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By Angela Ripley

Nestled between the pensive longing of "Des pas sur la neige" and the graceful beauty of "La fille aux cheveux de lin," the seventh of Claude Debussy's *Préludes*, Book I (1910), "Ce qu'a vu le vent d'ouest," provides a musical experience as variable as the wind itself. The constant activity of the piece encompasses rapid arpeggiations, trills, tremolos, long pedal points, and strident chords. Beneath the textural variety of the musical surface lies a work fashioned out of whole-tone scales, connected by chromatic passages, and bounded by vestiges of tonality. For the undergraduate music student, this prelude provides a useful introduction to some of the many resources available to the early-twentieth-century composer. After presenting an analysis of the piece, this article proposes two lesson plans for discussing the prelude in an undergraduate course in post-tonal music theory.[1] Both plans feature small-group peer discussions examining important intervallic and melodic aspects of the piece as well as significant musical similarities and differences across discrete sections. Students are encouraged to support their analytical findings with specific musical examples. Collaboration among students is further promoted by the joint construction of a musical timeline. Aided by the familiar solo-piano instrumentation of the work and opportunities for repeated listening, students explore the ways in which Debussy blends diatonic and whole-tone elements in this piece.

Analysis

Low in the bass, F♯1 emerges as the first note of the prelude.[2] It pauses only to repeat itself at once, morphing into a pedal tone that implacably withstands rapid waves of thirty-second notes that first arpeggiate a major-minor seventh chord on D, then reach for

[1] The analysis and lesson plans presented here focus primarily on the pitch content of the piece.

[2] I specify octave register throughout this article in relation to middle C as C4.

notes outside the chord—first E♭4, then A♭4 and G♭4 as a pair of grace notes—until the dam bursts, admitting in its entirety a major-minor seventh chord on A♭, and the two chords, conjoined by the tritone C–F♯/G♭, are simultaneously juxtaposed and intertwined in a torrent of sound. At last silence falls, save for the low tremolo between F♯1 and C♯2 that heralds the arrival of the first pure triad of the piece, F♯ major, in m. 7. The succession of the F♯ major triad by major triads on E♭ and A does not phase the F♯ pedal, which remains secure in the knowledge of its established centricity (see Example 1).

A quasi-tonal framework for the prelude emerges through Debussy's persistent use of pedals. However, the majority of the piece, in contrast to this framework, stands outside the realm of functional tonality by synthesizing elements of the WT_0 and WT_1 collections while employing diatonic sonorities in non-functional ways. In essence, Debussy seems to shift the emphasis from the tonal system to its constituent elements in such a way that diatonic sonorities become intrinsically complete without reference to the norms of functional tonality. This paradigm shift complicates matters for analysts—and especially for students—as the diatonic collection, joined by whole-tone and octatonic collections, becomes simply one of several sources of melodic and harmonic material in this prelude. While the interplay of octatonic and whole-tone collections throughout the piece is intriguing, the more salient of these collections remains the whole-tone. In light of the pedagogical focus of this article, I will supply a brief discussion of some octatonic elements identified by other theorists before presenting an analysis and lesson plans that focus on whole-tone and diatonic aspects of the prelude.

Example 1. Debussy, "Ce qu'a vu le vent d'ouest," from *Préludes* (Book I), mm. 1–10. © Copyright 1969 by Peters Edition (Leipzig). Reprinted by Permission of Peters Edition.

Octatonic elements in this prelude tend to appear via the combination of diatonic sonorities.[3] According to Allen Forte,

[3] The scholars whose work I discuss in this article use a variety of different methods for labeling whole-tone and octatonic scales. In order to facilitate terminological continuity throughout the article, I adopt Miguel Roig-Francolí's respective designations of whole-tone scales as WT_0 or WT_1 and octatonic scales as OCT (0,1), OCT (1,2), or OCT (2,3),

Debussy most often creates octatonic collections from diatonic materials such as triads and seventh chords, particularly the major-minor seventh chord.[4] For example, the opening D7 and A♭7 chords form the octatonic hexachord 6-30 (013679), which Forte traces to the pitch-class-equivalent coronation chord from Modest Musorgsky's opera *Boris Godunov*. Non-functional triadic successions like those in mm. 7–9 are also common generators of octatonic collections in the music of Debussy.[5]

Because of scale segments which the diatonic collection respectively shares with the octatonic and whole-tone collections, Richard Bass notes that motivic continuity between these collections is feasible in spite of their diverging harmonic foundations.[6] Continuity between octatonic and whole-tone collections—without recourse to the intermediary function of the diatonic—flows from common-tone retention; for example, every octatonic collection shares four pitch classes with each of the two whole-tone collections.[7] One such example appears in Forte's relation of OCT (0,1) in mm. 15–18 to WT_0 in mm. 19–20 via four common pitch classes, which collectively form a 4-25 (0268) tetrachord, and continuity of motive.[8]

Although the musical surface does reflect octatonic collections to some extent, Kip Wile argues—and I concur—that the primary role of the octatonic collection in this prelude is one of organization below the musical surface. Wile divides the prelude's self-defined middleground into two 4-25 tetrachords that, when combined, yield

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where the numbers associated with each label refer to pitch-class content. See Roig-Francolí's *Understanding Post-Tonal Music* (New York: McGraw-Hill Higher Education, 2008), 52.

[4] Allen Forte, "Debussy and the Octatonic," *Music Analysis* 10, no. 1–2 (March–July 1991): 139.

[5] Ibid., 128, 157.

[6] Richard Bass, "Models of Octatonic and Whole-Tone Interaction: George Crumb and His Predecessors," *Journal of Music Theory* 38, no. 2 (Autumn 1994): 157.

[7] Ibid., 158, 161.

[8] Allen Forte, "Table II: Structure According to PC Sets and Genera," in Unpublished Analysis of "Ce qu'a vu le vent d'ouest," Allen Forte Electronic Archive, http://forte.music.unt.edu/files/images/Forte_Papers/Debussy/Cequavu/Dbssy_Cequavu_p2.jpg (accessed July 1, 2017).

the complete OCT (0,1) collection.[9] The versatility of tetrachord 4-25 presents a wealth of options for embellishing the structure of the middleground at the surface of the piece with octatonic, whole-tone, or other pitch materials.[10] Transitions between collections are facilitated by invariant members of set class 4-25; for example, the constituent tritone A–D♯/E♭ from one of these tetrachords acts as a bridge between the octatonic-forming chords of mm. 7–9 (see Example 1) and the WT_1 collection in mm. 11–14 (see Example 6).[11]

The most overt use of either whole-tone scale in this piece appears in mm. 19–20 (see Example 2). Debussy combines thick chords with ascending scalar sweeps that comprise the only complete, stepwise presentation of WT_0 found in the piece.[12] Within this two-measure span, Debussy emphasizes WT_0 as a source of both melodic and harmonic elements. Providing a sense of stability amid the busy texture, the first chord of m. 19 (a 4-25 tetrachord) recurs every two beats in this passage. Each of the interpolated sixteenth-note chords reaches successively higher, but the first three of these chords collapse back into the opening sonority. Only with the final attempt

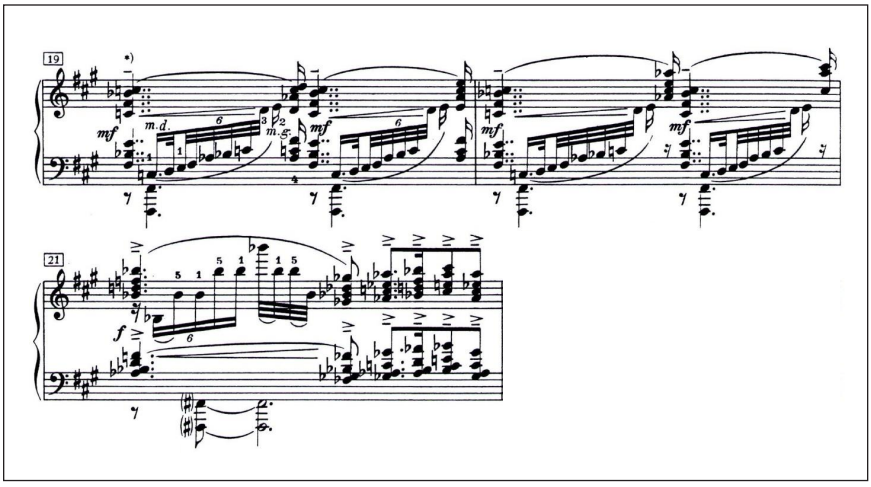
[9] Kip Wile, "Recurrence, Level Organization and Collection Interaction in Three Piano Preludes by Debussy," *Indiana Theory Review* 22, no. 2 (Fall 2001): 79, 73–74. Wile's term "self-defined" denotes "pitch organization that is guided by principles other than those that produce tonal functionality." Wile explains that his use of the term "middleground" is not strictly Schenkerian but remains analogous to that method as it "describes medium-range voice-leading events" that "produce structure that underlies and joins to the compositional surface" and "elaborate still deeper organization" (53nn3–4).

[10] Forte, "Octatonic," 141; Wile, "Recurrence," 74. Tetrachord 4-25 is the only one of three whole-tone tetrachords that can also be octatonic (Forte, "Octatonic," 141). This tetrachord also regularly appears in tonal music in the guise of a French augmented-sixth chord, or as a dominant seventh chord with lowered fifth. The reinterpretation of this sonority as either a whole-tone or an octatonic entity tightens the bonds of musical continuity, as observed by Bass, and recalls Forte's argument that the formation of octatonic collections in the music of Debussy can most often be traced to diatonic materials (Bass, "Models," 157; Forte, "Octatonic," 139).

[11] Wile, "Recurrence," 73–74.

[12] However, the whole-tone melody in mm. 63–66 does present a stepwise five-note subset of WT_0.

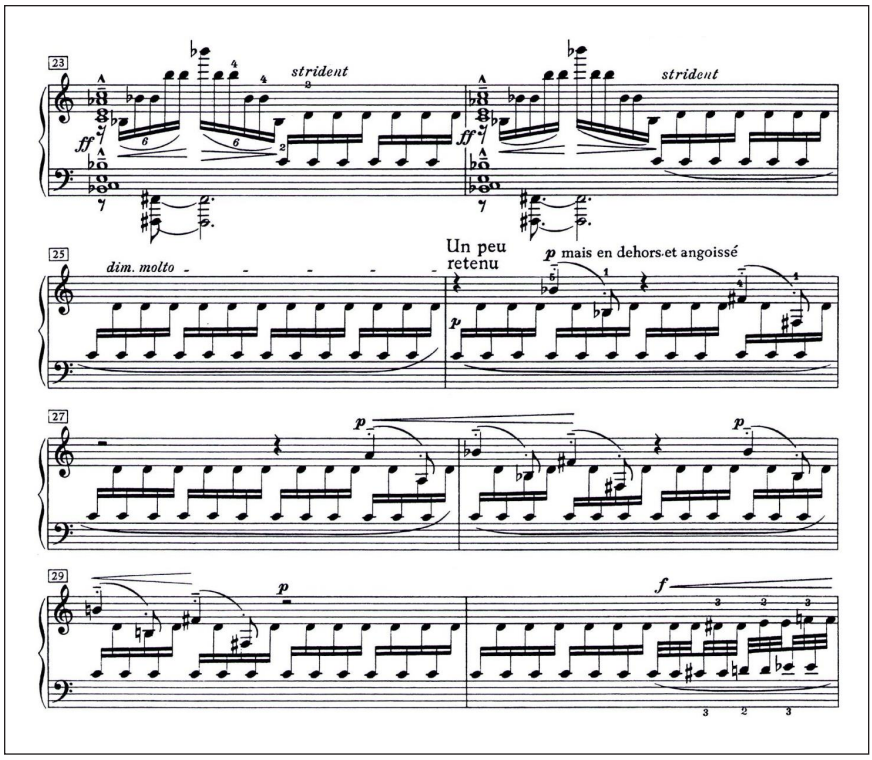
at the end of m. 20 is the sixteenth-note chord able to break free from the gravitational pull of the opening sonority—and the WT_0 collection—to reach the B♭7/A♭ that begins m. 21.[13]



Example 2. Debussy, "Ce qu'a vu le vent d'ouest," mm. 19–21. © Copyright 1969 by Peters Edition (Leipzig). Reprinted by Permission of Peters Edition.

The WT_0 collection reappears, in its entirety, in mm. 23 and 24. The following section (mm. 26–29) retains the notated trill between C4 and D4 that begins in m. 23; with two exceptions, the pitch material of this section can also be traced back to WT_0 (see Example 3). Broken octaves appearing over the trill give a concise melodic impression that, to my ear, briefly implies the key of G minor. The most frequently appearing notes, B♭ and F♯, belong to the prevailing WT_0 collection. However, two notes from outside this collection (A and B) each appear once during this passage. Because of their proximity in pitch space, both additions may be explained as neighbors to B♭. The ambiguity involved in distinguishing notes within the prevailing pitch collection from those outside that collection—and in determining what the prevailing pitch collection might be—provides fertile ground for discussing with students the need to grapple with contradictions and conflicts within the music in order to arrive at a nuanced hearing of the piece.

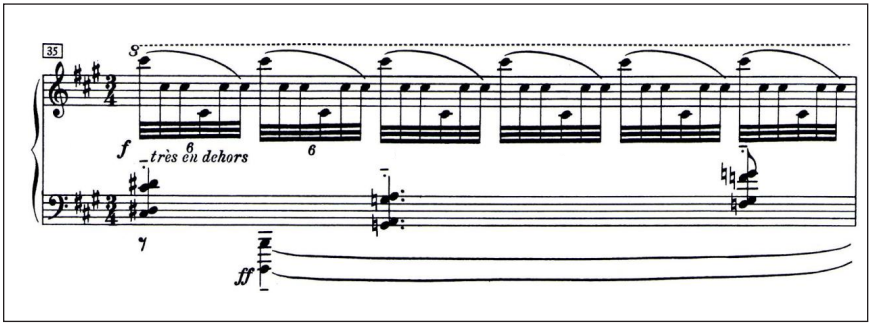
[13] The resolution of the prevailing 4-25 tetrachord in mm. 19–20—enharmonically a French augmented-sixth chord with a tonic note of B♭ (with F♯ in its usual position in the bass)—to a B♭ major-minor seventh chord in m. 21 is reminiscent of a common-tone augmented-sixth chord.



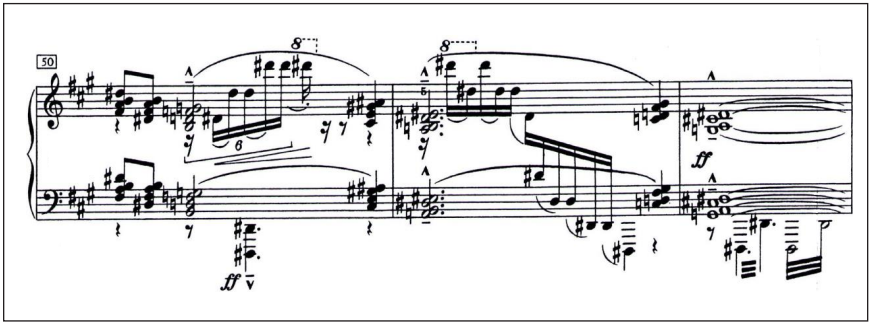
Example 3. Debussy, "Ce qu'a vu le vent d'ouest," mm. 23–30. © Copyright 1969 by Peters Edition (Leipzig). Reprinted by Permission of Peters Edition.

Debussy also makes good use of the other whole-tone scale, WT_1. This pitch collection is most prominently displayed in the section beginning at m. 35, where C♯7 and B0 respectively hold the highest and lowest registral positions and the other members of the collection appear in three major-second dyads with octave doublings: C♯–D♯, G–A, and F–G (see Example 4). When combined, the first two of these dyads form a pair of tritones (C♯–G and D♯–A) that yields pitch-class set 4-25. The two tritones are separated by a major second, an interval that also appears prominently throughout the piece in trill figures and simultaneous chromatic scales. Debussy makes this relationship explicit in m. 52 when he presents all four notes of this 4-25 tetrachord simultaneously in close position (see Example 5). His emphasis of tritones a major second apart also extends to other pairs of tritones that combine to form 4-25 tetrachords in m. 51. The presentation of WT_1 as a series of major-

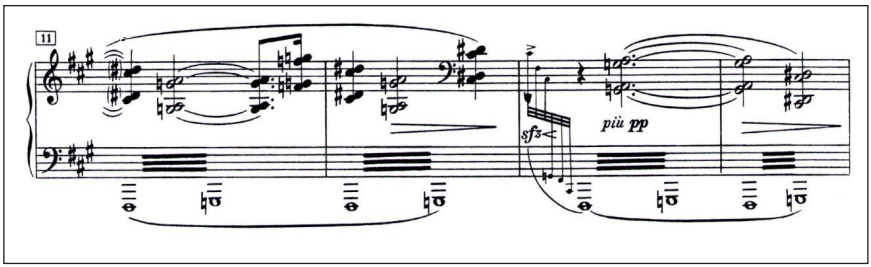
second dyads is foreshadowed in mm. 11–14 (see Example 6) and echoed near the end of the piece in mm. 69–70 (see Example 7). By means of this consistent presentation, Debussy clearly connects the passages that feature WT_1 while emphasizing the major second—a singularly important interval for a piece that draws heavily on whole-tone scales—and the tritone. By emphasizing multiple tritones, Debussy undermines tonality in both narrow and broad contexts. For instance, the opening section of the prelude (mm. 1–6) features major-minor seventh chords whose roots are a tritone apart (D and A♭). The tritone also emerges as an element of large-scale organization through Debussy's choice of key signatures, which respectively imply F♯ minor and C major.



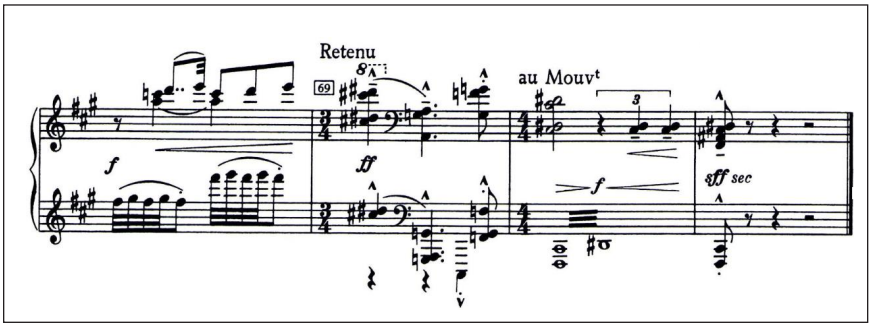
Example 4. Debussy, "Ce qu'a vu le vent d'ouest," m. 35. © Copyright 1969 by Peters Edition (Leipzig). Reprinted by Permission of Peters Edition.



Example 5. Debussy, "Ce qu'a vu le vent d'ouest," mm. 50–52. © Copyright 1969 by Peters Edition (Leipzig). Reprinted by Permission of Peters Edition.



Example 6. Debussy, "Ce qu'a vu le vent d'ouest," mm. 11–14. © Copyright 1969 by Peters Edition (Leipzig). Reprinted by Permission of Peters Edition.



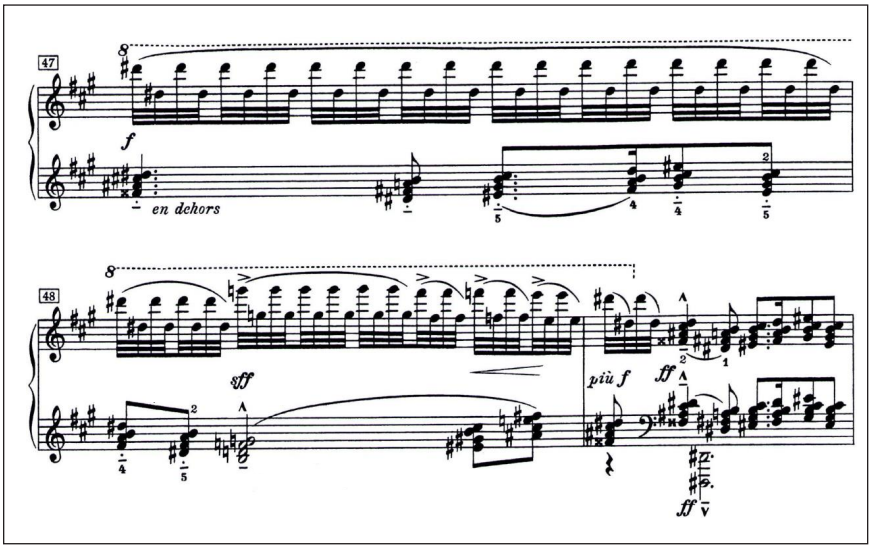
Example 7. Debussy, "Ce qu'a vu le vent d'ouest," mm. 68b–71. © Copyright 1969 by Peters Edition (Leipzig). Reprinted by Permission of Peters Edition.

The penultimate section of the piece, mm. 63–68, returns to the F♯1 pedal and D^7 chord with which the piece began. The texture, however, changes. Instead of the rapid arpeggiation that characterized the beginning, D^7 now appears as a simultaneity in short, accented chords (see Example 8). Something far more significant than the texture also changes from the beginning of the piece to this point. In the opening section, D^7 initially appears alone with the F♯1 pedal, betraying no hint of the whole-tone material that is to come. However, when the chord returns in m. 63, it is accompanied by a melody from the WT_0 collection. By synthesizing the opening diatonic sonority with a whole-tone melody, Debussy alludes to the beginning of the piece while acknowledging that the piece is permanently changed by its journey through both whole-tone scales.

Example 8. Debussy, "Ce qu'a vu le vent d'ouest," mm. 63–68. © Copyright 1969 by Peters Edition (Leipzig). Reprinted by Permission of Peters Edition

Although the majority of the piece features material drawn from whole-tone scales, Debussy does not shy away from conventionally tonal sonorities. He does, however, use these sonorities in ways that are far from conventional by tonal standards. For instance, mm. 47–48 feature a series of chords in the left hand (see Example 9). The top note of each chord reveals a melody from the WT_1 collection. Rather than remain strictly within the framework provided by WT_1, Debussy harmonizes the melody with a succession of inverted major-minor seventh chords, keeping the pitch structure static in the pianist's hands through parallel voice-leading and drawing the listener's attention to the coloristic harmonization of the whole-tone melody without engendering expectations that

these chords will resolve tonally. A similar passage featuring a WT_0 melody harmonized with inverted major-minor seventh chords and whole-tone chords appears in mm. 21–22. Motivic similarities between these passages enhance the musical coherence of the work by bridging the gap between the two whole-tone scales and making explicit the synthesis of diatonic and whole-tone elements that pervades the piece.

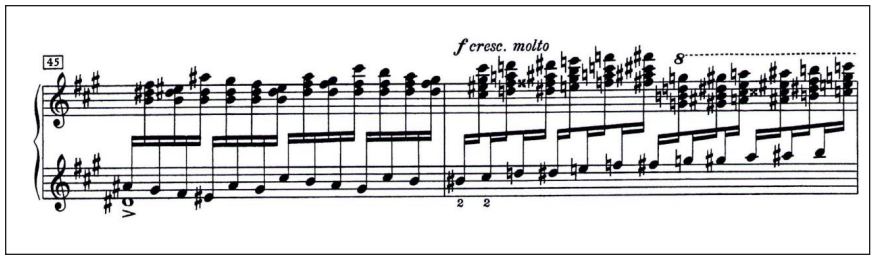


Example 9. Debussy, "Ce qu'a vu le vent d'ouest," mm. 47–49. © Copyright 1969 by Peters Edition (Leipzig). Reprinted by Permission of Peters Edition.

In this prelude, diatonic chords that do not function in tonal ways often occur in chromatically based transitional material. One such passage appears in m. 46 when Debussy uses parallel major triads to harmonize an ascending chromatic scale (see Example 10).[14] Another example of Debussy's non-functional employment of diatonic sonorities comprises the brief series of major triads—highly disjunct in contour—that appears in mm. 7–9 (see Example 1).[15]

[14] Other major-triad harmonizations of chromatic passages appear in mm. 15–18.

[15] A similar passage occurs in mm. 59–61, and m. 8 subsequently returns as m. 62 during the "transformed and telescoped" reprise Forte locates in mm. 54–62. Recall Forte's identification of an octatonic passage



Example 10. Debussy, "Ce qu'a vu le vent d'ouest," mm. 45–46. © Copyright 1969 by Peters Edition (Leipzig). Reprinted by Permission of Peters Edition.

Fluctuating musical textures are stabilized by pedal points throughout the majority of the piece—55 of 71 measures contain a pedal of some sort.[16] It is from these pedals that a quasi-tonal framework emerges. In keeping with the prevailing key signature of three sharps (F♯ minor), the most common pedal point is F♯.[17] With brief interruptions, the F♯ pedal covers the first twenty-four, and the last ten, measures of the piece. A shorter instance of the F♯pedal occurs in mm. 54–57. Altogether, the F♯ pedal is present in slightly more than half the piece (36 measures).

The second pedal point is C♯, the dominant of F♯ minor. Appearing primarily in the middle of the piece, this pedal occupies mm. 35–37 and mm. 39–41. A C♯ pedal also appears in the final three measures of the piece, the last two of which overlap with the concluding F♯ pedal. The transition from m. 69, which features a C♯ pedal without F♯, to mm. 70–71, which contain both C♯ and F♯ pedals, subtly suggests an authentic cadence and retrospectively affirms an F♯-centric reading of the prelude's opening.

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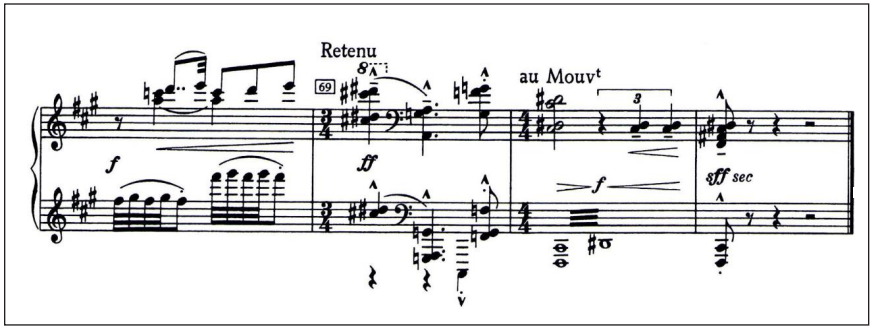
arising from non-functional triadic succession in mm. 7–9 ("Octatonic," 128; "Table II" of his unpublished analysis).

[16] While many of these pedals fit the conventional notion of sustained notes in the lowest voice, they do sometimes occur in other voices. In addition to sustained notes, the pedal points mentioned here include repeated notes with octave displacement, trill or tremolo figures, and low, non-sustained notes occurring on downbeats.

[17] It is also possible to think of the tonal framework as F♯ major instead of F♯ minor. A♯ (or B♭) does occur throughout the piece, and some of the thirty-second notes interpolated with the F♯ pedal in mm. 15–18 outline an F♯ major triad.

Finally, D♯ also appears as a pedal. Like C♯, the D♯ pedal occurs primarily in the middle of the piece (mm. 38, 42–45, 47–48a, and 49–53a). As the (raised) submediant, the D♯ pedal first appears between two C♯ pedals, acting as an upper neighbor to C♯. This relationship is also maintained near the end of the piece in m. 70 (see Example 11). Here, all three points of tonal reference (F♯, C♯, and D♯) coalesce into the final sonority; D♯2 is presented with C♯2 in a tremolo figure that ultimately resolves to C♯2 in m. 71, while D♯3 enters in m. 70 and persists through the final F♯^{add6} chord in m. 71.



Example 11. Debussy, "Ce qu'a vu le vent d'ouest," mm. 68b–71. © Copyright 1969 by Peters Edition (Leipzig). Reprinted by Permission of Peters Edition.

What, then, did the west wind see? It saw a piece replete with fluctuating musical textures, a piece indebted to both whole-tone collections for melodic and harmonic material. It saw familiar diatonic sonorities—such as the major triad and major-minor seventh chord—used in non-functional ways, often as coloristic harmonizations of whole-tone melodies or chromatic scales. It saw tonality simultaneously undermined through Debussy's emphasis of multiple tritones and embraced through tonal relationships among the pedal points F♯, C♯, and D♯. After a breath-taking journey through the prelude "Ce qu'a vu le vent d'ouest," the west wind looked into the music, as into a mirror, and saw itself.

Lesson Plans

With its tumultuous journey through whole-tone and diatonic elements, "Ce qu'a vu le vent d'ouest" provides an intriguing focus for two consecutive classes of an undergraduate course in post-tonal theory. The lesson plans presented here—intended

for students who have already been introduced to the concept of whole-tone scales but may not yet have encountered them in a musical context—provide opportunities for students to

- explore their aesthetic responses to an unfamiliar piece of post-tonal music;
- identify melodic and harmonic examples of whole-tone collections (differentiating between WT_0 and WT_1) in a musical context;
- evaluate these examples for clarity in relation to an audience of high-school students;
- collaborate with classmates in small groups to examine melodic, harmonic, tonal, and textural features of the piece in dialogue with analogous features of common-practice-period music;
- present their findings to the class and support those findings with specific musical examples; and
- compare their initial aesthetic responses to their responses after analyzing the music.

Some students may find it challenging to deal with the sound of the piece, which is rather dissonant at times. Because of their previous experience analyzing tonal music, students may be frustrated when their carefully formed tonal expectations are thwarted. In the hope that continued exposure to the piece will help students to find it less strange and to comprehend its distinctive aural characteristics more fully, the pedagogical process outlined here includes opportunities for students to listen to the piece multiple times.

At the beginning of the first class, students listen twice to a recording of the piece (first without the score in order to focus on the contour, then with the score to connect the sounding music to its notation) and write down their first impressions in response to the following questions:

1. List three words you would use to describe the piece. Briefly explain why you chose these words.
2. What is one spot in the music that you find surprising or intriguing? Provide measure numbers.[18]

[18] To save class time and minimize confusion, the instructor should provide students with scores in which the measure numbers are already marked.

Collecting these responses for a participation grade allows the instructor to obtain early feedback on the initial reactions of students to the piece.[19]

After students take a few minutes to identify changes in texture and other potentially important points of articulation, they work together to construct a musical timeline on the board. This timeline provides a concise summary of the piece as well as a common frame of reference for further analysis.[20] The timeline should identify by measure number all changes in key signature, time signature, and texture that occur during the piece. Any other pertinent observations made by students may also be added. To expedite the process of constructing the timeline, the instructor can divide the class into small groups, each of which is responsible for a certain aspect of the timeline (e.g., Group 1 adds key signatures and time signatures to the timeline; Group 2 finds textural changes in mm. 1–22 and marks them on the timeline; and so forth). Alternatively, each group of students may be responsible for all aspects of the musical timeline that correspond to an assigned section of the prelude. Moving beyond the prelude's most obvious features, the instructor can ask students which notes occur as pedal points throughout the piece. Students add these to the timeline and discuss, at the prompting of the instructor, how the different pedals might combine to give the

[19] John Bean notes the power of exploratory writing at the beginning of class to focus students' thoughts, stimulate discussion, and provide instructors with insight into the thought processes of students through formative assessment. John C. Bean, *Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom*, 2nd ed., The Jossey-Bass Higher and Adult Education Series (San Francisco: Jossey-Bass, 2011), 132, 124, 122).

[20] The musical timeline bears some similarities to the "road map" suggested by Brian Alegant and Gordon Sly for teaching post-tonal music analysis; Alegant and Sly apply this strategy to two Debussy preludes: "La fille aux cheveux de lin" and "Feuilles mortes." "Taking Stock of Collections: A Strategy for Teaching the Analysis of Post-Tonal Music," *Journal of Music Theory Pedagogy* 18 (2004): 23–51. The road map as pedagogical strategy also appears in Philip Stoecker and Brian Alegant, "Upon Further Reflection: Teaching Inversion through Jean Papineau-Couture's *Nuit*," *Journal of Music Theory Pedagogy* 25 (2011): 129–52. Alegant provides further information and examples of road maps for tonal and post-tonal works in "A Picture is Worth a Thousand Words: Road Maps as Analytical Tools," *Current Musicology* 95 (Spring 2013): 162–76.

piece something of a tonal framework.[21] A sample timeline for the prelude appears in Figure 1.

In this timeline, the top two lines respectively show key and time signatures throughout the piece. The third (middle) line describes textural features while the fourth line displays, from top to bottom, the pedal points D♯, C♯, and F♯. The bottom line supplies measure numbers for the prelude; each segment of this line represents a two-measure unit. Musical features included in the timeline align with the grid provided by the measure numbers. For example, the C♯pedal in mm. 35–37 occupies one whole unit (mm. 35–36) plus one half unit (m. 37) on the timeline. Similarly, the D♯ pedal in m. 38 appears one-half of the way through the unit that begins in m. 37.

As they consider more detailed pitch aspects of the piece, students can examine features of Debussy's chord construction. While the major triads and major-minor seventh chords that pervade the piece should be familiar to students from their previous study of music theory, students may find the enharmonic spellings and diverse textures associated with some of these chords confusing.[22] A timely reminder from the instructor to consider the possibility of enharmonic spellings and chords that do not appear in block form may prove helpful as students label the triads and seventh chords they find with lead-sheet symbols and determine whether or not they function tonally. When students realize these familiar chords do not function tonally, they can consider the settings—primarily chromatic passages and busy textures—in which the chords appear in the piece.

[21] Students can copy down the timeline, or use their cell phones to take pictures of it, for future reference.

[22] The E♯ or F major triad in m. 15, spelled as E♯2–A2–B♯2, provides one such potentially confusing example. These examples can prompt class discussion of why Debussy chose to use enharmonic spellings. In this instance, the spelling emphasizes $\hat{7}$ and $\sharp\hat{4}$ as tendency tones in an F♯-centric reading of the piece.

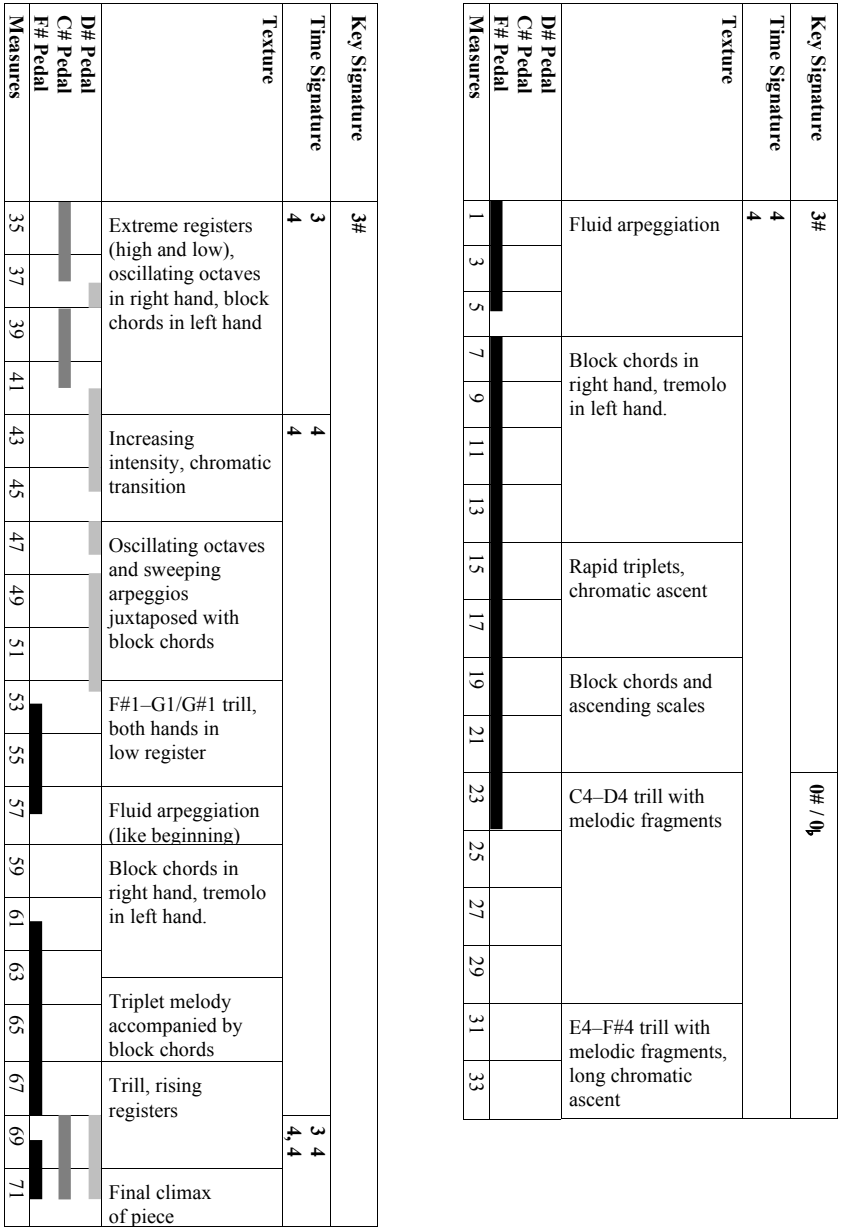


Figure 1. Timeline for Debussy's "Ce qu'a vu le vent d'ouest."

In conjunction with the class's examination of diatonic chords throughout the piece, the instructor can prepare students to identify whole-tone-based portions of the prelude by pointing out non-

diatonic chords whose members belong to an underlying whole-tone collection.[23] After briefly reviewing the two whole-tone scales, the instructor can pose the following scenario as homework for the next class:

> Several years after graduation, you have been asked by your high school theory students to explain whole-tone scales. Sitting at your piano happens to be a copy of this Debussy prelude. Look through the piece and find the clearest examples of the two whole-tone collections that you can share with your students. Mark all the whole-tone passages you find on the score and indicate which whole-tone collection is featured in each example.

This assignment requires students to apply their understanding of whole-tone scales to finding whole-tone-based examples in a musical context and prompts students to evaluate the clarity of these examples in relation to an audience of high school theory students.[24]

It may be challenging for students to identify which passages are based on whole-tone collections. When the instructor reviews the different types of whole-tone scales, he or she can help students to formulate each one in terms of the notes that occur most frequently in the piece; for example, WT_0 is usually spelled here as C, D, E, F♯, A♭, B♭. Students who require more time to find examples of whole-tone scales in a musical context can work at their own paces because that portion of the analysis is assigned for homework.

Students begin the second class period by listening to the piece again before comparing the whole-tone passages they have found with those found by their peers. This exchange of ideas provides students with clarification and reassurance as they solidify their grasp of whole-tone scales in a musical context. Following this conversation, the instructor divides the class into groups of three or

[23] If students are familiar with the use of integer notation to represent pitch classes, the conventional designations of WT_0 and WT_1 may be used. If not, students can refer to the respective scales as WT-C and WT-C♯. At the instructor's discretion, the basics of integer notation may also be informally introduced at this time.

[24] The assignment accords with Bean's argument that a simple and effective means of promoting critical thinking is to invite students to "explain course concepts to a new learner." The rhetorical context of explaining material to a naïve audience allows students to act as experts relative to that audience and helps students engage course content from a new perspective (*Engaging Ideas*, 152, 42).

four students to discuss a short list of questions (see Figure 2). While the questions remain the same for each group, their order may vary so each question is addressed by at least one group within the time available for discussion.

1. Does this piece have a melody? What do you consider the most melodic aspects of the piece? Provide specific musical examples.

2. Conventionally tonal pieces often emphasize fifths and thirds. What intervals do you think are most important in this piece? Support your answer with specific musical examples.

3. Despite their different textures, what similarities can you find between the opening section of the piece (mm. 1–6) and the penultimate section (mm. 63–68)?

4. How do appearances of the WT_0 and WT_1 collections interact with textural changes throughout the piece? Refer to the timeline for changes in texture and provide specific musical examples.

Figure 2. Discussion questions for "Ce qu'a vu le vent d'ouest."

After students consider the questions in small groups, they come together to discuss the findings of each group. If, for instance, students identify the major second as an important interval in response to question two, this provides an opportunity to consider the significance—and likelihood—of this interval holding a prominent position in a whole-tone piece. Wrapping up the large-group discussion, the instructor can ask students to identify which aspects of their analyses they hear when listening to the piece before playing the recording one more time. Students can also reflect—either orally or in writing—on their current impressions of the piece and how these may or may not have changed since their first hearing (e.g., "Now that you have spent time analyzing this piece, would you still use the same three words to describe it as you did at first? Why or why not?").[25]

If scheduling constraints preclude spending two class periods on this piece, the foregoing lesson plan may be modified to fit a single class. In this case, students listen to the prelude before they come

[25] Such reflections emphasize the relationship between aural and written analysis and place students—as Bean puts it in his discussion of double-entry notebooks—"in dialogue with their own ideas" (*Engaging Ideas*, 135).

to class and submit their initial responses via posts to the course's online discussion board—their post-analysis reflections may likewise be submitted online. After listening to the piece again at the beginning of class, students take a few moments to familiarize themselves with salient changes in key signature, time signature, and texture. Omitting the construction of a musical timeline, the instructor can use the previously posed high-school teaching scenario to ask students to mark portions of the piece that use WT_0 or WT_1 and identify the clearest examples of the two whole-tone collections. In small groups, students consider the questions mentioned above; other questions may be added to replace large-group discussions accommodated by the two-day lesson plan (see Figure 3). The students in each group focus their discussion on a single question before summarizing their conclusions for the rest of the class. A final hearing of the piece wraps up the class's investigation of the prelude.[26]

By combining whole-tone and diatonic sonorities, Debussy's "Ce qu'a vu le vent d'ouest" provides a challenging, yet feasible, entry for undergraduate students into the realm of post-tonal music analysis. The familiar instrumentation and manageable length of the piece permit students to engage the entire work with a moderate amount of time and effort. In a setting that invites both tonal and post-tonal analysis, students can embrace the versatility of music theory and learn to discern which analytical tools are appropriate in diverse musical contexts.

[26] The piece can serve as a bridge for students from studying whole-tone scales to studying octatonic scales. If desired, the instructor may reserve the last few minutes of the final discussion for students to catalog the pitches in an octatonic section of the piece (such as mm. 7–9) and list these pitches in ascending order. The resulting pattern of half- and whole-steps acquaints students with the structure of an octatonic scale and shows students how Debussy, as noted by Forte, creates octatonic passages by combining traditional tertian sonorities ("Octatonic," 139).

1. Does this piece have a melody? What do you consider the most melodic aspects of the piece? Provide specific musical examples.

2. Conventionally tonal pieces often emphasize fifths and thirds. What intervals do you think are most important in this piece? Support your answer with specific musical examples.

3. Despite their different textures, what similarities can you find between the opening section of the piece (mm. 1–6) and the penultimate section (mm. 63–68)?

4. How do appearances of the WT_0 and WT_1 collections interact with textural changes throughout the piece? Provide specific musical examples.

5. Which notes occur as pedal points throughout the piece? Provide an example of each of these notes serving as a pedal. How might these pedals combine to give the piece something of a tonal framework?

6. How does Debussy construct chords in which several notes appear simultaneously? What types of chords are familiar from your previous experience with music theory? What types are different? Provide specific musical examples.

Figure 3. Expanded discussion questions for "Ce qu'a vu le vent d'ouest."

Bibliography

Alegant, Brian. "A Picture is Worth a Thousand Words: Road Maps as Analytical Tools." *Current Musicology* 95 (Spring 2013): 162–76.

Alegant, Brian, and Gordon Sly. "Taking Stock of Collections: A Strategy for Teaching the Analysis of Post-Tonal Music." *Journal of Music Theory Pedagogy* 18 (2004): 23–51.

Bass, Richard. "Models of Octatonic and Whole-Tone Interaction: George Crumb and His Predecessors." *Journal of Music Theory* 38, no. 2 (Autumn 1994): 155–86.

Bean, John C. *Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom*. 2nd ed. The Jossey-Bass Higher and Adult Education Series. San Francisco: Jossey-Bass, 2011.

Debussy, Claude. "Ce qu'a vu le vent d'ouest." In *Piano Works*, vol. 2 (*Préludes*, Book I). Edited by Eberhardt Klemm. Leipzig: Peters Edition, 1969. http://imslp.org/wiki/ Pr%C3%A9ludes_%28Book_1%29_%28Debussy,_Claude%29.

Forte, Allen. "Debussy and the Octatonic." *Music Analysis* 10, no. 1–2 (March–July 1991): 125–69.

———. Unpublished Analysis of "Ce qu'a vu le vent d'ouest." Allen Forte Electronic Archive. http://forte.music.unt.edu/?q=node/333. Accessed July 1, 2017.

Roig-Francolí, Miguel A. *Understanding Post-Tonal Music*. New York: McGraw-Hill Higher Education, 2008.

Stoecker, Philip, and Brian Alegant. "Upon Further Reflection: Teaching Inversion through Jean Papineau-Couture's *Nuit*." *Journal of Music Theory Pedagogy* 25 (2011): 129–52.

Wile, Kip. "Recurrence, Level Organization and Collection Interaction in Three Piano Preludes by Debussy." *Indiana Theory Review* 22, no. 2 (Fall 2001): 51–82.