Harmonic Function in Chromatic Music: A Renewed Dualist Theory and an Account of Its Precedents by Daniel Harrison. Chicago: University of Chicago Press, 1994.

Review by Robert O. Gjerdingen

In this brave, well-written book Professor Harrison takes us back to a musical style and a way of thinking about harmony no longer familiar to most students of European concert music. There was, of course, a time when the list of "modern" composers would have begun with names like Reger, Pfitzner, Busoni, Karg-Elert, or Schreker. These men. along with their now better-known contemporaries Mahler, Richard Strauss, and the young Schoenberg, composed with a dazzling harmonic palette that still has the capacity to amaze and astonish. So complex was their musical language and so seemingly recondite their chordal grammar, that late twentieth-century students of harmony generally make a detour around their compositions, dismissing them as either symptomatic of a dissolution of eighteenth-century harmonic tonality or characteristic of an emerging twentieth-century German expressionism. But to paint someone like Karg-Elert as either a decadent hanger-on or a half-baked revolutionary does little to illuminate his art. We should remember that Mahler's reputation dwelled in that same netherworld for much of this century. To better understand the harmonic language of the one is to better round out our picture of the other.

The title of Harrison's book refers to the two concepts that are central to any discussion of this now almost secret chromatic art: function and dualism. Though the concepts necessarily intertwine, let me first address "function."

In his Cours de composition musicale (5th ed., Paris: 1912), Vincent D'Indy committed to print the lectures which he had given at the Scola Cantorum during the late 1890s. He remarks that "since the time of Hauptmann, research into the theory of harmony seems to have been concentrated almost

exclusively in Germany" (p. 139). Thus D'Indy draws many of his guiding harmonic principles from the writings of Hugo Riemann, "professeur de musique à l'université de Leipzig" who, though capable of a literary style "assez aride," "has made great progress as concerns concepts of tonality, tonal function, and the esthetic import of the chord" (pp. 141-42). For a French composer in the first decades after the national humiliation of the Franco-Prussian War to draw attention to his German sources may seem odd. Yet the respect of French instrumental composers for the *musique savante* of the great German tradition transcended national chauvinism and helped to disseminate German music theory more widely than many appreciate today.

In part, adopting German theory seems to have been a culturally neutral "technology transfer" directed toward bringing the French science of harmony up to date. Yet there was also much in Riemann that gave voice to notions already widely held about relationships between tones (Tonverwandschaften). A long-standing Gallic tradition, championed by Fétis in particular, singled out the scale degrees I, IV, and V as the "cordes tonales," as the tones that define the tonality. I mention this to point out how Riemann's thesis that any triad suggests one of three (and only three) harmonic categories tonic, dominant, or subdominant — did not come out of thin air or out of remote eighteenth-century sources (e.g., Daube). As Riemann himself emphasized in his Geschichte der Musiktheorie im IX.-XIX. Jahrhundert, his "doctrine of the tonal functions of harmonies is nothing but the further development of the Fétisian concept of tonality. The tenacious relationship of all harmonies to the tonic has found its most pregnant expression imaginable in the designation of all chords as more or less strongly modified manifestations of the three main pillars of logical harmonic structure: the tonic itself and its two dominants" (pp. 389 ff.). It was hence not entirely tautological for D'Indy, after presenting Riemann's precepts as basic harmonic truths, to recommend to his readers Riemann's Musik-Lexikon, where they would find "quite a number of new observations on relationships between tones . . . all in perfect accord with the harmonic and tonal theory presented in the preceding chapters" (p.142).

During the last decades of the nineteenth century, as the example of D'Indy amply demonstrates, "function" rapidly emerged as a pan-European term in harmonic parlance and its usage far outstripped the reach of Riemann's own vigorous advocacy. Good harmony became synonymous with "functional" harmony. Bad harmony became, by inference, dysfunctional (though "inorganic" was as likely a pejorative). Ironically, in North American usage "functional" harmony became synonymous with the harmonic tonality of Bach or Mozart, while the difficult harmony of those latenineteenth-century composers who actually knew what Riemann meant by the term is now often "nonfunctional." Professor Harrison limits his book to a careful survey of German-language texts. Yet "functional" harmony remains a pervasive concept of music theory in any language.

As a system for reducing the variegated appearances of actual chords to three universal categories, functional harmony had broad appeal wherever harmony was taught. As a system for expanding the universe of chords and chordal connections, functional harmony was taken up mainly by "modern" German composers. In either of its guises — as a reductive or a generative system — the grand idea of a threefold psychological or spiritual response to tones had to confront the mundane mechanics of fitting the many appearances to the few categories (or vice versa). Fashioning the proper engine for this task was a continuing problem for Riemann and remains difficult for Harrison or anyone attempting functional analysis today. With each assertion of functional equivalence one would hope simultaneously to satisfy constraints imposed by a host of interlocking musical domains: the perceived melodic tendencies of individual tones, the perceived unity of the triad as an element in harmonic relationships, the statistical regularities of chord successions, the acknowledged homologies between the major and minor modes, the traditional tolerance for slightly differing chords in a particular

syntactical slot, the theoretical distinctions between harmonic tones and nonharmonic tones, the joint memberships of tones in diatonic scales and diatonic triads, a conservative repertory of established harmonic/metric/contrapuntal schemata, and a progressive vision of a chromatic music freed from its diatonic substrate. The global forms of evaluation necessary to accomplish this sort of multidimensional constraint satisfaction in the context of real-time listening stretch current theories of cognition and ultimately require the (nonverbal) human brain as analytical engine. Nineteenth-century methodologies were not up to this enormous task, nor is Harrison's renewal of them completely successful. Yet the fact that the selection of precepts presented by Harrison works as well as it does is testament both to his wise selections from the Riemannian legacy and to Riemann's own considerable powers of synthesis.

Dualism is a term that describes a general class of precepts needed by a functional harmony to produce categorical identities from apparently distinct chords. At its heart is the methodological move of positing symmetries. As D'Indy put it, "The tonal functions of a chord are thus of three types, and strictly symmetrical between the two modes" (p.109). Harrison does a good job of describing these symmetries: major/minor, sharp/flat, authentic/plagal, dominant/subdominant, and so forth. And he notes that their existence is a matter apart from attempts to explain their origins. Riemann's first efforts at explaining them relied on suggestions of undertones — the mirror twins of overtones. That explanation has been a sore point for Riemann's critics. Yet just as a culture is neither valid nor invalid when judged by the plausibility of its creation myths, so dualist symmetries are neither valid nor invalid by virtue of tales telling how they might have arisen.

Dualist theories of harmony differ in their emphases on specific symmetries. Some focus on chords, others on cadences, some on accidentals, others on scale degrees. Harrison's emphasis on scale degrees recalls a mild form of D'Indy's conceit that "musically, chords do not exist, and harmony is not the science of chords. The study of chords per

se is, from a musical point of view, completely in error esthetically, for harmony comes from melody and ought never to be separated from it in practice" (p. 91). Yet in the practice of analysis, Harrison becomes a much stronger proponent of a melodic view of function than was D'Indy. Figure 1 shows D'Indy's analysis of the Tristan chord (p. 117). Note how little remains but the harmonic function S (subdominant) in progress to D (dominant).

Figure 1. Vincent D'Indy's functional analysis (ca. 1898) of the Tristan chord and its resolution.



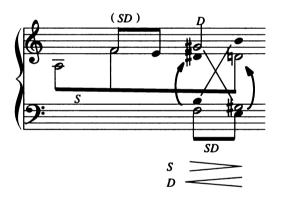
Fonction sous-dominante Fonction dominante

Harrison deconstructs the unity of triad and disperses the S-to-D movement across voices and across time (see Fig. 2). The crescendo and decrescendo indications below the staff of Figure 2 indicate Harrison's belief that:

the strength of this initial Subdominant function decreases during the course of the passage as that of the Dominant increases. This process begins with the

upper-voice motion from F to E, which is analyzed as a weak SD discharge; a more conclusive discharge occurs in the following two chords, where the F-to-E motion is placed in the bass. Yet, even though Dominant is felt to increase as the idea unfolds, Subdominant function is still active enough that the D included in the final sonority can communicate a bit more Subdominantness than is usual for a V⁷ chord. In other words, the Subdominant diminuendo is not a Subdominant perdendosi. (pp. 156-57)

Figure 2. Daniel Harrison's functional analysis of the Tristan chord in its local context (p. 156).



In a footnote, Harrison adds that "Wagner's orchestration of the passage abets the sense of functional change. The opening S-functioned figure is played by the cellos, but, as Dominant begins its ascendancy, the cellos pass the voice-leading line to the English horn, which plays the final D*-D motion. The change of timbre corresponds beautifully to the change in the strength of the two functions."

Harrison's richly textured analysis certainly seems a great improvement over D'Indy's dogmatic reduction. Yet the deconstruction of the functionally univocal chord — a notion implied at times by writings in the generation after Riemann (e.g., Erpf and Kurth) but only made a central feature of

functional analysis by Harrison — engenders an explosion of complexity. If each move between each pair of tones can have functional significance, and if those moves can occur between two different voices, then each four-voice chord progression — with its ten two-voice combinations — could simultaneously present several competing functional "discharges." I do not bring this up to disparage the deconstruction, which I take to be a real advance. And the recognition of competing functional "attitudes" goes a long way toward interpreting the special character of so famous a sonority as the Tristan chord. But Professor Harrison provides the reader with relatively few guidelines for managing this complexity. If we are to resurrect the "science" of harmony from the rubble of the voice-leading era, then we may need to be somewhat more scientific in the sense of stating hypotheses and algorithms in ways that others can accurately replicate and objectively evaluate.

The final third of the book presents an historical account of harmonic function and dualism. That account stands as the best in English for those wishing to explore the birth, growth, decay, and afterlife of functional analysis. What could have been a perilously dull inventory of esoteric theories is tremendously enlivened by Harrison's prose style and his considerable wit. What Harrison says of Karg-Elert — that "one often smiles while reading [him] . . . because of the sheer exuberance and eccentric enthusiasms of the author" (p. 313) stands as an accurate assessment of this reader's experience with Harrison. His delight in exploring this important topic is infectious, and his broadly based assessments of the leading German figures in functional analysis are well researched and documented. As I mentioned earlier, functional analysis quickly extended beyond the borders of German-speaking lands, but to cover that history of dissemination and reception would have required another volume.

The book presents, in addition to theory and history, extensive analyses of chromatic masterworks. The discussions of Wolf's "An den Schlaf," Franck's Pièce héroique, Reger's Introduktion, Passacaglia und Fuge, and Mahler's Sym-

phony No. 2, though far too long and detailed to discuss in this context, repay careful study. These analyses are addressed to other analysts, which somewhat limits their possible audience (many undergraduate music students would find them too difficult). But there are smaller and simpler analyses within the volume that would be intelligible to anyone having had a course in chromatic harmony. In a few cases, complete scores will be necessary both to follow the argument and to correct small errors in music printing. Because Reger's *Introduktion*, *Passacaglia und Fuge* will not be on everyone's music shelf, permit me to note that the musical example on Harrison's p. 187 should show the left hand of Piano II in bass clef, while on p. 191 the corresponding staff should show a treble clef after the first eighth note.

Professor Harrison is not the first among a younger generation of scholars to have taken up a reexamination of nine-teenth-century harmony. But this major statement, informed as it is by thorough familiarity with the musical repertory and harmonic theories of the day, places him in the forefront of that group, and ought to encourage still others to follow his lead.