Polytonal Closure in the Music of Darius Milhaud and Howard Swanson

by

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THESIS ABSTRACT

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Recent years have seen a renewed interest in cadence and closure in post-Classical-era music, especially Romantic and neo-tonal repertoire (Caplin 2018 and 2024, Rodgers and Osborne 2020, Eng 2019). One subset of neo-tonal music that poses special challenges regarding closure is polytonal music. Polytonality relies on the establishment of separate key centers that can work both independently and in conjunction with one another, which raises many questions concerning cadence and closure—principally, what do we consider a cadence in polytonal music, and is closure possible in only one key or can it happen in multiple keys at once?

My thesis addresses these questions by examining the closural strategies utilized by French composer Darius Milhaud and African-American composer Howard Swanson. Drawing upon studies of polytonality by Peter Kaminsky (2004) and studies of neo-tonal closure by Clare Eng (2019), I outline three types of closure that appear in Milhaud's and Swanson's polytonal works: (1) *monoclosure*, where closure is reached in one of the established keys, but the other key(s) does not achieve any closure, either stopping mid phrase or continuing uninterrupted; (3) *polyclosure*, where simultaneous closure occurs in two (or more) separately established keys; and (3) *converging closure*, where multiple established keys converge at the point of cadence to achieve closure in one unified key.

After developing this analytical approach, I apply it to large-scale works by Milhaud and Swanson. First, drawing on the Sonata Theory of James Hepokoski and Warren Darcy (2006), as

well as writings about twentieth-century sonata form by Joseph Straus (1990) and Damien Blättler (2024), I analyze the first movement of Darius Milhaud's Sonata for Flute, Oboe, Clarinet, and Piano, Op. 47-I; this analysis includes a meta-narrative analysis founded on theories of agency theory by Robert Hatten (2018) and Edward Klorman (2016). Then, I turn to Swanson's *Fantasy for Soprano Saxophone and String Orchestra*–a work that has never been published or performed, which I found among Howard Swanson's papers in the Amistad Research Center at Tulane University. After developing a model of analyzing Swanson's unique polytonal idiom in general terms, building upon Marsha Reisser (1989) and Lee Cronbach (1981), I use my theory of polytonal closure to show how multiple layers of formal function emerge out of this 350-measure single-movement work.

ACKNOWLEDGMENTS

I am deeply indebted to my committee chair and advisor Dr. Steve Rodgers for his dedication in overseeing this project. I could not have done this without him; his care and guidance were invaluable in navigating this process. I am also extremely grateful to the other members of my committee, Dr. Drew Nobile and Dr. Abigail Fine, for their insights and patience through the development of this thesis. Additionally, this project could not have progressed without the research support of the School of Music and Dance (SOMD) at the University of Oregon.

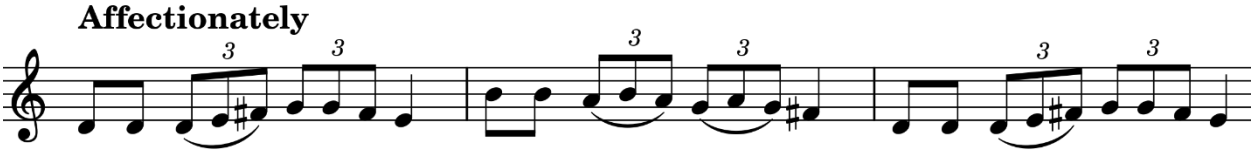
A very special thank you to the Amistad Research Center at Tulane University. The invaluable work of the archivists/librarians there made my research into Howard Swanson possible; they provided every manuscript I have from Howard Swanson. Amistad is the largest archive of Black history in America, and they are experiencing constant attacks from hegemonic powers on their funding, legacy, and institution; learn more at saveblackhistory.org.

Lastly, I'd like to express my gratitude to my friends, family, and loved ones for keeping me loved the whole time. My family and friends displayed a continued enthusiasm in my work, whether they have musical training or not, and listened to my stream of consciousness with care and attention.

DEDICATION

Dedicated to my fiancée, Mireya Leilani, without whom I could not have written this. This thesis would not exist today if she had not encouraged me to continue my education, and she continues to support me through every step of the way.

Through the arduous process of graduate school, you have supported me and kept me sane. Through the process of writing this thesis, you stayed with me during the late nights and difficult times. You planned a wedding while I couldn't get my head out of the books. We educate ourselves for a better future, and I can't wait to live and celebrate that future with you. I'll see you there, my Love.



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Chapter 1: Introduction

Figure 1 shows the ending of a phrase within Darius Milhaud's *Le Boeuf sur le Toit* (simply *Le Boeuf* from here), where two keys are cadencing simultaneously. As the strings and woodwinds, in the key of G♭ major, approach rehearsal D, they move through a cadential progression (V6/4=5/3–I), landing on a root-position tonic at the downbeat of rehearsal D. All the while, the French horns and trumpets play the same line as the woodwinds a tritone away, in the key of C major. They move through the same cadential progression and land on the tonic at rehearsal D. Taken in isolation, each key center—grouped according to instrumentation (G♭ major: strings/woodwinds; C major: brass)—communicates a sense of ending through the same mechanism of closure, a textbook perfect authentic cadence (PAC). However, within the whole texture, these key centers are at odds; in fact, they are as far apart as two key centers can be, situated at opposite ends of the circle of fifths. How do we experience closure in a passage like this, which closes in different keys at the same time? How does it communicate a sense of ending? And how do the closural techniques in this passage relate to closural techniques used in other polytonal works that also close in multiple keys at once?

My thesis explores these questions, focusing on polytonal works by French composer Darius Milhaud (1892–1974) and African-American composer Howard Swanson (1907–1978). I choose these two composers for their diverse applications of polytonal closure, as they both employ similar methods but do so to different expressive effects. Through these composers specifically, I construct a theory of polytonal closure that describes mechanisms of closure, the expressive effect/utilization of closure, and the form building function of polytonal closure.

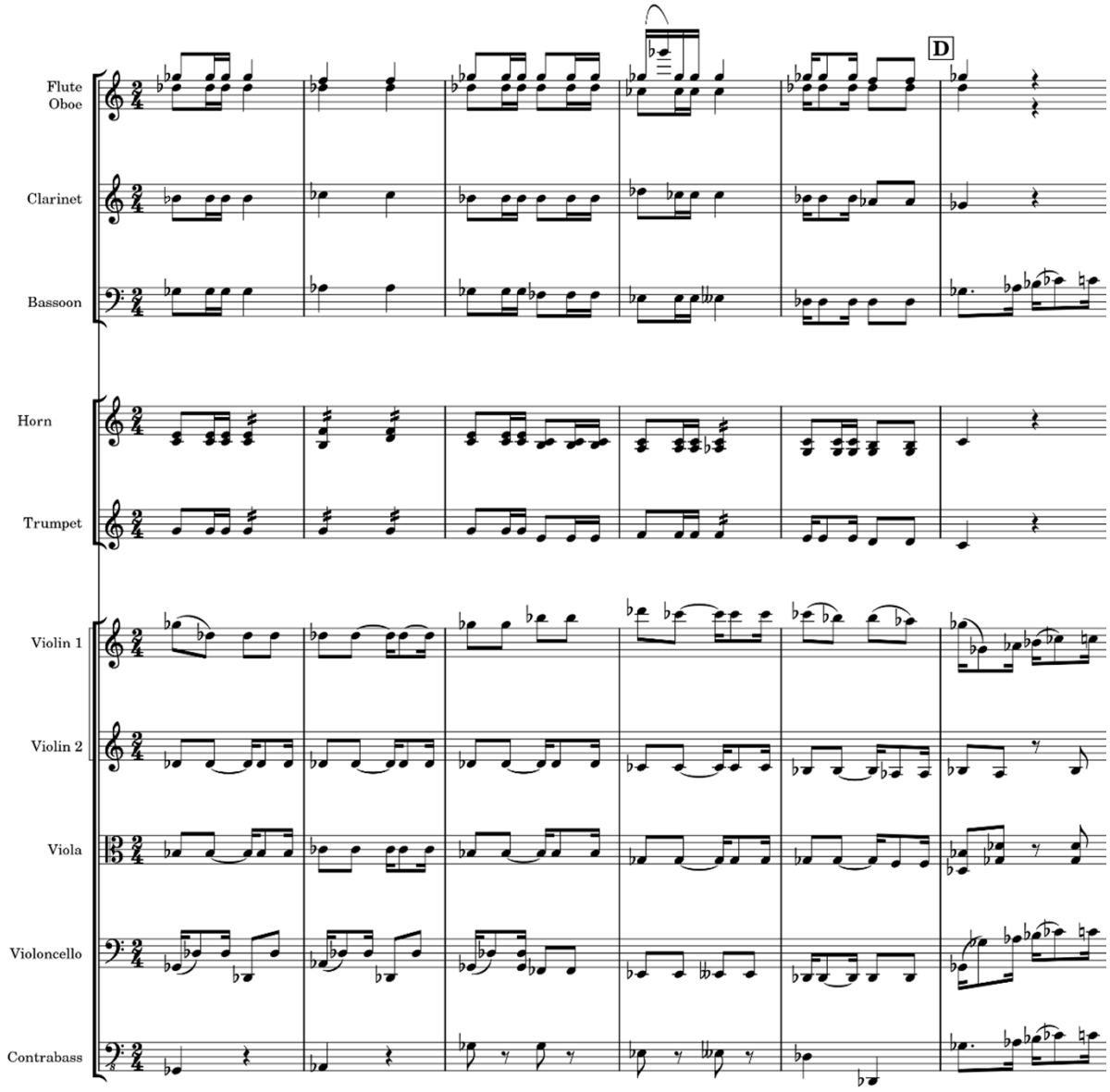

Figure 1: Milhaud's *Le Boeuf sur le Toit*, closure in G♭ major and C major.

Darius Milhaud was a principal purveyor of polytonality in the early-to-mid twentieth-century. His contribution to polytonality spurred the rise of neoclassicism and worked its way through his connection to the composer collective, *Les Six.* With Milhaud at the helm, polytonality became representative of neoclassicism and was integral to the development of the post-war neoclassical movement, with every composer of *Les Six* experimenting with it (Médicis

2005, 575). Milhaud's philosophy on polytonality upheld neoclassical ideals, as he claimed it was the natural progression from diatonicism (Milhaud 1923, 7).[1]

Howard Swanson was a Black American composer who saw great success in his day but fell into relative obscurity following his death. Swanson received a master's degree in composition from the Cleveland Institute of Music and spent a year studying with Nadia Boulanger. On the surface, his musical aesthetic is defined by strong neo-classical influences, structural forms, contrapuntal textures, and polytonality. However, deeper insight into his music has revealed a strong connection to Afro-American idioms and Black culture (Reisser 1989, 15; 1982, 6). I have chosen the music of Howard Swanson as one of my primary focal points because of his distinct use of polytonality, which—through its interaction with African-American idioms—is unlike that of any other composer.

Milhaud, insofar as my project is concerned, is therefore a stand-in for the normative use of polytonality and polytonal closure in neo-classical music. Swanson, by contrast, represents a more idiosyncratic use of polytonality and polytonal closure. Together, they show the wide diversity of polytonal closure in the twentieth century.

In researching polytonal closure, I expand upon and integrate two different realms of scholarly inquiry that have tended to remain separate but, when brought together, can deeply enrich our understanding of the mechanics of closure in passages like Milhaud's *Le Boeuf* (Figure 1). The first scholarly realm is research on "key priority" in polytonal music, which explores the various factors that allow us to hear one key (among several superimposed keys) as predominant—but which has not generally considered closure to be one of those factors. The

[1] This parallels Schoenberg who considered atonality to be the natural progression from chromaticism, Milhaud explicitly draws this parallel in his article "Atonality and Polytonality," 1923.

second area of research is work in the subfield of "new *Formenlehre*," which has in recent years developed new frameworks for understanding closure in music after the Classical era but has not yet grappled with the many different closural strategies used in polytonal music (Caplin 2018).

I engage with each of these bodies of scholarship to build the foundation my framework emerges from, and outline three types of polytonal closure: (1) *monoclosure*, where closure is reached in one of the established keys but not in the other key(s); (2) *polyclosure*, where simultaneous closure occurs in two (or more) separate keys; and (3) *converging closure*, where two or more established keys converge at the point of cadence to achieve closure in one unified key center. As I will show, Milhaud and Swanson utilize these techniques in a variety of different ways, with different expressive effects. Looking at their music with these categories in mind reveals the wide range of strategies that these composers use to create moments of closure, and also provides a possible starting point to explore similar strategies in the music of other composers who make use of polytonality.

The second chapter of this thesis explores specific examples of polytonal closure, moving through my three categories one by one, to define the scope that polytonal closure covers. I analyze specific moments of closure, continuing to draw connections between theories of polytonality and priority, and theories of *Formenlehre* and closure. In doing so, I showcase the breadth of expressive effects that Milhaud and Swanson created through their use of polytonal closure.

The third chapter is a case-study analysis of a polytonal sonata. I undertake the analysis of sonata form because of Sonata Theory's interaction with, and requirement of, closure. I analyze Milhaud's Sonata for Flute, Oboe, Clarinet, and Piano through my framework of closure, all the while considering how the work engages with sonata-form conventions. In my analysis of

Milhaud's sonata, I examine the use of polytonal closure through the lens of virtual agency and multiple agency (Hatten 2018; Klorman 2016). I also incorporate perspectives from disability studies to produce a nuanced analysis that avoids a therapeutic conflict–resolution narrative (Straus 2018).

The fourth chapter examines how polytonal closure functions within Howard Swanson's music, and by extension, how polytonal closure works to project form. This chapter starts with an initial exploration of Swanson's unique idiom and approach to tonality and polytonality through an analysis of his unpublished piece, *Noret.* Then, I dive into the levels of closure within Swanson's *Fantasy for Soprano Saxophone and String Orchestra* to show how Swanson uses polytonal closure as a form-generating device.

Methodology

This thesis combines two disparate areas of music theory scholarship to construct a framework of polytonal closure: key priority and closure. Key priority is a loose framework of analysis developed for describing the relative strength of competing key centers in polytonal music. Prior to a theory of key priority, music theorists lacked a framework for analyzing the strength and perceptibility of competing tonal centers. Methods for analyzing how different keys were set against each other did and do exist, and date back to Milhaud's own conception of polytonality.[2] This framework of key perceptibility is combined with modern approaches and conceptions of closure in post Classical music.

[2] See Milhaud's "Atonality and Polytonality," 1923.

On Key Priority

Polytonality refers to the presence of multiple key centers perceived simultaneously; however, these key centers are not necessarily understood as having equal strength. First explored by David Huron (1989), later built upon by William Forde Thompson and Shulamit Mor (1992), and finally described in detail by Peter Kaminsky (2004), the concept of *key priority* provides a hierarchical framework for ordering keys in polytonal music according to their relative importance. In other words, it helps us to discern which keys are audible and dominant within a particular polytonal passage. Realistically, the relative dominance that one key holds over another can change from moment to moment, depending on contextual factors like dynamics, voice leading, and instrumentation. Since these factors change over the course of a piece, so too can key priority, making this a fluid analytical framework.

Kaminsky argues that in a *superimposed* moment, multiple keys constantly vie for priority, and priority can change quickly. Kaminsky often uses the word "superimposed," rather than "polytonal," to describe such passages because, in his mind, "polytonal" implies that multiple key centers are being perceived simultaneously, whereas "superimposition" simply refers to the compositional act of putting two (or more) keys in contrast with each other, without making a claim as to whether one key dominates, or two keys are perceived at the same time. Works of superimposition may be polytonal, but they may also lend themselves to monotonal readings. In other words, all polytonal works come from superimposition, but not all superimposition results in polytonality. The act of superimposition is relatively straightforward: contrasting key centers are set against each other as superimposed chords, scales and scale fragments, and/or key signatures. Within any moment of superimposition, many factors

contribute to priority. The one most cited by Kaminsky is voice leading, but others include the choice of keys being superimposed, the instruments associated with the keys, and the ranges of the instruments. Through all these factors (and more), a moment of superimposition may be heard in multiple keys at once, i.e., polytonally. If those keys are heard as more or less equal in importance, then the passage may be referred to as exhibiting *dual priority* (Kaminsky 2004, 241). If those keys are heard hierarchically (i.e., with one key predominating), then one key would exhibit *primary priority* and the other would exhibit *secondary priority* (Kaminsky 2004, 240). Kaminsky does not carve out space for a *tertiary priority*, since his levels of superimposition include *bass voice* and *upper voice(s)*, without room for a third layer.

If music exists within a polytonal space, the concept of priority is always in effect. In Thompson and Mor's research on the matter, they note that "listeners draw on long-form knowledge of tonal organization when listening to polytonal music. Internal representations of key structure are established rapidly by the immediate context" (1991, 70). When listening to a passage of polytonal music, a listener is constantly re-analyzing and re-understanding their perception of key importance, hierarchy, and priority. Kaminsky makes a similar point, writing that "the support for such a weighting process by a listener will hinge on contextual factors, including the manner of presentation of the conflicting parts, and the extent of their respective pitch organizations, rhythm, register and contour" (2004, 240). These are the factors that must be considered when determining the hierarchy of keys. However, one factor that Kaminsky does not consider is the effect of closure and cadence on priority. Nor do other scholars of polytonality treat closure as a central feature of their analyses.[3]

[3] In general, scholars writing about polytonality do not address cadence/closure directly, if they address it at all. Where closure is mentioned, it is not thematized as a main topic but mentioned briefly in the context of

On Closure

Recent strides in the so-called "new *Formenlehre"* have sparked new conversations about closure in post-Classical era music. For example, in his article "Beyond the Classical Cadence" (2018), William Caplin explores the "fate" of the Classical cadence in early Romantic music, identifying seven characteristics of Romantic style that affect cadence and closure. Aspects of post-Classical closure are further explored by Hyland (2009), Smith (2016 & 2020), Rodgers and Osborne (2020), Rodgers (2022), and Caplin (2024). As studies of closure stretch into the music of the twentieth century, the sheer diversity in the modes of closure becomes an analytical challenge. Some twentieth-century composers still write music that is in dialogue with Classical closural conventions, of course, and Caplin's ideas about Classical and Romantic closure thus remain relevant to the analysis of this music. However, for those neo-tonal composers who don't rely on Classical conventions, the study of closure in their music requires a wider outlook and approach.

Clare Eng, in her 2019 article "The Problem of Closure in Neo-Tonal Music," offers just such an approach. Her work bears heavily on my own as I address strategies of closure in repertoire that could be considered neo-tonal. Eng addresses shared systems of closure in the music of Benjamin Britten and Béla Bartók, exploring how both composers use similar systems in different ways. The "problem" that Eng identifies is that neo-tonal closure engages with so many conventions of closure that it can be difficult to define closural strategies that apply to a

individual analyses, in order to show how closure is achieved in a particular passage. Kaminsky (2004), for example, contains only two mentions of cadence/closure. In both instances, cadence/closure is not treated as a factor that contributes to key priority but rather as a byproduct of key priority (e.g., two superimposed keys have already established *dual-priority;* therefore, they can successfully pull off a cadence in two keys). Other scholars mention how particular polytonal passages close—with rhythmic resolution (Reisser 1989) and dissonance vectors (MacFarland 2009), for instance—but do not generalize about strategies of polytonal closure as a whole.

broad range of neo-tonal repertoire.[4] Different composers, in short, use different strategies, and even where the same strategies appear in two different works, the effects of those strategies may be radically different. She writes:

> I propose that closure is a relational construct that engages with conventions on multiple levels. Conventions that influence the quality of an ending come not only from a stylistic corpus or piece, but also from a composer's normative practice. […] Because similar endings engage in different conventions, and because conventions can interact in different ways to influence the quality of an ending, neo-tonal endings with similar features should not ipso facto be assumed to have the same closural quality (2019, 285).

Building upon Eng's discussion, I would argue that the polytonal conventions of closure that I have defined above (*monoclosure*, *polyclosure*, and *converging closure*) apply principally to the patterns of closure within Milhaud's and Swanson's music (i.e., they are first and foremost *composer conventions*). And even where similar conventions appear across the music of these two composers, those conventions can't be assumed to have the same effect (or, to borrow from Eng, the "same closural quality"). It is the way these conventions are used in the context of individual works that matters most. I also do not claim that all polytonal music uses the three strategies I have outlined (i.e., I do not argue that they are *corpus conventions*). Still, I hope that these categories might be useful to other music analysts exploring how other polytonal composers use closure, should they wish to establish broader *corpus conventions*. Furthermore, I make no claims as to the hierarchy or strength of any closural pattern over another (i.e., *polyclosure* isn't necessarily stronger closure than *monoclosure*). In other words, I do not rank these types of closure according to syntactical strength, as Caplin does with Classical cadences (see especially Caplin 2004).

[4] Eng outlines three layers of convention in neo-tonal music: (1) *opus conventions*, conventions that exists within few or single pieces; (2) *composer conventions*, conventions utilized by a specific composer across their compositions; and (3) *corpus convention*, genre-level conventions that are ubiquitous within a particular genre.

That being said, I do borrow Agawu and Caplin's terminology of *rhetorical* strength. Which is defined by Agawu as "the set of devices that emphasize the close…" (1991, 67). This use of "rhetorical"—in describing closure—is expanded by Caplin to mean, "[the cadence that] has a unique compositional realization entailing the entire range of musical parameters, including rhythm, meter, texture, intensity, and instrumentation" (2004, 107). The conventions below may not have a set hierarchy of syntactical strength, but we can nonetheless gauge their *rhetorical* strength on a case-by-case basis as they are applied by Milhaud and Swanson. I do so by examining the same elements relevant to key priority, such as rhythm, dynamics, melodic contour, register, texture, and timbre. I consider rhetorical strength in two layers: first, the rhetorical strength of individual key strands and their ability to communicate closure in isolation, and second, the rhetorical strength of the whole polytonal close (whether mono, poly, or converging). In other words, I look at the rhetorical strength of closure in the individual key strands, and in the total composite of key strands.

Finally, I define closure much more broadly than many scholars working in the subfield of "new *Formenlehre*," for the precise reason that composers of polytonal music enact musical closure in so many diverse ways. Sometimes these composers do indeed evoke Classical-style cadences (PACs, IACs, and HCs), but just as often they use non-Classical harmonic progressions to create a sense of ending, or they use parameters other than harmony, such as rhythm, register, melodic contour, timbre, and so on. Therefore, I use the term "closure" quite loosely, more in line with Eng's conception of closure. I define *Closure* as a feeling of rest, or a feeling that something has ended. Adopting a loose definition such as this enables me to focus on the closural mechanisms of each individual work, and, in turn, weigh the strength of various moments of closure intuitively, considering the musical parameters most relevant to any

particular situation (rather than importing Classically-derived definitions based largely on harmonic progression). This approach parallels the fluidity of the key priority framework, as both call for case-by-case analysis of present and relevant factors, ultimately allowing the music to dictate whether we are hearing an example of monoclosure, polyclosure, or converging closure.

Chapter 2: Three Methods of Polytonal Closure: Analytical Vignettes

Monoclosure

Monoclosure is when one key within a polytonal work reaches a moment of closure, but the other key does not (or, in cases where more than two keys are present, when only one key achieves closure). In the music of Milhaud and Swanson, this method of closure most often appears as *local closure,* at the end of a phrase, and occasionally as *intermediate closure,* at the end of a section, to borrow terminology from Kofi Agawu (1987, 6). This single key center can come to a close through various methods. In the case of Milhaud, a full cadence often appears in a superimposed key while the other voices (in other keys) continue their themes. In the music of Howard Swanson, a melodic line often appears in a single voice and ends contrapuntally while the other voices continue. As we'll see, Swanson uses this technique extensively with different expressive effects, both rhetorically strong and weak.

Dirge*, from Suite for Cello and Piano, Howard Swanson*

The third movement of Howard Swanson's Suite for Cello and Piano*,* titled *Dirge,* is built upon this idea of monoclosure and uses it consistently, particularly in the B section. In this movement there are four layers of superimposition as analyzed by Marsha Reisser (1989). The cello is in F minor, the piano's treble clef is in D♭ major, and the piano's bass clef is in two keys in different registers, A minor in the upper register and E in the lower (the lower register projects neither major nor minor because it presents only open fifths and octaves). Figure 2 depicts the beginning of the B section where each key strand is initially expressed. The accompanying rhythm is

consistent throughout the section: the piano (in 6/4 time) hits every beat in a repetitive pattern that descends in register as we move through each polytonal strand in the piano. Beat 1 is a chord in the key of D♭ major (with some chromatic motion), beat 2 is an A-minor chord, and beat 3 is an open fifth over E with the octave doubled. Beats 4–6 repeat this same pattern descending through the register. The consistency and unyielding energy of this cascading accompaniment pattern provides a backdrop for the monocloses to come.

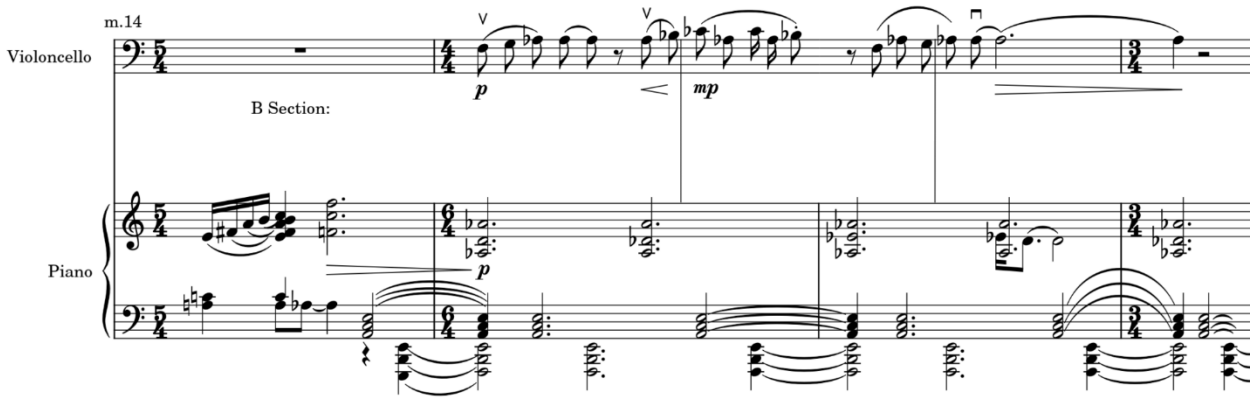

Figure 2: *Dirge*, beginning of the B section.

One of the more prevalent moments of monoclosure in *Dirge* occurs in the middle of the B section, depicted in Figure 3. The F-minor cello plays an improvisatory-type melody over the cascading polychords of the piano. For this phrase to be an example of monoclosure, one of the strands will have to exhibit some type of closure that the other strands must not, and that closing strand must have enough priority to be understood as its own individual key strand. In other words, whatever strand closes does not have to have primary priority (it can have secondary priority), it just cannot be assimilated into the other strand(s).

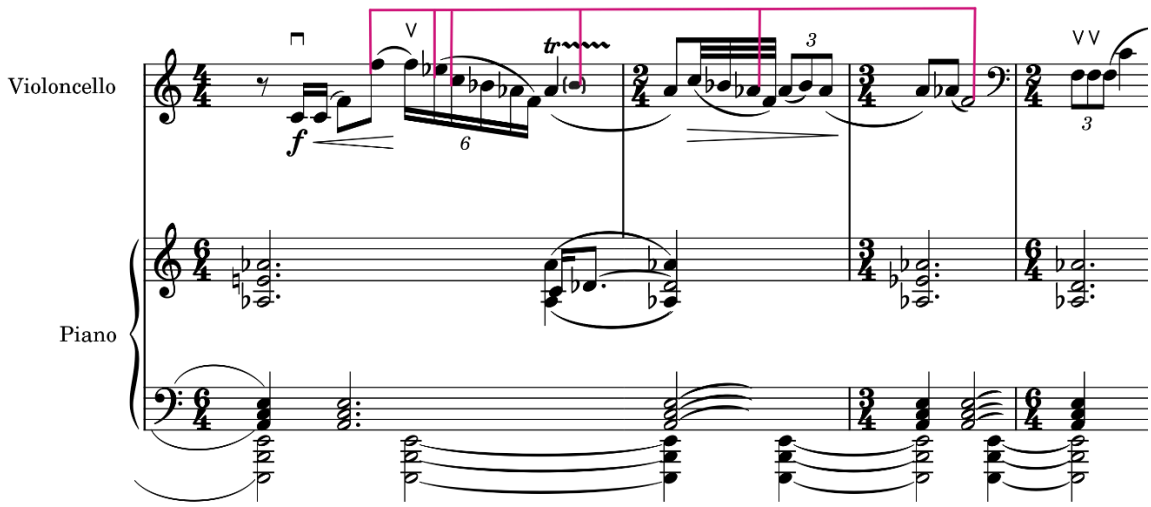

Figure 3: *Dirge*, closure in the middle of the B section.

The cello plays a single phrase conveying a sense of closure in F minor. The arch of this phrase builds tension and anticipation, which is resolved in the final bar. Without harmonic support, the closural strength of this example is achieved chiefly by the contour of the line. The phrase opens on scale degree $\hat{5}$ before abruptly jumping up a fourth to scale degree $\hat{1}$, then immediately jumps up again, this time an octave. Within the first two beats, a substantial amount of energy is built up. The phrase then descends to $\hat{1}$, the octave below, touching on every note of an F minor-pentatonic collection in a single sextuplet gesture: F–E♭–C–B♭–A♭–F. That quick descent includes the fastest rhythmic motion in the movement thus far, and the cello's next measure (after the trill) increases the surface rhythm even more. But finally, that tension is released in the final bar of the phrase, with a slow $\hat{3}$–$\hat{1}$ gesture. Notice that this final F completes a longer-range descent through an F minor-pentatonic scale (marked in the pink overlay). The contour, combined with the relaxing of motion, creates a strong sense of rest and closure at that last F.

Beneath this melodic line that comes to a point of rest are dissonant polychords that do not reach a resolution. The key centers of E and A minor are static—they simply play single chords and fifths—and while the D♭ strand does exhibit some harmonic motion, it too does not reach a tonal resolution (or any other type of resolution) in the final bar of the example. Nor is there rhythmic closure, as the cascading pattern keeps consistently moving forward. Finally, there is no closure contrapuntally. Throughout this section, the middle voice of the D♭-major strand descends by step before leaping up and restarting its descent (most often as F♭–E♭–D–D♭). This pattern is initially depicted at the beginning of the movement in Figure 2 above (D–D♭–E♭–D–D♭). As it coincides with the F-minor cello's closure, the D♭-major strand is restarting its contrapuntal descent, not ending it. Therefore, against the descending melody of the F-minor cello, the cascading piano makes no indication that it's reaching any sort of rest or conclusion.

I have shown that only one of the four strands of this excerpt achieves closure, but what about the relative priority of those strands? When we listen to music like this, we are constantly listening to strands vying for priority and recalculating their hierarchy (Thompson and Mor, 1992). Because the E and A-minor strands are so static, they have the least priority.[5] Therefore, the F-minor cello strand and the D♭-major piano strand, which do feature some motion, are the two strands vying for the most priority. D♭ major and F minor are closely related keys, so if one strand is going to break away from the other, it is going to require a considerable effort.

It is the F-minor cello that does the work to break away from D♭ major. The interaction between the D♭-major piano strand and the F-minor cello is deeply engaging, as the cello is constantly distancing itself from D♭-major harmony. This is the most telling at the harmonic

[5] While Kaminsky doesn't outline a *tertiary priority,* that is what I would label the E and A-minor strands here. As key strands/centers that may be audible but aren't really pulling focus.

changes in the D♭-major strand. In the first measure of Figure 3, the cello's C is part of the piano's $V^{\flat 5}$, but it quickly moves away from that association by moving to F, resisting assimilation. Later, on the fourth beat of that same measure, the cello again finds itself a part of the D♭ strand as it plays an A♭ against a D♭ tonic chord, but it again resists the harmony by trilling up to B♭, further thwarting harmonic assimilation. Finally, at the last bar, as the cello finds itself as the root of the A♭ chord, it calmly moves away to its own tonic. In doing so, the cello consistently resists D♭ major with contrapuntal motion more indicative of F-minor.

However, the cello doesn't just distance itself through harmonic or contrapuntal means; its timbre and effect are also completely separated from the piano. As discussed above, the cello line is restless in how it builds tension early and quickly, holds onto it, then finally releases the energy at the very end of the phrase. Compared to that, the D♭-major piano strand does not exhibit the same energy. The D♭-major strand's only motion is chromatic or small leaps in the middle voice, and its rhythm stays mostly constant. Timbrally, there are no dynamic or articulative indications that set it apart from the static harmonies of A and E. Through rejected harmonies and individualized tensions, the F-minor cello affirms primary priority, and the D♭-major piano claims secondary. In short, the F-minor cello puts in the work to separate itself from the other strands, claiming primary priority, where the D♭-major piano does not exhibit the same work.

A singular key strand that distances itself from others and communicates a sense of rest/closure is an example of monoclosure. In this example, it isn't just any distance; it is a substantially defying distance. And it isn't just a sense of rest created through contour; it is a sense of rest built through growing and resolved tension. Swanson uses monoclosure to great

rhetorical and expressive effects in this example. Despite playing in each other's range and in closely related keys, there is a feeling of great distance between the two strands. Even as the cello resolves, the distance remains, and the strong sense of rest in the cello can predominate. The predominance of this monoclosure furthers the cello's primary priority which is utilized continually throughout the B section. As the cello keeps coming to moments of monoclosure, it reinforms to the ear that it's something to listen to. The monoclosure informs the status of primary priority as much as it relies on it.

Dirge contains numerous similar examples of monoclosure within its B section, which comes to define the expressive effect of the movement. In each instance of monoclosure, the piano continues its progression of polychords through its repetitive comping rhythm, while the F-minor cello continually defies D♭ major and reaches similar moments of closure on scale degrees $\hat{1}$, $\hat{3}$, and $\hat{5}$. A few are recreated below in Figure 4, where the contrapuntal line in D♭ is notated beneath. In the greater context of this piece, this monoclosure exhibits the idea of the F-minor cello fiercely rejecting D♭ major and coming to rest against such an unyielding dissonance. It could be speculated that this pattern relates to the name of this movement, *Dirge*: a movement depicting an improvisatory lament set against a dissonant marching backdrop refusing to relent. Each monoclosural moment in the cello is a brief moment of local closure, but the rhetorical strength of that closure can only get so far against the dissonance and momentum of the piano. This feud will eventually come to a head at the end of the B-section—more on that in the section on *converging closure.*

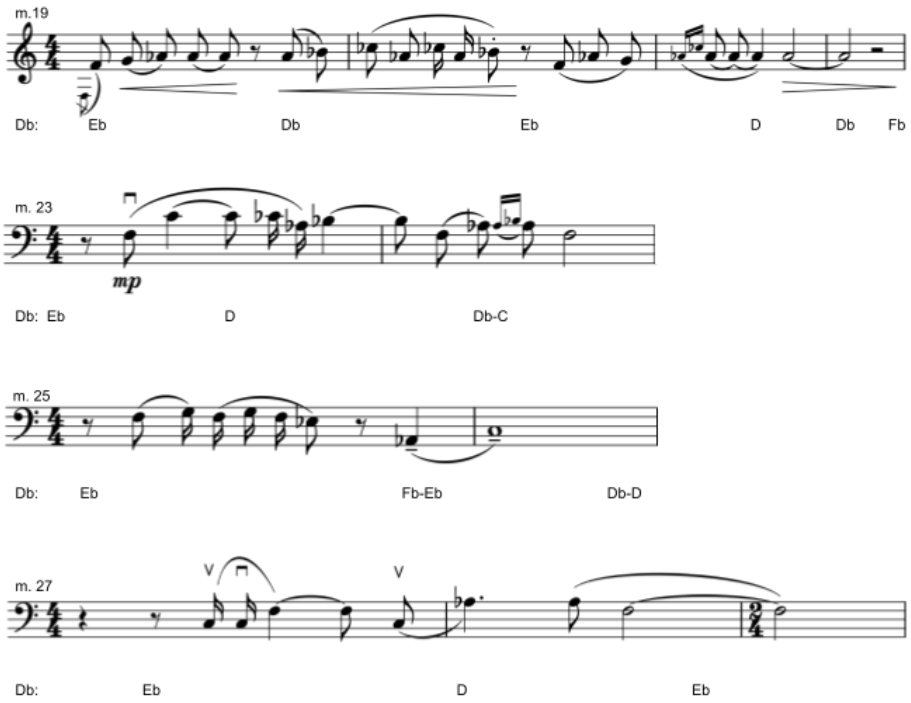

Figure 4: Various cello monocloses within *Dirge* against the D♭-major strand's inner counterpoint.

Polyclosure

Polyclosure is the presence of two (or more) tonal centers closing simultaneously. This type of closure has a wide-ranging ambiguity that is often dependent on the relationship between the superimposed keys; keys that are distant (not closely related, lacking common tones) from each other may project relatively weak polyclosure, because dissonance between the keys undercuts true closure in one or both keys. On the other hand, rhetorically stronger polyclosure is typically achieved when the superimposed keys have a more consonant relationship with each other.

Le Boeuf Sur le Toit*, Darius Milhaud*

The introductory example to this thesis provided an instance of rhetorically weak polyclosure (condensed and annotated below in Figure 5). To reiterate, in this excerpt from Milhaud's *Le Boeuf* two strands are superimposed: a G♭-major strand played by the strings and woodwinds and a C-major strand played by the brass. The measure before rehearsal D, both strands progress through a cadential progression, landing on their individual tonics on beat 1 of D.

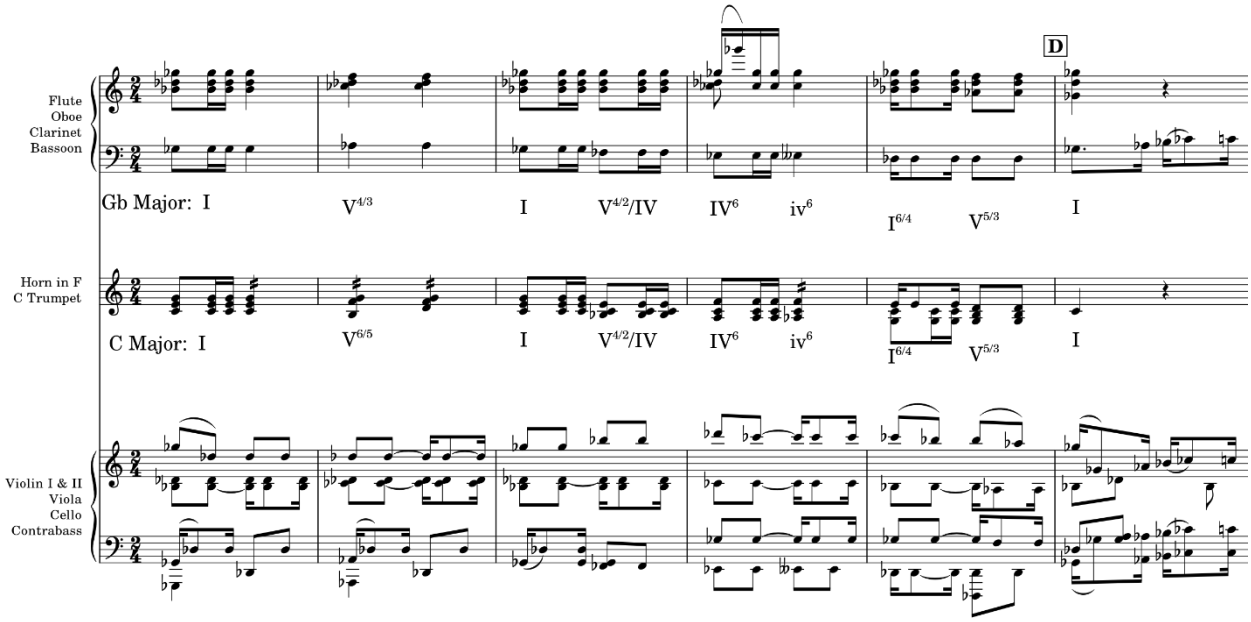

Figure 5: Milhaud's *Le Boeuf*, closure in G♭ major and C major, condensed and annotated.

The G♭-major strand assumes primary priority over C major through a number of factors. Registrally, G♭ major covers the widest range, as it is expressed as low as the double bass and as high as the flute, whereas the trumpets and French horns of the C-major strand stay within the same register. Moreover, G♭ major is prevalent across a variety of timbres, including the whole range of strings, the double reeds, the clarinet, and the flute. By contrast, C major is expressed

only in the high brass, trumpet and French horn. Finally, C major is simply outnumbered by G♭ major: more voices sound in the G♭-major strand, reinforcing it as primary priority.

However, the C-major strand is able to resist assimilation into G♭ major and keep individual secondary priority. The tritone-related keys of C major and G♭ major are, of course, far apart intervallically—far enough that it is difficult to rationalize and hear C major as an extension of G♭ major within this context. There are no contextual clues that would indicate C as a distant altered extension to G♭, so they remain separate key centers. Also contributing to this sense of separation is the timbral difference between the G♭-major strand and the C-major strand. As mentioned above, C major is expressed only in the high brass, but those instruments exist within a timbral space that isn't encroached upon by the rest of the orchestra. The brass may be outnumbered, but they're still very clearly audible within the texture of the orchestra.[6]

This hierarchical priority continues through the phrase until the dual cadence occurs at rehearsal D. As I noted earlier, both keys proceed through the same harmonic progression concurrently, each leading to a perfect authentic cadence. Formally, this is also the end of a section, as the very next melody heard is the refrain of the rondo form (Corrêa do Lago 2002, 20). So, this fits firmly within my definition of closure: *something has ended*, which is further confirmed by a new beginning. This is characteristic polyclosure: two keys, tonally separated from each other, achieving individual closure simultaneously, and in the composite, express an overall closure.

[6] Rudolph Johnson (2011) categorizes the trumpet and horn as part of the "Power" class, as opposed to the "standard" class that the strings, flute, and bassoon fall under. They sound within their own distinct timbral spaces.

What, however, is the effect of that overall closure? Though each key closes emphatically (with the most syntactically strong cadence, a PAC, utilizing a syntactically strong cadence per Caplin 2004, in dialogue with Classical closural conventions); the combined effect is rather rhetorically weak, in large part because these two emphatic cadences seem to cancel each other out. The G♭-major strand may have had primary priority on the approach to the moment of closure—because of register, timbral diversity, etc.—but the sheer strength of closure in C major puts the strands ever so briefly on equal footing. In Caplinian terms (relevant because the cadence plays on classical convention), the syntactical strength of the C-major cadence is the same as that of the G♭-major cadence. In turn, the two cadences are competing for priority at the moment of polyclosure, thus muddying and weaking the composite closure.

Joyeux*, from Sonata for Flute, Oboe, Clarinet, and Piano, Darius Milhaud*

In contrast with *Le Boeuf*, the second movement of Milhaud's Sonata for Flute, Oboe, Clarinet, and Piano, titled *Joyeux*, ends with an example of polyclosure that is rhetorically strong. By the end of the movement, shown in Figure 6, the oboe has dropped out and the piano plays in F♯ major. Superimposed against it, the flute is centered around A (there are no Cs or C♯s in the flute melody to indicate whether it is in A major or A minor). These key centers are certainly closer to each other than C and G♭ and can achieve closure that is overall rhetorically stronger.

Both key centers are established independently from each other, stratifying the strands. The piano's key center of F♯ major is expressed through repeated root position F♯-major chords, it's monotonous, but steadily focused. The flute's key center of A is established melodically. The flute only plays $\hat{1}$, $\hat{4}$, and $\hat{5}$ of the key of A (until the penultimate measure). The absence of other

scale degrees in the flute part precludes the passage from a modal interpretation– major, minor, or otherwise– but does still point towards a tonal center. In application, the scarce number of scale degrees present in use does little else other than point towards a tonal center.

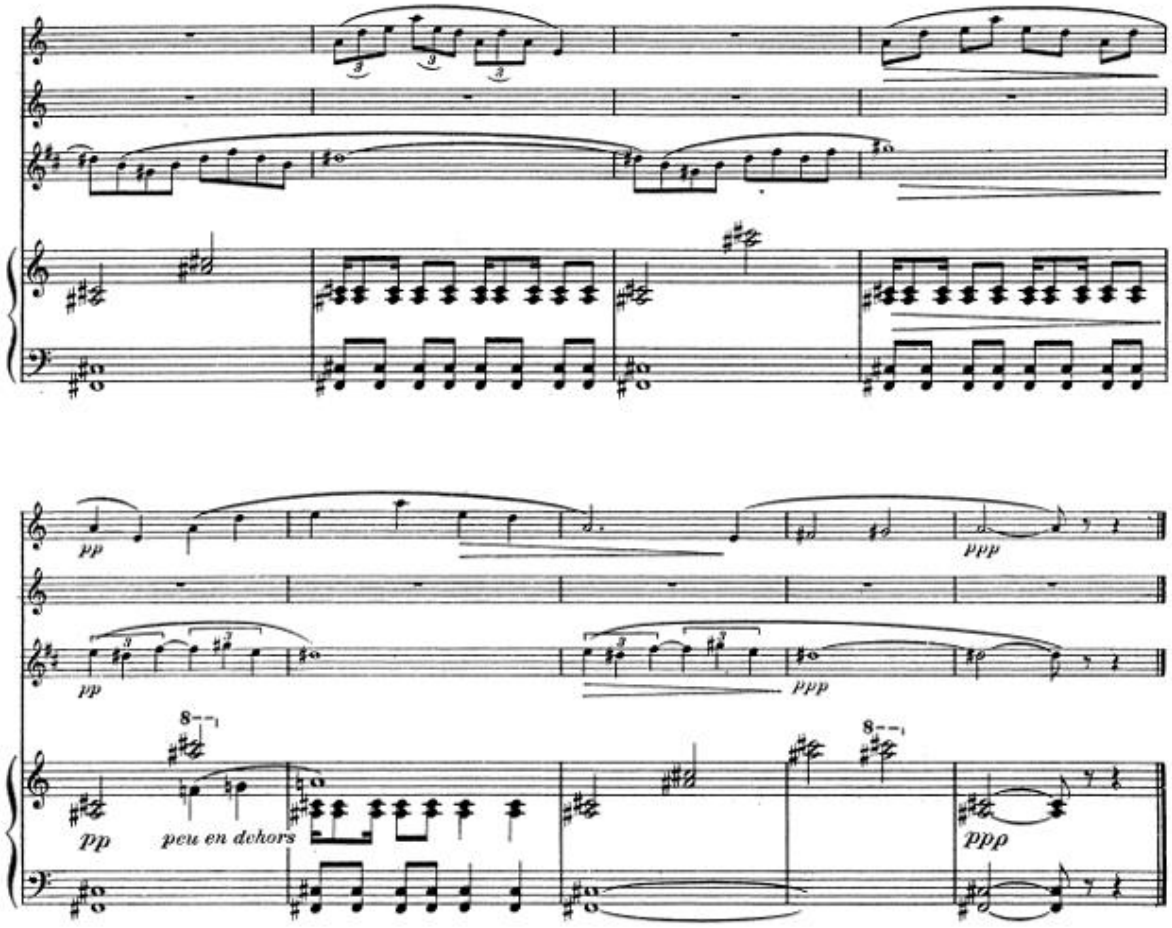

Figure 6: *Joyeux*, mm. 70–78.

While the flute and piano are firmly in their key centers, the clarinet hovers between the two tonal centers, fluctuating between F♯ minor and A major. The ambiguity in the clarinet part effectively contributes harmonic information to both the piano's F♯ strand and the flute's A strand. In the first few measures, the clarinet is playing an arpeggiated $F♯^{m7}$ chord (F♯–A–C♯–E). This could be interpreted as firmly residing in F♯, albeit polymodally to the F♯-major piano, but it

is better interpreted as alternating between F♯-minor and A-major triads. The clarinet can therefore be fully understood as participating in two separate tonal contexts simultaneously, F♯ and A.

More on the tonal ambiguity of the clarinet, motion in the clarinet part alternates with the motion in the piano and flute. When the flute and piano are both moving, such as the second and fourth measures in Figure 6, the clarinet idles on a common tone to both A major and F♯ major; when the piano and flute stop moving (either resting or idle), the clarinet restarts its motion with the $F♯^{m7}$. The effect is that the flute and piano are directly pitted against each other, in conflict, and the clarinet is offering a compromise. With the strands established, they must work towards their independent modes of closure.

Motion and rhythm play a chief role in the F♯-major strand's closure, as its motion calms over the course of the phrase, before coming to rest. The piano plays F♯-major chords, alternating between measures of quicker motion and measures of relative calm. The first five measures in Figure 6 alternate between half notes and syncopated rhythms. The sixth measure slows the syncopations down to quarter notes. More motion is expected in m. 8, but instead, the piano continues its half notes. This slowing of motion is accompanied by a long decrescendo from *p* to *ppp*, giving an all-around effect of winding down. Moreover, the half notes in the piano part create their own pattern of closure. Each second half note in mm. 1, 3, and 5 raises in octaves above A♯3 and C♯4. Once the motion has slowed in m. 7, the half note pattern plays through again, echoing the previous measures and projecting closure of the F♯-major strand.

The flute utilizes the same slowing of motion as it moves towards closure. It alternates between motion and rest, and every iteration of motion slowed. The motion is first in triplets,

then 8th notes, then quarter notes, and finally, closure is achieved in half notes. Along with the slowing of motion is a long dynamic descent that was also present in the piano. The A flute and F♯-major piano parallel each other in their modes of closure, they both close in the same way. These parallels contribute towards the rhetorical strength of closure.

The clarinet's contribution to closure mostly goes towards the flute. When the clarinet is considered contributing to the A-strand, there is a more complete harmonic understanding. With the addition of the clarinets C♯ and F♯, the A strand can fully be understood as A-major. The final pitch of the clarinet, C♯, is easily interpreted as $\hat{3}$ of A major. Such an interpretation would give the flute harmonic closure as well. Moreso, the flute introduces its first new pitches in the penultimate bar, F♯ and G♯. The introduction of these pitches, paired with the A/C♯ dyad in the final bar, is a typical diatonic closing gesture: $\hat{5}$ –$\hat{6}$ –$\hat{7}$–$\hat{1}$. These rhythmic, dynamic, harmonic modes allow for both strands to reach a healthy amount of closure.

Regarding priority, the flute is fighting an uphill battle in establishing its own tonal center without being assimilated into the piano. As mentioned above, the lowest voice is more naturally going to overtake the higher voices, and the burden of separation falls on the higher voice to distance itself from the lower (Kaminsky 2004).

There are a variety of ways that the A-major tonal center distances itself from the F♯-major strand. Until the very end, the flute is playing only A's, D's and E's, which are all distant overtones from F♯ (19th, 13th, and 7th respectively). While D and E are closer harmonics than A, they are deeply out of tune, almost a quarter tone out of tune in equal temperament. Therefore, the notes of the flute are less likely to be heard and understood as distant extensions over the F♯ chords in the bass. To understand these notes as harmonic extensions above F♯ major, the As, Ds,

and Es need to be interpreted as ♭$\hat{3}$ (split third), ♭$\hat{7}$, and ♭$\hat{6}$. Such an interpretation would be a leap and imply F♯ minor more than anything. Moreso, the clashing of A in the flute against A♯ in the piano provides a healthy amount of dissonance to permeate between the two parts and keeps them separated.

Furthermore, the A-strand flute actively resists F♯ minor assimilation. Kaminsky cites voice leading as one of the most important factors in resisting the assimilation of the lower voice (2004, 240). The flute here, with its limited pitch catalog, doesn't commit to F♯-minor voice leading. I would argue that it's simpler for the ear to understand its melody as all $\hat{1}$, $\hat{4}$ and $\hat{5}$ in A, rather than a melody consisting only of ♭$\hat{3}$, ♭$\hat{6}$, and ♭$\hat{7}$. If the flute melody had any D's resolve down to C♯, its voice leading may imply a more F♯ minor centered tonality, as D–C♯ would be interpreted as ♭$\hat{6}$–$\hat{5}$ in F♯, rather than a $\hat{4}$–$\hat{3}$ motion in A. Note that the clarinet does have this D–C♯ motion, and is interpreted as centralizing both A and F♯. By never having this motion, or any like it, the flute resists assimilating into F♯-minor, effectively circumnavigating any draw towards an F♯ center, major or minor.[7]

As the voices oscillate between motion and rest, so too does the priority change. When the flute and piano are both in motion, priority is split into dual priority. When both are resting or idling, the clarinet begins its motion and ambiguously contributes to both tonal strands. This effectively makes the priority oscillate between a measure of dual priority and a measure of ambiguity, where both strands are vying.

[7] This seems to be one of the drawbacks of superimposition of close key centers. The *Le Beouf* above example couldn't even accidentally voice lead like its counter, because the key centers are so far. The closeness of F♯ minor and A mean the composer must make heed to not accidentally imply even a relative/parallel relationship.

The movement ends without either winning out. The final chord of the movement is a split third chord, containing both A♯ and A. Both the F♯-major strand and A-strand are still present, yet despite such dissonance, the movement ends restfully. The two strands are able to remain separate from each other, but through their parallel modes of closure, can wind down to a rhetorically strong sense of rest.

Converging Closure

Converging closure is an instance where two (or more) keys have split priority but join together in one unified key at or before a moment of closure. As a result, converging closure interacts differently with key priority than both monoclosure and polyclosure. Both monoclosure and polyclosure involve the feeling of closure in (still) separated key strands that are continually vying for priority up to and through the moment(s) of closure. By contrast, in converging closure key strands converge into each other before, or at, the moment of closure, effectively ending the striving for priority. In many cases, because the closure stemming from converging closure can be heard and analyzed monotonally, it is often rhetorically stronger closure.

Botafogo*, from* Saudades de Brasil*, Darius Milhaud*

An example of this occurs in the first phrase of Milhaud's "Botafogo," the second piece in his *Saudades de Brasil.* In this excerpt, shown in Figure 7, the left hand of the piano is in the key of F minor, playing an ostinato pattern alternating between i and V. After two introductory measures, the right hand enters in F♯ minor, playing an ascending melody that quickly becomes

descending block chords. Kaminsky analyzes these descending block chords as alternating i and V7 in F♯ minor, though the dominant chords have no root (Kaminsky 2004, 242).

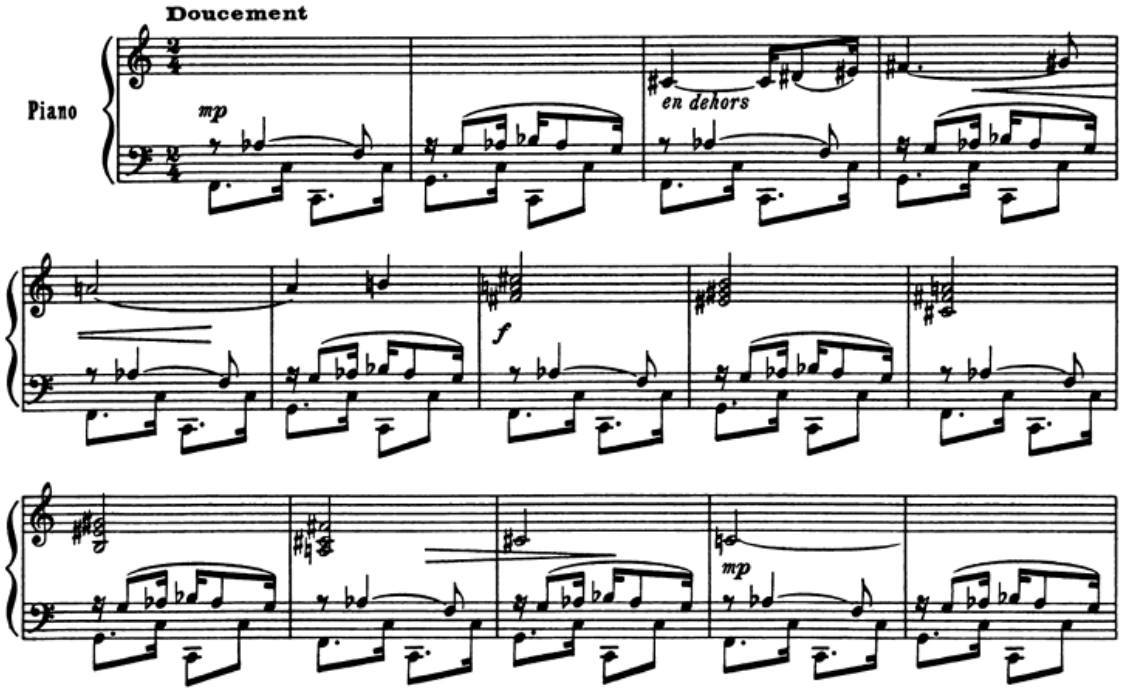

Figure 7: Milhaud's *Botafogo*, mm. 1–14.

In Kaminsky's own analysis of this excerpt, he awards it the coveted status of dual-priority (coveted because it's harder to achieve), where the F♯-minor strand and F-minor strand have equal tonal focus for most of the phrase. Unlike previous examples, both strands in "Botafogo" are played by the piano, so timbre is far less of a contributing factor in the separation of key centers, and dual-priority is established by other elements of the superimposition—such as the distance between the key centers, the textural difference of the two lines, and the registral difference.

If we agree with Kaminsky that these two keys have dual priority, then for converging closure to occur, they will have to unify at or before a moment of closure. These keys converge

together at m. 12, when the right hand of the piano breaks its pattern and drops down to a single note, C♯. Within the F♯-minor strand, this C♯ is first understood as $\hat{5}$, and underneath it, the F-minor ostinato has reached the V in its pattern. Without any other harmonic information in the right hand to keep up dual prioritization, that $\hat{5}$ in F♯ minor is quickly reinterpreted as ♭9 in the dominant beneath it (i.e., D♭). Making the composite of that measure a $V^{\flat 9}$ ($C^{\flat 9}$) in F minor. That ♭9 then immediately resolves down to a C over the ostinato's tonic chord, as would be expected. In short, the F♯-minor strand forfeits its priority and is assimilated into F minor by filling in a tone in F minor's dominant. This forfeit of priority works in conjunction with the $V^{\flat 9}$ to create a rhetorically strong cadence.

Converging closure in polytonal music is often rhetorically strong, because the moment of closure can typically be understood within a monotonal context (like $V^{\flat 9}$ to i in the key of F minor). To iterate that point, Figure 8 provides a recomposition of the above excerpt to feature a different type of polytonal closure. In this case, rather than the F♯-minor voice dropping down to a single voice and relinquishing priority, it instead keeps up its pattern of descending tonic and dominant chords.

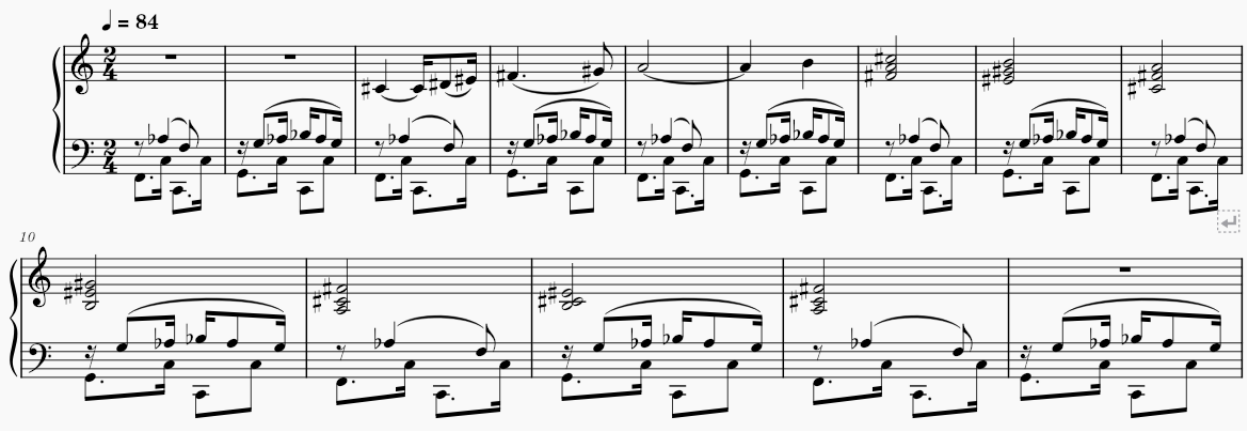

Figure 8: Recomposition of *Botafogo*, mm. 1–14.

This recomposition could be analyzed as either polyclosure or monoclosure. As a method of polyclosure, the F♯-minor strand ends its phrase on a i chord, coming from a V^7. Simultaneously, the F-minor ostinato plays its V^7 to i below. However, this is not particularly strong closure, it is rhetorically weak. As seen with polyclosure examples above, the dual priority of this excerpt undercuts feelings of closure in both keys. A monoclosural reading of this recomposition would include the F♯-minor strand closing as described above, but the movement of the F-minor ostinato doesn't allow it a feeling of closure, as it's a continuing ostinato. Regardless of which analysis, the closure of the recomposition is rhetorically weaker than the original. Closure is present, particularly in the F♯-minor strand, but the feeling of rest is much less than the original composition. Therefore, it is reasonable to conclude that the process of converging closure leads the ear towards a more concise rhetorically strong close.

Pantomime*, from Suite for Cello and Piano, Howard Swanson*

Another case of converging closure is found in the B section of the second movement of Swanson's Cello Suite, *Pantomime*. In this section, the piano's tonal centers are fluid, and each passing center implements extensive use of blue notes and modal mixture (Reisser, 1998). The cello maintains a key center of C, also with extensive modal mixture, expressing both C major and minor. Reisser analyzes the key areas of the piano as A minor, G major, C major/minor, and A minor (1998); see Figure 9. These centers are not necessarily projected with full harmonic progressions, rather, they are more centralizing the harmonic areas.

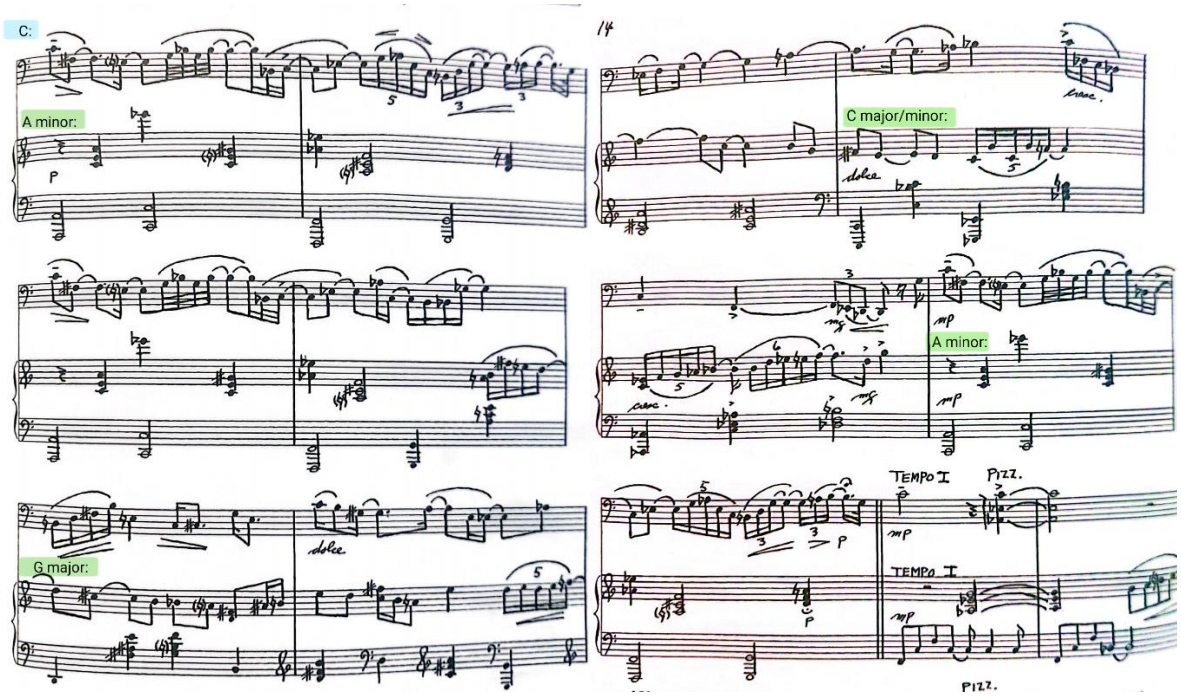

Figure 9: Swanson's *Pantomime*, B section.

Figure 10 is a map of this polytonal section. The top strand represents the cello in C. The bottom strand represents the piano's tonal space as it travels through its various tonal centers, moving toward and away from the tonal center of the cello. The most intriguing parts of the example occur in m. 3 and m. 12, where the piano converges with the cello. Relative distance between the tonal strands denotes the relative distance of the tonal centers.

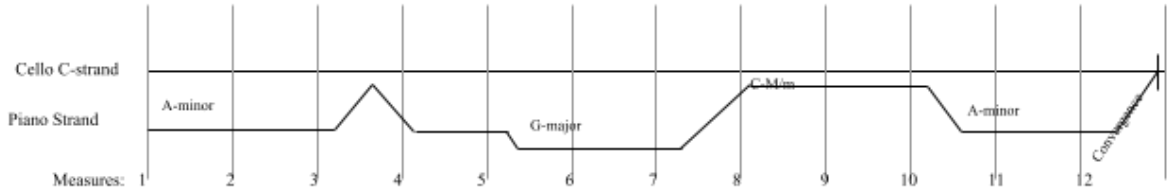

Figure 10: Polytonal map of *Pantomime*, B section.

In the first few measures of this section, recreated in Figure 11, the cello and piano are harmonically separate from one another. While the cello may use modal mixture and blue notes, its key center is definitively C. By contrast, the piano uses so much chromatic alteration that its key center is more nebulous, though it has been analyzed as closer to A minor (Reisser, 1989). Simply through that juxtaposition, the cello's clearer center gives it *primary priority*. Now for this example to be considered *converging closure*, these two strands (C-cello/A-minor-ish piano) must assimilate into each other and reach closure together.

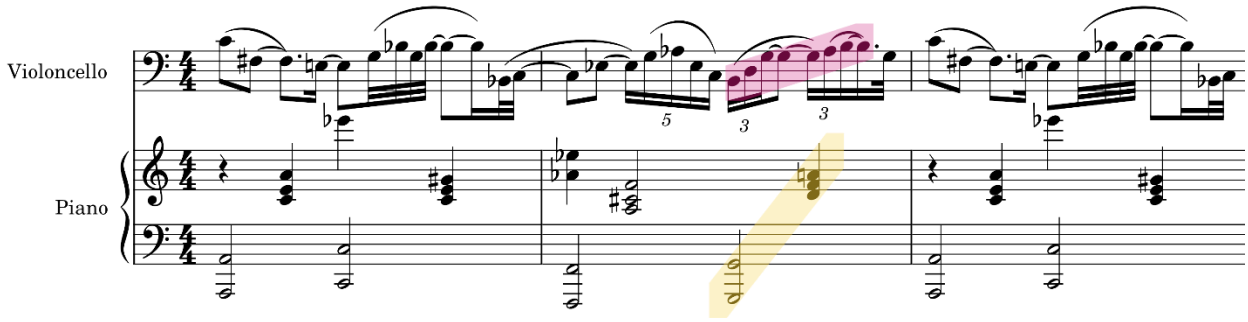

Figure 11: Converging closure in *Pantomime*, beginning of B section.

Tackling these requirements individually, let us first analyze their level of convergence. The cello moves through its improvisatory melody before outlining a G-major chord in m. 3, reaching a climax on B, highlighted in pink. At the same time, the piano floats its way into a G^9 chord, with the third omitted, highlighted in orange. Like puzzle pieces, the climactic B fits right into the G^9 of the piano, and the two successfully converge to create something like a half cadence in C.

However, this pseudo half cadence doesn't project a strong sense of closure. On the very next beat, the strands separate into C and A minor again, and the very next measure restarts the same melody and chord progression. The half cadence that the cello and piano formed together is

rejected, preventing this from being a true moment of *converging closure.* As there may have been convergence, but there was no closure. This brief rejected *converging closure* is depicted in the map as a peak in the piano strand at m. 3.

Following this missed *converging closure*, the piano (separated from the cello) begins to float around to a few more key centers. It first creates more distance from the C cello by moving to G major (m. 5). It then converges around a C tonal center (m. 8). While both parts project C simultaneously, they still avoid fully converging. When the piano is in C major, the cello is in C minor, and then they switch. Throughout these measures, neither strand achieves full convergence or closure. This section feels almost like a cat and mouse game where the piano is trying to converge with the cello. In this game, it's almost as if the piano is trying to predict where the cello is going to be. This back and forth is congruent with the programmatic title, "pantomime," which would evoke some sort of imagery of imitation.

Finally, after multiple failed attempts at converging the cello and piano return to the material that got them the closest to closure the first time, that initial near convergence. Figure 12 depicts the final bars of the B section of *Pantomime*; you'll notice the material in the last two bars of B is identical to the first two bars of B (Figure 11) effectively bookending the section. The cello and piano strive for convergence again, just as they did before, but can they achieve closure this time? The only thing that differentiates these ending measures from the opening measures is, (1) a dynamic drop, and (2) a fermata on the composite G^9 chord. This time around, the long pause on the converged half cadence achieves closure. By book-ending the section, returning material can signpost an ending. The short pause on the created HC, that then moves on to A-section material indicates the end of the section, as a type of intermediate closure. Thus, the whole cadence can be considered *converging closure.*

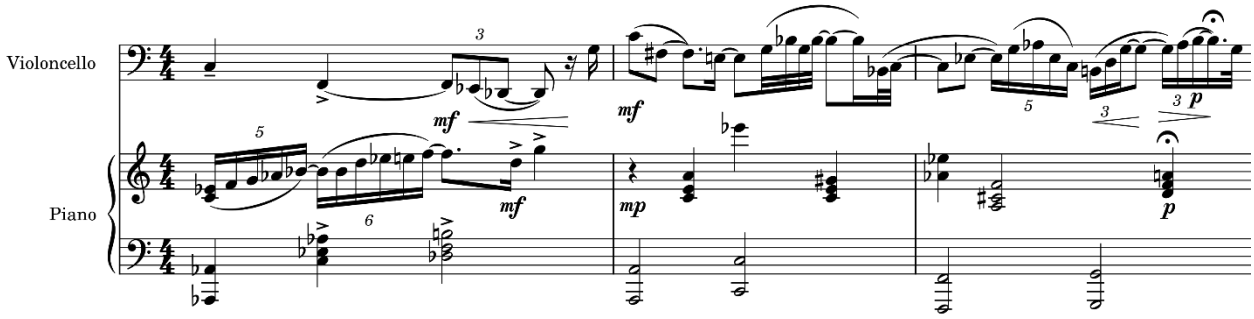

Figure 12: Converging closure in *Pantomime*, end of B section.

The expressive effect of this section hinges on these moments of convergence and closure. It opens with a split priority that quickly converges together but misses its moment of closure. It rebounds to more distant keys before trying to converge again. This time the convergence doesn't line up as the strands aren't modally on the same page. Finally, they return to the material that secured their near miss at the beginning, and, on their second attempt, converge and pause on the convergence, dwelling on it before moving on. This example of converging closure is one I will refer to in Chapter 4 as it encapsulates a distinct mode of converging closure. A mode of convergence where, rather than an assimilation of one tonal strand into another (as in "Botafogo"), disparate tonal strands effectively float into each other and create a composite chordal structure–something that Lee Cronbach would call "vertical dynamism" (1981). The composite chord is then both a moment of convergence and a structurally harmonic chord. As I will show, Swanson uses this mode of convergence extensively to great expressive, closural, and formal effects.

Dirge*, from Suite for Cello and Piano, Howard Swanson*

For my final example of converging closure, I return now to the B section of *Dirge*. Earlier, I explored the incessant use of monoclosure throughout this middle area as local closes. As the section comes to its end, *converging closure* is used to resolve more strands than just the F-minor cello's and provides an intermediate close that is rhetorically stronger.

The F-minor cello reaches the final phrase of its improvisatory melody against the polytonal piano part (D♭ major, A minor, E); see Figure 13. At the end of the cello's phrase, it comes to a sustained A♭, scale degree $\hat{3}$. Held scale degree $\hat{3}$ was a common enough feature of monocloses for this section as the cello had previously come to monoclosure on A♭; see Figure 4 above. The difference being, this final pitch in the phrase (A♭) is held far longer than any of the monocloses heard so far. This longer drawn-out end contributes to a sense of rhythmic closure. While the cello holds this note, the piano continues the same cascading pattern it has been using throughout the entire section, including the contrapuntal descent within the D♭-major strand.

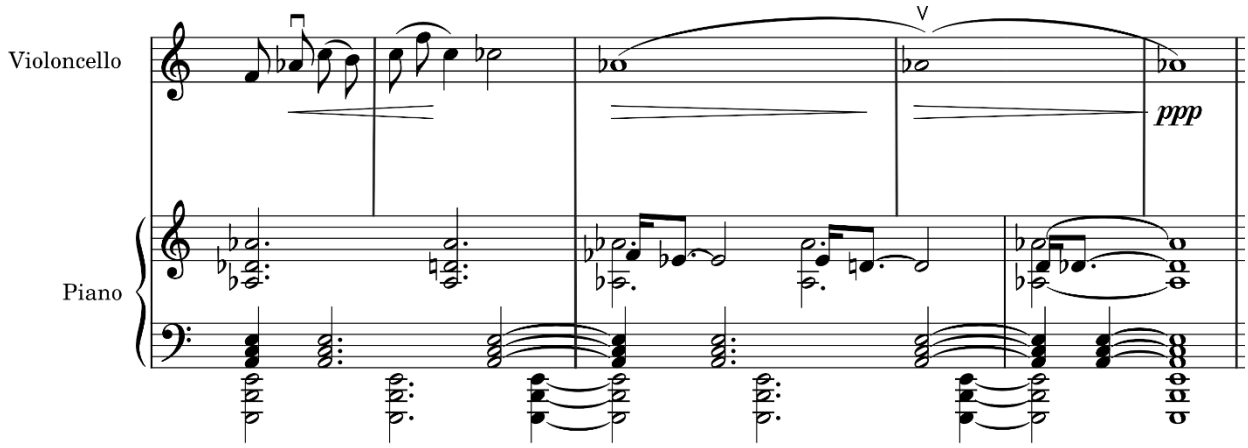

Figure 13: Converging closure in *Dirge*.

This moment of closure is different from the monocloses already heard, as the D♭-major piano strand also reaches a moment of closure coinciding with the cello. Harmonically, the D♭-major piano strand moves from a dominant on beat 1 of the penultimate piano measure, to a tonic on beat 1 of the final measure (of the section), giving harmonic closure. Meanwhile, the inner voice follows its prescribed pattern, descending chromatically down from F♭ to D♭, providing a sense of contrapuntal closure; as compared to Figure 3, this time the contrapuntal closure is concurrent with the cello's closure. Finally, the continuous cascading accompaniment pattern stops at this contrapuntal arrival on a D♭-major chord, providing rhythmic closure that coincides with the cello's closure. This ending then exhibits (at least) two strands coming to close simultaneously.

If the closing of these two strands happened independently in separated keys, this would be an example of *polyclosure*. For this to be considered *converging closure*, the cello and piano would have to assimilate into each other in some way, which they do. The previous examples from this movement depicted the F-minor cello constantly distancing itself from the piano, but in contrast, the cello is no longer actively resisting assimilation by D♭ major. The cello reaches and holds a note which is very prominent in the D♭-major strand below it and doesn't shy away as it did before. Not only is it on the common tone of A♭, it is in full unison with the piano. Moreover, where the cello was initially separated from the piano by tension, motion, and dynamics, it now parallels the piano by being calmer and quieter. Through this calm and quiet unison, the D♭-major piano can assimilate the cello part into its key. In effect, as the A♭ is held in the cello it is initially heard as scale degree $\hat{3}$ in F minor, but as the piano line continues under it, that held A♭ is reinterpreted as $\hat{5}$ of D♭ major. With reinterpretation, the cello and piano successfully converge

on D♭-major and reach a moment of *converging closure*, *e*nding the B section of *Dirge* with a rhetorically powerful joint sense of rest.

This instance of converging closure is unique in that it itself functions as a component of another type of closure. While the F-minor cello and D♭-major piano come to a moment of converged closure in D♭ major, the other piano strands in A minor and E do not converge or assimilate into D♭ major. In short, the composite closure of this entire section ends with 3 independent strands, where just one of the closing strands is D♭ major.[8] Thus, the whole of this closure is either *polyclosure* or *monoclosure*. The distinction between polyclosure and monoclosure in this case depends on whether these ancillary strands (A minor and E) achieve closure. The only thing that changes about those strands in that moment is that the cascading accompanying rhythm stops and the strands hold their chords. In turn, this provides the same sense of rhythmic closure awarded the D♭-major piano strand above. Whether or not this single mode of closure is enough to say these strands reach a state of rest is ambiguous and leads to two possible analyses: (1) if the rhythmic closure of the A-minor and E strands *is* enough to say they have reached sense of rest, the whole composite would be polyclosure, as three independent (unassimilated) strands would be reaching a sense of closure and rest simultaneously; on the other hand; (2) if the rhythmic closure in those strands *is not* enough to create a true sense of rest (if, in other words, they seem to *stop* but not to *close*), the whole composite would be *monoclosure*, as only one of the composites strands is reaching closure among the group of 3.

[8] I've affectionately (unofficially) dubbed this *compounded converging closure.* An instance where a *converging closure* sits within the composite of another type of closure. Within this corpus there is not enough examples of this (that I have found) to constitute adding it to my framework outright. But it has the potential to describe polytonal closure when 3 or more strands are in play.

Figure 14: Two possible interpretations of closure in *Dirge*'s B sectiondiagrams these two possible analyses.

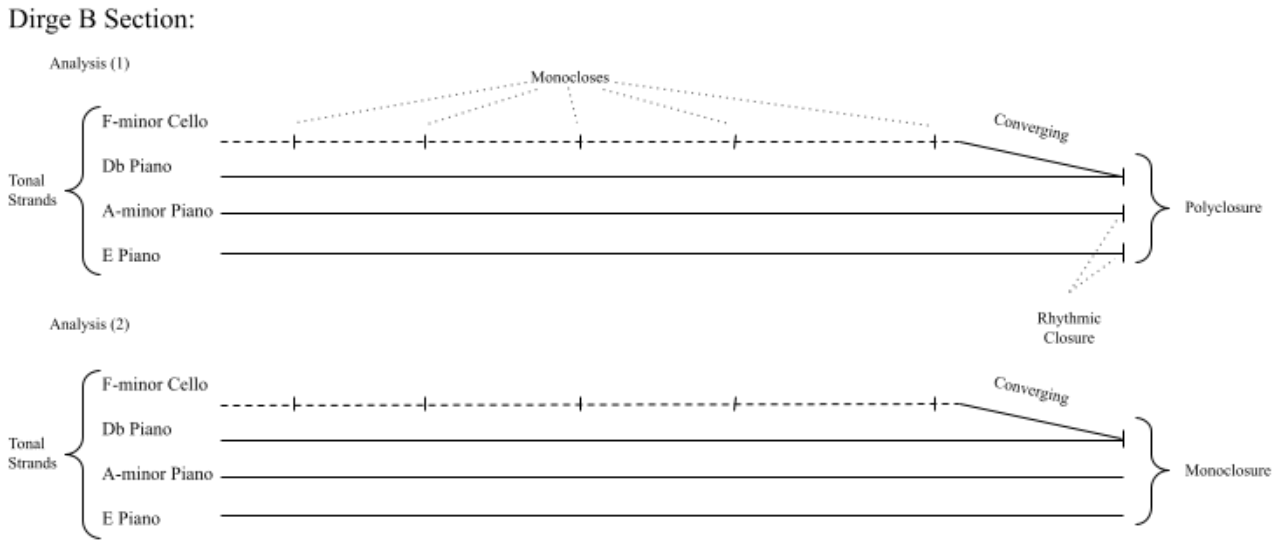

Figure 14: Two possible interpretations of closure in *Dirge*'s B section.

All the modes of polytonal closure will be used to great expressive effects in the following case studies in Chapters 3 and 4. The intention of this chapter was to analyze each of these closural methods in isolation to uncover the distinct mechanisms of closure at play. While the later chapters—which still examine the internal closural mechanisms to an extent—are more concerned with the rhetorical, narrative, and form building properties of polytonal closure.

Chapter 3: Case Study: Sonata Form

Introduction

Polytonality, Sonata Theory, and Disability

With a developed framework in place to analyze and describe modes of polytonal closure, I now have the tools to describe and analyze polytonality in longer musical forms that rely on cadence and closure, such as sonata form. Milhaud wrote numerous compositions that utilize superimposition and are in dialogue with elements of sonata form. For this case study I will look primarily at the first movement of his Sonata for Flute, Oboe, Clarinet, and Piano, Op. 47 (1918).

I follow the formal framework set forth by Hepokoski and Darcy in their 2006 book, *Elements of Sonata Theory.* However, as this is a twentieth-century sonata, I take certain liberties in analyzing the form as outlined in Joseph Straus's book, *Remaking the Past* (1990). As Straus explains, "The interesting twentieth-century sonatas are those that struggle most profoundly with the tradition" (1990, 132). It is Milhaud's reconciliation of superimposition and sonata form—the profound struggle—that makes this piece the perfect case study for understanding how polytonal closure functions in a narrative/formal context. In analyzing the narrative, I also refer to the work of Damien Blättler and his corpus study of twentieth-century Parisian sonatas (2024), in which he analyzes the first movement of Milhaud's Op. 47. While I construct a different narrative around the function of polytonality in this piece, his analysis of irony in the French neoclassicists has influenced my analysis. Synthesizing Blättler's analysis of French irony with Straus's ideas on twentieth-century composers profoundly struggling with sonata form, I construct a narrative reading within Milhaud's sonata that engages with a meta-understanding of sonata form and its seeming incongruence with polytonality.

When superimposition is utilized in a sonata form, regardless of whether such a superimposition is heard polytonally or not, questions related to the larger form arise from smaller technical questions—*What does Essential Expositional Closure look like in a polytonal sonata? What would the key structure of a polytonal sonata be?*—to broader questions—*What is the role of closure within a sonata form? Can polytonal closure fill that role? Can a sonata even be polytonal?* This case study intends to address those questions and more, in order to further develop an understanding of closure and cadence within polytonal music as it relates to larger forms. Over the course of this case study, I will identify the conventions of sonata form utilized within Milhaud's sonata and show how polytonal closure contributes to defining the form. I will also approach the analysis of this sonata through a lens of virtual/multiple agency and disability studies to construct a narrative analysis of the sonata through the formal/closural conventions analyzed.

The first movement of Milhaud's Sonata for Flute, Oboe, Clarinet, and Piano (Op. 47-I from here on) is my first case study because of its interactions between polytonal closure and conventions of eighteenth-century sonata form. Within this movement, Milhaud uses all three modes of polytonal closure with various rhetorical strengths. As I will show, the rhetorical strength of internal polytonal closure maps to conventional structures of sonata forms. In other words, rhetorically strong polytonal closure correlates with where strong harmonic closure would be expected in a conventional sonata. Conventional sonata forms tend to rely on conventional harmonic structures, wherein harmonic closure plays a pinnacle role in the mapping of the form (Hepokoski and Darcy 2006, 174). Without traditional harmonic closure, it could be difficult to interpret or understand a polytonal composition as a sonata, and a conventional sonata-form

analysis would have to come to terms with a lack of closure as a very substantial deformation.[9] I choose to analyze Op. 47-I through the framework of Sonata Theory since the movement contains the narrative functions of a traditional sonata form and a near-standard sonata layout, per Hepokoski and Darcy (2006). At the same time, I substitute my framework of polytonal closure for the more conventional methods of harmonic closure typically seen in a sonata form. Analyzing the piece through the dual framework of Sonata Theory and polytonal closure allows us to fully understand its dynamics of closure.

So, I argue, does viewing the sonata through the lenses of virtual agency and multiple agency. Robert Hatten describes "agents" working in music as fictitious characters within a story (2018). Agents are often musical gestures but can include specific instruments and melodies. These agents develop their own identities through the course of a piece of music with their own roles and motivations, like protagonist and antagonist (Hatten 2018). Edward Klorman expands on a different theory of agency, one where the agential properties of gesture and melody are personified in the performer playing those parts (2016). For example, in the case of a striking musical gesture played in the viola part of a string quartet, Hatten would be concerned with the narrative role of the gesture, and Klorman would be concerned with the narrative role of the viola. In my analysis, I give agency to both instruments and gestures in such a way that Seth Monahan would call *work-personas*; in that these agents have a longer formed understanding and perception of the narrative unfolding and are active in it (2013). By applying the theories of virtual agency/multiple agency to polytonal works, I expand on their theories to include the unique function of key areas within an agency narrative. Key areas in Op. 47-I are not so much agents themselves but are like masks that musical agents don and doff in the progression of the

[9] Blatter concedes to this deformation. He doesn't acknowledge any closure in his sonata analysis.

story. Essentially, key areas in a polytonal work are like props that various *work persona* agents use to build out narrative.

Finally, I bring a disability studies focus to my analysis. Much research into polytonal music has approached this repertoire from the perspective of overcoming a challenge or solving a problem—i.e., the so-called "therapeutic model" of disability (Straus 2018, 155–84).[10] Op. 47-I itself has previously been analyzed as overcoming polytonality; Blättler argues that "the sense of resolution at the recapitulation is here produced by the taming of polytonality" (2024, 122). I analyze this sonata differently, viewing polytonality not as something to be overcome but instead as an essential feature of the piece that doesn't need to be solved or "tamed." In the analytical vignettes from Chapter 3, I intentionally avoided applying a conflict narrative to the role of polytonality or polytonal closure, for the precise reason that polytonality does not always pose a conflict in these works. In many of my examples from Chapter 3, including the second movement of this same piece (*Joyeux*), polyclosure is utilized to genuine and congenial effect, without any sense of conflict. The same is true of Op. 47-I.

Contextual Conceptions of Neoclassicism, Polytonality, and Sonata Form

Before I begin the analysis, I must first situate Milhaud in relation to conventions of neoclassicism, polytonality,[11] and sonata form. To accurately analyze Milhaud's op. 47-I, it is important to contextualize its composition date (1918) within the broader scope of conventions occurring at the time. This piece was written during a so-called "revolt against impressionism" in

[10] A prime example of what Straus calls a *disabling discourse* in polytonal studies could be found in Jennifer Beavers 2016 article "Integrating Incompatibilities" wherein pitches that are perceived as "wrong" are "normalized" through polytonality.
[11] "Polytonality" in Milhaud's time would have been a catch-all term for all applications of superimposition.

post-war France and thus finds itself at an aesthetic turning point, toward neoclassicism. It uses extensive polytonality, a deeply controversial practice tied closely to *Les Six* and French musical nationalist ideology—though *Les Six* wouldn't be formed for two more years (Rašín 1957, 165; De Médicis 2005, 574). And it uses sonata form, a deeply Classical form with centuries of history that no composer of the twentieth century could be ignorant of (Straus 1990, 132).

Neoclassicism is difficult to define and often means different things to different people. A common definition of neoclassicism is that it is a return to eighteenth-century aesthetics and ideals, but it was mostly used by critics, not composers (Messing 1991, 481). A conception of neoclassicism as a purely aesthetic movement would be inaccurate. As Messing argues, the Neoclassical movement is a resistance to the predominant aesthetics that preceded it (1991, 489). It is not an aesthetic in and of itself, it is a backlash. Marianne Wheeldon writes that "*neoclassicism* was a relational term, deriving much of its meaning from the way it was positioned against a series of imagined antagonists in composers' and critics' discourse" (2017, 436). The composers that neoclassicists were resisting were primarily Debussy and Schoenberg.

Milhaud's op. 47-I was then written during the rising pressure of this backlash, so what was Milhaud's role in resisting the pressures of Debussy and Schoenberg? Before Schoenberg popularized atonality and serialism, Milhaud and the rest of *Les Six* were reacting to the Debussian aesthetic (Wheeldon 2017, 435). This reaction was emphasized through more reliance on counterpoint than harmony, and a paradigm shift of timbral importance. According to critics and observers at the time, such as Louis Laloy (1920), new composers (referring to *Les Six* and Stravinsky) preferred the "dryness of intersecting melodies." Even more, their contrapuntal technique evolved; Laloy goes on to say that "this counterpoint is extremely simple and basically consists of pedals, which cling stubbornly to a note despite the modulation of the other parts"

(1920, 2). He is talking about superimposition, and the splitting of tonal strands. This aesthetic preference is highly prevalent in op. 47-I, as we shall see.

Timbrally, the neoclassical reaction to Debussy includes a change in instrument emphasis. Another contemporary critic, Émile Vuillermoz (1923), described it as a de-emphasis of the violin and a reranking of timbral hierarchy. Wind instruments and percussion were given more dominant roles in the orchestral music of the time. Timbral stratification became a priority in reaction to string orchestras' timbral homogeneity. This too is evident in Milhaud's op. 47-I. Revived recognition of contrapuntal importance and new desire for timbral variety leave room for new compositional techniques that make strong use of both. In essence, the aesthetic trajectory of early twentieth-century France was the perfect space for polytonality to emerge.

Milhaud's attachment to neoclassicism ties directly into how he understood and developed his polytonal technique. Polytonality was in Milhaud's mind the natural progression of tonal music, making it intrinsically an extension of the tonal tradition, not a breaking from it. In his article "Polytonality and Atonality" (1923), he states in explicit terms that the atonality of Schoenberg was the natural progression and next step of chromaticism–a belief that Schoenberg shared to an extent. Continuing on, he concludes that since atonality was the natural progression of chromaticism, then polytonality must of course be the natural progression of diatonicism. He rationalizes polytonality as being the next step in a tonal tradition. When viewed within the reactions against Debussy, polytonality is a technique that relies heavily on counterpoint and timbre for the tonal separation of strands. Refer to Chapter 2, Figures 5 and 6 (*Le Boeuf* and Op. 47-II respectively), where timbre and counterpoint are explicitly called out for establishing independent tonal strands. In Figure 5, the secondary tonal strand of G♭ major is stratified through timbral separation by keeping that tonal strand solely in the high brass–trumpet and

French horn. In Figure 6, it is the contrapuntal movement of the flute (in A-major) that resists the draw of F♯-major in the piano.

Milhaud did not lay out this approach and conceptual ideas of polytonality until years after writing Op. 47 and being scrutinized for it. The use of polytonality was highly politicized, per de Médicis (2005). And despite being widely accepted by *Les Six*, many other composers in France, and indeed many French critics, saw polytonality as synonymous with atonality. Many articles and reviews equating polytonality to German atonal ideals were published at the time. This would lead to stronger reactions from polytonalists to establish polytonality as a purely French idea (De Médicis, 2005). In the midst of this backlash Milhaud published his articles (referenced above) explicitly separating the polytonal aesthetic from Schoenberg's atonal aesthetics. The explicit separation from Schoenberg and atonality encourages a purely polytonal understanding of Op. 47-I. There are areas of Op. 47-I where so much superimposition is occurring that it may be heard and conceived of as atonal. Milhaud himself warned listeners that this was possible in his 1923 article, wherein too much or too distant superimposition of keys would destroy a perception of tonic and create something atonal. Such is the case with Milhaud's fourth string quartet, which consisted of three to four simultaneous superimpositions and would ultimately be dedicated to Schoenberg.

An area of neoclassical ideals I have yet to touch on is the prevalence and importance of Classical influence. Music that is Neoclassical is in dialogue with older aesthetics. In essence, it is synthesizing contemporary ideas of counterpoint and harmony with older models of the baroque and Classical eras (Hyde 1996, 202). This drive for modernizing older forms comes

from an anachronistic desire to imitate mastery.[12] In her article, "Neoclassic and Anachronistic Impulses in Twentieth-Century Music," Martha Hyde outlines four different imitative practices that neoclassicists used to modernize older forms (1996). In brief, those four practices are: (1) reverential imitation, where a composer sticks to older forms/practices in a textbook to an exact manner; (2) eclectic imitation, a loose, more allusionary reference to older forms and aesthetics; (3) heuristic imitation, highlighting and accentuating older anachronisms (this separates itself from reverential imitation by allowing itself to stray from models, where reverential imitation is a dogmatic adherence); and (4) dialectical imitation, where the form is used simply as a backdrop for a different musical idea to be expressed (often a conflict narrative or dialogue narrative) (Hyde 1996). I understand Milhaud's Op. 47-I as lying somewhere between dialectical and heuristic imitation. In such that, the sonata form of the piece maintains the parts of a traditional sonata form but produces a different rhetorical model of such parts (dialectically imitative), but that different rhetorical model essentializes and even parodies the sonata form model (heuristically imitative). As I'll show, Op. 47-I synthesizes the sonata form model with polytonality, and in doing so, spins a rhetorical metanarrative of sonata form.

Permission for such a distant analysis for a sonata form comes from Joseph Straus (1990). Straus claims, "it is no longer possible in this [20th] century, however, to write a sonata form that arises organically, spontaneously, and seamlessly from the musical relationships. [...] Twentieth century composers inevitably approach the sonata self-consciously and often, as we have seen, with malice aforethought" (1990, 132). It is then reasonable to assume that Milhaud would synthesize sonata form with polytonality and create an alternative metanarrative.

[12] "Mastery" implicitly referring to composers that Justin London refers to as "BHMB"–Bach, Hayden, Mozart, Beethoven– in his 2022 article, "A Bevy of Biases."

Milhaud then finds himself at the center of dueling aesthetics. In his reaction against Debussy, he developed polytonal technique. But in developing a polytonal technique, local criticism compared him, and the rest of *Les Six*, to German aesthetics (De Médicis, 2005). Milhaud's Op. 47-I finds itself right in the middle of this swing. Meanwhile alternative approaches to neoclassicism, having to do not with aesthetics, but with form, are developing in French, German, and Russian composers alike. As such, Milhaud makes his mark by composing a polytonal sonata, one that plays on formal convention through parody and metanarrative.

Exposition

The exposition of Sonata for Flute, Oboe, Clarinet, and Piano unfolds following many formal conventions. It includes a primary theme zone (P), a transition (TR), a secondary theme zone (S), with expected Medial Caesura (MC), and Essential Expositional Closure (EEC).[13] As all these formal areas play out sequentially, the initial characters/agents and their corresponding motives are established within the sonata's rhetorical narrative chronologically.

The exposition of Milhaud's Op. 47 ranges from mm. 1–52. It opens with conventionally tonal language but quickly moves into the polytonal soundscape. From there, the deformations of the traditional sonata form include the utilization of polytonal closure as well as the atypical key structure of the primary and secondary themes. When these deformations are accounted for under

[13] The medial caesura is a mid-exposition break between the transition and the start of a secondary theme, where the sonata slows to a point of rest before starting the second part of the form; this often coincides with a half cadence in the key of the dominant but is not required. Essential Expositional Closure is the first PAC in an a sonata form exposition occurring at the end of the secondary theme; it is often the first most significant moment of closure (Hepokoski and Darcy 2006, 176).

the lens of virtual/multiple agency, a narrative revolving around the polytonal key areas and their closure begins to take shape.

The Primary Theme

The movement opens with some tonal ambiguity (mm. 1–19 depicted in Figure 15). The piano opens with a comping figure, alternating E♭/A♭ dyads and F/C dyads. At the outset, it's not immediately clear whether the piece is in A♭ major or F minor. The piano continues its static ambiguous harmony while the P theme enters in m. 2, played by the oboe. The oboe's melody is also harmonically ambiguous, it could either be analyzed as $\hat{4}$–$\hat{7}$–$\hat{5}$–$\flat\hat{7}$–$\hat{1}$ in F minor, or as $\hat{2}$–$\hat{5}$–$\hat{3}$–$\hat{5}$–$\hat{6}$ in A♭ major. However, the clarinet enters in m. 3 to clear up the ambiguity with a clearly centralized A♭. Therefore, despite an opening ambiguity, I analyze the primary theme in A♭ major.[14] However, the conventionality of the P theme is muddied by the entrance of the flute.

The flute enters in m. 6, outlining a C-major triad, and continues into a superimposing C-major melody against the A♭-major primary theme, developing a polytonal soundscape. The C-major countermelody hovers mostly around E and G ($\hat{3}$ and $\hat{5}$) providing an abundance of dissonance against the A♭ theme, which emphasizes E♭ and F ($\hat{5}$ and $\hat{6}$). Moreover, the flute sounds in a radically different timbral space than the oboe, clarinet, and piano, i.e., it is timbrally distinct and separated (Johnson 2011, 6). Therefore, there is enough disparity and dissonance between the two tonal centers to keep the flute from being assimilated into the A♭-major strand, making this opening primary theme affirmably polytonal. By strength in numbers and registral dominance, the pre-established A♭-major strand has primary priority, and C-major strand has

[14] Blättler (2024) analyzes the primary theme similarly.

secondary. These two superimposed keys continue their thematic material all the way to a moment of monoclosure in m. 10.

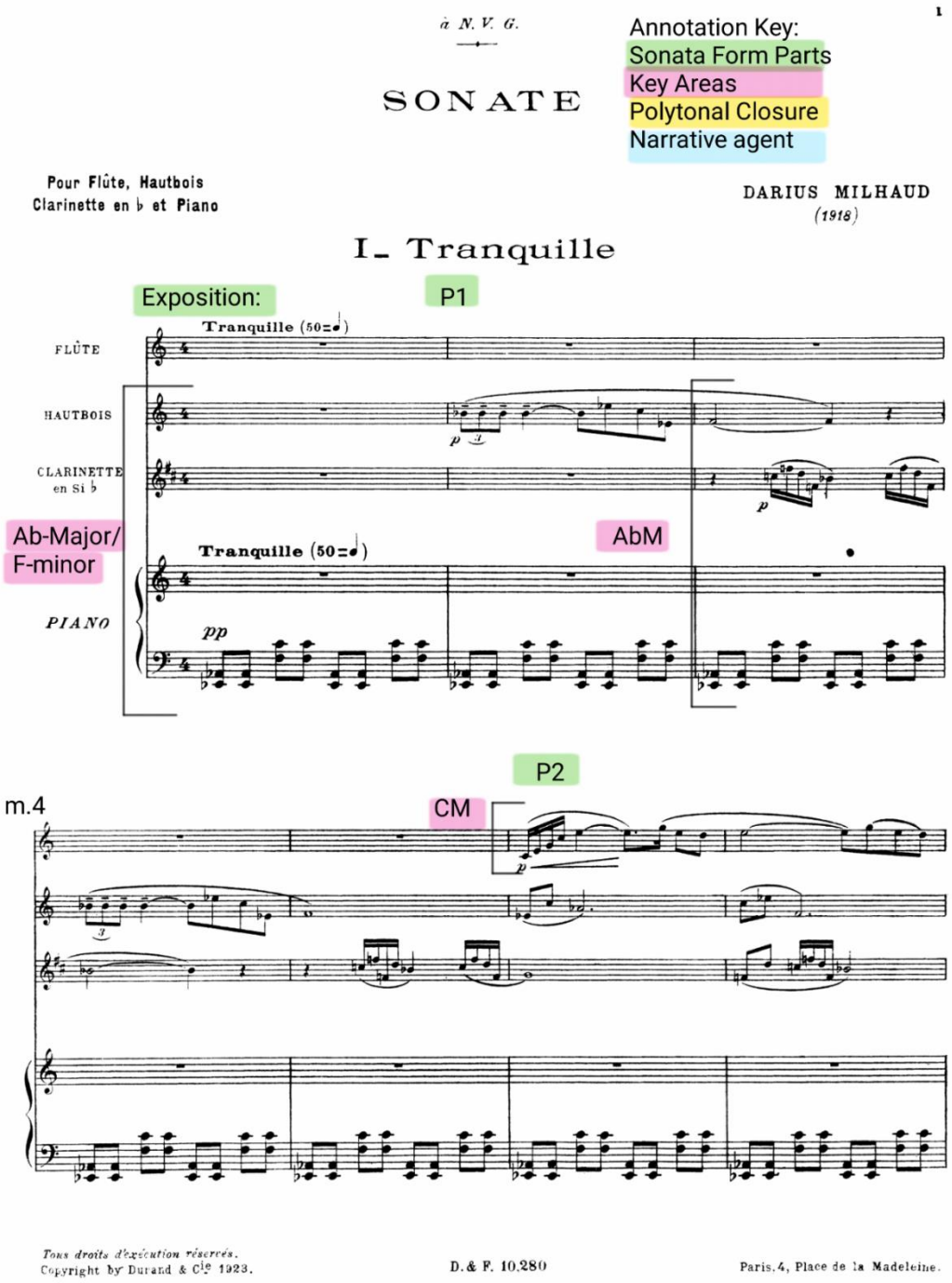

Figure 15: Op. 47-I, mm. 1–19.

Figure 15 cont.

The A♭-major melody in the oboe and clarinet reach monoclosure against the C-major flute, in m. 10. The monoclosure of the A♭-major oboe is achieved through contrapuntal and melodic means. It is the P theme's opening motive restated, but resolving to A♭ instead of F. The clarinet's final utterance is a diminutive echo of the oboes final line, closing in the same fashion. This monoclose retains some rhetorical strength, as the A♭-major theme doesn't surrender primary priority, even when the oboe drops out, and in fact the restatement of the oboe's closing line pulls more focus towards the clarinet. In this instance, the monoclosure is effectually contributing to the maintaining of priority. After the clarinet monocloses out, effectively ceasing the A♭-strand and returning to ambiguous piano harmony, the C-major flute is readily handed primary priority. But rather than continuing to a cadence in C major, the flute immediately shifts to resolve in A♭, m. 11. The transition starts in the following bar, m. 12.

Two questions related to sonata form deformation must be asked: (1) How does a polytonal primary theme work? And (2) is the monoclosure achieved in the clarinet and oboe enough cadence attainment to consider this sonata tonally closed (or *tonally determined*, to borrow Hepokoski and Darcy verbiage)?

The primary theme could be functioning polytonally in one of two ways, and the answer won't be clear until the recapitulation. It is first possible, and likely, that the primary theme is just the A♭-major strand/theme, and C-major strand is ancillary to P. In this case, the flutes C-major theme is serving as polytonal flavor and accompaniment. However, it is also possible that the polytonal C-major melody is a distinct part of P, and is a part of the character and establishment of P. Again, this won't be entirely clear until the recapitulation, but if it is the case, then the C-major theme could be considered a second P-zone. The polytonal nature of the piece makes the two P-zones occur in conjunction, rather than one after another as a traditional sonata

may present them. Regardless of their simultaneity, I would still refer to the A♭-major theme as P^1 and the C major theme as P^2, and it remains to be seen whether P^2 plays a role in the recapitulation.

The only closure achieved in the primary theme(s) is A♭-major closure, but they are not traditionally defined cadences (in Caplinian terms). As discussed in the introduction to this case study, a lack of traditional harmonic closure will not be a limiting factor for this analysis. Therefore, I will take the presence of A♭-major monoclosure, with moderate rhetorical strength, as an indication of a tonally determined P theme. With the second P-zone resolving to A♭ major as well, I feel comfortable in considering the P theme as, what Hepokoski and Darcy would call, tonally *overdetermined* (2006, 124–27).

Narratively, the P-zone of this sonata acts as an inciting incident to begin to unfold. This sonata opens with three virtual agents establishing their *agential identity*.[15] The static ambiguity of the piano is not an agent as it's progressing aimlessly thus far. But the oboe and the clarinet are two agents working towards a common goal, establishing A♭ major as tonic. Their agential identity stems from the piano's tonal ambiguity. First, the oboe comes in with an opening motive but still fails to fully establish the key center. Then, the clarinet enters to solidify A♭ major as tonic in this sonata.[16] Finally, the flute enters as a third agent, openly antagonistic towards A♭ major. While the oboe wasn't fully successful in establishing a strong A♭ major key center by itself, it was at least working within the right diatonic pitch collection. The flute, however,

[15] In other words, the roles they will fill in the narrative, including their motivations.
[16] The implication of this is great, the tonic of a sonata carries weight, which Milhaud and these agents would be fully aware of. Establishing a strong tonic is paramount to sonata form, so per Straus 1990, Milhaud is fully aware of the conventional deformation he utilizes here.

protests A♭ major with C major. It rises out of the middle of the texture, crescendos into a dissonance, and soars above the other melody, establishing its own melody and key center.

The oboe is the first to drop out, resolving to A♭ major. The clarinet's agency was strong enough to pull the oboe to A♭ major, but it fails in getting the flute on the same page. The oboe monocloses out with rhetorical strength. While it may have failed to tonally assimilate and pull the flute to A♭ major, it gets its last strong statement before the agent departs. Now alone, the flute resolves down to A♭, effectively changing its agential identity. Why does the flute, the *antagonist*, resolve down to A♭?

The flute, as an agent, is not working as an antagonist, but as a *devil's advocate*. It's as if all these agents are having a debate. The oboe as an agent is unclear on their stance, but they're in the right direction, and the clarinet solidly conscripts them to their view (the stance that this sonata should be in A♭-major). At first, the flute chooses to be contrarian, but once the oboe and clarinet exit stage left in a huff, the flute shows its cards. It doffs the mask of C major to reveal itself as A♭ major. As a rhetorical device, a devil's advocate may be contrarian for the sake of sparking an argument, but they may also play the role for the sake of strengthening the original argument. In the latter case, the devil's advocate posits the contrary opinion to test the strength of the original argument. I posit that in the case of the C-major flute's agential identity, that it is not functioning as antagonist or belligerent but is working in contrary to strengthen the A♭-major key center.

The Transition

Measure 12 marks the start of the transition, with fragments of both P^1 and P^2 transposing multiple times. P^1 starts immediately, moving towards F-major but still understood in A♭ major, and a beat later P^2 enters in A minor. The distance between the two P-zones remains the same in the transition–a major third apart–but P^2 sees a modal change to minor, where it was originally major. P^1 is used multiple times in the transition, with both the opening and closing motives fragmented and appearing independently. In the final measures of the transition, mm. 18–21, the winds come together in A♭ major, each playing imitatively the closing motive of P^1.

The piano finally begins to expand out of its repetitive comping rhythm in m. 16. Planing major 6/4 chords extend out of the piano's bass voice and establish themselves in the right hand, previously resting. The piano continues to evolve as it expands into quartal harmony in m. 18. This quartal harmony comes to a resolution with the wind voices in m. 21, which marks the end of the transition with a medial caesura (MC). All voices come to rest within the quartal harmony established by the piano. Moments of gentle rest make room for the piano to begin a low E pedal, previewing its role in the upcoming secondary theme, and making space for the secondary theme to begin.

The agential roles of the clarinet and oboe are typical in this transition, but the flute is not. The transition opens with modulating fragments, which is typical of transitional material. Both the clarinet and oboe move around a bit, but they make it back to A♭ before the anticipatory MC. However, the flute never makes it back to its original tonal space. Its first modulation is to A minor, with strong implications of C major in mm. 13–14. Its second statement in mm. 14–16 has tonal ambiguities, containing both A♮ and E♭. Its final statement of the transition is in A♭

major, reaching the tonic of P^1. This harkens back to the tonal overdetermination of the P theme and the flute's/C-major's role as a devil's advocate.

Before the piece moves on to the secondary theme, the flute acknowledges the tonic of A♭ major with the oboe and clarinet, all agents get on the same page. As a devil's advocate, the flute acknowledges the original key of A♭ major is *correct*, but its initial question is still to be considered: *what of C major*?

The Secondary Theme

The S-zone begins in m. 23 (Figure 16) and functions to answer the C-major question, fully considering C major. The piano starts another ostinato, this time implying E major, with an A♯ added tone. The piano strand consistently centralizes E through an E1 pedal point, and the preceding MC consisted of multiple spaced E's foreshadowing an E tonal center. The clarinet enters with a melody in C major in m. 23. The melody is simple, with most phrase members ending in descending 8th notes.

Priority in this opening passage of the S theme is not so easily labeled, but this specific superimposition is significant. The piano is very colorful, but it's very static. The major seconds in the piano part permeate the texture with dissonance, but it repeatedly anchors itself with its E pedal tone. In contrast, the simple C-major melody is uniquely plain, almost drawing attention in its mundanity. The clarinet's focus on $\hat{1}$ and $\hat{5}$ put it directly at odds with the C♯ and G♯ persistently present in the piano. The clarinet part has *primary priority* as it is pulling more attention. It is a strong structured melody piercing through the piano's dissonance.

The relationship between C major and E major bares significance in the scheme of this sonata. C major and E major have a similar relationship to each other, polytonally, that A♭ major and C major have. C major is a minor sixth above E major, and a major third above A♭, it is inversely related to both. In other words, E major and A♭ major share the same number of common tones with C major, as both keys have four accidentals in their signatures. Therefore, the relationship between P^1 and P^2 is effectively the same as the relationship between S and the accompaniment, they are equally dissonant to each other.

Following the established S, the oboe and flute join in mm. 27 and 29, respectively, but from here the S theme zone begins to spin out. The C-major strand remains consistently present throughout the S-zone, as different superimpositions occur against it. The piano's moving key center is the most relevant throughout the S-theme, as it moves through the most diverse areas.

The piano's tonal rotation is mildly palindromic as it plays through a gambit of various key centers before working backwards to E-major again. In conjunction with the flute's entrance in m. 29, the piano moves to a static C♯-major chord, with a C♯1 pedal point. In m. 31 the piano plays various additive and quintal harmony chords over an F♯ pedal point. The farthest the piano reaches is in m. 34, when the piano plays an ostinato of E♭-minor 7th chords over an E♭ pedal. The piano stays in E♭-minor for the longest duration, before moving back to F♯ in m. 40, C♯ in m. 41, and a final grand return to E in m. 43.

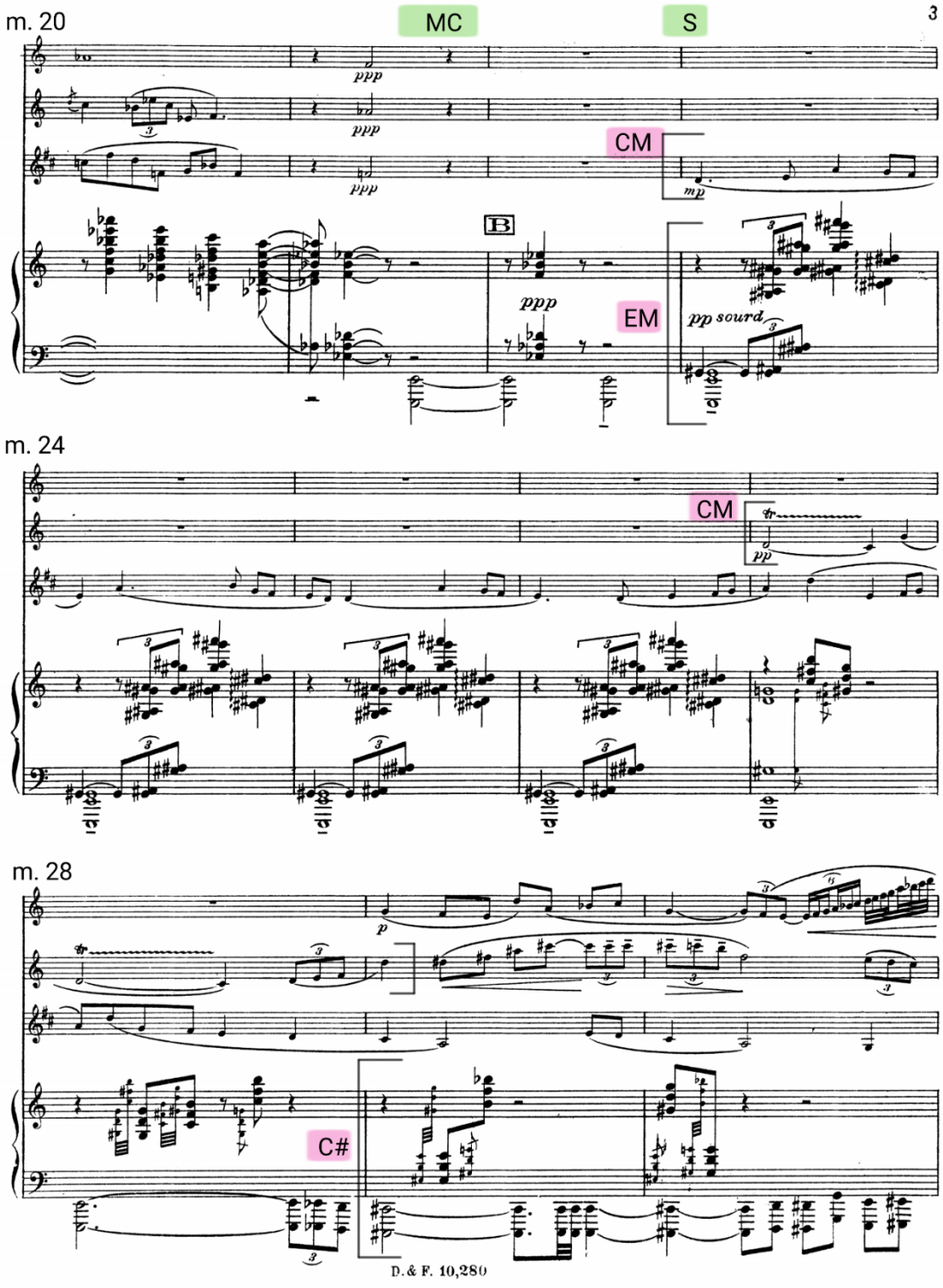

Figure 16: Op. 47-I, mm. 20–30, MC and S-zone start.

The long detour centralizing E♭ is conventionally important for the S theme of this sonata. E♭ major would be the conventional key area of the secondary theme for a sonata in A♭ major. So, its distorted appearance implies recognition of convention, possibly even a musical parody as mentioned above.

While the piano is playing through its various key centers, the flute, oboe, and clarinet are playing contrapuntally through various keys before they all reach closure in C major. The clarinet remains faithfully in C major, playing the S theme for the majority of the spin-out. The flute makes its way back to C major in m. 35 and eventually reaches closure in C major in m. 39. As the flute closes out, the oboe returns to C major in m. 39, reaching its closure in m. 42 (Figure 17). The final measures of the S-zone, from mm. 43–47, consist of the clarinet repeating the S theme against the piano in E, until converging closure concludes the exposition (Figure 18).

The S theme ends with rhetorically strong converging closure. Going into the moment of closure, the clarinet had primary priority as it stayed faithfully to C major throughout. The prior monoclosural resolutions into C major by the flute and oboe lend strength to the C major clarinet. While the piano part is pedaling an E1, the RH chords only serve to centralize E, they're not fully functional. The hazy tonality of the piano part delegates it to secondary priority against the more stable C major. As the clarinet retains its C major strength, the piano loses momentum and intensity, before converging blissfully into C major in m. 47 (Figure 18). If anything is acting as essential expositional closure in this sonata, it is the rhetorical strength of this converging closure.

The secondary theme introduces a new agent, the piano. While the piano's agency was taken for granted in the P theme, it's now establishing a clear agential identity, as the interrogator of C major. The piano as an agent works to meticulously test C major against various key

centers. The spinning out of the S theme is functionally a gambit of tests, weighing the strength of C major against other key areas.

The piano agent first weighs C major against E major. As discussed above, these two key centers effectively have the same level of dissonance as A♭ major against C major, making it comparable to the juxtaposition of P^1 and P^2. Through this dissonance, C major is successfully able to maintain its priority, discernible above the piano part. The piano gives C major a taste of its own medicine, yet it prevailed; C major survives the scrutiny that it initially played against A♭ major.

The key/agent of C major is then weighed against C♯ and F♯. C major struggles more to be heard through the dissonance and intensity, yet C♯ can't strongly establish itself through the addition of the flute and oboe agents. The F♯ pedal is almost a reprieve for the C major strand. While C major soars above its tritone, the piano right hand plays mostly consonance against it through additive chords and quartal harmony. This reprieve is welcomed by the C major strand, as the next test will be its most challenging.

Finally, C major is weighed against E♭ minor. This is significant not just because of the dissonance C major faces against E♭ minor, but also because of the challenge to convention. In a conventional A♭-major sonata, the secondary theme should be E♭-major. While it is deformed to E♭ minor, the question the piano asks of C major evolved: *Why C major and not E♭? Can you overcome the convention?* The C major strand must output serious concerted effort to overcome the challenge of E♭. The flute joins the C major strand and uses the force of monoclosure to reaffirm C major's priority.

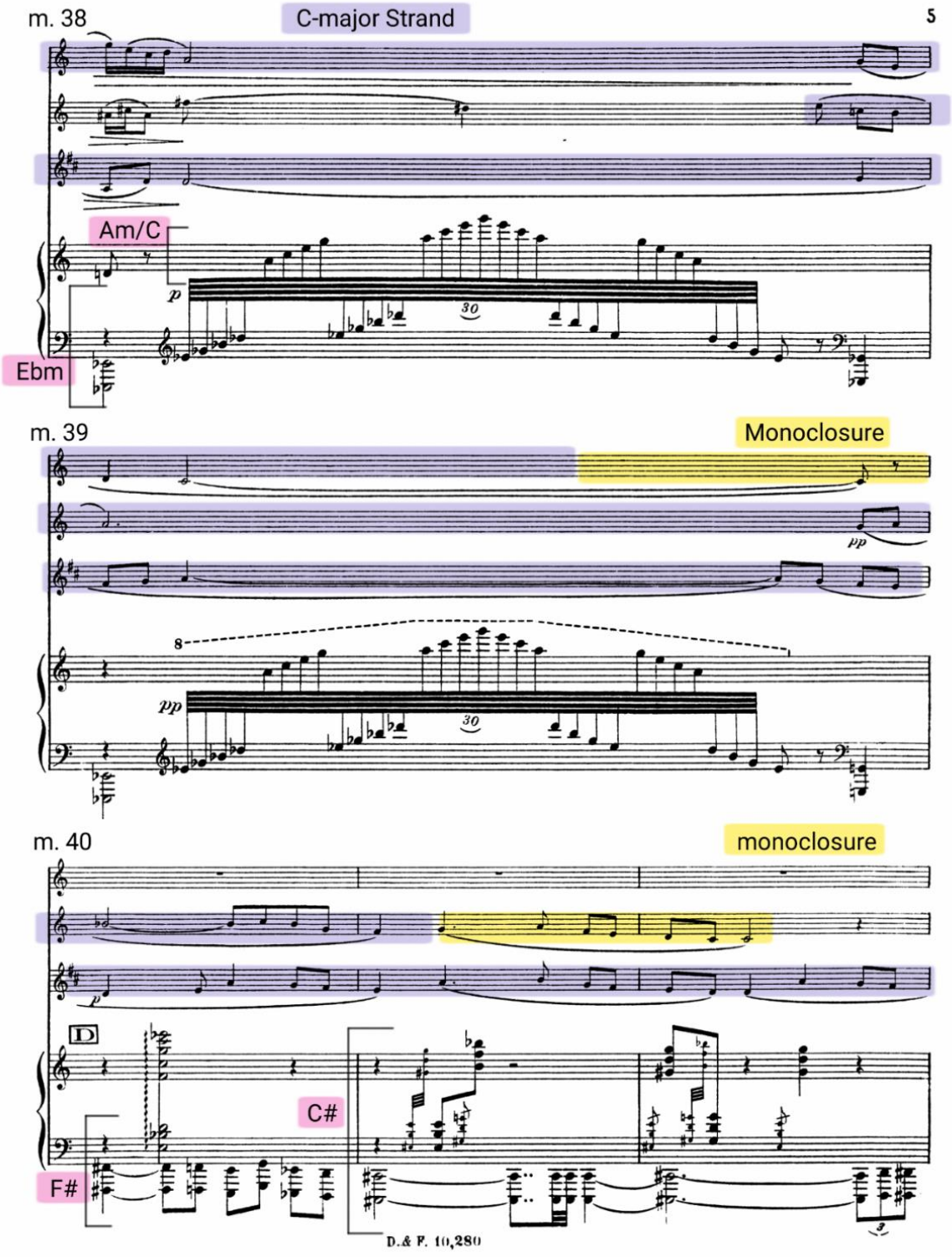

Figure 17: Op. 47-I, mm. 38–42.

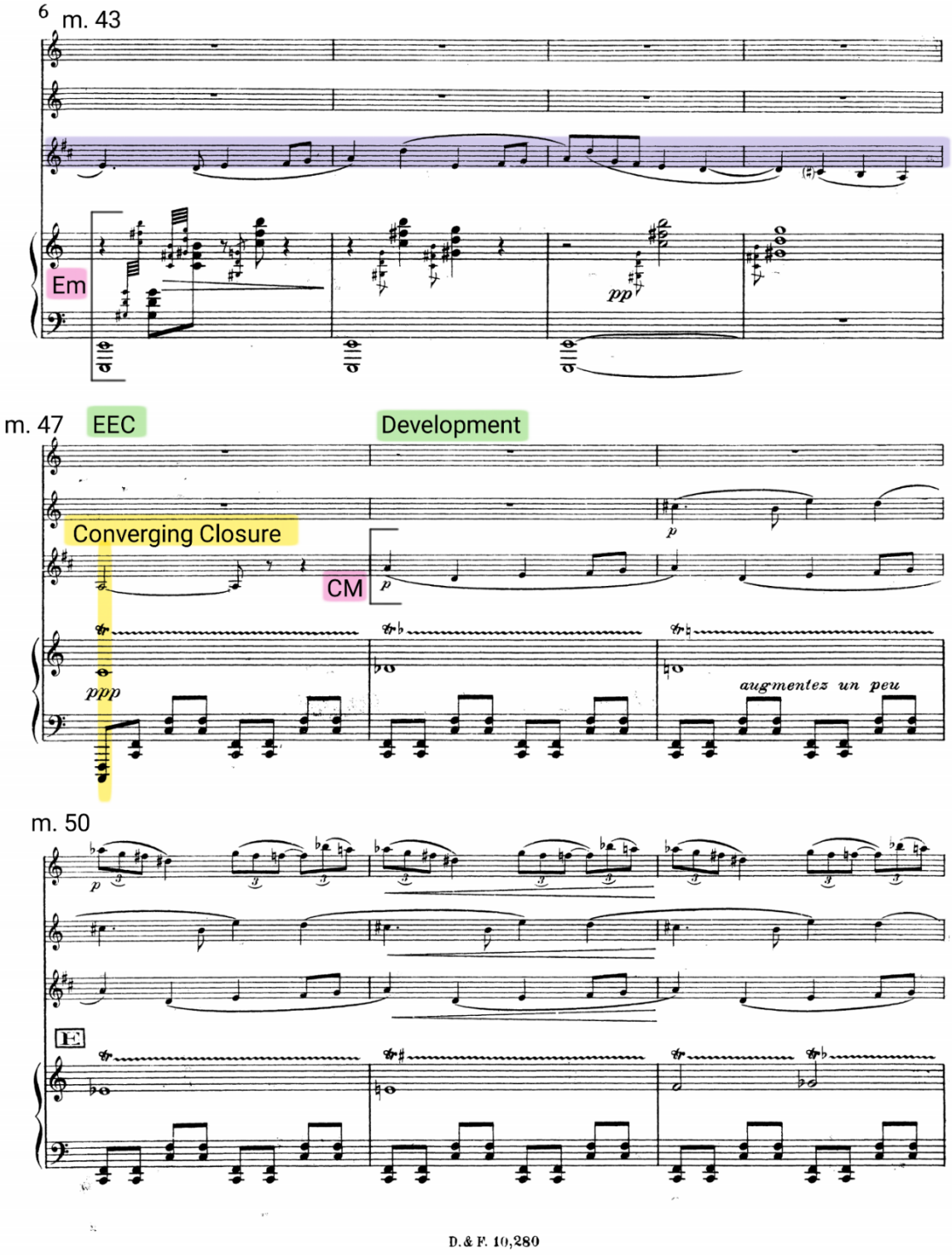

Figure 18: Op. 47-I, mm. 43–52.

After such rigorous testing, C major is easily able to reign in primary priority as the piano backtracks through F♯, C♯, and E. The strength of C major, after its trials, drags the clarinet to it. In concluding the exposition, the strength of the C major agent is finally able to assimilate the piano up into it. This final convergence–when all agents are finally on the same page–is the clearest moment of the EEC. It's an incredibly powerful moment of tonal closure for the secondary key, even if it isn't a perfect authentic cadence (PAC).

Returning to the narrative device of the devil's advocate, the debate between the agents grows more heated as they work through considering C major. After its introduction as a devil's advocate, C major is thoroughly and rigorously scrutinized. While it may have been initially posed as a P^2, through its exploration as the secondary theme, it proves itself as a rhetorically significant key center.

Development

Following the EEC, the sonata dives headlong into the development without a closing theme. The development broadly applies fragmentation and modulation and is made up of consistent superimposition between various key centers. The final stage of the development, leading into a retransitional area, is something of a false recapitulation. The false recap is the most narratively relevant moment that occurs within the development.

The development starts at m. 48 and plays out through m. 79. Most of the section consists primarily of superimposition and polytonal soundscapes, with various key strands present over its unfolding. Eventually, the development reaches a texture reminiscent of a retransition in m. 65. All voices reach a moment of converging closure on a D dominant ninth, sounding like a HC

in G (Figure 19). By conventional standards, the sonata has gotten very off track, as a conventional retransition for a sonata in A♭-major would be expected to HC on an E♭ chord to prepare for arrival in A♭ major. The piano plays a chromatic line out of the HC until m. 66 where it begins an accompaniment pattern in F♯ minor. The oboe inters with the P1 theme in m. 68, transposed to F♯ minor. The other winds enter trying to confirm F♯ minor but eventually dissolve out of the texture with chromatic descents in mm. 73–75. The piano is left to arpeggiate F♯ chords (no third), with a brief superimposed allusion to C major in m. 77.

The false recap sees the return of P^1 in the "wrong" key (Figure 19). Aside from the oboe, which fully states P^1 in F♯-minor, the other winds have a harder time getting on board with the recap. The oboe, as defined in the exposition, is seldom successful at decerning the "correct" key center, as it needed an extra push to decide between F minor and A♭ major. Therefore, it freely states P^1 in F♯ minor, whereas the other winds decern quickly that F♯ minor is the "wrong" key center. They both play chromatic passages and allude to C major before exiting. Once the piano is alone, mm. 76–79, the true retransition starts.

The narrative implications of the false recap and "incorrect" key center imply a devolution of rhetoric. Following the metaphor of the debate, the development depicts the body of the argument. Just when it seems all the agents have reached some sort of consensus, the agents begin a recap in the wrong key. It is as if the debate has spun out so far, they have forgotten the original point of the argument. They need to reorient to find their conclusion.

Figure 19: Op. 47-I, mm. 65–68.

Recapitulation

Following the false recap, the official recapitulation begins m. 80 with the flute's entrance of P^1 in A♭ major, soaring above the texture (Figure 20). Unaccompanied by the oboe and clarinet, the flute proceeds through a full statement of P^1 over a developed accompaniment in the piano, mm. 80–87. Ater a full elongated statement of P^1, the movement ends with a cadence in A♭ major. The recapitulation closes out the narrative agents/strands through the appearance of prominent key centers, and tonal closure.

The pianos' accompaniment in the recapitulation is significantly developed from the opening of the exposition. Recall that the piano in the opening of the movement used simple dyads for its comping, E♭/A♭ on beats 1 and 3, and F/C on beats 2 and 4. Now in the recap, the F/C dyads on beats 2 and 4 have been developed out into full C triads, possibly into its own tonal strand.

Beats 1 and 3 keep up the E♭/A♭ dyads as they did before, but beats 2 and 4 have some ambiguity as they could be interpreted as both fully in A♭ major, or as fully a secondary tonal strand in C major. In mm. 80 and 82, the potential C strand chords on beats 2 and 4 are C major and $G^{ø7}$. If interpreted wholly in A♭ major, the C major chords are chromatic mediants and $G^{ø7}$ is $vii^{ø7}$. If interpreted as a secondary tonal strand, then C major functions as tonic in the strand, with secondary priority, and $G^{ø7}$ is an altered dominant. However, these two interpretations are not entirely mutually exclusive. A blended interpretation may consider the C major chords as constituting their own tonal strand, and the $G^{ø7}$ serving a dual function as both an altered dominant in C major and $vii^{ø7}$ in A♭ major. This combined analysis assigns $G^{ø7}$ the role of coupling the two tonal strands, linking them together through a mutually extended/altered

dominant. Therefore, the two superimposed tonal strands are at their farthest separation in mm. 80 and 82, but maintain some level of connective tissue. It is unclear whether or not the separation of these superimposed strands is enough to constitute a label of "polytonal" and award C secondary priority.

Alternating with mm. 80 and 82 are mm. 81 and 83 where the potential C strand and A♭ strands grow even closer related, before merging entirely. These measures, 81 and 83, save for the present B♮, can be analyzed as A♭add6/E♭, and can be analyzed as a near convergence of the two tonal strands. B♮, as a nonharmonic tone, serves to tonicize C and works to keep the two tonal strands from fully converging (annotated in orange in Figure 20). In the following measures, mm. 84–85, the harmony stays on the A♭add6/E♭, and the B♮ drops out, effectively finishing the convergence of the two tonal strands. Measure 86 sees the piano dropping back to opening gesture, which is now unambiguously understood as A♭add6/E♭ rather than A♭ and F dyads as it was initially. The movement reaches its conclusion with a large quartal harmony in mm. 88–89, resolving back to the A♭add6/E♭ (with an additional C♭, more on that later).

The movement ends on an A♭add6/E♭, without recapitulating the transition or the secondary theme. While this may initially seem like a radical deformation, research into twentieth-century sonatas out of Paris shows that such a drastic change to the recap had become typical of the time and place. Damien Blättler in his article "Radically Inconspicuous Absence" provides evidence that a truncated recap was the norm of many composers, including Martinu, Ravel, Honegger, and Milhaud (2024).[17]

[17] Blatter uses Op. 47 as evidence.

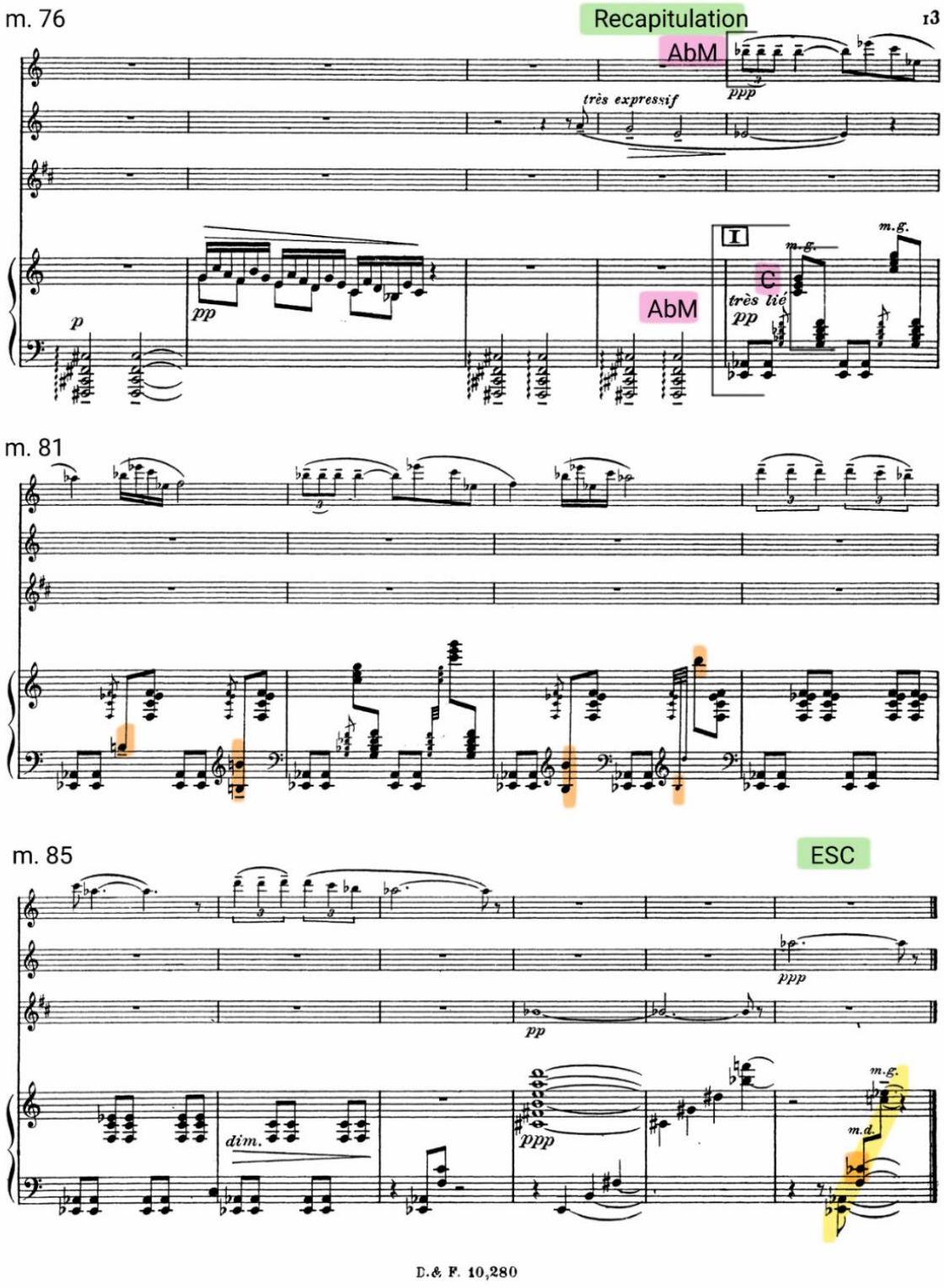

Figure 20: Op. 47-I, mm. 76–90.

The presence of P^1 in A♭ in the flute agent closes the first narrative point. The devil's advocate, the C-major flute, has been successfully convinced of the A♭-major tonic, without any allusions to C major. Coming out of the false recap, it is the flute agent that successfully brings the social interplay back on track and starts the true recapitulation. The flute agent is now unabashedly in A♭-major, playing P^1 even higher than the agents in the exposition. Narratively and expressively, it's as if the flute believes in P^1 in A♭ major even more now than it did before.

However, it is the piano agent that plays the biggest role in wrapping up the narrative by reconciling the C-major and A♭-major strands. While the exposition started with C major as a counterpoint to A♭ major, C-major was successfully integrated into A♭ major over the course of the recapitulation. Starting with the two strands separate and using $G^{ø7}$ as a bridge to connect the two, until A♭add6/E♭ encapsulated both, see Figure 21 for the map of tonal strands progressing through the end of Op. 47-I. The added sixth (F) serves to reconcile the opening ambiguities of A♭ major and F minor. In such a sense, A♭add6/E♭ combines all the significant key centers that have been played out. It fully considers C and F as additions to the A♭-major key center.

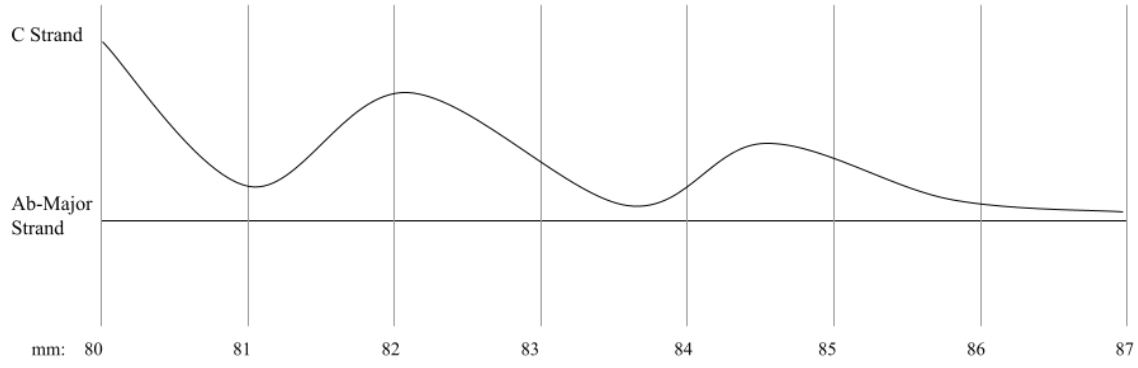

Figure 21: Op.47-I, map of C strand's assimilation into A♭ strand.

This type of resolution, where these alternate key centers are integrated rather than overcome, may explain why the rest of the exposition was not recapitulated. In a conventional recapitulation, the secondary theme is replayed in the tonic key center rather than dominant. In traditional narratives of sonata form, this "fixes" the key center and brings tonal closure to the whole sonata, with the moment of Essential Expositional Closure (ESC). However, this sonata does not need to "fix" the secondary key center because it has *integrated* it into the A♭-major tonic. C major has converged into A♭ major, there is no narrative purpose to try and "fix" the tonal center of the secondary theme. Therefore, the ESC is the final chord of the movement, where the tonal centers of A♭, C, and F have fully reconciled and reached narrative and harmonic closure on an A♭add6/E♭ chord.

The large quartal/quintal harmony alludes back to the end of the transition, where quartal harmony was used the first time as part of the MC. But without requiring a recap of the secondary theme, the sonata can move on to its tonal resolution to A♭add6. The final chord, m. 90, does contain a nonharmonic chord tone, C♭. Enharmonically reinterpreting C♭ as B♮ likens back to the presence of B♮ in mm. 81 and 83. C♭ helps to tonicize C, reaffirming the presence of the C major tonal center even as it has been assimilated.

Conclusion

To summarize, through the framework of agency and polytonal closure, and interpreted through the lens of disablist studies, a nuanced narrative reading of Milhaud's Op. 47-I takes shape. The key center of A♭-major is introduced as the initial tonic and maintains a level of agency representing conventional sonata form. The flute introduces a second competing tonal center, C-

major, as a viable option for tonic. Modes of polytonal closure reveal the flute/C-major agent to be acting more like a devil's advocate, rather than an antagonist. In the secondary theme, the piano agent meticulously scrutinizes and interrogates the key of C major against the internal norms of superimposition (E), and external norms of conventional sonata form (E♭-minor). Proving that A♭ major and C major are both viable key centers, the narrative agents devolve into hectic debate. A false recapitulation in a key outside of A♭-major and C-major sidetracks the conversation, but the flute agent enters to reorient. Soaring above the texture in a triumphant A-major melody, the C-major agent still permeates under the texture, affixing itself to A♭-major. Finally, the sonata form concludes with the key centers of A♭-major and C converged together to cadence.

In a twentieth-century sonata, a narrative focused on the best key center–of said sonata–is the exact kind of ironic metanarrative that Straus and Blättler are referring to (1990; 2024). It is a story based around the construction of the very sonata we're listening to. The virtual agency of the instruments, and the tonal center masks they don and doff, construct the narrative through a working personification of sound and instrument (Monahan 2013; Hatter 2018; Kloman 2016). Rather than reading C major as the proverbial thorn in the side of A♭ major to be fixed in the end, C is instead assimilated and attached to A♭ major. Through it all, polytonal closure is a guide through the process just as conventional harmonic closure would be. Polytonal closure indicates the agential identity within the narrative. It works plainly within the formal functions of sonata form as a one-to-one replacement of conventional harmonic closure. And it concludes the sonata in such a way as to allow us to conceive of the final chords as assimilated tonal strands rather than polytonality therapeutically overcome.

Chapter 4: Case Study: Simple Forms

Introduction

This chapter will showcase polytonal closure as an effective framework for analyzing music that is not so definitively closure oriented, as sonata form is. I will use two main case studies from Howard Swanson, *Noret* and *Fantasy for Soprano Saxophone and String Orchestra* (*Fantasy* from here on out) in this endeavor. *Noret,* as a case study, will be used less for its application of closure and primarily as a point of entry for understanding Swanson's unique musical idiom. Once principles for interpreting Swanson's music have been established, I will analyze *Fantasy* for its utilization of polytonal closure in developing the overall form.

Howard Swanson had an idiosyncratic harmonic/contrapuntal language that shows no obvious influences from earlier composers, and that has been largely unexplored by scholars. It was said of him that despite his teachers and formal education, Swanson forged his own way of writing music. His friend and colleague Hale Smith wrote:

> There are two pitfalls in [analyzing] Howard's writing that must be avoided: (1) the even eighth-note writing that pervades the writing, and (2) the presumption that his music should be viewed from the perspective of his study with Boulanger and the influence of French neo-classicism. Although his music is very highly stylized, there are two roots of his music. One is the old, southern, camp-meeting tent service, with its hand-clapping, and the other is the blues. His studies with Elwell and Boulanger gave him a certain polish, but most performances of Howard's works focus on the polish and not the stone underneath (Smith 1988).

Uncovering the inner workings of his harmonic style, or the "stone" as Smith puts it, therefore requires looking at the scores themselves to determine the idiosyncratic logic behind his ambiguous tonal centers. This is no small feat, and a full exploration of Swanson's compositional language would be a thesis of its own. My goal in what follows is to develop a working understanding of his language, not a comprehensive theory of his music. To do so, I rely largely

on primary sources from Swanson, i.e., the manuscripts that he marked extensively with his own conceptions and interpretations, including key centers. My research into Howard Swanson's idiom is built upon—and expanded out of—research into Swanson by Marsha Reisser (1981; 1989) and research into African-American structural polytonality by Lee Cronbach (1981).

In examining Swanson's music, it is clear that he approaches polytonality very differently than Milhaud. As explored in Chapter 3, Milhaud approaches polytonality from the direction of monotonality, as something that grows out of diatonicism—but acknowledging that enough polytonality approaches atonality. Swanson approaches polytonality from the atonal side, as something found within atonality. In other words, Milhaud's music is monotonal until it grows into polytonality, and Swanson's music is near atonal before it reveals an under layer of polytonality. Both use extensive polytonality, but they are approaches from two different tonal origins.

Noret, for its use as a case study, is the most comprehensive manuscript in my possession that showcases Howard Swanson's harmonic language, counterpoint, and superimposition, so it will serve as the clearest guide for understanding Swanson's work. With the ultimate goal of authentically analyzing his works for their application of polytonal closure, I first must decode and uncover Swanson's unique compositional idioms in *Noret*. In other words, *Noret* will be my pseudo-Rosetta Stone for understanding Swanson. In an effort to develop a working understanding of *Noret*—and subsequently Swanson's greater catalogue—I will venture down occasional tangents into Swanson's other manuscripts, *Short Compositions* and *Nocturnes.* I will use these additional scores to form a more complete analysis of *Noret* and craft a thorough working list of analytical principles to carry onto my analysis of *Fantasy.*

After establishing a foundational understanding of Swanson's music, I will dive into Swanson's *Fantasy* and explore his techniques of closure from large to small, starting with the *global closure* of major sections and moving to the *intermediate closure* of smaller composite subsections. Examining these two levels of closure allows me to make a roadmap for understanding this piece and, more broadly, to show that closure—even in a polytonal piece, and perhaps *especially* in a polytonal piece—can demarcate and divide formal sections and inform listening and understanding.

Noret as Rosetta Stone

Noret is a solo piece for piano in three staves. Within the score, Swanson included his own annotations indicating key centers, as depicted in Figure 22. To develop an understanding of Swanson's language, I will analyze this score with the goal of justifying Swanson's own key labels. Rather than a more normative analytical approach—that of looking at a score without labels and determining what keys are projected—I take the reverse process. I know the end result, what key centers are supposed to be projected, it is my task to figure out how Swanson got there. The aim is to create a set of working principles that I can apply when analyzing other works by Swanson.

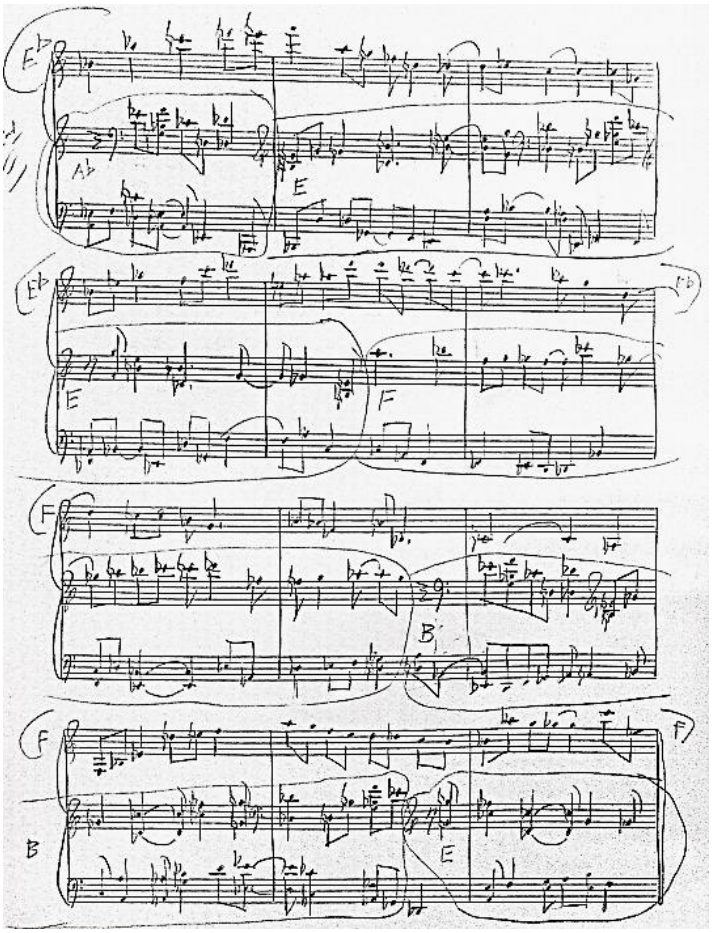

Figure 22: Swanson's *Noret* (Undated).

This approach revealed a few principles of Swanson's compositional practice. The first and broadest is that *major and minor are almost interchangeable to Swanson*. In the labeled manuscripts, Swanson interprets a few dozen of his key centers, yet he never makes a distinction between minor and major.[18] Furthermore, looking at the melody line of *Noret* shows that tones are being pulled from both major and minor consistently; modal mixture, in other words, is pervasive. This would also be an accurate description of the previous Swanson analysis in Chapter 2, where both *Dirge* and *Pantomime* used extensive modal mixture. The tones in red could then be explained as embellishing tones, which I have also labeled. It would seem then that

[18] I have seven annotated manuscripts in my possession, each with multiple key center annotations.

melody centralizes tonal center through modal means. However, when looking at the harmony supporting it, a different story is told.

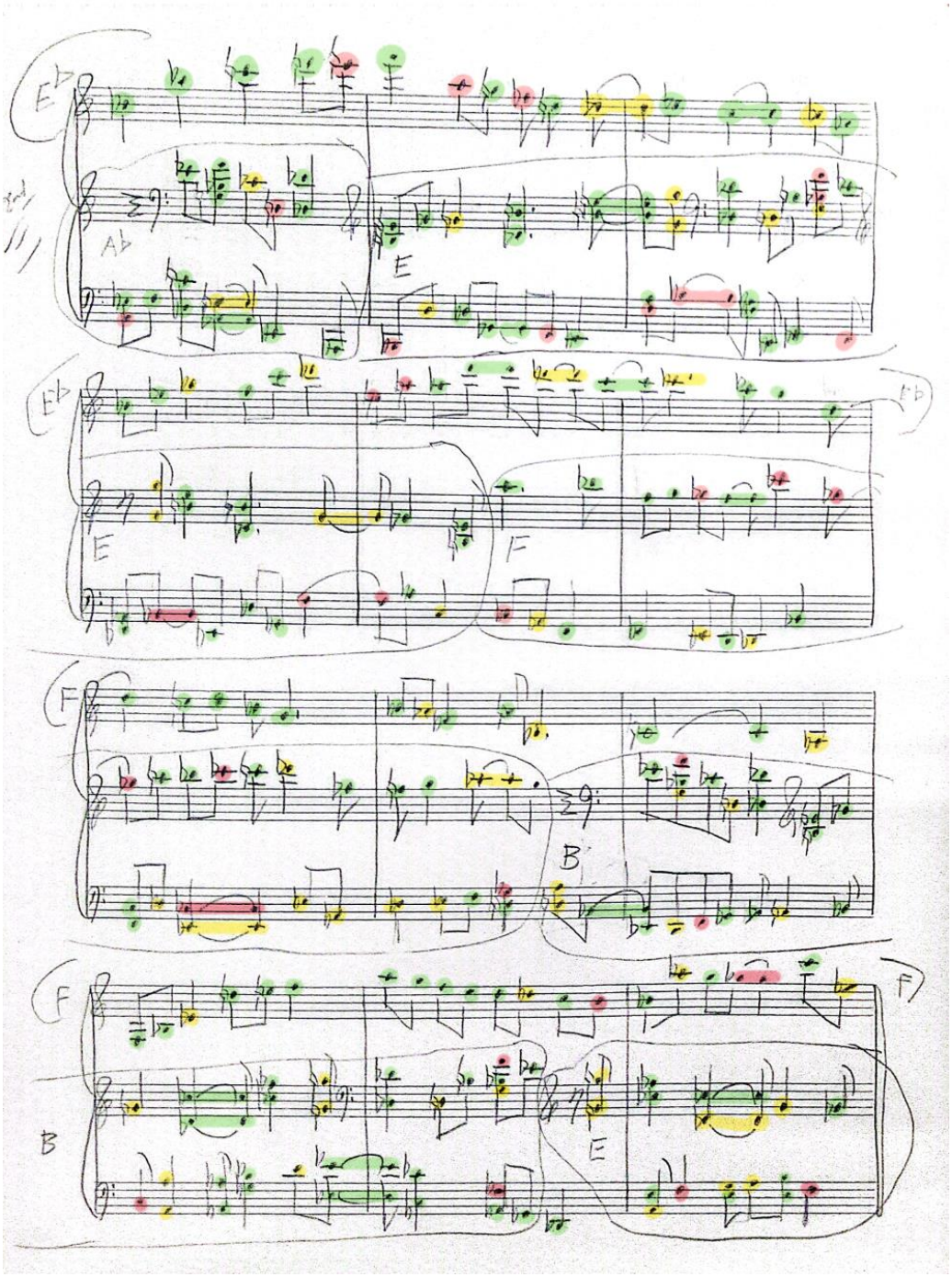

Figure 23: Diatonic analysis of *Noret*, where green indicates notes from the marked major key, yellow indicates notes from the parallel minor ($\flat\hat{3}, \flat\hat{6}, \flat\hat{7}$), and red indicates non-diatonic pitches.

To best understand the harmonic/contrapuntal language in *Noret*, it is beneficial to detour into Swanson's use and application of palindromic writing. Swanson uses palindromes extensively in many of his compositions, including *Noret*. While *Fantasy* doesn't make use of palindromes, as far as I have found, looking at the multitude of ways that Swanson interpreted his palindromes provides insight into how he is conceptualizing key center from a harmonic/contrapuntal standpoint, rather than just a melodic one. For the greater purposes of understanding Swanson's idiom, his palindromic writing functions as a sort of constant against which I can examine his harmony and counterpoint. Keeping with the Rosetta Stone analogy, Swanson's palindromes in *Noret* are the Greek script to be used to understand the Egyptian hieroglyphics in *Fantasy*. In instances where Swanson uses a palindrome multiple times, but interprets it as separate tonal centers, I can examine more specifics as to how he makes the distinction between tonal centers. So, while palindromes may not be relevant to the eventual analysis of *Fantasy,* they can provide the clearest insight into how Swansons uses his personal contrapuntal and harmonic style to develop and express key centers.

Take, for instance, the first segment designated "E" in mm. 2–5 of *Noret*, given in Figure 23. The RH accompaniment plays a palindrome starting on the downbeat of m. 3 with a B/E dyad, reaches a midpoint on beats 3–4 in m. 4, and concludes in beat 2 of m. 5. This same palindrome occurs again through mm. 9 (b. 4) through 13 (b. 1). However, in this second statement, the segment is designated as "B," but moves back to "E" by the end. *How could the same palindromic line—at the same transposition—be interpreted in two separate keys? Perhaps even more perplexing, how could the same statement of said palindrome be in a different key in the back half?* To answer these questions concerning Swanson's palindromes, I will dig deeper

into my tangent and examine a more explicit source that uses palindromes exclusively: *Short Compositions* (undated, unpublished).

Short Compositions are all palindromes with labeled key centers, the first page of which is depicted in Figure 24 annotated with the same color coding of diatonicism. Each composition uses the same constant palindrome in one of the hands at different transpositions (marked with stars), allowing me to analyze the external factors contributing to Swanson's interpreted tonal centers. Each palindrome is seven measures long and takes up two lines of staff (with the fourth measure being split in half to each staff). The palindrome alternates RH and LH throughout, with seemingly unprepared transpositions. Looking at the instances when the palindrome is used at the same transposition level, but with a different tonal designation by Swanson, allows me to identify how these palindromes make use of a modular tonality and can be interpreted in different tonal centers.

The first statement of the palindrome occurs in the RH part and is designated "E." The very next statement of the palindrome occurs in the LH at the same transposition, but this time designated "B." Serendipitously, this is similar to the *Noret* palindrome, which also happens to get analyzed as "E" and "B" when at the same transposition. The palindrome in *Short Compositions* is recreated below in Figure 25. Considering that the palindrome is constant, it must be the interaction between it and the other lines that leads to a modularly defined tonal center. Put simply, because the palindrome is not changing or moving, the designated key centers must be more informed by the other strands of music and their interaction with the palindrome, rather than by the palindrome itself.

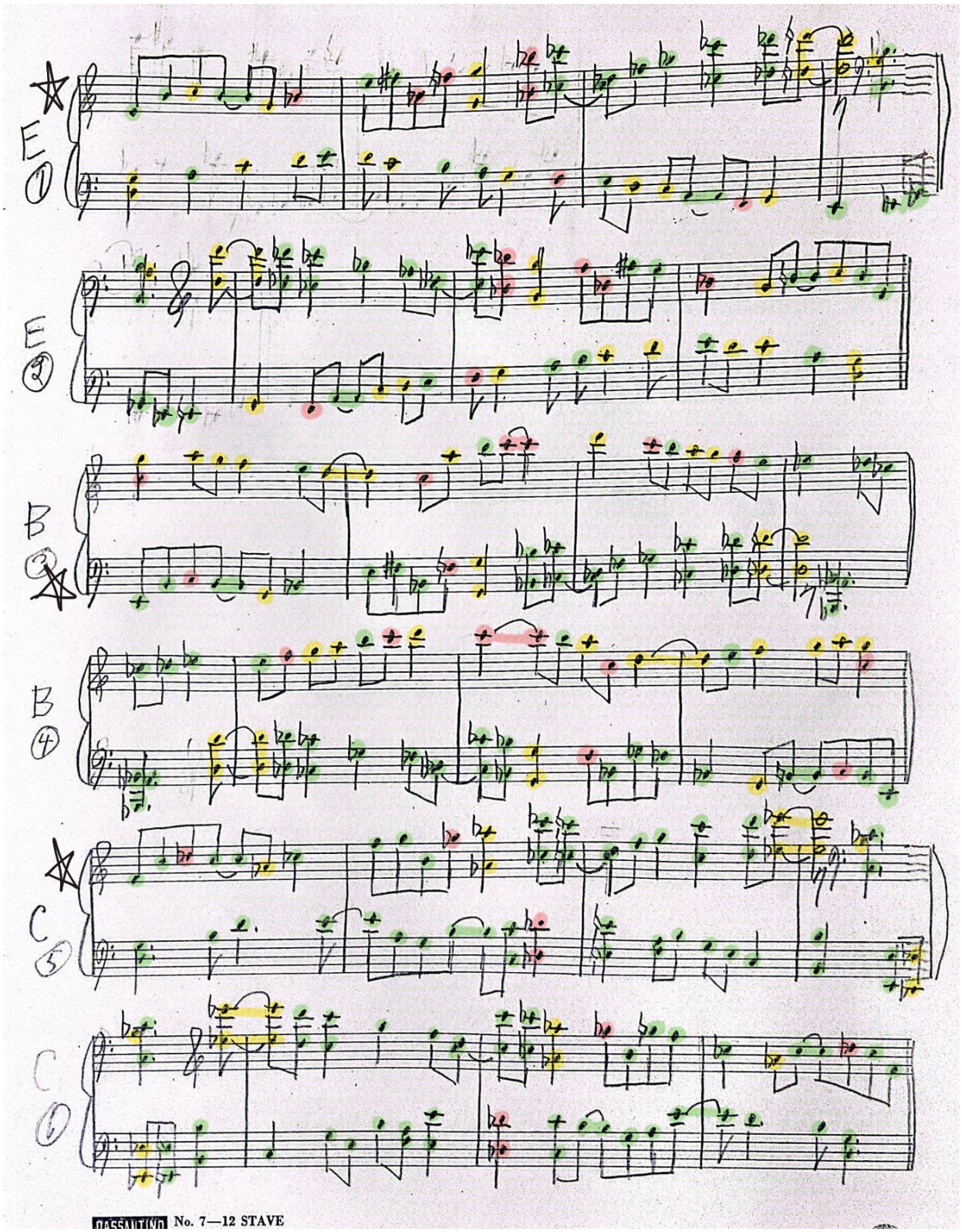

Figure 24: Swanson's *Short Compositions*, pg. 1.

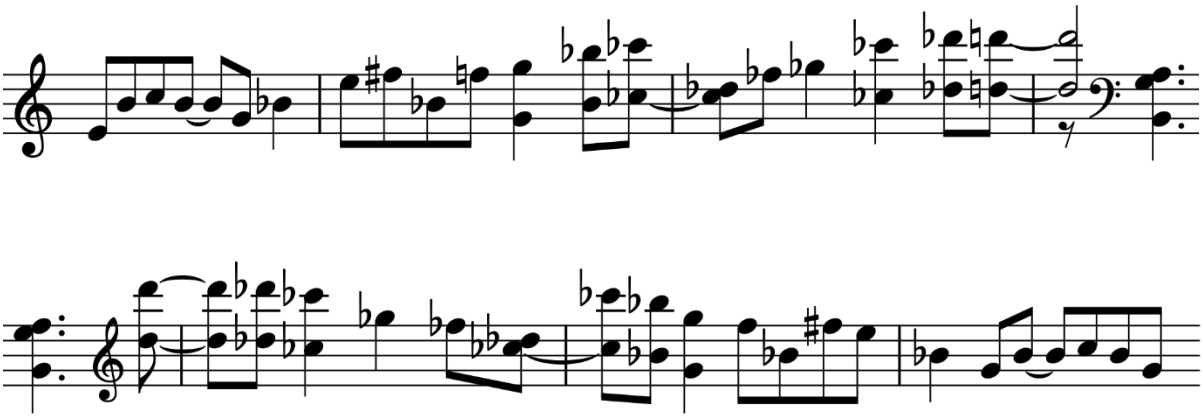

Figure 25: *Short Composition*'s palindrome in E & B.

E and B are closely related keys, and the palindrome sits in-between the two. The color-coded Figure 4c shows plenty of diatonic foundations in both, but with a slightly stronger relation to B. In other words, the palindrome at this transposition level has more green and yellow when analyzed in B, compared to how much green and yellow is found in the E focused analysis. Regarding the counterpoint against the palindrome, the "E" part in the LH can be well founded in E minor, with centralization of tones around E and a few chromatic embellishments ($\flat\hat{2}$ being the most pervasive). By contrast, the RH part over the palindrome in "B" isn't as strongly in B and does not centralize B melodically or gesturally. This implies to me that as long as one contrapuntal line can firmly and foundationally be understood in a key, even with modal mixture and embellishment, then other stratified part can wonder more ambiguously away from that center. In the case of these first two statements, the first bass line has a strong attachment to E, so the palindrome constant can be a bit further away from E. Vice versa, in the second statement when the constant palindrome has a strong connection to B, the RH melody can be more distant from B. Notably, in both cases of the above statements, it is the bass voice which had a stronger connection to the annotated tonal center. This trend is congruent with Kaminsky's

voice leading principle of priority, discussed in Chapters 1 and 2, that the lower register tends to claim more priority.

Now with a better understanding of Swanson's palindromic writing, and harmonic/contrapuntal language in a controlled environment, let us return to *Noret* and apply what we learned. The palindrome Swanson uses in *Noret* is more firmly rooted in E than it is in B. The palindrome outlines E-minor triads before it reaches its midpoint; see Figure 26 where I have circled the E minor triads present in blue. The midpoint moves briefly away from E, outlining an E♭-major triad, but then of course the back half of the palindrome (not pictured) outlines the E-minor triads again.[19] Keeping in mind what was learned from *Short Compositions,* because this palindromic line is well grounded in E, the other line–the bass line–can be more distant and ambiguous, which indeed it is. Following the same logic from *Short Compositions*, when this same palindrome is used again in the B segment (which is not as strongly in B), the bass line should imply B more strongly, which it does. In Swanson's tonal labeling, there seems to always be at least one stratified line that strongly implies his designation.

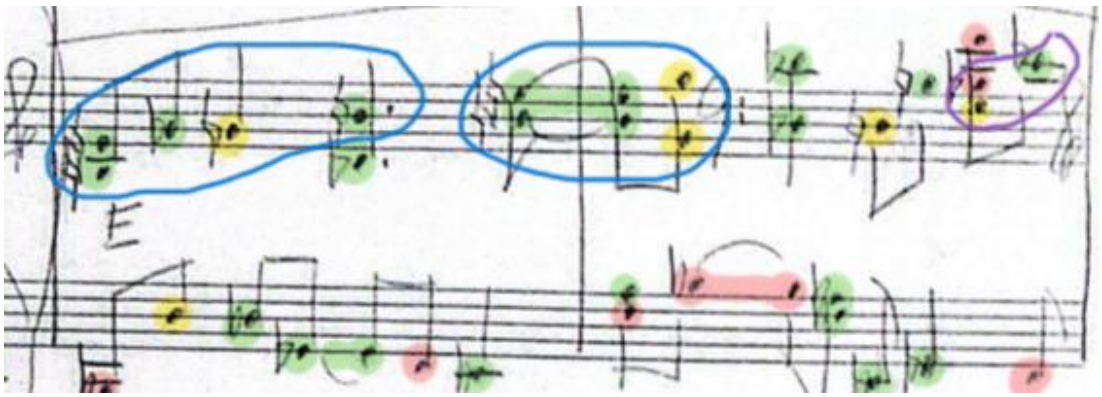

Figure 26: *Noret* palindrome.

[19] I should note that the back half statement of this palindrome has a slight rhythmic alteration, but pitches, register, and contour are preserved.

The final proof of concept to solidify a principle of harmony and counterpoint comes by analyzing how the palindromic segment can switch between being analyzed in B at the onset of its statement, and E in the back half; referring now to mm. 9–12 of Figure 23, where the palindrome is again found in the RH accompaniment. When the bass line stops implying B as implicitly, m. 12, the segment shifts back to E. The bassline becomes more ambiguous, so tonal focus (priority) is drawn to the palindrome, which is firmly rooted in E. This confirms that the tonal center in Swanson's music is highly dependent on contextual information, but that there does exist an anchor that implies a general tonal center. That anchor is often found, as expected, in the bass, but that is not the only factor to consider when determining what works as a tonal anchor. Depending on how loosely constructed that anchor is, the parts around it can pull it away from the center. A firmly rooted anchor allows the other parts to play out more ambiguously.

The analyses for *Noret* and *Short Compositions* allow us to start to build a list of harmonic/contrapuntal principles that can guide an analysis of Swanson's writing, which can and will be used in an analysis of the *Fantasy*. Before I move on to *Fantasy,* there is another aspect of *Noret* to be explored: the polytonal stratification used within the piece. Prior to this second leg of analysis of *Noret,* it is helpful to compile a list of what has been learned so far in explicit terms, as these principles apply to the individual strands of his polytonality as well. In approaching analysis of Swanson's music, the principles to keep in mind are:

- Accept full enharmonic equivalence.
- There is very little distinction between minor and major, and almost every tonal strand uses extensive modal mixture.
- There seems to be some sort of tonal anchor in his parts; at least one voice will be mostly anchored in a tonal center so that another voice can be more distant or ambiguous.
- The anchor is often in the bass voice, but that is not a requirement.

The above principles don't necessarily relate to Swanson's application of polytonality specifically, because they're only referring to one key at a time (though they do relate to individual key strands in isolation). To create a complete picture of Swanson's idiosyncrasies, and finish my Rosetta Stone, I'll need to turn my attention towards Swanson's application of superimposition in *Noret* and the interaction between key centers. In doing so, I will add a few more principles to my list:

- Superimposition and discant tonal strands are often established in conjunction with stratified parts, but not always.
- The embellishing tones of distinct tonal strands/strata are often borrowed tones from other strands/strata present in the texture.

Perhaps, as a starting point, it may be best to describe how Swanson's utilization of polytonality is distinct from Milhaud's. In previous examples of Milhaud's superimposition, disparate tonal strands are typically stratified (separately established) through timbral means, such as in *Le Beouf,* where the C-major tonal strand is present in the high brass (French horn and trumpet) timbrally distinguishing it from the other instruments and tonal strands. Counterpoint does play an important role in establishing tonal centers and keeping strands from assimilating each other, as Kaminsky points out, but timbre is doing a lot of work in this aspect as well (2004). However, for a piece like *Noret,* which uses superimposition in a single instrument and a homogenous timbre, counterpoint and register are the only processes to stratify distant tonal strands (Reisser 1982; Cronbach 1981). To properly understand Swanson's use of superimposition and polytonality, I'll have to look at not just how individual tonal strands are established, but how they're stratified through counterpoint.

In analyzing the tonal strands of *Noret*, I used a similar labeling method to the diatonic labeling method used above. In Figure 27 below, I have annotated the designated tonal strands

with color coordination. Notes labeled with dark blue hues belong to the melody line's tonal strand, where the lighter cyan indicates a modal adherence. Notes labeled in red hues indicate adherence to the RH accompaniments tonal strand, where the lighter pink indicates a modal adherence. Common tones between the two tonal centers are labeled green.

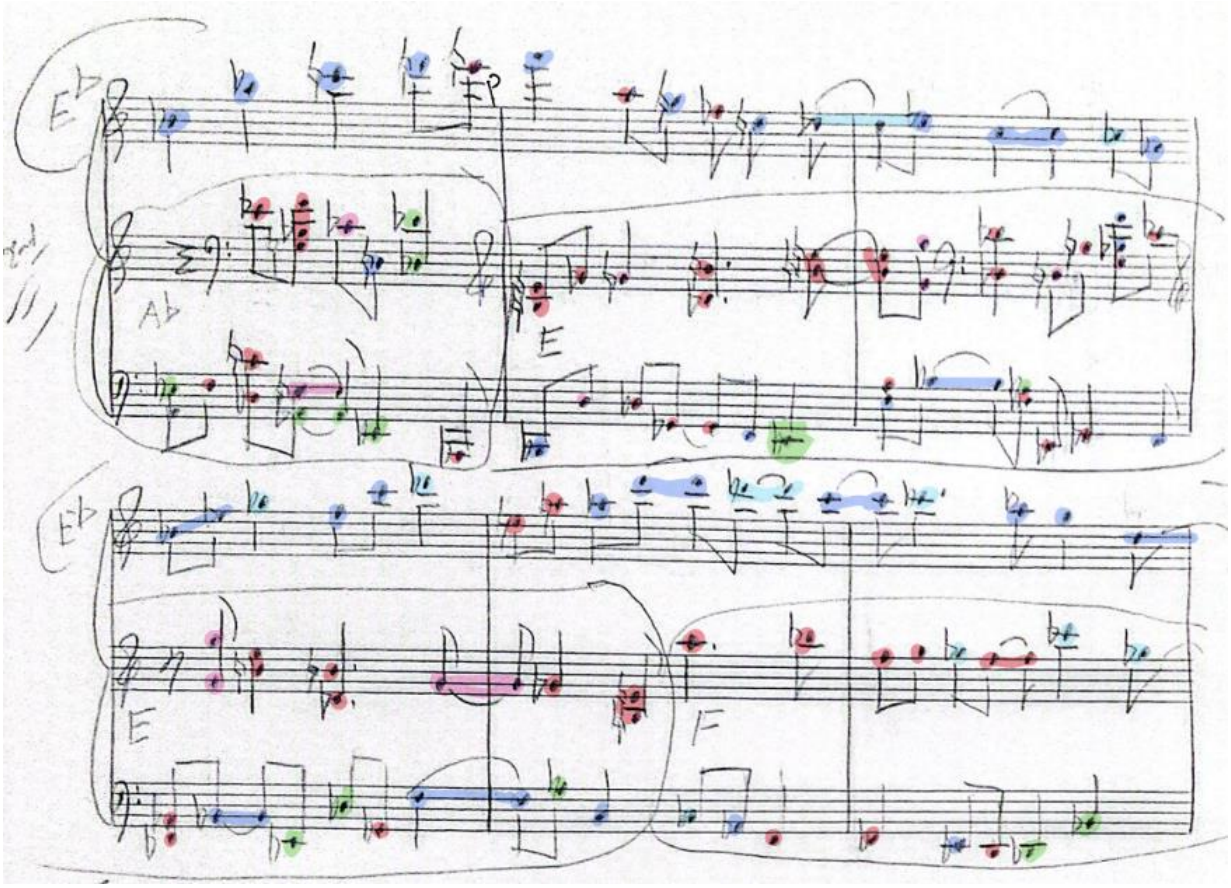

Figure 27: *Noret* mm. 1–3, tonal strands annotated.

Observations from just this labeling start to establish the principles of Swanson's polytonality. The separate tonal strands establish themselves in different stratums. The melody line is contrapuntally established as its own stratum and is given its own tonal center. The other stratum, in the RH staff, is both contrapuntally and tonally separated. This speaks towards the first polytonal principle, that discant tonal strands are established in conjunction with stratified

parts. We will see that this is not always the case with Swanson's music, as in the LH part to be addressed soon, but such a broad principle works as a starting point. Also, immediately noticeable in the color gradient annotation is that the "nonharmonic" tones labeled as red in Figure 23 are more often belonging to the other tonal strand present. For example, the nonharmonic tones labeled in just the first line follow this principle: the E in m. 1 is enharmonically $\flat\hat{6}$ in A♭, and the A and F♭ in m. 2 are scale degrees $\hat{4}$ and $\hat{1}$ in the E strand, respectively.

The use of embellishing tones that cross strands and strata start to blend and muddy tonal centers. Where this is most apparent is in the LH part, where there is almost equal presence of blue and red. In this LH accompaniment, two tonal strands are present, but they aren't stratified. To describe this authentically in *Noret,* and Swanson's idiom, I will make another brief detour to Swanson's *Nocturne 1* to examine how he writes superimposition sans stratification.

Nocturne 1 (1967) is a piece written for solo piano that contains superimposition without stratification. *Nocturne 1* has instances where two tonal strands are present, but they are fully intertwined and braided together, rather than contrapuntally or timbrally separated. Take mm. 36 and 37, for example, Figure 28; these measures have two strands present, but they are not separated LH and RH like the previous examples were.

The annotations on Figure 28 follow the labeling scheme as *Noret*: a strand in red and the other in blue. An easier way to show this would be to forcibly stratify the strands and examine them separately. I have done so in Figure 29, where both lines have been separated into two separate staves (I changed some rhythms to fill blank space in each stratum). When stratified, it becomes clearer how tonal strands are functioning individually. I analyze the C strand harmonically to highlight the individual function of the strand. The second strand, labeled mostly

in G♭-major, may also be two unstratified strands, A♭ and G♭. This possibility is highlighted at the end of the phrase which closes with various A♭/G♭ dyads. In Swanson's original composition, these individually functioning lines get intertwined and disguised. This is an important facet of his writing to be cognizant of. While his music typically keeps its strands within individualized stratums, it does not always do this. When analyzing *Fantasy,* my first assumption should be that strands have some level of stratification, either timbral our contrapuntal, but this may not always be the case. While *Nocturne 1* is not being used to analyze polytonal closure, this does happen to be an example of polyclosure.

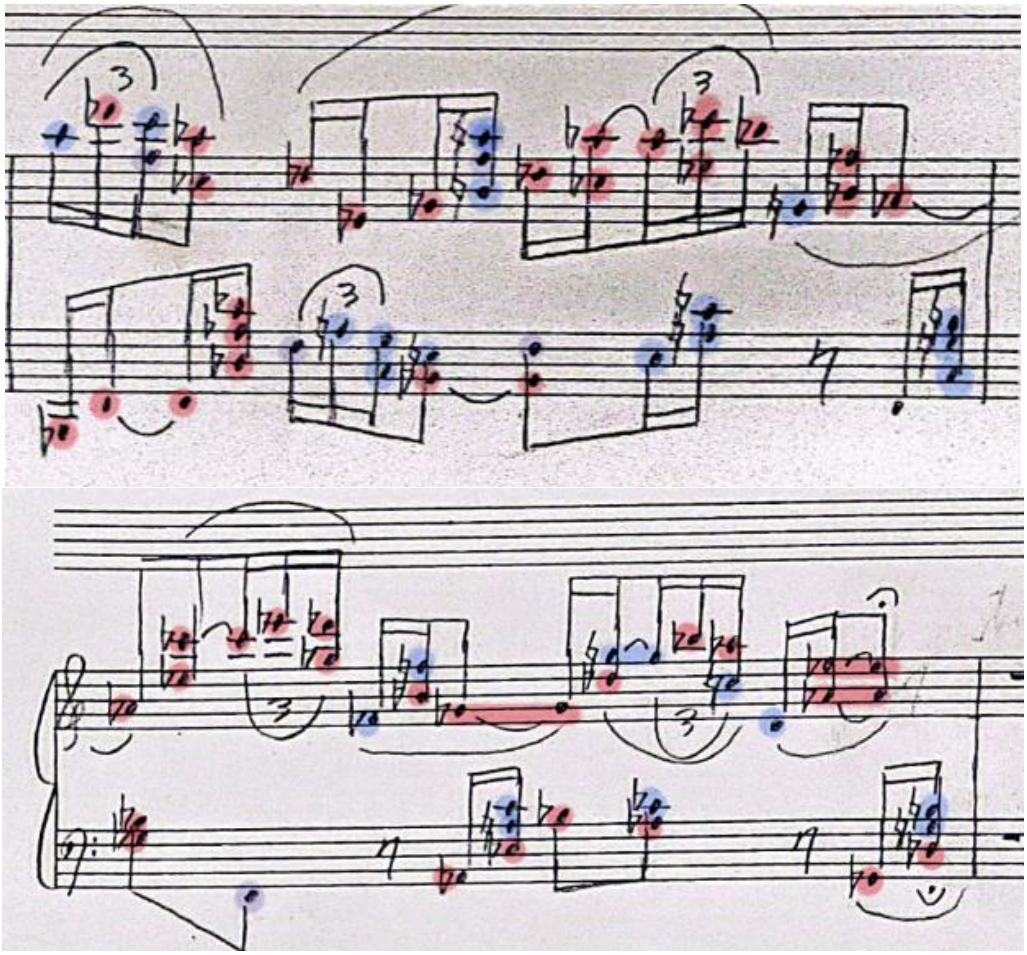

Figure 28: *Nocturne 1,* unstratified strands.

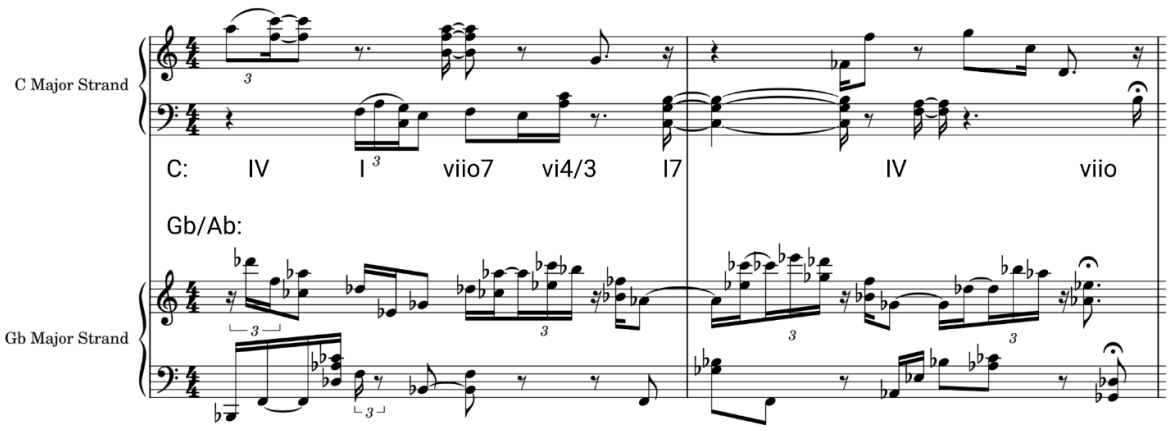

Figure 29: *Nocturne 1*, stratified.

With this in mind, I will return to *Noret* to finish the case study by analyzing the bass staff. The intertwining of tonal strands is most present in the LH accompaniment, as shown by the equal presence of red and blue in Figure 27. Following a similar process as my analysis of *Nocturne*, I can force these lines into stratification and recompose them as two separate bass lines working in different tonal strands. When these are combined with the melodic/palindromic segments in the melody line and RH, two tonal strands fully complete with basslines become clear, see Figure 30.

Noret as a composition showcases many of the things most important to Swanson's idiom. As a case study, it unveils the mysterious shroud over Swanson's ambiguous key centers and unique approach to polytonality and superimposition. As a Rosetta Stone it provides the necessary information to guide my analysis of *Fantasy.* As I analyze *Fantasy*, I will keep all of these compositional principles at the forefront of my approach, and turn my attention towards how closure manifests in Swanson's music through the disparate veil of his idiom.

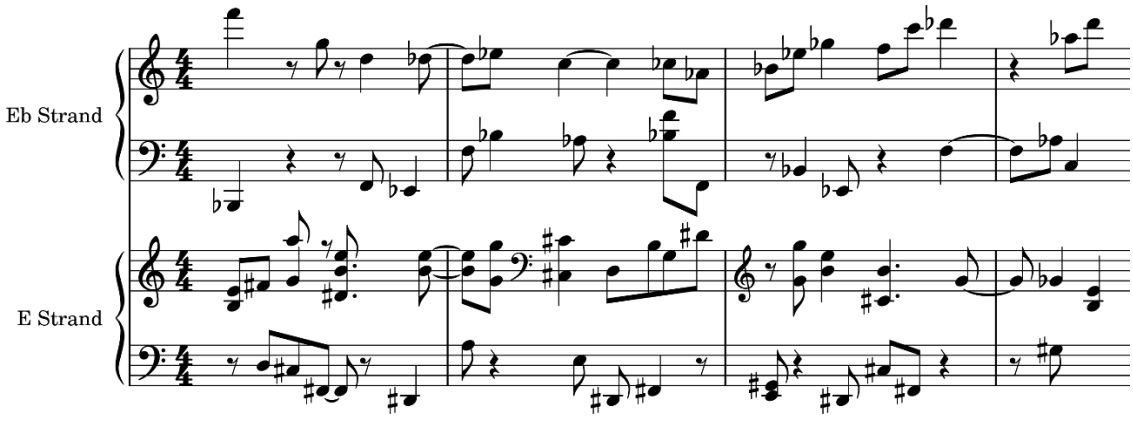

Figure 30: *Noret*, stratified.

Closure in *Fantasy for Soprano Saxophone and String Orchestra*

Howard Swanson's *Fantasy for Soprano Saxophone and String Orchestra* is a single–movement piece that relies on closure to frame its form. As the piece makes extensive use of polytonality and superimposition, the polytonal closure within serves as a guide to the overall roadmap of the composition. In this case study, I will lay out the overall roadmap and sections of Swanson's *Fantasy*, and then I will examine each section more closely, analyzing closure in two levels: *global closure* and *intermediate closure*. By doing so, I will show how closure in a polytonal setting is used to progress a simple form. This piece isn't as narratively or agentially driven; therefore, this analysis doesn't necessarily make broader claims about the "story" being told and how polytonal closure is used rhetorically (for such an approach, see Chapter 3 for an analysis of Milhaud's Op. 47-I). Instead, polytonal closure in my analysis of Swanson's *Fantasy* is acting as signposts, indicative of larger formal delineation. Polytonal closure at the global and intermediate levels marks the beginnings and endings of sections, both large and small. With an understanding of how polytonal closure produces both strong and weak closure, the greater form of Swanson's *Fantasy* is evident.

This piece contained significant challenges for analysis. First, and foremost, is that it isn't immediately clear whether the soprano saxophone part is transposed or not. For the sake of this analysis, the assumption is that the soprano part is transposed and therefore sounds a major second lower than written. I have chosen to analyze it this way for two reasons: (1) Swanson didn't write individual parts for many of his scores, and I was unable to locate individual parts for this piece at the Amistad Research Center,[20] so musicians were to presumably read out of the score; (2) analyzing the soprano part as transposed aligns better with the Rosetta Stone created in the first part of this chapter. Both a transposed and concert pitched reading of the soprano sax part contain significant polytonality and superimposition, but as a transposed part, the internal logic is more idiomatically aligned with Swanson's idiosyncratic tendencies.

As a single movement work, *Fantasy* does not clearly mark where major section changes occur. Instead, the only indication of where different subsections may be are in textural and tempo changes, and of course melodic/motivic recurrence. My challenge, then, was to take the many uniquely textural/temporal/motivic subsections and organize them into a larger structural understanding of this nearly 350-measure piece. By examining the closural strength of the many polytonal closes—occurring at subsectional changes—it becomes much easier to organize this piece into larger sections/movements.

Fantasy is a large ternary form, consisting of three independent sections, A, B, and C. Each section contains two to four smaller sections. A formal diagram is recreated below in Figure 31 with the tempo markings indicated at each section. I will analyze the closure in *Fantasy* at two levels to show this large ternary form: I will first consider the *global* closure of the three

[20] Amistad Research Center is the only archive with the works of Howard Swanson; if they don't have it, no one does.

major sections, then the *intermediate* closure present in the smaller internal sections. I borrow the terms "global closure" and "intermediate closure," from Kofi Agawu who argues that closure occurs in music at three structural levels: that of the phrase (local), that of the section (intermediate), and that of the piece/movement (global) (1989). However, I do take one slight liberty, where Agawu reserves "global closure" for the closure of entire pieces or movements, I use the term to describe the closure of major sections.

In analyzing *Fantasy* in such a way, I am claiming that the major sections within *Fantasy* are akin to movements, played attacca. While Swanson doesn't label the piece as such, it may be best to examine *Fantasy* as if sections A, B, and C are individual movements. Agawu's labeling of closural hierarchy only has three layers (1989). I will show through my analysis of polytonal closure that there are moments of closure within *Fantasy* that have a strength more akin to a global close, and that they shape the formal structure in such a way to be better understood as global closure. The smaller subsections within the larger formal sections/movements would just be individual simple forms of larger movements.

Figure 31: *Fantasy* form diagram.

Section A

Movement 1/Section A of Swanson's *Fantasy* consists of four smaller subsections: *Andante, Moderato*, *Andante*, and *Allegro Moderato.* As a composite form, the subsections create an overall binary form, ABAB′. In general, the whole section is very contrapuntal and makes use of returning motivic material throughout the smaller sections.

Andante introduces a motive in the violin that appears repeatedly over the course of the movement. Depicted in Figure 32 the motive is made up of an ascending half step in 16th notes, followed by an ascending leap of various distances, in mm. 1–2, 3–4, and 6 of the figure below. The saxophone isn't introduced until the final measures of the subsection, which immediately launch into the next subsection.

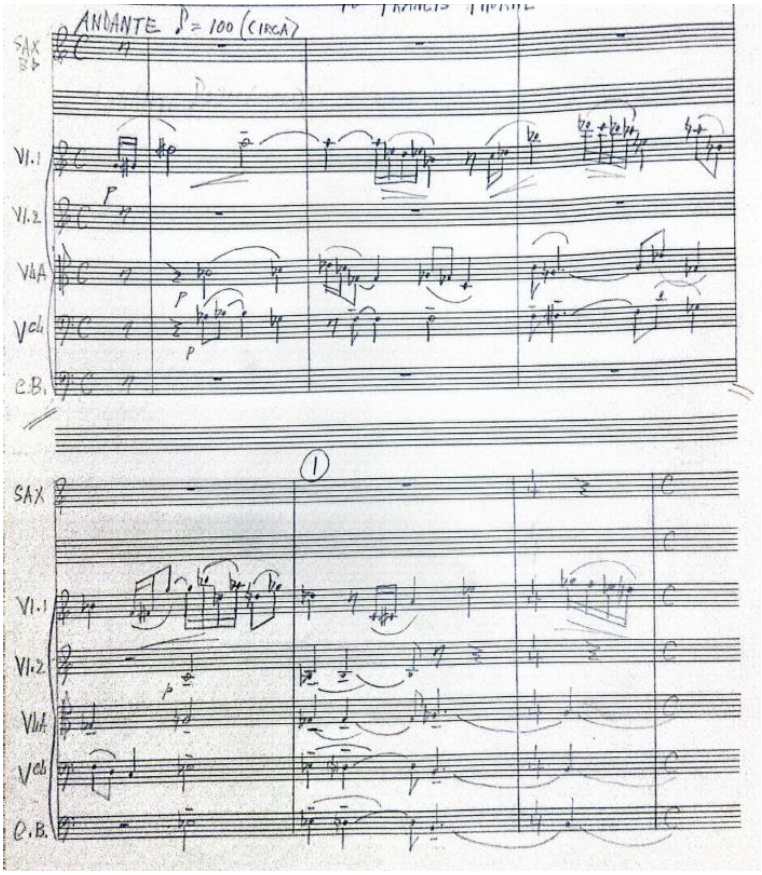

Figure 32: *Fantasy*, opening.

Moderato picks up markedly more chromatic than *Andante*. While *Andante* makes use of a developing motive and imitative counterpoint, *Moderato* takes up a more angular texture and approach to tonality (see Figure 33). *Moderato* contrasts with *Andante* because it is much more active and forward driving. The following *Andante* subsection, the second A as it were, is a repeat of the first, this time with the melody in the saxophone and an expanded transitional phrase tacked on.

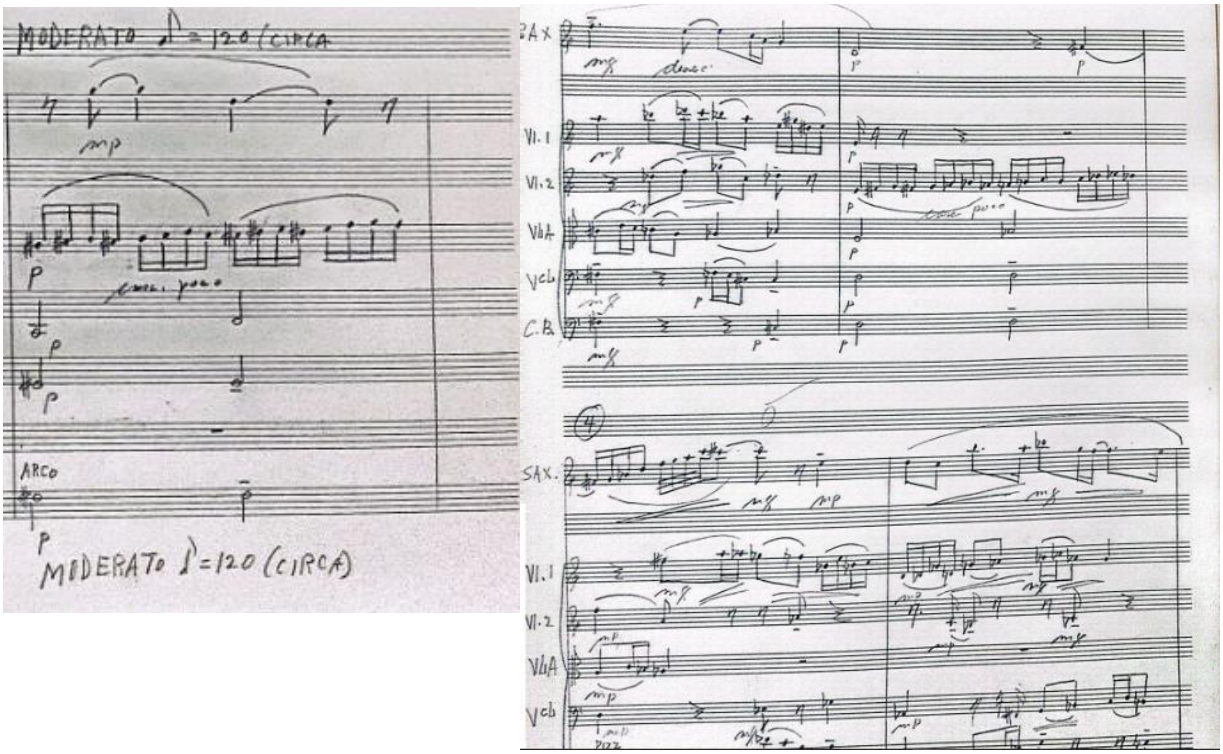

Figure 33: *Fantasy*, A section, *Moderato*.

The final subsection of the A section is *Allegro Moderato,* and I have elected to denote this subsection as B′. This subsection does not necessarily build on the same material as the *Moderato*; instead, it acts in the same way that the *Moderato* was acting. In other words, while the *Allegro Moderato* doesn't use the same B material, even in variation, I would hesitate to call it a C subsection. It serves the same formal function of B (*Moderato*). While the material may be

different from the first B, it is used to the same effect: to contrast with the A section and bring about a rhetorically strong closure. There are some motivic elements–such as the occasional return of the *Andante* motive– that keep it linked to the A section/first movement—but the main point is that it has a similar formal function to the first B.

Global Closure

The final closure of the A section, and subsequently of the *Allegro Moderato,* is a massive moment of converging closure, seeing three tonal strands come together and followed by a partial resolution that launches into highly contrasting new material. To examine the relative rhetorical strength of this closure, what makes it so strong, I will work strand by strand to build out the composite closure. Each tonal strand is stratified rhythmically and melodically between the saxophone/violin 1, violin 2/viola, and cello/bass; see Figure 34. In other words, each pair is in unison/octaves, and each pair has its own rhythm and center that demarcates it from the other. My first assumption in analyzing these stratified parts is that disparate tonal strands will be specific to each stratum, as is informed by my Rosetta Stone.

The saxophone and violin are playing in parallel octaves. With extensive modal mixture and enharmonic equivalence accepted, their melody is best understood in the key of G. This instance of octaves is quite significant, since it is the first time in the piece that the saxophone is in unison with *any* voice. Due to that fact alone, there is rhetorical significance in the joining of the two voices. Together, the violin and saxophone achieve individual closure through melodic means. Their melody adheres well to the major/minor modes of G except for the D♭ in m. 102. However, even that D♭ can be explained by my principles of Swanson's logic, as it belongs to

another tonal strand (more on that later). The final contour of the melodic line can be understood as $\hat{4}$–$\flat\hat{3}$–$\hat{7}$–$\flat\hat{7}$–$\hat{2}$–$\hat{1}$. In proper Swanson fashion, he uses both versions of scale degree $\hat{7}$ available to him, but there is still a directionality leading to G as $\hat{1}$.

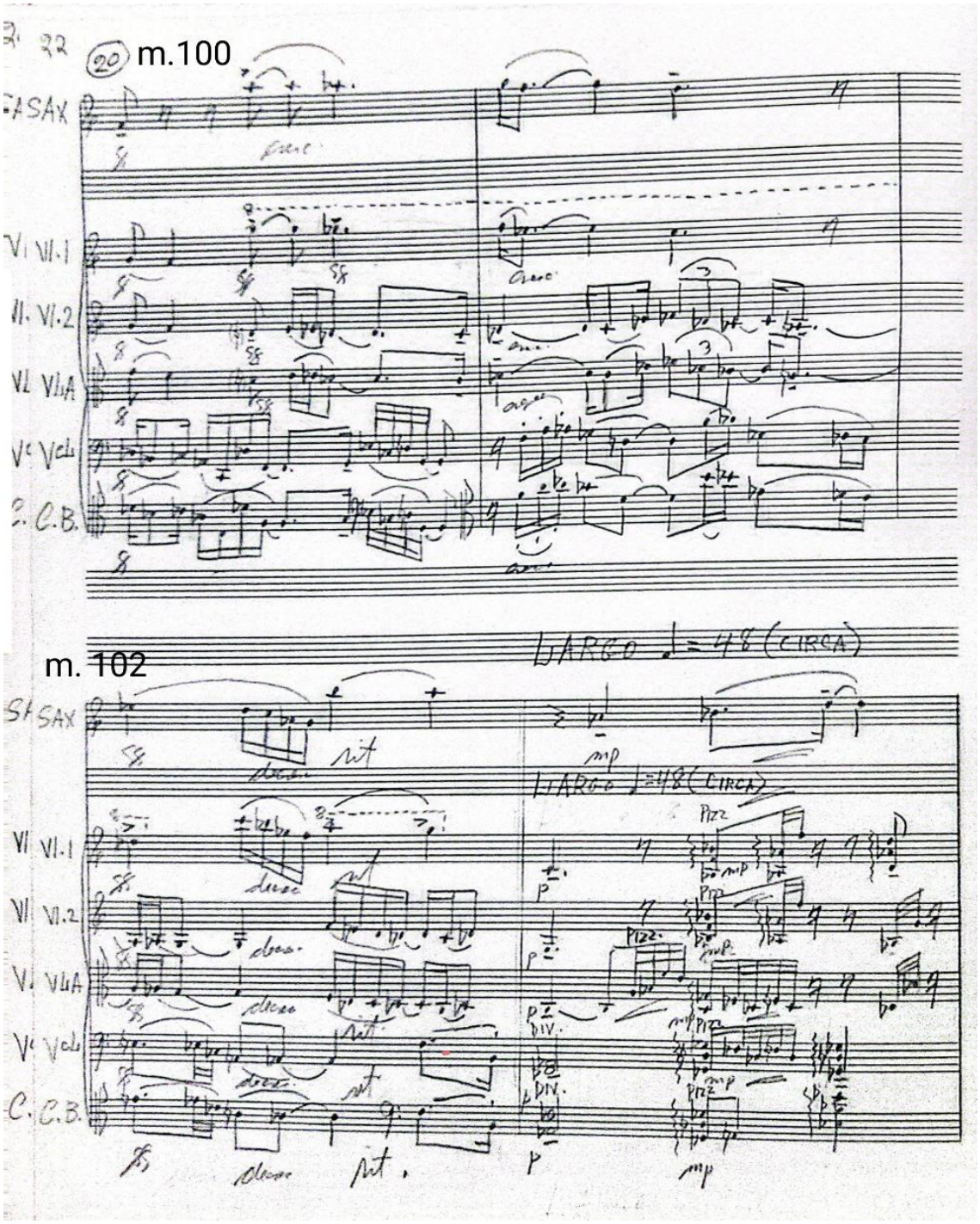

Figure 34: *Fantasy*, Section A, global close.

The next stratum, violin 2 and viola, also features two instruments playing in unison, though their instance of unison is not nearly as significant as the soloist's (saxophone). Their tonal center is best understood as D♭, though there are a few tones that exist outside of D♭ major or D♭ minor. For example, the A on beat 4 of m. 101, and the G on beat 2 of m. 102. However, both pitches out of key can be explained according to one of the above principles on pg. 86: Swanson will often borrow tones from other strata/strands as embellishing tones. In both cases, the A and G are tones prominent in the melody of the violin and saxophone stratum. Similarly, the D♭ found in the saxophone/violin 1 strand is borrowed from the D♭ strand of the violin 2/viola. I think it is no coincidence that these "borrowed" tones from the paired strands occur simultaneously; it's almost as if the tonal strands are crossing for a moment. This violin 2 and viola strand/stratum reaches a similar individualized closure through contour. After spending some time centralizing D♭, there is a clear closing gesture in $\hat{3}$–$\hat{2}$–$\flat\hat{2}$–$\hat{1}$–$\hat{7}$–$\hat{1}$ ($\flat\hat{2}$ in this case may be borrowed, but it may also just be a chromatic passing tone between E♭ and D♭).

The final stratum/strand, cello and bass, is the least tonally grounded. Much like the prior *Noret* example, this bass line can be understood as pulling from tones in both strands present above it. In doing so, it forfeits a singular tonal identity and instead works to inform the tonal identity of the G and D♭ strands. I would seldom say it achieves closure on its own, but its final pitches are B and F, which are both $\hat{3}$ in the keys G and D♭, respectively.

In brief, there are two tonal strands working across three total strata. The saxophone/violin 1, in the key of G, reaches closure through melodic contour and gestural means. Violin 2/viola similarly reaches individual closure through melodic contour and gesture, but in the key of D♭. All the while, the bass voices are supporting both strands but undermining and resisting any tonal center of their own. They are effectively fully chromatic and atonal. If the

analysis stopped there, this moment could be considered an example of polyclosure, but there is one other dimension to be examined.

The composite structure of all these isolated moments of closure forms an overall converging closure on a pseudo-HC. The composite chord formed on the final beat of m. 102 is spelled G–B–D♭–F. Recall from Chapter 2 the different ways that converging closure can happen; sometimes the power of a tonal center is strong enough to pull and assimilate another tonal strand into it (as with Milhaud's *Botafogo*), but sometimes disparate tonal strands float and wander into a composite chordal structure, which is then itself treated as a harmony (as with Swanson's *Pantomime*). This is one such case where the isolated tonal strands are not necessarily drawn into each other or assimilated, but their composite superimposed structure—the whole strata—can be interpreted as a momentary moment of functional harmony. The spelled chord is an altered dominant, $V^{7/\flat 5}$, in the key of C. This may seem entirely coincidental or passing if it didn't resolve to a C chord in m. 102, which of course it does. There is even more evidence to suggest that disparate strands coming together to form vertical structures is part of Swanson's black American idiom. Lee Cronbach, in his 1981 article "Structural Polytonality in Contemporary African Music," makes that claim that "differing tonal centers served a common function–the creation of what could be called vertical harmonic movement, vertical dynamism" (1981, 32). The next downbeat, and the start of the B section/second movement, is a polychord that predominantly features a C major triad (spelled with an F♭), seemingly confirming a resolution of this vertical harmonic movement.

Therefore, the global close of the A section includes numerous levels of closure, which strengthens the overall closure. In total summary of the A section's global close, each individual strand reaches an isolated moment of closure, i.e., the G and D♭ reach closure. But together, all

parts converge to create strata containing functional harmonic closure within the whole composite. It's like a Russian nesting doll of closure. I would argue that closure could be heard clearly, regardless of which level/stratum of the texture is being heard or perceived. In such a case, priority is almost inconsequential. If homing in on upper voices or inner voices, individual closures can be heard. If listening to the bass line or whole texture, greater harmonic closure is perceivable. This omnipresence of closure is singular and unique to the A section's global close. The individuality of this moment of global closure, coupled with the actual closural elements contained within it, makes it very rhetorically strong.

Intermediate Closure

There are three instances of intermediate closure within the A section, occurring at the ends of both *Andante* subsections and the *Moderato* subsection. Each instance of closure is a clear demarcation of an internal sectional change and serves to outline the composite form within the A section as a binary form (ABAB′).

The first instance of intermediate closure occurs at the end of the first *Andante* (m. 16, see Figure 35). This moment is best described as a moment of polyclosure, wherein two strands reach individual moments of closure. However, distinct from the global closure of the A section, the composite of this moment does not form any functional harmonic structure. Following individual moments of closure, there is a distinct change in texture and effect as the *Moderato* subsection begins. Something new is clearly starting in m. 17, marking the end of *Andante*.

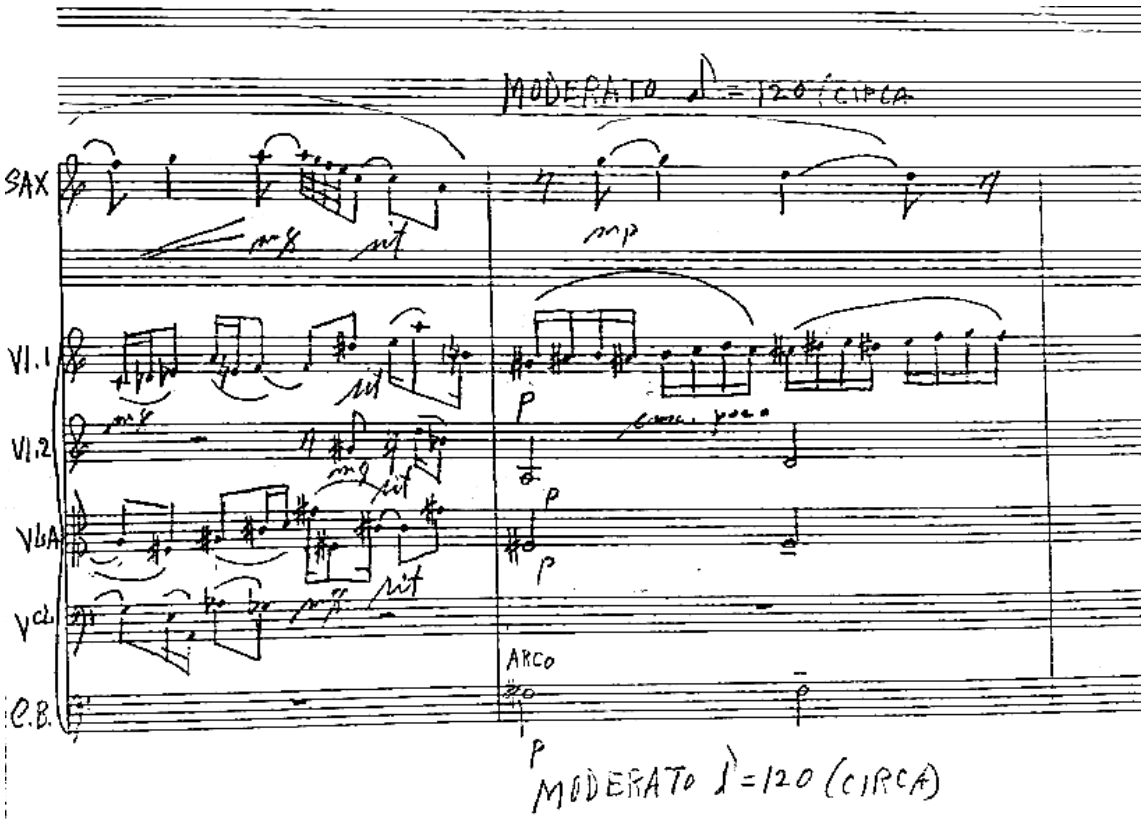

Figure 35: *Fantasy, Andante* 1 closure, mm. 16–17.

Speaking on the actual mechanism of polyclosure at the end of *Andante*, the two clearest strands are in the saxophone, in G, and the viola, in F♯, with violin 1 existing somewhere between the two. The saxophone reaches melodic closure in its strand, playing a descending G-minor scale and outlining a G-minor triad, $\hat{8}$–$\flat\hat{7}$–$\flat\hat{6}$–$\hat{5}$–$\flat\hat{3}$–$\hat{1}$. The viola similarly reaches closure, but its closure is less defined by a melodic shape and more by what harmonies it outlines. There is a clear outline of an F♯-major triad and a C♯/G♯ dyad, $\hat{1}$–$\hat{3}$–$\hat{5}$–$\flat\hat{6}$–$\hat{2}$–$\hat{5}$–$\hat{2}$, implying I-V in F♯. The following downbeat of the viola part is an F♯, meaning this line would likely be heard as functional. There is no convergence of the tonal strands through composite structures, and no indication that there is any assimilation of tonal strands into one another. Therefore, the final polyclose of *Andante* has some closural strength. As two tonal strands reach individual moments

of closure before being contrasted against what is clearly the start of something new, but it is not nearly to the degree of strength of what a global close will be.

The next moment of intermediate closure, occurring at the end of *Moderato,* is comparatively much stronger than the *Andante* closure, and is depicted in Figure 36. Note that the start of the second *Andante* subsection is not where the tempo change is (m. 44), but instead where the *Andante*'s opening motive is heard again, in m. 45. This is an instance of converging closure where all voices converge and cadence in the key of G♭, and it is very rhetorically strong. Following the saxophone dropping out, the strings converge together to form a functional harmonic progression, audibly understood as motion from dominant function to tonic function.

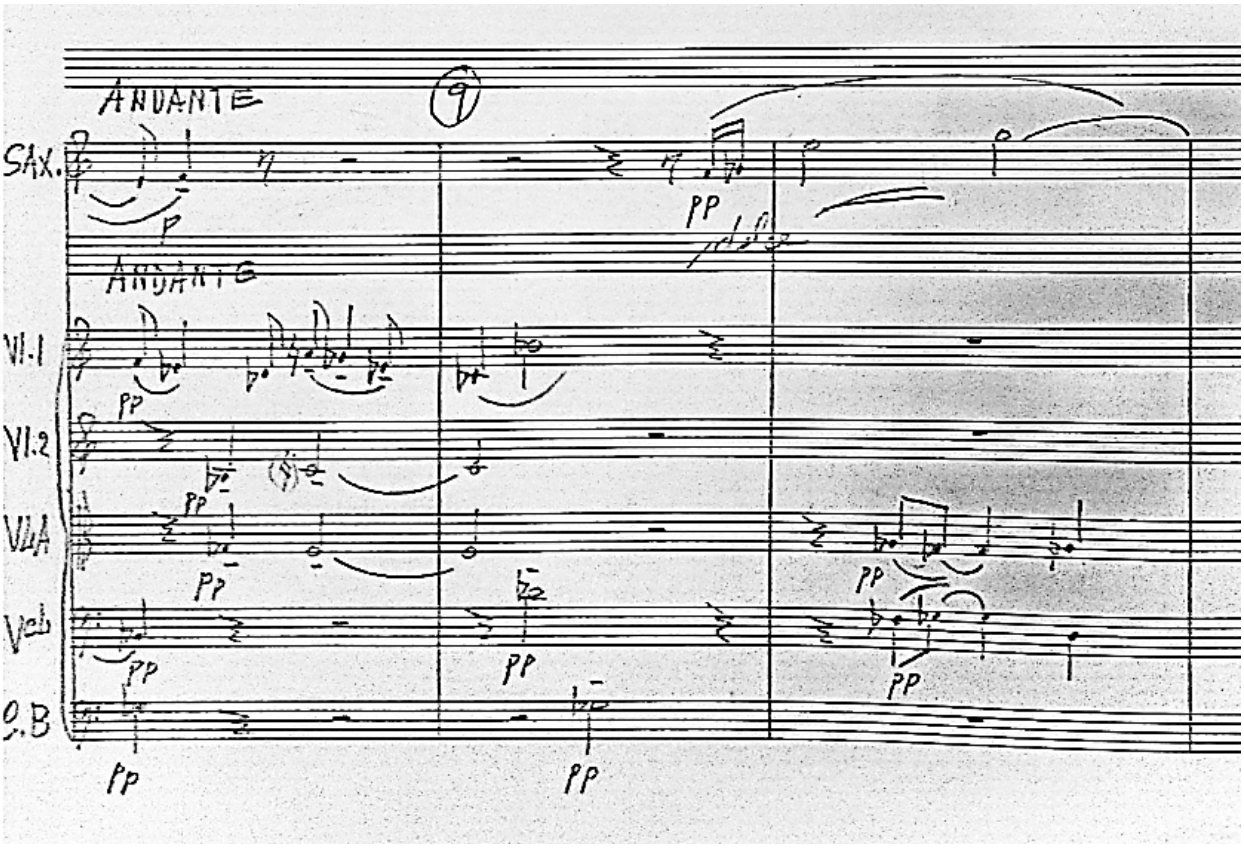

Figure 36: *Fantasy*, *Moderato*, mm. 44–46.

The saxophone's drop-out is notable only for what it predicts in the eventual global close of the A section. Referring to the global close from Figure 34 above, the saxophone joins the first violins and plays in unison. In this instance of intermediate closure (Figure 36), the saxophone and violin 1 step in contrary motion into a unison, and then the saxophone drops out. In doing so, the saxophone effectively attaches itself to violin—in other words, it hands off the proverbial baton—and foreshadows their eventual coupling in later closure.

While the saxophone and violin 1 are converging into an E♭, the rest of the strings are preparing for closure. As annotated in Figure 37, beats 1 and 2 of m. 44 are both G♭-major triads, the first inverted, the second in root position. Beat 3 is a brief F-major triad, but violin 1 eventually descends (with modal mixture) into a C♭ on beat 1 of m. 45. The sonority this forms in total is C–F–C♭, wherein F and C♭ are $\hat{7}$ and $\hat{4}$ in the key of G♭. The next beat includes the addition of D♭ and B♭. With the D♭ factored into the sonority, even delayed, that sonorous moment could be understood as having some sort of dominant function in the key of G♭, as it includes D♭–F–C♭ (with an added C for chromatic coloring).

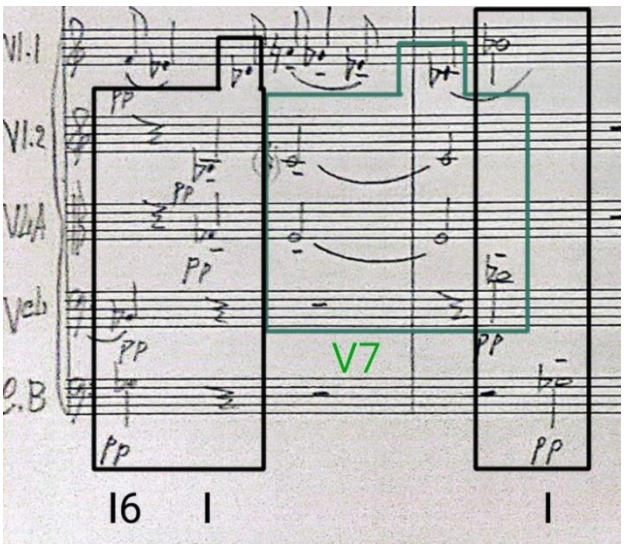

Figure 37: *Fantasy*, *Moderato*, harmonic closure.

This instance of closure is about as close to an authentic cadence as Swanson is willing to give this early on and is incredibly rhetorically strong—possibly even rivaling the rhetorical strength of global closure. However, the immediate return of A material from the first *Andante*, this time transposed a major third down, signals that this closure was not global, but returning to an already heard part of the form. Such powerful closure leading into subsection A material reinforces that this whole section A/movement 1 is a rounded binary form, where strong closure occurs before the return of the A section.

The final moment of intermediate closure within section A occurs at the end of the second *Andante* and into the *Allegro Moderato* subsection, in mm. 67–69 (Figure 38). This closing zone has two moments of closure which borrow from, and harken back to, the two previous moments of intermediate closure. I will address them sequentially.

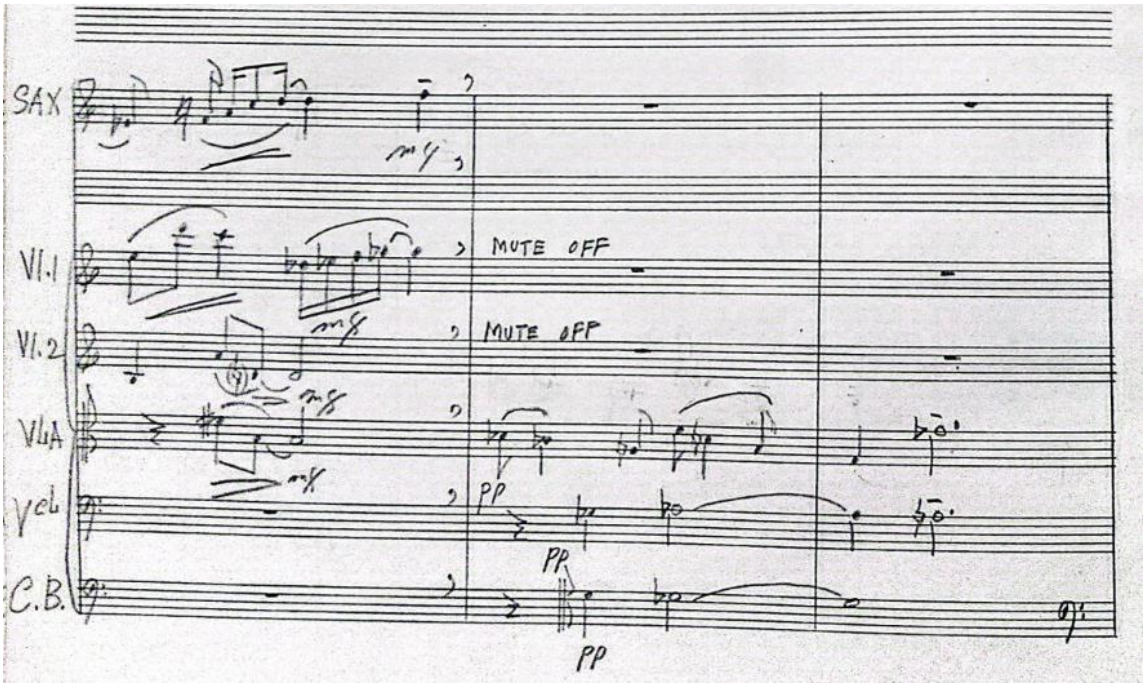

Figure 38: *Fantasy*, *Andante* 2, mm. 67–69.

The first moment of closure, in m. 67, is reminiscent of the original closure in the first *Andante,* but it falls short in closing each composite stratum. The saxophone outlines an E♭ triad, but there was no prior indication of how that would function in its tonal strand. Violin 1, in parallel, seems to progress $\hat{5}$–$\hat{6}\hat{7}$–^$\hat{1}$ in G♭ major, but it hadn't established itself in G♭ prior to that beat. Similarly, violin 2 and viola come together to outline as B^{m7} chord, but once again, there wasn't enough information regarding the tonal strand that proceeded that moment to indicate how it may function. I would then hesitate to call this moment polyclosure.

However, there may be a case to be made for converging closure. The composite structure of the final beat creates some sort of B triad, with both a D and D♯ present in the texture. Once again, this B triad isn't contextually informed enough to have any type of function, and the next down beat does not have chord that could be considered a resolution. In all, this moment is best described as converging closure as it is—technically—converging all the voices together to form a recognizable composite, and it is closure because something is ending followed by a brief rest (breath mark). It is not, however, rhetorically strong in any way.

As if in recognition of the very weak closure, the lower strings begin a progression that connects a B-minor triad (the same as the composite convergence) to a cadence in G♭, that is very similar to the previous moment of closure in *Moderato*. See Figure 39, where a B-minor triad moves chromatically into a D♭ major, then resolves to G♭ minor. This clearly beckons back as it replicates the method of closure of the previous section.

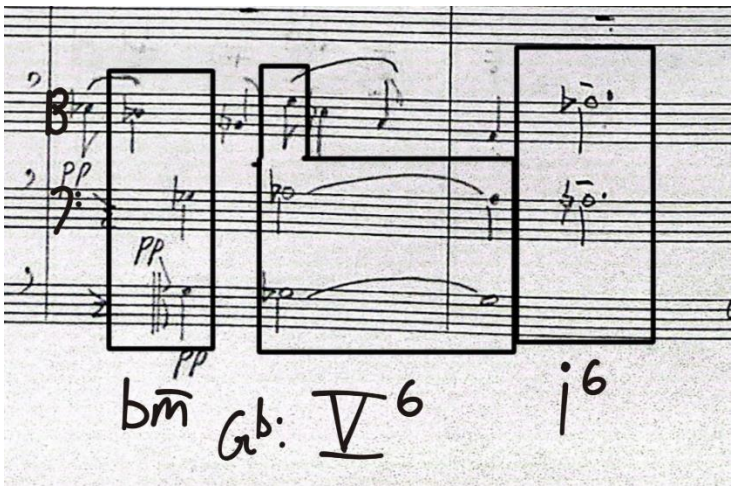

Figure 39: *Fantasy*, *Andante* 2, mm. 68–69.

A closer look at the closure present in the A section, both intermediate and global, paints a clear picture of how closure frames the movement. While I wouldn't go so far as to say that a narrative is unfolding, I would argue that the mechanisms of closure used throughout the A subsections are informing the global close to great expressive effect. Elements of every subsectional close are appearing in the global close of the A section, it is a great culmination of closural material.

The first moment of closure, the end of *Andante*, has a mildly strong polyclosure that sees various individual strands come to rest. The second moment of closure, the end of Moderato, features harmonic motion leading to a very strong functional cadence. The final intermediate close saw disparate strands come together to form a composite chordal structure; however, because it wasn't prepared, it didn't function well as harmony. All these mechanisms of closure combine to create the global close. The closure at the end of *Allegro Moderato* contains individual strands with individualized moments of closure (intermediate close 1), as each of the strands close, they build a composite harmony (intermediate close 3), and that harmony is

conceivable as a functional progression (intermediate close 2). It is as if Swanson has taken all these individual moments of closure and "Frankensteined" them together.

With each of these closural moments taken in context, the ABAB′ structure is reaffirmed: the strongest moments of closure occur at the end of B and B′, and the two weaker moments occur at the end of the A subsections, with closure at the second *Andante* being the weakest, but still a building block contributing to, and culminating in, the global closure. Figure 40 zooms in on the formal diagram of the A section to highlight how closure shapes the form. The relative thickness and density of the lines between formal subsections loosely represent how closural strength is maps to the form.

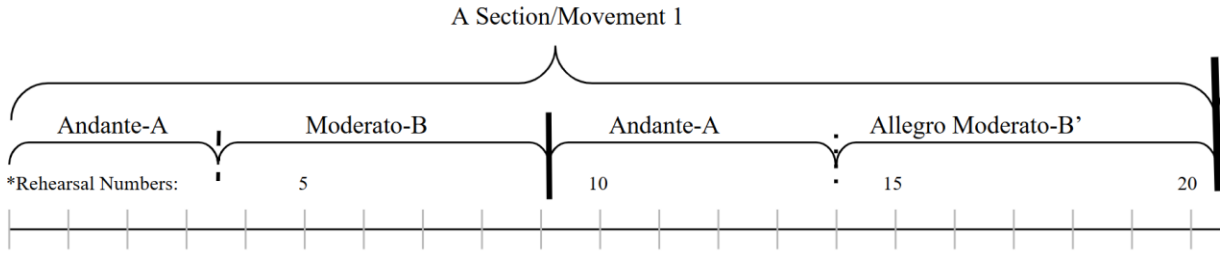

Figure 40: *Fantasy*, formal diagram of the A Section/first movement.

Section B

Section B/movement 2 starts in m. 103, continues for two smaller sections labeled *Largo* and *Larghetto*, and ends in m. 202. As is conventional for a second movement, or B section, this grouping makes up the slower part of the entire piece. Because of its two-part structure, it is most clearly understood as a binary form.

The first section, *Largo*, has a more homophonic texture, starkly contrasted from the contrapuntal nature of the *Allegro Moderato* that precedes it (see Figure 34 for the stark change in texture of the *Largo* subsection). For most of this section, the soprano saxophone is playing a slower, simpler, melody. Shorter runs and trills give momentum and a hint of liveliness, but it is very different from anything seen in the A section. The strings have a new idea as well, with a change to pizzicato arpeggiated chords supporting the soprano saxophone's melody. This harmonic support slows and calms towards the end of the movement, where it changes into an entirely half note chordal texture in the strings. As the strings move to chordal texture, they leave space for the soprano sax to get rhythmically busier, before calming again, and coming to a slow conclusion of its melody.

The *Larghetto* keeps the strings going with their half note chordal texture. Rhythmic variation in the lower string voices and looping chordal tension in the whole string section start *Larghetto* off with powerful churning motion. The motor of this section is set off immediately, before the saxophone even comes back in. The saxophone enters in a tonally distant realm, with smaller chunked fragments of melodic ideas. As the motor keeps churning under the saxophone, the melody plays longer more complex chunks, reaching new climaxes, until eventually the motor peters out, and the saxophone concludes with a final decisive denouement.

Global Closure

Starting again with global closure, I turn my attention to the ending of the *Larghetto* subsection, Figure 41. Up to this point, the strings have been churning, propelled by rhythmic harmonic variation, and the saxophone has been playing through a series of shifting tonal centers and registral climaxes. Before I begin discussing tonal centers and relying on my Rosetta Stone, I

want to first explore how closure is signaled and achieved in the final moments of the section, beyond just the tonal.

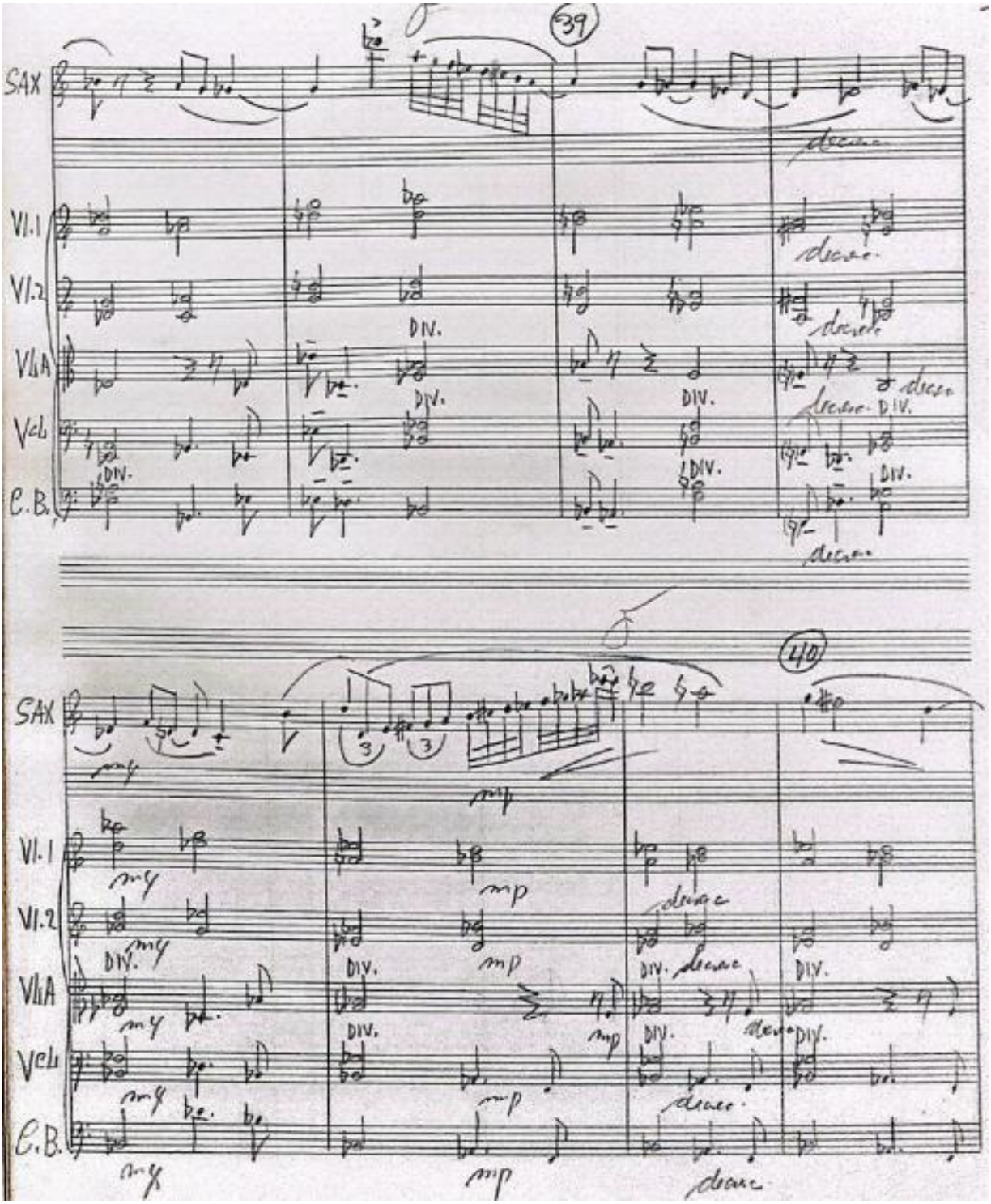

Figure 41*: Fantasy, Larghetto*, mm. 193–202.

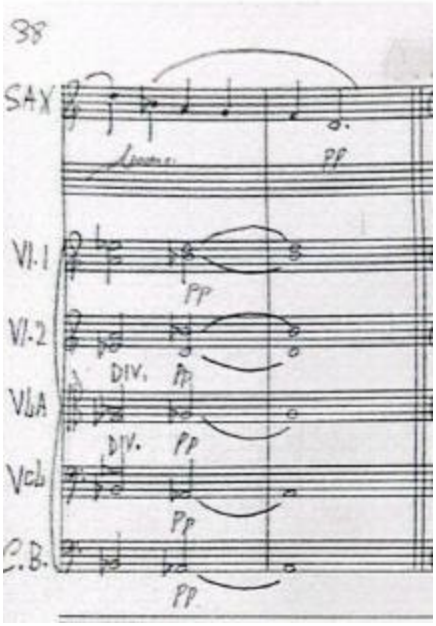

Figure 41 continued.

The strings up to this point have been characterized by two phenomena, and the first I've already mentioned: (1) they have an insistent churning motion, and (2) they seldom repeat. Both facets are dissolved in the final measures of *Larghetto*, signaling the impending end.

The motion in the strings is partially propelled forward by continual variations of rhythms in the lower string voices (bass/cello/and sometimes viola). One such variation is recreated in Figure 42. Notice, in m. 145 (rehearsal 29), that a rhythmic pattern and contour are established in the lower voices over two bars and immediately repeated (marked in green). But the following measures establish and repeat a new pattern. This repetitive gesture of setting a rhythmic variation and contour, repeating it a single time, and then moving on from it is one aspect that leads to the churn of the strings. Throughout *Larghetto*, the bass voices never return to a previous rhythmic/contour variation and are very consistent in repeating each variation (with

only two pattern breaks). Until of course the very end of *Larghetto*, where the rhythmic/contour variation pattern is broken.

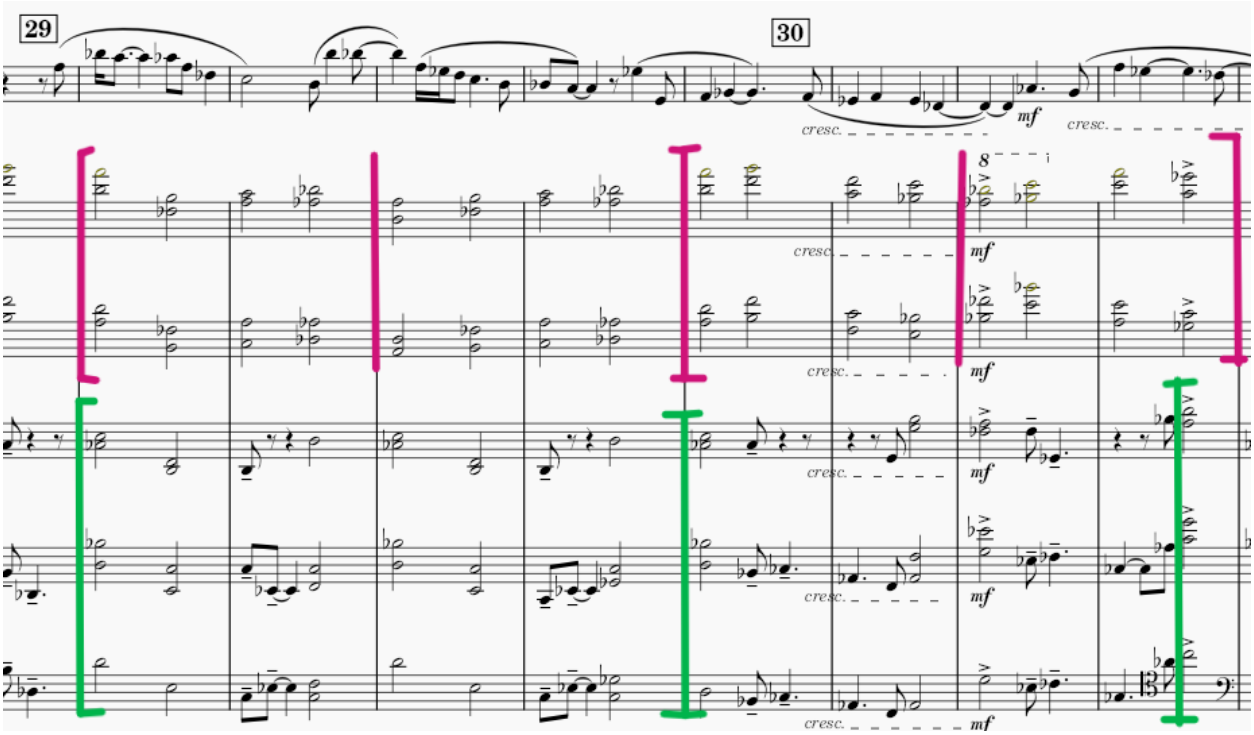

Figure 42: *Fantasy*, *Larghetto*, rhythmic churn, mm. 145–152.

Notice how in Figure 41 a rhythmic pattern and contour are again established in the lower voices, in mm. 193–194. This pattern is not repeated; instead, a new one is stated in mm. 195–196. This new pattern is again not repeated, and yet again, something new is introduced. This is the initial break of the grand churning pattern, where the rhythmic variation does not get its established repeat. The newest pattern is only a single measure long, m. 198, and this pattern does receive multiple repeats until the final cadence. This abrupt break in in the grander pattern of the lower strings signals a coming change. Expressively, it's almost like taking the wind out of the sails or turning off the motor. The motor has been turned off, and the lower string putter to resolution and closure through rhythm and contour, not just tonally.

The upper strings similarly lose their contribution to the motor. Just as the lower strings have been churning in (mostly) four-measure chunks, the upper strings have been moving in two-measure chunks. They are tonally distanced from the bass voices (more on that later), but their chunks have been moving more discreetly, in that there is no rhythmic variation to inform their chunking motion. They don't repeat themselves either, every two measures a new harmonic chunk appears in the upper strings (see Figure 42; the upper string chunks labeled in pink). Until m. 148, where in conjunction with the lower strings' repetitive single bar, they begin to repeat a measure. Yet again, the churning has ceased its momentum. Once the strings have fully stopped churning and begin to move towards close, the saxophone does the same.

In a tonal sense, there are three disparate strands working towards closure, and they're the same groups as the chunks described above. The saxophone has its own tonal strand, as do the violins, and the rest of the strings are grouped together into a third and final strand. To describe how *Larghetto* closes tonally, I'll start by looking at how the strings close together and then factor in the closure of the saxophone.

The lower strings for the majority of *Larghetto* move around E♭ and B♭ tonal centers. Relying on the principles laid out in my Rosetta Stone, the lower strings make extensive use of modal mixture, so the force in centralizing E♭ and B♭ seems to stem from their placement within the lower strings' chunks. Most of the chunks, as much as they vary in contour and rhythm, do centralize E♭ and B♭ typically by starting and ending on either of those pitches. Continuing to draw on principles from my Rosetta Stone, this string part is like the anchor that grounds this passage in some tonal realm, making the lower strings' tonal strand the most affirmed, even if it's not immediately clear whether E♭ or B♭ is acting as the tonal center. This continually falls in line with the prior logic revealed from Swanson's other manuscripts, that the lower harmony is

typically the more grounded one. As the motor is taken out, and the section/movement is reaching some sort of close, this lower strand begins to alternate B♭/G♭ and A♭/F dyads.

While the lower strand provides the anchor, the violin strand can be more tonally free. It rotates through various tonal areas, without necessarily affixing itself to any firm tonal center, until that is, the end of the movement/section. As the churn slows, and the lower strings begin their dyadic alterations, the violins converge into the lower string harmony. The priority of the lower strings, as the tonal anchor, is easily able to pull them down and assimilate them. See Figure 41, in m. 198, the violins lock into playing E♭/A and D/B♭ dyads. As these two strands lock in together, the composite texture of the strings becomes alternating chords: E♭-minor (with an added A) and B♭4/2. This could be interpreted as alternating $i^{sus\sharp4}$ and V4/2 in the key of E♭ minor.

To summarize closure in the string parts: two tonal strands/stratum function tonally independently but inform each other's churning motion. The first strand in the lower strings sticks to E♭/B♭ tonal areas, and the second strand in the violins isn't affixing itself to any identifiable single key and functions much more ambiguously. Once closure is signaled in the string parts, through means beyond tonal, the violin strand converges into the lower string strand, and both begin alternating colorized i and V chords in E♭. They end the movement/ section with this alternation and a slow decrescendo into a final V4/2 chord. This effectively concludes the string strands with converging closure into something akin to a HC.

The saxophone adds a final strand into the mix of this section/movement closure. The saxophone line is fully stratified, tonally and timbrally, from the string parts. Like the violins, the

saxophone moves through various tonal areas, though not in conjunction with the violins. The most stable tonal center that the saxophone repeatedly returns to within this section is C.

As the string parts begin their decay into closure, the soprano saxophone reaches its own individualized closure. Figure 43 is a recreation of the saxophone's final line, in concert pitch. Just as the strings begin to alternate their chords in m. 198 (2 before rehearsal 40), the saxophone ascends a C-major scale, a D♭-tetrachord, and reaches a climax on D♭. To this moment, this is the highest climax the saxophone reaches in the *Larghetto* section. Referring briefly back to Figure 41, this D♭ has an annotated arrow, written by Swanson, pointed at it. A similar arrow appears earlier, just before rehearsal 39, pointed at a concert C♭. At that time, that was the highest point the saxophone had reached within the *Larghetto.* In fact, there are five different instances where Swanson indicates a new climax, each higher than the last. After this newest climactic point, the saxophone descends over the course of the final measures, reaching a C and concluding on its tonic pitch. Therefore, closure is achieved in the saxophone through the contour of this phrase and resolution of the tonal center.

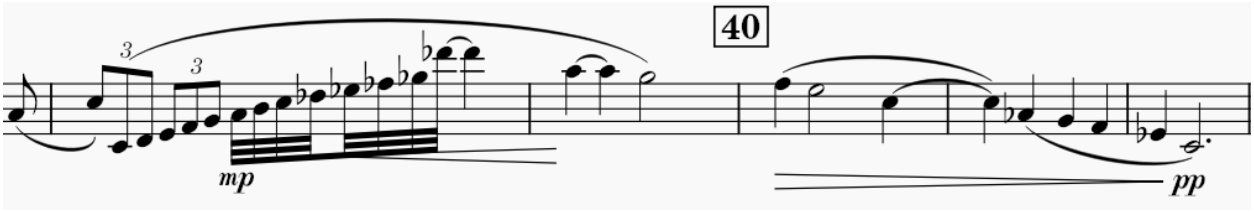

Figure 43: *Fantasy*, *Larghetto*, mm. 198–203.

The saxophone manages to resist assimilation into the string part through voice leading and timbral differences. The saxophone's final measures do include pitches that could be assimilated into the string harmony. For instance, the A♭ and F in the saxophones penultimate measure would both contribute to the $B♭^7$ occurring in the strings. But through its individualized

strand, and tonal stratification, those pitches don't act like they're part of the harmony; rather, they act like a scale. This is reiterated in the final note of the saxophone. Occurring over a B♭^{7} chord, the final C could be reinterpreted as the ninth extension of the chord. However, the sheer distance between the parts in intensity, timbre, and tonal center, seldom imply such a reinterpretation. Moreso, the added A, previously mentioned in the upper string part, supports a tonal stratification of the saxophone. The A destabilizes the tonic triad of the string parts, undercutting priority, and allowing the saxophone to resist. Through such resistance, and informed by isolated closure in each strand, I consider the saxophone to have a dual priority to the string parts.

Global closure achieved in this B section is then an overall rhetorically powerful polyclosure. Both through melodic resolution in the saxophone's C strand and a harmonic pseudo-HC in the strings E♭ strand, and compounded within the E♭ strand's closure was a tonal convergence into E♭ by the more unstable, tonally ambiguous violins. The relative rhetorical strength of such closure is informed by perceived context. The full convergence of strings into a single tonal strand is novel, and it marks this instance of closure as different. It should also be noted that the dominant that *Larghetto* ends on is resolved in the next downbeat to a B♭ chord.

Intermediate Closure

Section B only contains a single moment of intermediate closure, in the transition from the *Largo* to the *Larghetto*; however, this closure serves to set up the eventual global close at the end of *Larghetto*. The closure at the end of *Largo* is visually very similar in texture and type to the closure that follows it; see Figure 44. The overall texture consists of the saxophone tonally

separated, while the strings progress through chords underneath. Both strands seemingly reach closure (at least visually) in m. 137, in a moment of polyclosure that foreshadows the eventual *Larghetto* cadence. However, despite their similarity, the closure at the end of *Larghetto* functions to conclude the larger section/movement and the closure in *Largo* functions to launch into the *Larghetto*.

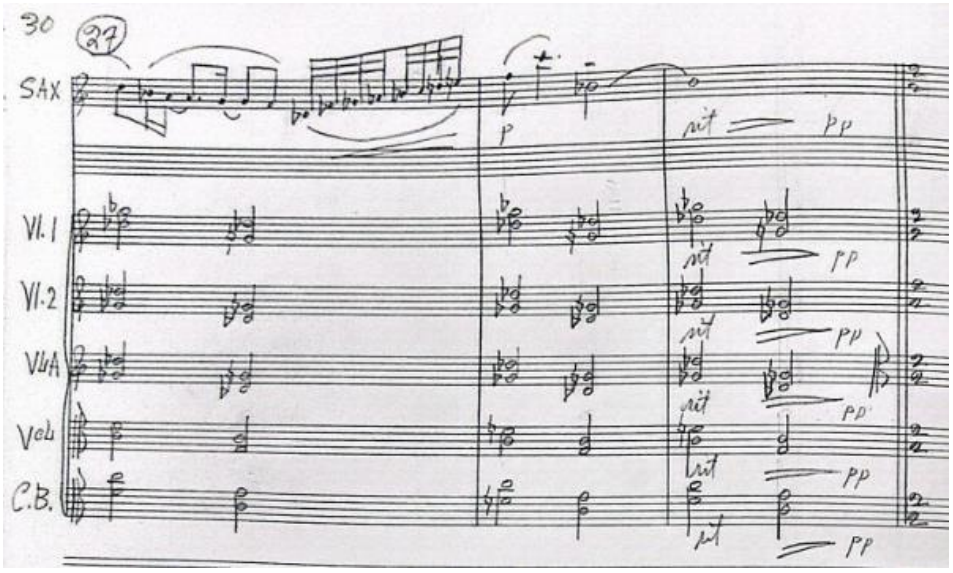

Figure 44: *Fantasy*, *Largo*, mm. 135–137.

In the previous section, I likened the momentum in the strings to a churn or motor and showed how the tonal and rhythmic properties of the string parts signaled the eventual end of the motor and petered out. This closure in *Largo* contains no such petering out; rather, the motor of the *Larghetto* is set into motion by the *Largo*'s end. This motor is set up by two dominant forces: (1) the shift to chordal texture in the strings just before *Largo*'s conclusion, which becomes a defining characteristic of *Larghetto*; and (2) the string orchestra's harmonic strand prepares to divide into the two discant strands present in *Larghetto*.

As shown above in Figure 34, the majority of *Largo*'s texture consists of arpeggiated pizzicato chords, with plenty of open space and subtle gestures. In the final eight measures of *Largo*, the entire string section switches to the chordal texture seen in Figure 44. Such a drastic shift does less to prepare the listener for closure, than simply to imply some sort of transition to new material. However, in the case of *Largo*, the new material—this chordal texture—is short-lived before a moment of closure. The closure, then, is less restful; it hasn't said enough and experienced much preparation. As seen in the *Larghetto* above, the global closure was prepared throughout the entire section by setting up all the agents with their own momentum over the entire length of the section, and then subtly bringing them together for gentle rhetorically powerful close. In contrast, this section does not set up the close over the longer form. Therefore, this closure, while similar, cannot be as rhetorically strong as the closure found in Larghetto.

Of course, I would be remiss not to acknowledge that this *Largo* closure occurs before the *Larghetto* closure and is therefore the first closure to be heard in the B section/second movement. When listening to this section chronologically, this closure does contain much rhetorical strength. But because of the rhetorical strength of this closure, the following closure is even stronger. This intermediate closure bolsters and foreshadows the global close, it sets the anticipation and expectation of powerful closure. Even after the moderately rhetorically strong close, the chordal texture, which we've just been introduced to, continues into the next section. This immediately signals that this newer chordal texture was introduced to prepare for this next section. Through retrospective reinterpretation, the closure in *Largo* can be better understood as transitionary closure, leading to a new section (Schmalfeldt 2011). Therefore, it must be intermediate closure, which by its very nature is weaker than global closure.

The final measures of *Largo* also harmonically foreshadow the tonal strand splitting in the strings. By the end, the string orchestra is conjoined into a singular tonal strand, and the cadence is brought about through harmonic means, vertical dynamism. See Figure 45 for the closing measures of the chordal texture. The strings move through a series of major-seventh chords and fully-diminished sevenths; I have annotated the figure with lead-sheet symbols underneath. Remember that according to the principles of Swanson's music, full enharmonic equivalence is accepted. So, while the chord in m. 130 may be spelled A–E–D♭–A♭, it is reinterpreted as A–C♯–E–G♯, the rest of the chords through this passage are likewise respelled in the lead sheet. In the final three measures, the strings begin to alternate D^{maj7} and A^{7} chords before fading out and closing on the dominant, similarly, a pseudo-HC.

The predicted split of the tonal strand is projected through the contrapuntal/voice leading pattern throughout this closing section. Every part is *div.*, playing either perfect 4ths, perfect 5ths, or tritones. Each part progresses through a series of these intervals and the composite chord produced is either a maj7, min7, or dim7. They move in lock step, always producing a composite harmony, that while chromatic, is still homogenously expressed through vertical dynamism. Except for one misstep, that being the second chord in m. 134. That chord is spelled C–F–E–A–D♭–G, and follows the same precedented pattern as before, with every part divided into one of the three intervals. Except this chord isn't interpretable as a single seventh chord (for one thing, it has six pitches).

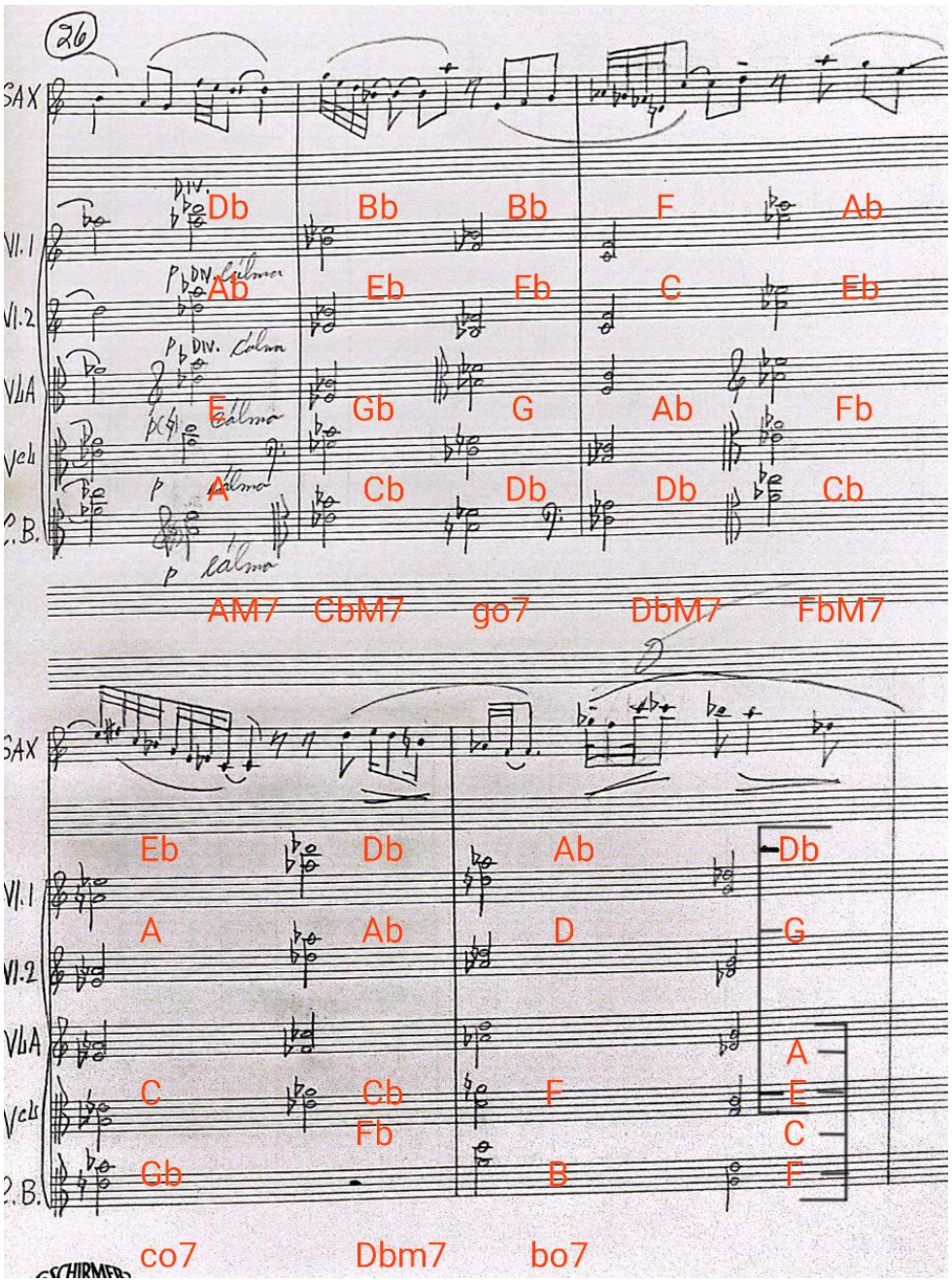

Figure 45: *Fantasy*, *Largo*, mm. 130–134

This chord is a polychord and is a single brief moment that foreshadows the splitting of the tonal strand. There are various ways this polychord could be interpreted, but the best I have settled on is as a C♯^{o} triad superimposed over an F^{maj7}. My choice to analyze it this way is informed by the polytonal principles extrapolated from my *Noret* analysis—that is,

superimposition is usually established along stratified parts. Individually, both chords would have made sense and fit within the logic of the passage. Every chord so far has been a dim7 or a maj7 chord, and the passage hasn't been going long enough for any overtly recognizable order to be established. Therefore, the chord following the B^{o7}, could have been either option, yet the voices split strands by lower and upper strings. Just for a moment, the strings separated into two strands, along the same stratification lines to be seen later in *Larghetto*.

To summarize, the strings have a sudden change in texture which hasn't been used before. In that new texture, they move along a single tonal strand, which is admittedly hazy and chromatic. However, there is an internal logic produced through counterpoint and voice leading. But a single misstep in that internal logic causes the briefest of splits in that tonal strand, a single fray. This split happens to be stratified along the same lines which define the stratification in *Larghetto*. The fray is left behind, as all the string parts begin to alternate D^{maj7} and A^7 chord, to be understood as I^7 and V^7 in D major.

Yet unmentioned is what the saxophone is doing. The saxophone, perhaps overly simply, is in A♭, and reaches closure through its melody line with a clear $\hat{5}$–$\hat{2}$–$\hat{1}$ pattern. The clear closure in the A♭ strand over clear closure in what becomes the D-major strand is what classifies this moment as polyclosure. However, within that polyclosure lay the building blocks for what will define the *Larghetto* section that follows, i.e., disparate strands stratified by register, driven forward by a harmonic churn. Expressively, if the *Larghetto* section is a churning motor that peters out by the end, this closure in *Largo* functions to build and power that motor. When all the pieces are put together and the motor is ready, the voices all come to a small respite—the polyclose. But then the churn begins, the motor is running, and *Larghetto* begins. Figure 46 is a zoom in on the formal diagram of the B section.

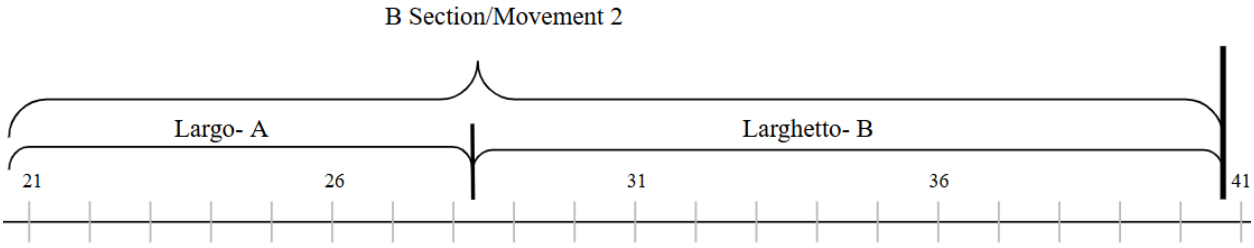

Figure 46: *Fantasy*, formal diagram of the B section/second movement.

Section C

The final movement/section of *Fantasy* starts in m. 203 and is another rounded binary structure, consisting of ABA-coda (Figure 47). The initial A subsection, *Adagio*, is brief but introduces melodic material striking and unique enough to be heard clearly in the eventual return of A (Figure 48). Seemingly drawing both from the angular contrapuntal nature of the first movement, and the purely homophonic texture of the second movement, this movement/section C sits somewhere in the middle. There are clearly defined structural chords moving under the melody, but the progressions are embellished and decorated with contrapuntal movement. Aside from the superimposition/stratification of the saxophone's tonal center, this movement is both texturally and structurally what one might expect to find in a concerto.

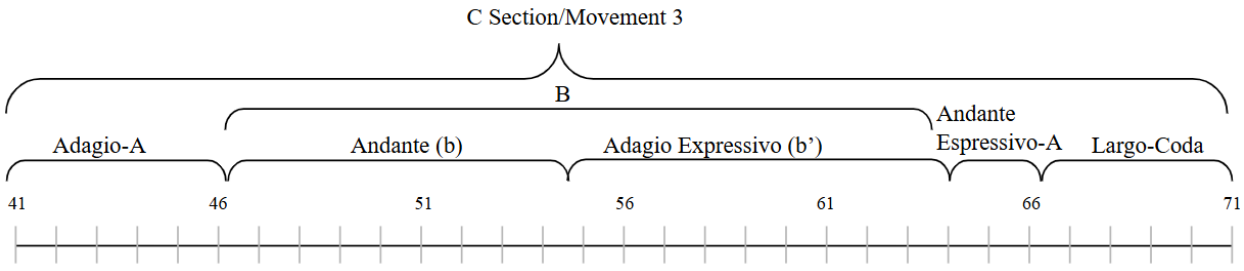

Figure 47: *Fantasy*, formal diagram C section/third movement.

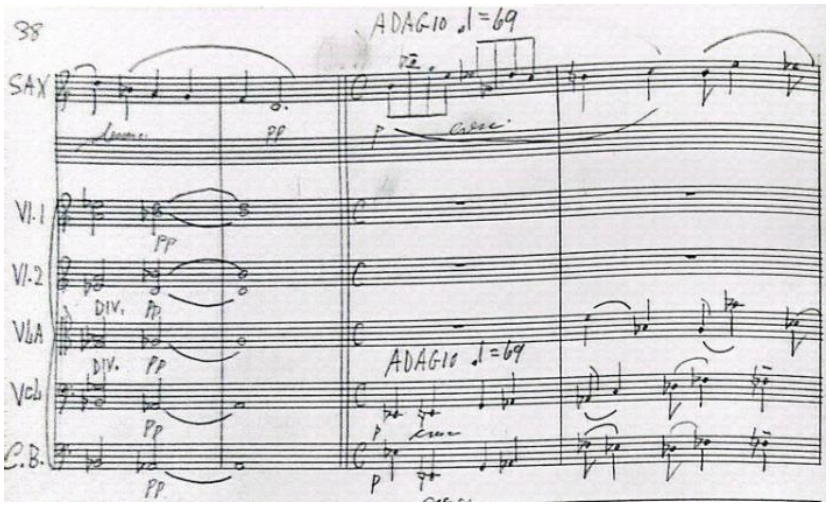

Figure 48: *Fantasy*, *Agadio,* mm. 201–204.

The B section itself is in two smaller parts, though they both use the same material. A more complete formal diagram of this section would probably be considered AbbA (coda), as is depicted in Figure 47. Starting in m. 231, *Andante*, the saxophone introduces new material, distinct from the A melody (Figure 49). Following that first b, the same material returns in *Adagio Expressivo* in the violin 1 part.[21] This second b sees an expansion built on the same material but is completely devoid of the saxophone (Figure 50). This sub-subsection is the moment in the piece where the orchestra and first violin get the chance to show-off, it is the longest stretch without the saxophone.

The return of the A material coincides with the return of the saxophone as all parts rejoin for a final shortened restatement of A in a subsection titled *Andante Espressivo* (Figure 51).[22] I call it a rounded binary, rather than ternary, because the return of A material is so brief and does close out the major themes/motives of the movement or piece. It is short lived as the return of A

[21] This is how Swanson chose to spell "Espressivo."
[22] Spelled correctly.

is immediately followed by a coda in m. 331. The final coda, given the distinction *Largo*, serves to end and close out the entire 355-measure piece.

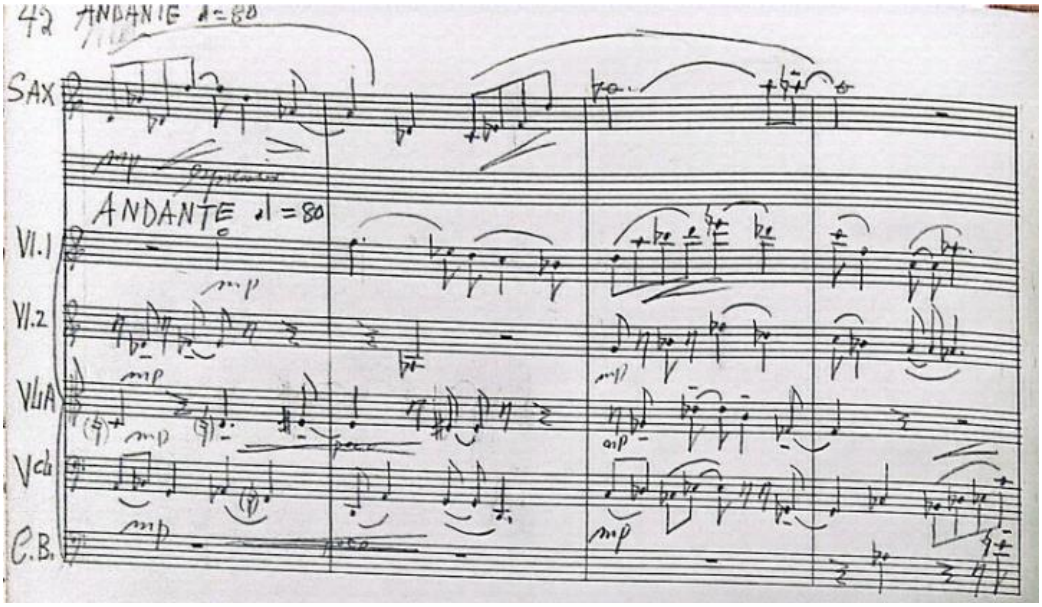

Figure 49: *Fantasy*, *Andante* (3), mm. 231–234.

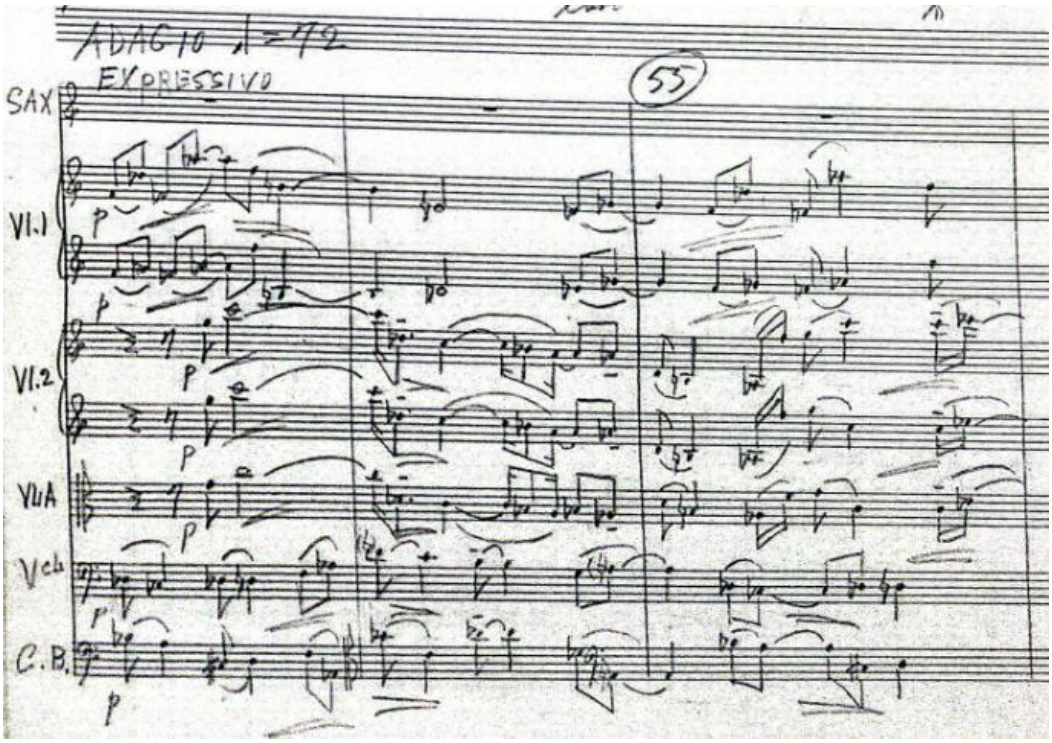

Figure 50: *Fantasy*, *Adagio Expressivo*, mm. 255–257.

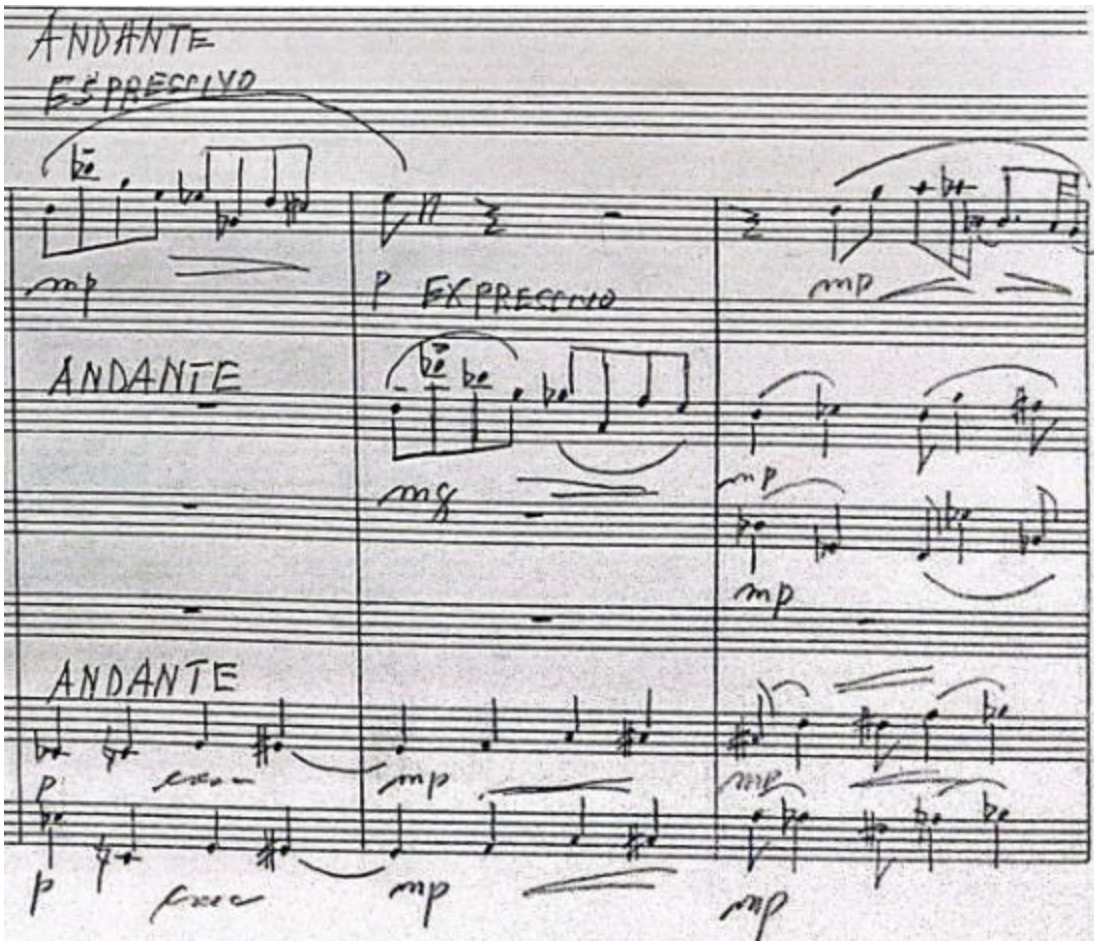

Figure 51: *Fantasy*, *Andante Espressivo*, mm. 222–224.

Global Closure

The final moment of closure that concludes the entirety of *Fantasy* is polyclosure. Depicted in Figure 52, the final measures see two tonally distinct strands close simultaneously: the saxophone/violin 1, and the remaining parts of the string orchestra. The polyclose pulls together and invokes the earlier global close to truly end *Fantasy*.

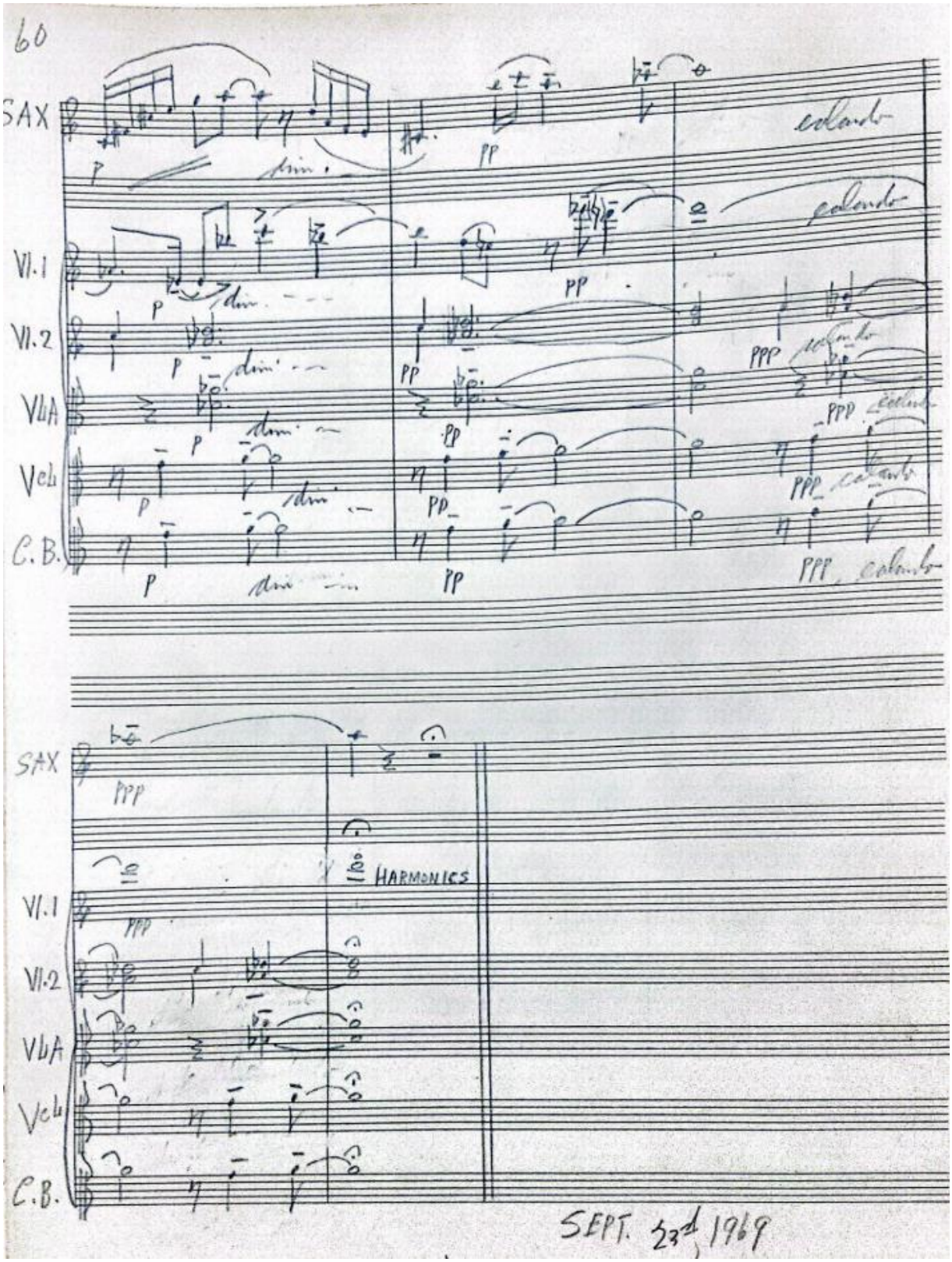

Figure 52: *Fantasy*, global closure in *Largo*, mm. 351–355.

Throughout the *Largo* (coda), the string orchestra is alternating between D♭ major triads, and A♭ major triads (D♭ major: I–V). Occasionally, pitches in separate strands contribute to this harmonic progression, adding extensions on top of these alterations creating $D♭^{maj7}$ and $A♭^{7}$. But the main core of the string orchestra continues to be the dominant-tonic alternating, until this final close where the string orchestra lands on a D♭-major triad and cadences. Most notably, this cadence in isolation is a true perfect authentic cadence in Caplinian terms. Giving it tremendous amounts of closural strength. Through overwhelming strength, both in numbers, rhetoric, and—for the first time in *Fantasy*—syntax, the string orchestra undoubtably takes primary priority.

Violin 1, best understood in the key of E♭, reaches very weak closure but still mostly resists assimilation into the D♭ string orchestra. Through the *Largo*, and in approach to the final moment of closure, it consistently emphasizes the pitches A♭, B♭, and E♭ ($\hat{4}$, $\hat{5}$, and $\hat{1}$ in E♭, respectively); some of this emphasis can be seen in Figure 53. In m. 352, it plays the motion E♭-D ($\hat{1}$–$\hat{7}$) and holds that D until the very conclusion. In the final bar, it is specifically marked for the violin to switch to a harmonic. This closure is very weak in relation to the string orchestra, as it's made through dynamic and rhythmic means more than anything. The long descent into *ppp* and the long held final note imply closure, but the motion of $\hat{1}$–$\hat{7}$ would imply incomplete closure, as there is a lack of resolution in the contour/melody. However, the pitch D is difficult to rationalize in the D♭-major chord below. It could potentially be understood as $♭\hat{9}$, but that would be an abnormal extension over a tonic chord. Rather, I analyze this final pitch not as assimilated into D♭ major, but more like tonal coloring. It has very weak priority, not nearly strong enough to pull from the string orchestra, but enough to insert chromatic dissonance into the final chord.

The saxophone moves through various key centers in *Largo*, but ends on a G♭, which similarly resists assimilation into the string orchestra. The key center of the saxophone is much more ambiguous throughout the entire coda. Referring to Figure 53, there are allusions to tonal centers in the saxophone part through specific gestures, such as the gesture in mm. 345–346, which seems to imply F♭ (written G♭), but new gestures imply a moving tonal center, like m. 347, beats 3–4, which imply C major (written D major).

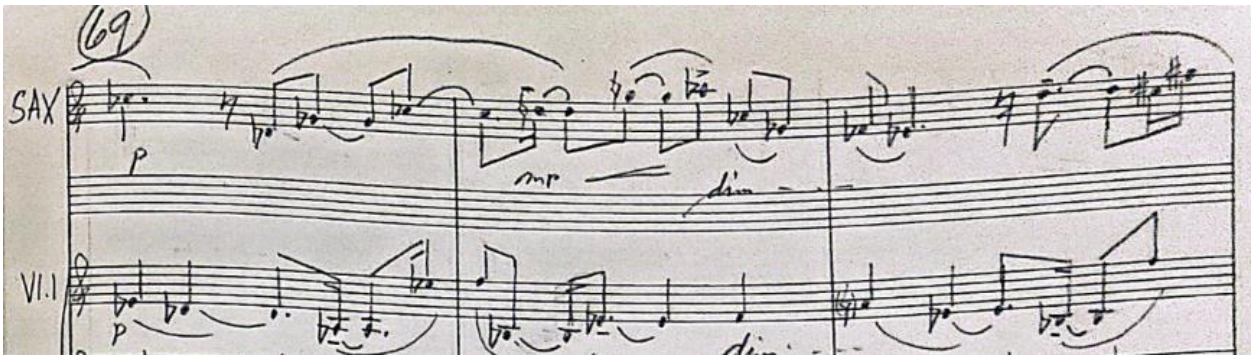

Figure 53: *Fantasy*, *Largo* (2), mm. 345–347.

The final five measures of the saxophone line are most readily understood in the key of G (written A), but it is not assimilated into the D♭-major chord either. If understood in G, the final gesture of the saxophone's line would be $\hat{2}$–$\flat\hat{3}$–$\hat{1}$–$\hat{7}$, drawing a direct and simultaneous parallel to the closing gesture of violin 1. Much like violin 1, this G♭ is not assimilated into the string orchestras beckoning tonal center. Instead, it is enharmonically reinterpreted to F♯ and forms a consonance with violin 1. Violin 1 and the saxophone converge together in the final measures to create an overall polyclosure, where the D♭-major string orchestra reaches closure through harmonic means with primary priority, and the violin/saxophone strands converge to close on a D/F♯ dyad with secondary priority.

This overall polyclose alludes to the global closes found in previous movements. The combining of harmonic closure in the string orchestra, and independent strand closure in the saxophone/violin 1, is in direct parallel to the closure found in movement 1/section A. Recall that section A also saw the unifying force of the saxophone and violin 1 reach a conclusion through contour and melody, where the harmony of the string orchestra closed in a pseudo-HC. Also recall that the global close of movement 2/section B saw the alternation of I and V chords in the E♭-major strings–ending in a pseudo-HC–and the independent closure of the saxophones line through melodic means. Elements of both of these global closes compound together to form the global close of movement 3/section C, and indeed, the entire piece.

Intermediate Closure

The intermediate closes within movement 3/section C are reminiscent of some of the intermediate closes encountered before. In general, they each serve to prepare for the coming of the next subsection and the closing of their own subsection. They do this to demarcate the internal form of section C as a clear binary (ABA-coda).

First is the closure at the end of the first A section, m. 230, *Adagio* into *Andante.* Depicted in Figure 54, this closure is very similar to the first intermediate close found in the first movement/A section. There are two tonal strands in G and C, and they are all stratified rhythmically (i.e., each strand has its own rhythm to go with its tonal center). Each strand reaches closure through gesture or melody: G-minor saxophone/cello through ♭$\hat{3}$–$\hat{2}$–$\hat{1}$–♭$\hat{7}$–$\hat{6}$–♭$\hat{7}$–$\hat{1}$; C-minor violins through a descending C-minor scale (with A natural). Like the A section's intermediate close (Figure 35), the cello/viola strand implies a bit of both. The two tonal strands

reach their moments of melodic closure and form a total composite C-minor triad, vertical dynamism. However, this triad isn't prepared harmonically and doesn't resolve to anything, making it mostly incidental. This closure, as polyclosure, has middling strength. It's certainly not the strongest or the weakest heard so far, but the independent strand closure and brief convergence into a structured harmony audibly mark it as a moment of closure.

The closure from the *Adagio Expressivo* subsection to the *Andante Espressivo* subsection (B back into A), m. 321, is very weak closure, almost bleeding right into the return of the A motive. No clear tonal centers are expressed in any strand, though the strands are similarly stratified by rhythms: violin 1/violin 2, cello/bass, and the viola may belong to the violin strand or may be its own. Regardless of stratification, the independent strands don't form any solid tonal identity, nor do they stumble into a chordal structure. The final chord of the subsection is spelled D–F♭–B–B♭, which even through various enharmonic reinterpretations, is difficult to rationalize. It achieves closure through only two means, it is durationally accented (as the first long note in a while), and the start of A material signals the turn to a new section.

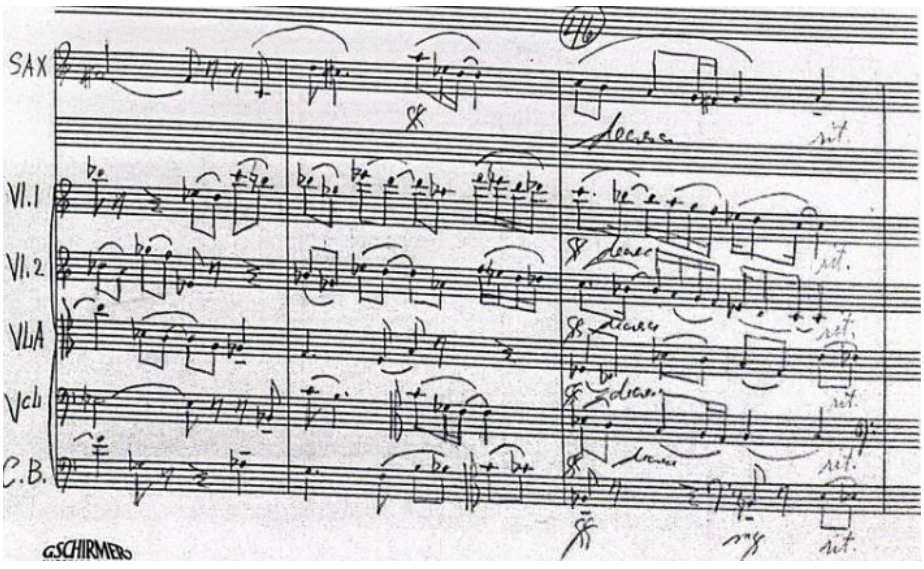

Figure 54: *Fantasy*, *Adagio*, mm. 228–230.

The final moment of intermediate closure in Section C/movement 3 is the cadence into the *Largo* (coda) that occurs in m. 330. In mm. 328–331 (Figure 55), the string orchestra has a weak dominant-tonic progression that leads into repeated A♭-major triads, while the saxophone plays a melody in B♭ overhead. In m. 327, beats 1–2, the composite chord spelled G–B♭–D♭–F functions as a leading-tone diminished-seventh chord into the A♭-major cadence. The motion of $\hat{1}$–$\hat{7}$ in the saxophone is a closing gesture made familiar over the curse of this piece, forming an overall polyclose. The true power of this closure, which may have initially been understood as tonic, is heard when the entire chord resolves to a $D\flat^{maj7}$ on the next downbeat. In effect, making A♭ the dominant all along and starting off the coda in the key of D♭ major, where it will of course end.

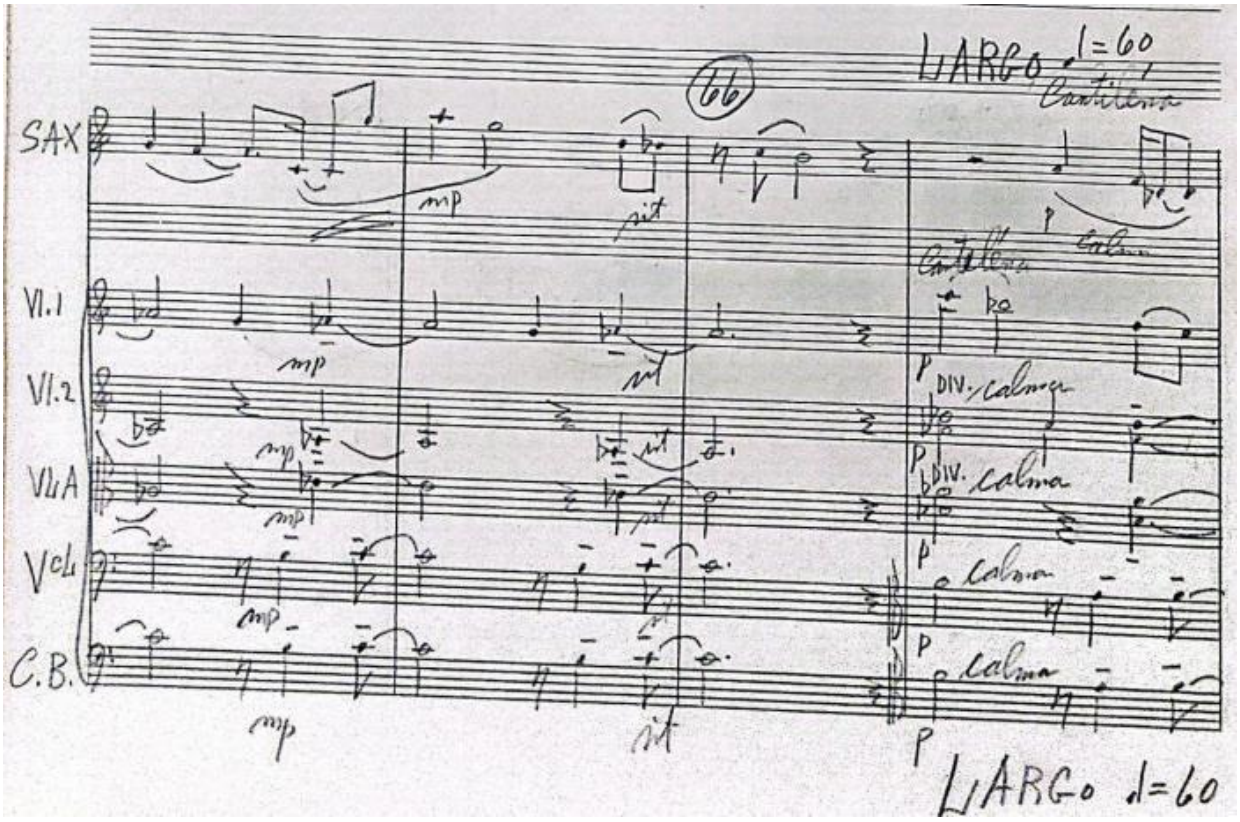

Figure 55: *Fantasy*, *Andante Espressivo*, mm. 328–331.

Chapter 5: Conclusion

In the first chapter of this thesis, I synthesized theories of closure and theories of key priority to construct my theory of polytonal closure. Formal theory of twentieth-century music is fickle, a warning explicitly given by Clare Eng (2019). She argues that there are so many conventions of closure established by the twentieth century that an overly generalized theory can never be specific enough to accurately describe neo-tonal closure. Heeding Clare Eng's warning, my challenge was to develop a theory of polytonal closure that was cognizant of conventions but wasn't overly generalized to be considered a *corpus convention.* By combining a theory of closure with the analytical lens of priority given by Kaminsky, I crafted a theory of polytonal closure that works on the levels of both *opus convention* and *composer convention* (Kaminsky 2004; Eng 2019). My framework of polytonal closure was crafted to blend the realm of "*new Formenlehre"*—with its typically stringent definitions of closure and syntax—with looser conceptions of key areas and tonal priority. The emerging framework is then definitive enough to classify mechanisms of closure, but flexible and fluid enough to retrofit to the conventions of composers and opuses. In other words, by combing stricter definitions of closure from the "*new Formenlehre"* with a fluid framework of priority and tonal perceptibility, a theory of polytonal closure can be adapted to the specific needs and idioms of different composers and pieces.

The second chapter of this thesis worked to broadly apply the analytical framework to diverse repertoire. While Milhaud and Swanson both make extensive use of superimposition and polytonality, the expressive effect of their applications couldn't be more different. I chose these two composers because of their differences. If the theory of polytonal closure was made to be adaptable, then this chapter was the stress-test. Essentially, it serves to prove the theory in as wide a range of music as possible. Contrasting examples of similar mechanisms of closure show

how adaptable these labels and this framework can really be. The clearest example of that is found in comparing the converging closure of Milhaud's *Botafogo* and Swanson's *Pantomime*. In these examples, the category label of "converging closure" covers two different methods of achieving it, such as (1) the assimilation of keys through the strength of tonal priority and the merging of tonal strands as in Milhaud's *Botafogo*, and (2) the ambiguous tonal float that causes tonal strands haphazardly bump into each other, forming vertical harmonic structure—or vertical dynamisms—that are harmonically functional as in Swanson's *Pantomime*.

Chapter 3 took the framework of polytonal closure out of the isolated examples of closure in Chapter 2 and applied it to a more complex formal scheme: sonata form. Taking the first movement of Milhaud's Sonata for Flute, Oboe, Clarinet, and Piano as a principal case study, I asked and answered the question of what closure means in a polytonal sonata. I incorporated strategies and frameworks of Hepokoski and Darcy (2006), Damien Blättler (2024), and Joseph Straus (1990) to formally map how polytonal closure is functioning within a twentieth-century polytonal sonata. I also incorporated theories of agency by Robert Hatten (2018) and Edward Klorman (2016) to construct a narrative understanding of Op. 47-I. Heeding the warning by Joseph Straus concerning the "therapeutic model" of music theory, I constructed a metanarrative understanding of the piece in strict avoidance of "curing" polytonality (Straus 2018). The metanarrative incorporates elements of irony and parody into the story—which in itself fits within a contemporary understanding of a neoclassical approach to musical form (Straus 1990; Hyde 1996).

The model of polytonal closure mapped onto Sonata Theory in an almost one-to-one replacement of traditional harmonic closure. Strong polytonal closure occurred where strong syntactical closure would traditionally need to be (EEC and ESC). Even the minute detail of P-

zone overdetermination of tonal center can be explained within the model and lends itself to the metanarrative analysis; very significantly as well, as the P-zone overdetermination was the reveal of the *devil's advocate* agent. Within large complex schema, the framework of polytonal closure continues to adapt fluidly to other formal organizations.

The final chapter of my thesis, Chapter 4, turned its sights on the works of Howard Swanson. While the formal categories of "binary" and ternary" may be reduced to delineation of co-called "simple forms," Swanson's forms are by no means simply constructed. Before I could even begin to analyze the closure within Swanson's music, I first had to develop an approach to analyzing his music generally. What I call my Rosetta Stone is a working list of idiosyncratic principles of Swanson's music. Constructed through analyses of *Noret*, *Short Compositions*, and *Nocturne 1*, the Rosetta Stone is my point of entry for understanding his highly stylized music. It is built on the back of research done by Marsha Reisser (1989) and Lee Cronbach (1981), the most recent scholars who had addressed Swanson's unique compositions.

With a point of entry established, I went about analyzing the formal functions and closure of Swanson's *Fantasy for Soprano Saxophone and String Orchestra.* The distinct mechanisms of closure within this piece function in a broad range of expressive effects. There is unprepared closure that seemingly leads nowhere, but there are also complexly constructed harmonic verticals, made from a composite of disparate tonal strands, which in turn each have their own isolated structures. In both cases, and indeed all those in between, the framework of polytonal closure was adaptable enough to give language to the mechanisms.

Beyond just the analysis of moments of closure, the theory of polytonal closure allows for the clear delineation of formal structures, even the so-called simple ones. A clear roadmap of larger sections/movements, and subsectional composite forms within those larger structures, can

be constructed just by examining the piece through the lens of polytonal closure. I used the language of Kofi Agawu (1989) to examine the closure at sectional changes in a hierarchy of global and intermediate, which is not the syntactical hierarchy outlined by Caplin (1998; 2018; 2024), which I explicitly do not attach to my theory. By examining the rhetorical strength of individual moments of closure, analyzed both in isolation and in context, I hierarchically sorted them into a perceivable larger form structure.

Further research into polytonal closure would consist of the framework's application to other polytonal composers to continue to test its usefulness in analyzing expressive effects, narrative information, and formal function. Application to other neoclassicists may provide similar results to Milhaud, as I used Milhaud as a stand-in for that style of music. However, the application of the polytonal closural framework to more diverse music could expand the theory to incorporate more mechanisms and applications. I do not make the claim in this thesis that my framework of polytonal closure is universally applicable, a *corpus convention.* But I do not eliminate the possibility that it could be applicable to music beyond Milhaud and Swanson. Moreover, just as the theory of polytonal closure could be combined with theories of agency in Chapter 3, other frameworks could be combined with the theory to produce nuanced readings and understanding of diverse repertoire. For example, I could imagine this theory being more thoroughly combined with the "process of becoming" described by Janet Schmalfeldt (2011), allowing us to develop even more nuanced understandings of tonal center, narrative, and form in polytonal repertoires. No matter which future paths one pursues, I hope that my analytical framework can provide a foundation for other scholars interested in exploring the myriad ways that composers of polytonal music use closure to shape their music.

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