



Review of Alexander Rehding, *Hugo Riemann and the Birth of Modern Musical Thought* (Cambridge: Cambridge University Press, 2003)

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[1] 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. Oswald Jonas, for example, after arguing for the uselessness of function theory and noting that “such harmonic hearing and interpretation can even surpass a manner of composing—although the two are obviously interdependent,” cites a passage from a string quartet by Max Reger—the great *Gegenbeispieler*—analyzed in the Riemannian way. “Need anything further be added?,” he sarcasms in the following, one-sentence paragraph. ⁽¹⁾

[2] 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 (e.g., Dirk Haagman’s *Tonal Function: Harmony, Scales, and Intervals*, the first volume of which was published in 1916). ⁽²⁾ But the war exposed North Americans to powerful anti-German propaganda of a then unprecedented force: not only was sauerkraut restyled as “liberty cabbage” and the city of Berlin, Ontario, renamed Kitchener over the objections of its inhabitants, but all things German were subject to patriotic disapproval, leading even to the public abuse of German-speaking immigrants and their descendents. After such a dose of cultural vitriol, it is hardly surprising that the second volume of Haagman’s book never appeared, that Copland, Piston, and other post-war composers journeyed to France instead of Germany, and that Riemann’s ideas gained no new advocates on this side of the Atlantic.

[3] The rehabilitation and neo-logizing of Riemann occurred thanks to David Lewin’s admirable ability to adopt (or at least try out) a *modus audiendi* from historical music theory. His 1982 article “A Formal Theory of Generalized Tonal Functions” ⁽³⁾ took the fun out of Riemann jokes, and subsequent important work by Lewin, his students, and other interested scholars succeeded in making them politically incorrect. The culmination of the first phase of revisionist activity was Richard Cohn’s “survey and historical perspective” that prefaced an issue of the *Journal of Music Theory* devoted to neo-Riemannian topics. ⁽⁴⁾

which artfully connected current theoretical projects to historical precedents—an activity at which Riemann himself was particularly adept. Now, Alexander Rehding's *Hugo Riemann and the Birth of Modern Musical Thought* completes the process with a richly detailed backstory that prepares us for new stages of inquiry. It also restores some of the better punchlines.

[4] Hugo Riemann is an excellent subject for an intellectual history: he was a *Vielschreiber*, cranking out all manner of publications from treatises to essays for give-away calendars; he was rooted in the philosophical thought of his time and bore fruit predictably characteristic of the *terroir*; and he was both tendentious and stubborn, which prompted him frequently to maintain questionable positions past the point of plausibility, exposing thereby a complete range of strengths and weaknesses for critics to inspect. Rehding's book does for Riemann very much what Thomas Christensen's did for Rameau, providing intellectual context and even re-animation for a figure whose achievements have long since been sorted and absorbed by the discipline. Moreover, not only is context provided, but also a sense of the flawed human being within the context, a more sympathetic and intriguing figure than that of the impersonal agent of Intellectual History. Both Riemann and Rameau, in their respective authors' hands, are captured in informal poses—their theories unbuttoned and ideas uncombed. These pictures are skillfully extracted as the underpainting of the formal self-portraits offered in these thinkers' many writings. Nineteenth-century standards of living and work having endowed Riemann with a larger canvas, his self-presentation to history has, if less color than Rameau's, then more detail—and more flaws. As a result of this difference in scale, Rehding maintains a constant focus on his subject, yet he also populates his narrative with an ensemble cast of figures who can assist the reader in understanding the sources and influences of Riemann's ideas. In this way is he able to make fascinating the ideas, writings, and circumstances of a German academic of the last century, whose chief accomplishments resulted from strongly held yet questionable opinions and an industriousness that we would today call workaholic.⁽⁵⁾ So engaging is this narrative, clearly written and graced with belle-lettristic touches, that a movie version ought to be optioned.

[5] Consider, for example, this opening scene as scripted by Rehding: “During a silent night in 1875, the young musicologist Hugo Riemann struck a key on his grand piano. He was listening for undertones, which he believed to exist in the sound wave” (15). What he heard that night is a mystery. He claimed to have heard “something very distinct.” Were they undertones? Couldn't be. But whatever he did hear, or claimed he did hear, was proffered as undertones. That others could not replicate his experimental results was unfortunate—for them; maybe they needed a better kind of piano. With such an attitude, Riemann appears to be the stereotypical Mad Scientist tinkering away in his private laboratory. Rehding writes: “The image of Riemann hearing undertones has become a derisory emblem of theoretical hermeticism, coupled with a level of wrong-headedness that is so much beyond our comprehension that ridiculing the approach seems to be the only way to cope with the sheer absurdity” (17). Perhaps Gene Wilder is available to play Dr. Riemann.

[6] What was at stake with undertones? As is well known, Riemann wished to found the minor triad on the same acoustical principles as the major; whereas only the latter could be extracted as a subset from the overtone series, the former must needs for Riemann be a subset of the undertone series, which he then endeavored to hear on that fateful night. Thus, from a fundamental C_4 emerges both the major triad C–E–G in the 6th octave and the minor triad C–A \flat –F in the 0th, like so: (see **Example 1**). Both triads being derived from the same fundamental, both should benefit equally, Riemann believed, from the usual synecdochic naming practice. That is, both ought to be recognized and named as types of C triads. The major, over-chord, Riemann labeled $c+$, and the minor, under-chord, he labeled $-c$. And from this principle of *harmonic dualism* he famously constructed a new language—alphabet and vocabulary—for his beloved Janus-monster. Rehding's central theme is to show how important this creature was for Riemann's entire project, and he succeeds in providing this much-needed corrective to the embarrassed impulse to isolate, hide, or otherwise dismiss dualism as just one of many Riemannian constructions, botched though it is.

[7] One of the few faults of Rehding's book is its Riemannian persistence in stuffing into a single bag any musical object prefixed with the adjective “major” or “minor.” Triads, keys, scales, systems, and sometimes compositions are all lumped together according to their modal adjective. To be sure, such adjectives do indicate a relation among these things, but Riemann, Rehding, and others frequently fail to differentiate among them, so that all things major (or all things minor) end up being fundamentally the same, and as a result nouns are interchanged freely in discussion. When Rehding writes that “harmonic dualism is the postulate of theoretical equivalence between major and minor systems” (28), is not the correct noun, in light of Dr. Riemann's nighttime experiments, “triads” instead of “systems”? A few pages later, terms have shifted again: “harmonic dualism is the attempt to declare the major and minor modes as natural,” and, further down the page, it is a kind of outlook that “seeks to present the minor system as equivalent to the major system” (31).

[8] Contrast this looseness with the careful wording in the following quotation from Helmholtz, which Rehding cites as one

of the motivating sources for Riemann's dualism:

This assertion that the minor system is much less consistent than the major will be combated by many modern musicians, just as they have contested the assertion already made by me, and by other physicists before me, that minor triads are generally inferior in harmoniousness to major triads. (21; Helmholtz, 301)

[9] The minor system is less "consistent" than major, while the minor triad is less "harmonious." Undoubtedly, the inferior harmoniousness of the minor triad contributes to the inconsistencies of the minor system, but the precise nature of this contribution is too frequently not spelled out, leaving questions of dependence and priority up in the air: is the minor system, for example, synthesized from pre-existing parts, or is it presented through compositions and analyzed into parts that depend on their systemic membership for existence?

[10] The question may be thought pedantic; if only Riemann himself were so careful about the differences! Rehding is surely right in pointing to Riemann's fundamental interest supporting the compositional equality—or rather, the equal *availability* for composition—of major and minor keys and their systems. And he is also right to emphasize Helmholtz's findings about the unequal "consistencies" of the respective systems as the cause for the mad striking of piano strings in the dead of night. But was Riemann really constrained to address this inequality through triads? All of his various dualistic hypotheses focus their anxiety upon these structures, as if showing their "equality" would vouchsafe the aesthetic equality of keys and the compositions in these keys.

[11] Clearly, Riemann believed—along with Hauptmann, Oettingen, and others—that the whole system is essentially the sum of its parts, that the major key, for example, is built from the union of the major primary triads, such as (for C major): F–a–C–e–G–b–D. Triads first, then key (through union), and then scale (through reordering). But Helmholtz, for one, offered a different way, essentially similar to Fétis's culturally sensitive reading of tonality: scale, a synthetic entity derived from compositions, precedes key, which precedes triad. What is more, "the system of scales, modes, and harmonic tissues does not rest solely upon inalterable natural laws, but is also, at least partly, the result of esthetical principles, which have already changed, and will still further change, with the progressive development of humanity."⁽⁶⁾ Rehding devotes many well-researched pages explaining that Riemann could not be at all comfortable with this statement, but he does not critique why his answer to it had to take the particular form that it did.⁽⁷⁾

[12] The confusion of terms becomes problematic in Rehding's further interpretation of Helmholtz's positions. He quotes a lengthy passage from Helmholtz, which he describes as "added" to Helmholtz's account of modal differences (though actually integral to it) as well as "sound[ing] somewhat like a consolation prize" (though it is of great aesthetic import):

But I am by no means of [the] opinion that this character [i.e., the lesser consistency of minor compared to major] depreciates the minor system. The major mode is well suited for all frames of mind which are completely formed and clearly understood, for strong resolve, and for soft and gentle or even for sorrowing feelings, when the sorrow has passed into the condition of dreamy and yielding regret. But it is quite unsuited for indistinct, obscure, unformed frames of mind, or for the expression of the dismal, the dreary, the enigmatic, the mysterious, the rude, and whatever offends against artistic beauty;—and it is precisely for these that we require the minor mode, with its veiled harmoniousness, its changeable scale, its ready modulation, and less intelligible basis of construction. The major mode would be an unsuitable form for such purposes, and hence the minor mode has its own proper artistic justification as a separate system. (Helmholtz, 302).⁽⁸⁾

[13] Rehding's commentary on the passage:

But a justification as a separate system is precisely what the minor mode did not obtain from Helmholtz. Just as the acoustical inferiority of the minor triad was explained—with a barrage of feminising adjectives—by its dependency on the acoustical *Klang* (sonority), which corresponds to the major triad, so the aesthetic effects of the minor mode, too, depend on what the major mode is capable of signifying. The minor mode is only of aesthetic use for that which is excluded by the major mode. Both acoustically and aesthetically, the minor system remains fundamentally no more than a failed major mode (21).

[14] Is this reasoning Riemann's or Rehding's? Certainly, the last sentence has the sound of a Riemann panic-attack, found elsewhere in his writings, in which modal anxieties heat up and bubble over. Note that Helmholtz nowhere mentions anything about the "failure" of minor, but on the contrary firmly fails to "depreciate" it. And there is also the curious matter of the "feminising adjectives" (presumably "indistinct, obscure, unformed") predicated to the minor *triad*—when it is clear

that Helmholtz is writing about the minor *mode*. Again, we witness Riemann's *Klang*-obsessed modal myopia, but has Rehding, through long and loving contact with his subject, also been similarly affected? (I almost wrote "infected"!)

[15] Helmholtz also loses credit at the end of Rehding's dualism story. Noting that "hardly any living theorist would consider harmonic dualism a viable solution" to problems of modal ontology, Rehding writes:

While the clashes between overtones and beatings of summation tones are still the same as in Helmholtz's day, we have taken the other avenue, and tend to disregard acoustical science altogether when talking about major and minor harmonies. With this music-theoretical paradigm shift, however, harmonic dualism became redundant; it became an attempt to answer a question that no longer interests us. (32)

[16] But this is because the question is settled—and Helmholtz got it right. It is not the case that dualism is no longer a fashionable music-theory ideology because we have "moved on"; it was wrong from the beginning, based on sloppy reading, faulty reasoning, and irreproducible science. That it got as far as it did is largely due to Riemann's industry and, to be fair, his gradually more sophisticated understanding of modal issues over time. But it hardly survived Riemann himself, and savvy function theorists were able to strip it out even before his passing.⁽⁹⁾ Moreover, as Rehding points out (18), dualism was hardly without vigorous critics in Riemann's own day,⁽¹⁰⁾ and even Rehding's own detailed look at Riemann's work-project does not shrink from showing the very tenuous if not plain bad thinking that went into tying all its parts together. It is not that the question was ultimately uninteresting, but that Riemann's answer was unsatisfactory.

[17] Ironically, the most productive arguments about minor that Helmholtz advanced go unmentioned by Rehding and, to my knowledge, by Riemann as well: that a well-defined minor mode comes late in the history of music; that it had difficulty being accommodated in poly- rather than monophonic styles;⁽¹¹⁾ that there is a marked preference in both popular and art repertoires (especially Viennese Classicism) for the major as the principal key of a work; and that the device of Picardy third (read by Helmholtz as "avoidance of minor close") indicates a structural preference for major over minor.⁽¹²⁾ About this last phenomenon, Helmholtz writes that "it was not until composers ventured to put a minor chord at the close of compositions written in the minor mode [in the middle of the 18th century], that the musical feeling of European musicians and hearers can be admitted to have become perfectly and surely habituated to the new system" (Helmholtz, 365). This sophisticated argument, both empirical and historical, was the final outcome of Helmholtz's modal investigations; having determined that minor was less consistent a system than major, he then ventured some observations about the artistic consequences. These he would admit as being tentative: "I must request the reader to regard this section [on the history of music] as a mere compilation from secondary sources; I have neither time nor preliminary knowledge sufficient for original studies in this difficult field" (Helmholtz, vii). Such recognition of his limitations prevented him from wondering in print whether the increased use of the minor system might correlate to an increased interest in expressing "the dismal, the dreary, the enigmatic, the mysterious, the rude, and whatever offends against artistic beauty."⁽¹³⁾

[18] Riemann, too, was interested in history, but in what seems like a self-serving way:

But I think that the actual purpose of historical research is to make recognisable that which is a primordial law in all ages, governing all perception and artistic creation. There is still enough left to characterise specifically the age from which the works stem. (91)

It is this attitude that caused him to locate the origins of polyphony in England (Wales, actually), to read Zarlino as a dualist, and to elevate a minor 18th-century thoroughbassist, J. F. Daube, to a major figure in the history of harmony. Rehding analyzes Riemann's positions as a historian with splendid critical sympathy, and he moreover connects these positions across the entire range of Riemann's interests, so that no one area can be said to be fundamental.

[19] The only fundamentals, then, are the "primordial laws," and Rehding rightly stresses Riemann's complex relationship to them. These laws are not specifically musical laws, but rather laws of perception (physiology, psychology) and of cognition (psychology, epistemology). They are laws pertaining to the human condition, and Riemann thus positions himself to carry out the polymathic work of uncovering, elucidating, and even enforcing these laws in the jurisdiction of music.

[20] Heinrich Schenker comes immediately to mind as another theorist who claimed this kind of insight, and comparing notes on their respective ideologies is an interesting dialectical exercise. While Schenker identified himself as an Artist, Riemann—despite having composed and published over 60 opus numbers during his lifetime⁽¹⁴⁾—was clearly on the side of Science. For Schenker, the law of music resided in the tones themselves, and master composers were those who were successful mystic mediums, who brought forth art in their act of obedience. Riemann, too, esteemed the master composers

as law-abiding paragons, yet they were as susceptible to error as any human being, especially so when it came to the notation of their works. For notation was essentially transcription, a second-order representation that could only imperfectly represent the first-order idea, which resided in the psyche of a listening composer. On this point, the contrast between Schenker and Riemann can be made even more vivid, for both produced editions of Beethoven piano sonatas founded on their respective positions. Schenker's edition inaugurated what we today regard as exemplary editorial practices, as Carl Schachter explains:

[Schenker] was the first consciously to reproduce, as far as it is possible in print, the visual impression of the autograph. In other words he tried to be faithful not only to the contents of the work but also to the form in which the autograph presents them to the eye of the viewer. Very often Beethoven writes in a manner contrary to standard notational practice. Most editors before Schenker simply "corrected" these irregularities without realizing that they were possibly blocking access to an understanding of the composition. (Preface to Dover edition, vol. I, page vi.)

Riemann, from his vantage point, would not only deny that such notational idiosyncrasies were access points, but also would maintain that even conventional notation blocked access to the contents, which in any case were not to be found in the autograph, but in the mind of the listener (with the composer being the original listener). His mission, when editing works, was to represent the proper relation of the published work to the actual, law-abiding original. His editorial interventions were thus analytic acts, designed to show the conformity of the artwork to the laws of phrasing and dynamics. The treatment of the second theme of op. 14, no. 1, first movement perfectly illustrates his methodology (see **Example 2**). The top staves are Riemann's, and the bottom are Schenker's. Skipping tedious detail about the analytic meaning of Riemann's various articulation signs, I focus instead on what happens in final two bars. In a footnote, Riemann acknowledges that Beethoven's original is as Schenker has it, but that the situation involves phrase-motivic overlap—hence, the crossed slurs. G \sharp^5 is at once the end of a motive (because it resolves F double-sharp), and the anacrustic beginning of another (the thesis point being the octave below, G \sharp^4). This analytic truth, which the ear knows at once, is given a notational existence by means of a "doubled" G \sharp^5 . Why edit this way? Riemann writes:

This new method of notation is a running commentary, a detailed thematic analysis of the works. It prevents a defective or faulty conception of the same and indicates instead proper expression, doing away with the need for reflection. It eases the work of the teacher in an unprecedented way and makes possible for one without a teacher to progress without making serious errors. In this way the author offers the beginner an indispensable relief in working out phrasing, while offering the advanced player new technical problems to solve.⁽¹⁵⁾

[21] Beneath the somewhat shocking hope that performers might dispense with "reflection" is the fact that Riemann's edition is essentially Beethoven rendered in analytic notation—obviously not "reductive" like Schenkerian analysis, but nonetheless no different in its use of noteheads and symbols to convey structural truth about the music. In later and more well-known work with Beethoven sonatas, which involved detailed harmonic and phrase-motivic analysis, Riemann would even rebar passages in order to bring out other such truths.⁽¹⁶⁾ Rehding does not shrink from claiming, rightly, that Riemann "tampered with the notation in order to *preserve* the integrity of the music" (163).

[22] Finally, like Schenker, Riemann was anxious about the continuing integrity of the primordial laws. Schenker, who imagined himself standing before a "Herculaneum and Pompeii of Music,"⁽¹⁷⁾ believed that knowledge of the law had passed away (with Brahms), and that composers of his day were either frauds or hopeless wannabes from whom God had permanently turned his face. Riemann, writing a generation earlier, felt the rumbles of the volcano and, in a Riemannian image that Rehding uses imaginatively, foresaw an expulsion from an "Edenic garden" that an eventual explosion would cause (or, rather, the explosion would be brought about by the willful departure from the garden). The tragedy in this was that the garden offered an inexhaustible number of paths and byways: "everybody may then find new side paths for himself leading to ever new perspectives on regions never entered before" (105).⁽¹⁸⁾ There was no point in leaving—unless one was ignorant or had a kind of criminal intent. As to the former condition, Riemann saw the remedy in proper pedagogy, and the whole of his text- and handbook output can be seen in this light as cultural prophylaxis. Indeed, in Max Reger Riemann initially believed that he had the model of a properly educated and responsible artist who could show the world how to play happily in the garden. The relationship was so important that Reger even boarded at Riemann's home until an argument with Frau Riemann necessitated his own expulsion. Even so, as Rehding recounts, Riemann continued to believe in Reger until the erstwhile pupil, a troubled and unstable soul, proved unable to bear his teacher's hopes and turned on him in print by declaring his allegiance with the "degenerates." A criminal act of betrayal! Not a paragon of prelapsarian joy, but, as Schenker

pegged him for very much the same reasons, a *Gegenbeispiel*. In the matter of Music *n*: Reger, the two great if self-appointed judges, who agreed on almost nothing else, condemned the accused.

[23] Riemann was gentler with musical cultures which did not know any better. Although the primordial laws were true in all times and places (like those of other sciences), the progress of musical art in Europe was characterized by productive change with a few unfortunate wrong turns—the bass-upwards conception of chord structure, exemplified in Roman-numeral systems, being chief among them. Non-European cultures, not having made the correct turn into full harmonic understanding (marked by recognition of the importance of the major third), were left with more or less unproductive musical systems. Towards the end of his career, as he attained a less pedantic intellectual outlook, he could examine some of these in *Folkloristische Tonalitätsstudien* with something approaching critical sympathy. Rehding devotes some pages to this previously obscure area of Riemannian thought, and it is a welcome broadening of Riemann's intellectual biography. (It also is a object lesson for modern-day scholars: despite his well-documented limitations, Hugo Riemann was an industrial-strength research machine who worked until death wherever the primordial laws needed him. His record of production will likely never be broken.)

[24] A better known consequence of the late intellectual outlook is the theory of *Tonvorstellungen*—variously translated in the literature; Rehding's somewhat reluctant choice of "Tone Imagination" is a good one. Stimulated by study of late Beethoven and very likely, as biographer Michael Arntz has discovered,⁽¹⁹⁾ Riemann's own increasing hearing loss, this turn epitomized the psychologizing tendency in Riemann's work, and made absolutely clear that music "signified for Riemann not merely the sounding phenomenon, but rather the whole process of transplanting the musical thought of the composer into the musical mind of the listener. Sounding music was merely the intermediary stage—the beginning and end of the process were tone imaginations" (166). Thus, tone imagination was, as Riemann himself put it, the "Alpha and Omega of musical artistry." Although Rehding revisits this well-known site and does not dig up anything extraordinarily new, he does map the paths leading to it from other parts of the Riemannian terrain, and in so doing gives us a better appreciation of its origins and purposes.

[25] In fact, almost everything that Rehding does in this book increases appreciation for Riemann, despite his unsparing criticism of many aspects of his subject's thought. He refuses, for example, simply to dismiss harmonic dualism with harsh words, but rather examines it deeply and in good faith before letting its own contradictions lead to the proper conclusions. He even goes so far as to enlist Hans Vaihinger and his philosophy of the "As-if" to help out with the undertone series, which is tried out as a "productive fiction," something unreal but nonetheless a "useful basis for science *as if* the fiction were real" because it enabled continued investigation into a matter of interest (86). Such is the scope and sympathy of Rehding's project that in his hands Hugo Riemann is fully rehabilitated as an interesting musical thinker.

[26] But is he a modern musical thinker? There is something puzzling about Rehding's title, for the coupling of Riemann with "modern musical thought" (or at least its birth) is an uncomfortable one. Such a reading would not allow us to assess as modern, for example, Riemann's mildly politicized musicology pitting Anglo-Saxony against Latiny and Germany against Austria. Much of this went the way of the *Pickelhaube* and now seems just as antique.⁽²⁰⁾ Rehding's summary justification for his title (182–5) does, however, seem to place Riemann within the purview of current, modern concerns. Consider: Riemann's "conceit that tonality constitutes a timeless structure supplanted François-Joseph Fétis's earlier, historically contingent, definition of the term, and tonality is still commonly understood in this ahistorical sense in the academy" (183). While true that tonality has undergone a certain reification in a vaguely Riemannian direction (i.e., "functional harmony"), and while true that few if any subscribe to Fétis's original construction, the concept (procedure? cultural construct? theoretical fiction?) is not at all out of play, and more-or-less silly academic fights about its nature erupt even today.⁽²¹⁾

[27] Rehding also positions Riemann as the Great Institutionalizer of musicology and theory, a figure who solidified the structures upon which disciplinary discourses (such as this review) could take place. There is something to this point, but its demonstration lies outside the scope of the book, which is concerned more with Riemann's thought than with an academized "Riemann thought" that grew up somewhat afterwards. Some of this is covered in Arntz's excellent biography, some in Chapter 8 of *Harmonic Function in Chromatic Music*, and some in Renate Imig's still valuable 1971 survey of post-Riemann function-symbol systems.⁽²²⁾ But the full story is yet to be told, and the extent to which Riemann created or merely rode the wave of an institutionalized music study in Germany is still an open question.

[28] In the end, Rehding's book allows us finally to retire William C. Mickelsen's 1977 study (although his translation of the final part of Riemann's *Geschichte der Musiktheorie* may still be consulted in cases where the original is unavailable).⁽²³⁾ It also

fills in my own lightly sketched isagoge that is Chapter 7 of *Harmonic Function in Chromatic Music* and rounds out material presented in Chapter 4 of David Kopp's *Chromatic Transformations in Nineteenth-Century Music*.⁽²⁴⁾ Along with Arntz's biography, Rehding's book completes a detailed Riemann album sufficient, I suspect, not only for any present but also for any currently imaginable future purposes.

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Footnotes

1. Oswald Jonas, *Introduction to the Theory of Heinrich Schenker*, translated and edited by John Rothgeb (New York: Longman, 1982), 127–8.

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2. Dirk Haagmans, *Tonal Function: Harmony, Scales, and Intervals*, Book 1 (New York: J. Fischer & Bro., 1916). John Comfort Fillmore's translation of Riemann's 1882 lecture, "Die Natur der Harmonik" (in *New Lessons in Harmony* [Philadelphia: Presser, 1887]) should be noted as the first published appearance of Riemannian ideas in North America. Also noteworthy is the persistent, sharp criticism of Riemann's work by Bernhard Ziehn, a German expatriate living in Chicago whose writings were followed in the German-American community as well as in Germany itself.

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3. *Journal of Music Theory* 26.1 (1982): 32–60.

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4. *Journal of Music Theory* 42.2 (1998): 167–80.

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5. Riemann's writing desk—at which he worked, 4 am to 10 pm, every day of the year except Christmas—was called "Papa's Altar" by his kids. Michael Arntz, *Hugo Riemann (1849–1919): Leben, Werk und Wirkung* (Cologne: Concerto Verlag, 1999), 43.

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6. Hermann Helmholtz, *On the Sensations of Tone*, trans. and ed. Alexander Ellis (New York: Dover, 1954), 235.

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7. To be sure, the central place of the major third in Riemann's thought, an interval he understands as primarily a harmonic one, is the starting point for any reconstruction of Riemann's theory-building method. But yet there are (and could have been then as well) other entry points into dualistic systems besides the triad.

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8. Rehding's extract leaves out the positive attributes of the major mode, quite understandable given the direction of his argument at that point. His redaction of the second and third sentences is: "The major mode is quite unsuited" etc. Also, in connection with Rehding's description of the passage as "added," it is appropriate to note that the passage was in the first German edition (1863) of Helmholtz's treatise (page 463) and was not an addition to subsequent editions.

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9. I sketch this situation in Chapter 7 of *Harmonic Function in Chromatic Music* (Chicago: University of Chicago Press, 1994).

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10. On the other hand, dualism did seem to engender interest in symmetrical musical structures even among opponents of Riemann's dualism. See David W. Bernstein, "Symmetry and Symmetrical Inversion in Turn-of-the-Century Theory and Practice," in *Music Theory and the Exploration of the Past*, ed. Christopher Hatch and David W. Bernstein (Chicago: University of Chicago Press, 1993), pages 377–407.

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11. Helmholtz's translator, Alexander Ellis, notes that meantone temperament may have played a significant role here. The minor third of the tonic triad was quite sharp and hence "much rougher" than just, whereas the major third was just or nearly so. Helmholtz, 301.

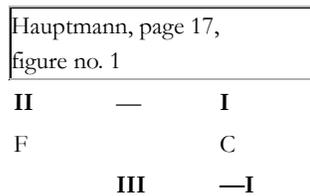
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12. See Helmholtz, pages 301–2, 365, and vii.

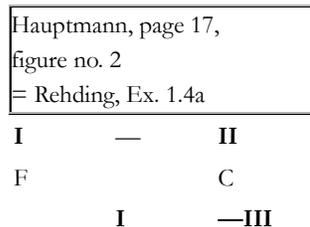
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13. A Riemannian rebuttal of Helmholtz's arguments would, I am quite sure, involve evidence of composers treating the two modes in some equal fashion, and exhibit A would be the *Well-Tempered Clavier*. Here, the place of Bach and of his great minor-mode works (e.g., the B-minor Mass) in the reception history of German music would be critical.

Before leaving the subject of Riemann and his predecessors, I should correct an apparent misreading of Moritz Hauptmann's minor-triad structures and explanations, which Robert Wason caught and pointed out to me. While not a full-gospel dualist, Hauptmann consistently thought about musical structures in dualistic, oppositional ways. The inversional relationship between major and minor triads was thus of great interest to him. In adapting his dialectical system (succinctly described by Rehding on page 24) to the minor triad, his first impulse was to invert the representation, so that the starting point, I, was reckoned from the upper note of the fifth, like so:

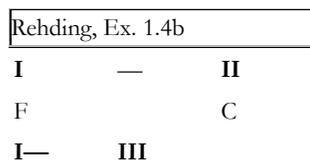


This analysis of the minor triad, shortened to **II–III–I**, is used throughout the rest of his book and seems to be entirely satisfactory. However, through some unexplained calculus, Hauptmann claims that the above structure "is the same as" the following analysis:



I will avoid a detour into Hauptmann's opposition of "determine" and "is determined," which seems to be the way of balancing the equation of first and second figures, and instead point out that the two figures claim very different things. The second, in fact, is consonant with a "co-generation" theory of minor, in which the chord appears to have two "roots": in this case, F and . Curiously, it is this figure that appears first in Rehding's discussion of the "dialectal" minor triad—as an inverted major.

The following figure then appears in Rehding's book as an illustration of Hauptmann's "alternative explanation of the minor triad, bottom-up but no longer dialectical" (25):



This representation is found nowhere in Hauptmann, and is even at odds with Hauptmann's basic claims of interval intelligibility (that is, there is no intelligible relationship in the minor third F–.) Something has gone wrong here, and I suspect a kind of typographical error involving Rehding's examples, since the text commentary suits the "correct" versions of

the examples much better. Since more readers of Rehding's book may be consulting this review than combing library stacks for a dusty copy of Hauptmann, I submit that discussing the typo here is better than merely calling attention to it.

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14. See Arntz, 341–44, for a list.

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15. Ludwig van Beethoven, *Sonaten für Klavier, kritisch revidiert mit Fingersatz und genauer Bezeichnung der Phrasierung herausgegeben von Dr. Hugo Riemann* (Berlin: Simrock, 1885), II: 4. Translation by the author. Schenker's response to this kind of work was his essay "Abolish the Phrasing Slur" (*The Masterwork in Music*, vol 1 [1925], translated by William Drabkin [Cambridge: Cambridge University Press, 1994]), in which he voices his indignation that "editors can have the audacity to incorporate their interpretations into a work of art of which they have not the slightest understanding" (20).

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16. See, for example, Hugo Riemann, *Ludwig van Beethovens sämtliche Klavier-Solosonaten*, 2nd edition (Berlin: Max Hesse), II: 201, for rebarring the opening of op. 27, no. 1.

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17. Heinrich Schenker, *Counterpoint*, trans. John Rothgeb and Jürgen Thym, ed. John Rothgeb (New York: Schirmer, 1987), I: xvii.

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18. Quotation from Riemann, *Musikalische Syntaxis* (Leipzig: Breitkopf & Härtel, 1877), 120. It is the peroration of the work.

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19. Arntz, 120.

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20. To be sure, a terrible mutant strain of this attitude came back with the swastika, and reading Riemann in the backwards-reflecting light of this tragic development is quite chilling.

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21. Consult, for example, the thread initiated by John Clevenger entitled "The nature of tonality in the Western European tradition" at <http://societymusictheory.org/pipermail/smt-talk/2002-December/>.

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22. Arntz's book is given a thorough review by Rehding in *Music Theory Spectrum* 24.2 (2002): 283–93. Some material in the review also appears in Rehding's book. Renate Imig, *Systeme der Funktionsbezeichnung seit Hugo Riemann* (Düsseldorf: Verlag der Gesellschaft zur Förderung der systematischen Musikwissenschaft, 1971).

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23. Hugo Riemann's *Theory of Harmony and History of Music Theory*, Part III (Lincoln: University of Nebraska Press, 1977).

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24. David Kopp, *Chromatic Transformations in Nineteenth-Century Music* (Cambridge: Cambridge University Press: 2002).

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