



JOURNAL OF MUSIC THEORY PEDAGOGY

Volume Nineteen 2005

JOURNAL
OF
MUSIC THEORY
PEDAGOGY

Volume Nineteen 2005

SCHOOL OF MUSIC
THE UNIVERSITY OF OKLAHOMA

JOURNAL OF MUSIC THEORY PEDAGOGY

EDITOR

J. Kent Williams

Univ. of North Carolina-Greensboro

REVIEWS EDITOR

Jane Clendinning

Florida State University

FINAL EDITING

Daryl Hammack

University of Oklahoma

MANAGING EDITOR

Alice M. Lanning

University of Oklahoma

PRODUCTION

Bennie McElhaney

EDITORIAL REVIEW BOARD

Tim Smith, Chair

University of Northern Arizona

John Buccheri

Northwestern University

Joel Phillips

Westminster Choir College
of Rider University

Renee McCachren

Catawba University

Michael R. Rogers

University of Oklahoma

Deron McGee

University of Kansas

Eleanor Trawick

Ball State University

EDITORIAL & BUSINESS OFFICE

Journal of Music Theory Pedagogy

School of Music
University of Oklahoma
Norman, OK 73019

SUBSCRIPTION RATE (1 issue/yr.)

Individual	\$30.00
Student/Emeritus	\$15.00
Library/Institution	\$40.00
(International: \$5.00 additional)	

Information about back issues and special rates available through the business office

The Gail Boyd de Stwolinski Center
for Music Theory Pedagogy

James H. Faulconer, Director

Copyright ©2005, The Board of Regents, The University of Oklahoma

ISSN 0891-7639

CONTENTS

Volume 19

ARTICLES

Poetry Analysis in the Music Classroom: Wilfred Owen and Britten's <i>War Requiem</i>	Byron Almén	1
Developing the Analytical Point of View: The Musical 'Agent'	Gordon Sly	51
Cycling Through Polyrhythms	Nick Rissman	65
D. A. Kolb's Theory of Experiential Learning: Implications for the Development of Music Theory Instructional Material	Michael Lively	77
The Teaching of Harmony and Composition in the French Conservatoire in the Nineteenth Century: the Importance and Influence of Reicha and Fétis	Gloria Toplis	103
Some Challenges in Teaching American-Based Harmony in French	Roxane Prevost	129
Errata for Volume 18		151

CONTRIBUTORS	157
--------------	-----

GUIDELINES FOR CONTRIBUTORS	158
-----------------------------	-----



Poetry Analysis in the Music Classroom: Wilfred Owen and Britten's *War Requiem*

Byron Almén

The study of poetic texts that appear in musical works occupies a limited position in the modern theory curriculum. Despite the intimate connection between music and the human voice that has existed as long as the human race, disciplinary divisions have tended to relegate poetic analysis to the applied voice studio and to isolated moments in the theory sequence—usually in conjunction with treatments of Romantic *Lieder*. Time constraints and the need to deal effectively with a large number of topics can lead to the marginalization of text analysis in the classroom. Yet at no time in recent history has the subject been more in need of attention than today. Students currently entering post-secondary institutions are less and less likely to have a solid grounding in the study of literature and writing than was the case in previous decades, when the study of classic texts formed the essential core of education. To a lesser degree, this trend, together with disciplinary specialization, has also resulted in many faculty lacking the expertise and experience to address issues of text and music, as evidenced by the relative paucity of scholarly literature on music and text in relation to other analytical issues. In a field where singers and instrumentalists alike encounter music with text on a frequent basis, the need for analytical facility with text is one of the great unfinished tasks in music pedagogy.

At the same time, these difficulties should not be overstated. Many instructors devote entire semesters to seminars or core classes devoted to text and music issues. New undergraduate theory textbooks devoted to expanding the traditional palette of approaches to music are increasingly giving greater emphasis to the analysis of texts. These initiatives go beyond the addition of another topic to the curriculum; they contribute to a comprehensive understanding of musical

meaning. Because language is more familiar to students as a vehicle for conveying meaning than is music, it provides a point of approach that can lead to discussions of the many other distinct ways that music conveys meaning—association, topic, narrative, symbol.

What is needed, however, is a more comprehensive analytical palette for analyzing text in musical works that balances the multifaceted character of musical analysis proper. What is required is an organizational scheme analogous to musical parameters—rhythm, harmony, melody, form, texture—that can provide clarity to the process of text analysis. Also needed is a realization that text analysis is an integral part of studying vocal and choral music. Not only will a musical setting be insufficiently understood without prior awareness of the subtleties of the text, but it is also dependent in many respects on that awareness. In truth, the process of attending to these issues is well underway, most notably with the publication in 1996 of *Poetry into Song: Performance and Analysis of Lieder* by Deborah Stein and Robert Spillman. This book, designed primarily for undergraduate performers and theory students, provides readers with an effective introduction to analyzing German Romantic *Lieder*, with equal emphasis given to poetry, music, and performance. With respect to poetry, it introduces several important approaches to text analysis, including an awareness of poetic imagery, dramatic progression, mood painting, the role of the persona and the constructed audience, the relationship between line and sentence length, scansion, and stanza division. This article will not abandon the foundation laid by Stein and Spillman. Instead, I hope to supplement and expand that approach where possible and place it within a larger analytical framework.

In the following pages, I will outline and illustrate a method of poetic analysis that can serve as the basis for an extended unit on text and music for graduate or upper-division undergraduate music majors. I have employed this method for several years in my graduate analytical techniques class and have found it to be both effective and well-received. The basis of the method is an elegant

classification of analytical techniques laid out by the poet and English professor Mary Kinzie in her book *A Poet's Guide to Poetry* (1999). This work stands out among recent treatments of the subject for its pedagogical effectiveness, its subtlety of insight, and its accessibility for non-specialists. In particular, I will appropriate her eight-fold scheme of poetic elements, and I will show how these elements form the foundation with which musical settings begin. Further, the choice of this single text also lends itself to classroom application, since the instructor can, at his or her discretion, choose to make use of it as a required or optional reference source. The following is a summary of the interrelated elements which constitute this approach to text analysis, with Kinzie's definitions given or paraphrased. Unfamiliar terms will be fleshed out later in the paper. Footnotes show where Kinzie's method parallels that of Stein and Spillman.

1. THEME: (the central element around which the other elements converge—a particular application of one element or another will tend to influence theme) the subject matter of the poem, which may be explicit or implicit in articulation, and simple or complex in character (Kinzie 1999, 5).

2. LINE: “the primary formal unit in poetry.” Lines can either be “end-stopped to coincide with syntax or enjambed into the next line” (Kinzie, 459).¹ The speed at which one moves through lines is not constant, depending upon where sentences end in relation to lines.

3. SENTENCE: “a complete syntactical unit consisting of a subject and a verb. The normal order is subject-verb-object (s-v-o); any other sequence inverts the sentence. Word order also affects and is affected by meter” (Kinzie, 459). The relative length and complexity of the sentence or the employment of unusual sentence types (questions, commands, fragments) also contribute to their expressive effect.

¹ See also Stein and Spillman 1996, 33-34.

4. DICTION: “style viewed from the perspective of word formation (morphology), word length, and suggestive complexity” (404). Relevant issues include:

- the relative degree of concreteness or abstraction expressed by individual words,
- the use of monosyllabic or polysyllabic words for expressive purposes,
- figures of speech: the choice of words with respect to their sounds (Stein and Spillman, 29, 36-38) (alliteration, assonance, onomatopoeia, adnomination, preference for dark or light vowels), and
- the resultant stylistic register conveyed (high, middle, low, or mixed).

5. TROPE: “figures of thought”; “the element of poetry that includes all form of comparison and transfer of meaning by means of which language means doubly” (Kinzie, 475-77). Troping involves such devices as irony, punning, metaphor, simile, symbol, metonymy, allusion, archetype, and allegory (Stein and Spillman, 21-26). These devices differ with respect to the character of the double meaning or with respect to their degree of specificity or scope.

6. RHETORIC: “the art and style of persuasion when referred to speech generally rather than writing or poetry exclusively” (Kinzie, 454). Relevant issues include:

- the effect of positing an implied speaker (persona) and audience on the organization of the poem and its meaning,
- the way in which the listener is influenced by aspects of diction (such as figures of speech or stylistic register), trope, or other elements,
- the apparent degree of involvement (posture) of the poet in the poetic message—unobtrusive, self-dramatization, narrative or third-person dramatization,
- the use of tense in marking off important moments or setting a scene—past, present, future, or mixed,

–the evocation of a mood or sequence of moods as a means of expression.²

7. RHYTHM AND METER: Rhythm is “the accommodation of the poet’s individual voice in its natural scope to the constraints and relaxations of the accentual-syllabic line. A particular poem or line’s rhythm is created by variation from or adherence to the anticipated alternation of accent with nonaccent” (Kinzie, 457). Meter is the normative alternation of some scheme of accents and non-accents which forms a “fixed grid” against which the line’s actual stress patterns work. These generally result in two- or three-syllable units with a single primary accent that recur continuously throughout the poem (438). (Not all poems are metrically organized, so this category is not universally applicable.) In practice, analysis of rhythm and meter involves determining the speech stresses of the lines, then placing them in comparison with the abstract pattern of metric feet that is only partially coincident with the speech stresses. The points of difference between the two levels (substitutions) cause that fragment of text to stand out, to be marked expressively.³

8. STANZA AND RHYME: Stanza is “a group of three or more lines, usually within a fixed rhyme scheme, which is repeated more than once. Stanzas are used additively, unlike a one-time pattern of rhymed lines such as the sonnet, which is complete in fourteen lines” (Kinzie, 453). Rhyme is “the agreement of two metrically accented syllables and their terminal consonants” (454-55). Relevant issues include:

–the relationship between the stanza divisions and thematic progression,

² With respect to this category in particular, Stein and Spillman provide an excellent summary of useful analytical techniques. See Stein and Spillman 1996, 26-33.

³ Stein and Spillman 1996, 38-45 features a discussion of poetic meter that, not uncommonly in poetic treatises, conflates accent and stress such that the conjunction of the two cannot be clearly seen. Kinzie’s approach, though less common, has the advantage of clearly separating the two levels, much as music analysis does with respect to meter and surface rhythm.

- the use of unusual or multiple line lengths at certain points within stanzas with respect to their expressive effects,
- the effect of the rhyming pattern (end-rhyme scheme) on the flow of the poem—possible patterns include adjacent rhymes (for example, aabbcc), alternating rhymes (abab), or interspersed rhymes (ababccb) (455).
- the use and relative frequency of strong (accented) or weak (unaccented) line endings and the effect of this on the flow of the poem (Stein and Spillman, 48-51).

As an illustration of these analytical techniques, I will examine a very different musical style from that discussed in Stein and Spillman, namely, the *War Requiem* of Benjamin Britten, and in particular a constituent text by the English poet Wilfred Owen. This music is less likely to be familiar to students, and the text and music analysis can serve as an entry point into this literature. The *War Requiem* is useful for several other reasons. First, its length and number of constituent poems allows for a varied and wide-ranging discussion of compositional choices within a single stylistic framework, and provides sufficient material for class discussion, individual assignments, and group projects. Second, in its employment of English poetry (along with Latin texts), it provides English-speaking students a chance to encounter poetic techniques on the familiar ground of their own language. Third, it features both great poetry—by the World War I era soldier-poet and pacifist Wilfred Owen—and text settings by a composer who is renowned for his sensitive and nuanced vocal writing. Finally, its subject matter—war and its human consequences—can provide an instructor with a opportunity to address social issues of concern to students and teachers alike in a way which is not always possible in a traditional theory curriculum.

This paper will focus primarily on analysis of the poetry and some of the implications of that analysis for understanding the piece as a whole. However, examples will be given which illustrate various ways in which insights gleaned

from the text analysis intersect with the musical setting by Britten. In the process, it will be seen that the relationship between poetic text and musical setting is complex. Aspects of this relationship should be carefully addressed in any classroom discussion of text and music. Some poetic effects, such as historical allusion, emerge clearly in any musical setting as long as the text is presented in the same order and with sufficient distinctness. Others are strongly affected by individual musical settings: patterns of word stresses from the poem can emerge clearly or be completely obscured by musical elements including, among others, meter, phenomenal pitch rhythm, pitch directionality, word repetition, melismatic writing, and agogic accent. Further, musical discourse sometimes creates a similar effect to that found in a poetic text, but only by using entirely different means—for example, a sense of “elevated” discourse can be represented textually by the choice of abstract, polysyllabic, unfamiliar words, and musically by the appropriation of certain musical topics or stylistic features. These elements can mutually reinforce each other, but textual meaning does not exist merely to support musical meaning or vice-versa. Poetic analysis and musical analysis should be undertaken separately to uncover their unique features, after which their interactions can be traced more effectively. Poetic interpretation will then be seen to reinforce, contradict, ignore, or inflect musical interpretation in various proportions. Although the poetic text is an integral part of the musical discourse, its contribution can and should be examined separately. The musical examples in this article do not comprise a detailed analysis of the score—they should be supplemented in the classroom by a more detailed look at the history of the work, the musical style of Benjamin Britten, and other analytical features of interest. They are provided to illustrate the various relationships that can exist between text and musical setting and to show how music analysis depends on a prior understanding of relevant poetic features.

This paper features an analysis of “Anthem for Doomed Youth,” one of the Wilfred Owen poems contained in the *War Requiem*, with respect to the techniques described above. The poetic text is given below in Figure 1.

What passing-bells for these who die as cattle?
Only the monstrous anger of the guns,
Only the stuttering rifles’ rapid rattle
Can patter out their hasty orisons.
No mockeries for them from prayers or bells,
Nor any voice of mourning save the choirs, –
The shrill, demented choirs of wailing shells;
And bugles calling for them from sad shires.

What candles may be held to speed them all?
Not in the hands of boys, but in their eyes
Shall shine the holy glimmers of good-byes.
The pallor of girls’ brows shall be their pall;
Their flowers the tenderness of silent minds,
And each slow dusk a drawing-down of blinds.

Figure 1: Wilfred Owen, “Anthem for Doomed Youth” (Britten 1997, viii)

This poem appears in the opening movement of the *War Requiem*, positioned between two texts from the Latin Requiem Mass: the ‘Requiem aeternam’ verse and the ‘Kyrie eleison’ from the Ordinary of the Mass. Both texts are prayers of supplication, the former seeking eternal rest for the dead, the latter seeking mercy for the living. The Owen poem, as with all such interpolations in the *Requiem*, concretizes these supplications by focusing them on the subject of war and its consequences. In each movement, Britten’s choice of interpolated English text is motivated by a conceptual link with the Latin text, causing it to function as a commentary on the traditional verses. In this case, that link is prayer: the ‘Requiem aeternam’ text contains a plea for God to “hear our

prayer" ("exaudi orationem meam"), while the "Anthem" poem laments the remoteness and insufficiency of ritualism and prayer from the realities of battle and loss—"no mockeries for them from prayers or bells."

Analysis of the poetic text reveals the ways in which the thematic argument is strengthened and clarified at individual moments and in the poem as a whole. To illustrate the poetic analysis elements described above, let us examine each in turn in the context of their employment in "Anthem for Doomed Youth." Because *theme* is implicated in the activity of all the other elements, it will be treated in tandem with those elements rather than separately.⁴ The elements described in this article do not lend themselves to complete and rigid separation, even in a pedagogical setting. At every turn, these elements interpenetrate and mutually influence each other: diction affects rhetoric, meter affects trope, etc. In classroom discussions, it is important to clarify the distinctions between elements for the sake of preserving the usefulness of the tool, while at the same time revealing that no clear division is possible in practice.

Line: Most lines in "Anthem for Doomed Youth" are end-stopped—that is to say, the line ending coincides with a sentence or phrase ending to mark a significant punctuation point. This in itself is significant, in that the frequent coincidence of sentence and line lends greater clarity to features like rhyme and meter. There are, however, two significant moments in which end-stopping is eschewed, resulting in the listeners' attentions being drawn to them. The first moment features an enjambment at the end of line 3: the phrase from this line carries over without punctuation to the end of line 4. The resultant two-line phrase "only the stuttering rifles' rapid rattle can patter out their hasty orisons" acquires a rushed,

⁴ Since the thematic effect of a particular effect frequently involves the coordination of several elements, it will occasionally be necessary to discuss the effect of certain elements out of the order established above. When this occurs, the element name will appear in parentheses and italicized in order to keep the conceptual boundary lines clear.

headlong character in relation to the surrounding lines as a result of the enjambment. The thematic purpose of this effect cannot be completely explained by the enjambment alone. As we will see, lines 3-4 engage a rhetorical device which recreates the sound of gunfire in the unfolding of the text. This device is complex in construction, resulting from the coordination of irregularities of line, sentence, diction, trope, rhythm, and meter.⁵ This moment will be examined more fully below.

The second moment lacking an end-stopped line involves lines 10 and 11: "Not in the hands of boys, but in their eyes shall shine the holy glimmers of good-byes." The momentum of line 10 is arrested after three of the line's five metric feet by a caesura, then continues without punctuation through the remainder of lines 10 and 11. The effect of the caesura is to call attention to the dual connotations of the shining light (*trope*) that is the primary image of the final sestet: the light shining through the tears of bereaved children is more authentically sufficient to mourn the departed loved one than the ritualized light of a candle carried in the hands of funeral celebrants. The caesura works together with syntactic inversion (*sentence*) to place the word "eyes" at the end of the line where it will receive greater prominence as befits its thematic status. Frequently, an enjambment will have the effect of de-emphasizing the line ending, but this effect is mitigated here by the caesura earlier in the line and by the shift in rhyme scheme from alternating (abab cdcd) to interspersed (effegg) which brings the rhymed words "eyes" and "good-byes" closer together (*stanza and rhyme*).

Britten's setting reinforces both the caesura after "boys" and the syntactic emphasis on the word "eyes" in line 10. The vocal phrase featuring the text "Not in the hands of boys" is separated from the phrase containing the remainder of line 10 and line 11 by a full three measures. This is the only moment in

⁵ Britten mitigates the effect of this enjambment by introducing destabilizing rests into the phrase after "rattle." However, as will be described below, Britten is attempting to achieve an analogous effect to the poetic re-creation of gunfire in specifically musical terms. This results in a blurring of the poetic effect in this instance

the entire setting where Britten separates any part of a line into separate phrases. The separation also allows for an extended musical trope to be exploited. Beginning at Rehearsal 13, a new formal section is initiated, featuring melodic material derived from earlier in the movement: namely, a portion of the *Requiem aeternam* text sung by boys' choir. The oboes and first violins at Rehearsal 13 play a transposed version of the boys' choir line "Te decet hymnus" from Rehearsal 3. This is followed by a variant of the consequent phrase from the "Te decet" passage, sung by the tenor to the text "Not in the hands of boys." Here Britten sets up an association between the poetic image of "boys" in the Owen poem and the boys' choir which was employed to sing the Latin verses. This serves to reinforce the textual link between the Latin text "hear my prayer" and the "prayers and bells" of the Owen poem. After the caesura, the three-measure interlude between vocal phrases is used to reprise further boys' choir material, this time a variant of "et tibi redetur votum in Jerusalem" from Rehearsal 4, played by the clarinets and second violins. When the tenor enters again, singing the remainder of lines 10 and 11, Britten uses an inversion of the previous phrase ending to set the text "but in their eyes"—the previously descending gesture now ascends to a local high point (F5) on the word "eyes," where it remains for three beats, the longest note in the entire vocal phrase (see Example 1). Britten thus emphasizes "eyes" through register and agogic accent, and with it the rhymed words "eyes" and "good-byes," while still allowing the phrase to continue through all of line 11 without a break. Thus, the Owen poem's emphasis on "boys" and "eyes," set up by the poetic manipulation of line and sentence, is preserved and expanded in Britten's treatment through phrase shaping and through the melodic recalling of the boys' choir passage.

13 Oboe



mf *express.*

3 Boys I



f

Te - de - cet hy-mnus hy - mnus, - De - us in Si - on;

3 after 13 Tenor



Not in the hands of boys

4 after 3 Boys II



f *smooth*

Te - de - cet hy - mnus, hy -

4 after 13 Cl. in Bb



mf *expr.*

4 Boys I



f

Et ti - bi red - de - tur vo - tum, vo - tum in Je - ru sa - lem

8 after 4 Boys II

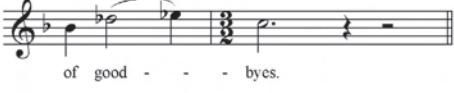


8 after 13 Tenor



cres. *inversion*

but in their eyes Shall shine the ho - ly glim - mers



of good - - - byes.

Example 1: Comparison of phrases from Rehs. 3-5 and 13

The caesura-enjambment combination in lines 10-11 has one further effect. After the irregularities of rhyme scheme shift, line flow, and sentence structure, the return of end-stops in lines 12-14, combined with the repetitive list of contrasts between actual and ritualized offerings (pallor/pall, tenderness/flowers, dusk/drawing of blinds), gives the ending of the poem a character of tragic finality. The slow succession of regular phrases piles up the contrasted concepts inexorably, suggesting the weight of grief that cannot be assuaged. Britten emphasizes this character in his setting by “slowly relaxing” the tempo of the ending and by presenting in augmentation the setting of the final poetic line, with its gradually descending “Te decet” motive.

Sentence: This category is concerned with the degree of syntactical simplicity or complexity that characterizes the poem under discussion. The simplest sentences are generally those that feature the most normative word ordering (subject-verb-object) combined with few additional phrases or clauses and a shorter overall length. By contrast, more complex sentences are formed through alteration of the normative word order, the addition of further phrases or clauses, the use of unusual sentence types—fragments, exclamations, interrogatives, etc.—and/or greater overall length. Further, the degree of sentence complexity tends to correlate in some manner with thematic aspects. For example, long sentences often create tension by overrunning the ends of poetic lines. Likewise, complex sentences that are more difficult for the reader/listener to untangle may suggest a more cerebral, intellectualized persona than simple sentences with few obstacles to comprehension. Sentence structure may also be adjusted in order to place significant words at the beginnings or endings of lines, either for greater emphasis or to suggest a partial meaning (‘half-meanings’) at a line ending that is contradicted or inflected by the unexpected continuation of the sentence into a subsequent line.

The structure of the sentences in “Anthem for Doomed Youth” is relatively complex, reflecting both conceptual weight

and emotional intensity. An important interaction with form is the use of interrogative sentences to initiate the two unequal segments of the sonnet (lines 1 and 9). These sentences (“What passing-bells for these who die as cattle?” and “What candles may be held to speed them all?”) determine the content of the sonnet’s two sections by requiring answers which the remaining lines supply. Britten provides these interrogative lines with special emphasis and hints at the emotional intensity of the poem by giving them a unique phrase shape. In the first case (line 1), the tenor sings an incantatory C5 reciting tone, then slowly ascends by step to a measure-long melismatic climax on the word “die.” Immediately thereafter, the line plunges downward in an explosive release on the word “cattle.” The overall effect is one of great tension barely contained. A similar profile characterizes the phrase containing the second question (line 9), except that the climax on “speed” is followed by a double unfolding of a G $\flat$ -C tritone, the work’s most pervasive symbolic motive (atypically standing for the heavenly world in contrast to the suffering world below). This phrase achieves a similar intensity to the first by ending with a powerful *sforzando*. Only one other line in the setting shares this characteristic phrase shape, and that is the critical line 5 (“No mockeries for them from prayers or bells”), in which the questions are denied a conventional response and through which the poem’s bitterness emerges most strongly. Here the word “prayers” is emphasized through an instance of word-painting: the pitches of the G $\flat$ -C tritone alternate several times, both reflecting the symbolic object of prayer (God and the divine realm) and imitating the melismatic chanting of celebrants in worship (Example 2). Musically, of course, this positioning of similar lines in the first, fifth, and ninth vocal phrases, each separated from the next by three contrasting phrases, lends a pleasing symmetry to the first part of the poem.

1 after 9 Tenor

cres. with force *ten.* *fz*

What pas sing - bells for those who die as cat tle?

1 after 11

cres. *ten.* *fz*

No mock er ies for them from pra yers or bells,

5 before 13

f *fz*

What candles may be held to speed them all?

Example 2: Britten's setting of lines 1, 5, and 9

The initial question immediately confronts the reader/listener with a primary clause that lacks a verb—one must infer a fuller construction like “What passing-bells *are rung* . . .” or “What passing-bells *suffice* . . .” The truncated syntax of this sentence, combined with the obscure term “passing-bells” (*diction*) and the uncertain referent of “these”—who is dying like cattle?—creates an eerie effect, as though the speaker were too overwrought to express himself clearly, or were escaping from strong emotion into rhetorical distance. The immediate answer to this question (lines 2-4) excessively emphasizes the sentence’s subject through two parallel lines beginning with the word “only.” (Britten reinforces this parallelism by shaping the vocal phrases corresponding to lines 2 and 3 in a similar manner, just as was the case with lines 1 and 9.) In these lines, we are not simply given more context—the dead are soldiers in battle—but are also made aware of the insufficiency and inappropriateness of the weapons of war as a suitable dirge for the dead. The answer is unexpected because it shifts the poem’s setting from church to battlefield, and the repetition in lines 2-3 provides the necessary emphasis to underline that shift while simultaneously revealing the emotional force behind the poet’s words. By delaying the verb-object sequence until line 4, the poet increases the expressive tension through the initial lines of the poem.

The remaining lines of the octave (eight-line passage) also comprise a single, complex sentence, and again the sentence lacks a verb. Parallel phrases further develop the correlation of battlefield sounds with the sounds of ritualistic memorial—“no mockeries . . .” followed by “nor any voice of mourning . . .,” “the shrill, demented choirs” paired with “bugles.” The repetition of syntactic units here becomes a rhetorical gesture (*rhetoric*) which lends grandeur and force to the poem’s message through re-emphasis.⁶

⁶ Britten’s setting of these lines is less concerned with overt parallelism, although there are motivic similarities between lines 6-8 and 2-4. Instead, he focuses on word-painting and trope, illustrating “wailing shells” by a long, melismatic line and the “sad shires” by a sudden slowing of the phrase at its conclusion

The closing sestet begins in a similar fashion as the initial octave: a question is answered through the successive accretion of detail *via* parallel lines. Here the imagery relates to visual images rather than sound (*trope*), however, and the verb is present in the interrogative line. Mention has already been made of the sentence inversion in lines 10-11 that focuses attention on the word "eyes" at the expense of the poem's true subject, "glimmers." A more normative word order would be: "The holy glimmers of good-byes shall shine in the eyes of boys, not in their hands." Apart from the fact that this sentence wreaks havoc with the rhyme scheme, it lacks the expressive force of the actual, inverted version (comprising the sequence object-verb-subject), which, like lines 2-4, forces the reader/listener to wait until the end of the sentence to untangle its sense. Because all these lines are set by Britten without interpolations or repetitions, the expressive effects derived from syntactic rearrangement come through clearly in the setting.

The syntactical devices set up by Owen through the first eleven lines abruptly give way to a new strategy in the final three lines; only the principle of repetition remains as an important link to the earlier text. Here the syntax becomes comparatively simple and phrase lengths coincide precisely with line lengths. As previously mentioned, this passage has the effect of conveying the inexorable advance of grief. The sequential elaboration of martial and religious correlations and the coincidence of line and phrase are reinforced by the regularity of syntax: for the first time in the poem, the sequence subject-verb-object unfolds within a single poetic line, and this effect is repeated twice more, functioning both as a sign of closure and as an intimation of tragedy through the yoking of expressive flexibility into the deathly correspondence of meter, line, and phrase. As mentioned above, Britten sets these lines with musical material from the earlier boys' choir passage in Latin. Lines 12-13 refer back to the two inverted unfoldings of the tritone C-F# on the text "exaudi orationem meam" ("hear my prayer") from Rehearsal 5; the parallelism of these phrases reflect the parallelism of the sentences themselves. Line 14

features the augmented variant of the “Te decet hymnus” phrase mentioned above.

Diction: This category invokes all the effects of word choice upon the meaning and unfolding of the poem. The degree of concreteness or abstraction of the chosen words helps to characterize the thematic and rhetorical content of the poem, as does the choice of a more unfamiliar, or complex, word in place of a more familiar, or simple, word. Further, an increase in the number of monosyllabic words in a line increases the number of word stresses, which in turn slows the flow of that line. By contrast, larger words with fewer stressed syllables cause the line to move forward more rapidly, or possibly more uncertainly due to the larger gaps between stresses. The use of multiple words with the same initial consonant sound (alliteration) or medial vowel sound (assonance) or quality of lightness or darkness of vowel gives a greater emphasis to the lines in which these words appear or groups those lines together. Finally, the choice of particular words invokes a stylistic register that implicates particular social strata or social functions—elevated discourse suggests the upper classes, ritualized expression, or a rhetorically-heightened expressive voice, while simple discourse suggests the working classes, informal conversation, or a neutralized narrative voice. Whatever the relevant aspect, diction is as closely tied to thematic expressivity as any poetic element.

Paradoxically, “Anthem for Doomed Youth” achieves its pointed commentary on religion and war through an almost obsessive focus on things. The energy of this poem arises from the placing of one object against another, substituting the sounds and sights of battle for the sanitized ritual objects that purport to explain them, achieving the physical and moral separation of the two worlds that they inhabit. Prayers and bells give way to guns and rifles, singing voices to “wailing shells” and bugles, candles to tear-filled eyes. Owen’s directness of word choice reflects the immediacy of war even as he injects the poem with tension through syntactic complexities and rhetorical flourishes. The few words that

reach beyond the accessible and immediate are those that evoke the solemnized vocabulary of liturgy—passing-bells, orisons—in order to emphasize their remoteness in the face of war. As Owen writes: “no mockeries for them from prayers or bells.” The stylistic register of this poem largely inhabits a middle range, eschewing lofty language in favor of realistic immediacy, but nevertheless retaining a religious tone that elevates the moral force of its message.

The result is a largely monosyllabic text in which extra stresses seem to drag the momentum of individual lines to a halt. In particular, the last line of the octave renders grief immediate through excessive stress: “and **bug**-les **cal**-ling for **them** from **sad shires**.” Britten largely preserves the effect of piling up monosyllables, especially in the setting’s first section (Rehs. 9-13). In the second section (Rehs. 13-16), the vocal lines are derived from the boys’ choir section, so the phrases more frequently sacrifice their monosyllabic character in order to fit the poetic lines into pre-existing musical phrases. In the first section, however, most phrases are largely set syllabically. Only three words (“prayers,” “wailing,” and “sad”) receive more than two notes per syllable, and in each case the melisma calls attention to a moment of word-painting (discussed above). As a result, the density of the text with all its expressive power comes through strongly in Britten’s setting.

Polysyllables are not uncommon in the text, but they stand out among the shorter words in particular ways: (1) they give way to monosyllables to mark the boundary line of the two constructed worlds (“passing-bells for those who die as cattle”); (2) they inject emotional outbursts into the battlefield descriptions, humanizing the starkness of the comparisons (“monstrous anger of the guns,” “shrill, demented choirs,” “the tenderness of silent minds”); (3) they participate in the creation of effects involving multiple poetic elements (the two- and three-syllable worlds in the phrase “only the stuttering rifles’ rapid rattle can patter out their hasty orisons” cause the text to gallop along like the event it describes).

This last example, taken from lines 3-4, partly explains the first two remarkable multi-parametric poetic effects in the poem.⁷ Here Owen creates an extended metrical onomatopoeia, in which not only individual words but also their succession in time imitates the rhythmic, percussive pulsing of gunfire that is the impromptu equivalent of a funeral drum. Several "figures of speech" combine here to create this effect. The alliteration in "rifles' rapid rattle" combines with the regular alternation of stress in the successive two-syllable words to establish a consistent speech rhythm. A similar repetition of the medial consonant "tt" in "stuttering," "rattle," and "patter" highlights the onomatopoeia effect of each of these words. One, therefore, hears both the individual sounds of gunfire and its regular alternation when taken together. Finally, the assonant "a" vowel in the words "anger," "rapid," "rattle," and "patter" give this passage a particular integrity, particularly as this vowel largely gives way to darker vowels in the immediately succeeding lines.⁸

Other figures of speech in this poem are more subtle, highlighting individual moments. The brief alliteration at "sad shires" helps to emphasize the overstressed quality of this poignant line ending. The parallel medial vowels of "candles" and "hands" suggests the kinship of ritual object and function which is then denied when "hands" give way to "eyes" at the end of the line.

Trope: We have already had occasion to discuss the primary trope in "Anthem": the repeated metaphorical assumption of religious symbols into the images and sounds of the battlefield. For the guns, rifles, shells, and bugles that accompany death in battle and the emotions and complexions of the bereaved are not simply set against religious objects in a contrast of the real vs. the ideal. Rather, the former come to acquire the function of the latter. The battlefield symbols are doubly meaningful in that they serve as both the byproducts of war and its memorial. It is in this duality that the poem's

⁷ The other being lines 11-12, discussed above.

⁸ The other important aspect of this passage, the striking alternation of triple and duple meters, will be discussed below

meaning resides; it forces the reader/listener to consider the ways in which war shatters the consolatory power of religion through the sheer force of its inhumanity, scope, and impact. The poet's—and reader/listener's—stance on religion and war is a question of rhetoric, but the symbol of the battlefield that rejects any consolation not on its own terms is a complex one worthy of explanation. It is not clear from the poetic text what message we might draw from this extended trope: does it call for a more authentic and consistent religious impulse that does not allow war to arise, or is it a rejection of religion in the face of man's inhumanity to man. The symbol is thus paradoxical: it is both a more honest anodyne to suffering and a rejection of any possible consolation.

A further connection between trope and rhetoric in this poem, between the symbol *per se* and its function in the discourse, is the use of simile and personification to reveal the poet's stance and to bring the perception of war's consequences into sharp relief. In the first line of the poem, the casualties of war are compared to cattle slaughtered for food. This comparison suggests both the scale of the killing and the lack of remorse that accompanies it. War acquires a moral dimension when the poet attributes human qualities to the objects of war: guns fire with a "monstrous anger," artillery shells are "shrill" and "demented." Owen does not allow the reality of the events he describes to be sanitized into universalizing platitudes. The human emotions attributed to the inanimate forces of war reveal both the culpability of human actions in their use of this force and the passion with which the poet, and presumably the reader/listener, confronts the consequences.

The musical analog of the poetic trope is the principle of association. Because both categories often focus their attention on the work's primary symbols, the latter can be employed to lend even greater force to the associational network of the text. Britten's setting of "Anthem for Doomed Youth" is a marvelous example of text and music both signifying in ways unique to themselves to achieve a powerful synergistic result. Musical association is densely employed throughout the

entire setting, beginning with its first measure. The opening harp figuration consists entirely of the now symbolically resonant G $\flat$ -C tritone (mentioned above), and the initial string lines feature a dotted rhythm characteristic of the orchestral opening of the *War Requiem*, a passage that accompanies the supplication “Lord, grant them eternal rest” (Example 3).

The image displays a musical score for string parts, comparing two different rehearsal points. The score is written on two staves, each with a treble and bass clef. The left staff is labeled '5 before 1 Doublebass' and the right staff is labeled '9 Doublebass'. Both staves feature a dotted rhythm in the bass line, characteristic of the opening of the *War Requiem*. The right staff includes a dynamic marking of *f* (forte) and a 'marked' instruction. The notation includes various musical symbols such as notes, rests, and slurs, indicating the specific musical context and performance instructions for each part.

Example 3: Comparison of string parts—6 before Reh. 1, Reh. 9

Two orchestral passages interpolated between vocal lines in Rehs. 9 and 10 imitate the “monstrous anger of the guns” (bass drum played by snare drum sticks) and “wailing shells” (flutes and clarinets) (Example 4).

The musical score for Example 4 consists of three staves. The first staff is for Flute, the second for Clarinet in Bb (Cl. in B $\flat$), and the third for Percussion (B.D., S.D. sticks). The time signature is 4/4. The key signature has two flats (Bb and Eb). The score is marked with dynamics: *pp* (pianissimo) and *p* (piano). There are also markings for *express.* (expressive) and *p marked and dry*. A bracket labeled "3 before 10" spans the first two staves, indicating a rehearsal mark. The Flute and Clarinet parts feature melodic lines with slurs and ties, while the Percussion part has a more rhythmic, staccato pattern.

Example 4: Gunfire and “wailing shells”—3 before Reh. 10

The “stutt’ring rifles’ rapid rattle” is suggested by dry, dotted figures in the oboes, bassoons, and horns before Reh. 11 (Example 5).

4 before 11

The musical score consists of three staves: Oboe, Bassoon, and Horn in F. The key signature has two flats (B-flat and E-flat), and the time signature is 4/4. The score is divided into measures by vertical bar lines. Above the first measure, there is a box containing the number '11', preceded by the text '4 before'. The Oboe staff begins with a *pp* dynamic and a 'short' articulation. The Bassoon staff also begins with a *pp* dynamic and a 'short' articulation. The Horn in F staff begins with a 'muted' marking and a *p* dynamic, also with a 'short' articulation. The music features dotted rhythms and triplet markings (indicated by a '3' over a group of notes). Dynamics change throughout the piece, including *cres.* (crescendo), *f* (forte), and *pp* (pianissimo). The Horn in F staff has a 'muted' marking over its first measure.

Example 5: “Stutt’ring rifles’ rapid rattle”—4 before Reh. 11

Bugle calls are suggested by triadic dotted figures in the horns as the line “And bugles calling for them from sad shires” is sung (Example 6):

12 Horn in F

mf marked

f

dim.

Example 6: Bugle calls at Reh. 12

The vocal imitations on “prayers,” “wailing,” and “sad” have already been mentioned, as has the imitation of the boys’ choir music at Reh. 13. All of these instances of word-painting and association have the effect of enriching the associations already present in the Owen text and of calling attention to parallels with the *Requiem aeternam* text from earlier in the movement.

Rhetoric: This category is concerned with the description of a persona that speaks through the poem and the devices through which this persona influences the reader / listener. The persona may or may not convey the belief, thoughts, ideas, and perceptions of the poet; it is frequently impossible to know for certain. A rhetorical analysis involves uncovering the qualities of this constructed voice. Does “he” speak objectively, or with great personal concern? Is “she” flamboyant and excessive in her use of metaphor and elaborate figures of speech and thought, or is she direct and lacking in overt artifice? Many of the poetic elements discussed above reveal the character of the persona, so it will not be necessary to cover the same ground again in every case.

Rhetoric is also the art of persuasion. Just as there are many different qualities that a persona may possess, there are also many different strategies and techniques that can be employed by a poet to persuade and influence the reader / listener. A poem can be presented like a miniature drama, with characters interacting and developing a plot. It can be a narrative description, tracking fundamental changes in its constituent elements from one point in time to another. It can be a lyric description of a memory or perception that largely eschews interpretation. It can be a philosophical disputation, an oration, a polemic. The manner in which the message is conveyed in a poem reveals much about the message itself and about the character of the poem as a whole.

“Anthem for Doomed Youth” most closely resembles an impassioned sermon in its emotional appeal and subject matter. The speaker-persona does not remain aloof from his subject, but uses his words as an appeal to impart a signal truth to his listeners. The unfolding of the poem is crafted

like an oration to instill insight and shock. The first device used to employ this strategy is the rhetorical question in the opening line: "What passing-bells for these who die as cattle?" We are meant to understand that this question goes beyond mere inquiry. It might be translated as "What passing-bells can possibly be sufficient to reckon the loss of these who die as cattle?" The answer is emphasized through repetition at first (lines 2-3), delaying the listener's full awareness of the speaker's extended metaphorical project until line 4. The parallel lines beginning with "only" and, later, with "no" and "nor" embody a common oratorical technique of increasing the force of a point through iteration.⁹ Indeed, as we have seen, the building-up of comparatives throughout the sonnet gives it the force of conviction, a force which concentrates in the final three lines as the comparisons arrive one after another, line by line.

It has also been observed above that the persona goes beyond description to express a particular position. This emerges most strongly in line 5 ("No mockeries for them from prayers or bells") where it becomes clear that the speaker is invoking religious imagery in order to convey its insufficiency. Ironically, the mode of presentation itself—poem as sermon—is an acerbic commentary on the countless other sermons delivered in times of war that ring hollow with platitudes. The overall tone of the poem is one of not-quite-resigned bitterness, a recognition of the enormity of loss that cannot be reconciled with a superficial spirituality.

The shift of tense in this poem is also employed to rhetorical effect. I have remarked upon the forcefulness of the final three lines due to their unexpected concatenation of line-sentence coincidence, straightforward syntax, reiteration of imagery, and overstressed word successions. To this can be added a shift from present to future tense at the volta (the dividing line

⁹ The rhetorical tradition is replete with descriptions of *Figuren*, characteristic devices used to achieve a particular effect. For the purposes of a music class, however, anything but a cursory discussion of these figures would be a significant diversion. It is likely to be more fruitful to treat this subject more informally by discussing what characteristics make the poetic argument most effectively

between the octave and the sestet in a sonnet). The final lines of the poem serve as a warning of grief to come. While the first lines of the poem describe the present realities of death on the battlefield, the ending reveals that this reality will soon spread beyond its point of origin to affect all those who hear the speaker's words. This subtle device joins with the others already mentioned to intensify the attention and emotion of the listener to its highest pitch.

Several of the musical effects that Britten used to rhetorically embody the persona have been discussed above: the tension-building climb to an explosive release in lines 1 and 5, the forceful parallel phrase construction of the answering lines (2, 3), and the slow decline in tempo in the last line. To these might be added other rhetorical devices. Note, for example, the placement of a registral high-point at the very end of the phrase containing line 9 (see Example 2). This sudden ascent has three obvious functions: (1) to complete the C-G $\flat$ tritone which bookends the phrase (a *troping* function), (2) to suggest the uncertainty of the interrogative in that line (a *rhetorical* function), and (3) to set up, by way of the final sustained G $\flat$, a large-scale question for which the contrasting section will serve as answer (a *rhetorical* function).

The rhetorical "making real" of a poem's characters and their emotions and ideas can also be enacted by the inflections given to each line by musicians during performances. The famous recording directed by the composer (Britten 1963) features Peter Pears as the soloist for "Anthem for Doomed Youth." Pears convincingly conveys the shifting emotional resonances of each line. For example, the plaintive legato of "Nor any voice of mourning, save the choir" gives way to brittle, clipped singing at "The shrill, demented choirs" and then to an eerie wavering of intensity level at "wailing shells." His voice becomes distant and ruminating on the line "And bugles calling for them from sad shires," only to burst forth passionately at "What candles may be held to speed them all," leading to a long, resigned dying away on the last syllable. The importance of analyzing specific performative realizations can not be understated, particularly with respect to the rhetorical

elements of poetry, concerned as these elements are with embodying the notes on the page as human utterances.

Rhythm and Meter: In music we are familiar with the interplay of rhythm and meter, though tension is generated between predictability and stability on the one hand, and flexibility and freedom on the other. Musical meter embodies a more-or-less unchanging grid of strong and weak accents. This metric regularity is created by the overall effect of every pitch in the piece—a pattern emerges from the phenomenal stresses that occur. However, metric regularity is not universally displayed by every line in the musical texture or at every point. Only a significant fraction of the musical events are required to engage the listeners' perceptions of a meter. The metric succession of accents and non-accents remains in our memory to organize our listening, even when particular melodic lines or accompaniment figures place stresses on weak beats or neglect to put stresses on strong beats (or even set up a rival metrical pattern for a brief time). Once set up, a metric pattern will tend to be retained by the listener until the musical evidence for a different pattern is strong enough. Rhythm is thus more irregular, more natural in its flexibility than meter, and much temporal interest in music is derived from the way the rhythmic *stresses* interact with the more regular *accents* of the metric grid.

Poetry uses the same phenomena, but traditional approaches to scansion have tended to overemphasize the role of meter. Indeed, this is the primary reason why poetry read badly sounds bad: readers often cause their speech pattern to conform to the metric stress at all times, resulting in a monotonous regularity of cadence, akin to pounding out musical downbeats. If, instead, the natural stresses of a poem are emphasized, a more irregular, flowing line emerges that does not always coincide with metric accents but, nevertheless, recovers much of the interesting interplay between rhythm and meter. The key to reading poetry well is to bring out this balance between stress and accent without giving too much emphasis to one or the other.

The analogy with music can be taken further. In much

music, metrical units tend to form naturally into groupings of two or three regular pulses arranged around a single accent. It is difficult for listeners to hear groupings of larger numbers of pulses without mentally subdividing them into smaller units—note the tendency to subdivide even quadruple meters into two duples (with the accent of the first being slightly stronger than the accent of the second). In English-language poetry, this effect is if anything even more restrictive. Duple meters tend to sound most natural, while even triple meters sound unusual,¹⁰ and meters with more than three syllables are not used. The most common English *foot* (metrical unit akin to a measure) consists of a weak syllable followed by a strong syllable—an *iamb*. Poems whose meter is based around it employ an iambic meter. In practice, the only other foot that is metrically viable is also duple in construction: the *trochee* comprises a strong-weak accentual combination. Other feet are possible, but are reserved for isolated moments or unusual effects. So, the foot is analogous to the musical measure and is usually duple.

Just as a poet can reinforce meaning by combining the effects of line, sentence, diction, trope, or rhetoric, that poet can also use the interplay of rhythm and meter to reinforce meaning. However, poetic scansion as treated in the classroom is typically limited to determining the metric feet. Apart from establishing the accentual foundation of the poem, this isn't very interesting, and doesn't get at the critical feature of scansion, which is the uncovering of the moments where natural speech rhythms work against the metric pattern. In other words, *there are two layers to poetic scansion, the meter and the rhythm* (the accents and the stresses), and these two layers need to be discussed separately.¹¹

¹⁰ One can experience this phenomenon by noticing the comic effect of triple meter in limericks. Even when spoken with nonsense syllables, the limerick seems to trip along too excessively.

¹¹ Failure to separate these layers is the other most common problem in many classroom applications of scansion. The result is a single layer in which accent becomes confused with stress, so that the two become indistinguishable and useless as analytical parameters.

The following approach to poetic scansion illustrates the two-layer method, and requires a printed text of the poem in which all syllables within words are separated by hyphens:

1. Speak the poem as if it were prose, and identify the points where you naturally would provide a stress to a syllable. It is important not to speak artificially or with too great an awareness of the meter at this point. Place an apostrophe above each stressed syllable, leaving enough space between the stress mark and the word for metrical markings to be added later. Not everyone will agree on the same pattern of stress, since it is somewhat dependent on how the reader chooses to render meaning through emphasis.

2. Determine the prevailing metrical foot from the overall pattern of stresses. Since duple meters are most prevalent, begin by reading through the poem again, placing an accent on the second, fourth, and all subsequent even syllables of each line (suggesting an *iambic* meter). Next, read the poem again, placing an accent on the first, third, and all subsequent odd syllables of each line (suggesting a *trochaic* meter). If the iambic reading results in many accents coinciding with stressed syllables, then the iambic meter is likely to be the prevailing one. The same would apply to the trochaic reading. If neither reading achieves this goal, then it is likely that one of the triple feet is being used. Some lines will be more regular, with a greater accent-stress coincidence than others. The most appropriate meter will probably feature more such lines. Once you have decided on the appropriate meter, indicate accented syllables with a “—” and unaccented syllables with a “~” directly above the text and below the stress marks. In some

duple-meter poems, an occasional triple foot must be shown on the accent line when an extra syllable breaks the prevailing pattern. Also, an extra weak syllable is occasionally found at the beginning or ending of a line; this syllable is incorporated into the nearest foot. In all other cases, all metrical feet in the poem should be the same.¹²

3. Set off each metric foot visually by placing a vertical line at the boundary points. These lines need not coincide with word endings. Place a double vertical line after any caesura. Compare the locations of the metric accent and any rhythmic stresses in each foot. If there is only one stress mark, and that mark coincides with the metric accent, then that foot is said to be "regular." Its rhythmic character is derived unproblematically from the prevailing metric foot type.

4. If, however, (1) there are no rhythmic stresses in a particular foot, or (2) there is more than one rhythmic stress in that foot, or (3) there is one rhythmic stress in that foot that does not correspond to the location of the metric accent, then that foot is said to be a *substitution*, in that its rhythmic character derives from a foot that differs from the prevailing meter. This does not erase the effect of the meter, but adds a simultaneous and contradictory layer to it. Show all substitutions by italicizing (or, in the classroom, circling) the relevant foot. These events are primarily responsible for reinforcing thematic effects (although excessive regularity can also have that effect).

These steps have been performed on "Anthem for Doomed Youth," as shown in Figure 2.

¹² Obviously, these restrictions do not apply to poems which are not accentual (organized by metric principles).

What pas-| sing-bells | for these| who die| as cat-tle?|
 On-ly| the mon-| strous an-| ger of| the guns,|
 On-ly| the stut-ter-| ing ri-| fles' rap| -id rat-tle|
 Can pat-| ter out| their ha-| sty o-| ris-ons.|
 No mock-| er-ies| for them| from prayers| or bells,|
 Nor an-| y voice| of mour-| ning save| the choirs, -|
 The shrill,| de-men-| ted choirs| of wail-| ing shells;|
 And bu-| gles cal-| ling for| them from| sad shires.|
 What can-| dles may| be held| to speed| them all?|
 Not in| the hands| of boys,| but in| their eyes|
 Shall shine| the ho-| ly glim-| mers of| good-byes.|
 The pal-| lor of| girls' brows| shall be| their pall;|
 Their flowers| the ten-| der-ness| of si-| lent minds,|
 And each| slow dusk| a draw-| ing-down| of blinds.|

Figure 2: Rhythmic and metric scansion of "Anthem for Doomed Youth"

The metric label for the poem is derived from the prevailing metric foot, but any substitution will briefly suggest a different *substituted foot*, determined by the pattern of stresses and non-stresses rather than the pattern of accents and non-accents. Substituted feet typically reveal moments of interest, since they draw the reader/listener's attention to the non-coincidence of meter and rhythm at that point. The effect of a particular substitution varies with context, but as a general rule, lines with extra stresses (*overstressed lines*) slow the momentum of the line or provide greater emphasis, while lines with fewer stresses (*understressed lines*) move the line along more smoothly. The use of many substitutions creates uncertainty or tension, while extremely regular lines can be placid or overly rigid. Occasionally, substituted feet will appear in groups which momentarily suggest an alternative meter. This effect does not appear visually on the metrical level of the scansion, but remains on the level of stress and non-stress. Substituted feet are labeled using the same terms that apply to metric feet (*iambic*, *trochaic*, etc.), but more labels are required, since the number of possible distinct patterns of stress and non-stresses is larger than the number of viable metric feet.¹³

The prevailing meter for "Anthem for Doomed Youth" is *iambic* (weak-strong). Examining the pattern of stresses, we see that two lines are completely regular (lines 6-7), and that half of the poem's fourteen lines—lines 4, 5, 6, 7, 9, 11, and 13—are either regular or deviate by only a single unstressed (*pyrrhic*) foot. No other prevailing meter, when applied to this poem, results in even a single such line. In at least three places (line 1: "as cattle"; line 3: "the stutter" and "-id rattle") an extra syllable requires the use of an *amphibrach* (weak-strong-weak) foot on the metric line, since triple feet cannot otherwise be

¹³ Below are listed the most common labels for substituted feet. Both the noun and adjective versions of the term are given, along with their corresponding patterns of stress and non-stress. Note that, of these labels, only iambs, trochees, and (occasionally) the triple feet are viable possibilities for metric organization: iamb(ic): weak-strong; trochee (trochaic): strong-weak; spondee (spondaic): strong-strong; pyrrhus (pyrrhic): weak-weak; dactyl(ic): strong-weak-weak; anapest(ic): weak-weak-strong; amphibrach(ic): weak-strong-weak; cretius (cretic): strong-weak-strong; bacchius (bacchic): weak-strong-strong.

shown in a prevailing duple meter. In two of these instances, the *amphibrach* occurs in the final foot of a line. This position is frequently altered in such a manner to allow for the interplay of strong and weak line endings.

Although not all of the substituted feet contribute in any significant way to the thematic expressivity of the poem, several instances are worthy of comment:

1) The *amphibrach* at the end of line 1 reinforces the question mark by forcing a pause in the poem's unfolding. There is no comfortable way to read through line 1 to line 2 without a pause, since the added final syllable disrupts the metric weak-strong pattern, requiring a hesitation to supply a silent accent before beginning line 2 with its metrically weak (though rhythmically strong) syllable. The *amphibrach* also has the effect of separating out the question line from its answer in lines 2-4.

2) The *trochaic* substitutions on the word "only" in lines 2 and 3 cause these lines to begin more forcefully than the surrounding lines. Like the weak ending of line 1, these *trochees* effect a separation of the question and the answer. The sharp initial attacks reinforce the rhetorical heightening of emotion in these lines arising from the personification of "guns" and "rifles."

3) The striking episode of extended onomatopoeia in lines 3 and 4 discussed above has a crucial rhythmic component. In effect, the substitutions in these lines create a marvelous moment in which the poetic rhythms imitate musical rhythms—the pattering of the "hasty orisons." The enjambment at the end of line 3 causes lines 3-4 to be heard as one unit, which Owen exploits by creating a drum pattern out of the interplay of triple and duple patterns of stresses. Although this pattern generally adheres to the prevailing meter, especially toward the end of the pair of lines, the effect can be more clearly seen by displaying the stress pattern as a musical succession, with the stressed syllables functioning as the strong portions of individual beats. Notice how the alliteration, assonance, and repeated "tt" sounds enhance the word-painting in this passage:

(triplet) (triplet) (triplet)
 1 & a 2 & a 3 & 4 & 5 & a 1 & 2 & 3 & 4 & 5
 On-ly the stut-ter-ing ri-fles rap-id rat-tle can pat-ter out their ha-sty o-ris-ons.

Figure 3: The drum-pattern rhythm in lines 3-4

Although the resultant five-beat “musical” meter is a bit unusual, the initial stress in line 3 and the triple substitutions clearly contribute to the sound-effect realized by trope, sentence, line, rhetoric, diction, and theme.

Britten, in setting the line, both exploits and rejects this poetic rhythmic device. As with the text alone, the vocal phrase at first exhibits an alternation of triple and duple meter, but the succession is slightly different. The word “stuttering,” a triple substitution in the poem, is compressed to “stutt’ring” and sung on two quarter notes, which sound duple in relation to the previous quarter-note triplets. On the other hand, the duple foot “rapid” is set to a quarter-note triplet, adding an extra triple unit that was lacking in the poetic stress. The musical rhythm of line 2 thus creates the following succession of subdivisions of the half note: 3 + (2) + 2 + (3) + 2. The numbers in parentheses indicate where the subdivisions contradict the poetic stress pattern. The overall effect is slightly more irregular, or unstable, than the pattern in Figure 3, which initially groups triple and duple units into pairs. The vocal phrase corresponding to line 3 obscures the poetic stress patterns to an even greater degree, due to the presence of rests inserted in an irregular manner throughout the phrase. The syllabic spasms that result nevertheless reflect the spirit of Owen’s text even as it departs from the particular devices emphasized by the poem. Britten has chosen another, more exaggerated, approach to illustrating rifle fire by imitating its apparently random composite rhythm. This passage is an excellent example of how music and poetry can achieve convergent aims with divergent means (Example 7).

10 Tenor *p* smooth
On - ly the mon strous an - ger — of the guns

Tenor 6 before 11 *p*
On - ly the stut - t'ring ri - fles' ra - pid rat tle Can pat ter out their

has ty o - ri - sons.

Example 7: Britten's setting of lines 2-3

4) In three instances, *spondaic* (strong-strong) substitutions slow the pacing of the poem, resulting in greater emphasis and emotional weight. In each case, the *spondees* occur near the end of a formal unit, concentrating the reader/listeners' attentions on those moments. The first instance concludes the final line of the octave ("sad shires"), the second appears in line 12—the first of three final lines featuring atypical regularity of phrase ("girls' brows"), while the third is found in the poem's final line, joining with the previous foot to display three consecutive stressed syllables ("each slow dusk"). This latter instance is clearly a moment of word-painting, since we hear the slowness of each dusk in the rhythmic slowing of the line.

5) Like lines 2-3, line 10 features the response to a question posed in the previous line, and, as in the earlier case, a *trochaic* substitution at the beginning of the line (on the word "not") sets off the answer from the question while simultaneously emphasizing the force of the denial suggested in the text. The *pyrrhic* substitution later in the line has the opposite effect of pushing the line's momentum forward to "eyes" the delayed true object of the sentence.

In each of the above five examples, substitutions reinforce and confirm the effect of poetic devices from other categories.

The musical realization of a text can significantly influence perception of that text's metric and rhythmic patterns. Because music has its own such paradigms, musical rhythm and meter create a further layer of temporal patterning that interact in complex ways with poetic rhythm and meter: the two can mutually reinforce each other, or one can mitigate the effect of the other. Alternately, both might project partially independent patterns through which one or the other will increase or recede in the listener's awareness. Composers frequently try to be sensitive to the poetic meter and succession of stresses unless there are good reasons to supersede them (as, for example, when motives are recalled for associative purposes that fit imperfectly with the stress patterns of the text). However, this is not always a simple matter—realizing

poetic meter through an exact correspondence with musical meter or setting stressed syllables in the same way can lead to a sort of metrical-rhythmic doggerel that is as unpleasant as its poetic counterpart. Instead, one frequently sees a variety of musical strategies used to project the stress and metric pattern of a text when such is desired.

The beginning of Britten's setting of "Anthem for Doomed Youth" is a good example. In the first section of the piece (Rehs. 9-13), Britten is very careful to bring out the stress patterns of the text without being formulaic. In the first line (see Example 2), the stress on the first syllable of "passing" is realized through its location on a strong beat and through the unusual emphasis given by the short-long rhythmic unit. The word "bells," by contrast, is held for three beats and overlaps the barline, providing that word with agogic emphasis. The word "these" is gently emphasized by a stepwise ascent (by contrast with the phrase's beginning) and by the relative metrical strength of the third beat of the measure. The melisma on the word "die," the first of its kind in the phrase, gives that word a particular force, after which the climax on "**cat**-tle" receives a strong metrical accent and a *sforzando* marking and is followed by an extreme registral leap. Thus, five distinct musical devices are employed in this first line to convey the poem's pattern of stresses. Although metric accent contributes to some degree to this process, the metrical feet are not aligned precisely with the measure boundaries or with the musical metric pattern. As a result, the line achieves a pliability and naturalness that is characteristic of Britten's style. The same approach might be taken with any of the phrases in the first section. In the second section (Rehs. 13-16), as indicated above, a careful attention to projecting the natural stresses gives way to the demands of musical association—the melodic lines here are derived from the earlier boys' choir passage, which occasionally rub against the natural stresses. Two such moments are the melismatic emphases given to the weak final syllables of "tenderness" in line 13 and "drawing" in line 14.

Although meter and rhythm are perhaps the most elusive poetic elements to grasp intellectually, their interplay is among the most viscerally obvious to the listener. In "Anthem

for Doomed Youth,” we feel the ebbing and flowing of energy through the poem as the gradual *accelerando* and drum patter of lines 1-4 give way to the slow regularity of lines 5-8, the hesitation of lines 9-11 and the poignant *ritardando* in lines 12-14. Since these divisions of the poem also figure in its formal organization, the preceding discussion forms a useful segue into a summary of stanza and rhyme.

Stanza and Rhyme: This category is concerned with the grouping of lines in a manner analogous to musical form. This can be accomplished in several ways: (1) through organization into *stanzas*—“a group of three or more lines, usually with a fixed rhyme scheme, that is repeated more than once” (Kinzie, 463)¹⁴—or some other paradigmatic arrangement of lines (such as a sonnet, which, though not composed of stanzas, involves a small number of complex rhyme schemes and a shift in emphasis, tone, or theme after lines 8 or 9 that divides the poem into two unequal parts); (2) through an *end-rhyme scheme* based on using the same sounds for the final accented syllable of groups of two or more lines in a particular pattern; (3) through the manipulation of *line lengths* as determined by the number of feet per line; and (4) through the interplay of *strong and weak line endings* as determined by the presence or absence of a metric accent in the line’s final syllable. Any or all of these techniques may be present, and each contributes to the articulation of meaning and to the overall effect of a poem.

“Anthem For Doomed Youth” is a sonnet, and therefore lacks stanzaic organization. The sonnet’s typical thematic and formal division into two unequal units can, however, be found here. The division into 8 + 6 (or, with the rhyme scheme, (4 + 4) + 6) lines is articulated in this case through sentence and rhetoric (a question followed by an answer appears in lines 1-8 and 9-14), through theme and trope (aural symbols give way to visual images beginning in line 9), and rhyme scheme

¹⁴ Stanza labels reflect the number of lines per stanza. In ascending order from a two-line stanza to an eight-line stanza, some of these labels are couplet, tercet, quatrain, cinquain, sestet, and octave..

(see below). Additionally, the two sections of the poem have a similar energetic curve, with complex sentences and rhythmic variety being answered by simpler sentences and a rhythmic slowing. This curve engenders, through isomorphism, a dramatic progression from outrage and bitterness to resignation and hopelessness. Interestingly, Britten's formal divisions slightly diverge from Owen's stanza divisions. He replaces the 8 + 6 pattern with a 9 + 5 pattern. The effect is to place both question lines (1, 9) in the first section, allowing the answer to the final question to have its own musical coloring.

The rhyme scheme of "Anthem" [*abab cdcd effegg*], in which identical small-case letters stand for lines in the same end-rhyme group, both reflects the thematic-formal divisions of the poem and directs their degree of momentum. The two four-line groupings of alternating lines correspond to the first question-and-answer sequence (lines 1-4) and to a subsequent sentence (lines 5-8) which adds detail, focus, and context to the previous grouping. The alternating rhyme scheme of these eight lines establishes a moderate level of connectedness between lines: adjacent lines are not grouped as closely together or as distinctly as an *aabb ccdd* scheme, but are not as complexly interconnected and globally encompassing as an *abba cddc* scheme. This pacing of the rhyme scheme is most thematically relevant in comparison to the pacing of the final sestet (*effegg*). The sestet's interspersed rhyme scheme is more effective than an alternating scheme in support of the reiterated phrases in lines 13 and 14, and it ties together a larger number of lines—the pattern is not completed after four lines, but extends through six lines, an effect which causes the listener to suspend closure for a longer period, increasing the level of tension and anticipation.

"Anthem" does not make use of varying line lengths as an expressive feature, although two other Owen poems used in the *War Requiem*, "Futility" and "Strange Meeting," use a small number of *reduced lines* to articulate formal stanza boundaries or to provide emphasis at key moments. "Anthem" is one of many poems that uses a constant number of feet per line, in

this case five, the most common line length in English. The Greek terms *dimeter*, *trimeter*, *tetrameter*, *pentameter*, *hexameter*, *heptameter*, etc. are used to indicate the prevailing line length of a poem. “Anthem” is, therefore, said to be written in *iambic pentameter*, in that its prevailing meter is the *iamb* and its prevailing line length is five feet per line. Since this poem does not feature any change in the line length from beginning to end, the parameter functions more as a global organizing principle than as an expressive element, although its regularity does contribute on some level to the inexorability of the poem’s impact.

Finally, “Anthem” makes nearly continuous use of *strong endings*—endings of lines accompanied by a metrical accent. This is a consequence of the prevailing meter, since *iambic* feet end with an accent. Such endings place the weight of the line at the final syllable, as opposed to *weak endings*, which feature an unaccented syllable at the line ending, and which, therefore, evoke a subtler effect. We have already mentioned the pair of instances—lines 1 and 3—in which Owen uses weak endings in place of strong endings. The latter ending, on the word “rattle,” participates in the drum pattering of lines 3 and 4, while the former sets off the initial question from the answer.

The preceding analysis, which serves as an introduction to our element-by-element approach to poetic texts, can be adapted for class lecture or discussion, using “Anthem for Doomed Youth” as an example piece to illustrate the relevant concepts. Because the analytical project encompasses a large conceptual terrain, a summary of pertinent questions to be addressed by students is given below in Figure 4.

Theme:

1. Expand on the meaning of the poem
 - What is the poem about?
 - What is its central message?
 - What historical or biographical context is needed to understand this text?
 - Does the text have hidden or implicit meanings?
2. Continuously attempt to discern links between particular uses of the other elements and the poem's theme

Line:

3. Look for caesuras and for instances of enjambment
 - What are the effects of these occurrences?
 - Is there a reason why one or the other was used?
4. Look for significant half-meanings

Sentence:

5. Look for uses of syntactic inversion
 - What words were emphasized?
 - Why was this technique used?
6. Look for other unusual sentence types (interrogatives, imperatives, fragments, etc.)
 - What effect does this usage have?

Diction:

7. Examine the use of concrete, abstract, monosyllabic, and polysyllabic words in the poem
 - How does this reflect the theme?
 - Is more than one style found in the poem (such as the use of a coarse word out of context, or a conflict between two thematic "worlds")?
 - What is the effect of these usages?
8. Look for significant instances of alliteration, assonance, adnomination, and onomatopoeia
 - What is the effect of these word choices?
9. Look for passages that emphasize bright or dark vowels
 - What does this emphasize in the poem?
10. Examine the stylistic register(s) in which the poem is written
 - What are the implications of this usage?

Figure 4: Summary of topics for poetry analysis

Trope:

11. Examine the objects, concepts, images, etc. used in the poem with respect to their tendency to suggest other meanings
 - How do these meanings reflect, reinforce, or work against the theme(s) of the poem?

Rhetoric:

12. Describe the persona of the poem, the relationship of the persona to the poet and his/her message, and the apparent audience
13. Describe the level of involvement of the persona in the unfolding of the poem and the means by which this is conveyed
 - Is the persona objective? passionate? flamboyant? removed?
 - How does this influence the theme of the poem?
14. Indicate the nature of the poetic discourse
 - Does it resemble a drama, a lyric description, a narration, a philosophical argument, an oration, etc.?
15. Describe the temporal frame of the poem
 - Is it static or does it change?
 - How does this influence the theme of the poem?

Rhythm and Meter:

16. Scan the poem: use the actual stress pattern to determine the prevailing meter
 - Where do the stresses work against the metric pattern?
 - How are these substitutions significant with respect to the theme or to other parameters of the poem?

Stanza and Rhyme:

17. Determine whether or not the poem is organized into stanzas and, if not, whether there are non-stanzaic formal divisions within the poem (based on traditional formal types or rhyme patterns)
 - How do these stanzas or rhymed groupings reflect a meaningful division of the poem with respect to theme, trope, or other parameters?
18. Determine the end-rhyme scheme, the number of feet per line, and the use of masculine or feminine endings
 - How do these elements contribute to a more comprehensive organization of the poem (with respect to theme, trope, etc.)?

Figure 4: Summary of topics for poetry analysis (*Continued*)

Analyses of poetic texts should be followed by a treatment of the music independent of the text using whatever methods are considered appropriate, by a discussion of the historical and stylistic context of the work under discussion, and, most importantly, by an examination of the ways in which musical details reinforce, contradict, highlight, ignore, alter, or in some way inflect the characteristics of the poetic texts. Some examples of this latter process have been described above, although such insights are better achieved in the classroom after a separate study of the music itself has been undertaken. In this way, the relationship between the poetic and musical details can be informed by a thorough appraisal of each aspect taken separately before they are brought together. By way of methodological summary, we observe that certain musical elements are more likely to remain relatively unaffected by translation into a musical medium, while others are strongly dependent on the composer's distinctive setting. The various degrees of analytical integrity can roughly be organized into three categories:

1. *Sentence, diction, trope, and rhyme*: Unless the composer chooses to omit portions of the poem, to add interpolated material, or to change the ordering of that material, these elements will be least affected by any musical setting. A complex sentence is complex, no matter how it is set to music. The poet's choice of words will still be manifested clearly in most musical settings, as will the inherent symbolic relationships that exist. The primary role of the composer in shaping these elements is one of calling greater or lesser attention, of minimizing or maximizing their impact. For example, Britten uses melodic word-painting techniques to highlight particular verbal images in his setting of "Anthem for Doomed Youth." The word "prayers" is sung to a motive that alternates pitches a tritone apart, both evoking an association to melismatic chant and foregrounding the tritone as the primary symbolic embodiment of the sacred in the *War Requiem*.

2. *Theme and rhetoric*: The composer has a greater freedom to adjust these elements than was the case with the three in the first category, although essential elements of the poet's original conception are likely to remain. Here a composer can not only minimize or maximize thematic and rhetorical effects, but can also suggest alternate readings, even to the extent of contradicting the poetic analysis. For example, a composer might choose to employ associative techniques in a vocal accompaniment that cast doubt on the veracity, sincerity, or reality of the sung text, even if this layer of meaning was not present in the original poem. Likewise, a persona can be made, through musical stylistic associations, to possess a different or altered set of characteristics than those established by the poem. Such extreme alterations are not necessarily common, but they are possible theoretically. On the other hand, the composer can emphasize thematic or rhetorical aspects of the poem through the choice of musical setting. In the case of "Anthem for Doomed Youth," Britten allows the passionate involvement of the persona to emerge clearly even in the melody of the first poetic line, which strains upward by step through the small registral compass of a tritone—again, the symbolic association is deliberate—pausing excruciatingly on a brief ascending melisma on the word "die," before violently closing the phrase on an explosive descent of a seventh on the word "cattle." Here Britten uses musical techniques to underpin and support the rhetoric of the poem.

3. *Line, rhythm, meter, and stanza*: These elements are most susceptible to alteration by the composer, since they partake most of the shared temporality between music and poetry. It is difficult, and probably undesirable, to retain every original effect of line, rhythm, meter, or stanza, since important musical effects involving melodic association, vocal phrase shaping, formal patterning, and dramatic development may take precedence. As a single example, consider Britten's melodic fidelity to Owen's rhythmic and metric patterns in "Anthem for Doomed Youth." With respect to the significant drum-patter rhythm set up by Owen in lines 3-4, Britten generally follows Owen's lead. Through all of line 2, he faithfully

conveys the triplet/duplet pattern indicated in Figure 3 above, in one case expanding Owen's intention by adding an extra melodic syllable to the word "rapid," turning it from a duplet into a triplet, and compressing the word "stuttering" into "stutt'ring," creating the opposite effect. Britten clearly intended to highlight the sound-imagery first suggested by Owen. In line 3, however, Britten went his own way, although the effect is similar. Instead of retaining the rhythmic-metric regularity of the original, Britten actually foregrounded the word-painting in line 4 to an even greater degree by introducing pauses and syncopations into the melodic line so as to suggest the "hasty orison" indicated by the text. On the other, in the contrasting formal section of the setting (Reh. 9 to 7 mm. after Reh. 15), Britten largely eschewed the rhythmic patterns of the poetic text. His setting of lines 10-14 at first seem willfully skewed, with unusual stresses appearing on the weak final syllables of "glimmers," "tenderness," and "drawing," until it is discovered that Britten transplanted previous melodic material to evoke an association: the melody derives from the earlier boys' choir passage "Te decet hymnus," and he evoked not only a symbolic link between the performing forces of the choral passage and the boys in the poem, but also a poignant association between the previous text—"all flesh shall come before thee"—and the implied fate of the memorialized victims of the Owen poem. As a final note, it is also interesting to observe that Britten contradicted the formal division of the sonnet into 8 + 6 lines by placing his contrasting section after line 9. The effect of this change, however, is to use the interrogatives in lines 1 and 8 as a framing device for the A section, rather than as the initiating gesture between two different section. As a result, the final response in lines 10-14 achieves a special emphasis through being set in a more abstract, hieratic style than was the case with the passionate emotionalism of lines 1-9.

The *War Requiem* is a work rich in potential for exploring the relationship between text and music, and I have found it useful for introducing students to the intricacies and details of

poetic analysis as described above in an effective and engaging way. Instructors who wish to make use of this approach may choose to use other pieces as befits their goals, while still reaping the benefits of a nuanced, multifaceted analysis of poetic texts bequeathed to us by our sister discipline.

References

Arnold, Ben. 1991. "Music, Meaning, and War: The Titles of War Compositions." *International Review of the Aesthetics and Sociology of Music* 22: 19-28.

Bagley, Peter B. 1972. *Benjamin Britten's War Requiem: A Structural Analysis*. DMA dissertation: Indiana University.

Berley, Marc. 2000. *After the Heavenly Tune: English Poetry and the Aspiration to Song*. Pittsburgh: Duquesne University.

Berman, Laurence, ed. 1972. *Words and Music: The Scholar's View*. Cambridge: Harvard University Press, 1972.

Bernard, Andrew. 1990. *Two Musical Perspectives of Twentieth-Century Pacifism: An Analytical and Historical View of Britten's War Requiem and Bernstein's Kaddish Symphony*. DMA treatise: University of Washington.

Booth, Mark. 1981. *The Experience of Songs*. New Haven: Yale University Press.

Boykan, Martin. 2000. "Reflections on Words and Music." *Musical Quarterly* 84: 123-36.

Britten, Benjamin. 1963 (1985). *War Requiem*. London Symphony Orchestra, Melos Ensemble. Benjamin Britten. Decca 414-383-2.

_____. 1997. *War Requiem, Op. 66: Full Orchestral Score*. The Boosey & Hawkes Masterworks Library. London: Boosey & Hawkes.

Cone, Edward T. 1989. "Words into Music: The Composer's Approach to the Text." In *Music: A View from Delft*. Edited by Robert P. Morgan, 115-23. Chicago: University of Chicago Press.

Cooke, Mervyn and Philip Reed. 1996. *Britten: War Requiem*.

Cambridge Music Handbooks. Cambridge: Cambridge University Press.

Ford, Boris, ed. 1994. *Benjamin Britten's Poets: The Poetry He Set To Music*. Manchester: Carcanet.

Green, Jonathan. 1992. *A Conductor's Guide to Twentieth-Century Choral-Orchestral Works in English*. DMA treatise: University of North Carolina, Greensboro.

Ivey, Donald. 1970. *Song: Anatomy, Imagery, and Styles*. New York: Free Press.

Kramer, Lawrence. 1984. *Music and Poetry: The Nineteenth Century and After*. Berkeley and Los Angeles: University of California Press.

Kinzie, Mary. 1999. *A Poet's Guide to Poetry*. Chicago Guides to Writing, Editing, and Publishing. Chicago: University of Chicago Press.

Kuster, Andrew Thomas. 2000. "Benjamin Britten's Poetic Alterations." *Choral Journal* 40: 9-15, 17-19.

Maus, Fred Everett. 1989. "Agency in Instrumental Music and Song." *College Music Symposium* 29: 31-43.

Rupprecht, Philip. 2001. "Britten's Musical Language." In *Music in the Twentieth Century*. Cambridge: Cambridge University Press.

Scher, Steven Paul, ed. 1992. *Music and Text: Critical Inquiries*. Cambridge: Cambridge University Press.

Shaw, Robert. 1988. "The Text of Britten's War Requiem." In *Five Centuries of Choral Music: Essays in Honor of Howard Swan*. Edited by Gordon Paine, 357-83. Festschrift Series 6. Stuyvesant: Pendragon.

Stecker, Robert. 2001. "Expressiveness and Expression in Music and Poetry." *Journal of Aesthetics and Art Criticism* 59: 85-96.

Stein, Deborah and Robert Spillman. 1996. *Poetry Into Song: Performance and Analysis of Lieder*. New York: Oxford University Press.

Winn, James. 1981. *Unexpected Eloquence: A History of the Relations Between Poetry and Music*. New Haven: Yale University Press.



Developing the Analytical Point of View: The Musical 'Agent'

Gordon Sly

One of the basic assumptions that underlies the undergraduate theory curricula of most colleges and universities is that instruction in counterpoint, harmony, and form will prepare students to do analysis. In some respects, this assumption is valid: a student who understands how passing tones and suspensions work will stand on more solid ground in a Schenkerian analysis course than one who does not. But for the sort of analysis whose goals are less clearly prescribed—when we ask students to make an argument about a work's striking qualities, its particularly beautiful or eccentric events, about what gives it its special character—here, I would maintain, this assumption is misplaced: the typical Freshman-Sophomore sequence proves largely inadequate as a preparation for analysis.

Whether an ability to do analysis is the chief aim of undergraduate instruction in theory is another question. I would argue that it should be, but this is not the issue I intend to take up here. It is likely that the larger community of teachers of music theory would agree that at least one of the goals of undergraduate theory instruction is to develop an ability to analyze music, however that activity is defined. That said, why do the experiences of so many of us confirm this failure of the first years' instruction to develop into an ability to do analysis?

I would suggest that the difficulty is owed not so much to a lack of technical preparation as to a misunderstanding of the process. That is, we fail to bridge the gap between an ability to identify contrapuntal, harmonic, and formal features, and a process whose central quality is an argument, an analytical point of view.

What may seem a simple problem and an easy fix, though, is anything but. Coaxing students to develop and to articulate an analytical point of view is a formidable task. Sadly, the very idea seems thoroughly unfamiliar to most, and as a result, both the knowledge of how and where to begin and the confidence to succeed are in short supply. As a first step, some sense of what we mean by an analytical viewpoint must be conveyed. I have found

an analogy to be the most successful means to this end. A trial lawyer addressing a jury, thanks to television serials and movies, is an image that all students can easily call to mind. This lawyer, they understand, is in possession of a body of evidence. But simply running down the list of that evidence, they also understand, would be a losing strategy. The result would be a bored, frustrated, and confused jury. Instead, the lawyer's task is one of interpretation. Tell the jury a story, simple and concise. Here is what happened! This viewpoint, then, provides context and meaning to all of the individual pieces of evidence presented to them. The viewpoint is everything.

An obvious second step, then, is to make the formation and expression of a viewpoint a central part of the analysis assignment. Guidance is required here, as well. Analytical viewpoints may range widely in many respects, of course, and constraints must be imposed to ensure that students develop a "way in" to a piece that is both manageable and likely to provide a measure of success. Trial and error with a number of classes has led me to focus on one approach to this stage of the process that seems most helpful to students: I ask them to direct their thinking toward the notion of musical "agency," which I define as the capacity of some musical element or idea to influence the course of events. Their analysis, then, will assert that the agent of the piece acts as the guiding force or principle in how the music unfolds. Rather than attempting to be "comprehensive"—which inevitably turns out to be "unfocused," euphemistically characterized—their work will concentrate relentlessly on the workings of this agent, and will try to persuade the reader that viewing the piece through this particular lens is compelling.

Finally, most students require at least some direction in identifying an agent. We want students to learn to do this for themselves, of course, but this is a goal best approached gradually. One strategy here may be to have students submit their ideas for agents and to provide feedback that will help them rethink or hone those ideas. An important precept in my classes is that many analytical perspectives are valid and that their analyses should represent their views—and not try to anticipate my views—on a piece. Because this is an idea that seems to require frequent emphasis, I try to avoid processes that involve my having to approve or agree with their ideas for agents. Instead, I try to provide direction while their ideas are being formulated. One approach is to allow class discussion to carry the

initial stages of the process, to identify a small number of a work's qualities that should suggest ideas for agents, and to have them proceed from that point individually. Another alternative is to have students work in groups of three or four members to come up with agents. We do a number of activities in these small groups in my classes, so students are accustomed to working this way. As they work, I wander around the classroom eavesdropping and inserting an occasional remark. I have used this procedure several times in the past few years, and have been very pleased with the result. Groups have a way of filtering out the really impenetrable ideas that some students tend to come up with individually.

Once these steps have been taken, students are given a written assignment that is comprised of three parts. The first is a one-paragraph description of the piece—its outer form and characteristic features. The second part is a "point of view" statement. Two restrictions are set here: first, these statements must be concise—no more than a sentence or two; second, the agent they describe must flow out of the description of the piece as given in their opening paragraph. The third part of the assignment is the analysis itself. Once again, students are admonished not to stray from their point of view: every word they write should serve the argument for that idea.

The balance of the essay will illustrate this process using two well-known pieces that have served well in recent classes. At the conclusion of each analysis, I will provide summaries of analyses that proceed from contrasting agents and viewpoints, in each case taken from my students' work. I will close with a note on the usefulness of this process in large classes.

Chopin, Mazurka 49 in F minor, Op. 68/4¹

Description: The piece is cast in an “ABA” design. The opening section is closed in tonic F minor. The “B” section is tonally open, leading to V, and, though it gets away from the tonic, does not establish a contrasting key area. While this is more typical of digression sections in rounded binary forms, here the “B” section has sufficient weight and independence that the piece is best understood as a sectional ternary form.² The surface texture of the opening music is thoroughly chromatic, both in the melody of the right hand and in the individual voices that comprise the accompanying chords. This feature is introduced in the initial melodic gesture, where D $\flat$ 5 appears as the upper neighbor to C5. The “A” section is fashioned from a single eight-bar phrase and its varied restatement. That restatement is expanded internally by means of a striking digression into A major. The link between the F-minor phrase and the A-major digression is the D $\flat$, enharmonically reinterpreted as C $\sharp$.

“Point of View” Statement: The tone D $\flat$ /C $\sharp$ 5, the “agent” of the piece, is assigned privileged status. It acts as a point of reference, remaining frozen as the musical context changes around it, and, bound as neighbor to C5, defines the voice-leading motion that characterizes much of the piece.

Analysis: Example 1 simplifies the opening eight-measure phrase. The chromatic descent that guides all voices springs from the first melodic idea of the piece, the C-D $\flat$ -C neighbor motion. Chopin maintains outer-voice M10th through the first five

¹The version of the piece I am using is the partial transcription by his amanuensis, Julian Fontana, of the sketch that Chopin left behind. This version omits one whole section and several repetitions of other sections implied in Chopin’s sketch. For an account of the complex history of attempts to reconstruct the sketch, see Jeffrey Kallberg, *Chopin at the Boundaries: Sex, History, and Musical Genre* (Harvard University Press: Cambridge, Massachusetts, 1996): 118-34. A brief discussion of the piece also appears in Steven G. Laitz, *The Complete Musician: An Integrated Approach to Tonal Theory, Analysis, and Listening* (Oxford University Press: New York, 2003): 547-51.

²Melodically (or thematically), both the rounded binary and ternary forms express an “ABA” design. The difference between the A | BA rounded-binary and the A | B | A ternary conceptions turns on the musical “substance” of the B section, a quality influenced by a number of factors.

measures: in the i^6 chord of m. 1, the $M10^{th}$ occurs as the 3rd and 5th of the triad; thereafter, this interval represents the root and 3rd of a series of $Mm7^{th}$ chords. None carries any harmonic function, of course, and by the time we reach the $Mm7^{th}$ chord on $E\flat$ in m. 5, our sense of tonal priority has grown vague in the chromatic haze. In m. 6 Chopin allows the upper three chord tones to descend, but keeps the bass $E\flat$ in place, creating a $^{\circ}7^{th}$ chord. This harmony, $vii^{\circ 7}$, moves through a passing $\frac{6}{4}$ chord to its $\frac{6}{5}$ position in m. 7, and on the third beat becomes the root-position V^7 that allows closure of the phrase.

Example 1. Chopin, *Mazurka 49 in F minor, Op. 68, no. 4, mm. 1-8*

The arrival on the $^{\circ}7^{th}$ chord in m. 6 breaks the symmetry of the parallel $Mm7^{th}$ chords but, lacking an immediate tonal context, does not revive our tonal focus. It is only with the motion through the $B\flat$ -minor $\frac{6}{4}$ chord and into the $\frac{6}{5}$ that we hear this $^{\circ}7^{th}$ on $E\flat$ as $vii^{\circ 7}$. Note that this passing $\frac{6}{4}$ chord coincides with a return of the $D\flat 5$ neighbor tone. This tone initiates a closing melodic gesture that summarizes the descending-5th descent that shapes the whole of the opening phrase. Chopin signals the long-delayed return to a functional harmony, then—and to our tonal bearings—with a poetic recurrence of the opening $D\flat 5$ chromatic neighbor.

A restatement of the opening phrase begins in m. 9, but extends not eight but fifteen measures, reaching its cadence in m. 23. Its expansion is effected by an interpolation involving an extraordinary shift into A major, which, in the context of F minor, has a remarkably bright quality. The contrast is especially vivid because our attention is drawn to the transformation of $D\flat$ into $C\sharp$ as the main tone of melodic focus. The expansion results, then, from the already prominent $D\flat$ neighbor of the opening phrase being elevated to a higher level of

structural import in the restatement. Example 2 illustrates. Here the neighbor tone, as C $\sharp$, is given consonant support in tonicized A major, whose extension causes a temporary departure from the unfolding of the underlying eight-bar phrase. The example uses numbers between the staves to show this underlying phrase, and dashes to indicate the digression. The main part of the latter is the five-bar interpolation following the sixth measure of the phrase. In m. 20 the C $\sharp$ 5 of the A-major prolongation reassumes its role as D $\flat$ 5, signaling a resumption of the underlying phrase. Measures 21-22 confirm the return to D $\flat$ 5 and produce a further expansion of the phrase with their repetition of the melodic gesture of mm. 19-20 before the final bar of the basic eight-bar unit sounds in m. 23.

The turning of C $\sharp$ back into D $\flat$ is beautifully simple. In m. 19 C $\sharp$ moves to C $\natural$ which then leaps up a 4th to F. This changes the A2 in the bass from root to chordal third, which resolves as leading-tone to B $\flat$ 2 on the downbeat of m. 20. Meanwhile, F5 in the soprano passes through the chordal 7th, E $\flat$ 5, which urges resolution to D $\flat$ 5.

Chopin accomplishes two things with this deft transformation. First, the consequent proximity of A-major and F-minor passages maximizes their contrast. Second, it integrates the A-major passage into the underlying voice-leading of the phrase; a more complex or extended passage would tend to have had the opposite effect, isolating the interpolated material. In Example 2b, mm. 15-19 are represented by B $\flat$, rather than A $\flat$, in the bass in order to depict the soprano tone as D $\flat$. This notation emphasizes the kinship between the first and second phrases, and illustrates that the derivation of the one from the other turns on an emphasis upon D $\flat$ 5.

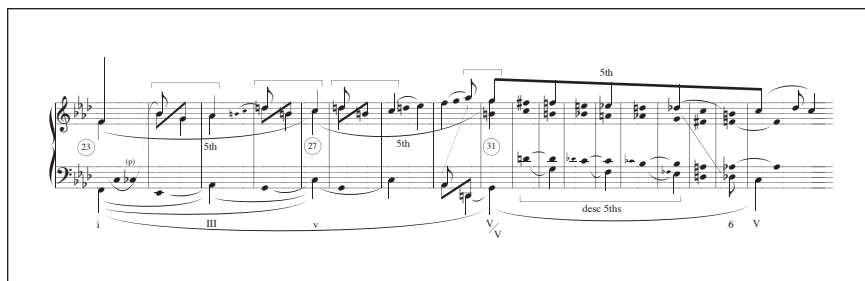
Though the "B" section provides a contrast in character, the neighbor figure and stepwise 5th motion that it embellishes are maintained as the central ideas, and thereby provide a powerful bond between the two sections. The linking of the sections is effected by a passing motion through the tenor-voice C $\flat$ in m. 23 to the soprano B $\flat$ of m. 24, a simple and beautiful gesture that recalls the D $\flat$ -C neighbor figure of the opening. As Example 3 illustrates, successive ascending stepwise 5^{ths}, the first from F4 to C5, the second from C5 to G5, carry the music from i in m 23 to V/V in m. 31. Both ascents are embellished prominently by upper-neighbor tones, which are bracketed in the example.

a) (5th)

b)

The image displays two musical staves, labeled 'a)' and 'b)', representing measures 9 through 23 of Chopin's Op. 68, no. 4. Staff 'a)' is a grand staff with treble and bass clefs. It features several annotations: a bracket labeled '(5th)' above measures 9-15; a box around measures 15-19; a dashed line connecting measures 19 and 21; and a large bracket spanning from measure 9 to measure 23. Fingerings 1 through 6 are indicated for the right hand. Staff 'b)' shows the same measures with simplified notation, highlighting specific notes and measures (9, 15, 19, 20, 21, 22, 23) with circles and a dashed line connecting measures 19 and 21. The key signature is B-flat major (two flats).

Example 2. Chopin, Op. 68, no. 4, mm. 9-23



Example 3. Chopin, *Op. 68, no. 4*, mm. 23-40

The second stage of the “B” section, though quite different in character, shares several basic features with the work’s opening music. Here a 5th-sequence of interlocking V⁷ chords results in stepwise chromatic descents in two voices a tritone apart. Chopin adds chromatic passing tones in the tenor voice, creating a series of Mm7th chords with three voices in chromatic descent. Differences between this passage and that of the opening are the motion of the bass voice and the root movement it describes. The arrival of D⁵ in the soprano in m. 37 signals the end of the 5th-sequence and a change in surface figuration. A new sequential gesture pushes the music down in parallel Mm7th chords, reaching D³ in the bass in m. 39. Its Mm7th is treated as a Gr⁺⁶..., which moves to the home dominant in m. 40—marked by the conspicuous motion of D^b into C.

A wonderful effect is created by the opening gesture of the reprise being set within the V⁴. It might be argued that this carries further the quality of a diluted tonic already present in the work’s initial i⁶, which contributes to the harmonically unanchored nature of the opening phrase.³ But it is quite possible to hear other than a dominant prolongation through m. 40. An elision is also a reasonable interpretation. The German augmented 6th-chord, of course, normally leads into a dominant embellished by a cadential ♯ in order to avoid surface parallel 5^{ths}. As the melody signals the reprise in the second half of the measure, though, dominant harmony gives way to the tonic point of departure of the opening phrase. The unstable, decorative quality of the notes of the ♯, A^b and

³While it is undeniable that the opening i⁶ depletes somewhat the stability that would attach to a root-position tonic, it does not necessarily follow that a desire for this effect was the reason for the choice. It is at least as plausible that the i⁶ support for a melody that begins on scale-degree 5 is due to a desire for outer-voice 10^{ths} rather than 12^{ths}. (A similar passage begins the E-minor Prelude.) Understood in this way, the listener may not hear the tonic as weakened in any real sense.

F, seems to evaporate, and these tones become the stable 3rd and root of tonic harmony. One might say, then, that the $\frac{4}{3}$ resolution occurs, but is not written into the music; rather, it is understood, or, more accurately, it is provided by the listener.⁴

By way of summary, the “point of view” statement at the outset assigned privileged status to the tone D $\flat$ 5, asserting that, as musical “agent,” this tone shapes the course of the piece. In the opening phrase D $\flat$ 5 appears in the first melodic gesture, and is regained as tonal focus is reestablished late in the phrase. The expansion of the varied repetition of this phrase from eight to fifteen measures is the result of an interpolated passage that fixes upon D $\flat$ 5, turning the fleeting neighbor tone into the stable 3rd of the locally tonicized A major. The transformation of C $\sharp$ 5 back into D $\flat$ 5 brings the opening section to a close. In the opening eight bars of the middle section, it is not the D $\flat$ itself, but rather its neighbor-note function, as well as the 5th-span it embellishes, that are chiefly influential. With the ascent to G5, the 5th-sequence reestablishes the descending chromatic voices that issued originally from the D $\flat$ 5-C5 neighbor figure. The sequence breaks precisely as D $\flat$ 5 is regained in the soprano, and from here parallel Mm 7th chords push down to the one built on D $\flat$ 3. This chord is reinterpreted as a Gr⁺⁶, which urges motion into the dominant, and, of course, D $\flat$ into C in the bass. Finally, resolution of the V $\frac{6}{4}$ is conceptual rather than actual, an eccentricity that throws light on the return of the seminal D $\flat$ 5-C5 gesture that signals the reprise. It is no hyperbole, then, to say that D $\flat$ 5 is felt in every measure of the work.

⁴This interpretation points to a larger idea of which this passage is just one example: that conventional patterns in music become a compositional resource, since they trigger an expectation in the listener which a composer can exploit. Numerous examples come to mind that suggest a broad range of interplay between the anticipated and the actual. In the present example, it is as if having arrived on the cadential $\frac{4}{3}$, since his audience knows perfectly well how this pattern works, Chopin allows us to complete it for ourselves while he goes on to the next idea. It might be pointed out to students that they themselves do this very thing all the time in conversation, abandoning ideas in mid-sentence once the meaning has been conveyed, and moving on to the next thought.

I have used this piece successfully in class assignments over several years. Most recently, one student identified the agent as “chromatic descent,” and viewed the piece as an attempt to “expand two typical contexts for chromatic lines, the descending bass tetrachord from tonic to dominant and the descending 5th sequence with interlocking 7ths.” These two contexts had been taken up in class, of course, and the student’s analysis tried to trace all of the chromatic descents in the piece back to one of these two models. Though not entirely successful, it was nonetheless a very thorough and focused analysis.

Another student decided that “the neighbor tone” was the agent, and argued that “neighbor tones are primarily responsible for delaying the arrival of melodic chord tones and thereby cause the restless and haunting character of the music.” The analysis became a dogged search for neighbor tones, and while a few passing tones and chord tones got caught up in the process, of particular value was the student’s attempt to sort out passages such as the melodic line of mm. 9-10, where it was argued that five neighbor tones occur in succession, the D^b’s and B[♮] to the foregoing C, and the C and A[♯] to the following B.

Schumann: “Walzer” (Albumblätter, Op. 124, No. 4)

Description: This work, like the Chopin Mazurka, is cast in a broad three-part design. The “A” section is comprised of two eight-measure phrases, whose antecedent-consequent relationship forms a parallel interrupted period. Though the “B” section is comprised largely of a descending-5th sequence (again, like the Chopin), typical of the “digression” in a rounded-binary form, its contrasting key area and repetition make the section sufficiently substantial to counterpoise the surrounding “A” sections, suggesting a ternary conception. The most conspicuous feature is the F2-A5 dyad that serves as point of departure for every phrase in the piece (can a similar claim be made of any other piece?), and which is heard eight times through the course of this brief work, each on the first beat of a hypermetrically accented bar, and each sounding alone until the complete harmony appears on the second beat.

“Point of View” Statement: The agent here is the ambiguity in meaning or function that attaches to the F2-A5 dyad. This quality draws attention to these tones, and thereby creates a source of both unity and contrast: the former through the recurrences of the dyad; the latter through the different harmonic contexts into which it is set.

Analysis: The ambiguous quality of the F2-A5 dyad is established in the opening measure, as Schumann sets these tones within a completely unexpected context: as the 3rd and 5th of a Gr⁺⁶ chord in A minor.⁵ This function becomes apparent, however, only with the arrival of the dominant on E2 in m. 2. The opening dyad leads us to expect a major triad on F, which, being the first sonority of the piece, we would tend to hear as the tonic. On the second beat, though, D $\sharp$ and C $\flat$ are added to the F and A. This new information causes us to revise our assumption of an F tonic triad; what we have instead, apparently, is a V⁷ chord on F. With the downbeat of m. 2, we realize that we are twice deceived. Schumann keeps us off balance with an irregular phrase structure: the eight-measure antecedent phrase divides into groupings of 3 + 2 + 2 + 1. The consequent phrase begins with the same three-bar unit that began the opening phrase before following its own course to closure, again setting forth an irregular division, this time into 3 + 3 + 2 measures.

It is left for the “B” section to realize the tonal context for the F2-A5 dyad that the listener anticipated but was denied in m. 1. Here, as a reflection of this more predictable course, the phrase structure unfolds a regular design. A four-measure phrase that leads from the (local) tonic to the dominant is followed by an eight-measure phrase that is framed by these same harmonic degrees. That the “B” section should end on the dominant is necessary, of course, since the motion from this harmony into the F2-A5 dyad that signals the return of the “A” section is integral to the central idea of the piece. In fact, that the first beat of m. 29 is this time heard *explicitly* to function as an F-major tonic triad makes its reinterpretation as the Gr⁺⁶ in A minor all the more vivid, and reenergizes the imbalance that so characterizes the outer sections of the work and that is so decidedly absent from the central section.

⁵Beginning a piece with an augmented-6th chord is very unusual, of course, but Schumann employs this strategy to great effect here and elsewhere. See, for example, *Am leuchtenden Sommermorgen*, the twelfth song from *Dichterliebe*, Op. 48, where, in addition to beginning the work with the Gr⁺⁶ chord, Schumann later reinterprets this chord as V⁷/II.

a) Melody, mm. 1-7

b) Melody, mm. 21-28

c) Melody, mm. 17-20

Example 4. Schumann, "Walzer" from *Albumblätter*, Op. 124

Set against the contrasts between the "A" and "B" sections are a number of similarities, which perhaps acknowledge and issue from the identity of the sections' opening sonorities. Their initial melodic gestures are alike in rhythm and contour, and the manner of accompaniment remains unchanged. The final eight measures of the "B" section unfold a descending-5th sequence that alternates root-position and first-inversion triads. This allows for an upper-voice figuration that integrates the phrase melodically within the piece. Example 4 illustrates the detail of this integration. The melody of the opening phrase is given at a). As the beams show, the segment of mm. 2-3 is nested within a broader occurrence of that same segment that shapes the phrase. The melody of mm. 17-20 is shown at c), and that of mm. 21-28 at b). The arrows projected from a) and c) toward b) suggest that the latter is formed as a conflation of the other two. Points of contrast and of unity, then, are salient features of this work, and, as proposed at the outset, both flow out of the workings of the F2-A5 dyad that its harmonic ambiguity allow.

This piece has also prompted many insightful interpretations in several classes of students. The most sophisticated came from a student who named "contrast within unity" as the agent, and argued that in a "B" section whose tempo, rhythmic figures, and

melodic shape remained unchanged from the previous section, the contrast that one expects to find is provided by metric regularity and, tonally, “begin-clarified gestures,” as opposed to the metric irregularity and “end-clarified gestures” of the “A” section.

* * *

Finally, as promised, an observation of pragmatic importance. The foregoing analytical commentaries comprise approximately 1600 and 700 words, respectively. In double-spaced, 12-point, Palatino font, these numbers translate roughly to five and two pages. Many of us face enrollments in undergraduate analysis classes in the thirties, forties, even fifties. This creates an intractable challenge: how to design a written analysis assignment that can be both substantive and of manageable length. The approach discussed here offers a solution. The constraints on the scope of students’ discussion imposed by the “viewpoint” ensures that succinctness be a central concern. At the same time, that very requirement of an articulated viewpoint demands a thorough and thoughtful consideration of the music.



Cycling Through Polyrhythms

Nick Rissman

The formal study of polyrhythms (2:3, 3:4, 3:4:5 etc.) often begins in the typical four-semester undergraduate theory sequence. Polyphonic instrumentalists are, no doubt, introduced to these rhythms earlier. Commonly, the rhythms are taught with the aid of subdivisions, the least common denominators shared by the separate parts of a polyrhythm. For example, the polyrhythm 3:2 has six subdivisions (the product of its two separate parts). Typically, this information is presented as a linear index¹ (Ex. 1a), or as a series of counts² (Ex. 1b) indicating the exact moments each part is to be articulated:

Example 1a

Example 1b

Example 1

This paper suggests teaching and understanding polyrhythms in a somewhat different manner: looping the subdivisions around themselves so that they form repetitive cycles and, in the process, mimic the motions of rotating gears rather than a linear index or series of counts. One advantage is that oral counting of the subdivisions

¹A linear index is used by S. Schick in "Developing and Interpretive Context: Learning from Brian Ferneyhough's Bone Alphabet", *Perspectives of New Music* 32.1:132-53 (1994). The index is applied to an impressive 10:12 subdivided polyrhythm and is perhaps the only solution, given the subdivided texture of the passage.

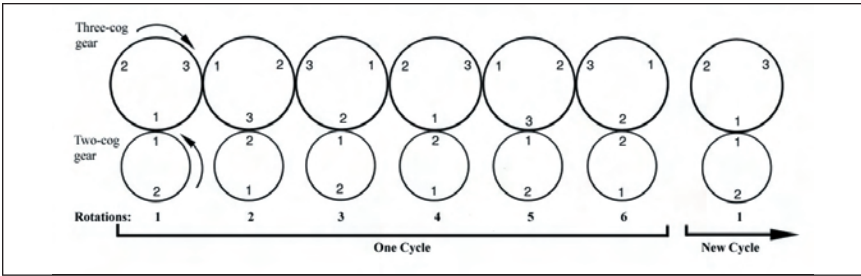
²Robert Starer offers a series of six "preliminary exercises"--various two-part polyrhythm drills--in *Rhythmic Training* (New York: MCA, 1969). Meter and rhythm are imposed on four abstract patterns: 2:3 (3:2), 3:4 (4:3), 2:5, and 3:5. This method encourages the counting of subdivisions.

is unnecessary and thus, the polyrhythm is more easily integrated into the composition at hand. (It would be difficult, for instance, to simultaneously count the polyrhythms' subdivisions and the actual metrical units in Exx. 1a and 1b). A second advantage is that one of the "gears" always coincides with the metrical unit; this allows the polyrhythm to be prepared a beat or two prior to its occurrence, something that is of particular value to the ensemble performer. The process is easily demonstrated, learned, and becomes a valuable reference tool while motivating students to explore ever more complex polyrhythms.

I. THEORY

A large gear and a small gear rotate at different rates based on their relative circumferences, and yet are joined at their cogs. A "cog" represents each gear's *lowest common denominator*. Example 2 illustrates the meshing of a two-cogged gear with a three-cogged gear, a ratio of 2:3. Note that six rotations are necessary before the two gears return to their starting position. This "cycle" of rotations (6) is the *least common multiple* of the two gears, and is the product of the two gears' cogs ($2 \times 3 = 6$). As ratios increase in size, it is important to be certain that the product of the two parts has in fact been reduced to the least common multiple, lest one's gears end up twice as large as necessary to complete a cycle. To assure this, keep two formulas in mind:

1. The highest common factor = the least common multiple for each of the two parts.
2. Where x and y are different prime numbers: xy = The least common multiple. The product of 10:12, for example, is 120. However, 120 can be further reduced to 60. Thus, 60 rotations equal one cycle of 10:12.



Example 2

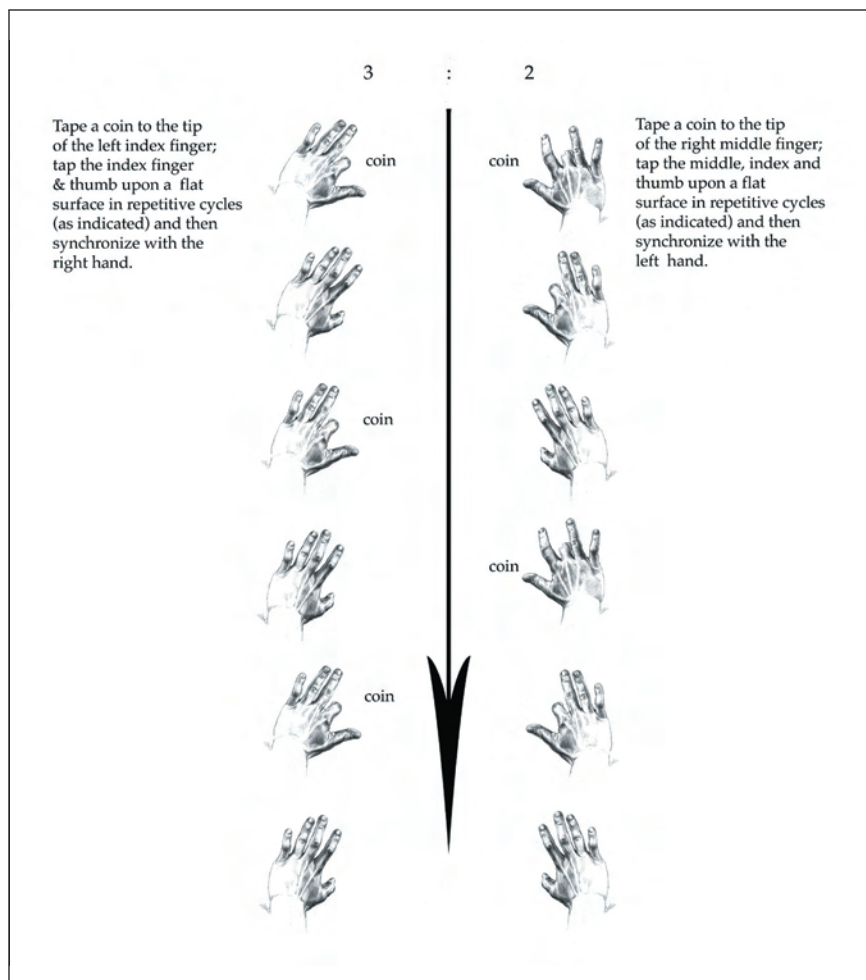
Returning to our two gears, imagine them unwound from their circumferences into lines, then laid flat with their cogs side by side (Ex. 3). The smaller gear, of course, needs to rotate or, in this case, repeat itself three times for every two repetitions of the large gear before returning to the starting position (Ex. 4). This process of “unwinding” can be made audible by taping a single coin (in the case, for example, of 2:3) to the tip of one hand’s middle finger and the other hand’s index finger. Tap both hands’ fingers simultaneously and consecutively *inward* from the “coined-fingers”--through each intervening finger--towards the thumbs in repetitive cycles. The *sound* (“coined-fingers”) of the polyrhythm emerges automatically, as does the *feel* of each of the rotations (including the “non-coined fingers”). Students master the process surprisingly quickly, and since important information is obtained both by *sound* and *touch*, oral counting of the subdivisions is unnecessary, a feature that will be useful when the process is applied to actual music passages.

Example 3

1 2
 [/ /] Two "cogs" in this gear
 [/ / /] Three "cogs" in this gear
 1 2 3

Example 4

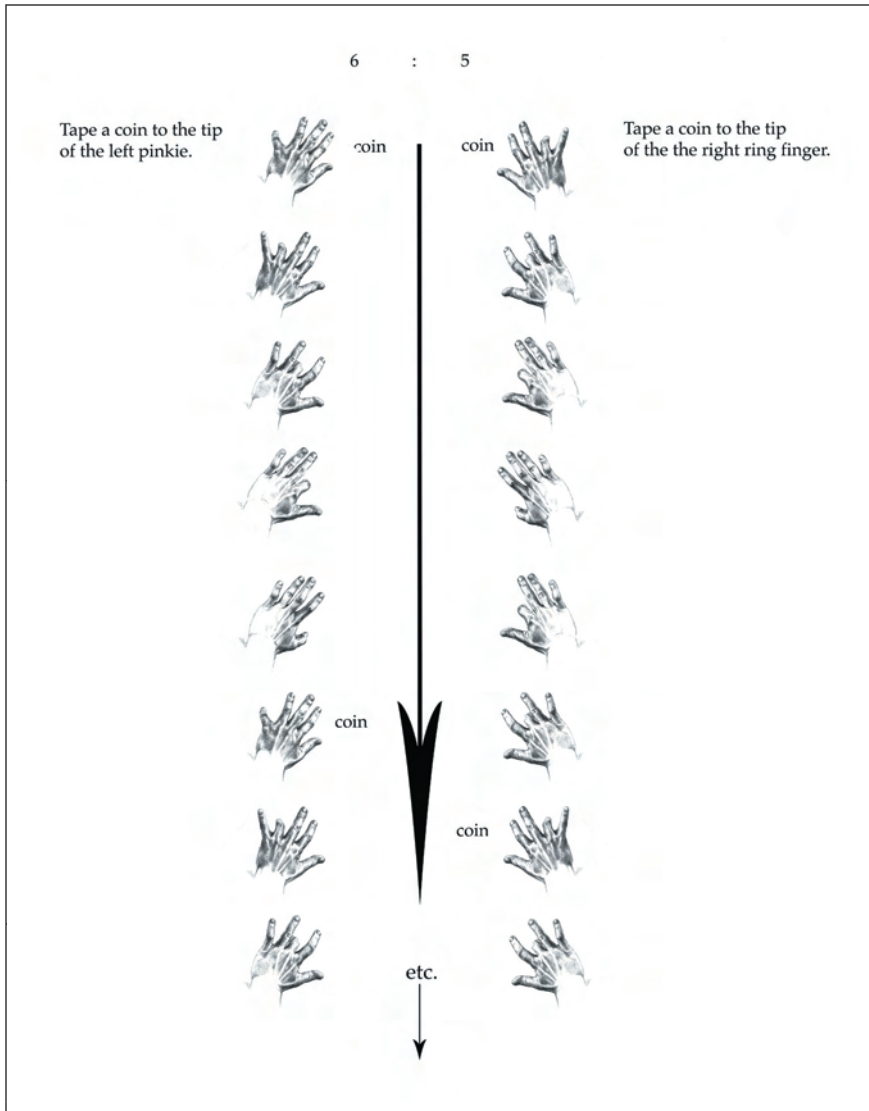
1 2 1 2 1 2
 [/ /][/ /][/ /]
 [/ /][/ /][/ /]
 1 2 3 1 2 3
 |-----one cycle-----|



Example 5. 2:3 (one cycle)

Any pattern from 5:4 downward may be performed in this manner. Additionally, the procedure may be applied to ratios greater than 5:4, as Ex. 6 illustrates. All that is required is a logical, *repetitive* sequence of fingers so that the mind can forget what the hands are doing.³

³It is important to stress that this procedure is intended for the undergraduate student, not necessarily the undergraduate piano student. In the past, some of the more innovative solutions to complex polyrhythms have come from my instrumentalists and vocalists, rather than from the keyboardists.



Example 6. 6:5 (a partial cycle). Note the right hand.

II. Application

While polyrhythms may exist as abstract patterns without the constraints of meter, it is important to understand them in a metrical context. There are four types: 1) A *Sub-metrical* polyrhythm nests within a portion of the beat (Ex. 7a); 2) A *Metrical* polyrhythm nests within the beat (Ex. 7b); 3) A *Super-metrical, coinciding* polyrhythm

is longer than the duration of the beat, with one of its parts coinciding with the beat (Ex. 7c); 4) A *Super-metrical, non-coinciding* polyrhythm is longer than the duration of the beat, with *none* of its parts coinciding with the beat (Ex. 7d).



Example 7a: *To Wake the Dead* (II. "Riverrun") by Stephen Albert.
Copyright 1979 by Carl Fischer, LLC. Reprinted by Permission.



Example 7b: Sonata No. 9 for Piano, Op. 103 (mvt. IV) by Serge Prokofiev.
Copyright © 1955 (Renewed) by G. Schirmer, Inc. (ASCAP)
International Copyright Secured. All Rights Reserved. Reprinted by Permission.



Example 7c: Sonata (for Flute, Oboe, Cello and Harpsichord) (mvt. III) by Elliott Carter.
Copyright © 1960 (Renewed) by Associated Music Publishers, Inc. (BMI)
International Copyright Secured. All Rights Reserved. Reprinted by Permission.



Example 7d

Examples 7a, 7b, 7c, and 7d.

Sub-metrical and metrical types are more easily mastered than the super-metrical variety because the meter itself is not a factor. However, super-metrical polyrhythms involve the beat, which in essence becomes a third part (Ex. 8).

The musical score for Example 8 consists of three staves. The top staff is for Viola, the middle for Conductor, and the bottom for Piano. All three parts are in 6/4 time. The Viola part features a 4:3 polyrhythm, indicated by a bracket above the staff. The Conductor part uses a simplified notation with 'x' marks on a staff to represent beats. The Piano part features a 5:3 polyrhythm, indicated by a bracket above the staff. The copyright notice at the bottom reads: "Copyright 1979 by Carl Fischer, LLC. Reprinted by Permission."

Example 8. To Wake the Dead (VII. "Passing Out") by Stephen Albert

To illustrate the application of our "coined-finger" method to an actual musical passage, let us first turn to a *metrical* example (Ex. 9). Example 10 demonstrates the "coined-finger" method applied to a *super-metrical, coinciding* example.

The musical score for Example 9 consists of four staves. The top staff is for R.H. (Right Hand), the second for Piano Solo, the third for L.H. (Left Hand), and the bottom for Conductor. All parts are in 6/4 time. The R.H. and L.H. parts feature complex polyrhythmic patterns. The Piano Solo part features a complex polyrhythmic pattern. The Conductor part uses a simplified notation with 'x' marks on a staff to represent beats. The notation 'COIN' is used above the R.H. and L.H. parts, and 'COIN' is used below the Conductor part, indicating the application of the "coined-finger" method.

Example 9. Brahms. Concerto No. 1 in D Minor for Piano and Orchestra, mvmt. II, m. 87

Example 10 is a musical score snippet from the piece "Passing Out" by Stephen Albert. It features three staves: Conductor, Soprano, and Piano. The tempo is marked as $\text{♩} \sim 63-72$. The Conductor staff shows a 5:3 polyrhythm with "Coin" markings above the staff. The Soprano staff has lyrics "First we" and "pass through". The Piano staff has lyrics "pass through" and "Coin" markings below the staff. The score is for the piece "From To Wake the Lead (VII. 'Passing Out') by Stephen Albert. Copyright 1979 by Carl Fischer, LLC. Reprinted by Permission."

Example 10. Because the quintuplet in m. 2 is “super-metrical,” it forms a 5:3 polyrhythm with the conductor’s beat. Cycling facilitates perfect alignment of such “-uplets.” (Note how the fifth and sixth beats of m. 1 are used to prepare the polyrhythm.)

Perhaps the greatest challenge in Example 10 is context. Since the conductor’s beat is one part of the polyrhythm (due to the slow tempo), it is crucial that the pattern be properly aligned with the baton. Therefore, tape a coin to the tip of the right hand’s “pinkie” and the left hand’s middle finger, then tap as indicated in Ex. 10. It is useful to observe that the right hand (with the coin taped to the pinkie) will repeat three times for every five repetitions of the left hand (with the coin taped to the middle finger). Thus, the right hand is the 3 in the ratio 5:3, and it coincides with the beat. Example 10 also illustrates how the polyrhythm can be prepared a few beats before its occurrence, to guarantee proper alignment with the baton. Example 11 is an alternate presentation (using piano-fingerings) of Ex. 10, and is better suited to our purposes as we continue.

Example 11

More problematic is the *super-metrical, non-coinciding* type. In Ex. 8, for instance, neither the viola (4) nor the piano (5) coincides with the the conductor's beat (3), resulting in a 3:4:5 polyrhythm. To obtain the least common multiple, multiply the three parts by one another. The result is sixty rotations per cycle. Example 12 demonstrates a modified version of the "coined-finger" approach to this polyrhythm: Here, the greatest benefit to this approach is that, like gears, it is cyclic. In contrast, an index of the subdivisions would be linear; a rather unwieldy collection of integers that are difficult to count because they are non-cyclic (Ex. 13).

Polyrhythms are all around us: the sounds of our steps when walking with a friend; the simultaneous sounds of a turn signal and a windshield wiper. Anywhere circular motions of different diameters coincide there is an opportunity to calculate their least common multiple and reconcile them through their lowest common denominator. Is it not useful to mimic these motions in our music?

(R.H.)

Conductor

R.H.

Viola

Piano

L.H.

Example 12. Note that the conductor and viola use identical fingerings. Students have suggested that substituting a melody for the finger numbers makes them easier to memorize. For example, the left-hand pattern is: do re mi fa sol fa mi re mi fa sol fa.

Conductor	1		21		41																																																							
Viola	1		16		31	46																																																						
Piano	1		13		25	37																																																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60

Example 13



D. A. Kolb's Theory of Experiential Learning: Implications for the Development of Music Theory Instructional Material

Michael Lively

Undergraduate students often find music theory courses to be among the most difficult and sometimes most frustrating experiences of their early college careers. The difficulty may stem from the tendency of music theory instruction to rely heavily upon the learner's ability to process information with abstract modes of cognition. Many students have either limited experience with abstract intellectual tasks or limited aptitude for cognitive abstraction. This essay will explore the process of adapting music theory instructional material for the learning styles of individual students.

Individuals use a variety of methods during the learning process and each student has a preferred style of learning. D. A. Kolb has proposed a typology of individual learning styles based upon the theory of "experiential learning." The typology, detailed in Kolb's *Experiential Learning; Experience as the Source of Learning and Development*,¹ derives from the manner in which an individual tends to "apprehend" new information, and the methods which an individual tends to use when processing new concepts. An instructor may consider Kolb's typology during the process of developing instructional material, and thereby adapt his or her teaching strategies so that each of Kolb's learning style "types" will benefit from appropriately directed instruction.

Each person represents a unique combination of personality traits, intellectual aptitudes, and cognitive tendencies. As a result, people prefer to learn in different ways. Differences in perceptual preferences for learning, tendencies toward visual vs. language-based cognition, as well as a number of individual personality

¹David A. Kolb, *Experiential Learning; Experience as the Source of Learning and Development* (Englewood Cliffs, NJ: Prentice Hall, 1984). Kolb is the DeWindt Professor in Leadership and Enterprise Development at the Weatherhead School of Management, Case Western Reserve University. He is known for his research in the area of learning styles theory and was the originator of the theory of experiential learning.

characteristics help to define an individual's "learning style." Research in the field of individual learning styles informs the process of developing instructional material by identifying the needs of learners who possess the full range of human cognitive tendencies.

The term "learning style" refers to a variety of theoretical constructs and cognitive models. Although some of these paradigms differ from each other in significant ways, most of the theoretical structures that use the term "learning style" relate to the concept of individual differences in the dominant cognitive modality used for the learning process. Schmeck (1983) defined "learning style" as a predisposition to adopt a particular learning strategy regardless of the specific demands of the learning task.² Some of the most significant studies on learning styles theory include Fox (1984)³ and Armstrong & McDaniel (1986),⁴ who assess learning styles among adult learners in various post-secondary environments, Eiszler (1982),⁵ who studies the learner's preferred sense modality, and Riding and Boardman (1983),⁶ who study adult learning style in terms of performance on the Test of Embedded Figures (Cuthbert, 1971).⁷

A variety of psychometric instruments have been developed to assess the preferred learning style of an individual; most of these describe bipolar pairs of specific personality traits in a manner

²Schmeck's definition of learning style is given in "Learning Styles of College Students," in *Individual Differences in Cognition*, ed. Ronna F. Dillon and Robert R. Schmeck (New York: Academic Press, 1983), 233-79.

³R. D. Fox, "Learning Styles and Instructional Preferences in Continuing Education for Health Professionals: A Validity Study of the LSI," *Adult Education Quarterly* 35 (1984): 72-85.

⁴P. Armstrong and E. McDaniel, "Relationships Between Learning Styles and Performance on Problem-Solving Tasks," *Psychological Reports* 59 (1986): 1135-8.

⁵C. F. Eiszler, *Perceptual Preferences as an Aspect of Adolescent Learning Styles* (Washington, DC: U.S. Educational Resources Information Center, 1982). ED 224769.

⁶R. J. Riding and D. J. Boardman, "The Relationship Between Sex and Learning Style and Graphicacy in 14 Year Old Children," *Educational Review* 35 (1983): 69-79.

⁷C. Cuthbert, *Test of Embedded Figures*, unpublished test.

derived from the Jungian theory of "types."⁸ Some researchers have attempted to extend Kolb's model by blending the concept of experiential learning with concepts from other approaches to the issue of learning styles. Merritt & Marshall (1984)⁹ and Sewall (1986)¹⁰ have studied the psychometric properties of the various learning styles instruments.

Kolb's learning model describes a learning cycle in which experience leads to observation and reflection, followed ultimately by concept formation. New concepts, in turn, may guide choices for new experiences. The theory maintains that knowledge is acquired either by concrete experience or abstract conceptualization, and that knowledge is processed through either reflective observation or active experimentation. Kolb theorized that a person first has a concrete experience and then makes reflective observations about it; these reflective observations will eventually form the basis of abstract conceptualizations as the individual fits the observations

⁸The Grasha-Riechmann Student Learning Style Scales were designed to study the learning styles of late post-secondary and university students. The instrument recognizes three bipolar pairs of learning styles, similar to the opposites found in the Myers-Briggs and Hogan-Champagne instruments, also corresponding closely to the Jungian typology.

The Myers-Briggs Type indicator attempts to measure and identify an individual's personality profile based on Carl Jung's typology of conscious functioning. Jung described three bipolar pairs (Introversion-Extraversion, Thinking-Feeling, Intuition-Sensing), to which Myers-Briggs adds a fourth (Judging-Perceiving). The Personality Style Indicator, designed by R. Craig Hogan and David W. Champagne, is based on the Myers-Briggs indicator and similarly reflects the Jungian typology of conscious functioning. It describes the following bipolar pairs: Introvert-Extrovert, Thinking-Feeling, Intuitive-Sensing, and Perceiving-Judging.

The texts of many psychometric instruments may be found on a number of internet sites and are frequently re-published in a variety of printed media. The Grasha-Riechmann Student Learning Style Scales have been published in several of the authors' works, including Grasha's *Teaching with Style: A Practical Guide to Enhancing Learning by Understanding Teaching & Learning Styles* (Pittsburgh, PA: Alliance Publishers, 1996). The Myers-Briggs Type Indicator is distributed by Consulting Psychologists Press, <http://www.cpp-db.com>. The Hogan-Champagne Personality Style Indicator is published privately by the authors, but its text may be found on the world wide web.

⁹S. L. Merritt and J. C. Marshall, "Reliability and Constructive Validity of Ipsative and Normative Forms of the Learning Style Inventory," *Educational and Psychological Measurement* 24 (1984): 463-72.

¹⁰T. J. Sewall, *The Measurement of Learning Style: A Critique of Four Assessment Tools* (Washington, DC: U.S. Educational Resources Information Center, 1986). ED 267247.

into generalized theories. A person will then ultimately test these theories through active experimentation. Figure 1 is a representation of the learning cycle.¹¹

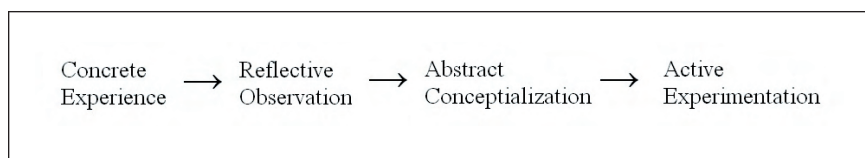


Figure 1. *The Learning Cycle*

Kolb's typology is derived from the relative emphasis an individual places on the different stages of the learning cycle. The tendency for knowledge to be acquired in an abstract rather than a concrete cognitive modality (in terms of concrete experience compared to abstract conceptualization) is described as a distinct dimension of learning style; and the tendency for knowledge to be transformed in a reflective rather than an active cognitive modality (in terms of reflective observation compared to active experimentation) is described as another distinct dimension of learning style. Figure 2 represents the two distinct dimensions of learning style as x and y axes and Kolb's four learning style types as the quadrants formed by the intersection of these axes.

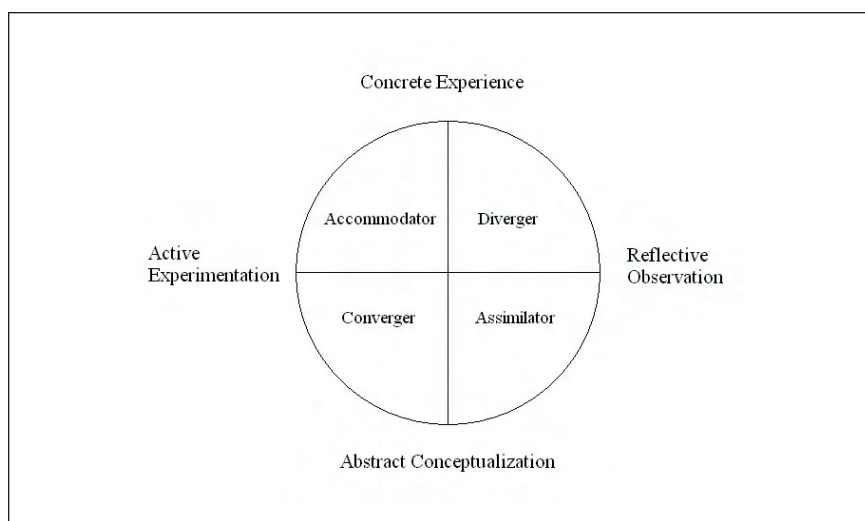


Figure 2. *Learning Style Modality as x-y Axes and Learning Style Types as Quadrants*

¹¹Figures 1 and 2 are derived from Kolb's description of the learning process in *Experiential Learning* (1984), 20-38.

Kolb's cognitive dimension of active-experimentation vs. reflective-observation may be compared to the epistemological concept of "extension" vs. "intention." Carl Jung equated the concept of extension with the extroverted personality type (analogous to Kolb's cognitive modality of active-experimentation) and the concept of intention with the introverted personality type (analogous to Kolb's cognitive modality of reflective-observation). Jung also suggested a connection between extension and the concept of *esse in re*, and between intention and the concept of *esse in intellectu*.¹²

In a similar manner, Kolb's cognitive dimension of concrete-experience vs. abstract-conceptualization may be compared to the epistemological concept of "apprehension" vs. "comprehension," with apprehension being analogous to Kolb's cognitive modality of concrete-experience, and comprehension being analogous to Kolb's cognitive modality of abstract conceptualization. William James observed that many languages express the distinction between apprehension and comprehension, and provides examples, such as *noscere* vs. *scire* in Latin, *kennen* vs. *wissen* in German, and *connâitre* vs. *savoir* in French.¹³ William Shakespeare distinguished between the connotations of "apprehend" and "comprehend" in the last act of *A Midsummer Night's Dream*.¹⁴

Lovers and madmen have such seething brains,
Such shaping fantasies, that apprehend
More than cool reason ever comprehends.

The theory of experiential learning serves as the foundation for Kolb's research concerning individual learning styles. Kolb developed a psychometric instrument, known as the Learning Style Inventory (LSI), for use in determining the types of learning styles an individual tends to use most often. The original Learning Style Inventory was developed in 1974, but Kolb and others have

¹²Jung describes the process that Kolb refers to as the "acquisition" of knowledge in *Psychological Types*, see the edition translated by R. F. C. Hull (Princeton, NJ: Princeton University Press, 1977), 12-68.

¹³James describes this process as the "transformation" of knowledge in *The Principles of Psychology* (New York: Holt, Rinehart and Winston, 1890), vol. 1, 221-2.

¹⁴William Shakespeare, *A Midsummer Night's Dream*, V/i/4-6. See the New Cambridge Shakespeare edition (Cambridge: Cambridge University Press, 2003), 124.

continued to improve and update the inventory since that time, in addition to developing other similar psychometric instruments.¹⁵

The Learning Style Inventory (LSI) defines four types of learners: the Accommodator, the Diverger, the Converger, and the Assimilator. The typology does not characterize individual learning styles as being fixed, permanent, or genetically invariable, but rather posits that the learning style types represent relatively stable cognitive states—all of which an individual may utilize, although one specific learning style is likely to be used most often.¹⁶ Given below are brief descriptions of the four types of learners.

Accommodators are individuals with a high score in the Concrete-Experiencing (CE) dimension and the Active-Experimenting (AE) dimension. Accommodators learn best from specific examples and rely heavily upon experimentation. These individuals grasp information through concrete experience and process it through active experimentation. Favorably indicated areas of study include marketing and sales.

¹⁵The Learning Style Inventory is a self-description test based on experiential learning theory. The LSI obtains four measures for learning style: Concrete-Experiencing (CE), Abstract-Conceptual (AC), Reflective-Observational (RO), and Active-Experimenting (AE). In addition, two other scores are computed from these four; CE subtracted from AC indicates the degree to which the learning style is biased toward abstraction or concrete cognition, and AE subtracted from RO reflects a bias toward reflection or active cognition. Kolb's LSI is distributed by McBer & Company in Boston, MA, <http://trguk.haygroup.com>, see also Donna M. Smith and David A. Kolb, *The User's Guide for the Learning-Style Inventory: A Manual for Teachers and Trainers* (Boston, MA: McBer & Company, 1986). The validity and reliability of the LSI has been the subject of several recent studies, including Robert K. Henson and Dae-Yeop Hwang, "Variability and Prediction of Measurement Error in Kolb's Learning Style Inventory Scores: A Reliability Generalization Study," *Educational and Psychological Measurement* 62 (2002): 712-27, and Iain Garner, "Problems and Inconsistencies with Kolb's Learning Styles," *Educational Psychology* 20 (2000): 341-8. A significantly different version of the LSI, developed by Rita Dunn, Kenneth Dunn, and Gary E. Price, is provided as an appendix to Dunn's *Teaching Students Through Their Individual Learning Styles: A Practical Approach* (Reston, VA: Reston Publishing Company, 1978).

¹⁶Leona Tyler has referred to enduring and consistent patterns of cognitive transaction between the individual and his or her environment, such as the learning style "types" posited by Kolb, as "possibility processing structures." See Tyler's *Individuality* (San Francisco, CA: Jossey-Bass, 1978), 106-7.

Divergers are individuals with a high score in the Concrete-Experiencing (CE) dimension and the Reflective-Observational (RO) dimension. Divergers learn best from specific examples and tend to reflect upon new information. These individuals grasp information through concrete experience and transform it through reflective observation. Favorably indicated areas of study include the humanities and the liberal arts.

Convergers are individuals with a high score in the Abstract-Conceptualizing (AC) dimension and the Active-Experimenting (AE) dimension. Convergers learn best in an environment that emphasizes systematic analysis and rely heavily upon experimentation. These individuals grasp information through abstract conceptualization and process it through active experimentation. Favorably indicated areas of study include technology and engineering.

Assimilators are individuals with a high score in the Abstract-Conceptualizing (AC) dimension and the Reflective-Observational (RO) dimension. Assimilators learn best in an environment that emphasizes systematic analysis and tend to reflect upon new information. These individuals grasp information through abstract conceptualization and transform it through reflective observation. Favorably indicated areas of study include science and mathematics.

Kolb's typology provides a theoretical structure for the evaluation of music theory instructional material in terms of individual learning styles. An instructor may employ Kolb's typology during the process of developing instructional material, so that each of Kolb's learning style "types" will benefit from appropriately adapted instruction. In the current essay I will attempt to evaluate the effectiveness of a specific methodology for the development of music theory instructional material in terms of Kolb's experiential learning theory and Kolb's individual learning style typology. Educational theorists have developed methods for the adaptation of instructional material to the learning styles of individual students. The process of matching instructional design to the needs of individual learners involves the creation of instructional material, the development of teaching strategies, and the organization of the structure and environment in which learning occurs. Since the 1980s, when learning styles theory began to achieve a high level of prominence, various areas of educational

planning and development have reflected the influence of research into learning styles.

Rita Dunn has written extensively on the process of adapting instructional material to match the specific learning styles of individual students. Dunn provides several specific techniques for the adaptation of instructional material to the learning modalities identified by various theoretical paradigms. In Dunn's methodology, instructional material is altered to match the cognitive tendencies described by an existing theoretical model, with independent adaptations being created for each style of learning. To implement Dunn's system in an instructional environment, the learning styles of each student in a class must first be assessed, and the teacher must then adapt material for the learning styles represented by the students.¹⁷

Many of the existing methodologies for adapting instructional material to the learning styles of individual students require that the learning styles of each student in a class first be assessed, and that instructional material then be adapted for the specific individual learners. The process of adapting instructional material directly for individual learners is associated with the concept of "individualized instruction." Dunn's methodology includes elements of the "individualized instruction" approach to the development of instructional material.¹⁸ In the current study, Dunn's methodology is extended by simultaneously adapting a

¹⁷Rita Dunn describes her procedures for adapting instructional material to the learning styles of individual students in *Teaching Students Through Their Individual Learning Styles: A Practical Approach*, also see Rita Dunn's *How to Implement and Supervise a Learning Style Program* (Alexandria, VA: Association for Supervision and Curriculum Development, 1996). ED 395367. Other significant methodologies for the adaptation of content material to the requirements of individual student learning styles include the "4MAT" system developed by B. McCarthy, see McCarthy's *The 4Mat System: Teaching Learning Styles with Right/Left Mode Techniques* (Barrington, Illinois: Excel Inc., 1985) and Stephanie Kadel's strategy known as "problem centered learning," see Kadel's *Problem-Centered Learning in Mathematics and Science* (Washington, D.C.: Office of Educational Research and Improvement, 1992). ED 342681.

¹⁸Rita Dunn provides a description of "individualized instruction" in *Teaching Students Through Their Individual Learning Styles: A Practical Approach*, 1-24. See also Rita Dunn and Shirley A. Griggs, *Practical Approaches to Using Learning Styles in Higher Education* (Westport, CT: Bergin & Garvey, 2000). Important publications concerning the issue of "individualized instruction" include Samuel Messick, ed., *Individuality in Learning* (San Francisco, CA: Jossey-Bass, 1976) and Roger Hiemstra and Burton Sisco, *Individualized Instruction* (San Francisco, CA: Jossey-Bass, 1990).

single instructional sequence for all of the learning styles described in a theoretical model. As in Dunn's methodology, the specific needs of each learning style are individually addressed during the development of the instructional material.

Instructors may adapt material for the specific learning styles described in Kolb's typology. Given below are examples provided by Rita Dunn of instructional procedures adapted for each of Kolb's four learning style types. The adaptations were designed for a school counselor education class.¹⁹

Accommodators (who grasp information through concrete experience and process it through active experimentation) were required to interview a currently practicing counselor and to write a paper recommending ways that schools or agencies could serve more effectively.

Divergers (who grasp information through concrete experience and transform it through reflective observation) were required to interview a currently practicing counselor and to then engage in reflective observation through class discussion.

Convergers (who grasp information through abstract conceptualization and transform it through active experimentation) were required to formulate questions that they would like to ask a currently practicing counselor and to write a paper recommending ways that schools or agencies could serve more effectively.

Assimilators (who grasp information through abstract conceptualization and transform it through reflective observation) were required to formulate questions that they would like to ask a practicing counselor and to then engage in reflective observation through class discussion.

Kolb's typology of learning styles may serve as a model to evaluate the ability of music theory instructional material to match the learning styles of individual students. Since music analysis requires abstract conceptualization, learners who require concrete experience should be given an opportunity to see several examples of each new concept in which a number of variables remain constant (such as chord inversion or musical texture) before progressing to more varied examples. Since completing analytical exercises is a process of active experimentation, learners who require reflective observation should be given an opportunity to internalize new concepts. Reflective observation could be a process for class

¹⁹See Rita Dunn's *How to Implement and Supervise a Learning Style Program*, 32-3.

discussion and review of student compositions, which would then be revised and analyzed. Composition may seem to be an active experimenting process, but in actual practice the creation of new music requires both reflection and the internalization of new analytical concepts.

Experienced music theory teachers have often observed that some students seem to benefit substantially from the process of mentally hearing or silently rehearsing musical structures, in some cases even responding to analytical tasks more successfully when musical examples are heard rather than read. Other students tend to recognize theoretical concepts and analytical formulations much better in written form than in the actual sound-environment of a musical performance. Theory teachers usually attempt to address difficulties experienced by students who may represent either of these extremes by directly attempting to alter the students' preferred method of musical apprehension, sometimes suppressing important and uniquely individualized cognitive modalities for hearing and comprehending musical structure. Although the perception and cognitive understanding of Western art music relies significantly upon the process of responding directly to sound, or at least to the sounds that theorists have traditionally regarded as musically important, I will only attempt to address the issue of the individual learning strategies that students may apply to the cognitively abstract task of musical analysis.

An important dimension of Kolb's modality of concrete experience, as applied to music theory, is the question of "concrete hearing" vs. "concrete visualization" of a musical text. In order to provide a concrete experience for each of these sub-modalities, musical examples should always be played for the students. Learners who prefer the modality of abstract conceptualization will, of course, either "hear" or "visualize" musical texts internally, but even for these students the process of performing musical examples may slightly benefit students who prefer the sub-modality of "abstract hearing."²⁰

Given below are examples of music theory instructional procedures adapted for each of Kolb's four learning style types.

²⁰Rita Dunn has identified four distinct sense-modalities for the learning process among child and adolescent learners: auditory learning, visual learning, tactual learning, and kinesthetic learning, see Dunn's *Teaching Students Through Their Individual Learning Styles: A Practical Approach*, 13-5.

The learning objective is the ability to analyze secondary-dominant sonorities; the student is assumed to have previously acquired the necessary skills to analyze diatonic common-practice musical texture in terms of "roman numeral" analytical notation. The concept of sonorities with secondary-dominant function may be introduced for all four learning style types using both the concrete examples presented in Figure 3 and the abstract description presented in Figure 4.²¹

Individuals with the *Accommodator* learning style grasp information through concrete experience and process it through

The figure shows a musical score in C major, consisting of 12 chords arranged in two staves. The chords and their Roman numeral equivalents are as follows:

Chord	Roman Numeral
C	I
F#	V ⁷ /ii
D	ii
G#	V ⁷ /iii
E	iii
Bb	V ⁷ /IV
F	IV
C#	V ⁷ /V
G	V
A#	V ⁷ /vi
D	vi
C	I

Figure 3. Concrete Examples of Secondary-Dominant Function

If the answer is "yes" to all of the questions in group 1 or group 2, then a particular sonority has a secondary dominant function.	
Group 1	Group 2
Is the sonority chromatically altered from the key signature?	Is the sonority chromatically altered from the key signature?
Is the sonority a major triad or a major-minor seventh chord?	Is the sonority a diminished triad, a fully-diminished seventh chord, or a half-diminished seventh chord?
Is the pitch a perfect fifth below the root of the altered chord a member of the diatonic scale?	Is the pitch a half step above the root of the altered chord a member of the diatonic scale?
Is the pitch a perfect fifth below the root of the altered chord a pitch on which one could build a diatonic major or minor triad?	Is the pitch a half step above the root of the altered chord a pitch on which one could build a diatonic major or minor triad?

Figure 4. Abstract Description of Secondary-Dominant Function

²¹Figure 4 provides a slightly altered version of a procedure for recognizing secondary dominants found in Stefan Kostka and Dorothy Payne's *Tonal Harmony*, 5th ed. (New York: McGraw-Hill, 2004), 248-49, 265.

active experimentation. The concept of secondary-dominant function may be introduced with the use of both Figures 3 and 4, but the concrete examples presented in Figure 3 should be emphasized. Figure 5 may serve as a further example of secondary-dominant function, since the sonorities are presented in chorale texture and mostly in root position.²² To facilitate active experimentation, students should be asked to analyze the secondary dominant sonorities found in an example, such as Figure 5, and then asked to complete a realization assignment, such as Figure 6. Students should complete the assignment without assistance, but after the exercise is finished, an instructor should check the students' work and explain the analysis of each of the secondary dominant sonorities. These activities allow students an opportunity to grasp the concept of secondary-dominant function through the modality



Figure 5. Further Example for the Modality of Concrete Experience



Figure 6. Analytical Exercise for the Modality of Active Experimentation

Directions: Complete the soprano, alto, and tenor voice parts in chorale texture.

²²J. S. Bach, Chorale No. 102, as given in Albert Riemenschneider's *371 Harmonized Chorales and 69 Chorale Melodies with Figured Bass by Johann Sebastian Bach*. New York: G. Schirmer, 1941.

of concrete experience, and to transform the concept through the modality of active experimentation.

Individuals with the *Diverger* learning style grasp information through concrete experience and process it through reflective observation. The concept of secondary-dominant function may be introduced with both Figures 3 and 4, but the concrete examples presented in Figure 3 should be emphasized. Figure 5 may serve as a further example of secondary-dominant function, since the sonorities are presented in chorale texture and mostly in root position. To facilitate reflective observation, Figure 5 should be demonstrated through an instructor-guided comparison of the concrete examples from Figure 3 to the specific sonorities encountered in Figure 5. Students should be asked to complete a brief composition project, such as the one presented in Figure 7, and the student compositions should then be compared and analyzed through group discussion. These activities provide an opportunity to grasp the concept of



Figure 7. Analytical Exercise for the Modality of Reflective Observation

Directions: Compose the bass line and accompanying material in any musical texture

secondary-dominant function through the modality of concrete experience, and to transform the concept through the modality of reflective observation.

Individuals with the *Converger* learning style grasp information through abstract conceptualization and process it through active experimentation. The concept of secondary-dominant function may be introduced with the use of both Figures 3 and 4, but the abstract “rules” presented in Figure 4 should be emphasized. Figure 8, which presents secondary-dominant sonorities in a variety of inversions, may be used as a further example.²³ Other examples may be used that demonstrate secondary-dominant sonorities in different musical textures (such as chamber or orchestral scores). To facilitate active experimentation, students should be asked to analyze the secondary-dominant sonorities found in an example

²³George Frideric Handel, Sonata for Violin in B $\flat$ Major, second mvt., mm. 1-71

musical passage, such as Figure 8, and then asked to complete an analytical assignment, such as Figure 6. Students should complete the assignment without assistance, but after the exercise is completed, an instructor should check the students' work and explain the analysis of each of the secondary-dominant sonorities. These activities allow students an opportunity to grasp the concept of secondary-dominant function through the modality of abstract conceptualization, and to transform the concept through the modality of active experimentation.

Individuals with the *Assimilator* learning style grasp information through abstract conceptualization and process it through reflective

Figure 8. Further Example for the Modality of Abstract Conceptualization

observation. The concept of secondary-dominant function may be introduced with the use of both Figures 3 and 4, but the abstract "rules" presented in Figure 4 should be emphasized. Figure 8, which presents secondary-dominant sonorities in a variety of inversions, may be used as a further example. Other examples may be used that demonstrate secondary-dominant sonorities in different musical textures (such as chamber or orchestral scores). To facilitate reflective observation, Figure 8 should be demonstrated through an instructor-guided application of the rules from Figure 4 to the specific sonorities encountered in Figure 8. Students should be asked to complete a brief composition project, such as the one shown in Figure 7, and the student compositions should then be compared and analyzed through group discussion. These activities allow students an opportunity to grasp the concept of secondary-dominant function through the modality of abstract conceptualization, and to transform the concept through the modality of reflective observation.

In the preceding examples of music theory instructional procedures adapted for Kolb's learning style types, each type of

learner received a separate adaptation, similar to Dunn's method of individualized adaptation for the school counselor education class. Since the majority of music theory instructional environments, especially within American colleges and universities, rely primarily upon group instruction or even large-group lectures, an efficient method for adapting Kolb's theoretical paradigm to the reality of the classroom may be to combine all of the individual adaptations suggested by the experiential learning model into a single integrated instructional plan. A possible methodology for the implementation of such a combined formulation is provided below.

1. Identification of a specific learning objective.
2. Analysis of the learning objective in terms of Kolb's axis of apprehension (concrete experience vs. abstract conceptualization.)
3. Creation of an instructional strategy specifically targeted for the concrete experience element of the apprehension axis.
4. Creation of an instructional strategy specifically targeted for the abstract conceptualization element of the apprehension axis.
5. Analysis of the learning objective in terms of Kolb's axis of transformation (active experimentation vs. reflective observation.)
6. Creation of an instructional strategy specifically targeted for the active experimentation element of the transformation axis.
7. Creation of an instructional strategy specifically targeted for the reflective observation element of the transformation axis.
8. Creation of instructional material that includes the essential elements produced from procedures 3, 4, 6, and 7.

As an example of the process outlined by the methodology, let us apply the eight procedures detailed above to the learning objective of the previous adaptations, i.e., the analysis of secondary-dominant sonorities.

1. Identification of a specific learning objective. The learner will be able to provide "roman numeral" analysis of secondary-dominant sonorities.
2. Analysis of the learning objective in terms of Kolb's axis of apprehension (concrete experience vs. abstract conceptualization). The concept of secondary-dominant function relates most closely to the learning modality of abstract conceptualization. Adaptation for the modality of concrete experience may be supplied by providing the learner with specific examples of secondary-dominant sonorities.

3. Creation of an instructional strategy specifically targeted for the concrete experience element of the apprehension axis.

The learner will be presented with specific examples of secondary-dominant sonorities in which a number of variables remain constant (such as chord inversion or musical texture).

4. Creation of an instructional strategy specifically targeted for the abstract conceptualization element of the apprehension axis. The learner will be presented with an abstract description of the concept of secondary-dominant function (such as Figure 4).

5. Analysis of the learning objective in terms of Kolb's axis of transformation (active experimentation vs. reflective observation.)

The concept of secondary-dominant function may be transformed either by experimentation or reflection.

6. Creation of an instructional strategy specifically targeted for the active experimentation element of the transformation axis.

The learner will complete an analytical exercise (such as Figure 6).

7. Creation of an instructional strategy specifically targeted for the reflective observation element of the transformation axis.

The learner will compose an original composition that includes secondary-dominant sonorities. The student's composition will be compared and analyzed through group discussion.

8. Creation of instructional material that includes the essential elements produced from procedures 3, 4, 6, and 7. The instructional plan will combine all of the strategies described in procedures 3, 4, 6, and 7.

This methodology provides a process for the creation of music theory instructional material that is simultaneously adapted for all four of Kolb's learning-style types. By following the methodology an instructor is able to specifically address the needs of each of Kolb's four types of learners during the development of instructional material.

As an informal method of demonstrating the value of this methodology, a brief survey was conducted, primarily relying upon volunteers from the local population of undergraduate music theory students. One group of volunteers was presented with a computer-based instructional sequence corresponding to an adaptation for only the learning modality of abstract conceptualization, while the other group was presented with a computer-based instructional sequence adapted for all four of Kolb's learning-style types.

In general, students who were presented with the combined or integrated instructional sequence demonstrated a superior learning outcome, in terms of pre-test vs. post-test scores, than students who were presented with the more limited instructional sequence, suggesting that the use of instructional materials consistent with the goals of the methodology described in this essay may result in a more successful practical learning achievement than instructional materials or procedures that rely primarily upon a limited field of cognitive strategies. Table 1 documents the generally superior learning outcome of the students presented with the integrated instructional sequence compared to those presented with the limited instructional sequence, among individuals with an improvement greater than zero the integrated sequence resulted in a 40.4% improvement, while the limited sequence resulted in only a 32.3% improvement. Table 2 displays the generally more dramatic improvement in learning outcomes for students under the age of twenty than for those twenty years of age or older, in terms of the benefit derived from receiving the integrated rather than the limited instructional sequence; among individuals with an improvement greater than zero the difference in the rates of improvement for individuals under the age of twenty was 50.9% compared to 34.5%, while the difference for individuals twenty years of age or older was only 30.7% compared to 30.0%. Table 3 displays the generally more dramatic improvement in learning outcomes for female students than for their male colleagues, in terms of the benefit derived from receiving the integrated rather than the limited instructional sequence; among individuals with an improvement greater than zero the difference in the rates of improvement for females was 42.1% compared to 28.5%, while the difference for males was only 38.0% compared to 35.0%.²⁴ These results are consistent with the hypothesis that young adults and women tend more often toward concrete experiencing as an important modality for the learning process.

²⁴Among the total population of male volunteers, the more limited instructional sequence actually produced better learning outcomes than the integrated or combined instructional sequence, 35.0% compared to 31.6%. This result is consistent with the hypothesis that males tend to favor the modality of abstract conceptualization more often than females.

The difficulty of either teaching or studying music theory successfully at the undergraduate level may, to a large extent, be compounded by the diversity of students' academic experiences. For some students an entirely abstract or almost mathematically symbolic language may be the best method of acquiring and mastering the academic content, while for others only concrete and realistic examples of specific musical techniques will allow the development of a sufficiently sophisticated understanding of the necessary theoretical concepts. Good teachers have always known that a variety of different approaches must be offered, and that both abstract and concrete modes of expression must have equal validity within the classroom. An instructor who attempts to represent and value the full range of human cognitive tendencies will not only succeed in minimizing the social and cultural barriers that many students face in their efforts to learn, but will also, at least partially, help to provide an equal opportunity for success to a student body that is increasingly diverse in terms of age, gender, and cultural history.

Table 1

**Comparison of Learning Outcomes
Produced by Instructional Sequences #1 and #2**

	IS #1	IS #2
#P	19	31
#PI Δ >0	17	24
APre	52.6	53.5
APost	81.5	84.5
AI	28.9	31.2
AI Δ >0	32.3	40.4
#P	Number of Participants	
#PI Δ >0	Number of Participants with an Improvement Greater than Zero	
APre	Average Pre-test Score	
APost	Average Post-test Score	
AI	Average Improvement from Pre-Test to Post-Test	
AI Δ >0	Average Improvement from Pre-Test to Post-Test, Among Participants with an Improvement Greater than Zero	
IS #1	Instructional Sequence #1	
IS #2	Instructional Sequence #2	

Table 2

**Comparison of Learning Outcomes Produced by
Instructional Sequences #1 and #2 Among Participants
with an Age Less than Twenty and
with an Age of Twenty or Above**

	A<20	A<20	A20+	A20+
	IS#1	IS#2	IS#1	IS#2
#P	12	16	7	16
#PIΔ>0	11	11	6	14
APre	48.3	54.3	60.0	52.6
APost	80.0	89.3	84.2	79.3
AI	31.6	35.0	24.2	26.6
AIΔ>0	34.5	50.9	30.0	30.7

#P	Number of Participants
#PIΔ>0	Number of Participants with an Improvement Greater than Zero
APre	Average Pre-test Score
APost	Average Post-test Score
AI	Average Improvement from Pre-Test to Post-Test
AIΔ>0	Average Improvement from Pre-Test to Post-Test, Among Participants with an Improvement Greater than Zero
A<20	Participants with an Age Less than Twenty
A20+	Participants with an Age of Twenty or Above
IS#1	Instructional Sequence #1
IS#2	Instructional Sequence #2

Table 3

**Comparison of Learning Outcomes Produced by
Instructional Sequences #1 and #2
Among Male and Female Participants**

	M IS#1	M IS#2	F IS#1	F IS#2
#P	10	12	9	19
#PI Δ >0	10	10	7	14
APre	53.0	54.1	52.2	53.1
APost	88.0	85.8	74.4	83.6
AI	35.0	31.6	22.2	30.5
AI Δ >0	35.0	38.0	28.5	42.17

#P	Number of Participants
#PI Δ >0	Number of Participants with an Improvement Greater than Zero
APre	Average Pre-test Score
APost	Average Post-test Score
AI	Average Improvement from Pre-Test to Post-Test
AI Δ >0	Average Improvement from Pre-Test to Post-Test, Among Participants with an Improvement Greater than Zero
M	Male Participants
F	Female Participants
IS#1	Instructional Sequence #1
IS#2	Instructional Sequence #2

BIBLIOGRAPHY

American Association of School Administrators. *Learning Styles: Putting Research and Common Sense into Practice*. Arlington, VA: American Association of School Administrators, 1991. ED 34209

Armstrong, P. and E. McDaniel. "Relationships Between Learning Styles and Performance on Problem-Solving Tasks." *Psychological Reports* 59 (1986): 1135-8.

Cordell, Barbara J. "A Study of Learning Styles and Computer-Assisted Instruction." *Computers & Education* 16 (1991): 175-84.

Cuthbert, C. *Test of Embedded Figures*, unpublished test.

Dunn, Rita. *How to Implement and Supervise a Learning Style Program*. Alexandria, VA: Association for Supervision and Curriculum Development, 1996. ED 395367.

_____. *Teaching Students Through Their Individual Learning Styles: A Practical Approach*. Reston, VA: Reston Publishing Company, 1978.

Dunn, Rita and Shirley A. Griggs. *Practical Approaches to Using Learning Styles in Higher Education*. Westport, CT: Bergin & Garvey, 2000.

Eiszler, C. F. *Perceptual Preferences as an Aspect of Adolescent Learning Styles*. Washington, DC: U.S. Educational Resources Information Center, 1982. ED 224769.

Fox, R. D. "Learning Styles and Instructional Preferences in Continuing Education for Health Professionals: A Validity Study of the LSI." *Adult Education Quarterly* 35 (1984): 72-85.

Garner, Iain. "Problems and Inconsistencies with Kolb's Learning Styles." *Educational Psychology* 20 (2000): 341-48.

Grasha, Anthony F., and S. Riechmann. *Student Learning Style Scales*, psychometric instrument.

Grasha, Anthony F., *Teaching with Style: A Practical Guide to Enhancing Learning by Understanding Teaching & Learning Styles*. Pittsburgh, PA: Alliance Publishers, 1996.

Gusentine, Stephen, and Marybelle C. Keim. "The Learning Styles of Community College Art Students." *Community College Review* 24/3 (1996): 17-26.

Hamkins, G. "Motivation and Individual Learning Styles." *Engineering Education* 64 (1974): 408-11.

Henson, Robert K., and Dae-Yeop Hwang. "Variability and Prediction of Measurement Error in Kolb's Learning Style Inventory Scores: A Reliability Generalization Study." *Educational and Psychological Measurement* 62 (2002): 712-27

Hiemstra, Roger, and Burton Sisco. *Individualized Instruction*. San Francisco, CA: Jossey-Bass, 1990.

Hinton, Samuel. "The Learning Style Preference of Students in Graduate School," paper presented at the Annual Meeting of the Mid-South Educational Research Association, Knoxville, TN, November 11, 1992. ED 354807.

Hogan, R. Craig, and David W. Champagne. *Personality Style Indicator*, psychometric instrument, published privately by the authors.

James, William. *The Principles of Psychology*. New York: Holt, Rinehart, and Winston, 1890.

Jung, Carl. *Psychological Types*. Translated by R. F. C. Hull. Princeton, NJ: Princeton University Press, 1977.

Kadel, Stephanie. *Problem-Centered Learning in Mathematics and Science*. Washington, DC: Office of Educational Research and Improvement, 1992. ED 342681.

Kolb, David A. *Experiential Learning; Experience as the Source of Learning and Development*. Englewood Cliffs, NJ: Prentice Hall, 1984.

_____. *Learning Style Inventory*, psychometric instrument, distributed by McBer & Company.

Kostka, Stefan, and Dorothy Payne. *Tonal Harmony with an Introduction to Twentieth-Century Music*, 5th ed. New York: McGraw-Hill, 2004.

McCarthy, B. *The 4Mat System: Teaching Learning Styles with Right/Left Mode Techniques*. Barrington, IL: Excel Inc., 1985.

Merritt, S. L., and J. C. Marshall. "Reliability and Construct Validity of Ipsative and Normative Forms of the Learning Style Inventory." *Educational and Psychological Measurement*. 24 (1984): 463-72.

Messick, Samuel, ed. *Individuality in Learning*. San Francisco, CA: Jossey-Bass, 1976.

Miglietti, Cynthia L., and C. Carney Strange. "Learning Styles, Classroom Environment Preferences, Teaching Styles, and Remedial Course Outcomes for Under prepared Adults at a Two-Year College." *Community College Review* 26/1 (1998): 1-19.

Myers, Isabel, and Katherine C. Briggs. *Myers-Briggs Type Indicator*, psychometric instrument, distributed by Consulting Psychologists Press.

National Association of Secondary School Principals. "Learning Styles: Key to Improving Schools and Student Achievement." *Curriculum Report* 18 (1989).

Riding, R. J., and D. J. Boardman. "The Relationship Between Sex and Learning Style and Graphicacy in 14-year-old Children." *Educational Review* 35 (1983): 69-79.

Riemenschneider, Albert, ed. *371 Harmonized Chorales and 69 Chorale Melodies with Figured Bass by Johann Sebastian Bach*. New York: G. Schirmer, 1941.

Schmeck, Robert R. "Learning Styles of College Students." In *Individual Differences in Cognition*, ed. Ronna F. Dillon and Robert R. Schmeck, 233-79. New York: Academic Press, 1983.

Sewall, T. J. *The Measurement of Learning Style: A Critique of Four Assessment Tools*. Washington, DC: U.S. Educational Resources Information Center, 1986. ED 267247.

Shakespeare, William. *A Midsummer Night's Dream*. New Cambridge Shakespeare Edition. Cambridge: Cambridge University Press, 2003.

Smith, Donna M., and David A. Kolb. *The User's Guide for the Learning Style Inventory: A Manual for Teachers and Trainers*. Boston, MA: McBer & Company, 1986.

Tyler, Leona. *Individuality*. San Francisco, CA: Jossey-Bass, 1978.





The Teaching of Harmony and Composition in the French Conservatoire in the Nineteenth Century: the Importance and Influence of Reicha and Fétis

Gloria Toplis

In 1818 Antoine Reicha was appointed teacher of counterpoint at the École Royale de Musique et de Déclamation. He was joined in 1821 by F-J. Fétis. At the time of their appointment each of these two composers brought to the École an established reputation as a teacher and a philosophy of teaching well considered, though the ideas and the musical repertoire which each called upon in his teaching differed from that of the other and of the teachers of composition of longstanding whom they joined at the École.

Reicha and Fétis are rarely discussed in the same context. Fétis, from Belgium, a former pupil of the Paris Conservatoire¹ who returned there as a teacher after working as an organist and schoolteacher elsewhere in France, was thoroughly steeped in the theoretical tradition of that country; the older and more travelled Reicha, educated in Bonn alongside his contemporary Beethoven and acquainted with Haydn during his years in Vienna, had direct experience of the musical traditions not only of Paris, but also of these two other important European centers. Reicha's compositions have survived alongside his theoretical writings whereas those of Fétis have been largely forgotten. His legacy consists of a wealth of critical writings and essays in musical history not confined to the music of western Europe, a comprehensive biographical dictionary, and an essay which is generally regarded as the first to document the history of harmonic theory. Reicha's writings on harmony and composition are characterised by an absence of dogma and a practical approach; those of Fétis owe even the ordering of their content to the theory of tonal relationships which their author developed.

The presence of these two teachers at the École led to a division of the populace into two camps—one loyal to Reicha and one to Fétis. While dispute over the retention of the modal system in the

¹In 1816 the École Royale de Musique et de Déclamation succeeded the Conservatoire de Musique, founded in 1795.

study of counterpoint constituted one of the factors which led to this polarization of opinion, it was undoubtedly fueled by the jealousy towards Reicha exercised by Cherubini, teacher of composition throughout the years of the Conservatoire and director of the École from 1822². It is important that the existence of this well-documented rift, involving conflict between the traditional teaching of Fétis and the modernizing of a musical language by Reicha, not be allowed to mask the similarities of purpose which are displayed in the pedagogical writings of the two.

Despite differences in teaching approach, personality, and vocation, both Reicha and Fétis possessed attributes characteristic of men of their age: both were well read in philosophy and mathematics; they were so devoted to the exercise of logic and order that they produced teaching manuals in which learning in music was sequenced to an unprecedented degree; they were prepared to identify with a new intellectual order to the extent that they broke the fetters of obsolete theory. Such qualities enabled them to fulfil a seminal role in a France which demanded fast and effective education for its populace, and it is not surprising that the theory and pedagogy which they separately developed served as the foundation for a generation of teachers which followed them. It is in the context of the developing pedagogy of the French conservatoire that this article examines the writings of Reicha and Fétis intended for the teaching of harmony and some of the elementary texts written by their successors which they directly influence.

By the time the two composers arrived at the École, pedagogic clarity in the teaching of harmony was already well established through the use of Catel's *Traité d'Harmonie*. Since the founding of the Conservatoire in 1795, only authorized teaching materials had been allowed in its classes; in his *Traité Complet de la Théorie et de la Pratique de l'Harmonie* Fétis testifies that Catel's text—the first official publication for the teaching of composition which gained approval in 1802—quickly achieved popularity, and that it remained in use up until 1815 (Fétis, 1844: 244, 246).³ As the content and layout of the *Traité* influenced Reicha and Fétis, I will refer to it later within the

²For accounts of the Conservatoire rivalries see Wangermée, 1951: 34-36 and Emmanuel, 1937: 48.

³Reicha's *Cours de Composition Musicale ou Traité Complet et Raisonné d'Harmonie Pratique* first appeared around the following year, 1816.

context of their writings. For present purposes, let us note that the spirit of pedagogical clarity in which Catel's work was conceived had suited well the educational ideals of post-revolutionary France; the work had fulfilled admirably the requirement for precision and simplicity contained in the brief followed by the commission which approved it (see Catel, 1802: Preface; Pierre, 1900: 96, document of 29th. August 1794).

A concern for effective pedagogy is demonstrated in the writings of A.E.M Grétry, also published during the early years of the Conservatoire. Grétry advocated a teaching method which did not contradict the natural musical inclinations of the pupil; aware of the need to motivate his pupils, he often used tunes already known to them as material for exercises (Grétry, 1797 vol. 3: 385-392). The title of his *Méthode Simple pour Apprendre à Préluder en Peu de Temps avec toutes les Ressources de l'Harmonie* (1802) foreshadows that of Fétis' *Méthode Élémentaire et Abrégée d'Harmonie et d'Accompagnement suivie d'exercices ... par l'étude desquels les Amateurs pourront arriver promptement à accompagner la basse chiffrée et la partition* (1823). The *raison d'être* of these two volumes—to lead the reader along the most direct path to successful practical employment of harmony—was to become that of scores of elementary textbooks which appeared in France subsequent to the publication of Fétis' several instruction manuals for the use of students and amateurs.

With regard to elementary teaching, Fétis held views essentially similar to those of the older Grétry: he advocated using popular songs for music reading and harmonization so that a pupil might be led from the known to the unknown; the elementary teaching methods which he commended were those which contained "the least precepts and the most exercises, because one learns quicker and better by practice than by reflection". When he wrote that the place of analysis was to reinforce knowledge already experienced [*la méthode d'analyse n'est bonne que pour résumer de connaissances acquises*] he echoed the sentiments of Grétry, who in his *memoires* pointed out that the great theorists were composers before they wrote their treatises, and warned of what he called the "misuse of science," the danger of allowing respect for harmonic theory [*science harmonique*] to overshadow musical language to the extent that the integrity of the latter is destroyed (Fétis, 1830: 36; Grétry, 1797 vol. 3: 194-196).

The words of Fétis quoted above are from an article in his *Revue Musicale* penned in August 1830, a year in which France was committing itself to a huge expansion in the provision of free education for its populace. In this article Fétis presents his vision of a music education to complement the teaching of literacy and numeracy to all. A freelance musician and teacher practised in the teaching of his subject at elementary as well as advanced levels, Fétis was deeply concerned with both the nature of music education and the dissemination of musical knowledge; alongside discourse on the aesthetics and theory of music, these matters are given ample coverage in his *Revue Musicale* and are often treated in articles he wrote for the *Revue et Gazette Musicale de Paris*.⁴ His publications include elementary instruction manuals as well as treatises designed for students at advanced stages of the study of composition; in this respect his output differs from that of Reicha, who found no cause to write a book on the rudiments of music. At the close of his review of the second edition of Reicha's *Traité de Mélodie* for *Revue Musicale*, when countering the suggestion that a more talented composer of melodies than Reicha might have been better qualified to write such a volume, Fétis demonstrates a true appreciation of the gifted teacher and reveals his premise that a necessary quality of the teacher of composition is the ability to analyze the practice of composition: "the genius who is always occupied with producing has not the requisite qualities for analyzing the mechanism of his production...the ability to analyze is a rather rare gift of nature and is not the inevitable corollary of other qualities of the mind" (Fétis, 1832: 307).

For Fétis it was essential not only to analyze the artifact—a practice which undoubtedly enabled him to realize his ideal of teaching through the provision of exercises and examples—but also to undertake the exhaustive evaluation of compositional theories which led him to the formulation of his own. It has been said that he had read over eight hundred tracts on music (Arlin, 1972/3: 114). His reading was not confined to the area of music theory: his knowledge of philosophy was extensive, and he had studied mathematics for several years in the hope that this would assist him to gain insight into theory (Nichols, 1972/3: 122). Underlying

⁴The *Revue Musicale* was Fétis's own journal, begun in 1827. In 1835 it was subsumed into the *Gazette Musicale de Paris*, for which Fétis was one of several distinguished editors.

his statement that the object of his *Traité Complet* is “to expose both the processes [*procédés*] of art and the facts of science” (1844: 4) is the belief that the functions of creator and theorist are distinct. These functions are defined at the opening of the work:

To organize sounds into relationships which develop sensations and ideas more or less animated...exalted...pleasing, more or less capable of realizing the views of the artist, is the object of art; to discover the laws of these relationships, is that of science (1844: 1).

When Grétry spoke in his *Mémoires* of “science” he undoubtedly had in mind the mathematical proofs of harmonic relationships characteristic of eighteenth-century theory and Rameau’s rules of chord succession; he may well also have been thinking of the cumbersome lists of hypothetical chords produced for students of harmony to which he later referred as “antique scaffolding” and which he and Catel set out to simplify (Grétry, 1802: Preface; see also Catel, 1802: Preface). His publication of 1802, a teaching method for “preluding” (keyboard improvisation), embodies a tension between the inclusion and non-inclusion of the theory which had traditionally been taught in classes of composition in France: to render it accessible to the young amateur, all chord types are seen as emanating from either the *accord parfait* or the seventh chord, yet the *basse fondamentale* is retained as a validator of correct chord construction.⁵ Catel’s *Traité*, published in the same year, was a single volume in which theoretical exposition is integrated into a practical harmony. Mathematical demonstration of the origin of chords and chord classification are similarly simplified for the benefit of the pupil. Catel’s work can be distinguished from the manuals produced by his predecessors in France in that his material is conveyed through concise verbal explanations accompanied by examples of compositional practice substantial both in number and length.⁶ In the Preface to the third edition of his *Traité Complet*, Fétis compared the abstract systematising of Rameau to the empirical approach of Catel; neither satisfied his need for a coherent science which corroborated analysis of his art (Preface to the third edition of *Traité Complet* p. vi quoted in Wangermée, 1951: 47-48). Unable to

⁵In the *Institut National de Musique*, the precursor of the Conservatoire founded in 1793, composition was taught separately as theory and practice (see Pierre, 1900: 108-109).

⁶For a discussion of the harmony treatises in circulation in France during the years immediately preceding the adoption of that of Catel, see Geay, 1999.

embrace a theory divorced from practice, he invented a “science” which he claimed was “freed from hypotheses” (Fétis, 1844: 4). In his biography of Fétis, Wangermée has pointed out that the theory set out in the *Traité Complet* is very much a product of the Romantic Age in which it was conceived, since it constitutes essentially a “reflection on his art” (Wangermée, 1951: 47-48).

Fétis’ “science,” his theory of *tonalité*, has been given ample coverage in the course of discussions on music theory of the nineteenth century. To deal in depth with the theory, its antecedents, and the formulations—such as those of Schenker—to which it may be regarded as a forerunner, is not an object of this article; discussion will be confined to those of Fétis’ precepts which were transmitted either through his own pedagogy or through that of his followers.⁷ One of these precepts is that each degree of the major and minor scale performs a discrete function within the scale; a corollary is that the chord based on any particular scale degree as root has its own particular affective quality:

Each note of a scale, having a particular character and fulfilling a special function in music, is accompanied by a harmony analogous to this character and this function. The collection of the harmonies belonging to each degree of the scale determines the [*tonalité*] (Fétis, 1844: 3).

The tonic chord possesses the quality of absolute repose. Chords on the fourth, fifth and sixth degrees possess a secondary degree of repose in accordance with their use as the terminal chords at cadence points. The chord of the dominant seventh, possessing no sense of repose but rather a dissonant tritone, fulfills a crucial function—that of setting into relief the terminal chord of a cadence through the attraction exerted by the seventh degree of the scale for the note a semitone above and by the fourth degree for the note a semitone below in major (1844: 14-22, 37 and 251).

The role which Fétis assigned to the dominant seventh chord and his acknowledgement of a hierarchical order of cadence points provide clues to the sources of his analytical activity: the symmetrically-phrased operatic arias popular in the Paris of his day, and the Viennese symphonic and choral movements which exhibit periodicity of structure and in which dominant prolongations

⁷The origins of some of Fétis’ terms and concepts are traced in Simms, 1975.

form an essential component of the musical discourse. The same musical sources gave rise to the extensive pedagogical writings of Reicha, for whom it was as imperative to articulate the principles of phrase structure as it was to demonstrate harmonic relationships. Though Fétis does not allocate space in his writings on harmony to what Reicha calls “the theory of rhythm; that of points of repose or cadences...the science of periods and of their connection” (1814: 9), that he was aware of eighteenth-century writings on the musical period is demonstrated in the review of Reicha’s *Traité de Mélodie* previously cited, and his ongoing attempt to define rhythm and meter is exemplified in articles for *Revue et Gazette Musicale*.⁸ Such concerns inevitably played a part in the formulation of his theory of *tonalité*.

As the distances between scale degrees constitute the building-blocks of both melody and harmony, the definition of each type of interval is essential to Fétis; as chords possess affective qualities, so do intervals. This is why a relatively long section at the beginning of the *Traité* is devoted not only to naming intervals—a procedure deemed to be necessary by most nineteenth-century writers of textbooks on musical rudiments—but also to describing their individual characteristics (1844: 5-22). In this, Fétis follows his teacher, Rey, whose *Exposition* begins with a treatment of the various intervals which is not a mere taxonomy but emphasizes the difference in quality between consonant and dissonant intervals, and in this context speaks of the resolution of dissonance. Later, demonstrating how chords are connected, Rey states that leading notes attract [*appellent*] tonics and the fourth degree of the scale the third (Rey, c.1807: 6-22, 31).⁹ Fétis begins his *Méthode Élémentaire* with a similar account of what he calls the “theory” of intervals, at the end of which he states that the pleasurable effect produced by a series of consonant intervals and the converse effect of dissonant intervals is felt more or less acutely to the extent that the ear is trained to accept these effects. A sense of harmony is similarly acquired through the practice of accompaniment from figured

⁸See, for example, his *Philosophie de la Musique* serialised during 21st. March-11th. April 1852.

⁹Fétis labels the intervals of the augmented fourth and diminished fifth *consonnances appellatives* (see especially 1844: 8-9). Simms traces the origin of the term to the writings of Choron and Catel. It is, however, likely that in speaking of the tritone in this way Fétis simply followed his own teacher, Rey.

bass (1823: 7-8). In other words, the ear is to accustom itself to the conventions of a musical language in which particular sound combinations produce particular effects on the listener who, if not possessed with innate ability to appreciate them, must be trained to do so. The same principle underlies the teaching of Reicha, who spoke of this musical language as a “code” (see below, discussion of Reicha, 1816-18 p.7 footnote).

Though Fétis’ *Méthode Élémentaire* predates his *Traité*, it is built soundly on principles which its author was to elaborate in his later work. The pupil is to learn a tonal language through correct practice of it; the theory of *tonalité*, being founded on chord usage rather than on abstract rules, explains correct practice. Fétis had only to order the contents of his manual in a sequential manner and the pupil would learn quickly and effectively—in five or six months, he suggests (1823: 26). In this respect he had a precedent in the publications of Catel and Grétry, which teach their reader the simplest triadic combinations before introducing chords of greater complexity that require careful resolution. Fétis, however, goes a step further than his predecessors, and infinitely further than his own teacher, Rey, who in his *Exposition* introduces complex chords of the ninth and eleventh before explaining correct handling of the dominant seventh. He teaches only those chords *in common usage*. Whereas Catel presents the *accord parfait* on all degrees of the scale (Catel, 1802: 10), Fétis presents it on the tonic, fourth, fifth and sixth degrees where it will produce the effect of repose, and its second inversion on bass notes tonic and dominant only because it is most often used in these contexts.

The name Antoine Reicha has perhaps been cited as often in connection with the most famous of his pupils, Berlioz, Gounod, Franck, and Liszt, as with his music and theoretical writings. His classes at the Conservatoire may be compared with those of Messiaen in the mid-twentieth century; they attracted colleagues as well as students, and their influence extended through his pupils to composers of subsequent generations. Soon after his arrival in Paris, established musicians such as the composer and violinist J. P. Rode, the oboist G. Vogt and the violinist F. A. Habeneck took lessons with him (Vysloulil, 1970: 30 and footnote 37; Emmanuel, 1937: 36-37). Reicha’s compositional techniques have been identified in the works of Berlioz, and it has been pointed out that his conception of musical form underpinned the theoretical writings of d’Indy written as late as 1902 (Ramaut, 1999: 333-4; 332 footnote 5). Some

of Reicha's distinguished pupils penned testimonies to his teaching which demonstrate that it fulfilled the ideals of the Conservatoire teachers of the early nineteenth century. Berlioz, who portrayed Reicha as a conscientious teacher dedicated to facilitating the progress of his students and described his teaching of counterpoint as remarkable in its clarity, claimed that Reicha taught him a lot in a short time and using few words (Berlioz, 1870: 45-46); Adolphe Adam wrote in his memoirs that Reicha covered as much counterpoint in one year as did his colleague, Eler, in five (Adam, 1857, quoted in Emmanuel, 1937: 31).

Though Reicha was born in Prague in 1770, he relinquished his Czech language and culture as early as his eleventh year. It was while playing in the orchestra of the Elector of Cologne in Bonn alongside Beethoven, his direct contemporary, that he developed a passion for composing and began reading mathematics, literature, and philosophy. In his autobiography, Reicha claimed at this time to have studied the treatises on composition available in Germany. Referring to his studies at the University of Bonn, he spoke particularly of his progress in algebra, to which he attributed that fostering in his intellect of a propensity for the analytical which contributed to his later understanding of composition and the development of his pedagogy. He also mentioned scrutiny of the works of Handel, Haydn and Mozart (Vysloulil, 1970: 14,16). Reading science, mathematics, and philosophy was to constitute Reicha's chief diversion from the study, teaching, and composition of music through the remainder of his life and catalyzed the logical sequencing of ideas to which he committed himself when compiling his theoretical writings. An extract from his autobiography tells of the concerns which occupied him in Hamburg during the last few years of the eighteenth century:

... I began seriously to reflect on composition, on its nature, the way in which it is taught and the real ease with which its language can be wrongly used [*la grande facilité d'abuser de ses moyens*]. The study of algebra rendered my intellect analytical; I took a dislike to everything which was not clear. In this category were included all the works which I had read on harmony and composition. On this subject I wanted to find a rational system which could as far as possible satisfy the intellect. Over at least twenty years

I applied myself to this with the greatest diligence. I entirely reformed the manner of teaching my art and I managed to save my students years, it being this which established my reputation as one of the best teachers of composition in Europe...(Vysloulil, 1970: 18)

In 1799, while visiting Paris, Reicha made the acquaintance of several distinguished French musicians who were associated with the Conservatoire. Amongst these was Grétry and also Gossec, an Inspector of the Conservatoire and member of the commission responsible for the approval of Catel's *Traite*.¹⁰ It is inconceivable that Reicha did not at this time speak with these officials of the pedagogic issues which were occupying their thoughts as well as his own: the achievement of a new pedagogy founded on rational theory, displaying the utmost clarity of presentation and capable of facilitating learning in a minimum amount of time.

In 1808, after several years living in Vienna where he made the acquaintance of Haydn, Reicha returned to Paris to settle among musicians he regarded as his friends and with whom he felt a natural affinity.¹¹ It is undeniable that Reicha helped Parisians understand the Viennese classical tradition; certainly the Viennese style is encapsulated and amply illustrated in his theoretical writings, especially in the *Traité de Haute Composition Musicale* (1824) where the treatment of thematic material, for example, relates to the sonata-form movements of Haydn, Mozart and their contemporaries. The *Traité de Mélodie* (1814), however, contains an abundance of models from France and Italy, and in his theoretical writings Reicha did not neglect the music of former epochs. His biographer, Maurice Emmanuel, has pointed out that, between 1800 and 1815, the symphonies of Haydn and Mozart occupied a central place in the concerts given by the orchestra of the Conservatoire, which also performed three of Beethoven's symphonies during the same period. One of the factors that contributed to the success of

¹⁰Gossec's own treatise on harmony, which dates from the early 1790s, is discussed in Geay, 1999.

¹¹Ramaut sees Reicha as occupying a key role in the musical society of that city: he was received into a society imbued with the educational ideals of the French revolution; his "solid intellectual personality coupled with a brilliant precision of writing" satisfied the French musical society of the Restoration (Ramaut, 1999: 335).

Reicha's teaching must have been its relevance to a style of music to which his pupils were attracted and to which they had already been amply exposed. At a time when, as Emmanuel alleges, teaching of composition favored the style of popular French opera, Reicha's students would have been deeply impressed by his eclecticism, would have devoured hungrily his examples taken from the music of, amongst others, Bach—not particularly favored by others of the Conservatoire teachers of composition (Emmanuel, 1937: 33-35).

Though Reicha thought of his *Traité de Mélodie* (1814), the *Cours de Composition Musicale ou Traité Complet et Raisonné d'Harmonie Pratique* (1816-18) and the *Traité de Haute Composition Musicale* (1824) together as representing his teaching of composition, the *Cours de Composition Musicale* is a self-contained manual comparable, for example, with Koch's *Versuch einer Anleitung zur Composition* (1782-93) and sufficiently comprehensive to treat all areas of the subject thought to be necessary in a course of composition in Reicha's day. It can be distinguished from the treatises on composition of Reicha's predecessors on account of its examples, which in their length—some are complete pieces—and in the range of textures represented, far exceed those in any of the theoretical writings which its author is likely to have encountered during his formative years.

Reicha claimed that the popularity of the *Cours* was due "to the clarity with which the rules are presented, to the number of new subjects, important to make known, which were omitted in all preceding treatises on harmony, to the order in which the content is presented, and finally to the anticipated arguments which have necessitated the discussions which accompany each chapter" (Vysloulil, 1970: 30). To this list he might have added the commitment which he expressed in the work's preface to the treatment of modern music. Though in this connection Reicha criticized other published works on harmony and composition, he did not in the *Cours* refer to any of these by name. In the *Traité de Mélodie* he referred to the teaching of harmony of the German theorists Marpurg and Kirnberger, and of Albrechtsberger whom he encountered in Vienna. Though he made no reference to the work of his French contemporaries, however, the influence of Catel's *Traité* on Reicha's *Cours* cannot be overlooked.

Reicha's opinion on the usefulness of traditional theory is very similar to that of Catel, and is summarized in the following statement, in which the theory of vibrating bodies favoured by Rameau and his followers is referred to as Acoustics [*l'Acoustique*]:

Practical composition goes infinitely further than Acoustics; the first is concerned with an infinite quantity of possibilities [*moyens*] which the second does not explain at all and cannot so much as explain; it follows that the rules of practical composition form a code which, simultaneously, our auditory organ, feeling, intellect and the experience of several centuries have ratified; it is because of this that the treatises on composition do not agree on Acoustics which belongs rather to physics than to music (Reicha, 1816-18 p. 7 footnote).

Later, he likens arguments over the origin of chords to those of the etymologists over the origin of words; these may as well be abandoned if the usage of the chords or words is understood. Reicha's set of thirteen chords from which all others are derived is highly reminiscent of Catel's set of eight which make up *harmonie simple*, and is placed correspondingly at the outset of the *Cours*, preceded only by a few preliminaries. Of the thirteen chords, nine are formed from the resources contained within the major and minor scales, and the remaining four by chromatic alteration of these.¹² After stating that this fund of available harmonies may be supplemented by inversions of the same chords, with characteristic realism Reicha provides a list of those chords—in root position or in inversion—which are actually in common usage. He uses the *basse fondamentale* rather in the manner of Grétry, as a validator of correct root progressions, especially in the case of resolution of dissonant chords but concedes that there are exceptions to his rules where “nature requires us to observe other conditions” (1816-18 p. 9 footnote).

¹²It was the inconsistency demonstrated in Reicha's compilation of the thirteen “prime” chords which incurred the scorn of Fétis toward the theory of his colleague.

Reicha's chief legacies in the *Cours de Composition Musicale* can best be understood if the *Traité de Mélodie* is considered alongside it. This remarkable volume—not the first to set out a theory of rhythm within melody—is amply illustrated with examples from the repertoire which Reicha's students would have played and heard. Using motifs, phrases and periods, its author specifies model structures built on the principle of symmetry. Such an organization of the musical period, reliant on “the power of the rhythm” (Reicha, 1814: 14) is associated with a hierarchy of cadence points which distinguish the individual units of melody from another. It was thus necessary that the author's subsequent work on harmony, the *Cours de Composition*, appropriate cadences to their position within the phrase or the period; mere lists of the available cadences typical of Catel and his predecessors were inadequate. In the *Cours*, Reicha teaches that the end of a period is defined by a perfect cadence, both chords in root position; a phrase of which the sense is incomplete can end in an imperfect or an interrupted cadence. Chords belonging to cadences and other harmonies are provided with a context: chords in inversion, for example, may be used to good effect during the course of a phrase, and especially after intermediate cadences (Reicha, 1816-18: 13-14). Moreover, the same chord may appear in different contexts, as in the passage in Figure 1. This example, typical of Reicha's propensity to write complete pieces in illustration of a principle, shows the diminished chord fulfilling different functions: within cadence formulae completely different from one another, as part of a progression effecting a modulation, and in the course of a chord sequence [*marche régulière*].

Formule de cadence parfaite

Formule de demi-cadence

Marche régulière en La

Marche régulière

en Si mineur

Modulation de

Si mineur en Fa mineur

L'emploi de l'accord diminué est partout marqué d'une (x)

Figure 1. Reicha, *Cours de Composition Musicale*, 1816-18: 33

Allusions to the language of rhetoric permeate Reicha's writings, particularly the *Traité de Mélodie*. In the *Cours* Reicha set out to provide an exposé of the music of his day as if it were a language; he speaks of this "modern music" in the Preface when he says that "in [this] one must avoid frigid calculations and, on the contrary, only place ideas, feeling, taste, effects, melody, variety, realistic representation in imitative music etc." (Reicha, 1816-18: Preface). Consequently, he goes further than to define harmonic function; on occasions he suggests the expressive significance of a harmonic progression. For example, interrupted cadences not only punctuate the musical discourse, they maintain the listener's attention and give energy to the phrase which follows (Reicha, 1816-18: 14). Not all dissonant chords have the same effect. The diminished chord shown in Figure 1 has a "soft" effect, in comparison with which the second chord of Figure 2—containing a harsh major seventh—sounds hard. Reicha says that the charm of the sequence in Figure 2 lies in the progressive reduction in dissonance which takes place until the tonic chord is reached: the hard-sounding major seventh chord (m. 2) resolves onto a seventh chord containing a diminished fifth and minor seventh, of which the effect is "softer" (bar 3). Through the dominant seventh (m. 4), the sequence ends with a point of repose on the tonic.

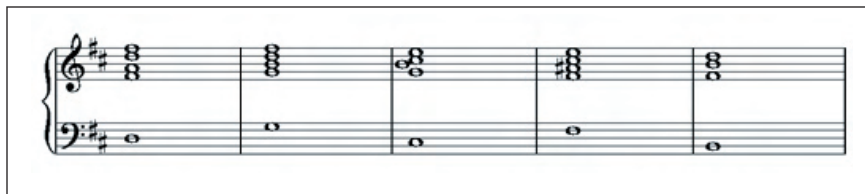


Figure 2. Reicha, *Cours de Composition Musicale*, 1816-18: 38

The *Cours de Composition Musicale* is divided into three sections. The first and shortest presents the available harmonic resources, and the third is largely concerned with counterpoint and instrumentation. The second and longest section provides a very thorough exposition of the ways in which harmonies are treated within a variety of textures, and of non-essential notes of all kinds. What is dealt with here is, in fact, all which Schenker was later to define as constituting the foreground surface of music. In this respect, Reicha's *Cours* may again be compared with Catel's

Traité which, in its large section devoted to elaboration of *harmonie simple* and its examples of bass progressions which are successively elaborated, pays considerable attention to the composing-out of basic harmonic structures (Catel, 1802: 19-33, 41-52).

The theoretical preoccupations of Fétis and Reicha, as well as the commitment to effective pedagogy well established at the Conservatoire, are evident in the elementary texts of two writers of the subsequent generation: J. G. Kastner and H.-R. Colet. Kastner, holder of a degree in philosophy from his native city of Strasbourg, was, like Reicha, from an early age an avid reader of theoretical texts on music. In his *Grammaire Musicale*, approved for use in the Conservatoire in 1837, he wrote that he had achieved continuity and progression [*enchaînement et progression*] in the ordering of content—a lifelong preoccupation of Reicha, whom he met in the latter's last year of life (Kastner, 1837: Preface p. 3). Colet, teacher of harmony and counterpoint at the Conservatoire where he had been a pupil of Reicha, took great pains to treat each area of his subject as thoroughly as possible before taking his reader on to the next stage of learning. His *Conseils à mes Élèves, ou Traité élémentaire d'harmonie* (1847) is remarkable for its aural basis; its author demands that the student not only play on the keyboard and write scale degrees, intervals and chords but also master their aural recognition; a teacher using his text must possess not only a sound understanding but also the ability to improvise fluently.

Kastner shares Reicha's concern with the function of harmony within the musical phrase. In book 3 of his *Grammaire*, that which deals with harmony, he introduces the concept of musical discourse being divided by means of modulations and cadence points into sections [*coupes*], phrases and periods, before embarking upon any detailed explanation of chords and their use (1837: 146-148). In the Preface to the volume, he recommends Reicha's *Traité de Mélodie*. Though to a modern reader Kastner's text appears obscure on account of its adherence to eighteenth-century concepts of fifth-related chord successions, descriptions of the affective qualities of chords in relation to the phrase betray a nineteenth-century viewpoint. Consonant triads are chords of repose; in inversion they do not possess the same degree of "energy" nor, conversely, the same degree of "calm" as in root position. The minor form of a plagal cadence used in a major passage can "temper the energy"; varying cadence chords and their positions produces effects which offset the definitive quality of a final cadence (1837: 148-154, 204-207).

That Kastner and Colet continued the Conservatoire tradition of harmony teaching begun by Catel is evident from the priority assigned in the texts discussed above to contrapuntal elaboration of harmony. Kastner introduces unessential notes of all kinds and suspensions even before dealing with the chord of the dominant seventh. In his discussion of suspensions, the use of the term *accord simple* for the chord which the suspension decorates is derived from Catel's *harmonie simple*.¹³ When he writes a passage to illustrate the use of the dominant seventh, he follows it with another in which notes are held over from one chord to the next as suspensions—a procedure reminiscent of that adopted by Catel in his *Traité*, whereby an example which uses straightforward harmony and homophonic texture is succeeded by others in which the same harmonies are subjected to progressively complex elaboration. (Kastner, 1837: 176, 182; see, for example, Catel, 1802: 39-40). Colet, like Kastner, teaches unessential notes—though not suspensions—before dealing with the dominant seventh chord. Throughout the discussion on chords in the *Conseils*, the student is taught to consider them as a source of melody as well as of harmony, to create melodies from individual chords and from chord progressions. It is in this context that Colet uses Reicha's term *dessin mélodique*, whereas Kastner, like Reicha on occasions, speaks of a *figure* (Colet, 1847: 65; Kastner, 1837: 161).

Colet shares Kastner's concern to explain the hierarchy of cadence-points which defines the phrasing of a melody; interestingly, he recommends that the student find examples through analyzing melodies written for the theater (1847: 96-99). His teaching, like that of Reicha, is founded on music popular in his day. The theory which underlies it bears the unmistakable hallmarks of the theory of Fétis: the importance assigned to the tritone formed between the fourth and seventh degrees of the scale in defining *tonalité*, and to the functions of the degrees of the scale relative to one another. When Colet speaks in the Preface to his *Conseils* of the necessity of knowing the "theory of intervals" he echoes the words of Fétis at the end of the Introduction to his *Méthode*. He goes infinitely further than Fétis, however, both in the development of such a theory and

¹³In Catel's theory, *harmonie simple* includes all chords which do not require preparation. *Harmonie composée* is derived from this by the prolongation of notes from one chord into the next. Kastner shows awareness of this theory when he states at the end of his treatment of suspensions that this section leads naturally to the discussion of dissonant seventh chords.

in its presentation, and fifty-nine pages out of a total two hundred in this elementary text on harmony are devoted to explaining how intervals both sound and function.

Colet attributes to each interval one or more affective qualities: the sixth conveys gentleness; a succession of thirds is pretty; the augmented sixth is dramatic; the tritone is very expressive; and the diminished seventh may either be sad and calm, or spirited and passionate. The student must learn to recognize each interval aurally, not in isolation but within the context of a key, not only because intervals may be distinguished from one another accurately only when the key is named--an augmented sixth from a minor seventh, for example, but also because intervals of the same name taken on different scale degrees both sound different and have different functions. The augmented fourth formed by the sixth degree of a minor scale and the second sounding above it is different from that formed between fourth degree and seventh which defines the key; the minor sixth formed between G and E♭ sounds melancholy when heard in the key of C minor, joyful or brilliant in the key of E♭ major.

Colet's classification of intervals by quality is much more than the invention of a system of prompts to aid the student in their identification; it is an attempt to codify the elements of tonal language. Since chords are made up of intervals, Colet reasons that, if the student knows how to handle the latter, he can go on to deal correctly with the former. The affective power of chords, which Reicha had begun to identify, is transferred to their constituent intervals, and the system of *tonalité* defined by Fétis provides the domain within which they function.

Two elementary instruction manuals which appeared during the 1860s allot considerable space to cadences and to the division of melody into phrases and periods. P. E. Wolff's *Cours Élémentaire Pratique et Théorique à l'usage des Pianistes* (1867), reminiscent of manuals on the art of preluding from the turn of the century in its provision of chord progressions of increasing complexity which the student is to learn in all keys at the keyboard, contains a very thorough coverage of unessential notes reminiscent of that in Reicha's *Cours*. B. Rahn's *L'Harmonie Popularisée* (1865-6), an early correspondence course first published as a series of articles under the heading *Journal de Composition Musicale*, claims in its extended title to teach the student to *Preluder, Improviser, Composer, Transposer, Accompanier, Analyser*. A remarkable and barely surpassed example

of strategic planning, the course teaches a musical language in easy stages—basic harmony alongside accompaniment styles and melodic elaboration; motivic development alongside phrase structure. The author acknowledges that the theory of Fétis underpins his teaching of harmony. To render it accessible to his readers, he couches it in prose as lightweight as that in the following passage:

It is necessary correctly to account for the role which is played by chords within the scale. The seven chords belonging to one scale form...a little society, a little monarchy, of which the tonic chord is the supreme chief. This supreme chief, concerting with his first minister, the chord of the dominant seventh, governs his subjects, his subordinates... the five other chords of the scale (Rahn, 1865-6: 76).

The need for an effective pedagogy to cater to the new social order which established itself in France after the revolution provided the impetus for a rapid growth of teaching methodologies. By the mid-nineteenth century the logical ordering of content and clarity of explanation which Reicha and Fétis had demonstrated in their writing was being widely emulated. The followers of these two chose to transmit both Reicha's concern for the function of harmonies within the phrase, and for the inter-relationship of melody, and harmony and the theoretical assumptions of Fétis—either because these were appropriate to the musical style which they sought to convey, or because, being concerned more to provide effective teaching than to reinvent theory, they were content to borrow from Conservatoire teachers whose reputation was well established.

The teachers of the early decades of the Conservatoire were faced with devising courses in composition which would be accessible to practical musicians who might never become theoreticians, based on theory which would stand up to scrutiny in the hands of scholars. Inheriting hypothesis and pedagogy related to modal counterpoint, an obsolete musical language, they devised both a theory which dealt with the music of the day and instruction which conveyed as clearly as possible the principles which governed its construction. Over the past three decades teachers of music have needed to address the challenge of catering for students of differing aspirations and needs within the same composition class. They have taught aspiring conservatory students alongside band players and those whose interest is in criticism and philosophical

speculation. Like Reicha and Fétis, they have done so in a climate in which a well-worked musical language—that of functional tonality—has been supplanted by new kinds of musical organisation, and in dealing with the plethora of musical languages which are represented in the music of today they have taken up a challenge which most probably outweighs that taken up by Reicha and Fétis, albeit in a society which has rejected dogma more easily than that of the nineteenth century.

Catel's and Reicha's publications are distinguished from those of their eighteenth-century predecessors by substantial inclusion of musical examples. Reicha himself wrote many, but also called upon the works of a variety of composers of both his own and previous generations. His teaching depended not only upon theoretical explanation but also, heavily, upon the provision of models of compositional practice. This "exemplar" approach to compositional teaching survived in the teachings of d'Indy at the turn of the century¹⁴ and formed the basis of some of the better teaching of composition in England during the same period such as that of Stanford.¹⁵ It continues to be favored today at all levels of teaching. It forms the basis of much of the material for teachers in UK schools published to support the teaching of the current National Curriculum for Music for England, and is generally regarded by British school inspectors as representing highly effective practice. Popular textbooks for the teaching of tonal harmony in universities such as the Kostka and Payne *Tonal Harmony* (2000) published in the USA, and Nicholas Cook's *Analysis Through Composition* (1996) published in the UK¹⁶ rely heavily on models from appropriate musical literature.

Nowadays in universities in the UK, as in the USA, tonal theory is commonly addressed through Schenker studies, for which there is no shortage of excellent texts.¹⁷ Though most of these introduce Schenker's theories as a reduction process, Schenkerian

¹⁴D'Indy's *Cours de Composition Musicale* began life as a series of classes delivered at the Conservatoire at the end of the nineteenth century.

¹⁵Charles Villiers Stanford's *Musical Composition* was published in 1911.

¹⁶Cook's text teaches tonal harmony through exercises of the kind which were worked by students during the Classical period.

¹⁷Among these may be mentioned Allen Cadwallader and David Gagné (1998) *Analysis of Tonal Music: A Schenkerian Approach*. New York and Oxford: Oxford University Press.

principles can easily be demonstrated through provision of skeleton progressions (both contrapuntal and harmonic) which may be elaborated and worked out by a student. Such a process is akin to the practice of preluding which formed part of the curriculum for Practical Harmony during the early days of the Conservatoire, and if we concede that the fundamental harmonies as defined by Schenker are essentially those defined by Fétis, we can understand music education today as part of a continuum in which a flourish of activity in the Paris Conservatoire in the early nineteenth century acted as an important catalyst.

REFERENCES

- Arlin, M. (1972-3) "Fétis' Contribution to Practical and Historical Music Theory," *Revue Belge de Musicologie* 26/27: 106-115.
- Catel, C. (1802) *Traité d'Harmonie*. Paris: Imprimerie du Conservatoire de Musique.
- Colet, H. R. (1847) *Conseils à mes Élèves, ou Traité élémentaire d'harmonie servant d'introduction à la Panharmonie Musicale*. Paris: O. Legoux.
- Cook, N. (1996) *Analysis through Composition: principles of the classical style*. Oxford: Oxford University Press.
- Emmanuel, M. (1937) *Antoine Reicha*. Paris: Renouard.
- Fétis, F-J. (1823) *Méthode Élémentaire et Abrégée d'Harmonie et d'Accompagnement suivie d'exercices gradués et dans tous le tons, par l'étude desquels les amateurs pourront arriver promptement à accompagner la basse chiffrée et la partition*. Paris: P. H. Petit.
- Fétis, F-J. (1830) "Des Avantages de la Liberté d'Enseignement Appliquée à la Musique," *Revue Musicale* 2/3: 33-39, article of August 22.
- Fétis, F-J. (1832) "Littérature Musicale" [review of second edition of Reicha's *Traité de Mélodie*], *Revue Musicale* year 6, no. 39: 305-307.
- Fétis, F-J. (1844) *Traité Complet de la Théorie et de la Pratique de l'Harmonie*. 2nd. ed., Paris: Schlesinger.
- Geay, G. (1999) "Le Traité d'Harmonie de Catel" in Bongrain, A. and Poirier, A. eds. *Le Conservatoire de Paris, 1795-1995 Deux cent ans de pédagogie*. Paris: Buchet/Chastel, 227-258.
- Grétry, A.E.M. (1797) *Mémoires ou Essais sur la Musique*. Paris: Imprimerie de la République.
- Grétry, A.E.M. (1802) *Méthode Simple pour Apprendre à Préluder en Peu de Temps avec toutes les Ressources de l'Harmonie*. Paris: Imprimerie de la République.
- d'Indy, V. *Cours de Composition Musicale* ed. de Lioncourt, G. (1950). Paris: Durand.

- Kastner, J.G. (1837) *Grammaire Musicale comprenant tous les principes élémentaires demusique, la mélodie, le rythme, l'harmonie moderne, et un aperçu succinct des voix et des instruments, à l'usage des amateurs et des artistes*. Paris: Lemoine.
- Kostka, S. and Payne, D. (2000) *Tonal Harmony with an introduction to twentieth-century music*. 4th ed., New York: McGraw-Hill.
- Nichols, R. (1972) "Fétis' Theories of Tonalité and the Aesthetics of Music," *Revue Belge de Musicologie* **26/27**: 116-129.
- Pierre, C. (1900) *Le Conservatoire Nationale de Musique et de Déclamation*. Paris: Imprimerie Nationale.
- Ramaut, A. (1999) "Antoine Reicha et le Conservatoire," in Bongrain, A. and Poirier, A. eds. *Le Conservatoire de Paris, 1795-1995 Deux cent ans de pédagogie*. Paris: Buchet/Chastel, 331-344.
- Simms, B. (1975) "Choron, Fétis, and the Theory of Tonality," *Journal of Music Theory* **19/1**: 112-138.
- Stanford, C.V. (1911) *Musical Composition: a short treatise for students*. London: MacMillan and Co. Ltd.
- Rahn, B. (1865-6) *L'Harmonie Popularisée*. Paris.
- Reicha, A. (c.1816-8) *Cours de Composition Musicale ou Traité Complet et Raisonné d'Harmonie Pratique*. Paris: Gambaro.
- Reicha, A. (1824) *Traité de Haute Composition Musicale*. Paris: Zetter.
- Reicha, A. (1814) *Traité de Mélodie, abstraction faite de ses rapports avec l'Harmonie; suivi d'un supplément sur l'art d'accompagner la mélodie par l'harmonie lorsque la première doit être prédominante*. Paris.
- Rey, J. B. (1807) *Exposition Élémentaire de l'Harmonie; Théorie Générale des Accords d'après la Basse Fondamentale. Vue selon les différens genres de musique: ouvrage classique servant à l'intelligence de tous les traités, systèmes d'harmonie et méthodes d'accompagnement, pouvant servir aussi d'introduction à la composition*. Paris.
- Vyslouil, J. (1970) *Notes sur Antoine Reicha avec une liste nominale de ses oeuvres* [contains Reicha's unpublished autobiography]. Brno: Opus Musicum.

Wangermée, R. (1951) "François-Joseph Fétis Musicologue et Compositeur Contribution à l'Étude du Goût Musical au Dix-neuvième Siècle," *Académie Royale de Belgique Classe des Beaux-Arts Mémoires* 6/4 Brussels: Palais des Académies.

Wolff, P-E. (1867) *Cours d'Harmonie Élémentaire Pratique et Théorique à l'Usage des Pianistes*. Paris: Gérard.





Some Challenges in Teaching American-Based Harmony in French

Roxane Prevost

I-INTRODUCTION

Music theory pedagogy at the undergraduate level imposes many challenges, such as the sequence of material, example selection, and drawing connections to performance, but the pedagogue of music theory in French at a North-American bilingual post-secondary institution faces more severe challenges. Since the University of Ottawa offers courses in both English and French, an attempt to coordinate the material between the different sections is ideal. Two main areas are problematic, however, for the French music theory class: the accessibility of recent resources in the pedagogy of music theory written or translated into French, and the discrepancy in the interpretation of certain concepts between English- and French-language texts. In recent years, French scholars have begun to translate and compile materials for a North American-rooted music theory, but few useful resources on music theory pedagogy exist.¹ In this essay, I first survey texts available for music theory pedagogy in French. I then explore some of the different interpretations for diminished, half-diminished, and augmented-sixth chords in English- and French-language sources. I conclude with a call for more resources for the French pedagogue and student of harmony.

¹Nicolas Meeus in particular has contributed to the availability of Schenker's texts in French. For example, his translation of *Der Freie Satz* (*L'écriture libre: Heinrich Schenker; seconde édition revue et adaptée par Oswald Jonas* (Liège: Mardaga, 1993)) and his *Heinrich Schenker: une introduction* (Liège: Mardaga, 1993) have become important materials in the study of Schenker's theories in the French-speaking world.

II—SURVEY OF MUSIC THEORY PEDAGOGY RESOURCES

Since the 1990s, interest in the pedagogy of music theory has grown dramatically in North America, as attested by the increase in the publication of new and revised editions of music theory textbooks.² The majority of these texts are written in English. Unfortunately, few resources exist in French; these currently available French texts are mostly outdated and primarily teach rudiments, such as intervals and scales, or offer an encyclopedic rather than a didactic approach. French music theory pedagogues interested in following a North-American approach are thus required to create their own instructional materials or translate materials from English-language sources. I shall survey five music theory sources currently available in French, four of which are texts and one a website, to show the need for a French music theory text designed to teach undergraduate tonal harmony in the North-American model.

(a) *Music Theory Texts: Dalmas-Noël and Passani, Rozay, Petit, and Beaudoin*

Valentine Dalmas-Noël and Emile Passani divide their *Traité d'analyse harmonique: 1er livre* (1972) into five parts.³ The first part is restricted mainly to the subject of triads and their inversions (see Figure 1). The most troubling aspect of this first part is that Dalmas-Noël and Passani discuss modulations in a mere two pages. They outline general rules on how to recognize modulations, but offer no explanation of the process, such as the use of pivot chords, nor do they supply the student with examples. As well, introducing modulations before cadences is problematic for a student with little background in harmony, and students will surely have difficulty in understanding cadences before an exposition of tonic and dominant functions.

²A few examples of new or revised popular music theory texts include: Miguel A. Roig-Francolí, *Harmony in Context* (New York: McGraw-Hill, 2003); Edward Aldwell and Carl Schachter, *Harmony and Voice Leading*, 3d ed. (Belmont, CA: Thomson-Schirmer, 2003); Robert Gauldin, *Harmonic Practice in Tonal Music*, 2d ed. (New York: W. W. Norton & Company, 2004); and Stefan Kostka and Dorothy Payne, *Tonal Harmony With an Introduction to Twentieth-Century Music*, 5th ed. (New York: McGraw-Hill, 2004).

³Valentine Dalmas-Noël and Emile Passani, *Traité d'analyse harmonique: 1er livre* (Paris: Éditions Musicales Transatlantique, 1972).

PART ONE		
Chapter 1:	Preliminaries	2
Chapter 2:	Chords	3
CONSONANT HARMONY		
Chapter 3:	Triads	3-6
Chapter 4:	Four-Part Writing	6-7
Chapter 5:	Figured Bass	7-9
	Analyzed Homework	9
Chapter 6:	Chord Inversions	10
Chapter 7:	First Inversion of Major, Minor, and Diminished (on second degree in minor) Triads	10-11
Chapter 8:	Sustained Tone in Figured Bass	11-13
	Analyzed Homework	13
Chapter 9:	Second Inversion of Major, Minor, and Diminished (on second degree in minor) Triads	14-15
	Analyzed Homework	15
Chapter 10:	Modulation	16-17
	Analyzed Homework	18
Chapter 11:	Cadences	19-20
	Analyzed Homework	21
PART TWO		
NATURAL DISSONANT HARMONY		
Chapter 12:	Dominant-Seventh Chord	22-24
	Analyzed Homework	24
Chapter 13:	Inversions of the Dominant- Seventh Chord	25-26
	Analyzed Homework	26
Chapter 14:	Dominant-Seventh Chord Without a Root	27-29
	Analyzed Homework	29-30
Chapter 15:	Dominant-Ninth Chord in Major	31-32
	Analyzed Homework	32
Chapter 16:	Inversions of Dominant-Ninth Chord in Major	33-35
	Analyzed Homework	35-36
Chapter 17:	Dominant-Ninth Chord in Minor	36-37
	Analyzed Homework	37

Figure 1: *Dalmas-Noël and Passani, Traité d'analyse harmonique*

Chapter 18:	Inversions of Dominant-Ninth Chord in Minor	38-39
	Analyzed Homework	39-40
Chapter 19:	Dominant-Ninth Chords Without a Fundamental in Major and Minor	41-44
	Analyzed Homework	44-46
Chapter 20:	Dominant-Seventh and Ninth Chords on the Tonic	47-49
	Analyzed Homework	49
PART THREE		
Chapter 21:	Artificial Dissonant Harmony	50-53
	Analyzed Homework	53
PART FOUR		
NON-CHORD HARMONIC TONES		
Chapter 22:	Alterations	54-59
	Analyzed Homework	59-60
Chapter 23:	Suspensions:	61-68
	Above	63-64
	Below	65-66
	In the Bass	66-67
	From an Alteration	67
	Chords Above Tonic	68
	Double Suspensions	68
	Triple Suspensions	68
	Analyzed Homework	69
Chapter 24:	Pedal Tones	70-72
PART FIVE		
NON-CHORD MELODIC TONES		
Chapter 25:	Passing Tone	73-75
	Analyzed Homework	76
Chapter 26:	Neighbor Tone	77-81
	Analyzed Homework	82-83
Chapter 27:	Appoggiatura	84-88
	Analyzed Homework	89-90
Chapter 28:	Anticipation	91-92
	Analyzed Homework	93
CONCLUSION		94
TABLE OF CONTENTS		95-96

Figure 1: *Dalmas-Noël and Passani, Traité d'analyse harmonique (continued)*

In the second part of their text, the authors discuss dominant-seventh, dominant-ninth, diminished-seventh, and half-diminished-seventh chords. When introducing inversions of the dominant-seventh chord, Dalmas-Noël and Passani use a fundamental C4, but in previous examples G, the dominant of C, is used. Inconsistencies of this sort would confuse a novice student, and plague an otherwise promising textbook. The diminished triad is interpreted as a dominant-seventh chord without a root (“suppression de la fondamentale dans l’accord de septième de dominante”)⁵ and labeled with V. Unfortunately, the authors also describe diminished triads in this manner; all diminished triads are interpreted as a rootless dominant chords in inversion. The problem with this interpretation is that the intervals above the bass differ from the inversions of other triads. The first inversion of the leading-tone diminished-seventh chord is called the second inversion of the dominant seventh with missing root. In addition, a special case must be made for the diminished triad on scale degree $\hat{2}$ in minor because this chord does not function as a dominant.⁶ The authors suggest that the chord root and the chromatic alterations of the figured bass be used as a guideline to differentiate between the “dominant-seventh chord without a root” and the diminished triad on $\hat{2}$. But the same situation occurs in their treatment of diminished-seventh and half-diminished seventh chords, both labeled as dominants without a root. The last chapter of the second part of the book focuses on dominant-seventh and dominant-ninth chords above the tonic (“accords de septième et de neuvième de dominante sur tonique”).⁷ The discussion of these chords seems misplaced, however, since the authors rely upon but have yet to discuss non-chord tones. This topic would be better situated with the discussion of pedal tones in chapter 24.

The third part of the text catalogs seventh chords other than dominant-seventh and diminished-seventh chords, while the fourth part of the text focuses on chromatic alterations in the figured bass, suspensions, and pedal tones. The discussion of chromatic alterations seems misplaced given the fact that Dalmas-Noël and Passani have previously described diminished triads, diminished-

⁵Dalmas-Noël and Passani, *Traité*, 27.

⁶Ibid.

⁷Ibid., 47.

seventh chords, and half-diminished seventh chords as rootless dominants with chromatic alterations in the figures. The last part of the text focuses on non-chord tones, specifically passing tones, neighbor tones, appoggiaturas, and anticipations. Remarkably, the authors devote more text individually to each of these non-chord tones than to the subject of modulations. The discussion of non-chord tones, both harmonic and melodic, constitutes almost half of a treatise of less than one hundred pages in length. Common chord progressions and voice-leading rules are omitted, leaving the student with little understanding of these topics. Although the goal of the treatise is to introduce the analysis of tonal music, the student is not given the tools to analyze even a simple tonal work.

In his *Initiation théorique et pratique à l'écriture de la musique* (1985), René Rozay offers a more comprehensive approach to the study of harmony.⁸ He divides his text into two large sections: harmony, which is subdivided into six parts with chapters, and practical applications of the theory through composition and keyboard accompaniment. I will focus solely on the first part of his text, which is more relevant to this paper, because I am most interested in the pedagogy of tonal harmony. Rozay devotes the first subsection of the first part to chords, chord doubling, and voice leading, and discusses chord inversions, resolutions of dominant chords, cadences, non-chord tones, and modulation in the second part (see Figure 2). The third part focuses on different types of seventh chords, ninth chords, eleventh chords and thirteenth chords, while the fourth part focuses on chromatic chords, such as the augmented triad, the diminished triad, and augmented-sixth chords. In the fifth part, Rozay discusses suspensions and pedal tones, and in the last part sequential progressions and sequential imitation. In general, the explanations in Rozay's text are more logically sequenced and better explained than in Dalmas-Noël and Passani's *Traité*. The discussion of modulations, in particular, is more helpful because Rozay identifies chords that mark a tonality, notes possible pivot chords, and describes different techniques for modulation to closely-related and distant keys. Although this 122-page text provides a brief survey of common topics for the study of tonal harmony, it offers too little to the novice harmony student.

⁸René Rozay, *Initiation théorique et pratique à l'écriture de la musique: Étude de l'harmonie, harmonisation d'un chant donné, notions pratiques de composition et d'accompagnement et transposition* (France: René Rozay, 1985).

I-HARMONY	1
Introduction	3-5
PART ONE: Definitions and General Rules	7
Chapter 1: Triads and Chords	9-12
Chapter 2: Voice Leading	13-14
Chapter 3: Melodic Motion	15-17
Chapter 4: Direct Fifths and Octaves	19-21
Chapter 5: Parallel Fifths and Octaves-Unison	23-25
PART TWO: Natural Consonant Harmony	27
Chapter 1: Root-Position Triads	29-31
Chapter 2: First- and Second-Inversion Triads	33-37
Chapter 3: Tendency Tones and Resolutions of Functional Dominant Chords	39-41
Chapter 4: Importance of Tonic and Dominant Chords, Development of Musical Discourse	43
Chapter 5: Cadences	45-49
Chapter 6: Chord and Non-Chord Tones	51-56
Chapter 7: Modulation	57-73
PART THREE: Dissonant Harmony	75
Chapter 1: Natural Dissonant Harmony	77-91
Chapter 2: Artificial Dissonant Harmony	93-96
PART FOUR: Altered Chords	97-103
PART FIVE: Suspensions and Pedal Tones	105
Chapter 1: Suspensions	107-109
Chapter 2: Pedal Tones	111
PART SIX: Sequential Progressions and Sequential Imitation	113
Chapter 1: Sequential Progressions	115-16
Chapter 2: Sequential Imitation	117-19
II-PRACTICAL CONCEPTS for Composition, Harmonization, Piano Accompaniment, and Transposition	121
Chapter 1: A Few Definitions	123-24
Chapter 2: Composition: Basic Concepts	125-27
Chapter 3: Harmonization of a Given Melody	129-32
Chapter 4: Piano Accompaniment	133-36
Chapter 5: Transposition	137-38

FIGURE 2: Rozay, *Initiation théorique et pratique à l'écriture de la musique* (1985) NOTE: Some page numbers are omitted in this and following figures because the author(s) have included blank pages in the page count of their texts.

In addition, three areas are problematic: the inconsistent labeling of chords, the description of chromatic chords such as the augmented-sixth, and the absence of both musical examples drawn from the tonal repertoire and practical application exercises.

When discussing root-position triads and seventh chords, Rozay labels the chords with roman numerals and figures but does not apply the labels conventionally. As shown in Example 1, Rozay identifies root-position chords with a "5" placed above a roman numeral used presumably to show chord quality; in the example, the last chord is a tonic C-major triad in root position. When identifying chord inversions, Rozay identifies the inversion with a "6," but in the example this inversion symbol is placed above an upper-case roman numeral III that describes on the one hand the bass, not the root, and the other hand the quality of the I chord. Rozay identifies the third chord of the example as "iv⁶" because the bass is F3, $\hat{4}$ of C major, and the triad is minor in quality; most theorists would identify this chord as "ii⁶." Rozay's figured-bass approach to chord labeling is completely out of touch with common practice that assigns arabic numerals to represent inversions and roman numerals to represent the root of the chord, not the bass. A student seeking other theory resources would struggle with the differences between the two labeling systems.

The image shows a musical staff with five measures, each containing a chord. The chords are: 1. Root position C major triad (labeled 6 III), 2. Root position C major triad (labeled 6 III), 3. First inversion C major triad (labeled 6 iv), 4. First inversion C major triad (labeled 5 v), 5. Root position C major triad (labeled 5 I). The labels are placed below the staff.

EXAMPLE 1: Chord Identification in Rozay's *Initiation théorique...* (34)

I shall return to the second problematic area, the description of augmented-sixth chords, later in this paper. Although Rozay supplements his text with examples of the concepts being discussed, he offers no musical examples drawn from the repertoire, nor does he suggest any as references or provide exercises for the student to practice the concepts he introduces. Rozay's text provides a summary of different tonal theoretical concepts, but the inconsistencies in the chord labels and the lack of practical application for the student make this resource almost useless for the pedagogue and student.

Since Jacques Petit's *Manuel d'harmonie: Livre théorique* (1995) is aimed at music pedagogues and performers, the majority of the four volumes focus on keyboard skills, rather than theoretical or analytical issues; only the second volume is devoted to theoretical issues.⁹ Petit divides this volume into eight parts: (1) harmony and chords; (2) voice-leading connections between chords; (3) chord functions, inversions, cadences, and harmonic rhythm; (4) chords with four or five different notes; (5) modulations; (6) chromatic notes; (7) non-chord tones; and (8) formal constructions, such as phrases and forms. These topics are all approached with the keyboard player in mind, and all are devised as keyboard exercises. These are notable features in Petit's text. In his discussion of functions, Petit categorizes pre-dominants into three groups: SD1 (IV), SD2 (ii⁶), and SD3 (ii⁶)¹⁰ This classification works well as a means of identifying pre-dominants over $\hat{4}$. His discussion of second-inversion triads is also convincing because he assigns functions, such as appoggiatura, neighbor, and passing, to these otherwise non-functional chords.¹¹ This text is excellent for the keyboard player with a strong theoretical background in harmony. Unfortunately, the typical undergraduate student will find Petit's discussion of some theoretical topics and lack of written exercises problematic. His text is an acceptable supplement for a course designed to increase proficiency in keyboard accompaniment.

⁹Jacques Petit, *Manuel d'harmonie: Livre théorique* (Paris: Institut de pédagogie musicale et chorégraphique), 1995. Petit focuses on keyboard skills for the first volume, focuses on theoretical issues for the second volume, provides examples of themes to be harmonized through keyboard skills in the third volume, and devotes the fourth volume to keyboard accompaniment issues.

¹⁰Ibid., 34.

¹¹Ibid., 38.

PART ONE:	NATURAL HARMONY	7
1.	Natural harmonics	9
2.	Triads	10-11
3.	Chord Spacing	12-13
4.	Chord Doubling	14-15
5.	Omitted Chord Tones	16-17
PART TWO:	VOICE LEADING	19
6.	Outer Voice Movement	20-21
7.	Parallel Fifths and Octaves	22-23
8.	Direct Fifths and Octaves	24-25
9.	Voice Leading Above Given Bass	26-27
10.	Voice Leading Below Given Melody	28-29
11.	Sequential and Symmetrical Progressions	30-31
PART THREE:	TONAL SYSTEM	33
12.	Tonal Functions	34-35
13.	First-Inversion Triads	36-37
14.	Second-Inversion Triads	38-39
15.	Cadences	40-41
16.	Harmonic Rhythm	42-45
PART FOUR:	CHORDS WITH FOUR OR FIVE NOTES	47
17.	Dominant-Seventh Chords	48-49
18.	Other Seventh Chords	50-51
19.	Sequential Progressions with Seventh Chords	52-53
20.	Dominant-Ninth Chords	54-55
21.	Diminished Triads and Diminished- Seventh Chords	56-57

FIGURE 3: *Petit, Manuel d'harmonie: Livre théorique (vol. 2) (1995)*

PART FIVE:	MODULATIONS	59
22.	What key are we in?	60-61
23.	Closely Related Modulations	62-63
24.	Techniques of Modulations	64-67
25.	Modulations by Diminished- Seventh Chords	68-69
26.	Sequential Progressions for Modulations	70-71
PART SIX:	ALTERED TONES	73
27.	Major-Minor	74-75
28.	Modal Borrowing	76-77
29.	Chromatic Alterations–Glissando	78-79
30.	Alterations to Predominant Chords	80-83
PART SEVEN:	EMBELLISHMENTS	85
31.	Chord and Non-Chord Tones	86-87
32.	Neighbor Tones and Passing Tones	88-89
33.	Suspensions and Appoggiaturas	90-91
34.	Anticipations and Escape Tones	92-93
35.	Pedal Tones	94-97
PART EIGHT:	CONSTRUCTIONS	99
36.	Harmonic Paradigms	100-01
37.	Phrases	102-03
38.	Cadential Patterns	104-05
39.	Development	106-07
40.	Formal Elements	108-12
41.	Forms	113-16

FIGURE 3: *Petit, Manuel d'harmonie: Livre théorique (vol. 2) (1995) (continued)*

In the preface to his *Éléments d'analyse et d'écriture musicales* (2002), Gilles Beaudoin asserts that his text is rooted in the American approach, most notably Wallace Berry for his discussion of forms and Heinrich Schenker for analytical concepts.¹² Beaudoin assumes that the reader will have already acquired basic theoretical skills. His book is divided into thirteen chapters followed by a glossary and three appendices, as shown in Figure 4. Beaudoin begins with instructions on notation and then proceeds to intervals. Triads, chord labeling, short functional progressions, and cadences follow. Before requiring the student to write progressions, Beaudoin turns to the analysis of melodies, motives, phrases, and periods. A discussion of modulation and secondary dominants follows. Once more, the student is expected to recognize and apply new concepts, but not write exercises on these concepts. Chords and modes in popular music and musical forms are discussed, followed by four-part harmonization. Beaudoin describes the Neapolitan chord and secondary dominants in the chapter on four-part harmonization, in addition to assigning written exercises for the student. The final chapter gives useful guidelines on writing an analytical paper. The appendices that follow show the different symbology between the American and French systems, and the book concludes with a diagram of the circle of fifths.

In comparison to the three previously discussed texts, Beaudoin's is the most accessible to the student. Not only is it well written, but the author also provides some useful examples and written exercises. Excerpts from Bach chorales illustrate the chapter on the analysis of triads, and numerous examples from the repertoire are chosen in the discussion of formal analysis. The only drawback of this text is the scope of the material. Beaudoin's text would be ideal for a first-year harmony course, but it lacks sufficient material and scope for a second-year course. And in the first year, it would require supplemental exercises and examples.

¹²Gilles Beaudoin, *Éléments d'analyse et d'écriture musicales*, 2d ed. (Saint-Nicolas, Quebec: Presses de l'Université Laval, 2002), preface to first edition.

Chapter 1	Notation	1-3
Chapter 2	Intervals	5-13
Chapter 3	Triads	15-20
Chapter 4	Chord and Interval Labeling	21-36
Chapter 5	Structure of a Harmonic Phrase	37-40
Chapter 6	Cadences	41-51
Chapter 7	Elements of Melodic Analysis	53-70
Chapter 8	Melodic Materials: Motive, Phrase, and Period	71-90
Chapter 9	Modulation–Secondary Dominants	91-102
Chapter 10	Popular Music: Chords and Modes	103-121
Chapter 11	Musical Forms	123-145
Chapter 12	Four-Part Harmonization	147-177
Chapter 13	Editing of an Analytical Paper	179-185
Glossary of Musical Terms		187-194
APPENDICES		
Appendix A	Reference Table for Figured Bass	195
Appendix B	Reference Table for Figured Bass	196
Appendix C	Circle of Fifth	197

FIGURE 4: *Beaudoin, Éléments d'analyse et d'écriture musicales (1998)*

(b) Website: Baron

The website most useful for the French pedagogue is Michel Baron's *Cours d'harmonie*.¹³ Although encyclopedic in nature, it provides the pedagogue with useful resources on different topics. The website was last updated in 1998, but it is, in fact, a revised version of Baron's *Précis pratique d'harmonie* (1973). It consists of twenty webpages, as shown in Figure 5. The first five pages focus on general voice-leading rules, triads in the context of cadences and other harmonic progressions, and triadic inversions. The Neapolitan-sixth chord is discussed with chords in first inversion. As in Petit's text, second-inversion triads are described as *appoggiatura*, passing, or neighbor chords. The discussion of modulations on webpage 6 is superficial; it only defines modulations and focuses primarily on false relations. Baron discusses seventh and ninth chords with

¹³Michel Baron, *Cours d'harmonie*, last updated in July 1998. <<http://membres.lycos.fr/mbaron/harmonie.htm>>

Webpage 1	Introduction
Webpage 2	General Rules
Webpage 3	Root-Position Triads
Webpage 4	First-Inversion Triads
Webpage 5	Second-Inversion Triads
Webpage 6	Modulations
Webpage 7	Dominant-Seventh Chords
Webpage 8	Other Seventh Chords
Webpage 9	Ninth Chords
Webpage 10	Alterations
Webpage 11	Suspensions
Webpage 12	Other Non-Chord Tones
Webpage 13	Pedal Tones
Webpage 14	Unfigured Bass
Webpage 15	Chorale and Other Styles
Webpage 16	Table for Figured Bass
Webpage 17	Bibliography, Biographies
Webpage 18	Useful Links, Research
Webpage 19	Excerpts from a Treatise (Koechlin)
Webpage 20	Author–e-mail

FIGURE 5: *Baron, Cours d'harmonie (1998)*

inversions and resolutions in the next three webpages. On the webpage addressing chord alterations, Baron describes augmented-sixth chords using the customary labels “Italian,” “French,” and “German.” The next three webpages focus on suspensions, and other non-chord tones such as appoggiaturas, neighbor notes, escape tones, and passing notes, and on pedal tones.

On the webpage 14, Baron focuses on unfigured basses, which he follows with a webpage on chorale-style writing and other period-style writing. A table with figures, a bibliography of pre-1980 works, and a biography of the author follow. This website is useful in that the pedagogue can move easily from one topic to the next, but the sequence of material is questionable. In addition, Baron has not devised exercises that would be useful for the undergraduate student, and few musical examples drawn from the repertoire are included in the discussion. Despite its problems, access to Baron’s text via the web makes it appealing to both the pedagogue and student.

III–DIFFICULTIES IN CHORD LABELING: DIMINISHED-SEVENTH AND AUGMENTED-SIXTH CHORDS

(a) *Diminished-Seventh Chords*

Since most of the texts surveyed in this paper are rooted in the European rather than the North-American tradition, some conceptual differences occur in the interpretation of diminished-seventh and augmented-sixth chords. As noted, Rozay argues that the “diminished-seventh chord is a dominant-ninth chord in minor, whose root has been omitted.”¹⁴ This interpretation suggests that the root of diminished-seventh chords, although omitted, is not ambiguous. But the diminished-seventh chord is symmetrical in intervallic structure, and composers often play on the ambiguity of its root to reinterpret diminished-seventh chords. Petit argues that this chord is ambiguous and can have different functions:

Very rich in possibilities, the diminished-seventh chord can have a **dominant** or **subdominant** (altered) function in major or minor; it can also be **reinterpreted** as a dominant or as a subdominant, which means that any diminished-seventh chord has a function in any tonality. Moreover, this chord can come after any other chord! Notably after another diminished-seventh chord.¹⁵

If the diminished-seventh chord is in fact a dominant-ninth chord without a root, it is difficult to accept that it can have a pre-dominant function.

¹⁴Rozay, *Initiation théorique*, 86. “L’accord de 7^{me} diminuée est, de fait, un accord de 9^{me} mineure de dominante dont la fondamentale a été supprimée.”

¹⁵Petit, *Manuel d’harmonie*, 68. “Très riche de possibilités, l’accord de septième diminuée peut être une fonction **dominante** ou **sous-dominante** (altérée), dans un ton Majeur ou mineur; il peut aussi être l’**emprunt** à la fonction dominante ou l’emprunt à la fonction de sous-dominante, ce qui fait que n’importe quel accord de septième diminuée a une fonction dans n’importe quel ton. En outre, cet accord peut venir après n’importe quel autre accord! Notamment après un autre accord de septième diminuée.”

Many French-language authors also argue that the half-diminished seventh chord is, in fact, a dominant-ninth chord in major with an omitted root.¹⁶ It is difficult for novice students to grasp the concept that a chord rooted in dominant harmony can also be found on the supertonic degree in minor. Some authors refer to this chord as “septième de sensible,” but that label ties it to the leading-tone. The label half-diminished triad, which refers to quality rather than function, seems to better describe the chord, and perhaps “mi-diminué” ou “demi-diminué” would best define this chord in French, rather than calling it a chord rooted on the leading-tone in major. One type of diminished-seventh chord that is absent in French-language texts, but discussed in most American harmony textbooks, is the common-tone diminished-seventh chord. In my teaching, I have adopted “septième diminuée par ton commun,” abbreviated as “(7°TC),” to represent this chord so that its label parallels that of its English-language counterpart.

(b) Augmented-Sixth Chords

Little discussion of augmented-sixth chords occurs in French theory texts. Sources written in English often classify augmented-sixth chords into three types: Italian, French, and German. This practice is useful in differentiating between the different scale degrees that accompany the interval of the augmented sixth and the tonic, but only Baron discusses the three types. He concludes his discussion of these chords with a charming mnemonic description, written curiously in both French and English:

¹⁶Rozay (*Initiation théorique*, 86) writes: “The seventh chord built on the leading-tone is in fact a dominant-ninth chord in major whose root has been omitted.” [“L’accord de 7^{me} de sensible est, de fait, un accord de 9^{me} majeure de dominante dont la fondamentale a été supprimée.”]

Let's speak about the lightness of the Italian sixth. With only a third with the augmented sixth, it is light, sunny, a little bit like italian [sic] cooking. A little fresh tomato, olive oil and basil and it is delectable. The Frenchs [sic] need to be a little different because they need to be heard when they have at times a political discordant voice. That's why the tritone is added. More personal and quite different. Of course, the Germans are so practical! They need to have a full meal, a well balanced meal and that's why the perfect fifth is added.¹⁷

Oddly, Baron's discussion of augmented-sixth chords appears to be the only concept derived from North-American based tonal theory on his website.

Augmented-sixth chords are also discussed briefly in one example and one sentence in Dalmas-Noël and Passani's text.¹⁸ The authors do not distinguish between the different types and give no resolutions of these chords (see chords 10 to 15 in Example 2). The chords are mentioned only in passing as chromatic alterations of the dominant V chord. Chords 11 and 12 are equivalent to the conventional French augmented-sixth chord, while chord 11 is an Italian augmented-sixth chord and chords 13, 14, and 15 are German augmented-sixth chords. This approach does not give the student a sense of the function of augmented-sixth chords as a pre-dominant resolving to dominant harmony.

¹⁷Baron, *Cours d'harmonie*, webpage 10.

¹⁸Dalmas-Noël and Passani, *Traité*, 57-58.

The image displays 16 musical examples of augmented-sixth chords, organized into three systems. Each example is shown in a grand staff (treble and bass clefs).

- System 1: Accords non altérés** (Chords not altered). Examples 1-8. Labels above: Accord Parfait M, Acc. 7, 7 sans fondamentale, 9 M, 9 M sans fondamentale, 9 m, 9 m sans fondamentale, 7 M.
- System 2: Altérations ascendantes** (Ascending alterations). Examples 1-8. Numbers 1-8 are placed above the first staff of each example.
- System 3: Altérations descendantes** (Descending alterations). Examples 9-16. Numbers 9-16 are placed above the first staff of each example.

A bracket under the last four chords (examples 13, 14, 15, and 16) is labeled "Accords de 6^{te} augmentée".

EXAMPLE 2: Augmented-Sixth Chords in Dalmas-Noël and Passani's *Traité* (57)

Rozay adopts a similar position in his discussion of the augmented-sixth. He derives augmented-sixth chords from the chromatic alteration of the perfect fifth in a second-inversion dominant-seventh chord and from the diminished-seventh chord in first inversion.¹⁹ In his examples, he alters a dominant chord, so as to produce an augmented-sixth between the flat supertonic and the leading tone (see Example 3). His augmented-sixth chords, as a result, resolve as altered dominants to tonic harmony: "the augmented-sixth chord often resolves naturally to a chord whose root is a fifth below the root of the augmented-sixth chord."²⁰ While

¹⁹Rozay, *Initiation théorique*, 101.

²⁰Ibid. "... l'accord de 6^{te} augmentée effectue fréquemment sa résolution naturelle sur un accord dont la fondamentale se situe à distance de 5^{te} inférieure de sa propre fondamentale."

he does show an example of an augmented-sixth chord resolving to dominant harmony, he labels the chord as “borrowed” from the key of the dominant.²¹

accords de 6^{te} augmentée

a) Résolution naturelle b) Résolution naturelle

+6	+6	5	+6	+6	5
II	3	I	II	3	I

EXAMPLE 3: *Augmented-Sixth Chords in Rozay's Initiation théorique (101)*

Although the origin of the geographical labels for augmented-sixth chords remains a subject for debate in American music theory, the function and scale degrees associated with the augmented-sixth chords have become conventional. A consensus has been reached between theorists that most augmented-sixth chords lead to dominant harmony, a result of the tendency tones $\flat\hat{6}$ and $\sharp\hat{4}$, and numerous examples from the tonal repertoire support this view. When teaching augmented-sixth chords in French, the pedagogue must turn to English-language sources.

²¹Ibid., 102.

IV—CONCLUSION: POSSIBLE SOLUTION

In this paper, I have surveyed French-language music theory resources to show that little consistent work has been done in the field of music theory pedagogy in French. Although American textbooks are readily available to assist the pedagogue and undergraduate student in music theory instruction, few comparable tools are accessible in French. The problem does not lie strictly with the lack of interest in music theory pedagogy, but rather in the number of North-American post-secondary institutions that offer music theory programs in French. Few French post-secondary institutions offer music theory, and thus a small market exists for a comprehensive North-American style music theory textbook in French. A comprehensive and pedagogically oriented source is needed to fill the void in French music theory resources. A practical solution would be a web textbook in the format of a pedagogically-oriented printed text. A translation of an English-language text would be sufficient. Students and pedagogues could easily access this type of book and the cost to the publisher would be minimal. As interest in music theory pedagogy grows in North America, pedagogues at French or bilingual post-secondary institutions will increasingly seek resources to offer instruction comparable to their English-language counterpart. At this time, no such resource exists.

AUTHOR'S NOTE:

I wish to thank Murray Dineen for all of his helpful suggestions.

CITED WORKS

Aldwell, Edward and Carl Schachter. *Harmony and Voice Leading*, 3d ed. Belmont, CA: Thomson-Schirmer, 2003.

Baron, Michel. *Cours d'harmonie*. Last updated in July 1998. <<http://membres.lycos.fr/mbaron/harmonie.htm>>.

_____. *Précis pratique d'harmonie*. Montréal: Éditions Brault et Bouthillier Limitée, 1973.

Beaudoin, Gilles. *Éléments d'analyse et d'écriture musicales*, 2d ed. Saint-Nicolas (Quebec): Presses de l'Université de Laval, 2002.

Dalmas-Noël, Valentine and Emile Passani. *Traité d'analyse harmonique, 1er livre*. Paris: Éditions Musicales Transatlantiques, 1972.

Gauldin, Robert. *Harmonic Practice in Tonal Music*, 2d ed. New York: W. W. Norton & Company, 2004.

Kostka, Stefan and Dorothy Payne. *Tonal Harmony With an Introduction to Twentieth-Century Music*, 5th ed. New York: McGraw-Hill, 2004.

Meejs, Nicholas. *L'écriture libre: Heinrich Schenker; seconde édition revue et adaptée par Oswald Jonas*. Liège: Mardaga, 1993.

_____. *Heinrich Schenker: une introduction*. Liège: Mardaga, 1993.

Petit, Jacques. *Manuel d'harmonie, vol. 2: Livre théorique*. Paris: Institut de pédagogie musicale et chorégraphique, 1995.

Roig-Francolí, Miguel A. *Harmony in Context*. New York: McGraw-Hill, 2003.

Rozay, René. *Initiation théorique et pratique à l'écriture de la musique*. Sancoins, France: Centre Imprimerie Avenir, 1985.



Errata for JMTP Volume 18

EDITOR'S NOTE: Some Figures and Examples included in Volume 18 were reproduced using the incorrect font. They are reproduced here in the correct font. Our apologies to the authors.

Corrected Figures for:
Alegant and Sly, "Taking Stock of Collections"

Figure 1: Formal Snapshot of “The Girl with the Flaxen Hair”

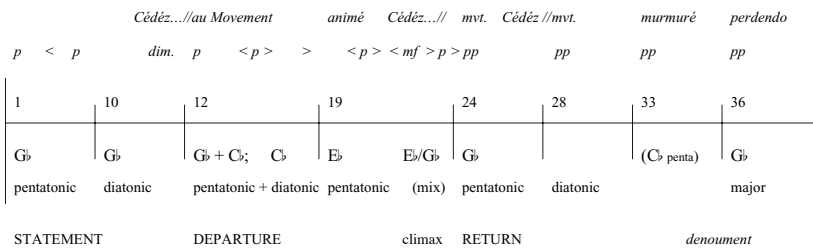


Figure 2. Formal Snapshot of “Dead Leaves”

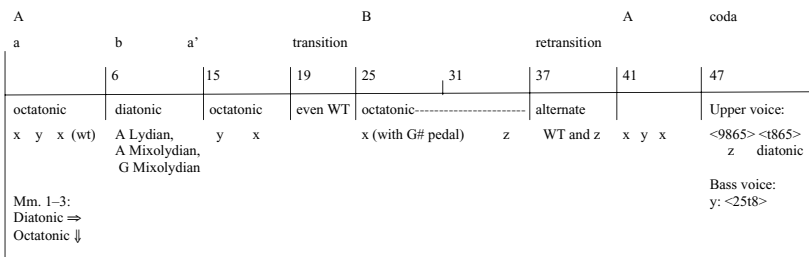
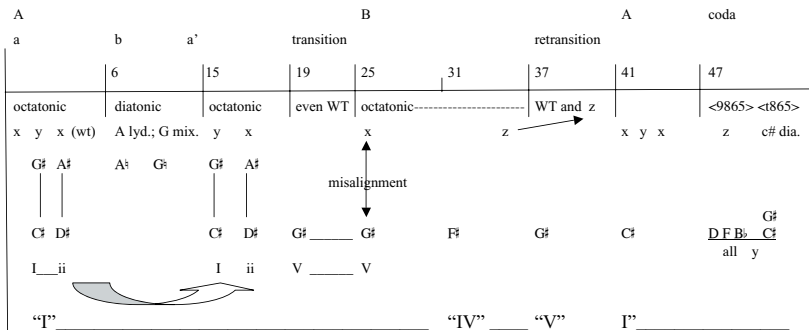


Figure 3. “Dead Leaves”: outer form and bass voice interpretation.



Corrected Examples for:
Davidian, “The New Music Theory Curriculum”

Example 1. Music Field of Study Courses

<u>Course</u>	<u>Number of Semesters</u>	<u>Semester Credit Hours</u>
Ensemble	4	4
Applied Study	4	8
Theory/Aural Skills	4	12-16
Music Literature	1	3

Example 2: Texas Association of Music Schools (TAMS) Music Theory Survey, 1998

<u>Item</u>	<u>2-Year Coll.</u>	<u>4-Year Univ.</u>	<u>Total</u>	<u>2000 CMS Survey</u>
Number of Respondents	24 (100%)	31 (100%)	55 (100%)	248 (100%)
Author(s) of Textbooks				
Kostka/Payne	8 (33%)	14 (45%)	22 (40%)	55 (22%)
Benward/White	6 (25%)	6 (19%)	12 (22%)	45 (18%)
Ottman	6 (25%)	4 (13%)	10 (18%)	20 (8%)
Turek	2 (8%)	2 (6%)	4 (7%)	12 (5%)
Benjamin/Horvit/Nelson	2 (8%)	2 (6%)	4 (7%)	6 (2%)
Other	0 (0%)	3 (10%)	3 (5%)	43 (17%)
Requirements				
Diatonic Harmony (Semesters 1 & 2)	24 (100%)	31 (100%)	55 (100%)	97 (39%)
Chromatic Harmony (Semester 3)	24 (100%)	31 (100%)	55 (100%)	70 (28%)
Form (Semesters 3 & 4)	24 (100%)	31 (100%)	55 (100%)	N/A (N/A)
Twentieth Century	20 (83%)	29 (94%)	49 (89%)	172 (69%)
Barrier Exam	2 (8%)	3 (10%)	5 (10%)	N/A (N/A)
Theory Taught Separately from Aural Skills	24 (100%)	19 (61%)	43 (78%)	161 (65%)
Separate Fundamentals Course	22 (92%)	18 (58%)	40 (73%)	136 (55%)
Software Used in Written Theory	15 (63%)	17 (31%)	32 (58%)	N/A (N/A)
Practica Musica	2 (8%)	10 (32%)	12 (22%)	
Finale	5 (21%)	1 (3%)	6 (12%)	
MacGamut	1 (4%)	3 (10%)	4 (8%)	
Music Lessons/MiBac	2 (8%)	2 (6%)	4 (8%)	
Encore	3 (13%)	0 (0%)	3 (6%)	

Corrected Examples for:
Davidian, "The New Music Theory Curriculum" (Continued)

Example 3. TAMS Aural/Ear-Training Research Survey, 2000
Melodic Dictation Concepts Taught during Semester I

Concept	2-Year College	4-Year Private	4-Year State
1. Conjunct diatonic melodies	20 (100%)	14 (100%)	16 (100%)
2. Melodies using m2, M2, m3, M3	20 (100%)	13 (93%)	15 (94%)
3. Melodies using P4, P5, m7, M7	12 (60%)	6 (43%)	7 (44%)
4. Melodies with arpeggiations of I & V	15 (75%)	11 (79%)	13 (81%)
5. Melodies outlining the I, IV, V, & vii° triads	9 (45%)	3 (21%)	7 (44%)
6. Two-phrase melodies	9 (45%)	1 (7%)	9 (56%)
7. Identification of major and three forms of minor scales	15 (75%)	12 (86%)	13 (81%)
8. Identification of all diatonic intervals including the tritone	12 (60%)	8 (57%)	12 (75%)
9. Melodic figure Identification: sequence, etc.	9 (45%)	1 (7%)	9 (56%)
10. Two-part melodies	2 (10%)	2 (14%)	2 (13%)
11. Melodies that modulate to closely related keys	1 (5%)	0 (0%)	1 (6%)
12. Phrase relationships and cadences	2 (10%)	1 (7%)	4 (25%)
13. Identification of binary, rounded binary and three-part form	1 (5%)	0 (0%)	0 (0%)
14. Mode identification: Dorian, Phrygian, Lydian, & Mixolydian	2 (10%)	0 (0%)	1 (6%)
15. Melodies containing nondiatonic tones	0 (0%)	1 (7%)	1 (6%)
16. Melodies containing typical blues figures	1 (5%)	0 (0%)	1 (6%)
17. Melodies based on 20th-century characteristics	0 (0%)	0 (0%)	0 (0%)

Corrected Examples for:
Davidian, “The New Music Theory Curriculum” (Continued)

Example 4: TAMS Aural/Ear-Training Research Survey, 2000 Melodic Dictation: Concepts and Proficiency Levels, Semester 1					
<u>2-YEAR COLLEGE</u>		<u>4-YEAR PRIVATE</u>		<u>4-YEAR STATE</u>	
<u>Concept</u>	<u>Proficiency Level</u>	<u>Concept</u>	<u>Proficiency Level</u>	<u>Concept</u>	<u>Proficiency Level</u>
1. Conjunct melodies	90%	1. Conjunct melodies	90%	1. Conjunct melodies	70%
2. Melodies using m2, M2, m3, M3	90%	2. Melodies using m2, M2, m3, M3	80%	2. Melodies using m2, M2, m3, M3	70%
3. Melodies using P4, P5, m7, M7	90%				
4. Melodies with arp. of I & V	90%	4. Melodies with arp. of I & V	90%	4. Melodies with arp. of I & V	70%
				6. 2-phrase melodies	70%
7. ID of major, 3 forms of min. scale	90%	7. ID of major, 3 forms of min. scale	90%	7. ID of major, 3 forms of min. scale	70%
8. ID of all diatonic intervals, TT	90%	8. ID of all diatonic intervals, TT	90%	8. ID of all diatonic intervals, TT	70%
				9. Melodic figure ID (seq., etc.)	70%
<u>6</u>	<u>90%</u>	<u>5</u>	<u>88%</u>	<u>7</u>	<u>70%</u>



CONTRIBUTORS

Byron Almén is Assistant Professor of Music Theory in the University of Texas at Austin School of Music.

Michael Lively is a doctoral student in music theory at the University of North Texas. He is currently researching a dissertation topic with Dr. Timothy L. Jackson relating to the suggestion of multi-linear and non-linear musical time in the “Krakow” sketches of Beethoven’s late-period string quartets.

Roxane Prevost is an Assistant Professor in the Department of Music at the University of Ottawa. Her research interests focus on the analysis of post-tonal works.

Maurice Nick Rissman is an Associate Professor of Music in the Department of Music, Theatre and Dance of Lamar University.

Gordon Sly is Associate Professor of Theory at Michigan State University.

Gloria Toplis is a Senior Lecturer and BMus Course Director at Kingston University in Kingston upon Thames, England.

GUIDELINES FOR CONTRIBUTORS

1. Articles on any aspect of teaching or learning music theory will be welcome. Contribution will be judged on originality, relevance, interest to a diverse audience, and clarity of writing.
2. Manuscripts should be typed double-spaced (including footnotes, references, and quotations) on 8-1/2" x 11" paper with at least one-inch margins. Please submit five clear copies. All footnotes, tables, figures, musical examples, and other material should be placed at the end on separate sheets with an indication of where they fit in the text. Long musical examples and complex diagrams or charts should be avoided when possible. Please also avoid musical symbols (i.e. notation) within the running text.
3. The author of an accepted manuscript will be asked to revise the article (if necessary) to fit the style guidelines of the journal and to submit it electronically in either Windows or Macintosh formats. Authors will be sent guidelines for style and guidelines for electronic manuscripts. Please do not send disks until requested to do so.
4. The author is responsible for obtaining permission to reproduce copyrighted material and for paying permission fees, if necessary. Permissions must accompany the electronic submission of accepted manuscripts.
5. The author is responsible for providing camera-ready copy for all non-text items (tables, figures, musical examples, and other material). This material should also be submitted electronically if possible. (PDF format preferred)
6. Manuscripts are accepted on the condition that they are unpublished and are not presently being submitted for publication elsewhere. Since all submissions are reviewed anonymously, please include the author's name and address only in the cover letter and eliminate identifying references (such as names of schools) from the article.
7. Please address all correspondence to:

Journal of Music Theory Pedagogy
School of Music
University of Oklahoma
Norman, OK 73019

The *JMTP* staff will send guidelines for style and electronic manuscripts to anyone requesting this information. On most matters of form and style, *JMTP* follows *The Chicago Manual of Style*.