

CHROMATIC MEDIANTS AS THE FOURTH BASIC FUNCTION IN TRADITIONAL HARMONY

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Translator's note¹

Following the practice of contemporary Czech theorists, Volek uses the term “function of traditional harmony” to designate a group of chords which have similar harmonic purpose and resolve in similar ways. Thus, the dominant function includes not only the dominant triad on V (the fifth degree of the scale) but also secondary dominants and, at times, triads on VII. The scale degree of the root of the chord does not suffice to determine its function within a given key. Even in English and American theory, a triad on II may be either a secondary dominant or a Neapolitan chord; a triad on VI may be a substitute tonic in a deceptive cadence. A triad may have multiple, or to use Volek's term, combined functionality – for example, the upper three notes of IV7 may behave like a submediant on VI even though the chord as a whole functions as a subdominant seventh.

Volek bases his theoretical remarks on actual music. The concept of harmonic functionality enabled Czech composers in the first half of the twentieth century to extend tonality to what Volek calls its periphery: free chromaticism resulting not from atonality, which is often termed a cul-de-sac in Czech theory, but from liberating chord functionality from a hierarchical structure based on the gravitational pull of the tonic. Remarkably enough, the strength of harmonic function was not diminished, and a performance practice developed in which such functionality became a powerful vehicle of expressivity. The harmonic realm described by Volek here is vital to our comprehension of this extensive repertory.

In this article, Volek proposes that a subgroup of the triads which we would call mediants and submediants, along with the tonic, can take on an independent harmonic function which has the properties of a cycle of triads at the distance of a major or minor third. He takes his examples from works in which tonality is still an active force.

Volek further establishes the context of this new function by describing three traditional harmonic functions defined in Czech theory: tonic, dominant, and subdominant. He

¹ This translation was made in 2001 from “Chromatické medianty jako čtvrtá základní funkce v tradiční harmonii” in Jaroslav Volek, *Struktura a osobnosti hudby* (Praha: Panton, 1988), pp. 70–102. The kind assistance of Milada Hornová in preparing this translation for publication is gratefully acknowledged.

refers to the work of his predecessor Otakar Šín, who, following Riemann's example, established a variety of other functions and chords, including Neapolitan, Lydian, Phrygian, and Mediant triads for Czech theory. Volek's contemporary Karel Risinger has proposed that Lydian triads (often variants of diminished triads and sevenths, patterned after the VII chord and its alterations) and Phrygian triads (II triads with flatted root and fifth, resolving directly to the tonic, often variants of the Neapolitan sixth, and including some of the altered chords discussed in American and English theory texts) also comprise functions.

Volek extends principles of diatonic harmony are extended into the chromatic realm to demonstrate transformation of traditional harmonic forms by twentieth-century composers.

Volek is the author of a more elementary discussion of harmonic functions, "Harmonické funkce," in *Slovník české hudební kultury* [Dictionary of Czech Musical Culture] (Prague: Supraphon, 1997), which provides an excellent introduction to this article.

For additional background information about Riemann theory in English, see Carl Dahlhaus, *Studies on the Origin of Harmonic Tonality*, translated by Robert O. Gjerdingen (Princeton: Princeton University Press, c1990): "A Guide to the Terminology of German Harmony," pp. xi–xv, and "The Theory of Harmonic Tonality," pp. 7–66, which discusses some of the same Riemann-related issues; in particular, the problems with mirror symmetry in the dualistic major-minor system and the tonic-like nature of mediant and submediant chords.

Glossary

The set to which a given chord belongs is not unique, but depends on its usage in context. A given triad may be said to imitate the function of the triad a third above or below it; in particular, a VII chord may take on the function of a V chord; a II chord can take on the function of a IV chord.

Examples are given for the keys of C major and c minor.

T – tonic – set of chords based on the I chord: C-E-G or C-Eb-G.

ƒ and **ƒ** are signs used by Otakar Šín for the Phrygian and Lydian triads respectively.

D – dominant – set of chords and their alterations based on the V chord G-B-D or G-Bb-D; can also refer to the upper three notes of the dominant seventh chord, B-D-F (VII chord).

D7 – dominant seventh: G-B-D-F.

DD – set of chords and their alterations based on the dominant of the dominant (i. e. II chord) D-F-A or D-F#-A.

S – subdominant – set of chords and their alterations based on the IV chord F-A-C or F-Ab-C.

S+7 – not only a subdominant seventh, but also the seventh chord of which the subdominant triad comprises the upper three notes, e. g. D#-F#-A-C.

SS – set of chords and their alterations based on the subdominant of the subdominant (i. e. VII chord, Bb-D-F or Bb-Db-F).

- M* – *mediant (includes III and VI chords, tonal and extratonal), categorized in the text; a specific set of extratonal mediants is proposed as exemplifying a new harmonic function.*
- MM* – *mediant of the mediant – for a III chord, a VI chord; for the VI chord, a III chord.*
- N* – *a chord with the functionality of the Neapolitan sixth.*
- F* – *Phrygian – set of chords and their alterations based on the II chord with flatted root: Db-F-Ab or Db-Fb-Ab.*
- L* – *Lydian – set of chords and their alterations based on the VII chord: B-D-F# or B-D#-F#.*

Combined functions proposed in the text:

- LS* – *Lydian/Subdominant: D#-F#-A-C,*
- DF* – *Dominant/Phrygian: Bb-Db-F-A.*

In this article Volek's references to the mediant function have to do with chromatic mediants rather than natural mediants.

Judith Fiehler

I.

Although one ordinarily does not give reasons for writing a non-polemic scholarly contribution – for the main reason usually is one's knowledge of the topic itself (or knowledge of one's ignorance of the topic itself) – I think that I should provide some explanation for my interest in this topic, and demonstrate how this article is related to my book **Novodobé harmonické systémy z hlediska vědecké filosofie** [Current harmonic systems from the perspective of scholarly philosophy], which was written in 1952 and published in 1961.

In both of my books – **Teoretické základy harmonie** [Theoretical foundations of harmony] (Bratislava, 1954) abbreviated in this article as TZH, and **Novodobé harmonické systémy z hlediska vědecké filosofie** [Contemporary harmonic systems from the perspective of scholarly philosophy] (Praha, 1961), abbreviated in this article as NHS – my goal was to express the chief theoretical problems in the field of harmony through philosophical and theoretical analyses of the most important harmonic systems, and to show, among other things, how a faulty philosophical – methodological basis leads to conflicts between musical theory and praxis. At certain points, I also endeavored to supplement critique of other works with my own ideas in a positive way. However, the conceptual scope of these two books formed a distinctive unity which did not allow me to discuss all of the issues which interest me and about which I have formed mature concepts; in particular, many problems related to application of the theory of functional harmony. Those who have read TZH may recall that this theory was assessed in that work as an essentially correct point of departure for interpreting the entire musical epoch from 1600 to 1900. Certain weaknesses in Riemann's own

concepts, such as the absolutely symmetrical dualism of major and minor, the ahistoric dominance of harmony over melody, and other topics were discussed within proper limits. I also took a stand against any expansion of the theory of functional harmony whose application would distort or nullify its fundamental principles. It would also have been possible to demonstrate philosophical and ideological causes of such distortion.

On the other hand, the development of the theory of functional harmony certainly did not end with Riemann. Diversified concepts; the incompatibilities of these concepts; the development of certain essential, even very important issues concerning the theory of functional harmony which arise in the context of the fundamental laws of these concepts; all of these topics not only can be, but must be discussed. It would be incorrect to look for a philosophical basis for each of these naturally evolving, varied ideas which would merely correspond in substance with a general theoretical framework. For this reason, and because a wealth of material was found while investigating other ideas and philosophical systems, I did not reconcile the theory of functional harmony with these theoretical issues in a systematic way, or offer a comprehensive view of the contemporary state of functional harmony from my own perspective at the close of NHS.

One of the inherent problems of the theory of functional harmony is that of the number of harmonic functions. Surely no one would think that the identification of three functions – tonic, dominant, and subdominant – represents the ultimate point of development in this theory, that this number is sacrosanct. Whenever we assume that there is no possibility of adding more functions, we are immediately faced with the necessity of doing so. When we examine the development of classic and romantic music, we realize that the reduction of every variety of harmonic phenomena to merely three functions is forced and leads to overly pedantic constructionism. Czech music theory has squarely faced this very issue in recent decades: In 1955, Karel Janeček published the article “Základní harmonické problémy a jejich řešení” [Fundamental problems of harmony and their solutions] in the periodical *Musikologie*, in which he departs from Otakar Šín’s position by proposing to increase the number of functions to five (the tonic, dominant, subdominant, Phrygian and Lydian functions – abbreviated as **T, D, S, F, L**) – thus, in effect, promoting the already established Lydian and Phrygian chords to the status of functions. Karel Risinger proposed a twelve-function system in 1958.² Emil Hradečský also supports five harmonic functions in his *Úvod do tonální harmonie* [Introduction to tonal harmony] (Praha, 1960). In the meantime, I had already expressed an opinion in the penultimate chapter of NHS (pp. 294–298) – not as a reaction to this new position, for I wrote in 1952 – that it was necessary to establish a fourth function for traditional harmony, the chromatic mediant function. In the context of that chapter, this passage gave support to another, more universal and important thesis: I demonstrated that the major and minor thirds upon which traditional chords are based can also serve as an intervallic basis for harmonic

² Karel Risinger, *Nástin obecného hudebního funkčního systému rozšířené tonality* [Outline of the customary system of musical functionality in extended tonality] (Praha: 1958).

functionality in late classic and romantic music under certain conditions; for example, as the relationship between the roots of two functionally related chords. I also demonstrated that the intervals of the fourth and fifth – intervals which were originally used as the basis of the structure of horizontal harmony – have, in recent times similarly served as a basis for chord construction (the fourth chord and others). Moreover, Karel Risinger thoroughly examined this very passage in his extensive review of this book, systematically developed it further with great practical knowledge, and incorporated it into the developing historic context of Czech music theory. Risinger reconstructs my entire concept of the number and arrangement of functions in an outline which, in my view, would be a very reasonable functional framework for music in performance as well as analytical and compositional praxis (with the use of schemas). As the author of a similar functional schema, he has specific reservations; nevertheless, he considers the introduction of an independent mediant function (with the symbol **M**) into the tonal system to be definitely correct (pp. 762–763). However, neither this passage nor its analysis and explication in Karel Risinger’s review can substitute for systematic investigation and direct commentary on this topic, which is often the center of attention; hence, I have decided to clarify it more systematically in this article.³

Because this topic is significant with respect to very recent developments in traditional harmony, its investigation here – even though it might be somewhat flawed – enables better analysis and orientation, chiefly for the very innovative compositions from the end of the 19th and beginning of the 20th centuries. Therefore, I believe that this essay can also contribute in part to paying the debt which music theory owes to tonal harmony, and bring music theory a few decades closer to contemporary praxis.

³ I have chiefly used examples from actual music, from genuine compositions, to demonstrate my ideas. I would like to make two comments about them.

These examples are merely objective illustrations, specific quotations – not a representative selection. Since we find widespread examples of chromatic mediant structures as early as the second half of the nineteenth century, an attempt to provide a representative selection would be a quite laborious affair, and such a selection would not be substantially more helpful for explaining the principles which will be discussed here. Thus, the predominance of examples (1) from Czech music (2) from piano compositions and particularly (3) from Suk’s piano compositions does not indicate that such structures have been significant aspects of Czech music, piano compositions, or Suk’s music, or that they might not be found elsewhere as frequently, with the same significance. This predominance is merely the result of a patriotic choice of the material which I sought and was at hand.

The second remark concerns my method of notating harmonic and chordal signs under the notes. The latent modulatory character of the mediant structure and other considerations led me to use two notational systems in certain places: 1. Chord specifications in common use, from which I utilize chord notation used in guitar and dance music (for example, D7 indicates D-F#-A-C and its inversions rather than a dominant seventh chord). 2. Šín’s familiar notation for analysis of harmonic functions. The “guitar-like” notation is indicated by normal type, and Šín’s harmonic functional notation by boldface type. [Translator’s note: this printing convention has been changed from that of the original text, since Šín’s notation may not be familiar to English-speaking readers.]

II.

In my opinion, the concept of harmonic function was introduced by Riemann in order to enable diagnosis of the deeper purpose of various chord progressions, diagnosis of that which such progressions with differing sound, structure, melody and rhythm have in common. He thus found a genuine basis for harmonic laws and specification of musical structure. Then the basis of harmony does not consist in how specific, mutually related chords differ (there is always enough of that in the context of reality), but how they are alike. For example, when we compare the progressions

The image contains two musical examples, labeled a) and b). Both are in 3/4 time. Example a) is titled 'a) Volně'. It shows a piano accompaniment with a treble and bass clef. The treble clef has a melody starting on G4, moving to A4, then B4, and finally C5. The bass clef has a chord progression: C major triad (C-E-G) in the first measure, and C major triad (C-E-G) in the second measure. Example b) shows a similar progression but with altered notes. The treble clef has the same melody as in a). The bass clef has a chord progression: C major triad (C-E-G) in the first measure, and C major triad with a flat (C-Eb-G) in the second measure.

we see, or better said we hear, that they are different from an expressive standpoint, even though the tempo, rhythm, melody, and aural effect are preserved. In example 1b, a difference in expressivity is obtained through altered notes. These notes are harmonic elements of the chords, and hence it is impossible to state that the harmonic progressions shown in these two examples are absolutely identical. However, one can say that they have the same purpose, direction and tendency to resolve (to the tonic in this case), and the same functionality. This fundamental tendency of chords to resolve supports the realization of structure; everything else can be considered as diversification, expression, intensification, animation, shading, coloration, and so forth; there is truly much at one's disposal here, metaphorically speaking. By reference to the philosophical dichotomy of "substance – phenomenon", we can consider a harmonic function (through the use of explanatory symbols) as the abstraction of the essential substance of the progression, and its concrete form (for instance, as a triad, seventh chord, altered or unaltered chord, a function of a primary chord or its substitute) as phenomenon, its implementation as a real event. Philosophy teaches us that substance has no existence except for its realization in form as phenomenon (thus, a "pure" abstraction of harmonic functionality is inaudible); that every event refers to an abstract concept; and that the attributes "universal," "specific," "identical," and "different" exist only in dialectic association.

These truly unoriginal reflections might seem to be self-evident to the point of banality. But I have the impression that Risinger's system of twelve functions somewhat jumbles these two categories, substance and phenomenon. For his purpose, functionality is not a designation for the inner relationships of actual chords or groups of chords, but for their individual or collective attributes. In its implementation, Risinger obtains a specific function for each degree of the chromatic scale. This result raises the fear that if we take off in this direction we might not be able to stop, for with

further differentiation based on the number of notes in the chord, chromatic alteration, etc., the number of functions might increase so much that we could eventually find ourselves in a situation in which each chord progression (not to mention inversions) would have to have its own function, and that function would be identified by means of the progression. To be sure, the author of the twelve-function system has accepted criticisms of his work which have often been motivated by these very objections, and he seems to be willing to consider whether an authentic function could be considered as an example of what he calls divisions, as something which almost coincides with the system of **T, D, S, F,** and **L** [tonic, dominant, subdominant, Phrygian, and Lydian functions]. I dare say that as this system develops Risinger will have five functions, as well as twelve kinds of subfunctions or functional variants on various degrees of the scale, which, in the end, will take actual form as a set of self-sufficient relationships.

If we proceed empirically from actual cases, as the laws of induction and deduction require – for instance, from the difficulties which arise over identification of certain functional signs of the Riemann-Šin system (to which Risinger appeals) – and also from a firm understanding of the consequences of the philosophical basis of “substance – phenomenon,” then, I think, there is a single correct path for efforts to increase the original number of three functions: we decide to introduce new functions when and only when it is absolutely clear that a specific group of interrelated, similar chord progressions which are in frequent use simply cannot be notated as any of the existing functions or functional combinations (**T-S, T-D, S-D, S-T, D-T, D-S**); we simply cannot specify a given chord unambiguously as subdominant, or as a vertical sonority with a dominant or tonic character. This condition holds for the chromatic mediant function. Thus, for instance, an Eb major chord resolving to C major does not play the role of a tonic (or substitute tonic, as Šin conjectured), or a dominant (for we do not perceive the Eb as D#!) or, obviously, of a subdominant. The triadic structure of the chord is compelling, consistently obvious, and only analysis on paper would venture to recommend that the Eb major chord be notated as D#-G-Bb, an altered dominant minor six-four chord in the key of C major. For we perceive Eb as the root of the chord; but this Eb is not usually resolved as an altered note would be, to E, but freely to C – and this vertical sonority would have to appear in a highly unusual, very specific context to be analyzed as a second inversion. An even greater difficulty arises with respect to non-modulatory chord progressions such as that from A major to C major, which are quite usual today. A theory which does not recognize the chromatic mediant function within the key, and does not want to admit extratonal mediants (perhaps with a proposition about abrupt modulations or mechanical juxtaposition of two tonic chords and so on), has no alternative but to:

1. change C# to Db and E to Fb! (which are, after all, alterations which are not allowed in C major) and thus to transform a comprehensible major triad into an incomprehensible six-four chord with an diminished fourth and diminished sixth(!);
or

- merely change C# to Db, whereupon a monstrous structure emerges – a four-five chord with a diminished fourth.⁴

I think that these risky methods are inherently doomed and that one does not have to speed their demise with sarcastic commentaries. I therefore abandoned such lines of reasoning and reached the inescapable logical conclusion that we run up against the actuality of a fourth basic function of traditional harmony in such cases.

To summarize the remarks we have made so far, we formulate them as two related premises:

- We sense (and the composer uses) progressions involving chromatic mediant not merely as empty functions but as normal, familiar, solid structures (that is why we find them in the closing sections of compositions and in dance music);
- Attempts to explain these functions as forms and combinations of established functions as well as the more recently introduced Phrygian and Lydian functions break down in the unnatural theoretical constructionism of the explanations themselves, which are far removed from actual praxis and normal musical intuition.

A syllogistic conclusion follows from these premises: there are four specific functions which have progressively unfolded within the recent evolution of European music on the foundation of Classic-Romantic harmony.

And there exists a chromatic mediant function **M** which defines the tonal harmonic relation of all major triads whose roots are a minor or major third from the root of the tonic in a major key

and of all minor triads whose roots are a minor or major third from the root of the tonic in a minor key.

The natural mediant are minor triads in major keys, and major triads in minor keys, (a minor ← C → e minor: Ab major ← c → Eb major). They do not evolve as a distinct function because they always have two common tones with the tonic; [Translator's note: in Riemann's theory] they are merely variants, functional substitutes or combinations of the tonic, subdominant, and dominant functions. These chords

⁴ In the review cited above, Risinger analyzed a similar case which was even more complex: E-G#-B in the key of C minor. He shows convincingly that all of the notes and intervals of the E-G#-B triad are perceived as such rather than enharmonically, as altered Fb, diatonic Ab, and so forth.

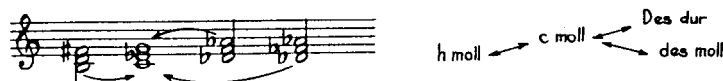
are called “mediants” by Gavaert (*Traité d’harmonie teoretique et pratique*, Brussels, 1907). Thus the term “mediant” is not new (it appears as early as Rameau, who uses it to indicate the natural triad on the third scale degree); but I use it in an innovative, fundamentally different way.

III.

Let us now return to the hypothesis that the Lydian and Phrygian functions are independent. Janeček treats this hypothesis very cautiously. He discusses them as supplementary, auxiliary, and complementary functions of lesser importance. Considering their harmonic affinity to the tonic and to other functions, I believe that their harmonic functionality is not independent, in fact it is not even subsidiary or supplementary; these chords are merely rather distant alterations of subdominant chords (the so-called Phrygian function) and dominant chords (the so-called Lydian function). [Translator’s note: the II triad has two common tones with the IV triad, and the VII triad has two common tones with the V triad.] If we would apply the strict conditions discussed above for determining harmonic functionality when constructing these functions, we could never resolve to proceed. The relevant relationships are schematically expressed thus in C major:



and in c minor:



(for example: Db-Fb-Ab in C major, B-D#-F# in c minor; for Fb and D# are enharmonic equivalents of the third of the tonic.)

We have explicitly introduced all of the possible Phrygian and Lydian triads to which the rules of alteration apply; however, we do not show possibilities for triadic relations which break these rules, those which can be considered as free chromatic progressions (abrupt modulations), or, of course, those for which it is difficult to establish a stable functional triadic relation (for example: Db-Fb-Ab in C major; B-D#-F# in c minor; Fb and D# are enharmonic equivalents of the third of the tonic triad, e if major and eb if minor – and thus cannot be recognized as altered notes). With respect to what remains of the variety of possibilities which we have shown in the diagrams, it is necessary to add that Šín (*Úplná nauka o harmonii*, third edition, 1942) classifies the Phrygian chord (designating it as a subdominant triad with the symbol F) in a group of triads which resolve entirely by semitone; for example, Db-F-Ab in C major and (evidently also) Db-Fb-Ab in c minor. [Translator’s note: In the following

passage, the concept of leading tone is extended to include resolution of an altered note by semitone, either upward or downward.] But not D-F-Ab in c minor, because the third of this triad is not a descending leading tone to Eb (it is not a semitone away from Eb). Šín analogously identifies the Lydian triad (designating it as a dominant triad with the symbol \mathfrak{D}) as the form B-D#-F# in C major rather than B-D-F#, again because the note D would not resolve by semitone as an ascending leading tone to the note E. The triad B-D#-F# can also be considered as a chord with three ascending leading tones. Janeček also supports this usage, defining these forms as Db-Fb-Ab in minor and B-D#-F# in major. But whether the terms “Phrygian chord” and “Lydian chord” are or are not restricted to chords which consist only of leading tones (the concept of a leading tone is somewhat broadened here, for the seventh of the dominant chord and to a lesser extent the root of the subdominant triad – the note F – are not leading tones, strictly speaking) we must bear this property in mind when considering the question of new harmonic functions, for it could hardly be possible to justify that a major chord would retain a well-defined functionality when altered to minor, but that the identical minor chord would not retain such functionality when altered to major. The existence of a leading tone (an authentic leading tone, not just a semitone interval resolving to the third of the tonic triad) is not the principal factor, as is shown by the fact that when this leading tone is not present, the relationship of the minor dominant and the major subdominant to the tonic is circumvented; the absence of this leading tone weakens the “fall,” the gravitational pull of the resolution to the tonic, nothing more.

One can state empirically that a direct, strong functional relationship to the tonic is indisputable for four of the six possible forms of the Phrygian and Lydian functions. These triads are: Db-F-Ab in C major and minor, B-D#-F# in major, and Db-Fb-Ab in c minor. On the other hand, justifiable dispute can certainly arise about the infrequently used Lydian triad B-D-F# (B minor) in the keys of C major and c minor. As we will see, a neat and thus theoretically valuable symmetry is lost to us through this evaluation. This asymmetry is due to the powerful effect of the Neapolitan chord (N), one of the earliest altered chords and the first to come into common use. Db-F-Ab in major and minor (used more frequently in inversion) is tonally and functionally quite stable and unambiguous, and preserves its potentiality for intelligibility and directionality even in its minor form, Db-Fb-Ab in c minor. In contrast to this secure position of the Phrygian forms, only one of the Lydian forms, B-D#-F#, retains its functionality, thanks to rather recent developments in music, and is certainly in favor – sometimes even to the point of being a cliché – for implementing the consistent semitone shifts which arrangers of dance music particularly appreciate. Even though Šín was rebuked at the time for proposing a Lydian chord which has been described as a “theoretical fabrication”,⁵ its functionality in praxis corresponds to the general indifference shown by Šín’s critics on this point, for progressions such as

⁵ According to Karel Janeček, “Základní harmonické problémy a jejich řešení,” p. 124. [Translator’s note: Janeček discusses the viability of these chords within Šín’s five-function system in his **Základy moderní harmonie** [Foundations of modern harmony] (Praha: Nakladatelství Československé akademie věd, 1965), p. 211.]

(Brahms: Intermezzo, Op. 118, no. 4)



(Suk: Píseň lásky, op. 7)



were not considered to be particularly innovative in Romantic and Postromantic music. In other words, theoretical explanations of these sonorities as chords in suspension or triple melodic suspensions do not eradicate their existence as phenomena, or their clear relationship to the tonic.

But what Šín formulated as a construction is actually a theoretically derived mirror symmetry, the intervallic inversion of the ordinary progression **N-D-T** [Neapolitan-Dominant-Tonic], which he formulated and notated as **T-S⁰-T**. But this inversion is vastly different from the original progression **N-D-T**, something else entirely. And in this case it is clear that the principle of symmetry has sometimes led harmonic theory astray. Šín's maneuver to the tonic from the Lydian form through the minor subdominant was basically scholastic harmony, an exact inversion of a progression used for centuries, and one must confess that it does not sound bad.⁶ The direct path, a suspension added to a Lydian triad such as B-D#-F# and its inversions resolving to

⁶ It is difficult to find examples of this progression in actual music. And where we do find them, we ascertain that the so-called Lydian chord does not resolve to an ordinary subdominant but to its strongly altered form, even if the composer has notated the chord in such a way that it does not seem to be a Lydian chord, but a vertical sonority which has an free tritone relationship with the chord to which it resolves.

(Suk: **O matince** no. 2)



the tonic, seemed to be the most convenient way to strengthen this chord's functionality, and is currently used in popular dance music.⁷

(Gypsy melody)

As we speculate why the structure of these symmetrically altered chords is obvious to us, but their functionality, frequency, moods, and diverse uses are not, perhaps I could communicate to the reader some of the experiences I had when studying the harmonic style and innovative aspects of the compositions of Frederick Chopin.⁸ [Translator's note: Contrary to Riemann's theoretical expectations] there is neither an equivalent relationship nor a symmetrical resolution of specific traits between dominant forms and subdominant forms in the context of the music itself. While the dominant forms are most statistically prevalent (as shown in H. Budge's **Study of Chord Frequencies**),⁹ the subdominant forms tend towards increased dispersion and qualitative diversity. The subdominant function is clearly predominant among the

⁷ From the example, it is also clear that the triad B-D#-F# (along with its inversions) plays the explicit role of a dominant here rather than any other specific role (function), and effortlessly supports the note G in the bass as its foundation, even often requires it. The well-known theme of Gershwin's **Rhapsody in Blue** also utilizes this chord, in an explicitly dominant function which is also made evident by the note G in the bass accompaniment of the piano part.

The compactness of this B major triad and the distancing of the pedal G by its timbre and voicing insures that we do not perceive the entire vertical sonority as a G-B-D#-F# seventh chord, but as a functional combination.

⁸ Jaroslav Volek, "Chopin – novátor hudební řeči" [Chopin – innovator of musical discourse] in his **Struktura a osobnosti hudby** (Praha: Panton, 1988). Also **Sborník Hudební věda**, 1/2, Praha 1961 (see page 113), and "Die Bedeutung Chopins für die Entwicklung der alterierten Akkorde in der Musik des XIX. Jahrhunderts," in **Chopin – The Book of the First International Musicological Congress devoted to the works of Frederick Chopin** (Warszawa: 1963), pp. 259–268.

⁹ Helen Budge, **A study of chord frequencies based on the music of representative composers of the eighteenth and nineteenth centuries** (New York: Teachers College, Columbia University, 1943).

altered chords. The dominant function, despite its statistical prevalence, seems to be concentrated in relatively few forms (chiefly the dominant triads, and dominant seventh chords), whereas the subdominant function unfolds its roles equably into diverse variants and variations; there is a far greater equivalence and balance among the minor and major subdominant forms, the subdominant triads and sevenths, than among the major and minor dominant forms. I am sure of this assertion with respect to Chopin's music; for other composers of the Romantic era, I have at least found nothing which would contradict it.

Therefore, it is this generally unequal distribution of the various traits of dominant and subdominant forms which functions in such a way among altered chords – the forms which are strikingly remote from the fundamental triads – that a clear preponderance of subdominant (Phrygian) forms over dominant (Lydian) forms emerges. The Lydian triad B-D-F# is very unstable functionally; its relationship to C major and C minor is the least customary, the least smooth, the least independent, and so forth. The position of the triad B-D#-F# is far stronger (and certainly has more potential for becoming a harmonic cliché), but only because it solidly conforms to our habit of invariably resolving the doubly altered S+7 (D#-F#-A-C) to the tonic in the key of C, and in fact, is only a newer, less banal variant (for example, in the form B-D#-F#-A). For this reason, it is not possible on historical grounds to consider the chord D#-F#-A-C to be LS, a form combining Lydian and subdominant functionality, as Janeček does, as I will demonstrate below in the appropriate place. This result naturally corresponds to the fact that the alteration of D to D#, which clearly engenders an additional leading tone, reinforces and facilitates the relationship of B-D#-F# to the tonic chord of C and nullifies the effect of the chord's independence from the key; whereas the minor D in B-D-F# seems far more neutral and does not have a gravitational attraction to either the major or minor third of the tonic triad (in this passage), even though, according to Šín – evidently incorrectly – it functions as a pseudo-leading tone when resolving to a minor tonic triad because it resolves by semitone (D to Eb).

Clearly, as soon as another note is added to the B-D#-F triad, such as the seventh and particularly if it is Ab, the sixth degree of the diatonic minor scale, the situation changes and the affinity with the tonic is intensified. Not through the Lydian function, but through the ordinary subdominant relationship. Janáček utilizes it in exquisite harmonic progressions in a crucial scene of his opera **Káťa Kabanová**:

(Janáček, **Káťa Kabanová**, piano reduction p. 148)

Adagio (♩ = 5/4)
Vni con sord.

Ob. VI.

A le smrt
na - při - chá - zí

as moll: T° D5 6# 4/2# (= L° 2 ?) T°6 T°

We presume that it is precisely the Fb, the flatted subdominant note in the lowest voice, which decisively emphasizes the altered, combined nature of the vertical sonority (which is somewhat ambiguously notated Fb-Bb-D-G, the third inversion of a g minor seventh chord with flatted seventh); as a result, we do not perceive this chord's function as inherently Lydian but as a simple **DS** form, a combination of dominant and subdominant; its originally subdominant root Db is raised to D, and otherwise it is identical to the usual diminished seventh chord.

The first condition, which stipulates that Phrygian and Lydian chords should not cause discontinuous functionality and a gap in the harmonic flow of the movement, can thus be generally considered to be fulfilled. Let us now see what the situation seems with respect to the second condition; that is, if explaining these vertical sonorities through established functions is in fact impossible or leads to distortion. I truly believe that the fundamental error made by adherents of the five-function system is to underestimate the significance of this second, empirically important condition. As a result, signs for functions (which, of course, are obviously useful to experts in specific cases) are rather extravagantly invented. But a more serious consequence is that the natural regions of the subdominant and dominant functions are necessarily restricted, and thus the capacity, the active range of one of the most important developmental principles of European harmony is weakened: the principle of alteration [Translator's note: here, chromatic inflection of an actual occurrence of a chord, preserving its original functional substance but changing its sound], which – if we carry this reasoning to its conclusion – can now, in effect, be quietly eliminated, since every proliferation of altered forms can be explained (on paper through construction) as a combination of the five functions: Tonic, Subdominant, Dominant, Phrygian, and Lydian.

When we attempted in every way possible to analyze chromatic mediant within the key, as some sort of altered subdominant or dominant or as a combination of the two, we found that it would be necessary to construct bizarre doubly diminished second inversion chords and other oddities from ordinary triads. But if we want to analyze a Phrygian or Lydian chord as an altered subdominant (or dominant) form, we do not have to change the structure of the chord at all; on the contrary, we can simply and directly construct a new altered form from ordinary, unaltered functions: from D-F-Ab we obtain Db-F-Ab; from B-D-F, we obtain B-D-F# and B-D#-F#. I do not understand how one can conclude that the subdominant loses its identity and is changed to another function when a given chromatic alteration intensifies the subdominant nature of the chord (or analogously, if it intensifies the dominant nature of a dominant chord). An example is the characteristic descending leading tone of the minor subdominant in C major, the diatonic Ab; if one adds a note below to produce the seventh chord D-F-Ab-C and chromatically alters it to Db, the resultant artificial descending leading tone intensifies the original nature of the chord. Moreover, this very progression often occurs in actual compositions; it unfolds before our very eyes in an indivisible, unidirectional process of gradually intensifying subdominantization in the following example: (**T, ST, N**) [tonic; tonic seventh; submediant; Neapolitan sixth]

(Beethoven, **Sonata** op. 27 no. 2)



According to the theory of five harmonic functions, this passage seems to break off illogically and suddenly take another course, “falling into” another function; even though there is no reason to do so according to our perception and directional purpose of harmony, even when though we perceive the passage as merely portraying the characteristic atmosphere of the subdominant! Similarly, when the fifth of the dominant in C major, D, is raised to D# [Translator’s note: producing the so-called Smetanian dominant, which appears as a functional substitute for the ordinary dominant chord], the typical dominant tension is intensified and the chord “falls into,” resolves to the tonic; hence this altered triad is also usually placed after an open fifth and the D# resolves to E, the third of the tonic chord (but not conversely!)

(Schubert, **Impromptu** no. 3)



But according to the five-function theory, this obvious intensification of the dominant quality of the chord B-D-F-A to B-D#-F#-A indicates a true reversal of the concept of alteration; it indicates change to another function. Furthermore. I became convinced that the Phrygian form (II) belongs to the region of the subdominant and the Lydian (VII) to the dominant (I repeat that I truly do not know what altered dominant and subdominant forms would be if this statement were not correct) by Šín’s failure to devise a mirror symmetry to the progression N-D-T for the Lydian chord. For in common practice the S-D progression is a natural and normal part of the cadence. However, its intervallic inversion, the D-S progression, although quite feasible and sometimes elegant in sound, is merely an exceptional, unorthodox, derivative, variant, expressively singular cadence. That is, in the tonal center. But in the periphery of tonality, the region of intensive alterations, a S-D progression (for example, N-D) is natural, whereas the D-S progression (for example, L-S) is only

a singular example of harmonic invention. Hence Šín did not attain mirror symmetry. But this detail once more confirms our conjecture: if conventional asymmetry is valid, the inversions of the **S-D** relationship – or to say it another way, the Phrygian and Lydian chords – are nothing but singular cases, merely realizations of dominant and subdominant functions in regions distant from the tonal center.

History, the historical development of music itself, provides us with another example. Janeček understood well that the Lydian chord is quite recent in time, and thus less stable than chords such as **D#-F#-A-C** and **D#-F#-Ab-C**, which were elegantly utilized by composers of French grand operas, and, with few exceptions, were not harmonically daring or original at all. And thus Janeček states (124 c. d.): “... the classic composers were only aware of its use in combined functions; modern composers were the first to use it in pure, uncombined form in direct relationship to the tonic.” Let us consider what this assertion signifies as an account of specific, incontestable empirical facts. First of all, it contains a remarkable, unverifiable anomaly which does not apply to any other function (not even our new chromatic mediant function); that a combination of functions evolved first, and the independent function emerged only afterwards. The idea that the innovative dominant ninth chord evolved earlier, or the seventh chord on VII was in use before the dominant and subdominant triads does not seem possible to us here. In other words, I think that if this assertion were extended to other harmonic functions, it would undermine the very concept of function as the foundation and basis of harmonic relationship. Functional relationships evolved historically as relatively advanced types of protofunctions, of the relationships in the movement of interrelated voices. The fundamental triads played a decisive role in that development – which no one today who acknowledges the Zarlino-Rameau-Riemann line of succession in music theory can doubt to be true in general. Combining functions produces intensified functional nuances, but also stronger, more stringent requirements. To put it another way: if functional combinations are to be comprehensible as such, the elements of these combinations – basic chords (and their interrelationships) must already have been established, and must exist in common practice. Chordal development in the seventeenth through the nineteenth centuries fully confirms this conclusion; in general, it clearly progresses from simplicity to complexity, from ordinary functions to their combined forms.

However, could someone object that this conclusion might be invalid for the end of the nineteenth and beginning of the twentieth century (with respect to the evolution of traditional harmony)? In that era, it is certainly remarkable that the chromatic mediant function conforms to this rule of development (from simple to complex). Today, we do not lack examples of polymorphous combinations of chromatic mediants and their combinations with tonic, dominant and other chords, as is shown in this example from Bohuslav Martinů's **Julietta**; in the key of E, a chromatic mediant on VI is sustained in the treble clef, (enharmonically spelled **Db-Ab-F**) along with **D**⁵

(dominant triad, B-D#-F#) then S⁵ (A-C#-E), then a mediant on III (G-B) and finally a Phrygian chord (altered substitute subdominant on II, F-A-C).¹⁰

(Bohuslav Martinů, *Julietta*; piano reduction, p. 119)

Moderato

The history of the chromatic mediant function clearly demonstrates that it was first established as such in simple triadic form, and that its potentiality for combinations in seventh chords, bichords and other chords emerged only afterwards. The law of natural progression from simple to combined forms applies from the beginning and throughout the comparatively recent expansion of its functionality. In the midst of

¹⁰ For example, it is noteworthy that the continuity of the tonal center of E major is always maintained in a remarkable manner, and the passage never deviates from that key. No matter where we break off this phrase, we always perceive the E major chord as the tonic; it even seems that the very presence of this chord combination reinforces our consciousness of a unique tonal center, that the tonal center is more secure thus than it would be if pure mediants were used.

There are two possibilities for linking mediant chords of the first degree, as we shall later show in more detail. Either: mediants on the III scale degree are linked; mediants on the VI scale degree are linked (Eb and E, Ab and A in C major; eb and e, ab and a in c minor), but then the semitone distance of all of notes of these chords will evoke sharp dissonances and the greatest possible difficulties in grasping the harmonic direction – hence this possibility never actually appears in praxis. Or: combinations of mediants on III and VI alternate (Eb and Ab, E and A, E and Ab, Eb and A in C major; eb and ab, e and a, eb and a, e and ab in c minor); these progressions are logical and natural in this region. The following example, constructed as sixteen-measure harmonic period for piano, systematically runs through these possibilities without detracting from the harmonic aspects and inflections of the periodic structure, in our opinion. Combinations of these mediants – Eb-Ab, E-A, E-Ab, and Eb-A – occur here in succession, and are repeated two or three times.

Moderato

such development, could the Phrygian and Lydian forms (which historically predate the chromatic mediant relationship) have evolved in the opposite manner for some mysterious reason? The mystery obviously resolves itself as soon as we abandon the hypothesis that the Phrygian and Lydian chords are functionally independent. Then everything is immediately quite clear, without mystery; the familiar diminished chord D#-F#-A-C is an altered S+7 substitute subdominant seventh chord; everyone recognizes that the relationship of this vertical sonority and its altered variant containing Ab to the key of C major has become domesticated in Czech music and elsewhere.



During the era of developing chromaticization of the Romantic musical style, the need for melodic voice-leading within inner voices made valuable contributions to this evolution, enabling routine preparation and nearly ideal conditions for resolution. But we do not want to concern ourselves with that topic here. As an altered chord, the B-D#-F# (Lydian) chord is less usable, not at all routinely prepared, and has specific problems with its resolution. That is why it began to be utilized relatively late in history. According to the five-function system, the chord D#-F#-A-C is defined as the combination of B-D#-F# and F-A-C, thus as **LS**, a form combining of Lydian and subdominant functionality (just as B-Db-F-Ab could be a combination of G-B-D and Db-F-A, thus **DF**, a form combining Dominant and Phrygian functionality). Therefore, according to these theories, composers using the familiar D#-F#-A-C and D#-F#-Ab-C chords must have been aware of the Lydian function (so that they could create these combinations); but their awareness never crystallized to the extent that they could use the Lydian function itself! I find a discrepancy here which can only be resolved comprehensibly if we refrain from constructing these additional functions.

And still another essential remark. It is clear to me that I can simplify the so-called harmonic notation of many of these chords through the implementation of these five functions. Any altered chord whatsoever can be functionally expressed with various combinations of the signs **T**, **S**, **D**, **F**, **L**, since these signs account for every note of the chromatic scale when supplemented by the signs “+” for major and “o” for minor chords. The fondness for combinatorial functions and symmetry opens the door wide at this point. However, there is a unity of logic and history in music as everywhere else; a logical system and schema need not be in discrepancy with its laws of evolution. To the contrary; history is not illogical chaos, a confused vacillation between extreme positions; it progressively discloses a logical kernel, the substance of matter. And that kernel is revealed in the field of tonal harmony, among other ways, as the principle of alteration (of artificially added leading tones), which brings chromatic notes into

harmonic relationships with the key; it need not be replaced by a principle of five-function combinatoriality except on paper. Hence, I was not at all offended when Risinger correctly stated in his review that my theory had the same weakness as Šín's; that is, that it "does not account for the functional reality of altered chords as combinations of **D**, **S**, **F**, **L**." This reality – it is said – "is not only a notational convention, but is profoundly connected to the actual traits of altered chords." (*Hudební rozhledy* 1962, p. 763) But I would like to ask: where is this profound (even significant!) connection of altered chords with combinations of **D**, **S**, **F**, **L**, and what is it like? After all, these combinations are clearly anti-evolutionary substitutes for altered progressions, and completely liquidate the meaning of alteration. To say it another way: what then is actually altered? Up to now, we have been accustomed to alter the subdominant and dominant without listening to reformers and an increasing number of simple-minded persons who have even begun to dispute alteration of the tonic. But there are no altered **S** and **D** chords in the five-function system, merely combinations of **S** and **D** with **L** and **F**. Thus, the system does not account for any altered dominants. Ergo, there is absolutely no place at all for alteration. It is necessary to understand this point and tell the honest truth. I am either an adherent of the principle of alteration (as Šín was), or of five-function combinatoriality. **Tercium non datur** and "profound connection with the actual significance of altered chords" are only chimeras. But to avoid misunderstanding I will point out that the names (rather than the functions) of the Phrygian and Lydian chords and their symbols **F** and **L** (in the place of symbols **Ƒ** and **ℒ** (which Šín introduces) seem to be suitable and practical to me. Similarly, the sign **N** for the Neapolitan sixth chord has long been in use in international theoretical literature without proclaiming it as an self-sufficient function in consequence.

IV.

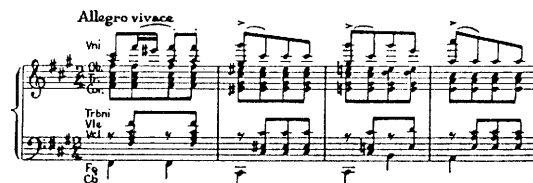
Let us now pose a question: what would be the situation for the tonal system if we would only use four functions: **T**, **S**, **D**, **M**? In the above-mentioned review, Karel Risinger suggests that I classify the set of vertical sonorities which belong to the mediant function according to a very simple shared idiomatic trait (the relationship of the third to the tonic), without differentiating more precisely among them. I consider this suggestion to be justified, and I will try to deal with it here, because the related passage in NHS is rather brief and incomplete – I point out once more that it was merely a digression, and I could not provide more comprehensive detail in it.

Most importantly, one must call attention to certain profoundly significant traits which differentiate the chromatic mediant from the established three functions, and which are generally characteristic of innovative harmonic processes. First of all, the **T**, **S**, and **D** functions encompass many chords (and chord progressions), but have basic canonical forms: the tonic, dominant, and subdominant triads. These forms are often fused with the very concepts of tonic, dominant, and subdominant. In contrast, the mediant function does not have a unique canonical form with many variants and

extensions, for all of the mediant chords (at least those which we have mentioned so far) are fully equivalent to each other and none of them are principal or subsidiary. That is why the term “mediant function” makes sense (as a designation for the relationship of a third to the tonic). I should first provide a small cautionary statement against an imprecise understanding of the **concept** of the “mediant.” Every chord which has a mediant relationship to the tonic is obviously a mediant, but the habit we have of frequently analyzing a tonic, dominant, or other chord directly as a specific chord (rather than as a member of a group of chords with related functionality) could well be misleading. We will also show that the mediant function can have specific variants (for example, Ab-Cb-Eb in C major and E-G#-B in c minor); but that does not change the fact that there is an obvious difference between the **T**, **S**, and **D** functions on the one hand, and **M**, the chromatic mediant function, on the other hand. And this difference corresponds to another trait of mediants: it is quite remarkable that although they resolve to the tonic from various directions (which is also the chief difference among them rather than any difference in sound; the structural homogeneity of the primary chromatic mediants is striking: major keys produce only major chromatic mediants; minor keys only produce minor chromatic mediants), yet their expressive effect is essentially similar and almost identical in their deepest causes. It corresponds to the so-called **Klangschattierung**, the metaphoric expression for the change of light and shadow (or conversely) of a sort of value in sound (rather than color!) while preserving absolutely constant dynamics, tempo, rhythm, melody, and instrumentation. The tension between chromatic mediants and the tonic is unlike that between dominants and the tonic; it is more static and does not seem to provide contrast. At the same time, this tension must not be slight or less significant than that of the dominant. Since this expressive effect is also achieved with a transformation to major in a minor key (see the progression in measures 4 and 5 in the example on page 213), I have considered explaining the relationship of the keys of C major and c minor as a form which facilitates mediant functionality.¹¹

¹¹ Here, the connecting link seems to consist of two parts. Any mediant relationship can be factored into two diatonic relationships by assuming a change of mode [Translator’s note: here, modulation from major to minor, or from minor to major]. When the entire relationship functions as a mediant link in rapid tempo, it is clear that the change of mode has caused this impression.

(Dvořák, **Slavonic dances** no. 5, measures 5–9)



An impression of a chromatic mediant relationship arises in measures 2 and 3; at this point, one could easily have gone directly to the key of D major (or to the key of A major via its dominant seventh). Instead, we hear the C# minor harmony in quick tempo as an insertion corresponding to the harmonic

It is quite remarkable that when the “light – shadow” effect is achieved with chromatic mediant, only major chords or only minor chords are used. Dominants resolve to the tonic, are drawn to it, but mediant is in equilibrium with the tonic. Thus, there are two aspects of functional linkage: dynamic, representing a theoretical concept of resolution – which also implies an obvious or latent dissonance – and static, representing the concepts of variation, alternating change. In the relation of the dominant to the tonic, resolution prevails over alternation; hence, the dissonance of the dominant is desirable. In the relation of the mediant to the tonic, alternation prevails over resolution (although, of course, mediant also resolve), and hence mediant is not dependent or only slightly dependent on dissonances, and less dependent on chromatic alteration, on this explicitly kinetic principle – they do not arise from direct alteration. It is not by chance that the classic trait of the relationship of the basic seventh chords of the dominant and subdominant is the resolution of the

realm of the second two-measure group, which is established as a dominant to tonic progression in the key of A major. This effect arises subjectively from the relationship of the dominant and tonic of A major to the preceding C# mediant structure.

Every chromatic mediant relationship can thus be analyzed as a tonal relationship at the interval of the third and a change of mode. Conversely, every change of mode can be analyzed as a chromatic mediant and a diatonic progression in a “third relationship.” In other words, one can perceive chromatic mediant progressions as contractions of primary diatonic modulatory progressions, as I have already demonstrated in NHS.

For example from C major to E major and back:	or from c minor to Eb major and back:
instead of C-e-E-A-a-C	or c-Eb-eb-ab-Ab-c
merely C-E-A-C	or c-eb-ab-c
instead of C-c-Ab-Eb-c-C	or c-C-e-a-C-c
merely C-Ab-Eb-C	or c-e-a-c

In addition, the **Klangschattierung** effect in progressions from C major to c minor and from c minor to C major can be understood as preparation or substitution for the mediant Eb or Ab (or e, a), or as a contraction of a modulation consisting of two mediant links (C-Ab, Ab-c, or C-Eb, Eb-c (or their retrogrades) into a jump modulation between C major and c minor (and its retrograde).

Sometimes the very form of a motive suggests changes of mode as particular cases of an underlying mediant-like trait. For example, there is a small but harmonically significant motive by Janáček which is frequently repeated in the prelude to the opera **Káťa Kabanová**; it appears as a solo as the curtain rises for the first act, and Kudrjáš sings “Zázrak, vskutku třeba říci, že zázrak” over it.

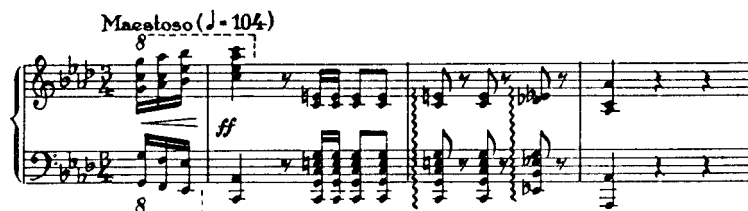
(Janáček: **Káťa Kabanová**, piano-vocal score page 12)



At first glance, merely a change from db minor to Db major. However, the note c in the second triplet over the ligature Ab-Db forms an f minor triad. Thus, the harmonic progression can also be identified as db minor – f minor (a chromatic mediant relationship) over a neutral prolonged fourth, Ab-Db. The quasi-mediante aspect of the change of minor to major is supported by an underlying, genuine mediant relationship, Db-f. And it is precisely these complex functional relationships, contained within a brief motive, which form the magical and inexhaustibly expressive richness of the passage.

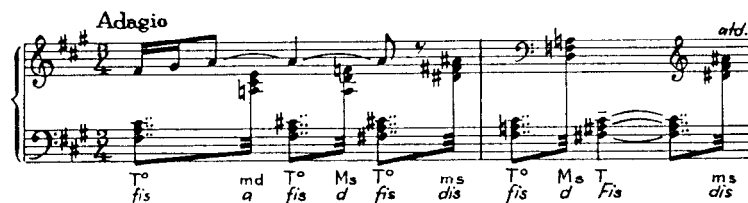
characteristic tritone in contrary motion; in contrast, the mediant relation is merely a simple juxtaposition of two major or minor chords with the same structure, often with obvious parallel motion at the octave and fifth.

(Chopin: **Polonaise** in Ab major, closing measures)



Perhaps even more characteristic of the predominance of alternation over resolution in mediant constructions is an almost systematic, gradual exposition which introduces varied mediants invariably returning to the tonic; separate, compact chords with highly similar timbre and voicing, as shown in the following example.

(Suk: **Životem a snem**, X)



From the perspective of musical psychology, we could also discuss the relatively greater importance and effect of retrograde **S-T** and **D-T** progressions and their weakened functionality in the neighborhood of mediant chords, which can become tonics in their own right at any time. This phenomenon corresponds to the modulatory genesis of chromatic mediant chords; to say it more precisely, they arise as abbreviations of modulatory progressions to a key at the intervallic distance of a third.¹²

¹² I quote from NHS, section 14, “Základní vztahy mezi složkami hudební formy,” pages 295–297: “Let us now consider what happens to these extratonal mediant progressions in the lengthy development of harmony during the nineteenth century. Let us consider the first link mentioned above, C major: Ab major. If the composer wants to modulate from C major to Eb major (we speak of modulation because this progression is, theoretically speaking, a linkage of tonal and extratonal chords), he could very well use this progression, for Ab is the subdominant of the desired key, and he can achieve an immediate cadence. [Translator’s note: In NHS, Volek gives as an example the following progression at this point: C major triad, first inversion of an Ab major triad, first inversion of a Bb major seventh chord, Eb major triad.] But the C major and Ab major triads do not belong to a common diatonic key; hence, it would be necessary to

We thus come to another distinguishing trait of chromatic mediants, whose consequences may be far more extensive than we can assess here. In the old **T-S-D** system, each function was differentiated, specific, as were the relationships among them. The very terms for dominant and subdominant, designated in various international systems as upper and lower, left and right dominants and so forth, demonstrate that **S** and **D** have something in common, that they are two distinct abstractions of an still more abstract concept: an absolute dominant (that is, neither upper nor lower, like an abstract number which can have a positive or negative value). Well then, chromatic mediants are not an extension of an absolute dominant; they are not in opposition to the tonic in this sense. Within the web of functional interrelationships, they approach tonic functionality instead, as is shown by their relationship to the dominants of the

modulate from C major to an Ab major chord by means of redefined chords or common-tone chords (such as an f minor chord). In fact, a so-called diatonic modulation through a succession of chords such as we have outlined above would not be permissible. As long as musical discourse was predominantly and consistently diatonic, as it was approximately up to Beethoven's era (of course, we also find chromatic modulations in the preclassic era), such progressions were usually considered to be erroneous, and extratonal mediants simply did not exist. But suddenly, as the result of a phenomenon and principle which is an entirely natural developmental stage of functionality – alteration, which has already been frequently mentioned in this article – in which a clear attempt to intensify functional relationships is made by artificially creating new leading tones and new, characteristic tritone dissonances, we observe that all twelve notes of the octave become usable notes, not just the previous seven notes – in short, that in a theoretical sense we pass from diatonism to chromaticism. But we should not infer that the laws of diatonism have been disrupted by this enrichment of musical form. Not at all. A chromatic note is something different within the musical key, it has another musical significance than a diatonic note; it does not have equal standing. The rough outline of the key system remains diatonic during the nineteenth century; but it is filled out ever more subtly, as if a network of chromaticism has been inserted within the frame of diatonism. Thus, chromatic notes are not always related to each other, but are related to those diatonic tones from which they are derived as alterations ...”

“Then, if all of the notes of the octave are permissible in the Romantic era, the context of our modulation to Eb major is also changed. How should we identify an Ab-C-Eb triad occurring within the key of C major? It could be the first inversion of the conventional subdominant seventh with an omitted sixth, which can be notated as Ab-C-D#. An enharmonic substitution, which in this case is an orthographic expression of functional redefinition, derives an Ab major triad from the chord, and we can continue with the modulation. In a word, so-called chromatic modulation enables direct linkage of extratonal mediants.”

“Let us now suppose that this link (and similar ones) is frequently used because it is reliable. In a great number of such cases, this link gradually becomes not just part of the modulation, but the modulation itself (here, clearly to Ab major). Such theoretically admissible – although we might not recommend them didactically – contractions of modulations appear very often, understandably shoving the aspect of redefinition completely to the background, because redefinition depends upon the specific tempo, the relative speed of the course of modulation. It is a common experience. Abrupt modulations are theoretically assessed as discontinuities, abbreviations precisely because the redefined links in the chain – all of the intermediate chords in the modulation – are omitted except for the first and last chords. And in a discontinuous progression there must be a redefinition of either the first or the last chord. Since these chords have an additional, important significance as the point of departure and goal of the modulation, the aspect of redefinition is often lost in the “jump,” in abbreviation of progressions of frequently used linkages. As soon as the sense of redefinition vanishes from the linkage, the harmonic progression as a whole inevitably ceases to be interpreted as modulatory. But if the linkage contains musically valuable chords, there can be no doubt that a new, directly functional progression has been created. Hence we consider progressions of extratonal mediants to be a fourth functional linkage, an addition to the three fundamental linkages which form the classic cadential function: **T-S-T**, **T-D-T** and **S-D-(S)**.”

tonic and their substitutes, and by their capabilities for resolution. Mediants have a relationship to the tonic which specifically counterbalances that of the dominants; they seem to have a tonic-like character and tend towards transformation within the key. As a result, frequent use of mediants results in tonicization of the musical discourse and expressivity, and is evidently also developed in response to the dominance of the principle of chromatic alteration, which often either

1. Tends to reduce the tonic to the status of a point, of a continually deferred cadence, a stream of alteration technique (as is known, the prelude to **Tristan** is almost crammed with continuous surfaces of relationships of intermingled altered and extratonal dominants); or
2. When tonics are statistically prevalent, compensates for their devaluation.

Let us recall that, even though there is a great abundance of altered dominant forms, they almost always support a single tonic triad or its **ST** substitute. Not only does the chromatic mediant progression do away with this inequality; it also expands the possibilities of the tonic through the technique of thickened chords, which is better suited to tonics and mediants than dominants.¹³

In view of these reflections, another logical difference which occurs to us is that there is a greater number of chromatic mediants (4 in major and 4 in minor, 4 in the dualistic major-minor system). This result corresponds to the quasi-tonic rather than the dominant nature of these mediants. The tonic, which in a musical context tends to close into itself (tonic repose, its capability to bring harmonic movement to a close), is always a relatively isolated form: on the other hand, we regard the dominant as a transforming and interactively propagating form, like an organism branching out from its roots. That is why the dominant and subdominant functions are more structural, more organic, a microsystem of heterogeneous, polymorphous chords; whereas mediants form cyclic groups whose primary forms are entirely homogeneous. This tendency of chromatic mediants to form groups can perhaps even be considered as the foreshadowing of later combinatorially constructed vertical systems (with chords which are weakly interrelated in the deep structure) such as those in systems by Hába, Schoenberg, Hindemith, and others. In these systems, the extreme result of artificially isolated harmonies and separated notes appears to be almost pointillistic. We could discuss a sort of absolute tonicization of elements here, if, of course, the obviously discontinuous aspect of this effect were not in direct contradiction to the circumstance that the tonic function signifies structure, continuity.

So much for what, in my opinion, strongly joins mediants together, and what forms from them a distinctive, specific group of triads in relation to the tonic and the dominants of a given key. This result clearly does not imply that mediants could not be further classified in the way that we differentiate the minor dominant, major dominant and substitute dominants and so on in actual use. I would like to demonstrate that a classification of mediants is entirely feasible.

¹³ For a discussion of thickened chords see Jaroslav Volek, "O zahušřování akordů" [On thickened chords] in his **Struktura a osobnosti hudby** (Praha: Panton, 1988), p. 103–112.

Let us pose the question, what is the relation of chromatic mediants to the dominants?¹⁴ We have said that these mediants arise in a relation of a sort of tonic-like, static contrast with respect to the tonic. Moreover, many of them can be brought into relation with other triads of the key as extratonal dominants or extratonal subdominants,

C:	A major = (D) DD	c:	Ab minor = (S) TD
	Ab major = (D) F		Eb minor = (S) SS
	E major = (D) ST		E minor = (S) L (DS 5 #)

thus clearly losing their mediant character and taking on that of dominants. On the other hand, if they serve as a chord of resolution (for example in chromatic expansion of the technique of the deceptive cadence) and appear as substitute tonics, they retain their mediant character.

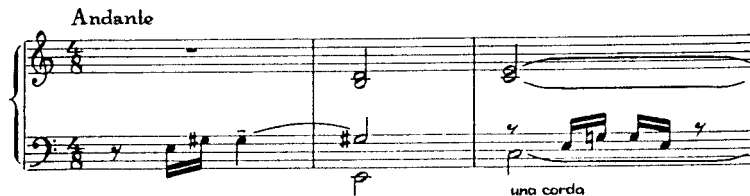
Examples (functional identification of chords which directly resolve to mediants):

C major:	D7	- A
	D7	- Ab
	°S+7	- Eb
	♯S+7	- E
c minor:	°D7	- Ab
	♯D7	- A
	°S+7	- Eb
	♯S+7	- E

There is yet another possible relationship of the chromatic mediant to the dominant and subdominant, the contextual and structural coloration of mediants through the presence of certain significant notes of the subdominant or dominant. The triadic tonic quality of the mediant and its given direct relationship toward the tonic does not permit us to assert the mediants' full-fledged affinity to, or substitution for, the dominant (even in exceptional cases); the actual quality of this kinship is limited to aspects of coloration, sound, and taste. Nevertheless, it can aid us in defining classes and subclasses of mediants which will always have at least one member. In C major and in c minor, mediants containing the note A or Ab will have subdominant coloring; mediants containing the note Bb or B will have a coloring of a minor or major dominant. The dominant or subdominant aspect of the mediant is understandably heightened by expanding it to a tonal seventh chord. But surprisingly, the **MD** and **MS** combinations do not arise even then, for there will still be an extratonal note in the mediant, and its triadic compactness will have a decisive impact on its functional independence. For example, in the following illustration

¹⁴ Here mediants in relationship to the tonic are discussed rather than mediants which can occur in a transitory modulation to the key of the dominant (see section V).

(Janáček: “Dobrou noc!”)



Md7 is used, structurally conforming to an extratonal dominant seventh, resolving to a **ST** in C major. However, this chord does not have the nature of a secondary dominant (and does not resolve as such), nor does it have the nature of a combination of a mediant and dominant, linked by the notes B-D. It primarily functions as a mediant in a tectonically important place, at the close of the entire composition.

As Karel Risinger proposes in the review, a further criterion for differentiation is possible according to whether the mediant root is a major or minor third from the tonic root (the significance of the intervallic distance of the triadic roots interestingly clarifies the existence of two branches of Czech music theory). Hence, we will classify mediants according to whether this interval is a major or minor third. Further criteria are not necessary. If we then choose the signs “**M**” for major and “**m**” for minor mediant and the indices **s** and **d**¹⁵ to identify their specific properties, we can construct the following table of mediants. [Translator’s note: these chromatic mediants are minor when the tonic triad is minor, and major when the tonic triad is major. Therefore they potentially can be interchanged with the tonic triad.]

c minor:	M_s^o : Ab-Cb-Eb	C major:	M_s : Ab-C-Eb
	m_s^o : A-C-E		m_s : A-C#-E
	m_d^o : Eb-Gb-Bb		m_d : Eb-G-Bb
	M_d^o : E-G-B		M_d : E-G#-B

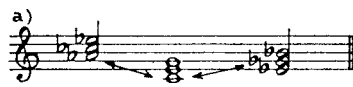
Half of these eight chromatic mediants, that is, **M_s**, **m_d**, **m_s^o**, **M_d^o**, have the property that they appear in the corresponding major or minor key as tonal chords with a tonic-like character (for example, the chromatic mediant **m_s^o** = **ST**, the natural submediant of C major, and **m_d** = **TD**, the natural mediant of c minor). In the amphibious (dualistic) **Cc** system, this number is narrowed to four: **m_s**, **M_d**, **M_s^o**, **m_d^o**. But what about other triads whose roots are at the intervallic distance of a third from the tonic but do not have a common tone with the tonic triad? These triads are:

C major:	Ab-Cb-Eb	c minor:	a-C#-e
	Eb-Gb-Bb		E-G#-B

¹⁵ Here mediants in relationship to the tonic are discussed rather than mediants which can occur in a transitory modulation to the key of the dominant (see section V).

C dur: *as - ces - es*
es - ges - b

c moll: *a - cis - e*
e - gis - h

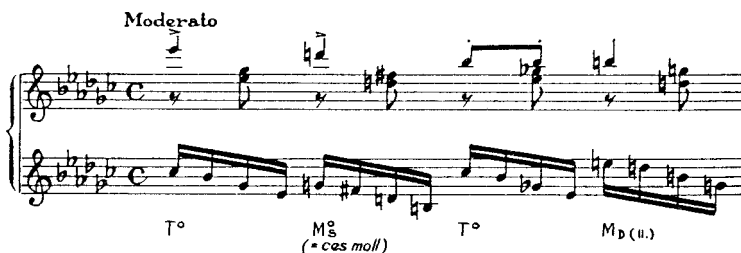


(Risinger identifies them as mediant in his review.) They do not occur as rarely as it might seem at first glance at the notes; they usually arise in passages teeming with shifts (in addition to these examples, see the example from *Dvě vdovy* cited below).

(Suk, *Radúz a Mahulena*, Prologue)



(Suk, *Suite* op. 21, *Dumka*)



Moreover, apparent difficulties with those chromatic mediant which do not have a common tone with the tonic triad actually become a useful impetus for resolving entire systems of mediant progressions and chords. Let us begin with the broadest possible definition of the mediant, a triad whose root is a major or minor third from the root of the tonic. Let us now divide the class of these vertical sonorities into three groups, in which the mediant and the tonic triad have 1. two common tones, 2. one common tone, 3. no common tones. No other such groups are possible. And thus it is shown that:

Group 1 consists of the natural III and VI triads. If the tonic triad is major, they are minor, and if the tonic triad is minor, they are major. Such triads either substitute for the tonic or act as **ST** or **TD** in combination. There are two such triads in each major key and two in each minor key, producing four unique triads in the system comprised of C major and c minor.

C: a minor: A-C-E: **ST** c: Ab major: Ab-C-EB: **ST**
 e minor: E-G-B: **TD** Eb major: Eb-G-Bb: **TD**

Because these triads do not belong to the chromatic mediant function as we define it, we call them **mediants of the null degree**, and we do not append supplementary marks to their functional symbol **M(m)**.

Group 2 are mediants of the first degree, and are the proper basis of our fourth harmonic function. They are extratonal triads with chromatic notes. If the tonic triad is major, they are major; if the tonic triad is minor, they are minor. Their functional notation is shown above. There are four such chords in each major key and four in each minor key, and four in the dualistic Cc system.

Group 3 are mediants of the second degree; their mediant functionality is more unstable, and they are more easily used in substitution. They can be understood as a more distant variant of the harmonic function **M(m)**. They are triads on chromatic degrees of the scale such that if the tonic triad is major, they are minor; if the tonic triad is minor, they are major. Their functions can be indicated by signs such as **M** with index **II** or **M** with an apostrophe (**M'**). Since they are distinct from the mediants of the first degree which are built on the same notes, it is neither practical nor necessary to introduce such signs. It is sufficient to notate them thus:

C: Ab-Cb-Eb as M_s° c: A-C#-E as M_s^{+}
 Eb-Gb-Bb as m_d° E-G#-B as M_d^{+}

There are two such triads in each major key and two such triads in each minor key, but none in the amphibious Cc system.

V.

Now, as we reach the close, let us examine certain traits of mediant structures which become evident to us through the study of pertinent examples of actual music, which have been recognized as artistically significant.

We have already mentioned the topic of chromatic mediants which have multiple functionality. Every chord inherently has a potentiality for functional redefinition. Thus, a tonic can become the subdominant or dominant of a neighboring key (in accordance with the cycle of fifths), and altered chords have a particularly strong tendency to have multiple functionality; hence, they are excellent resources for modulation, as the existing theoretical literature sufficiently demonstrates to us.¹⁶ Chords with chromatic mediant functionality clearly have a very strong modulatory capability (on the basis of their appearance as mediants in multiple keys, thus, if I might say, on the basis of their polytonal multifunctionality). Moreover, we encounter something else in the chromatic mediant which is a bit different – multifunctionality within one

¹⁶ In the Czech literature, a specialized, empirically valuable monograph has been devoted to the topic of polymorphous altered chords: Zdeněk Blažek, *Dvojsměrná alterace v harmonickém myšlení* [Bidirectional alteration in harmonic thought] (Brno: Rovnost, 1949).

and the same key, within a closed tonal system. This trait corresponds with the above-mentioned fact that the chromatic mediant function is not represented by a single canonical triad, but by a group of four triads. Furthermore: the relationship of the “affinity of the third,” the common chord tone, thus arises not only between the tonic and the set $\{M_s, M_d, m_s, m_d\}$, but also between the subdominant and the set $\{M_s, m_s\}$, and between the dominant and the set $\{M_d, m_d\}$. And this observation also applies to mediant of the second degree. One of the most familiar utilizations of mediant structure, which everyone recalls immediately when this function is discussed, is the refrain of Podhajský’s aria in the first act of *Dvě vdovy*:

(Smetana, *Dvě vdovy*, Podhajský’s aria)

Allegro moderato

Bůh du - ši je - ho chraň!

Precisely because many chromatic mediant relationships are crammed into this passage, their tonal and polytonal multifunctionality vividly attracts our attention. The c minor triad has a mediant relationship to the tonic (E major) and a subdominant relationship to the G major triad (in the context of the deliberately transient modulation or modulatory excursion to G major). Moreover, the G major triad has a mediant relationship to E major (m_d) as well as to the B major triad, which is the dominant of the key of E major (M_d in this case) in the context of the same key. The relationship of the mediant to the tonic is decisive; the relationship of the mediant to the dominant is also useful, for it contributes to the tonal stability of the passage. Another sort of multifunctionality, not as functionally centripetal as the example from Smetana’s music, is illustrated by a passage from Suk’s compositions. (The example shows the principal theme of the first movement).

(Suk: *Suite* op. 21 no. 1)

Allegro vivace

In this passage, the Eb major chord is a chromatic mediant of G major; it is separated from the tonic by an S chord, but the voicing is retained from chord to chord (this device is favored by Suk, Janáček, Martinů and others: a harmonic descent with

subdominant coloration continually shifting downward at the interval of a major second). Its direct relation to the tonic is indisputable, for if we stop the musical phrase at the mediant, we clearly sense the tendency to resolve to G major; we are always directed towards the tonic. But in the following example, a Phrygian chord Ab-C-Eb is inserted into a cadence to the dominant; the M_3 (the preceding Eb-G-Bb chord) is related to it as an extratonal dominant, and this relationship does not exist only on paper, for one vividly perceives a resistance to the rapid tempo when the music is heard. A M_3 chord can thus have multiple functionality: primarily as a chromatic mediant, and secondarily as an extratonal dominant. The entire harmonic motive corresponds to a **T-S-D-T** cadence; we can consider the entire passage from S to N as a set of varied forms evoking a subdominant atmosphere, for M_3 is a mediant of subdominant coloration. The structure at the close of this composition is similar.

(Suk: **Suite** op. 21, no. 4, closing measures)



Once again, the example shows the preparation of a Phrygian chord with the aid of M_3 , but here M_3 also functions as a factor in a quasi-deceptive cadence. For M_3 can always be used as a tonic substitute in what can be termed a “deceptive mediant cadence” or a chromatic deceptive cadence. It frequently modulates to other keys quite easily in the manner. This aspect of multifunctional mediants derives from the fact that the significance of their numerous forms (including seventh chords and others) approaches that of altered chords. We will discuss this aspect below when discussing the analysis of their modulatory capabilities. For the time being, we merely note it as a structural fact.

Multifunctionality is sometimes related to the entire context in which a chromatic mediant appears. Thus, for instance, these passages from Suk’s mixed chorus “O mladosti ...”

(Suk: **Raduz a Mahulena**, IV)

can be harmonically analyzed either in f# minor – thus, as an application of chromatic mediant functionality – or A major; here, we merely indicate the alternating major and minor quality of the various tonic and subdominant chords. A context of dual functionality is established, for these keys (A, f#) have a mediant relationship of the null degree. It is also clear that this relationship corresponds to the wistful theme of the chorus, which always seems to soar daringly towards the light and fall again into shadow; this **Klangschattierung** technique is syntactically and harmonically in correspondence with the chromatic mediant relationship, and semantically in agreement with the text and the mood of the scene.

Another expressive trait of chromatic mediant relationships which is certainly connected with their potential for polyvalence is their modulatory capability, their capability to propel modulation. Until recently, the so-called unprepared, abrupt modulation was precisely the mediant modulation itself; it was absolutely safe, effective, and comprehensible in any situation.¹⁷

(Smetana: **Prodaná nevěsta**, “Skočná”)



(Dvořák: **Slavonic dances** no. 3)



¹⁷ Through the influence of dance music and pop music (for example, strophic tunes from **Semaphor** such as “Klementajm” and “Marnivá sestřenice”), sequences of abrupt modulations by ascending semitone shifts have recently come to the forefront and to our collective awareness: each verse is sung in different key. This technique seems primitive at first glance, but it is appealing. It is also used by Beethoven at the beginning of the first movement of the **Appassionata**, where the f minor theme is repeated almost without change in Gb major. It is precisely this ingenious transformation to the major key a semitone higher which creates the unique atmosphere of the exposition.

When such an abrupt modulation is placed within a larger compact entity, it sometimes becomes a simple chromatic mediant progression.

(Suk: **O matince**, no. 2)

Allegro non troppo *atd.*

The score shows a piano accompaniment in 2/4 time. The first 8 measures end in C# minor, and the next 13 measures begin in e minor. The modulation is indicated by a chromatic movement of the bass line and a change in the treble line's intervallic structure. A m_3° label is placed below the bass line at the end of the first segment.

(Brahms: **Intermezzo** op. 118 no. 2)

Andante teneramente *atd.*

The score shows a piano accompaniment in 2/4 time. It consists of two 8-measure segments. The first segment ends in C# minor, and the second segment begins in e minor. The modulation is indicated by a chromatic movement of the bass line and a change in the treble line's intervallic structure. An *M* label is placed above the treble line at the start of the second segment.

In the example from Suk, the first 8-measure segment of the passage ends in C# minor; the second 13-measure segment begins in e minor, but the entire passage is created as an indivisible flowing whole, so that one cannot speak as unambiguously about an abrupt modulation as one can in the preceding examples. The example from Brahms shows us a similar mediant “seam” between eight-measure segments. Moreover, the modulatory capability of the chromatic mediant is not limited to abrupt modulations. One can set a fluent modulatory passage into motion through the use of the mediant. For example, in Podhajský’s aria (cited above), Smetana modulates from F major to E major by way of an A major chord, which is a mediant of the existing key of F major and the subdominant of E major, the target key:

(Smetana: **Dvě vdovy**, Podhajský’s aria)

Allegro moderato

The score shows a piano accompaniment in 3/4 time. It consists of two 4-measure segments. The first segment ends in F major, and the second segment begins in E major. The modulation is indicated by a chromatic movement of the bass line and a change in the treble line's intervallic structure. An *M* label is placed above the treble line at the start of the second segment.

Modulace pokračuje takto:
 $a: T(D) S^{\circ} T^{\circ}$
 $E: S^{\circ}, S^{\circ+6}, D, T$

F: D T M
 $a: T$

The prologue of Suk's incidental music for Zeyer's play **Radúz and Mahulena** is so saturated with modulation to keys with mediant relationships or directly through mediant structures of modulatory effect that we can speak of the inherently mediant atmosphere of this music, that these very relationships imprint the music with their own specific, inimitable nature which closely corresponds to the expressivity of the words and the emotional, purposeful melodramatic text. ("Jsem pohádka ...") The programmatic and poetic text of the Prologue continually requires alternating light and shade in relatively peaceful, simple transitions without dramatic tension and discord, without obvious dissonances and resolutions. The juxtaposition of major and minor keys in mediant relation is highly suited to this effect, and thus to relatively increased tonicization of the harmonic action. Towards delicacy, but always towards a sensitive stirring of the harmonic surface which presents the mediant structures and modulations, and which also usually involves relaxations of tempo: **ritardando** – **a tempo** always forms a counterbalance to progressively longer areas of harmonic, tonic-like peace, in alternating segments from two to four measures in length (in **adagio** or **poco meno mosso**). The general predominance of these relationships also controls transitions which we could analyze as distant relationships of altered dominants to new keys; they are so used and so freely voiced that they evoke straight-forward mediant structures. This comment applies to the following transitions: from E to C in measures 47 and 40 [!], from Bb to D in measures 77 and 78, from A7 to db minor in measures 94 and 95, from Ab7 to C7 to E in measures 115–119. Examples of pure mediant progressions which also have modulatory purpose are, for example: from C to E, measures 61–62, from D to F (82–83), from G to eb minor (128–129), from eb minor to b minor (130–131), from b minor to d minor (132–133). In the Prologue, we observe that even though mediant relationships are, as shown above, fundamentally different in nature from relationships among dominants and tonics, and this difference is most evident in comparison with primary, pure forms, nevertheless, these two functions can approach each other in distant, peripheral harmonic areas. Thus, a mediant triad enriched with a seventh or an added sixth can sometimes also be interpreted as an altered **D** or **S**, or as **DS** (and also conversely); the chord's actual meaning will tend toward one of these two functional types depending on its context, voicing and nuance. Chords of short duration and factura which relax strict harmonic resolution have a particularly decisive influence on the creation of a mediant atmosphere, as in the **Andante** (**) from the cycle **Jaro**, op. 22a by Josef Suk:

separate chords to emerge as relatively independent harmonies, whereas an interpretation based on altered chords would call for a more closely knit horizontal structure, and would also necessitate explaining many other unconventionalities and difficulties. For example, the note e in the third chord (F#-A-C-E) would then have to be deciphered as Fb (thus, as belonging to an extratonal subdominant with a raised root in c minor (F#-A-C-F#); in the penultimate chord, the a would function as Bbb (flatted subdominant root) in the key of f minor, and F# as Gb (flatted root of a doubly altered dominant seventh chord).

The modulatory character of the chromatic mediant function comes even more to the foreground in passages in which entire chains of this structure take shape based on extratonal dominants, chords on the seventh degree of the scale, and altered subdominants. The greater tonic-like nature of the mediant adds a more peaceful, static character to those progressions. We sense them as quite free progressions of given kernels rather than as a single band drawn continuously through the harmonic stream; resembling the chains of extratonal dominants and altered chords which, for this reason, often occur in piano compositions as part of brilliant concertante passages:

(Smetana: **Czech dances**, Polka in F major)

Allegro (♩ = 96) *and.*

(D4) (D7) (D) (D7) (D) (D7) *and.* ... (D7) (D) (D7) *ST*

Chains based on mediant and mediant progressions can be pure – that is, formed exclusively from mediant, for example:

(Suk: **Jaro** op. 22a, no. 4)

Poco più mosso

f 8 *and.* *ST*

(Here, regularity becomes circular symmetry; the roots of the chords progress by minor thirds from f and back to f) or they can be mixed with interpolated chords:

(Suk: **Serenade** in Eb major, fourth movement)

Meno mosso

(Janáček, **Výlety pana Broučka**, piano-vocal score p. 76)

Moderato

Here, relationships from mediant to mediant create the powerful movement of the harmonic action. A diatonic progression **D°-T** (in Josef Suk's music: **D-T**) is always interspersed as if it were a "brake," an explication. In the example from Janáček, the half-note chords support the harmonic plan and are mutually related through a cyclic major mediant relationship of the first degree; moreover, because of the multifunctional property of these mediants, the eighth-note transient chords also behave as mediants – of the second degree. The passage thus attains a melodic whole-tone coloration, and it forms a closed circle which is then repeated an octave below.

The effect of the quasi-tonic character of chromatic mediants and their tendency toward simple juxtaposition (rather than resolution) is that they are more easily linked through parallel or oblique motion than by contrary motion. For the same reason, the parallel motion of entire chords which is typical of Impressionism functions in the same way, especially when chains of these chords are based on chromatic mediants.

(Debussy, **Preludes** “Les sons et les parfums tournent dans l’air du soir”)

Moderé

Akordy: G b G E C E G E C A C E G^{is} - A^s
 Funkce v C: D m_d D M_D T M_D D M_D T m_b T M_D M_S

(Debussy, **Preludes** “General Lavine”)

es: T° M_{D(n)} D° M_{D(n)} T
 G: T m_{d(n)}

Chromatic mediant progressions – like progressions of the whole-tone progression, the shift **T-DD** (tonic – dominant of the dominant, I–II) or **SS** (tonic – extratonal subdominant of the subdominant, I–VII) – can thus easily become a solid basis for creating more complex tone color combinations, flecks of tone colors. But then they lose modulatory significance in the ordinary sense of the word and become tonally less precise.

Sequences are specific instances of chains with modulatory traits. An interesting demonstration is given in these four measures,

(Suk: **O matince**, no. 2)

Allegro non troppo

Akordy: fis a e g
 Funkce ve fis: T m_a S m_a
 v e: D°_a T° m_a

which have been analyzed from another perspective by Václav Štěpán,¹⁸ who called attention to the specific way in which these measures are phrased; the phrasing

¹⁸ Václav Štěpán, **Novák a Suk** (Praha: Hudební matice Umělecké besedy, 1945), p. 167.

conceals the sequence from listeners and those who read the music. However, the sequence is quite clear harmonically, as the notated functional signs indicate.

Another example of a chromatic mediant sequence occurs in a well-known harmonic passage from Suk's **Serenade in Eb major**: the pattern here is the **T-m_d** relationship (for completeness, the alternate analysis which disregards sequences is also shown, but it is much less logical and convincing):

(Suk: **Serenade in Eb major**, no. 3)

Più Andante (♩ = 60) ritard. a tempo

Akordy: E G D F C Es H7 E
 Funkce v E: T m_{d6} S N₆ m₅ (M_{d6}) D T
 Pasáž jako sekvence

The next distinguishing trait of mediants is not especially characteristic, yet one must warn that if its semblance does not emerge, mediants may not be present. It has to do with the fact that mediants, like dominants, can be either tonal or extratonal, and that they can also control an extratonal dominant. One of the most familiar motives in music, the beginning of Beethoven's **Waldstein Sonata**, contains an example of an extratonal mediant.

(Beethoven, **Sonata** op. 53, first movement)

Allegro con brio

D ← (m_d k D) (S) ← S

(Suk, Suite op. 21, “Dumka”)

Adagio ma non troppo

(M) D⁴ T⁰

but the close of Suk’s **Minuet** is somewhat more complex

(Suk: Suite op. 21, **Minuet**, closing measures)

Più mosso *poco rit.* *sostenuto*
mf *mf* *p*
atf.

*Funkce v G: (S+) M₃(S+) M₄(S+)T(S+) M₃ simile (akordy S+ jsou altarované,
nebo (S+ M)(S+ M)(S+ M).... se zvýšenou primou
i přídanou sextou)*

This is the final passage, and it has a fine, sonorous sound; its framework creates a cycle of mediants consisting of a progression of second inversion chords on Eb, B, G, Eb, the set of major mediants of the key of G major; each is prepared by its own chord, an extratonal altered subdominant. Of course, we could write the entire sequence as a (S-T) sequential pattern in which tonics are interrelated with mediants. Use of mediants by means of factura, auxiliary tones and other means can be quite complex. Their stability is demonstrated by the fact that they does not lose clarity even in the most diverse of these complexities, and that on their foundation we never lose orientation towards the tonal center.

In another example from Suk

(Suk: **O matince**, no. 2)

Allegro non troppo

akord. značky D_7 D_7 C^\sharp_7 C^\sharp_7 B^\flat
Funkce ve Fis: $M_5 \begin{matrix} 7 & 5 & 6 & 5 \\ 5 & 4 & 3 & 4 \end{matrix}$ $\begin{matrix} 6 & 5 & 6 & 7 \\ 3 & 4 & 3 & 5 \end{matrix}$ $D \begin{matrix} 7 & 5 & 6 & 5 \\ 3 & 4 & 3 & 4 \end{matrix}$ (all.) $D \begin{matrix} 6 & 4 & 6 & - \\ 2 & 3 & 4 & 1 \end{matrix}$ $M_4 \begin{matrix} 6 & 5 & - \\ - & - & - \end{matrix}$

we see that the deliberately sprightly lines in the bass and the other voices makes it difficult to recognize the harmonic kernel in the first three measures (hence, we use the “guitar” notation from popular music here). Nevertheless, the relationship of M_5 and M_4 to the latent F^\sharp major tonic (which is not heard in the passage at all, but is merely indicated by the moderately changed form of the D_7), which stealthily appears at the very beginning of the passage, not only as something quite evident but also, in fact, as the only possibility.

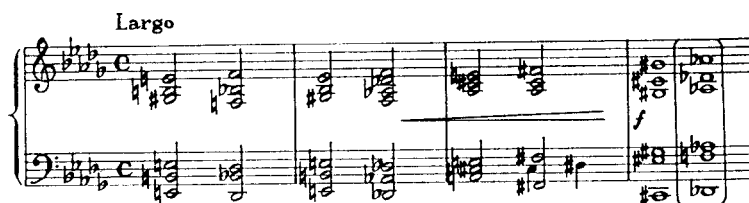
VI.

In closing I would like to demonstrate with the attached table that the set of four functions generally accounts for the relationships among all major or minor triads and a given tonic. Since other forms of chords with triadic structure, such as inversions, seventh chords, and ninth chords, are entirely dependent as a rule on the functional purpose of triads, and augmented and diminished triads and seventh chords, again as a rule, are derived as incomplete forms from seventh and ninth chords, it is thus possible to say a great deal about the completeness of the entire tonal system. This table is based on the keys of C major and c minor and the Cc system. The chords are arranged by pitch, from lower to higher. Enharmonic differences are not brought into consideration (in the vein of that which has often been said about the irrelevancy of this nuance for such a robust structure as harmonic functionality). The notes Db , Fb , F^\sharp , Gb , G^\sharp , A^\sharp , C^\sharp , Cb are altered notes, but we consider the notes Ab and Bb in C major, and A and B in c minor, to be diatonic.

Akord	(enh.)	C	c	Cc
c - es - g	- - -	T ^o	T	T ^o
c - e - g	- - -	T	T ⁺	T ⁺
des - fes - as	cis - e - gis	-	S ^o	S ^o
des - f - as	cis - eis - gis	S	S ^o	S ^o
d - f - a	- - -	S, DD ^o	DD ^o	S, DD ^o
d - fis - a	- - -	DD	DD	DD
es - ges - b	dis - fis - ais	m _d ^o	m _d ^o	m _d ^o
es - g - b	- - -	m _d	TD	^o TD ^o
e - g - h	- - -	TD	M _d ^o	+TD ⁺
e - gis - h	- - -	M _d	M _d ⁺	M _d
f - as - c	- - -	S ^o	S ⁺	S ^o
f - a - c	- - -	S	S ⁺	S ⁺
fis - a - cis	ges - heses - des	-(MM ^o)	-(MM ^o)	-(MM ^o)
fis - ais - cis	ges - b - des	-(MM)	-(MM)	-(MM)
g - b - d	- - -	D ^o	D	D ^o
g - h - d	- - -	D	D ⁺	D ⁺
as - ces - es	gis - his - dis	M _s ^o	M _s ^o	M ^o
as - c - es	- - -	M _s	ST	^o ST ^o
a - c - e	- - -	ST	m _s ^o	+ST ⁺
a - cis - e	- - -	m _s ⁺	m _s ⁺	m _s ⁺
b - des - f	ais - cis - eis	S ^o	S ^o	S ^o
b - d - f	- - -	S	S, D ^o	S, D ^o
h - d - fis	- - -	D	D ⁺	D ⁺
h - dis - fis	- - -	D	-	D ⁺

From the table, it follows that only three chords in major and three in minor (four unique triads in all) cannot be identified by the signs **T-D-S-M**; there is only one major and one minor triad in the **Cc** system whose roots are a tritone from the tonic root. A tritone relation also arises between the roots of the Phrygian and the dominant triads, and between the roots of the Lydian and subdominant triads. But that is another matter, for the directional relation of both chords is decisively toward the tonic, and that is not tritonal. But I do not think that a tritone relation resolving to the tonic could not be contrived or that such a direct functional relationship could not evolve. In the **Largo** from Dvořák's **Ninth Symphony** (From the New World):

(Dvořák, **Ninth Symphony**, second movement)



such a progression significantly contributes harmonically to the beauty of the passage.¹⁹ Risinger's twelve-function system might be useful for this example if his signs were not so significantly interrelated, or perhaps the sign "t" (small t = tritone function) could be helpful here. Nevertheless, we have other, more structural solutions in mind and would like to give priority to them. Let us concede that we can understand these relationships in certain favorable contexts as functional, specifically tonal structures rather than atonal (but not invariably) – and further examples substantiate this idea.

(Dvořák, **Rusalka**, death of the prince at the close of the opera)

Adagio
ppp

U-mí-rám šlásten, u-mí-rám ve tvém-ob-je-tí

ppp

(Suk, **O matince**, no. 1)

Allegro molto moderato

pp atd.

(Debussy, **Pelleas and Melisande**)

atd.

Je ne vois plus le ciel à travers tes cheveux

¹⁹ This progression most closely resembles a combination of altered **D** and **S** chords; in fact, it could be this combination whenever a definitive triadic form does not emerge to the foreground. Thus, in this example one could perceive Bb as A# = (altered S 1#), f as D5, the whole as an inversion of D-F-A#; in other words, a minor-augmented triad on the seventh degree of a Mixolydian scale, functioning as a combination of an altered minor dominant with an altered subdominant. The complexity of such an interpretation is clearly inherently discouraging, and particularly in this case one must prefer the simpler harmonic relationship: tonic and its antipode; in Janeček's terminology, the antitonic.

But is it necessary to search for new functional signs for these relationships, to perceive new functions in them? We surely cannot speak of a simple mediant relationship in this case, but we certainly can discuss the mediant of the mediant (**MM**). It is quite analogous to the very significant evolution of the relationships of **DD** and **SS**, the so-called modal adligatos of the tonic. Šín used the signs **DD** and **SS** primarily to indicate the relationship of the superdominant (II triad) to the dominant and of the subdominant of the subdominant (VII triad) to the subdominant; II and VII were related to the tonic merely as substitutes for other chords. Šín differentiated between the functionalities of substitute dominants and superdominants, and between substitute subdominants and subdominants of subdominants, on the basis of their relationships to the tonic even though the chords were identical. But today, under the influence of the development of more recent music, the direct relationship of these chords to the tonic has stabilized to such an extent that these distinctions and the remaining intricacies of the notational system of Šín's theory seem to be superfluous: substitute and secondary dominants can be interchanged and freely linked (clearly in diatonic as well as altered form) with the tonic well as with the primary dominants. Moreover, the linkage of altered forms with the tonic is more expressive!

(Janáček, *Káťa Kabanová*, piano-vocal score p. 27)

Adagio *atd.*

ces: T° — D — T°

(Suk, *O matince*, no. 4)

Andante sostenuto

mp

des: T S T

(Janáček, "Dobrou noc!")

Andante

pp

T D 6 - 5 T 6/4

(Janáček, “Nelze domluvit!”)

Andante

p
T° S° T° S°

(V. Novák, Vánoční sonatina, first movement)

Quasi allegretto

p
D: T₆ D_{2#} T₆ D_{2#}

(Suk: Capriccietto, op. 7)

Allegretto scherzando

a: T° S° T° (D₇) →

(Suk: Životem a snem, VIII)

Vivace

sempre p molto
Es: T S₄ T S₄ T S₄ T S₄ T S₄

Moreover, these very relationships later arise among triads based on the tonic and the tritone. Both triads on the tritone (for example on the note Gb or F# in the Cc system) are mediant of mediant: The F# minor triad is a first-degree mediant of

A major, and the eb minor triad is the submediant of a mediant of Eb major. The Gb major triad is a first-degree mediant of Eb major; the A major triad is the submediant of a mediant of a minor. These “secondary” or “alternate” mediant are stripped even of that slight subdominant or dominant coloration which helps us to identify the mediant; they are neutral in this sense, showing even more of a tonic quality, of a tonic with a more static purpose than the mediant has; from that perspective, the secondary or alternate mediant seems to be a mirrored, symmetrical counterpart of the tonic, a static antitonic of the key, but also forming a dynamic antitonic through which the dominant and subdominant are effectively linked (for example, g-b-d'-f-ab' in Cc). The secondary mediant – the mediant of the mediant –²⁰ was established in the development of functional music when the mediant structure emerged and was reinforced; from a certain perspective, it may be a factor in the final leap towards the completion of the functionality of the tonal system, just before its close and retreat in music which originated in the weakening and then the elimination of functional relationships.

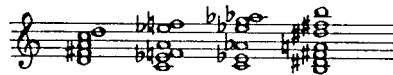
The definite, unquestionable inner correspondence of chromatic mediant to the tritone progression is shown by the following illustration from an actual composition whose strength and expression are rooted in its very harmonic aspect:

(Suk, **Jaro**, no. 1)

When we contemplate functional analysis of these noteworthy progressions, often repeated in this composition, two possibilities come forward. First, to abandon the definitely latent key of E major to which the tonal orientation of the entire area of the first 27 chords could perhaps be related (but which does not appear at all during the entire exposition of this theme!). Then, we find the first chord to be **S**, the second to be an unorthodox spelling of an altered **DS** (C-D#-F-A) of a Phrygian character, and the third to be **D7**. But this interpretation not only lacks the conventional logic of the dominant function but also does not take the point that we have made above in

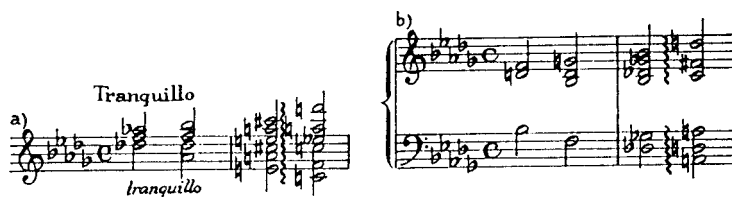
²⁰ We also choose the sign **MM** (double M) [mediant of the mediant] as analogous to the signs **DD** [dominant of the dominant] and **SS** [subdominant of the subdominant]. It is certainly true that this example actually shows the superposition of two minor mediant (m), because the superposition of the two major mediant merely results in the ordinary major mediant of the tonic which is obtained from M_s to M_d and conversely; it is not necessary in this case to consider the minor and major mediant in the classification, thus we use the sign which more appropriate from a notational perspective, which is in fact **MM**.

agreement with Risinger into consideration – that the lapidarity and compactness of chords and their structures clearly evokes and affirms our impression of static (not resolving), alternating, fully developed chords: a progression consisting of D major, F major, B major (the last as a dominant seventh). We also should not forget that the example comes from the beginning of the composition, where the orientation to the key of E major which will emerge later is more difficult to perceive than it is in the subsequent repeated progressions. Thus we hear the first linkage as that of the first and second mediant as an intensifying continuation of this chromatic mediant atmosphere, as a progression of the same type. This second linkage is tritonal, and if we approach it by designating its function as **MM**, it can be viewed as an abbreviation of the chord progression F-Ab-B, omitting the Ab7 chord. This is exactly the process which forms the basis for the resolution of the secondary dominant to the tonic – in which the transient, intermediate link of the usual dominant chord is also omitted – the II-V-I progression becomes II-I.



Omitting the Ab7 chord from this linked chain of mediant brings about an abrupt, daring leap in the harmonic movement of this phrase, which is implemented through the rising melodic progression. A corresponding “hardness” into sharp keys and heightened expressivity is also achieved, reinforced by *factura* and the energetic dynamism of the piano itself. Another important confirmation of our conjecture of the inner correspondence between the chromatic mediant function and the tritone relationship to the tonic is the fact that when a reminiscence of this theme appears in the last movement of **Jaro** (“V roztoužení”) ... as the only independent subsidiary theme –

(Suk, **Jaro**, “V roztoužení”)



as the use of flats gives the passage to a softer quality than that of the earlier, more energetic example, Suk abandons the **MM** relationship and stays with simple mediant; even then an illusory impression of a tritone relation is evoked. It is also significant that when Suk prepares a change during the development of the theme of the first movement to increased tranquillity by use of a clear, diatonic E major (a tempo), the

modulatory pattern of the preparation follows a mediant path, F7-Ab7-B7. Thus, the section as a whole is characterized by examples of mediant structures interspersed with seventh chords and their inversions (in this passage, a **D7** which does not have a dominant functionality); the note C can even be added to the first chord without changing that chord's harmonic purpose.

It thus seems that we do not put forth an overly risky hypothesis by noting that our table could still be supplemented with **MM**^o and **MM**⁺, the triads F#-A-C# and Gb-Bb-Db (and their enharmonic equivalents) in Cc. Then the table would be complete;²¹ furthermore, it would show symmetrical relationships of the dominants and mediants to the tonic: the secondary or substitute dominants find a counterpart in the secondary or substitute mediants in identical circumstances of historical origin, functional significance and conditions of use.

CHROMATISCHE MEDIANTEN ALS VIERTE BASISFUNKTION IN DER TRADITIONELLEN HARMONIELEHRE

Zusammenfassung

Der bedeutende tschechische Musikwissenschaftler Jaroslav Volek (geboren am 15. Juli 1923 in Trenčín, gestorben am 22. Februar 1989 in Prag) formulierte seine Theorie der Mediante als vierter Basisfunktion in der traditionellen Harmonielehre erstmals im Jahre 1952. In in sich abgeschlossener Form publizierte er sie in dem Buch *Struktura a osobnosti hudby (Struktur und Persönlichkeiten der Musik)*, Praha, Panton 1988, S. 70–102. Seine Konzeption, die Medianten nulten Grades, ersten und zweiten Grades unterscheidet, knüpft an die traditionelle europäische Theorie der Linie

²¹ The triads Db-Fb-Ab in the key of C major and B-D#-F# in the key of c minor (in the context of Cc) can be assessed as spontaneous chromatically shifted, enharmonically muddled key centers, too constrained to emerge as proper functional relationships. In general, it is interesting that the **T, S, D, M** system (excluding **MM**) covers all of the triadic relationships in the chromatic scale except for those which are closest to, and most distant from, the tonic. But even those relationships can sometimes be analyzed as **MM**^o, as is shown by this example:

Andante

Sbor: Kam br-zy do-padnaš

C E C#

← M₁ M₂ →

But here an authentic mediant is merely linked to a mediant of null degree, and thus the relationship is merely semifunctional.

Zarlino – Rameau – Riemann an, und reagiert auch auf die theoretischen Beiträge der tschechischen Theoretiker Otakar Šín, Karel Janeček und Karel Rísing. Die harmonische Erscheinung der Medianten als eigenständiger „tonikalen“ Funktion löst Jaroslav Volek auf originelle, überzeugende und durch zahlreiche Beispiele aus der Musik des 19. und 20. Jahrhunderts dokumentierte Weise. Die Studie wurde im Jahre 2001 von der amerikanischen Musikwissenschaftlerin und Angestellten der Library of Congress, Washington DC, Judith Marie Fiehler übersetzt.

CHROMATICKÉ MEDIANTY JAKO ČTVRTÁ ZÁKLADNÍ FUNKCE V TRADIČNÍ HARMONII

Résumé

Významný český muzikolog, hudebního teoretik a estetik Jaroslav Volek (narozen 15. července 1923 v Trenčíně, zemřel 22. února 1989 v Praze) formuloval svou teorii medianty jako čtvrté základní harmonické funkce poprvé v roce 1952. V ucelené podobě ji publikoval v knize *Struktura a osobnosti hudby*, Praha, Panton 1988, s. 70–102. Jeho koncepce, rozlišující medianty nultého stupně, medianty prvního stupně a medianty druhého stupně, navazuje na tradiční evropskou teorii vinoucí se od Zarlina přes Rameaua až po Riemanna a reaguje rovněž na teoretické přínosy českých teoretiků Otakara Šína, Karla Janečka a Karla Rísingera. Harmonický jev medianty jako svébytné „tonikální“ funkce řeší Jaroslav Volek originálním, přesvědčivým a z hudby 19. a 20. století hojnými příklady dokumentovaným způsobem. Studii přeložila v roce 2001 americká muzikoložka a pracovnice Library of Congress, Washington DC, Judith Marie Fiehler.