

Opening the “Door”: A Multifaceted Approach to the Analysis of Text Setting in the Third Movement of Kate Soper’s “Door” (2007)

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The majority of Kate Soper’s (b. 1981) output as a composer-vocalist focuses intensely on the relationship between words and music. Methods of text and music analysis have primarily focused on relating musical materials to the semantic meaning of texts or have studied the ways composers musicalize sounds and use the materiality of poetry. Building on past scholarship and drawing from Soper’s program note to “Door” (2007), a setting of poems by Martha Collins for soprano, flute, tenor saxophone, accordion, and electric guitar, I develop a model that looks beyond semantics to investigate the roles of acoustic and aesthetic properties of words. My novel approach examines the relationship between music and words through four different but interrelated interpretive lenses: 1. Lexical, 2. Figurative, 3. Acoustic, and 4. Aesthetic.

I demonstrate my methodology using the third movement of “Door” as a case study. I use Lexical interpretation to interrogate the piece-specific associations developed by Soper. My Figurative interpretation draws on the meaning of the words and extrapolates

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meaning from the poem before finding sonic analogues within the music. Acoustic interpretation involves inspecting the phonemes and acoustic envelopes of words and relating them to Soper's choice of instruments. Finally, I observe which qualities of the poem and text resonate with me. Through Aesthetic interpretation, I attempt to understand what makes these qualities appealing. This multifaceted approach opens the door to consideration of new dimensions of comparison between text and music.

Introduction

THE MAJORITY OF COMPOSER KATE Soper's (b. 1981) output focuses intensely on the relationship between words and music. Throughout history, music analysts have examined this relationship and proposed different modes of analysis. Some have engaged with semantics, offering methods of analysis for text and music based on meaning and relating musical materials to the definitions of words.¹ Others have studied the ways composers musicalize poetic sounds such as patterns of phonemes and intonational shapes.² And yet others such as the Epicurean Philodemus adopt the position that "the meaning of the poem is actually erased when it is sung."³ Using the third movement of "Door" by Kate Soper with text by Martha Collins as a case study, I present a novel, four-part approach to interrogating the relationship between music and text. While I build upon past scholarship, I primarily

¹ Arnie Cox, "Metaphor and Related Means of Reasoning," in *Music and Embodied Cognition: Listening, Moving, Feeling, and Thinking* (Bloomington: Indiana University Press, 2016), 58–81; Lawrence M. Zbikowski, "Music and Words," in *Foundations of Musical Grammar*, Oxford Studies in Music Theory (New York, NY: Oxford University Press, 2017), 167–200.

² Stephen Rodgers, "The Fourth Dimension of a Song," *Music Theory Spectrum* 37, no. 1 (Spring 2015), 144–153, <https://doi.org/10.1093/mts/mtv002>; Stephen Rodgers, "Song and the Music of Poetry," *Music Analysis* 36, no. 3 (Oct. 2017): 315–49, <https://doi.org/10.1111/musa.12091>

³ "Philodemus," in *Greek and Roman Aesthetics*, ed. and trans. Oleg V. Bychkov and Anne Sheppard, Cambridge Texts in the History of Philosophy (Cambridge: Cambridge University Press, 2010), 115, doi:10.1017/CBO9780511780325.011. This is similar to the assimilation model derived from the work of Suzanne Langer in Kofi Agawu, "Theory and Practice in the Analysis of the Nineteenth-Century 'Lied,'" *Music Analysis* 11, no. 1 (Mar. 1992): 3–36, <https://doi.org/10.2307/854301>.

allow Soper’s writings and thoughts and my experience of the piece to direct my multifaceted analytical approach.⁴

Kate Soper is a significant voice—as both a soprano and a composer—in the new music community. She was a 2017 Pulitzer Prize Finalist for *Ipsa Dixit*, which Alex Ross deemed a “Philosophy Opera.”⁵ “Door” was the first composition Soper ever wrote for herself as a performer of new music. Moreover, it is the first composition Soper ever wrote for the Wet Ink Ensemble, a group that has since served as her primary collaborators.⁶ A tapestry of sound worlds woven from a unique combination of instruments—soprano, flute (doubling piccolo), tenor saxophone, electric guitar, and accordion—“Door” has been described in *The New York Times* as “an exquisitely quirky setting of six poems by Martha Collins.”⁷ Over the course of the approximately ten-minute piece, Soper envelops the audience in sonic textures and Collins’s words.

In the program note to “Door,” Soper writes,

Both her suite of poems *Door* and my setting of it explore various ways in which words communicate: as direct conveyers of real meaning, as imprecise yet eloquent expressions of the indescribable,

⁴Different analytical approaches to the music of Kate Soper may be of interest to some readers. See Evan Kassof, “An Analysis of Kate Soper’s Opera *Here Be Sirens*,” (PhD diss., Temple University, 2021), ProQuest Dissertations & Theses Global and Sara C. Everson, “La Structure sans Maître: Considering Subjective Analysis through Three Analytical Vignettes of Recent Chamber Works by Women Composers,” (PhD diss., The Florida State University, 2020) ProQuest Dissertations & Theses Global. Kate Soper’s own analytical ideas can be found in Kate Soper, “2008 PATRICIA CARPENTER EMERGING SCHOLAR AWARD: Orchestration in the Chamber Works of Ruth Crawford Seeger,” *Theory and Practice* 35 (2010): 147–67; and Kate Soper, “Voices from the Killing Jar,” (D.M.A. diss., Columbia University, 2011), ProQuest Dissertations & Theses Global.

⁵Alex Ross, “Kate Soper’s Philosophy-Opera,” *New Yorker*, February 19, 2017, <https://www.newyorker.com/magazine/2017/02/27/kate-sopers-philosophy-opera>.

⁶Lucy Dhagrae, “Episode 47: Kate Soper,” January 14, 2019, in *Resonant Bodies Podcast*, produced by Resonant Bodies Festival, podcast, MP3 audio, 41:04.

⁷Allan Kozinn, “Where Composers Lend Their Voices,” *The New York Times*, June 17, 2010, <https://www.nytimes.com/2010/06/18/arts/music/18alliance.html>

as collections of pure sounds, and as vehicles for pure sensuous beauty.⁸

Soper suggests four ways that words communicate, looking beyond semantics to investigate objective, acoustic, and aesthetic properties of words. This program note serves as my “way in” to music analysis. By a “way in,” I mean that the program note grants me access to a specific angle for observing specific relationships and focuses my analysis on a particular aspect of the piece.⁹ This alleviates the daunting task of selecting an analytical approach for a piece, especially for music that is not obviously compatible with standard tools of music analysis. By drawing from Soper’s program note, I develop a novel approach to examine the relationship between music and words through four different but interrelated interpretive lenses: 1. Lexical, 2. Figurative, 3. Acoustic, and 4. Aesthetic. Applying these four lenses to the third movement of “Door” as performed by the Wet Ink Ensemble from the album *New Works for Small Ensemble* (2009), I demonstrate my approach to the analysis of words and music.

Lexical

Returning to Soper’s program note, the first way words communicate is “as direct conveyers of real meaning.”¹⁰ I call this interpretive lens *lexical* since it is concerned with the conventional meanings of words, specifically the meaning of individual, isolated words. Observing words through this lens is an approach to consider the words in the context of the poem. By only engaging with the meanings of individual words, I observe how the contextual meaning of each word relates to Soper’s musical decisions. The following poem by Collins is the source material for this movement:

⁸ Kate Soper, “Door for soprano, flute, tenor saxophone, electric guitar, and accordion,” *PSNY*, 2007, <https://www.eamdc.com/psny/composers/kate-soper/works/door/>.

⁹ This analysis, while indebted to Soper’s writings and thoughts about “Door,” did not engage with her theoretical writings or other analyses of her music, which could provide an alternate “way in” to others. See Soper, “2008 PATRICIA CARPENTER EMERGING SCHOLAR AWARD: Orchestration in the Chamber Works of Ruth Crawford Seeger,” 147–67; and Soper, “Voices from the Killing Jar.”

¹⁰ Soper, “Door.”

Poem 3 from “Door” by Martha Collins from the Arrangement of Space
(Peregrine Smith, 1991)

3.

Shell I think *pearl*

I think my hand

pearl pearl

Because words often possess multiple potential meanings, an analyst may consider the context of the poem for the purpose of narrowing down meanings before examining how contextual meaning does or does not influence the music. We typically eliminate potential meanings based on context. For instance, this poem has a total of six distinct words (*Shell*, I, think, *pearl*, my, hand). *Shell*, in this context, likely does not refer to a chicken egg due to the appearance of the word *pearl*; however, substituting the word “crack” or “yolk” for “pearl” would easily alter the contextual meaning of the word. The context of the poem narrows the relevant lexical possibilities of each word.

Composers often set text with congruent musical elements, such as gestures, that correspond with real-world actions or characteristics associated with specific words. Composers may also choose to signify the text with leitmotifs, musical materials that the listener comes to associate with words. Although there are qualities associated with the nouns present in the poem (*Shell*, *pearl*, hand) that could be made musical by compositional decisions, I do not hear sonic analogues that represent any of these nouns, nor do I hear any musical material that serves as a theme or substitute for the text. While I was able to glean a specific lexical meaning from each word in the context of the poem, Soper makes this task more challenging in the movement. Soper’s setting of the text further manipulates the lexical meaning by repeating certain words multiple times. She takes artistic liberties and repeats these words more often than they appear in the poem. For example, the word “*Shell*” is repeated thirteen times throughout the piece compared to its single occurrence in the poem. This leads to semantic satiation, in which the meaning becomes detached from the word over the course of many repetitions.¹¹ Additionally, the lack of obvious sonic analogues

¹¹Elizabeth Severance and Margaret Floy Washburn, “The Loss of Associative Power in Words after Long Fixation,” *The American Journal of Psychology* Vol. 18, No. 2 (Apr. 1907): 182–86.

and the bleaching of lexical meaning caused by semantic satiation draw my focus away from the nouns.

My lexical interpretation of Soper's setting of the poem focuses on the only verb present in the poem, "think." Although the poem repeats the phrase "I think" twice, Soper does not add additional repetitions. The lack of semantic satiation, the meaning of the verb, as well as the common usage of italics in literature as a means of representing thoughts and inner monologues led Soper to interpret this poem as a series of thoughts.¹² In keeping with Soper's interpretation, I read the italicized words as thoughts and the non-italicized words as speech.

Soper differentiates between the italicized nouns and the non-italicized subjective phrases in both registration and use of repetition. The italicized words often place Soper's voice in a higher register, where her vocal timbre becomes integrated as another instrument of the ensemble. The registral treatment of italicized words is contrasted with the non-italicized phrases: "I think" and "my hand." For most of the movement, Soper enters synchronously with the guitar and accordion; however, "I think" is never sung in conjunction with another instrument. The first time a listener hears "my hand" is the only time a noun phrase is not immediately repeated in the movement. Therefore, the first appearance of "my hand" is more likely to retain its meaning since it is not subjected to semantic satiation. Even though Soper is still singing in a higher register, she provides plenty of space after she sings for the phrase to linger in the mind of the listener. The second appearance of "my hand" in the movement consists of five repetitions of the phrase. Soper places her voice in a much lower register and sings the lowest notes of the movement during these repetitions.¹³

The repetitions not only remove lexical meaning from words but also engender a push and pull between the predictable flow from one thought to another as well as the unpredictability of new and distracting thoughts that occur or reoccur. The repetition of words not only engenders semantic satiation but also creates a setting reminiscent of

¹²Personal communication with Kate Soper, November 25, 2020.

¹³The two melody notes of "my hand" (E-F#) envelope the final melodic note of "shell" (F). Soper still places her voice in the lower register. I hypothesize that this is due to her choice to draw attention to a parallel between "my hand" and "shell," which is less apparent in the poem. I explore this in greater detail in the following section.

a persistent thought rattling around in a character’s mind throughout the day. We can lose ourselves in our thoughts; our internal perception of time differing from our external temporal experience. As Edmund Husserl writes, “the duration of sensation and the sensation of duration are different.”¹⁴ Therefore, I believe there is an ambiguous temporal element to contemplation.

I hear Soper’s sonic analog to thoughts and thinking in her temporal treatment of the unfolding chordal sonorities. A representative example of Soper’s technique can be found in the four repetitions of what I refer to as the first “shell chord”. Each time the soprano sings “shell,” the guitar, doubled by a sustaining accordion, repeats a series of pitches, i.e., a “shell chord.” Because “shell” appears this way three times throughout the piece, there are three distinct shell chords. Correspondingly, I refer to the two unfolding sonorities that accompany the word “pearl” as “pearl chords.” Observe how Soper composes the instrumental accompaniment to the first utterances of the word “shell.” Figure 1 shows the guitar and soprano parts for the first three measures of the movement, corresponding to the four iterations of the first shell chord. Each pitch of the first shell chord as performed by the guitar has been quantified in Table 1. The table shows the inter-onset interval between attacks in terms of the number of quarter notes for each of its four iterations.¹⁵ Because the tempo is measured in quarter notes, the duration of each note can be understood as a number that corresponds to a fraction of a quarter note. The first note in the guitar part, B₄, is an eighth note, which corresponds to half of a quarter note (0.500). The value of the third note, A_{b4}, is .458; a 32nd note (0.125) plus an eighth note from an eighth note triplet, i.e., a third of a quarter note (0.333). These values assume a precise realization of the score and do not consider the “poco rubato” direction.¹⁶

¹⁴Edmund Husserl, *The Phenomenology of Internal Time-Consciousness*, ed. Martin Heidegger, trans. James S. Churchill (Indiana University Press, 2019), 31.

¹⁵The accordion, while attacking each note at the same time as the guitar, holds notes to create timbral resonance. The durations of the held notes have not been quantified but play a significant role in augmenting the intended dream-like effect.

¹⁶This performance direction assists with the intended, nebulous temporal feel of the movement. The precise durations from the recording were not calculated since the resultant effect is a product of both Soper’s composed rhythms and explicit performance direction.

FIGURE 1. Soprano and Guitar parts from Measures 1–3 of “III. (shell I think pearl)” showing the rhythmic complexity and consistent pitch order of the first shell chord.

♩ = 46 *poco rubato*
Placid and dreamlike

Soprano
 shell shell shell shell I think

Electric Guitar
 Shell 1.1 Shell 1.2 Shell 1.3 Shell 1.4

TABLE 1. Inter-onset intervals of the four iterations of the first “shell chord” from “III. (shell I think pearl)” showing each guitar pitch as a duration (in fractions of a quarter note) to demonstrate the predictability of note order and lack of predictability of subsequent note.

	Pitch 1 [B ₄]	Pitch 2 [F ₄]	Pitch 3 [A _{b4}]	Pitch 4 [D ₄]	Pitch 5 [B _{b4}]	Pitch 6 [C ₄]	Total Beats	Duration at ♩ = 46
Shell 1.1	0.500	0.375	0.458	0.333	0.333	0.333	2.333	3.043
Shell 1.2	0.567	0.400	0.400	0.400	0.400	0.250	2.417	3.152
Shell 1.3	0.250	0.375	0.792	0.533	0.200	0.200	2.350	3.065
Shell 1.4	0.733	0.333	0.250	0.083	1.000	0.500	2.900	3.783

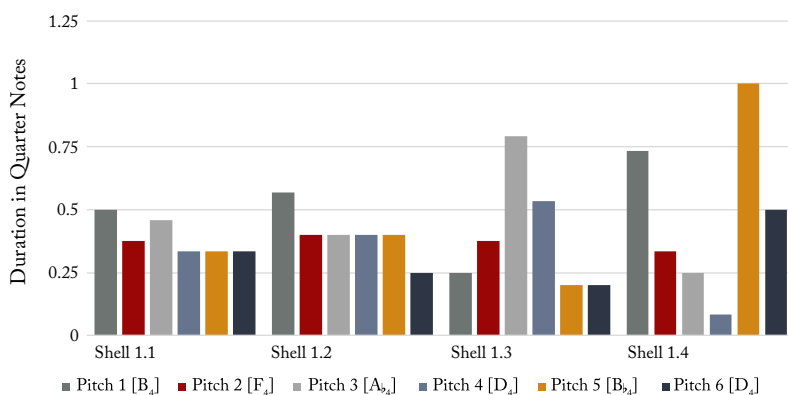
Because a listener does not have enough rhythmic information to predict when the next pitch will occur, the listener is unable to metrically entrain to the music, that is, to anticipate *when* a future event will occur.¹⁷ Based on the initial iteration of the chord, Shell 1.1, a listener may suspect that the first note of the cascading sonority performed by the electric guitar/accordion hybrid will be the longest and that there will be some rhythmic or durational consistency. By the third iteration, Shell 1.3, this prediction is entirely confounded, and a listener must attempt to adopt another anticipatory listening model or surren-

¹⁷For more information see John Roeder, “Interactions of Folk Melody and Transformational (Dis)continuities in Chen Yi’s *Ba Ban* (1999),” *Music Theory Online* 26, no. 3 (Sept. 2020).

der to the unpredictable pattern and focus on the predictable sequence while experiencing a dreamlike sense of time; a sense of time that is not only due to Soper’s compositional choices but also an explicit direction beneath the tempo marking in the score (see Figure 1).

The tension between regular melody and irregular rhythm is representative of the predictability/unpredictability dichotomy. The rhythmic pattern never repeats, yet the rematerializing cycle of notes associated with a word or phrase always repeats giving the listener a very clear sense of predictability. This is easily observed in Figure 2, where the order of the colors is very clearly maintained, yet there is no pattern to the height of the bars.

FIGURE 2. Visual Representation of the Inter-onset Intervals for each iteration of the first shell chord demonstrating the dichotomy between a predictable sequence of notes (color of the bars) and an unpredictable pattern of inter-onset intervals (height).



As opposed to metrical entrainment, Soper takes advantage of sequential recall: a listener’s ability to predict *what* a future event will be without necessarily knowing when it will occur.¹⁸ Soper keeps one element fixed while another is constantly changing, engendering both regularity in one dimension and irregularity in another, the same contour with rhythmic differences. The repetitions of the first shell chord are a single example of this technique, which is used in all other repeated sonorities. Soper creates a musical analogue for the thought process

¹⁸ Roeder, “Interactions of Folk Melody.”

suggested by the italicized words and the verb “think” through her use of rhythm, contour, and semantic satiation.

Figurative

Moving beyond a word’s ability to convey lexical meaning, Soper’s next category presents a more abstract interpretation of words “as imprecise yet eloquent expressions of the indescribable.”¹⁹ Not only is this a move to a more metaphorical interpretation of words and their associations, but it is also an invitation to observe the combination of words expressing meaning collectively. Though it may seem as if I have leapt past an intermediate step of considering the less abstract meaning of the words collectively, there is no necessarily straightforward meaning to poetry. Through this lens, I work to uncover what the poem means and what musical decisions Soper makes that assist my interpretation.

My interpretation of the poem involves creating an association between the word “*Shell*” and the phrase “my hand.” I envision the narrator of the poem thinking about a shell, likely an oyster shell that has or had the ability to produce a pearl. The narrator then, out loud due to the lack of italics, makes a connection between the shell and her own hand. Soper makes this explicit in her setting of the text by placing repetitions of “my hand” between the second and final appearances of the sonorities that accompany “shell.” More specifically, I interpret the narrator as yearning for her hand to possess the shell’s ability to produce an object of beauty, since the poem concludes with the repeated italicized thought “*pearl pearl.*”

Soper’s setting of the poem takes my interpretation of the poem and adds another layer of abstraction with a focus on the way a shell (or a hand) takes an irritant and creates a pearl (an object of beauty).²⁰ This figurative reading is the most congruent with my experience of the movement. The way each chord reveals itself to me creates an impression that there is a foreign note present, rubbing against a more consonant or familiar sonority. Soper presents several sonorities that can be derived from a diatonic collection. However, each chord contains a note that is not a part of the collection. By observing the sonorities that accompany the repeated words of the poem, we can search

¹⁹ Soper, “Door.”

²⁰ Another interpretation might involve how an artist, musician, and/or poet (my hand) can take a negative experience or trauma and turn it into something beautiful.

for the musical “foreign objects” or “irritants.” In the event that there are multiple options for “irritant” notes in the collection, I consider the intervallic relationships between tones and choose a note that creates the most dissonant interval.²¹

There are three chords that accompany the word “shell” in the movement. Figure 3 shows the notes of each chord without rhythm. The pitches appear in the order they unfold as played by the guitar and accordion. After the dashed bar line, I have placed the “irritant” note in the chord and stacked the remaining notes to show the sustained sonority heard in the timbral resonance of the accordion before the cycle repeats. The soprano note and the lyric appear above the ordered pitches. The diamond noteheads above the stacked chord correspond to the accompanying piccolo interjections.

FIGURE 3. Shell Chords, the accompanying material, and the selected “irritant” notes from “III. (shell I think pearl)”.

The figure shows a musical score with two staves. The top staff is for Soprano and the bottom staff is for Electric Guitar and Accordion. The Soprano staff has three measures, each labeled 'Shell' below the staff. Above each 'Shell' label is a box containing the number of the shell (Shell 1, Shell 2, Shell 3). Between the 'Shell' labels are 'Piccolo' interjections, represented by diamond noteheads. The Electric Guitar and Accordion staff shows the corresponding accompaniment for each shell chord and piccolo interjection.

The first shell chord consists of an unfolding diminished seventh chord (B_4 - F_4 - $A\flat_4$ - D_4) followed by a minor seventh, $B\flat_4$ and C_4 . Using my method, I determine that the B_4 is the “irritant” note. This interpretation creates a condition where all the remaining notes can be found in a single diatonic collection, $E\flat$ major. Though it is unlikely that many would describe a $B\flat^7/C$ as a consonant sonority, adding a B creates a chromatic cluster ($B\flat$, B , C) and selecting any other note makes it impossible to fit the remaining group into a diatonic collection.²² In addition, Soper’s voicings attenuate the dissonance significantly. In this case, C_4 creates a major seventh in conjunction with B_4 , as opposed to

²¹This is only one method for observing each tone in the collection as consonant or dissonant. I have selected this method since it is the most analogous to the process of an irritant becoming lodged in an oyster.

²²If we consider how the remaining notes fit into octatonic and harmonic major/minor collections as well, we gain two more options for “irritants.” If $B\flat_4$ is the “irritant,” then the remaining notes can either come from the octatonic scale that begins with a whole step starting on C or the C harmonic major/minor scales. If instead, we treat C_4 as the irritant, then the chord may be derived from the octatonic scale that begins on $C\sharp$ and is followed by a half step.

the more dissonant minor second if it were placed an octave higher. B_4 is also temporally distant from Bb_4 and C_4 ; and repetitions of the chord benefit from the large leap of a seventh. Furthermore, Soper's decision to present each note individually and to only hear the entirety of the sonority in timbral resonance lessens the potential dissonance.

The second shell chord ($C_5-Ab_4-F_4-G_4-B_3$) shares almost all the same pitches as the first shell chord (many in the same register). The $B\sharp$ and $C\sharp$ have switched registers— B_4 to B_3 and C_4 up to C_5 . The Bb is absent, and a G is now present. The D appears only in the piccolo. With the goal of relating the notes present to a single diatonic collection, B_3 and Ab_4 can both be heard as “irritant” notes. Both notes are in semitone relationships with the other notes of the chord ($B-C$ and $G-Ab$). However, the B also creates a diminished fifth with the F present in the chord. Removing the B from the sonority, all the remaining notes can be found in the Eb -major scale. If instead I select Ab , all the remaining notes can be found in a C -major scale. Because of the connection to the previous shell chord; the low, prominent, registral placement of the note; and its position at the end of an otherwise familiar sonority (F -minor with an added ninth), I have selected B_3 as the irritant note.

The final shell chord ($F_4-Gb_4-Eb_4-A_4-C\sharp_5$) appears quite unrelated to the previous two. The first and second shell sonorities share many of the same pitches while the final sonority shares only F_4 with the other two. While my method aims to relate all but one of the notes to a diatonic collection, the previous two shell chords contain “irritant” notes that not only fit this criterion but are also constituents of both a minor second and a diminished fifth/augmented fourth with other notes in the sonority. While $B\sharp$ satisfies these conditions in the first two shell chords, there is no note in the final chord that belongs to both a minor second and a diminished fifth/augmented fourth. The diminished fifth/augmented fourth is found between $Eb/D\sharp$ and A , whereas the semitone is between F and Gb . As in the second sonority, there are multiple options from which to choose; however, I identify F_4 (or more accurately $E\sharp_4$) as the irritant. Accordingly, I have respelled the chord enharmonically in the stacked sonority of the third shell chord in Figure 3. By considering the collection in terms of its enharmonic equivalents ($E\sharp_4-F\sharp_4-D\sharp_4-A_4-C\sharp_5$), I hear a collection reminiscent of A Lydian except for the irritant, which could be understood as an altered fifth scale degree.

We can apply the same strategy to the two unfolding sonorities that accompany the word “pearl,” as shown in Figure 4. To my ears, both sound like major seventh chords with extensions. I interpret the first

pearl chord ($B_4-C\sharp_5-F_4-G\sharp_4-A_3$) as an A major seventh chord with a natural ninth and raised fifth.²³ The natural eleventh can be heard in the piccolo. The second pearl chord can also be interpreted as a major seventh chord ($G_5-F\sharp_5-A_4-D_4-Eb_3$), Eb major seventh with a raised ninth and raised eleventh. A natural thirteen can be heard in the piccolo interjections. For both sonorities, Soper sings the third of the chord. I locate the “irritant” note in the guitar part for both sonorities, F_4 for the first and $F\sharp_5$ for the second. Removing the “irritant” notes from the sonorities reveals an A major collection and an Eb Lydian collection respectively.

FIGURE 4. Sonorities that accompany the word “pearl!” from “III. (shell I think pearl)”.

The image shows a musical score for Soprano and Electric Guitar. The Soprano part has two staves. The top staff is labeled 'Soprano' and the bottom staff is labeled 'Pearl'. The notes are G4, B4, C5, F4, G4, A4. The Electric Guitar part has one staff. The notes are G4, B4, C5, F4, G4, A4. Above the guitar staff, there are two boxes labeled 'Pearl 1' and 'Pearl 2'. A bracket labeled 'Piccolo' spans the first two measures, and another bracket labeled 'Picc.' spans the last two measures. The guitar part includes notes for the 'irritant' notes F4 and F#5.

This comparison cannot be expanded to include the sonorities that accompany “my hand” since the first time Soper sings “my hand” is the one instance within the movement when an unfolding sonority is not repeated. The chord that accompanies the second occurrence of “my hand” ($E_4-A_3-G_3-F\sharp_4/D\sharp_4$) is repeated five times. The slash between $F\sharp_4$ and $D\sharp_4$ denotes that the two notes are played simultaneously. Although these notes create a collection that can be explained as belonging to E melodic or harmonic minor, thinking about relating these sonorities to diatonic collections suggests that the $D\sharp$ is the “irritant” note. Unlike the other repeated words, “my hand” is a repeated phrase, and Soper sings two different notes: E on “my” and $F\sharp$ on “hand.” Although this is a repeated, unfolding, five-note sonority, it can also be understood as two distinct sonorities. “My” is accompanied by $E_4-A_3-G_3$ (a segment hinting at E minor) and the $F\sharp_4$ and $D\sharp_4$, which can be heard as a dominant leading back to the E minor material. Although Soper makes an overt connection between “shell” and “my hand,” “my hand” is not a part

²³In the guitar and accordion parts, Soper notates $A\flat_4$ instead of the enharmonic equivalent $G\sharp_4$. Curiously, a $G\sharp$ is used in the piccolo part. I have chosen to use sharps for all accidentals in this chord for ease of comparing it to an A major collection.

of the traditional process of an irritant becoming a pearl. Instead, we get the impression that there may be an irritant note, while maintaining the impression that hands cannot process irritants the way a shell can.

My figurative analysis focuses on relating the process of pearl formation to Soper's chord voicing choices in this piece. My method of isolating an irritant note—finding a foreign object inside a familiar collection—is an analogy to this process. In the order they appear in the piece, the “irritant” notes that can be heard in the shell and pearl chords are B₄, F₄, B₃, E₄/F₄, and F₅. If I consider these notes as an unfolding sonority that occurs throughout the piece, the “irritant sonority” unfolds with an augmented fourth down, diminished fifth down, diminished fifth down, and a minor ninth up. Using traditionally dissonant intervals, Soper's voicing attenuates the implied dissonance significantly. If we add the D₄ from the repeated “my hand” sonority, the dissonant sonority is further smoothed out and fits neatly into a B Lydian collection. Though a step removed from the metaphor between the shell and pearl, my analysis suggests that metaphorical irritation is contextual and that objects of beauty themselves, such as the “irritant” chord derived from the B Lydian collection, can be “irritants.”

Acoustic

Next, Soper invites us to consider words as “collections of pure sound.” This lens embraces Philodemus' position that singing erases the meaning of words. As discussed above, Soper assists us by repeating words and engendering semantic satiation. The *acoustic* lens asks the analyst to intentionally ignore meaning—even when it is clearly present in the words—and consider words as sonic objects devoid of any linguistic meaning.

This lens can be used to show how the piece derives its form from the poem. The form of the movement takes its shape from the spacing of the words on the page, even though Soper takes artistic liberties and repeats words more often than they appear in the poem, as seen in Figure 5. The durations noted in the table reflect the 2009 recording from the album *New Works for Small Ensemble* by the Wet Ink Ensemble.²⁴ Section 1 is devoted to the words of the first two lines of the poem. The electric guitar and accordion play in unison, creating a hybrid instrumental blend. An extended silence concludes this section and serves as a divider between sections. Section 2 is constructed from

²⁴Wet Ink Ensemble, *New Works for Small Ensemble*, released January 1, 2009 by Carrier Records.

the final line of the poem, “pearl pearl.” It consists of four repetitions of the word “pearl” accompanied by the second pearl chord. In contrast to section 1, the electric guitar, accordion, and piccolo all perform separately. The movement ends with four repetitions of the second pearl chord by electric guitar alone, with the piccolo adding timbral resonance by sustaining the first pitch of the chord (G_5).

FIGURE 5. Form of “III. (shell I think pearl)” based on word placement and repetition.

Section 1									Duration
Repetitions	4x	1x	3x	1x	1x	3x	5x	6x	1:35
Word	<i>Shell</i>	I think	<i>pearl</i>	I think	my hand	<i>Shell</i>	my hand	<i>Shell</i>	
Music	Shell Sonority 1		Pearl Sonority 1		Unrepeated Gesture	Shell Sonority 2	E ₄ -A ₃ -G ₃ my: hand: F ₄ /D ₄	Shell Sonority 3	
Pause									0:04
Section 2									0:42
Repetitions			4x			4x			
Word			<i>pearl</i>			(none)			
Music			Pearl Sonority 2			Pearl Sonority 2			

My acoustic interpretation speaks to the unique instrumentation of this piece. The three main words of the poem correspond to the three selected instrumental timbres. During my conversation with the composer, Soper referenced how the word “shell” was like a clarinet, specifically noting the similarities between the acoustic envelope of the word and the idiomatic way a clarinetist performing a single note with hairpin dynamics often enters with air before the tone emerges and decays.²⁵ Considering “shell” through a phonetic lens, the monosyllabic word is constructed from three sounds: 1. a voiceless postalveolar fricative [ʃ]; 2. a mid front vowel [ɛ]; and 3. a lateral approximant with multiple options for tongue placement (dental, alveolar, or postalveolar) [l]. The physical act of producing the word “shell” within the vocal tract has many parallels to woodwind instruments, especially in contemporary musical contexts where winds are asked to begin from *niente* (silence).

The envelope created by playing a wind instrument in this manner is strikingly similar to the envelope created by the sequence of phonemes that make up “shell.” Using Praat to generate spectrograms, I show my performance of the piccolo excerpt on clarinet and my vocalization of

²⁵ Personal communication with Kate Soper, November 25, 2020.

the word “shell” (Figure 6).²⁶ Figure 7 shows the notation of the piccolo’s entrance beginning on beat five of measure two. The piccolo begins from *niente* and crescendos to piano on beat one of measure three and immediately begins a decrescendo, ceasing to be audible by the final eighth note of the measure.

FIGURE 6. Envelopes of clarinet (left) and vocalization of “shell” (right).

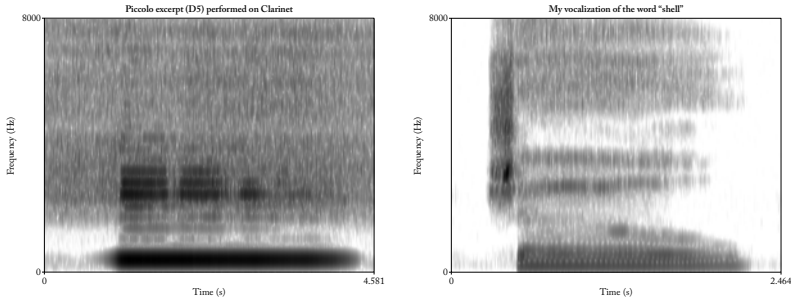


FIGURE 7. Piccolo entrance in measures two and three of “III. (shell I think pearl)”.



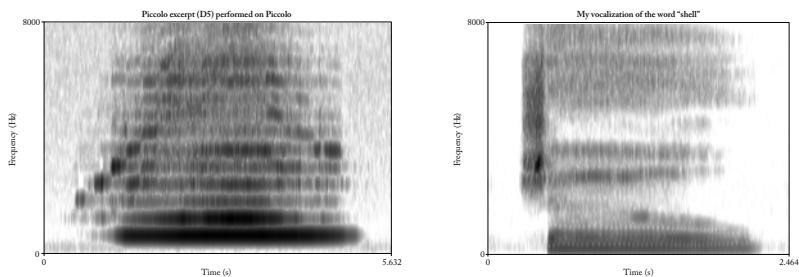
The voiceless fricative that begins the word is aperiodic and is perceived as having an indeterminate pitch, like the air sound that begins a clarinet note. The vowel, [ɛ], begins when the fundamental frequency appears. The formant structure in the vocalization and the prominent overtones in the clarinet are noticeably similar. As the clarinet note begins to decay and the tongue rises in the mouth to transition from [ɛ] to [ɪ], the upper formants become muted and then disappear. While my clarinet performance is noisier than the vocalization, there are clear similarities between the attack, sustain, and release of the two sound objects.

Although Soper related the word “shell” to idiomatic clarinet playing, Soper orchestrates the movement for piccolo, not clarinet. Figure 8 shows a spectrogram of flutist Alex Huyghebaert’s performance of the excerpt on piccolo and my vocalization of the word “shell”.

²⁶Praat is a free software developed for analysis of phonetics. It can be downloaded at www.praat.org.

Comparing the piccolo envelope to my vocalization reveals similarities to the clarinet spectrum and new parallels with my vocalization.

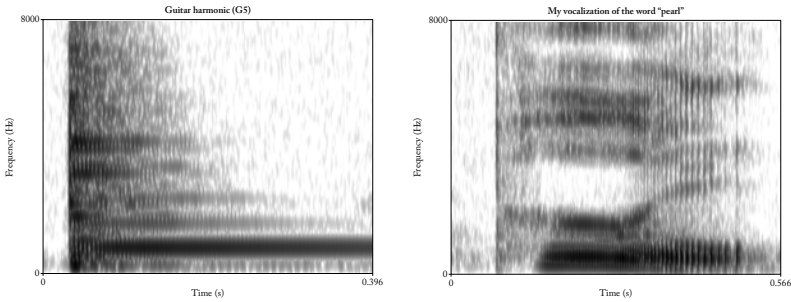
FIGURE 8. Envelopes of piccolo (left) and my vocalization of “shell” (right).



Starting with the beginning of the sound, my vocalization starts with energy concentrated in upper formants. This can also be seen in the piccolo performance. Prior to the onset of the fundamental frequency, the piccolo spectrum shows an apparent arpeggiation of upper partials. The high energy in the upper frequencies is, in part, due to the performance direction to begin the note from *niente*. The middle of both sounds shows a defined formant structure in the case of the vocalization and more stable upper partials in the case of the piccolo performance. The decay of the piccolo is less like my vocalization. Several upper formants shift to lower frequency bands as the sound decays. However, they do not disappear as they do in my clarinet performance and my vocalization. While the clarinet spectrum may be more like my vocalization, there are still clear parallels between the word “shell” and the piccolo.

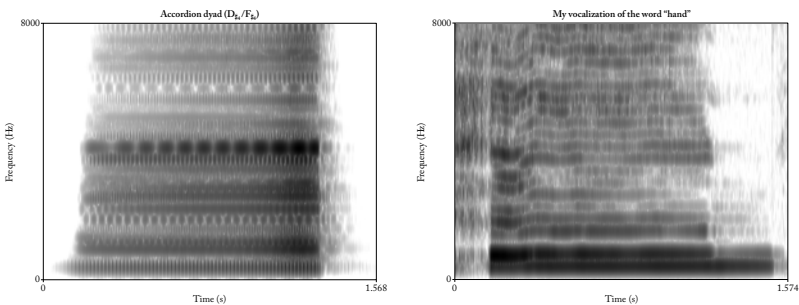
We can apply this same process to the two other repeated noun phrases of the poem. Figure 9 presents the envelopes of my performance of the guitar harmonic that begins the final section—the fourth partial on the G-string, sounding G_5 —and my vocalization of the word “pearl,” a voiceless bilabial plosive [p] followed by a low-mid central rhotic vowel [ɜ] and terminating with the same lateral approximant found in “shell” [l]. The plosive [p] that begins the word “pearl” can also be seen in the initial strike of the guitar string, which creates a loud, noisy burst before settling into the fundamental frequency. Though “pearl” and the guitar do not share as many characteristics in their sustain and decay, overall, it appears that the lateral approximant that ends both “shell” and “pearl” damps the upper formants as the tongue rises and the word comes to a close. The dampening effect is more severe for the guitar string as the upper partials almost disappear after mere milliseconds.

FIGURE 9. Envelopes of guitar harmonic (left) and my vocalization of “pearl” (right).



The final repeated word to consider, “hand,” has the most variable pronunciation. In conversation and when Soper sings this word, the final voiced alveolar plosive [d] is often unpronounced and presents as an abrupt termination of an alveolar nasal [n]. Figure 10 displays two spectrograms. On the right, I have placed my vocalization of the pronunciation of “hand” as it is most frequently sung by Soper, [hæn]. A spectrogram of my performance of the composed gesture most comparable to this pronunciation—an accordion dyad ($D\sharp_4$ and $F\sharp_4$) that accompanies the word “hand” beginning in measure eleven—appears on the left. The fricative that begins the word “hand” [h] is like the airy quality that is associated with the accordion, especially at soft dynamics. Additionally, the releases of the dyad and of the final phoneme [n] share many of the same characteristics in that they both create a noisy close to the envelope.

FIGURE 10. Envelopes of accordion dyad (left) and my vocalization of “hand” (right).



Employing the acoustic lens has offered insights into two aspects of this movement: its form and its unique instrumentation. By ignoring

the meaning of the words, I can focus on the words as sonic objects. As I have shown, Soper takes artistic liberties with repetition while keeping the overall form of the poem intact. The words that make up the first section of the movement come from the first section of the poem, and the second section of the movement corresponds to the single repeated word in the second section of the poem. The spectrogram analysis reveals the acoustic similarities between each of three instruments selected for this movement and a corresponding repeated word. This novel analysis considers words not merely as musical objects or collections of sound but specifically as timbres or timbral objects.

Aesthetic

The last interpretive lens reflects Soper’s position that words communicate as “vehicles for pure sensuous beauty.” This raises the question, “what makes a word beautiful?” or more aptly “what makes this movement beautiful?” The aesthetic angle can be difficult to tease apart from the others because it is so subjective. The beauty of a word or of a piece of music has to do with values, preferences, and associations that are both personal and socio-cultural. The aesthetic lens grants me the freedom to explore what I find to be beautiful or aesthetically pleasing about the work. Additionally, I can engage with Soper’s own comments about how she feels about the piece.

The various aspects of words and music discussed in the previous three sections also play a crucial role in my aesthetic experience of the poem and the piece. For instance, I enjoy the unpredictability of the temporal dimension. From a biological perspective, unpredictability is negatively valenced. However, in music I experience unpredictability without fear of consequences.²⁷ Furthermore, I find it very pleasurable to ignore or metaphorically “turn off” my impulse to find a beat when I listen to this movement. When I listen, I get to explore a non-rigid version of time and float along with the words.

Exploring the pitch-based realm, Soper’s chordal decisions intrigue me. The chords she uses to accompany words sound *almost* consonant as opposed to somewhat dissonant. For me, an *almost* consonant chord is one where the dissonance in the chord can be heard or thought of as decorative. I analyzed these chords by highlighting

²⁷ For more on enjoying negativity and taboos in music see Arnie Cox, “Musical Affect,” in *Music and Embodied Cognition* (Bloomington: Indiana University Press, 2016), 176–99.

the “irritant” note, one that if removed would generate a more familiar chord that can be found in a diatonic collection. In contrast, I do not hear any of the sonorities as particularly dissonant in my listening experience, not even the traditionally dissonant, emerging fully diminished seventh chord that begins the piece. Soper’s strategic, rhythmic deployment of each pitch individually gives my ears enough time to readjust and become acquainted with any notes, intervals, or chords that could be potentially heard as dissonant. Though this effect could also be due to over exposure that comes with in-depth musical analysis, it does not detract from my impression that these chords are beautiful. When I listen, her chords invite me to consider that it is not the pearl that is the object of beauty, but rather the mysterious process of an irritant being transformed into something of value that is beautiful.

Soper’s timbral choices create a unique palette of familiar instruments that are rarely grouped together in such intimate chamber contexts. Since I gravitate towards music that employs eccentric configurations of instruments, this piece fits certain criteria for my aesthetic preference. Additionally, I discovered “Door” when I was first exploring the use of electric guitar, my main instrument, in contemporary chamber music. When I think back upon the first time I heard “Door,” I remember the excitement of hearing a familiar timbre in an unfamiliar setting and the desire to perform music like this. These memories and associations add a fondness for this piece.

Unlike Soper, I came to the words after hearing the music. Since I was focused on engaging with music that employed electric guitar, I initially heard the words as sonic objects devoid of meaning. Unpacking how the words function as timbral components of the piece adds yet another layer of beauty to my listening experience. Soper chooses to describe words as aesthetic “vehicles,” insinuating that words are carriers of beauty. The words have now come to be associated with the other appealing qualities of the piece. “Shell,” as a vehicle, brings along the shell chords that I find appealing. When I think of “pearl,” I think about the transformative process as the object of beauty and how irritants can give rise to beautiful things.

Moving beyond my aesthetic interpretation of this movement, Soper describes her aesthetic appreciation of Collins’s poem and what drove her to consider setting it to music.

What drew me in was the sparseness and delicacy—it just seemed very musical to me, lightly orchestrated and contemplative. I was particularly captivated by the icy beauty of the third poem, which basically just has three words in it: ‘shell,’ ‘my hand,’ ‘pearl’—I felt powerfully how deep connections emerged between these words in my mind just from her simple (but expert) act of selecting them and placing them in proximity, which is a common compositional procedure (if you replace ‘words’ with ‘sounds’).²⁸

When I first came across this quote, the word “icy” puzzled me. Iciness evokes notions of cold and frozenness for me, qualities I did not see in this poem or hear in Soper’s musical setting. I find the instrumental timbres to be quite warm and intimate and the temporal aspect of the piece quite fluid. Soper’s choice of words invited me to look beyond my immediate association of ice as cold and rigid. As I probed further into the other associated qualities, I started to understand why Soper chose to use that word to describe the poem.

First, I thought about the way I experience ice visually. Ice can be clear or distorted and perhaps paradoxically is often both. When ice forms, non-water particles and air can become trapped in the layers. We can see these “irritants” through the clear portions, whereas the pearl hides them from our perception. There is a clarity to the poem since the meaning of the words is not difficult to ascertain. At the same time, there are more distorted layers of meaning that I have unpacked through my analysis; layers that lie beneath the clarity.

Second, ice is like a pearl as both are unique results of a process. A pearl is the beautiful result of an irritant trapped inside a mollusk, whereas ice is the result of water freezing. Although the pearl’s process is mysterious as it occurs inside the shell, visually hidden from us, water freezing can be observed. Unlike other liquids that become solid, ice is less dense than its liquid counterpart, which adds a mysterious component to this process as well.

Third, ice is delicate and fragile. These qualities are hinted at in the poem and observed by Soper. The words are placed in proximity, simply but expertly as Soper notes, to create the poem. Any change in the spacing, the addition or substitution of one of the six words would alter the poem. Furthermore, this final quality associated with “iciness” can be heard in Soper’s setting. The rhythmic precision required to perform this piece requires delicate coordination. The

²⁸ Robert Kirzinger, “Program notes by Robert Kirzinger,” 17–18.

guitar and accordion must function as a single voice for most of the piece, and any asynchrony between them has the possibility of shattering their union.

Lastly, ice often melts, and music is ephemeral. The beauty of an ice sculpture, a poem, or a piece of music is fleeting. We treasure these experiences, reminisce about them, and occasionally spend hours analyzing them to better understand why we found them so intriguing and beautiful. Recall that Soper chooses to describe words as aesthetic “vehicles.” Throughout my process of analyzing this piece and this poem, these words took on new passengers, my analytical experiences and aesthetic associations. My search for what makes words beautiful has, for me, endowed these words with associations that I value.²⁹ Taking advantage of a word’s ability to be a vehicle helps me hold on to the ephemerality of this movement.

Conclusion

Using only six words as source material, Soper musically articulates the various ways words communicate. Drawing upon the *lexical* meaning of the words, I argued that Soper interpreted the poem as a thought process and used several strategies to create a dreamlike sense of time for the movement. The *figurative* lens revealed explicit parallels between “shell” and “my hand” and was used to observe the strategic placement of dissonance in otherwise consonant sonorities. The *acoustic* lens showed how words can be regarded as sonic objects with unique timbral properties that correspond to the instruments used in the piece. Lastly, the six words of the poem carry beauty in addition to meaning, and I used the *aesthetic* lens to interrogate what makes these words, this poem, and this movement beautiful to me. In contrast to other ways of analyzing music with text, such as Kofi Agawu’s informal method of analyzing song, which advises the analyst to begin by searching for significant musical features, I start with the text and allow the varied ways words communicate to assist my analysis of the music. My method, using the four lenses to engage with the text and subsequently the music, places the text and its communicative properties at the center of the analysis.

²⁹While my analysis did endow words with positive associations, searching does not inherently endow words with positive associations, feelings, thoughts, or values.

I was able to use these four lenses to uncover various aspects about the multiplicity of meanings of the words, poems, and text-setting. That said, different text settings illustrate the four lenses to different degrees. The program note applies to all six movements, and my analysis focused solely on the third. For instance, the lexical lens was perhaps a bit limited for this movement. Due in part to the repetitions of the focal words of the poem, Soper eschews the lexical meaning of the words and facilitates an impression of the words as sonic objects without meaning. One of the difficulties presented by the third poem is that it is mostly constructed from nouns. While there are qualities associated with each of the three words Soper chooses to repeat, such as the smoothness or lustrousness of a pearl, verbs may be more readily analogized musically. In contrast, "I. (sound me out)," the first movement of "Door," begins with Soper interpreting the titular instruction verbatim. She breaks apart the phonemes that make up the words: elongating, contracting, and repeating them.

Interestingly, the same fragmenting technique is used in the fourth movement, "IV. (the space before the words)," to illustrate a more figurative aspect of the poem. This poem discusses the gaps between words, i.e., before, between, and after the words, as well as the opened mouth between the words. Due to the content of the poem, I interpret this fragmentation technique, especially the final phoneme elongations, as a means of exploring the space between words. As this movement is scored for flute and tenor saxophone in addition to soprano, I hear a musical equivalent in the air sounds of the two woodwinds. The instruments, too, get to explore the space before, between, and after musical utterances.

These four lenses exist as individual means of approaching words, but they can complement each other when used collectively. They all serve to investigate how Soper uses the various ways that words communicate. Furthermore, the insights offered by one lens can influence how the others are used. For instance, the lexical lens influenced my use of the figurative and aesthetic lenses greatly. By deciding to hear the poem as a series of thoughts, I found myself more open to the possibility of connections between words and ideas that may seem too far-fetched outside of a thought-process. In addition, the taboos of exploring someone else's thoughts and the unpredictability of Soper's unfolding sonorities enhanced my enjoyment and therefore my aesthetic appreciation of the movement. Rather than synthesizing the

lenses into a broader conclusion, I would suggest that each interrelated investigation supports the understanding and acceptance of the myriad meanings of words, contradictions of meaning, and the imprecision of human communication.

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