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*Metric Analysis and the Metaphor of Energy: A Way into  
Selected Songs by Wolf and Schoenberg*

YONATAN MALIN

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This paper provides additions and alternatives to the current practice of metric analysis, drawing on the metaphor of energy, and it engages in close readings of music and text in songs by Wolf and Schoenberg. The metaphor of energy enables in-time interpretations of relations between rhythm and meter, contour, intensification and de-intensification in other domains, and the desire of musical and poetic personae. The approach is also grounded in recent theories of metaphor, cross-domain mapping, and embodied meaning. Analytical readings explore the dynamics of subjectivity in Wolf's "Um Mitternacht" and "An die Geliebte" from the *Mörke Songbook* and an oscillation between manic excitement and depressive calm in Schoenberg's "Valse de Chopin" from *Pierrot Lunaire*.

Keywords: rhythm and meter, metric dissonance, energetics, music and text, German Lied, Wolf, Schoenberg, metaphor, embodied meaning

**E**XAMPLE 1 IS THE SCORE for the beginning of "Unterm Schutz," the first song from Schoenberg's *Book of the Hanging Gardens*, op. 15. Let us consider metric and energetic aspects of the opening gesture. The piano begins with a syncopated circling line in the bass,  $\langle F\sharp_2, D_2, F_2, E_2 \rangle$ .

The subtitle references David Lewin's "A Way into Schoenberg's Opus 15, Number VII" (2006, Chapter 16). Lewin's virtuosic analysis was the original inspiration for my approach.

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The syncopation then resolves, and the line escapes its register and its centripetal tendencies, leaping up to  $G\sharp_3$ . The syncopation sounds by itself at the beginning of the song; a listener who does not have a score and does not know the song hears only a regular pulse. We do have the score, however, and many readers will know the song; we may therefore have supplied the missing pulse internally. The displaced  $F\sharp$ ,  $D$ ,  $F$ , and  $E$  would then seem to accrue potential energy, like the energy of a compressed spring, and this "energy" would seem to release as the syncopations resolve, sending the line upward from  $E_2$  to  $G\sharp_3$ , with an extra push-off from  $F\sharp_2$ .<sup>1</sup>

I use the metaphor of energy in this description to give a dynamic account of the syncopations, melodic contour, and

<sup>1</sup> This description is adapted from Malin 2006.

1 Mäßig (♩ ca. 54) 2 3 4 5 6 7

8 *ppp* 9

Un - term Schutz von dich - ten Blät - ter-grün - den,

EXAMPLE I. Schoenberg, "Unterm Schutz," *op. 15, no. 1, measures 1–9*

their interaction. I describe the opening four pitches as “centripetal,” that is, tending inward, and I suggest that the synchopations generate “potential energy” which then releases, sending the line upward. This description gives the listener an embodied, gestural sense for the music, and it might give the performer some ideas for how to shape the line. In this paper, I argue for the interpretive and analytical value of the metaphor of energy. Section I situates my approach in relation to recent trends in metric analysis, with brief examples. Section II grounds the approach in theories of metaphor and embodied meaning. Sections III and IV feature close readings of music and text in two songs by Wolf, “Um Mitternacht” and “An die Geliebte” from the *Mörrike Songbook*, and one by Schoenberg, the “Valse de Chopin” from *Pierrot Lunaire*.

Energetic analysis may be applied productively in a variety of repertoires.<sup>2</sup> I focus here on songs to engage with the further interpretive possibilities offered by the combination of music and text. In song, we may read energetic processes as dynamic manifestations of elements depicted in the text.<sup>3</sup> The

- 2 There are extensive historical precedents in the Western tradition for a link between musical motion and the concept of energy, as outlined by Lee Rothfarb (2002). Ernst Kurth in particular applied an energetic approach to melodic motives in Bach, chromatic harmony in Wagner, and waves of intensification and de-intensification in Bruckner (Kurth 1991). Energetic conceptions of both melody and rhythm were fundamental to romantic theories of music, as Michael Spitzer has shown (2004, Chapter 6).
- 3 Zbikowski (forthcoming) writes, “According to current theory, mappings between language and music rely on image-schematic structures

texts themselves also have rhythmic and energetic properties, however, and these may carry over in the musical settings. (Here I am thinking especially of genres such as the Lied, which set pre-existent poetic texts.) Finally, rhythmic interactions between the voice and piano in the Romantic Lied play into the energetic form and the dynamics of desire.<sup>4</sup>

I focus on songs from the later nineteenth and early twentieth century because they feature especially direct links between desire, melodic contour, intensification and de-intensification in other domains, and rhythmic energy. The importance of energetic form in this repertoire was recognized early on. In 1909, Rudolf Louis described the “swelling and ebbing of feeling-intensity” as a primary characteristic of the modern Lied, from Wolf on (221; quoted in Kravitt 1996, 4). Here we shall seek to understand the role of rhythm and meter in this energetic form.

#### I. METRIC ANALYSIS AND THE METAPHOR OF ENERGY

Metric analysis has become a well-established field within Anglo-American music theory. In this section, I will review current practice and suggest additions and alternatives, drawing on the metaphor of energy. One significant addition is an in-time reading of relations between rhythm, meter, and melodic contour. I will also show how the metaphor of

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that are common to the two domains. Music will tend to instantiate such structures dynamically, while language will call them up through reference.” I outline the theory of image schemata below, in Section II.

<sup>4</sup> The joining of music and text has been a source of fascination in the Lied since its origins in the 18th century. Parsons (2007), Schwab (1965), and Dürr (1984) provide overviews of 18th and 19th century sources. Agawu (1992) surveys and critiques more recent approaches. Zbikowski (2002) draws on the theory of “conceptual blending” to explain how we interpret the combination of music and text. Cone (1974; 1992) and Hoeckner (2001) develop a theory of musical and lyric personae in the Lied.

energy works with notions of musical agency, persona, and subjectivity. The idea of a musical persona with the energies of desire will inform readings of music and text in song.

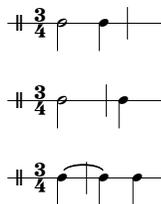
One of the central tenets of metric analysis is the idea that we entrain to beats or “metrical layers” in response to series of accented events that are perceptually equidistant, and in response to parallel structures.<sup>5</sup> An accented event is any event that calls attention to itself, or in Cooper and Meyer’s more general formulation, “a stimulus (in a series of stimuli) which is *marked for consciousness* in some way” (Cooper and Meyer 1960, 8; emphasis in the original). Accented events include dynamic accents, registral accents, durational or “agogic” accents, beginnings of melodic or motivic units, and changes of harmony, contour, texture, timbre, or any other musical feature (Lester 1986, Chapter 2). In vocal music, language also contributes accent structures. Metric entrainment then occurs as we attune ourselves not only to a single beat or metric layer but to a hierarchy of layers.<sup>6</sup> A “consonant” metric hierarchy is said to occur when all the layers align. Metric “dissonance” occurs when layers do not align (as in syncopation or offbeat accents) and when periodicities are not multiples or factors of each other (as in hemiolas). The former are called displacement dissonances and the latter are called grouping dissonances (Krebs 1999).<sup>7</sup>

The focus of metric analysis has thus been on the identification of metric layers and their interaction, in a variety of repertoires. Melodic, harmonic, dynamic, and other features are all interpreted as elements that contribute to the formation of metric layers. Rhythm is commonly conceived as something separate from meter, although the latter is dependent on the former. We entrain to metric layers in response to rhythmic patterning.

<sup>5</sup> Lerdahl and Jackendoff (1983, Chapter 4) provide the classic and most rigorous formulation. The term “metrical layers” is Krebs’s (1999, 30).

<sup>6</sup> London (2004) discusses metric entrainment (Chapter 1).

<sup>7</sup> Further methodologies for the analysis of metric dissonance have been developed by Krebs (1999) and Cohn (1992a, 1992b, and 2001).



EXAMPLE 2

The main thing missing from this account is a sense for the *interdependence* of rhythm and meter. We not only entrain metrically in response to rhythmic patterning, we also interpret durational patterns in the context of a given meter. The first benefit of energetic analysis is that it may encourage us to attend more fully to the interdependence of rhythm and meter. As Victor Zuckerkandl observes, there is a sense of motion towards and away from beats at various levels; rhythmic patterns contribute to the feeling of motion *and* are heard in relation to it (1956, 167–69, 177–80). The rhythms in Example 2 have the same durational profile but we would not say that they are the same rhythm. They each have a different energetic feel, because of their relations to the downbeat. This is not to say that meter is an inflexible, unchanging grid, a constant background for the interpretation of rhythmic variety.<sup>8</sup> It is to say that there is a degree of durability in our metric entrainment. Once we have entrained to a meter, we may sustain it for a time, even as we take in new rhythmic patterns and their potential for metric entrainment. It is also to say that the composer's metric notation (for notated music) is more than a matter of convenience.<sup>9</sup> It is significant, for instance, that Schoenberg notates the initial quarters in "Unterm Schutz" as syncopations, and that G#3

arrives on the beat. With energetic analysis, we may attend to the formation of a given meter (its energetic feel or "groove") and interpret rhythms in relation to regular periodic motion.

Pursuing this line of thought further, we may ask not only about the interdependence of rhythm and meter but also about relations between rhythm/meter and pitch. As we have seen, classic metric analysis cites contour, harmony, and other pitch elements as features that contribute to our metric entrainment. Recent research has also developed analogies between rhythm and pitch.<sup>10</sup> Analogies between pitch and rhythm have been especially intriguing when similar processes or states are found to coincide in individual works and repertoires (Lewin 1981; Krebs 1999, 149–56; Cohn 2001; Smith 2001). With the metaphor of energy, I introduce a third approach, different from both the entrainment modeling and analogical approaches. I suggest direct links between concurrent or successive processes in the domains of pitch and rhythm.

Our initial example, from Schoenberg's "Unterm Schutz," presented an instance of such a link. I suggested a transfer of energy from syncopations to a melodic leap. The connection does not model entrainment, nor is it based on pitch/rhythm analogies. We can interpret recurrences of the *idée fixe* from Berlioz's *Symphonie Fantastique* in similar terms. Example 3(a) provides the first two phrases of the *idée fixe* in their initial presentation. There is an expressive ascent from G, the dominant below, to E and then F, the third and fourth scale degrees above the tonic. The ascent, however, takes off just after the downbeat and it thus does not receive a metric impulse. It seems ungrounded, an apt representation of the

8 See Hasty's (1997) critique of standard concepts of meter.

9 Krebs (1999, 97–98, 180–82) provides a further discussion of this issue from the point of view of performance.

10 Joel Lester (1986, 52) and Fred Lerdahl (2001, 285–97) develop analogies between meter and tonality. Mathematically oriented approaches, such as Lewin's (1987, 9, 23), have worked with the concept of beat-class, by analogy with pitch class. Ng (2006) provides a recent application. The term "dissonance" is applied to meter by analogy with pitch dissonance, as discussed by Krebs (1999) and Cohn (1992b).

(a)

(b)

EXAMPLE 3. Berlioz, *idée fixe* from *the Symphonie Fantastique*. (a) first movement, measures 72–86; (b) second movement, measures 121–135.

*vague des passions* mentioned in Berlioz's program.<sup>11</sup> The second phrase develops with a similar rhythmic-energetic feel. Now consider Example 3(b), the theme's return in the Waltz movement, in F major. The melody seems to leap easily upward after the impulse of the downbeat F to C, as in a dance step. The combined melodic and rhythmic energy then sets the syncopations in motion. The metric impulses are clarified and strengthened in the second phrase, as the strings add an um-pah-pah accompaniment (not shown here). The artists' passions seem to be grounded, at least temporarily, in the physicality of dance.

The basic idea here is that the metaphor of energy enables an in-time account that relates aspects of rhythm, meter, and melodic contour. Rhythmic energy may contribute to the ease of a melodic ascent, metaphorically speaking, or melodic energy may sustain a given rhythmic pattern.<sup>12</sup> Notice also that the concept of energy is closely

tied with embodied experience. In my remarks on the *idée fixe* I noted a sense of being “ungrounded,” and a grounding that occurs through the physicality of dance. As it turns out, the metaphor of energy is uniquely suited to this kind of reading. We commonly hear both rhythm and melody as forms of movement. With the metaphor of energy we add the notion that force, movement, or the potential for movement can be *transferred* from one domain to another, say from a dance step to a leap, from a spring to an object, from motion to heat (via friction), or from syncopations to a musical line. Such transfers of energy are common in our experience of the physical world and they map intuitively onto musical events.

The metaphor of energy has further entailments. In other words, we will tend to hear and interpret musical events in particular ways, as we map concepts of energy from the physical world and our embodied experience onto music. I shall outline three further entailments here. First, one may hear syncopations “releasing,” or “dissipating,” just as energy

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like a gravitational field that conditions our embodied sense of up versus down, the relative weighting of events, and the relative amount of energy needed to overcome ‘gravitational’ constraints (as in ascending melody)” (115).

- 11 Chateaubriand, the “well-known writer” of Berlioz's program, describes the *vague des passions* as “a state of the soul . . . which precedes the development of our passions when our faculties are young, active, and whole, but closed in and exercised only on themselves, without aim or object” (quoted and translated in Brittan 2006, 213n10).
- 12 Robert Hatten (2004) develops a similar idea, in his theory of musical gesture. He writes, “At least for Western classical music, meter functions

releases or dissipates. In comparison, when one maps the notion of “dissonance” from the pitch domain onto rhythm and meter, one would be more likely to hear a syncopation “resolving.” The idea of “resolution” might be appropriate for discussions of dramatic form, as in Cohn’s metric analysis of the Scherzo from Beethoven’s Ninth Symphony (Cohn 1992a). The idea of “release” or “dissipation,” on the other hand, may be more apt for naturalistic depictions of psychic energy, typical of the mid-to-late nineteenth century.<sup>13</sup>

The second entailment is that our experience of energy includes the notion of causality, and we may map this onto musical events. Colloquially speaking, energy is that which causes things to happen. If we say that the energy of syncopations releases into a melodic leap, we might also say that the melodic leap is possible *because* of the rhythmic energy. The causality in play here is not strict. Event a does not lead by necessity to event b. Rather, event a generates the possibility of event b, and event b, once it occurs, can be heard as a result of event a. Here again there is a structural correspondence between our experience of energy and successive musical events. The potential energy of a compressed spring may release, sending an object up into the air, or the spring may remain compressed. Likewise, the inner tension of desire may release with its outward expression, or it may remain within, suppressed—or repressed, to use the Freudian terminology that will be applicable later in the paper.

The third entailment is implicit in the previous sentence. Energy is something that an agent or persona may have, and use. Thus, given a text, program, or programmatic reading, one may choose to imagine the musical energy as the energy of the musical persona.<sup>14</sup> To illustrate this idea, let us return

to Example 1, the opening of “Unterm Schutz.” Here I offer a performative analysis, extending beyond the first gesture. I shall describe the introduction from my point of view as the pianist. The song cycle as a whole is about desire and sexual initiation. Performing as a desiring persona, I play the syncopated  $F\sharp_2$ ,  $D_2$ ,  $F_2$ ,  $E_2$ , leap up expressively to  $G\sharp_3$  releasing the rhythmic tension, and then yield down to G natural. In my second gesture, I repeat the syncopated  $F\sharp_2$  and  $D_2$ , and then leap directly from  $F_2$  up to  $C\sharp_4$ . I am over-eager; I leap up before completing the original figure. Note also that the tonal quality eases in this gesture. In measure 2, the step-off pitch, leap, and sigh figure use  $F\sharp$ ,  $G\sharp$ , and  $G\sharp$ , a chromatic cluster in pitch-class space. In measures 3–4, the analogous pitches are  $F\flat$ ,  $C\sharp$ , and  $A\sharp$ , enharmonically equivalent to a  $B\flat$  minor triad. I then seem unable to re-capture the expressivity of my opening gestures. I syncopate  $E\flat$ ,  $F\flat$ , and  $D\flat$  (all members of the relatively consonant  $B\flat$  minor pentatonic collection), try a leap up to  $C\sharp$  and then try another leap up to  $E\flat$ . Why did I say that I “try” the leaps up to C and E? I do in fact reach those pitches. I do not, however, coordinate the leaps with a release of metric tension. The syncopation and inner tension remain unresolved.<sup>15</sup> My leaps in measure 5 are expressive and even moving because of the failure that they represent. The *sf* on the  $E\flat$  pickup to measure 6 is a willed gesture, impotent in that it does not derive its energy properly from within, from the tension of metric displacements. Discouraged by failure, I then repress my desire, leaving it to recur in the slow octaves of measures 6–7. This

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voice in the Lied. Hoeckner (2001, [2]) reviews and revises Cone’s earlier and later theories.

13 In analogous terms, Ernst Kurth described “the stepwise continuation of chordal dissonance . . . not so much as resolution (*Auflösung*) but more as a release (*Auslösung*) of constrained forces” (Rothfarb 2002, 941).

14 The notion of the musical persona was developed originally by Cone (1974), with a special focus on song. Cone later revised his original theory (1992), with renewed attention to the relations between piano and

15 The observations about pitch and pitch class are consistent with a tetrachordal analysis by Allen Forte (1992, 288–90). Forte observes that the opening gesture consists of three interlocking instances of set-class 4–2[0124], and that the second gesture has an interlocking 4–7[0145] and 4–17[0347]. To combine Forte’s analysis with the present mode, we can say that the “tight” 4–2 tetrachords in the first gesture “open out” to 4–7 and 4–17.

narrative depends of course on feeling the syncopated quarters *as* syncopations. I would not say that one has to feel them this way; I simply observe that a gestural logic emerges if one does attend to the notated meter.

The general idea in this analysis is that syncopations embody a kind of tension, and we may interpret this as the yearning or desire of a musical persona. The specific narrative emerges as we hear the syncopation releasing into a melodic leap in the first gesture, as we hear the earlier release and tonal easing in the second gesture, as we find that the syncopations do not resolve in the third gesture, and as we hear the opening gesture in augmented form, without syncopation, deep in the bass. This narrative also emerges when we hear the piano introduction in relation to the song cycle as a whole, including its text. One may in fact sustain this narrative, with associations between syncopation, desire, and melodic contour, through the remainder of the song and in subsequent songs, as I show in another context (Malin 2006).

Thus, to summarize, the metaphor of energy enables an in-time interpretation of relations between rhythm and contour. Entailments of the metaphor include the idea of energy transfer, causality, release, and the possibility of interpreting motion, tension, and release in relation to the desires of a musical persona. In this way, the metaphor of energy offers a significant addition to the current practice of metric analysis.

## II. METAPHOR AND EMBODIED EXPERIENCE

In the discussion up to now, I have been drawing implicitly on recent theories of metaphor and cross-domain mapping. We may provide a further grounding for the approach by reviewing these theories. I will also situate the metaphor of energy in a network of related mappings. My introduction to metaphor theory draws especially on Brower (2000) and Zbikowski (2002, Chapter 2).<sup>16</sup> I will highlight the role of experiential

correlation in metaphoric mappings. Such correlations have been underemphasized in the recent music-theoretical discussions of metaphor. They are especially significant for energetic analysis.

The basic idea in recent theory is that metaphor involves a mapping of elements from a source domain, which is relatively concrete or familiar, onto a target domain, which is more abstract or less familiar. The effectiveness of the mapping depends on structural correspondences between the two domains. It may also depend on experiential correlations between the domains. Metaphors are understood as common elements of our everyday lives, thus not only as features of “poetic” or “imaginative” play. Metaphors, furthermore, are commonly grounded in embodied experience, that is, in the experience of our physical selves and the world around us. This experience provides a set of basic patterns, or “image schemata,” which we map onto more abstract domains. Image schemata include things such as VERTICALITY (basic notions of up and down), CONTAINER (notions of boundary and things being inside or outside), and SOURCE–PATH–GOAL (movement from one place to another). Applications of metaphor theory to music have emphasized the idea that even basic concepts such as melodic motion and key manifest metaphoric mappings. We commonly conceive of series of pitches as motion from one “place” (in musical space) to another and we speak of being “in” a key, as though it were a container. Chromaticism takes us “outside” the boundaries of a key. Finally, metaphoric mappings generally carry with them logical entailments. We saw examples of these in Section I, in connection with the metaphor of energy. The basic idea is that we will carry as many features from the source domain over to the target domain as we can, without violating essential properties of the target domain.

The notion of musical energy then works in two overlapping ways. First, it responds to our experience playing music, moving with music, or identifying sympathetically with those

<sup>16</sup> Sources in Cognitive Linguistics that have been at the foundation of this work include Lakoff and Johnson 1980, Johnson 1987, and Turner 1996.

who play or move.<sup>17</sup> In this sense, it is not metaphorical. Rather, it describes musical experience. An increase of energy is generally required to play or sing louder, faster, or higher. Higher pitches are produced with greater tension and hence require more energy, either in the body or the instrument. Indeed, energetic analysis may draw directly on performance experience.<sup>18</sup> The notion of musical energy also works metaphorically, and it does so by organizing basic level mappings from the schemata SOURCE–PATH–GOAL (movement in musical space) and VERTICALITY (the understanding of pitch in terms of high and low). Thus, in my analysis of “Unterm Schutz,” I suggested that a certain amount of energy is needed for the upward leaps in pitch space. This interpretation does not derive directly from the mechanics of my performance on the piano, for there pitch space is horizontal and the “leaps” do not take any special effort. Rather, it derives from a prior mapping of verticality onto pitch frequency. It may also derive from an imagined vocalization of the opening figure, that is, from a sense for the energy required to sing the upward leaps.<sup>19</sup>

The thing to emphasize here is that the experiential and metaphorical dimensions of musical energy are closely

intertwined. Any given interpretation may be based directly on musical experience (i.e., experience of performing a given passage or moving with it), it may be based on the idea of motion in musical space, or it may be based on a combination of the two. Furthermore, a metaphorically based interpretation can easily become experiential, if one imagines the quality of motion or performs a gesture that corresponds with it. Energetic interpretation in this sense is performative and deeply embodied.<sup>20</sup>

Zbikowski notes experiential correlations between verticality and pitch: faster frequencies resonate higher in our bodies as we sing or speak (2002, 71). He then explains the intuitive nature of the mapping, however, by citing structural correspondences between the two domains and global cultural models. The structural correspondences are as follows: “Both space and the frequency spectrums are continua that can be divided into discontinuous elements. In the spatial domain, division of the continuum results in points; in the acoustic domain, it results in pitches” (71). The global cultural models derive from Western notation: “In the West, the description of pitch relations in terms of ‘up’ and ‘down’ arose around the same time musicians began to develop ways of notating polyphonic compositions. These notational systems often relied, either directly or indirectly, on the physical placement of symbols on the page” (72). The structural correspondences and the cultural models are certainly relevant, but the experiential correlation is also significant. Polyphonic notation was developed for vocal performance, in which the correlation is especially strong. When we *feel* a sense of intensification with pitch ascent or relaxation with pitch descent, this is not simply because pitch is a continua like space, nor do the cultural models associated with Western notation explain it fully. It also derives from the experience

17 Cox (2001) provides additional discussion.

18 David Lewin (2006) describes “energy profiles” in a passage from Shakespeare’s *Macbeth*, and then comments on the relation between the analysis and his embodied experience: “I first became aware of these energy profiles by noticing that I was instinctively clenching my fist as I said ‘This,’ and unclenching it, gradually splaying the fingers of my hand to their widest possible extend, as I intoned the words, ‘multitudinous seas incarnadine’” (83–84). Lewin then argues against institutional and sociological trends that separate performance and analysis. In this connection, see also Agawu 2004.

19 Cox (2001) suggests that “subvocalization,” an imagined vocalization that is often unconscious, may be integral to the perception and cognition of vocal and instrumental music (200). Subvocalization in this sense would be analogous to internalized metric entrainment. Eitan and Granot (2006, 224–26) provide a general discussion of intensity isomorphisms and cross-domain mappings.

20 Alexandra Pierce (1994) presents a pedagogy for performance and analysis along these lines, with expressive movement at its core. Hatten (2004, 126–31) and Spitzer (2004, 89–91) provide commentary on Pierce’s approach.

of producing a series of pitches with changing frequencies.<sup>21</sup> Ironically, an awareness of embodied image schemata has not always been combined with attention to the embodied nature of musical performance.<sup>22</sup>

There are further metaphors for melodic motion that have been developed recently, and these also participate in the network of mappings associated with the concept of energy. Steve Larson has explored melodic motion in terms of three forces: gravity (the “tendency of an unstable note to *descend*”), magnetism (the “tendency of an unstable pitch to move to the nearest stable pitch”) and inertia (the “tendency of a pattern of musical motion to continue in the *same* fashion”) (Larson 1997, 102; 1997–98, 57). We certainly map these forces intuitively onto musical motion, and as Larson demonstrates, melodic patterns often move in accordance with them. The notion of energy adds a framework for relating these forces and for discussing forms of motion that work against the virtual force fields. Thus, we imagined a certain amount of energy, required to *oppose* gravity in the upward leaps of “Unterm Schutz.” The notion of energy also allows for subjectivity, the idea of a musical presence that moves with its own individual energies. Energy is something that an agent or persona may have, and use. In comparison, one does not *have* force. One may exert force, and one uses energy to do so.<sup>23</sup>

As we saw in Section I, it is the energetic correlation of rhythm and melodic contour that proves especially productive, and that sets the present approach apart from current techniques of metric analysis. (Analyses in Sections III and IV will also work with harmony, dynamics, and text.) What is the experiential and metaphoric basis for our interpretations of rhythm and meter? They are based first of all on the sense of movement away from and back to beats at various levels. They are also based, however, on the energetic effects of alignment and non-alignment. Here again we deal with direct musical experience and mappings from other domains. Alignment usually corresponds with a sense of ease, and a merging of the self and the world. In this sense it may correspond with a loss of individual subjectivity. Non-alignment often corresponds with a sense of tension or desire and it may express the emergence of individual subjectivity (see the analyses of Wolf songs in Section III).<sup>24</sup> Non-alignment may also emerge as dramatic conflict (see the analysis of Schoenberg’s “Valse de Chopin” in Section IV). Furthermore, non-alignment and alignment may contribute to waves of intensification and de-intensification (see the analyses of Wolf’s “An die Geliebte” and in Schoenberg’s “Valse de Chopin” in Sections III and IV).

### III. WOLF, “UM MITTERNACHT” AND “AN DIE GELIEBTE”

Hugo Wolf’s “Um Mitternacht,” setting a poem by Mörike, features a scene of nocturnal stillness. The sense of subjective desire is muted; this is a song of weariness. There is subtle tension, however, and subjective desire emerges

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agent is complex, even more so when one adds the “force-field” of meter. I do not attempt to define this relationship in any general way here; it depends a great deal on musical context, performance, and individual choices of hearing and interpretation.

A strong association between syncopations, melodic ascent, and long-ing can be found earlier in the nineteenth century in Schumann’s “Intermezzo” op. 39, no. 2 and “Im wunderschönen Monat Mai” op. 48, no. 1 (Malin 2006).

21 For more on the role of experiential correlation in metaphoric mappings, see Grady 1999 and Grady, Oakley, and Coulson 1999, 112.

22 Arnie Cox (2006) offers a similar critique: “If it cannot be shown how musical experience might activate the PATH schema in its own right (or generate some kind of feeling that is in some way similar to motion), then we are left with the alternative that the concept of motion along a path is generated by the force of language, and that any bodily grounding is a by-product of conceptualization. The same problem would attend the application of image schema theory generally. I believe that the failure to show how musical experience motivates our metaphoric conceptualizations significantly undercuts the potential value of Johnson’s ideas” (296).

23 Robert Hatten (2004) distinguishes between a “musical agent’s motivational *gestural energies*” and “the *environmental forces* of tonal and metric fields that deflect them” (300; italics are mine). The precise relationship between Larson’s musical forces and the motivational energies of a musical

24

openly at one moment. Vocal syncopations are common in songs by Wolf, and we tend to interpret them as stylistic features or in connection with his precise declamation. The vocal line in “Um Mitternacht,” however, is generally not syncopated. Syncopation emerges rather in the moment of subjective awakening.

Example 4(a) provides the accompaniment and setting of the first poetic line. Regular oscillations in the accompaniment create an atmosphere of nocturnal stillness. One may compare this with the slow oscillations in Schubert’s “Nacht und Träume” D. 827 or the start and stop oscillations in Schubert’s “Im Dorfe” from *Winterreise*. (The latter depict a more unsettling form of nocturnal stillness.) Oscillations such as these articulate a basic pulse but they do not differentiate metric beats at higher levels. There is only the changing of harmony on occasional downbeats. “Nothing happens for a long time” as it were, and this creates the sense of stillness. Wolf adds a subtle metric tension to this characteristic figuration: the oscillations, interpreted via a “parallel scheme” (ab ab ab), articulate a quarter note pulse in conflict with the dotted-quarter note of the notated meter and vocal line. In order to reconcile the accompaniment and vocal line metrically, we may interpret the oscillation via a “switchback scheme” (aba bab aba bab . . .).<sup>25</sup> This creates a higher-level oscillation (ABAB), and thereby articulates the dotted half-note pulse, but in ever so subtle a manner. The tension between “aba” and “bab” aptly figures one of the poem’s central conceits, that of “goldne Wage . . . der Zeit in gleichen Schalen stille ruhn” (golden weights of time resting still in equal-balanced scales). (Wolf sets “gleichen” with a duplet, as given in Example 4(b), measures 8–9. He thereby divides the “bab” unit in two “equal” parts.) The tension in this figuration also emerges from tonal factors. Stability and instability are offset in the right and left hands. In measures 1–2, for instance, the right hand has the stable chordal pitches in the

“a” position and the unstable neighbor in the “b” position. The left hand has the unstable fifth in the “a” position and the stable root in the “b” position.

Example 4(b) provides the vocal line for measures 2–9. Example 4(c) provides the parallel passage at the beginning of the second strophe. In both passages, Wolf sets the tetrameter lines with strong syllables on beats one and three of the 12/8 meter. In other words, the vocal line is not syncopated; poetic and musical meter coincide. The gradually rising lines in the beginning express the mood and action of these first two poetic lines: “Calmly the night climbed onto the land, and leans dreamily against the wall of mountains.” We should in fact say that the gradually rising lines interpret the action as one that is slow and measured. (This already is an energetic interpretation, based on the combination of rhythm, meter, and contour.) The sense of motion then increases subtly, motivated by changes in the poetic meter. Example 5 provides the poem with a translation. Mörike adds a fifth foot in lines 3 and 4, and there is an enjambment—sustaining the motion—between these lines. Wolf responds beautifully by setting the “extra” fifth foot on the fourth beat of measure 7; this is the first strong syllable to be set on a weak beat. The direct link from measure 7, beat 4, with a rising arpeggio into the beginning of the next phrase on the downbeat of measure 8, then creates a musical analogue for the poetic enjambment (Stein 1971, 163). Wolf also adds a registral accent on the second beat of measure 7, with the rise up to B. The vocal line is thus animated in measure 7 by phenomenal accents on both weak beats. There are analogous accents on beats 2 and 4 of measure 9.

The sense of agency and oppositional energy are weak in this first section of the poem. The night climbs onto land, but it does so calmly. “Gelassen” (calmly) resonates with the meaning of “lassen,” as in “etwas tun lassen,” to have something done. In other words, one might say that night does not climb actively and energetically herself; she allows the climbing to happen. Similarly, it is not she (the night) that sees the golden weights of time, only her eyes see them. The broad metric alignment suggests a subjectivity that merges (wearily)

25 The terms “parallel scheme” and “switchback scheme” are Cohn’s (1992a, 193).

(a) **Sehr ruhige Bewegung**

*p*

Ge - las - sen stieg die Nacht an's Land, lehnt

*ppp*

(b) **Sehr ruhige Bewegung**

*p*

Ge - las - sen stieg die Nacht an's Land, lehnt träu - mend an der Ber - ge Wand, ihr

Au - ge sieht die gold - ne Wa - ge nun der Zeit in glei - chen Scha - len stil - le ruh;

(c)

20 21 22 23 24

Das ur - alt al - te Schlum - mer - lied, sie ach - tet's nicht, sie ist es müd;

25 26 27 28

ihr klingt des Him - mels Bläu - e sü - sser noch, der flücht - gen Stun - den gleich ge - schwung' - nes Joch.

EXAMPLE 4. Wolf, "Um Mitternacht." (a) measures 1–3; (b) vocal line, measures 2–9; (c) vocal line, measures 21–28

Gelassen stieg die Nacht ans Land,  
 Lehnt träumend an der Berge Wand,  
 Ihr Auge sieht die goldne Wage nun  
 Der Zeit in gleichen Schalen stille ruhn;  
     Und kecker rauschen die Quellen hervor,  
     Sie singen der Mutter, der Nacht, ins Ohr  
 Vom Tage,  
 Vom heute gewesenenen Tage.

Das uralt alte Schlummerlied,  
 Sie achtet's nicht, sie ist es müd;  
 Ihr klingt des Himmels Bläue süßer noch,  
 Der flücht'gen Stunden gleich geschwungnes Joch.  
     Doch immer behalten die Quellen das Wort,  
     Es singen die Wasser im Schlafe noch fort  
 Vom Tage,  
 Vom heute gewesenenen Tage.

Calmly the night climbed onto the land,  
 And leans dreamily against the wall of mountains,  
 Its eyes now see the golden weights  
 Of time resting still in equal balanced scales;  
     And the springs gush out more boldly,  
     They sing into the ear of the mother, the night,  
 Of the day,  
 The day that was today.

The old-ancient lullaby,  
 She heeds it not, she is weary of it;  
 For her the blue of heaven sounds far sweeter,  
 The well-poised yoke of fleeting hours.  
     But still the springs repeat the word,  
     The waters sing on, even in their sleep  
 Of the day,  
 The day that was today.

EXAMPLE 5. *Mörrike, "Um Mitternacht."* Translation adapted from William Mann's liner notes for the *Mörrike-Lieder* recording by Dietrich Fischer-Dieskau and Gerald Moore, EMI CMS 763563 2

with the world. The moments of non-alignment suggest slight disturbances, with implications for a later awakening.

Night becomes more active in the second stanza, as she responds to the springs, which "gush boldly" and sing of the day. She (the night) *chooses* not to pay attention to the song, and it is for her as a whole—not just for her eyes—that the "heaven's blue" sounds "sweeter." The synaesthesia of this statement—combining sound, sight, and taste—suggests the engagement of a complete being. And yet there is a slip and a contradiction, for she reaches not for the stars but for "heaven's blue", which belongs to the day (Geyer 1991, 102). One senses an awakening of subjectivity and desire.

It is in the setting of this moment that Wolf departs from the model of the first strophe and introduces more obvious syncopations. The syncopations in turn become a symbol of opposition—opposition to meter and to the regular beating of time. Wolf sets "ihr" (for her) on the downbeat of measure 25. The metrical placement provides appropriate emphasis, and it

is notable for being the only first syllable of a poetic line that is on a downbeat in the entire song. It is worth emphasizing the grammatical contrast that motivates this change. "Ihr Auge" in the first stanza lines up with "Ihr klingt" in the second, but whereas in the first stanza "ihr" is a possessive pronoun, "its [her] eyes now see the golden weights," in the second it is an indirect object, "for her the blue of heaven sounds far sweeter." We may say that the persona herself arrives, awakened, with the energy of a poetic and musical downbeat. The singer's "klingt" falls on the second beat of measure 25, and the line then pushes off the A<sub>4</sub> of "Himmels" to a C<sub>5</sub> syncopation on "Bläu" and to E<sub>5</sub>, the highest pitch in the song, on the weak second beat of measure 26. In other words, the metaphorical reach towards heaven (in pitch space) takes strength from the downbeat and strong third beat and then soars up, beyond the reach of metrical gravity. It is of course a fragile moment, soon to be gone. In the words of the poem, it is "the well-poised yoke of fleeting hours." Subjectivity and

desire awaken in this moment, both through and against the impulses of meter and rhythm.

Whereas “Um Mitternacht” dramatizes the momentary emergence of subjectivity, in “An die Geliebte” we will find that subjectivity and desire are in abundance, and then are suppressed as disbelief sets in. The vocal persona gives voice to desire initially by reaching up to syncopated highpoints. Then, overcome by doubt, he is unable to find the energy for metric opposition.

Example 6 provides a score for the first two sections of “An die Geliebte”. The vocal line in measures 2–9 is in a large wave form, with smaller embedded waves. It begins with a  $G_4$  recitation tone, surges up to  $C_5$  in measures 3–4, leaps up to a new climax on  $E_b_5$  in measures 4–5, and then descends gradually, reaching up once more to  $E_b_5$  in measure 8 before finally descending back to  $G_4$ . Each of the upward leaps follows, and is followed by, a gradual descent. And in each case the singer lands on his or her high note on beat 2 or 4 of the notated meter, and sustains the high note for a dotted quarter. This establishes a displaced half-note pulse. Arabic numeral 4s above the vocal line indicate the presence of this pulse; the 4 represents the periodicity of the displaced pulse, measured in eighth notes.<sup>26</sup> The melodic surges and the syncopations combine to create moments of heightened expressivity, moments which emphasize central ideas in the text: the mute awe of the poet, the “heil’gen Werth” (or holy worth) of the beloved, and the angel wrapped within her. Example 7 provides the first two stanzas of the poem with a translation.

There are also syncopated whole-note layers, indicated in the score by “8a” and “8b”. The singer leaps up to  $C_5$  and  $E_b_5$  on the fourth beats of measures 3 and 4; he or she thereby suggests a whole note pulse that anticipates the measure lines by one quarter (layer 8a). One may also hear or perform a slight accent on “An-schaun” on the fourth beat of measure 2. The quarter-note syncopation of “vergnüge” in measure 5 rides over beat 4; it arrives at the precise moment to disrupt

the anticipatory whole-note pulse. A different whole-note pulse, marked 8b, then emerges in measures 6–8. In this latter half of the strophe, the vocal “downbeats” arrive on the second quarter of each notated measure. Thus, the vocal ascent features an anticipatory whole-note pulse, and the vocal descent features a delayed whole-note pulse. This also maps onto an antecedent/consequent structure in the text and features of the harmony. Lines 1–2, beginning “Wenn ich,” form a linguistic antecedent and lines 3–4, beginning “dann hör’ ich,” are the consequent. The harmony in measures 3–5 emphasizes the dominant, with  $V^7/V$  (measure 3, second half) and a  $Ger+6$  (measure 5); measures 6–9 emphasize the subdominant, with  $V^7/IV$  (end of measure 5 and latter half of measure 9). Movement in the subdominant direction is even further strengthened with a tonicization of  $D_b$  ( $IV/IV$ ) in measure 6.

Wolf’s reading thus moves with metric anticipations and intensification (*Steigerung*) to a moment of pleasure (measures 4–5). Note also that pleasure emerges through an “exterior” sense, the sense of vision. The poet is stilled by the beloved’s *Anschaun* (appearance), and he enjoys her “holy worth”, ironically a public and rather distancing attribute. Sight is then replaced by sound as the poet “hears” the angel’s quiet breath. The melodic descent and metrical delays are marked, vis-à-vis the text, as forms of interiorization. The quiet breath, heard not seen, is wrapped within the beloved, and the music seems to seek out this interiorized presence. The continuing piano ascent in measures 7–8, related in an obvious sense to the idea of an angelic being, may also be heard as a symbol of interiorization. The tones become thinner and thinner, in this sense more distant, within.

The certainty of the song’s first section gives way to doubt, questioning, and disbelief in the next section (Example 6, measures 11–17). Harmonically, the sudden shift from an  $E_b$  major tonic triad to a B minor triad in measures 11–12 creates a shock. One is stunned or astonished (*erstaunt*), as in the poem.  $E_b$  major and B minor triads form “hexatonic poles,” a type of juxtaposition that has been used frequently to depict the uncanny (Cohn 2004). The singer leaps up to syncopated

26 Krebs (1999) uses similar numerical annotations.

**Sehr langsam**

*p* (2) (2) 8a 4 4 8a 4

Wenn ich, von dei - nem An - schau tief ge - stillt, mich stumm an dei - nem heil -

*pp*

5 (4) 2 2 8b 4 4 8b 4 8b 4

gen Werth ver - gnü - ge, dann hör' ich recht die lei - sen A - them - zü - ge des En - gels, wel - cher

9

sich in dir ver - hüllt. Und ein er - staunt, ein fra - gend Lä - cheln quillt

(ausdrucksvoll)

EXAMPLE 6. Wolf, "An die Geliebte," measures 1-18 with annotations

13

— auf mei - nem Mund, ob mich kein Traum be - trü - ge, dass nun in dir, zu e - wi - ger Ge -

16

nü - ge, mein kühn - ster Wunsch, mein einz' - ger sich er - füllt?

## EXAMPLE 6. [continued]

pitches for “fragend Lächeln” and “quillt auf meinem”, as in the first section. “Traum betrüge” however is marked by a highpoint on the downbeat and a dotted figure that descends from the beat. The piano echoes this figure, sequencing it upwards, while the singer struggles against it—perhaps against the idea that fulfillment is a dream—with one more expressive leap up to a syncopated pitch,  $G_5$ , in measure 15. The singer then gives in weakly to the metric strong beats in measures 16–17. Non-alignment has given way to alignment; independent subjectivity has yielded to disbelief.

This is not the end of the story. “An die Geliebte” goes on to enact inner torment and a mystical transfiguration in the final strophe (not shown here). There is synaesthesia again, as in “Um Mitternacht”: the persona kneels at the end of the

song to hear the stars’ “light-song”. Here, however, the self dissolves in a union with the cosmos. Syncopation, individual expressivity, and energetic struggle are no longer needed.

## IV. SCHOENBERG, “VALSE DE CHOPIN”

The notion of energetic form, or “wave dynamics,” to use Ernst Kurth’s term, will provide the framework for my concluding analysis. With this notion I link individual rhythmic transformations, the overall metric narrative, and aspects of tempo, contour, dynamics and text.<sup>27</sup> The “Valse de Chopin” consists of

27 My analysis of this song draws on and extends an analysis by Krebs (1999, 244–48).

Wenn ich, von deinem Anschaun tief gestillt,  
 Mich stumm an deinem heil'gen Wert vergnüge  
 Dann hör' ich recht die leisen Atemzüge  
 Des Engels, welcher sich in dir verhüllt.

Und ein erstaunt, ein fragend Lächeln quillt  
 Auf meinem Mund, ob mich kein Traum betrüge,  
 Daß nun in dir, zu ewiger Genüge,  
 Mein kühnster Wunsch, mein einziger sich erfüllt?

When, from your gaze deeply stilled,  
 I enjoy myself mutely in your holy worth  
 Then I hear truly the quiet breath  
 Of the angel which is wrapped within you.

And an astounded, questioning smile springs  
 To my mouth, whether no dream deceives me  
 That now in you, for eternal satisfaction,  
 My boldest wish, my only one is fulfilled?

EXAMPLE 7. *Mörike, "An die Geliebte," stanzas 1–2*

two energetic waves, and with these waves the singer and pianist perform an oscillation between states of manic excitement and depressive calm. An actress, Albertine Zehme, commissioned and first performed Schoenberg's *Pierrot Lunaire*. The theatricality of the "Valse de Chopin" emerges precisely through a performance of Pierrot's pathological states, and through distortions of the meter and rhythms of the waltz.

The text for the "Valse de Chopin," given in Example 8, is a free German translation by Otto Erich Hartleben of Albert Giraud's French. The poem itself depicts an oscillation between

states of manic excitement and depressive calm. In lines 5–6 "Wild chords of desire disrupt despair's icy dream"; the manic disrupts the depressive. Lines 9–10 at the beginning of the third stanza then describe the waltz with three sets of adjectives, progressing from the manic to the depressive: first, "Heiß und jauchzend (Hot and rejoicing)"; second, "süß und schmachtend (sweet and languishing)"; and third, "melancholisch düstrer Walzer (melancholy gloomy waltz)."

The poetic structure also has energetic properties. The first two stanzas form a closed chiasitic structure, moving

1. Wie ein blasser Tropfen Bluts  
 2. Färbt die Lippen einer Kranken,  
 3. Also ruht auf diesen Tönen  
 4. Ein vernichtungssüchtger Reiz.

5. Wilder Lust Akkorde stören  
 6. Der Verzweiflung eignen Traum—  
 7. Wie ein blasser Tropfen Bluts  
 8. Färbt die Lippen einer Kranken.

9. Heiß und jauchzend, süß und schmachtend,  
 10. Melancholisch düstrer Walzer,  
 11. Kommst mir nimmer aus den Sinnen!  
 12. Haftest mir an den Gedanken,  
 13. Wie ein blasser Tropfen Bluts!

Like a pale drop of blood  
 Rouging the lips of a sick woman,  
 So upon these tones rests  
 A destructive charm.

Wild chords of desire disrupt  
 Despair's icy dream—  
 Like a pale drop of blood  
 Rouging the lips of a sick woman.

Hot and rejoicing, sweet and languishing,  
 Melancholy gloomy waltz,  
 [it] never leaves my mind!  
 [it] clings to my thoughts,  
 Like a pale drop of blood!

EXAMPLE 8. *Hartleben/Giraud, "Valse de Chopin." Translation adapted from Robert Erich Wolf's liner notes for Elektra Nonesuch CD 9 79237–2*

from the refrain, “wie ein blasser Tropfen Bluts/färbt die Lippen einer Kranken,” to descriptions of the Waltz, and back to the refrain. The beginning of the third stanza breaks away from this closed structure, lines 9–10 therefore bear a certain structural weight, they have the energy of a new beginning. The words themselves at this point, “Heiß und jauchzend,” are also infused with energy, but as we have observed already, this energy quickly dissipates into “süß und schmachtend, melancholisch düster Walzer . . .”

All the poems in *Pierrot Lunaire* have the same form, derived from the rondeau quatrain: three four-line stanzas with an extra line tacked onto the third stanza, and a refrain that returns in lines 7–8 and 13, that is, in the middle of the second stanza and in the extra line at the end. This poetic form is a hemiola, with the 4-line periodicity of the stanzas interacting with the 6-line periodicity of the refrain. The refrain appears most frequently as the beginning of a syntactic statement in lines 1–2, with a comma or no punctuation after line 2, and as the conclusion of a syntactic statement in lines 7–8, with a period after line eight. Thus, the closed structure of stanzas one and two and the new beginning in stanza three, which we observed in the “Valse de Chopin,” is a frequent feature of the poems, and Schoenberg generally “performs” the structure this way in his settings.

Example 9 provides an annotated score for the “Valse de Chopin”. There are two climaxes in the song, the first in measures 16–18 with the setting of “Wilder Lust Akkorde stören” (line 5) and the second in measures 27–29 with the setting of “Heiß und jauchzend, süß und schmachtend” (line 9). A half-note pulse labeled 2a emerges at each of these climaxes. Another half-note pulse, labeled 2b, emerges in the energetic descents, following each of the climaxes, that is, in measures 19–22 and 30–35. The beats of the 2a pulse coincide with even-numbered measure lines and the beats of 2b coincide with odd-numbered measure lines.<sup>28</sup>

Example 10 transcribes the vocal line of measures 5–17 by itself. Chromatic ascents in the vocal line contribute to a subtle but clearly evident process of intensification. There is a chromatic ascent from  $G\sharp_4$  to  $B_4$  in measures 5–6, and asterisks indicate a rising structural line that ascends chromatically from  $E^*b_5$  in measure 8 to  $E\flat_5$  in measure 10 to  $F_5$  in measure 12 and finally to  $F\sharp_5$  on “Lust” in measure 16. The singer’s *Sprechstimme* may obscure the precise pitch of any given syllable, but the sense of an overall ascent should be clear. At the same time, as Jonathan Dunsby has observed, the piano’s lowest notes descend chromatically from D in measure 10 to G in measure 14 (alternating between two octaves). Thus there is registral expansion in both directions (Dunsby 1992, 41). And while the dynamic marking at measure 14 remains *piano*, Schoenberg marks the piano’s chords “schwungvoll” (swinging, or with zest).

The singer, the piano, and the clarinet each have waltz rhythms, which contribute to the downbeat pulse in measures 6–13. Example 11, adapted from an analysis by Krebs (1999, 245), shows these rhythms in the clarinet and vocal part in measures 9–13. The waltz rhythm then drops its final quarter in measures 14–15, and the new half-note pulse, 2a, becomes established. The piano chords in measure 14 stand out as a new texture, and they clearly represent the “wild chords of desire” which the singer “hears” and then sings about in measures 16–17. These chords distort the waltz by transforming the dotted-half note pulse or “3-layer” into an energetically overcharged 2a.<sup>29</sup>

The singer is carried away at first by the “wild chords of desire”; she joins the piano in measure 16, articulating 2a

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Unlike Roeder, however, I do not account for all the accented events in each passage.

29 David Lewin (2006) shows that the rhythm of the piano chords in measures 14–19 matches precisely the rhythm of the vocal line at the beginning of “Colombine” (the second song from *Pierrot Lunaire*). This rhythm projects a duple meter against the notated 3/4 meter in both songs (349–50). Lewin shows further that the rhythm can be convincingly notated in 4/4 with an expanded 5/4 measure at the end.

28 The methodology here has similarities to John Roeder’s “pulse stream analysis,” which also works with songs from *Pierrot Lunaire* (1994).

Langsamer Walzer (♩. = 46-50)

Fl.

Cl. in A

Rec.

Pno.

ohne Pedal

*pp*

*p*

*pp*

*pp*

*p legato espress.*

*dolciss.*

begleitend

Wie ein blas - ser Trop - fen

*pp*

3

7

*pp*

*pp*

*p.3*

3

Bluts färbt die Lip - pen ei - ner Kran - ken, al - so

*pp*

begleitend

*pp*

*stacc.*

*pp*

weich kurs weich

The image shows a musical score for Schoenberg's 'Valse de Chopin' with annotations. The score is in 3/4 time and consists of five staves: Flute, Clarinet in A, Recorder, Piano, and Voice. The tempo is marked 'Langsamer Walzer' with a quarter note equal to 46-50. The key signature has two sharps (F# and C#). The score includes various dynamics such as *pp*, *p*, *ppp*, *p legato espress.*, *dolciss.*, and *stacc.*. There are also phrasing annotations like 'ohne Pedal', 'begleitend', and 'weich'. The lyrics are: 'Wie ein blaser Tropfen', 'Bluts färbt die Lippen einer Kranken, also', and 'weich kurs weich'. There are also some performance instructions like 'Die mit □ bezeichneten Stellen sind bis zum Zeichen ▮ hervorzuhoben, espressive zu spielen, weil sie Haupt- oder I. Nebenstimme sind. Die andern Stimmen haben gegen sie zurückzutreten; sind Begleitung.'

Die mit □ bezeichneten Stellen sind bis zum Zeichen ▮ hervorzuhoben, espressive zu spielen, weil sie Haupt- oder I. Nebenstimme sind. Die andern Stimmen haben gegen sie zurückzutreten; sind Begleitung.

EXAMPLE 9. Schoenberg, "Valse de Chopin," op. 21, no. 5 with annotations

11

ruht auf die - sen Tö - nen ein ver - nich - tungs - sücht' - ger Reiz. schwungvoll  
durchaus legato

*stacc.* 3 *pp* *legato* *stacc.* *weich* *stacc.* *weich* *espr.* *2a* *p dolce espress.* *2a*

Climax I

15

Wil - der Lust Ak - kor - de stö - ren der Ver - zweif - lung

*p dolce* *f* *p dolce* *f* *2a* *2a* *1.5* *1.5* *8va* *2a* *2a* *2a* *2a* *3*

EXAMPLE 9. [continued]



29 *f* *pp* *ruhiger*

2a *ruhiger* 3 2b 2b 2b 3 2b

und schmach - tend, me - lan - cho - lisch dü - ster Wal - zer, kommst mir nim - mer aus den

*p* *pp* *pp* *sf* *ff* *fpp*

33 *pp*

(2a) 3 3 3 (2b) (2b)

Sin - nen, haft - est mir an den Ge - dan - ken wie ein blas - ser Trop - fen Bluts!

*pp* *pp* *pp*

Detailed description: This musical score is for a vocal and piano piece. It is divided into two systems, starting at measure 29 and 33. The top system (measures 29-32) features a vocal line with lyrics and a piano accompaniment. The vocal line begins with a dynamic of *f* and then moves to *pp* with the instruction *ruhiger*. The piano accompaniment includes dynamics *p*, *pp*, and *sf*. The bottom system (measures 33-36) continues the vocal and piano parts. The vocal line has dynamics *pp* and *pp* with *ruhiger* markings. The piano accompaniment includes dynamics *pp*, *pp*, and *pp*. The score includes various musical notations such as slurs, ties, and dynamic hairpins.

Segue directly to  
**Madonna**

EXAMPLE 9. [continued]

with ⟨dotted-quarter, eighth⟩ rhythms. Indeed, we might say that the energy of the chords propels her to reach  $F\sharp_5$ , for the first time, in measure 16. (The singer's  $F\sharp_5$  completes her chromatic ascent from measures 5–12, given in Example 10.) In measures 17–18, however, she begins to struggle metrically against the chords. She transforms the ⟨dotted-quarter, eighth⟩ rhythm into a ⟨quarter, eighth⟩ rhythm with the syllables “(Ak)-kor-de stö-ren.” She thereby briefly projects a dotted-quarter pulse or 1.5-layer (see the annotations). The syllable “stö” of “stören” is the only strong syllable in the song

that lands on a weak eighth and this is the only place where the singer *disturbs* the primary quarter-note pulse. It is an overdetermined moment: the singer as Pierrot sings/speaks of how the wild chords of desire disturb despair's icy dream and with the word “disturb,” “stören,” she disrupts the piano's chords and reinstates the icy dream.

There is a ritard and diminuendo in measures 19–22, and the flute and clarinet liquidate their sixteenth figures in measures 19–21. Schoenberg here depicts a descent, perhaps even a plunge, from the manic to the depressive, from the

Wie ein blas - ser Trop - fen Bluts färbt die Lip - pen ei - ner Kran - ken, al - so ruht auf die - sen  
Tö - nen ein ver - nich - tungs - sücht' - ger Reiz. Wil - der Lust Ak - kor - de ...

EXAMPLE 10. Schoenberg, “Valse de Chopin,” vocal line, measures 5–17

m. 9 clarinet	m. 10 clarinet	m. 11 voice	m. 12	m. 13 voice	mm. 14–15 piano
 3	 3	 3	(3)	 3	 2a    2a    2a

EXAMPLE II. *Waltz rhythms in measures 9–15 of the “Valse de Chopin” (after Krebs)*

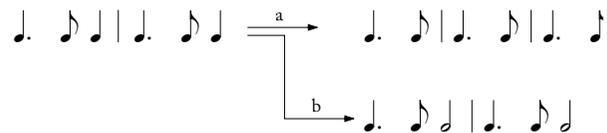
wild chords of desire to despair’s icy dream. The third quarter-note beat of measure 18 acts in retrospect as a “transformational beat”; it reinstates the non-distorted waltz rhythm and the primary 3-layer.<sup>30</sup> The piano then continues to project the primary 3-layer in measures 19–20 with ⟨half, quarter⟩ rhythms. The singer meanwhile returns to the waltz rhythm with “eis-gen Traum” in measures 19–20 but she sustains the word “Traum” over the measure line. This is yet another rhythmic transformation; rather than dropping the final quarter of the waltz rhythm, she extends it, and this transformation introduces 2b, the 2-layer that coincides with odd-numbered measure lines.

Continuing to listen through the metric filter of layer 2b, we hear an association between the alliterative accented words “blasser,” “Bluts,” and “Lippen”: “Wie ein blas-ser trop-fen Bluts färbt die Lip-pen ei-ner Kranken.” We might imagine Pierrot using a hot and desiring tongue for the L in all three words and pale, bloody lips for the P of “Lippen” and the B of “blasser” and “Bluts”. Note also that the “Pierrot” (i.e. the singer) closes his lips for the “m” of “Traum” on the second quarter of measure 20 in time with 2b. The first time the refrain appears, in measures 5–8, agogic accents on “blas-ser” and “Bluts” coincide with written downbeats. In measures 20–22 Pierrot declaims the refrain with relatively undifferentiated eighths. Immersed in “despair’s icy dream,” he is unable to articulate the line with the kind of rhythmic differentiation that he brought to it in the beginning. He keeps it moving,

however, in time with 2b, the faint pulse of his sustained “Traum.”

Measures 22–23 form the trough of the energetic wave; a new and fairly extensive process of intensification begins in measure 23. The singer then enters in measure 27 with ⟨dotted-quarter, eighth⟩ rhythms, in time with 2a, declaiming her line “Heiß und jauchzend, süß und schmachtend.” This is the second climax. Layer 2b then returns once again after the second climax.

Let us step back for a moment and consider the two main transformations of the waltz rhythm. These are outlined in Example 12. Transformation “a” drops the waltz’s final quarter and compresses three-quarter downbeat pulse into two quarters. This generates a sense of acceleration and intensification. Transformation “b” extends the final quarter, turning it into a half note. The downbeat pulse here becomes a four-quarter pulse, and there is a feeling of deceleration and relaxation. Transformation “a” generates the pulse layer 2a in Schoenberg’s song, a pulse associated with the two climaxes and transformation “b” generates the pulse layer 2b, associated with the energetic descents.



EXAMPLE 12. *Transformations of the waltz rhythm*

<sup>30</sup> The notion of “transformational beat” is discussed by Lewin (2006, 357).

The image displays a musical score for Schoenberg's "Valse de Chopin," specifically measures 1-4 and 23-26. The score is written for Clarinet (Cl.) and Piano (Pno.) in 3/4 time. The top system (measures 1-4) shows the Clarinet part with notes on measures 1, 2, 3, and 4, and the Piano part with arpeggiated figures in both hands. Dynamics include *pp* and *p*. The bottom system (measures 23-26) shows a varied recapitulation of the piano introduction, with the Clarinet part mirroring the melodic lines of the first system. Dynamics include *p* and *cresc.*. The score is annotated with measure numbers, dynamics, and phrasing slurs.

EXAMPLE 13. Schoenberg, "Valse de Chopin," measures 1–4 and 23–26, aligned with annotations

I should note that the association of one half-note pulse, 2a, with intensification and climax, and the other, 2b, with energetic descent, is arbitrary; it emerges as a convention in this song. There is no particular reason, in other words, why transformation "a" should generate layer 2a and not 2b, nor why layer 2a itself should be associated with energetic intensification and climax. One may begin to make sense of the energetic associations by recalling the fact that layer 2a coincides with odd-numbered measure lines and layer 2b with even-numbered measure lines. We may thus hear hemiolas that span odd-to-odd measures as manic or energized and hemiolas that span even-to-even measures as listless. What is remarkable is the extent to which the energetic associations of 2a and 2b are maintained

throughout the song. Consider a final series of analytical observations.

Example 13 aligns the clarinet and piano parts of measures 23–26 with those of measures 1–4 (the clarinet is notated in concert pitch). It shows that measure 23 initiates a varied recapitulation of the piano introduction. There are several obvious parallels: the left hand arpeggiates up from deep in the bass to  $G\sharp_4$  in both measures 1–2 and 23–24; the right hand meanwhile has  $B/D\sharp$  dyads; in measures 2–3 the right hand has a  $\langle C, D, C\sharp, B \rangle$  melodic line; this occurs again, transposed up an octave, in measures 24–25; and in measures 3 and 25 the clarinet performs the waltz rhythm,  $\langle \text{dotted-quarter, eighth, quarter} \rangle$  with its  $\langle F\sharp, F, A \rangle$  figure. Now, we can observe as well that the clarinet effects

rhythmic transformation “b” in measures 3–4; it sustains the final quarter of the waltz rhythm over the measure line. The clarinet’s G $\sharp$ <sub>5</sub> and the piano’s <D $\sharp$ ,C $\sharp$ ,A,F $\sharp$ > eighth-note figure then begin together on the second quarter of measure 4, in time with the relaxed 2b-layer. In measures 25–26, on the other hand, the final quarter of the clarinet’s waltz rhythm is not held over the measure line, and piano and clarinet enter together with their new gestures on the downbeat of measure 26, in time with the energized 2a layer. The piano repeats its <D $\sharp$ ,C $\sharp$ ,A,F $\sharp$ > figure exactly as in measure 4, but it situates it one quarter-note earlier. This introduces the 2a pulse and prepares the singer’s second climax, the climax of “Heiß und jauchzend . . .” Thus, the clarinet and piano perform transformation “b” in the opening, and thereby hint at layer 2b; then in the varied recapitulation they omit transformation “b,” they re-establish layer 2a, and maintain the momentum into the second climax.

Schoenberg also uses a brief return of 2a to perform Pierrot’s unrest in the aftermath of the second climax. The singer’s “haftest mir an den Gedanken” in measures 33–34 repeats and intensifies the melodic/rhythmic gesture of “nimmer aus den Sinnen” from measures 32–33. At the same time, “haftest mir an den Gedanken (it clings to my thoughts)” disturbs 2b with a brief return to 2a, a metric recollection, as it were, of the manic Waltz.

Finally, there is a hemiola in the last two measures which happens to be a “2b hemiola”; it spans from an odd to an even-numbered measure. The listener without a score of course would be hard pressed to identify this as 2b, rather than 2a, since there is no continuity of 2-layers in the extended postlude. It is nonetheless intriguing that this hemiola projects metric and energetic dissolution, in keeping with the properties displayed by 2b throughout the song. One might identify this as a “2b-hemiola” based on its energetic characteristics alone. In fact, the metric narrative of the final three measures features one more instance of disturbance and despair. The disintegration of the “(um)-pah-pah” figuration in measure 42 creates a disturbance

and a hint of 2a. The repeated eighth notes in measure 43 then delay 2a by a quarter, turning it into 2b. Layer 2b and the ritard connect the end of this song with the “Mäßig langsam” 4/4 of “Madonna,” the next song in the cycle. “Madonna” itself represents a significant turn, from the hopeful longings of the cycle’s first section to the dark destructiveness of the second.<sup>31</sup>

With the metaphor of energy we can form narratives that speak to the dynamic qualities of musical works and experience. To note that Pierrot’s repetition of the line “wie ein blasser Tropfen Bluts” takes place in the trough of an energetic wave is to note the effect of the moment, its relation to the passages that surround it, and its relation to the beginning of the song. It is to note that what was 3/4 in the beginning of the song is now 2/4, and what was layer 2a in the first climax has become 2b. It is to imagine the singer as an actor, with bloody lips, struggling against desire, falling into despair’s icy dream. And it is to hear Pierrot as a singer or the singer as Pierrot, struggling against the chords of desire, and reinstating the meter of despair’s icy dream.

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<sup>31</sup> Youens (1984) provides more discussion on this topic (107, 110).

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