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The undergraduate twentieth-century analysis course is difficult to teach: the vocabulary is expanded, at times the compositional techniques are new, and the course is usually compressed into a single semester. The teacher must determine precisely what the students should be expected to learn, since there are more possible pedagogical goals than there is time in such a course. This article assumes that the main objectives are helping the students develop the ability to analyze music that they encounter, familiarizing them with methodologies that may prove helpful in their analyses, and providing them with some knowledge of particular composers' styles. Given these goals and the time constraints, it is imperative to select works exemplary of their composers' styles and techniques. The commercially available anthologies cover the field well,[1] how-

[1]These anthologies include (among others): Mary I. Arlin et. al., *Music Sources*, 2nd ed. (Englewood Cliffs, NJ: Prentice Hall, 1989); Thomas Benjamin, Michael Horvit and Robert Nelson, *Music for Analysis*, 3rd ed. (Belmont, CA: Wadsworth, 1992); Charles Burkhart, *Anthology for Musical Analysis*, 5th ed. (Ft. Worth, TX: Harcourt Brace, 1994); Thomas DeLio and Stuart Saunders Smith, *Twentieth Century Music Scores* (Englewood Cliffs, NJ: Prentice Hall, 1989); Roger Kamien, *The Norton Scores*, 5th ed. (New York: Norton, 1990); Robert P. Morgan, *Anthology of Twentieth-Century Music* (New York: Norton, 1992); Claude V. Palisca, *Norton Anthology of Western Music*, 2nd ed. (New York: Norton, 1988); Bryan R. Simms, *Music of the Twentieth Century, An Anthology* (New York: Schirmer Books, 1986); Ralph Turek, *Analytical Anthology of Music*, 2nd ed. (New York: McGraw-Hill, 1992); and Mary H. Wennerstrom, *Anthology of Twentieth-century*

ever, lesser-known miniatures often are also effective. This article suggests content and ordering in presenting three brief pieces and addresses some issues of methodology. The compositions are:

1. "Jimbo's Lullaby" from *Children's Corner* suite by Claude Debussy;
2. *Tilimbom*, a song by Igor Stravinsky; and
3. "Dies ist ein Lied für dich allein," the first of *Fünf Lieder*, Op. 3, by Anton Webern.

Each of these brief works presents a clear stylistic example and establishes a foundation from which the students may advance into more complicated analytical work.[2]

Debussy composed his *Children's Corner* suite (1906-08) for his daughter. Several of the titles of the movements refer to her toys; "Jimbo's Lullaby," which refers to a toy elephant, is the second movement of six. This piece works well for introducing Impressionism in general as well as specific aspects of Debussy's style, and it is easily playable, thus creating a more musical atmosphere should the professor wish to present a live performance.[3] The following is a list of items for which the students might listen (many are possible without a score; some are more difficult): sections (no labels at first; simply find them), texture, tonal centers, pitch collections (scales) used and their relationships, harmony and chords, motivic structure (including rhythm and meter), and form.

The most important question concerning sections and tonal centers is not so much where they occur as why the students arrive at their conclusions. The students should be able to derive a plausible sectionalization, using a "bubble" or time-line diagram to summarize it. A temporary division into smaller units facilitates the analysis of other musical parameters. The discussion of how the sections are created should include factors such as texture, melodic material

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*Music*, 2nd ed. (Englewood Cliffs, NJ: Prentice Hall, 1988) and *Anthology of Musical Structure and Style* (Englewood Cliffs, NJ: Prentice Hall, 1983).

[2]The author is indebted to Mary I. Arlin for showing him the pedagogical value of the Debussy work and to Mary H. Wennerstrom for several ideas about the Webern composition.

[3]There is also a colorful orchestration of the entire suite by André Caplet.

and motives, and possibly the tonal centers and pitch collections used; these form-creating parameters are similar to those found in common-practice music of earlier eras. Since layered texture is typical of much Impressionistic music, one can point out the layering at such places as mm. 25-28, 39-40, and especially 63-70.

A discussion of the textural layers may lead into finding the various tonal centers and determining what makes them sound like tonics. While the tonal centers are ambiguous at times, they might be summarized as follows:

| 1-9 | 9-18 | 19-28 | 29-32 | 33-38 | 39-46 | 47-53 | 53-62 | 63-70 | 70-81 |
|---|---|---|---|---|---|---|---|---|---|
| ? | G? V/B♭? | B♭ | A♭ | --- | A | D♭ | G♭-E♭ | B♭ | --- |

The tonic of mm. 1-9 is best left open for later debate. The diagram shows G or V/B♭ as the tonic of mm. 9-18, and the situation is rather subtle: these measures provide an opportunity to discuss how the whole-tone scale obfuscates the prevailing tonic, since it has neither dominant nor leading tone and contains no half-steps. G may well be heard as tonic here, because the outer notes G5 and G1 of mm. 9-10 are reinforced by the F4-G4 pedal. One might just as readily hear F as the tonic (functioning as the dominant of B♭ on the larger scale). Measures 15-18, and most especially 17-18, serve as a transition to B♭, arriving on an implied V/B♭ in m. 18. After the relatively ambiguous opening (a connection to nineteenth-century practice), the remainder of the piece includes good examples of tonality by assertion or repetition. Although there are few spots where common-practice progressions and cadences establish the tonic, ostinati and pedals convincingly reinforce the tonics depicted on the diagram.

In addition to determining the tonics, the students might find those places that most nearly resemble traditional cadences. The most straightforward examples occur at mm. 18-19, 52-53, and 61-63, where the voice leading is largely by half- or whole-steps. Measures 52-53 feature the closest thing to an authentic cadence in the entire work: an altered dominant on D♭ resolving to G♭.

The tonic of mm. 1-9 may now be considered. Part of the beauty of the opening is its ambiguity, created by a relatively equal empha-

sis on all five pitch classes used and by their membership in an anhemitonic pentatonic collection. The returns of the opening material at mm. 21-28 and 63-70 have B♭ as tonic; might one then infer a B♭ tonic in the beginning as well? This question could be the subject for a discussion of implied notes, or even "implied tonics."

The relationships of the tonal centers and their placement within the overall tonal hierarchy are most efficiently depicted in a musical example (see Ex. 1).[4] After establishing that B♭ is the overall tonic, the students should discuss the relationships of the tonics; as is typical of much of Debussy's music, tonics related by second or third are more prominent than fifth-relations.

While it may appear conceptually backwards to find the tonics and then the pitch collections, students can more easily follow bass lines and hear ostinati and pedals as establishing tonic. Finding the complete pitch complement for a section is a more difficult task. In addition, determining the tonic sometimes facilitates the process of finding the scales used. Example 2 shows the pitch collections for the various sections of the work; the tonics are shown as whole notes while the other scale members are unstemmed quarter notes. Some of the scales, especially that of mm. 57-62, border on the total chromatic. Several of the sections contain "non-scale tones," which are omitted from the example.

"Jimbo's Lullaby" provides ample opportunity for presenting or reviewing scale types, including the pentatonic and whole-tone scales and the diatonic modes. The students might initially arrive at different conclusions, leading to a discussion of the potential ambiguity of the pentatonic and whole-tone scales and even the modes, if this has not already been considered. Connections among the pitch collections may be addressed by finding the common tones (see the circled notes in Ex. 2, which are the most obvious common-tone connections to address in a first class).

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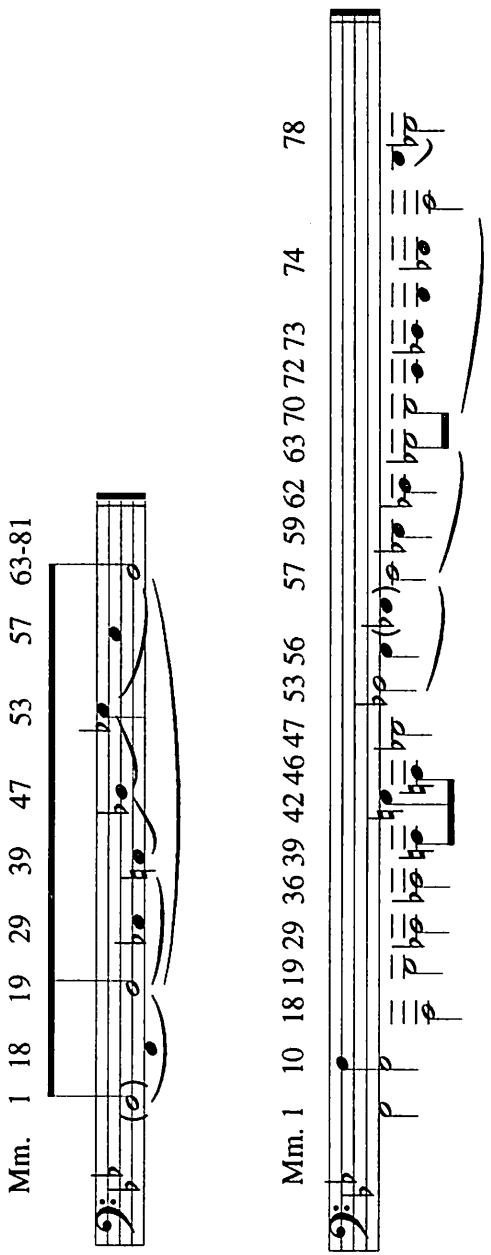
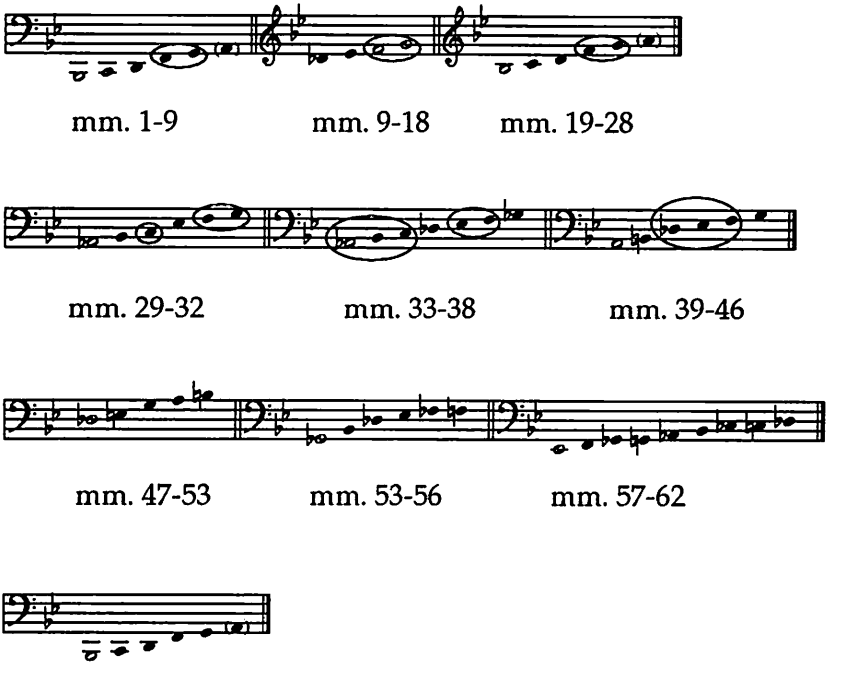
[4]In Example 1, my analysis is shown on the top, while the bottom reproduces that of Richard S. Parks in *The Music of Claude Debussy* (New Haven: Yale University Press, 1989), 69-70. While Parks discusses the pitch collections in this work by invoking pc set theory, and more specifically the notion of pc set genera, my analysis avoids this approach. The form diagram in this article is similar to that found on page 67 in the Parks book.

**Example 1.** Two readings of the tonal structure of "Jimbo's Lullaby": reading by Cummings on top, reading by Richard Parks underneath



**Example 2.** Pitch collections in "Jimbo's Lullaby"




As is typical of many of Debussy's works, the chords generally are comprised of the pitch-collection members and contain few "non-scale tones." Measures 33-36 provide a brief example of harmonic parallelism or diatonic planing within the $A^{\flat}$ Mixolydian collection, while mm. 47-48 are a good negative example: one may successfully address the common student error of calling parallel intervals planing, and point out that planing must be parallel chords of some type.

The motivic structure of "Jimbo's Lullaby," while not exceedingly complex, includes the varied repetition or recurrence of ideas, as is typical of Debussy's style. Example 3 shows two important melodic ideas along with some varied recurrences of each.

**Example 3.** Two prominent melodic ideas in "Jimbo's Lullaby" (registers altered for clarity)

A. Pentatonic motive

mm. 5-7[1]

mm. 7-9

B. Descending-step-motive

mm. 33-34

mm. 35-37

mm. 47-48

mm. 54-55

mm. 63-66

mm. 72-74

The material from mm. 5-7, which might be called the "pentatonic motive," recurs at mm. 7-9, 24-28, and 66-70. The "descending-step motive" is foreshadowed in mm. 29-30 and first clearly stated in mm. 33-34; it also returns in numerous guises. A final interesting detail is the major second, which is an integral part of all the pitch collections of the work and is used in a variety of ways (in particular, as part of pedals or ostinati; see Ex. 4).

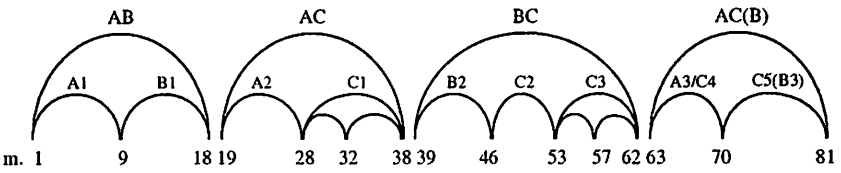
**Example 4.** Prominent major seconds in "Jimbo's Lullaby"


Rhythm and meter may be addressed in terms of the motives and the clarity of metric structure; however, "Jimbo's Lullaby" is not the most representative example of Debussy's rhythmic and metric subtlety.

The examination of detail may be summarized by an analysis of the form. "Jimbo's Lullaby" is a good example of Debussy's approach to form in that it exemplifies varied repetition and recurrence rather than development of ideas. A discussion can consider the reaction against Germanic developmental forms, the decreased emphasis on traditional phrase structure, and the replacement of it by immediate repetition and other techniques. If the students have already found the sections and why they are where they are, and have in addition covered pitch and rhythm in some detail, they will be able to discuss the relationships among sections and perhaps attach labels (see Fig. 1).

The students might approach the form by finding returns of the opening material (mm. 1-9) and labeling them with some form of 'A'. The material in mm. 9-18 appears to be transitional; however, it recurs in different surroundings in mm. 39-46, so it may be labelled

**Figure 1.** Formal diagram of "Jimbo's Lullaby"




'B'. If one interprets mm. 29-32 as transitional, then mm. 33-38—the descending-step motive—may well be labeled 'C', in part because this material recurs in mm. 47-48 and 54-59. The final large section, mm. 63-81, combines earlier materials in interesting ways: mm. 63-66 include the 'A' idea at the very top of the texture and a diatonic version of 'C' underneath it, followed by the recurrence of 'A' alone in mm. 67-70. Measures 70-81 form a coda, including 'C' (mm. 70-73, left hand) and a final allusion to 'B' (mm. 78-79, right hand). It is interesting to note that 'B' is first presented in an incomplete or fragmented way, almost like a foreshadowing (mm. 9-18), and that its final statement is even more fragmentary and allusive.

The students should also discover that one way in which Debussy recasts themes is by placing them in different registers. The final large section (mm. 63-81) includes all three themes in their highest registers except for theme C, which occurs in its highest then lowest register. This characteristic is common in many of Debussy's works.

"Jimbo's Lullaby," while a simple composition, exemplifies numerous Impressionistic techniques and stylistic features and illustrates a variety of pitch collections. The approach to the piece just discussed suggests a clear and fairly comprehensive introduction to Debussy's compositional practice. The teacher could follow this piece with any number of Debussy's works, including perhaps "Voiles" or "Des pas sur la neige" from the *Preludes*, Book I.

Just as "Jimbo's Lullaby" introduces Debussy's musical language and compositional techniques, so the song *Tilimbom* provides an initial exposure to Stravinsky. The discussion of this song may be as general and stylistic as that of the Debussy work, or the teacher can make it more methodology-specific by employing ideas about pc sets. *Tilimbom* was originally composed in 1917 as the first of the *Trois Histoires pour Enfants* for voice and piano. Stravinsky then rewrote it for voice and orchestra in 1923, lengthening it from 36 to the now-standard 64 measures. Finally, Stravinsky rescored it for voice, flute, harp, and guitar in 1954, making it the fourth of *Four Songs*. The song has a traditional Russian text.

The students could listen initially for texture. Generally, it is melody and accompaniment, but they will discover that the accompaniment is comprised of layered ostinati. The left-hand ostinato[5] is present throughout the piece; its pitch structure can be described in two different ways:

1. Stravinsky makes use of octave displacement, as exemplified by the F3-G4 leap on the second beat of each measure; and
2. The ostinato is a (0, 2, 7) pc set.

Regarding statement number two: it is sometimes a good idea to allude to integer notation and use it informally before formalizing it into full-blown pc set analysis. This may be as simple as saying: "let's eliminate the duplicated G and view the ostinato notes as F-G-C. If we call F zero and count up half steps, what would G and C be?" The students confirm that G is two and C is seven, and then one may say "Now we have a simple way to refer to the ostinato—we'll call it the (0,2,7) ostinato." Even a few initial lighthearted efforts at integer notation reduce anxiety later in the term.

After discussing the left hand, one would consider the right hand and the vocal line. This song has simple, clearly-delineated sections, yet there are numerous interesting points for discussion:

Are mm. 1-4 really bitonal (or at least examples of bichords)?
How are the vocal line and the right-hand ostinato related in

[5] All references are to the 64-measure piano-vocal score.

mm. 5-8? in mm. 28-32?
How are they related in mm. 53-57?
How are the ostinati in mm. 21-28 related to one another?

The final question provides an opportunity to discuss informally the transposition of pc sets: "G-A-D is also (0, 2, 7). Isn't it interesting that Stravinsky layers two ideas that are both (0, 2, 7)?" These patterns are similar to two different major triads: same interval structure, but different transpositions, and just as a triad may be placed in different inversions and registers, so has Stravinsky taken this (0,2,7) idea and used it in two different configurations.

In addition to the changing texture, the vocal line delineates sections in this work. The line sounds folk-like, covers a small range, and involves the (sometimes varied) repetition of a small collection of pitches: these are all stylistic traits of Stravinsky. The students may then find the different collections of mm. 1-32 (the remainder of the song repeats the collections):

| measures: | 1-4 | 5-16 | 21-32 |
|---|---|---|---|
| pitches: | A,C,D | G,A,B,C | G,A,B,C,D |
| pc sets: | (0,2,5) | (0,1,3,5) | (0,2,3,5,7) |

Having the students informally find the prime forms of each of the pc sets is more complicated here, since the students must "count down from the top" rather than up from the bottom (i.e., they are inverting the set); nevertheless, one can usually persuade the students to take a temporary leap of faith. On the other hand, if the teacher has already formalized pc set procedures, then these operations are easier.

Regardless of the degree of formalization, notions of sub- and supersets and invariance may be introduced at this point: mm. 1-4 and 5-16 hold the pitches A and C invariant, 5-16 and 21-32 hold the pitches G, A, B, and C invariant, and the pitches of both mm. 1-4 and 5-16 are contained in those of mm. 21-32. Therefore, the pitches of mm. 21-32 may be considered a superset, while those of mm. 1-4 and 5-16 are subsets. Working with the combined vocal line and accompaniment is also possible, although it may create greater pc set complexity than is desired in an introductory lecture.

In addition to the pc set structures, the students will find contextually emphasized pitches in the melody: for example, D5 alternating with C5 in mm. 1-4, A4 in mm. 5-16 (perhaps in alternation with B4 near the end of the section), and D5 and A4 in mm. 21-32.

By this point the students will have discovered recurring ideas throughout the song. One possible labeling of elements (a, b, c) reveals this formal diagram:

| section: | a | b | a | c | a | b | a | c′ | a |
|---|---|---|---|---|---|---|---|---|---|
| measures: | 1-4 | 5-16 | 17-20 | 21-32 | 33-36 | 37-48 | 49-52 | 53-60 | 61-64 |

Further discussions might include proportion, the imbalance of section lengths, and the rondo-like quality (or, at least, refrain structure) of the overall composition. In addition, there are few transitions: Stravinsky chooses instead to juxtapose different ideas. The song is less useful as an illustration of Stravinsky's rhythmic and metric procedures.

One might also consider Stravinsky's harmony. The "chords" (or perhaps better, simultaneities) in the work may be analyzed using the pc set procedures suggested above. Just as important at this initial point of study are the following:

1. The harmony is static—there is little or even no sense of progression.
2. Stravinsky makes consistent use of dissonance—interval classes 1 and 2 or, if one has not introduced this concept yet, students can find many seconds and sevenths and some ninths.
3. As mentioned earlier, another approach considers bichords.

*Tilimbom* provides a clear introduction to Stravinsky's style, and yet it does so in a brief, uncomplicated context. The song may be followed by any number of more complicated Stravinsky works. The "Russian Dance" from *Petroushka* provides a particularly good continuation in that it contains the same basic stylistic characteristics in a more complicated work and in full orchestral score.

"Dies ist ein Lied für dich allein," the first of *Fünf Lieder*, Op. 3, by Anton Webern, was composed in 1908. The text is from *Der siebente Ring* by Stefan George. This song contains many connec-

tions to the nineteenth-century German *Lied*, and the typical negative reaction of many students to "dissonant" music may be mollified or even eliminated by emphasizing the ties that Schoenberg and his students felt with tradition. Although perhaps the break from tradition is more important than the connection to it, emphasizing this relationship is not artificial. Before working on this song, the teacher might play an even earlier one by Webern: for example, the 1899 song "Vorfrühling," one of *Three Poems* with texts by Ferdinand Avenarius. This song has fairly conventional rhythms, is quite tonal, and is directly tied into the Schubert/Schumann/Wolf tradition, thus providing a good point of departure.

After listening to and discussing "Dies ist ein Lied" without the score, the students can address the connections to tradition:

1. This is a *Lied* for voice and piano; the genre is traditional, and the piano part is an integral component of the composition in a way similar to a Schubert *Lied*;
2. The division into fairly clear-cut phrases is related to earlier compositional practice;
3. The tripartite form of the song, in which the third section is a varied return of the first, is traditional; and
4. The way in which both the vocal line and the piano make use of gesture and of motivic concentration is typical of much eighteenth- and nineteenth-century composition.

This final point is important: Webern and his Viennese contemporaries created a compositional problem for themselves by eliminating the stabilizing and form-producing force of tonality, and their initial solution was dense motivic concentration. The song is in three sections, the third of which is a varied recurrence of the first:[6]

| | | | |
|---|---|---|---|
| section: | A | B | A′ |
| measures: | 1-5 | 6-7 | 8-12 |

[6]The form diagram and discussion of the Webern song bear some resemblance to those of Robert P. Morgan in both the anthology mentioned earlier and the accompanying text, *Twentieth-Century Music* (New York: Norton, 1991), 79-80. This article explores the set-theoretical aspects to a somewhat greater degree than do Morgan's anthology and text.

Aside from finding the sections, the more important issues of why they fall in these places, what creates cadences, and how the return is related to the opening should also be addressed. The structure of the motives themselves should be considered, arriving eventually at something like Example 5.

While the motives appear different on the surface, numbers 2-15 may all be seen as variants of number 1. The variety in numbers 1-4 is created through rhythmic alterations; numbers 2 and 6-10 may be seen as submotives (or subsets), varied through rhythmic changes and intervallic contraction or expansion. Finally, while numbers 11-15 look substantially different from number 1, the first four pcs of number 11 are identical to those of number 1.

After trying to find and characterize the motivic connections, the students will probably agree that they need a system to classify collections of notes in order to show their pitch similarities as well as their intervallic content. Here one might begin a systematic approach to pc set analysis, if it has not already been presented.

The important initial premises are enharmonic and octave equivalence. Quicker students will object to the loss of the voice-leading implications of different spellings and also the loss of register. There is little to say to them, but generally they will accept that the intervallic construction of the motives is an issue worth investigation. The teacher can demonstrate that generalization to the twelve different pcs is similar to the consistent labeling of a C major triad, even though the triad may be presented in varied voicings, spellings, and registral contexts.

The next step is to find the normal order of the set; however, one need not call it that immediately. Rather, one might simply state that one classification system calls the pc C zero, and then relates all other pcs to it. The students may notice that this is analogous to fixed-do solfège. The students may then group the notes as closely together as possible—to compress them into a small space, or try to put them into the shortest scale possible. This process is analogous to taking any major triad and putting it into root position, closest spacing.

A word about the rigor of presenting normal order: while there is a time and place for introducing the notion of examining every rotation of a pc set to determine its normal order and for discussing

**Example 5.** Motivic structure in "Dies ist ein Lied für dich allein"


(cont.)

**Example 5.** (cont.)


Where they are from: #1: mm. 1-2, voice; #2: mm. 2-3, piano; #3: mm. 8-9, piano; #4: mm. 9-10, voice; #5: mm. 10-12, piano; #6: mm. 1-2 voice; #7: m. 3, voice; #8: m. 4, voice; #9: m. 8, voice; #10: m. 4, piano; #11: m. 6, voice; #12: m. 7, voice; #13: mm. 6-7, piano; #14: m. 6, piano; #15: m. 7, piano.

best normal order, these procedures may be temporarily postponed if one creates situations in which they are unnecessary. For many trichords and tetrachords the smallest span is visually quite obvious. One can eventually formalize the process by teaching how to determine normal order two different ways:

1. The rotation system, in which one rotates the bottom note to the top and systematically examines the rotations to find the smallest span (one could also present the successive interval array in this context);[7] and

[7] See David Mancini, "Teaching Set Theory in the Undergraduate Core Curriculum," *Journal of Music Theory Pedagogy* 5/1 (Spring 1991): 95-107 for additional information about the pedagogical value of the successive interval array.

2. A procedure which accomplishes much the same thing: intuitively try to find the normal order, then duplicate the bottom note on the top. Find the largest interval, and begin the normal order on the top note of the largest interval.

The first chord in the Webern song includes pcs 2, 3, 10, and 11. If it has not already been introduced, this is a good opportunity to present the idea of modulo 12 arithmetic. It may be as simple as pointing to a clock face and saying that we do not say "13 o'clock" (at least in the United States), but rather call it "1 o'clock." It is thus as if we subtract twelve from any hour larger than twelve. The only exception to the clock face analogy is that "12 o'clock" is referred to as zero in mod 12 terms—we subtract 12 from 12 as well as from anything larger than twelve.

Another way of getting at it is to present two side-by-side continua:

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| . | . | . | 9 | 10 | 11 | 0 | 1 | 2 | . | . | . |
| | | | | | | 12 | 13 | 14 | . | . | . |

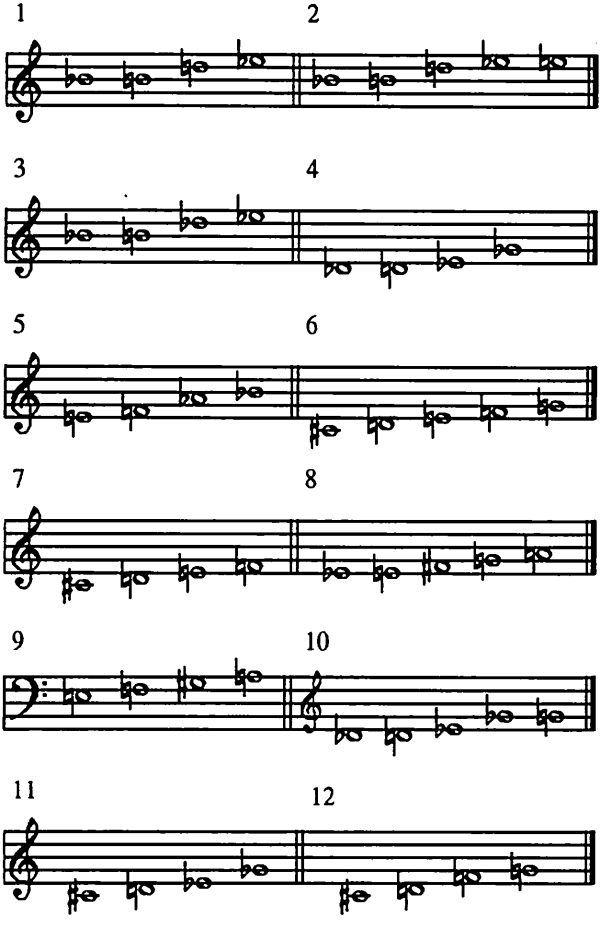
For the Webern chord, while [2,3,10,11] looks fairly compressed, it really has a span of nine semitones. The students will find that [10,11,2,3] has a span of only five semitones, the smallest span possible. The process of finding normal order thus involves:

1) assigning numbers (where C = 0);
2) eliminating duplications; and
3) finding the smallest span.

Normal order is useful for comparing chords and motives, particularly if one is looking for pcs in common between them. The normal orders of numerous other chords and motives throughout the song are given in Example 6. The issue of what to do when there is a "tie"—more than one rotation with the same interval span—might be addressed if the students are catching on quickly, but often it is best to leave it for a future class meeting.

An alternative to first creating a long list of normal orders and then converting them into prime forms (called set types in some texts) is immediately presenting the idea of prime form after find-

**Example 6.** Normal orders for several pc sets in "Dies ist ein Lied für dich allein"




| *Number* | *Location* | *Normal order* |
|---|---|---|
| 1 | m. 1, piano, r.h., first chord | [10,11,2,3] |
| 2 | m. 1, piano, l.h. added | [10,11,2,3,4] |
| 3 | m. 1, piano, r.h., second chord | [10,11,1,3] |
| 4 | mm. 1-2[1], voice | [1,2,3,6] |
| 5 | m. 2, voice, all pitches but Gb4 | [4,5,8,10] |
| 6 | m. 3, voice | [1,2,4,5,7] |
| 7 | m. 3, piano chord, beat 2.5 | [1,2,4,5] |
| 8 | m. 4, voice | [3,4,6,7,9] |
| 9 | m. 5, piano | [4,5,8,9] |
| 10 | mm. 5-6[2], voice | [1,2,3,6,7] |
| 11 | m. 6, beat 2, piano | [1,2,3,6] |
| 12 | mm. 7-8, fermata chord | [1,2,5,7] |

ing the very first normal order. Given the set with normal order [10, 11, 2, 3], the students might find it more efficient to begin the set on zero, analogous to transposition. The students may discover that this process is similar to taking several major triads with different roots and calling them all simply major triads; it is thus a general label. They may also discern the analogy with movable-do solfège—here, it is "movable zero." As the students figure out the prime forms, they will notice that several sets recur at different transpositions. They may then conclude that it is efficient to have one label which shows this similarity. Table 1 shows the prime forms and Forte designations[8] for each of the normal orders calculated in Example 6.

**Table 1.** Prime forms for several pc sets in "Dies ist ein Lied für dich allein"

| *Number* | *Normal order* | *Prime form* | *Forte name* |
|---|---|---|---|
| 1 | [10,11,2,3] | (0,1,4,5) | 4-7 |
| 2 | [10,11,2,3,4] | (0,1,2,5,6) | 5-6 |
| 3 | [10,11,1,3] | (0,1,3,5) | 4-11 |
| 4 | [1,2,3,6] | (0,1,2,5) | 4-4 |
| 5 | [4,5,8,10] | (0,1,4,6) | 4-Z15 |
| 6 | [1,2,4,5,7] | (0,1,3,4,6) | 5-10 |
| 7 | [1,2,4,5] | (0,1,3,4) | 4-3 |
| 8 | [3,4,6,7,9] | (0,1,3,4,6) | 5-10 |
| 9 | [4,5,8,9] | (0,1,4,5) | 4-7 |
| 10 | [1,2,3,6,7] | (0,1,2,5,6) | 5-6 |
| 11 | [1,2,3,6] | (0,1,2,5) | 4-4 |
| 12 | [1,2,5,7] | (0,1,4,6) | 4-Z15 |

If the class is particularly astute, one may even discuss the idea of subsets and supersets, using prime forms from the piece: (0,1,4,6) and (0,1,3,4,6); (0,1,2,5) and (0,1,2,5,6); and perhaps even (0,1,4,5) and (0,1,2,5,6). Finally, one may discuss Webern's notion of "the unity of musical space," citing the vertical and horizontal use of (0,1,2,5,6)

[8] See Allen Forte, *The Structure of Atonal Music* (New Haven: Yale University Press, 1973), 179-181.

and of (0,1,3,4) and (0,1,3,4,6). It is also worth mentioning that the sets (0,1,3), (0,1,4), and (0,1,4,5) were among Webern's favorites.

"Dies ist ein Lied für dich allein" provides a clear and practical introduction to atonal music and to pc set concepts; it may be followed by any number of compositions. Webern's Op. 5 or Op. 9 pieces work well, or if one prefers vocal music, Schoenberg's Op. 15 or Op. 21 are effective, as are Berg's Op. 2 songs. While it is chronologically more logical to begin with works which are on the edge between post-tonality and atonality, the students often find them more difficult to work with. It is sometimes easier to use clearly atonal, densely motivic, texturally transparent works first, and then address the more difficult post-tonal compositions such as Schoenberg's "Saget mir," number five from *Das Buch der hängenden Gärten*, Op. 15.

Undergraduate twentieth-century analysis courses are a joy to teach; however, the selection of compositions is critical to the students' understanding. The three miniatures discussed in this article provide concise introductions to their composers' styles and also to analytical approaches, and they may form a springboard into more detailed analytical investigation.