Both Miss Stevens and Mr. Crickmore indicate that awareness of the style of the music is essential to an understanding of it. Unfortunately, both of them bypass this basic approach to the music with excuses of insufficient space in or inappropriateness to their dissertations. Miss Stevens is trying to form generalizations from a study of 52 compositions. I question whether she succeeds. Mr. Crickmore, on the other hand, rather than confining himself to the six concertos of Wq. 43, looks for similarities to so many other concertos, not only of C. P. E. Bach, but also of Johann Christian Bach, Haydn, Mozart, and even Beethoven, that the result is confusing. To their credit, they have devoted time and energy to one of the most original and imaginative of composers.

Laurence David Berman-The Evolution of Tonal Thinking in the Works of Claude Debussy

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Mark DeVoto

This is an invaluable dissertation. It is not only a profound and incredibly thorough analysis of Debussy's approaches to harmony and musical form; it is a first-rate survey of 19th-century harmony as well, and this aspect of the dissertation alone—the prolegomena-to-Debussy—would make Dr. Berman's study a worthwhile reference text for a course in advanced harmony. But the preliminary studies in Dr. Berman's dissertation are not really a separate affair; they are closely integrated into the Debussy analysis. The documentation is gratifyingly immense: the musical examples, drawn from dozens of works by many different composers, are numbered through 306, but the many subdivisions of the numbers make probably twice that many actual examples. In addition, there are harmonic-melodic schemata for all the works discussed in detail. Dr. Berman's writing is vigorous, terse, absolutely direct, and a pleasure to read.

Dr. Berman's study cleaves once and for all many of the Gordian knots of Debusy's music. The analytical approach, and the results obtained, far surpass in depth and comprehensibility anything else on Debussy's music I have seen. We are all aware of Debussy's importance historically and intrinsically; we are equally aware of the mountains of simplistic and specious "analysis" that have appeared over the past 70 years, from such formidable people as Schoenberg on down, through Kurth and René Lenormand, through the syntheses of A. Eaglefield Hull and the newer "serial" analysts, to the miseries of Saturday Symphony program notes. For all that, Debussy's music is perhaps less well understood today than Schoenberg's, and, though familiar, it is still tantalizingly enigmatic even to most musicians. The man Debussy has recently been unveiled in Edward Lock-speiser's admirable two-volume study, Debussy: His Life and Mind (1962 and 1965), which deals in great detail, and with a penetrating over-all view, with the events and intellectual surroundings of Debussy's career; now, at last, there is a really fine book on Debussy's music. A pox on Harvard, for making Dr. Berman's dissertation so difficult of access (Harvard and University Microfilms do not have an agreement).

The dissertation is so thorough, precise, and full that I can discuss only a few essentials in this review. Appropriately enough, Dr. Berman begins his first chapter, "The Legacy of Wagnerian Chromaticism," with a look at Bach's G minor Fantasia for organ, a unique example in its day of the possibilities of diminished-seventh enharmony (and one that must have awakened the dead on the untempered instruments of Bach's time); Dr. Berman points out that until the 19th century, with Chopin and Wagner, the diminished-seventh was employed mainly as an unambiguous dominant (Vs), and only rarely as an enharmonic dominant. Similarly the augmented six-five-three or "German sixth" (also a resource of early classical harmony and differing from the diminished-seventh only by a single chromatic inflection), as illustrated in Mozart's K. 453 Piano Concerto, is described by Dr. Berman as "less ambiguous than the diminished seventh, since its function with relation to a given key is fixed" (p. 6). (Enharmonically, the augmented six-five-three is also an unambiguous dominant seventh.) The revolution in the use of these harmonic resources in the 19th century, according to Dr. Berman, came about by expansion of their contexts; Liszt and Wagner, for instance, made much of the requestial treatment, as opposed to resolutional, of chromatically-altered or otherwise multifunctional chords, and in such contexts, by gradually decreasing the frequency of appearance of distinguishing temporary tonics, achieved new paradigms for harmonic motion and musical continuity. Thus Dr. Berman states on page 11:

Wagner's attitude toward enharmony is this separated from Schubert's [as exemplified by the last page of his Imprompts, Op. 90, No. 3] in that it is not necessarily tension-building, from Bach's in that it does not rely upon temporary resolution in overt harmonies, and from Mozart's, since it is not confined to playing a predetermined formal role. In a word, the chromaticism of Parsifal is an enharmonic continuum which has no need for root movements to explain or clarify temporary tonalities.

And a little later, speaking about Parsifal, Dr. Berman says,

There is no denying that Wagner is concerned with breaking down longer chromatic spans into smaller entities which have some semblance of tonal unity. Yet, one may well ask whether, within the boundaries of these entities, the number, complexity, and expressive force of the chromatic details allow the listener to function on any but the lowest architectonic level.

From here Dr. Berman proceeds to a microscopic dissection of "Le balcon" (No. 1, though not the first composed, of Debussy's five Baudelaire [significantly Baudelaire!] settings of 1887-89), whose conspicuously chromatic dimension is wrought in an elaborately contrapuntal piano accompaniment reminiscent of Wagner's orchestral accompaniments, in striking contrast to the more "French," "figurational" treatment exhibited by other songs in the set, such as "Le jet d'eau" (No. 3), which is discussed in a later chapter. Dr. Berman points out that the "Wagnerian" songs in the Baudelaire group, compared with the Ariettes oublifes of about the same time, are something of an isolated phenomenon; nevertheless, "it cannot be ignored that this encounter with [Wagner's] chromaticism produced Debussy's first mature works. And just as Debussy, with all his later antagonism toward the Wagnerian aesthetic, never succeeded in resisting the music (nor, for that matter, the music-drama), so, too, the chromatic 'virus' is always latent in his work" (p. 30). Likewise, in La demoiselle élue (1887-89), the Tristan-like passages near the end coexist with the Medieval-modal "antique" harmonies of the beginning, the latter, Dr. Berman suggests, having their justification in the pre-Raphaelite literary origins of the work.

Dr. Berman then turns to the opposite pole of the 19th-century harmonic legacy in his second chapter, "Neutralization: The Diatonic Disintegration of Functionality." He says on page 31: "... Harmonic complication in a purely diatonic context contributed as forcibly to the disintegration of functionality as it did in the chromatic realm," and proceeds to back up this assertion with an impressive set of demonstrations. (Would that the authors of so many harmony texts could savor these words to the full, and climb off their pinnacles of "doubly-augmented-root-with-simultaneously-raised-andlowered-fifth-degree" chords!) Dr. Berman begins with the origin of the dominant seventh as a 16th-century passing-tone or suspension, and its subsequent evolution as an independent resource of quasi-consonant nature: "... Both [these processes] serve to show how conditioning to a sound within a certain environment allows the sound to leave that environment and find new ones: it has 'matured', so to speak" (p. 32). This statement could serve as a Law of Harmonic Evolution, to be engraved on the doorposts of every library of music theory.

In an analogous manner, in the 19th century, the triads on the so-called "modal degrees" of the scale (III and VI, sometimes II) achieve a greater independence as chordal entities, even when they are still structurally subservient to the major triads; Beethoven's fondness for casting second-theme groups in tonal regions based on III or VI is cited by Dr. Berman as an archetypal example of the new freedom. After giving several examples from Chopin (the beginning of the B-flat minor Funeral March and the

beginning of the Polosaise-Fastaisie, among others), Dr. Berman says:
"Considering the foregoing passages as a group, one is struck by a single characteristic common to almost all of them: the chords are in root-position regardless of the extent to which the "contrapuntal" vestiges are still apparent. In this respect, the growth of weak harmonic successions in 19th-century style is part of a more all-embracing tendency to call attention to the specific sound value of certain chords by giving them root status (this being synonymous with greater autonomy and independence)" (pp. 38–39).

An especially noteworthy feature of this discussion is the question of the so-called "added sixth degree," whose validity is scarcely acknowledged in most harmony books because it implies an origin other than superposition of thirds above a root; thus by the traditional interpretation Chopin's F major Prelude (or for that matter Weill's Movitat) begins on VI₈, despite the tonicity of the underlying bass, because the sixth degree cannot be accounted for as a passing-tone or neighboring-note, and cannot be achieved in a tower of thirds until the thirteenth degree above the bass is reached. (The major tonic triad with added sixth is, of course, a partial mapping of the black-key pentatonic scale, whose extensive employment by Debussy traces back to Chopin.) With reference to examples from Chopin and Lisat, Dr. Berman brushes aside all the old strait jackets:

The problem is essentially this: within the scope of the over-all piece the tonality is unequivocal, and the sixth degree remains ornamental. Yet, there are certain limited (microscopic) contexts which allow the sixth degree momentarily to build up its own field of associations (p. 45).

The broad field of "associations" is narrowed to specific "mixtures of sounds," from which Dr. Berman derives the general principle of sestralization (p. 46):

The clear-cut harmonic shapes of classical tonality, in which each chord has a certain role to play and a certain place to occupy, are obscured by the addition of dissonant or embellishing tones which evoke intervallic groupings at odds with the intention and the function of the original entity.... The dominant ninth chord itself is symbolic of this slow functional disintegration, because its particular physiognomy contains the substance of a "neutralization": its lower three notes say V, but its upper three say II.

Copious examples chosen from, inter alies, Gounod, Massenet, Bizet, and Debussy's earliest known work, the song "Nuit d'étoiles" (1876?), illustrate the principle in isolation; Dr. Berman then offers detailed analyses of three complete songs, "Mandoline" (1880–83), "C'est l'extase" from Ariettes oubliées (1888), and "Les Cloches" from Deax Romanus (1891).

Dr. Berman's third chapter, "The Nineteenth Century and Harmonic Modality," attacks squarely a subject that is very broad and highly ramified and, in most of the literature, utterly confused. On page 69 he writes cogently: The extent... to which the Romantics intended to copy sixteenthcentury polyphony in earnest is open to question. We are too quick to believe that they deceived themselves into thinking that they had successfully reproduced sixteenth-century techniques, when all they intended to do, more likely, was to give their sacred work a certain "legitimacy" by resurrecting the atmosphere of the old sacred style. It seems improbable that Beethoven's main concern in using the Lydian mode in his "Dankgesang" was to create a piece of pure modal writing (although critics disputing the authenticity of this writing have made it their concern, and, in so doing, have made it appear as if it had been Beethoven's as well).

And, on pp. 71-72:

It is undeniable that the source of our greatest confusion about "modal practice" lies in our failure to have distinguished between the use of modes in music of a single line and that of many lines. Indeed, the sixteenth-century theorists were already aware of the modifications which preoccupations of consonance and dissonance must impose on the employment of the medieval modes. Yet, if they were able to "perceive" these modifications with the ear—and thereby to understand the organization of the modes in the context of the polyphonic whole—they were not successful in conveying their perceptions to the nineteenth- and twentieth-century musician who had lost the gift for hearing in modal terms. Rather, they chose to designate the modality of a piece in relation to one line at a time, in which they were justified, supposedly, by the fact that their music was, indeed, composed of individual lines. But in the "harmonic" context of nineteenth-century "modality" such a basis for explaining modal procedures would be clearly unrealistic and useless.

As an example of this analytical problem, Dr. Berman cites the Neapolitan sixth chord, whose lowered-second-degree root is, in a scalar sense, equivalent to a component of the Phrygian mode; but the Neapolitan "had from the beginning very specific expressive connotations which are not known to have belonged to the Phrygian mode, if only because the lowered second degree in Phrygian was a real element of the mode—therefore sounded throughout the course of a piece—while the Neapolitan, as a foreigner to the mode, was reserved for certain momentary purposes" (p. 73). Dr. Berman then goes on to show, in a convincing set of analyses of part of the "Menuet" from the Petite Suite (1889) and the whole of "Le jet d'eau" (from the Baudelaire songs) and "L'Échelonnement des haies" (from the Trois Mélssies of 1891), that the origin of Debussy's modal structures is not to be found in 16th-century models or earlier, but, like so many of his tonal inventions, in the intrinsic relationships of tones themselves.

These analyses are a prelude to an exhaustive analysis of the String Quartet of 1893, Debussy's first large-scale masterpiece and a work which presents remarkable analytical problems. Dr. Berman shows that chromatic and modal elements in the first movement are at odds with each other and with a classical sonata-allegro tonal structure. "In a word, Debusy is using a conventional tonic-dominant opposition for his basic tonal structure and invoking a prodigious contrapuntal apparatus to cover it up" (p. 104). Dr. Berman suggests the possibility of external circumstances (Debusy's election to the Société Nationale) motivating the choice of outward sonata-allegro shape, a situation that in the light of our knowledge of Debussy as an archanticlassicist cannot fail to seem somewhat amusing, but which, if true (Dr. Berman's case is well made), produced a unique result. A similar conflict can be perceived in the last movement, which had Franck's Quartet as a model. In the middle movements, however, the apparently simplified formal schemes frame a more detailed and advanced state of Debussy's tonal language, one that marks these movements more than the other two as forerunners of the greater harmonic discernment and selectivity of the later works.

Chapter IV is called "The Impact of the Russian School: Chromaticism Turned Modal." Everybody knows about Debussy and Beris Godsnov, and nearly everybody knows about Mussorgsky's Sunless and Debussy's Nuages. Dr. Berman's study is the first that I have seen that goes into the particulars of the music; in addition, the historical information that he brings to bear on the subject demolishes many of the prevalent oversimplified notions about Debussy's encounter with "Russian realism."

In describing the concept of "mixed modes" (what Calvocoressi called "variable scales"), Dr. Berman gives the following interpretation of the famous chord-pair (C Eb Gb Ab and C D F\$ A) that underlies the Coronation Scene in Boxis Godswee (p. 133):

... To talk of "roots" at all implies a functional relation between the chords, in which one would play an altered V of V to the other's dominant, and vice-versa, tending towards a tonality which never appears. Given such an interpretation, one would find it natural to conclude that, by suppressing a chord of resolution, Moussorgsky has capitalized on the ambiguities of the two harmonies and created a state of instability in perpetaum.

The truth is, however, that the ostinato exists for quite different reasons. The chord of resolution is not missing but is very much present in the C major harmony. The oscillating chords, therefore, do not stand in the relation of altered II to V, but (if we are to give them functional names at all) as altered V of V to real V of V. With the elimination of a V-I cadence, these two harmonies are seen to have no basis at all in "roots", except in the C-pedal itself, which they embellish. The movements of the components of these chords to the pitches of the C-triad are thus contrapuntally conceived, and not guided functionally whatsoever.

F\$ is, of course, enharmonically common to both chords and is therefore also a pedal, but it is really submerged by the C, which has priority because of its reiteration and metric placement.

Indeed, the importance of the tonic pedal-point as an organic harmonic

resource cannot be overestimated in Debussy's and Mussorgsky's music, as Dr. Berman is at pains to demonstrate, here and in the next chapter; and it must be noted that these composers' use of a tone center as a parallel resource to key is a harbinger of a basic unifying concept in the products of the Viennese atonal revolution, notably in the "tonalistic" world of Alban Berg's music. (As an ancestral example, one could perhaps cite the G-centricity of the second theme of the first movement of Schubert's C major Quintet, which centricity of course coexists with but decidedly influences the tonal dimension of E-flat major.)

Dr. Berman brilliantly summarizes Debussy's search, in the years of growth, as follows (pp. 139-40):

... The music written in the decade 1890-1900 (the period of *Pelléar*) seems itself to pose the crucial question for Debussy's development at this time, namely, how must chromatic tones be arranged so as to relieve the total structure of functional responsibility? It is, in short, the period in which Debussy's hearing becomes further refined, in which his familiarity with altered-chord patterns and cadential formulae involving chromatic tones becomes sufficiently solidified to create a "non-functional", essentially linear music which provides a solution to the question of modulation, as it has already done with that of utilizing the old diatonic modes in the environment of a new harmonic style.

The new "chromaticism" may express itself, compositionally speaking, in diverse ways, but these are reducible to the conception of the mixture of modes as the generator of all potentialities required for "linear" modulation. It is in the acceptance of a chord built on any of the eleven non-tonic tones of a given scale to make a bone fide cadence with the tonic chord that the degrees heretofore considered chromatic, or foreign, to a particular major or minor scale must now be considered "modal alternates" of that scale. One can no longer speak of major-minor, but of an archetypal scale beginning with a tonic—the C-scale—which embraces all chromatic degrees, but in terms of diatonicism. That is to say—we are not dealing with a chromatic continuum, but with a construct in which only seven elements will be present at any given moment—and yet, one in which each of the twelve chromatic tones has an equal opportunity, theoretically, of being one of those seven elements.

The tritone-centricity in the Baris chords is an aspect which is mirrored in Debussy's Nactures for orchestra, and Dr. Berman's Chapter IV is built around an analysis of other parts of Baris and the whole of the Nactures. The latter work, however, exhibits a more complex structural plane. The B-F tritone, first of all, frames a Bogonform which is but one of the cyclic aspects of the three movements; "Nuages" begins and ends, and "Sirènes" ends, on B. "Fêtes" begins on the open fifth F-G; G to F\$ gives the beginning of "Sirènes" ("Fêtes" ends on an A major chord, which is also the second harmony heard in "Sirènes".) The pentachord BC\$D E F which frames the all-important English horn melody in "Nuages" and is essentially a referential scale, would ordinarily

be regarded as part of a Locrian scale with raised second degree (or perhaps as Phrygian-Locrian, a "mixed mode"); but Dr. Berman points out that the pentachord transposed to its own upper terminus, F, generates F G Ab Bb Cb, which is the underlying referent for "Fêtes," and which recreates the F-B polarity. As a tritone, the B-F pair permits enharmonic identification with two different dominant-seventh structures (like 50% of a diminished-seventh chord); as the first and fifth degrees of a scale, it effectively destroys tonic-dominant identification for that scale. (It seems almost to have become a 20th-century leitmotive. The B-F pair is central to Act I, scene 3 of Pelléas et Mélisande, as well as to one of the primary referential chords of Wezzeck, notably in Act III, scene 2.)

To generalize here would be only to repeat what Dr. Berman has brought out again and again with great force and clarity: modal degrees and chromatic inflections are inextricably interrelated; their function in context is the discriminant. Let me give an archetypal example, to which I hope Dr. Berman would not object. The lowered second degree has at various times "Phrygian" or "Neapolitan" attitudes. In Chopin's C minor Prelude, the D-flat major chord can be described as having, past facts, the function of root-position Neapolitan on one occasion (followed by V), and the function of IV of VI on another (followed by V of VI, then VI), both instances being preceded by VI. Similarly, in Chopin's C-sharp minor Nocturne, the lowered second degree is first the root-component of a Neapolitan sixth, and in the next beat the Phrygianly-inflected meladic second degree of the scale (in the comparatively uncommon V7 with lowered fifth).

In Chapter V, "Harmonic Evolution and Textural Innovation," Dr. Berman summarizes the principles described in the earlier chapters, and illustrates the extension of some of them with analyses, in terms of specific procedures, of examples from works by Debussy and his immediate prodecessors (Die Götterdämmerung and Duparc's songs are well represented). Dr. Berman apologizes unnecessarily for the "artificiality" of the categories which are given here as they appear under subheadings: "The Tendencychord Cadence," "The Phrygian Sound," "The Lowered Seventh Degree," "The Augmented Sixth Chord," "The Tonic Pedal," "The Raised Fourth Degree," "Ninth Chords," "The 'Heterophonic' Principle," and "The Whole-tone Scale." To recapitulate here the wealth of information and analytic penetration in these subchapters would require an outline as long as the chapter itself. I will dwell for a moment only on "heterophonic" sonority, which is a general term that covers "acoustic sensuality," variety of coloristic devices, and over-all complexity of texture in Debussy, and is inseparable from considerations of tone-relationships. The last paragraph of this chapter reads in part (pp. 213-214):

The Debussy textural ideal envisions a harmonic atmosphere in which dissonant tones are placed so as to reduce their "shock" value to a minimum and heighten their "overtone" value to a maximum. As Paul Dukas wrote in relation to the Quartet: "The harmony itself, despite many boldnesses, is never rough or hard. M. Debussy takes particular delight in successions of rich chords that are dissonant without being crude, more harmonious in their complexity than consonances themselves." Such an attention to the phenomenology of sound suggests a concentration on the requirements of an individual sonority, which in turn would imply a certain indifference to causal harmonic connection. As has been said above, the heterophonic context only encourages these possibilities, does not necessitate them

Dr. Berman's sixth and final chapter, "Tone and Gesture in La Mar," consists of a full analysis of that huge work of 1905, and demonstrates that La Mar exhibits a full flowering of motivic construction that forecasts the motivicity of the works of Schoenberg, Berg, and Webern (and that for this reason has, along with Jew, disproportionately attracted the scrutinizing eyes of today's composers). The brief Epilogue which follows Chapter VI points to La Mar as occupying the summit of Debussy's tonal evolution, with a continuous if occasionally circuitous path leading upwards from "Le balcon" of nearly twenty years earlier; the summit epitomizes a single-handed, personal, original achievement in the annals of tonally-structured musical form that is unsurpassed by any composer since Beethoven, and that is only now beginning to be understood.

Why did Dr. Berman not include Pelléas et Méliande in the continuity of his study? As soon as it is asked, this question is answered: Pelléas is unique in Debussy's works and in opera, and is music in a unique synthesis with a unique play, and really belongs in a separate survey. Whoever undertakes a comprehensive study of Pelléas—there has not yet been an adequate one will discover that Dr. Berman's The Evolution of Total Thinking in the Works of Claude Debusy is the most valuable preparation he can find anywhere. This last sentence is also by way of exhortation to publishers, who, if they have obligations to the community of interested musicians, cannot pass up this fine study.