5–6 exchange over a stationary D), Damschroder coins the term "unfurling."¹⁹⁸



Example 45: Christoph Willibald Gluck's *Iphigénie en Tauride*, act 1, scene 4, chorus, "Il nous fallait du sang," mm. 1–4 (from Damschroder 2018, 22).



Example 46: Damschroder's (2018, 25) analysis of Gluck's *Iphigénie en Tauride*, act 1, scene 4, chorus, "Il nous fallait du sang," mm. 1–4.

¹⁹⁷ For another example, the reader may also look ahead to Example 97 (page 314) to see Damschroder's Model 2 of "three-part form in movements with *Kopfton* $\hat{3}$ and a dominant-cadencing A₁."

¹⁹⁸ Schenker's own term for this phenomenon is "Auswerfen eines Grundtones" (Schenker 1956 [1935], 140), usually translated as "addition of a root" or "casting out a root."

A slightly more advanced example is shown in his analysis of Robert Schumann's "Hör' ich das Liedchen Klingen" (see Example 47 and Example 48). The logic behind Damschroder's Schumann analysis is the same as in the Gluck analysis, but the Schumann analysis none-theless shows the extent to which the foundational idea of 5–6 shifts controls Damschroder's readings, even at an elementary level. The analysis in Example 48 is by no means "incorrect," but when Damschroder returns to the piece in a student exercise later in the book, he suggests that the I^{5–6} of mm. 5–6 (the same as the below mm. 1–2) is projected in a large-scale progression in mm. 8–18 (Damschroder 2018, 184).



Example 47: Robert Schumann's "Hör' ich das Liedchen klingen" from *Dichterliebe*, Op. 48, No. 10, mm. 1–4 (from Damschroder 2018, 27).



Example 48: Damschroder's (2018, 248) analysis of Robert Schumann's "Hör' ich das Liedchen klingen" from *Dichterliebe*, Op. 48, No. 10, mm. 1–4

Although I have thus far sought to account for the historical development of Schenkerian practice and refrained from questioning analyses on the basis of my own readings—such comments belong to later parts of this dissertation—I will make an exception in this case.¹⁹⁹ The point is first and foremost to illustrate the extent to which Damschroder's 5–6 paradigm influences his analyses. Example 49 (see the following pages) provides the complete score and thus gives some context for the following discussion.

Damschroder's is a plausible reading, but it can be contested because it greatly downplays the role of the C minor of m. 9. This chord falls on a hypermetrical downbeat; it is tonicized in mm. 9-12; and it even-following this alternate reading-continues to exert influence as the governing Stufe, and as the structural predominant, until the arrival of the structural dominant in m. 192. Such a reading would interpret the E^{\flat} of m. 18 as an upper-third manifestation of the prolonged C minor, not as a 6-phase chord in a I⁵⁻⁶. Furthermore, taking the E^b-chord as connected to the subdominant/predominant better supports a reading in which one characteristic feature of this song is taken into account: throughout the song (notably in m. 5-6 and 17-18) the apparent dominant chord turns out to lead deceptively to the E^{\flat} chord. When D major finally does lead to G minor (in mm. 19-20), the D major notably lacks a third (owing to the surprising onset of the piano's interlocking canon, beginning in m. 19 and moving to inner voices in mm. 21 and 23).

The instrumental postlude seems to make up for this tonal conflict—D leading to E^{\flat} —by finally letting E^{\flat} transform into an augmented-sixth chord, thus necessitating a reversal of the D- E^{\flat} bass motive, such that E^{\flat} finally moves to D (in mm. 25–26). It is noteworthy, also, that after this intense climax, the augmented-sixth chord is stated again over a stationary D in the bass (m. 26), thus making for a highly dissonant *sforzando* chord that seems to combine the linear motives in one simultaneity; and in the following piano figuration, the dominant's missing third is finally stated clearly.

¹⁹⁹ I thank Lauri Suurpää for a rewarding session (in October 2016) on which I base my reading; the formulation of it is, of course, entirely my own responsibility.



Example 49: Robert Schumann's "Hör' ich das Liedchen klingen" from *Dichterliebe*, Op. 48, No. 10, with annotated measure numbers.



Example 49 (continued).

To repeat myself, my point is not to suggest that my reading is better, but simply to underline, by way of exemplification, that the prominence of Damschroder's 5–6 shift does influence the analyses he proposes—and, hence, that Damschroder's *Tonal Analysis* is yet another step in the process of "Americanization" and "streamlining" of Schenkerian theory.

In his glossary of terms, Damschroder notes with an asterisk all the terms that he introduces himself to the analytical vocabulary. The list is rather long: 5-phase chord, 6-phase chord, assertion, chordal evolution, collision, dominant emulation, surge, supersurge, and unfurling (some of which have already been discussed). A common characteristic of these new terms is a heightened concern for foreground harmonic activity compared to the Schenkerian practice evident in textbooks predecing his. For instance, the terms enable Damschroder to acknowledge that a prolonged *Stufe* may "evolve" into a "surge" that "emulates a dominant"—for instance "the evolution of C major's supertonic D-F-A into D-F[#]-A or F[#]-A-C-E(^b)" (Damschroder 2018, 260). As such, the Damschroderian analysis is a peculiar mixture of heavy streamlining, concern for Schenker's actual analyses, and integration of many new concepts.

Turning now to the latest Schenkerian textbook, Eric Wen's *Graphic Music Analysis* (2019), one is met with a completely different approach to Schenkerian theory. Wen's is a much more traditional approach, but there is one feature which characterizes his analyses throughout, and which I will thus emphasize here. In presenting his analyses—especially when it comes to challenging chromatic passages—Wen virtually always presents a series of increasingly elaborated models that illustrate how the composed passage has evolved from simpler, diatonic bases. In a word, Wen's approach is *generative* and thus much more in line with Schenker's ideal pedagogy (this said, the overall design of *Graphic Music Analysis* still progresses from foreground details—such as, in fact, the 5–6 shift—and toward larger extracts of compositions, and eventually the interaction of structure and form).

To take but one example, Wen concludes his book with an analysis of the theme of Bach's Fugue in B minor (WTC I), well-

known for using all twelve tones of the chromatic scale.²⁰⁰ The theme is presented in Example 50, in which Wen marks the appearance of the twelve notes.



Example 50: Eric Wen's (2019) presentation of the theme of J. S. Bach's Fugue in B minor (WTC I), BWV 869, mm. 1–4.

Wen observes that the overall motion of the theme indicates a modulation from the tonic B minor to the minor dominant F[#] minor, the latter being implied by the descending F[#] minor arpeggio and the tenor clausula from G[#] to F[#] in m. 3. Focusing on m. 2 alone, which holds staggering sequence of chromatic *Seufzer*-figures and surprising leaps, Wen proposes an underlying, implied harmonic progression as seen in Example 51. In level a, a relatively straightforward sequence of chords is suggested—essentially IV–V with intervening applied dominants. In level b, the applied dominants are altered to become diminished seventh chords instead. In level c, Wen clarifies how the sequence of pitches imply these chords by unfolding the outer voices of the progression.



Example 51: Wen's (2019, 356) analysis of the implied, underlying harmonies in J. S. Bach's Fugue in B minor (WTC I), BWV 869, m. 2.

²⁰⁰ Wen's analysis resembles (but differs slightly from) Johann Philipp Kirnberger's (1721–1783) analysis in *Die Wahren Grundsätze zum Gebrauch der Harmonie* (1773, 55–56). Here, Kirnberger also attempts to explain the underlying harmonic logic of the twelve-note theme. Kirnberger's approach is, of course, based on figured bass and fundamental bass analyses, and furthermore interprets some chords differently.

Example 52 shows a similar analytical procedure, now focusing on mm. 1–2.



Example 52: Wen's (2019, 357) analysis of J. S. Bach's Fugue in B minor (WTC I), BWV 869, mm. 1–2.

The overall motion from I to V is stated at level a. Level b adds an intervening IV^7 chord, supporting scale degree $\hat{3}$. Level c delays the entrance of this scale degree until the entrance of IV^7 . Level d further delays the entrance of scale degree $\hat{3}$ until the entrance of the [#]IV chord.²⁰¹ Level e adds the detail that the tonic is transformed into an applied dominant of IV before proceeding. And, finally, level f adds a local V⁴/₂ chord that connects the initial B minor with its altered B major version. In Schenkerian notation, Wen summarizes mm. 1–2 as shown in Example 53.



Example 53: Wen's (2019, 357) Schenkerian analysis of J. S. Bach's Fugue in B minor (WTC I), BWV 869, mm. 1–2

²⁰¹ Wen writes: "Although this sonority of a diminished seventh chord over E-sharp [the implied $E^{\sharp}-G^{\sharp}-B-D$ shown in Example 51, level b] can be understood locally as an applied VII⁷ of F-sharp minor, it represents [#]IV⁷ in the home key of B minor" (Wen 2019, 356).

For reasons of space, his similar approach to the remaining measures of the theme will not be discussed here, but his final analysis of the full theme (now including mm. 3–4) is shown in Example 54.



Example 54: Wen's (2019, 358) analysis of J. S. Bach's Fugue in B minor (WTC I), BWV 869, mm. 1–4.

If Damschroder's *Tonal Analysis* juxtaposed the two currents of American Schenkerian theory—an increasing Americanization and pedagogical simplifications on the one hand, and an effort to be truer to Schenker's writings and his approach on the other—Wen's *Graphic Music Analysis* reconciles them. The generative approach that is exemplified in the above analysis, and which characterizes Wen's analytical procedures throughout the book, is very much in line with Schenker's own ideals, but it nonetheless functions on pedagogical premises. The generative approach becomes a way of beginning with the simple and easy-to-understand deep levels, and then gradually adding details of increasing complexity until the foreground is reached—and, importantly, understood on the basis of the back- and middleground analyses that preceded (and generated) it.

Wen's approach explicates a basic feature of Schenker's and Schenkerian analytical practice, characteristic of every textbook discussed in this chapter: that harmony is *always* understood as functioning within a larger motion, and that this larger motion must always be taken into consideration to render an analysis meaningful. Even if many textbooks do not adopt *Free Composition*'s generative design, this fundamentally generative idea lingers in the (dare I say) background of any Schenkerian enterprise. This is one of the aspects that stands in notable contrast to function-analytical practice, and it will be discussed in greater detail in Part II, particularly Chapter 4.

2.4 SUMMARY: THE SCHENKERIAN TRADITION

Schenker's theory and its Anglo-American development became so rooted a tradition that Heinrich Schenker became the *only* theorist to receive an entire chapter (Drabkin 2002) devoted solely to his work in the 2002 *Cambridge History of Western Music Theory* (Christensen 2002).²⁰² In a general overview, Schenkerian theory posits that tonal music is organized in several levels, the deepest of which is the *Ursatz*. Whereas the *Ursatz* was an almost holy entity given by "Nature" for Schenker, its status in the Anglo-American tradition is more ambiguous. It is clear, however, that in analytical practice, the *Ursatz* functions as a prerequisite that demands of the analyst to comprehend any musical entity in its context, ultimately the full context of the entire composition.

The historical development of Schenkerian theory clarified and elaborated many aspects, sometimes giving rise to concepts and branches that were (to differing degrees) independent from Schenker's own theory. Examples are elaborations of tonal contexts, such as "phrase," "motive," and "form," and analytical terms such as LIP and imaginary continuo.

Of fundamental importance to Schenkerian practice is the preeminence of the very concept of "structure," which was among the terms that cast Schenkerian theory in a more scientific and rigorous light (as an alternative to the metaphysical organicism of Schenker). Related to the recasting of the *Ursatz* as "structure" is the Anglo-American conception of "function." Even though Schenker barely used the term—and had nothing more than critical comments about its use in, for instance, Louis and Thuille (1910 [1907])—"function" has become an integral part of the Schenkerian vocabulary. Beginning from Salzer (1952), it influenced both North American function theory (Guck 1978), ideas on elementary harmony (Forte 1962; Aldwell and Schachter 1978; 1979), and ultimately Schenkerian theory more concretely (Cadwallader and Gagné 1998; 2011). The result is that

²⁰² Rameau is the only other theorist mentioned by name in the book's chapter titles, but even he is treated alongside other theorists in "Rameau and Eighteenth-Century Harmonic Theory" (Lester 2002).

"function" is used in two related meanings. One is a more informal meaning which describes how an entity functions in the Schenkerian structure—this entity can be virtually anything, an appoggiatura, a motive, a tone. Another is a more technical term, often used in the locutions "harmonic function" and "contrapuntal function." A chord serves a harmonic function if it is part of a specific level's governing *Stufengang*, but it serves a *contrapuntal* function if it is subordinate to the *Stufen* of this level, in which case it composes-out a more fundamental *Stufe* by means of voice leading rather than harmonic progression.

Internal debates in Anglo-American Schenkerian theory have concerned disagreements between "revisionists" and "purists," between "Schenkerian-theory-only" and "Schenker-in-context," between "conservatory" and "university" Schenker, and between "background-to-foreground" generative approaches and "foreground-to-background" pedagogical adaptations. Despite these disagreements, the theoretical tradition and analytical practice that was eventually established was one that shared the fundamental principles described above. It is these principles and their analytical consequences that I shall now compare with function theory in Part II of this presentation.

PART II: COMPARISON

Chapter 3:

Comparing traditions

It might be worth pursuing the comparison [of Schenker and Riemann] a little further. (Cook 2007, 6)

A basic assumption of this dissertation is that it makes sense to do a comparative study of Schenkerian theory and function theory, both as music theories, as methods of analysis based on these theories and as scholarly traditions. This is an assumption that is easy to question. One may posit that as music theories, Schenkerian theory and function theory do not theorize about the same thing; that as analytical methods, they do not aim to uncover the same structures in music; and that as traditions, they are separate paradigms that have nothing to do with each other. In all three cases, it follows that Schenkerian theory and function theory are incommensurable and thus cannot be meaningfully compared: they are apples and oranges. There is some truth in this, and so in this chapter, I account for the ground on which the two complexes that were presented in the introduction (see Example 1, page 19) will be compared nonetheless.

The main reason that a comparison is meaningful is the fundamental tenet that Example 1 illustrates, and which was discussed in the introduction: that theory and analysis never occur in a vacuum, but always in a context that is shaped by (and shapes) tradition. This means that one must consider the contexts in which theory and analysis are practiced and observe how they relate (explicitly or implicitly) to tradition—and in this perspective, it becomes an inevitable fact that whatever one might think of their comparability, Schenkerian and functional approaches to music *have* been compared from the very beginning (in Schenker's own writings and in the early Schenker reception) to today (for instance at international conferences).

The chapter's title, "Comparing traditions," has a double meaning: gramatically, "traditions" is meant both as a subject and an object. In section 3.1, "tradition" is the subject. Here, I trace "the tradition of comparing," that is, I pursue the comparison (to use Cook's expression) of Schenker and Riemann through history to investigate exactly how they have been compared, and how it became common to frame Schenker and Riemann (and their adherents) as irreconcilable antagonists. Along the way, I will emphasize some categories and dichotomies that are recurring in the comparative studies, thus laying the foundation for later discussions in Part II. The historical pursuit serves, in addition, as a critical reassessment of Part I's separate reception histories in an international light-and as an extended argument for the viability of comparison in a practice-theoretical light.²⁰³ In section 3.2 (p. 236ff.), "tradition" is the object. Here, I rethink the common practice of comparison by underscoring how my study differs from the long history of comparisons, and, in this new light, offer my own comparison of the two traditions that were thoroughly discussed in Part I.

3.1 PURSUING THE COMPARISON

The comparison and opposition between function theory and Schenkerian theory is tantamount to a trope in the literature. Among other things, it seems to spring from the general division of the history of late-nineteenth century European music theory into two streams: one based on the Leipzig dualists (Riemann, Hauptmann, Oettingen) and one based on the Viennese fundamental bass school (Sechter and later Schenker).²⁰⁴ The list of studies that have the comparison of Schenkerian theory and function theory as *the* main purpose (or as a substantial part of their argument) is, in fact, relatively small.²⁰⁵ But in addi-

²⁰³ For instance, focusing on Hellmut Federhofer's position as one of the only advocates of Schenkerian theory in German speaking musicology offers an enlightening counternarrative to the prevailing reception histories, one that puts the *interaction* between the two traditions into the foreground.

²⁰⁴ This general division is already commented in Ernst Kurth's *Die Voraussetzungen der theoretischen Harmonik und der tonalen Darstellungssysteme* (1913, 6–7). It is traceable as well in Wason (1985) and Bernstein (2002).

²⁰⁵ Such studies include (in chronological order): Silberman (1949), Federhofer (1981), Christensen (1982), Wintle (1985), Gut (1986; 1989), Azzaroni (1989), Gut (1996), Redmann (1996), and Federhofer (2006). This list does not include studies of

tion to these studies come the insurmountable number of texts that more casually mention Schenker and Riemann as opposites, briefly compare them, or (typical in Schenkerian literature) compare Schenker's approach with "traditional" approaches to harmony, which may or may not include function analysis.²⁰⁶

Taken as a whole, such studies bear witness to the tenacity and wide dissemination of the idea of a competitive relationship between the two approaches:²⁰⁷ there is a *practice*, one might say, of understanding one tradition in relation to the other. In the following pages, a selection of these comparative studies will be discussed more thoroughly. The works of five theorists have been selected: Heinrich Schenker (various texts), Israel Silberman (1949; 1964), Hellmut Federhofer (various texts), Thomas Christensen (1982) and Bernd Redmann (1996; 2009). While the following examination revolves around these five, several other theorists with whom they have been in dialogue will be discussed along the way. Silberman, a figure of whom we know almost nothing, has been selected because his dissertation was the first comparative study ever published (to the best of my knowledge); Federhofer is selected because the comparison of Schenkerian and functional approaches was a recurring theme throughout his entire academic career, in which he for many years²⁰⁸ was one of Europe's only proponents of Schenkerian theory.²⁰⁹ Chris-

a more neo-Riemannian bent, or those of the North American current of function theory, such as Smith (1986), Swinden (2005a; 2005b), and Goldenberg (2007). Several of the mentioned studies will be discussed in more detail in this chapter.

²⁰⁶ The list of such studies is, indeed, too long to mention, but some representative examples of this mode of "casual" comparison (from 1945 to the present day) are Katz (1945), Salzer (1952), Beach (1994), Cook (2007, 6–8), Clark (2011, 297, 317–318), and Martin (2019, §11–12).

²⁰⁷ Often, when referring to both "theory" and "analysis," I will use the word "approach" as a common reference.

²⁰⁸ Approximately from WWII, during which he managed to write his *Habilitationsschrift* on Schenker's theory (Wozonig 2018, 121), despite the Nazi ban on Jewish music and musical thought, to around 1995, when the book *Ideologie und Methode: Zum ideengeschichtlichen Kontext von Schenkers Musiktheorie* by Martin Eybl marked the beginning of an increase in German research in Schenkerian matters (as outlined in section 2.2.2, page 133ff.).

²⁰⁹ Federhofer is explicitly described as such in Schwab-Felisch (2005, 243), Holtmeier (2005a, 1297), Federhofer (2006, 246–247), and Cook (2007, 275).

tensen is included because his article is the first one to explicitly argue for a reconciliation of the two approaches; and Redmann because he, too, has argued for a reconciliation that has, to some degree, influenced the models in Part III of this study.

The discussion of these five authors' works will be preceded by a dive into the very first texts that positioned Schenker and Riemann against each other—namely those by Schenker himself.

3.1.1 SCHENKER'S COMPARISON

Unlike some of the texts discussed below, Schenker never authored a text with the primary purpose of systematically comparing or opposing his theory to Riemann's. His longest outlash against function theory were some paragraphs in the first volume of Kontrapunktalthough, the scapegoats were Louis and Thuille rather than Riemann (Schenker 1910, 35ff.). When Schenker is discussed in this section nonetheless, it is because numerous critical remarks about Riemann and his theory are spread throughout his authorship. Indeed, the entry on "Hugo Riemann" in Schenker Documents Online says that "throughout his career, [Schenker] regarded Riemann as his chief rival, embodying the antithesis of his own music theory, as well as being an odious force" (SDO, "Hugo Riemann"). Many comments can be found in Schenker's private letters and diaries, made available at Schenker Documents Online: in a letter to his publisher Cotta, Schenker calls Riemann "the most dangerous musical bacillus in Germany" (SDO, CA 71), and in a diary entry, he writes that "Riemann [is] a nightmare, has to be fought with proof and scolding" (SDO, OJ 3/6, 2692). More curiously, according to a diary entry from 1914, he even dreams about reprimanding him: "I dream that Riemann visits me; I treat him harshly and dismissively, and criticize his quasi-related ideas, and finally offer to play him a sonata by Beethoven" (SDO, OJ 1-2/11-12, 608-609).²¹⁰

²¹⁰ "Quasi-related" is William Drabkin's translation of "wie Verwandte." Drabkin notes that the diary has a question mark above "Verwandte," and that it is "probably the wrong word for the context."

Riemann held a powerful position in Austro-German music theory and was an obvious competitor to Schenker.²¹¹ Hence, when Schenker sent the manuscript of his *Harmonielehre* to his publisher, he worried that it might fall into the hands of a "*Riemannianer*":

If I may at this point express one wish, it is that you not let too many specialists examine my manuscript. The issue is really one of the priority of my idea, which I should like to be sure is safeguarded as completely as possible through the commission. In particular, I fear lest Professor Riemann or a "Riemann follower" might get his hands on it. It is precisely against "musical mathematics" as represented by Riemann that my book is expressly directed. No one in the world is more eager than Professor Riemann to appropriate every new idea to himself alone, to present it as emanating from himself alone. He currently commands the marketplace, and no longer allows anyone even a small patch. (SDO, CA 5–6)

Apart from the many examples in private diary entries and letter correspondences, Schenker also actively positioned himself against Riemann in published texts. In Schenker's *Erläuterungsausgabe* of Beethoven's Piano Sonata in Ab major, op. 110—curiously, the piece he played for Riemann in the aforementioned dream—a prolonged critique spans pages 9–15 of Oswald Jonas' revised edition (Schenker 1972 [1914]).

In an essay on Beethoven's Piano Sonata in F minor, Op. 2, No. 1 (see mm. 1–14 in Example 55), he targets Riemann's analysis of its first movement (in Riemann 1919a, I:82–98), not without sarcasm:

If a theorist like Riemann cannot follow the aristocratic urge of genius to bind great unities, to present far-reaching compila-

²¹¹ Schenker's concerns about Riemann's position is understandable inasmuch as Riemann was very defensive of it; the theorist Bernhard Ziehn wrote in 1890: "No sooner would anyone have the audacity to wish that the slightest detail of [Riemann's] ideas were a little different, or—banish the thought!—point out to the most famous music teachter of all times some of his intellectual somersaults, than *Herr Doctor* would assault that unfortunate person with his quick quill as though he had committed patricide.... He demanded absolute submission" (Ziehn 1890, 357, 361; cited after Holtmeier's translation in Holtmeier 2011, 3). The case of Riemann's accusation of plagiarism against Rudolf Louis and Ludwig Thuille is also telling (Riemann 1907; see also *SDO*, CA 68 and section 1.2.1.2, page 60ff. in this presentation).

tions of chords from a single point or view, then, whether he wants to or not, then he must, in good democratic fashion, break up the whole, the large form, splinter the connections, and hear innumerable harmonies where only passing motions rule. (Schenker 2004b [1922], 92–93)

Schenker continues to write that "the ultimate cause of his gross transgressions is to be sought in his bad ear for music" (ibid. 93), which he exemplifies by quoting Riemann's function analysis of m. 11. Example 56 shows Riemann's analysis of mm. 11–14.

Schenker takes issue with Riemann's position that the F minor chord of m. 11 represents the tonic function, that the subsequent B^{\flat} minor seventh chord represents the subdominant, and that the preceding C major and C minor chords (appearing in mm. 8–10 before the excerpt in Example 56) represent the dominant. In Schenker's view, Riemann here "splinters the connections" because he fails to realize that the modulation toward A^{\flat} major has already begun with the C minor chord of mm. 9–10 (Riemann's equal sign between mm. 11–12 indicates the modulation's beginning). This C minor initiates a chain of descending fifths, and consequently, Riemann's "tonic" chord comes in the middle of a motion that has not yet ended; in effect, it cannot be a tonic, only a transitional chord within a harmonic sequence (cf. the "transit principle" in Väisälä 2008).

Example 57, my graph based on Schenker's own analysis (Schenker 2004b [1922], 72–74) as well as his critique of Riemann's (ibid., 92–93), indicates a different reading (note that "VI⁷" and "V⁷" are in 4 /₃-position in the score).

The sequential progression projects the line $C-B^{\flat}-A^{\flat}$ in the bass voice, accompanied in 10ths in the upper voice, $E^{\flat}-D^{\flat}-C$. This overall motion is contrapuntally embellished with intervening chords, creating the 3-becomes-7 pattern that Schenker highlights (2004b, 73). This is indeed a quite different reading than Riemann's: "In bars 9–11 in the consequent phrase, [Riemann] still continues in F minor with V–I, instead of entering at once into the modulation to A^{\flat} major," Schenker complains (ibid., 93).



Example 55: Score of Beethoven's Piano Sonata in F minor, Op. 2, No. 1, mm. 1–18.



Example 56: Riemann's analysis of Beethoven's Piano Sonata in F minor, Op. 2, No. 1, mm. 11–14 (Riemann 1919a, I:90).



Example 57: Adaptation of Schenker's analysis of Beethoven's Piano Sonata in F minor, Op. 2, No. 1, mm. 8–14.²¹²

²¹² This is my own representation based on Schenker's analysis in *Der Tonwille*, a very large graph which is not reproduced here for practical reasons. To this, I have

Connected to this complaint-that Riemann does not recognize the larger motions, always analyzing from one chord to the next—is a completely different stance toward temporality in music. This is a point to which I will return, but for now, suffice it to notice how Riemann and Schenker places the beginning of the modulation at different points. Roughly explained, Riemann's analysis represents that of a first-time listener, who, at the time of the "tonic" chord in m. 11, does not yet know that this chord is in the middle of a sequence (importantly, many theories, including later function theories, would not allow a minor dominant to progress to the tonic-not even in a firsttime listening-and would rather suggest that Cm-Fm is T-S in the key of C minor).²¹³ Schenker favors the analysis that shows the larger connections, making clear that F minor in m. 11 in retrospect functions as a transitional chord. In Riemann's analysis, function is always determined by the context of the music heard up until that point, while for Schenker, function is determined by the context of the entire phrase or, ultimately, movement. As concluded in sections 1.5 (page 108ff.) and 2.4 (page 192ff.), this fundamental difference between Riemann's and Schenker's analytical practices continued in subsequent traditions-though, notably, pre-war function theories as

added slurs and stems in the style of later Schenkerian graphing practice (but without any indication of an *Urlinie*). Later Schenkerian practice (following Forte and Gilbert) could also mark a 10–10–10 linear intervallic pattern (see section 2.3.2.1, page 159ff.) in these measures. The piece is discussed further below in connection with Israel Silberman's analysis of it.

²¹³ Riemann's reading is perhaps a consequence of his dualistic theory and the idea of *Variantklang* (see footnote 29, page 44) for more on its introduction in Riemann's theory). Hence, both theories preceding and succeeding Riemann's rarely allow for the minor V to progress to I. This has, among other things, to do with the distinction betwen "function" and "functionality," which I propose in section 4.1.1 (page 246ff.). For instance, Simon Sechter allows for both major and minor triads on V (1853, I:57); this concerns "function" and "chord identity." But he only allows the major V to progress to I (ibid., I:62); this concerns "functionality" and "chord behaviour." A similar situation appears in Rameau's harmonization of a descending minor scale in *Génération harmonique* from 1737: here, he harmonizes (^b)7 with a minor V chord (in today's terms), but he explicates that it appears to be a tonic. Only in the harmonization of 5, 4, and 2 does the V have a major third "to announce the true principle sound that will follow," that is, the tonic (as per the English translation in Hayes 1968, 161).

well as later Swedish and Danish theories did, sometimes, take more context into consideration.

Yet another comparative example can be found in Schenker's *Free Composition* (1979 [1956/1935]). Here, he cites an exercise from Riemann's *Anleitung zum Generalbass-spielen* (1917b [1903]), see Example 58 (in which the two left-hand systems are read before the two right-hand systems).



Example 58: Riemann's setting of "O Haupt voll Blut und Wunden" by Hans Leo Hassler (Riemann 1917b, 65-66).

Schenker (1979, fig. 116) presents Riemann's example without functional designations, keeping only the bass, melody, and figured bass. Riemann's problem, so it seems, is more fundamental than the fact that he uses functional nomenclatures: Schenker writes that the example "illustrates the latter-day disastrous growth of chords in the exclusively vertical sense. These 'chords' paralyze the contrapuntal flow of the bass as well as that of the inner voices" (Schenker 1979, 96). In Schenker's opinion, Riemann's example is nothing more than a series of disjunct chords, projecting no voice leading or *Auskomponierung*.

One could mention several other instances of heavy and more or less sarcastic Riemann-critique from Schenker's hand—critique not only of function theory, but of many other aspects, such as Riemann's understanding of fugue (see Schenker 1996b [1926], 43–44, 52–53)— but the picture should be clear.²¹⁴ Schenker's primary point of critique is that Riemann analyzes each and every chord as equally important in the structural hierarchy, thus impeding the possibility of identifying larger, contrapuntal motions. Considering Riemann's powerful position in Austro-German *Musikwissenschaft*, the purpose of Schenker's remarks often seems to be to emphasize his own approach as comparatively better than Riemann's. But the rigorous critique of the tendency to overemphasize music's vertical dimension was directed not only at Riemann, but at many other theorists such as Ernst Richter (see Schenker 1954 [1906], 175–177) and, especially, Rameau. In his essay "Rameau or Beethoven?" he writes that with the publishing of Rameau's famous *Traité de l'harmonie* "the seeds of death had already been sown in [music] theory, and indirectly also in music composition!" (Schenker 1997b [1930], 2). Once again, it is the vertical perspective of Rameau that Schenker bemoans:

In that he reduced all musical phenomena to fundamental basses and the progressions proper to them, Rameau detached what not even the layman can avoid seeing in front of his nose, namely the superimposition of notes, from the flux of horizon-tal voice-leading in which every superimposition has its origin. (Schenker 1997b [1930], 2)

Schenker's dislike of Riemann and overly vertical approaches was inherited by his acolytes, and must have been one of the factors that prompted Ernst Oster to teach William Rothstein to (in Rothstein's words) "look down on chord-labeling and everything, and everyone, connected with it—everyone, that is, from Rameau to Walter Piston" (Rothstein 1992, 1).

²¹⁴ To the best of my knowledge, Riemann only wrote about Schenker, primarily as a composer and editor, in the ninth edition of his *Musiklexicon* (1919b [1882], 1045). Riemann died in 1919 before its publication, and according to its title page, it was finished by Alfred Einstein. 10 years later, in the 11th edition also edited by Alfred Einstein, Schenker is described as "Führer einer theoretischen Schule (Vrieslander, Herman Roth, Dr. Hans Weisse, J. Petrie Dunn, F. von Cube u.a.), die an der klassichen Komposition das reine Phänomen der Musik und ihres rein musikalischen Kerns ('Urlinie') aufzuzeigen sucht" (Riemann 1929 [1882], 1611).

3.1.2 SILBERMAN'S COMPARISON

According to David Carson Berry, Israel Silberman's dissertation was "perhaps the first American doctoral dissertation to feature Schenker's theories prominently" (Berry 2005b, 107). Its title *A Comparative Study of Four Theories of Chord Function* refer to the theories of Schenker, Riemann, Paul Hindemith, and Joseph Schillinger, but notably, the chapter on Schenker is twice as long as any of the others.

As the title of Silberman's dissertation indicates, he believes that what makes Schenker, Riemann, Hindemith, and Schillinger comparable is that they theorize about chords' "functions." With the coupling of Schenker and Riemann with such different theorists as Hindemith and Schillinger, Silberman's concept of function necessarily becomes very broad. Indeed, Silberman writes:

Chord function is a term which has not yet gained universal currency and meaning among theorists and must therefore be defined. From the viewpoint of this study, chord function refers to the way chords are used in composition to express musical and artistic purposes, and it will be the chief intent of this study to discover those purposes in order to understand <u>why</u> and how chords function. (Silberman 1949, 1-2)

Silberman defines function, that is, with regards to the musical and artistic "purposes" that chords "express." A particular theorist may then conceptualize chord function on the basis of different "purposes." To explain this, he classifies "purposes" as seen in Table 2—notice the grouping of Schenker and Riemann under I,2—and more detailed as seen in Table 3.

Silberman's criteria of classification—as well as the very classifications that results from these criteria—are deeply problematic (at least when viewed from today's perspective).²¹⁵ The problems seem to arise, among other things, from his coupling of Riemann and Schenker with such different theorists as Hindemith and Schillinger. Aiming

²¹⁵ Even if we accept his main criteria, experience and expression, his categorization of theoretical concepts is puzzling. For instance, it appears erroneous to group Riemann's functions in Table 2-I,2 and then to group "Chord formation," "Inversion," "Chord progression" and more in Table 3-I—as if function had nothing to do with these aspects.

- A. Classification of purposes underlying chord function.
 - I. Chord function on the basis of aural experience
 - For purposes of euphony (all theorists)--euphony to be understood in the broadest sense as "agreeable sound"--i.e., including dissonance.
 - (2) For purposes of unity and variety (Riemann-tonal functions, Schenker-Ursatz, Hindemith-twelve-tonesystem, Schillinger-mathematical means of expansion and unification. etc.)
 - II. Chord function on the basis of expression
 - (1) For purposes of emotional coloring of sound (Hindemith-chord tension, Schillinger-melodic tension)
 - (2) For purposes of emotional coloring of a text, mood or scene (Schillinger-emotional resources of chords).

Table 2: Israel Silberman's "Classification of purposes underlying chord function" (Silberman 1949, 10).

- Chord function on the basis of aural experience for purposes of euphony-- 1. Chord formation, 2. Chord spacing,
 Chord doubling, 4. Inversion, 5. Dissonance, 6. Chord progression.
- II. Chord function on the basis of aural experience for purposes of unity and variety-- 1. Chromatic harmony, 2. Modulation, 3. Modern chord formation. 4. Efforts to achieve unity or variety.
- III. Chord function on the basis of expression for purposes of emotional coloring of sound-- 1. Chord tension, 2. Melodic tension.
- IV. Chord function on the basis of expression for purposes of emotional coloring of a text, mood or scene-- 1. Harmonic devices, the psychological dial and pictorial representation.

Table 3: Israel Silberman's detailed classification of purposes underlying chord function (Silberman 1949, 11)

to reconcile them all, he aims for a grand theory able to encompass both tonal *and* post-tonal music (Silberman 1949, 4–5).

Many remarks indicate a favorable assessment of Schenkerian theory—and an equally disfavorable of function theory. "Incidentally," Silberman writes, "Schenker is the only one of the four theorists whose work is organized in terms of purposes, and who thereupon shows how those purposes determine and direct technical procedures" (Silberman 1949, 10). Though it is very unclear, Silberman is likely thinking of Schenker's concept of *Tonwille* when he uses the word "purpose." If purpose is a foreign term for the other theorists, then one might ask whether it is a meaningful criterion for his study on whole.

Of course, it is not inherently problematic that Silberman ultimately argues for Schenkerian theory's superiority over function theory, but it is problematic that he is so biased that he really does not make a fair comparison—hardly a comparison at all, in fact. The section on Riemann is 13 pages long, while the section on Schenker is 43 pages.

Even so, his understanding of Schenker is another objectionable aspect. Silberman writes, it must be remembered, in a very different musicological climate than today—one in which American music theory had not yet been institutionalized, and where the influence of Schenkerian theory was still in its early stages. That his understanding of Schenker differs from today's is not surprising, then, but it differs as well from his contemporary American Schenkerians.

This can be demonstrated by his analysis of the exposition of the first movement of Beethoven's Piano Sonata in F minor, Op. 2, No. 1—Riemann's analysis of which Schenker criticized, as discussed above in section 3.1.1—published in an article 15 years after his dissertation (Silberman 1964). Example 59 shows Silberman's background reduction, and Example 60 his middleground (see the score in Example 55, page 203).



Example 59: The background of Silberman's Schenkerian analysis of the exposition of Beethoven's Piano Sonata in F minor, Op. 2, No. 1, mvt. 1, mm. 1–48 (Silberman 1964, 296).



Example 60: The middleground of Silberman's Schenkerian analysis of the exposition of Beethoven's Piano Sonata in F minor, Op. 2, No. 1, mvt. 1, mm. 1–48 (Silberman 1964, 297).

Once one has deciphered Silberman's graphing technique—which differs from Schenker's and the established Schenkerian practice—one can see that he suggests the *Urlinie* of the exposition to be $\hat{8}-\hat{7}-\hat{6}-\hat{5}-\hat{4}-\hat{3}$.

Even though Silberman *does* show the sequence in mm. 10–14 in a manner close to Schenker's (notice the parallel 10ths between the outer voices, and that Riemann's "tonic" F minor is, consequently, not present in his reduction²¹⁶), Silberman's 8-line differs greatly from Schenker's own reading as well as numerous later analyses that all take the movement's *Kopfton* to be 5, arriving after an initial ascent in m. 7 (Schenker 2004b [1922], 73; Katz 1935, 316–317; Forte and Gilbert 1982, 152; Cadwallader and Gagné 2011, 5–14; Beach 2012, 34; Damschroder 2018, 126).²¹⁷ Silberman's analysis was published in 1964, in an article that "shows how the theory can be used for instruction in composition" (Silberman 1964, 295). It is clear that Silberman's conception of Schenker's theory is markedly different from that of his contemporaneous (and much more influential) Allen Forte, who wrote in 1959 that

Der Freie Satz (...) is an instructional book not on composition, but on analysis. Let there be no doubt on this point, Schenker was outspokenly against any efforts to use the concept of fundamental structure for the purpose of composing music. (Forte 1959, 22)

Indeed, Silberman's early Schenker reception seems not to have had a big impact. Among the many articles on early American Schenker proselytes in New York, none focuses specifically on Israel Silberman. His dissertation is mentioned now and then, but it does not seem to have been very influential. As David Carson Berry has noticed, however, it did affect the work of another early American Schenkerian,

²¹⁶ I am here referring back to the analyses discussed in Example 56 and Example 57 (page 203ff.).

 $^{^{217}}$ Forte and Gilbert do not provide an actual analysis of the piece, but use it in an exercise for the reader to identify initial ascents; their brief instructional commentary makes it clear that they regard C as the *Kopfton*. Cadwallader and Gagné's analysis is from the introductory chapter of their book on Schenkerian analysis, and is meant to serve as an example of basic analytical techniques rather than a fully-fledged Schenkerian analysis; though they do not *write* that the *Kopfton* is $\hat{5}$, it is very clearly implied; the same is true for Katz' analysis.

Howard Murphy, who was part of Silberman's dissertation committee. In Murphy's textbook *Teaching Musicianship* from 1950, he allegedly "advocated using a combination of Schenker's 'linear approach' and Riemann's 'tonal functions'" (Berry 2011, 212).²¹⁸

In itself, Silberman's study shows, if nothing else, that by 1949, the Schenker-Riemann opposition lived on.

3.1.3 FEDERHOFER'S COMPARISON

In 2013, a collection of Hellmut Federhofer's music-theoretical articles was published at Georg Olms Verlag, a compilation of texts spanning more than 60 years (Federhofer 2013). Throughout the long life of this Austrian musicologist—he lived from 1911 to 2014—he was more or less the only persistent advocate of Schenker's theory in German-speaking musicology, as well as in the rest of Europe (as briefly mentioned in section 2.2.2).

He graduated from the conservatory of Vienna in 1936 and handed in his *Habilitationsschrift* entitled *Musikalische Form als Ganzheit* at the University of Graz in 1943 (Wozonig 2018, 121). In his thorough article "Die frühe Schenker-Rezeption Hellmut Federhofers," Thomas Wozonig describes it as "virtually a textbook on Schenkerian analysis," which indicates that "the department of musicology at the University of Graz, or at least Federhofers' supervisor Werner Danckert, tolerated the ideas of the Jewish theorist" (ibid.).²¹⁹ Wozonig notes that Federhofer was in contact with the early "*Schenker-Kreis*," especially Felix Salzer, Oswald Jonas, und Moriz Violin (ibid. 129–130). Federhofer's oeuvre amounts to a noteworthy counternarrative to the history of European Schenker reception, even though "sein Einsatz … bedauerlich wirkungslos [blieben]" (ibid., 147).²²⁰

²¹⁸ I have, unfortunately, not been able to acquire this source.

²¹⁹ I have not been able to acquire Federhofer's *Habilitationsschrift*.

²²⁰ However, Federhofer's monographs *Heinrich Schenker*. *Nach Tagebüchern und Briefen* (1985a) and *Heinrich Schenker als Essayist und Kritiker* (1990) are influential works on Schenker's biography to this day (as mentioned in section 2.2.2).

The focus in the following pages will be Federhofer's comparative texts, particularly his article on the second movement of Beethoven's Piano Sonata Op. 10, No. 3 (Federhofer 1972), and his monograph *Akkord und Stimmführung* (1981). As one of the only remaining advocates of Schenker in Europe, Federhofer seems to have been particularly interested in comparison as a way of making understandable "die bislang unüberbrückte Kluft, die Musiktheorie in den USA und im deutschsprachigen Raum voneinander trennt" (Federhofer 1989, 61)—a "Kluft" that he saw as the symptom of larger disagreements about the purposes of music theory (which, according to him, was composition teaching in German-speaking musicology, and analysis for its own sake in USA [ibid.]). In one publication, Federhofer takes a reconciliatory position toward this "Kluft." I quote at length from an interesting passage in *Musikwissenschaft und Musikpraxis*:

Während über die Prinzipien musikhistorischer Forschung fachintern weltweite Übereinstimmung herrscht, wird die neuzeitliche Musikanalytik - analog zur Musiksoziologie - von scheinbar unversöhnlichen Gegensätzen geprägt, die oftmals in polemisch gefärbte Auseinandersetzungen ausarten. Es erscheint daher angebracht, über diesbezüglische Grunde bzw. Ursachen nachzudenken. Der jeweilige musikanalytische Nutzeffekt ist für seine Beurteilung unbestreitbar. Beide unterliegen Wertmaßstäben, die unbeweisbar sind, sondern auf intersubjektivem Konsens beruhen. Folglich liegen die Möglichkeiten zu Kontroversen auf der Hand. Wird jedoch berücksichtigt, daß Analyse unterschiedliche Zwecke verfolgt, lassen sich gegensätzliche Ansichten teilweise überbrücken.... Ob sich nun ein Harmonielehrer der herkömmlichen Stufenbezeichnung, wie sie ursprünglich noch A. Schönberg verwendete, oder zwecks Unterscheidung der Akkorde der Funktionszeichen bedient, ist von geringer Bedeutung als die Tatsache, daß beide Methoden das Detail betreffen. Dadurch underscheidet sich nämlich grundsätzlich eine derartige Betrachtungsweise von jener anderen, die sich a priori auf eine Verlaufsgestalt als ganzheitliche Erscheinung bezieht und eine Analyse von deren Merkmalen versucht. Beide Methoden müssen jedoch nicht zu widersprüchlichen Ergebnissen gelangen, sondern können sich - zumindest teilweise - ergänzen. Zwei oder mehrere Analysen unterschiedlicher Zielsetzung ein und derselben Komposition verdeutlich diese Feststellung. Beispielsweise bietet Diether de la Motte ... vom einst vielgespielten Gondellied (op. 30 No. 6) F. Mendelssohn Bartholdys "Analytische Details", während H. Schenkers Bemühen der Synthesen des nur 55 Takte umfassenden Werkes gilt, ohne daß eine Analyse die andere überflüßig machen würde.²²¹ (Federhofer 1985b, 35–36)

Two things in this quote are noteworthy insofar as they deviate from Federhofer's stance in other texts. First, he provides an explanation for the emergence of controversies: both approaches rely on intersubjective consensus rather than provable and measurable standards. Second, he argues in favor of a "Methoden-Pluralismus" (ibid., 36) on the basis that the methods can enlighten each other insofar as they theorize about different, complementary elements. Though the position expressed here is very much in congruence with the practicetheoretical and reconciliatory orientation of this dissertation, the vast majority of Federhofer's work openly takes sides:

In Bezug auf die dur-moll-tonal gegründete Mehrstimmigkeit steht für mich aber die Überlegenheit der Musiktheorie Schenkers über jene Riemanns außer Zweifel, weil nur sie allein die *organische* Verbindung zwischen horizontaler *und* vertikaler Dimension entsprechend berücksichtigt. (Federhofer 1958, 190)

In another text, he underlines that

Ein und derselbe Zusammenklang kann vielmehr in verschiedenem Zusammenhang etwas ganz anderes bedeuten, auch wenn diesen Unterschied weder die Webersche *Stufenbezeichnung* noch die Riemannsche *Funktionsdeutung* zum Ausdruck bringen kann. (Federhofer 1956, 81)

In his article "Methoden der Analyse im Vergleich," he distinguishes (with reference to Franz Eibner) between tonality based on chords and tonality based on voice leading— "akkordbezogener" and "stimmführungsgebundener" tonality (Federhofer 1989, 67). He admits the applicability of function analysis for "akkordbezogener" tonality, citing as an example Schenker's reference to Max Reger's Piano Quintet No. 2 in C minor, Op. 64—an example that, importantly, Schenker calls an "abschreckendes Beispiel" of a row of chords without voice leading, coherence, and direction (Schenker

²²¹ Federhofer refers to the analyses in Motte (1968, I:125–130) and Schenker (2005b [1925]).
1906, 220).²²² Barely concealed in Federhofer's recognition that function analysis may be applicable to Reger's music lies, therefore, a harsh sarcasm.²²³

Among the many texts by Federhofer that criticize function theory while praising Schenkerian theory, one article deserves special attention (Federhofer 1972). In this article, Federhofer provides a thorough critique of Riemann's (1919a, I:354–368) and de la Motte's (1968, I:49–59) formal and functional analyses of the second movement of Beethoven's Piano Sonata No. 7 in D major, Op. 10, No. 3. He refers to Schenker's analysis (1979, fig. 39,2) and provides his own Schenker-inspired reading of selected passages. One interesting passage is the piece's coda, mm. 65–76, in which the right hand plays rapid arpeggios, while the principal theme moves to the bass and unfolds in unexpected chromatic harmonies. The score of this is passage, annotated with measure numbers, is provided in Example 61. Example 62 provides Federhofer's reduction and analysis of these measures, and Example 63 provides Riemann's.

²²² The critique of Reger, appearing in an extended footnote, is among the omitted passages in the English translation of Schenker's *Harmonielehre* (Schenker 1954 [1906]). Reger and questions of tonality become relevant again in section 4.1.3 (see especially page 285ff.).

²²³ The relationship between function theory and Max Reger's music is more complicated than that, however: it is well-known that a certain antagonism existed between Riemann and his former pupil Reger (Rehding 2003, 10–14), and Reger's compositions have more often served as an example of neo-Riemannian principles (see Broman 2002; Sprick 2014).



Example 61: Beethoven's Piano Sonata No. 7 in D major, Op. 10, No. 3, II, mm. 65–76.



Example 62: Federhofer's graphic analysis of Beethoven's Piano Sonata No. 7 in D major, Op. 10, No. 3, II, mm. 65–76 (Federhofer 1972, 346–347).²²⁴



Example 63: Riemann's analysis of Beethoven's Piano Sonata No. 7 in D major, Op. 10, No. 3, II, mm. 65–76 (Riemann 1919a, I:367).

Federhofer cites Riemann's analysis in which the E^bm chord of m. 67 is given special attention (marked with "NB" in Example 63): "Das seltene harmonische Phänomen der Variante des Akkords der neapolitanischen Sexte (...) sei nicht übersehen" (Riemann 1919a I:358).²²⁵ For Federhofer, the function of this chord is described thus:

Von Ges₁ als tiefstem Ton schreitet nämlich die linke mit der rechten Hand in einem chromatisch bereicherten Sextensatz aufwärts, so daß am Ende von Takt 70 mit Wiedererreichen der Tonika (als Sextakkord) deren Oktavraum d'-d'' in der Oberstimme stufenweise durschschritten erscheint. Nunmehr folgt mit höchster Kraftenfaltung in Takt 71 e'' in der Oberstimme, das in Takt 75 in f'' mündet. (Federhofer 1972, 346)

²²⁴ Federhofer's analysis is printed across two pages, resulting in a space in the middle m. 70 of Example 62. (The marker in Example 63 is the unfortunate result of an earlier, careless library borrower.)

²²⁵ Unlike some post-Riemannian theories where the Neapolitan chord receives its own functional suffix -n, Riemann's symbol interprets the E^bm chord as the minor *Variante* of the minor subdominant's *Leittonwechselklang*.

In other words, $E^{b}m$ functions as part of the *Auskomponierung* of the tonic, signaling the beginning of a movement of parallel, stepwise sixths between the outer voices (in effect, Federhofer evidently takes the augmented second $E^{b}-F^{\sharp}$ in the soprano, mm. 67–68, to form a step, and not a leap; the same applies to $G^{b}-A^{\natural}$ in the bass). In this perspective, the D–E–F trajectory of the upper voice that Federhofer describes turns out to be a composed-out version of the initial ascent²²⁶ of the piece's very beginning. "Die Funktion der zahlreichen Durchgangsklänge," Federhofer continues, "besteht in der Horizontalisierung des Tonikaklanges. Daher ist es müßig, sie ohne Kenntnis dieser Funktion harmonisch analysieren zu wollen, wie dies Riemann tut" (ibid. 346–347). Here, no credit is given to Riemann's or de la Motte's approaches—they are "müßig," that is, pointless.

By modern standards, Federhofer's Schenkerian graphing leaves too many tones uninterpreted, and it is striking that Federhofer does not ask why Beethoven used a G^b rather than a G^{\natural} in the bass beneath the melody's E^b, since a G^{\natural} would not have made the chord less passing in function. Federhofer's analysis exemplifies the comparative discourse, but is not necessarily a good example of ideal or even widespread Schenkerian practice.²²⁷ It was taken as exemplary of Schenkerian practice, however, in an article by Christopher Wintle which discusses analyses of this work by Riemann, Schenker, de la Motte and Federhofer:

Federhofer has no more to say about 'the numerous passing chords'—symptomatically so, perhaps, for it is too common a fallacy among Schenkerians to think that the identification of some broader function (here a tonic scale-step) in itself absolves them from a more detailed scrutiny of local harmonic manipulations. (Wintle 1985, 172)

²²⁶ See Appendix 1 for more on this term.

²²⁷ Adele T. Katz provides a similar but slightly different Schenker-inspired reading of this exact passage, in which the E^bm of m. 67 resides slightly deeper in the hierarchy, though it still functions as a passing chord: a passing chord between the Dm of m. 65, and the E half-diminished chord (d: II⁶/s) of m. 71. In this perspective, the outer voices of E^bm, G^b and E^b, move to the outer voices of the II chord, G[‡] and E[‡], a motion propelled forward by the intervening parallel sixths (Katz 1945, 180–182).

Wintle uncovers a 'counter-structure' of dissonant diminished chords as a supplement to everything the Schenkerian reductionism overlooks. His insistence that one should pay close attention to details like the diminished fourth $(F-C^{\ddagger})$ of m. 1 and the diminished fifth (G- C^{\ddagger}) of m. 2, both greatly affecting the movement's expression—is laudable, but unfortunately his argument relies heavily on hypothetical recomposing of passages. Furthermore, Wintle goes far beyond the comparison of the four analyses: he also discusses Donald Francis Tovey's analysis, as well as the analytical standpoints of Alban Berg, Arnold Schoenberg, Carl Dahlhaus, Rudolf Reti, and several others. It seems that he aims for a truly all-encompassing analysis that takes into account harmonic function, voice leading, form, motives, intervallic structures, and everything in between.

Since Wintle's objective is so much more far-reaching than synthesizing harmony and voice leading, his text will not be scrutinized thouroughly here. However, he does point out one interesting difference between the Schenkerian and Riemannian approaches that was already touched upon in relation to this dissertation's Example 56 and Example 57 (page 203ff.): namely the difference between what Wintle denominates the *structural* and *retrospective* function of chords (on the Schenkerian side) versus the *experiential* function (on the Riemannian side) (Wintle 1985, 154).

This distinction also proves relevant in relation to Federhofer's 1981 monograph Akkord und Stimmführung in den musiktheoretischen Systemen von Hugo Riemann, Ernst Kurth und Heinrich Schenker (henceforth called Akkord und Stimmführung) and its reception. To this day, this book remains relevant. It is the most extended comparative study of Riemann and Schenker (and Ernst Kurth), and theoretically much more coherent than Silberman's dissertation. However, it is also a problematic study in many crucial respects. The book's reception identified some of its principal problems, and furthermore tells an interesting story of the conflictual relationship between the function-theoretical and Schenkerian traditions.

The book received several reviews, and tellingly enough, they seem to fall into two groups: the European reviews are generally negative, and the American reviews are generally positive. The Swede Ingmar Bengtsson finds certain commendable aspects in Federhofer's analyses and his communication of Schenkerian theory, but also writes that "both the first and second reading of Federhofer's text can awaken mixed emotions"²²⁸ (Bengtsson 1982, 85). Among other things, he criticizes that "while Federhofer devotes the first two chapters to criticizing Riemann and Kurth, he devotes the third to criticizing those who criticized Schenker"²²⁹ (ibid.), and calls the text a *plaidoyer* for Schenker.

Peter Rummenhöller, who has published function-theoretical texts (1975; 1977), is through and through negative in his review. He argues that Federhofer does injustice to both Hugo Riemann and Ernst Kurth and perseveringly defends Riemann: "Alles was sich in irgendeiner Weise 'funktionale' oder 'funktionell' dur-moll-tonale etc. Harmonielehre nennt, [wäre] ohne Riemann nicht Denkbar," he writes, praising Riemann's achievement "auf einen Tatbestand tonaler Musik aufmerksam gemacht zu haben," in effect creating "eines der plausibelsten Modelle des Funktionierens tonaler Harmonik" (Rummenhöller 1986, 384). Furthermore, he notes that Federhofer in at least one of his critiques of Riemann actually misunderstands basic aspects of his theory-or as Rummenhöller polemically puts it: "[Es] wird deutlich, daß der Autor weder der Intention Riemanns noch darüberhinaus der Bedeutung funktionaler Auffassung von Harmonik gerecht zu werden imstande ist" (ibid.). Rummenhöller refers to Federhofer's discussion of Example 64. Here Federhofer writes:

Die II⁷ [i.e. the fourth chord] in diesem Fall als *Sp* einer ihr unmittelbar vorangegangenen, auf schwächerem Taktteil stehenden *S* zu deuten, müßte von der Stimmführung des Basses, der Horizontalisierung der II⁷ und dem anschließenden Quartschritt E-A, abstrahieren (Federhofer 1981, 23).

To this, Rummenhöller objects that neither Riemann, nor his successors, would call the chord of the second scale step in minor Sp, but $S_{/6}$;

²²⁸ "Både första läsningen och omläsningen av Federhofers skrift kan väcka blandade känslor."

²²⁹ "Medan Federhofer ägnar de båda första kapitlen åt att kritisera Riemann och Kurth, begagnar han det tredje till att kritisera dem som kritiserat Schenker."



Example 64: Brahms' Violin Sonata No. 3 in D minor, Op. 108, I, mm. 233–236. Curly bracket by Federhofer, showing the horizontalization of II^7 (Federhofer 1981, 23).

an unfortunate mistake of Federhofer, but one that frankly does not challenge the point of his example.

John Rothgeb's review is, as might be suspected from one of the more influential American Schenkerians, positive except when it comes to one aspect: Federhofer's account of Schenker's theory—which, I might interpolate, is twice as long as the chapters on Riemann and Kurth—is not thorough enough (Rothgeb 1982, 133). Throughout the review he also has several additions to and critical remarks about Federhofer's Schenkerian analyses, while critical engagement with Federhofer's account of Riemann remains conspicious by its absence.²³⁰

The review by William Drabkin (1983), another influential Schenkerian, is also very positive, though he recognises that Federho-fer's treatment of Riemann is too brief and unconvincing:²³¹

The first chapter [on Riemann] doesn't really contribute to the central thesis of the book, though the concluding argument remains valid: that showing how a succession of chords is logically conceived does not amount to demonstrating tonal coherence in music.²³² (Drabkin 1983, 104)

²³⁰ Although his priority is clearly Schenkerian, Rothgeb also comments (predominantly positively) on Federhofer's account of Kurth (Rothgeb 1982, 132–133).

²³¹ Drabkin reviews it in tandem with Karl-Otto Plum's Untersuchungen zu Heinrich Schenkers Stimmführungsanalyse (1979).

²³² In a later article, Drabkin wrote: "Though the title [of Federhofer's *Akkord und Stimmführung*] suggests equal coverage for three renowned theorists, Federhofer's

Notice here that Drabkin sees a difference between "logical succesion" of chords and "tonal coherence."

A similar dichotomy is seen in David Neumeyer's review. Neumeyer, whose relation to Schenkerian theory can be described as ambiguous (cf. section 2.3.2.3, especially page 175ff.), provides what is perhaps the most critical assessment of the book:

What Akkord und Stimmführung seems to promise us is a good beginning to an objective history of theory for the period 1890 to 1930 ... Unfortunately, bias causes Federhofer's book to fail to deliver on its promise ... Akkord und Stimmführung is another dogmatic apology for Schenker. (Neumeyer 1983, 99–100)

In Neumeyer's defense of "Riemann and Kurth against Federhofer's misguided and largely irrelevant arguments" (ibid., 103), he writes that "Riemann did not propose to equate 'harmonic logic' with 'musical structure'," and that "Federhofer's comparisons are bogus: Schenker's game on Schenker's terms" (ibid., 105). Drabkin's distinction between "logic" and "tonal coherence" is echoed in Neumeyer's distinction between "harmonic logic" and "musical structure." In section 4.2.2 (page 297ff.), I shall further discuss this peculiar dichotomous pair.

Apart from these reviews, the book gave rise to some controversy between Dahlhaus (1983), Federhofer (1984), and Karl-Otto Plum (1984).²³³ Dahlhaus' review-essay is ordered into eight principal objections to *Akkord und Stimmführung*, of which I will focus on the first four and the last.

First, he takes issue with Federhofer's position that Rameau's (and consequently Riemann's) focus was exclusively "vertical." Because Rameau's fundamental bass theory and its concept of *double emploi* explain bass motion in ascending seconds (i.e. F to G in C major) as descending fifths/ascending fourths in the fundamental bass (i.e. D to G), it is "zweifellos eine Interpretation von Harmonie-

book is in reality a history of twentieth-century German theory as seen through Schenker-tinted spectacles" (Drabkin 1984–85, 183).

²³³ A more extended, English guide to the contributions to this debate than the one offered here can be found in Puffet (1984).

fortschreitungen, also ein Theorem über ein 'horizontales' Moment des Tonsatzes" (Dahlhaus 1983, 83). Importantly, Dahlhaus goes on: "Federhofer's Irrtum wird allerdings ... die gesamte 'horizontale' Entwicklung von Musik—deren Fortgang in der Zeit—als Stimmführungsphänomen im Sinne Schenkers aufzufassen" (ibid.). In other words, Dahlhaus questions the Schenkerian practice of equating horizontality only with the Schenkerian conception of voice leading.

Second, Dahlhaus writes that Federhofer's starting point is the primacy of voice leading. This is noteworthy because it is in direct opposition to the position Federhofer—at least on paper—takes: it is a recurring main point in *Akkord und Stimmführung* that tonality consists of an interaction of both aspects (not *Akkord oder Stimmführung*), which seemingly implies an equal status of harmony and voice leading. But while Dahlhaus applauds Federhofer's contention that a functionally meaningful chord can also be explained by means of voice leading, he notes that Federhofer fails to recognize that the opposite is also true, "daß nämlich die funktionale Deutung von Akkordzusammenhängen auch dann ein partielles Recht behält" (Dahlhaus 1983, 84).

Third, Dahlhaus criticizes the tendency for theorists to aim for one universal method instead of letting several perspectives enlighten each other, which, in the case of Schenkerian theory and function theory, should be possible without large difficulties ("mit geringer Mühe" [ibid.]).

Dahlhaus' fourth objection regards Federhofer's critique of Dahlhaus' *Waldstein* analysis as it appears in Dahlhaus' article "Musikalische Form als Transformation" (Dahlhaus 1977). Dahlhaus' function analysis is written in prose, but in Example 65 below, I represent his analysis aligned with the score. (Note that his analysis is a rough one, only showing the main functions, not the modal change of the subdominant in mm. 7–8 and the embellishments of the dominant in mm. 9–13).



Example 65: Beethoven's Piano Sonata No. 21 in C major, Op. 53, "Waldstein", I, mm. 1–13 with Carl Dahlhaus' function analysis (Dahlhaus 1977, 29).

Federhofer calls this analysis "kadenzwidrig" because it basically proposes a functional progression D–S–D–T (Federhofer 1981, 143; he refers to the functions of mm. 3, 7, and 9, which, taken together, imply an idea of hierarchy that is not obvious in Dahlhaus' function analysis). According to Dahlhaus, Federhofer here fails to recognize the difference between harmony and key areas: "So ungewöhnlich die Folge D S als Akkordprogression ist, so häufig liegt sie dem Modulationsgang ganzer Sätze zugrunde" (Dahlhaus 1983, 85). These disagreements arise from fundamentally different conceptions of chord, *Stufe*, function, and key. This central issue is further discussed in Chapter 4.

Dahlhaus' eighth and last point of critique is aimed at the tendency for Federhofer—as well as for music theory in general—to push away questions of ambiguity and paradox. In analysis, Dahlhaus writes, one should embrace music's "Prozeßcharakter" (ibid., 87), taking seriously all the impressions, intuitions, and expectations that one perceives throughout the movement; and one should not only take seriously the "last" impression, the grand overview that one has by the end of the movement. Dahlhaus quotes Federhofer, who regards ambiguities as "Fehlverhaltungen und desgleichen, die im weiteren Verlauf korrigiert werden müssen" (Federhofer 1981, 143).

As was also the case in Riemann's and Schenker's analyses of the first movement of Beethoven's Op. 2, No. 1 (see Example 56 and Example 57, page 203ff.), different positions on music's temporality are at issue here.²³⁴ Is the "function" of a musical parameter—of which a chord is but one example—to be judged on the basis of a moment-to-moment (emulated) first-time listening situation, in which one may be "led astray" by ambiguities and paradoxes that proceed in surprising or deceptive manners, or is it to be judged on the basis of an overview of the entire movement, in which one can render probable how a seeming ambiguity "really" functions in the largescale structure?

²³⁴ The reader is reminded that Riemann's Op. 2 analysis was contingent not only on his position on temporality, but also his dualistic theory. See footnote 213, page 204.

Federhofer's and Plum's responses to Dahlhaus' critique provide no surprising objections. Federhofer begins by assuring the reader that though Federhofer has reused Dahlhaus' paper title—"Im Namen Schenkers"-Federhofer's title is not ironic, just as the title of Dahlhaus' book Schönberg und andere is not ironic (Federhofer 1984, 21). In fact, all of Dahlhaus' points of critique seem to emanate from his favorable view of Schönberg, Federhofer writes.²³⁵ Among other things, Plum rejects Dahlhaus' idea that ambiguity does not play a role in Schenkerian analysis (Plum 1984, 26), referring first of all to his own writing on "Zweideutigkeit" in Schenkerian analysis (Plum 1979, 119-128), which Federhofer does mention in Akkord und Stimmführung (Federhofer 1981, 115).²³⁶ Furthermore, Plum notes that Dahlhaus contradicts himself insofar as he takes a more positive stance toward Schenkerian analysis in his earlier Analyse und Werturteil (Dahlhaus 1970, 16-19), and he thus calls Dahlhaus a "demaskierte Schenkerianer" (Plum 1984, 26).²³⁷

Federhofer's *Akkord und Stimmführung*, then, received considerable attention, albeit from very different perspectives.²³⁸ For this study, the book and its reviews serve as the most extensive and interesting documentation of the "clash of traditions." In an overall view,

²³⁵ The opposition of Schenker and Schoenberg is another music-theoretical trope, much more present in especially Anglophone literature than the opposition between Schenker and Riemann (evident from Berry's *A Topical Guide to Schenkerian Literature* which contains five entries on Schenker–Riemann comparisons, and 35 on Schenker–Schoenberg comparisons [Berry 2005b, 316–324]). Briefly put, a main disagreement between the two schools is that Schenker takes unity to emanate topdown from the *Ursatz*, while Schoenberg takes unity to grow bottom-up from the developing variation of motives.

²³⁶ The *Zweideutigkeiten* mostly concern strictly Schenkerian matters such as the question of whether to read an *Urlinie* from $\hat{5}$ or $\hat{3}$, not really ambiguities of the sort Dahlhaus refers to.

²³⁷ Plum's reading of the cited passage in *Analyse und Werturteil* is somewhat tendentious, however, insofar as Dahlhaus merely argues that harmony and other musical parameters should not be analyzed alone, but in connection with other parameters in order to address the work as a coherent whole—something that surely sounds Schenkerian, but which is not explicitly presented as such by Dahlhaus.

²³⁸ In addition to the reviews discussed here, it was reviewed by Channan Willner (1982) and (in Polish) by Zbigniew Skowron (1986). Furthermore, Federhofer's chapter 1 "Zur Kritik der Funktionstheorie" was translated to Italian and published in Azzaroni (1991, 245–264).

Federhofer's main argument is one that seemingly-but only seemingly-is in direct correspondence with that of this dissertation. Tonal music operates by means of both harmony and voice leading, and an adequate analysis should take both into consideration. But there can be no denying that even though Federhofer posits this, his approach is de facto one that conceives of voice leading and harmony in an exclusively Schenkerian sense, and, in addition, prioritizes voice leading. In fact, Federhofer's development mimicks that of Schenker: William Rothstein has argued that for the early Schenker "harmony and voice leading were coequal branches of musical government," but that he later made a "controversial turn toward seeing Stufen as mere supporting actors" (Rothstein 2019, 2, 12).²³⁹ As demonstrated in Federhofer's analysis of the second movement of Beethoven's Piano Sonata No. 7 in D major, Op. 10, No. 3 (recall Example 62 and the following discussion), this is the tendency in Federhofer's analytical practice, too.

3.1.4 CHRISTENSEN'S COMPARISON

An early text of the now renowned music theorist Thomas Christensen is his article "The Schichtenlehre of Hugo Riemann," the title of which reveals his reconciliatory purpose (Christensen 1982). In this article, he questions the accuracy of the characterization of Schenker and Riemann as "opposite ends of a spectrum representing seemingly irreconcilable interpretations," and notes that their differences have "often been unduly exaggerated by many Schenkerians, to the obvious disadvantage of Riemann" (ibid., 37)—here, a footnote provides a quote from Federhofer's article "Die Funktionstheorie Hugo Riemanns und die Schichtenlehre Heinrich Schenkers" (Federhofer 1958) as an example of a biased comparison. Christensen sets out to argue that "polemics aside, there are undeniable overlappings in the theories of Riemann and Schenker" (Christensen 1982, 37). He provides a quick list of some of their obvious commonalities:

²³⁹ I am grateful to William Rothstein for providing me with this forthcoming text.

Each had a similar evolutionary perspective toward the history of tonality, as well as a chauvinisitc prejudice for German music (although this is more pronounced in Schenker's writings than in Riemann's). Furthermore both accepted the overtone series as the natural progenitor of tonality, although Riemann extended this principle to include a purpoted "undertone" series. Scattered in both their writings are biological metaphors characterizing the "organic" behavior of music and metaphysical references to the unity of the primeval *Hauptklang*. William Mickelsen goes so far as to claim that the origin of Schenker's concept of *Stufen* "might well have been Riemann's tonal system of tonic with its upper and lower elements." (Christensen 1982, 38)²⁴⁰

Mickelsen's claim is rather speculative, but the obvious similarities and differences—between the concepts *Stufe* and function will be discussed further in section 4.1.1 (page 246ff.).

Christensen notes that "Riemann reifies the tonic triad as the ultimate, and essentially the only true consonance" (Christensen 1982, 40), which is obviously similar to Schenker's chord of Nature from which the *Ursatz* and eventually the composition is derived. Christensen certainly points to a deep-rooted resemblance between their theories. In Riemann's writing on modulations, Christensen also sees a parallel to Schenkerian theory. He exemplifies with a quote from the second edition of *Handbuch der Harmonielehre*:

The passing from one key to another is totally like the passing from one chord to another. The difference between the true and a newly arrived at key corresponds to the difference between the tonic chord and its neighboring [i.e. subdominant and dominant] harmonies. Modulation is thus tonality of a higher order. (Riemann; cited in Christensen 1982, 41)

Christensen takes this as an indication that Riemann was aware of "a higher level of tonal organization" (Christensen 1982, 41). Combined with the fact that Riemann considers different chords "to be representatives and expressions of a dialectically higher class of function called tonic" (ibid., 42), Christensen suggests that Riemann's concept of function is similar to (but "by no means the same animal—as Mickelsen implies" [ibid.]) Schenker's *Stufen*. If Riemann believes that keys relate to each other just as chords do, then it follows, argues

²⁴⁰ Christensen refers to Mickelsen (1977, 96).

Christensen, that key relationships represent large-scale functional relationships.²⁴¹ However, "Riemann never carries to the logical end the implications of his functional theory" (ibid., 43). The large-scale analyses that Christensen is looking for are, in other words, not to be found in Riemann's analytical practice. Christensen suggests such an analysis himself, shown here as Example 66.



Example 66: Thomas Christensen's (1982, 43) function analysis of keys in a hypothetical sonata.

Christensen speculates why Riemann did not carry such an analysis out. Although it is indeed unclear what Riemann himself would think of this analysis, one could argue (in line with post-Riemannian function theories) that "DD" does not function well as a key designation, because a key cannot function as a secondary dominant (Spv might be more accurate). But the main problem with Christensen's reconciliation is that it does not work on Schenkerian ground. Renotating Christensen's hypothetical (and very abstract) example in Schenkerian notation, many of these "keys" could be seen as subordinate to other governing *Stufen*. If one did take each of the suggested keys as a *Stufe*, the hierarchy between them would still be different than in Christensen's function analysis (see Example 67 for an example).



Example 67: Thomas Christensen's (1982, 43) hypothetical analysis compared with one possible Schenkerian reading of the same key sequence.

²⁴¹ I disagree that this is exactly what is implied by Riemann. If T–S–D–T is the paradigm for harmony, it is not the paradigm for key sequences, where the harmonically "forbidden" T–D–S–T can often be found.

But in Schenkerian theory and analytical practice, keys are not necessarily *Stufen*, and *Stufen* are not necessarily keys. Hence, some of the suggested keys may be subordinate to preceding *Stufen*, or a deepresiding *Stufe* may appear within this foreign key.²⁴² This has been clearly demonstrated in Carl Schachter's article "Analysis by key" (1987), which will be discussed further in section 4.1.3.1 (see especially page 272ff.).

Christensen is aware of this, of course, and his article concludes by regretting that "Riemann never pursued this idea further" (Christensen 1982, 44). If Christensen's own hypothetical analysis is not completely in line with Schenkerian ideas, he at least points to some general, but notable, similarities between the theorists and their theories, and his argument that a *further* development of Riemann's function theory *could* result in a function theory which is reconcilable with Schenkerian ideas is certainly thought-provoking. It is regrettable, then, that Christensen did not look to later (especially German pre-war) function theories (while it is understandable that Scandinavian theories were not on his radar).²⁴³

3.1.5 REDMANN'S COMPARISON

The last theorist to be discussed in this historical overview of compar-"Zum isons is Bernd Redmann and his two articles (Schein-)Antipodentum von Hugo Riemann and Heinrich Schenker" (1996) and "Funktionstheorie" (2009). The former article argues, as the title suggests, that the antagonistic and irreconcilable relationship between Riemann and Schenker is only apparent. Its introductory words point to Riemann's and Schenker's statuses as the founders of a prolonged war of ideas:

²⁴² Some confusion has been caused by Schenker's "Stufen der Tonalität als Tonarten" (Schenker 1994a [1925]; cf. Rothstein 2003, 220–221).

²⁴³ In his introduction to Riemann's theory, Elmar Seidel also briefly writes of an idea similar to Christensen's, though in a much more inaccurate manner: "Schließlich unterliegt die Beurteilung der harmonischen Großbeziehungen ganzer Sätze, ja ganzer Satzzyklen denselben Grundsätzen. Wie wir sehen, gelangte Riemann knapp dreißig Jahre, bevor H. Schenker seinen Stufenbegriff formulierte, zu einer Schichtenlehre der Harmonieschritte" (Seidel 1966, 52). In Rummenhöller (1975; 1977) something along the lines of Christensen's hypothetical key analysis is offered.

Musiktheoretische Kontroversen arten sich nicht selten in Glaubenskriege aus. Hugo Riemann und Heinrich Schenker zählen nicht nur zu den bedeutendsten Systemdenkern der Musiktheorie, sondern verewigten sich in der Geschichte ihres Faches zugleich als Begründer eingeschworener und wehrhafter Glaubensgemeinschaften. (Redmann 1996, 131)

Redmann's purpose is to underline the theorists' similarities—for instance, the simple fact that they were both concerned with the music of the eighteenth and nineteenth centuries—and to relativize their antipodean positions. He strikingly points to the fact that "produktive Ergebnisse solcher Debatten sind nur zu erwarten, wenn es gelingt, das Aneinandervorbeireden in ein sachbezogenes Mit- und Gegeneinander auf der Basis methodenunabhängiger Maßstäbe zu verwandeln" (Redmann 1996, 131). Whether there are also other approaches to comparison and mediation will be discussed in section 3.2 (page 236ff.) and section 6.1 (page 351ff.), but Redmann is certainly right that the frequent quarrels between the traditions are unproductive as long as they are performed as trench warfares, instead of being performed with "methodenunabhängiger Maßstabe."

Referring to Elmar Seidel (1966; briefly mentioned in footnote 243 above), Redmann writes that Riemann's *Musikalischen Syntaxis* (1877)²⁴⁴ sketches a harmonic *Schichtenlehre* (Redmann 1996, 136). Like Christensen and Seidel, Redmann's contention is based only on the fact that Riemann extends his ideas about harmonic relations to key relations (and even inter-movement relations between global keys). While it is certainly true that this amounts to a multileveled hierarchy, Riemann's "*Schichtenlehre*" is—for the reasons rehearsed in the discussion of Christensen's article above—not synonymous with Schenker's *Schichtenlehre*. Carl Schachter's stipulation that "the tonal centre of a passage may change during the prolongation of a

²⁴⁴ Riemann's *Musikalische Syntaxis* (1877) predates his function theory (Riemann 1891; 1893). A basic feature of *Musikalische Syntaxis* is Riemann's Hegelian conception of harmonic progressions as consisting of *These*, *Antithese* and *Synthese*. These dialectic stages resemble his later T, S, and D, but not quite. The Hegelian dialectic emanates from Riemanns very first writing, "Musikalische Logik" (1872), but underwent significant transformations in *Musikalische Syntaxis*. A good introduction to this stage of Riemann's theory, and the development of the dialectic model, is provided in Harrison (1994, 266–274).

single harmony" (1987, 292) is of paramount importance for the Schenkerian concept of *Schichten*, but practically irreconcilable with Riemann's theory—both at this stage, in later stages, and in most—but not all—post-Riemannian function theories.

Redmann's 1996 article, in other words, rehearsed exactly the same arguments as Christensen's 1982 article. Since Redmann did not refer once to Christensen's article, it is possible that he was not aware of its existence.

If Redmann's reconciliatory approach is unsuccessful—because it aligns two completely different conceptions of *Schichten*—his later article "Funktionstheorie" (2009) comes closer.²⁴⁵ In a discussion of the applicability of function analysis on different repertoires, Redmann cites the Beethoven passage shown in Example 68. Redmann writes that this passage causes Riemann "ungeheuere Schwierigkeiten" (Redmann 2009, 62). Riemann's struggle is shown in Example 69 (in fact, on a second page, Riemann suggests yet another analysis not displayed here).²⁴⁶

At the end of Redmann's example (Example 68), his own analysis is shown. Redmann suggests that "die Intervallsatz-Folge als Einschub in die Logik der kadenziellen Klangfortschreitung diese suspendiert" (Redmann 2009, 62). He then takes a markedly Schenkerian leap: "Diesem Einschub kann hier auch die Funktion zugeschrieben werden, den Tonikaklang zu linearisieren und auszukomponieren" (ibid.). The interpolated "Intervallsatz-Folge" is, in Forte and Gilbert's (1982) terms, a linear intervallic pattern, thus not representing a harmonic progression (cf. section 2.3.2.1, especially page 160ff.). Thus far, Redmann's argument resembles that of Federhofer insofar as they both point out what function analysis *cannot* do. In this light, the most interesting aspect of Redmann's article is his following sentence, in which he turns his argument upside down:

²⁴⁵ Toward the end of this article, Redmann *does* refer to Christensen (Redmann 2009, 68).

²⁴⁶ Each quarter note in Riemann's analysis represents a measure. Note that Riemann begins his excerpt a measure earlier than Redmann (with the C minor of m. 25 instead of m. 26). Riemann advocates that all his four analyses may be possible at the same time (Riemann 1919a [1917] II:215).



Example 68: Beethoven's Piano Sonata No. 13 in E^b major, Op. 27, No. 1, "Quasi una fantasia," II, mm. 26–40, and Bernd Redmann's (2009, 62) analysis.



Example 69: Top staff: Riemann's analysis of Beethoven's Piano Sonata No. 13 in E^{\flat} major, Op. 27, No. 1, "*Quasi una fantasia*," II, mm. 25–40. Middle and bottom staves: Alternative analyses of mm. 26–35 (Riemann 1919a [1917], II:214).

CHAPTER 3: COMPARING TRADITIONS

Dienen Intervallsatz-Strukturen oft dazu, Funktionsklänge zu prolongieren, so begegnet ebenso häufig die umgekehrte Konstellation, dass ursprünglich diatonische Intervallsatz-Folgen (z.B. Quintfallketten oder 5–6-Bewegungen) durch Chromatisierung mit funktionalen Klangverhältnissen (meist D–T/t-Folgen) überbaut werden. (Redmann 2009, 62)

It is unfortunate, then, that Redmann shows no analytical examples of such processes, at least not within the standard repertoire.²⁴⁷

Redmann does proceed with an analytical example which is meant to remedy what he believes to be the prime problem of function analysis, namely that its vertical perspective entails that all chords which receive a function symbol are given equal status. He then takes another Schenkerian leap: "Als Hilfskonzept für eine Bedeutungsabstufung von Klängen könnte die Differenzierung von 'auskomponierten' und 'auskomponierenden' Strukturen fungieren" (Redmann 2009, 65). As an example, Redmann provides the analysis seen in Example 70.



Example 70: Bernd Redmann's (2009, 65) analysis of Haydn's Divertimento in F major, Hob.XVI:9, I, mm. 1–8.

Redmann is closing in on an actual synthesis of function analysis with core Schenkerian ideas. The tonic is prolonged, visually represented by the extended line, until the arrival of the dominant in m. 8. The intervening chords receive two kinds of labels: Some of them receive a function label,²⁴⁸ and most of them are also interpreted as "melodic" or "linear" constructs with a label in parenthesis. The label "(WK)" means *Wechselklang* (neighboring chord) and is a chordal equivalent

²⁴⁷ Redmann does discuss underpinnings of functional harmony in works by Debussy and Grieg, but since this impressionistic repertoire (Grieg's music is perhaps better described as being on the brink of romanticism and impressionism) is beyond the scope of this study, I will not engage in a discussion of his analyses.

²⁴⁸ Redmann follows Wilhelm Maler's system of functional designations (see section 1.2.3.2, page 77ff.).

to "WN," *Wechselnote*. The label "(DK)" means *Durchgangsklang* (passing chord), an equivalent to "Dg," *Durchgang* (passing note).

One aspect that his analysis does not take fully into account is *phrase structure*. The reader may find the entire phrase in Example 118 (page 372), where this piece is discussed again (and analyzed with my own analytical model). As can be seen, this particular phrase may arrive at an important dominant in m. 8, but this dominant, which appears in first inversion, initiates an expanded cadential motion. The music cadences on the root-position dominant in m. 11, and in retrospect, the dominant of measure 8 was not the arrival of the structural dominant, but rather the initiation of a cadential motion toward it (in this motion, it serves as a local tonic in first inversion). Redmann's cutting off of the rest of the phrase (phrase here understood in Rothstein's terms) makes it unclear why the final dominant is not just a neighboring one (E being the leading-tone neighbor to the tonic F). Though Redmann's analysis surely adds a new layer to function analysis, it does not fully function on Schenkerian premises.

A detail about visual readability is also worth noticing. At first glance, Redmann's analysis seems to suggest that the tonic is prolonged through a very long neighboring Sp or S, but when reading the music, it becomes clear that the tonic returns (in root position or in inversion) many times in between his labels. Why has Redmann not labeled these returns? Residing at a deeper structural level, they are arguably even more important than the neighboring chords, and the analysis does not communicate this visually. They may be implied, of course, by the horizontal line that extends from the initial T, but it still seems to be a problem that the reader cannot infer from the analysis itself that the Sp (WK) *is* indeed a *Wechselklang* that *imme-diately* returns to its point of origin. Had this been represented visually by another function label or by alternative means, the analysis would have communicated the musical course much more clearly.

Only by the end of his article "Funktionstheorie" does Redmann relate his just described approach explicitly to that of Heinrich Schenker, thus confirming his reconciliatory aim. He speculates about the possibility of other means of visual presentation, and also considers more or less "practical" solutions. It is clear that Redmann's suggestions do not amount to a fully-fledged synthesis, but it is a noteworthy prolegomenon.

In passing, Redmann refers to his deep-residing function symbols (T and D in Example 70) as "Satzfunktionen" (Redmann 2009, 68).²⁴⁹ This seems to me to be a very useful term to distinguish such functions from the neighboring or passing functions that he also notes. I have already referred to my own analysis of Haydn's Divertimento below (page 372). In the section surrounding that analysis, and in section 6.4 (page 403ff.) I shall return to discuss Redmann's model and its influence on my own models.

3.2 **RETHINKING THE COMPARISON**

If one compares Chapters 1 and 2 with what has thus far been discussed in Chapter 3, one will notice a glaring difference in contents: Chapters 1 and 2 were devoted primarily to what happened in the time after Riemann and Schenker published their works, while all of the studies discussed in detail in section 3.1 compared the works of Riemann and Schenker. Valuable as these studies may be, they say little about the relationship between the post-Riemannian and Schenkerian traditions that have dominated twentieth-century Western mu sic theory, especially after WWII. It is not the case that they say absolutely nothing about these traditions-as Chapter 2 argued, Schenker does hold an authoritative position in the Schenkerian tradition, and a study of Schenker is thus also a study of a part of Schenkerian practice. But only indirectly so, for (as Chapter 2 also argued) the relation of Schenkerian theory to Schenker's theory (and Schenkerian analysis to Schenker's analyses) is complex and multi-faceted, something that was especially discernible in the many Schenkerian debates (Conservatory vs. University Schenker, revisionist vs. purist approaches etc.).²⁵⁰ When it comes to Riemann's relation to the post-Riemannian tradi-

 $^{^{249}}$ He uses the word not in relation to the Haydn analysis, but in an analysis of mm. 1–4 of Beethoven's Piano Sonata in A^b major, Op. 26, first movement. Redmann makes no mention of the similar "phrase model" in Laitz (2003), but the similarities between Redmann's, Laitz', and my own analytical models are discussed in section 6.4, page 403ff.

²⁵⁰ These debates were summed up at the end of section 2.4 (page 192ff.).

tion, the situation is quite different. As exposed in Chapter 1, theories and analytical practices in post-Riemannian traditions—both before and after WWII—differ so much from Riemann's practice that one might say, in a more black-and-white statement, that the comparisons offered by Schenker, Silberman, Federhofer, Christensen, and Redmann, say nearly nothing of value about the European post-Riemannian analytical practice that has now dominated for approximately 100 years.

This is the first problem with comparisons hitherto offered: They focus not on the living traditions, but on their founding fathers. Federhofer is, in fact, aware of this:

Es ist im Sinn vorliegender Themenstellung nicht beabsichtigt, die Entwicklung der Funktionstheorie Riemanns oder ihre Veränderungen, die sie bei dessen Nachfolgern bis hin zu Hermann Grabner, Hermann Erpf, Wilhelm Maler und Diether de la Motte erfuhr, zu verfolgen. Die Verhältnis zwischen Akkord und Stimmführung wird durch sie ohnehin kaum betroffen. (Federhofer 1981, 12)

Federhofer's project, then, is explicitly to compare historically important theorists, and on these premises, his lack of concern for post-Riemannian theory can be excused. Even so, the numerous critical responses to Riemann's theory (many of which appeared already in Riemann's lifetime) testify to the fact that it is sometimes very easy to criticize Riemann—especially his dualism and many of his analyses—but, so I would argue, it is less easy to criticize (at least some of) the post-Riemannian function theories that he gave rise to, even if Federhofer is right that the relation between chord and voice leading did not fundamentally change in these theories. In effect, if Federhofer's project—his many articles as well as *Akkord und Stimmführung*—was to break with the dominant tradition of his contemporaneous music-theoretical milieu, the critique of Riemann was a strawman.

The second problem concerns the purposes of the comparative studies (both those discussed here, and more informal comparisons such as those listed in footnote 205, page 198). With the exception of Christensen's and Redmann's, comparisons are usually biased and performed with the purpose of proving which theory or analytical

approach is "right" or "the best." Federhofer's *Akkord und Stimmführung* (1981) exemplifies this tendency. Though it is certainly the most comprehensive and enlightening of comparative studies, it also serves, with its biased coronation of Schenker, as the epitome of counterproductive and polemical comparisons on an uneven foundation that only reinforces the "clash of traditions." On its own premises, that need not be a problem as such: Federhofer's intention is not to reconcile Schenkerian theory and function theory, and my critique is not that he does not achieve this. It *is* problematic on Federhofer's own premises, however, that he offers no relevant comparison. To quote David Neumeyer's above-discussed review (page 221), Federhofer's criticism of function theory is based on "misguided and largely irrelevant arguments" (Neumeyer 1983, 103).

To recapitulate—and to rehearse some arguments from the introduction—this study therefore distinguishes itself from the abovementioned comparative studies in several respects. This may be summarized in three points:

1) The current comparison is conceived of as an unbiased study of the two traditions. A truly unbiased position is, I acknowledge, a utopia. Had another person conducted this study, the outcome would likely be different. But contrary to, for instance, Silberman and Federhofer, my intention is not to argue for the supremacy of one theory or analytical approach over the other.

2) I do not compare Hugo Riemann and Heinrich Schenker as historical theorists, but the traditions that they gave rise to (while, certainly, I acknowledge the direct or indirect influence they have). This is a methodological stance with far-reaching ramifications, and the largest difference between my study and previous ones.

3) In order to meet the demands of points 1 and 2, I work on the foundation modelled in Example 1 (page 19), with an understanding of theory and analysis as occuring in traditions and existing as practices. If the "methodenunabhängiger Maßstabe," which Bernd Redmann spoke of (see page 231), is attainable at all, then practice theory offers the most viable approach to attain it. If, in recalling the theory of Etienne Wenger (1998, 54; see page 23ff.), one posits that meaning does not reside in the musical works per se, but in the communities of practice in which meaning is negotiated, then it follows that an unbiased metaperspective recognizing each practice as valid within its community becomes attainable (point 1)—and it follows that one's object of study must, instead of Riemann and Schenker, be those very "practices" that they gave rise to (point 2). It is in this light, as well, that the complexes of Example 1 are seen as comparable at all: historically, and continuing to this day, there has been a noteworthy and widespread practice of understanding each tradition in relation to the other, as the previous section (3.1) unequivocally documents.

The first step in conducting a comparison on the bases just described is to look back at the two large Chapters 1 and 2 and compare post-Riemannian and Schenkerian traditions *as traditions*. Of course, when considering Example 1, this involves comparing theories and analytical practices as well, because they are all interconnected. For practical reasons, however, the remainder of Part II compares traditions, theories, and analytical methods one at a time—but should ultimately be seen as one interconnected comparison in a practicetheoretical light.

As scholarly traditions, there is one significant aspect that differentiates the post-Riemannian from the Schenkerian. This has to do with the overall *geographical* segmentation made in Chapters 1 and 2 (and therefore does not include such exceptions as the North American reception of Riemann as discussed in section 1.4). One may illustrate this notable difference by pointing to the title of David Beach's 1985 article entitled "The Current State of Schenkerian Research" (Beach 1985).²⁵¹ An equivalent article by a European author entitled "The Current State of (post-)Riemannian Research" is nearly unthinkable. Certainly, this is not to say that European research has not focused on Riemann, but simply that one cannot speak of "Riemannian research" as a *field* in the same way that one can speak of Schenkerian research. There are no *International Riemann Symposiums*, but there are regular *International Schenker Symposiums*. There is not a series

²⁵¹ This article was discussed in section 2.3.2, especially page 157.

of anthologies entitled *Riemann Studies*, but there is a series entitled *Schenker Studies*. There is no academic, peer-reviewed journal called *Journal of Riemannian Studies*, but there is an academic, peer-reviewed journal called *Journal of Schenkerian Studies*.

The post-Riemannian tradition is primarily a pedagogical tradition; it lives primarily in the classroom and in the textbook (and, more exceptionally, in journal articles). The Schenkerian tradition is a pedagogical *and* a scholarly (research-oriented) tradition; it lives in the classroom, the textbook, and in academic journals, conferences, professional societies and networks.

This is connected, of course, to the larger picture that "music theory" evolved into its own discipline in America in the 1960s (see section 2.3.1.2, page 146ff.), while an equivalent institutionalization of music theory has not occurred in Europe. The results are absolutely fundamental differences in the conception of what "music theory" is, how it should produce knowledge, and what kind of knowledge it should produce—an ontological as well as epistemological difference. In American academia, it is customary to distinguish rather strictly between musicologists and music theorists (and, as a third position, ethomusicologists). The historical and cultural research agendas of American musicologists are not always shared by American music theorists-as became particularly obvious in the debate that was sparked by New Musicology's critique of music theory and analysis, and the numerous articles that were devoted to this debate. Although this picture seems to be under constant change, especially in these days (cf. Christensen 2018; Martin 2018; Cohen et al. 2019; Ewell 2019), the allegation against music theorists was, among other things, that they were overly concerned with formal models, rigid systematization, and that they disregarded historical and social context.²⁵²

By extension, similar musicological critiques have been aimed toward the European subdiscipline of music theory, but it is notable that the bulk of the debate was (and is) one that concerned the *insti*-

²⁵² Roughly, one might say that music theorists were concerned with Guido Adler's "systematic musicology," and musicologists with his "historical musicology" (Mugglestone and Adler 1981, 14–15).

tutionalized music theory-Music Theory rather than music theory, as it were. The result is that, while Music Theory has certainly responded to and in some cases even adopted the perspectives of New Musicology (see for instance Agawu 1996, §§17-22), it has managed to continue as an independent discipline, while European music theory has been put in a difficult position "zwischen den historischen, systematischen und ethnologischen Teildisziplinen und hinsichtlich ihres primären Betätigungsfeldes, des Unterrichts an Musikhochschulen, zwischen Wissenschaft, Pädagogik und künstlerischer Praxis" (Janz and Sprick 2010, 5). Indeed, it is quite easy to identify the Schenkerian traditions' epistemological values and their development (keywords were science and rigor, but also their seeming opposites intuition, tonal analysis as art, etc.), but it is more difficult to identify such values in the post-Riemannian tradition. It does seem that one notable feature of this tradition is a deeper concern for *history*; by this, I do not mean that Schenkerians do not care for history, of course. But it is clearly observable that "historically informed" theories-sometimes dubbed historische Satzlehre and historische Analyse-seem to have been of comparatively greater importance in European music theory, at least until more recent years.²⁵³ One example was Knud Jeppesen's hugely successful contrapuntal theory-an international success, to be sure, but nonetheless one that was, on Schenkerian ground, criticized for its foundational idea, namely that a contrapuntal theory must take an actual repertoire as its starting point-recall the discussion of Counterpoint in Composition (Salzer and Schachter 1969) in section 2.3.1.2, especially page 149ff. A similar concern for music history also influenced function theory: Here, the prime example is Diether de la Motte's reformulation of function theory which aimed at creating a historically more correct vocabulary (see section 1.2.3.3, page 81ff.).²⁵⁴

²⁵³ The most notable English-language equivalent to *historische Satzlehre* is the by now influential "schema theory," the main work being Gjerdingen (2007).

²⁵⁴ A more radical *historische Satzlehre*, of course, would not apply function theory to a repertoire that predates the formulation of the theory. This is one point in Thomas Daniel's critique of de la Motte (Daniel 2001; see also page 82).

As traditions, then, the post-Riemannian and Schenkerian traditions are quite different in nature, existing under quite different circumstances, and with dissimilar epistemological values and interests. Schenkerian theory and analysis is arguably the aorta of the discipline of Music Theory²⁵⁵—though, whether this holds true in 2020 is debatable—while function theory is surely *the* dominant tradition of harmonic theory in Europe, but in no comparable way holds such a central position in musicology as a *discipline*.

It is noteworthy that these different circumstances arose historically from a more or less shared beginning in the early days of modern German-speaking musicology. Surely, Riemann and Schenker already inscribed themselves into two different traditions: as mentioned earlier (see page 198), Riemann joined the Leipzig-based circle of dualists, and Schenker continued the Vienna-based circle of fundamental bass theorists. But as shown in Chapter 1, ideas from both traditions circulated relatively freely and influenced theorists such as Johannes Schreyer, Rudolf Louis and Ludwig Thuille, and even the early Hermann Grabner.

In the historical trajectory of both traditions, WWII was a defining moment. Indeed, if ideas circulated freely before WWII, it was this very event that forced Schenkerian ideas to migrate to the USA, Jewish ideas being banned in Europe (Gerigk and Stengel 1940), while at the same time sanctioning function theory as the *Reichsharmonielehre* (see page 74, especially footnote 69). In a grim sense, WWII was the event that established the traditions *as* traditions, separate and each with their own hegemonic theory. As such, current disagreements between the traditions—and perhaps even between Music Theory and European musicology in a wider sense—also have their historical root in WWII.

This concludes the current discussion of the traditions *as traditions*. Overall, it may be said that the antagonistic relationship between Schenkerian and post-Riemannian traditions originated in

²⁵⁵ As Steven Rings wrote in 2011, "all new approaches to tonal analysis must at some point situate themselves with respect to the Schenkerian tradition, the *lingua franca* of tonal theory in the Anglo-American academy" (Rings 2011b, 35).

Schenker's own resentment toward Riemann, but was firmly established after WWII. The idea that Schenkerian and Riemannian approaches are antitheses to each other have been fed by the widespread practice of defining one theory against the other. This was especially clear in the early establishment of American Schenkerian theory (see section 2.3.1.1, page 139ff.), but also in the later comparisons studied in this chapter. Because it is only the theories and analyses of Schenker and Riemann themselves that have been subject to comparative scrutiny, it remains an open question whether Schenkerian and post-Riemannian *theories* and *analytical approaches* are as irreconcilable as the previous comparative studies would have us believe. Focusing on the theoretical issues first, the next two chapters are devoted to this question.

Chapter 4:

Comparing theories

4.1 COMMON GROUND?

If one were asked to very succinctly pinpoint what the common ground is for Schenkerian theory and function theory, a probable answer would be this: they both theorize about the function of harmony (and voice leading)²⁵⁶ in tonal music. The answer could be rephrased in a number of ways, but it seems to me that it is fairly precise and describes the main reason why the two theories have so often been juxtaposed and compared, as documented in Chapter 3.

The question is then: What exactly is meant by this answer? What does the central terms in this answer really mean? The *function* of *harmony* and *voice leading* in *tonal* music—all of these italicized words, I would argue, are used in similar but slightly and sometimes notably different ways in the two theories. They do not seem to agree on what the word *function* means, and even the term *harmony* denotes slightly different phenomena. The core concept of *tonality*²⁵⁷ also seems to be defined in different ways, and in consequence, there is not a complete overlap between the *repertoires*—the tonal music—that the two theories claim to cover. This section therefore discusses the terms *function, harmony* and *voice leading*, and *tonality* one by one in order to clarify and compare what they denote in the two traditions. The textbooks, articles, and previous comparisons discussed

²⁵⁶ Voice leading is set in parentheses because it is obviously a core focal point for Schenkerian analysis, while it is usually a secondary phenomenon in function theory (as discussed further below).

²⁵⁷ John Koslovsky (2014) has pointed out that Schenker himself put only mild emphasis on the concept of tonality, while it was an integral part of the early Schenkerian enterprise—and judging from the titles of recent books (*Analysis of Tonal Music* [Cadwallader and Gagné 1998] and *Tonal Analysis* [Damschroder 2018]), it continues to be to this day.

in Chapters 1–3 supply the empirical data for this discussion, and additional relevant sources will be discussed as well along the way.

Before embarking on this comparison, it is crucial to understand its connection to the mediation attempted in Part III of this study. The comparison and the mediation are connected by virtue of the following argument: If two theories make significantly different claims about the *same* phenomenon, then one can speak of an actual disagreement, and possibly of irreconcilable, competing, and mutually exclusive theories. But if core terms shared by the two traditions are homonyms rather than synonyms, then it is possible that the two theories do not make claims about the *same* phenomenon, but rather about *different* but *related* phenomena. It is not immediately obvious that such claims, then, should necessarily be irreconcilable. It may be the case that one theory makes a claim about a super-phenomenon, while the other theory makes a claim about a sub-phenomenon (of the super-phenomenon).

4.1.1 FUNCTION

It is obvious that "function" plays a central role in "function theory," but as Chapter 2 documented, "function" is a frequently used term in Schenkerian theory as well. The question is to what extent the function-theoretical "function" and the Schenkerian "function" are similar, exclude each other, or designate different and co-existing phenomena. I will discuss this question by first making some general observations about the use of "function" in the two traditions, and then, in subsection 4.1.1.1, turn to the specific functions "tonic" and "dominant," as well as the frequently encountered discussion about the terms "subdominant," "predominant," and "intermediate harmony."

The function-theoretical "function" is, as Chapter 1 showed, a rather ill-defined entity. Riemann's feat was to coin a term that made intuitive sense, even if it was difficult for subsequent theorists to define it strictly (if they attempted at all). Despite—or perhaps because of—the term's vagueness, it was widely adopted and adapted, creating a series of different function concepts (key-relational, intervalrelational, progressional, etc.; see Appendix 3). The principle that all post-Riemannian function theories share is a very general one: any harmony in tonal music carries the function of T, S, or D, either by being a manifestation of their prime forms (I, IV, and V) or by being functionally related (different conceptualizations of the nature of this relation have resulted in different function concepts). Even this tenet is questioned in some function theories which argue that II is the primary form of the subdominant (Hamburger 1955; Hvidtfelt Nielsen 2015)—this is discussed further below—but the primacy of T, S, and D, and the idea of third-relations, is the defining feature of function theory.

As summarized in section 2.4 (page 192), the Schenkerian tradition has used "function" in two ways. First, it may be used informally. Here, the word describes how any musical entity (tone, suspension, motive, etc.) "functions" in the Schenkerian "structure." A metrically emphasized dissonance may "function as" an appoggiatura, or a tone may "function as" a passing tone. Second, it is also seen as a more technical and specific term, especially in the locutions "harmonic function" and its opposite "contrapuntal function." In this technical meaning, which emanated from Salzer (1952) and took root in Salzerian as well as more mainstream Schenkerian theory, as Chapter 2 documented, "harmonic function" is a synonym for Stufe (at the structural level in question), and "contrapuntal function" is applicable to the chords at the shallower levels. The concepts are relative: a harmonic function at one level may serve a contrapuntal function at a deeper level. Because "harmonic function" is a synonym for Stufe, it follows that there are a limited number of scale steps that may exhibit a harmonic function, namely the initial I, the structural V, and the final I of the Ursatz (the global or a local one), plus a series of scale steps which may serve as the Auffüllung of the tonal space between the initial I and the structural V. And because IV is one of the scale steps, it is easy to see a similarity between function theory's T-S-D-T and Schenkerian theory's I-IV-V-I. But because several other scale degrees (such as II, III, and VI) may also serve as the intermediate step between I and V in the Ursatz, Schenkerian theory does not infer a three-function system.

It seems fairly clear, then, that there is a relation of *similarity* between function theory's "function" and Schenkerian theory's "function," but it also seems that it is not a relation of *identity*. To further unpack this relation, one may consider how musical *context* is approached in the two theories.²⁵⁸

In function theory, the most general context into which a chord is put is the prevailing key. The function of a specific chord may also be contingent upon the function that immediately precedes it—but the extent to which it is depends both on the *type* of function theory in question (progressional function theories being the most likely to determine function on this basis) and the analytical practice of the individual analyst. In certain situations, a function may be determined on the basis of what comes after the chord in question. For instance, I– II[‡]–V may initially be heard as T–DD–D, but retrospectively (if there is a more or less extended motion to the dominant as a new key center) be reinterpreted as (S–D)–D or S–D–T in the key of the dominant.

A function does not always behave as expected, a familiar situation being the deceptive cadence. In such contexts, function theory stipulates that V still exerts dominant function, even though it does not lead to I. This is not always the case in Schenkerian theory. In Schenkerian theory, context has more far-reaching ramifications. As was discussed in the section on Schenker's own theory (section 2.1, especially page 113ff.), his concept of *Stufe* was, by very definition, only applicable to actual compositions, not theoretical models. What is more, because a *Stufe* (or harmonic function) is always one that functions in relation to the pre-determined *Ursatz*, one *always* has to take a specific chord's entire context into account: it functions in a phrase, a series of phrases, and ultimately the entire composition. This also means that the V in a deceptive cadence is sometimes *not* acknowledged as serving dominant function—rather, it can be seen as a passing chord on the way to a deeper-residing VI.²⁵⁹ An example

²⁵⁸ I will limit this discussion to strictly harmonic and tonal contexts—not the context of "design," which may often influence how a Schenkerian reading is carried out.

²⁵⁹ "Sometimes" is a key word here: one can also imagine a structural V progressing to a neighboring VI, and eventually returning with a concluding V–I. In fact, Schach-

was David Damschroder's analysis of Robert Schumann's "Hör' ich das Liedchen klingen" (see Example 47 and Example 48 from page 184), in which the D major of m. 1₂ did *not* have dominant function; rather, it provided consonant support for the melody's tone A.

One may summarize that function theory determines function in a chord-to-chord perspective, and Schenkerian theory determines function in a chord-in-complete-structure perspective. One might also say that function theory determines function on the basis of what the chord *is*, and Schenkerian theory determines function on the basis of what the chord *does*. This has already been noted by different theorists, such as David Kopp:

In his [i.e. Riemann's] own work he explicitly associated *Funktion* with *Bedeutung*. But the word naturally evokes more dynamic associations. After all, in everyday usage, the function of any object or concept has to do with what it does more than with what it is. It is inevitable that this sense of the word would have influenced our notion of harmonic function, leading us to associate the concept with the behaviors of chords and to transform it into an active verb ("functions as"). (Kopp 1995, \$14)

Elsewhere in the article, Kopp writes: "Hugo Riemann's theory is indisputably a functional one in some sense, since it was he who popularized the term. But his notion of function and ours are worlds apart" (Kopp 1995, \S 8).

By "ours" Kopp presumably refers to elemental North American tonal theory anno 1995, and as I showed in section 1.4 and Chapter 2, this is fundamentally influenced by Salzerian/Schenkerian thinking.²⁶⁰ Kopp does not discuss post-Riemannian function theories, but if he had done so, he would have noticed that the active verb "functions as"—*funktionieren* or *fungieren*—is not frequently used at all.²⁶¹ The "function" of function theory is more often a noun, which

ter has discussed numerous contextual meanings of the deceptive cadence (Schachter 2006b).

²⁶⁰ Kopp's article also points to the fact that the informal and the formal use of "function," which I identified above, are closely related.

²⁶¹ This is not to suggest that these verbs do not occur with technical, functiontheoretical meanings at all in the post-Riemannian corpus—I would be surprised if they did not—but I have, in fact, not been able to find it.

only confirms Kopp's point that the two "functions" are worlds apart.

To pinpoint the crucial difference of the two conceptions of "function," Michael Polth's article "Ist die Funktionstheorie eine Theorie der Funktionalität?" (2001) provides a useful vocabulary. Polth—who belongs to the circle of new German Schenkerians²⁶² (see section 2.2.2, page 133ff.)—writes with the purpose of criticizing the conception of function that prevails in function theory. Polth's answer to the question in the article's title is that function theory is not a theory of "functionality" because it does not consider the compositional whole sufficiently: "wer die Funktion eines Einzelmoments in einer Komposition angeben kann, hat zugleich einen Begriff vom Kunstwerk im Ganzen, weil das Einzelmoment seine Funktion nur dadurch besitzt, daß es auf bestimmte Weise Teil eines Ganzen ist" (Polth 2001, 319). Because Riemann's Ganze is simply comprised of the work's central key, the Funktionstheorie is nothing more than a theory of chords, Polth writes. According to Polth, "die bislang einzige Theorie, die eine echte Funktionalität im musikalischen Kunstwerk zeigen kann, ist diejenige von Heinrich Schenker" (Polth 2001, 322).

Some of my points about the theories' conceptions of "function" have already been noted in or implied by other authors' comparisons of Riemann and Schenker. What has not been sufficiently underlined is that this is not just a difference in analytical attitude, but also a difference in theoretical propositon; the "function" that one theory theorizes about is simply not the same "function" that the other theory theorizes about. I believe that the literature has thus far overlooked this simple circumstance. It is telling, for instance, that Wason writes of Sechter's theory: "Rather, it should be noted that at many points Sechter's system is also a *Funktionstheorie*, in which 'function' is not arrived at a priori, but through the local context of progression" (Wason 1985, 50). This conflates two uses of "function" (Sechter's fundamental bass theory and Riemann's *Funktions*-

²⁶² Schenkerian underpinnings are pronounced in his dissertation (Polth 2000; see especially pp. 88–106).
theorie), and Wason's position thus entails that only one of them can be right.

Rather than judging who is right and who is wrong, one may, from the standpoint of practice theory, posit that there are two different communities of practice, each using "function" in a different way. Within each community of practice, their respective definitions and usages of function are considered correct and consistent. More importantly, the function-theoretical "function" and the Schenkerian "functionality"—I will use these terms of Polth's to distinguish between them—may, so I will argue, go hand in hand, precisely because the two concepts do not designate the same phenomenon. This becomes clear when one focuses specifically on the theories' usages of the terms "tonic" and "dominant," and especially the terms "subdominant," "predominant" and "intermediate harmony."

4.1.1.1 Tonic, Dominant—and what else?

Generally, function theory stipulates that I is tonic, the central chord of the key, and V is dominant, the function that most clearly points toward the key center by virtue of its leading tone, its fifthrelationship with the tonic, and (in some function theories) the common tone it shares with the tonic. An additional "gravitational pull" may occur if the characteristic dissonance of the seventh is added, because it must be resolved downward to the tonic's third. IV manifests the subdominant function, counterbalancing the dominant by being fifth-related to the tonic in the other direction than the dominant. This general stipulation is very literal: any I, V, and IV that occurs in the music exhibits tonic, dominant, and subdominant function. The notable exception, of course, is the apparent tonic in second inversion, which is seen as a dominant function with ⁶/₄ suspension.²⁶³

In Schenkerian theory, one may use tonic, dominant, and subdominant merely as "positional," descriptive terms, in which case they are simply the names of the scale degrees and enjoy no superior

²⁶³ A rarer exception can be seen in progressional function theories in which IV may, under specific circumstances, be construed as referring to the tonic. See, for instance, Example 122, page 388, and Kirkegaard-Larsen (2018, 84).

status in comparison with "supertonic," "mediant," "submediant," and "leading-tone" triad. But often, the terms are also meant to imply notions of harmonic function. Consider the following quote from Carl Schachter:²⁶⁴ "The G-major chord thus does not have tonic function, but rather has the function of supporting a passing tone" (Schachter 2016, 228). The situation is a familiar one in Schenkerian analysis: on the surface, a root-position G major chord appears in the key of G major, but because it occurs within the prolongation of a deeper *Stufe* (here, it is II), the chord does not exhibit the "harmonic function" of tonic, but rather a "contrapuntal function," supporting a passing tone.

In other words: What Schachter here identifies as *not* having tonic function, *does* have tonic function in the function-theoretical perspective.

This has far-reaching ramifications. For instance, the "plagal cadence" is a given in function theory—for surely, the progression IV–I occurs in tonal music. In Schenkerian theory, on the other hand, a true plagal cadence is rare, if possible at all. In analytical practice, any apparent plagal cadence—a concluding "Amen," for instance—virtually always occurs *after* the true, concluding authentic cadence, and the IV thus has the effect of prolonging the tonic, not the effect of cadencing. This idea is also adopted in some North American function theories. Even William Caplin, whose approach is notably un-Schenkerian, writes that

an examination of the classical repertory reveals that such a cadence [i.e. plagal cadence] rarely exists—if it indeed can be said to exist at all.... Most examples of plagal cadences given in textbooks actually represent a postcadential codetta function: that is, the IV–I progression follows an authentic cadence but does not in itself create genuine cadential closure.²⁶⁵ (Caplin 1998, 43–45)

²⁶⁴ For present purposes, it is not necessary—and would lead too far—to present the full analytical context of the quote.

²⁶⁵ In a footnote, Caplin adds: "Plagal cadences perhaps arise in works from the nineteenth century. But even in some of those cases, the progression from IV to I seems to omit an implied penultimate dominant of an authentic cadence" (Caplin 1998, 265).

One may infer that the different conceptions of "function" and of the specific functions "tonic," "dominant," and especially "subdominant," lead to different conceptions about what a "cadence" is. By extension, this also leads to different conceptions of "phrase," for tonal motion and cadential closure are key elements of Schenkerian ideas of phrase, while function theory may take virtually any succession of T–S–D–T to comprise a cadence.

This is a very deep-rooted disagreement between the theories, and it seems clear that any mediation between them would have to take this into consideration as a central element.²⁶⁶

Turning now to the "frequent music theoretical argument concerning the terms 'subdominant' and 'predominant'," as White and Quinn call it (2018, 314) it is clear that these terms function on quite different premises in post-Riemannian and Schenkerian theories. A predominant is a term of "functionality" rather than functiontheoretical "function." A Schenkerian predominant may often exert a subdominant function (in the function-theoretical sense), but it may also exert other functions such as Tp (vi) or it may even be a local tonic. For instance, the predominants shown in Example 71 all have different function-theoretical functions, as shown by the function analysis in the lower line. The VI of m. 16 is a local tonic, and its "function-theoretical function" fundamentally changes when it is transformed into an augmented-sixth chord, even though its "functionality" is that of a predominant throughout. The IV⁶ of m. 44 is, on the other hand, a subdominant for function theory, while still a predominant for Schenkerian theory.²⁶⁷

²⁶⁶ For this reason, meter, phrase, and cadence are at the center of discussion in section 6.2.3 (page 373ff.).

²⁶⁷ In this specific movement, one can make many more observations on the relation between chords' predominant "functionality" versus their "function-theoretical functions." For instance, the opening progression Em–C can be seen as t–tG in moderelational theories or T–Taf (tonic derivation) in progressional theories; in a Schenkerian reading, this C may either connect to the ensuing local predominant rooted on A[#], or it may be seen as the result of a I^{5–6}. The *Maggiore* section is notably set in C major and is a large-scale repetition of the deep tonal structure of mm. 1–30. Finally, the Coda also begins in C major and—of course—ends in E minor.



Example 71: The author's deep middleground analysis of the Allegretto section of Beethoven's Piano Sonata No. 9 in E major, Op. 14, No. 1, II, mm. 1–61, with added function symbols.

Even though the Schenkerian application of Roman numerals does communicate a difference between the first and second instances of predominants in Example 71, it does not (because of its reliance on monotonality) communicate the difference in local function. Although a more detailed foreground or middleground graph could communicate that C major is a local I in mm. 16–29, it ultimately positions this local I as a *Stufe* in relation to the global I.

I have thus far underlined that Schenkerian "functionality" and function-theoretical "function" do not designate the same phenomena in music. I will now argue that for this very reason, the two views are compatible. If one regards Schenkerian functionality as a "superconcept" which may contain several different function-theoretical functions, then one can see that the two concepts simply work on different levels. The analysis in Example 71 is a simple demonstration of this. This furthermore entails that the frequently discussed question of the functional primacy of IV or II—and their relation to II[#]—is nonsensical; they may all serve a predominant functionality, but there is still a difference in function-theoretical function. David Damschroder writes that theories which ascribe different functions to II and II[#] in major keys, and which call the latter V/V (or DD, though he does not mention this) "confuse chordal function and chordal quality" (Damschroder 2010, 7). Damschroder's critique is valid enough, and he even constructively launches the term "dominant emulation" to

acknowledge the local dominant-like *quality* of such a II^{\sharp} . But the critique is one that patents the Schenkerian conception of function—for it is clear that in post-Riemannian function theories, what Damschroder calls chordal quality *does* influence the function in question.

It is worth noting that certain function theories have already shown signs of a multi-leveled approach to function (such that functionality becomes a superconcept above function), though without fully articulating them. I already showed that Riemann's very first articulation of function theory—the article "Neugestaltung der Harmonielehre" (Riemann 1981)—conflated S and DD into *one* function, implying a concept closer to "functionality" than his theory and its adaptations would eventually promulgate (see the discussion surrounding Example 2 on page 43). Elsewhere (Kirkegaard-Larsen 2019b, 152–154), I have noted that the Swede Sten Ingelf's model of common progressions between functions (see Example 72) orders the functions in a series of vertical "slots," in which it is notable that S, Sp, and DD are all aligned.²⁶⁸ One may therefore regard the slots as corresponding to Schenkerain T–PD/Int–D–T functionalities, and the circles as different local functions of such functionalities.



Example 72: Sten Inglelf's overview of possible/common progressions in major keys (Ingelf 1980, 87).

²⁶⁸ "Kan gå till alla funktioner" means "may go to all functions." Thick lines indicate more common progressions, thin lines less common. On Ingelf's possible influence from Jørgen Jersild's *position theory* (Jersild 1970) as well as Schenkerian theory, see Kirkegaard-Larsen (2019b, 152–154, 156–157).

It follows from all this that a successful mediation between Schenkerian theory and function theory would have to work with two levels of "function": a super-level of Schenkerian functionality, and a sub-level of function-theoretical functions. For practical reasons, of course, a vocabulary which distinguishes more clearly between functionality and function must be developed, so as to not become too confusing.

4.1.2 HARMONY AND VOICE LEADING

Undoubtedly, the dichotomy that is most often invoked in comparisons of function theory and Schenkerian theory is that of harmony and voice leading-or Akkord und Stimmführung as Federhofer entitled his 1981 monograph-and its related dichotomy of verticality and horizontality/linearity. Considering the previous comparisons (section 3.1, page 198ff.), the general contention seems to be that function theory prioritizes harmony as a governing principle in tonal music, while Schenkerian theory prioritizes voice leading. From one perspective, function theory puts too much emphasis on harmony, failing to recognize that some passages in music, including those that are "analyzable" with function theory, are guided by voice leading rather than harmonic principles; from the other perspective, it is too often the case that Schenkerian voice-leading reductions demote to "unimportant" passing chords what may be functional and harmonically "extravagant" events, as was the characterization that Charles J. Smith used in his much discussed article "The Functional Extravagance of Chromatic Chords" (1986).

Adherents of function theory may interject that function theory surely *does* pay attention to voice leading and horizontality—recall Dahlhaus' opinion that the focus on harmonic progressions (*Harmoniefortschreitungen*) is a focus on horizontality (see his critique of Federhofer, discussed on page 222ff.). Likewise, Schenkerians may insist that it is the *interaction* between harmony and voice leading that they study, and that there is thus no special prioritization of voice leading. That there is a perceived difference in emphasis nonetheless is evident from the literature surveyed in section 3.1.

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And indeed, the general contention that the theories prioritize harmony and voice leading differently does point to an essential fact. One may assert that Schenkerian theory evaluates which chords have the status of Stufen on the basis of voice-leading motions; and conversely, that function theory explains voice-leading phenomena on the basis of functions. In the article in which Riemann accused Louis and Thuille of plagiarism, Riemann wrote: "Was ist der Kern meiner Methode? Die Ableitung der Gesetze für die Stimmführung, besonders die Verdoppelungen gewisser Töne, aus den tonalen Funktionen" (Riemann 1907, 502). One such law of doubling is the law concerning deceptive cadences. Riemann-and this is wholly adopted by post-Riemannian function theories—stipulates that when V leads to VI, the third should be doubled in the latter chord because the apparent third is the functional root. This is why V–VI has the function of D–Tp (or, in progressional theories D-Tst [tonic substitution]). In his fervent critique of Riemann and function theory, the contrapuntal theorist Knud Jeppesen turned Riemann's claim upside down: one might as well argue that such doublings are the outcome of good voice leading (no parallel fifths); the function is then a by-product of voice leading-instead of voice leading being a by-product of function (Jeppesen 1951, 30–32).²⁶⁹

As with the term "function," one may ask whether or not the terms "harmony" and "voice-leading" denote the same phenomena in the theories. I already observed above that function theory takes virtually any harmony as a function, and it follows that it takes almost any simultaneity as a harmony (frequent exceptions include melodic motions above stationary harmonies, appoggiaturas and similar phenomena). This is not always the case in Schenkerian theory. Felix Salzer, for instance, distinguishes between *harmonies* and *chords*.²⁷⁰ Chords and progressions between chords are the results of voice-

²⁶⁹ Jeppesen's article was given as a plenary lecture at the IMS' congress in 1949, and it was later published in a Danish edition (Jeppesen 1952).

²⁷⁰ The tendency I am here discussing is rather pronounced in Schenkerian theory, but it is not unique to it. For instance, Carl Dahlhaus notes that both Jean le Rond d'Alembert (1717–1783) and Gottfried Wilhelm Fink (1783–1846) distinguished between *Akkord* and *Harmonie* (cf. Dahlhaus 1989, 101).

leading motions, whereas harmonies and the progression between harmonies are the result of harmonic relationships (this was discussed on page 141). Forte and Gilbert's concept of linear intervallic pattern is another example (see section 2.3.2.1, especially page 160ff.): the authors emphasize that a linear intervallic pattern is not a "harmonic progression" (Forte and Gilbert 1982, 85). In their discussion of "harmonic classes" (T-Int-D-T), Cadwallader and Gagné write that because the "Int" class in a phrase may consist of both IV and II, this reveals "the distinction between 'chord' and 'harmony,' a significant aspect of Schenker's ideas" (Cadwallader and Gagné 2011 [1998], 42). However, this is something which varies between Schenkerian practitioners. It seems that David Beach (2012), for instance, does not reserve "harmony" for Stufen, but also applies it to simultaneities that arise out of voice leading.²⁷¹ This indicates that, as in function theory, Schenkerian theory may use "harmony" in a more general sense. A major difference persists nonetheless: function theory basically claims to be able to functionally explain any harmony and harmonic progression in tonal music (with the possible exception of sequences), while Schenkerian theory claims to be able to distinguish between functional harmonies and non-functional contrapuntal chords.

In a classic essay entitled "Either/or," Carl Schachter discusses the frequent analytical problem that this entails for Schenkerians: either a particular chord exerts a harmonic function, or it does not. The analyses at (a) and (b) in Example 73 are, in principle, both valid, insofar as they do not violate Schenkerian principles. But they are also mutually exclusive, as are the three *Stufengänge* below the music. And echoing Schenker's argument that *Stufen* are by definition dependent upon concrete musical contexts, Schachter argues that the analyses in

²⁷¹ In a discussion of the apparent G^{\flat} minor chord—spelled $G^{\flat}-A^{\natural}-D^{\flat}$ instead of $G^{\flat}-B^{\flat}-D^{\flat}$ —in Brahms' Intermezzo in B^{\flat} minor, Op. 117, No. 2, m. 8, David Beach writes that "one might be tempted to interpret the harmony in measure 8 as a minor chord built on G^{\flat} ," but argues that the chord is really a prolongation of the dominant F major (which explains the unusual spelling) with an extended passing note D^{\flat} in a $E^{\flat}-D^{\flat}-C$ trajectory (Beach 2012, 40). Even though the chord is the by-product of voice leading, he does use the term harmony.

Example 73 may all be valid in principle—in theory—but they are not all equally good analyses:

One of the three readings is truer to the Mazurka as a unique and individual work of art than are the other two, which can be considered valid only from a perspective that takes in general aspects of tonal structure but that excludes the specific features of the piece's design. (Schachter 1990, 169)



Example 73: Carl Schachter's (1990, 168) analysis of Chopin's Mazurka in $G^{\#}$ minor, Op. 33, No. 1, mm. 1–8.

For a Schenkerian analysis to work on Schenkerian premises, Schachter's either/or is mandatory and necessary. Certainly, Schachter explicitly acknowledges that ambiguities exist in music (Schachter 1990, 169), but without the either/or, analyses easily become internally contradictory.

Now, if one adopts my above contention—that Schenkerian functionality and function-theoretical function work on separate levels, both of them valid and important—then one is able to show separate levels of harmonic function without violating the either/or. In fact, a similar view was expressed by the influential Schenkerian William Rothstein at the Second International Schenker Symposium as early as 1992. Referring to Charles J. Smith's above-mentioned article "The Functional Extravagance of Chromatic Chords" (1986), Rothstein uttered:

To paraphrase Smith's argument, how is it that all those passing and neighboring tones time and again *just happen* to dispose themselves in ways that produce what appear to be tonics, dominants, and other familiar chords, often behaving in exactly the ways predicted by the reviled textbooks? Isn't this just too great a coincidence? Are all those triads and seventh chords really just chance by-products of voice leading? Not that such chance by-products never occur, but it requires a very large leap of faith to believe that so many chordal structures and successions, exhibiting so many regular patterns, are to be ascribed to contrapuntal accident alone. (Rothstein 1992, 3)

In this paper, which was "not very well received,"²⁷² Rothstein argued that Schenkerians ought to recognize that chords which may be contrapuntally explained at one level can still be harmonically explained at another: "Why claim that one level—invariably the larger one invalidates another, smaller level? Or that one level constitutes 'appearance' and the other 'reality'?" (ibid., 4). Rothstein argues against the either/or and the "nothing-buttery," as he terms the frequent claim that some chord is "nothing but" a contrapuntal byproduct. As an example, Rothstein discusses a frequent but complex type of cadence in which a typical Schenkerian reading explains away shallower levels as contrapuntal by-products without harmonic function. The cadence is seen in Example 74 ("P" means predominant function).

The interesting aspect of the cadence has to do with the $\frac{4}{2}$ and $\frac{6}{3}$ chords (across mm. 2–3). A typical Schenkerian analysis would take these chords as subordinate to the overarching IV–V, relegating them as inferior contrapuntal by-products without harmonic function. But as Rothstein's function analysis (which follows cues from Keiler, Guck, and Ratner, who were discussed in section 1.4.2, page 97ff.) shows, he insists that the $\frac{4}{2}$ chord *does* exert a local dominant function, and that the ensuing $\frac{6}{3}$ chord *is* a local tonic, even though they exert other functions at a slightly larger level. At this level, the $\frac{4}{2}$ chord is at the boundary of the IV-prolongation, while I⁶ is dominant-functioning (an inverted $\frac{6}{4}$ dominant).

²⁷² Private email correspondence with the author (February 2017); I am grateful to William Rothstein for providing me with this as yet unpublished paper.



Example 74: Rothstein's (1992) "Schrock cadence" according to Schenkerian analysis and function analysis.

The approach to harmony and voice leading which Rothstein proposes here is pursued further in Part III. It is an approach which frames the question of the primacy of harmony or voice leading as a chickenor-the-egg question.

4.1.3 TONALITY

The theories in question are both theories of tonal music and they therefore both rely on some notion of tonality. In the following pages, I will compare their notions of "tonality" and related concepts such as "key" and "modulation." Some similarities and differences between their conceptions are already well described in the literature, but a less well-described consequence of the differences is that the two traditions do not fully agree on what counts as "tonal music," that is, the theories do not theorize about exactly the same repertoire. Possibly, this has large-scale consequences for music historiography in the two traditions because it questions the rationale behind familiar music-historical periodizations and style history.

I should underline that I do not intend to be comprehensive in this discussion. Surely, "tonality" remains one of the most ubiquitously discussed terms in music theory, often taken for granted but equally often heavily debated.²⁷³ In addition to such debates which at least limit themselves to discuss the "tonality" of Western music from approximately 1600 to approximately 1900, more recent music theories propose far more inclusive conceptions of tonality which allows twentieth-century music—classical as well as popular—to be described as "tonal" or at least exhibiting some sense of "tonality" (see Tymoczko 2011; Harrison 2016). I thus limit my comparison to the texts surveyed in Chapters 1 and 2, but even for this (still rather large) corpus, I make no claim of comprehensiveness. Furthermore—and with the risk of repeating myself—I focus on the theoretical traditions *after* Riemann and Schenker. Riemann's reliance and adaption of Fétis and Rameau is not irrelevant, but only indirectly influences post-Riemannian conceptions of tonality.

Of course, it can come as no surprise that "tonality" is conceived differently in the two theories—it is probably a truism that any tonal theory conceives of tonality in its own more or less unique way.²⁷⁴ At the same time, it is worth underlining that there is at least some common ground: in both traditions, "tonality" is seen used as a broad term, corresponding to what Thomas Holme Hansen has called a "regulating principle which resides above the composition and thus the composition process, and which to some extent functions prescriptively for the total continuum of successive and simultaneous connections of tones"²⁷⁵ (Hansen 1998, 17). The regulating principle in both theories is, ultimately, the tonic *Klang*. In fact, one might boil the main differences between the two theories down to this: that the tonic *Klang* regulates the composition in rather dissimilar ways. In Schenkerian theory, the *Ursatz* is a temporal elaboration of this

²⁷³ See, for instance, Hyer (2001)—later revised as Hyer (2002a)—and the debate of this article in Rothstein (2001); Hyer (2002b); and Rothstein (2003).

²⁷⁴ For instance, Martin Eybl writes, specifically about conceptions of tonality: "Rameaus Fundamentalbaßtheorie, die Stufentheorie, die Funktionstheorie, Ernst Kurths dynamisches Tonalitätskonzept oder Schenkers Schichtenlehre—keiner dieser Ansätze führte zur Ausbildung einer einschlägigen Lehrmeinung, die über die Grenzen der jeweiligen Schulen hinaus Geltung erlangt hätte" (Eybl 2005, 54).

²⁷⁵ "et kompositionen og dermed kompositionsprocessen overordnet regulerende princip, som i et vist omfang fungerer præskriptivt for det samlede kontinuum af successive og simultane toneforbindelser."

Klang, and the *Ursatz* is, in turn, also composed out temporally, generating the entire composition. In function theory, one cannot speak of a temporal composing-out in the same manner. Instead, it is a question of relations and representations on a pre-temporal, systematic level: any triad is conceived as a function of the tonic, dominant, or subdominant, and together, these three main functions point toward the tonic *Klang* as the tonal center.

Hence, in both Riemann's theory and in post-Riemannian function theories, the "concept of tonality [is] intimately bound up with the idea of harmonic function," as Alexander Rehding has noted (2011, 112). Riemann himself frames his function theory as an extension of Fétis' notion of tonality.²⁷⁶ Hermann Grabner's function theory consists of "five laws of tonality" (see footnote 56, page 71) and thus by very definition conflates function and tonality.²⁷⁷ And Wilhelm Maler explains the transition from church modes to *Durmolltonalität* in terms of function: when triads are no longer to be described as the results of voice-leading motions (*Stimmenverläufe*), but "als Träger eines Kräftevorganges, als *Funktion*," the era of *Durmolltonalität* begins (Maler 1931, 6).

Hermann Grabner and Wilhelm Maler provide good examples of the fundamentally *relational* concept of tonality in function theory. Studying their examples of "extended tonality" is the best way to study this *relationality* because it shows the widest consequence—the logical extreme—of this way of conceiving of tonality. Furthermore, the study of post-Riemannian ideas of tonality is of interest for Riemann research at large, for it is an often-discussed fact that Riemann cites the hypothetical progression shown in Example 75 in his *Musik-Lexicon* entry on *Tonalität*, explaining that it is tonal because all chords refer to C major as the tonal center.²⁷⁸

²⁷⁶ Set in *Speersatz*, Riemann underlined in Handbuch der Harmonielehre: "Unsere Lehre von den tonalen Funktionen der Harmonie ist nicht anderes als der Ausbau des Fétis'schen Begriffes der Tonalität" (Riemann 1917a [1887/1880], 214).

²⁷⁷ The reader may find the five laws in footnote 56, page 71.

²⁷⁸ See Harrison (1994, 266–269); Kopp (2002, 61–66; 2011, 401–402); Rehding (2011, 112–113 et passim). Cohn's *Audacious Euphony* (2012) is named after (Cohn's own translation of) Riemann's characterization of this progression.



Example 75: Riemann's example in his entry on *Tonalität* (Riemann 1919b [1882], 1202).

Alexander Rehding (2011) makes a point out of the fact that Riemann never analyzes the progression, 279 but looking to post-Riemannian theories, there would be many possible analyses. Adopting his teacher Max Reger's motto,²⁸⁰ Grabner's fourth law of tonality, entitled "Erweiterung der Tonalität," entails that "auf jeden Akkord kann jeder Akkord gebracht werden" (Grabner 1923, 32). This "extended tonality" operates first and foremost through extended third-relationships. Following the lead of Louis and Thuille's writings on third-relations (1927 [1907], 342-347), Grabner introduces the symbol "t" for *terzverwandt*. As an example of its usage, he presents the analysis shown in Example 76. The initial G major is a secondary dominant of the C major that appears in m. 3; this C major is *terzverwandt* with the global tonic E^{\flat} major. In this way, he is able to functionally explain an unusual opening, and thus to posit that it is "tonal." At the same time, Grabner writes that the music does not begin in the "Haupttonart Es-Dur" (1923, 38), thus underlining that tonality is a phenomenon above the level of keys (Tonarten).

A similar contention is found in the first edition of Wilhelm Maler's *Beitrag zur Harmonielehre* (1931). In his sections on "Erweiterung des Tonartbegriffs" and "entfernte Terzverwandtschaft," Ma-

²⁷⁹ Not in functional terms, at least; Riemann uses terminology from his theory of *Harmonieschritte* to label the progression. Late in his career, Riemann did suggest new function symbols for chromatic mediants but it remained a fleeting remark in the preface of the sixth edition of *Handbuch der Harmonielehre* (Riemann 1917a, XVII), only sporadically used in his Beethoven analyses (1919a). It is one of Rehding's purposes to further trace this idea.

²⁸⁰ As Daniel Harrison has noted, Reger himself ascribed the motto to Franz Liszt (Harrison 1994, 1).



Example 76: Grabner's (1923, 38) function analysis of Hans Pfitzner's "Studentenfahrt" from 5 Lieder, Op. 11, No. 3, mm. 1–7.

ler argues that in late romantic music, major and minor keys with the same root may comprise one unified tonality. Although Schenkerian theory does work with a similar idea—that of *mixture* (*Mischung*)— Maler's idea results in something quite foreign to Schenkerian theory, namely an expansion of the usual functional relations which enables nearly any chord to be functionally interpreted. His *Tonnetz*-like system is shown in Example 77.

It is notable that Maler is fully aware of this model's pronounced *theoretical*—rather than empirical or practical—character:

Eine praktische Anwendung dieser Erscheinungen im vierstimmigen Satz kommt wohl kaum in Frage, da die weit entfernte Terzverwandtschaft in der typischen Kadenz-formel nicht oder nur selten vorkommt. Für die *harmonische Analyse* dagegen ist die Einsicht in die erweiterte Tonalität notwendige Voraussetzung. (Maler 1931, 42)

Systems akin to Maler's are not infrequent in function theories. In addition to Maler's mode-relational system, one may find similar models in Sven E. Svensson's and Carl-Allan Moberg's (1933) keyrelational functional circle of fifths (see Example 78)²⁸¹ and Jan Maegaard's (1990) progressional-processual overview of theoretically possible functions for any triad in C major/minor in Example 79.

²⁸¹ It is beyond the scope of this presentation to account for the many symbols in this figure, but a discussion of this and other functional circle of fifths in the Swedish literature can be found in Kirkegaard-Larsen (2019b, 140–141 et passim).



Example 77: Wilhelm Maler's (1931, 42) illustration of the tonal system.



Example 78: Sven E. Svensson's and Carl-Allan Moberg's (1933, 91) functional circle of fifths in major (upper circle) and minor (lower circle) keys.

C-DU	D /M	OT T
0 00	11/11	OLL

Klang	Mogliche Funktionen	Mogliche Funktionen				
	eigenständig	stellvertretend				
C-Dur Deses-Dur	⁺ T ⁺ Dpvn ⁺ SSpvpvn ^o SSpvpn	⁺ Tpg ⁺ Dpa ⁺ SSpvp ⁺ SSpvpa Tnnv ^o SSpvpv				
C-Moll Cis-Dur	+DDADA	^o Tp ^o Ta Tng Dn Dna ^o Spg ^o DDpvpg ^o SSpvn				
Des-Dur	Sn ^o Dpvp ^o DDpn ^o SSp	OS ODDVS ODDV ODDVA DDVA OSSA				
Cis-Moll	+Dpvp	⁺ Dpv ⁺ DDpvpva ⁺ SSpvpv				
[Pes-Moll [b_p	Snv ^O Dpvpv ^O SSpv	*Tnn ^o Dpvpng ^o Spn Snng ^o DDpvpn ^o SSpvp ^o SSpng				
Eses-Dur	OD Spv Tpvpvn Tpvpn SSnn	*Tpvp *Tpvpa *Spvpg *DDpg *Tpvpv DDnay SSnv				
D-Moll Eses-Moll	+Sp ODD SSnnv	+Tpvna +Tpvn +S +Sa oDpg +Spvng oDDp oDDpa DDng				
Es-Dur	^o Tp Dn ⁺ SSpvn	org op opa +SSp +SSpa				
Dis-Moll Es-Moll	o _{Tpv Dnv}	⁺ T _P vpv ^O Tpvp ^O Tpvpa ^O Tpng ^O Dpn ^O Dpna Dnng ^O Spvpg DDnn DDnna SSn SSna				
E-Dur Fes-Dur	+Dpv +DDpvpvn +SSpvpv Tnn ºSpn ºSSpvp ºDDpvpn	+Dpvpg +DDpvp +DDpvpa Thv °Spv °DDpvpv				
E-Moll	+Dp +SSpvp	+D +Da +Dpvng +Spvpvn +Spvpva +DDpvna +DDpvna				
Fes-Moll	Tnnv ^o SSpvpv	⁺ SSpv +SSpva +SSpvpvng ^o Spvpn				
F-Dur Geses-Dur	+S oDDp +Tpvn	⁺ Tp ⁺ Tpa ⁺ Spg ^o DDg Sany				
Eis-Moll F-Moll	og o _{Dpv}	⁺ DDpvpv Tn Tna ^o Sp ^o Spa Sng ^o Dpvpg ^o DDpvp ^o DDpvpa ^o DDpng ^o SSpg				
Fis-Dur	+Труру	*Tpv				
[Ges-Dur	Tpvp SSn DDnn ^o Dpn	^o Dpv DDnv ^o SS				
Ges-Moll	OTPVPV SSnv DDnnv	Deven Sen Occor				
G-Dur Ases-Dur	+D +SSpv +Spvpvn +DDpvn Spvpn	+Dpg +Spvp +Spvpa +DDp +DDpa +SSpvpg				
GMo11	o _D + _{SSp}	^{oT} pg ^o Dp ^o Dpa Dng ⁺ Spvn ⁺ Spvna DDn DDna test test testant				
Gis-Dur As-Dur	+DDpvpv Tn °Sp °DDpvp	OT OTA OSA ODDOVA				
Gis-Moll As-Moll	+DDpvp Tnv ^o Spv ^o DDpvpv	<i>⁺Spypv +DDpv</i> ⁻ <i>Tpn</i> ⁻ OTpna Tnng Dnn Dnna ⁻ Spyp ⁻ Spypa ⁻ Spng ⁻ ODpypng				
A-dur Heses-dur	+Tpv +Dpvpvn Snn ©SSpn ©Dpvpn	+Tpvpg +Dpvp +Dpvpa •Dpvpv Snv •SSpv				
A-Moll	+Tp	T +Ta +Tpvng +Dpvn +Dpvna +Sg ODDpg				
Heses-Moll	Snnv	*SSpvpvn *SSpvpvna *SSpvpn				
B-Dur Ceses-Dur	+SS °Dp +Spvn DDn	oDg +Sp +Spa oDD oDDa +SSpg +SSnnv				
Ais-Moll B-Moll	oss oppv DDnv	<pre>*Dpvpv oTpvpg oDpvp oDpvpa oDpng Sn Sna oDDpn oDDpna</pre>				
H-Dur Ces-Dur	*Spvpv *DDpv °Tpn Dnn °Spvp	DDng OSSp OSSpa SSng +DDpvpg OTov Dov				
H-Moll	+Spvp +DDp	*Tpvpvn *Tpvpvna *Spv +Spva *DD +DDa +DDpvne				
Ces-Moll	Dnnv ^o Spvpv	oTpvpn SSnn				

Example 79: Jan Maegaard's (1990, 80) overview of theoretically possible functions for any chord in C major/minor.²⁸²

 $^{^{282}}$ Symbols set in italics (in the right-hand column) signify that they are substituting, that is, appearing instead of a (local) tonic targeted by a (secondary) dominant. a =

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The models are dizzying in their complexity, but they show the kernel of function theory's conception of tonality: for music to be tonal, the chords must exhibit a function; to exhibit a function, a chord must meaningfully relate to one of the three main functions; any chord may, in theory, relate to a main function through the principle of fifth- and third-relations (and this principle may be extended beyond the first "link"). In practice, of course, theorists acknowledge that context plays a large role, and that some chord progressions (for instance, parallel motions in impressionistic music) may be experienced as violating functional principles. The sequence is an example of a frequent violation of functional principles *within* the tonal repertoire, and it is therefore discussed further below.

Turning to Schenkerian theory, its conception of tonality is simultaneously simpler and more complex. It is simpler because Schenkerian theory does not rely on the system of functional relations—narrow or extended—and does not posit such dizzying models as the ones just described. And it is more complex because, in Salzer's words: "any chord may be part of any key, provided it has a function to fulfill within the structural framework. In general, whether or not a chord belongs to a key depends on function only, not on degree of harmonic relationship" (Salzer 1952, I:25).

In comparing tonality in Schenkerian theory and function theory, Salzer's above quote is interesting because it—supposedly on purpose—pinpoints the main difference: the Schenkerian (or, in any case, the Salzerian) conception of tonality does not rely on "degree of harmonic relationship" (which is exactly what function theory and the discussed models do) but on whether or not a chord "has a function to fulfill within the structural framework." We saw what this meant earlier: in Hellmut Federhofer's (1972, 346–347) Schenkerian analysis of Beethoven's Piano Sonata No. 7 in D major, Op. 10, No. 3, II, mm. 65–76 (see Example 62, page 217), the many diminished chords all belong to the overall tonality because they mediate the way from I to I⁶ (in his reading)—that is, they "fulfill a function" within the

afledning (derivation); g = gennemgang (passing chord); n = neapolitanization. The table is from a German version of an originally Danish article (Maegaard 1989–90).

structural framework. This reverberates with the above discussion of "function." "Function," in the Schenkerian sense, has nothing to do with more or less extended harmonic relationships, whereas it has, in the function-theoretical sense, everything to do with harmonic relationships. Or, in other words: In function theory, tonality is an *a priori* system of harmonic relationships (that is, "functions" and "functional representation"), but in Schenkerian theory, tonality is a system of *a posteriori* structural relationships (that is, "functionality"). In even shorter terms: In function theory, tonality relies on *representation*, but in Schenkerian theory, it relies on *prolongation*. The relation between representation and prolongation will thus be central to the analytical models in Part III.

Alexander Rehding has discussed the relation between "rule" and "repertory" in Riemann's conception of *Tonalität*, and has argued that Riemann's rules are not always directly applicable to the actual music he analyzes (exemplified by his analyses of Beethoven's piano sonatas). "Put starkly," as Rehding rightly cautions, "even if no piece of music had ever been written, Riemann's *Tonalität* as a principle would exist just the same" (Rehding 2011, 112).²⁸³ This is indeed "starkly" put, but it is notable that one would not be able to posit the same about the Schenkerian conception of tonality. Just as the concept of *Stufe* is by definition dependent upon actual musical contexts, so Schenkerian tonality only arises in concrete pieces which can be construed as having been generated from the *Ursatz*.

4.1.3.1 Keys, modulations, and monotonality

When it comes to the concept of "keys," which is surely closely related to the idea of "tonality"—and especially the German expression *Durmolltonalität*—the two theories in question have much in common, in part owing to the fact that the research on the historical transition from modes to keys is one that has not—at least not primarily—been carried out from strictly function-theoretical or Schenkerian

²⁸³ It is not Rehding's objective to consider post-Riemannian theories, but it must be pointed out that the refinements of function theory that these have proposed arise, for a large part, out of analytical observations.

standpoints. The theoretical traditions largely agree on what constitutes a key in (the foreground of) music—that the tritone between $\hat{4}$ and $(\#)\hat{7}$ is an important and defining feature, for instance. They also largely agree on the idea that tonal music has *one* "global" key, and often several subordinate "local" keys. But in Schenkerian theory, this tenet of *monotonality* is more far-reaching. Because it posits that a tonal composition is generated by the *Ursatz*, which is generated by the tonic *Klang*, it is, in principle, a problem when works begin in one key and end in another. This is, however, a theoretical problem more than a practical problem, for there are plenty of (post-)Schenkerian analyses of works that begin in one key and end in another—and even within the "mainstream" Schenkerian theory, such analyses exist.²⁸⁴

Nevertheless, there are pronounced disagreements between function theory and Schenkerian theory as to what constitutes a "key," and especially as to what constitutes a "modulation." But, so I will argue, this disagreement also results in one theory often misunderstanding aspects of the other. Consider the passage shown in Example 80 (in m. 61, a natural sign for the C in the right hand is missing).



Example 80: Schubert's Piano Sonata in A minor, D. 537, III, mm. 59–66 (from Damschroder 2010, 4).

Skipping the I-chord (mm. 59–60), David Damschroder writes that analyzing this passage as $II_{(mm. 61-62)}-V^7/V_{(m. 63-64)}-V_{(m. 65-66)}$ would give "the misleading impression that three harmonic events occur and that the tonal center shifts from D to A and then back to D" (Damschroder 2010, 3).²⁸⁵ Instead, he sees "II" and "V⁷/V" as *one* har-

²⁸⁴ See, for instance, Schachter (1988).

²⁸⁵ I take this example from his not strictly Schenkerian book *Harmony in Schubert* (2010), but there are many corresponding passages in his *Tonal Analysis* (2018)—

monic event which undergoes a chromatic transformation. The chord in mm. 63–64 is II[‡] in the key of D major, he insists, not V in the key of A major. Damschroder implies that the label V⁷/V indicates a change of key center, and though this critique is not aimed at function theory as such, it would surely be applicable to function theory on the same ground. Here "II" would be seen as a subdominant with added sixth and no fifth, and the "II[‡]" would be analyzed as a fundamental change of function, a change to DD.²⁸⁶ (As discussed above, however, I believe these two views to be entirely compatible.)

Damschroder's critique—that V^7/V (or DD) wrongly implies a change of key center—is interesting when compared with the following passage from Felix Diergarten's article on Johannes Schreyer.

Die klassischen Fundamentalbaß- und Stufentheorien konnten mit ihrem "klassischen" Modulationsbegriff des 18. und 19. Jahrhunderts die spätromantische Harmonik Wagners und Liszts nur als Unmenge von Modulationen begreifen und dementsprechend kompliziert beziffern; die Riemannsche Funktionstheorie dagegen mit ihrem neuen, mit Zwischendominanten operierenden Modulationsbegriff, erlaubte es, längere Abschnitte zu analysieren, ohne beständig von Modulationen sprechen zu müssen. (Diergarten 2003–05, 164)

Diergarten's characterization of Riemann's *Zwischendominanten* contradicts Damschroder's dictum: a secondary dominant does *not* imply a change of key center; it retains its function *in* the global key even though it suggests a dominant relation to another chord than the global tonic. In another post-Riemannian theory, that of the Swede Ingemar Liljefors (1906–1981), this is clearly depicted in a multileveled model, shown in Example 81.²⁸⁷ The upper level (which translates to "key designation") indicates the individual keys in a work; ²⁸⁸ the middle level indicates the functional relation between the global key

and it does represent a frequently found, though not universal, theoretical attitude in Schenkerian practice.

²⁸⁶ Except in Hamburger (1955) and Hvidtfelt Nielsen (2015).

²⁸⁷ This and other Swedish approaches to key and modulation are discussed more in depth in Kirkegaard-Larsen (2019b, 141–143 et passim).

²⁸⁸ Exactly what constitutes an "independent" key for Liljefors is difficult to ascertain, but it seems that the keys of entire formal sections count as "independent."

Tonartsbeteckn.:	C :					
Bitonartsbeteckn.:	Ton:	Dom:	Sub:	Tonp:	Domp:	Subp:
Parentesbeteckn.:	(D)Tp(D)Sp	OSV.				

Example 81: Ingemar Liljefors' (1951, 34) hierarchy of chromatic elements, secondary keys, and independent keys.

and more fleeting *secondary* key areas (Tonp = key of the tonic *Parallel* etc.); the lower level indicates chromatic elements and secondary chords within a key.

Damschroder is right, of course, that there is a difference in analytical utterance between II^{\ddagger} and V/V, insofar as the former label more clearly relates the chord to its position in the overall key. But in function theory, it is the functional relations—not the chords' position in a scale—which are of fundamental importance.

Another very notable difference between the two theories' conception of keys is this: in function theory, a work's tonal structure is, on the most overall level, determined by the main key and its functional relation to the work's subsidiary keys; in Schenkerian theory, it is, as a rule, only a work's main key which determines the tonal structure, and *not* any of the subsidiary keys it might pass through. The Schenkerian distinction between key and *Stufe* has been most lucidly discussed by Carl Schachter in his article "Analysis by Key: Another Look at Modulation" (Schachter 1987). I quote him here at length:

Central to Schenker's work is the notion that the tonic triad, an image of the overtone series generated by the tonic note, functions as a matrix—the source of the Fundamental Structure that governs large-scale harmony (through the bass arpeggio) and melody (through the Fundamental Line) as well as the ultimate source of the middleground structures and foreground details that grow our of the Fundamental Structure. As matrix, the tonic triad has rhythmic properties: it defines the beginning and end of complete and self-contained harmonic and melodic progressions; it also provides the foundation for form and design,

Other theorists, such as Rasmussen (2011), have extended the analysis of functional relations to such "independent" keys.

since motivic and thematic elements always connect (usually quite closely) to tonal structure. (Schachter 1987, 291)

Having thus defined the tonic as "matrix" that governs the way music unfolds in time, he continues:

Every tonic conveiced as a matrix is a prolonged chord, but not every prolonged chord is a tonic. The D minor and G major triads of Ex. 3 [see Example 82] are not. Although D and G govern their prolonged harmonies, they have no special relation to the non-harmonic notes of the melodic lines, nor does either form the point of origin or expected goal of a self-contained tonal progression. D and G are centres of a sort, for they are harmonic roots or fundamentals, but they are centres in a much more limited sense than tonic notes, for they exercise no control over scalar functions, over the syntactic properties of subordinate chords, over form or design. (Schachter 1987, 292)



Example 82: Carl Schachter's example 3 (Schachter 1987, 292).

Now, having established that the prolonged triad need not be a tonic—hardly a surprise for anyone with a rudimentary knowledge of Schenkerian theory—he goes on to discuss situations in which the tonal center changes *within a prolonged triad*. He first presents an analysis of Bach's Prelude in E minor from WTC I, which he compares with Donald Francis Tovey's analysis, in which the E minor key is taken as re-established in mm. 30–32 (cf. Tovey 1924, 85). Both analyses are shown in Example 83. Contrary to Tovey's analysis, Schachter reads the E minor of m. 32 as a passing chord (supporting the melody's passing note B) that may well reveal the prolonged A minor as no longer a local I, but rather a global IV—but this E minor nonetheless functions *within* the timespan of the "matrix" of the prolonged A minor triad, allowing him to reveal a large-scale I–IV–V–I succesion of *Stufen* (Schachter 1987, 292–293).



Example 83: Carl Schachter's comparison between Tovey's (1924, 85) analysis (top, "4a") with his own Schenkerian analysis (bottom, "4b") of J. S. Bach's Prelude in E minor (WTC I), BWV 855 (Schachter 1987, 293).

Schachter goes on to describe a situation in which the key changes not within the prolongation of the IV *Stufe*, as above, but within the prolongation of the tonic triad. He illustrates this with a middleground sketch of Beethoven's Piano Sonata No. 4 in E^b major, Op. 7, first movement, shown in Example 84. In the augmented-sixth chord, G^b represents the altered third of the tonic triad, E[‡] the altered root. Both notes arise from opening the tonic triad through a process of voice exchange. The augmented-sixth chord is simultaneously an altered tonic of E^b major (at a deep level) *and* an altered subdominant, or IV, of B^b major. We will see another example of this procedure and discuss its analytical consequences in comparison with function analysis in section 5.1 below (page 306ff.)



Example 84: Carl Schachter's analysis of Beethoven's Piano Sonata No. 4, Op. 7, I, mm. 1–34

To sum up, foreground key changes, in the Schenkerian sense, may thus "result from linear activity within a harmony (or a progression of harmonies)" (Schachter 1987, 302). If a key *is* confirmed through a local transference of the *Ursatz*, the local tonic may, but need not, take a deep position in the structure.

The theoretical difference discussed here sometimes have significant analytical consequences. In function analyses, implied, fleeting, or more extended tonal areas are more often acknowledged. They are usually acknowledged as subordinate to the global key, but the absence of an imperative for monotonal readings make way for more frequent claims of tonal ambiguities.²⁸⁹ Although nothing prevents the Schenkerian analyst to make an analytical point out of such tonal ambiguities, its pronounced monotonal perspective is notably different from the function-theoretical. One may even distinguish between "functional tonality" and "functional monotonality." The latter term is used in Brown (1998, 118; previously discussed on page 175). The distinction will come in handy in subsection 4.1.3.3 (page 284) on the theories' applicability to the musical repertoire.

²⁸⁹ This is among the aspects I discuss in greater depth in Kirkegaard-Larsen (2017b), where I launch the idea of "tonal inflections."

4.1.3.2 Sequences

Books have been written about sequences (cf. Sprick 2012). They remain a fundamental problem in many tonal theories, and the problems only rise in number when comparing different approaches. Once again, the following discussion must be somewhat tentative and I make no claim of comprehensiveness. When sequences must be touched upon nonetheless, it is because they are phenomena which seem to hold a mirror in front of the tonal theories in question, clarifying quite a lot about their conception of tonality.

Riemann himself wrote that sequences represent a suspension of the logic of functions. He divided sequences into a "model" and its "imitations." Only "the model of the harmonic progression must consist of a succession of harmonies which has logical sense in itself," which is to say that one must be able to explain the model of the sequence in functional terms (Riemann 1895, 122). Riemann continues: "That which follows in the imitation is accepted as the result of a sort of *necessity of nature*; and only when the sequence is relinquished, do the tonal functions resume their efficacy" (ibid.). As to the question of how one treats this in analytical practice, Riemann writes:

As the tonal functions are suspended during the imitations of the sequence motive, there can be no object in indicating them; we therefore only give indications for the harmonies of the motive [model], and just intimate at the first imitation, whether the sequence rises or falls; but, for the rest, abbreviate the indications by means of brackets.²⁹⁰ (Riemann 1895, 125)

Riemann's approach to sequences has largely been adopted by the post-Riemannian tradition (cf. Maler 1931, 43). Riemann's use of brackets is also seen—and supplemented—in the Dane Jørgen Jersild's analysis of the coda of the second movement of Schubert's Piano Sonata in C minor, D. 958. The measures in question are seen, in Jersild's notation, in Example 85, and his analysis is seen in Example 86. The coda proper begins in m. 102, but Jersild starts his discussion in m. 104.

²⁹⁰ Johann Phillipp Sprick (2018) has noticed a discrepancy between Riemann's suggested analytical practice and his actual practice: there are many cases where Riemann assigns function labels to every chord in a sequence.





Example 85: Schubert's Piano Sonata in C minor, D. 958, II, mm. 104–112 (Jersild 1982, 75).²⁹¹



Example 86: Jersild's (1982, 76) function analysis of the sequences in Schubert's Piano Sonata in C minor, D. 958, II, mm. 104–112.

 $^{^{291}}$ In Example 85, the note names indicate chord roots. In Example 86, "as:" means "in the key of A^b," "fes:" means "in the key of F^b (and so on).

Using Jersild's measure numbers (which are obviously not the actual measure numbers of the coda), one can see that mm. $0 \mid 1-2$ are analyzed as a series of imitations of the D–T model (notated with upward brackets in Example 86). The imitations appear in a succession of descending thirds (A^b, F^b, C), but the chords are inverted so as to make the bass move by step in what amounts to a whole-tone scale.

In the following measures, mm. 1 | 2–4, the D–T model is extended with a plagal suffix (using the minor subdominant, °S). Jersild writes that the sequential pattern is now realized as a chromatically ascending scale, corresponding to the keys C–D^b–D (Jersild 1982, 75). Note that the final chord of m. 2 is notated as a substitute for the dominant in D^b major, signified by the italic D (this is true for the next part of the sequence as well). Jersild explains that in the second "joint" of the sequence

the chordal foundation is not, as expected, D^{\flat} major's dominant (root = A^{\flat}), but instead the chord of the tonality's third scale-step, F- A^{\flat} -C. Since the chord so obviously substitutes for the dominant, with which it has the tones A^{\flat} -C in common but replaces fifth with sixth, it must be understood as the dominant's substituting chord ... The dominant substitution is seen correspondingly in the third joint of the sequence. Both chords are well-founded, in that they represent the S-position in the previous joint, and thus produce a functional linkage of the total progression ...²⁹² (Jersild 1982, 76)

Finally, Jersild notes a third type of sequence in the excerpt: from the upbeat to m. 5, Jersild proposes a chromatically *descending* pattern, A: T–D and A^{\flat} : T–D.

All in all, Jersild's is an interesting example of "functional" sequences—the bass voice and chord relations are not always literally sequenced, but the local functional relations are. Even though Jersild

²⁹² "Det akkordiske underlag er ikke som ventet des-durs dominant (grundtone = as) men derimod tonalitetens III-trins-akkord f-as-c. Da akkorden så tydelig substituterer dominanten med hvilken den har tonerne as-c tilfælles, men erstatter kvint med sekst, må den ses som dominantens stedfortræderakkord … Dominant-stedfortræderen ses tilsvarende i sekvensens tredie led. Begge akkorder er velbegrundede, idet de repræsenterer S-positionen i det forinden kommende led, og på den måde afstedkommer en funktionel sammenkædning af den samlede følge …"

underlines the "functional linkages" that make the total excerpt cohere, he proposes no functional relations between the key centers that his analysis is based on.

For present purposes, one cannot help to think what Schenker or a Schenkerian would think of Jersild's tendency to readily ascribe new key centers. As per the above discussion of keys and modulations, the importance that Jersild ascribes to these key centers can be seriously questioned on Schenkerian ground (and, to be fair, they can on function-theoretical ground as well). Especially Jersild's last sequence (from the upbeat to m. 5) is problematic insofar as it is the *dominants* of these "keys"—E and E^b instead of A and A^b—which are most emphasized in the foreground.²⁹³

In general, Schenker treats sequences quite differently—and as Stephen Slottow (2018) has noticed, the Schenkerian attitude toward sequences is quite different from Schenker's own. Schenker himself spurned the very idea of sequence, just as he spurned any idea that violated the organic coherence of a work by dividing it into smaller segments such as "melody" and "motive":

Kann so bei den Meistern von Melodie und Einfall im üblichen Sinne überhaupt nicht die Rede sein, so noch viel weniger von einem 'Gang', von 'Sequenz', 'Füllsel' oder 'Kitt' im Sinne geltender Kunstbegriffe: was hätte denn vergleichsweise in einem logisch gebauten Satz der Sprache Kitt zu heißen, und wie wäre ein Einfall vom Kitt zu unterscheiden?²⁹⁴ (Schenker 1956 [1935], 59)

Slottow traces how the idea of sequences slowly returns in Schenkerian theories; he points out that even though Forte and Gilbert's (1982) *linear intervallic pattern* is emphatically *not* the same as a sequence (see section 2.3.2.1, page 160), most of their examples of LIPs

²⁹³ It is entirely possible, of course, that a Schenkerian would acknowledge these implied key centers if it serves their analysis. Though not following a Schenkerian approach, Kofi Agawu notes an overall motion from C (Jersild's m. 2) to D (m. 4) through the chromatic D^{\flat} (m. 3). When arrived in the key of D, it is possible to move smoothly to a cadence in A major, Agawu notes, suggesting that Schubert halts the cadence, hesitating, before providing the "correct" cadence in A^{\flat} major (Agawu 2009, 35).

²⁹⁴ In the English version, *Gang, Sequenz, Füllsel* and *Kitt* are translated to "passa-ge," "sequence," "padding," and "cement," respectively (Schenker 1979, 27).

are also sequences. He also cites the following passages from the third edition of *Analysis of Tonal Music*:

Sequences and associated linear intervallic patterns produce harmonic prolongations and larger structural connections. And, like linear progressions, linear intervallic patterns prolong a single harmonic class or expand the space between classes in T– Int–D–T frameworks. (Cadwallader and Gagné 2011 [1998], 86–7)

This formulation pinpoints the usual functions of sequences in a Schenkerian perspective: they are a means of moving from one *Stufe* to another. The first chord in the sequence usually embodies the first *Stufe*, and the last chord in the sequence embodies the second. To provide an example, consider the analysis of the opening of the third movement of Bach's Brandenburg Concerto No. 3 in G major in Example 87.

The movement opens with a circle-of-fifths sequence which halts when it arrives at the dominant D major in m. 4. Another circleof-fifths sequence then leads from this D major to the A major in m. 8. (I will focus on these measures for now, although one may notice that the circle-of-fifths progression continues in mm. 8–11, but without the melodic sequence, and with another harmonic rhythm.)

In the first sequence, mm. 1–4—which may also be construed as a modulating Prinner according to Robert Gjerdingen's schema theory (Gjerdingen 2007)—it is the first and the last chords which are taken as structurally deeper. In short, G major leads to D major through a sequence, and the sequence is itself an embellishment of the stepwise descending bass line G–F[#]–E–D, the "leading" linear progression.²⁹⁵ In the ensuing sequence, it is once again the initial D major and the concluding A major which are structurally deeper. In a more overall view, the two sequences comprise one large sequence which leads from the beginning of the first sequence—the G major tonic—to the end of the second sequence—the A major supertonic (and dominant of the dominant). This large sequence comprises one

²⁹⁵ For more on the terms "leading" and "following" linear progressions, see Franck (2018).

descending bass line, in principle inverting the ascending second I–II[#] to a descending seventh.

Johann Phillipp Sprick has suggested that both function theory and Schenkerian theory conceive of the sequence as "connector of harmonies" (2018, \$11). This is true on a general level: in function theory, conventional and functional tonality is suspended for a while, but resumed once the sequence ends—but the first and last chords of a sequence enjoy no superior status in function theory. Rather, the important units are the "model" (the descending fifth in the Bach example—with special attention to the key-defining tritone interval), and the first chord *after* the sequence, because it resumes the functional logic.

Earlier in this presentation, I noticed (in footnote 177, page 160) an interesting parallel between Forte and Gilbert's (1982) concept of linear intervallic pattern (LIP) and Fétis' idea that "the mind suspends any idea of tonality" in sequences (Fétis 2008 [1844], 252). The parallel arises because Forte and Gilbert write that chords participating in (the very sequence-like concept of) a LIP are, emphatically, not harmonic entities, but pure voice-leading phenomena. Since Riemann follows Fétis on this point-and since post-Riemannian theories follow Riemann-this common ground is worth noticing. But it is also worth noticing that this exact common ground says a lot about the differences between function-theoretical and Schenkerian conceptions of tonality. As Sprick has formulated it, "a Schenkerian understanding of tonality certainly integrates a linear intervallic pattern within tonality and not as something extratonal" (Sprick 2018, §11). This resonates with Salzer's formulation which I quoted above: "any chord may be part of any key, provided it has a function to fultill within the structural framework. In general, whether or not a chord belongs to a key depends on function only, not on degree of harmonic relationship" (Salzer 1952, I:25).

In conclusion, one may define the two theories' conception of tonality, and sequences' role within tonality, as follows. Function theory defines tonality as a network of functional relations; in principle, any chord may appear in any key (as per Reger's motto) provided its relation to the tonic, dominant, or subdominant is intelligible and





"functional"²⁹⁶; sequences suspend tonality while copying its network of functional relations to a smaller scale, which is repeatedly imitated, before tonality resumes. Schenkerian theory defines tonality as the compositional realization of the *Ursatz*; in principle, any chord may appear in any key (as per Salzer's dictum), provided it has a harmonic or contrapuntal function at some level of the composing-out of this *Ursatz*; sequences always function as paths from A to B in this structural framework, and therefore they do not suspend tonality.

4.1.3.3 Repertoire

If conceptions of tonality differ, then it is a logical consequence that conceptions of what counts as "tonal music" differ. Once again, it must first be underlined that to a large extent, Schenkerian theory and function theory agree on this question. Indeed, what justifies the current comparison is—besides the many aspects discussed in Chapter 3—the simple fact that Schenkerian theory and function theory are theories of (more or less) the same music, based on studies of (more or less) the same music, and analytically applicable to (more or less) the same music.

In both traditions, "tonal music" is *at least* the repertoire from J. S. Bach to Brahms. Plenty of Schenkerians have analyzed the repertoire before and after these composers, popularly speaking pre- and post-tonal music, and fundamental Schenkerian analytical practices—such as the voice-leading graph as a means of analytical communication—have been extended far beyond the Bach–Brahms repertoire. However, as I have stated repeatedly, those extensions remain controversial.²⁹⁷ The Bach–Brahms repertoire takes a central place in

²⁹⁶ It is, to repeat myself, exactly the different ideas about what constitutes a "functional relation" which has spurred the different types of function theory (key-relational, progressional, interval-relational, etc.).

²⁹⁷ Joseph N. Straus' article "The Problem of Prolongation in Post-Tonal Music" (1987) makes the important point that in music where consonance and dissonance are equal, one cannot distinguish between the prolonged and the prolonging. David Schulenberg makes a similar point about applying Schenkerian analysis to pre-tonal music, which "can lead to the confusion of essential and accidental music structures" (Schulenberg 1985–86, 304). A striking point in Schulenberg's discussion is that the very idea of octave equivalence is not obviously transferable to modal music, in

Schenkerian theory, even more than it does in function theory. It is not obvious that it is exactly *these* two composers who define the boundaries of the repertoire which is most commonly and uncontroversially studied through the lense of function theory. In Schenkerian theory, on the other hand, it is obvious enough to have become a convention—and obvious enough for David Beach and Yosef Goldenberg to entitle their 2015 anthology *Bach to Brahms*. The essays of the anthology are, in the editors' words, "all analytical in nature, most concerned at some level with Schenkerian theory" (Beach and Goldenberg 2015, 1), and it is striking that the title *Bach to Brahms* plays on such conventionalized ideas that it functions as a clear signifier of the anthology's Schenkerian orientation.

Plainly put, function theory's repertoire extends more widely in both directions, comprising much music before J. S. Bach and after Brahms. Usually, its boundaries are set to around 1600 and 1910 (perhaps even as late as 1949, when Richard Strauss died). Particularly noticeable is the fact that the function-theoretical tradition seems to have had a particular interest in late-romantic music. Hermann Grabner's above analysis of Hans Pfitzner (Example 76, page 265), and the very role that Max Reger played in Grabner's theoretical output, testifies to this. For Schenker, Reger was the great Gegenbeispiel,²⁹⁸ and Anglo-American music theory seems to have approached his music with primarily neo-Riemannian means (cf. also Broman 2002) and through Daniel Harrison's (1994) version of function theory. Whereas Schenkerian textbooks rarely account for music after Brahms, almost every function-theoretical textbook does. In fact, many of them even account for impressionistic and atonal music-but usually for the purpose of showing how this music differs from earlier music (cf. Motte 1976; Larsen and Maegaard 1981).

which notes in definite registers, not abstract pitch-classes, are fundamental (ibid., 306-307).

²⁹⁸ "Gegenbeispiel" was the word Schenker used about Reger in an essay in *Das Meisterwerk in der Musik* (Schenker 1996c [1926]). In *Harmonielehre*, an extended footnote (not included in the English translation) also mocks Reger's music as a "ab-schreckendes Beispiel" (Schenker 1906, 220–226). However (as also noted in footnote 223, page 215), the relation between Riemann and Reger was also quite problematic.

The idea of "progressive tonality," though coined already in 1947 by Dika Newlin and thus not a Schenkerian construct, seems to have been influential first and foremost in the Anglo-American academy. Although it may find use in European and post-Riemannian traditions, this term, and its related terms "directional tonality," "double-tonic complex," and "tonal pairing" seems to have gained success out of a need to describe the problems which arise-from a Schenkerian perspective-when works are emphatically not monotonal. It is striking, as well, that Anglo-American scholars have launched the idea of The Second Practice of Nineteenth-Century Tonality, as one anthology is entitled (Kinderman and Krebs 1996),²⁹⁹ while many European function theorists are of the opinion (which is surely also widespread in Anglo-American music scholarship) that late-romantic music is part of one common-practice era running from the Baroque. It is a common argument that romantic and lateromantic music simultaneously represent a sort of potentation of the logic accounted for by function theory on the one hand,³⁰⁰ and an increasing use of procedures foreign to this theory on the other hand, eventually leading to the emergence of non-tonal music (Maler 1931, 45; Motte 1976; Larsen and Maegaard 1981, 7-8; Rasmussen 2011, I:26-29).³⁰¹

For adherents of either tradition, what I am writing here may be obvious. But it must be remembered, once again, that it is not just two theories I am comparing here. It is two large and very influential scholarly traditions, and the fact that they describe different repertoires as "tonal"—in their particular, respective senses—is therefore significant. It is beyond the scope of this study to document exactly

²⁹⁹ This anthology was a *Festschrift* for Robert Bailey (1937–2012), who originated the concepts of directional tonality, double-tonic complex, and tonal pairing, further developed by his students.

³⁰⁰ Such a view underlines that romantic harmony has more frequent and more daring alterations of the dominant and subdominant, a more frequent fluctutation between major and minor versions of the same key and consequently an increasing use of chromatic third-relationships, an increasing distance between cadentially confirmed tonics, and so on—all are parameters of central importance to function theory.

³⁰¹ This teleological view of music history is propounded often, but, it must be mentioned, also criticized often.
how and to what extent this may have influenced music-historical periodizations in the two traditions—this may not be the case at all, since music history is, in the Anglo-American academy, more associated with musicology than with the independent discipline of music theory. Suffice it to say that the two notions of tonality entail that the boundaries and "peripheries" of the tonal era are quite differently defined. This will be further substantiated in the next section on "fundamental differences."

4.2 FUNDAMENTAL DIFFERENCES

In section 4.1, I asked to what extent there is common ground between function theory and Schenkerian theory. The answer was, of course, not simple at all. On the one hand, they are both theories of the function of harmony (and voice leading) in tonal music; on the other hand, this only makes for a limited common ground, for as the subsequent discussion showed, "function," "harmony," "voice leading," and "tonality" are understood in ways that do not always cohere completely—but which may perhaps be reconciled.

In this section, I will, on the basis of Chapters 1-3 and section 4.1, point to some *fundamental* differences between the two theories-differences which are not easily reconcilable. There are two fundamental aspects of music that the two theories do not agree on, and they are closely connected to the issues discussed in section 4.1. The first aspect is that of music's temporality. Many of the disagreements between the two theories and their analytical results originate in the fact that they do not approach the temporal aspect of music in concordant ways. The second aspect has to do with terms which were recurring in Chapter 3's overview of previous comparative studies, namely the terms "logic" and "coherence." Even though these are terms which may (like "function," "tonality," etc.) be used in a plethora of ways, I will posit that function theory is a theory of tonal logic, while Schenkerian theory is a theory of tonal coherence-and I will argue that there are subtle but important nuances which distinguish these two types of theory from each other.

4.2.1 TEMPORALITY

In Chapter 3, I repeatedly underlined some noticeably different attitudes toward temporality which the previous comparative studies implied, but did not discuss at length. For instance, consider again Riemann's and Schenker's diverging analyses of Beethoven Op. 2, No. 1 (see Example 56 and Example 57, p. 203ff; the score is shown in Example 55). Schenker objected to the fact that Riemann took the F minor chord of m. 11 to be a tonic because this chord appears in the middle of a sequence—and as discussed above (section 4.1.3.2, page 277ff.), Schenkerian theory prioritizes the beginning and end of a sequence, not the middle. Because the F minor appears as the second chord in a phrase that begins in C minor, Riemann's analysis may be questioned even on function-theoretical ground-especially because he applies the "minor dominant," a non-existing concept in predualist theories, and a problematical (but not unheard of) concept in monistic function theories (recall footnote 213, page 204). But, provided one accepts Cm-Fm as representing °D-T (instead of T-S in C minor), one may imagine a listener's tonal intuitions on a moment-tomoment basis, in which case it is certainly possible to conceive of the F minor as a tonic. After all, Beethoven could—in a less inspired moment-have written something like the recomposition shown in Example 88. Here, the function of the chord in m. 11 could be construed as tonic (the six-four position still being the result of voiceleading considerations).³⁰²



Example 88: The author's recomposition of Beethoven's Piano Sonata No. 1 in F minor, Op. 2, No. 1, mm. 9–16 with function analysis.

The subject of temporality was also relevant in the discussion of Christopher Wintle's (1985) and Carl Dahlhaus' (1983) engagements

³⁰² To remind the reader, "Taf" means "tonic derivation" (from Danish: *tonikaafled-ning*).

with Federhofer's writings (1972; 1981). In Wintle's (1985) discussion of Schenker's, Federhofer's, Riemann's, and de la Motte's analyses of the second movement of Beethoven's Piano Sonata No. 7 in D major, Op. 10, No. 3 (see Example 62 and the subsequent discussion, page 216ff.), he indicated that Schenker and Federhofer analyzed chords retrospectively, Riemann and de la Motte experientially (that is 'in the moment'). And according to Dahlhaus, Federhofer rejects notions such as ambiguity and paradox because he always reverts to explaining how an ambiguity *really* functions in the large-scale picture that one achieves in retrospect, thus not embracing music's "Prozeßcharakter" (Dahlhaus 1983, 87). Suzannah Clark, too, has written that "Riemann's theory privileges the moment, where surface key-or even surface triad-is the focus of attention. Schenker's is a largescale hearing, based in monotonality" (Clark 2011, 318). The theme of Riemann being "in the moment" and Schenker being "outside the moment" is a recurring one, and these temporal attitudes are, by and large, adopted by their subsequent traditions.

In his Musikästhetik (1967, 111-112), Dahlhaus introduces concepts from the phenomenology of Henri Bergson that are useful in this context: temps durée and temps espace, which can be translated as durational time and spatial time. Dahlhaus' point is that the two temps cooperate in the aesthetic experience of music: "Ist der temps espace, das leere Vor und Nach, eine Abstraktion vom temps durée, so sind andererseits die Dehnungen und Verkürzungen der erlebten Zeit erst faßlich vor dem Hintergrund der räumlichen" (Dahlhaus 1967, 111-112). Or as Roger W. H. Savage explains: "The temps durée, according to which time is experienced as passing, and the temps espace, where time is imagined as being extended spatially, work together to produce a sense of movement and change" (Savage 2018, 18-19). This interaction is central and traceable in both function theory and Schenkerian theory, but one may, heuristically, invoke the concepts as useful denominations for dominant attitudes in the two theories. Riemann's abovementioned analytical choice-the F minor as tonic in m. 11 in the Beethoven sonata-can be said to represent a temps durée approach because time is experienced as passing: the function analysis that understands the chord of m. 11 as a tonic does not take into account what is yet to come; it is tonic, both in Riemann's own analysis (Example 56, page 203) and in my recomposition (Example 88, page 288). Schenker's analysis represents *temps espace* in which the F minor in m. 11 is seen as a step on the way to an event that occurs later in time, as if time was extended in space (an idea that is reified in the Schenkerian graphic representation of analysis).

I should underline that by claiming that function theory's temporal attitude is predominantly that of a *temps durée*, I do not mean to infer that function theory presupposes that all analytical decisions are taken as if one were "in the moment" with no knowledge of what comes after that moment. On the contrary, it is an essential part of analytical practice to "go back" and retrospectively revise one's functional attribution (more on retrospection below), for example if the music changes key. I simply mean that function theory implies an analytical approach that is, by definition, temporally contingent. Any function is non-absolute, it is always relative and may, because of temporal contingency, change its meaning over time.³⁰³ Function theory lends itself more easily to Dahlhaus' view that analysis must embrace music's "Prozeßcharakter," and not just one's final retrospective understanding (see the discussion on page 225ff.).

Confirming Dahlhaus' point about interaction, Schenkerian analytical practice surely integrates *temps durée* perspectives as well. Poundie Burstein's article on the ambiguities that may arise in Schenkerian perspectives of half cadences is but one example of an analytical and theoretical approach that embraces several evaluations of the same event, based on both *temps durée* "in the moment" apperceptions and alternative *temps espace* reevaluations (Burstein 2014). I will nonetheless posit that Schenkerian *theory* first and foremost invites a marked *temps espace* approach. This is because foreground events are always evaluated on the basis of the background of the

³⁰³ Cf. also Stephanie Probst, who, in a discussion of a function analysis which interprets and later reinterprets a harmonic function, writes: "Eine solche Analyse … zeigt die temporal abhängige und relative Bedeutung funktionaler Zuschreibungen, die sich von der 'absoluten' Bezeichnung einzelner Akkorde in der Stufentheorie klar unterscheidet" (Probst 2012, 269).

entire work. In a sense, past, present, and future events are "present" at any given moment—recall Schenker's introduction of the structural levels which relied on temporal (and Goethean) metaphors: "Bezeichne ich Ursprung, Entwicklung und Gegenwart mit Hinter-, Mittelund Vordergrund..." (Schenker 1956 [1935], 25).³⁰⁴

A discussion that appears in David Damschroder's *Harmony in Schubert* (2010) provides a good example of the consequences of this temporal attitude. In a discussion of mm. 44–53 from the first movement of Schubert's Piano Sonata in C minor, D. 958 (see Example 89), he writes:

Of course several viable options exist as the successor of almost any chord. The extent to which the paths not taken are explored and remarked upon varies among analysts. For example, the Db-F-Ab chord of [Example 89], measures 48 through 50, does serve as dominant Bb's upper-third chord, but it could have served as a dominant announcing a tonicized mediant region (Gb major) and in fact does behave in that manner in measure 71 (there connecting Eb Minor and Gb Major). Because chords may play multiple roles within musical syntax, potential interpretations that the composer might not have intended may emerge in the minds of listeners. Analysts must learn to cope with this dilemma. I recommend a practice in which interpretations are confirmed through consideration of the broader context, taking into account pitches that sound after the chord in question. Other analysts may take a chronological approach, processing only the data received up to the moment of a chord's sounding in coming to terms with the situation and thus contending with a wider array of unrealized hypotheses, since less data from the composition is used in dermining how a chord functions. In most cases I find that methodology to be unproductive, particularly after repeated hearings of a work. (Damschroder 2010, 14)

As discussed above (section 2.3.2.5, page 181ff.), Damschroder's book is clearly inspired by Schenkerian theory (but also by other impulses).³⁰⁵ Indeed, in a footnote following the quote above, he writes

³⁰⁴ See section 2.1, especially page 120. In Schenkerian theory, metaphors of depth have gained more importance than Schenker's metaphors of time, but in this context, it should be mentioned that Schenker also speaks of "earlier" (= deeper) levels and "later" (= shallower) levels.

³⁰⁵ The same strategy for evaluating chord function can be observed in his later textbook on Schenkerian theory (Damschroder 2018, 28 et passim).





Example 89: Schubert's Piano Sonata in C minor, D. 958, I, mm. 44–53 with chord symbols (after Damschroder 2010, 13).

that he concurs with "Schenker's endorsement of an '*ex post facto*' recognition of harmonic function" (Damschroder 2010, 270).³⁰⁶

Adherents of function analysis sometimes express opinions that indicate a pronounced *temps durée* attitude, completely opposed to the Damschroder quote. In a Danish context, an example can be found in Jens Rasmussen's as yet unpublished response to Svend Hvidtfelt Nielsen's article "Hvem er altereret?" ["Who is altered?"] (2015). In this article, Hvidtfelt Nielsen debates the relation between II and IV (we thus return to the issues discussed above in section 4.1.1.1) and suggests the former's primacy over the latter: a "Copernican revolution" in function theory, as he calls it. Specifically, Hvidtfelt Nielsen suggests working with a plagal and an authentic system, inspired by Daniel Harrison (1994, 96), rendering it possible to work with the concept of subdominant in plagal progressions (I– IV–I) and a *Wechseldominant* (abbreviated "VD" from Danish

³⁰⁶ Damschroder refers to Schenker's discussion of harmonic ambiguities in the first movement of Beethoven's Piano Concerto in G major, mm. 6–14, in which Schenker argues that the chords' actual harmonic function can only be recognized *ex post facto*, that is, retrospectively (Schenker 1954 [1906], 253–254).

vekseldominant) in authentic cadential progressions. As Rasmussen notes, the progression C–F–C would in effect be analyzed T–S–T, while both I–IV–V–I and I–II–V–I would be analyzed T–VD–D–T. Rasmussen's reaction to this reads as follows:

This entails that the F- and D-chords in the two latter examples must be regarded as functionally identical, while the F-chord in the former example is regarded as functionally distinct from them both. That is nearly absurd. This way of thinking has, in addition, the fundamental weakness that the chord in question must alone be analyzed according to the way in which it progresses. Hence, chord number two in the C–F progression cannot be interpreted before we know whether it is followed by C or G.³⁰⁷ (Rasmussen 2017, 19–20)

For Rasmussen it is, as appears from this quote, obviously problematic to interpret a chord's function retrospectively. For other theorists, such as Hvidtfelt Nielsen and many Anglo-American and Schenkerian theorists, this is far from obvious. A recent article by Christopher White and Ian Quinn surveys how II and IV are related in a body of literature on the subject:

Kevin Swinden makes the provocative claim that "harmonic function cannot be defined by pitch class alone," arguing that a IV chord should only be called "subdominant" if it progresses to I; otherwise, it is a "dominant preparation." Charles Smith has gone so far as to argue that the plagal function (his term for the subdominant as distinct form predominant) should be given the same status as the dominant function, with a pre-plagal function analogous to the predominant. The Kostka-Payne textbook argues for a still more complex understanding of IV's functional meaning: "The IV chord is an interesting chord because it has *three* common functions. In some cases, IV proceeds to a I chord. … More frequently, IV is linked with ii; IV can substitute for ii (going directly to V or vii^o), or IV can be followed by ii (as in IV-ii–V)." The authors seem to argue for a

³⁰⁷ "Det indebærer, at F- og D-akkorderne i de to sidstnævnte eksempler skal forstås som funktionelt identiske, mens F-akkorden i første eksempel forstås som funktionelt forskellig fra dem begge. Det er tæt på at være absurd. Tænkningen har tillige den grundlæggende svaghed, at den pågældende akkord skal analyseres udelukkende i forhold til dens videreførelse. Akkord nummer to i C-F-forbindelsen kan således ikke tolkes, før vi ved om den følges af en C eller G." I thank Jens Rasmussen for providing me with this unpublished text.

subdominant, a predominant, and a pre-predominant function.³⁰⁸ (White and Quinn 2018, 315)

Neither of the texts they refer to here are Schenkerian texts per se, but it is clear that they all find it meaningful to interpret a chord's function according to what follows it—an assumption building on fundamental Schenkerian tenets derived from the fundamental-bass tradition of Rameau, Kirnberger, and Sechter.³⁰⁹

Temps espace and temps durée are useful as rough models, as tentative metaphors, but because it is true for both theories that the two temps interact and cooperate (as per Dahlhaus' point), one might further approach the temporal attitudes of Schenkerian theory and function theory by considering the vocabulary employed by David Lewin in his famous essay "Music Theory, Phenomenology, and Modes of Perception" (1986). The analysis of Schubert's "Morgengruß" from Die schöne Müllerin which appears in this essay clearly shows how a relatively simple passage may be analyzed in a plethora of ways depending on the context one considers, and depending on how one construes temporality.³¹⁰ Applying a Husserlian phenomenology, Lewin considers musical perception and apperception with special reference to temporality and the terms "retention" and "protention." Retention refers to the circumstance that at any given moment in the musical work, one's perception of chord "X" is informed by what went before that moment; and protention refers to the circumstance that at any given moment in the musical work, one's perception of chord X is also informed by one's expectations as to what might happen next.

Now, it is clear that these terms are connected more with music perception than with music theory and music analysis per se—and the

³⁰⁸ The authors refer to Swinden (2005a, 253), Smith (1981), and Kostka and Payne (2012, 114); the emphasis in the quote of the Kostka and Payne is added by White and Quinn.

³⁰⁹ This was substantiated in section 1.4 and several times in Chapter 2; cf. also footnote 213, page 204.

³¹⁰ This part of Lewin's article originated in an unpublished manuscript from 1974. Underlining its importance, it was, after years of circulation among theorists, recently published in its full extent, accompanied by three critical essays (Bard-Schwarz and Cohn 2015).

extent to which these disciplines are interrelated is a frequent subject of debate. Nonetheless, it seems that ideas of rentention and protention-and their related terms retrospection and prospection-are integrated features of function theory (their roles in Schenkerian theory are discussed below). Function theory models not only the actual harmonies of a piece, but also the implied and expected harmonies, whether they are realized in the music or not. In a C major context, an E⁷ harmony exhibits the function of a secondary dominant of the expected tonic Parallel: (D)^[Tp]. If the music proceeds to F major, this function label does not lose its justification. Rather, it is the function of the F major chord which may be affected by the protention created by E^7 (depending on the type of function theory applied): in progressional function theories, F major could in this context be labeled "Tpst," or "the tonic Parallel's substitution." In other words, its function is determined by the retention of the earlier protention. Even so, this F major might *retrospectively* occupy a subdominant function as well, if the music proceeds with G⁷-C; and already at the entrance of the F major, one might prospectively assume that this is the context it will partake in. A function analysis might model all this quite concisely (though not with the precision of Lewin [1986]):³¹¹

C E^7 F G^7 CT $(D)^{[Tp]}$ Tpst \Rightarrow S D^7 T

Retention and protention are not integrated in Schenkerian theory in the same way because specific musical events are viewed from the standpoint of the *entire* composition, rather than their immediate appearance *in the moment*. Or, one might also posit that Schenkerian theory takes for granted an after-the-entire-movement retention or retrospection on which the entire analysis is based. The outspoken

³¹¹ I here use the symbol \Rightarrow , which is not part of the standard function-theoretical toolbox. Changes of function are more often signified by = or \approx , but because these signs may also indicate modulations or enharmonic reinterpretations, I here use \Rightarrow . The symbol, which is inspired by Janet Schmalfeldt (2011), will play a larger role in Part III.

temps espace entails that it is not uncommon to construe the retrospective view as more correct than all the "wrong" predictions a listener might infer en route—thus distinguishung between "appearance" and "reality." This would affect the analysis of both E^7 and F major in the above example: the former does *not* exhibit secondary dominant function, but is rather an outgrowth of the tonic, and the latter is more accurately described as a predominant than as a subdominant, insofar as it is construed as something that comes before the dominant, rather than as something which has a subdominant relation to the tonic. Example 90 shows a hypothetical voice-leading graph of this progression.



Example 90: Hypothetical Schenkerian analysis of progression.

If one combines the points made about the theories' conceptions of tonality with the above observations of the theories' attitudes toward temporality, one arrives at a rather paradoxical conclusion: Function theory's conception of tonality relies on a *non-temporal* and *a priori* network of functional relations—but it evaluates and reevaluates a specific chord's function by observing the relation suggested by the chord's immediate context *in the moment*. Schenkerian theory's conception of tonality relies on the *temporal* unfolding of a structural framework in which chords are only "functional" *a posteriori*—that is, they are functional insofar as they partake in a *motion* from A to B—but it evaluates a specific chord's function by observing it from the standpoint of a *non-temporal* given (the tonic triad or "chord of Nature"), which either predetermines (when viewed generatively) or reconfigures (when viewed retrospectively) the meaning of each tonal event.

4.2.2 LOGIC AND COHERENCE

Chapter 3—specifically the survey of previous comparisons in section 3.1—showed several instances where the concepts of "logic" and "coherence" were set against each other. This seems peculiar, for it is not immediately obvious that these concepts form a conceptual pair or dichotomy in the same way that "harmony and voice leading" or "verticality and horizontality" do. Nevertheless, recall (from page 221) Drabkin's review of Federhofer's *Akkord und Stimmführung* (Federhofer 1981), which posited that "showing how a succession of chords is logically conceived does not amount to demonstrating tonal coherence in music" (Drabkin 1983, 104); and compare with Neumeyer's review (page 221) in which he wrote: "Riemann did not propose to equate 'harmonic logic' with 'musical structure'" (Neumeyer 1983, 105).

Neumeyer and Drabkin have similar points: Riemannian concepts of harmonic logic (Neumeyer) or musical logic (Drabkin) are *not* synonymous with Schenkerian concepts of musical structure (Neumeyer) or tonal coherence (Drabkin). Neumeyer and Drabkin (and, according to their reviews, implicitly Federhofer) seem to argue that function theory primarily models "logic" and Schenkerian theory primarily models "coherence." The concepts form a pair because they describe the theories' and analytical methods' primary objective. If this is a viable hypothesis, it has far-reaching ramifications.

In practice, I cannot imagine a theory of tonal music which does *not* claim to model both logic and coherence in music.³¹² Once again, the following discussion is therefore a discussion of different conceptions of the same terms. For instance, function theorists often—more often than not—seek to enlighten how the detail connects with the whole, following more or less organicist ideals and thus invoking the idea of coherence. Examples are legion: "Werkanalyse in diesem Sinne ist mehr als deskriptive Schau, ist *Deutung der Ganzheit*" (Grabner 1950, 1); "Ich sprach von der musikalischen Analyse als einer

³¹² Within the field of music theory, systematic thematizations of *incoherence* and *illogical* relations have only recently gained attention in the growing trend of so-called "disablist music theory." See Lerner and Straus (2006) and Straus (2018) for good introductions.

dreifachen Aufgabe: Erkennen der Details—Erkennen der Zusammenhänge, also Funktion der Details im Ganzen der Komposition— Aufbau und sprachliche Darstellung der Analyse" (Motte 1968, 9); "At the end of the day, the analytical endeavour is directed toward this goal [of understanding the harmonic course in its entirety]"³¹³ (Hamburger 1951, 48); "As regards musical analysis, there is a long tradition of [analysis and synthesis] actually being two sides of the same coin"³¹⁴ (Rasmussen 2018, 32). Indeed, Rudolf Louis construes "Tonalität als oberstes Prinzip für die Einheit der harmonischen Zusammenhänge" (Louis 1907, 614).³¹⁵

Nevertheless, Neumeyer and Drabkin point to a noteworthy difference in the way "coherence," "cohesion," "unity," and related concepts are understood in the traditions and construed in the theories. Indeed, it seems to me that their dichotomy of logic (in function theory) versus coherence (in Schenkerian theory) epitomizes several of the above-discussed topics-even if both theories would claim to model logic and coherence. If Schenkerian analysis aims to understand a chord's functionality in relation to the tonal structure in temps espace-regardless of whichever local "function-theoretical function" the chord in question may have-then it is an essential prerequisite that there is a whole, and furthermore that this whole is not a random series of events, but a coherent whole, consisting of "functioning" parts. In other words, the idea of "functionality" originates in the idea of structural coherence (or vice versa). If, conversely, function theory aims to understand a chord's position in the tonal network of relations in temps durée (or at least a more pronounced temps durée attitude), then it is an essential prerequisite that harmony must progress in such a way as to appear "logical," and thus capable of being mapped onto this network. In other words, the idea of

³¹³ "Og mod dette mål [forståelsen af det harmoniske forløb i sin helhed] rettes dog til syvende og sidst den analytiske beskæftigelse."

³¹⁴ "Hvad musikalsk analyse angår, er der en lang tradition for, at de to ting reelt er to sider af samme sag."

³¹⁵ I cite only Louis, and not Thuille, because the passage appears in Louis' response to Riemann's accusations of plagiarism.

"harmonic function" originates in the idea of musical, or perhaps more accurately, progressional *logic*.

For Riemann, the idea of musical logic was central from his very first publication "Musikalische Logik," published in 1872when Riemann was only 23-in Neue Zeitschrift für Musik under the pseudonym "Hugibert Ries" (Riemann 1872).³¹⁶ Adolf Nowak (2001) has suggested that Riemann conceived of logic in three different ways during the course of his career: first, the concept was bound to the cadence, which was conceived in a Hegelian way, dividing I-IV-I-V-I into thesis (I), antithesis (IV-I-the latter really a V⁶/₄), and synthesis (V-I); later, from his Grundriß der Kompositionslehre (Riemann 1905 [1889]), Riemann speaks of the inner logic of a musical work: and late in his career, he wrote about the logic of Tonvorstellungen,³¹⁷ definitively marking a "paradigm shift" (Rehding 2003, 166) in his theory, which was no longer based on acoustics and Hermann von Helmholtz' physiological Tonempfindungen, but emphasized internalized psychological Tonvorstellungen.318 Adolf Nowak has also, more recently, written a large monograph on the subject of musical logic. From this, it appears that Riemann's "logic" is more or less synonymous with Folgerichtigkeit (of which I can find no satisfying English

³¹⁶ Researchers have documented that Riemann's conception of logic was likely inspired by Hermann Rudolf Lotze (1817–1881) and Christoph Sigwart (1830–1904), both philosophers and logicians (see Arntz 1999, 68–69; Rehding 2003, 83–87; Pearce 2008, 93–94).

³¹⁷ Riemann's concept of *Tonvorstellung*, presented in his late article "Ideen zu einer Lehre von den Tonvorstellungen" (Riemann 1914–15), has been translated into English in several different ways. A complete English translation of the article uses the translation "the imagination of tone" (Riemann 1992 [1914–15]), but as a lengthy discussion in the introduction to the translation documents, the authors are well aware of the many connotations of *Vorstellen* (Wason and Marvin 1992, 72–75). Trevor Pearce (2008, 91) has translated it as "tone representation," and Brian Hyer (1995, 102–104) has discussed several other possibilities. For these reasons, I will simply use the German word here.

³¹⁸ Although there is general agreement about this overall evolution in Riemann's thought, Riemann himself emphasized that his "logic" was consistent: "Daß das Musikhören nicht nur ein passives Erleiden von Schallwirkungen im Hörorgan sondern vielmehr eine hochgradig entwickelte Betätigung von logischen Funktionen des menschlichen Geistes ist, zieht sich als leitender Gedanke durch meine sämtlichen musiktheoretischen und musikästhetischen Arbeiten seit meiner Dissertation" (Riemann 1914–15, 1).

translation), while "die Gebundenheit der Klänge in der Stimmführung gilt Schenker als die primäre musikalische Logik" (Nowak 2015, 221).

Folgerichtigkeit alludes, in this context, to chord successions, and it presumes that the progression from chord to chord is logical, invokes tonality, or (in sequences) imitates tonal paradigms repeatedly—this idea has been fully adopted in the post-Riemannian tradition while other of Riemann's conceptions of logic have played a smaller and more indirect role. *Folgerichtigkeit* does not invoke Schenkerian coherence, because it does not entail that music is monotonal, that there must be a "structural dominant" at some point, that chords arise from voice-leading horizontalizations of a vertical *Stufe*—and so on.

If there really is a difference between function theory's "logic" and Schenkerian theory's "coherence," it might be best exemplified by looking to the peripheries of the theories' tonal repertoires (thematized above in section 4.1.3.3, page 284ff.). One good example is the prelude to the third movement of Carl Nielsen's Wind Quintet. This prelude has been subject to a plethora of analytical methods. The music clearly invokes some sense of tonality, but it is blatantly obvious that it is a tonality that functions on quite different premises than the neo-classical and deliberately simple harmony that follows (and, in the other movements, precedes) the prelude.

In the article "Pitch Structure in Carl Nielsen's Wind Quintet," Richard S. Parks considers the said prelude from the perspective of both Schenkerian theory and pitch-class set theory, underlining that the music is very much on the brink of tonality (Parks 1994, 562– 589). His conclusion, to put a long argument very briefly, is that the music is susceptible to neither method, at least not in a completely satisfactory way. After a successful Schenkerian reading of other parts of the quintet, he attempts a Schenkerian reading of the prelude, but identifies a series of problematic issues and anomalies in the voiceleading graphs. Interestingly, he concludes (my emphases):

Regardless of whether <u>logical</u> explanations derived from harmony and voice-leading may be postulated for such anomalies, the fact remains that the Prelude does not behave like the rest of the piece as exemplified in the voice-leading graphs for the Theme and the Minuet and Trio. Harmony and voice-leading in the Prelude display numerous peculiarities and distortions, and while one could presume that Nielsen was lax, or inept, or lacked good judgement—a view that Schenker himself would likely have embraced from his chauvinistic perspective—it seems more likely that <u>some other principle</u> operates to distort the <u>tonal structure</u>. (Parks 1994, 569)

It is interesting, in this context, that Parks concludes that the tonal structure is distorted because of "some other principle," while he, in the beginning of the quote, opens up to the possibility that this principle may (or may not) be "logical." Although Parks does not intend to invoke the idea of function-theoretical logic, this allusion is worth pursuing.

In his PhD dissertation, Michael Fjeldsøe (1999) has attempted a function analysis of the music, based on the assumption that the prelude is based on late-romantic idioms. The analysis is shown in Example 91. Fjeldsøe's analysis is, in fact, successful; the music *is* susceptible to a function analysis—at least a progressional/processual function analysis in the style of Larsen and Maegaard (1981) and Maegaard (1990), whom Fjeldsøe seems to draw on.

Fjeldsøe's analysis shows a highly complex example of lateromantic harmonic devices.³¹⁹ The three lines of his analysis (the flute solo in mm. 5–10 is abbreviated by Fjeldsøe) all show an overriding T–S–D structure, albeit some very elaborated ones, and with chromatic third-relations between key centers. Especially the middle line seems to suggest several fleeting key centers. The pv-chains (that is,

³¹⁹ Fjedsøe uses some Danish symbols, and symbols not yet discussed in this dissertation. The circled letters indicate key areas (upper-case is major, lower-case is minor). "Td" means "dominantized tonic" and is a sort of compromise between the more usual (D)^s, and a more *Stufentheorie*-like approach in which one acknowledges the dominant character, but communicates that it evolves from the tonic function. "fh" is an abbreviation of *forudhold*, that is *Vorhalt* or appoggiatura. Fjeldøe thus interprets some of the most striking sonorities as pure voice-leading phenomena approaching the goal-chord chromatically. This is similar to Wilhelm Maler's (1931) concept of *freie Leittoneinstellungen*, which was briefly mentioned on page 79. "~" signifies an enharmonic reinterpretation. The enharmonic reinterpretation in m. 13 is discussed further in the main text. Tilted function symbols signify substituting functions (appearing as the conclusion of deceptive progressions).

several instances of *Parallelvariante* relations) is highly similar to neo-Riemannian ideas of RP-transformations³²⁰ but—importantly—the processual function analysis suggests that some kind of tonic function or tonic reference persists, even in the highly elaborated "Tpvpv" of m. 13.³²¹

Fjeldsøe provides an interesting explanation for one of the most striking places in these measures, namely m. 13, and this serves as a good example of functional logic that defies Schenkerian coherence. Aurally, one is inclined to simply hear the chords $G^{\flat}m-G^{\flat}$ in m. 13, that is, an oscillation between major and minor versions of the same chord. Nielsen, however, employs an enharmonic respelling, which Fjeldsøe explains as a functional reinterpretation: $G^{\flat}-B^{\flat}b-D^{\flat}$ is respelled $G^{\flat}-A^{\natural}-D^{\flat}$, and thus changes function from a Tpv in E^{\flat} minor (a regular G^{\flat} minor chord) to an incomplete, altered double dominant in the same key. To spell the incomplete chord out completely, with the omitted tones in parentheses, it is seen as $(F)-A^{\natural}-C^{\ddagger}-(E^{\flat})-G^{\flat}$, its "functional root" being F.³²²

This chord, bound to lead to B^{\flat} minor or major, moves deceptively to G^{\flat} major in first inversion. The music eventually moves toward the key of A minor, and retrospectively, the enharmonically respelled chord (G^{\flat} - A^{\natural} - D^{\flat}) in m. 13 is a secondary dominant of the Neapolitan chord of A minor; in this perspective, the G^{\flat} major in first inversion that concludes m. 13 is a ${}^{o}Sn$, a substitution of the minor version of the targeted Neapolitan (its substituting function is signified by the italic or "tilted" function symbol).

Surely, this music is on the brink of conventional function analysis, too—but in terms of an emphatically post-Riemannian, progressional-processual function analysis, it is not incomprehensible. One may summarize, then, that the music succeeds logically from harmony to harmony—it satisfies the principle of *Folgerichtigkeit*—but it does

 $^{^{320}}$ RP = relative-then-parallel, in the English sense of the words.

³²¹ This is among the main points in my comparison of Scandinavian function theories and neo-Riemannian theories in Kirkegaard-Larsen (2018), and the argument is elaborated at length in that article.

³²² There is a striking parallel to David Beach's analysis of Brahms' seeming G^{\flat} minor chord, spelled G^{\flat} -A^{\beta}-D^{\beta}, as discussed in footnote 271, page 258.



Example 91: Michael Fjeldsøe's (1999, 156) function analysis of the Prelude to Carl Nielsen's Wind Quintet, Op. 43, III, mm. 1–26.

not necessarily amount to a coherent structure in the strictly Schenkerian sense.

Contrary to Riemann and Schenker, I intend no aesthetic value judgment with the previous discussion of "logic" and "coherence," but I hope to have rendered probable that the two traditions emphasize these concepts in fundamentally different ways—and that this difference explains some of the identified differences between conceptions of tonality and tonal music.

4.3 SUMMARY: IMPLICATIONS FOR MEDIATION

To sum up, it seems that the split between the two complexes in Example 1 (page 19) has far-reaching ramifications, not just for the analyses of concrete works, but for the very understanding of basic concepts in tonal music. When, for instance, a Schenkerian criticizes what David Damschroder has called the "one-chord/one-label approach" (2008, 123), this is to be seen as a symptom of discrepancies between two larger, dichotomous conglomerates of music-theoretical ideologies. It is, in effect, also a critique of the prioritizing of harmony over voice leading, the temps durée approach to temporality, the specific funktionstheoretische idea of Funktion, and the pursuit of logic rather than coherence. Conversely, when Schenkerian theory is accused of being overly reductive, the deeper underpinnings of this critique take issue with Schenkerian ideas of voice leading, temps espace, functionality, and coherence. A mediation between the two approaches, therefore, must take this into account and use it productively. What happens, for instance, if function theory supplements its temporal attitude with a more far-reaching *temps espace* approach to temporality and tonality, in which a chord's function can now be interpreted from the perspective of the whole? And what happens if a Schenkerian analysis aims to incorporate ideas of harmonic relationships such as third-relations, or strive toward modeling the processual logic from moment to moment? These are some of the questions to be tackled in Part III of this dissertation.

Chapter 5:

Comparing analyses

In previous chapters, we already saw some of the analytical consequences of the different perspectives offered by paradigmatic functional and Schenkerian approaches. In this section, I offer three more examples and discuss them in greater detail. The first is a Haydn string quartet from 1793; the second is a Schubert song from 1828; and the third is a Mendelssohn piano piece from 1841. I will thus focus here on a rather limited timeframe of music history, the late classical period until the early and middle romantic period. The comparison of analytical approaches to these three pieces will serve as a means of investigating the analytical results of the different approaches, allowing one to compare the analytical methods and their results when applied to the same work; furthermore, the three works will return in Part III in which they will serve as vardsticks for the new analytical models I propose in order to exemplify how and evaluate whether the differences and "fundamental issues" I identified aboveand whose analytical consequences I examine in this chapter-may be "solved" with the new analytical models.

One reason that compositions from the years 1793–1841 have been chosen is that the new analytical models proposed in Part III integrate theories of meter. Many of these theories of meter are based on—and are most readily applicable to—music of the classical and early romantic eras. Baroque *Fortspinnung* and Wagnerian "endless melodies" pose more complex examples, which I will not discuss in this dissertation, but generally, they are not beyond the reach of the metrical theories I draw on (see for example Rothstein 1989, 125– 127, 249–305).

5.1 JOSEPH HAYDN: STRING QUARTET NO. 59 IN G MINOR ("RIDER"), OP. 74, NO. 3, II, *LARGO ASSAI* (1793)

Among the quartets that Haydn dedicated to Count Anton Georg Apponyi is the one nicknamed "Rider" or "Horseman," a quartet with a curious tonal disposition. The first and fourth movements are in G minor, and the third movement's menuet is in G major with the trio section in G minor. The slow second movement, *Largo assai*, however, is in the distant key of E major, a rather unusual choice for the time of composition (1793), and as such, this movements stands out from the others.

Table 4 provides a formal overview of the movement. It is in ABA- or large ternary form, and the A-parts are themselves small ternary aba-forms. The melody's initial motive—a stepwise descending third—permeates the movement to a degree that easily gives the impression of a theme-and-variations movement. The B-part has the character of a sort of development section exploring the tonal areas of E minor and C major, while its melodic material is an inversion of the descending-third motive. In the table, " \rightarrow " means that a section "modulates to" or "initiates a modulation toward" the ensuing key.

Large	A ₁			В		A ₂			Co-
ternary									da
Small	a_1	b	a ₂	(c)	(c)	a ₁	b	a ₂	(a)
ternary									
Keys	Е→В	В→	Е	Em	С	Е→В	В→	Е	Е
Functions	T→D	D→	Т	Tv	Tvaf ³²³	T→D	D→	Т	Т
					or °Sp				
Measures	1–10	11–14	15-22	23–29	30–37	38–47	48-51	52-59	60–64

Table 4: Formal overview of Haydn's String Quartet, Op. 74, No. 3, II.

A function analysis of mm. 1–10 is provided in Example 92. After an abundance of tonics and dominants in different inversions, the disruptive augmented-sixth chord of m. 8 initiates a modulation to the key of B major—a short-lived one, however, that only briefly tonicizes

³²³ Tvaf = the derivation (Danish: *afledning*) of the tonic Variante.

this key before returning to the global tonic when the measures are repeated.³²⁴

When comparing this analysis with the Schenkerian analysis (presented below), a few things are worth noticing. The first is the already mentioned sheer abundance of tonics and dominants, which any Schenkerian would oppose.³²⁵ Second, the disruptive fortissimo augmented-sixth chord of m. 8 presents a sort of harmonic "Far Out Point"³²⁶: functioning as the *incomplete doubly altered double domi*nant in the key of the dominant, the chord seems to be as far away from the tonic E major as possible-in sharp contrast, as we will see, with the linear explanation of the chord that a Schenkerian viewpoint might favor.³²⁷ Third, mm. 5-6 exhibit a progression that seems to violate one of function theory's stipulations. Following the A^{#07} chord in m. 5, functionally interpreted as the incomplete double dominant with lowered ninth, we arrive at the expected dominant in first inversion, thus resolving the diminished chord's seventh dissonance downward in the bass. Next, however, another double dominant appears, this one with a fifth in the bass.

³²⁴ One reading not pursued in Example 92 should be briefly mentioned here: after the brief tonicization of the dominant at the end of m. 6, the E major of m. 7 could be heard as having (temporary) subdominant function, which could explain that the first violin leaps away from the apparent leading tone in m. 6. In Part III, I will pursue another reading of this moment.

³²⁵ To take but one example, this is Felix Salzer's critique of a comparable, conventional chord-by-chord Roman numeral analysis of mm. 1–3 of Bach's Prelude in B^b major from WTC I: "It completely dissects the phrase, turning an organic musical idea into a group of isolated chords and motives, each of which is represented as an independent entity thorough the application of grammatical symbols.... What has this analysis revealed of the phrase's motion, and of the function of the chords and sequences within that motion?" (Salzer 1952, I:11).

³²⁶ Here, I informally adapt the term that Richard Taruskin uses to describe the tonally most remote key area of a tonal composition (cf. Taruskin 2010 [2005], 392– 394, 425, 504, 520, et passim).

³²⁷ This explanation of the notoriously cryptic augmented-sixth chord is, moreover, an explanation against which Schenkerians have expressed grave misgivings. For instance, Gottfried Weber provides a comparable explanation of the chord in his *Versuch einer geordneten Theorie der Tonsetzkunst* (Weber 1830–32 [1817–21], II:122), an attempt that Irene Montefiore Girton (née Levenson) calls "herculean, but doomed" (Levenson 1984, 36).





The resulting "reverse" D–DD-progression is not unusual in function analyses, but the fact that the metrically strong DD of m. 6 is approached from a D in m. 5 nevertheless represents a frequent kind of problem in function analysis—one in which prose text must explain the ostensible oddity that the analytic symbols themselves communicate. The function analysis also has no way of explaining—indeed, does not even seek to explain—the manner in which the bass voice skips into a dissonant note in the very first measure (a skip that is echoed in the first violin in mm. 1–2). I–V⁴/₂, or T–D_{/7} is not an uncommon progression, and as such it arguably does not "need" the explanation that a Schenkerian viewpoint would entail.³²⁸

A Schenkerian foreground analysis of mm. 1–10 is proposed in Example 93, and Example 94 provides an analysis of the deeper middleground. The foreground analysis makes it clear that there is a long prolongation of the initial tonic through means of neighbor notes and octave transfer of the *Kopfton*. The many T's and D's are differentiated so that only the concluding dominant is seen as an "actual" V-harmony, while the dominant of m. 6 also resides at a relatively deep level, but only functions as a divider or "backrelating dominant."

As seen at the lower level of Roman numerals in Example 93 as well as in Example 94, I read a large-scale chromatic voice exchange between the chords of mm. 1 and 8: E goes to E^{\sharp} , and G^{\sharp} goes to $G^{{\natural},329}$ In other words, and in glaring contrast to the above function analysis, the augmented-sixth chord is *not* far removed from the global tonic E major; it is rather *part* of it, being at the *boundary* of the tonic prolongation.

³²⁸ In *Free Composition*, Schenker writes: "Since it originates in the octave, the seventh must move onward in the descending direction" (Schenker 1979 [1956/1935], 65 [§178]). This implies that the bass' A in m. 1 belongs to an inner voice descending from the viola's B.

³²⁹ I am thankful to Lauri Suurpää for directing my attention to this in my early studies of Schenkerian analysis in October 2016.





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Example 94: Schenkerian deep middleground analysis of the second movement of Haydn's String Quartet, Op. 74, No. 3, mm. 1–10.

This is not to say that a Schenkerian analysis cannot acknowledge that the chord simultaneously initiates a move toward the tonicization of B major—Example 93 shows as much in the upper level of Roman numerals—but it invites a linear understanding in which the tonic is prolonged until the entrance of the II[#] in m. 9 (preceded by a $^{6}/_{4}$ suspension in the locally tonicized B major). Put crudely, the analytical statement is that the augmented-sixth chord in some way grows out of the tonic, perhaps even that it carries a fundamentally tonic function in the phrase. In function theory, this statement is both impossible to arrive at and nearly nonsensical. Diether de la Motte's *Hör-Analyse* (recall Example 20, page 85) comes close, but for function theory, the chromatic alteration of the voice-exchanging tones implies a change of function. The example thus captures a crucial difference between the two ways of theorizing harmony and the analytical consequences it entails.

As it happens, however, this specific composition has a recurring use of German augmented-sixth chords, making the question of their *function* an interesting and perhaps important one in the analysis of the piece. Before continuing with an example of this, the following analyzes the b and a₂-parts, mm. 11–22, of the large ternary's A₁-part. A function analysis of this music is proposed in Example 95.









For the function analyst, there are two main questions: Has the piece fundamentally modulated to B major in m. 10, and for how long does this modulation then last? Or is it rather still in E major? In both cases—and this is the second main question—what is the function of the G major chord in first inversion in m. 12?³³⁰ At its entrance, the chord is unexpected, but together with the ensuing F[#] chord, it partakes in a secondary cadential movement to the B major of m. 13—which has an unambiguous dominant function at the point of entrance because of the seventh in the bass. I deliberately notate the function of the G major chord in two ways: As °Sp and Svp. The symbols mean the same—that G major is the *Parallel* of the local minor subdominant, E minor. Another possibility is to follow Wilhelm Maler's mode-relational practice and designate the chord sP, thus communicating a shorter 'distance' because fewer functional symbols are needed to express the chord's function.

The rest of the excerpt in Example 95 is relatively straightforward, and function analysis is able to make sense of the two harshly juxtaposed diminished chords in mm. 18–19. The *forzando* chord of m. 20 introduces the first subdominant element in the phrase and initiates the concluding cadence, in which the three upper voices embellish the dominant in a manner that resembles an inversion of their corresponding embellishment m. 8.

A Schenkerian background analysis of mm. 11–22 is provided in Example 96. If one compares my analyses with David Damschroder's "Model 2" in what he terms "Three-part form in movements with *Kopfton* $\hat{3}$ and a dominant-cadencing A₁" (see Example

³³⁰ One may notice, tentatively, that this phrase's strange and somewhat "disruptive" chord is again a sort of "G chord," as is the diminished chord in m. 18. But if one asserts a connection between the augmented-sixth chord in m. 8, the G major chord in m. 12, and the diminished chord in m. 18, one asserts an incongruent connection between three different ways of determining chord identity. In the augmented-sixth chord, the *bass* tone is G, but the *functional root* is the tone C[#] (and the function is called incomplete because this root is not actually present); in the G major chord, the bass tone is B, but the *structural root* (the bass when third-stacked) is G; and in the diminished chord, the bass tone is again G, but this time the *structural root* is A[#] while the *functional root* is F[#]. (I use the term *structural root* because it is slightly different than the *fundamental bass* which sometimes overlaps with the functional root.)

97), one can see that they correspond closely. Example 98 is a more detailed foreground analysis, including a brief background summary of mm. 1–10 to put the excerpt into its tonal context—an imperative that distinguishes Schenkerian from function-analytical practice.



Example 96: Schenkerian background analysis of the second movement of Haydn's String Quartet, Op. 74, No. 3, mm. 1–22.



Example 97: David Damschroder's "Model 2" for three-part movements with Kopfton $\hat{3}$ and a dominant-cadencing A₁ (Damschroder 2018, 220).





The functions of the E major chords in m. 13 are interesting. From a post-Riemannian viewpoint, the chords have tonic function. An E major chord appearing in the key of E major could hardly have anything else. The exception would be what Hermann Grabner calls the Wechselquartsextakkord, a $\frac{5}{3}-\frac{6}{4}-\frac{5}{3}$ motion resulting in a "Schein-S innerhalb der T" or "Schein-T innerhalb der D" (Grabner 1944, I:58). However, for Grabner (as for other post-war theorists discussed in Chapter 1), the Wechselquartsextakkord must retain the dominant's bass note, hence the middle chord must appear as an actual ⁶/₄chord. This does not occur in the Haydn example, m. 13. The E major occurs in first inversion, then in root position, but not in second inversion. But from a Schenkerian viewpoint, context invites a reading of the chord as an umgekehrte Quartsextakkord, or a 6/4-chord with "addition of a root" (Schenker 1979 [1956/1935], 90), or an "unfurled" chord in Damschroder's terms. Here, the E major chords of m. 13 are seen only as neighboring ⁶/₄-chords to the still prevailing dominant Stufe.

The schism between these readings springs out of the typical "harmony versus voice leading" schism. Whereas function analysis conceives the chords harmonically in their literal appearance, the Schenkerian reading suggests that the *apparent tonics* have their origin as means of supporting the neighbor note G^{\sharp} that embellishes the *Urlinie*'s 2—a consonant support for a background dissonance.

An interesting nuance that the function analysis brings with it is the emphasis on the modulatory gesture toward B major and—again in m. 13—the point at which the function of the B major changes from temporary tonic to definite dominant. Contrary to this, the Schenkerian analysis maintains the tonal center on E major throughout the movement and relates every tonal event to this center because of the monotonal basis discussed in section 4.1.3.1 (page 270ff.).

One might also notice the different roles of the adjacent diminished chords in m. 13. In the function analysis, the $E-A^{\#\circ}-D^{\#\circ}-E$ progression of mm. 17–20 embodies an incomplete and altered version of a paradigmatic T–DD–D–T. In the Schenkerian reading, this apparently cadential gesture is more divided. The $A^{\#\circ}$ relates primarily to the preceding E major chord and functions as a *common-tone* *diminished seventh chord*, a term that (to the best of my knowledge) does not have an equivalent in function-theoretical terminology.³³¹

We now arrive at the movement's contrasting B-section, which begins in E minor. Score reduction and function analysis are provided in Example 99.

At its entrance, the unexpected E minor chord has the function of a tonic Variante, but immediately takes over the role as new tonic. After a T–S–D–T (with the D in incomplete form), m. 26 introduces a secondary dominant that initates a modulation toward C major, a key that is subsequently confirmed with an elaborate cadence. Here, we once again encounter a German augmented-sixth chord (m. 28), and once again, it is emphasized in forzando dynamics. In the new C major key follows a circle-of-fifths sequence, A7-Dm-G7-C. In m. 34, a secondary dominant E major leads to the Tonic Parallel A minor in m. 35. The function of the second chord in m. 35 is dubious from a strictly function-analytical point of view. Having touched upon the Parallel key through the E major dominant, one could perhaps describe it as a Dp, a minor dominant in C major's Parallel key. But even if one maintains this strictly function-analytical viewpoint, it seems blatantly obvious that the chord has a passing voice-leading function in the movement from A minor in m. 351 to the augmentedsixth chord in m. 36. If one analyzes the ensuing modulation toward the expected E minor (which ends in E major instead) beginning already from m. 34, the chord can be seen as what Grabner calls a Durchgangsquartsextakkord, a passing 6/4-chord (in other subtraditions labeled as a rare tonic in second inversion rather than a dominant) in the overall movement from S to DD.

Since the rest of the movement is an ornamented repetition of the first A-part, plus a tonic-confirming coda, the function analysis is now complete. Overall, the function analyst may notice that the German augmented-sixth chord—or the doubly altered incomplete double

³³¹ Examples of compositions with notable common-tone diminished seventh chords are: Schubert's String Quintet in C major, D. 956, first movement, m. 3; Mendels-sohn's *Rondo capriccioso*, Op. 14, m. 5; Brahms' Piano Trio No. 2 in C major, Op. 97, fourth movement, m. 1 and 2; and Brahms' Symphony No. 3, Op. 90, first movement, m. 2.







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dominant—is repeatedly used as the means of modulating: from E to B; in confirming the modulation to C major after the weak modulation from E minor to C major; and in modulating back from C major to E minor/major. What the analyst uses this insight for, of course, is dependent upon context. One may use it as a textbook example of a specific means of modulation; one may use it in a discussion of the function of augmented-sixth chords in their theory-historical treatment or music-stylistic uses (cf. for example Harrison 1995; Biamonte 2008; Hvidtfelt Nielsen 2015); or one may even argue that the recurring harmonic function takes the role of a kind of *harmonic motive* specific for this composition. Though "harmonic music (cf. the analyses of Schubert and Brahms in Black 2009 and Smith 2009), Brian C. Black's definition of it is in close correspondence to its significance and use in this Haydn movement:

By 'harmonic motive,' I mean a harmonic event or progression that resonates across the movement and influences its key relationships, modulatory strategies, and affective atmosphere. This recurring entity thus has a motivic status in the full sense of the word. It originates often in the first gesture of the movement and is pursued throughout the piece to become not just a subtle unifying element, but something that contributes to the overall meaning and effect of the music. (Black 2018, §1)

The interpretation of the augmented-sixth chord as a harmonic motive is not precluded from the Schenkerian perspective, of course—in the end, this depends on the analyst rather than the analytic system per se—but it is perhaps less obvious because the chords may be seen not as harmonic entities in their own (motivic) right, but as "accidental" simultaneities growing out of voice-leading procedures—in this movement always originating in voice exchanges. The Schenkerian analysis of the B-part, shown in Example 100 and Example 101, displays these voice exchanges in mm. 28 and 35–36. In my reading, the tonicized C major chord functions as an upper neighbor to the structural dominant of m. 37.

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Example 101: Schenkerian background analysis of the second movement of Haydn's String Quartet, Op. 74, No. 3, mm. 1–37.

To avoid parallel fifths between C major and B major, the latter is approached through a typical 5–6 transformation of the former; in the 6-stage of this transformation, I read the bass' A as another "addition of a root." The surge toward the dominant B is then intensified by the chromatic voice exchange creating the augmented-sixth chord.

The piece touches upon four keys: E major, B major, E minor, and C major. In function-theoretical terms, the first three keys have the tonal functions of T, D, and Tv, while C major can be interpreted in different ways. One could see it as Svp or, as tG in Maler's symbology, or Tvaf in progressional function theories (see Table 4, page 306). The Schenkerian analysis has a very different understanding of the roles of these keys in the composition: even though E minor and C major are established as actual keys-and, as such, are organizing factors in the movement-they are subordinate to the dominant Stufe of m. 37, which is given more priority despite the fact that it "only" asserts itself as a chord, not as a key. We already saw the distinction between key and Stufe have a large impact on the interpretation of the augmented-sixth chord of m. 8: instead of marking the breaking point with the E major-key, it functioned, according to my Schenkerian analysis, as the boundary of the tonic prolongation; and we see it again in a larger perspective in the treatment of the E minor and C major-keys of mm. 23-37, illustrated in the above Example 101 as well as in my background analysis of the entire movement in Example 102.



Example 102: Schenkerian background analysis of the full second movement of Haydn's String Quartet, Op. 74, No. 3.

The previous discussion of Schachter's "Analysis by Key" (1987; see page 274ff.) provides the theoretical explanation for these analytical differences. Notice that the situation in the beginning of this quartet—that a tonic triad is prolonged through chromatic voice exchange, resulting in an augmented-sixth chord—is completely analoguous to the situation in Schachter's analysis of Beethoven's Piano Sonata No. 4 in Example 84 (page 276).

The analytical consequences of function-theoretical and Schenkerian ways of theorizing harmony and tonality has been demonstrated through the comparison of analyses of this Haydn example. From this, one might infer that a successful synthesis of these approaches must be one that is able to mediate between the Schenkerian identification of linear *Auskomponierungen* of vertical *Stufen* on the one hand, and the function-analytical act of relating chords to the modulating key center on the other. Since the augmented-sixth chords function as motivic harmonies, thus influencing the movement's "key relationships, modulatory strategies, and affective atmosphere" (Black 2018, §1) as I have argued, an analysis that allows for this aspect, too, would be of great value for this specific movement. These are some of the criteria that inform the work in Part III.
5.2 FRANZ SCHUBERT: *DIE STERNE*, OP. 96, No. 1, D. 939 (1828)

Franz Schubert's *Die Sterne*, D. 939, was composed in 1828 and was published the same year as the first of four independent *Lieder* in his Op. 96. The score of the entire song, including measure numbers, can be seen in Example 105 at the end of this section, beginning on page 328. The song has a noteworthy structure: It is set stably in E^{\flat} major, but in the third line of every four-line stanza, there is a modulation to a "chromatic mediant," to use David Kopp's categories (2002, 11).³³² The modulation is abrupt and without intervening secondary dominants, and it ends just as abruptly when the fourth line returns to E^{\flat} major. The first stanza modulates to C major; the second to C^{\beta} major; the third to G major; and the fourth to C major again. As Kopp notes, only G^{\beta} major is lacking for the song to be a comprehensive study on chromatic mediants (Kopp 2002, 23).³³³

Indeed, the song plays a central role in Kopp's study on mediants. It is one of the first analytical examples in the book (Kopp 2002, 23–29), and he briefly discusses it again later in the book (ibid., 129). Situating his own theory against the dominating Schenkerian practice, Kopp has the following concerns of a Schenkerian reading:

Both lower mediants [i.e. C and C^b] could be interpreted as upper neighbors to the dominant, while the upper sharp mediant could be seen as a third-divider, a diminution of the fifth leading upward from tonic to dominant. This means, though, that Schenkerian theory treats the upper and lower mediants as quite different sorts of background event, effectively upholding the same scale-degree distinction just discussed. Moreover, both the third-divider and upper-neighbor explanations require the resolution or completion of the contrapuntal tendency of the mediant degrees. But no such followings-through occur. Instead

³³² David Kopp distinguishes between *relative mediants*, which have two common tones with the tonic (in C major: A minor and E minor); *chromatic mediants*, which have only one common tone with the tonic (in C major: A major, A^{\flat} major, E major, E^{\flat} major); and *disjunct mediants*, which have no common tones with the tonic (in C major: A^{\flat} minor and E^{\flat} minor) (cf. Kopp 2002, 10–11).

³³³ For now, I will focus on these stanzas, while the intrumental introduction and interludes, as well as the text-music relationship, will be briefly discussed when the song is approached with a new analytical model in Part III, section 7.2 (page 417ff.).

of moving to the dominant scale degree, the lower mediant progress directly back to the tonic. Likewise, instead of achieving the composing-out of a fifth, the upper mediant moves directly back to the tonic. (Kopp 2002, 27)

Kopp then notes that the above-sketched Schenkerian analysis is exactly how Harald Krebs analyzes it in his PhD dissertation, as seen in seen in Example 103 (Krebs 1980, II:30).

The analysis invites a certain way of hearing the piece, in which the return to the tonic E^{\flat} —the return always being in first inversion, marked by the "6" in his analysis (except in the third stanza)—is subsumed under the following dominant *Stufe*. The A^{\flat} major chord in m. 44 is thus a lower neighbor to the dominant.

The analysis of the mediant key areas is completely in line with what was discussed in the Haydn example above: it relies on the Schenkerian stipulation that a "key" may not always take the role of a *Stufe*. In Krebs' Schubert analysis, C major and C^b major play essentially the same role as C major did in my above Schenkerian analysis of Haydn's string quartet—the role as incomplete upper neighbors to the structurally deeper, ensuing dominant. Only now, in the Schubert piece, the return to the tonic key E^b major is itself subsumed under the ensuing dominant (as an unfurled $\frac{6}{4}$).

Even though the underlying theoretical argument that "validates" Krebs' Schubert analysis is essentially the same as the one that lies behind my Haydn analysis, the musical context of the Schubert song seems to call for another approach than Krebs'. Personally, I have large difficulties hearing a structural dominant appear before m. 45; rather, I hear mm. 39–42 as being governed by a I⁶, and not a socalled inverted or unfurled cadential ⁶/₄ dominant. Though the chord does indeed look like a V⁶/₄ from m. 39₂, the bass G is so emphatically stated in *fortepiano* at the downbeat of m. 39 that I hear it as implied in the following measures. This bass G then moves to the the predominant A^b in m. 44 and on to the dominant in m. 45.

This leaves the question of what to do with the chromatic mediants. If they are not stepping stones on the path toward the structural dominant, what then?





Function analysis may have an answer to this, although it should be emphasized that different types of function theory would provide different answers. The following analysis takes as its starting point the *processual function theory*, as introduced in section 1.3.2 (see also Appendix 3), but it is not incompatible with the key- or interval-relataional function theories introduced in the same section.

In a 2018 article of mine (Kirkegaard-Larsen 2018, 99-101), I discussed the affinities between processual function theory one the one hand, and transformational and neo-Riemannian theory on the other. These theoretical branches all work with the idea that a chord can be transformed through a certain process to become another chord: in David Lewin's words, this is an analytical approach with a "transformational attitude" (Lewin 1987, 159; see also Rings 2011b, 24-25). As already discussed in section 1.4.3 (page 104ff.), neo-Riemannian theory will not be thoroughly treated here, but the kinship it has with processual function theory is notable, and—especially for readers unfamiliar with this branch of function theory-worth keeping in mind here. Even more crucial to keep in mind, however, is the fundamental difference between neo-Riemannian transformations and function-theoretical processes: namely that only the latter postulate a functional relation between two chords, and consequently that only the latter relates the chords to the key. A processual function analysis of the key relations in *Die Sterne* is provided in Example 104.

Measures:	1	32	39	63	78	84	108	122	129	153	167	175
Keys:	E♭	С	E♭	E♭	C♭	E♭	E♭	G	E♭	E♭	С	E♭
Functions:	Т	Tpv	Т	Т	Tn	Т	Т	Tnn	Т	Т	Tpv	Т

Example 104: Overview of keys and key functions in Schubert's Die Sterne.

C is here interpreted as the Tpv of E^{\flat} —the *Parallelvariante* of the tonic. C^{\flat} is interpreted as Tn, a neapolitanization of the tonic, and as an analogy, G is a double neapolitanization.³³⁴ One may question what these labels say about the music. Is the relation between E^{\flat} and

³³⁴ For more on neapolitanizations, see section 1.3.2, especially page 92ff.; see also Appendix 1.

 C^{\flat} closer to the relation between E^{\flat} and G because of they can be seen as "neapolitanizations"—or because both relations cover the root distance of a major third? Does it not matter that C and C^{\flat} are lower mediants as opposed to the upper mediant G? Surely, using other systems of functional nomenclature, one may label them in other ways. What these labels do say, however, are two things. First, that the mediant keys all have some kind of fundamentally tonic function. Second, that they carry this tonic function because the tonic has been altered through a voice-leading procedure in which one common tone is retained while the two others move. The problem is, of course, that this second statement is not communicated very clearly by function theory's labels, which do not visualize voice leading at all.

A conventional function analysis of the harmonic rather than the tonal level is very straighforward and will not be fleshed out here. One problem with such an analysis, however, is that it—as always simply analyzes on a chord-to-chord basis without taking harmony's interaction with phrase boundaries into consideration.

A successful mediation of the analytical approaches to this song would thus be one that accomplished an integration of functional third-relations into the Schenkerian analytical practice—a type of integration which would allow one to simultaneously show these third-relations as the results of certain voice-leading procedures.



Example 105: Schubert's *Die Sterne*, annotated with measure numbers (the example continues on the next pages).



Example 105 (continued).



Example 105 (continued).



Example 105 (continued).



Example 105 (continued).

5.3 FELIX MENDELSSOHN: VARIATIONS SÉRIEUSES, OP. 54 (1841)

The theme of Felix Mendelssohn's Variations Sérieuses, composed in 1841, will serve as the final example in this chapter.³³⁵ The following presents some of my own analytical observations on the piece, but it also discusses and compares already published analyses. Felix Salzer published a Schenkerian analysis in vol. 1 of The Music Forum (Salzer 1967), and an alternative to this analysis was suggested in Arthur Komar's review of that volume (Komar 1971, 321). It also appears as an exercise for the reader-that is, without a written-out analysis-in Forte and Gilbert (1982, 349).³³⁶ Since these Schenkerian analyses largely agree with my own, but disagree with me as well as with each other when it comes to the background level, I will save a discussion of Salzer's and Komar's analyses to the end of the section. An analysis with observations on harmonic function appears in Peter Rummenhöller's book Romantik in der Musik (1989, 178-181), and a full function analysis appears in Benedikt Stegemann's Theorie der Tonalität (2013, 87-90); along the way, I will supplement their function analyses with my own, based on a progressional function theory, as introduced in section 1.3.2 (see also Appendix 3). Example 106 shows the 16-measure theme of the piece.

Stegemann (2013, 88) takes the first five harmonies to be t– DD–s–D–t.³³⁷ He does not comment on the somewhat unusual progression DD to s. The progression s to DD is a common way of intensifying the surge toward the dominant while the opposite progression is more unusual (but not unheard of). In any case, it is symptomatic that Stegemann gives the E^7 harmony of m. 1 the function of DD even

³³⁵ The piece was composed for a Beethoven anthology published in late 1841 or early 1842. For a detailed study of the origin and reception of *Variations Sérieuses*, see Jost (1992).

³³⁶ They write: "Above all, the theme of these variation needs careful analysis at the foreground as well as the deeper levels. As in Beethoven's Op. 109, the stepwise motion spanning a third is of paramount importance at all structural levels" (Forte and Gilbert 1982, 349).

³³⁷ Stegemann adheres to Maler's (1931) practice of designating minor functions with lower-case letters, major functions with upper-case.



Example 106: Felix Mendelssohn's Variations Sérieuses in D minor, Op. 54, mm. 1–16.

though it does not "act" as a paradigmatic DD (leading to D, that is), and thus, from a Schenkerian perspective, does not "function as" a secondary dominant (as per the discussion of function in section 4.1.1, page 246ff.).

In a Schenkerian voice-leading perspective it can be argued that rather than functioning as a dominant, the E⁷-chord is the result of a chromatically descending voice-leading motion from A to F in the structural alto voice, accompanied by a motion from D to A in the structural tenor voice (see Example 107).³³⁸

While this analysis brings forward a voice-leading based explanation, it also smooths over a characteristic feature of this composition: that the E^7 *does* progress in an unexpected way. The E^7 calls upon further attention because of the metrical organization in which the tonic appears as an *upbeat* to E^7 falling on measure 1.³³⁹ Calling it a "disconcerting progression," Christina Jost has written that this opening is "obscuring the main harmonic functions" (Jost 1992, 59).

³³⁸ The Roman numeral designations of this example adhere to the practice of Damschroder (2018).

³³⁹ Generally, the metrical aspect of this piece deserves some comments. When listening to the theme, one could easily be led to perceive the tonic upbeat as a downbeat—and many recorded performances further strengthen this impression with a small caesura after the half cadential dominant of m. 5. Only the cadential endings at mm. 7–8 and especially mm. 15–16 seriously challenge this perception. The notation thus suggests an invigorating emphasis on the many dominant seventh chords falling on strong beats.

5.3 · Felix Mendelssohn: Variations Sérieuses



Example 107: Foreground graph of Felix Mendelssohn's Variations Sérieuses in D minor, Op. 54, mm. 0 | 1–2.

Rummenhöller, too, dwells on this initial progression. He characterizes the first two chords, Dm–E⁷, as "eine Verbindung, die zwar formal korrekt, aber wenig sinvoll mit Tonika–Doppeldominante zu bezeichnen wäre" (Rummenhöller 1989, 179), and continues:

Zwei Dreiklänge, deren Grundtöne stufenweise steigen und deren zweiter ein Dur-Dreiklang ist, haben allemal Halbschlußcharakter (zumal wenn der erste ein Moll-Dreiklang ist und sich somit eindeutig als Moll-Subdominante ausweist) ... Die ersten vier Akkorde verhalten sich wie zwei Halbschlüsse zueinander, die einander verschränkt sind: d verhält sich zu E⁷, wie g zu A⁷, oder anders ausgedrückt, d und E⁷ sind s und D von a-Moll, g und A⁷ dasselbe von d-Moll. (Rummenhöller 1989, 179)

Rummenhöller furthermore notes the unusual juxtaposition of E^7 and Gm and calls it "ein antiquarischer Verfremdungseffekt" (ibid., 180).

The different perspectives on the very beginning of Mendelssohn's piece, then, epitomize the frequent discussion of harmony (verticality) versus voice leading (horizontality). In the functiontheoretical perspective, the chords are vertical entities with harmonic function, whereas in the Schenkerian perspective they are rather contrapuntal entities with passing function. But while the Schenkerian analysis may be "predisposed" and thus favor this contrapuntal perspective, it *is* capable of communicating the appearance of a *Stufen*- *kreis* (as in the I–II–V–I seen in Example 107), and whether one would call this *Stufenkreis* "functional" is up to the analyst; the function analysis, on the other hand, does not have a way of communicating the contrapuntal origin of the chords or, at the very least, analyzing the interaction between contrapuntal and harmonic forces in these few measures.

In Stegemann's analysis, it appears that something completely novel happens in mm. 4 | 5–6. Benedikt Stegemann (2013, 88) analyzes the five harmonies as follows:

Chords:	Dm	E^7	Cm	\mathbf{D}^7	Gm
Functions:	t	DD	(s	D)	S

The E⁷ now progresses to a C minor chord, which is a secondary subdominant to the upcoming G minor chord (which in the following partakes in a modulation toward F major). Again, the surprising progression E⁷–Cm is not explained in Stegemann's analysis. Rummenhöller, on the other hand, compares the disjunct progressions E⁷–Gm and E⁷–Cm and furthermore points out that the initial "Halbschluß" Dm–E⁷, which ascended to another "Halbschluß" (Gm–A) in the antecedent, instead descends in the consequent to Cm–D⁷. Rummenhöller does not exactly write of these recurring local "minor subdominant-to-dominant" progressions as "harmonic motives," but he certainly invokes the idea—which also has relevance for the sequential beginning of the theme's second part, as discussed below.

The Schenkerian graphs shown in Example 108 provide another explanation for the Cm chord, in which the affinity between mm. $0 \mid 1-2$ and $4 \mid 5-6$ is even clearer. The Cm chord partakes in a descending Zug F-Eb-D (Example 108a's alto), accompanied by D-C-Bb-A (tenor).³⁴⁰

³⁴⁰ In Example 108b, I show the F–Eb–D an octave lower than it appears in Example 108a, so as to better illustrate the upper voice's A–G–F[#] interlocking with the F–F[#]–G.





Example 108: Foreground (a) and middleground (b) graph of Felix Mendelssohn's *Variations Sérieuses* in D minor, Op. 54, mm. 4 | 5–8.

This Schenkerian analysis thus posits an intimate connection between the antecedent (Example 107) and consequent (Example 108), insofar as the consequent presents a composed-out version of the antecedent's D-C-Bb-A Zug in the tenor voice (repeatedly transferred, as the arrows show, to the alto voice and back).

The two analytical approaches offer very different readings: Rummenhöller suggests a sort of harmonic s–D motive, while Stegemann shows no connection between the antecedent and consequent of the theme's first eight measures. The Schenkerian analysis emphasizes common voice-leading features. The graphs in Example 108 do not clearly show that the Cm partakes in an auxiliary cadence to Gm, itself the beginning of a new auxiliary cadence.³⁴¹ Instead, Cm is seen as a neighbor chord between the D minor and D major chords.³⁴² An important difference between the so-called vertical and horizontal perspectives comes to the fore here: in the vertical understanding, D minor and D major have different functions and are thus not the same entity. One is tonic and the other is a secondary dominant of the subdominant. Schenkerian practice often (but not always) differs from this view. Section 4.1.1.1 (page 251ff.) already cited Damschroder's position that the use of V/IV (or the equivalent $D^{[S]}$) "confuse[s] chordal function and chordal quality." (Damschroder 2010, 7). The Mendelssohn excerpt thus provides an interesting case: In the local context and function-theoretical perspective, the C minor signals the beginning of a cadential move toward G minor, and the D major chord has a fundamentally different function than the D minor. In the broader, Schenkerian context, D minor becomes a D major seventh chord: the latter is an evolution of the tonic *Stufe* that surges toward the G minor: "Not two individual harmonies - for example, I followed by V7/IV - but instead two phases of a single harmonic initiative" (Damschroder 2012, 7).

Before continuing with mm. 8–16 of the theme, a few things remain to be said about the theme's first part. This has to do with the identification of something as a "dominant" in the two analytical practices (as discussed theoretically in section 4.1.1.1, page 251ff.). For instance, in Stegemann's analysis of mm. 1–8 (see Example 109), he designates the A major chord of the last eighth in m. 2 as the dominant of an unrealized tonic; the Bb major that occurs instead (m. 3_1)

³⁴¹ An "auxiliary cadence" is the English translation of Schenker's *Hilfskadenz*, and designates a cadence—not necessarily at a phrase boundary, as Burstein (2005, 161) notes—that does not begin with the tonic.

³⁴² Of course, the graph *could have* shown the parallelism between the auxiliary cadences as well; I have pursued another reading here for the sake of comparison, but also because this is clearly the reading proposed by Felix Salzer (see ahead, Example 113 on page 345, in which his example c labels E⁷ and Cm in m. 5 as "N," that is, "neighbor chord").





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is analyzed as tG (Stegemann 2013, 88).³⁴³ Rummenhöller, too, writes of mm. 2_2 – 3_1 as a "Trugschlußkadenz" (1989, 180). The next chords, F-C/G-Gm-A (mm. 31-2) are interpreted by Stegemann as (S-D⁶/4-D⁷)^[dP]–D: a secondary cadence aiming at dP (C major) but ending at the dominant of the global tonic. I am puzzled that Stegemann analyzes the G minor chord as D⁷, especially since he uses Wilhelm Maler's practice of showing minor functions with lower-case letters, major functions with upper-case letters. This is most likely a mistake. Be that as it may, it is symptomatic that Stegemann pursues a hypothetical reading of how the music could have continued (had the G chord been major) to dP, or to t in the D-tG progression. This is so habitual a move in function analysis that one easily overlooks its significance. It points to the fact that function analysis does not always concern itself with what *actually* happens in the music, but also with "tonal intuitions" as Brian Hyer (1989) has called them, or Tonvorstellungen in Riemann's (1914-15) own terms-and we saw its wider significance in the discussion of temporal attitudes in section 4.2.1 (page 288ff.).

In my own Schenkerian reading, shown in Example 110, the A major at the last eighth of m. 2 does not have the "functionality" of a dominant.³⁴⁴ It has a function similar to F major at the second eighth of m. 3: they both prolong the preceding harmony by functioning as a manifestation of their upper fifths, and are thus pure voice-leading phenomena connecting structurally deeper harmonies. The Bb major of m. 3 is, in this perspective, not a deceptive chord, but a harmonization of a 5–6 voice-leading transformation of the tonic. This reading downplays the "tonal intuitions," the *prospective* point of view, that was important in the function analysis, and instead favors an explanation of the chords that puts them into the context of the entire phrase. It is only in a *retrospective* point of view that one can under-

³⁴³ Stegemann's analysis is organized in a table, Example 109 is my "translation" of that table. The "v" in the DD^v of m. 7 stands not for "*Variante*," but for "*verminder*-*te*" (diminished).

³⁴⁴ Example 110 shows a slightly different reading of the initial measures than Example 107 did. The lower voice shows that it is possible as well to do a reading from $\hat{5}$, and that m. 4 can be seen as a (surface) interruption.



Example 110: Foreground graph of Felix Mendelssohn's Variations Sérieuses in D minor, Op. 54, mm. 0 | 1–4.

stand mm. 2_2 – 4_1 as essentially a Romanesca (Gjerdingen 2007), allowing the determination of hierarchical differences between the harmonies in the schema.³⁴⁵

I turn now to the theme's second part (mm. 8₂–16). Example 111 presents my own function analysis—applying a progressional function theory—of the initial sequence in these measures. I propose two analyses: below the dotted line, the most general overview is offered. Here, some chords are left unlabeled, showing the sequence's general motion: S–D–T in C major, followed by a S–D–Tst in D minor. Above the dotted line, a more detailed and complex overview is offered. Here, the "model" presents a chromatically ornamented T– DD–D progression (of which the DD–D can be D–T in another key), and the "sequence" repeats this one step higher, albeit with a deceptive conclusion.³⁴⁶

³⁴⁵ The Romanesca is a schema with $\hat{3}-\hat{2}-\hat{1}-\hat{7}-\hat{6}-\hat{5}$ in the soprano and I–V–VI–III–IV–I in bass and harmonies (Gjerdingen 2007, 29). The schema has room for variation; in the Mendelssohn excerpt it ends on V instead.

³⁴⁶ In Example 111, "st" means "substitution" [Danish: *stedfortræder*], as explained in section 1.3.2 (see also Appendix 1). The G key is never confirmed cadentially but only asserts itself as a sequential analogy to the F; for this reason, the analysis from key C is extended.



Example 111: The author's function analysis of Felix Mendelssohn's Variations Sérieuses in D minor, Op. 54, mm. 8 | 9–12.

The progression seems to be an elaboration of a paradigmatic move from T to D via DD, the latter of which is first presented as an incomplete chord (Rummenhöller's implying that the *Halbschluß* functions as a harmonic motive is thus also relevant here). The progression even seems to confirm a fundamental tenet of function theory, namely that diminished chords function as incomplete dominants. Benedikt Stegemann does not communicate a sequential logic in his analysis, but simply analyzes the measures in D minor alone: C major is dP, B^b is sP etc. (Stegemann 2013, 88).

My Schenkerian analysis of these measures—shown in the context of the entire theme—is presented in Example 112. Here, only the outer points of the sequence are of structural importance, and though the intervening chords may carry a local tonic-to-dominant relation, they are explained as voice-leading phenomena between these outer points (cf. section 4.1.3.2, page 277ff.).³⁴⁷ These voice-leading phenomena function as a way of avoiding parallel fifths between the structurally deep, parallel ⁵/₃-chords (F–G–A–B^b).

³⁴⁷ Cf. also Olli Väisälä's "transit principle" (Väisälä 2008, 187ff.; 2011).





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Having thus introduced my own Schenkerian analysis of the entire theme in Example 112, a brief discussion of Felix Salzer's and Arthur Komar's alternative analyses is due. Salzer's analysis (see Example 113) is presented in an article which has the primary purpose of introducing the reader to the signs and symbols of graphic Schenkerian analyses. Salzer uses brackets to show motives (for instance the melody's recurring descending chromatic semitones, $A-G^{\sharp}$, $D-C^{\sharp}$, etc.). Salzer also sees an interesting ascending line from A in m. 4 and stepwise up to the D of m. 12-I have not included this because I take the F major of m. 8 as structurally more significant than Salzer. More importantly, our graphs differ with respect to the background structure and the role we assign to the I⁶ of m. 15. In an analytical move that is very characteristic of Salzer, he takes this chord to have deep background significance. I prefer to see this most fleeting chord as a neighbor to the prolonged II⁶/₅ predominant arrived at-together with 2 in the *Urlinie*—in m. 13.³⁴⁸

Arthur Komar's critique of Salzer's analysis in his review of the first volume of *Music Forum* regards exactly Salzer's emphasis on the fleeting I⁶ (Komar 1971, 321). Komar's analysis, in which the B^{\flat} of m. 12 is seen as a neighbor to the structural dominant (and consequently as the initiation of the dominant prolongation), does not correspond completely to my analysis either, but is somewhat closer.

From a purely function-analytical point of view, the above discussion is, in fact, irrelevant. What does it matter whether this or that chord is structurally "deep," one might ask: the chords have the functions they have independently of their structural significance—could be the hypothetical postulate of a function theorist. The I⁶ of m. 15 is, whether one assigns a deep structural function to it or not, the resolution of a brief V⁴/₂ chord. In functional terms, D_{/7} goes as expected to T_{/3} in m. 15, and only after that does a concluding cadence arrive.

³⁴⁸ A frequent critique of Salzer from Schenkerians is that he tended to take every tonic at face value. The "apparent tonic," which was discussed in the above section on the concept "tonic" (4.1.1.1, page 251ff.), is rare in Salzer's analyses. It is perhaps worth noticing this fact in conjunction with the fact that it was Salzer (in possible cooperation with Weisse and Katz) who introduced "function" as a technical term in Schenkerian theory (as discussed in Chapter 2).





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Example 114: Arthur Komar's analysis of Mendelssohn's Variations Sérieuses, Op. 54 (Komar 1971, 321).

Indeed, the very idea of prolonging a chord in the middle of one cadence across the boundary of a new cadence is, from this perspective, absurd.

This is, in fact, a similar situation to Rothstein's "Schrock cadence" discussed above (see example Example 74, page 261). To cite Rothstein's position on such a tonicized chord (the I⁶ or $T_{/3}$) within the prolongation of another chord:

The chord is *tonicized* by the preceding 4/2 chord, and thus it represents a functional tonic in the foreground. To say that this is simply a first-inversion tonic triad would be as incomplete as to claim that it is "nothing but" an inverted cadential 6/4. It is emphatically both: a tonic and a dominant simultaneously, albeit at different levels. (Rothstein 1992, 10)

Though I do not see the I⁶ chord of Mendelssohn's measure 15 as initiating the dominant prolongation (as does Komar in Example 114), Rothstein's insistence that this type of chord is not *either or*, but decidedly *both and*—but, importantly, at different levels—is highly interesting and useful for the purposes of mediation in Part III.

5.3 · Felix Mendelssohn: Variations Sérieuses

To recapitulate, the Mendelssohn piece is subject to many clashes between the two analytical perspectives. From one perspective, its notable chromaticism is a means of composing out *Stufen*; from another, it is a means of juxtaposing unexpected harmonies, such as E^7 and Gm or E^7 and Cm, but in a manner which reproduces the harmonic motive of the *Halbschluß*. From one perspective, the theme is one long I–II–V–I *Stufenkreis* decidedly in D minor throughout; from another, it is a more fragmented series of secondary cadences and brief fluctuations to other keys. A mediation between these two perspectives must be one, then, that succeeds in explaining certain harmonies as resulting from or, at the very least, being part of, chromatic voice leading, while at the same time acknowledging the romantic functional extravagance—to paraphrase Charles J. Smith (1986)—of these chromatic chords and the tonal intuitions they cause.

PART III: MEDIATION

Chapter 6:

Models of mediation

6.1 MEDITATION ON MEDIATION

In these introductory pages to Part III, I clarify how the ambitions of a mediation should be understood in this study. I do this in three steps. First, I discuss the meaning of the word "mediation" and the related words "synthesis," "reconciliation," and "integration." Second, I consider different methodologies of mediation by discussing three previous studies with similar ambitions (Schmalfeldt 1991; Goldenberg 2007; Rings 2011b). None of these studies mediate between specifically Schenkerian and function-theoretical approaches, but they have useful (meta)considerations on mediation as such. Third, on the basis of this discussion as well as the discussions in Part II, this will lead me to conclude what constitutes a successful mediation for the present purposes.

Part III is entitled "Models of mediation," but it might also have been titled "Synthesis" or "Reconciliation." In the field of music theory, it seems that the latter two words are more often used in texts that, in one way or the other, aim to bridge seemingly opposing theories. For instance, in David Carson Berry's *A Topical Guide to Schenkerian Literature* (2004), an astounding number of texts are listed under the topical heading "Comparative and Synthetic Studies." In a Hegelian sense—the idea that Hugo Riemann based his early function theory on—synthesis implies that a "thesis" and an "antithesis" are melted into one, or, translated into the subject of this dissertation, that Schenkerian and functional approaches merge into one. This does not fully describe the aim in the present study, for one main reason: a true "synthesis" is perhaps possible between *theories* and *analytical methods*—it may be difficult and even utopian, but theoretically possible—but an actual synthesis of *traditions* and *practices* is more difficult to grasp. It suggests that the two complexes of Example 1 (see page 19) become one; that not only theory and analysis, but also the people *practicing* theory and analysis, suddenly agree on some new ideal practice, establishing a new tradition. Obviously, this is far beyond the boundaries of what one can achieve with a dissertation or any other single text.

The other frequent word "reconciliation," used for instance in Janet Schmalfeldt's article "Toward a Reconciliation of Schenkerian Concepts with Traditional and Recent Theories of Form" (Schmalfeldt 1991), is closer to my present purposes. It has two related meanings: It may designate the restoration of friendly relations between people, or it may refer to the act of making two views compatible with one another. While I will argue that Schenkerian and functional perspectives are compatible to a certain extent, "reconciliation" holds the same promise as "synthesis," that the traditions will somehow come to agree. That is not necessarily the case for every aspect of Schenkerian and functional approaches; indeed, forcing the approaches into full agreement would inevitably demand a distortion of important aspects of both. As alternatives to "synthesis" and "reconciliation," Yosef Goldenberg has written about analytical integration without theoretical reconciliation, and Steven Rings has written abot dialogue in texts discussed further below (Goldenberg 2007; Rings 2011b).

"Mediation" is a more accurate description of the aims in this study for two reasons. First, the word implicitly acknowledges that there are two entities between which the mediation occurs—they do not have to become one (synthesis) or to agree on everything (reconciliation). Second, since mediation is something that occurs between people or groups of people, it implies that these two entities are not just abstract theories or methods, but scholarly communities of practice embedded in traditions. In short, "mediation" is more in line with the practice-theoretical framework of this presentation. What might such a mediation look like? The studies by Janet Schmalfeldt (1991), Yosef Goldenberg (2007) and Steven Rings (2011b) each have useful and quite different ideas on how to bridge between Schenkerian and other theories—respectively, form theories, neo-Riemannian theory, and transformational theory (the latter including the neo-Riemannian branch to some extent).

Schmalfeldt's 1991 article is a classic when it comes to discussions of the relation between form theories and Schenkerian theory. Near the beginning of the article, Schmalfeldt writes about the basis of her reconciliation: "The basis for reconciliation to be explored here is the premise that categories, or 'ideal [in the sense of abstract] types', of musical organization play as central a role in Schenkerian theory as they do in both traditional and recent theories of form" (Schmalfeldt 1991, 235). One such category or ideal type is the concept of "theme" as understood by theorists such as Arnold Schoenberg, Erwin Ratz, and William Caplin.³⁴⁹ She notes a "correspondence" between this concept of theme and the Schenkerian idea of "complete middleground harmonic-contrapuntal structure" (Schmalfeldt 1991, 237)—that is, transferrals of the background *Ursatz* to middleground layers. She goes on to explore how this correspondence can inform analyses and challenge a one-sided approach to works.

Schmalfeldt's approach, then, is to work from the starting point of a specifically *theoretical* correspondence. Interestingly, the theoretical correspondence gives rise to subtle *analytical* disagreements that impels a consideration of both perspectives.³⁵⁰ There are, as I argued in section 4.1 (page 245ff.), analogous theoretical correspondences between functional and Schenkerian perspectives. Importantly, however, I also argued that the correspondences are sometimes superficial: a function-theoretical tonic is not necessarily the same as a Schenkerian, structural tonic, and the tonality they theorize about is conceived in dissimilar ways. The question of the *subdominant* and its relation to the Schenkerian *predominant* and *intermediate function*

³⁴⁹ Schmalfeldt clarifies: "Caplin defines Schoenberg's 'theme' as 'a complete musical complex that includes a soprano and bass counterpoint, a definite harmonic plan, a phrase-structural design, and cadentual closure'" (Schmalfeldt 1991, 237; she refers to Caplin 1987, 216).

³⁵⁰ For instance in her analysis of Schubert's lied "Der Wegweiser" from *Winterreise*: Here, formal and Schenkerian perspectives may offer diverging explanations of the phrase structure that becomes blurry when the piano and voice desynchronize in mm. 9–10, seemingly beginning the second phrase (after the instrumental introduction) at different measures.

was discussed in section 4.1.1.1 (page 251ff.), and it showed that a relation of theoretical correspondence, to use Schmalfeldt's term, is not necessarily a relation of synonyms. That is to say, while Schmalfeldt's strategy of taking theoretical correspondences as a starting point has certainly influenced the mediation proposed below—for instance with respect to the correspondence between the subdominant and predominant—this has been done with an eye to the danger of distorting subtle differences. Furthermore, as substantiated below, I will take analytical practice—understood very much in the practice-theoretical sense—as the most important starting point.

In his article on Schenkerian and neo-Riemannian theory, Yosef Goldenberg takes the opposite approach: he proposes an "analytical integration without theoretical reconciliation," as he phrases it in the subtitle of the article (Goldenberg 2007). This means that he acknowledges that there are certain theoretical principles and concepts in the two theories that simply do not align very well with each other-they have very different explanations of third-relations, they are often applied to slightly different repertoires, and, perhaps most fundamentally, they do not rely on the same concept of tonality.³⁵¹ Through a series of analytical examples, he shows that neo-Riemannian operations may nevertheless be integrated into Schenkerian graphs in order to explain local chromatic third-relations or largerscale symmetrical divisions of the octave—or vice versa, that passages analyzed through primarily neo-Riemannian means may integrate Schenkerian graphing technique to visualize how the neo-Riemannian transformations operate in a (vaguely) functional context. He even argues that "the understanding of the passages analyzed above can hardly be adequate without both theoretical perspectives" (Goldenberg 2007, 84). From one perspective, "Model 2" (presented below in section 6.3) is a simple analytical integration of "Model 1" (presented below in section 6.2) into Schenkerian analytical practice-but it goes

³⁵¹ Neo-Riemannian analyses rely only on triadic harmonies, not necessarily on a clear sense of tonal center and harmonic function. However, Steven Rings' reframing of transformational theory (of which neo-Riemannian theory is a branch) puts it into a more solid tonal context through the concept of "oriented networks" (Rings 2011b).

beyond that because it also integrates core concepts of function theory into Schenkerian theory.

Schmalfeldt's strategy of theoretical correspondence and Goldenberg's strategy of analytical integration may be supplemented by a third strategy, that of *dialogue* as proposed by Steven Rings in a passage from his book *Tonality and Transformation* (2011b). The passage in question begins thus:

All new approaches to tonal analysis must at some point situate themselves with respect to the Schenkerian tradition, the *lingua franca* of tonal theory in the Anglo-American academy. The need to do this with transformational approaches is perhaps more pressing than usual, as developments in neo-Riemannian theory have generated a degree of antagonism between adherents of the two methods. (Rings 2011b, 35)

Apart from the fact that function theory is not a "new approach," it is noteworthy in this passage that one might very well replace "neo-Riemannian theory" with function theory, as the mechanism of antagonism is similar. Rings continues:

I will ultimately propose that any tension or competition between the two methodologies is misplaced and unnecessary. Such a tension suggests that Schenkerian and transformational theories represent two versions of the same kind of music theory—that their claims are equivalent and competing. I will instead argue that they are *not* competing forms of the same kind of music theory, but represent distinctly different styles of music-analytical thought. (Rings 2011b, 35)

This echoes some of my conclusions to Part II, especially Chapter 4. To take but one example, I argued that the frequent comparison of the terms subdominant and predominant assumed that they were competing descriptions of the same tonal phenomenon, while they are better seen as functioning on different analytical levels, one encompassing the other.

Rings' solution is to embrace their differences and, instead of aiming at a synthesis, to let them go into "dialogue":

In light of these considerable methodological differences, we should eye with caution any effort to unite these two styles of analytical thought into a grand *über*-method. Transformational

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and Schenkerian approaches thrive best when their divergent analytic and synthetic strategies are allowed free rein; to recreate either in the image of the other would result in a substantial loss ... In any case, it should be clear that nothing in either of these methods excludes the other. On the contrary, their differences of scope and emphasis make possible their dialogic coexistence in analytical practice. By the word *dialogic*, I do not mean anything fancy or Bakhtinian; I simply mean an interaction in which each discourse registers the presence of the other. Dialogue, of course, involves two independent interlocutors, not two individuals speaking in unison. Thus, we should not expect nodding agreement at all times. (Rings 2001b, 38)

I agree with Rings: In the current project, too, a grand *über*-method is neither possible nor desirable. I do not seek to fully replace both theories and merge them into one. But I also think that a mediation between the two theoretical traditions is not possible with a simple juxtaposition of two diverging analyses and the supposition that they are somehow in dialogue. The downside to Rings' strategy is practical. The problem with the idea of *dialogic coexistence in analytical practice*, as Rings calls it, is that *in practice* this demands quite a lot from the analyst: in the case of Schenkerian theory and function theory, it demands (first) that one invests a lot of time in each approach and (second) puts both to use in the analysis of a specific work, and (three) actually "facilitates" the dialogue, instead of simply juxtaposing the two analyses. *In practice* very few will follow this approach.

Because of this, and because of the practice-theoretical orientation of this study, the following sections suggest two models of mediation, one that takes function-analytical practice as its starting point and one that takes Schenkerian analytical practice as its starting point. The two models are closely related and should be regarded as two "modelings" of the same idea. To put it briefly, the strategy in Part III is to take the approaches of both Schmalfeldt, Goldenberg, and Rings into consideration. Based on the comparisons in Part II, we can see which concepts may be reconciled theoretically, as per Schmalfeldt's approach. With Rings' words to mind, however, we should be cautious to propose or to believe in an all-encompassing "über-method." Therefore, the idea is presented from two perspectives—as two models that both aim at reconciling aspects of one theory with the other. What is left of irreconcilable differences will remain thus, but may still be productively integrated in concrete analyses as per Goldenberg's approach—and the ambition is to better facilitate such integration.

It is thus crucial to notice that "Model 1" and "Model 2" constitute two modelings of the same idea. Since Model 1 is presented first, it will appear as constituting the most substantial new addition to tonal theory and analysis in this dissertation. After the introduction of this model, it will be easy to see that Model 2 simply incorporates it into traditional Schenkerian analytical practice.

As has been discussed in the introduction, "practice" encompasses many aspects, but for the purposes of mediation, the word is here understood in a rather "pragmatic" way: a central aspect in function-analytical practice is the act of assigning function labels underneath (or above) the staves of a score. For Schenkerian analysts, the central act is that of doing a voice-leading reduction in treble and bass clefs.³⁵² In their immediate juxtaposition it becomes very obvious that these two practices are immensely different. In one practice, one assigns interpretative labels: letter symbols that designate functional relations between adjacent harmonies. In the other, one in fact reproduces certain parts of the score in a modified system of musical notation that is able to designate hierarchy and structure—and in addition to this partial reproduction, one assigns certain labels (Stufen, scale degrees, possibly other symbols designating contrapuntal patterns, formal aspects, measure numbers, etc.). Moreover, in order to communicate different hierarchical layers, one sometimes creates several reductions of the same passages of the work. The analytical routines that one performs when creating a Schenkerian analysis and a function analysis are quite far apart.

³⁵² Of course, there are many other aspects to these practices. One may, for instance, sit by a piano and play through portions of the piece in question, one may do the analysis imaginatively by reading the score only, or one may do it aurally by listening to the piece, depending on one's aural skills. Preparing the analysis for publication is another story. Still, the end results are as described: a series of function symbols aligned with the score (though sometimes without the score) versus a voice-leading graph.

In a general overview, four aspects contribute to the form of my models of mediation, and all are aspects discussed earlier in this dissertation. First, the models are informed by Chapter 4's comparison and conclusions about correspondences and differences; second, they are inspired by previous reconciliatory studies discussed above and in Chapter 3; and third, they are greatly informed by the practice theory that creates the basis of my entire study. A final, fourth impetus has to do with the historical dimension that was treated in Chapters 1-2. In the early reception of function theory, the degree to which Schreyer's, Louis and Thuille's, and Schmitz' theories resembled key Schenkerian concepts such as passing chords, prolongation and more, was remarkable. In the later reception-that is, after the second world war-it was equally remarkable that these aspects of function theory vanished. Though I am wary of framing my analytical model as a historical resuscitation of the "innocent" pre-war theories, I have undoubtedly been influenced by their seamless, if somewhat ad hoc, mixtures of ideas. They constitute crucial parts of the study that led to the models presented below, and these historical theorists remain of the utmost importance, if not for their entire analytical systems, then at least for demonstrating that, first, post-Riemannian function theory and more or less Schenkerian ideas may in fact coexist, and, second, that the tradition of antagonism-the practice of comparison and opposition—is a historical tendency that may begin already in Schenker's own writings, but which only blossomed after these prewar theories. The specific historical precedents of my own models will be discussed in greater detail in section 6.4 (page 403ff.).

6.2 MODEL 1: MULTILEVELED FUNCTION ANALYSIS

The first model I propose takes its starting point in conventional function-analytical practice: that of communicating one's analysis primarily through the use of function symbols (letters, numbers, and other symbols such as parentheses), often below the actual score of the music. To this standard notational repertoire, the model adds a few new aspects—lines, dots, new letter symbols, and the arrangement of the
analysis in several layers. In contrast to Schenkerian practice, it does not communicate through the means of a modified musical notation.

The model has the purpose of mediating between traditional function-analytical practice and Schenkerian practice by incorporating certain Schenkerian views on harmony in the function-analytical endeavour. The model furthermore facilitates mediation between analytical traditions because Schenkerian concepts foreign to function theory are incorporated more seamlessly than if one were to propose that function analysts simply begin to create voice-leading graphs. The latter would amount to a huge leap away from current functionanalytical practice-practice here understood in the practicetheoretical sense as a broad web of shared ideas and conventionalized procedures. The intention with the model is furthermore to move function analysis in a direction that would make a conventional Schenkerian analysis less foreign and impenetrable: if one understands the premises of multileveled function analysis, chances are that a better understanding of Schenkerian analysis is rendered possible, because one has already become familiar with certain Schenkerian ideas within the realm of function analysis. Lastly-and importantly-I believe the Schenkerian aspects significantly enrich and improve conventional function analysis.

Before commencing, it should be underlined that I base my model on the specifically *progressional* function theory, and integrate aspects of *processual* function theory where relevant. This is because the progressional function theory is much closer to a Schenkerian understanding of "functionality" than a key-relational or mode-relational one.³⁵³ To provide a brief argumentation, consider the *Journal of Music Theory* review of the English translation of Diether de la Motte's *Harmonielehre* (1976). In one passage, the reviewer complains about the following fact of de la Motte's key- or mode-relational system:

³⁵³ In specific contexts (Appendix 2 provides some details), I believe that aspects of both key-, mode-, and interval-relational theory is relevant as well, but for concise-ness, I will not pursue this idea further here.

Deceptive cadences in major and minor are *functionally* different (as $D \rightarrow Tp$ in major and $D \rightarrow tG$ in minor) though in both cases VI or vi is standing in the place of the tonic in essentially the same way. (Bresnick 1978, 322)

Such problems do not exist in progressional function theories. Here, they are both tonic substitutes: D–Ts (as discussed further below, I will suggest the symbol "Ts" for this function instead of the Danish T or Tst). The functions are, in this perspective, not "functionally different," neither from the perspective of "function," nor "functionality" (cf. section 4.1.1, page 246ff.).

The following introduces how rudimentary aspects of Schenkerian analysis are integrated into function analysis in this model. To avoid an abstract discussion of a model yet unknown to the reader, only very elemental—but all the more important—aspects are briefly accounted for, before the visual layout of the multileveled function analysis is presented. Following this, more intricate questions about phrase, meter, and cadence are discussed.

6.2.1 BASICS

If there is one elementary Schenkerian idea that this model incorporates into function analysis, it is the idea of prolongation. In a sense, the entire project of mediation relies on this integration and its ramifications. The stipulation that harmonies may be prolonged in time by other chords entails the idea of Schichten, of hierarchy. This in itself entails that one must have a method of distinguishing between prolonged harmonies and prolonging chords; this discrimination is done via consideration of harmony's interaction with phenomena such as meter, phrase, and cadence-aspects that are discussed in depth in section 6.2.3-as well as harmonies' "horizontal" motions, that is, voice leading. This discrimination can only be made if one accepts a more pronounced *temps espace* and *structural* view of harmony than is customary in function analysis (as argued in Chapter 4)-but as I can hopefully demonstrate, the strength of the model is that it simultaneously allows for a temporally contingent (temps durée) view which integrates protention and retention simultaneously. Ultimately, the model shows how temporally contingent perceptions of harmony

"functions" in the large-scale structural framework, and how these levels interact.

Once one has integrated the idea of prolongation, it is possible to regard certain harmonies as deeper, and others as leading to and from these deeper harmonies. Therefore, concepts that have hitherto been reserved for purely melodic analyses in the functional tradition must be integrated into the harmonic domain, such that one may speak of entire chords or series of chords as *passing* between deeper harmonies or *neighboring* deeper harmonies. Indeed, Ludwig Holtmeier has argued that "im Begriff des Durchgangs finden gleichsam Kontrapunkt und Harmonielehre zusammen. Man könnte behaupten, daß die ganze Schenkersche Theorie eine Verabsolutierung dieses Durchgangsbegriffs ist" (Holtmeier 2005d, 248; this quote was discussed on page 64). It is between this central contribution of Schenkerian theory and traditional function theory that I wish to mediate with the multileveled function analysis.

Among the many ramifications that the concept of prolongation has are also some less obvious ones. It entails, for instance, that a chord which appears as a 5/3 chord on the surface may, at the deeper level, signify a neighboring 6/4 chord. The progression C–F–C in the key of C major is no longer T–S–T, but $T^5/3-T^6/4-T^5/3$. Or rather—and this is crucial—it is *both* T–S–T *and* $T^5/3-T^6/4-T^5/3$, *but at two different levels*. This will be further discussed in concrete analyses below. In any case, with the introduction of prolongation it is also necessary to introduce the idea, fundamental in Schenkerian analysis, that surface appearance and deeper structure may vary, and furthermore that abstract voice-leading motions may occur between different voices in different registers.

The relation between the ideas of prolongation and functional representation was implied by some of the discussions in Chapter 4, but a fuller discussion has been saved for the present context. By virtue of the theories' different conceptions of tonality, one might summarize that whereas prolongation entails that a I-triad may be prolonged by any chord that assists in a voice leading-guided *Auskomponierung* of the triad, functional representation only entails that it may be represented by its third-related chords—and, by extension of

this logic in the processual function theory, also by *their* third-related chords, under certain circumstances. That is, in function theory, the occurrence of a IV or V triad would normally necessitate a shift of fundamental function (except in special cases in processual function theory). I–IV–V–I is always T–S–D–T. This is not the case with prolongation, in which I–IV–V–I may be seen, at a deeper level, as motion within a single harmony, I. This deeper level, importantly, has to do with *Stufen*, not with keys and modulations (the analytical consequences of this were discussed in the Haydn analysis in section 5.1).

While I thus introduce the fundamental idea of prolongation to function theory, I will not use the term *Stufe* to refer to prolonged chords. Instead, I call them *phrase functions*.³⁵⁴ The overlap between the two concepts is obvious; the difference will be clearer when reviewing my Model 1 together with Model 2, which proposes that prolongation may also occur through functional third-representation; a function may thus be prolonged beyond the boundaries of a Schenkerian *Stufe*. In short, I will attempt to mediate between ideas of *representation* and *prolongation*, which were discussed in section 4.1.3 (page 261ff.).

The multileveled function analysis retains the three fundamental harmonic functions tonic, subdominant and dominant at one level, but reconceptualizes them at the deeper level as Tonic (T), Predominant (PD), and Dominant (D) *phrase functions*. A phrase always has a Tonic and a Dominant phrase function, and often a Predominant phrase function mediating between these. What constitutes these three phrase functions will be discussed below; first it is necessary to also introduce the idea of the structurally deep $T_{/3}$ phrase function.

As seen in numerous Schenkerian analyses, as well as in fig. 14 in Schenker's *Free Composition* (Schenker 1979 [1956/1935], fig. 14), I⁶ (or $T_{/3}$) often appears either as an intermediate harmony between I and V, or as a significant passing tone between I and IV. When it is relevant, the multileveled function analysis will therefore display the $T_{/3}$ at the deep level—sometimes just signified with a large "/3"—but

³⁵⁴ This term is inspired by Redmann's (2009) *Satzfunktionen*. I discuss this, as well as Laitz' (2003) *phrase model* below, in section 6.4 (page 403ff.).

because of the subtle difference between *Stufe* and *phrase function*, it is always to be understood as part of the Tonic phrase function, not as an independent phrase function. Because of functional third-representation, this is true even in cases in which this bass note is harmonized by $III^{\ddagger\ddagger}$, as it is in some of the examples in Schenker's above-mentioned fig. 14.

A multileveled function analysis may incorporate aspects of counterpoint and voice leading, but not to the extent to which Schenkerian analysis does it. For instance, it does not explicitly incorporate considerations about the role of melody as these are undoubtedly best communicated with Schenkerian graphing technique-but since the concept of prolongation does not make sense without some idea of voice leading, this is implicitly a part of the model. Voice-leading features can therefore be explicated through the use of, for example, numbers, lines, and dots, but the model will not easily communicate phenomena such as long-range unfoldings. Furthermore, and deviating fundamentally from Schenkerian theory, the model does not entail a theory of an Ursatz covering (or, rather, generating) the entire movement in question. In general, very deep-leveled structures-often the aspects that function theorists have the biggest difficulties accepting-are not necessarily addressed in this model; however, in considering phrase structure, the model does penetrate deeper than conventional functional analyses of surface level and adjacent harmonies.

All of this will be aptly demonstrated through analyses in the next chapter, but before that, it is worthwhile to go beyond this abstract discussion and see what a multileveled function analysis actually looks like.

6.2.2 VISUAL LAYOUT

The multileveled function analysis is, as the name suggests, organized in several levels.³⁵⁵ Example 115 introduces the basic layout.

³⁵⁵ An overview of all symbols used in Model 1 and Model 2 can be seen in Appendix 2 (from page 531). While some symbols are explained in this section as well, the reader is advised to consult Appendix 2 in cases of doubt.



Example 115: Basic visual layout of the multileveled function analysis.

The primary level is the level of *phrase functions*; in Example 115, this is the level labeled with a T (for Tonic phrase function). A prolongational line extends from the phrase function, indicating the duration over which this phrase function is prolonged. Above the prolongational line, harmonic functions may be indicated. This means that when a new surface chord appears in the music, the level of harmonic functions may analyze this chord in conventional functionanalytical terms. If we imagine that Example 115 is in C major and that the progression $C-F_{/C}-C$ appears, the level of harmonic functions may indicate that this is a tonic followed by a subdominant with its fifth in the bass, followed by another tonic. Below the prolongational line, the *prolongational effects* of the harmonic functions may be clarified. With regard to the $C-F_{/C}-C$ -progression, one can clarify that the $F_{/C}$ may be a subdominant, but that it is a *neighboring* subdominant a neighboring six-four to the tonic. By noting its prolongational effect with an "n" for "neighbor," it is clarified how this harmonic function assists in prolonging the phrase function. (The dots signify that the phrase function appears in its prime form, and will be discussed further below.) It is in this sense that the analysis is multileveled: the functional syntax of the immediate surface level is acknowledged, while the deeper level-the chords' role in the entire phrase structure-is clarified simultaneously. The visual layout is further demonstrated in the analysis of Mozart's famous theme from K. 331, I, in Example 116 (page 366).

In a multileveled function analysis, the reader should first orient herself with respect to the overall phrase structure and the phrase functions within this structure. Focusing on the first four measures of the Mozart analysis, one can see that I propose a large-scale progression of the phrase functions Tonic (T), Predominant (PD), and Dominant (D). These words are deliberately capitalized to distinguish them from harmonic functions in the prose text. After this T–PD–D cycle, a single vertical line marks a break in the phrase structure and indicates that the cycle is incomplete, ending with a half cadence.³⁵⁶

Before looking at the symbols above and below the prolongational line of the Mozart analysis, the reader will perhaps notice that I have already reduced away a few simultaneities. First of all, I have not indicated the harmonic function or prolongational effect of the fleeting dominant chord following the beginning's dotted eighth note. This could be done, of course: its harmonic function is that of a dominant seventh, and its prolongational effect is that of a neighbor. It is a matter of analytical temperament whether one wants to display such details, but in this case I find the detail obvious enough to be immediately reduced away, thus avoiding too many symbols in the analysis. The same goes for the chords at 1_2 and 2_2 : they are obviously inversions of the previous chords, but they are structurally less important than the primary bass movement A–G[#]–F[#] of mm. 1–3.

Above the prolongational line, harmonic functions are shown. The harmonic function of the initial chord is not explicated because it is implicit that it is a tonic function—it coincides with the Tonic phrase function. Following this, a dominant chord in first inversion leads to a chord marked "Ts." I make use of the *progressional* function theory here: instead of marking it Tp (tonic *Parallel*), which would indicate that there has been some sort of indication of the *Parallel* key, I mark it Ts for "tonic substitution." A *substitution* is a means of representing the third-related function that was indicated by the previous dominant. In contrast to the Danish tradition introduced in section 1.3.2, in which this function is marked "Tst," I will (as already briefly mentioned above) propose to indicate any functional suffix with only *one* letter; in later analyses of music in which a secondary function is "removed" more than one degree from the main

³⁵⁶ The use of this sign is obviously inspired by the two lines used to show interruptions in Schenkerian analysis, and in this case, there *is* an interruption as this point (notice that the upper voice's *Urlinie* is clearly interrupted at $\hat{2}$). However, I use only a single line for half cadences, and double lines for perfect authentic cadences to show that they are more "complete." Since the multileveled function analysis does not consider the *Urlinie* or *Ursatz*, an occurence of the phrase functions "T–(PD)–D |" does not necessarily mean that there is a Schenkerian interruption, which is why I have chosen a slightly different symbol.

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Example 116: Commented multileveled function analysis of Piano Sonata No. 11 in A major, K. 331, I, by Mozart, mm. 1–18.

function, this will come in handy because the number of letters in the functional suffix will always indicate its degree of distance from the represented function (see for instance Example 127, page 395).

After the Ts, another dominant in first inversion leads back to the tonic in root position before ${}_{II}S_{/3}$ and D enter, the latter with a sixfour suspension. The symbol ${}_{II}S_{/3}$ is to be read as a "second scaledegree subdominant" (in first inversion), inspired by Jens Rasmussen (2011, I:117–118 et passim). I adopt it to communicate that a II may in some cases carry a subdominant function which is more independent than the typical "Sp" symbol indicates.³⁵⁷

In the Mozart example, the Tonic and Dominant phrase functions are constituted by their "homonym" harmonic functions, tonic and dominant. This is not the case for the Predominant phrase function, which may take the form of different harmonic functions. Throughout the Mozart analysis, Predominants appear in the form of $_{11}S_{/3}$ (mm. 4, 7, 15), DD^{7} (m. 12), and S (m. 17). This is the logical consequence of the argument I made in section 4.1.1.1 (page 251ff.): that "subdominant" and "predominant" were in practice used as terms designating different analytical levels—even though they were often mistaken for representing the same thing.

Below the prolongational line, letters and symbols indicate how the harmonic functions above the line partake in voice-leading motions that serve to prolong the reigning phrase function. The letter "p" stands for "passing chord" and the letter "n" (appearing in m. 9 and 11) for neighboring chord. Because the multileveled function analysis does not employ a modified form of musical notation—as does Schenkerian analysis—it does not communicate precisely which voice moves through a passing note or a neighboring note. Such features are, after all, best communicated in a voice-leading graph, but as

³⁵⁷ I employ it here in a perhaps more radical way: I simply think that the subdominant function may be found on both IV and II, and that the discussion about which of these is the primary form of the subdominant is often irrelevant and tedious. Even though explanations have differed and discussions have been heated, there has been some degree of agreement about a certain relationship between II and IV ever since Rameau's *double emploi*, and I think that this agreement is the primary matter, not the academic discussions.

we will see in later examples of multileveled function analyses, they can be explicated with this method as well. In the Mozart analysis, the passing and neighboring voices are often very obvious. The neighboring dominant in m. 11, for example, produces neighbor-motions in all voices but the top voice: the bass A moves to G^{\sharp} and back; the tenor C^{\sharp} moves to D and back (a motion that is doubled in the right hand); and the "alto" A moves to B and back.

The dots displayed beneath the prolongational line serve to show the temporary or final goals of the passing or neighboring motions. The "open" dot in m. 3 symbolizes a third-representative of the prolonged phrase function; in other words, it communicates that the $T-D_{/3}$ -Ts reaches a temporary goal in the prolongation of the Tonic phrase function in an overall movement from T to Ts. The filled-in dot of m. 4 (as well as mm. 7, 10, and 12) symbolizes a return to the prime form of the prolonged phrase function. Therefore, the dots serve as points to which the reader might orient herself in order to grasp the overall prolongational motions. The reason for introducing this new analytical symbol is to be found in my previous discussion of Bernd Redmann's (2009) *Satzfunktionen* (in section 3.1.5, page 230ff.), which failed to show the return of a function's prime form after, for instance, a neighboring motion, thus making the analysis visually impenetrable.

Toward the end of the analysis, in m. 17, it is shown how a passing motion may also occur between two different tones of the *same* chord, here between the root and the third of the tonic. Passing motions may also occur, of course, between *melodic* notes of the same function. This is the case in the beginning of the second movement of Mozart's *Eine kleine Nachtmusik*, shown in Example 117 (page 370).³⁵⁸ Here, the numbers below the prolongational line in mm. 1–2 (and 5–6₁) are careted (with ^) to indicate that the motion occurs between *melodic* tones of the prolonged phrase function, not the bass (in contrast to m. 6₃ which indicates the new bass tone E). The example also shows that passing and neighboring motions may occur simultaneously. The dominant seventh chord in m. 3₃ produces

³⁵⁸ The score reduction is based on William Caplin's reduction (1998, 12).

a passing motion in the melody (G–F–E) and a neighboring motion in the bass (C–B–C), leading back to the prime form of the prolonged Tonic phrase function marked by a dot. The letters p and n are therefore stacked to show that the passing function occurs in the upper voice, the neighboring function in the lower. Again, these details are a matter of analytical temperament, and the analyst may wish to focus on only one of these, for example the neighboring bass which is the first new bass note after the long pedal point.

The analysis of *Eine kleine Nachtmusik* shows an analytical detail that deserves a comment. In mm. 2_3 – 3_{1-2} I first show a neighboring subdominant, and then a tonic with ⁶/₄-suspension. In this excerpt, they could be seen as one and the same thing, and one could either display one long neighboring subdominant or one long neighboring tonic ⁶/₄. My own aural experience, however—owing to the steady harmonic rhythm—is that there is first a move to a neighboring subdominant, a new harmonic function that prolongs the tonic, followed by an expected return to the tonic; but instead, an appoggiatura-like ⁶/₄ delays the return of the tonic. The analysis is thus meant to communicate a subtle difference between the neighboring subdominant and the ⁶/₄ tonic, keeping the steady harmonic rhythm before it accelerates toward the cadence.

The analysis furthermore shows that no Predominant phrase function is necessary in a phrase function cycle. It does not appear in the antecedent, but it does appear in the consequent.

Several factors contribute to the elevation of the dominant in m. 4 to a Dominant phrase function. To the Schenkerian theorist, most of them are very obvious and are natural consequences of the inclusion of the concepts of prolongation and hierarchical levels. However, certain conceptions of meter, phrase, and cadence are crucial in this analysis. These conceptions have a primarily Schenkerian background but also align with Lerdahl and Jackendoff's (1983) generative theory (itself, as I have argued, an outgrowth of Schenkerian theory) as well as William Caplin's (1998) form-functional theory.





Some considerations of meter was already discussed in section 2.3.2.2 (page 164ff.), but they must be fleshed out here. Therefore, special attention will be given to meter, phrase, and cadence in section 6.2.3 below (page 373ff.).

Example 118 (page 372) introduces another layer to the analysis which can be relevant in instances of modulation. Haydn's Divertimento in F major sets out with a theme that modulates to the dominant.³⁵⁹ The analysis is organized in two levels. In the *deeper* level, there is an overall motion from a Tonic phrase function to a Dominant phrase function; in this case, these two phrase functions correspond to the tonal organization of the theme (from tonic key to dominant key), but that need not always be the case. I call this "Level 1" in the analysis to stick with the metaphor of depth, such that the deepest level receives the lowest number and is displayed at the lowest position in the visual layout. In "Level 2" more details are shown. Most interesting here is the way the modulation to the dominant key comes about. Level 2 shows that after a long Tonic prolongation, there is a move to the dominant in first inversion at m. 8. This chord-which one could initially expect to have a passing or neighboring prolongational effect-turns out to be the initial Tonic (prolonged for some measures) in a secondary T-PD-D-T cycle that definitively modulates to the dominant key. In Caplin's terms, the onset of m. 8 marks the beginning of the cadential function, while the onset of m. 11 marks the cadential arrival (Caplin 2004, 77). The multileveled layout of Example 118 is able to show this distinction.

The dotted prolongational line in both Level 1 and Level 2 show that it is a transitional passage moving from the prolongation of the Tonic phrase function (in which the prolonged chord of m. 8 is a dominant) to an assertion of the Dominant phrase function as the new regining one. Following this assertion, a T–PD–D–T cycle in the dominant key—in which the PD is now spun out for some mea-

³⁵⁹ I discussed Redmann's analysis of this piece in Example 70 (page 234ff.), and the following is an attempt to remedy what I perceived as Redmann's primary problem, namely the lack of concern for meter and phrase in his model.







14 15

12

Ξ

D D

×

-

Measures:

REDUCTION

DT

Ë

D⇒ C: T

ā

D ⇒(J

H

Ë

Level 2:

Ω

Level 1: F: T

sures—confirms this new key. Below the score, a summary provides a broad overview of this music.

One new symbol is introduced in Example 118, namely S^a , which is to be read as an "upper *Ableitung*."³⁶⁰ As mentioned, an overview and explanation of all new symbols may be found in Appendix 2 (page 531), but briefly, it might be understood as a monistic and progressional alternative to the dualistic *Leittonwechsel* and the key-relational (and covertly dualistic) *Gegenparallel*. In this context, the S^a connects with the S in m. 12, as indicated by the open dot.

To sum up, the basic visual layout of the multileveled function analysis is as follows. The large-scale picture is shown by the phrase functions, while analytical details are noted above and below the prolongational line. *Above* the line, conventional harmonic functions are placed to elucidate local functional-harmonic relationships and syntax; read in tandem with the symbols *below* the line, the prolongational voice-leading effects of these subsidiary chords are revealed. This is to say that the harmonic functions always serve two purposes: they form local, chord-to-chord progressions *and* either serve as a phrase function *or* as a prolongation of a deeper phrase function by having a neighboring, passing or other *prolongational effect*.

6.2.3 METER, PHRASE, AND CADENCE

The introduction to the basics and the visual layout of the multileveled function theory should give the reader a broad overview of the model, and it should provide some context for this section, in which I

³⁶⁰ It is unfortunate, surely, that the superscript "a" does not have an obvious meaning in English. One possibility is to translate it as "adjacent," but this word does not fully cover what *Ableitung* does. I have instead chosen to translate the Danish *afledning* to the German *Ableitung* for several reasons. First, the direct English translation "derivation" would be abbreviated "d," which would be unfortunate because it is, in some function theories, reserved for "dominantized" functions. Second, a mixture of English and German vocabularies would ideally advance the reconciliating and internationalizing purposes of the present work. Third, it would enable one to retain other German key concepts, such as *Parallel* and *Variante*, in the functiontheoretical vocabulary. Fourth, looking at the Anglo-American tradition of Schenkerian theory, it seems to have no problem in integrating German words (*Kopfton, Ursatz, Leittonwechsel*, and so on) as central constituents of "English" terminology.

discuss specific aspects of the present mediation between Schenkerian theory and function theory. As already discussed in section 6.2.1, including prolongation in function-analytical practice means that the analyst has to decide which chords represent phrase functions and which chords represent only harmonic functions with a prolongational effect. As a methodological move, this is completely uncontroversial in Schenkerian analytical practice, while it has no counterpart in function-analytical practice (except for some of the early German and late Swedish ones, as documented in Chapter 1).

This central contribution to function analysis therefore needs some elaboration and a firm theoretical foundation-all the more so because I use the term phrase function. As Janet Schmalfeldt noted about the term phrase in 1997, "one would be hard pressed to find a comparable term to which, from the mid-eighteenth century to the present, so many different conceptions have been attached" (Schmalfeldt 1997, 98). One's decisions as to which chords count as phrase functions are based on one's identification of *phrases* in the music, and thus on one's *definition* of phrase. Phrase, in the sense that it is used here, is less dependent on themes and thematic boundaries than in more colloquial uses of the term, but these factors certainly contribute to the analysis of phrases. It is more contingent upon certain definitions of meter and cadence and harmony's role in these concepts. I shall therefore first discusses meter, which lays the foundation for the subsequent preliminary definition of *phrase*; finally the term cadence and its phrase-defining function will be discussed. The discussion of these terms will be somewhat cursory, in part for reasons of space, in part because I expect most readers to be familiar with the most influential works on which I draw-if not from elsewhere, then from the previous discussions of (some of) them in this dissertation.

The works that influence the definition of meter, phrase, and cadence in my proposed analytical model are four quite different sources. The first is the generative theory of Lerdahl and Jackendoff (1983), especially their very useful and fundamental distinction between grouping structure and metrical structure; the second is the influential study *Phrase Rhythm in Tonal Music* by William Rothstein (1989), who writes from a Schenkerian perspective; the third is the

form-functional theory of William Caplin (1998), who is markedly un-Schenkerian, drawing on for example Arnold Schoenberg, Erwin Ratz, Leonard Ratner, and—in his conceptualization of harmony even Hugo Riemann³⁶¹; and the fourth is Janet Schmalfeldt (1991; 1992; 1997; 2011), whose reconciliation of Schenkerian theory and *Formenlehre* has already been discussed in section 6.1.

Of these four sources, only the first two are markedly Schenkerian. Lerdahl and Jackendoff (1983) and Rothstein (1989) have already been discussed in section 2.3.2.2 (page 164ff.). Caplin and Schmalfeldt are "less Schenkerian," but they nonetheless represent advances in the study of meter, phrase, and cadence that now inform Schenkerian analytical practice—as seen, for instance, in Burstein (2014) and Suurpää (2014).³⁶²

It is a point in itself that Hugo Riemann's own theory of meter does *not* form the basis for the analytical method I propose here.³⁶³ As briefly discussed toward the end of section 1.1 (page 42ff.), Riemann's theory of meter relied more on melody and motive than the theories I follow do. When Riemann did consider harmony's role in meter, it was with his idea of *Harmoniewirkung*, which, combined with his *Aufttakttheorie*, made for a quite problematical conception

³⁶¹ See Caplin (1998, 23). As might be expected, Caplin's conceptualization of Riemann's function theory puts him in the category with other North American function theories (as described in section 1.4.2, page 97ff.), because he clearly integrates ideas that are central to this current (such as predominant instead of subdominant, Schenker-inspired ideas of hierarchy that make plagal cadences impossible, as discussed on page 252, and so on).

³⁶² The reader may notice that I do not discuss a related and hugely influential study—which *is* discussed in the mentioned articles by Burstein (2014) and Suurpää (2014)—namely *Elements of Sonata Theory* (Hepokoski and Darcy 2006). Hepokoski's and Darcy's theory of sonata and large-scale form is beyond the scope of the present work.

³⁶³ The historical precedents of the American theories of meter on which I draw are rather to be found, as Danuta Mirka has argued, in eighteenth-century theorists such as Joseph Riepel (1708–82), Johann Sulzer (1720–79), Johann Philipp Kirnberger (1721–83), and especially Heinrich Christoph Koch (1749–1816); indeed, Mirka suggests that "one might venture a hypothesis that it was the return to this [Sulzer's, Kirnberger's and Koch's instead of Riemann's] concept that made the recent advances in the study of meter and rhythm possible. Consequently, twentieth- and twenty-first-century theory of meter can be viewed as a further development of eighteenth-century music theory" (Mirka 2009, ix).

of meter. With the vocabulary of Lerdahl and Jackendoff (1983) it becomes clear that Riemann here makes the methodological fallacy of mixing metrical and harmonic theories in such a way that the result is an equation of *grouping structure* with *metrical structure*; as Lerdahl and Jackendoff argue, these are separate phenomena. Construing them as separate phenomena allows for a theory in which meter can be beginning- or end-accented depending on the work in question,³⁶⁴ while at the same time allowing for *structural accent* (more or less equivalent to Riemann's idea of *Harmoniewirkung*) to be viewed independently. For instance, in the case of beginning-accented meter, structural accent may occur at both the metrically strong beginning *and* the metrically weak ending (see Lerdahl and Jackendoff 1983, 30–34).

In the multileveled function analysis, *meter* is understood as a series of beats that (as a rule with exceptions) alternates between accented (strong) and unaccented (weak) beats. The series of beats is organized into *measures* such that, in a measure in 4/4-meter, 1 is the strongest, 3 is less strong, and 2 and 4 are equally weak; in 3/4, 1 is strongest while 2 and 3 are equally weak. The said "strong beats" or accents are not actual accents in the music, such as *sforzandi* or other dynamic or technical features, but a cognitive construct a listener imposes upon the heard music—emphatically the *heard* music rather than the notated.³⁶⁵ In many cases listeners will agree, but the cognitive nature of meter means that listeners may also disagree on metrical organization. This has been accurately described in Lerdahl and Jackendoff's analyses of the theme of the first movement in Mozart's

³⁶⁴ Lerdahl and Jackendoff as well as Schenker more often prefer beginning-accented meter than Riemann's *Auftakttheorie* does. Lerdahl and Jackendoff posit the "strong beat early" preference rule (1983, 76), but note that it is a weak preference rule which may be overridden. Schenker, in the chapter on meter and rhythm in *Free Composition*, also includes themes that begin with a weak measure, e. g. the Scherzo of Beethoven's Symphony No. 5 (Schenker 1979, fig. 146,5).

³⁶⁵ I acknowledge the inherent problems in such a conception of "hearing," which must entail some notion of the "expert listener." However, a rigid sticking to notation, which leaves no room for listening, is part of the problem with Riemann's metrical theory, as discussed in Caplin (2011).

Symphony No. 40 in G minor (see Lerdahl and Jackendoff 1983, 24 et passim).

As beats are organized into patterns of accented and unaccented points in time, measures combine into patterns of accented and unaccented measures—or rather, accented and unaccented downbeats, as it is not the entire measures that are stronger or weaker.³⁶⁶ Hypermeter is thus "the combination of measures on a metrical basis" (Rothstein 1989, 12), and a specific coherent group of measures is called a *hypermeasure*. As shown by Lerdahl and Jackendoff (1983, 18–21) and Rothstein (1989, 12–13), hypermeter is a hierarchical construct and may thus exist on several levels that contain each other.

Meter and hypermeter are not the same as *phrase* and *phrase structure*. I adhere primarily to William Rothstein's definition of phrase:

A phrase should be understood as, among other things, a directed motion in time from one tonal entity to another; these entities may be harmonies, melodic tones (in any voice or voices), or some combination of the two. *If there is no tonal motion, there is no phrase*. (Rothstein 1989, 5)

This is arguably a stipulation that is implicit in Schenker's and Schenkerian theory, but which was only definitively developed and brought out in Rothstein (1989). As already mentioned earlier in this presentation (see page 167), Rothstein concisely illustrates the ramifications of this definition in his analysis of Johann Strauss II's famous *An der schönen blauen Donau* Waltz, No. 1, mm. 1–16, which according to him "forms a single, large phrase" (Rothstein 1989, 10); the fourmeasure groupings that one easily perceives are thus not phrases.³⁶⁷ If phrase is directed tonal motion, *phrase structure* is then the larger level concerning several phrases. In Lerdahl and Jackendoff's terms,

³⁶⁶ The alternation is not always equidistant. Schenker, for instance, read a triple hypermeter in the Sarabande of Bach's English Suite in D minor (Schenker 1979, fig. 144,1). This would be appropriate, as well, in the opening measures of the third movement of Mozart's Symphony No. 40 in G minor.

 $^{^{367}}$ This is because they lack tonal motion, and because each group begins with an upbeat, not a downbeat. In relation to the four-bar hypermeter, the four-bar goups (or subphrases) are 4–1–2–3, not 1–2–3–4.

meter and hypermeter are metrical phenomena, distinct from the grouping phenomena of phrase and phrase structure.

These two sources—Lerdahl and Jackendoff (1983) together with Rothstein (1989)—represent the strands of Schenkerian theory that inspire the multileveled function theory to the largest extent. Aspects of Caplin's (1998) theory of formal functions can be a great aid when analyzing metrical and phrase structural aspects of music (his writings on the concept of *cadence* are discussed further below). His theory concerns neither meter nor phrase as such, but the formgenerating properties of harmony and melody and their formal function in classical music. However, his notions often coincide with phrase structural analyses. For instance, identifying a theme as a sentence is helpful in determining a phrase's beginning and the harmonic acceleration at the cadential part of the theme; or identifying a period may assist in realizing that the overall tonal motion moves first to a half cadence and then to a perfect authentic cadence; and so on.

Janet Schmalfeldt is the fourth theorist who has influenced my model of multileveled function analysis. It is specifically her notions of the "one more time"-technique and evaded cadence that have been important (Schmalfeldt 1992). Furthermore, I have adopted impulses from her monograph *In the Process of Becoming* (2011): I employ her symbol " \Rightarrow " to signify "becoming," and I adopt the processual view of music which this entails—something that is very much in line with the temporal attitude dominant in function theory (recall the *temps* and Dahlhaus' "Prozeßcharakter" in section 4.2.1). Schmalfeldt has already discussed how this interacts with Schenkerian perspectives (see especially Schmalfeldt 1992, 35–42), and as mentioned earlier, one purpose of my models is to show how temporally contingent and "processual" retention and protention function within retrospective and larger-scale structural frameworks.

For all of the mentioned theorists, *cadence* is an important part of the definition of phrase.³⁶⁸ In the definition used in the current presentation, a phrase always ends with a cadence. Therefore, ca-

³⁶⁸ For Rothstein (1989), the crucial concept is *tonal motion*, which need not be a cadence. Schmalfeldt (1997) also embraces several perspectives on this matter.

dence must be briefly discussed as well. Function-analytical practice varies in this respect, but one definition of cadence is that it is the simple occurrence of T–S–D–T. An analysis by the Danish musicologist Finn Egeland Hansen can serve to demonstrate that this definition is not sufficient. In his book *Layers of Musical Meaning* (Hansen 2006), he develops his own notational system based on function theory—a system which aims to show the larger picture instead of every single T, S, and D:

The main principle of the notational system is that a full cadence, T–S–D–T, is indicated by a horizontal line, which at its left end has a specification of the actual key written in bold (C: means C major; **a**: means A minor). Normally there is no indication of the positions of the tonal functions. (Hansen 2006, 232)

One may indicate that the cadence ends in a dominantized tonic:

<u>C:_____T/(D)</u>

Or that it lacks one of the main functions, for example the subdominant:

<u>C: -S</u>

Hansen also writes that "if a cadence has a double dominant and no subdominant you may analyse it as a full cadence" (Hansen 2006, 233), indicating that he is close to something along the lines of my concept of phrase function, in which S and DD may both take the place of the Predominant phrase function. He furthermore presents a way of notating sequences and other phenomena, all in a very easily understandable way. His ambitions are laudable, but the danger of equating every occurrence of T–(S)–D–T with a full cadence is clear in his analysis of the first movement of Mozart's Piano Sonata No. 2, K. 280, shown in Example 119. I show only his first page; his entire analysis spans pp. 235–240 of his book.









Example 119: Finn Egeland Hansen's (2006, 235) analysis of Mozart's Piano Sonata No. 2, K. 280, I.

The first three measures are taken as a full cadence in which the subdominant is left out and in which the final tonic is dominantized. The occurrence of the dominantized tonic at the end of m. 3 itself marks the beginning of a new full cadence that ends in m. 6 (and the local dominant relationship of F^7 to B^{\flat} in mm. 3–4 is indicated by an additional line with Roman numerals). The tonic in m. 6 is again simultaneously the end of one cadence and the beginning of a new one that ends in m. 8, this time without subdominant; m. 8 is in itself a cadence without subdominant that furthermore intiates a series of cadences that end in the middle of m. 13.

What is crucially lacking in Egeland Hansen's registration of each and every T-(S)-D-T is a sense of phrase, larger-scale motion, and a general reconsideration of what a cadence is in tonal music. In Example 120, I offer my own alternative analysis of mm. 1–13, which shows that some dominants and subdominants are not part of a cadence, but part of a prolongation of the initial tonic. The analysis takes the 13 measures as one phrase (with mm. 1-6 as a subphrase, as discussed below).³⁶⁹ In the large phrase, there are nowhere near as many cadences as Egeland Hansen notes. The consideration of meter and hypermeter makes it clear that T-D-T in mm. 6-8 is not a cadence in itself; rather, one should note the bass line and the tone E's neighboring function. In this phrase, there is only one true cadenceone with cadential function, to invoke Caplin's theory of formal functions. I will call such a cadence a formal cadence.³⁷⁰ It begins in mm. 8-9 and is interrupted by the "one more time"-technique (cf. Schmalfeldt 1992). It achieves closure at the first beat of m. 13-not, as Hansen's analysis indicates, in m. 11, which occurs in the middle of this phrase expansion technique. A formal cadence ends a phrase; it does not occur in the middle of it. The T and D in mm. 4 and 5 argu-

³⁶⁹ Robert Gjerdingen's (2007) schema theory would identify mm. 1–6 as a *Quiescenza*.

³⁷⁰ For reasons of space, I will not trace the possible similarities and differences between my concept and the *förmliche Cadenz* and *förmliche Schlusscadenz* which appears in eighteenth- and early nineteenth-century writings of, for instance, Mattheson, C.P.E. Bach, Koch, and Albrechtsberger. I thank William Rothstein for directing my attention to this terminological similarity. Schenker discusses C.P.E. Bach's *förmliche Schlusscadenz* in *The Masterwork in Music* (1994b [1925], 4).





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ably participate in a *prolongational cadence*, but surely only a prolongational one, underlined partly by the tonic pedal point, partly by the voice leading.³⁷¹ Formal cadences are almost impossible where the bass is immobile (exceptions, where they exist, tend to be found in music later than the Classical period). One last factor confirming that the T–S–D–T of mm. 1–6 is not a formal cadence is the fact that the harmonic rhythm only speeds up in mm. 8–9, a clear indication of cadential function (Caplin 1998, 11).

Hansen does not aim to incorporate Rothstein's or Caplin's theories of phrase and formal functions, and as such, it is not a problem that his theory does not address these issues.³⁷² Still, it is implicit in his analysis and his method that the mere occurrence of T–(S)–D–T always has some significance and can always be called a "cadence." The case shows that there is much to be gained in incorporating perspectives on phrase and form in harmonic analysis: the analysis becomes more sensible to the music at hand and the theory becomes more precise, nuanced, and bold.

6.3 MODEL 2: FUNCTIONAL REPRESENTATION AS PROLONGATION

The second model I propose is one which takes conventional Schenkerian practice—that of making voice-leading reductions—as its starting point. Because I have already introduced all the fundamentals of my mediation in sections 6.1 and 6.2, this section is structured a bit differently. As already discussed, Models 1 and 2 are to be regarded

³⁷¹ In the right hand, $\hat{6}$ in S (m. 4) and $\hat{4}$ in D (m. 5) are upper and lower neighbors to $\hat{5}$ in T (m. 6)—needless to say, $\hat{4}$, the D's seventh, resolves to an implied $\hat{3}$ in m. 6. In the left hand's tenor voice, D is an ascending passing tone in a C–D–E–F fourth progression, as well as a A–B^b–C–D–E–F sixth progression.

³⁷² Although, there *is* reason, I believe, to criticize how hermetically sealed off this book is from developments in English-language scholarship—after all, the book is written in English. In his quite critical review, Anthony Gritten wrote that Hansen shows a "reluctance to engage with other scholarship" and that a consequence is that "the book is out of date" (Gritten 2008, 154). He specifically criticizes that there is no mention of Schenker anywhere—once again the gap between the traditions is obvious—nor of Alexander Rehding's study on Riemann (Rehding 2003).

as two perspectives on the same idea, each taking a separate analytical practice as its starting point. Therefore, Model 2 requires no further introduction of theoretical basics or visual layout; it simply incorporates Model 1 in a standard Schenkerian voice-leading graph.

With Model 2, I will argue that there is something to be gained for the Schenkerian tradition, as well, in a mediation between itself and the thus far antagonistic analytical practice of the post-Riemannian tradition. For Schenkerian practice, careful consideration of harmonic function in the specifically *progressional* function conception offers new and useful perspectives on prolongation that often (but not always) yield alternative Schenkerian readings. Put briefly, this model proposes that it is not just *Stufen* which may be prolonged, but also *functions*: in addition to Schenker's many techniques of prolongation, one may add—under certain circumstances—the technique of *functional representation*. This is all implicit in the multileveled function analysis, but its ramifications for Schenkerian analysis are explored in this section.

6.3.1 DIATONIC THIRD-REPRESENTATION

American music theorist Diego Cubero has discussed a recurring problem in Schenkerian analysis, namely that of downward arpeggiations:

Such arpeggiations [downward from fifth through third to root, connecting two different harmonies] occur often as part of a motion from I to IV or from V to I.... In every case, the arpeggiation unfolds the triad heard at the end of the progression, extending it backward, as it were, prior to its arrival as a verticality. Schenker, however, prolongs the first chord of the progression up until the arrival of the last note of the arpeggio, thus problematizing the status of the middle note. The result is a contradiction between the prolongation of the initial chord and the arpeggiation of the final one that challenges our most basic understanding of how harmonies are prolonged in tonal music. (Cubero 2017b, 29–30)

Cubero suggests that, depending on the exact musical context, one may 1) argue that the initial harmony is prolonged until the end of the arpeggiation, in which case the middle note is seen as anticipatory of the final harmony; 2) argue that the final harmony enters with the middle note rather than with the final; or 3) argue, in particularly blurry cases such as Brahms' Intermezzo in B minor, Op. 119, No. 1, that the exact boundary between the two harmonies is fluid (Cubero 2017b, 55).³⁷³ What I propose with my Model 2 (and its implicit integration of Model 1) is a fourth solution: with the idea of harmonic functions in mind, one may argue that the initial chord is not prolonged through arpeggiation—not by a literal horizontalization of a vertical harmony that after all only enters at the end of this arpeggiation—but by *representation*, the defining core principle of function theory.

To illustrate the issue with an example, one may consider the second theme of Beethoven's well-known "Waldstein" sonata, where the question of downward arpeggiation and prolongation is relevant. Example 121 shows William Rothstein's reproduction of Ernst Oster's graphs of the passage, handed out to students at a seminar on Schenkerian analysis at the New England Conservatory in 1975. Oster focuses his attention to the surprisingly complex first half of the theme (Example 122, discussed shortly, shows the full score of this half), in which the function of the A major chord in m. 36 is ambiguous. I quote at length from Rothstein's summary of the analytical problems in Example 121.

The melodic descent from $g^{\sharp 2}$ to $c^{\sharp 2}$ in mm. 35–36 (graphs [b] through [e]) does not qualify as a genuine fifth-progression (*Quintzug*) because its boundary tones outline a triad, VI, that has little structural significance, and that appears neither at the beginning nor at the end of the melodic descent. One might choose to regard this descent as a 'following progression,' passively following the bass's descent from I to IV at the upper tenth.... But in retrospect—that is, from the standpoint of the four-measure phrase as a whole—the status of the IV in m. 36 is itself problematic. The bass's ascent from f[#] to b in mm. 37–38 would appear to be a fourth-progression (*Quartzug*), outlining the V harmony; but that would mean that the middleground V has already arrived at the beginning of m. 37 and is merely

³⁷³ William Rothstein pointed out the same problem with descending arpeggiations in his PhD dissertation (1981). He proposed that the middle note may have a "connective" or "anticipatory" function (Rothstein 1981, 130–132).

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prolonged until the end of the phrase. This analysis is not confirmed by the ear, which hears the true arrival of V only in m. 38. One's initial instinct to connect the IV of m. 36 to the V of m. 38 is thus cast into doubt by the equivocal status of the bass motion in between these two points—to say nothing of the melodic ascent, which again fails to outline a harmonically relevant interval. (Rothstein 2006, 132)

As can be seen from graphs [e] and [f], Oster's solution was to see the melody's $c^{\sharp 2}$ as part of an inner voice ascent reaching from b^1 to $g^{\sharp 2}$. At the arrival of this $g^{\sharp 2}$, it has become part of a $\frac{6}{4}$ suspension. This means that the A major chord is not seen as a true IV. Rather, it is interpreted as a passing ⁶/₄ over an implied, prolonged tonic bass note (see graphs [c] and [d]). This harmony is then being "absorbed into the following ⁴/₃ chord on f[#]" (ibid., 133) (graphs [e] and [f]). As implied by the unfolding beam, "absorbed" means that the bass A becomes an inner voice in the ⁴/₃ chord; it belongs to a conceptual tenor voice, while f[#] belongs to the bass voice. While function theories would struggle to argue that the A major chord is "absorbed" into the following chord, the progressional function theory can in fact support Oster's reading of the A major chord as being part of a tonic prolongation. Example 122 (from Kirkegaard-Larsen 2018, 84) compares Riemann's own analysis (1919a, III:15) with key-relational, interval-relational, and progressional function analyses.³⁷⁴

Riemann's analysis has been criticized by Alexander Rehding: "In calling the A mjor harmony S, regardless of the context in which it appears, Riemann holds on to the chordal aspect of this 'harmonic pillar' here by considering the full congruence of the A major triad with the subdominant 'harmonic pillar' of E major" (Rehding 2003, 61). The three alternatives to Riemann's reading all suggest that the A major may instead be read as a kind of tonic. In actual analytical practice, of course, the chord is very likely to habitually be taken as the subdominant; but if one persists in focusing on paradigmatic progressions, which is especially characteristic of progressional function

³⁷⁴ Note that because this is from an earlier article of mine, the example uses the conventional Danish label "st" for "substitution" instead of the one-letter symbol "s" I suggest in Part III of this presentation (the "s" in the example instead stands for the Norwegian interval-relational "submediant").



Example 121: William Rothstein's reproduction of Ernst Oster's graphs of the second theme of Beethoven's "Waldstein" sonata, Op. 53, I, mm. 35-42.



Example 122: Four different function analyses of the second theme in Beethoven's Waldstein Sonata, first movement, mm. 35–38 (Kirkegaard-Larsen 2018, 84).

theories, it is possible to read the "zwei Trugschlüsse" that Riemann himself mentions in his prose commentary (Riemann 1919a, 6), as resulting in an extension of the tonic function.

Example 123 proposes a Schenkerian analysis based on this reading, combining the functional symbology of Model 1 with a traditional Schenkerian voice-leading reduction. In this analysis, the local dominants B major and G^{\sharp} major are seen as incomplete neighbor chords moving first to a substitution of the expected tonic, and second to a substitution of the expected tonic *Parallel*. The tonic *function* is thus prolonged. It subsequently goes through a passing dominant (m. 37₁) to a structurally significant tonic in first inversion, functioning as an intermediate harmony on the way to the dominant. In the consequent phrase, one is forced to read the A major chord both retrospectively (as resulting from a prolonged tonic function) and prospectively (as functioning as the Predominant of the entire phrase). A similar analytical move is necessary (and, in my opinion, completely unproblematic) in Oster's analysis:

The consequent phrase, mm. 39–42, is simpler, because the IV in the second measure clearly moves to V in the third measure, thus placing V earlier in the consequent phrase than in the antecedent. The difference in the placement of the V arises from the



Example 123: Tonic function prolonged through substitutions in the second theme of Beethoven's "Waldstein" sonata, first movement, mm. 35–42

necessity to reach the final I within the confines of the second four-measure phrase. (Rothstein 2006, 134)³⁷⁵

One of the great qualities of Schenkerian approaches to music is that it does not always yield straight answers. It often forces the analyst to think thoroughly about deceivingly simple passages. One may arrive at different, mutually exclusive readings without being able to decide which one is "better" or more "accurate." In his introduction of the above Oster analysis, Rothstein's description of Oster's practice is indicative—first and foremost, of course, of Oster's serious commitment to music analysis, but also of the said qualities of a Schenkerian approach:

It was not unusual for him [i.e. Oster] to tell students that he had been thinking about some passage for 30 years and was still not certain he had gotten it right. I remember him saying this, for example, about the E major theme in the first movement of Beethoven's "Waldstein" Sonata; as simpe as this theme appears, Oster was not ashamed to admit that he found it hard to understand. (Rothstein 2006, 130)

My own analysis, based on "Model 2," is therefore not meant as a way of finally settling the question, once and for all. It is first and foremost an attempt of *mediating* the question, making it relevant at all for function analysts. It is furthermore a contribution to the ongo-

³⁷⁵ Rothstein refers to his discussion of this frequent phrase phenomenon in Rothstein (1989, 22–25).

ing scholarly discussion of how to understand this passage, and, from a larger perspective, of how to theorize *prolongation*. Unlike in Oster's analysis—and, as far as I can decipher his graph, in Carl Schachter's too (cf. Schachter 2016, 255)—my analysis does not "absorb" the A major chord into the passing chord with bass f^{\sharp} , but rather absorbs it into the tonic function. The difference is subtle but important.

As demonstrated in Chapter 1, different types of function theories model third-relationships in different ways, but in the end, they all agree on the fundamental tenet that third-related chords may represent each other, however this relation may be conceptualized. Therefore, the above-mentioned prolongational technique, prolongation through functional representation, is relevant in many musical examples in which third-relationships play a significant role. One interesting example is a passage from Brahms' Intermezzo in E major, Op. 116, No. 6. This passage, reproduced with Jens Rasmussen's (2011 II:12) analytical annotations in Example 124, initiates the contrasting G[#] minor section of the piece's ternary form. Example 125 is Rasmussen's reduction of functions in mm. 29-33. To the extent that Rasmussen considers phrase structure-it is not an explicit part of his concerns-his analysis seems to suggest an antecedent phrase in mm. 25-28, which ends with a half cadence, and a consequent phrase, mm. 29-33, ending with an imperfect authentic cadence. My own phrase analysis differs: I see both mm. 25-28 and mm. 29-33 as ending with half cadences, thus comprising one large antecedent phrase which is followed by a consequent phrase with a proper authentic cadence (after Rasmussen's excerpt). Beat 3 in m. 32 is therefore a phrase overlap; the D[#] in the melody resolves the E's appoggiatura, acting as an afterbeat, but it simultaneously acts as an upbeat to the consequent phrase.

In any case, Rasmussen's analysis shows that the music is characterized harmonically by a series of descending thirds. Rasmussen's reduction (Example 125) shows that the chain of *Ableitungen* (Danish: *afledninger*, abbreviated 'af') can be seen as a means of extending the tonal cadence T–S–D–T by cycling through third-related chords. While Rasmussen does not work with a Schenkerian idea of prolonga-



Example 124: Jens Rasmussen's function analysis of Brahms' Intermezzo in E major, Op. 116, No. 6, mm. 24 | 25-33₂ (Rasmussen 2011, II: 12).

Example 125: Jens Rasmussen's analysis and functional reduction of Brahms' Intermezzo in E major, Op. 116, No. 6, mm. 29–33 (Rasmussen 2011, II: 12).

tion, it is difficult not to perceive the association. Indeed, I will argue that the idea of third-representation that governs Rasmussen's analysis—and which is so central to function theory—can be implemented into a Schenkerian analysis, yielding interesting and suggestive results. To illustrate, Example 126 exemplifies a traditional Schenkerian approach.

While this analysis may have advantages that the function analysis does not, it also has some problems. One problem is the parallel perfect fifths which, in the functional approach, do not necessarily assert themselves as analytical problems in the first place. Another is the E major chord in m. 25 which poses the problem that Cubero discusses in his article: does this chord somehow represent an anticipation of the IV of m. 26? Or is it the contrapuntal outgrowth of a I chord through a 5–6 shift, as is often the case in similar instances in David Damschroder's (2010; 2018) analyses?³⁷⁶ The blurred boundaries between the chords could suggest either this or a more gradual transition from harmonies I to IV, all viable explanations.

In the second subphrase of mm. 29–32, the paradigmatic Schenkerian reading of VII is interesting when compared with the function analysis. By way of unfolding, VII in m. 31 is taken as an anticipation of the dominant. For a progressional function analysis, taking $F^{\#}$ as anticipating $D^{\#}$ is, despite the tenet of third-representation, a completely foreign procedure; it is far more obvious to take $F^{\#}$ as an *Ableitung* of the preceding chord, thus retaining one's reading of the chain of descending thirds. However, if $F^{\#}$ is the goal of $C^{\#}-A^{\#}-F^{\#}$, it must have *some* kind of middleground significance to not violate central Schenkerian principles—hence it is connected to V.

That the blurring of chord boundaries is a consequence of descending chains of thirds is a well-known fact of the tonal system, often explored by Brahms and often discussed at length by scholars.³⁷⁷ The progressional function analysis is a helpful supplement to the Schenkerian analysis in capturing the overall tonal motion as well as these blurred boundaries and the sense of one chord "becoming" another. In Example 127, I thus suggest a Schenkerian analysis of the piece that implements the progressional function analysis—in my ver-

³⁷⁶ See the discussion of Damschroder's 5–6 shift in section 2.3.2.5 (especially page 183ff.).

³⁷⁷ In Kirkegaard-Larsen (2017b) I discuss a large number of analyses of Brahms' Intermezzo in B minor, Op. 119, No. 1.



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sion omitting Rasmussen's $_{II}S$, which I do not think constitutes an independent harmony in this case.

The F[#] chord of m. 31 is simultaneously shown as an outgrowth of the *Ableitung*-technique which dominates the music, *and* as an anticipation or transition to the dominant function. This is signified by the unfolding sign in the graph, the dotted prolongational line, and the "becomes" sign (\Rightarrow) (cf. Schmalfeldt 2011; this symbol was introduced above on page 378). By way of repeated thirdrepresentation, it both prolongs the subdominant function and becomes the beginning of the dominant.³⁷⁸

From a certain point of view, of course, there is little difference between the analytical utterances "T–Ta" and "I^{5–6}."³⁷⁹ In minor keys, Ta—or, in mode-relational function theories, Tp or tG—is often theorized as a tonic chord in which the fifth has moved up a step, and where this sixth has taken the role as the root of a new chord (cf. Riemann 1895, 71). Nevertheless, the well-known difference between fundamentally "harmonic" and "contrapuntal" perspectives remains; and one advantage of the former is that it allows the extension of the *Ableitung* process (or 5–6 shift) beyond the first link.

³⁷⁸ Contrary to Jens Rasmussen (see Example 124 and Example 125), I do not take the dominant $D^{\sharp7}$ as a derivative [*afledning*] of the preceding $F^{\sharp7}$; for this to make sense, it should carry the long label Safafafv—notice the addition "v" for *Variante*: F^{\sharp} major's derivation [*afledning*] is D^{\sharp} minor, not D^{\sharp} major. Besides, in the auditive context, I hear the chord establishing itself as a dominant with the entrance of the raised third f[×].

³⁷⁹ The 5–6 shift was prominent in the Schenkerian theories of Damschroder (2018) and Wen (2019), as discussed in section 2.3.2.5 (page 181ff.).




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6.3.2 CHROMATIC THIRD-REPRESENTATION

It is not only in cases of diatonic downward arpeggiation that the idea of functional representation by thirds may come in handy for Schenkerian analysis. It is also in cases of chromatic third-relations, characteristic of the romantic repertoire. One example is found in the second theme of the first movement of Schubert's String Quintet in C major, D. 956. I have previously written briefly about the possibility of integrating ideas of progressional and processual function theory in a Schenkerian analysis of this music (cf. Kirkegaard-Larsen 2018, 95–97) but intend to extend my argument here. Example 128 presents my reproduction (previously published in Kirkegaard-Larsen 2018, 96) of Teresa Waskowska Larsen's and Jan Maegaard's score reduction (Larsen and Maegaard 1981, 134–135).

The tonal function and context of this theme has been frequently discussed in the literature, and for good reasons. Before presenting my own solution to this problem, based on my Model 2, the following pages introduce these discussions (the impatient reader may thus skip to my own analysis beginning on page 400, and especially Example 131).

The piece's global key is C major; preceding the second theme is a 10-bar-long standing on the dominant G which to some analysts constitutes a half cadence in the key of either C major or C minor, and to others constitues an actual modulation to the key of G major. After this, the second theme surprisingly and without mediation begins in the apparent key of E^{\flat} major—and whether E^{\flat} establishes itself as an actual key is one of the central points of discussion—but proceeds with further modulations. The dominant key is finally firmly established with a cadence at the very end of the theme, in m. 79.

One interpretation of the circumstances described above is provided by Felix Salzer, who wrote about this theme in his very first publication "Die Sonatenform bei Franz Schubert" from as early as 1928 (Salzer 1928).³⁸⁰ He takes the 10-measure-long composing out

³⁸⁰ This text has been translated to English in Mak (2015). Another analysis of Schubert's Quintet from 1928 is Donald Francis Tovey's in his article "Tonality" (Tovey









Example 128: The author's reproduction of Larsen and Maegaard's score reduction of Schubert's String Quintet in C major, first movement, mm. 58–79 (Larsen and Maegaard 1981, 134–135). Previously published in Kirke-gaard-Larsen (2018, 96).

1928). His analysis is brief but seems to take E^{\flat} as an established key, though one that functions as a middle-point toward G major.

of G major (preceding the excerpt in Example 128) to establish a modulation to G major—a "nicht überzeugend" modulation, however, because G major is not confirmed by a cadence. Of the following theme in E^{b} he writes "daß wir von einer Es-dur-Tonalität nicht sprechen können, da doch hier die notierten Stufe nicht innerhalb des Eskomplexes vorzufinden sind, sondern nur von der Es-stufe ausgehend zur G-stufe weiterleiten" (Salzer 1928, 113). That is, he apparently sees the E^{b} major chord as functioning in a G major tonality that is only thoroughly established at the theme's end, but its exact function in G major is not well-defined.

James Webster (1978, 28–29) and Charles Rosen (1988, 256– 258) both suggest that the G major chord of m. 58—demarcating the end of the transition to the second theme beginning in m. 60 represents a half cadence in the key of C major, not a modulation to G major as in Salzer (and Larsen and Maegaard 1981, 135). The ensuing second theme, then, remains fundamentally in the key of C major before the actual modulation to the key of G major, which only occurs at the very end of the theme, in m. 79. The role of the apparent E^{b} major key that enters with the entrance of the theme in m. 60 is therefore curious. Example 129 presents Webster's voice-leading reduction.

His prose explanation is as follows (note that Webster takes what I label the second theme as a "lyrical transition" to a subsequent "second theme group"):

The wonderful tune refuses to cadence there [in E^{\flat} major], preferring a half cadence on the home dominant in m. 64, and on C major itself in mm. 71–73; this C major proves to be the subdominant of G major, and the cadence in mm. 78–79 promptly confirms the dominant as the goal. The mediant E^{\flat} is thus not a key but a gigantic floating pivot chord. The transition comprises a double move from E^{\flat} to G, mm. 60–64 and 66–79. (Webster 1978, 29)³⁸¹

³⁸¹ Webster also refers to Miriam Whaples (1968, 194–95), who "relates the sequence of keys I–^bIII–V to the contour pitches $\hat{1}$ –^b $\hat{3}$ – $\hat{5}$ in the opening melodic phrase (mm. 1–5)" (Webster 1978, 29).





Exactly how to understand the function of the "giant floaing pivot chord" E^{\flat} is a difficult question. Charles Rosen disagrees with Webster's characterization of E^{\flat} as a pivot chord:

I think that the extraordinary reappearance of C major in bar 71 and the way it is sustained make "pivot chord" an inadequate description of the way the new theme in E^{\flat} acts. With a pivot chord, we should find one tonality on one side and the new one on the other; indeed, the E^{\flat} ought, by rights, to be a pivot chord, but the return to C major erodes its function. It is this doubly ambiguous function that gives such poignance to this section. (Rosen 1988, 258)

Instead, Rosen suggests the reduction shown in Example 130, explaining that the "previous phrase ends in the minor mode, with a half-cadence on G as the dominant of C minor ... The C minor is first transformed into its relative major, E^{\flat} , and then into its own major mode, C major, before being allowed to proceed" (Rosen 1988, 258).



Example 130: Charles Rosen's analytical reduction of the second theme of Schubert's String Quintet in C major, D. 956, I (Rosen 1988, 258).

With E^{\flat} major and C major as parenthetical "transformations" of the C minor mode, the fundamental progression for Rosen, then, is a largely conventional cadence toward G major: iv–()–()–V⁶/₄–V–I.

To my ears, these analyses overlook the emphatically stated G major chord and its striking juxtaposition with E^{\flat} major.³⁸² Though I would take the G major as a half-cadential dominant (in line with Webster and Rosen) and not as a tonic in G major (in line with Salzer), it is interesting that Salzer subordinates the E^{\flat} *Stufe* to G, rather than relating it primarily to the global key C. However, the nature of this "subordinate" relationship is, as mentioned, undefined.

³⁸² Specific to Rosen's analysis is furthermore a methodological inconsistency: he takes the *key* of C minor (which is hinted at, but never fully established with a cadential tonic chord) to partake in a *chordal* progression.

Progressional and processual function theory comes in handy here, for one may, in line with Larsen and Maegaard (1981, 136), describe the move from the G major chord to the E^b major chord as a *neapolitanization*.³⁸³ (In the present study, I introduced the concept of neapolitanization in the discussion surrounding Example 23, page 93.) The resulting overall view of mm. 1–79 (in fact, because of the second theme's immediate repetition, mm. 1–100) is shown in Example 131.



Example 131: The author's "Model 2" analysis of the *Bassbrechung* in the first movement of Schubert's String Quintet, D. 956, mm. 1–79 (Kirkegaard-Larsen 2018, 97).

The example was previously published in my article "Transformational Attitudes in Scandinavian Function Theories" (Kirkegaard-Larsen 2018). In that article, the example functions as a way of making sense of Larsen and Maegaard's function theory and their idea of neapolitanization for the presumably primarily Anglo-American and Schenker-trained readers of the journal *Theory and Practice*: it was an attempt at mediation, in other words. But apart from making neapolitanization "understandable" to a Schenkerian audience, the graph also demonstrates the primary point of "Model 2" in this dissertation: that Schenkerian analysis may gain useful new perspectives in incorporating the possibility of diatonic *and* chromatic thirdrepresentation in their conception of prolongation. In the above analysis, there is a large-scale movement from tonic (m. 1) to dominant (m.

³⁸³ Since Larsen and Maegaard (1981, 136) takes the G major preceding the theme as a tonic in the dominant key, they decribe the relation as T–Tn; I adapt this analysis as D–Dn in the tonic key.

79)-as per the downward stems. The dominant of m. 79 is confirmed as a modulatory goal by a long-range cadence from the G major in m. 58, which retrospectively functions as a half-cadential dominant in C, but which prospectively connects to the (briefly tonicized) C major of m. 73 and D major of m. 77 and finally the G major of m. 79, thus establishing a large-scale T-S-D-T cadence, as per the upward stems. The E^b major is seen as a neapolitanization of the dominant G, which has several advantages. First, it justifies the interpretation that E^b major does not constitute a cadentially confirmed key; second, it renders probable that the half-cadential dominant G is prolonged but ultimately only confirmed as a new key center in m. 79; third, it situates E^b as an associate of G, but still explains its function in the global key of C major, while avoiding the awkward proposal that it is the relative of a C minor key that is never established (as per my above critique of Rosen); and fourth, it captures the "functional extravagance," to use Charles J. Smith's term (1986), of the E^b major chord in its direct juxtaposition with G major.

It is important to mention that a very similar reading is not unthinkable on purely Schenkerian premises. After all, the neapolitanization can be construed as a 5-b6 transformation (with lowering of the third B to B^{\flat}) combined with a "casting out of the root." This is exactly how Peter Smith reads another instance of neapolitanization, namely the recurring G-E^b harmonic motive in the first movement of Brahms' String Sextet No. 2 in G major (Smith 2009). Nevertheless, I find neapolitanization to be a powerful term; for instance, in the Brahms sextet, the "opposite" third-relation G-B, which surprisingly occurs in the coda, may be explained as T-Tnn whereas a purely Schenkerian reading would struggle to show a conceptual connection between E^{\flat} and B. Importantly, Smith's reading is not a hermetically sealed-off Schenkerian perspective at all; he incorporates neo-Riemannian theory and thus acknowledges the relations between G-E^b, a PL transformation, and G-B, an LP transformation, and internally between E^b and B.³⁸⁴

³⁸⁴ Another piece in which neapolitanizations are relevant is the opening of the Finale of Bruckner's eighth symphony, which I analyze in Kirkegaard-Larsen (2018, 97–

6.4 HISTORICAL PRECEDENTS

The reader will hopefully have noticed that my models take some clues from theorists discussed in Chapters 1, 2, and 3. It has already been made explicit that the progressional-processual function theories (1.3.2, page 89ff.), certain impulses from North American function theories (section 1.4.2, page 97ff.), and parts of Schenkerian theory which dealt explicitly with meter, phrase, and cadence (section 2.3.2.2, page 164ff., and section 6.2.3, page 373ff.) fundamentally influenced my models. Likewise, the comparisons of theories and analyses in Chapters 4 and 5 provided the yardsticks from which I could define which disagreements could realistically be resolved and from which I could evaluate whether my attempt at mediation was successful or not.

My models and the ideas that guided their creation were especially influenced by a few of the many theorists discussed in this study. Of particular importance were the early German function theories (discussed in section 1.2.1, page 52ff.) as well as late Swedish theories (discussed in section 1.3.2, page 89ff.), which pointed tentatively in directions I have pursued further. The theories of Schreyer, Louis and Thuille, Schmitz, Ergo, Jansson and Åkerberg, and Ingelf, all incorporate-to varying degrees-notions of passing and neighboring chords in a way that has a larger impact on their function theories. It entails implicit notions of prolongation, of harmonic Schichten, of interaction with phrase structure, and so on. None of these authors, however, have any explicit connection to Schenkerian theory, and many of them therefore lack a steady theoretical basistheir deviations from "traditional," Riemann-faithful function theory are often very interesting, but also quite ad hoc. In the post-war theories, Diether de la Motte's (1976) Hör-Analysen also resembled a path taken by my models (see Example 20, page 85). As the only post-war theorist, de la Motte seemed, in his Hör-Analysen, to imply

^{101).} One may compare this reading with the purely neo-Riemannian reading in Ramirez (2013), and the Schenkerian reading in Pell (2018)—both convincing readings on their own premises.

a sense of prolongation which was not contingent on pedal points, but he never fully explained the ramifications of this idea.

My model also takes some clues from Bernd Redmann's article "Funktionstheorie" (2009) discussed in section 3.1.5 (page 230ff.) The problems with Redmann's model was already discussed in that section: his symbols and visual layout made it difficult to grasp the overall structure of phrases and hierarchy between chords. His term *Satzfunktionen*, however, seems accurate and useful and is the term that gave the name to the *phrase functions* introduced here.

There is also a certain connection to Thomas Christensen's article "The *Schichtenlehre* of Hugo Riemann" (Christensen 1982), discussed in section 3.1.4 (page 227ff.). I do not think, like Christensen, that there is an implicit *Schichtenlehre* as such in Riemann's writings; but I do think that one may construct it via the mediation between Schenkerian theory and post-Riemannian function theory proposed here.

Finally, my idea of *phrase functions* and specifically the locution "phrase function cycle" is similar to Schenker's early theory and his concept of *Stufenkreis*. William Rothstein recently brought renewed attention to this concept of Schenker's which has been somewhat overlooked in Schenkerian research (and thus not discussed in Chapter 2). My idea that T–PD–D–T creates a harmonic cycle corresponds to Schenker's *Stufenkreis*, in which, for instance, I–IV–II–V–I creates one *Kreis* (Rothstein 2019, 5).

American readers will perhaps see a kinship between my model and Steven Laitz' *Phrase Model* from his book *The Complete Musician* (Laitz 2003).³⁸⁵ In an overall view, our two models are based on the same assumptions and largely work in similar ways. But because Laitz inscribes himself in the tradition of North American versions of function theory, and because he does not intend to mediate between or reconcile theories, his phrase model has few if any traces of the many other post-Riemannian theorists who have influenced my models. While Laitz works with an idea of third-representatino, it is mostly with the loose stipulation that VI may represent I, etc.; but just

³⁸⁵ I thank Svend Hvidtfelt Nielsen for bringing my attention to this kinship.

as in Louis and Thuille (1910 [1907]), his use of Roman numerals means that he is not able to communicate the tonic function of VI in his graphic analyses, only in his prose text. Furthermore, the Roman numerals do not communicate the *nature* of this third-relation, which may be conceived in many different ways, as Chapter 1 and the typology of function theories clarify. There are thus some notable differences between our models and our analyses.³⁸⁶ Furthermore, Laitz' model does not intend to mediate between or reconcile theories.

This brief overview should clarify how the many theories discussed in this dissertation have been used constructively to create the models of mediation; and it should clarify, as well, exactly how the models are fundamentally influenced by both post-Riemannian and Schenkerian theories, distinguishing them from apparently similar models such as Laitz'.

³⁸⁶ For instance, compare Example 116 in this dissertation (page 366) with Laitz (2003, 230).

Chapter 7:

Analytical applications

In this chapter I apply my analytical models to the compositions that were discussed in Chapter 5 in order to evaluate whether the models are successful in mediating between Schenkerian and functionanalytical practices and whether the models are able to reconcile some of the dichotomies and disparities that were evident between these practices.

7.1 HAYDN REVISITED

To refresh the conclusion of the previous discussion of the second movement in Haydn's String Quartet No. 59, let me quote what I wrote at the end of section 5.1:

A successful synthesis of these approaches must be one that is able to mediate between the Schenkerian identification of linear *Auskomponierungen* of vertical *Stufen* on the one hand, and the function-analytical act of relating chords to the modulating key center on the other. Since the augmented-sixth chords function as motivic harmonies, thus influencing the movement's "key relationships, modulatory strategies, and affective atmosphere" (Black 2018, §1) as I have argued, an analysis that allows for this aspect, too, would be of great value for this specific movement.

In the comparison of the two analytical approaches to this movement, it seemed that the primary analytical problem had to do with the augmented-sixth chord of m. 8: its harmonic function, its tonal implications, and the recurrence of this function as a harmonic motive in later parts of the work. From a Schenkerian viewpoint the chord was at the boundary of the tonic prolongation, while from a functional viewpoint the chord was as far from a tonic function as imaginable because it unequivocally initiated the modulation toward the dominant key. I will argue that my analysis based on Model 1, seen in Example 132, is able to capture both viewpoints: that the chord, at the most shallow level ("level 2"), initiates a modulation that tonicizes the dominant; but that, at the deeper level ("level 1"), which takes the entire phrase into consideration, it indeed serves as the boundary for the prolongation of the tonic phrase function that moves to PD (in the form of a DD with ⁶/₄-suspension) and D.

The interaction between the local PD-D-T phrase functions in B major (mm. 8-10) and the overall T-PD-D phrase functions in E major (mm. 1-10) is highlighted in a way that is not easy to communicate with traditional Schenkerian means (compare with the Schenkerian analysis in Example 93, page 310)—and impossible with any post-Riemannian function analysis. Above the prolongational line in level 2, a traditional function analysis acknowledges the local functional relationships; but below the prolongational line, their simultaneous prolongational effects are explained ("..." marks a repetition of earlier prolongational effects). The many local dominants serve primarily as passing and neighboring chords of the prolonged tonic, while the dominant of m. 6 is a slightly deeper-residing back-relating dominant (marked "b") which is approached by a series of passing chords.³⁸⁷ Level 1 adheres to the Schenkerian idea of chromatic voice exchange, but the dotted line together with the analysis of level 2 ackowledges that the tonic phrase function of the augmented-sixth chord in m. 8 is very unstable, and certainly not "tonic" in a traditional harmonic-functional sense. Finally, the dual function of the last B major chord-a tonicized harmony in level 2, but a structural dominant in level 1—is also highlighted in the analysis.

Following the above-discussed a_1 section, Example 133 analyzes the b and a_2 sections (mm. 11–22).

³⁸⁷ Integrating the idea of back-relating dominants into function theory enables one to explain a point I made earlier (see footnote 324, page 307): the leading tone D[#] of m. 6 does not resolve to E because this is not a literal "D–T," but, as it were, a "D, T" (the comma suggesting a caesura in the harmonic flow).









The T-D phrase functions at the beginning of the analysis are included as a very brief summary of a₁, the context in which the following measures are to be understood. At the level of phrase functions, the b part (mm. 11–14) is one long dominant prolongation. As the symbols above and below the prolongational line shows, the Dominant phrase function is first prolonged by moving to its upper neighbor C[#]m (with the local function of Tp), and then to its own dominant F[#] with A[#] in the bass. These two neighboring chords are approached by passing chords. In order to show that the two neighboring chords are the *primary* means of prolongation, and that the G^{\sharp} and G^{\natural} chords have a secondary status in relation to these, the p-symbols are set in parentheses. The parentheses serve much the same function as parantheses normally do in function analysis: they signal that the chord in question serves a function in relation to the ensuing chord (or the *expected* ensuing chord). The passing chord of mm. 11 and 12 are, in other words, secondary passing chords.

After the Dominant phrase function has been prolonged by the two neighbors, it is further prolonged by a neighboring six-four chord. This is already in complete congruence with what Hermann Grabner wrote in *Handbuch der funktionellen Harmonielehre* (Grabner 1974 [1944], 19), with the important difference that Grabner's concept requires a steady bass root above which the 5/3-6/4-5/3 motion can occur (see Example 14, discussed on page 76ff.). The analysis suggested here applies the Schenkerian concept of "inverted six-four" chords. Notice that the return to the 5/3 form of the dominant that was "supposed" to occur in m. 13 (so that the bass' A[#] would move to B) does not happen. I interpret the situation as an elision, which is marked by the square brackets in the "[8]–7" beneath the dominant function symbol.³⁸⁸

From m. 15, the Tonic phrase function is first prolonged like it was from m. 1. The diminished chord of m. 18 breaks a_2 's repetition of a_1 . As shown by the unbroken prolongational line, I understand this chord as partaking in the prolongation of the tonic function,

³⁸⁸ Had the elided B been present, the resemblance of mm. 11–13 to Gjerdingen's (2007) "Fonte" schema would have been clearer.

leading—as another secondary passing chord marked by (p)—to the neighboring dominant of m. 19. Harmonically, the chord has a local double function. First, it is a so-called common-tone diminished seventh chord. As I discussed in section 5.1 (see especially page 317), this theoretical concept does not exist in any function-theoretical vocabulary that I know of-while it is common currency in Anglo-American Schenkerian as well as non-Schenkerian harmonic theories. Seeing as this is a frequent pheomenon in tonal music, there is good reason to integrate it into the model. I label the chord T_c, which means that it has a fundamental tonic function, but that the tonic has been modified to a common-tone diminished seventh chord, the displaced tones serving as appoggiaturas. But, as shown by the "becomes" symbol (\Rightarrow) , it also has a forward-pointing function: because the appoggiaturas do not resolve, it serves as an incomplete dominant of the ensuing incomplete dominant. The ability to display such local functional Folgerichtigkeit is one of the strengths of traditional function analysis which is retained in my analytical model.

Following the prolongation of the Tonic phrase function, the Predominant enters—marked by *forzando*—in the form of ${}_{II}S_{/3}$ (an incomplete subdominant in traditional functional terms) and continues to the Dominant and Tonic phrase functions.

What follows is the contrasting section—the B part in the overall, large ternary ABA-form, beginning in E minor. A multileveled function analysis of this section is provided in Example 134.

The analysis is again displayed in two levels. In the lower level, level 1, a large-scale T–PD–D cycle of phrase functions is shown. The T phrase function continues from the previous section and is first modified by the Tv (tonic *Variante*) that this section begins with. As it moves to the C major chord of m. 27, the Tonic phrase function is challenged, but since there has not been an actual cadence in C major yet, this chord might work as a lower-third representation of the tonic, and thus as a continuation of the Tonic phrase function; but as the music cadences on C major in m. 30, it has lost any immediate connection to the global tonic of E.





 $7.1 \cdot Haydn revisited$

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In the context of the entire section, this C major is a predominant which goes through a 5-6-#6 voice-leading transformation. The 6-stage turns it into a local Tp (A minor), and the #6-stage turns it into the motivic German augmented-sixth chord on C. This chord, in harmonic-functional terms an altered double dominant, moves to the Dominant phrase function and simultaneously obliterates the sense of C as a local tonal center, thus marking the return of the tonic key.

In level 2 of the analysis, it is once again a more traditional function analysis that is displayed above the prolongational lines, while the symbols below the lines interpret their prolongational effect. For instance, in the initial cadential motion in E minor (mm. 23–26), the chords of mm. 24 and 25 are acknowledged as having a local S and D function, while it is explicated below the line that these are not phrase functions, but neighboring harmonies above the sustained tonic pedal point. The *forzando* G major seventh chord of m. 26 serves as a dominant passing chord toward C which is therefore tonicized. A local cycle of T–PD–D–T phrase functions establishes it as a cadentially confirmed key—but one that is at the same time a Predominant from the larger perspective.

In mm. 30–34, the C major T is prolonged by neighboring Sp and D functions.³⁸⁹ At the end of m. 34, C moves through a passing dominant to an A minor chord in m. 35. Retrospectively, with regard to the C major key, this A minor chord functions as Tp, and its role as the 6-stage in the 5-6-#6-motion has already been explained. However, in order to explain how this A minor chord is connected to the augmented-sixth chord of m. 36, I found it necessary to also show its *prospective* harmonic function as a subdominant in the key of E minor. The resulting S–DD movement (with a mediating passing sixfour chord) is a paradigmatic expansion of the Predominant phrase function—one that appeared in the key of C major a few measures before, in m. 28. The fact that the tonal ambiguity of the A minor chord (Tp in C major or S in E minor) is clarified with the entrance of

³⁸⁹ Here is a regular "Fonte" instead of the modified one mentioned above in footnote 388.

the augmented-sixth chord is symbolized by the joining of the two prolongational lines into one.

The advantages of the multileveled function analysis in comparison to other post-Riemannian functional approaches is, I would argue, quite obvious: the method allows for the usual labeling of each chord, but it also allows for the indication of these functions' role in the larger context—it adds a layer to the analytical work that traditional function analysis simply does not contain. In comparison to Schenkerian analysis the method adds something in situations such as the one with the A minor chord in m. 35. Though the Schenkerian analyst has considerable freedom as to what he or she might want to communicate with an analysis, I believe that one is invited by Schenkerian theory and practice to prioritize the interpretation of the A minor chord as the middle point in the 5-6-#6 motion—thus overlooking the functional extravagance of this discrete harmony.

A work-specific feature that the multileveled function analysis brings out is the role of the recurrent German augmented-sixth chord. This doubly altered double dominant enters in different keys and contexts thoughout the work. First it appears as the boundary of the Tonic prolongation, which simultaneously marks a local Predominant phrase function in relation to the key of B major, as discussed above in relation to Example 132. Later, it occurs as a stage in the prolongation of the Predominant phrase function (twice in Example 134). The use of two levels (a level of phrase functions and a level of harmonic functions) enables the analysis to show the double identity of the augmented-sixth chord: it is both a voice-leading evolution of the Predominant phrase function ("growing out" of the subdominant), but it is also, at the harmonic-functional level, the carrier of functional agency: it is this chord that pushes the modulation through, as it were, forcing the listener to give up intuitions about the previous tonal center and create expectations about the new one (mm. 35-36 in Example 134 is a good example). It is in this role as a functional agent that it becomes a sort of, if not harmonic, then functional motive-an associate of the subdominant at the deeper level, but qualitatively and harmonic-functionally very different at a shallower level.

In my mediation between functional and Schenkerian practices I have chosen to *not* argue that one must identify *one* primary and overarching T–PD–D–T cycle, equivalent to the Schenkerian background I–()–V–I *Bassbrechung*. Therefore, a summary of the entire piece looks as shown in Example 135.

Level 2:	T—PD	D-D-	—— T–PD–D–T T–PD——D T—PD–D– ——				T-PD-D-T		
	a_1	lЬ	a ₂	П	$ a_1 $	l b	a ₂	П	
	A_1			ll B	$ A_1 $			П	
[Level 1:]	[TPDD T							D–T]	

Example 135: Multileveled function analysis of Haydn's String Quartet No. 59, II, full movement.

Level 2 represents a summary of the cycles of phrase functions that can be derived from the previous examples in this section. I remind the reader that one solid vertical line (I) symbolizes an incomplete phrase function cycle (a half cadence), and two solid lines (II) symbolize a complete phrase function cycle of T–PD–D–T. Since I do not aim here at theorizing levels beyond that of the phrase, Level 2 suffices for now. However, in order to indicate that it is conceivable to push a multileveled function analysis in a direction that is even closer to classic Schenkerian principles, the hypothetical Level 1, presented in square brackets, shows how the piece can also be seen as one large incomplete cycle, followed by a complete cycle:

T–PD–D | T–PD–D–T ∥

This would require the axiom that the tonic prolongation may extend beyond double lines (II) at deep levels, and with consideration to the Schenkerian analysis of the piece that was presented Example 102, page 322, it is certainly possible to further develop the method of multileveled function analysis in this direction. The connections to Schenker's *Stufenkreis*, which I briefly mentioned in section 6.4, page 403, would be especially pronounced if one pursued this thought further.

7.2 SCHUBERT REVISITED

In section 5.2, I compared Schenkerian and functional approaches to Die Sterne. The main problem of the functional approach, I argued, was a familiar one: that its lack of attention to the interaction between harmony and phrase structure or other formal segmentations was problematic. Its advantage, however, was that it had a vocabulary that enabled one to analyze this specific song's perhaps most distinctive feature, namely the recurring fluctuations to chromatic mediants. This latter feature was significantly downplayed in the traditional Schenkerian reading, based on that of Harald Krebs (1980, II:30). Because third-representation is only possible in Schenkerian analysis if it is reframed as the incidental result of a contrapuntal transformation, the Schenkerian reading had to treat the two lower mediants as upper neighbors to the ensuing dominant, and the upper mediant as a third-divider on the way to the dominant-hence neglecting both the bold return of the global tonic as well as degrading the apparent Predominant of m. 44 to a lower neighbor of the already arrived-at Dominant (consult the score again on page 328 and onwards).

I therefore suggest an alternative reading based primarily on Model 2: the integration of third-representation into Schenkerian analytical practice. I will argue that this is not only fruitful for the analysis of the mediant passages, it also permits a more satisfactory analysis of each of the four stanzas in their entirety and a more convincing analysis of the piece's overall structure.

The song's instrumental introduction, which was not discussed in section 5.2, is fairly straighforward. A middleground sketch supported by the functional symbology of Model 1 is offered in Example 136.



Example 136: Middleground reduction of the instrumental introduction in Schubert's *Die Sterne*, D. 939, mm. 1–16. Brackets designate voice-leading elisions.

Harmonically, there is a fundamental move from T to an expected Tp (marked in square brackets) that goes through a passing dominant; instead of leading directly from this passing dominant (m. 5) to the Tp (m. 9) by way of a deceptive progression, a secondary dominant of Tp is interpolated in m. 7. Tp never materializes, as it is dominantized at its entrance. From the third chord (m. 7), then, there is an obvious chain of decending fifths, $G^7-C^7-F^7-B^{b7}-E^{b}$, subordinate to a more fundamental T–PD–D–T phrase structure. It is perhaps worth noticing that two of the chromatic mediants employed as keys later in the song—G major and C major—appear with different harmonic functions in this chain.

Example 137 presents a voice-leading graph of the entire first stanza, the one that modulates to C major; Example 138 presents a graph of the second stanza modulating to C^{\flat} major; and Example 139 presents a graph of the third, modulating to G major.



Example 137: Analysis of Schubert's Die Sterne, first stanza, mm. 18-46.



Example 138: Analysis of Schubert's Die Sterne, second stanza, mm. 63-91.



Example 139: Analysis of Schubert's Die Sterne, third stanza, mm. 108-136.

The examples show the strengths of Model 2: on the one hand, the function symbols make clear that C^b, for example, has a fundamentally tonic function and can be seen as a neapolitanization (in Example 138). On the other, the voice-leading graph makes clear that C^b carries this tonic function precisely because it assists in the composing-out of the tonic E^{\flat} through means of a neighbor note and a socalled wobbly note or simply wobble, marked in the graphs with a "W." The wobble is David Damschroder's term for a certain type of neighbor note. The wobble functions not as a usual neighbor, but as a chromatic inflection of a note, which is then "diatonicized" again. This term has, so it seems, not become part of standard Schenkerian practice. Damschroder introduced it in his Harmony in Schubert in 2010 (Damschroder 2010, 29 et passim), and has used it in other of his studies on harmony in Haydn, Mozart, Beethoven, Mendelssohn, Schumann, and Chopin (cf. Damschroder 2012, 30 et passim; 2016, 14 et passim; 2017, 63 et passim). He does not use it, however, in his textbook on Schenkerian theory (Damschroder 2018). I will argue that it is a very useful term that contains great explanatory power in situations such as Schubert's Die Sterne. Together with the broadly accepted idea of neighbor notes, the wobbly notes explain how the chromatic mediants retain the function of the tonic that they are derived from. These are truly both-and entities: they comprise the dual aspect of being *derived from* (through a voice-leading process) and pointing back to (through harmonic function) the tonic;³⁹⁰ they are both contrapuntal and functional entities.

Incidentally, when focusing on the wobble, we arrive at a plausible explanation for the lack of G^{\flat} major—the only chromatic mediant not appearing in Schubert's song. The most straighforward explanation is surely the simple fact that Schubert wrote the song to a poem with only four stanzas. Rather than introducing a fourth and all new key area in the fourth stanza, the reappearance of the E^{\flat}–C relationship gives some sense of "return" or "resolution." But, as Exam-

³⁹⁰ This sentence paraphrases a sentence from an earlier publication of mine (Kirkegaard-Larsen 2018, 101–102)—a sentence that was is itself a paraphrase of a sentence by Bo Alphonce (1988, 171).

ple 140 shows, the wobbly notes of the song's mediant digressions are exactly the notes corresponding to an upward arpeggiation of the tonic triad from root to octave; the appearance of G^{\flat} major would ruin this system (though in this system, it could have replaced C^{\flat} major).



Example 140: Wobbly notes in Schubert's Die Sterne.

If this idea of ascending wobbly notes has some kind of explanatory power, it perhaps has to do with the text-music relationship. David Kopp writes in his discussion of the song:

The prominent role of chromatic mediants at key points in this song suggests a possible relation between them and its text. Specific associations with word meaning at the exact moment of the mediant moves do not seem to occur. However, the overall impression of the harmonic distance of these third-related areas, coupled with the *pianississimo* effect which Schubert requests throughout them, does communicate an otherworldly sense which complements the heavenly spaces and heavenly moods, the eerie light and transcendent love evoked by the poem. (Kopp 2002, 27–29)

I agree with Kopp's general association of harmonic distance and the heavenly contents of the poem by Karl Gottfried von Leitner (1800–1890), and I also agree with him that no immediate text-music relationship can be discerned at the exact moments of the mediants' entrances. When looking at the general imagery and description of the stars' light, however, it is words like *blitzen*, *lichten Gebilde*, *wallen*, *leuchten*, *schweben*, *silbernen Licht*, *strahlige Schaar* and *Geflimmer* that dominates the poem: words circling around the shimmering, twinkling, flickering and unstable character of the starlight—much like the status of the flickering and fluctuating tonic E^{\flat} , whose tone content wobbles here and there throughout the song.

7.3 MENDELSSOHN REVISITED

At the end of my discussion of Mendelssohn's *Variations Sérieuses* in section 5.3, I wrote the following:

A mediation between these two perspectives must be one, then, that succeeds in explaining certain harmonies as resulting from or, at the very least, being part of, chromatic voice leading, while at the same time acknowledging the romantic functional extravagance—to paraphrase Charles J. Smith (1986)—of these chromatic chords and the tonal intuitions they cause.

I will argue that such a mediation can be achieved through the deployment of my Model 1. Questions concerning third-representation (Model 2) will also be discussed in the following.

Example 141 proposes a multileveled function analysis of mm. $1-8_1$. In mm. $1-4_1$, the analysis in Level 1 visualizes how the Tonic phrase function is extended through a descending chromatic voiceleading pattern in two voices.³⁹¹ At the conclusion of this chromatic descent, the tonic-representation continues through the Ts and its surrounding passing chords, and the symbol ">----" suggests that the Auskomponierung through voice leading has finished, proceeding instead with harmonic-functional third-representation in the Ts (as per Model 2). After this, the Tonic phrase function reaches its limit and moves to the Predominant and Dominant phrase functions (in mm. 3_2 - 4_1). Importantly, the analysis visualizes that the chromatic voice-leading pattern yields the impression of certain functional relations: In Level 2, a local T-PD-D-T is shown in mm. 0-3, and it is explicated that this local PD appears first as DD and then, unconventionally, as °S. Below the analyses, the repeated Halbschluß harmonic motive that Peter Rummenhöller emphasized in his function analysis (Rummenhöller 1989, 179) is displayed: the initial °S-D^[D] is sequentially repeated in °S-D^[T]; and the ensuing Romanesca figure suggests two rapid T-D-like progressions.

³⁹¹ Note that the numbers are written to represent conventional figured bass symbols, but that the 8-7-46-46-5 motion begins *below* the 5-44-4-3 motion. Both of these abstract descending gestures alternate between voices.





The analysis thus shows the interaction between harmony and voice leading, between the vertical and the horizontal, in ways that are not covered by conventional functional or Schenkerian practices.

In the analysis of mm. 82–16, presented in Example 142, Level 1 shows the large-scale T–PD–D–T structure of the entire theme; note here that the initial Tonic phrase function is the D minor tonic of the theme's first part, which I include to show the total context into which the theme's second part is set. The long expansion of the Tonic phrase function is explained in Level 2: it moves through a series of functional representations of the Tonic, first through Tp in m. 9 (which was tonicized at the end of the theme's first part), then-as the surprising conclusion to the sequence-to Ts in m. 12, tonic substitution. This Ts is itself expanded by a neighboring ⁶/₄ chord. Lastly, the tonic expansion concludes in an Ableitung of this Ts in m. 14.392 This Tsa becomes (\Rightarrow) the subdominant (and, at the deeper level the Predominant). The subdominant is itself prolonged by moving through a passing chord to its Ableitung (at the end of m. 14); and the Sa is further expanded before moving to the concluding D-T phrase functions.

The primary points at the second level are T-Tp-Ts-Tsa \Rightarrow S-Sa-D-T. This level is itself explained with letters and symbols above and below the prolongational line. Below the line, I first explicate the primary movement of the ascending bass voice F-G-A-B^b. The justification for the choice of exactly these bass tones as the structural ones (and not, for example, the C in m. 10) has to do with the sequence. I incorporate the Schenkerian idea that the outer points of the sequence are the most important: the model begins on F, is sequenced on G, but because of the deceptive continuation its last tone is the A, which then moves deceptively to B^b. In the concluding measures, notice that the multileveled function analysis is able to acknowledge the local Sa-D-T-progression of mm. 14₂-15₁, the "Schrock-like" cadence which I discussed at the end of section 5.3, while at the same time interpreting this apparent cadence as a voice-

³⁹² The *Ableitung* was introduced on page 373. See also Appendix 2 for an explanation of the new terms and symbols in my analytical models.





leading phenomenon that, in the larger context, serves as neighbors to the Sa which is resumed in m. 15_2 .

Above the prolongational line of Level 2, I emphasize some of the harmonic-functional relations that arise from the model and its sequence. First, a local T–DD–D (in relation to the Tp, that is, F major) is presented. In its sequential repetition, I do not analyze every chord function, but simply write [*seq*.], implying that similar functional relations are imitated. Importantly, the double arrow indicates that because this sequence is aborted (it does not end as expected on a local D), the sequence's G and A-chords *become* the major subdominant and dominant of the tonic D, which is not materialized as it moves deceptively to Ts. Notice here that the Ts doubles the functional root D, and not the chordal root B^b, in accordance with standard applications of the Ts.

Measures 8_2 -11 constitute a highly complex point in the piece. Neither traditional function analysis nor traditional Schenkerian analysis is able to capture that mm. 102-11 represent both a voiceleading movement through F–G–A–B^{\flat}, and in retrospect a sequencing of functional relations presented in mm. 82-9, and, as a third thing, a local, prospective S-D cadence that serves to modulate back from F major to D minor-but concludes deceptively. Furthermore, while holding on to D minor as the global tonic, the analysis still shows all the tonal intutions that arise throughout the piece: from the local Halbschluß motives of the first part which suggests, but never realizes, a series of keys, to the expanded Halbschluß sequences of the second part. The analysis is able to show the interaction between harmony and voice leading, between phrase functions and tonal intuitions, in a way that, I would argue, succeeds in mediating between functional and Schenkerian practices in one analysis. At the same time, this analysis is, compared to the Haydn and Schubert analyses above, certainly the visually most unclear one, and it arguably demonstrates some downsides to Model 1 as well. I show a relatively high level of detail in my analysis, and more clarity could be achieved by reducing away some of these, depending on one's analytical temperament and purpose.

Conclusions

The purpose of this dissertation—to investigate and provide a path beyond the "antagonism" of the post-Riemannian and Schenkerian traditions—has been approached from three interrelated angles, comprising the three parts of the dissertation: a theory-historical angle, a comparative angle, and a mediating angle. With these three angles, I have sought to elucidate, and ultimately confirm, the two central hypotheses presented in the introduction: that it is possible to conceive of a *via media* between the post-Riemannian and Schenkerian approaches without violating core principles of either theory, and that such a mediation must take actual analytical practices and living traditions into consideration.

In these conclusions, I will sum up the findings of the study, and I will explicate the underlying argument that runs through Parts I–III. Among other things, I will touch upon the themes of reception history, the historical establishment of the traditions and their "antagonism," their opposing conceptions of central terms, and my suggestions as to how one might mediate between them. Prolonged attention will be given to the conclusions regarding "function" versus "functionality": just as Chapter 4, which addressed these terms, took a central place in the dissertation—building on the discussions in Chapters 1–3 and to a large extent determining the course of Chapters 5– 7—so the conclusions regarding these terms take a central place in the continuous argument.

That function theory and more linear approaches to harmony may coexist was already indicated by the early German function theories of especially Schreyer and Louis and Thuille. However, it was the monistic and more "vertical" theories of Grabner, Maler, and de la Motte which established an actual tradition in Germany and elsewhere, and any connection that function theory might have had with horizontal and contrapuntal perspectives was significantly downplayed. This, as well as the emigration of Schenkerian theory to the

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USA, was largely a result of WWII and national socialistic ideology in Germany. As such, the post-Riemannian and Schenkerian traditions, and their antipodean relationship, are post-war phenomena, not some state of nature. This fact alone suggests the possibility of a *via media*.

But the three influential German theorists, Grabner, Maler, and de la Motte, do not represent the entire post-Riemannian tradition: numerous national subtraditions have emerged, many of whom swear to surprisingly different formulations of function theory. Differences aside, the common characteristic of the post-Riemannian function theories is the stipulation that there are three harmonic functions, and that each of them may be represented by third-related chords. It is the conception of the *nature* of this third-relation that has resulted in the different function theories, formalized in the typology of function theories I propose. This goes to show the dangers of equating Riemann's theory with those he gave rise to. And it underlines that, if "function" and "relation" are closely interrelated terms, then one must be aware that the latter can be construed on many different bases.

The sub-tradition of function theory that stands most apart from the other ones-geographically as well as conceptually-is the North American one. The conception of "function" which dominates in this tradition is markedly different than the "function" found in any of the European post-Riemmanian theories discussed in this dissertation. This is because North American function theory is fundamentally influenced by ideas that originate, not with Schenker, but with American Schenkerian theory. The so-called "Americanization" that Schenker's theory famously underwent when it emigrated to the USA instilled the interrelated notions of "structure" and "function" as core concepts of Schenkerian theory. This process started already with Hans Weisse, Adele T. Katz, and Felix Salzer, the latter of whom popularized the terms. Though current Schenkerian historiography tends to disregard Salzer-as a result of the assertion that he instigated the "revisionist" branch of Schenkerian theory, as opposed to the "purist" branch-his introduction of the idea of harmonic and contrapuntal "function" was influential in Schenkerian theory, and in North American harmonic theories in general.
The idea that Schenker had been "Americanized"—through Salzer and through later aspirations for science and rigor—took root in the 1980s and marked the beginning of a new era of Schenkerian research which strived for a historically more correct understanding of Schenker. But the present study establishes that this did not halt some Americanizing tendencies: responding to the pedagogical needs of the newly institutionalized field of music theory, the reification of certain concepts such as the "linear intervallic pattern," the "motivic parallelism," and the "imaginary continuo" contributed to these tendencies while also enriching and developing Schenkerian theory and analytical practice.

The above-described introduction of "function" to Schenkerian theory is an integral, but often overlooked, part of this history as well. As appears from Chapter 2, the function concept disseminated from Salzer (1952) to Forte (1962), Aldwell and Schachter (1978; 1979), and Guck (1978), from whence it seems to both establish a current of North American function theory, and to assimilate into mainstream Schenkerian theory. This culminated in Cadwallader and Gagné's Schenkerian textbook, especially in its third edition (2011 [1998]), in which ideas on "function" and "harmonic classes" are not just colloquialisms, but technical and central terms.

The difference in conception of "function" is responsible for many disagreements and explains aspects of the "antagonism" between the European post-Riemannian tradition, and the Anglo-American Schenkerian tradition. Previous comparative studies tend to presuppose that the two theories make opposing claims about the same phenomenon—the same kind of harmonic "function"—which has resulted in many quarrels and biased comparisons, of which Federhofer's is perhaps the most telling. However, I contend that the "function" of function theory and the "function" of Schenkerian theory (and North American function theory) are not the same, which has resulted in the proposition of Chapter 4 that one should distinguish between "function" (in function theory) and "functionality" (in Schenkerian theory). The former concerns chord identity and *Folgerichtigkeit* between adjacent harmonies, and it presumes that harmonic function arises in a temporally contingent flux of interpretation

and reinterpretation, protention and retention. The latter concerns chord behaviour and structural coherence, and it presumes that functionality arises as a retrospective (or generative) result of the individual chords' relation to the entire structural framework of the musical work. "Function" operates with the central condition of thirdrepresentation; "functionality" with prolongation and structural hierarchy.

The ramifications of these different conceptions of "function" are far-reaching: they imply different conceptions of tonality—I summarized these as functional tonality versus functional monotonality— and of keys, modulations, sequences, and other central terms in tonal theory. Indeed, it has been possible to document that the traditions' slightly differing conceptions of the "tonal repertoire" seem to spring from their different stipulations about tonality. The analytical consequences of all these differences is that the same work may be subject to analyses which seem truly irreconcilable.

As such, it is no surprise that it has been difficult for the two theories to speak together. I have maintained that they may, in fact, do so nonetheless. This is the logical result of my above-mentioned distinction between "function" and "functionality," which led to the conclusion that they do not theorize about the same phenomena in tonal music; rather, they theorize about—and each make useful claims about—similar, interrelated, and overlapping phenomena. For instance, if one conceives of the "Predominant" as a category of "functionality," then this does not render function-theoretical distinctions between the "functions" of subdominant and double dominant irrelevant; rather, these terms meaningfully describe specific harmonic functions which may both take the functionality of (for example) Predominant. Functionality is a super-category, function is a subcategory.

This feeds into the dichotomy of "horizontal" versus "vertical" approaches to harmony, a theme around which many discussions in the present work has revolved. Indeed, the Knud Jeppesen quote in the epigraph adumbrated this as a theme from the beginning. One may conclude that it is the contention of both function theorists and Schenkerian theorists that their respective theories satisfy Jeppesen's

elementary stipulation: harmony and voice leading should be viewed in tandem. That the theories conceptualize the central terms "harmony" and "voice leading" quite differently—and that there are thus different opinions as to whether they do satisfy his stipulation—is obvious, but none would admit to accounting for one aspect without the other. However, the widespread characterization of the two theories holds true: as a consequence of their focus on adjacent functions and long-range functionality, respectively, function theory generally prioritizes the vertical perspective, Schenkerian theory the horizontal.

Both theories and analytical methods are dominated by an "either/or" attitude: either a chord has harmonic functionality, or it is the by-product of voice-leading, says Schenkerian theory; either a chord has harmonic function, or it must be a part of a sequence (or the harmony must be non-functional and thus beyond the tonal repertoire), says function theory (more on the tonal repertore and beyond below). Even if a true embracing of both harmony and voice leading in one analytical system is the perhaps unachievable El Dorado for music theorists (to paraphrase Wintle 1985, 176), it seems that an amalgamation of post-Riemannian and Schenkerian theories is one way of approaching this ideal—one way of disposing of the either/or and moving toward a both/and.

The two models proposed in Part III of this dissertation are my suggestions as to how one might accomplish this—and my suggestion as to how one might mediate between the traditions. Building primarily on the progressional function theory—because it showed a heightened sensitivity to chord context without eliminating the specifically function-theoretical notion of function—the two models seek to accommodate both representation and prolongation, as well as prospective and retrospective views on temporality. In this way, they aim to communicate the "double identity" of chords. A single chord may be seen, at one level, as voice-leading outgrowths of prolonged phrase functions, and, at another level, as having harmonic function, as perhaps carrying the agency that initiates a modulation, or as instilling the effect of a harmonic motive. This implies that the analyst adopts two temporal attitudes at once, such that the individual chord is interpreted and reinterpreted in a temporally contingent flux of proten-

tion and retention (as mentioned above), while it is also situated retrospectively in the larger-scale structural framework. To truly encompass both *Harmony and Voice Leading*, *Akkord und Stimmführung* (as two of the influential books discussed in this study are entitled), this amalgamation of temporal attitudes is a prerequisite.

Since the two traditions include slightly different repertoires under the banner of "tonal music"-and consequently demarcates the historical boundaries of "Durmolltonal" music and the "common practice era" differently-the question remains as to which music may be productively analyzed with the proposed Models 1 and 2. The models are based on what I have repreatedly referred to as "mainstream" Schenkerian theory and function theory. Because mainstream Schenkerian theory by convention concerns the repertoire of "Bach to Brahms," while mainstream function theory covers much music before and after these composers, it is a natural consequence that the narrower of the two-Schenkerian theory-decides the boundaries for the immediate applicability of Model 1 and 2. However, testing the models on earlier and later repertoires is an obvious area for further work. It is not immediately obvious whether they are also applicable on function theory's wider definition of tonal music and the tonal repertoire.

Ultimately, such further studies would also test the scope of some of the claims made above. If harmony and voice-leading always interact, if an individual chord carries both function and functionality, and if this is determined on the basis of a chord's position in both a tonal network and a structural framework, then in what music, exactly, are these claims valid? Is the "double identity" of chords equally pronounced in all "tonal" music? And if not, how might this affect music- and style-historical periodizations?

It has been beyond the scope of the present work to address such questions thorughly outside the Bach-Brahms repertoire, because it would require the consideration of more controversial and nonmainstream versions of Schenkerian theory, perhaps also what is sometimes dubbed "post-Schenkerian theory"—and it might even be the case that neo-Riemannian perspectives on late nineteenth-century harmony could be productively implemented as well. But because

ideas on extended third-relationships, romantic harmony, and "erweiterte Tonalität" are so frequently found in mainstream function theory, there is reason to believe that the models would be at least partially applicable to music after the Bach-Brahms repertoire (or to other, late-romantic styles within the timeframe that these two composers demarcate); perhaps the notion of third-representation can resolve some problems that convetional notions of prolongation cannot (Model 2 hints at this possibility).

In any case, the proposed models raise some important questions about the assumptions each tradition makes about "tonal music" and its peripheries. If the proposed models are most readily applicable to the "Schenkerian-tonal" music, but less successful in the parts of the "functional-tonal" repertoire that do not overlap with the "Schenkerian-tonal," then it suggests that the wide definition of a Baroque-to-late-Romanticism tonal repertoire is meaningful on certain ("purely" function-theoretical premises) but not on others (function-*and*-functionality-theoretical premises). In one perspective, the "tonality" of function theory is not fine-meshed enough; and in another, the "tonality" of Schenkerian theory is too restrictive.

If anything, this illustrates the ever-present problems with strict historical periodizations. Perhaps, the common practice era is best understood in the practice-theoretical light that permeates this study: the "common practice" was one that gradually evolved, one that gradually conventionalized certain compositional standards and expectations, and was continually negotiated by composers until it no longer functioned meaningfully as a practice—or continued to do so in some communities (cf. Harrison 2016), but not in others (the Second Vienesse School being the obvious example). The models describe how harmony and tonality functioned in a segment of this historical continuum; a segment in which harmony and voice leading were in a particularly reciprocal relationship. But tonality-inducing aspects of the "common practice," dynamic and fluctuating as they must be in the practice-theoretical light, quite possibly extend beyond this segment.

If this is the case, then the models are not necessarily models of all "tonal music," nor of "monotonal music," for since they do not

necessarily work on levels beyond the phrase (but may do so if relevant), there is no claim of overarching tonal unity. The models are models of a particular kind of interaction of harmony and voice leading in phrase structures which are characteristic for much tonal music in the Classic-Romantic repertoire—and less characteristic for other tonal music. As was already mentioned in Chapter 6, the reliance on specific notions of phrase implies a certain applicability in Baroque *Fortspinnung* and Wagnerian endless melodies, but also certain difficulties.

While the models may not have achieved perfection, and while it would certainly be interesting to develop them along the lines described above, they address the central hypothesis of this study: that a *via media* between post-Riemannian and Schenkerian approaches to music theory and analysis is possible. I hope to have confirmed that it is not only possible, but also that it is viable, at least for a large and central part of the tonal repertorie. Whether the models will have any bearing on music theory beyond this dissertation, only time will show.

The second central hypothesis presented in the introduction was that a succesful mediation must take historical and social context into consideration. I have sought to show the pitfalls of not doing so by emphasizing the differences between Riemann's and Schenker's theories on the one hand, and their afterlives and practical applications on the other hand (primarily in Chapters 1–2), and by engaging critically with previous comparative and "synthetic" studies, which did not take these afterlives into account (primarily in Chapter 3). Musictheoretical and music-analytical terms and notions have been continually negotiated in communities of practice, and they have been affected by historical events. "Parallel," for example, had one meaning for Riemann, another meaning for Grabner, and yet another meaning in progressional and interval-relational theories. "Music theory" meant one thing in pre-war Germany and America, and quite different things after the war. This has not been sufficiently acknowledged in previous comparisons. Overlooking the historical contingency of basic terms means overlooking the difference between theories-in-theory and theories-in-practice. Surely, previous comparisons

of Schenker and Riemann have valuable historical interest, and they may certainly uncover relevant aspects of the theories which subsequently established traditions. But the differences between Schenker's and Riemann's theories (on the one hand) and the ones they developed into (on the other hand), are large and significant enough to call for pervasive contextualization. If the aim is to mediate between the conflictual traditions, then an amalgamation of historical theories is simply insufficient.

Historical and social contexts thus affected paths taken in the suggested models: they are not based not on some *a priori* definition of what "function" is (to take this example again), but on the actual—and contrasting—uses of this term. They are not based on a universal definition of what "function theory" or "Schenkerian theory" is, but on aspects of the scholarly practices that have been performed in their names. Much like the many rectangles in Paul Klee's *Neue Harmonie*, the proposed analytical models—and this entire dissertation—hopefully make a new whole out of the patchwork of contrasting textbooks and theories on which they are based.

English summary

Analytical Practices in Western Music Theory: A Comparison and Mediation of Schenkerian and Post-Riemannian Traditions.

This dissertation is a study of two of the most influential traditions in Western music theory: post-Riemannian function theory and Schenkerian theory, dominating in European and Anglo-American music scholarship, respectively. Both approaches focus on the function of harmony (and, to differing degrees, voice leading) in tonal music, and the musical repertoire they cover is thus—more or less—the same. Especially since the theories were established as geographically demarcated traditions, following WWII, a markedly "antagonistic" relationship has existed between them. The negative consequences are many: knowledge dissemination between the traditions is impeded, the traditions' apparently opposing claims about the same phenomena in the same music raises fundamental epistemological questions, and previous comparative studies usually serve to coronate one as better than the other—rather than examining whether, how, and to what extent the approaches may enlighten and enrich each other.

The purpose of this dissertation is to investigate, chart and provide a path beyond the antagonism of the two music-theoretical and -analytical traditions. Divided into three main parts, the dissertation aims to achieve this purpose by providing 1) a thorough historical study of the theoretical traditions since Schenker and Riemann (with a special focus on the relatively uncharted territory of post-WWII history); 2) a comparison of these traditions' theoretical assumptions and analytical practices; and 3) a *via media* between the two approaches to tonal music.

Rather than the writings of Hugo Riemann and Heinrich Schenker, the primary object of study is their subsequent theoretical and analytical traditions. These are approached through the heuristic thinking tool of *practice theory*, which is given special consideration in the introduction. It is argued that music theory, analysis, and tradi-

tion are fundamentally interrelated and exist as cultural, social, and epistemic practices in professional and specialized communities, and it is outlined how this practice-theoretical orientation informs basic choices and delimitations of the study.

PART I: TRADITIONS.

Part I is comprised of Chapters 1–2, examines how Riemann's and Schenker's theories established themselves as traditions, how the centers of each tradition came to be geographically separate, and how theoretical concepts and analytical practices evolved from their respective starting points (Riemann's and Schenker's own writings) through later theorists' adaptations, through significant historical events, and through changing ideas about the epistemological and ontological foundation of music theory in the theorists' academic and societal contexts.

Chapter 1 presents a brief overview of Riemann's own function theory before it goes into detail with its reception. Devoting special attention to its German reception, the chapter emphasizes significant differences between adaptations of function theory before and after WWII. Pre-war theories (Schreyer 1903; Louis and Thuille 1910 [1907]; Schmitz 1911) were remarkably linear in their approaches and obviously closer to Schenkerian ideas of prolongation and structural hierarchy-but any direct influence they might have had was halted; by and large because of a new epistemology and ontology for music theory in the wake of WWII and national socialistic ideology. The more "vertical" post-war theories were tremendously influential, specifically the types of function theory which I designate as keyrelational and, related to this type, mode-relational. These were above all promulgated and widely disseminated by Hermann Grabner (1923; 1944), Wilhelm Maler (1975 [1931]) and Diether de la Motte (1976).

Other European adaptations of function theory were also influenced by Grabner, Maler, and de la Motte, but local variants evolved. A particular focus on the Scandinavian function theories illustrates alternative conceptions of functional relations which I characterize as *interval-relational* (prevailing in Norway) and *progressional* function theories (prevailing in Denmark), plus a sub-type of the latter, *processual* function theory (adapted from Rasmussen 2011; Sweden adopted the German key-relational and mode-relational theories).

In a section on North American adaptations of function theory, it is argued that even though these draw on Riemann's conception of "function" to some extent, they are fundamentally influenced by tenets from Schenkerian theory, especially as developed by Schenker's student Felix Salzer. One can therefore question whether the North American function theories can be viewed as part of, or as related to, the other (European) post-Riemannian theories and traditions.

Despite the many variants of post-Riemannian function theory, their common characteristic is the tenet that tonal music consists of three main functions, and that secondary chords represent these functions by virtue of being third-related—the different conceptions of the nature of this third-relation have resulted in the different types of function theory.

Chapter 2 focuses on the history of Schenkerian theory. After sketching Schenker's theory and its limited, but often overlooked, influence on European music theory before and after WWII-and noticing its recent possible, but still limited, return to European music theory-the bulk of the chapter focuses on the American reception. The presentation revolves around the American streamlining and reification of certain concepts, most notably the concepts of "structure" and "function." I trace how these were introduced as technical and central terms by Felix Salzer (1952) (in possible cooperation with Hans Weisse and Adele T. Katz), further developed in elementary harmony textbooks by Allen Forte (1962) and Aldwell and Schachter (1978; 1979), how they seem to have laid the foundation for some of the North American function theories studied in Chapter 1, and how they even influenced the English translation of Der freie Satz (Schenker 1979). Finally, the Salzerian conception of function became a crucial component in Cadwallader and Gagné's (1998; 2011) influential Schenkerian textbook, and its ramifications are particularly clear in Damschroder's many books on harmony (2010; 2012; 2015; 2016; 2017), including his Schenkerian textbook (2018).

Throughout Chapter 2, the institutionalization of music theory as an independent discipline in American academia is charted. This institutionalization—which sought to justify its independence by striving for theoretical rigor and objectivity—was a factor that greatly contributed to the Americanization of Schenkerian theory, and it is the dissertation's claim that the above-mentioned reification of "structure" and "function" is to be viewed in this light. However, these aspirations were also in constant conflict with less rigorous approaches to Schenkerian theory framing tonal analysis as an art, more than a science.

PART II: COMPARISON.

Part II of the dissertation is comparative in nature and is comprised of Chapters 3–5. After critically engaging with previous comparative studies of Riemann and Schenker, new comparative perspectives on the post-Riemannian and Schenkerian traditions, theories, and analytical methods are presented.

Chapter 3 sets out by critically surveying previous comparative studies. This serves two purposes: first, it clarifies that the widespread conception of Schenkerian and function-theoretical approaches as irreconcilable opposites is based solely on comparisons of Schenker's and Riemann's own writings, while the many developments which were traced in Chapters 1–2 are almost completely neglected; second, the survey offers a way of tracing the historical development of the "antagonistic" relationship. Thus, I rethink the ground on which post-Riemannian and Schenkerian approaches to tonal music may be compared. Concludingly, some comparative reflections on the traditions *as traditions* are presented; here, the different conceptions of what music theory is at all—a part of musicology versus an independent discipline—is a central schism.

Chapter 4 has a theoretical focus. It is posited that the common ground for both theories is that they may be defined as theories of the function of harmony (and, to differing degrees, voice leading) in tonal music, while it is observed that the key concepts of this definition— "function," "harmony," "voice leading," and "tonality"—are not understood and used in identical ways across the traditions. Focusing

on each concept in turn, it is argued that in many cases, they are homonyms rather than synonyms. Furthermore, it is argued that this opens up to the possibility that the theories are not contradictory (inasmuch as they do not make different claims about the same phenomena) but possibly reconcilable (inasmuch as they make claims about separate and co-existing phenomena). I thus propose a distinction between the function-theoretical idea of "function" and the Schenkerian idea of "functionality," and I show that one and the same chord may possess both, but on different analytical levels.

The chapter also thematizes the traditions' different conceptions of tonality, and I trace the ramifications of this circumstance: it entails different conceptions of such central terms as "key," "modulation," "sequence," and it allows slightly different parts of music history to be included in the "tonal repertoire."

In the second part of the chapter, some deep-rooted differences in the theories' conception of musical temporality and cohesion are discussed. Concerning temporality, I propose that Schenkerian theory embraces a retrospective *temps espace* while function theory embraces a more temporally contingent *temps durée*—though it is underlined that both temporal attitudes interact in both theories. Concerning cohesion, it is noted that previous comparative studies have independently posited a difference between Schenkerian theory's striving for "structural coherence," and function theory's striving for "musical logic." These deeply ambiguous terms are discussed before the chapter is concluded with a summary of its implications for Part III's ambitions of mediation.

Chapter 5 compares post-Riemannian and Schenkerian analytical approaches to three works: a string quartet by Haydn, a song by Schubert, and a piano piece by Mendelssohn. The purpose is to explore the analytical consequences of the theoretical assumptions discussed and compared in Chapter 4. The three works prompt many disagreements between the post-Riemannian and Schenkerian readings: the functional identity of an emphasized augmented-sixth chord in the Haydn piece is interpreted in ways that truly seem mutually exclusive; the tonal plan of the Schubert song, with its pronounced

focus on third-related key ares, is mapped out in contrasting ways; and the Mendelssohn piece illustrates how the linear approach of Schenkerian theory produces an entirely different understanding of harmonic processes than the vertical approach of function theory does. At the end of each analysis, it is evaluated which aspects of the opposing readings must be rendered reconcilable by the analytical models proposed in Part III—in other words, what the criteria of success are.

PART III: MEDIATION.

Part III, comprised of Chapters 6–7, proposes and applies two new analytical models, representing two approaches to the merging of aspects from post-Riemannian and Schenkerian theories and analytical methods.

Chapter 6 first reflects on the project of "mediation"-what does this mean, what does it entail, and what are the risks of such an ambition? After clarifying my approach to these questions, I provide a detailed introduction to "Model 1," which I designate "multileveled function analysis." This analytical model integrates Schenkerian concepts such as prolongation and structural levels into a progressional function theory. Special attention is devoted to questions of meter, phrase, and cadence, the theorization of which are all necessary components of the transformation of function theory in a more Schenkerian light. "Model 2" integrates the idea of functional thirdrepresentation into a Schenkerian framework. In a series of examples, it is demonstrated how this interacts with conventional Schenkerian readings and ideas of prolongation, and I argue that Schenkerian theory may gain new and useful perspectives by incorporating the idea of harmonic third-relationships in addition to its conception of such relationships as the results of *contrapuntal* transformations. At the end of Chapter 6, I reflect on the historical precedents of my two models, clarifying how the many theorists and textbooks discussed in previous chapters have contributed to my construction of the models.

Chapter 7 revisits the pieces from Chapter 5 and applies the new analytical models instead. The purpose is to underline the mediatory potential of the models: in a general overview, the models ex-

plains harmonic phenomena—including the problematic passages identified in Chapter 5—as resulting from interacting voice-leading processes and harmonic-functional relationships. While the analysis of three movements can only provide limited evidence of the models' applicability, they indicate the potential and feasibility of a *via media*.

Dansk resumé

Analytiske praksisser i vestlig musikteori: En sammenligning og mediering af schenkerske og postriemannske traditioner.

Nærværende afhandling er et studie af to af de mest indflydelsesrige fagtraditioner i vestlig musikteori: post-Riemannsk funktionsteori og Schenkerteori, som dominerer i europæisk, hhv. anglo-amerikansk musikvidenskab. Begge teorier fokuserer på harmonisk funktion (og, i forskelligt omfang, stemmeføring) i tonal musik, og det musikalske repertoire, som de dækker, er derfor – mere eller mindre – det samme. Især siden teorierne blev etableret som geografisk afgrænsede traditioner i kølvandet af anden verdenskrig, har et udpræget "antagonistisk" forhold eksisteret mellem dem. De negative konsekvenser er mange: Vidensdeling mellem traditionerne hæmmes, traditionernes tilsyneladende modsatrettede påstande om de samme fænomener i den samme musik rejser fundamentale epistemologiske spørgsmål, og tidligere komparative studier har som regel til formål at krone den ene som bedre end den anden – i stedet for at undersøge om, hvordan, og i hvilket omfang de to tilgange kan belyse og berige hinanden.

Formålet med nærverende afhandling er at undersøge, kortlægge, og angive en vej hinsides de to musikteoretiske og -analytiske traditioners antagonisme. Afhandlingen er opdelt i tre hoveddele som søger at opfylde formålet ved at fremsætte 1) et grundigt historisk studie af de teoretiske traditioner siden Schenker og Riemann (med særligt fokus på det relativt uudforskede territorium som udgøres af teorihistorien *efter* anden verdenskrig); 2) en sammenligning af traditionernes teoretiske præmisser og antagelser samt analytiske praksisser; og 3) en *via media* mellem de to tilgange til tonal musik.

Det primære studieobjekt er ikke Hugo Riemanns og Heinrich Schenkers skrifter, men de teoretiske og analytiske traditioner, som de dannede grobund for. Disse tilgås gennem det heuristiske tænkeværktøj *praksisteori*, som tildeles særlig opmærksomhed i indledningen.

Her argumenteres der for at musikteori, musikanalyse og tradition er uløseligt forbundne, og at de eksisterer som kulturelle, sociale og epistemiske praksisser i professionelle og specialiserede fællesskaber, og det sammenfattes hvorledes denne praksisteoretiske orientering præger basale valg og afgrænsninger i afhandlingen.

DEL I: TRADITIONER.

Del I, bestående af kapitel 1–2, undersøger hvordan Riemanns og Schenkers teorier blev grundlagt som traditioner, hvordan disse traditioner adskiltes geografisk, og hvordan teoretiske begreber og analytiske praksisser udviklede sig fra deres respektive udgangspunkter (Riemanns og Schenkers egne skrifter) gennem senere teoretikeres adaptationer, gennem signifikante historiske begivenheder, og gennem vekslende idéer om musikteoriens epistemologiske og ontologiske grundlag i teoretikernes akademiske og samfundsmæssige kontekster.

Kapitel 1 præsenterer en kort oversigt over Riemanns egen funktionsteori før den går i detaljer med dens reception. Den tyske reception tildeles særlig opmærksomhed, og kapitlet fremhæver de betydelige forskelle mellem adaptationer af funktionsteori før og efter anden verdenskrig. Førkrigstidens teorier (Schreyer 1903; Louis and Thuille 1910 [1907]; Schmitz 1911) var bemærkelsesværdigt lineære i deres tilgang – og åbenlyst tættere på schenkerske idéer om prolongation og strukturelle hierarkier - men enhver direkte indflydelse, som disse må have haft, blev bremset; i det store hele som følge af det nye epistemologiske og ontologiske grundlag for musikteori, som fulgte i kølvandet på anden verdenskrig og den nationalsocialistiske ideologi. De mere "vertikale" teorier fra efterkrigstiden var særdeles indflydelsesrige, især de typer af funktionsteori, som jeg betegner toneartsrelationel og, relateret til denne type, tonekønsrelationel funktionsteori. Disse blev først og fremmest forkyndt og udbredt af Hermann Grabner (1923; 1944), Wilhelm Maler (1975 [1931]) og Diether de la Motte (1976).

Andre europæiske adaptationer af funktionsteori var også under indflydelse af Grabner, Maler og de la Motte, men lokale varianter udvikledes. Et særligt fokus på de skandinaviske funktionsteorier illustrerer alternative opfattelser af funktionelle relationer, hvilke jeg

betegner som *interval-relationelle* (dominerende i Norge) og *progressionelle* (dominerende i Danmark) funktionsteorier, samt en undertype af sidstnævnte, *processuel* funktionsteori (adapteret fra Rasmussen 2011; Sverige indførte de tyske tonearts- og tonekønsrelationalle teorier).

I et afsnit om nordamerikanske adaptationer af funktionsteori, argumenteres der for, at selvom disse i nogen grad trækker på Riemanns udlægning af "funktion", så er de grundlæggende påvirket af doktriner fra schenkerteori, især i den af Schenkers student Felix Salzer udviklede form. Man kan derfor stille spørgsmålstegn ved, om nordamerikanske funktionsteorier kan anskues som værende en del af, eller som værende relateret til, de andre (europæiske) postriemannske teorier og traditioner.

På trods af de mange varianter af post-riemannsk funktionsteori må deres fællestræk siges at være den doktrin, at tonal musik består af tre funktioner, og at biakkorder repræsenterer disse funktioner i kraft af deres terts-relation – de forskellige opfattelser af *beskaffenheden* af disse terts-relationer er netop det, som har resulteret i forskellige typer af funktionsteori.

Kapitel 2 fokuserer på schenkerteoriens historie. Efter en skitsering af Schenkers teori, samt dens begrænsede, men ofte oversete, indflydelse i europæisk musikteori både før og efter anden verdenskrig - og efter også at have bemærket den nylige, men stadigt begrænsede, mulige tilbagevenden af schenkerteori i europæisk musikteori fokuserer hoveddelen af kapitlet på den amerikanske reception. Fremstillingen er centreret omkring den amerikanske strømlining og reificering af visse begreber, af hvilke de mest påfaldende er begreberne "struktur" og "funktion". Jeg opsporer hvorledes disse blev introduceret som tekniske og centrale termer af Felix Salzer (1952) (i et muligt samarbejde med Hans Weisse og Adele T. Katz), hvorledes de blev videreudviklet i elementære harmonilærebøger af Allen Forte (1962) samt Aldwell og Schachter (1978; 1979), hvordan de synes at have dannet grobund for de amerikanske funktionsteorier, som blev studeret i kapitel 1, og hvordan de endda påvirkede den engelske oversættelse af Der freie Satz (Schenker 1979). Endelig blev den salzerske opfattelse af "funktion" en essentiel del af Cadwallader og

Gagnés (1998; 2011) indflydelsesrige schenkerlærebog, og følgerne af denne funktionsopfattelse er særligt tydelige i Damschroders mange bøger om harmonik (2010; 2012; 2015; 2016; 2017) inklusive hans lærebog om schenkerteori (2018).

Gennem hele kapitel 2 kortlægges desuden institutionaliseringen af musikteori som selvstændig disciplin i amerikansk musikforskning. Denne institutionalisering – som i en stræben efter teoretisk stringens og objektivitet søgte at legitimere fagets selvstændighed – var en omstændighed som i høj grad bidrog til amerikaniseringen af schenkerteori, og det er afhandlingens påstand at den ovennævnte reificering af "struktur" og "funktion" skal ses i dette lys. Imidlertid var denne stræben også i bestandig konflikt med en mindre stringent tilgang til schenkerteori; en tilgang som opfatter tonal analyse mere som kunst end som en videnskab.

DEL II: SAMMENLIGNING.

Del II af afhandlingen er komparativ og udgøres af kapitel 3–5. Efter en kritisk diskussion af tidligere komparative studier af Riemann og Schenker præsenteres nye komparative perspektiver på de postriemannske og schenkerske traditioner, teorier og analysemetoder.

Kapitel 3 lægger ud med en kritisk undersøgelse af tidligere komparative studier. Dette tjener to formål: For det første klargøres det, at den udbredte opfattelse af schenkerske og funktionsteoretiske tilgange som værende uforenelige modsætninger alene er baseret på sammenligninger af Schenkers og Riemanns egne skrifter, mens de mange teoretiske og analytiske videreudviklinger som blev kortlagt i kapitel 1–2 næsten totalt forbigås. For det andet tilbyder undersøgelsen en metode hvormed den historiske udvilking af det "antagonistiske" forhold kan følges. Således gentænkes grundlaget på hvilket de post-riemannske og schenkerske tilgange til tonal musik kan sammenlignes. Slutteligt fremlægges komparative begtragtninger over traditionerne *som traditioner*; her er de forskellige opfattelser af hvad musikteori overhovedet er – en del af musikvidenskab kontra en selvstændig disciplin – et centralt skisma.

Kapitel 4 har et teoretisk fokus. Det fremsættes at teoriernes fællestræk er, at de kan defineres som teorier om harmonisk funktion

(og, i forskellig grad, stemmeføring) i tonal musik, mens det dog pointeres at hovedbegreberne i denne definition – "funktion", "harmonik", "stemmeføring" og "tonalitet" – ikke bliver opfattet og brugt ens på tværs af traditionerne. Ved at fokusere på begreberne en ad gangen argumenteres der for, at begreberne i mange tilfælde er homonymer i stedet for synonymer. Endvidere argumenteres der for, at dette åbner op for den mulighed, at teorierne ikke er modstridende (eftersom de ikke fremsætter forskellige påstande om de samme fænomener), men muligvis forenelige (eftersom de fremsætter påstande om separate, og sameksisterende fænomener). Således foreslår jeg, at der skelnes mellem den funktionsteoriske idé om "funktion" og den schenkerske ide om "funktionalitet", og jeg viser at den samme akkord kan besidde begge egenskaber, men på forskellige analytiske niveauer.

Kapitlet tematiserer også traditionernes forskellige opfattelser af tonalitet, og jeg aftegner følgerne af dette forhold: Det indebærer forskellige opfattelser af så centrale termer som "toneart", "modulation", "sekvens", og det betyder at uens udsnit af musikhistorien inkluderes i det "tonale repertoire".

I kapitlets anden hoveddel diskuteres fundamentale forskelle i teoriernes opfattelse af musikalsk temporalitet og "sammenhæng". Vedrørende temporalitet fremsættes den påstand, at schenkerteori arbejder med et retrospektivt *temps espace* mens funktionsteori arbejder med et mere temporalt afhængigt *temps durée* – mens det dog understreges at begge temporale attituder interagerer i begge teorier. Angående "sammenhæng" noteres det, at tidligere komparative studier uafhængigt af hinanden har påpeget en forskel mellem schenkerteoriens stræben efter at påvise "strukturel kohærens" og funktionsteoriens stræben efter at påvise "musikalsk logik" i værker. Disse dybt uklare begreber diskuteres før kapitlet afsluttes med en opsummering af dets implikationer for Del 3's ambitioner om en mediering.

Kapitel 5 sammenligner post-riemannske og schenkerske analytiske tilgange til tre værker: En strygekvartet af Haydn, en *Lied* af Schubert, og et klaverværk af Mendelssohn. Formålet er at undersøge de analytiske konsekvenser af de teoretiske antagelser, som blev diskuteret og sammenlignet i kapitel 4. De tre værker giver anledning til

mange uenigheder mellem de post-riemannske og schenkerske analyser: funktionen af en særligt fremhævet forstørret sekstakkord i Haydn-værket fortolkes på måder, som virkeligt synes at være gensidigt udelukkende; det tonale plan i Schubert *Lied*'en, med dens udtalte fokus på tertsrelaterede tonearter, bliver kortlagt på kontrasterende måder; og Mendelssohn-værket illustrerer hvordan schenkerteoriens lineære perspektiv afstedkommer en aldeles anderledes forståelse af harmoniske processer end funktionsteoriens vertikale perspektiv gør. Mod slutningen af hver af de tre analyser evalueres det, hvilke aspekter af de modstridende læsninger, som må gøres forenelige i de analytiske modeller, som foreslås i Del III – med andre ord, hvad succeskriterierne er.

DEL III: MEDIERING.

Del III, som udgøres af kapitel 6–7, foreslår og applicerer to nye analysemodeller, som repræsenterer to måder at fusionere aspekter fra post-riemannske og schenkerske teorier og analysemetoder.

Kapitel 6 reflekterer først over ambitionen at "mediere" - hvad betyder dette, hvad indebærer det, og hvad er risiciene ved denne ambition? Efter at have klargjort min tilgang til disse spørgsmål gives en detaljeret indføring i "Model 1", som jeg betegner "flerplanet funktionsanalyse" (multileveled function analysis). Denne analysemodel integrerer schenkerske begreber såsom prolongation og strukturelle niveauer i en progressionel funktionsteori. Særlig opmærksomhed rettes mod metrik, fraser og kadencer, eftersom en grundig teoretisering af disse begreber er nødvendige komponenter i en transformation af funktionsteori i et mere schenkerteoretisk lys. "Model 2" integrerer idéen om funktionel tertsrepræsentation i en schenkerteoretisk ramme. I en serie eksempler demonstreres det, hvordan denne idé interagerer med konventionelle schenkeranalyser samt prolongationsbegrebet, og jeg argumenterer for at schenkerteori kan opnå nye og brugbare perspektiver ved at inkorporere idéen om harmoniske tertsrelationer som en tilføjelse til dens opfattelse af sådanne relationer som værende resultatet af kontrapunktiske transformationer. Mod slutningen af kapitel 6 gør jeg nogle betragtninger over de historiske forgængere for mine modeller, hvormed det altså klargøres hvorledes

de mange teoretikere og lærebøger, som har været diskuteret i de foregående kapitler, har bidraget til min konstruktion af modellerne.

Kapitel 7 vender tilbage til værkerne fra kapitel 5 og applicerer de nye analysemodeller i stedet. Formålet er at understrege det medierende potentiale i de to modeller: Overordnet set forklarer modellerne harmoniske fænomener – inklusiv de problematiske passager, som blev identificeret i kapitel 5 – som værende resultatet af interagerende stemmeføringsprocesser og harmonisk-funktionelle forhold. Mens analyserne af tre satser kun kan tilvejebringe begrænset bevis for modellernes anvendelighed, så indikerer de ikke desto mindre potentialet i og gennemførligheden af en *via media*.

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Appendix 1: Symbols and terms in historical sources

This appendix gives an overview of symbols and terms in (first) historical function theories and (second) Schenkerian theory (starting from page 519). The lists are structured alphabetically and are not necessarily comprehensive.

Because it is a main point in the dissertation that one and the same word may be used in many different meanings, the following list does not necessarily cover all meanings of each concept. The list gives a good indication of some common uses of the terms, but they should ideally always be viewed in context.

FUNCTION THEORY

- () (see *parentheses*).
- [] (see *parentheses*).
- + = suffix or prefix indicating that the function in question is major.
- [°] = prefix indicating that the function in question is minor.
- <, >, (see *Leittonwechsel*).
- / or (see *incomplete function*).
- 3, 5, or 13, 15, etc. (see *subscripted numbers*).
- ⁷, ⁶, ^{b9}, etc (see *superscripted numbers*).

af, afledning [derivation] (used in progressional theories exclusively).

Functional suffix signifying the functional relation between a main function and its diatonic submediant when appearing in direct succession. The relation between C major and A minor may be described as T–Taf when they appear in direct succession, such that A minor does not appear as a local tonic in the *Parallel* key or as the goal of a deceptive cadence (or in other contexts). The relation between C minor and A^b major may be described as T–Taf under the same circumstances. (See also "a" for *Ableitung* in Appendix 2).

Auffassungsdissonanz.

Louis and Thuille's term for the phenomenon in which a chord appears to be consonant, inasmuch as it consists of only consonant notes, but is nonetheless perceived as a dissonance in its tonal context—that is, any chord but the I, V, and IV which exerts tonic, dominant, and subdominant function. See also *Scheinkonsonanz*.

D; or **D/d** = **dominant**; or major dominant and minor dominant, respectively.

Symbol for the dominant function. In mode-relational theories, uppercase letters designate a major tonic, lowercase a minor tonic. The minor dominant is viewed as problematical by many function theorists, but is nonetheless seen in certain contexts.

d (as functional suffix).

Functional suffix signifying that a main function takes the character of a secondary dominant. For instance, Td signifies the same as (D)^s, but interprets the chord as still carrying, or as growing out of, tonic function.

dualism, dualistic.

Dualism, or harmonic dualism, denotes Hugo Riemann's theory that major chords are generated from the root and upwards, and minor chords are generated from their "fifth" (i.e. dual root) and downwards. Thus, a C major chord consists of the intervals major third + minor third (C–E–G) while A minor consists of the same sequence of intervals extending doewnwards, major third + minor third (E–C–A). These two chords share the same major third (C–E) and their *Parallel* relationship is explained on this basis. A major chord's leading tone is below the root; a minor chord's leading tone is above its "dual root." This is the mechanism behind Riemann's *Leittonwechsel* (see *Leittonwechsel*). Riemann claimed that the major chord originated in the overtone series, while the minor chord originated in an undertone series extending from the "dual root" and downwards in the same sequence of intervals as the overtone series.

figured bass numbers.

Figured bass numbers are rarely used in function theory; but they are often seen in $\frac{6}{4}$ and $\frac{5}{4}$ suspensions (most often above the dominant).

functional suffix.

Term used in this dissertation to designate any function symbol which may appear as the suffix of a main function, i.e. the "p" in "Tp."

g, Gegenparallel.

Functional suffix signifying the functional relation equivalent to that between C major and E minor; and between C minor and A^{\flat} major. Monistic alternative to Riemann's *Leittonwechsel*, only used in key-relational and mode-relational theories. Swedish theories use "k" for "*kontraparallell*," but the meaning is the same. In mode-relational function theories, lowercase g indicates a minor function, uppercase a major function.

g, gennemgangsakkord [passing chord] (progressional theories exclusively).

Functional suffix only used in Danish progressional theories, which signifies that a secondary function appears as a passing

chord between two other harmonies. For instance, C–Em–F is T–Tg–S; the B in E minor appears as a passing tone between C major's C, and F major's A.

harmonic dualism (see dualism, dualistic).

Incomplete function.

Function in which a note is implied, but not literally present. Signified by crossing over the function letter with / or —. Most frequent is the incomplete dominant, B–D–F (in C major/minor), in which the root G is implied. The incomplete sub-dominant in C major is F–A–D; in other words, a subdominant with added sixth and omitted fifth.

Italics (progressional theories exclusively).

In progressional function theories, any function symbol (even if it is a compound one) may be set in italics to indicate that it enters in a deceptive manner. See *st*, *stedfortræder* [*substitution*].

k, kontraparallel (see g, Gegenparallel).

Leittonwechsel.

Modification of a main function implying that its dualistic root is exchanged for its dualistic leading tone. In C major, E minor is the tonic *Leittonwechsel*; in C minor A^{\flat} major is the tonic *Leittonwechsel*.

main functions.

T (tonic), D (dominant), and S (subdominant).

monism, monistic.

Conceived as an alternative to dualism (see *dualism*, *dualistic*). Regards both major and minor chords as extending from the root and upward and denies the existence of an undertone series—as in most contemporary music theory. **n**, Neapolitan; or neapolitanization (in progressional/processual theories exclusively).

Functional suffix reserved for Sn, the Neapolitan subdominant, in most function theories. In progressional/processual theories, n may be suffixed to any function to indicate a similar relation as that between S and Sn. Thus C-A^b may be analyzed as T-Tn. The neapolitanized chord need not be in first inversion (but often is). Occasionally, "nn" is seen in the meaning "double neapolitanization," thus indicating the relation between C major and E major (or F^b major). This indicates that C major is first neapolitanized to A^b (C-E-G \rightarrow C-E^b-A^b) and that A^b is then neapolitanized to F^b major (A^b-C-E^b \rightarrow A^b-C^b-F^b), enharmonically equivalent to E major.

Neapolitanization (see *n*, *Neapolitan*).

Nebenharmonien (see secondary functions).

nn, double neapolitanization (see *n*, *Neapolitan*).

p, Parallel.

Functional suffix signifying the functional relation equivalent to that between C major and A minor; and vice versa. Equivalent to the English term "relative." Progressional and intervalrelational function theories often reserve the term for relations between keys, or use it as a harmonic function when the *Parallel* key has been implied. In mode-relational function theories, lowercase p indicates a minor function, uppercase a major function.

Parentheses.

Function symbols enclosed in parentheses designate that they have a secondary subdominant or dominant functional relationship to the function that follows directly after the parenthesized function or functions, or the function that is indicated in superscript; $(D)^{s}$ is the secondary dominant of the subdominant.

Functions enclosed in square brackets indicate non-realized or implied goals. For instance $(D)^{[T_p]}$ indicates that a chord functions as the secondary dominant of the tonic *Parallel*, but that the function does not actually progress to the tonic *Parallel*.

S; or S/s = subdominant; or major subdominant and minor subdominant, respectively.

Symbol subdominant function. In mode-relational theories, uppercase letters designate a major subdominant, lowercase a minor subdominant.

s, submediant (used in interval-relational theories exclusively).

Functional suffix signifying the functional relation between a main function and its diatonic submediant. The relation between C major and A minor may be described as T–Ts when A minor does not appear as a local tonic in the *Parallel* key. The relation between C minor and A^{\flat} major may be described as T–Ts when the A^{\flat} major does not appear as Sp (that is, when it does not appear as related primarily to the *Parallel* key).

Scheinharmonie.

Johannes Schreyer's term for a sonority which appears to be a harmonic entity, but which is in fact a product of voice leading.

Scheinkonsonanz.

A chord which sounds consonant, but which is really dissonant in its tonal context; i.e. any chord but T, D, and S in Riemann's function theory.

secondary functions.

Functions which are third-related to the main functions; i.e. functions with a suffix.

Square brackets (see *parentheses*).

st, stedfortræder [substitution].

Functional suffix signifying the functional relation between a function and its diatonic submediant, when the submediant enters as the conclusion to a deceptive progression, that is with ascending stepwise root motion. An A minor may serve as Tst in the key of C major when it enters after the dominant, D. An A^{b} major may serve as Tst in the key of C minor under the same conditions. Any function, also compound ones with several suffixes, may in theory be introduced in a deceptive manner after a (secondary) dominant. Thus, Tpst designates the substitution of the tonic *Parallel*, when the latter has been targeted by a secondary dominant. An alternative to the suffix, st, is to put the function symbol in italics or to "tilt" the function symbol.

Subscripted numbers.

Subscripted numbers denote that tone of the chord in question which appears in the bass (third, fifth, seventh, etc.).

Superscripted numbers.

Superscripted numbers denote chordal extensions such as seventh chords, added-sixth chords, chords with added lowered ninth, and so on. Occasionally, they appear as figured bass numbers (see *figured bass numbers*).

- T; or T/t = tonic; or major tonic and minor tonic, respectively. Symbol for the tonic function. In mode-relational theories, uppercase letters designate a major tonic, lowercase a minor tonic.
- t, terzverwandt (Grabner 1923 exclusively).

Functional suffix signifying any functional third-relation (whether diatonic or chromatic).

v, Variante.

Functional suffix signifying the functional relation between the major and minor versions of a chord. It thus designates a rela-

tion equivalent to the English term "parallel," namely that between for instance C major and C minor.

v, vermindert.

Sometimes used for the diminished chords of a scale (for instance in Motte 1976). For instance, diminished chord on a major scale's seventh step is D^{V} .

SCHENKERIAN THEORY³⁹³



- $\hat{5}$, $\hat{4}$, $\hat{3}$, etc. (see *careted numbers*).
- I, IV, V, etc. (see Roman numerals).
- 5, 6, 10, etc. (see Arabic numerals).
- 5-6 shift.

Contrapuntal transformation in which a chord's fifth moves up a step. The resulting minor chord may appear in root position in the foreground.

³⁹³ For good introductions to graphic notation and core concepts in Schenkerian theory, I advice the reader to consult Cadwallader and Gagné (2011 [1998], 384–402) and Wen (2019, 359–361).

Arabic numerals.

Arabic numerals are used for different purposes in graphic notation. Placed between the staves, the numerals refer to a linear intervallic pattern (see *linear intervallic pattern*), or may be employed to highlight consecutive fifths; in short, they denote the intervallic relation between (typically outer) voices. Arabic numerals may also appear in figured bass notation (see *figured bass notation*).

Auskomponierung (see composing-out).

Background.

The deepest structural level (see structural levels).

Back-relating dominant.

Dominant of relatively deep (often middleground) structural significance, which represents the upper fifth of the tonic, rather than a true structural dominant; it therefore does not lead to the tonic, but relates backward as a prolongation of the preceding tonic. Also known as *dividing dominant*, *Quintteiler*, and *Oberquintteiler*.

Bass arpeggiation (see *Bassbrechung*).

Bassbrechung.

The *Bassbrechung* is the bass voice of the *Ursatz*. It begins on I, leads to V, and ends on the I which supports $\hat{1}$ of the *Urlinie*. The space between the initial I and V may be filled out by a predominant or intermediate harmony.

Beams.

In graphic notation, beams denote the same thing as slurs: that tones belong together in one harmonic entity. Depending on practice and context, beamed notes often imply a deeper structural significance than slurred notes. Most notably, the tones of the *Ursatz* are beamed together. Notes of an unfolding (see *un-folding*) are often connected with a diagonal beam.

Careted numbers.

Careted numbers signify a scale degree tone. $\hat{5}$ = the tone on the fifth scale degree. In Schenkerian analysis, careted numbers are often (but not exclusively) used to show the descending scale degrees of the *Ursatz*.

Composing-out (Auskomponierung).

Denotes the linear horizontalization of a single vertical interval or chord, a process by which the sonority is extended in time.

Consonant support.

Consonant support refers to the process by which a dissonant passing tone or neighboring note achieves a harmonic support so as to render it consonant at shallower levels. This means that the passing tone may appear consonant at shallower levels, but it remains dissonant at deeper levels. In a 3-2-1 *Urlinie*, the 2 is a passing tone between 3 and 1, but it receives consonant support by the *Bassbrechung*'s V.

Contrapuntal function.

A chord can be said to serve a contrapuntal function when it does not originate from a harmonic relation, but rather as the by-product of voice-leading between harmonic functions (see *Stufe, Stufen*).

Depth, deep vs. shallow (see also structural significance).

A "deep" harmony (or another musical entity) is one that serves a function in the (deep) middleground or background. Depth is synonymous with structural significance and is thus a relative concept.

Diagonal lines.

In graphic notation, diagonal lines connect or realign rhythmically displaced notes which belong the the same structural sonority.

Dividing dominant (see back-relating dominant).

Dotted slur (or broken tie).

A dotted slur (or broken tie) is often used to signify the connection of a tone and its repetition at a later time or in another register, and it implies that the tone is prolonged for the duration of the slur. A dotted slur may also connect chromatic variants of the same tone, thus indicating their mutual diatonic origin, or it may connect enharmonic equivalents.

Eighth note (see *flagged notes*).

Figured bass notation.

In graphic notation, Roman numerals are often accompanied by traditional figured bass notation to indicate inversions etc.

Flagged notes.

Though practice varies here, a flagged note most often signifies that the note has a neighboring function. Flagged bass notes may signify a predominant function.

Foreground.

The shallowest structural level, close to the surface. See *struc-tural levels*.

Fundamental structure (see Ursatz).

Harmonic function (see *Stufe*, *Stufen*).

Hidden motivic repetition (see *multileveled motvic repetition*).

Imaginary continuo.

Reduction of the score which takes the form of a bass with accompaniment. Often used as an analytical tool for middleground reductions.

Initial arpeggiation (see *initial ascent*).

Initial ascent (Anstieg).

A stepwise ascending linear progression extending from a movement's beginning to the onset of the *Urlinie*'s *Kopfton*. It may result in a rhythmical displacement between the onset of the *Urlinie* and the onset of the *Bassbrechung*, normalized at deeper levels. An initial arpeggiation (such as $\hat{1}-\hat{3}-\hat{5}$) to the *Kopfton* is also possible.

Intermediate/intermediary harmony.

Structural harmony or *Stufe* which appears between the initial tonic and the structural dominant. It may appear in the form of a predominant (see *predominant*), but is a broader term which also includes III (in different versions) and I⁶.

Interruption (Unterbrechung).

Interruption denotes a frequent phenomenon in which the *Ur*satz is interrupted when the *Urlinie* reaches scale-degree 2, supported by the *Bassbrechung*'s V. After an interruption, the *Ur*satz usually resumes from the beginning and is completed without further interruption.

Kopfton.

In widespread Schenkerian terminology, the *Kopfton* designates the first tone of the *Urlinie*, i.e. $\hat{3}$, $\hat{5}$, or (rarely) $\hat{8}$. However, Schenker uses *Kopfton* to refer to the first tone of any linear progression, ascending or descending (see footnote 127, page 120). In this dissertation, I adhere to the former, widespread practice.

Linear intervallic pattern (LIP).

A specific interval or a pair of intervals in alternation is retained in stepwise ascending or descending motion in two (often outer) voices. It is signified by consecutive numbers between the staves in the graphic analysis: 10-10-10 signifies consecutive tenths, 10-7-10-7-10 signifies alternating tenths and sevenths (to take but two examples). In practice, a LIP often coincides with a sequence, but a LIP may appear without a literal sequence. The sonorities resulting from a LIP serve a contrapuntal rather than harmonic function.

Linear progression (Zug).

A linear progression is a stepwise composing-out (see *composing-out*) of a harmonic interval. Its beginning and end points therefore belong to a single harmony and are connected by passing note(s).

Middleground.

The middle structural levels (the others being background and foreground). The concept is relative, and one may conceive of many middleground levels of deeper or shallower significance. See *structural levels*.

Mixture (Mischung).

Mixture is when a piece in a major key borrows scale degree $\hat{3}$, $\hat{6}$, or $\hat{7}$ from the minor mode—or vice versa. Schenker also regards $\stackrel{\flat}{2}$, the "Phrygian $\hat{2}$," as a type of mixture.

Motion from an inner voice (Untergreifen).

Denotes a situation in which one "real" voice of the composition moves from a structurally shallower conceptual inner voice, to a structurally significant conceptual outer voice.

Multileveled motivic repetition.

A multileveled motivic repetition is when a motive appears in two or more structural levels. If the first tone of the motive marks its beginning on two structural levels at once, one speaks of nesting (the shallower motive is nested within a deeper one).

Neighbor tone, neighboring tone, neighbor note.

A tone may be prolonged by moving to its neighbor tone (and back). The neighbor tone is then the structurally shallower tone appearing one step above or below the prolonged tone. If one or more tones of a chord moves to its/their neighbor, another chordal sonority may be the result; because of the neighboring motion, it is explained as a shallower contrapuntal by-product rather than a functional harmony. In graphic notation, a neighbor tone is sometimes signified by a flagged stem, or by an "N," or simply by being the middle note between notes connected by a dotted slur (see *dotted slur*). Incomplete neighbors do not return to their expected starting point and may be marked "IN." An incomplete neighbor may also precede the main tone, as in an appoggiatura.

Nesting (see *multileveled motivic repetition*).

Noteheads.

Open noteheads imply a deep structural significance, and they are often reserved for members of the *Ursatz*, sometimes including the structural predominant. Filled-in noteheads imply a shallower structural significance.

Oberquintteiler (see back-relating dominant).

Passing tone, passing chord, passing function.

A tone or chord which appears in the middle of a stepwise passing motion between two structurally more significant tones or chords is a passing tone or passing chord; it is said to have a passing function. See also *contrapuntal function*.

Predominant.

Structural harmony or *Stufe* which appears before the structural dominant, often as a shallower neighbor harmony. Most often appears as II, IV, VI or as inversions of these. III or I⁶ are more often included under the term *intermediate harmony* (see *intermediate/intermediary harmony*).

Prolongation.

Prolongation refers to the linear extension of a chord (normally a triad) or a single tone. For Schenker, it also meant the transfer of contrapuntal rules from one species to the next, and eventually to the free composition.

Quintteiler (see back-relating dominant).

Reaching-over.

Denotes a situation in which an inner voice in a descending motion (usually moving by step) is superposed above the structural upper voice.

Registral transfer.

A registral transfer is when a voice is displaced upwards (*Höherlegung*) or downwards (*Tieferlegung*) compared to its expected register.

Roman numerals.

Roman numerals signify harmonies. They clarify the degree of the scale on which they are rooted, and they often clarify extensions and alterations with figured bass notation (sevenths, inversions, change of mode, etc.). Roman numerals are usually reserved for *Stufen*, meaning that they signify chords with harmonic functionality rather than each and every chord. Slurs (or ties). See also dotted slurs.

In graphic notation, a slur denotes the same thing a beam: it ties together notes to signify that they belong to one composed-out sonority. For instance, slurs are used to signify a linear progression, and the starting point and end point of the slur must therefore belong to a meaningful harmonic interval.

Stems.

Stems are used in graphic notation to communicate relative structural importance. Depending on one's practice, a longer stem implies a deeper structural significance, and noteheads without stem imply a shallow structural significance.

Structural levels (Schichten).

There are three primary structural levels (foreground, middleground, and background), but they are relative in nature, and one may conceive of many more or less detailed middleground levels. The deepest levels, identical with or close to the background, influence all shallower levels. A chord may exert a harmonic function at one level, and a contrapuntal function on another.

Structural significance (see also *depth*).

A structurally significant harmony (or another musical entity) is one that serves a function at the structural level in question. It is a relative concept: what may have a structural significance in the shallow (see *depth*) foreground may appear as a passing chord in the deeper middleground. An entity with deepest structural significance, such as the inititating tonic, exerts its function on all structural levels.

Stufe, Stufen.

Abstract concept which determines that a specific chord appears with relative structural significance and harmonic function at a specific structural level. A chord may appear as a *Stufe* at one level, but serve a contrapuntal function (see *contrapuntal func*-

tion) at a deeper level. The initial I, the structural V, and the final I are the fundamental *Stufen* of the *Ursatz* (see *Ursatz*); but in between these points, other *Stufen* of relative significance may be inserted.

Surface.

Structural level equal to or very close to the composition as written.

Swan slur.

The so-called swan slur denotes the first of two intersecting slurs (but because the first slur never appears without the second, the swan slur is, in practice, a pair of slurs): the first slur shows the primary movement from tonic to dominant; and the second, intersecting slur shows the subordinate motion from predominant to dominant.

Ties (see *slurs*).

Übergreifen (see reaching-over).

Unfolding (Ausfaltung).

Unfolding refers to the horizontal composing-out of an interval which moves from the outer to an inner voice, or vice versa. Unfoldings are often signified by a diagonal beam.

Untergreifen (see motion from inner voice).

Urlinie.

The upper voice of the *Ursatz*. As a rule, an *Urlinie* descends by step from $\hat{3}$, $\hat{5}$, or (more rarely) $\hat{8}$. It may be interrupted at scale degree $\hat{2}$ (see *interruption*).

Ursatz.

The *Ursatz* is the temporal expansion of the tonic chord, and the most fundamental organizing framework of a composition. It is made up of the *Urlinie* and a *Bassbrechung*.

Voice exchange (Stimmentausch).

Voice exchange is when two conceptual voices exchange tones. This may happen over the course of short or long time, and it serves as a means of prolongation. For instance, the upper voice may first have the tone E as $\hat{3}$ in C major, while the bass voice has C as $\hat{1}$; this may be exchanged for $\hat{1}$ in the upper voice and $\hat{3}$ in the bass voice. These two outer points are often connected by passing tones.

Wobble, wobbly note.

David Damschroder's term for a tone which is chromatically altered and then "diatonicized" again.

Zug (see linear progression).

Appendix 2: Symbols and terms in Model 1 and Model 2

Because Model 1 and Model 2 are built on existing analytical practices, Appendix 1 already explains many of their details. The below alphabetical list gives an overview of some of the new symbols and terms in the models.

Preceding the list, a table provides a general overview of the functiontheoretical basis. I have constructed it on the basis of progressional function theory, but it adopts the *Gegenparallel* as a term reserved for instances in which III in major keys or VI in minor keys are tonicized. I also adopt aspects of interval-relational function theory inasmuch as the intervallic direction of the relevant relation is signified by a subscripted or superscripted functional suffix. The two tables are nearly identical *except* for the lower rows where the position of the *Parallel* and *Gegenparallel* switches places; this does not entail harmonic dualism because these concepts regard key relations. Some of the tables' progressions and functions are hypothetical and theoretical in nature, and will rarely be relevant in the literature. I do not show pvand vp-relations in the tables.

Context determines whether I–VI in minor keys is to be analyzed as T–Ta or T–Tn; if the latter appears in first inversion, or if neapolitanizations play a significant role in the piece, Tn may be the better interpretation.

The functional relations formalized in the tables take the tonic as their reference point, but they may also be extended to the dominant and subdominant.

MAJOR KEYS

EFFECT VEND SCALE DEGREE	VI	III
EXTENDING (ABLEITUNG)	I–VI = T–Ta	$I-III = T-T^a$
EXTENDING (NEAPOLITANIZATION)	$I-^{\flat}VI = T-Tn$	I–III [#] = T–Tnn
DECEPTIVE (SUBSTITUTION)	V–VI = D–Ts	$V-III = D-T^s$
MODULATING/TONICIZING (Parallel/Gegenparallel)	$III^{\sharp}-VI = (D)-Tp$	VII [#] –III = (D)–Tg

MINOR KEYS

$_{\rm EFFECT}$ \setminus End scale degree	VI	III
EXTENDING (ABLEITUNG)	I–VI = T–Ta	$I-III = T-T^{a}$
EXTENDING (NEAPOLITANIZATION)	I–VI = T–Tn	I - #IIII # = T - Tnn
DECEPTIVE (SUBSTITUTION)	V–VI = D–Ts	$V-III = D-T^s$
MODULATING/TONICIZING	$III^{\sharp}-VI = (D)-Tg$	$^{(\flat)}$ VII [#] –III = (D)–Tp
(Parallel / Gegenparallel)		

• (filled-in dot).

In analytical notation, a filled-in dot denotes the return of the prime form of a Phrase function after it has been prolonged (and thus not literally present) in the music. The dots serve as visual aids according to which the reader may orient herself to quickly grasp overall tonal motions.

° (open dot).

In analytical notation, an open dot denotes a thirdrepresentation of the prolonged Phrase function. Like filled-in dots, they serve as visual aids, indicating the primary tonal motions between the phrase function and its (temporary) goal at the third-representation; but they are subordinate to larger tonal motions between two prime forms (filled-in dots) of the same phrase function. I (see *phrase function*).

II (see *phrase function*).

and – – – – (see *prolongational line*).

 \Rightarrow (becomes).

Symbol adopted from Schmalfeldt (2011) denoting that a function may have one function at its introduction, and another for its continuation. Both functions are valid and represent interpretations at different temporal points.

/3.

In analytical notation, /3 signifies a structurally significant tonic in first inversion (that is, with the third in the bass).

a, Ableitung (and upper Ableitung).

Functional suffix. *Ableitung* means "derivation" and is a German translation of the orignally Danish term *afledning*. The *Ableitung* serves to extend a main function by diatonic third-representation in contexts shown in the above table. I propose both a lower *Ableitung*, the most common, and an upper one. See also *a*, *afledning* in Appendix 1, function theory.

b, back-relating dominant.

Symbol used to show prolongational effect (see *back-relating dominant* in Appendix 1, Schenkerian theory).

c, common-tone diminished seventh chord.

Functional suffix indicating that some tones of a diminished seventh chord function as appoggiaturas to the function represented by the main function label to which it is suffixed, while other tones are common-tones with the represented function. For instance, T_C in E major can be $A^{\#o}$, in which $A^{\#}$ is expected to resolve to B; $C^{\#}$ is also expected to resolve to B; E is a com-

mon-tone with the tonic; and G^{\ddagger} functions as F*, expected to resolve to G^{\ddagger} . A T_c is seen in Example 133 (page 410). See also footnote 331 (page 317).

Cadence (see phrase function).

Formal cadence.

A formal cadence is a cadence which ends a phrase, and which thus coincides with the termination of a phrase function cycle.

Harmonic function.

Multileveled function analysis retains the idea of conventional function analysis that any chord represents the tonic, subdominant, or dominant—but it adds that chords might simultaneously serve a phrase function (see *phrase function*) or prolongational effect (see *prolongational effect*).

n, Neapolitan chord or neapolitanization (see *n*, *Neapolitan* in Appendix 1, function theory).

n, neighboring chord (notated below prolongational line).

Denotes that the prolongational effect of a harmonic function is that of a neighboring chord, because it is the by-product of neighboring motion in one or more voices of a prolonged phrase function. See *passing chord* in Appendix 1, Schenkerian theory.

p, Parallel (see Parallel in Appendix 1, function theory).

p, passing chord (notated below prolongational line).

Denotes that the prolongational effect of a harmonic function is that of a passing chord, because it originates in linear passing motion. See *passing chord* in Appendix 1, Schenkerian theory.

Phrase function and cadence.

In addition to conventional harmonic functions, multileveled function analysis proposes that a chord may serve a *phrase function*. A complete phrase function cycle is Tonic, Predominant, Dominant, Tonic, or T–PD–D–T. The Predominant is not always present. In analytical notation, a complete cycle may be marked by a double vertical line: II. An incomplete phrase function cycle ends with a half cadence: T–(PD)–D, and may be marked by a single vertical line: I. An imperfect authentic cadence (IAC) may be signified by (II). An evaded cadence (EC) may be signified by [II].

Predominant (phrase function).

The Predominant is a phrase function which may be represented by different harmonic functions such as S, S, DD, and more.

Prolongational cadence.

A prolongational cadence is a cadential figure which does not end a phrase; i.e., it is subordinate to a larger cycle of phrase functions. It may coincide with its beginning but not its ending. It often appears as a cadential progression above a stationary pedal point and therefore lacks the full cadential effect.

Prolongational effect.

In addition to serving local harmonic functions, chords may, in the larger scale, serve to prolong a phrase function. "Prolongational effect" refers to the specific means by which a chord prolongs a phrase function. See under *n*, *neighboring chord* and *p*, *passing chord* for examples of prolongational effects.

Prolongational line.

In analytical notation, a prolongational line extends from the prolonged phrase function until it moves to a new phrase function. The boundaries of the prolongation may be indicated with a dotted prolongational line.

Appendix 3: Typology of function theories

This appendix provides a typology of different function theories and a short description of each type. The typology is introduced in Chapter 1 and is especially relevant for Chapters 4–7. In this dissertation, it is primarily the key-relational and progressional function theories—and their respective subtypes, mode-relational and processual function theories—which are discussed in depth.

The typology is a useful tool for distinguishing between the different ways in which the idea of functional "relation" has been conceptualized in the post-Riemannian tradition. It builds on previously published work of mine (Kirkegaard-Larsen 2017a; 2018); some details are further expanded here, while other details are omitted because they have limited relevance in the present study. The typology is thus not comprehensive but indicative of dominant conceptions of functional relations in the literature surveyed in the dissertation. All types are *monistic* (or, at least, intend to be).

As is the case with most typologies which generalize and classify, the following is an artificial construct; in reality, the borders are fluid. For instance, aspects of the key-relational function theory is arguably present in every adaptation of Riemann's function theory. Though Denmark is dominated by the so-called progressional function theory, in practice one often sees a liberal use of the *Parallel* term which indicates a key-relational function concept instead.

The typology is organized into a hierarchical structure because some types of function theory can be seen as sub-types of others.

Type 1: Key-relational function theory.

Functional relations are conceptualized on the basis of how secondary functions are positioned in the tonal network of the prevailing major or minor key. Third-relations are thus designated with symbols such as p for *Parallel* or *Parallelklang*, and g for *Gegenparallel* or *Gegenklang* (k for *kontraparallell* in Sweden). Two parameters of this relation are dependent on the *mode of the key*: the *direction* of the relation (C's *Parallel* is the *lower* third Am; Cm's *Parallel* is the *upper* third Eb) and the *mode* of the chord with the g- or p-suffix (C's *Parallel* is a *minor* chord; Cm's *Parallel* is a *major* chord).

Key-relational function theories do not have specific symbols for specific progressions. The deceptive cadence in major, for instance, is always designated D-Tp. In minor it is designated D-Tg. There may be a progressional aspect in that iii can be designated Tg if it follows T, and Dp in other instances.

Most German and Swedish function theories are key-relational; following Maler's (1931) introduction of upper-case letters for major functions, and lower-case for minor functions, a new subtype of the key-relational function theory evolved, the "mode-relational" theory.

Sub-type 1: Mode-relational function theory.

Functional relations are conceptualized on the basis of how secondary functions are positioned in the tonal network extending from the major-minor tonic. The difference between this sentence, and the first sentence in the above description key-relational theory, is subtle. The mode-relational function theory posits that in any key (typically in Romantic music), the three main functions may relate *directly* to all third-related chords of their major *and* minor versions, independently of whether the global key is major or minor—hence the term "mode"-relational instead of "key"-relational.

Mode-relational function theory adopts the symbols from keyrelational function theory, with an important modification: functions are designated with upper-case letters for major chords and lowercase for minor chords. In the key of C major, one may therefore propose a direct, functional relation to a A^{\flat} major chord by construing it as a tG (a *Gegenklang* of the minor tonic) instead of key-relational
symbols "^oSp" or "TvG" (the tonic *Variante*'s *Gegenklang*) or Riemann's late symbol "III+" (1917a, XVII). An illustration of its implications for the tonal network is shown in Example 77, page 266.

Wilhelm Maler introduced it in 1931 (Maler 1931), and it was adopted in most later German function theories, including Motte (1976), and in Swedish theories following Tegen (1974) and Smedeby (1978).

Type 2: Progressional function theory.

Functional relations are conceptualized on the basis of paradigmatic chord progressions. The *Parallel*-term is often reserved for instances where there is an actual indication (by tonicization or modulation) of the *Parallel* key. Within the key, secondary functions are named after their third-relation to one of the main functions with symbols like a/af (derivation [*afledning*]), s/st (substitution [*stedfortræder*]), g (passing chord [*gennemgang*]), f (extension [*forlænger*]) and otst (overthird substitution) (the latter appears in Rasmussen 2011). The exact suffix is dependent on the progression in which the chord partakes. In major, a vi-chord can be Taf in I-vi; Tst in V-vi; and Sf in IV-vi.

Most Danish function theories after Westergaard (1961) are in essence progressional.

My own analytical models build primarily on progressional function theory. Here "a" means *Ableitung* (derivation), "s" means *substitution* or *Stellvertreter*. Upper-third relations can be relevant in progressions such as I–IV–VI–V. Here, I suggest the term "upper *Ableitung*," symbolized by T–S–S^a–D. One may also speak of an upper substitution if V leads deceptively to III instead of VI: V–III is thus D–T^s (this as an alternative to the otst in Rasmussen 2011). My adaptation of progressional function theory is also outlined in Appendix 2.

Sub-type 2: Processual function theory.

Functional relations are conceptualized on the basis of repeated chord-to-chord processes. In a manner that resembles the transformational attitude of neo-Riemannian theory to some extent (see Kirke-gaard-Larsen 2018), the functional suffixes imply that a chord is transformed, but—importantly—that it retains its tonal character by

APPENDIX 3

referring to the main function from which it is derived. In this way, a process of functional representation may be repeated across several links.

Chains of *Parallelvariante* or *Variantparallel* relations are typical signs of a processual function concept: $C-E^{\flat}-F^{\sharp}-A$ may be interpreted as T-Tvp-Tvpvp-Tvpvpvp; $C-A-F^{\sharp}-E^{\flat}$ as T-Tpv-Tpvpv-Tpvpvv-Tpvpvv.

Specific to the processual function theory is the concept of *neapolitanization*: C-A^{\flat}-E may be conceptualized as T-Tn-Tnn. Direct juxtapositions of for example C-E is sometimes conceptualized as T-Tnn, but remains a conceptual problem if no "single" neapolitanization-relation has been implied by the music in question.

Type 3: Interval-relational function concept.

Functional relations are conceptualized on the basis of a secondary function's directed intervallic distance from a main function. Like progressional theories, the *Parallel* is usually reserved for actual modulations or tonicizations of the *Parallel* key. Without such implications of change of key center, third-related chords are determined as s (submediant) and m (mediant). The s and m yields diatonic (sub)mediants, but unlike the key-relational and mode-relational theories, the direction of this relation is always the same, independent of the key's or main function's mode. An s-function is always a diatonic third below the main function to which it refers; an m-function is always above.

Interval-relational function theories thus describe deceptive cadences in both major and minor as D-Ts, since both vi and VI are submediants of the tonic. But they also describe I-vi as T-Ts, meaning that the concept is not dependent on exact progressions.

The function theories of Hamburger (1951), and most Norwegian function theories are interval-relational.