

STRUCTURAL FRAMING AND ITS INTERACTION WITH LINKAGE TECHNIQUE

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Abstract. This essay investigates how structural framing (the motivic association of opening and closing gestures of a formal unit) interacts with linkage technique (*Knüpftechnik*), a Schenkerian concept concerning the method of having a concluding gesture in one passage become an initiating gesture in a passage that immediately follows. Although structural framing emphasizes discreteness by outlining formal units, and although linkage technique promotes continuity by stringing together adjacent formal units, both techniques can work together. The essay explains by using paradigms that model the interaction of structural framing and linkage technique and applying them to analyses of musical passages. In general, the essay showcases how content—motives articulated via structural framing and linkage technique—impacts the demarcation of formal units.

KEYWORDS AND PHRASES: Analysis, form, *Knüpftechnik*, linkage technique, motive, motivic, structural framing, Schenker, Schenkerian.

OPENING FRAME

THE THIRTIETH VOLUME OF *INTÉGRAL* represents an incredible achievement of graduate student involvement at the Eastman School of Music. Not only does it symbolize the hard work put in by its current editors and staff, all of whom are graduate students, but also that of the entire lineage of editors and staffers who have helped produce each volume of *Intégral* within its thirty-year history. Indeed, the thirtieth volume creates a significant bookend of music-theoretic endeavor, with its companion bookend being, of course, the first volume of *Intégral*.

The previous paragraph employs a frame: its topic sentence concerns the present volume of this journal while the concluding sentence references the first. Additionally, the body of the paragraph addresses the students who have worked on both volumes and all the volumes in between, creating a linkage of continuity within the outer parts of the frame. This framing and linking structure symbolizes

the important role that *Intégral* has played within the field of music theory.

Of course, frames and links are not just elements of prose composition; indeed, they appear often within musical composition. Within the latter context, application of frames has been studied under the rubric of *structural framing* whereas the employment of links refers to Heinrich Schenker's *linkage technique* (*Knüpftechnik*).¹ Structural framing has been explored most recently by Brian Alegant (the second editor of *Intégral*) and Don McLean and linkage technique has been investigated by Michael Baker, Steve Larson, and Peter H. Smith, to name a few.² Structural framing concerns the motivic association of opening and closing

¹ Smith (2007, 109) refers to definitions of linkage technique that appear in Jonas (1982, 7–9) and Kalib (1973, Vol. 1, 89–92).

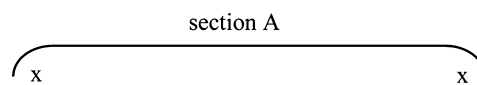
² For material on structural framing, see Alegant and McLean (2007). For earlier references to framing, see Agawu (1987, 10–11), Alegant and McLean (2001, 57 and 65), and Cone (1968, 22–31). Con-

gestures of a formal unit and linkage technique involves a concluding gesture in one passage becoming an initiating gesture in the passage that immediately follows. Whereas structural framing emphasizes discreteness by outlining formal sections, linkage technique promotes continuity by stringing together adjacent sections. Despite their opposing tendencies, both techniques can work in concert. And although some of the research cited above acknowledges the possibility of combining both techniques, the practice of doing so remains under-theorized within the music-theoretic literature.³ This investigation therefore aims to enhance our understanding of how the techniques interact. The essay is in two parts: the first section presents paradigms that model the interaction of structural framing and linkage technique and the second section then applies the paradigms to analyses of musical passages. The ideas presented here provide only an initial foray into combining structural framing with linkage technique, a small endeavor intended to help celebrate the publication of the thirtieth volume of *Intégral*.

1. FRAMING AND LINKING PARADIGMS

According to Alegant and McLean, “*Structural framing* is the reference to initial material at the end of a formal unit; this formal unit might be a theme, section, movement, or even a multi-movement work.”⁴ The “initial material” can take many guises, including motives, harmonic progressions, rhythmic patterns, etc. For the sake of simplicity, we will refer to such material as “motives,” regardless of what form they take. Additionally, the motives we are considering occur at the foreground or surface and should not be confused with Schenkerian motives, which occur at multiple levels of structure and concern only abstract pitch phenomena, such as linear progressions and neighbor tones.⁵ Example 1 depicts a scenario that corresponds to Alegant and McLean’s description of a structural frame. Here, a motive, represented by *x*, appears at the beginning and end of a formal unit, section A, which could correspond to a theme, section, or even a movement. The entire complex shown in Example 1 constitutes a structural frame, at least, in the manner in which Alegant and McLean propose.

At first blush, the model shown in Example 1 seems simple enough to understand. In this sense, the initiating and concluding *x* motives serve to frame the section of which they are a part. Yet, upon further scrutiny, we can see that the model demonstrates only the process of framing, but



Example 1. Illustration of a structural frame, adapted from Alegant and McLean (2007); *x* refers to a motive.

not the actual frame itself. To be sure, section A delimits the boundaries in which the framing takes place. In this way, one could understand section A as providing the frame. This understanding, however, appeals to circular reasoning: the frame demarcates the section, yet, the section provides the frame. Thus, Example 1 conflates the process of framing with the structural frame itself.

The foregoing discussion raises an essential question: what is a frame, structural or otherwise? Two definitions from the Oxford Dictionary of English are instructive in providing context here:

1. “a rigid structure that surrounds something such as a picture, door, or windowpane”;
2. “the rigid supporting structure of an object such as a vehicle, building, or piece of furniture.”⁶

Both definitions address aspects of structural frames that have been discussed in this essay thus far: the first definition suggests that a frame is autonomous from the content that it contains, while the second definition dictates that a frame is actually part of the content.

With respect to musical contexts, the second definition of a frame offered above corresponds to the model in Example 1. That is, motive *x*, which is part of section A, serves to frame the section. Relating the first definition to musical contexts, however, is more elusive, since it describes the enclosure of physical objects, such as works of visual art, rather than the containment of ephemeral, time-dependent phenomena such as musical works. Example 2(a) captures one aspect of the first definition by showing a picture encased within a picture-frame.

Relating the graphic in Example 2(a) to a musical context recalls a famous quotation from Edward T. Cone (an author who contributed to the first volume of *Intégral*):

... music stands in great need of a frame to separate it from its external environment—to mark off musical time from the ordinary time before it and after it. Without such a frame, the chaotic, undifferentiated flow of ordinary time will encroach on each extreme of the composition. It will prevent us at the beginning from being aware of the measure of temporal control exerted by the music, and at the end from appreciating the full

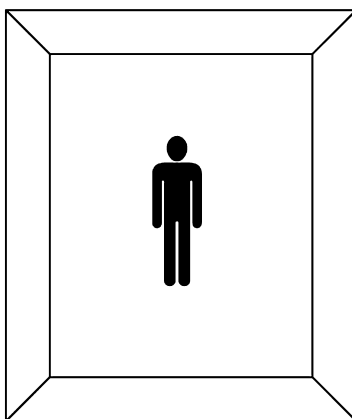
cerning linkage technique, see Baker (2011), Larson (2003), and Smith (2001, 2006a, 2006b, 2007).

³ An exception is Alegant and McLean (2007, 11 and 27).

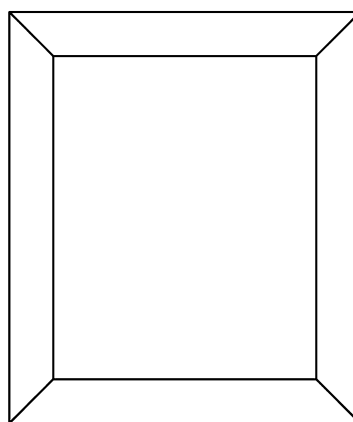
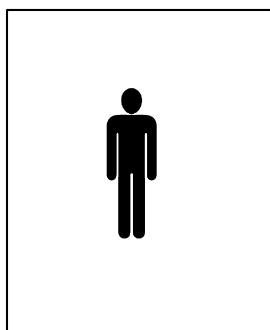
⁴ Ibid., 3.

⁵ For more on Schenkerian motives, see Pastille and Cadwallader (1992).

⁶ “Frame,” in *Oxford Dictionary of English*, edited by Angus Stevenson. Oxford University Press, 2010.



(a) The picture within the frame.



(b) The picture outside of the frame.

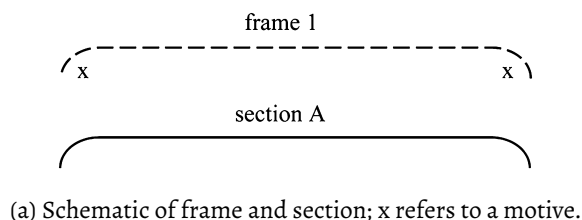
Example 2. Frames and pictures.

discharge of its energy. At this point you have undoubtedly guessed what the frame is. It is silence.⁷

To be sure, the type of frame to which Cone is referring is *external* to the music, but this externality holds particular promise for the types of frames that I am proposing within this essay. That is, externality suggests that frames exhibit a certain degree of autonomy from the material they surround, suggesting the scenario depicted in Example 2(b). Material, in this sense, refers to sections, such as section A identified earlier in Example 1. But, as in that example, rather than collapsing a frame and section into one entity, we can instead distinguish a frame from a section, which produces the scenario in Example 3(a). Now, the frame and section occur as separate entities, where the frame (frame 1) is bookended by a motive (x) and the section (section A) occurs as a discrete formal unit.

With the separation of frames and sections now proposed, further criteria are provided here as to how to distinguish them. A frame demarcates a span via initiating and concluding motives that are identical or similar to each other. The frame itself comprises only these motives, yet it is understood that music occurs between them. In this respect, the frame behaves much like a container, corresponding to the illustration in Example 2(b). The music contained within the frame need not bear any resemblance to the initiating and concluding motives, though it is entirely possible for it to do so. Additionally, a frame consists of foreground-level phenomena—pitches, rhythms, harmonies, etc.—thus, a frame resides at a low level of structure. Finally, the motives within a frame occur at or near sectional boundaries; thus, although frames exhibit a degree of independence from sections, they still work partially in concert with them. In contrast, a section consists of a formal unit that plays a role within a formal scheme (see the quotation earlier from Alegant and McLean [2007, 3]). For instance, a section could be

⁷ Cone (1968, 16). Alegant and McLean (2007, 13n13) make reference to Cone's ideas concerning frames.



(b) J. S. Bach, Prelude in A Major, from the *Well-Tempered Clavier*, Book I, mm. 7–8.

(c) J. S. Bach, Fugue in C Major, from the *Well-Tempered Clavier*, Book II, mm. 13–22.

Example 3. Illustrations of frames and sections as separate entities.

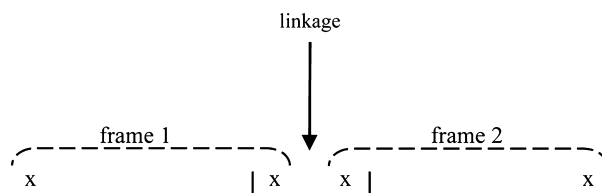
an antecedent of a period, a main theme of a sonata-form movement, the first reprise of a rounded binary form, or the first movement of a symphony, to name just a few examples. Whereas a frame employs only foreground-level phenomena, a section is more abstract in that it does not

rely entirely (or at all) upon the foreground for its articulation. For instance, an antecedent, which comprises a basic idea followed by a contrasting idea, partially engages foreground-level phenomena, but an entire movement is much larger in scope, and thus does not depend only upon

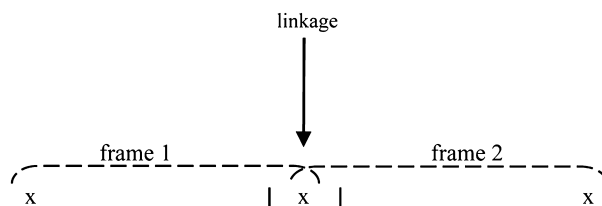
the foreground for it to be recognized as a complete unit. Based upon the criteria given above, we can see that frames and sections perform different functions: frames motivically outline spans and sections demarcate formal units. To be sure, frames and sections interact with each other, but—due to their different functions—they need not perfectly align with each other. Thus, frames and sections work, while not *entirely* independently from each other, at least to a certain degree.

Such partial independence appears in Example 3(b), which depicts a passage from J. S. Bach's Prelude in A Major, from the *Well-Tempered Clavier*, Book I, mm. 7–8. Here, section A corresponds to a short episode comprising a descending-fifths sequence that leads from IV to I within the home key and the onset of a subject entry, and frame 1 corresponds to the span of music bookended by motive *x*. The beginnings of section A and frame 1 align with each other; however, their endings do not, in that the ending of section A coincides with the arrival of the A-major harmony in m. 8, beat 3, but the ending of frame 1 continues past this point via the articulation of motive *x*. Example 3(c) presents a different case of partial frame-section independence within a passage from Bach's Fugue in C Major, from the *Well-Tempered Clavier*, Book II, mm. 13–22. In this passage, section A corresponds to an episode that begins on the tonic in the home key of C major and ends with a V:PAC in m. 22, and frame 1 begins and ends with motive *x*, which consists of the fugue-subject head. The beginnings of section A and frame 1 are slightly misaligned with each other; more significant misalignment, however, occurs between their endings in that the PAC that concludes section A does not coincide with the articulation of motive *x* as the conclusion to frame 1. Indeed, motive *x* in m. 21 also serves as the beginning of a subject entry that entirely oversteps the sectional boundary at m. 22, and, therefore, potentially initiates another frame. Thus, both instances of motive *x* within frame 1 occur near, but not at, the boundaries of section A, demonstrating that frames do not necessarily align with the sections with which they interact.

With this initial understanding of frames as partially autonomous entities involving motives, we can now show how they interact with linkage technique, which also employs motives, but in a different way. According to Oswald Jonas, linkage technique occurs when “a new phrase takes as its initial idea the end of the immediately preceding one and then continues independently, either within the same formal unit . . . or to initiate a new section.”⁸ Adapting his ideas, we can show how adjacent frames can interlock with each other via linkage technique (Example 4). At (a), two instances of motive *x* serve to link two discrete frames (frame 1



(a) Linkage involving discrete frames.

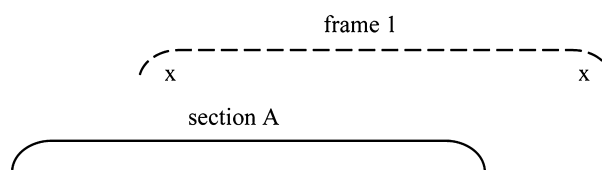


(b) Linkage involving elided frames.

Example 4. Illustrations of linkage technique.

and frame 2); at (b), one instance of motive *x* elides two adjacent frames.⁹

Recent research by Michael Baker provides a typology of linkage technique, which determines the degree to which associated motives are identical or similar to, or different from, each other within the domains of pitch and rhythm.¹⁰ In this vein, Baker creates eight ways to associate motives based on these criteria within these two domains. For instance, related motives may be identical to each other within the domain of pitch and similar to each other within the domain of rhythm. But like the structural frame shown in Example 1, Baker's typology does not allow for the kind of motivic autonomy (via independent frames) as shown in Example 3(a). Such autonomy allows for metrical alignment and misalignment to occur between frames and sections. A case of misalignment appears in Example 5. Misaligning frames with sections produces intriguing overlaps, as evidenced within the two Bach passages in Exam-

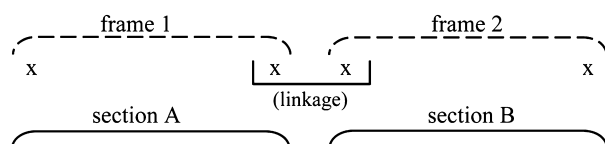


Example 5. Frame-section misalignment.

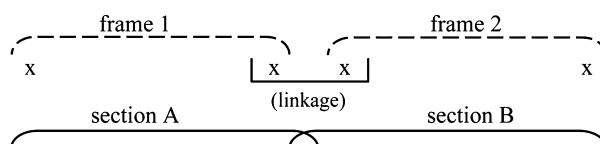
⁸ Jonas (1982, 7–8).

⁹ See Jonas (1982, 146, Examples 215a and 215b); Baker (2011) also mentions these two types of linkage technique. But see also Jonas (1982, 9, Examples 13 and 14), who shows that linkage does not necessarily involve motives that are directly adjacent to each other.

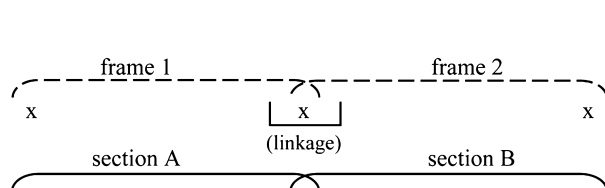
¹⁰ Baker (2011).



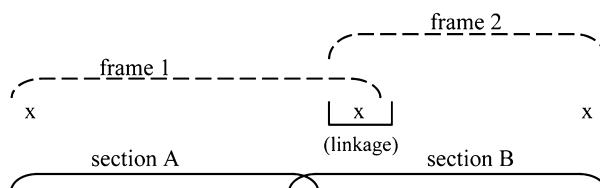
Paradigm a. Discrete sections, discrete frames (frame-section alignment).



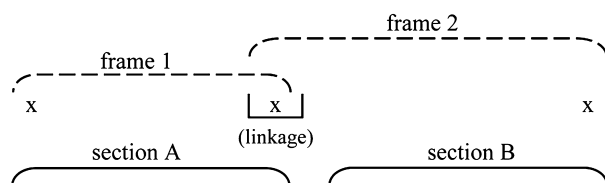
Paradigm b. Elided sections, discrete frames (frame-section alignment).



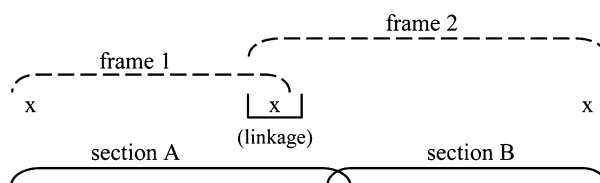
Paradigm c. Elided sections, elided frames (frame-section alignment).



Paradigm d. Elided sections, overlapping frames (frame suspension).



Paradigm e.1. Discrete sections, overlapping frames (frame anticipation).



Paradigm e.2. Elided sections, overlapping frames (frame anticipation).

Example 6. Framing and linking paradigms.

ple 3. In Example 3(b), the end of frame 1 extends past the boundary of section A, overlapping with the beginning of another section that starts with the subject entry in m. 8, beat 3; in Example 3(c), the end of frame 1 in m. 21 overlaps with the beginning of another frame (not shown), initiated by a subject entry; furthermore, this overlap occurs before the end of section A (articulated by a V:PAC), which elides with the beginning of another section that starts in m. 22. We will investigate other cases of overlap later in the essay.

When we now take into consideration that frames can be misaligned with sections and combine this principle with linkage technique, we are left with a number of framing and linking scenarios as illustrated by the paradigms in Example 6. The paradigms put into play the three elements I have been discussing so far: frames, sections, and motives. Each paradigm shows a pair of adjacent frames that correspond to a pair of adjacent sections, and each is distinguished by the way these adjacent units link with each other. Adjacent sections can appear discretely, as in paradigms a and e.1, or elide with each other, as in paradigms b–d and e.2. Adjacent

frames can also appear discretely, as in paradigms a and b; elide with each other, as in paradigm c; and even overlap with each other, as in paradigms d–e.2. In paradigm d, the concluding motive of frame 1 elides with the onset of frame 2, but only after the elision of section A and section B occurs; thus, the concluding motive of frame 1 protrudes into the following section and frame, much in the way a consonant tone from a previous measure is tied over to the next measure, creating a dissonant suspension. Due to this similarity, I classify paradigm d as a frame suspension. Within this paradigm, overlapping frames satisfy the following three conditions:

1. that a new frame begins before a prior frame concludes;
2. that a single instance of the linking motive occupy the space in which the two frames overlap;
3. that all or, at least, some of the overlap between both frames occurs over one section only.

Much research concerning overlap and elision occurs within the secondary literature, though it does not explain overlap as involving the coordination of frames and sections

Example 7. J. S. Bach, *English Suite*, No. 1, *Bourrée I*, excerpts from mm. 1–16; paradigm a: discrete sections, discrete frames (frame-section alignment).

in the way that I propose.¹¹ As already mentioned, overlapping frames also occur in paradigms *e.1* and *e.2*, but at the end of section A, thus permitting the concluding motive of frame 1 to anticipate the onset of section B. Due to this anticipatory effect, I thus classify paradigms *e.1* and *e.2* as frame anticipations. Although the motives employed within all these paradigms occur at precise locations within the frames they occupy, this does not preclude them from sometimes overstepping their frame boundaries in particular situations. That is, motives can have tail-end portions that overlap the ending of one frame and the beginning of another, regardless of the way in which the frames link up with each other (discretely or through overlap). Such motivic overlaps do not diminish the explanatory power of the framing and linking paradigms; rather, they highlight the malleability with which motives can serve to initiate and link adjacent frames. Overlapping of tail-end portions of motives appears in the next example (Example 7) within the following section of the essay, which involves applying the paradigms to analyses of passages from the literature.

2. ANALYSES EMPLOYING FRAMING AND LINKING PARADIGMS

This section of the essay applies the framing and linking paradigms to analyses of passages from well-known

works. Example 7 shows the opening and close of the first reprise from J. S. Bach's *English Suite*, No. 1, *Bourrée I*. Section A corresponds to the entire first reprise and frames 1 and 2 consist of units outlined by motive *x*, which initiates the reprise with a point of imitation, but also closes it by coinciding with the concluding V:PAC. The adjacent sections here correspond to the first and repeated statements of the reprise, as do frames 1 and 2 (thus the reason for using the label "section A, repeated," rather than "section B"). The end of section A and its subsequent repeat are discrete from each other due to the aforementioned cadence in m. 16. The end of frame 1 and the beginning of frame 2 are also discrete from each other, since motive *x* and its immediate repetition in mm. 16–17 stay primarily within the confines of their respective frames, despite the minimal overlap created by the tail of motive *x* at the end of frame 1 extending partially into the beginning of frame 2. In general, this excerpt articulates discrete sections and discrete frames as dictated by paradigm *a*.

A slightly different situation appears in Example 8, which demonstrates elided sections and discrete frames (paradigm *b*) within the context of Bach's *Fugue in C Minor*, from the *Well-Tempered Clavier*, Book I. Here, section A corresponds to the first episode in the fugue and section B the final subject entry of the exposition. Frame 1 is demarcated by the neighboring motion of motive *x*, as is the beginning of frame 2. The elision results from the tonic in m. 7 occurring as both the resolution of a V–I motion that closes off section A but also as an initiating tonic that punctuates the beginning of section B. No elision, however, occurs at the frame level, since motive *x* appears at the end of frame 1 and the beginning of frame 2. Moreover, at the point of linkage—the way in which the concluding motive *x* of frame 1 interacts with the opening motive *x* of frame 2, either discretely or through elision—motive *x* stays within its respective frames.

Such is not the case in Example 9, which shows elided sections and elided frames (paradigm *c*) within the context of Schumann's "Im wunderschönen Monat Mai," from *Dichterliebe*. Here, the sections correspond to the first and

¹¹ See Lerdahl and Jackendoff (1983, 55–62), Rothstein (1989, 44), Smith (2006a, 143–146, and 149), and Smith (2006b, 69). Lerdahl and Jackendoff (1983) distinguish between overlap, which involves two adjacent groups in which the ending of the first group becomes the beginning of the second group, and elision, where either the ending of the first group is omitted (left-elision) or the beginning of the second group is omitted (right-elision). Rothstein (1989) states that "two phrases may be said to overlap when the last note (or chord) of the first phrase acts simultaneously as the first note (or chord) of the second phrase." Smith (2006a) focuses on anticipation and retrospection of two competing and overlapping prolongational spans occurring at the boundary of two formal sections. Smith (2006b) addresses formal overlap between the retransition and recapitulation within a sonata form, where the latter intrudes upon the former.

frame 1

section A (episode)

frame 2

section B (subject entry)

m. 5

x

x

x

Example 8. J. S. Bach, *Fugue in C Minor*, from the *Well-Tempered Clavier*, Book I, mm. 5–7; paradigm b: elided sections, discrete frames (frame-section alignment).

frame 1

section A (first strophe)

Langsam, zart

p

Im wun - der-schö-nen Monat Mai, als

p

frame 2

section A, repeated (second strophe)

7

al - le Knos-pen sprangen da ist in mei - nem Her - zen die Lie - be auf - ge - gan-gen. Im

rit.

x

Example 9. Schumann, “*Im wunderschönen Monat Mai*,” from *Dichterliebe*, Op. 48, mm. 1–15; paradigm c: elided sections, elided frames (frame-section alignment).

second strophes of the song. Additionally, the beginning and end of section A are articulated by the move to the dominant of F# minor from a semitone above in the bass. Due to the elision at the section level, what appears to be a dominant arrival signaling the end of section A is also the opening of the auxiliary cadence that initiates the repeat of section A, thus effacing the boundaries between both sections. The same process occurs at the frame level, where motive x, which comprises not only the upper-voice melody, but also the surface figuration, the D–C# bass line, and the iv⁶–V⁷ chord progression in F# minor, occurs at the beginning and end of frame 1, the latter of which elides with—and thus,

also serves as—the opening of frame 2. The elisions that link the sections and frames here emphasize continuity, a characteristic that corresponds to the song’s portrayal of longing and desire.¹²

In Example 10, we return to Bach’s *Fugue in C Minor* and focus on another episode followed by a subject entry, which correspond to sections A and B respectively. Similar to the previous passage from this fugue, elision between sections results from the tonic resolution within the local

¹² For more on this particular interpretation of the song, see Perrey (2002, 163–177).

Example 10. J. S. Bach, *Fugue in C Minor*, from the *Well-Tempered Clavier*, Book I, mm. 9–11; paradigm d: elided sections, overlapping frames (frame suspension).

Example 11. Mozart, *Symphony in G Minor*, K. 550, i, excerpts from mm. 1–22 (reduced score); paradigm e.1: discrete sections, overlapping frames (frame anticipation).

key of E \flat major closing off one section while also serving as the beginning of the next. The same motive *x* is also used to bookend both frame 1 and initiate frame 2. But the way in which this is done differs from that in the previously analyzed passage of the fugue. What occurs now is a case of overlapping frames. The overlap here corresponds to what I call a *frame suspension* (paradigm d), where frame 1 is in the process of concluding, while frame 2 has already begun. Meanwhile, section B has already gotten underway, as articulated by the cadential elision on the downbeat of m. 11. The perceptual effect of this combination of elision and overlap

is one of surreptitiousness: we only perceive the beginning of frame 2 well after it has begun.

Our final illustration, in Example 11, is taken from the first movement of Mozart's *Symphony in G Minor*, K. 550. Here, section A refers to the main theme and section B corresponds to the transition.¹³ Motive *x* of frame 1 is the first basic idea (within the context of a sixteen-measure sen-

¹³ Although the transition begins like the main theme, it very quickly moves away from the G-minor key area and towards B \flat major in m. 28.

tence) presented by the violins in mm. 1–3;¹⁴ motive *x* then returns at the end of frame 1 in mm. 20–22, coinciding with the end of the main theme and hovering above the dominant belonging to the i:HC, introduced in m. 16 (not shown). But as frame 1 is ending with the articulation of motive *x*, so frame 2 is beginning, anticipating the onset of section B, or the transition. Additionally, motive *x* not only occupies the end of frame 1 and the beginning of frame 2, it also bleeds into the beginning of section B (via the ascending leap of a sixth, D₅–B₅), further obscuring the boundaries between the adjacent frames and sections. (As noted earlier, a portion of the overlap between two frames can occur across the ending of one section and the beginning of another.)¹⁵ The overlapping frames and the way they interact with the discrete sections A and B create a sense of ambivalence concerning the location of where the main theme ends and the transition begins.¹⁶ On the one hand, judging by the overlapping frames, the end of the main theme elides with the beginning of the transition (at the anacrusis to m. 21); on the other hand, according to the discrete layout of the sections, the main theme ends in m. 21 and the transition begins in m. 22.¹⁷ Which reading is more compelling? The answer, at least according to the framing and linking paradigms at our disposal, is not readily apparent. Indeed, the question ignores what is most compelling about this passage: it artfully equivocates between beginnings and endings, playfully inviting the listener to re-hear it numerous times, each time proposing a novel way in which the main theme concludes and the transition commences.

CLOSING FRAME

The framing and linking paradigms I have formulated and the musical excerpts to which I have applied them only scratch the surface concerning the topic of how structural framing interacts with linkage technique. Despite the preliminary nature of this study, the paradigms provide a starting point for investigating how content (in the form of motives, textures, outer-voice patterns, etc.) interacts with the demarcation of formal sections. Moreover, the paradigms

provide methods of categorizing the way adjacent frames and sections connect up with each other along a continuum that ranges from discrete (paradigm *a*) to overlapping (paradigms *d*, *e.1*, and *e.2*).¹⁸ More research, however, needs to be done to better understand how this continuum of paradigms corresponds to the articulation and linking together of formal sections throughout complete movements. Until then, let us consider these paradigms as an initial study of the interaction between structural framing and linkage technique, a study offered as my contribution to the thirtieth volume of *Intégral*.

REFERENCES

- Agawu, V. Kofi. 1987. "Concepts of Closure and Chopin's Opus 28." *Music Theory Spectrum* 9 (1): 1–17.
- Alegant, Brian, and Donald McLean. 2001. "On the Nature of Enlargement." *Journal of Music Theory* 45 (1): 31–71.
- Alegant, Brian, and Don McLean. 2007. "On the Nature of Structural Framing." *Nineteenth-Century Music Review* 4 (1): 3–29.
- Baker, Michael. 2011. "A Framework for Describing Linkage Technique in Tonal Music." Paper delivered at the Annual Conference of the Society for Music Theory, Minneapolis, MN.
- Caplin, William E. 1998. *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven*. New York: Oxford University Press.
- Cone, Edward T. 1968. *Musical Form and Musical Performance*. New York: W. W. Norton & Company.
- Jonas, Oswald. 1982. *Introduction to the Theory of Heinrich Schenker: The Nature of the Musical Work of Art*, translated and edited by John Rothgeb. New York: Longman.
- Kalib, Sylvan Sol. 1973. "Thirteen Essays from the Three Year-books *Das Meisterwerk in der Musik* by Heinrich Schenker: An Annotated Translation." Ph.D. dissertation, Northwestern University.
- Larson, Steve. 2003. "What Makes a Good Bridge?" *Tijdschrift voor Muziektheorie* 8 (1): 1–15.
- Lerdahl, Fred, and Ray Jackendoff. 1983. *A Generative Theory of Tonal Music*. Cambridge, MA: MIT Press.
- Pastille, William A., and Allen Cadwallader. 1992. "Schenker's High-Level Motives." *Journal of Music Theory* 36 (1): 119–148.
- Perrey, Beate Julia. 2002. *Schumann's Dichterliebe and Early Romantic Poetics: Fragmentation of Desire*. Cambridge: Cambridge University Press.
- Rothstein, William. 1989. *Phrase Rhythm in Tonal Music*. New York: Schirmer Books.

¹⁴ For more on the sixteen-measure sentence, see Caplin (1998, 69).

¹⁵ The end of frame 2 does not reproduce a surface-level motive *x* at the end of the transition (not shown); however, throughout the dominant pedal in B \flat major that concludes the transition (mm. 38–42), the first violins present a large-scale upper-neighbor motion C–D \flat –C (♯– \flat –♯ of V within the context of B \flat major), reminiscent of the neighbor motion that initiates motive *x* at the start of frame 2. According to the typology of Baker (2011), the two instances of motive *x* within frame 2 share a similar pitch relationship and a different rhythmic/metric relationship.

¹⁶ Caplin (1998, 272n62) references Lerdahl and Jackendoff (1983, 21–25), who address metrical issues concerning the main theme.

¹⁷ A reading Caplin (1998, 174n21) endorses.

¹⁸ Paradigm *e.2*, which was not featured within the analyses of the second part of the essay, explains the case of overlap discussed earlier with respect to Example 3(c).

Smith, Peter H. 2001. "Brahms and the Shifting Barline: Metric and Formal Process in the Trios with Wind Instruments." *Brahms Studies* 3:191–229.

———. 2006a. "Harmonic Cross-Reference and the Dialectic of Articulation and Continuity in Sonata Expositions of Schubert and Brahms." *Journal of Music Theory* 50 (2): 143–179.

———. 2006b. "You Reap What You Sow: Some Instances of Rhythmic and Harmonic Ambiguity in Brahms." *Music Theory Spectrum* 28 (1): 57–97.

———. 2007. "New Perspectives on Brahms's Linkage Technique." *Intégral* 21:109–154.