UNIVERSITY OF CALIFORNIA SAN DIEGO

Amplifying the Status of Texture in a Musical Work

A Dissertation submitted in partial satisfaction of the requirements
for the degree Doctor of Philosophy

in

Music

by

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The Dissertation of Zachary Seth Konick is approved, and it is acceptable in quality and form for publication on microfilm and electronically.

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ABSTRACT OF THE DISSERTATION

Amplifying the Status of Texture in a Musical Work

by

Zachary Seth Konick

Doctor of Philosophy in Music

University of California San Diego, 2023

Professor Roger Reynolds, Chair

"Amplifying the Status of Texture in a Musical Work" explores the formal strategies and consequences of musical texture serving a heightened function in a musical work by means of successive textural prolongations. Through two distinctive case studies of my own composition *Constellations* and composer Beat Furrer's *Spur*, the formation and linear organization of idiosyncratic musical textures are examined to demonstrate how they operate within each work and how they each uniquely attain an amplified state of formal salience. These contrasting examples serve to offer an examination on formal consistencies and incongruities between the works, highlighting archetypal features of texturally focused compositions, as well as offering contrasting approaches to such designs. This study demonstrates how the organization of textural

prolongations within a texture-centric narrative heavily relies on a balance of relatively low–activity and high–activity states of tension. The distinctive characteristics of textural components and the number of such component entities operating in a textural narrative, the integration or stratification of textures and number of stratified layers, and the ordering and proportionality of these activity states are imperative formal distinctions between such compositions. Extra features, including the incorporation of conventional melodic motives, various forms of transitional function, and formed narratives of timbral and dynamic progressions also further dimensionalize texturally dominant compositions. By presenting these observations through two case studies, various considerations on formal design strategies can be illuminated regarding texture–focused composition. The aim of this study is a discovery of novel forms of musical expression through the magnification of coordinated textural schemes.

INTRODUCTION

The formation and formal independence of classifiable sonic textures has been a prevailing topic of interest in my work. In traditional listening structures, textural elements have mostly served a secondary function to a primary figurative activity. Numerous composers particularly from the twentieth century up to now have explored texture in place of figurative motives including György Ligeti, Iannis Xenakis, Krzysztof Penderecki, Brian Ferneyhough and Beat Furrer. These composers all had individual approaches to texturally motivated composition, and their results are just as distinctive. The application of texture as a primary formal element in music has engendered novel listening experiences and design strategies. To highlight the formal significance of textural structures in my music, I prescribe for them idiosyncratic characters which serve a salient formal function.

In this document, I will discuss the way I generate and formally integrate these structures in my work *Constellations*, a chamber ensemble work composed in 2023 for three vibraphones, viola, cello, and contrabass[1]. I will begin with a review of the salient formal features present throughout the work, including the application of an occasional conventional melodic motive, a variety of prolonged textural states, and an iconic figure which attains distinctive formal significance. The textural narrative[2] in the work formally operates independent to the work's other entities. I will further discuss how I form textural components which offer textural formations their distinctive character, and how these textural components generate textural states

[1] A studio recording of *Constellations* can be accessed online through the following link: https://soundcloud.com/composerkonick/constellations–for–chamber–ensemble.

[2] The use of the term "*narrative*" in this paper refers to a progression of events which attain a distinctive formal coherence. Multiple simultaneous sub-narratives can occur in a work to generate the work's grand narrative.

according to a multi–dimensional system. I will then discuss my means of sustaining textural states over time by what I refer to as textural prolongation, and the ability for these textural prolongations to form either integrated or stratified layers of activity. Further aspects of the work's design, including timbral and transitional forms will be considered, including the ability for textural structures to form perceptual states of anticipation, suspension, and resolution devoid of harmonic dependence which normally guides such formal states. Given this foundation in *Constellations*, a narrative of formal design based primarily on textural concerns will be postulated.

Another comparable musical example, *Spur* by the composer Beat Furrer, will also be examined according to the same terms. This comparison will allow observation on variances and archetypal features between formal strategies. The discussion will cover topics of successive formal development of the textural states including a meticulous structuring of integrated and stratified textures and their functions, and diverse methods of transitional behavior in a texture–centric environment. I offer these comparative case studies to encourage further objective research on the perception, construction, and functional utilities of complex textural listening structures. This research will also be of particular interest to the contemporary composer.

CHAPTER 1 – MUSICAL TEXTURE

Chapter 1.1 – Musical Texture

A musical texture is formed by continuous, uninterrupted emphasis on one or more normative activities (such as “choral”, contrapuntal, pointillistic, etc.) and is further characterized by the relative composite density of these activities. One can perceive musical textures as singular or combined layers of textural activity occurring simultaneously if there exist multiple independent component structures at once. If the texture is singular in nature, it is an integrated texture. Textures which entertain multiple component activities are perceived as simultaneous stratified activities.

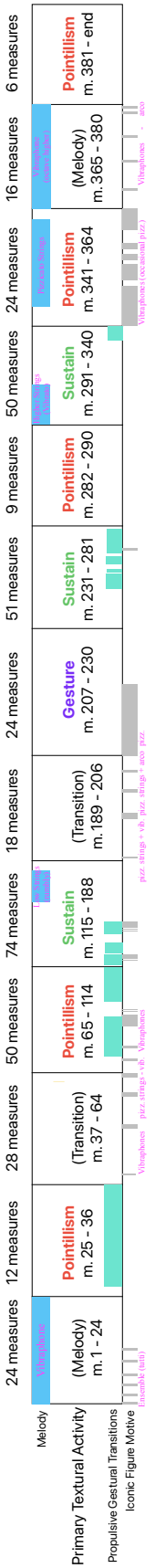
CHAPTER 2 – ZACHARY KONICK'S *CONSTELLATIONS*

Chapter 2.1 – The Application of Texture

Constellations is composed of three salient formal entities which comprise the work's larger narrative. These include applications of texture, an iconic figure, and a melodic activity. In conventional circumstances, textural entities tend to serve as a formal modulator to instances of melodic motives. Amy Bauer postulates that the centricity of pitch and peripherality of timbre, dynamics and articulation is a historically manufactured notion (Bauer 61). In *Constellations*, while an occasional conventional melodic motive is present which arguably attains formal prominence due to its recapitulatory nature, textural formations also achieve a salient function independent of the work's other significant components. This is made possible through the categorization, logical development, and proportional representation of three select textural component activities. There is also the presence of a distinctive iconic figure which offers another significant feature in the work. This element often contributes to textural formations like the three textural components but operates in an individualized manner in the work. These three entities of a multiplicity of textures, an iconic figure, and a melodic motive are proportionally woven into a dialogue throughout the work to generate a complex formal structure, as outlined in the table below (Table 1).

The conventional functions of texture in music are like that of timbre. These features are typically applied to add and modulate the perceived color of a motivic foreground activity, conventionally a melody. The prolific composer, Pierre Boulez contended that "the functional possibilities of timbre only seem valid if they are linked to language and to the articulation of a discourse through structural relationships… without musical discourse it is nothing, but it can also form the entire discourse on its own" (Boulez 170). Through the integration of multiple

Table 1 – a formal diagram of *Constellations*.



structural relationships, both within the textural narrative and across the other elements which offer the work it's formal integrity, the formal salience of musical texture offers this element an amplified status in the work's discourse.

Chapter 2.2 – Textural Components of *Constellations*

The textural narrative of *Constellations* comprises discrete successive states of musical texture which seek to attain formal significance through their prolongation and distinctive structural contrasts. To attain formal meaning between textures in *Constellations*, I devised three textural components which serve as the basis for the work's textural formations: pointillism, gesture and sustain. In this work, these textural components are distinguished by means of their contoured or non–evolutionary pitch nature and their temporal state of being which is broken into definable events or seeming continuousness. Below, I will further outline and diagram the three textural components in the work and discuss the issues surrounding their formal boundaries.

The first textural component presented in the work is pointillism (Figure 1). A pointillistic state is comprised of attack–based articulations which accumulate into a current of segmented events. The most characteristic representation of this component in a textural state involves pitch representation which proportionally covers a wide ambitus, and pitch sequences which are not distinctly contoured.

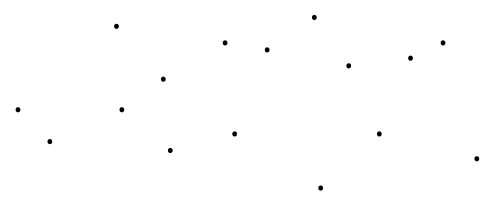


Figure 1 – a visual representation of a characteristic state of pointillism.

The second textural component is gesture (Figure 2). A gesture in music is an activity which evokes a state of a physical motion through sound. The most common form of motion in music is achieved through rapid pitch successions. Gestural motions through pitch evolution can either be unidirectional or multidirectional. Aside from pitch distinctions, a sense of gesture may also be perceived through swift evolutionary behaviors, such as dynamic or temporal swells or contractions. Due to their swift, evolutionary nature, gestural activities are commonly utilized for anticipatory or transitional functions.

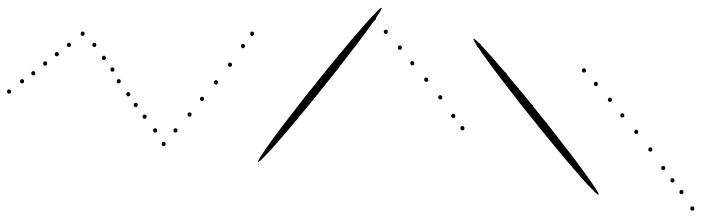


Figure 2 – a visual representation of a characteristic state of gesture.

The third textural component is a sustain (Figure 3). A sustained state is an activity which is perceived as an unbroken presence, forming a singular event. Its most characteristic presentation involves static pitch. In this case, both a local activity and its component pitches are sustained, forming the purest form of sustain. However, any activity can be presented as sustain through perceived connectivity of both contoured and non–contoured behaviors.

Figure 3 – a visual representation of a characteristic state of sustain.

When component identities are presented in less–characteristic states, their individualities in a textural structure can become ambiguous, instead generating formal assimilations of the

various component entities. This can occur when the formal constituents of each textural component share qualities of another component. For instance, a registrally contoured, sustained activity (Figure 4) could be viewed as a gesture or a sustain. A contoured pointillistic activity with intermittency (Figure 5) can be viewed as either gesture or pointillism. A rapid pointillistic activity with pitch stability can be interpreted as a pointillistic sustain. In this state, minimal intermittency of attacks would be more conducive to a categorization of pointillistic sustain (Figure 6). However, intermittency with pitch stability can also be perceived to have a quasi–sustained quality (Figure 7). The formal ambiguity of these states in such instances can be resolved by the presence of textural threads. Textural threads can be construed as a continuity within a particular textural component activity through a prolonged period of textural evolution. For example, a state of pointillism which becomes a series of contoured points and then collapses to rapid repeated attacks on a single pitch can be considered a textural thread of pointillism which undergoes an evolution, assimilating features of gestural and then sustained behaviors. These threads of continuity provide context which help define the central form of textural activity within textural prolongations and categorizes certain aspects of their evolution.

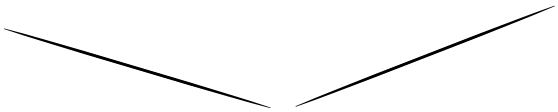


Figure 4 – a visual representation of sustained gesture.

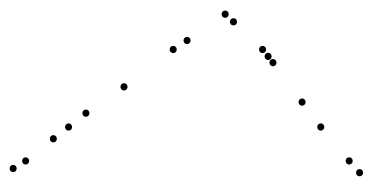


Figure 5 – a visual representation of pointillistic gesture.

Figure 6 – a visual representation of a pointillistic sustain.

Figure 7 – a visual representation of an intermittent pointillistic sustain.

These three components of musical texture operate in multiple dimensions regarding the overall textural formation. The smallest dimension is the articulative level, where the component is represented by the individual articulations within a musical texture. The next dimension, which occurs at a larger scale, is the textural manifestation level. This level represents the normative categorization of musical textures, in which individual articulations are arranged to form a distinctive structure at a higher scale. A third dimension occurring at a further expanded scale is the gestalt textural behavior level. This level represents the application of textural component behaviors to the entire structure's textural manifestations. The classification of these various dimensions relies strongly on temporal and pitch behaviors as temporal compartmentalization of distinct formations categorizes this feature. Further dimensions of textural formation are conceivable depending on the complexity of the construction but are not intentionally explored in *Constellations*. The formal manifestation of these three dimensions in the work help to further complexify the presentation of textural structures and offer more diverse meanings to the work's textural components.

The three textural components noted above are introduced early in the work's formal development. As an opening solo vibraphone figure evolves into a pointillistic texture, a series of

secondary textural events accompany it in the strings. The secondary textural layer in the strings modulates from a pointillistic activity in the work's opening measures (Figure 8) to a sustained activity in measure 12 (Figure 9), then to a gestural activity in measure 26 (Figure 10). This opening sequence introduces the gamut of textural components in the work.

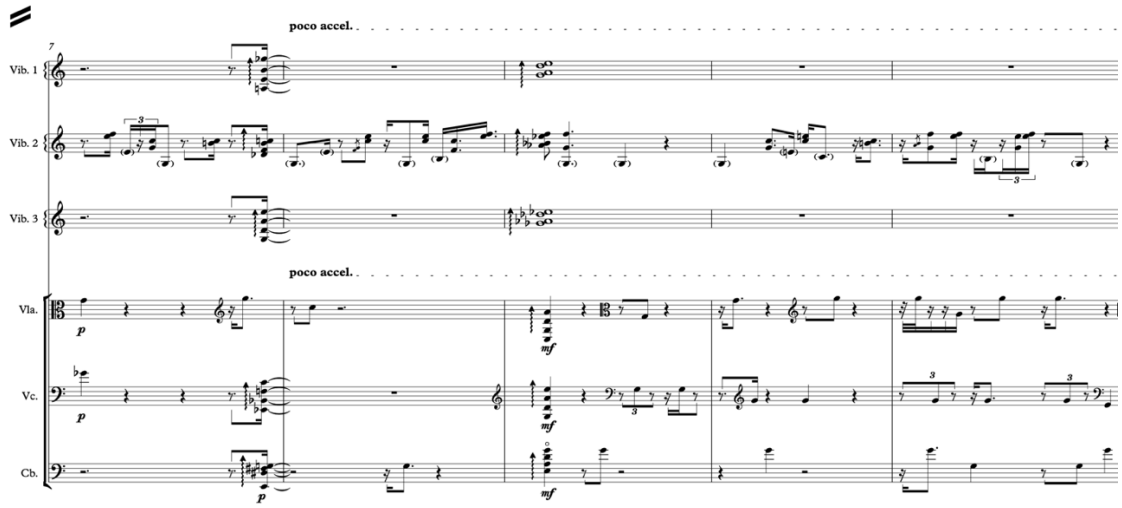


Figure 8 – Z. Konick, *Constellations*, mm. 7 – 11.

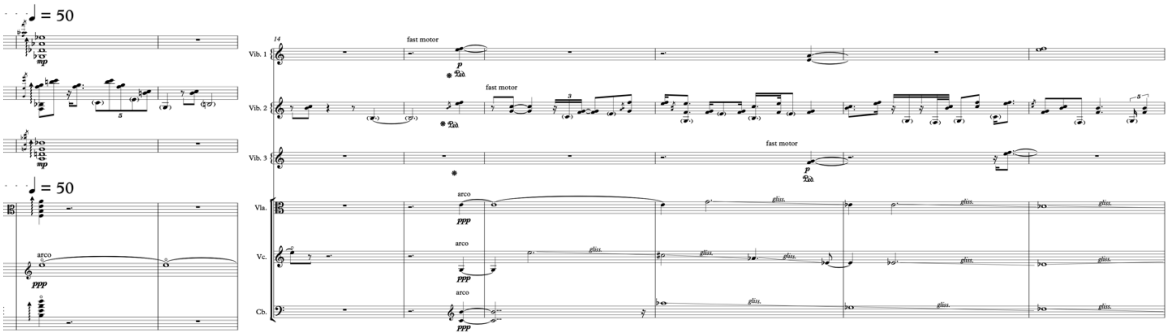


Figure 9 – Z. Konick, *Constellations*, mm. 12 – 19.

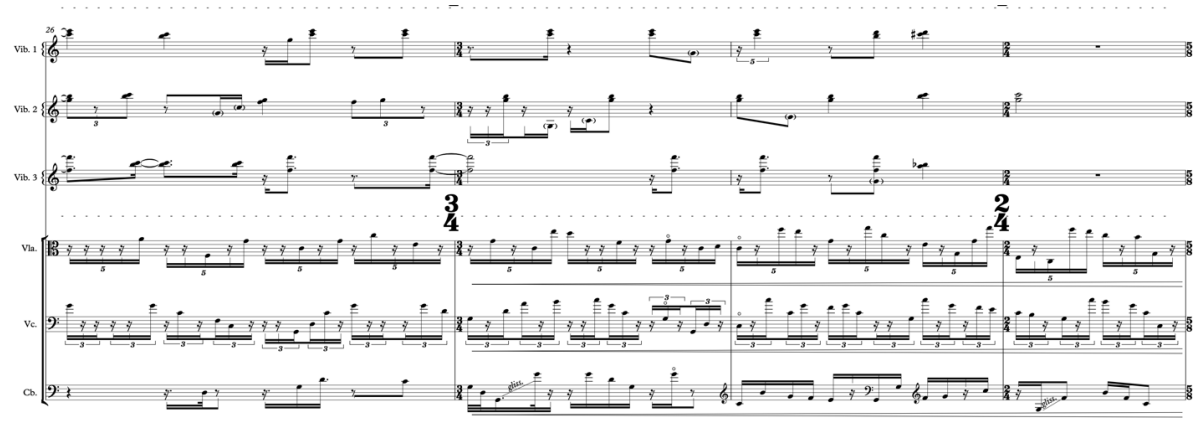


Figure 10 – Z. Konick, *Constellations*, mm. 26 – 29.

One instance where all three of these dimensions are presented simultaneously in the work through a textural formation occurs at measure 214 in the pizzicato strings (Figure 11). Here, the articulative level is represented by a gestural articulation of a swift rising arpeggio (a pizzicato strum on stopped strings). The textural manifestation level is represented as a state of pointillism due to the offset separated attack articulations (although separation here can become somewhat blurred into a sense of sustain by the gestural articulations if performed without gaps of silence). The gestalt textural behavior level in this passage suggests a state of gesture due to

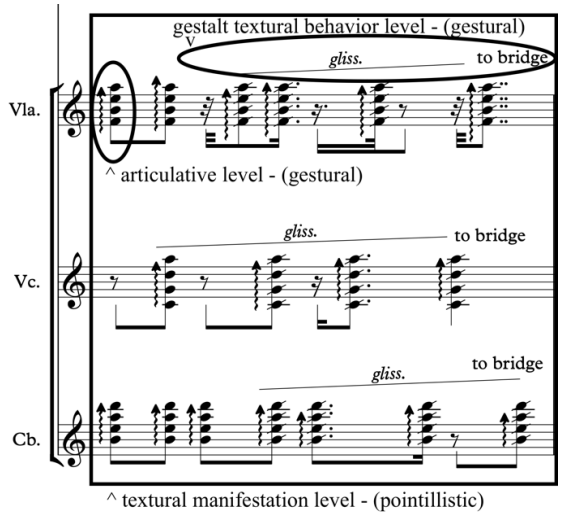


Figure 11 – three dimensions of textural formation operating in *Constellations*, m. 214.

the contoured nature of the textural manifestation. This is represented by the indication of glissando. The intention in this passage is a rising shift in register of the pointillistic activity by moving the performance of the gestural figure up the fingerboard (toward the bridge) for all active performers.

Another contrasting instance of textural formation through these three textural components can be seen in measures 318 – 319 (Figure 12). Here, the strings perform a textural activity based on a sustained articulation, a pointillistic textural manifestation through interspersed pitch alterations and a gestalt textural behavior of a rising gesture through the contour of the pitch alterations. In this instance, the addition of vibrato serves only a secondary effect.

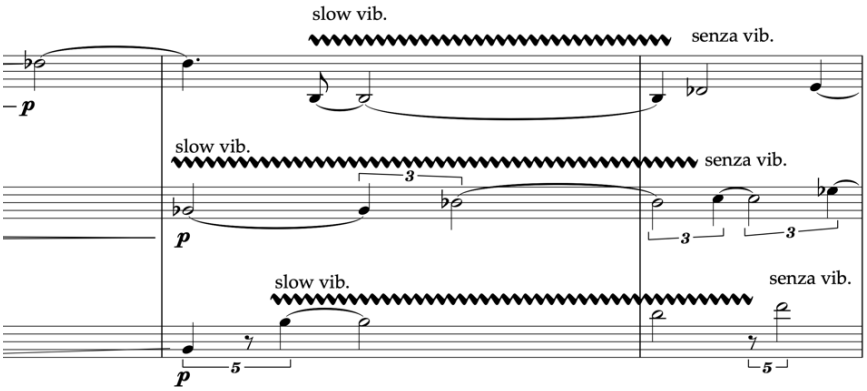


Figure 12 – three dimensions of textural formation operating in *Constellations*, mm. 318 – 319.

Chapter 2.3 – The Iconic Figure

The iconic figure attains distinctive formal meaning in the work. It is a unique gestural articulation: a swift rising arpeggiated chord. The iconic figure is a specific form of the gestural component of texture. It is evoked through a pointillistic textural manifestation and a gestalt textural behavior of sustain through general pitch stability and occasionally rapid periodic

representation. This activity deserves independence from the normative categorization of textural components due to its consistent compartmentalized presentation of a rapid gestural articulation. This feature acts as a distinctive component to the work's narrative by being strategically interspersed through multiple significant occasions. When used to represent a textural state in the work, the iconic figure is intended to represent all three of the textural components. It offers a gestural articulation by means of a swift rising arpeggiated chord, in a textural manifestation of pointillism with a gestalt behavior of sustain.

This iconic figure is introduced at the very start of the work as a secondary, occasional, punctuative force performed by the entire ensemble, accompanying the opening melodic vibraphone activity (Figure 13). It returns later in the vibraphones alone as a sustained surge of rapid periodic articulation from measures 78 – 80 (Figure 14), then again in a similar though more temporally relaxed state from measures 118 – 120 and from measures 128 – 130. This activity returns in measures 207 – 217 (Figure 15), now modulated in timbre through an ensemble of string pizzicato strumming at a fairy relaxed pace while preserving continuity. For the first time in the work, the iconic figure takes on a primary role, whereas earlier representations served a secondary function to another textural entity. The final return of this activity occurs in measures 341 – 364 (Figure 16). The activity is represented again in the resonant vibraphones, but now at a similarly relaxed temporal state to the previous string pizzicato activity. This is a striking moment which provides a strong formal sense of arrival within the textural narrative of the work.

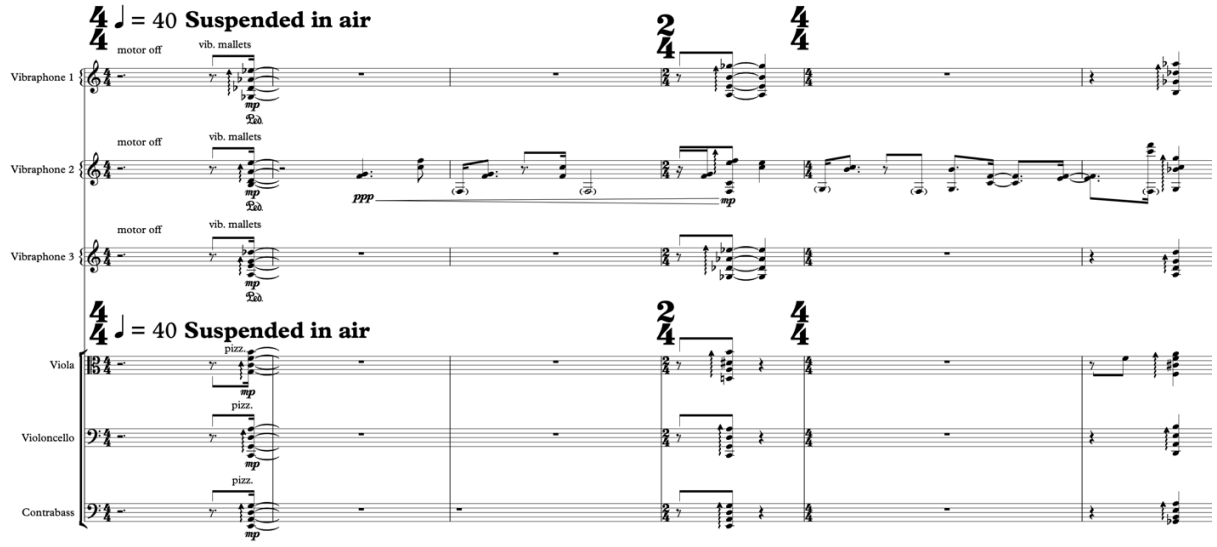


Figure 13 – Z. Konick, *Constellations*, mm. 1 – 6.

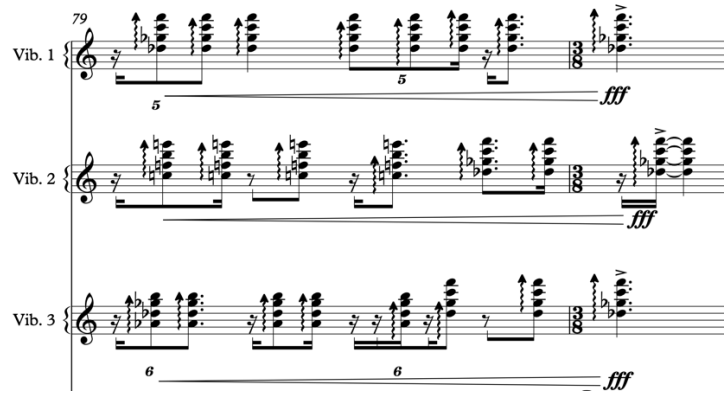


Figure 14 – Z. Konick, *Constellations*, m. 207.

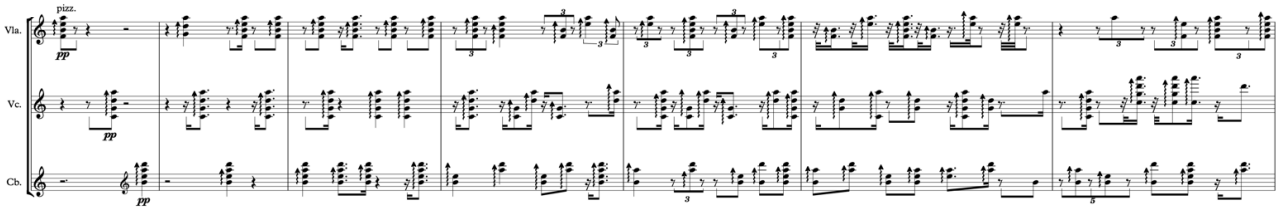


Figure 15 – Z. Konick, *Constellations*, mm. 207 – 213.

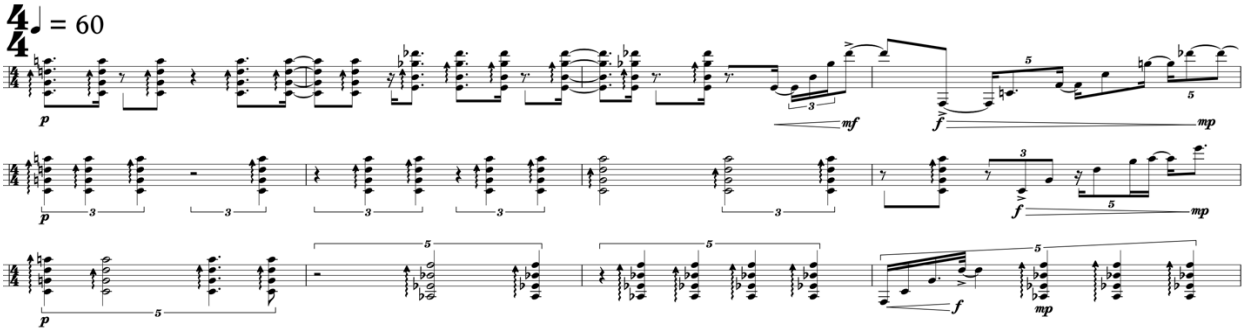


Figure 16 – Z. Konick, *Constellations*, mm. 341 – 344.

In summation, the iconic figure in *Constellations* is introduced as a punctuative entity, which is later reinforced as a meaningful element through occasional reappearances secondary in function to save its formal impact. Then, after a significant period, the activity returns, taking on a primary emphasis of texture in a new timbral setting of muted string plucks. After yet another significant period, the same activity is rearticulated in the original timbral setting of resonant vibraphones, highlighting the sense of a drastic resonant opening of the previous muted string pizzicato activity. In this moment, the iconic figure temporally expands from the state of a singular figure into a textural state of pointillism with a gestalt textural behavior of gesture. This formal evolution underlines a gradual emphasis toward a climactic occasion of the iconic figure within a textural state, facilitated through a gradual temporal widening and timbral contrasts.

Like the other textural component activities, the manifestation of this component activity can suggest other component behaviors. For instance, occasions of temporal separation between articulations of the iconic figure are conducive to a perception of pointillistic textural manifestation. Instances of temporal connectivity of the articulations may suggest a sustained state. Finally, instances of the iconic figure in rising pitch motion imply a gestural manifestation

(Figure 11). However, the work only presents a subtle gradation between these states for the iconic figure in order to maintain its distinctive status.

Chapter 2.4 – Melodic Motive

Conventional melodic statements only occur on rare occasions throughout *Constellations*. Since the majority of the work is texturally focused, the presence of lyrical activity offers stark contrasts in the work. A conventional melody is a succession of pitches which generate distinctive identity through their intervallic succession, contour, and rhythmic character. The melody which periodically reappears in *Constellations* is a slowly articulated progression of contoured pitches at a temporally digestible rate. Reoccurrences of the melody are not literal restatements but are suggestive of the initial melodic contour and share many common intervallic motions.

The first melodic presentation occurs at the start of the work (Figure 17) in the vibraphone before becoming a textural state of pointillism. The clarity of melodic succession is veiled due to the frequent presence of dyads. Multiple intervallic motions can be interpreted from this succession. However, a particular character of contour and possible interpretation of intervallic series is elaborated in later melodic occurrences. Using interval class identification, the primary intervallic sequence in this instance is a motion up a perfect 5^{th}, down a perfect 5^{th}, up a major 2^{nd}, down a major 2^{nd}, and down an octave. This intervallic sequence pertains to the pitch sequence of F C F G F and F. The pitch activity here is reserved due to the intention for this activity to morph into a harmonically reserved statement of pointillistic activity.

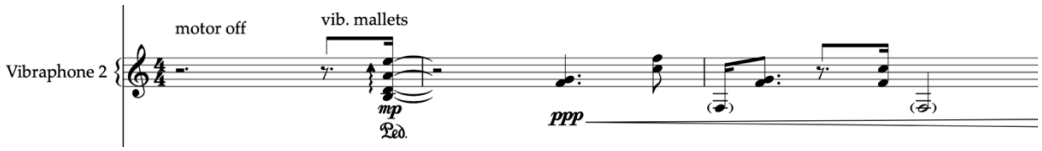


Figure 17 – Z. Konick, *Constellations*, mm. 1 – 3.

The melodic succession first reappears at measure 149 in the low register by the cello (Figure 18). The pitch sequence, seen in the top voice of the cello dyads is G Bb F E G. This forms an intervallic sequence of up a minor 3rd, up a perfect 5th, down a major 2nd, and down a major 6th. Considering the contour of this figure against the original statement, the original motion of up – down – up – down – down is only missing one intervallic motion. The motion in this case of up – up – down – down is only missing the second interval of downward motion of the original presentation.

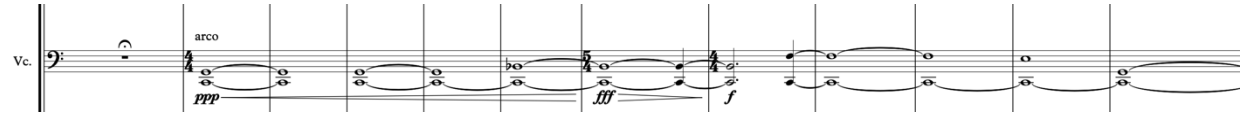


Figure 18 – Z. Konick, *Constellations*, mm. 149 – 159.

Another instance of melodic motive activity occurs at measure 165 (Figure 19) in the top voice of the viola dyads. Here, there is a pitch motion of F – C – A – G – F# with intervallic motion of up a perfect 5th, down a minor 3rd, down a major 2nd and up a major 7th. This up – down – down – up presentation offers a permutation to the previous melodic contour. The intervallic motions in this instance employ the intervals of the previous statement out of order: a major 2nd – minor 3rd – perfect 5th – and a major 6th or 7th which both represent a large concluding leap.

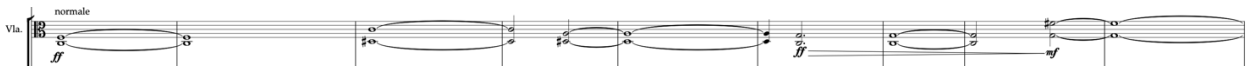


Figure 19 – Z. Konick, *Constellations*, mm. 165 – 173.

The melodic motive reappears again at measure 291 (Figure 20), where the figure is presented as a sustained figure by a bowed viola. The pitch sequence Ab – D – E – B – D# – C# – C# offers an intervallic sequence down a diminished 5th, up a major 2nd, up a perfect 5th, down a minor 6th, down a major 2nd, and down an octave. In this instance, the up – up – down – down contour of the occurrence at measure 149 is present beginning at measure 292. The intervals at measure 291 continue to emphasize the major 2nd, perfect 5th, and a wider interval (previously a major 6th, major 7th, and octave), in this case a minor 6th. This sequence continues to demonstrate variation of both the melodic contour and the order of the characteristic intervals.

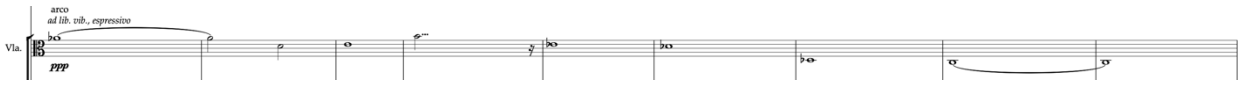


Figure 20 – Z. Konick, Constellations, mm. 291 – 297.

The melodic figure then returns at measure 345 (Figure 21) as secondary to the climax of the textural activity. Here, it is performed by the viola and cello in unison attacks by a pizzicato technique offering harmonic contrast between the two instruments. Based on the higher voice of the viola, the pitch sequence is G F G F E C F G. This produces an intervallic sequence of up a minor 7th, down a minor 7th, up a minor 7th, down a minor 2nd, down a major 3rd, up a perfect 4th, up a major 2nd. The reserved pitch presence of pitches C E F G and the rhythmic character of this presentation are reminiscent of the opening melodic statement. However, new intervals of the minor 7th and minor 2nd as well as the perfect 4th are presented to generate an evolution to the

intervallic qualities of the opening figure. Furthermore, the original intervallic contour of up – down – up – down – down is clearly represented in this statement, although at differing positions of the rhythmic identity.

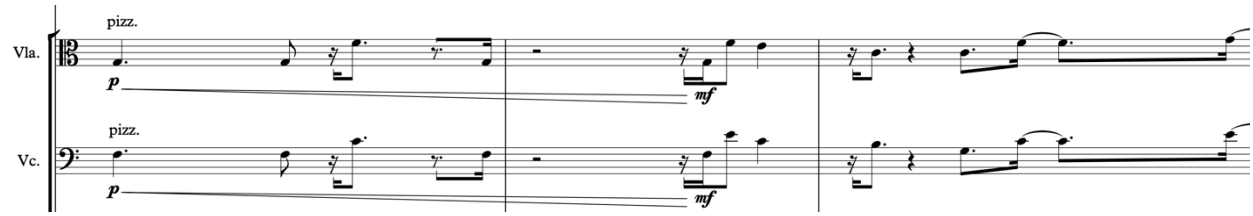


Figure 21 – Z. Konick, *Constellations*, mm. 345 – 347.

In the final statement at measure 365 – 369 (Figure 22), the melodic figure is finally returned to the vibraphone in similar fashion to the opening but pitched up an octave higher and temporarily unaccompanied to further highlight this climactic presentation of melodic motive. This melodic return generates a salient formal recapitulation of the opening melodic motive.

Figure 22 – Z. Konick, *Constellations*, mm. 365 – 369.

Chapter 2.5 – Textural Prolongation

In *Constellations*, musical texture attains the dominating presence in the work's development while the melodic activity and the iconic figure act as formal markers for significant periods in the work. The three forms of prime textural entities are thoroughly digested and developed through the application of textural prolongation. This technique allows unitary textural component events (particularly those which are not naturally conducive to being

sustained) to remain active over long temporal periods through periodic repetition. Textural prolongations can be perceived at a local period of prolonged activity, or as large–scale continuities of a constant textural behavior. Textural states can undergo variation through transferences in the three component forms of textural formation, temporal modulation, timbral modulation, and a dialogue of textural layering. The classification of large–scale textural prolongations is based on the most prevalent thread of ongoing textural component activity through a demarcated period of the work. This classification can be a challenge when multiple textural components are strongly represented by means of the three textural dimensions of articulation, textural manifestation, and the gestalt textural behavior. In such events, prolongations are classified according to the textural thread of prevalent textural identity which lasts over the extended period, despite changes in other component behaviors.

Prolongation in music is conventionally associated with harmonic function. Harmonic prolongation is the extension of a harmonic state, most commonly to extend a state of tension such as a seventh chord. According to Goldenberg, "tension–preserving prolongations are especially effective when the prolonged harmony is an absolute dissonance" (Goldenberg 96). Tension is typically manifested through activity intensification, including features like quicker temporal pacing, louder dynamics, and rapid and abrupt changes (97). These features are also characteristic within the dimension of texture. Textural dissonance is particularly salient due to temporal features. Goldenberg goes on to suggest that contrary attributes offer a similar form of tension, stating that a slower rhythm, softer dynamic, and an absence of change produces a mysterious quality (97 – 98). The salient opposition of the poles of extreme low and high activity when presented in contrast to one another, offer a higher state of tension and dramatic expressiveness. The salience of these opposing poles is facilitated particularly by extremes in the

musical parameters, and through strong and abrupt environmental contrasts (98). Pierre Boulez supports this position, positing that the feature of discontinuity is vital to the field of composition with timbre (comparable to the category of musical texture) (Boulez 170). He goes on to offer that this structural component should be integrated through a multidimensional circumstance, where the distinctive specificity of the timbral (or textural) features articulate the degree of its significance (171). In *Constellations*, distinctive features of contrasted high and low activity states are significant and balanced in the design of textural prolongations. Sustained textural states tend to offer the lowest activity attributes in this work, while pointillistic, and more–so, gestural states tend to present the most active qualities.

Constellations begins its narrative of textural prolongation following the first instance of a melodic activity. This occurrence is a low–activity, temporally open and harmonically consistent figure performed on a single vibraphone (Figure 13). It first operates separate from the textural prolongation narrative. This activity is accompanied by the occasional ensemble punctuations of the work's iconic figure of unison arpeggiated chords. Gradually, the solo vibraphone figure morphs into the work's first textural state, accumulating into a dense pointillistic texture as the remaining two vibraphones multiply the melodic figure with progressively greater attack separation (Figures 8 – 10). This accumulated pointillistic state forms a predominant thread of pointillism, serving as the work's first textural prolongation. The next textural prolongation presented in the work is sustained state from measures 115 – 188. (Figure 23). The sustained activity begins as a thin single–voiced activity which is transferred through the ensemble, and gradually shifts in register and voice density (Figure 24).

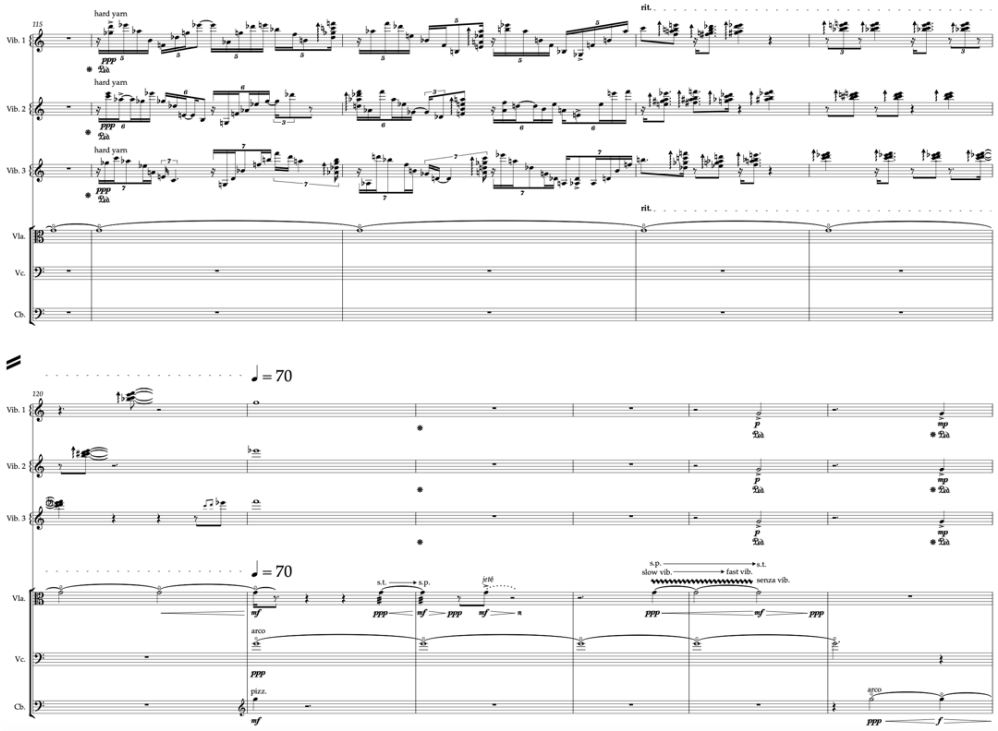


Figure 23 – Z. Konick, *Constellations*, mm. 120 – 125.

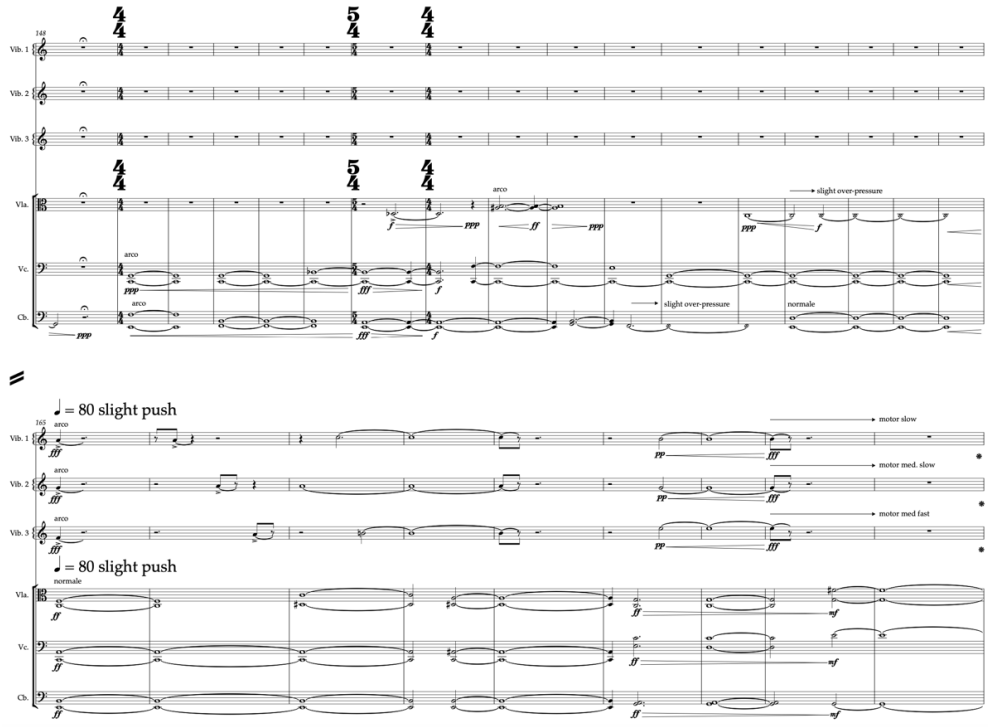


Figure 24 – Z. Konick, *Constellations*, mm. 148 – 173.

From measures 207 – 231, there is a gestural focused textural prolongation (Figure 25). The first presentation of prolonged gestural concentration is comprised of repetitions of the iconic figure in the strings. The gestures become longer in duration through greater pitch density and cover a wide ambitus.

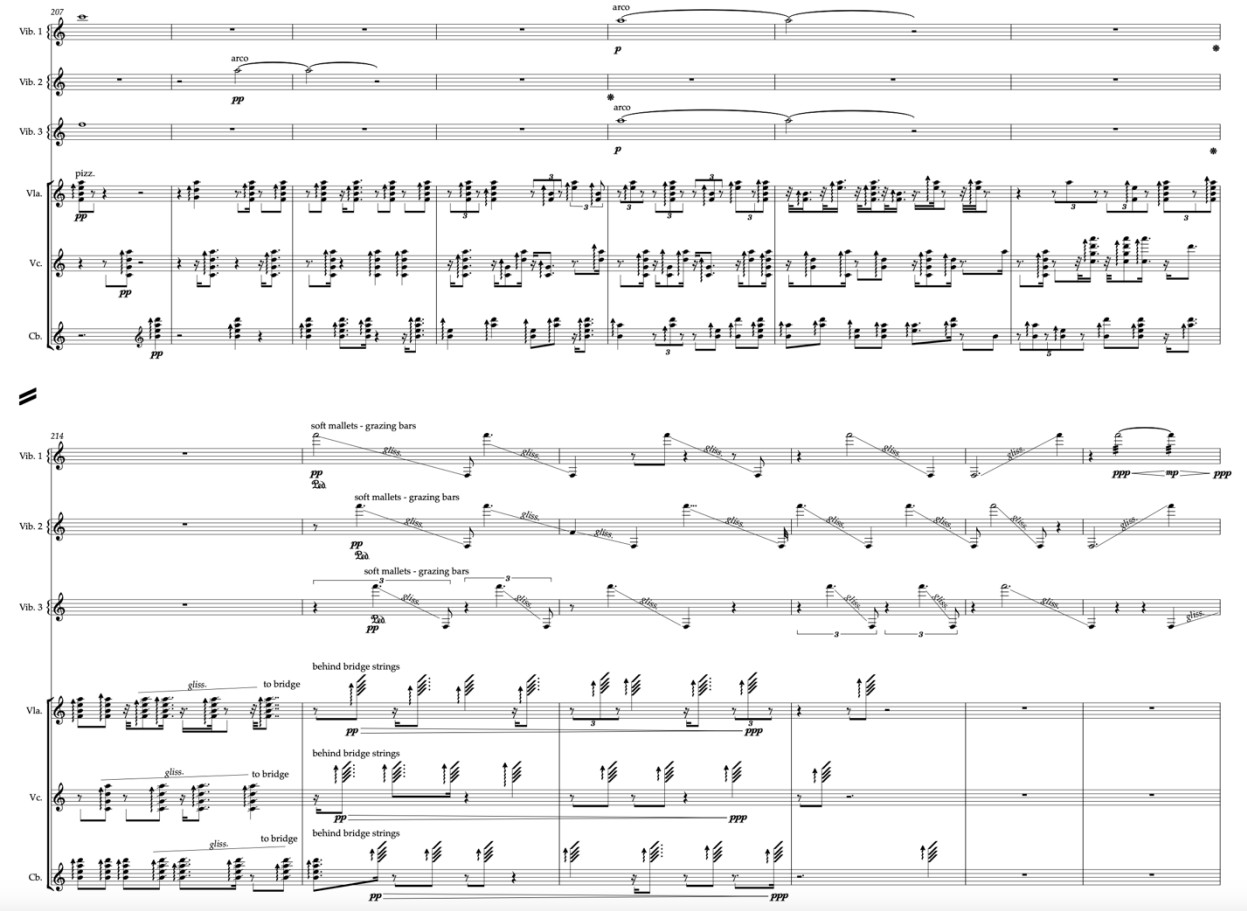


Figure 25 – Z. Konick, *Constellations*, mm. 207 – 219.

Measure 231 (more markedly at measure 234) (Figure 26) returns to a sustained prolongation. This sustain is expressed through a state of rapid pointillism of a primarily fixed pitch. Due to the rapid expression and consistency of pitch, this state can be correlated to a sustained state, formed by pointillistic activity.

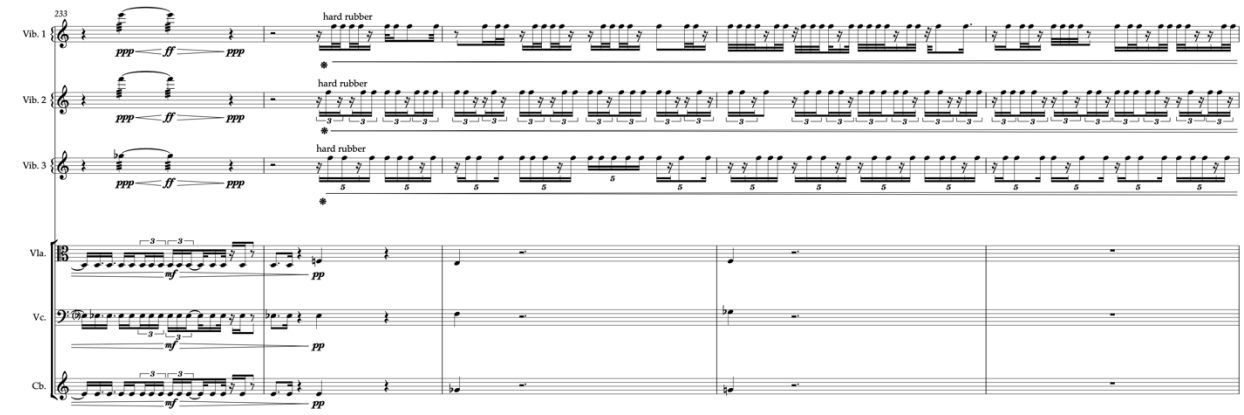


Figure 26 – Z. Konick, *Constellations*, mm. 233 – 237.

At measure 282 (Figure 27), pointillism becomes the primary activity for a brief section but shifts back to a primarily sustained activity from 289 – 340. The effect here is a temporal opening of the previous sustained state of pointillism. Within this textural activity, measures 291 – 299 present the first return of a melodic figure which is vaguely reminiscent of the opening vibraphone figure, serving as an important formal marker.

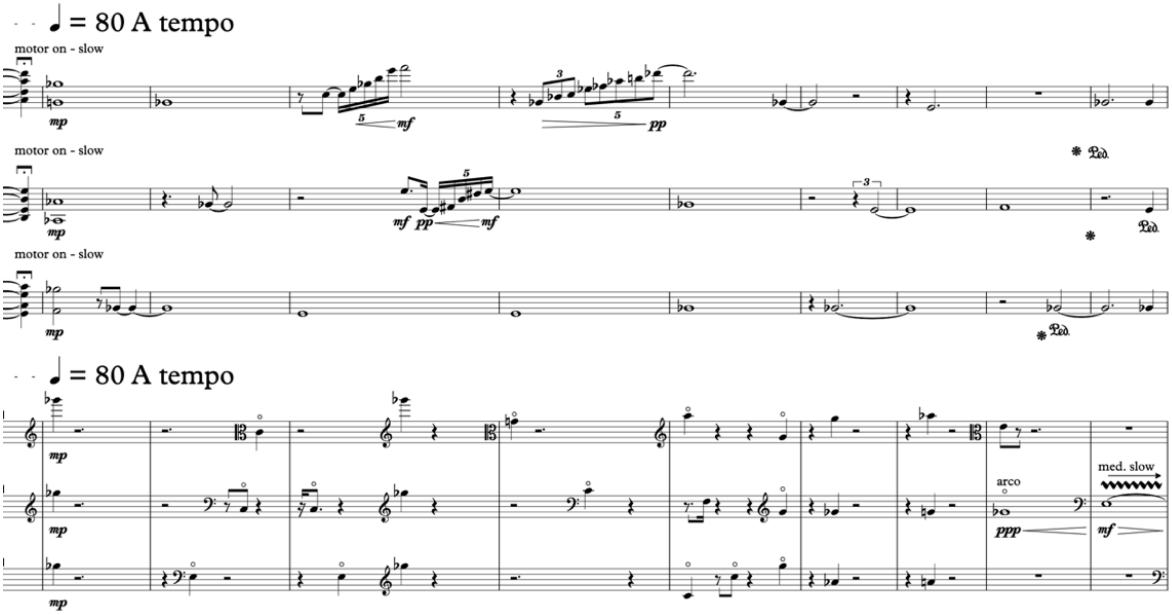


Figure 27 – Z. Konick, *Constellations*, mm. 282 – 290.

At measure 341 – 364 (Figure 28), the textural prolongation returns to a primarily pointillistic activity. This momentous instance of textural pointillism is presented through a gestural articulation and a gestalt textural behavior of at first a primarily sustained activity from measures 341 – 353, and then a primarily gestural one from 354 – 360 and returns to a sustained activity from 361 – 364. Through this evolution, the gestural component activity temporally expands, effectively morphing into the gestalt textural behavior. Measures 345 – 360 (Figure 29) reintroduce the initial vibraphone melodic activity within this new textural state.

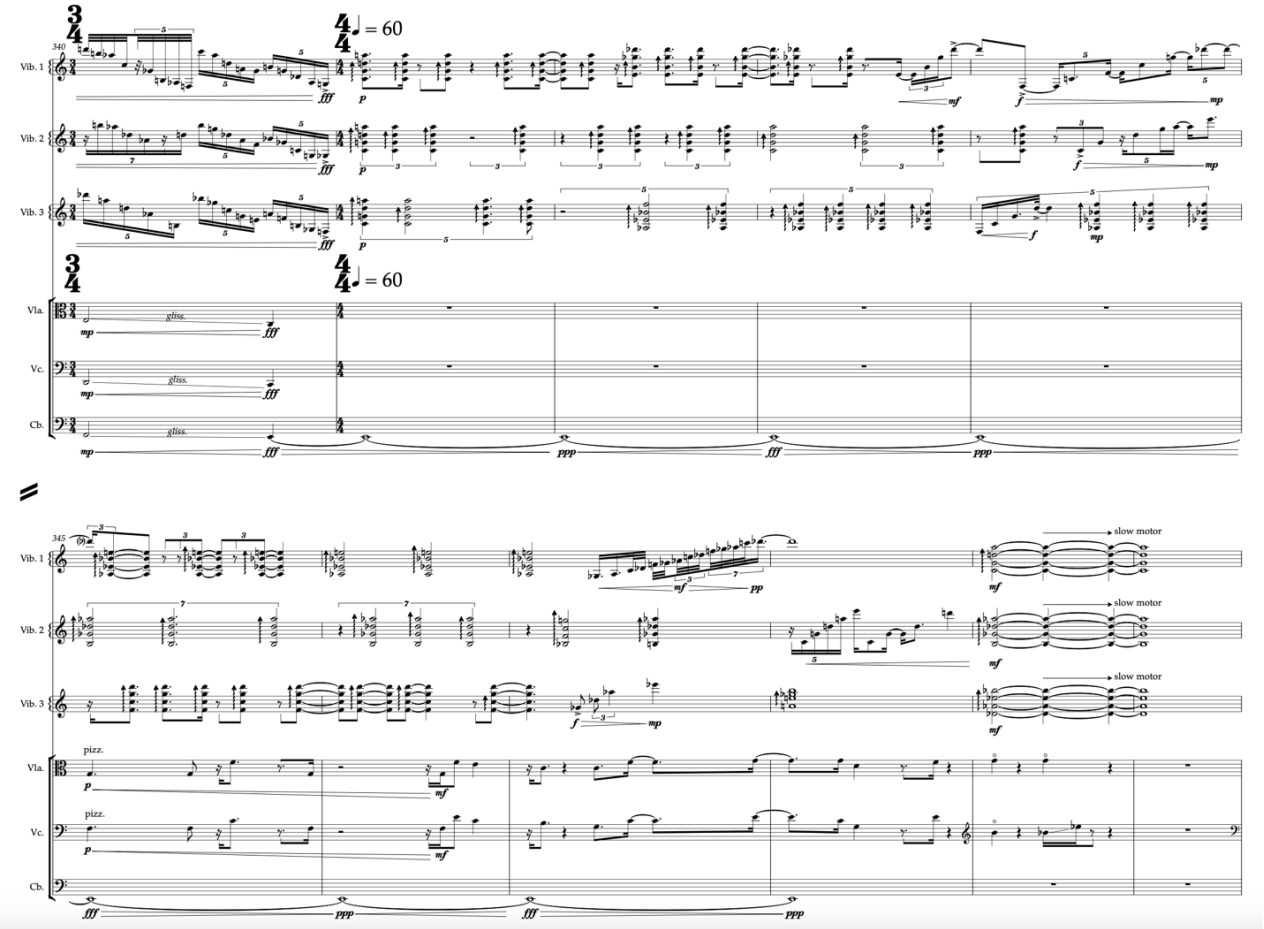


Figure 28 – Z. Konick, *Constellations*, mm. 340 – 350.

Finally, the work concludes with a return of the solo melodic vibraphone figure, separated again from the narrative of textural prolongations (Figure 29). Unlike the opening, where there is an accompaniment activity of punctuation, here, textural behaviors of pointillism, sustain and gesture interject between the space of the thematic figure prior to resolving to a pointillistic chiming (m. 381 – end). This passage essentially offers textural 'snapshots' which recall segments of the work's journey, before subsiding into a concluding pointillistic activity, offering a symmetry to the work's opening state of accumulated pointillism. The state of pointillism becomes well defined from measure 381 to the end (Figure 30).

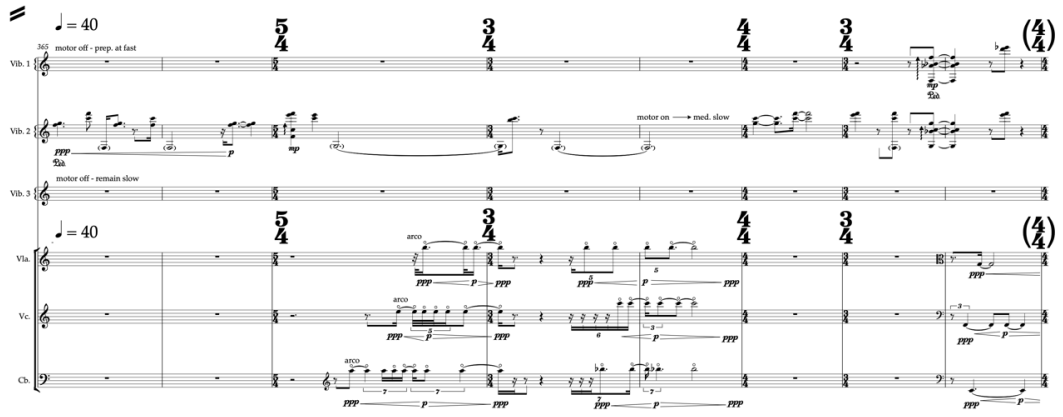


Figure 29 – Z. Konick, *Constellations*, mm. 365 – 372.

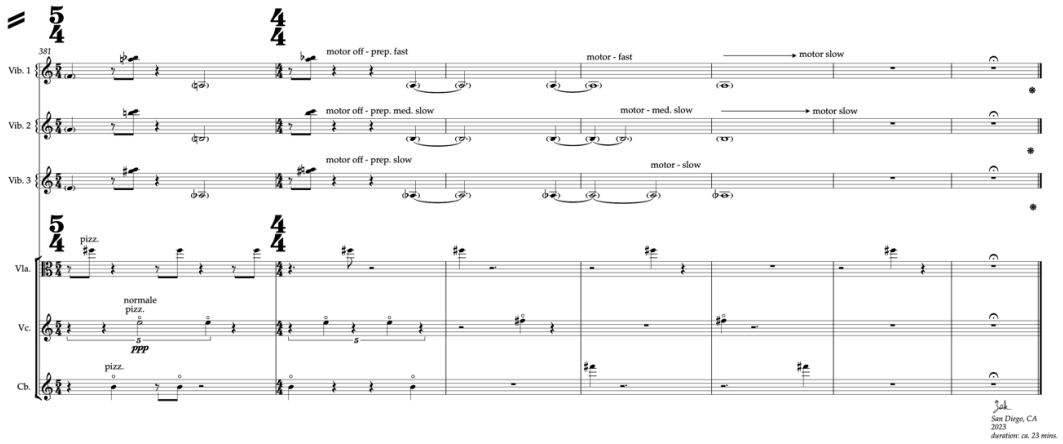


Figure 30 – Z. Konick, *Constellations*, mm. 381 – 387.

The textural prolongations in *Constellations* reveal a clear formal progression (Table 1). The states of pointillism, sustain and gesture are all represented through a form of textural prolongation in the work, but certain states attain greater representation. Pointillistic textures attain the most recurrences with 5 distinct occasions. The sustained state has the second greatest number of occasions with three textural prolongations. There is only a single gestural prolongation in the work. It is also the shortest representation of prolongation, covering a space of only 24 measures. However, the prolongations of pointillism do not attain the greatest degree of temporal representation. Pointillistic prolongations account for 100 measures (not accounting for the ending fermata of silence). Meanwhile, sustained prolongations account for 175 measures in the work.

Given the theory that high activity states offer greater tension, it would be inferred that such states contribute the strongest function within the work's formal hierarchy. The highest activity states in the work attain the briefest durations per representation, while the lowest activity states have the longest durations. The generation of formal symmetry by means of textural event ordering, and the frequency of recurrence per texture type also helps to establish the hierarchy of certain textural states. In *Constellations*, the state of pointillism serves as the strongest formal feature of the textural narrative. It begins and ends the work, contributing a state of formal symmetry, it generates a relatively high activity, it has the greatest number of textural recurrences, and the pivotal climax in the work is represented through pointillism. These factors suggest its functional prominence within textural prolongations. Along with transitional activities, long periods of low-activity sustained textural prolongation are interspersed between relatively active pointillistic events. These instances of low activity sustained textures allow their opposing states of pointillism and gestural textures to have a salient formal impact. While

gestural activities occur at multiple points throughout the work, a gestural prolongation only occurs once to provide a distinctive textural moment at the midpoint of the work. This formal arrival is notable as the state of gesture had not yet achieved formal prominence, serving primarily transitional functions elsewhere in the work.

Chapter 2.6 – Timbral Functions

Timbre also plays an independent formal dimension in the work. The timbral character of a delimited period of sonic activity is correlated with the degree of harmonicity or inharmonicity, the variability or fixation of ambitus, and the relative dynamic strength and intervallic spacing of all components present. In *Constellations*, it serves as both a developmental feature within a textural prolongation and as a transformational feature to recurrences of the primary formal elements throughout the work. These features significantly help to amplify the work's formal narrative. A sense of distinctive evolution across the work's various formal dimensions becomes pronounced through the progression of a preliminary timbral state, a contrasting timbral state, and a return to the preliminary timbral state. Like the textural design in *Constellations*, timbre also plays a multi–dimensional role. Timbral dimensions are classified in relation to both the component timbres of the ensemble by means of the source–voice and technique, and the wholistic timbre based on the textural manifestation of a delimited period of textural activity.

There are formally compelling timbral evolutions which occur through the work's distinctive formal elements of melodic statements, iconic figure occurrences, and textural developments. Timbral evolutions between these three activities provide a clear development of formal contrasts due to their modulated states at intermittent appearances. In the space of textural

prolongations, timbral evolutions also occur throughout the duration of certain textural manifestations.

The presentation of iconic figures provides an intermittent timbral source progression of the tutti ensemble consisting of plucked strings and vibraphones, exclusively vibraphones, and exclusively strings as plucked or bowed. A principled progression is discernable primarily from the commencement of the piece's tutti representation to the focus exclusively on vibraphones markedly at measure 79 (Figure 14), followed by the gradual introduction of plucked strings at measure 86 (Figure 31). The plucked string activity gradually becomes primary and takes on the main timbral feature at measure 207 (Figure 25), which serves as a pivotal formal juncture in the work. When the iconic figure returns at measure 341 (Figure 28), it returns to the timbral representation of the vibraphone with occasional plucked strings serving as an acknowledgement of the previous momentous plucked string activity. Gradually, the plucked strings recede,

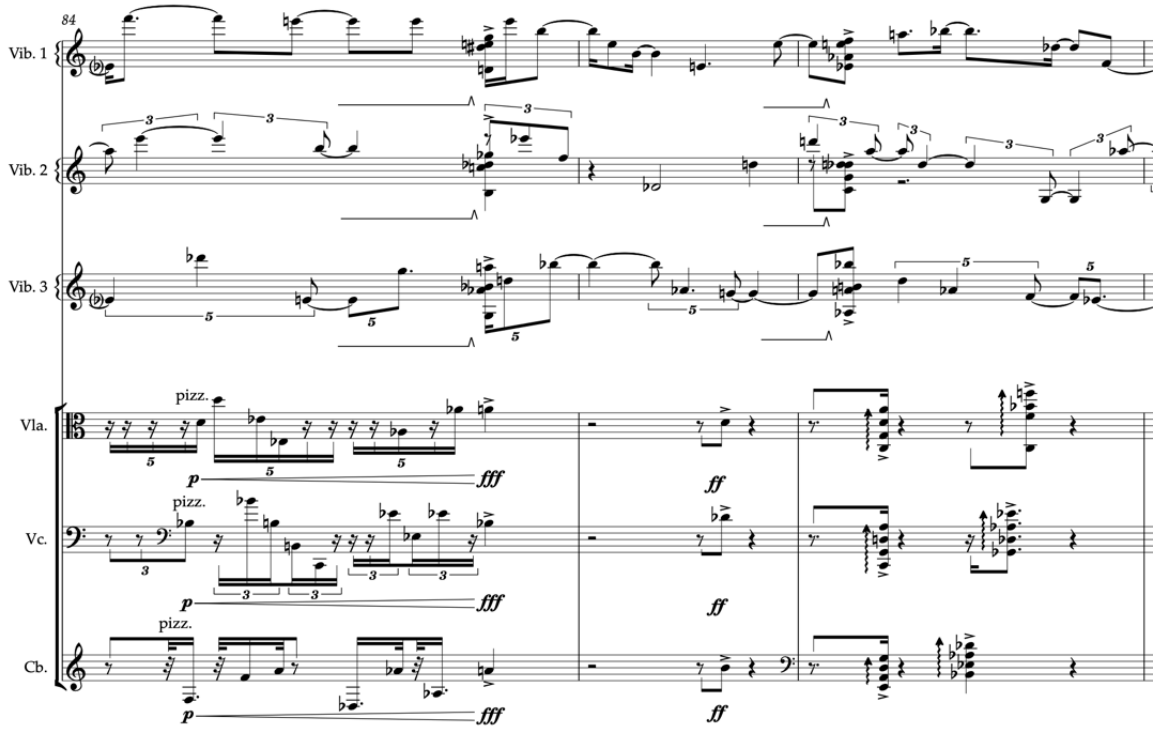


Figure 31 – Z. Konick, *Constellations*, mm. 84 – 86.

returning the work's initial timbral state of exclusively vibraphone activity at measure 365 (Figure 29). This return, which occurs within the concluding instance of the melodic motif, offers a distinctive contoured development of a preliminary state, a gradual timbral modulation, and a return to the initial state. Following the conclusion of this large scale timbral development, the iconic figure's narrative resolves at measure 380 with a single occurrence in a new state of bowed cello, performed behind the bridge.

The evolution of iconic figures offers further timbral modulations through the harmonic state of the activities. In the work's opening (Figure 13), the harmonic representation consists of pitches E1 A1 C2 D2 G2 D3 Gb3 G3 A3 B3 C4 Db4 D4 E4 F4 G4 Ab4 A4 B4 Db5 Eb5 and E5 (reduced to pitch classes C Db D Eb E F Gb G Ab A and B). This harmonic representation consists of eleven of the twelve possible diatonic pitches, resulting in a complex dissonant quality. In the later, pivotal occasions of measures 207 (Figure 15) and particularly at 341(Figure 28), the iconic figure is represented as a harmonic tutti expression primarily of pitches C4 G4 D5 and A5. The contrast between these pivotal occasions is very stark. The opening presents both a significantly wider ambitus, and a more complex harmonic circumstance than the later developments, where the harmonic state and register representation become significantly more focused and distinguishable.

Noteworthy timbral modulations are also distinguished between formal appearances of the melodic motive. There is a clear progression from resonant vibraphone attacks at measure 1 (Figure 13), to bowed strings at measure 149 (Figure 24) beginning in the low register to create a rumbly timbral state, then moving into the higher register with the timbral addition of vibrato effect at measure 291 (achieved through both *vibrato* and *espressivo* technique indications) (Figure 32). The bowed activity then modulates to plucked strings at measure 345 (Figure 27),

creating a progression in the strings from long sustain to an attack–based activity which can effectively be associated to the normative vibraphone activities. The melodic motive finally returns to the vibraphone for the work's conclusion at measure 365 (Figure 29).

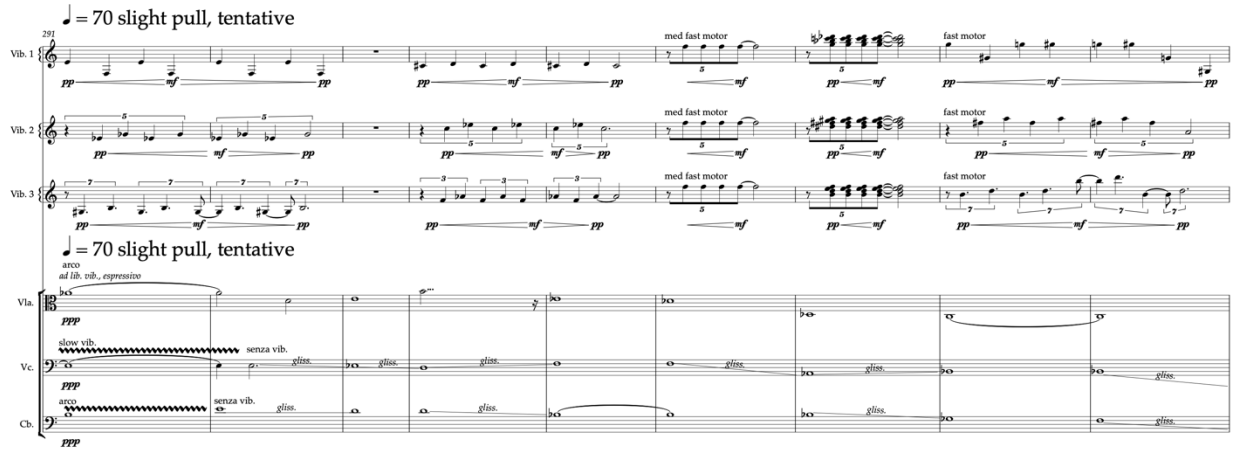


Figure 32 – Z. Konick, *Constellations*, mm. 291 – 299.

Timbral modulations to the textural dimension are also notable. Such modulations are achieved by means of the source voices, techniques, register focus and ambitus of the gestalt ensemble activity. In *Constellations*, the primary features of these timbral states of texture occur through harmonic representation, register representation, and ambitus spread. This feature can be observed from measures 81 – 99 in the vibraphone (Figure 33). Here, the vibraphones begin in a harmonically dense state with a wide pitch ambitus. This harmonic complexity gradually simplifies to a single repetitive pitch attack of F6 at measure 93 before returning to a wide ambitus at measure 95 (Figure 34). However, while the ambitus expands in a similar manner to the initial state of measure 81, the harmonic representation temporarily remains simple and centered on the pitch class F, now in multiple octaves to achieve the ambitus shift. Measure 97 –

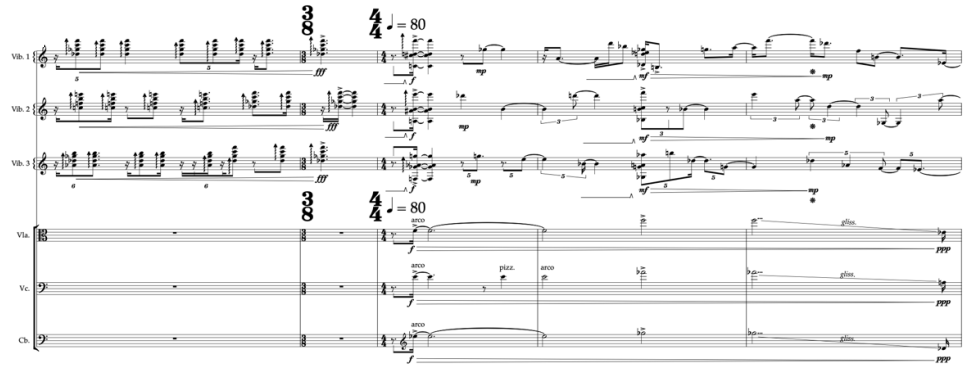


Figure 33 – Z. Konick, *Constellations*, mm. 79 – 83.

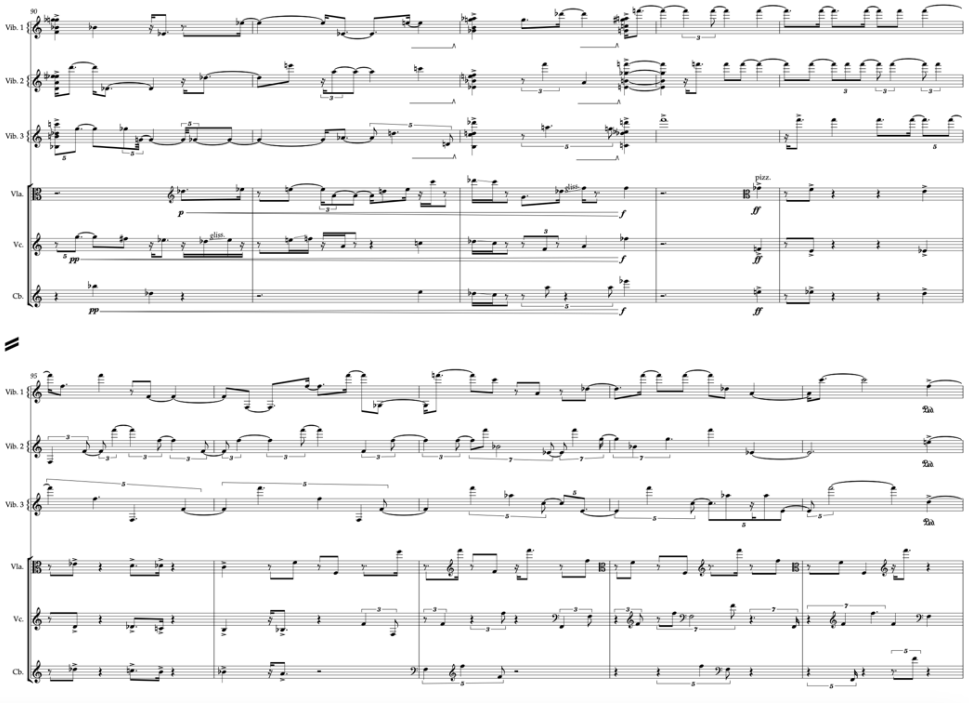


Figure 34 – Z. Konick, *Constellations*, mm. 90 – 99.

99 continue the same representation of the pitch F but gradually introduces extra pitches which primarily outline an F–based chord, highlighting pitches F A C with occasional added

dissonances. This short segment demonstrates a development of a distinctive textural state through timbral means.

These instances of timbral function demonstrate poignant evolutions which all significantly contribute to the work's formal narrative. Nearly all instances of timbral function generate a clear formal arc by beginning in a control state, modulating to a new state, and ultimately returning to the initial state, demonstrating a strong dependence on formal contrasts within the dimension of timbre. The only timbral function which offers a freer progression occurs within textural developments, serving to offer a multitude of potential variations within a textural prolongation.

Chapter 2.7 – Transitional Functions

The formal matter of transitions is another noteworthy area of consideration in this work. There are multiple forms of transitional function occurring in varied forms and within diverse dimensions of scale. Through consideration of the relationship between transitional states and the narrative of textural prolongations in the work, certain functions of each can be observed. I have discerned three distinctive forms of transitional behavior in the work which either connect or divide formal sections.

The first type of transitional activity is a formal divider of non-continuous textural activity. Formal dividers of non-continuous textural activity give space to formal sections in the work due to their low level of activity. They are intended to allow for the previous activity to be digested before continuing the work's narratives. These types of transition are formed of the same components of texture in the work but do not present a continuous flow of any activity. Rather, fleeting actions of various textural component representations are separated by occasional

silences, disallowing the perception of a formal hierarchy or distinguishable continuity in these periods. Instances of this transitional activity can be most clearly observed from measures 37 – 64 (Figure 35) and measures 189 – 206 (Figure 36). These moments first occur following the initial presentation of the work's formal contents, allowing the listener a chance to digest these elemental materials. The later occurrence follows a substantial bout of sustained texture prior to the first momentous presentation of the textural activity of the gestural state in the string pizzicato at measure 207 (Figure 25). It is notable that these two instances of formal dividers occur following or prior to momentous occasions in the work.

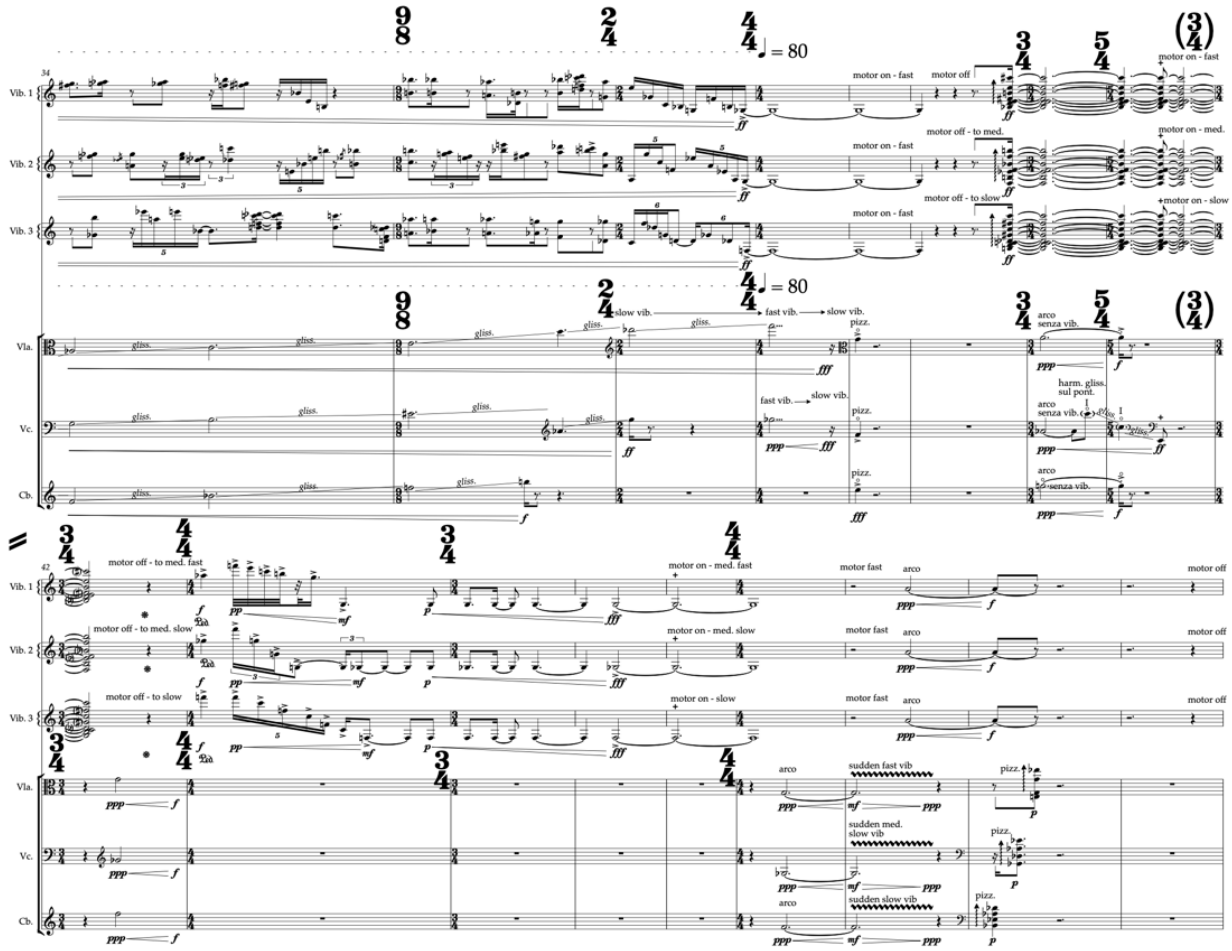


Figure 35 – Z. Konick, *Constellations*, mm. 34 – 50.

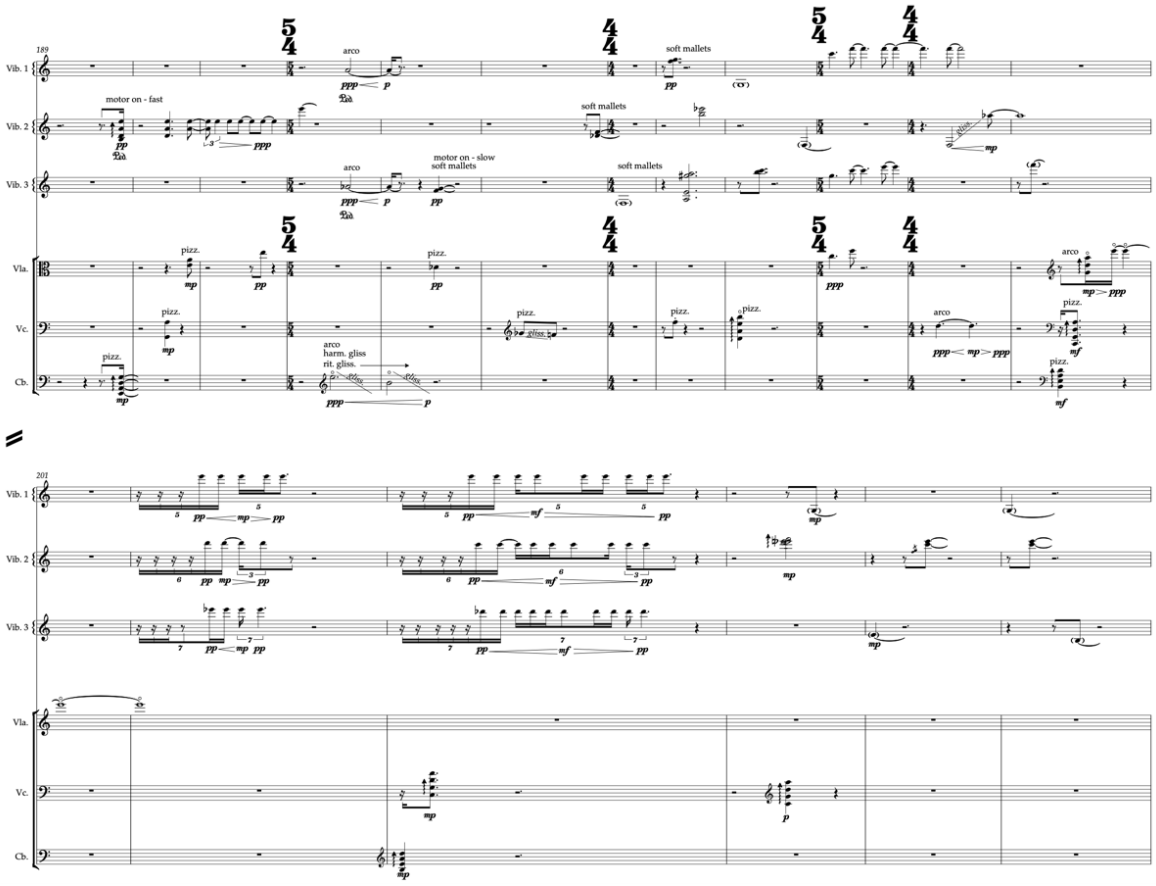


Figure 36 – Z. Konick, *Constellations*, mm. 189 – 206.

The second type of transitional activity is another form of divider, consisting of a purely sustained–based textural activity. This form of transitional activity is a formal divider of low-activity textural continuities. Both dividers of non-continuous textural activity, and formal dividers of low-activity textural continuities require relatively low–activity states in correlation to textural prolongations of pointillistic or gestural activities due to their static quality. This is mostly true for the purest manifestations of sustain through non–evolutionary pitch or rhythmic activities. Sustained prolongations are integrated into the work primarily as a form of low–activity divider between prolonged periods of more active textural states. These instances are

both texturally focused and unbroken in nature, and thus do not fit into the state of a formal divider of non-continuous textural activity.

The third form of transitional activity is a propulsive connector. Propulsive connectors are high–activity level events which help to generate a sense of momentum into a formal event evolution. This form of activity appears to be primarily related (at least in this work) to the presence of an uninterrupted current of either unidirectional or multidirectional pitch contours, with unidirectional contours being particularly salient for transitional function. The application of propulsive connectors can commonly be seen in traditional forms of classical music. In Robert Schumann's *Faschingsschwank aus Wien*, op. 26, the phrase beginning at measure 85 concludes with a propulsive connector at measures 103 – 104 (Figure 37) by means of a swift unidirectional descending pitch gesture, leading into the start of a new phrase. Joseph Bologne's *Sonata for Flute and Harp in Eb Major* presents an instance of propulsive connector in similar fashion as the Schumann at measure 51 (Figure 38). Here, the descending figure propels the conclusion of one movement into a new movement.

A strategic approach to propulsive connectors can be observed throughout *Constellations*, based on the premise that unidirectional contours create a stronger formal sense of arrival than multidirectional contours. These transition types are often manifested as gestural textures but are not necessarily presented as a textural prolongation of the gestural state. The first instance of a propulsive connector occurs briefly from measures 35 – 36 (Figure 35), culminating in a brief but strong unidirectional downward contour. The next three notable occurrences comprise

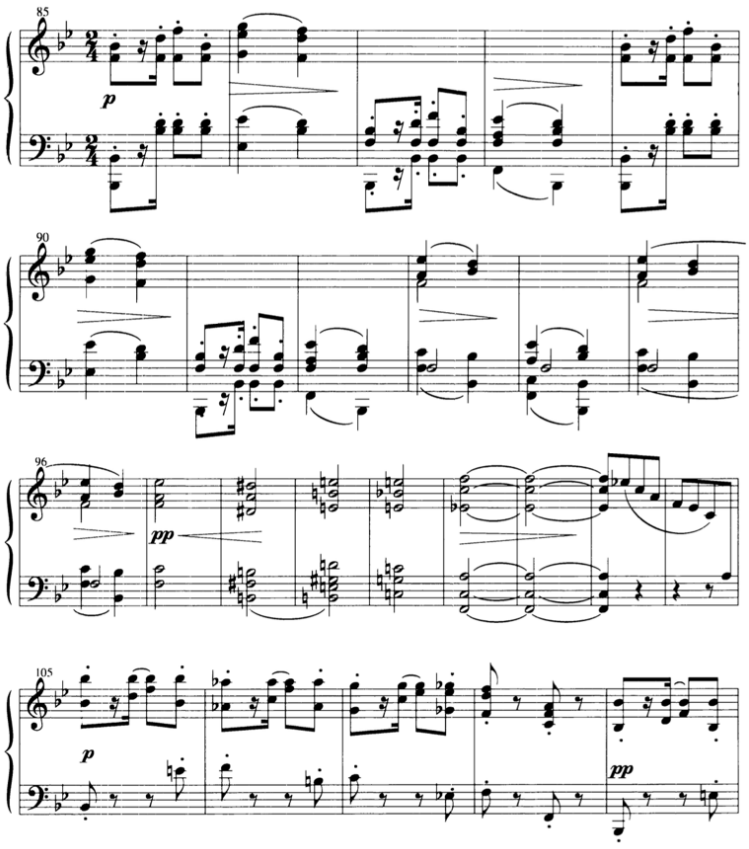


Figure 37 – R. Schumann, *Faschingsschwank aus Wien, op. 26, mvt. 3*, mm. 85 – 109 ("*Scherzino*").

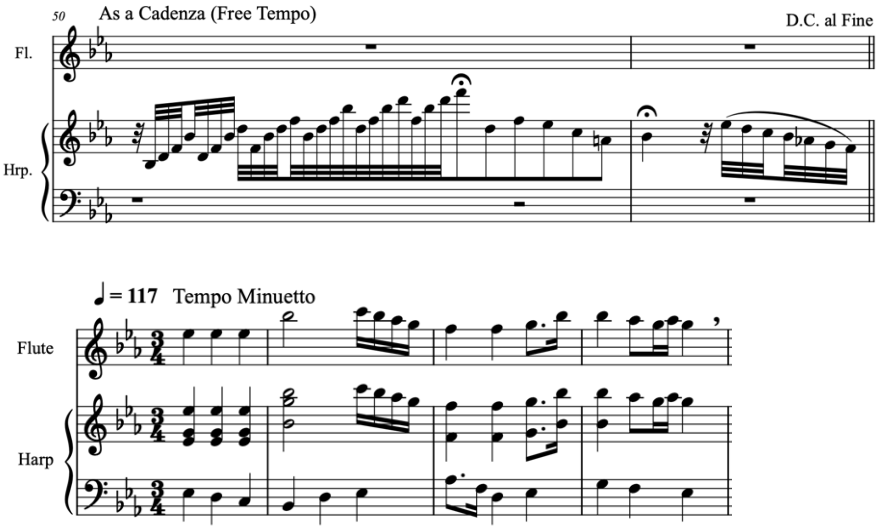


Figure 38 – J. Bologne, *Sonata for Flute and Harp in Eb Major*, mm. 50 – 55.

measures 76 – 80 (Figure 33), 106 – 120 (Figure 39), 126 – 130 (Figure 40) and 273 – 279 (Figure 41) all present primarily multidirectional contour. It is not until the final occurrence of a propulsive connector from measures 335 – 340 (Figure 42) that a significant predominance of unidirectional descending contour occurs, leading to the work's culminating climax of the iconic figure activity. This progression of transitional propulsive connectors is quite telling, as it suggests that multidirectional contours were strategically selected for less prominent formal arrivals, saving the most salient transitional form of propulsive connector for the work's climax. This further suggests an important relationship between the work's textural narrative and the distinctive applications of transition.

The distinction between formal dividers and a propulsive connector is a low– or high–activity level. The application and positioning of propulsive connectors can momentarily alter their nature. As seen in the work's formal diagram (Table 1), most applications of propulsive connectors are positioned toward the end of a formal passage or prolongation. In the first instance of prolonged sustain activity at measure 115 (Figure 39), the propulsive connector activity is applied to the beginning of the passage and rapidly dissipates. This occurs only once but is a momentous moment in the narrative where the first sustained event occurs. Throughout the remainder of the work, the propulsive connector activity only occurs within the remaining prolongations of sustain. However, following the first instance of sustain at measure 115, the propulsive connector returns to a placement within the conclusion of these formal passages. The initial use of a propulsive connector within a sustain prolongation is striking due to the stark contrast of low–activity texture with a secondary augmentation of high–activity propulsive connector activity. The original function of propulsive connectors returns in the remaining final two sustained prolongations, shifting its position to the end of the passage, each leading into

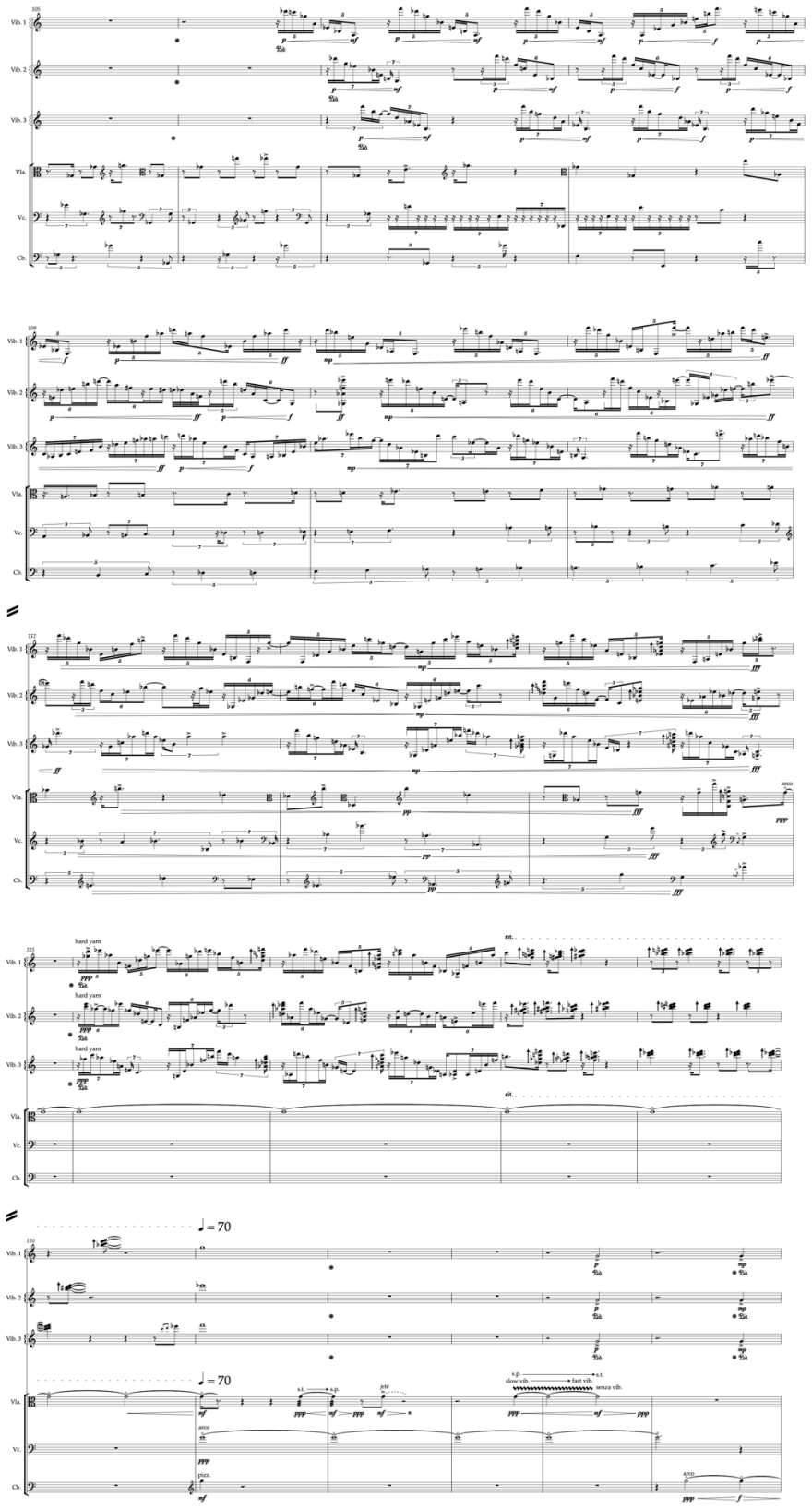


Figure 39 – Z. Konick, *Constellations*, mm. 105 – 125.

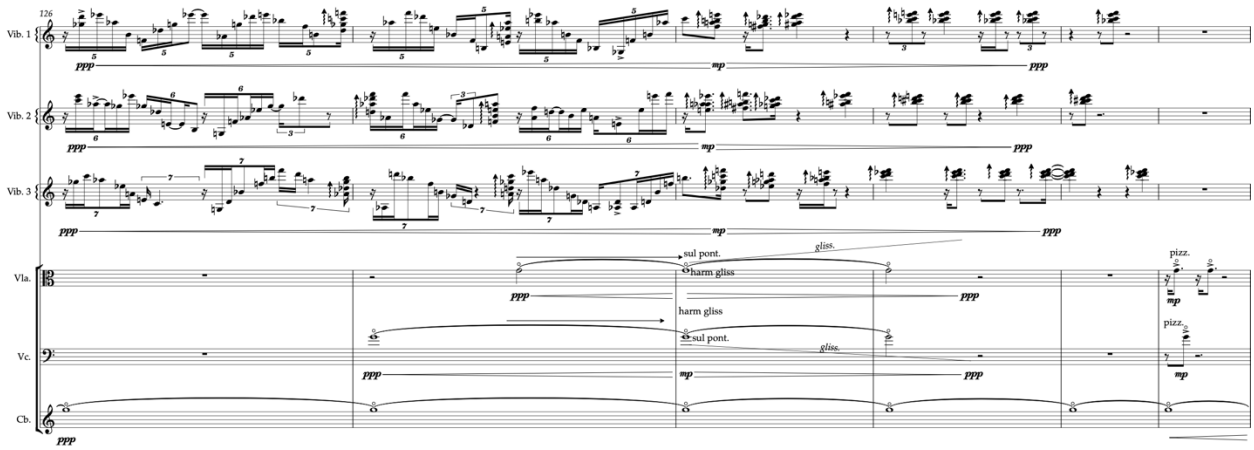


Figure 40 – Z. Konick, *Constellations*, mm. 126 – 130.

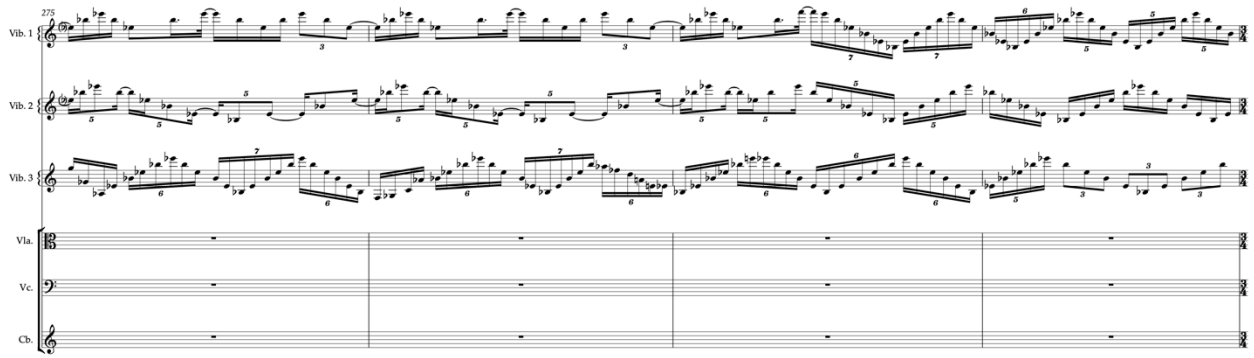


Figure 41 – Z. Konick, *Constellations*, mm. 273 – 279.

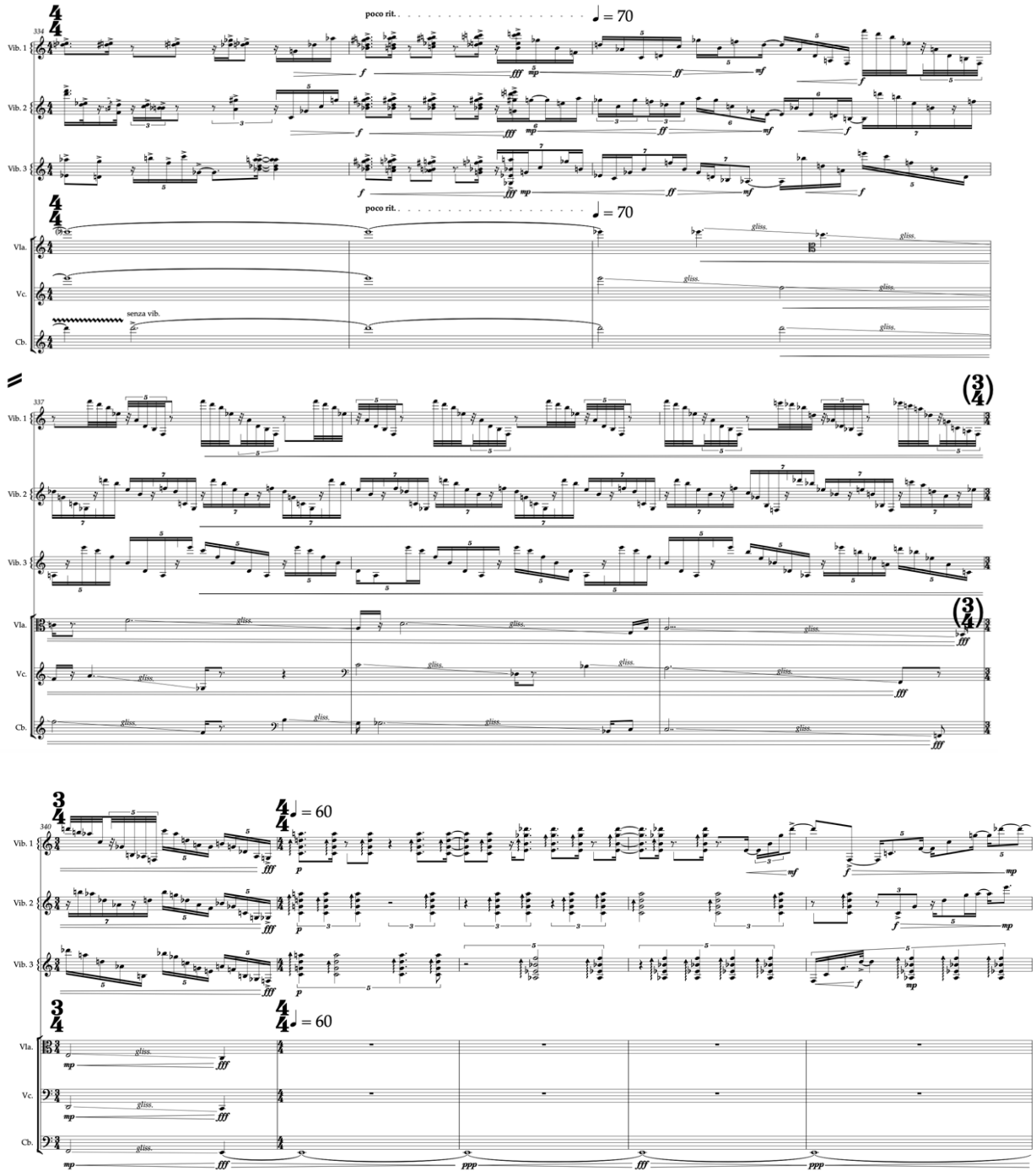


Figure 42 – Z. Konick, *Constellations*, mm. 334 – 340.

relatively more active periods of prolonged pointillism. These formal features demonstrate a significant and carefully devised application of transitional features within the work which achieve a balance of various high– and low–activity states throughout the work. Ultimately, these transitional functions help create sensations of anticipation or pause throughout the work, generating periods of tension.

Chapter 2.8 – Formal Presence of Anticipation, Suspension and Resolution Through Texture

Conventional harmonic treatments of dissonance also play a role in *Constellations*, not only through harmonic function, but through the presentation of textural components and transitional activities. The application of anticipation, suspension and resolution can be seen throughout *Constellations*. One notable instance of this feature occurs from measures 106 – 148 (Figure 39). Here, a gestural texture acts as a transitional propulsive connector to the arrival of a sustained textural prolongation at measure 115. This transition immediately thrusts the listener into a polarity shift from a high-activity state to a very low-activity state. However, the gestural activity which initially propelled the music into a sustained texture returns as secondary to the sustained texture in measures 116 – 120 and 126 – 130 (Figure 40), before the sustained texture settles into a true state of low eventfulness. It can be posited that this progression of textural states results in a similar listening function as would a harmonic anticipation, sustain and resolution. The gestural activity builds an intensity into the suddenly static state of sustain, then is sustained through the new textural state before dissipating, allowing the sustained texture to fully engulf the perceptual listening space. This progression can be likened to a non–chord tone being sustained through a new harmonic instance prior to resolving to the new harmonic state.

This brief example of carefully balanced intensity levels demonstrates the salient formal qualities of rapidly juxtaposed states of intensity polarities.

Chapter 2.9 – Discerning a Narrative of Formal Elements in *Constellations*

There is an intended sense of dialogue between the various narratives of formal elements in *Constellations* (Table 1). The melodic motive and iconic figure activities instigate the work. At measure 25, the state of pointillism then takes on formal precedence, devoid of melodic or iconic gesture activity. The iconic figure then attains a formal presence from measures 40 – 130, at first accompanying activities formally independent from the textural narrative, and then textural prolongations of pointillism and sustain. The iconic figure temporarily ceases, giving space to the work's first recurrence of the melodic motive at measure 149 within a state of sustained prolongation. The iconic figure activity returns at measure 189 within activities formally independent from the textural narrative, following the conclusion of the melodic activity. At measure 207, the iconic figure activity becomes particularly prominent within the singular instance of a gestural prolongation of texture. Following sustained and pointillistic prolongations, at measure 291, the melodic motive returns in a state of sustained prolongation devoid of iconic figure activities. In the final two presentations of melodic activity, the iconic figure occurs with other materials for the first time in the work. It appears first within a pointillistic prolongation, prior to a melodic focus separate from the textural narrative. The iconic figure activity gradually diminishes its presence to clear the way for a final recapitulation of melody at measure 365, only occasionally punctuating the melodic activity.

Through this narrative, the iconic figure activity undergoes a development from punctuative to continuous functions at momentous formal periods in the work, before returning

to a punctuative function in its final occurrence. Both the melodic and iconic figure activities are allowed to stand alone throughout the work until they finally share representation in their climactic, concluding presentations in the work. The progression of these two elements demonstrate that the melodic and iconic figure activities were carefully arranged to generate a dual narrative which is independent to and augments the narrative of textural prolongation. These two activities also notably commence and conclude the work. The formal symmetry and weighty structural placement suggest that these elements maintain a primary role in the perception of the work, despite the proportional amplification of textural features. This dual narrative offers a layer of contrasting events which operate independent to the work's scheme of textural contrasts and generate multiple independent forms of development and climaxes in the work.

The two most significant moments of textural prolongation activity occur at measures 207 (Figure 25) and at the work's climax at 341 (Figure 28). Following the development of the iconic figure as a punctuative force, these moments place this figure into a purely textural circumstance, through steady periodic repetition at a regular temporal rate. Since the iconic figure had developed over the course of the work from a punctuative to a more regular, less–broken textural state, these two textural presentations offer a distinctive formal sense of arrival in the work's narrative.

CHAPTER 3 – BEAT FURRER'S *SPUR*

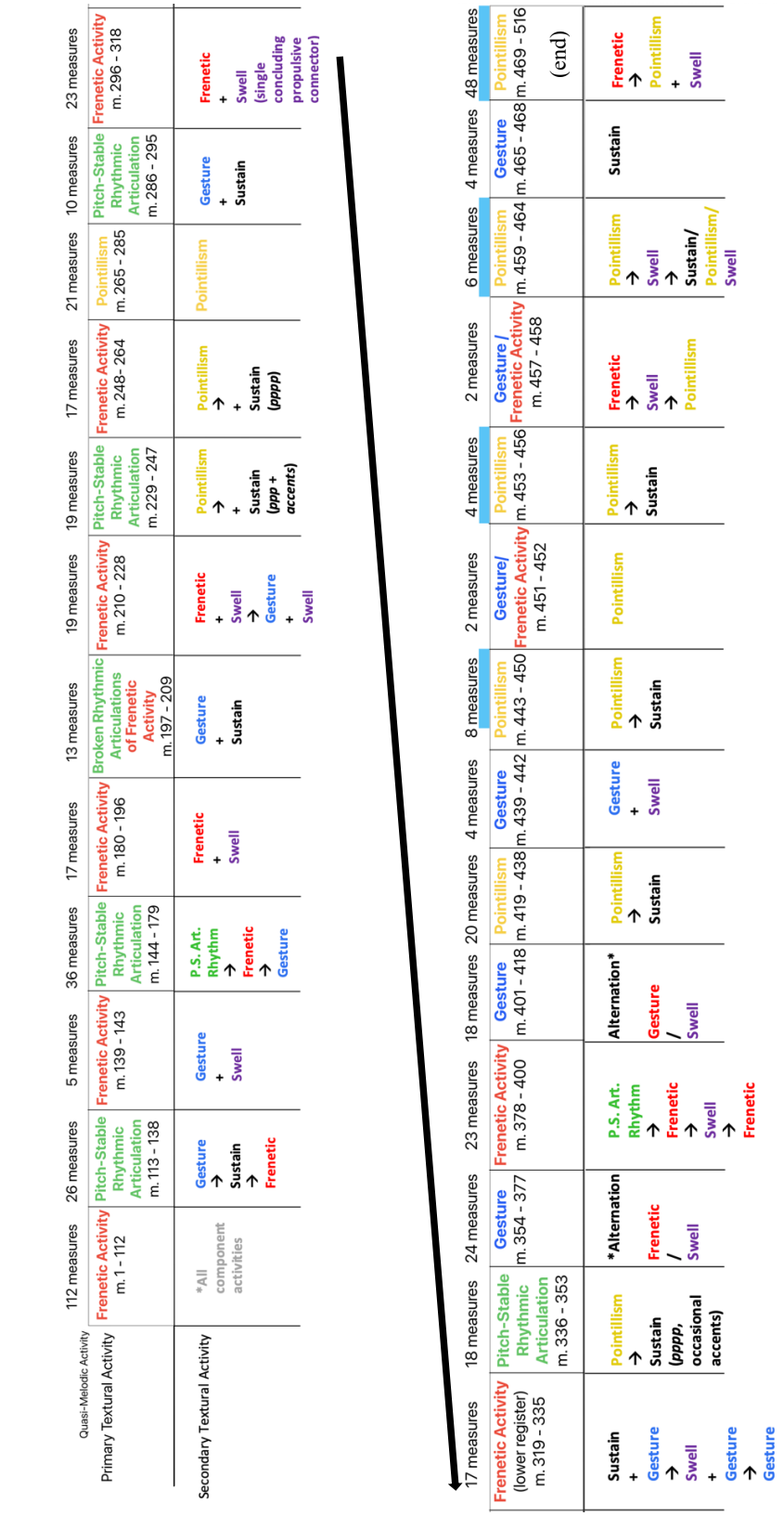
Chapter 3.1 – Presence of Textural Prolongation in Beat Furrer's *Spur*

Beat Furrer's composition *Spur* for piano and string quartet was composed in 1998. This work offers considerations on another composition based on a narrative of diverse prolonged textural states and a stratification and integration of textural layers. Hermann recognizes Furrer's *Spur* as a work that "expresses itself in repetitive sounds" (Hermann 1). In the CD booklet of the 2008 recording release, Marie Luise Maintz states that the narrative of *Spur* deals with various aggregate states of motion and presents a regular oscillation between opposing static and dynamic states (Maintz 11). These repetitive continuities of distinctive textural states generate a formal juxtaposition of activity levels. They define prime behaviors of carefully structured textural prolongations. I will examine the work according to the terms set forth in this paper from my discussion of *Constellations*.

Chapter 3.2 – Significant Formal Elements of *Spur*

Spur is comprised primarily of multiple states of textural prolongation. The states of textural components are more varied than in *Constellations*, containing six distinctive forms, as opposed to the three main formal elements in *Constellations*. However, only four of the six forms of textural activity are represented in the surface layer of a stratified textural structure (Table 1). There is a form of melodic activity which only appears near the work's end. In *Constellations*, there was a third presence of an iconic figure that attained multiple functions both as a contributor to texture**,** a punctuative force, and a formal amplifier of significant structural periods in the work. There is no distinctive iconic activity in *Spur*, analogous to that in *Constellations*, which is represented as a pivotal climactic event in the work. However, the

Table 2 – a formal diagram of *Spur*.[3]



[3] This diagram is broken into two layers so that more detail can be seen.

textural component of a swell undergoes an individualized narrative of textural component behavior in the work. Despite this behavior, it does not attain a primary formal function in the work. The nuanced narrative of multi–layered textural successions in *Spur* already offers a sufficiently detailed progression without further formal variables.

Chapter 3.3 – Textural Components of *Spur*

The textural components presented in *Spur* are distinctive, demonstrating both similarities and individualities in the classifications of textural components. Within the surface layer, articulated by the piano, four distinct components of texture are distinguished throughout the work. These components include a frenetic activity, a pitch–stable rhythmic articulation, pointillism, and gesture, where the latter two relate to the *Constellation* discussion above. In the secondary layer, articulated by the string quartet, all components of the surface layer are represented, but two further activities of sustain and swell are also integrated. Altogether, there are five activity types. Frenetic and gesture events are relatively high–activity events, while pitch stable rhythmic articulations and sustain are relatively low–activity events. Swell activities can serve multiple forms of activity, but primarily serve as a low–activity state.

The frenetic activity (Figure 43) consists of a continuous high–activity level of rapid pitch articulations which are not specifically contoured into a distinctive directional state. The features of this textural component are like a pointillistic texture in *Constellations*. However, this textural activity is recategorized due to its rapid rate of speed which nearly constitutes a quasi–sustained activity. This activity's consistency of temporal motion distinguishes its identity from a genuine representation of pointillism in this work.

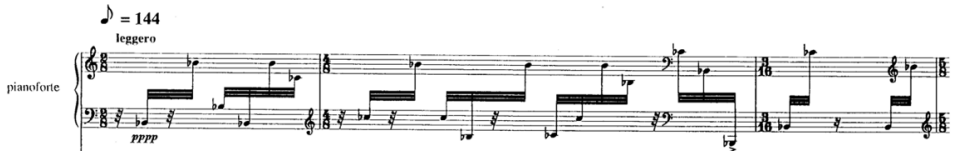


Figure 43 – B. Furrer, *Spur*, mm. 1 – 3 (a typical frenetic activity).

The pitch–stable rhythmic articulation (Figure 44) is an activity reminiscent of morse–code where pitch remains unchanged and a rhythmic articulation of singular or two successive attacks are separated by brief, temporally measured silences within a regular pulse. In *Constellations*, such an activity could have been interpreted as a combination of the component features of pointillism and sustain.

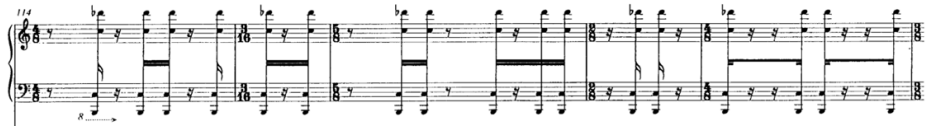


Figure 44 – B. Furrer, *Spur*, mm. 114 – 118 (a typical pitch–stable rhythmic articulation activity).

The pointillistic activity in *Spur* (Figure 45) is characterized by significant durations of silence between singular attacks.

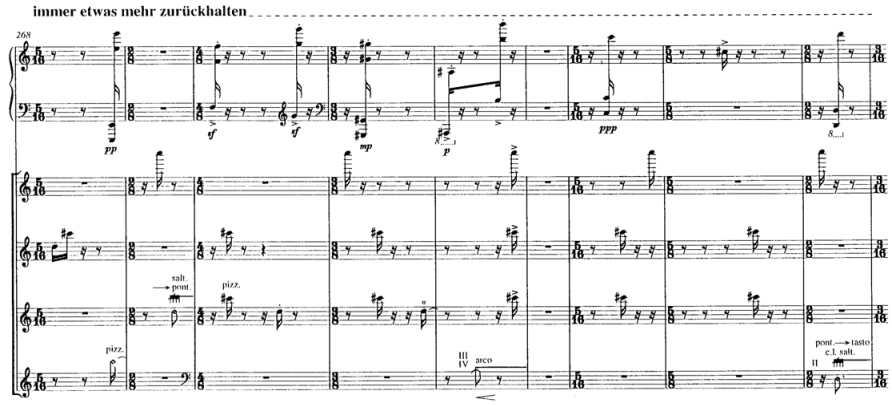


Figure 45 – B. Furrer, *Spur*, mm. 268 – 276 (a typical pointillistic activity).

Gestural activities in *Spur* (Figure 46) are consistently unidirectional, rising pitch contours which are articulated at a rapid temporal pacing.

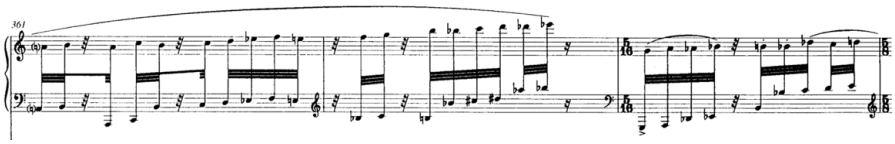


Figure 46 – B. Furrer, *Spur*, mm. 361 – 363 (a typical gestural activity).

The secondary layer of textural activity consists of all the textural component activities represented in the surface layer piano activity. However, the secondary string quartet activity contains two additional components of sustained and swell activities.

Sustained activities in *Spur* (Figure 47) are defined the same as in *Constellations*. These unbroken states of activity are particularly salient when presented through static pitch but can also be represented through a pitch–contoured state. Sustains in *Spur* can be augmented by periodic dynamic accentuations, offering instances of sustained activity a distinctive temporal urgency.

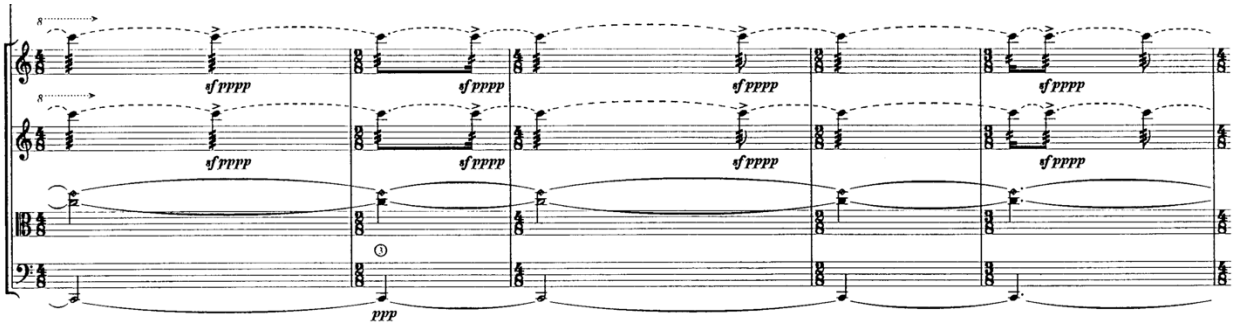


Figure 47 – B. Furrer, *Spur*, mm. 347 – 351 (a typical sustain activity).

The final distinctive textural component is a swell activity (Figure 48). This component activity is a sustained pitch with a brief, rapid increase in dynamic toward its sudden termination. The nature of this component forms an immediate heightened intensity (like dynamic accents)

due to the rapid formation of extremes between a suddenly loud and suddenly arrested sustained activity. Swells are presented primarily by means of static pitch but are occasionally contoured. While not analogous to the function of the iconic figure in *Constellations*, this feature does offer a formal outlier in *Spur* regarding its multiplicity of functions throughout the work. Swells can be perceived as either high or low states of activity depending on how they are temporally integrated into textures. This feature can generate textural formations like oscillations of dynamic modulation (Figure 49), serve as a propulsive connector to a new passage (Figure 50), or it can be periodically scattered into points of other textural activities as a quasi–punctuative force of excitation in order to increase or maintain a state of tension (Figure 51). This textural component most frequently serves in a low–activity state regarding its periodic temporal integration, but its innate attributes of momentous dynamic modulation ensure its tension–building quality. In the event of a swell operating as a pulsation of dynamic oscillations, the resulting activity is analogous to a sustain with accentuations, an occasional form of sustained activity in the work.

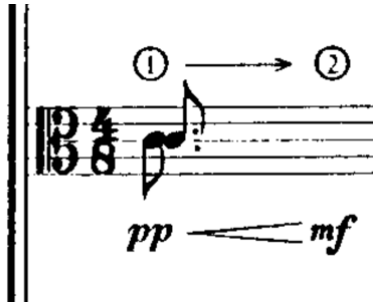


Figure 48 – B. Furrer, *Spur*, m. 114 (a typical swell activity).

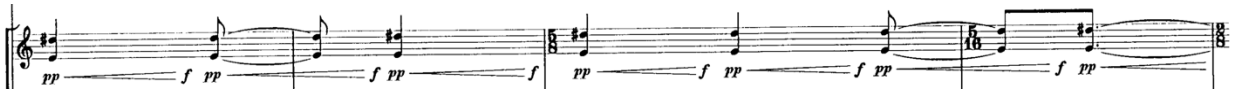


Figure 49 – B. Furrer, *Spur*, mm. 321 – 324 (swells forming dynamic oscillations).

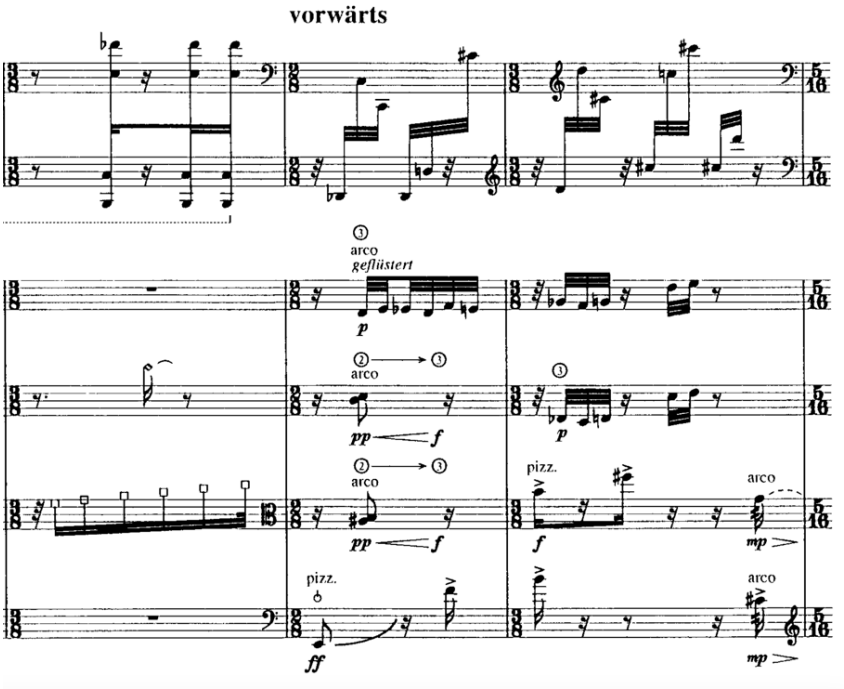


Figure 50 – B. Furrer, *Spur*, mm. 179 – 181 (swell as propulsive connector).

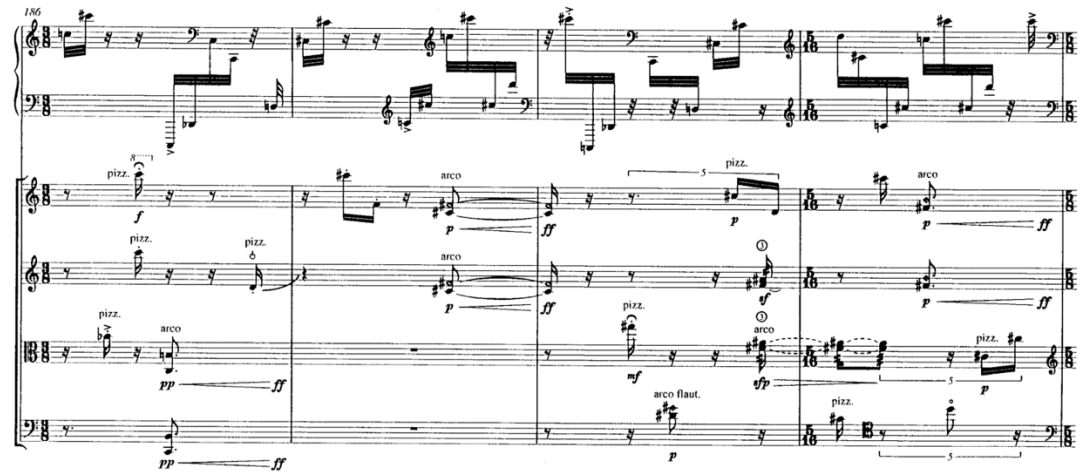


Figure 51 – B. Furrer, *Spur*, mm. 186 – 189 (swell as periodic quasi–punctuations).

It should also be noted that the application of frenetic activity within the secondary textural layer is consistently presented in a significantly narrow range (Figure 52). This likely

could have been a matter of performative practicality because of the requirement of a rapid series of pitches on bowed strings.

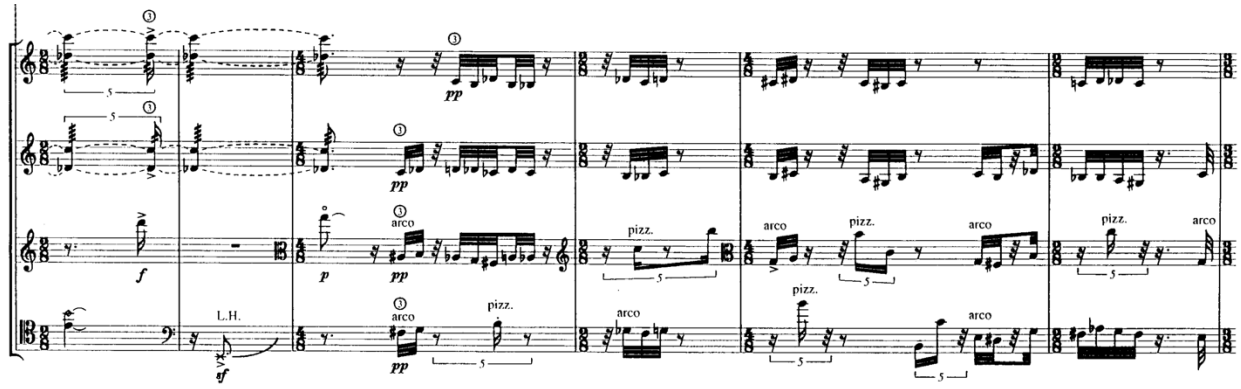


Figure 52 – B. Furrer, *Spur*, mm. 126 – 131 (frenetic activity in the strings).

In *Constellations*, I formed general classes of texture which can navigate through various nuanced manifestations of temporal states. However, in *Spur*, texture–types are particularly strict in presentation, making distinction of the textural narrative especially compelling and digestible.

Chapter 3.4 – Textural Prolongation Narrative in *Spur*

As with the construction of *Constellations*, *Spur* offers a multi–layered stratification of textural behaviors and prolongations. The two layers are divided according to the piano and string quartet, at times with the string quartet being segregated into further divisions. The piano takes on the leading prolongation activity, due to its consistent stability against the more nuanced modulations of secondary activities in the string quartet. The surface layer of texture in the piano offers a digestible narrative of its four textural component activities. In this layer, the design of successive textural states offers a continuous oscillation between states of relatively high– and low–active states. The frenetic activity takes on the primary textural state, due to its expositional

nature at the start of the work, and its consistent representation throughout the course of the piece as the most active and most represented element. The frenetic activity serves as one of two active states in the work. The second form of high–activity state in *Spur* is the gestural state. The primary low activity textural states in the work's surface layer of texture include pitch–stable rhythmic articulations and pointillism.

In the first half of the work, high–activity frenetic textural prolongations are regularly juxtaposed against a relatively low–activity of temporally spacious, pitch–stable rhythmic articulations. One instance of a transition between a high–activity of frenetic motion state to a low–activity pitch–stable rhythmic articulation state can be seen from measures 139 – 179 (Figure 53). The second half of the piece continues the narrative of juxtaposed high– and low–activity states but achieves this dichotomy through a modulated juxtaposition. The latter portion of *Spur* contrasts brief periods of high–activity gestural material against more significant periods of temporally spacious pointillism. This contrast can be observed between measures 439 – 450 (Figure 54), where a gestural state segments into a pointillistic state.

The secondary layer of textural activity offers a more nuanced augmentation to the primary textural narrative of the work. There remains a premise of juxtaposed high– and low–activity states in the secondary layer. However, the narrative is elaborated by the composer's forming of moments of textural integration through occasional singular textural presentations, the formation of extra stratified textural layers through couplings of textural component representation, or progressions of up to four successive textural component representations within a prolongation. This allows for Furrer to offer various states of high–activity events juxtaposed against of relatively low–activity events within prolongations themselves as well as within the work's

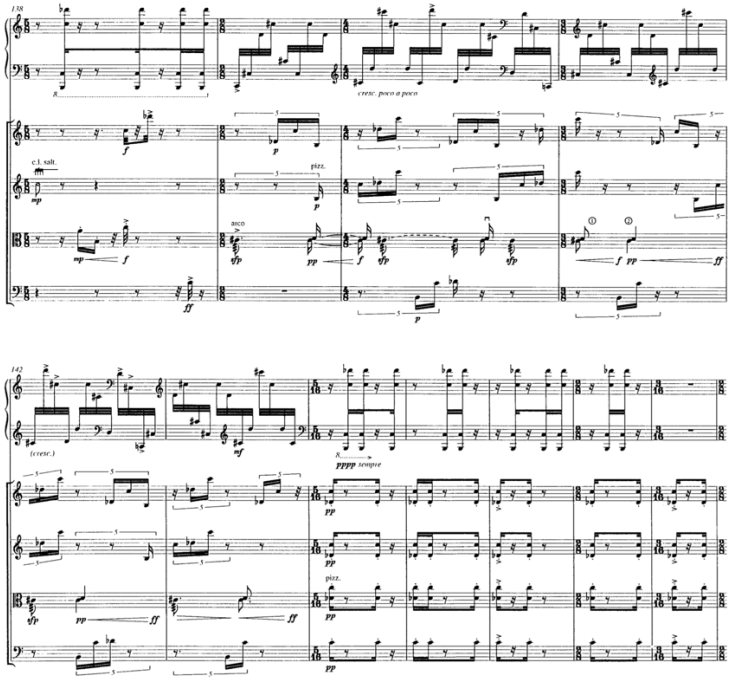


Figure 53 – B. Furrer, *Spur*, mm. 138 – 148.

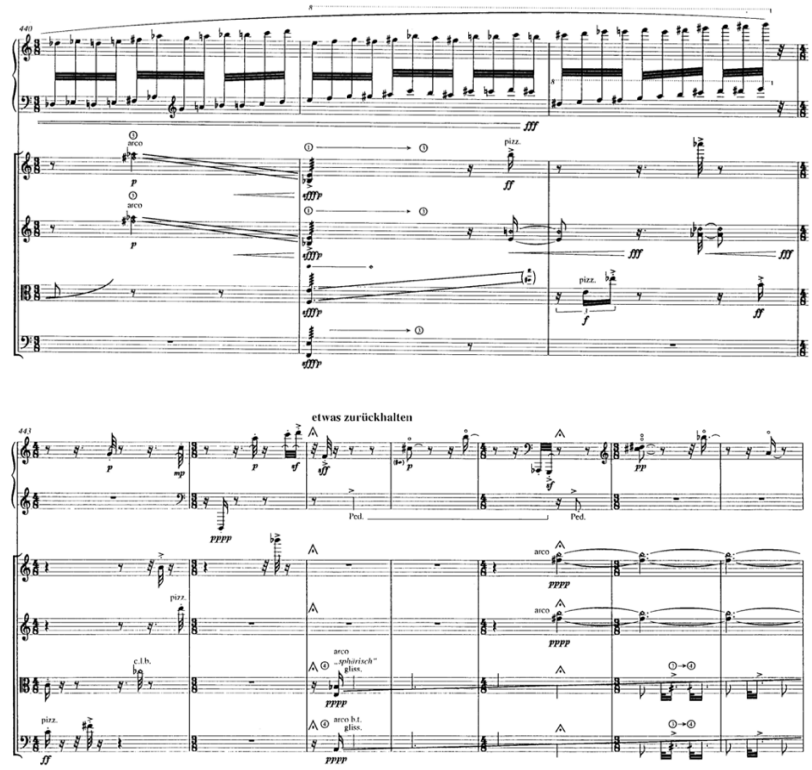


Figure 54 – B. Furrer, *Spur*, mm. 440 – 449.

larger narrative. The added representation of swell and sustain events helps to offer further flexibility in this category.

Spur begins with the secondary textural layer introducing all the textural component activities to be presented in the work. This expositional presentation closely resembles the nature of the secondary layer of activity in the opening textural prolongation of *Constellations*. Following this exposition of materials, the surface layer shifts from an active frenetic activity to a less–active pitch–stable rhythmic articulation. The secondary layer which accompanies the relatively low–activity of pitch–stable rhythmic articulations in the primary textural layer from measures 113 – 138, generates a micro–structure narrative of a high–activity gestural state, to a low–activity state of sustain, back to a high–activity state of frenetic activity (Figure 55). The progression of these states offers variation on the higher– activity states within this brief narrative. Such microforms strongly help to shape and maintain interest in the work's larger narrative. This form of elaboration in the secondary layer allows for a sense of linearity through various elaborations on the two dichotomies by means of combination, succession, or alternation of the various textural component activities. It keeps the work from being an exclusively continuous formal repetition of two distinctive dichotomies.

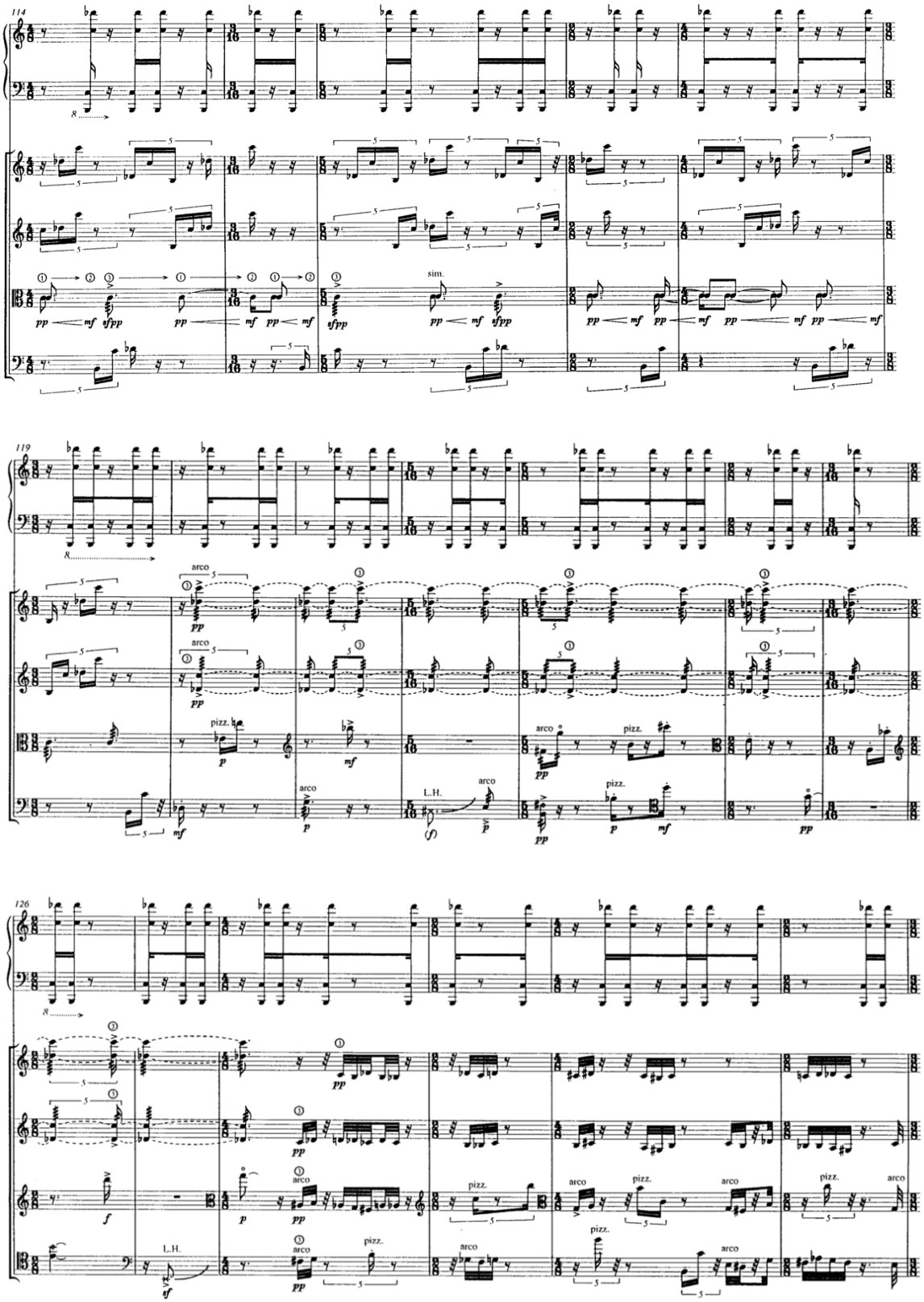


Figure 55 – B. Furrer, *Spur*, mm. 114 – 131.

Chapter 3.5 – Timbral Functions in *Spur*

As in *Constellations*, timbre here attains a strong formal amplifier by offering an additional dimension of contrasts between sections of corresponding textural identity. In the piano, since the potentials of practical idiomatic timbral contrasts are particularly limited (though are occasionally explored, most timbral contrasts in the surface layer of activity occur by means of contrasts in the wholistic timbral dimension through textures. One such instance of timbral contrast between analogous texture states in the surface–level of activity occurs between measures 139 – 143 (Figure 56) and 319 – 335 (Figure 57). These two segments are both forms of frenetic texture activity. However, the former instance of frenetic texture comprises of an ambitus spanning approximately four octaves from pitches C2 – D6, and consisting of three pitch–classes: C C# D. The latter instance of frenetic texture activity spans an approximately two–octave spread from pitches C#1 – D3, consisting of five pitch–classes: B C# D G# A. This distinction in ambitus and harmonic presentation portrays a significant contrast between limited and dense harmonic states, and narrow and wide states of ambitus.

Timbral contrasts between analogous texture states occur typical in the secondary layer of activity. As in the surface layer of activity, changes in the wholistic texture are common in the secondary layer. However, the starkest timbral contrasts in this layer are made possible by the component instrumental timbre activities in the string quartet. String instruments entertain a significantly more extensive range of practical timbral possibilities than the piano does. One such instance of timbral contrast between analogous texture states in the secondary level of sustained

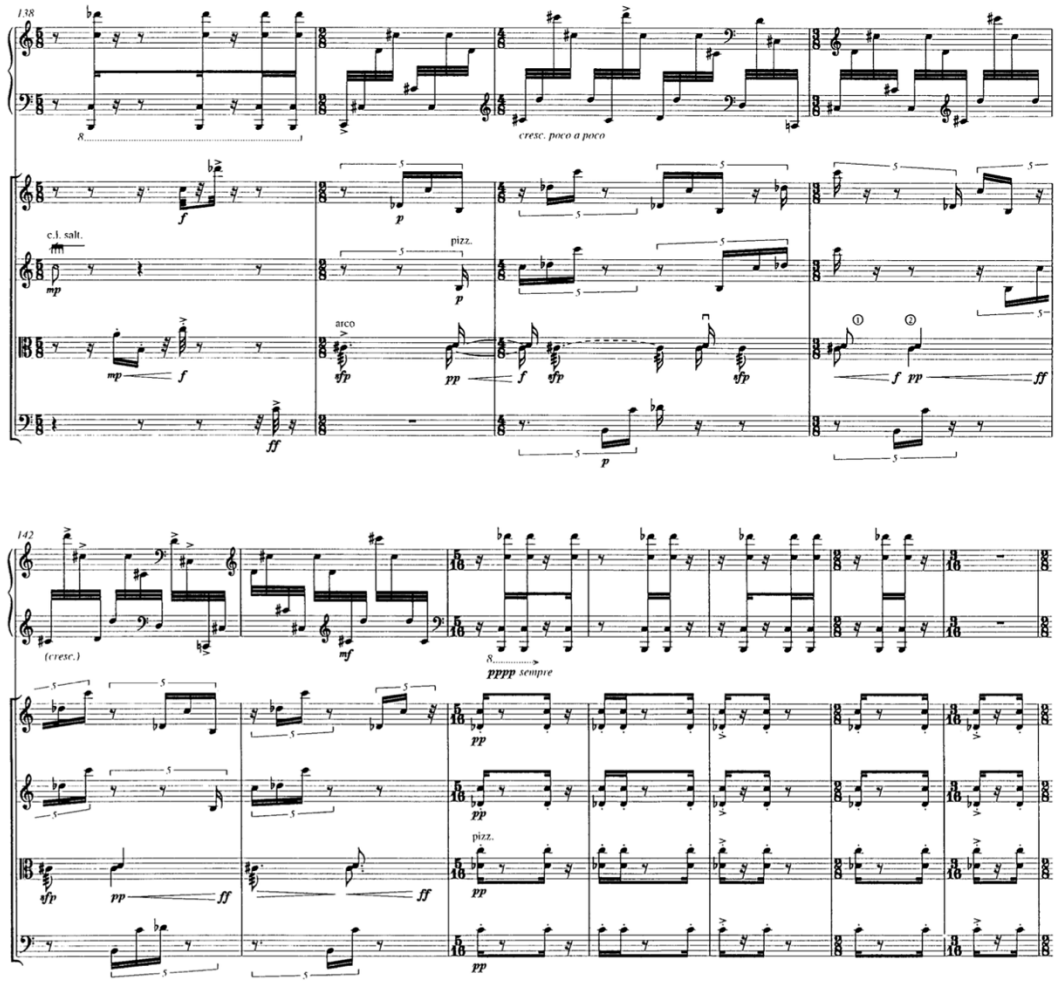


Figure 56 – B. Furrer, *Spur*, mm. 138 – 148.

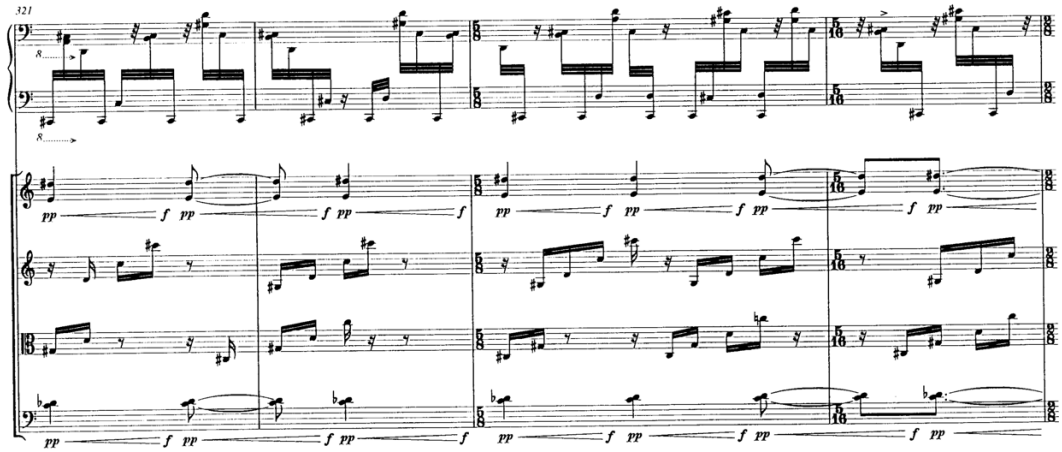


Figure 57 – B. Furrer, *Spur*, mm. 321 – 324.

activity occurs between measures 235 – 247 (Figure 58) and 343 – 353 (Figure 59). Both these states present a sustained activity with periodic accentuations. In measures 235 – 247, the violin and cello operate in combination to form a four–note harmony with a three–octave ambitus spread of pitches Db2 C3 E4 and D#5. An extra–timbral feature further characterizes this activity through instrumental technique by means of the string technique, "*tonlos*", which translates to "just stroking (bowing) noise". This technique, which results in a focus on the sound of the instrumental body, masks the harmonic presentation of the sustained activity through a more noise–focused approach. In the contrasting instance of texturally analogous sustained activity from measures 343 – 353, four instruments are employed to form a composite timbre of sustained activity. The harmonic activity in this instance presents a five–octave ambitus spread of pitches C2 C6 and C7. The timbral composite is comprised of a normative sustain in the cello, a harmonic sustain in the viola, and a tremolo sustain in the two violins. Unlike the suggestion of a discordant harmonic presence in the prior occurrence, this instance offers a more diverse timbral construction within a harmonically pure state of pitch octaves. These two texturally analogous formal sections present contrasting states of noisy timbral complexes.

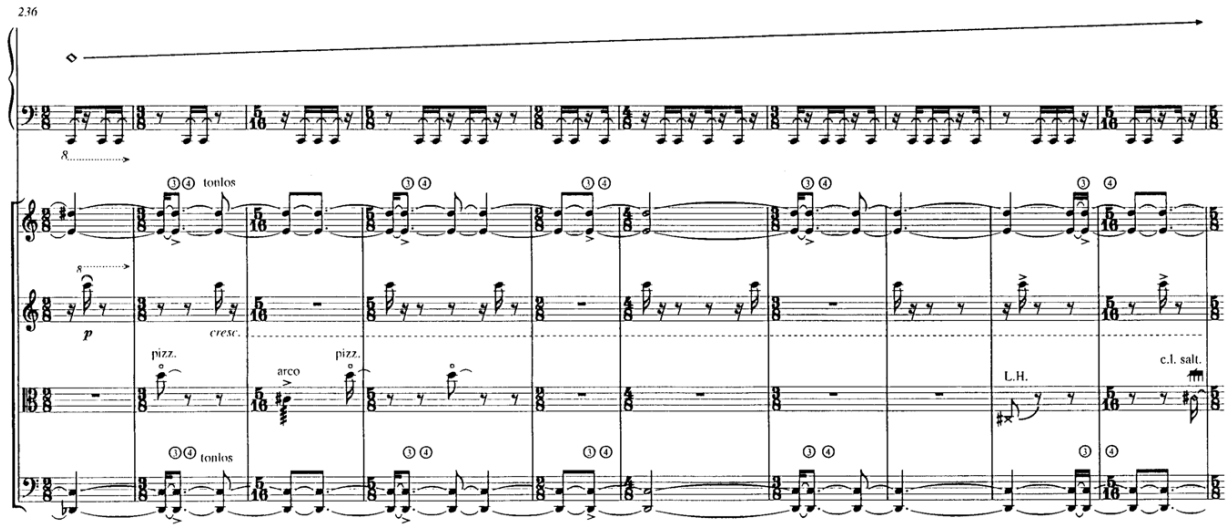


Figure 58 – B. Furrer, *Spur*, mm. 236 – 245.

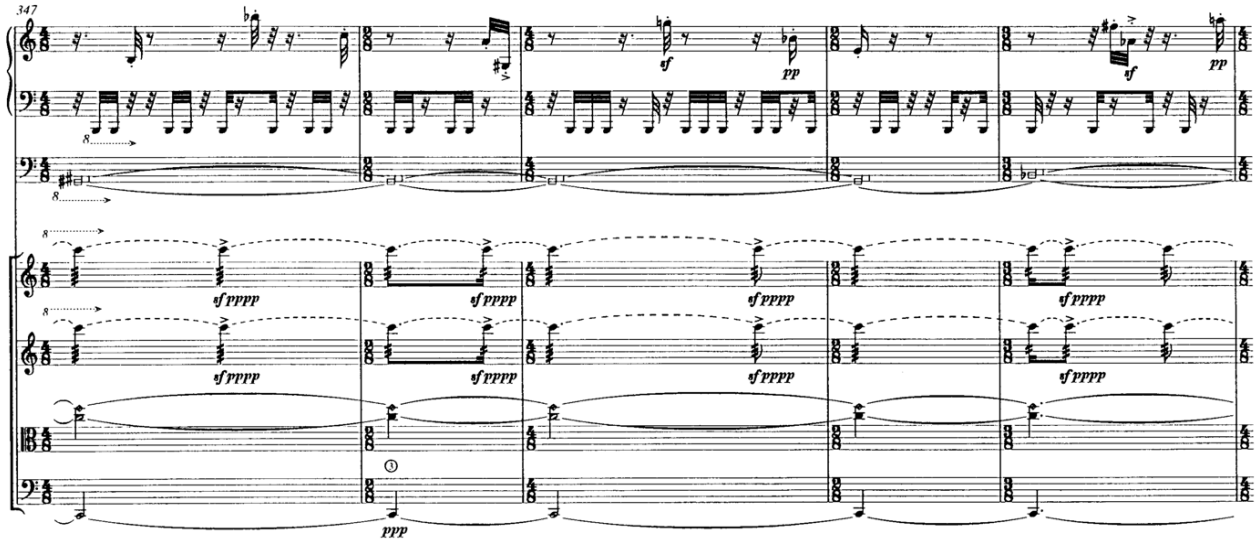


Figure 59 – B. Furrer, *Spur*, mm. 347 – 351.

Chapter 3.6 – Transitional Activities in *Spur*

Spur contains instances of propulsive connectors and textural divider activities. Due to their tension–building nature, frenetic activities, gestures and swells occasionally serve propulsive connector functions when positioned as a lead into a formal modulation. Pitch–stable rhythmic articulations, states of pointillism and of sustain all serve a function of textural divider due to their low–activity nature. Due to the work's format of juxtaposed oscillating states, the phenomenon of transition is less pronounced. Transition activities are particularly consequential when they serve to highlight or off–set narratives of tension. Since this work generates continuous tension and brief periods of development, the function of transitions is less individualized than in *Constellations*. However, common functions of propulsive connectors do occur at multiple points in the form of *Spur*.

One distinctive instance of propulsive connector activity in *Spur* can be seen at measure 197 (Figure 60). This moment also presents an instance of anticipation, suspension, and

resolution. A strong build of tension through a propulsive connector occurs in the violins, directly leading into a textural modulation. In the new texture, the violins continue to sustain the pitch of the initial swell, while light and active motions of gestural and frenetic activity occur in the piano, viola and cello. This pitch swell creates a high contrast of stasis against high–activity material. The secondary texture shifts into a state of pointillism as the attack separation temporally widens at measures 204 – 209. This temporal spreading suggests a state of lower activity, but the continued sustain of the violins maintains the memory of the previous active material. This form of sustained tension is not resolved until measure 210, where the ensemble abruptly returns to a totally frenetic state of activity, continuing tension through rapid motion, as opposed to excitation and simultaneous high degrees of contrast.

Another unique occasion of transition occurs between the primary and secondary layer of textural activity from measures 229 – 285. In the secondary layer of the strings, the state of pointillism is introduced for the first time at measure 229 (Figure 61). This presentation of secondary pointillism foreshadows an eventual evolution into a total pointillism at measure 265 (Figure 62) following the piano's initial pitch–stable rhythmic articulation and then frenetic activity. This transitional activity is based on the idea of emergent formal salience of a particular formal feature, in this case, the textural state of pointillism.

Occasionally, passages are divided with brief periods of silence by a fermata. Such instances can be likened to the effect of formal dividers. One instance of such an activity occurs at measure 228 (Figure 63). Here, a high–activity state concludes with a swell. This swell abruptly stops, leading to a brief pause. This placement of the pause generates a sustain of tension over a period of silence. At measure 229, the activity suddenly recommences with a

lower state of activity through pitch–stable rhythmic articulations. Additionally, another application of a pause might follow high–activity states, suspending formed tension, and recommence through a state of either lower–activity to suddenly release tension or of higher–activity, suddenly recommencing tension. Pauses can also generate a surprise effect by introducing a sudden high–activity state following a low–activity state. The elements of surprise and tension through working memory of a previous activity are the most salient applications of formal dividers.

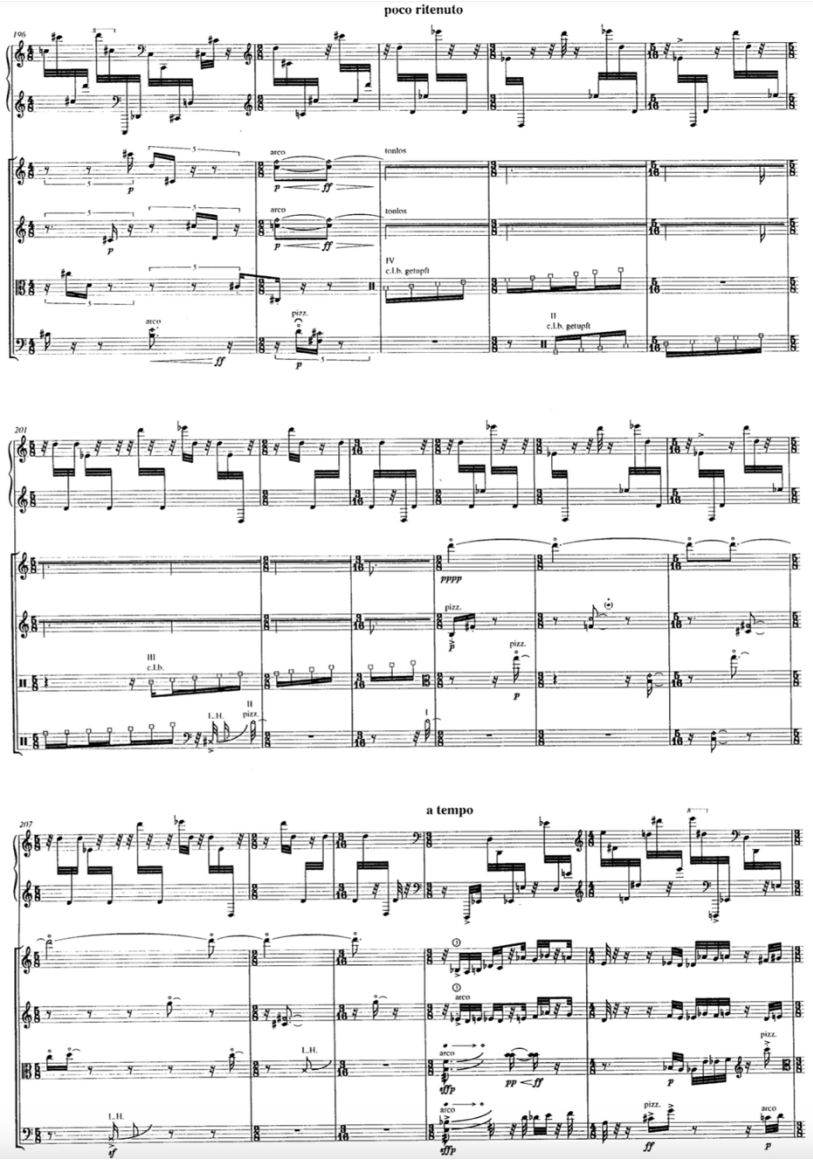


Figure 60 – B. Furrer, *Spur*, mm. 196 – 211.

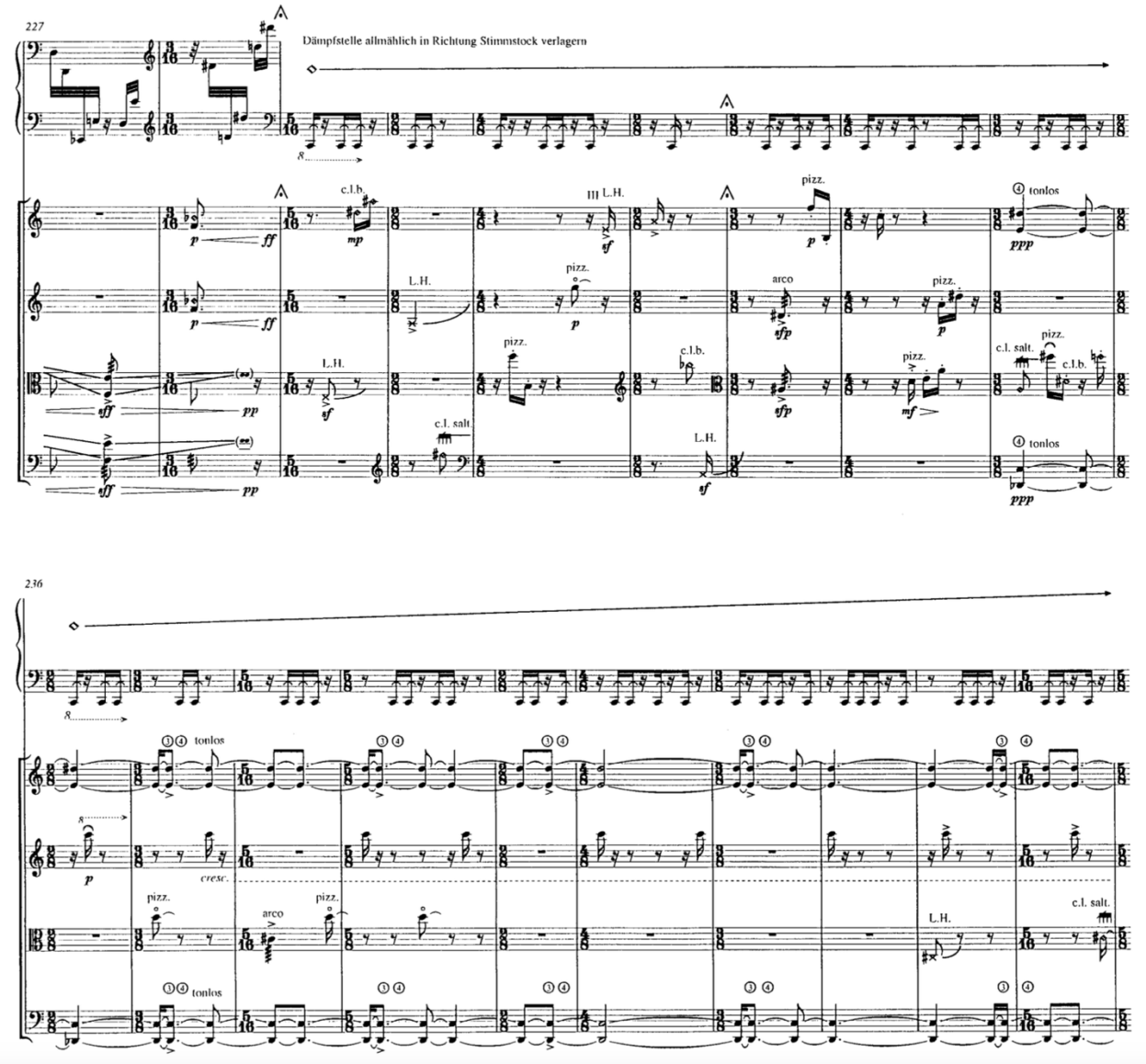


Figure 61 – B. Furrer, *Spur*, mm. 227 – 245.

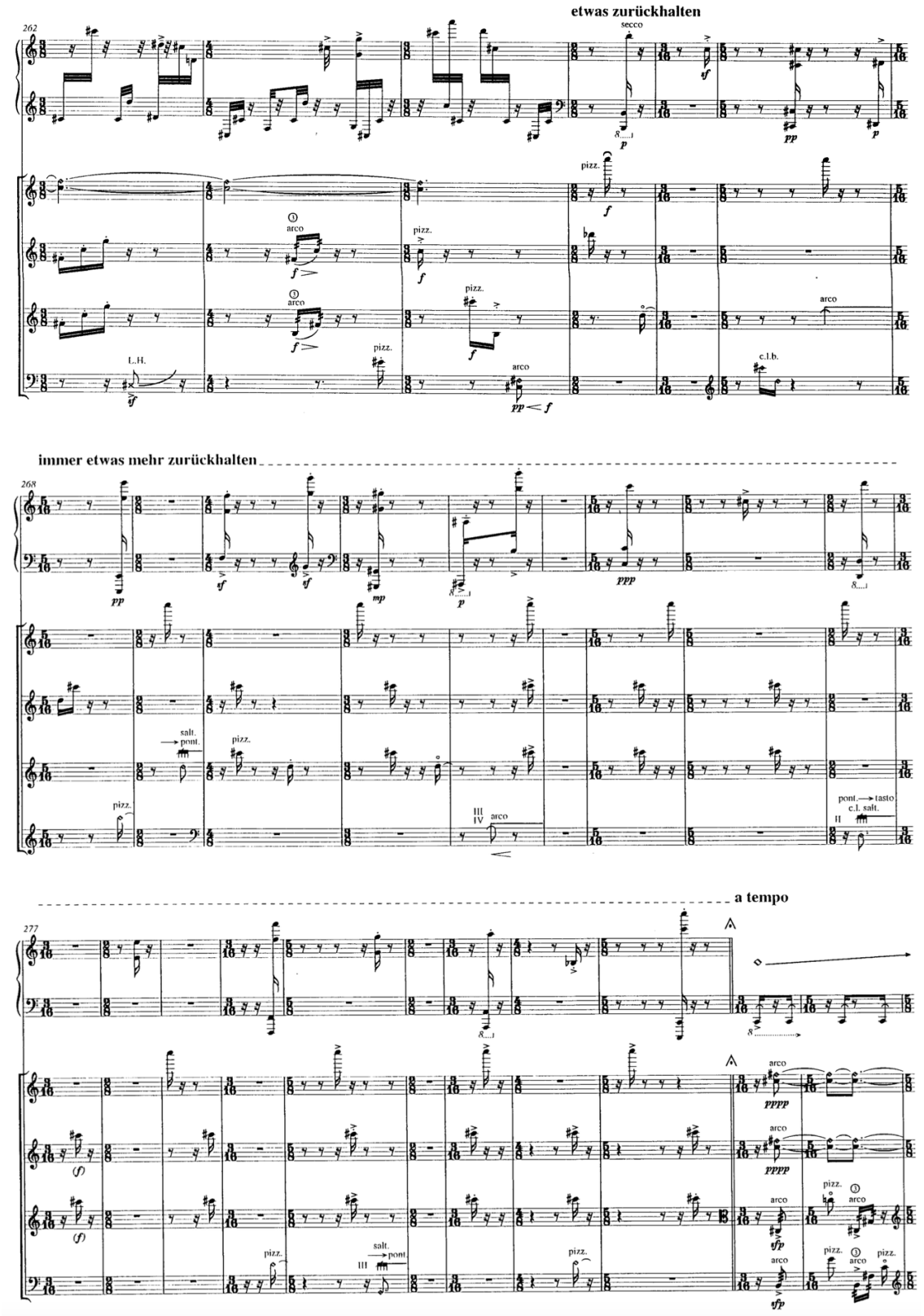


Figure 62 – B. Furrer, *Spur*, mm. 262 – 287.

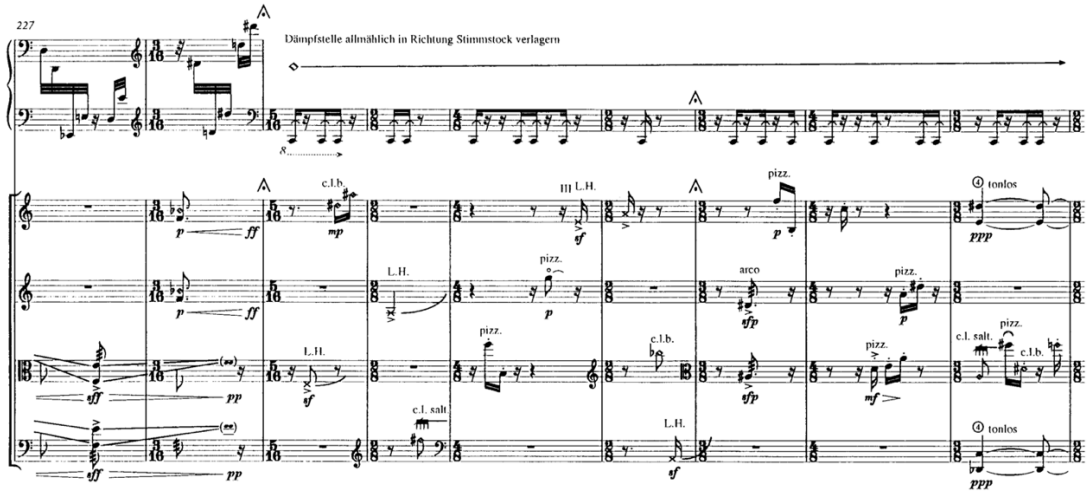


Figure 63 – B. Furrer, *Spur*, mm. 227 – 235.

Chapter 3.7 – Melodic Activity in *Spur*

Spur contains a form of melodic activity which serves a distinctive function in comparison to the melodic motives of *Constellations*. Unlike in *Constellations*, where melodic statements recur at varied periods throughout, this melodic activity remains confined to the final pointillistic passages of the work (Table 2). This activity clearly emerges beginning at measure 446 (Figure 64). Here, passages of pointillism and melodic activity are continually separated by brief gestural moments, allowing for the activity to seem recurring in nature. However, the melodic activity does not regularly repeat itself in pitch or intervallic content upon pointillistic returns. Rather, it continues a thread of distinctive pitch activity from where the musical line previously concluded, forming a single overarching presentation of an atonal melody. The application of resonance to certain pitches through techniques like application of the piano's sustain pedal generates a hierarchy of pitched attack events, distinguishing its melodic function, as opposed to the secondary textural activity. Through this textural state, Furrer reveals a new linear form of listening: the phenomenon of distinctive pitch successions which outline a melodic

contour. Following the initial resonant melodic pitches, the melodic activity gradually becomes more obscured by the loss of salient pitch and resonance by means of more pitch–veiled instrumental techniques both in the strings and the piano (Figure 65). One's working memory of the initial continuity of a melodic state of resonant pitches forms the sensation of a later, veiled melodic continuity. The reserved presentation of a melodic activity in the latter part of the composition aids in generating a greater sense of linear progressivity in the work.

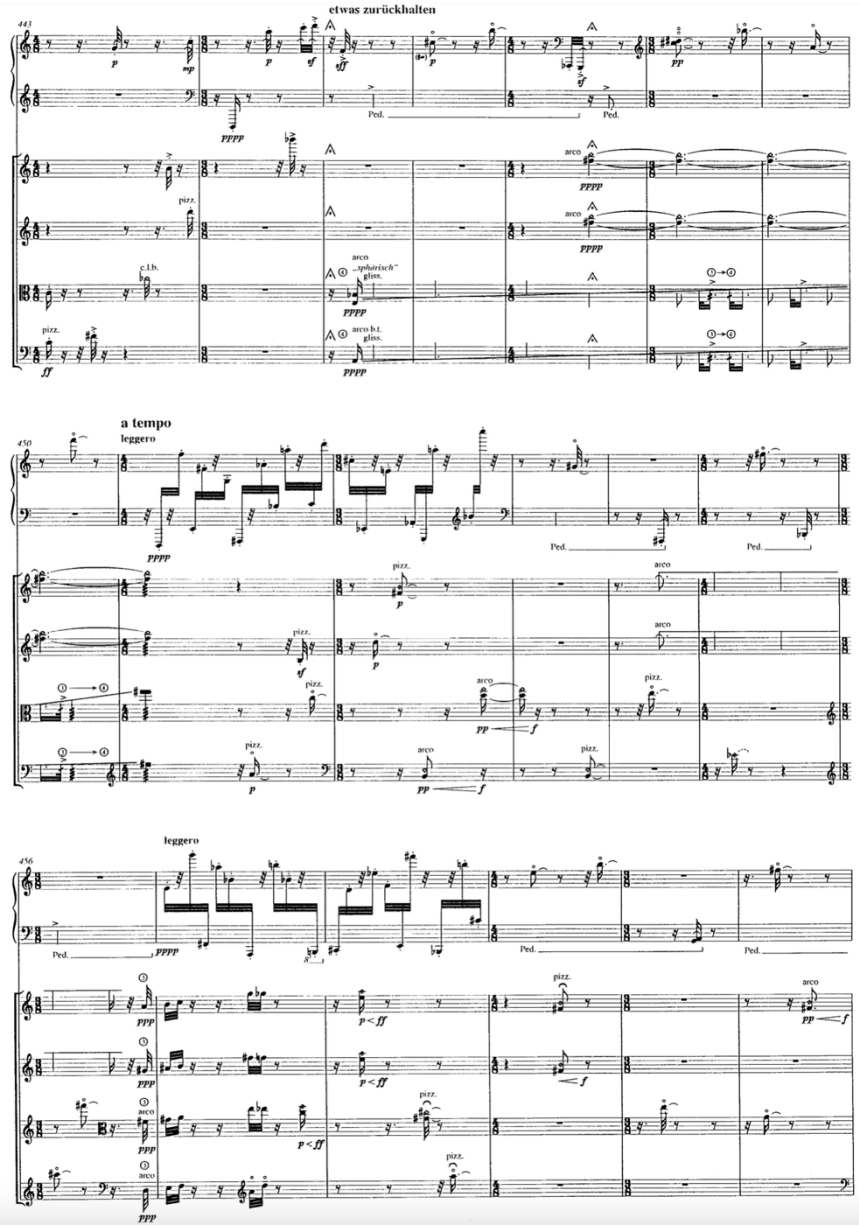


Figure 64 – B. Furrer, *Spur*, mm. 443 – 461.

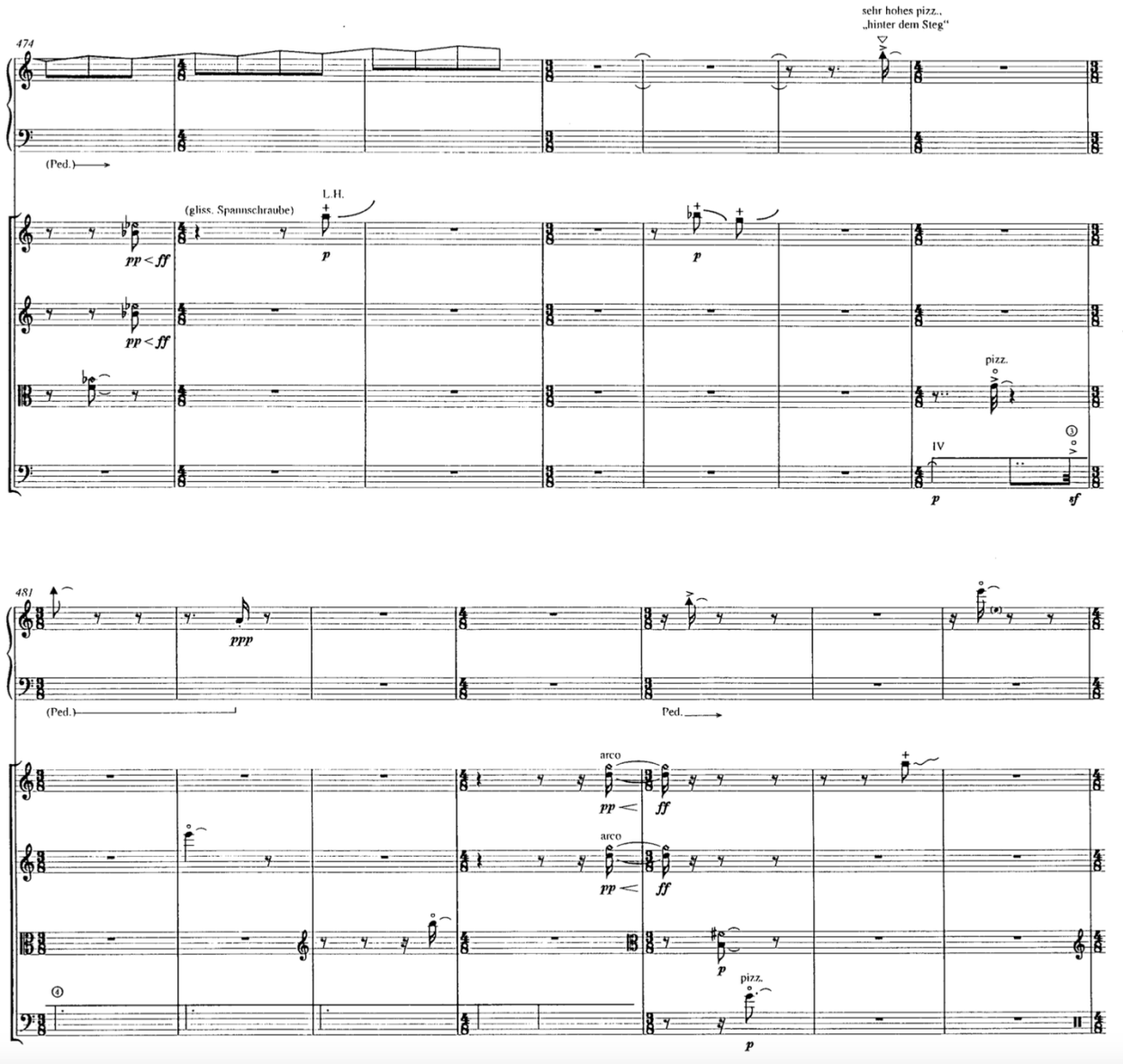


Figure 65 – B. Furrer, *Spur*, mm. 474 – 487.

Chapter 3.8 – Perception of Integrated or Stratified Textures

Whether or not the multiple textural layers in *Constellations* and *Spur* are ultimately processed as separate textural identities or operate by contributing to a singular, overall integrated textural state is a matter of perception. McAdams posited that "sequential grouping

connects events [of timbre, pitch, loudness, duration, and spatial position] into single or multiple auditory streams on the basis of which perception of melodic contours and rhythmic patterns is determined. The orchestral effect is the integration or segregation of events into streams, textures, and foreground and back–ground layers" (McAdams 217 – 218). While this basis of sequential grouping is discussed here particularly in relation to conventional musical structures, and even suggests that textures can be a result of such processes, I posit that the same perceptual function can be applied to the dimension of musical textures themselves.

In *Spur*, a multiplicity of instrumental timbral features and independent textural narratives distinguish the prominent and secondary textural layers. This can make it difficult to structurally perceive a true textural integration of these two states. However, the perception of a singular integrated texture by combined layers is achievable, particularly when the two stratified layers of textural activity both represent the same component texture type. When there are many simultaneous operating textural components scattered across a composite texture, integration can be achieved. This is made possible due to a lack of distinction available from any one form of activity. Therefore, to attain textural integration, there needs to be either only one form of component texture activity formed into a textural circumstance, or multiple (typically compartmentalized) forms of component texture activities operating simultaneously within a delimited period. Textural integration is broken and generates textural layers when multiple forms of textural component activity operate in opposition to each other, competing for attention through a consistent individualistic linear presentation.

One instance where multiple distinctive textural layers are formed occurs in *Spur* from measures 128 – 138 (Figure 66). Here, a pitch–stable rhythmic articulation activity in the piano is accompanied by frenetic activity in the strings. Textural layering is strongly pronounced in this

example due to both the distinction of high– and low–activity states between their component activities, and a separation of timbral qualities. Timbral separation is particularly salient because the piano activity is a form of percussive string attack, while the strings present the frenetic activity through rapid bowed articulations. In the violins, the timbre is particularly distinctive, due to being presented in the instrument's lower register.

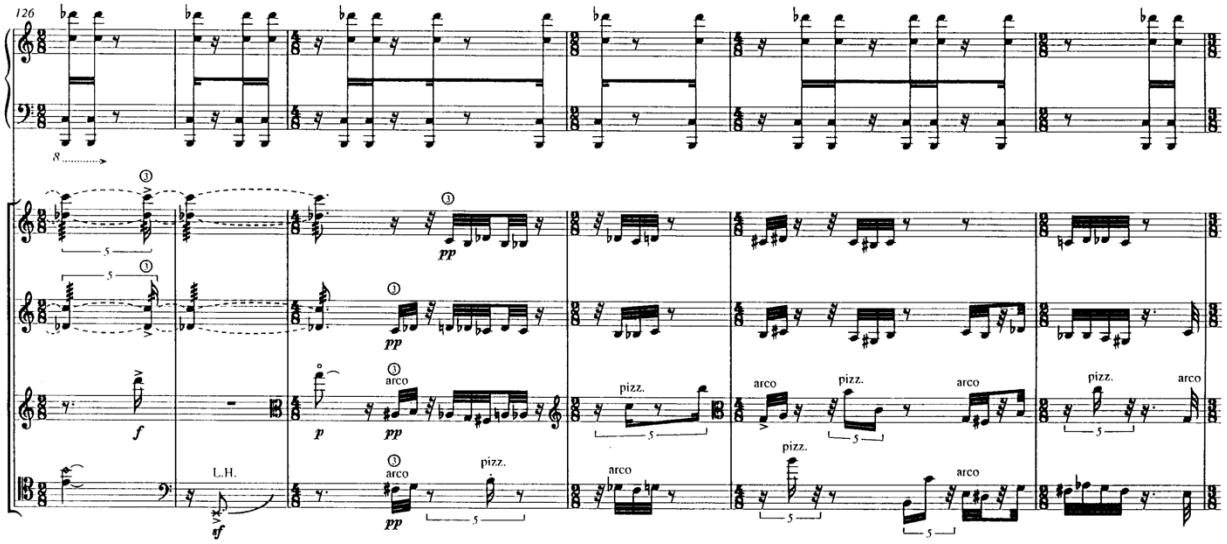


Figure 66 – B. Furrer, *Spur*, mm. 126 – 131.

Another instance of separation into textural layers occurs at measures 229 – 247 (Figure 67). Here, a pointillistic activity in the strings accompanies pitch–stable rhythmic articulations in the piano. These dual representations of textural activity generate distinctive textural layers. However, in this example, there is greater timbral and articulative similarity between the two layers as they both perform short percussive activities on strings, primarily by means of plucks or attacks. The two textural layers are also more similar because their components share the quality of a low–activity state.

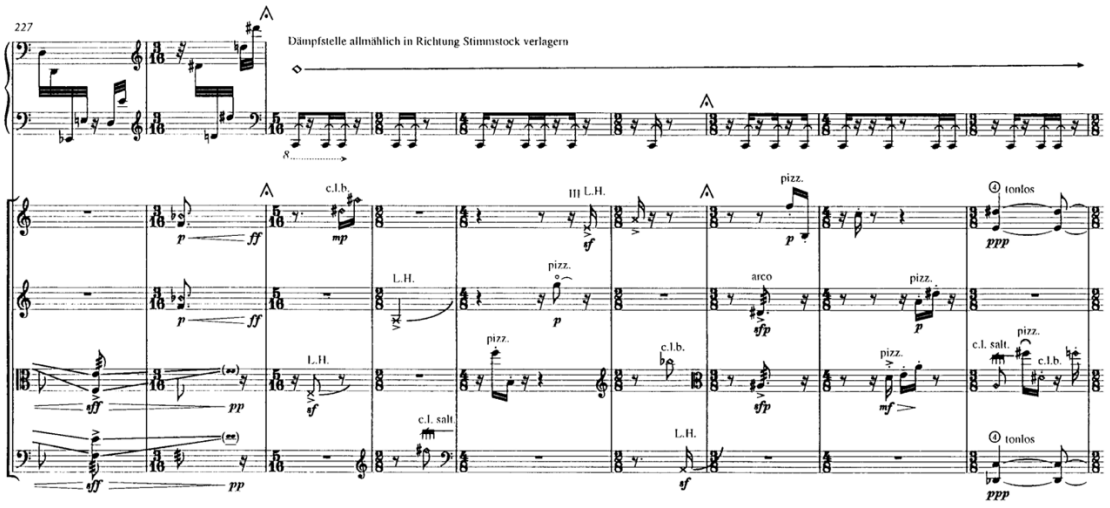


Figure 67 – B. Furrer, *Spur*, mm. 227 – 235.

An occasion of pointillistic activity in *Spur* from measures 265 – 285 (Figure 68) presents an instance of strong textural integration. The timbral similarity of the plucked strings of the quartet and the hammered strings of the piano help to alleviate the potential of source timbre influencing a perceived textural stratification. Furthermore, the unity of textural component behavior between the full ensemble does not present simultaneous contrasts, resulting in a uniform textural state.

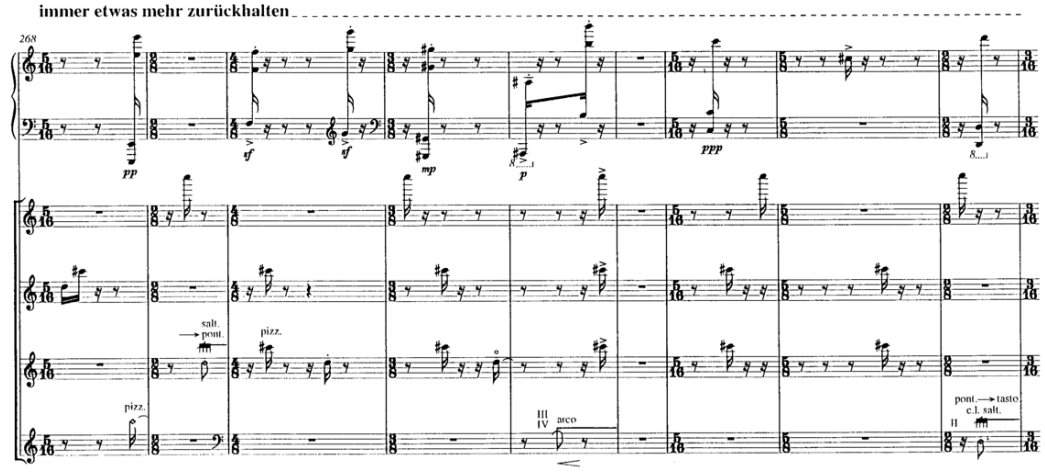


Figure 68 – B. Furrer, *Spur*, mm. 268 – 276.

These observations regarding textural integration and layering demonstrate how timbre and textural component activity both serve as strong formal delineators to the perceived integration or stratification of texture. Textural stratification and integration can serve a pertinent feature of a formal narrative in texture–centric compositions.

Chapter 3.9 – Conclusion

Musical texture has historically served a primarily secondary formal function in Western art music. My composition, *Constellations* and Beat Furrer's *Spur* offer two formal approaches to generating a work which amplifies the formal applications of texture. In *Constellations*, the expositional and climactic conclusionary placement of melodic motives arguably maintain melody's formal prominence in the work, due to the culturally fashioned perceptual reliance on pitch and harmonic recapitulatory functions. However, in *Spur*, the application of melody is saved for a brief period in the work's conclusion, but maintains a veiled pitch state, weakening its salience as being primary in function within the work's grand formal narrative. Both *Constellations* and *Spur* achieve strong formal statements which carefully attend to the various stages of their design. The amplification of texture and the proportional diminishment of other formal elements heightens the status of texture but does not in itself ascertain that texture attains the work's primary formal feature. The perceptual qualities of pitch and harmony, particularly when utilized in a conventional formal manner, can eclipse the significantly greater proportionality of textural elements. These fundamental formal elements illuminate how formal salience cannot rely on quantitative means alone.

A system of multi–dimensional features operate throughout both works to generate a complex formal structure. Prolonged states and periodic recurrences of idiosyncratic textural

formations offer a succession of significant periods of motivic-like behavior. As in conventional musical styles of Western art music, these varied states generate a progression of distinctive forms of tension. The application of transitional structures generates additional momentary contributions to the balance of tension. Specific timbral progressions are also devised to generate another dimension of contrasts between the various significant formal entities in the work, as well as facilitating the separation and the integration of textural layers. Through a balance of contrasts in tension, textural identity, textural multiplicity or singularity, and timbre and dynamics, distinctive formal narratives are forged through the application of musical texture.

Varied approaches to formal construction are demonstrated in the contrasting works. The number of distinct textural component identities in the work and their respective degrees of tension, the structuring of these textural identities over time, the application of textural stratification or integration, as well as the singularity or multiplicity of textural entities all are of particular interest in the individualization of musical form through texture.

Both *Constellations* and *Spur* present varied means to generate formal evolution within a structure otherwise based on various oscillatory states. They each attend to this matter through the application of additional functions which serve a modulatory role. In *Constellations*, the application of an iconic figure and a recurring melodic activity signal momentous periods of change in the work. In *Spur*, a single occurrence of quasi–melodic activity is integrated in the later portion of the composition to signal a formal change in the final, intermittent statements of the work. When texture is significantly amplified and conventional motivic elements are diminished in a work, previously foregrounded functions of melody and figure take on a relatively more veiled or absent state. This results in a historic reversal of structural tasks in

music formation despite the perceptual strength of the recapitulatory nature of melody and harmony.

By generating this document, I aim to encourage further study on the constituent features, design, and perception of recent textural works. By offering attention to further circumstances of texture–centric compositions, the consequences of formal decisions founded on textural considerations can be elucidated. My experiments and investigations in such compositional methods illuminate the possibility of an expanded place in musical creativity for textural concerns. Through the categorization and nuanced formal structuring of distinctive primitive components, musical textures can attain meaningful stature and unique relationships which provide a musical work its substance. I intend to continue similar explorations on textural composition through further analysis of other relevant works. These investigations in effect, can broaden an awareness of diverse formal approaches, which can inform further directions in compositional practice. Ultimately, the fruits of these investigations will ideally be revealed through novel forms of musical expression.

APPENDIX

Score of *Constellations*.

Score

Zachary Konick

Constellations

for Chamber Ensemble

Duration: 23 minutes

Program notes:

Zachary Konick, *Constellations* (2023)

Constellations was composed in 2023 for three vibraphones, viola, cello and contrabass. The work explores various textural environments, each composed of a limited set of idiosyncratic behaviors. These behavioral elements are reconceived in each textural circumstance through a variety of transformational processes. This compositional approach examines the unique effect which space and time confer on one's perception and experience of reality. To me, this entertains our ability to capture distinctive dimensional perspectives, each of which offers their own beauty.

Duration: 23 minutes

Instrumentation:
Viola
Cello
Contrabass
3 Vibraphones (including working motors)

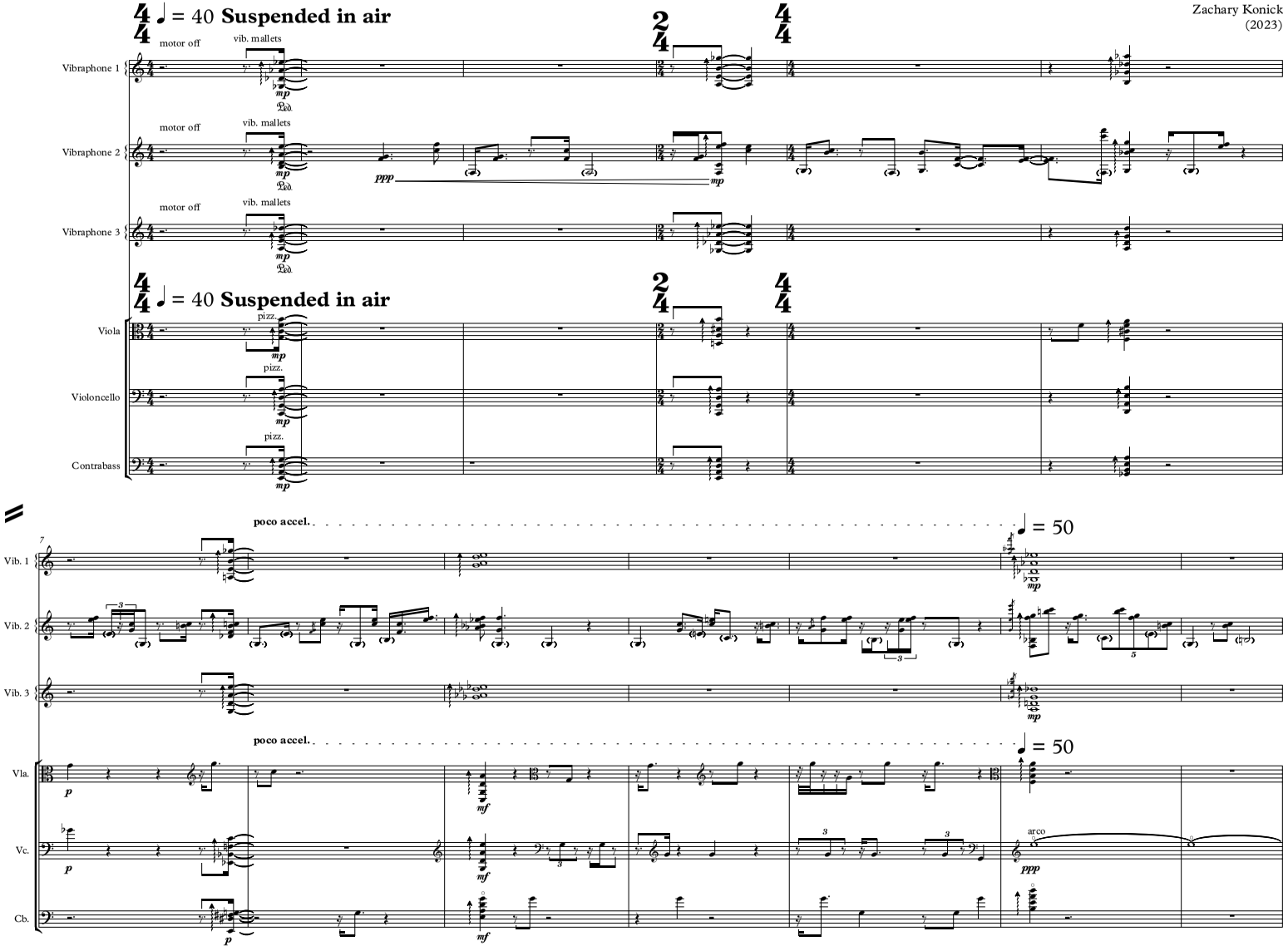
Performance notes:

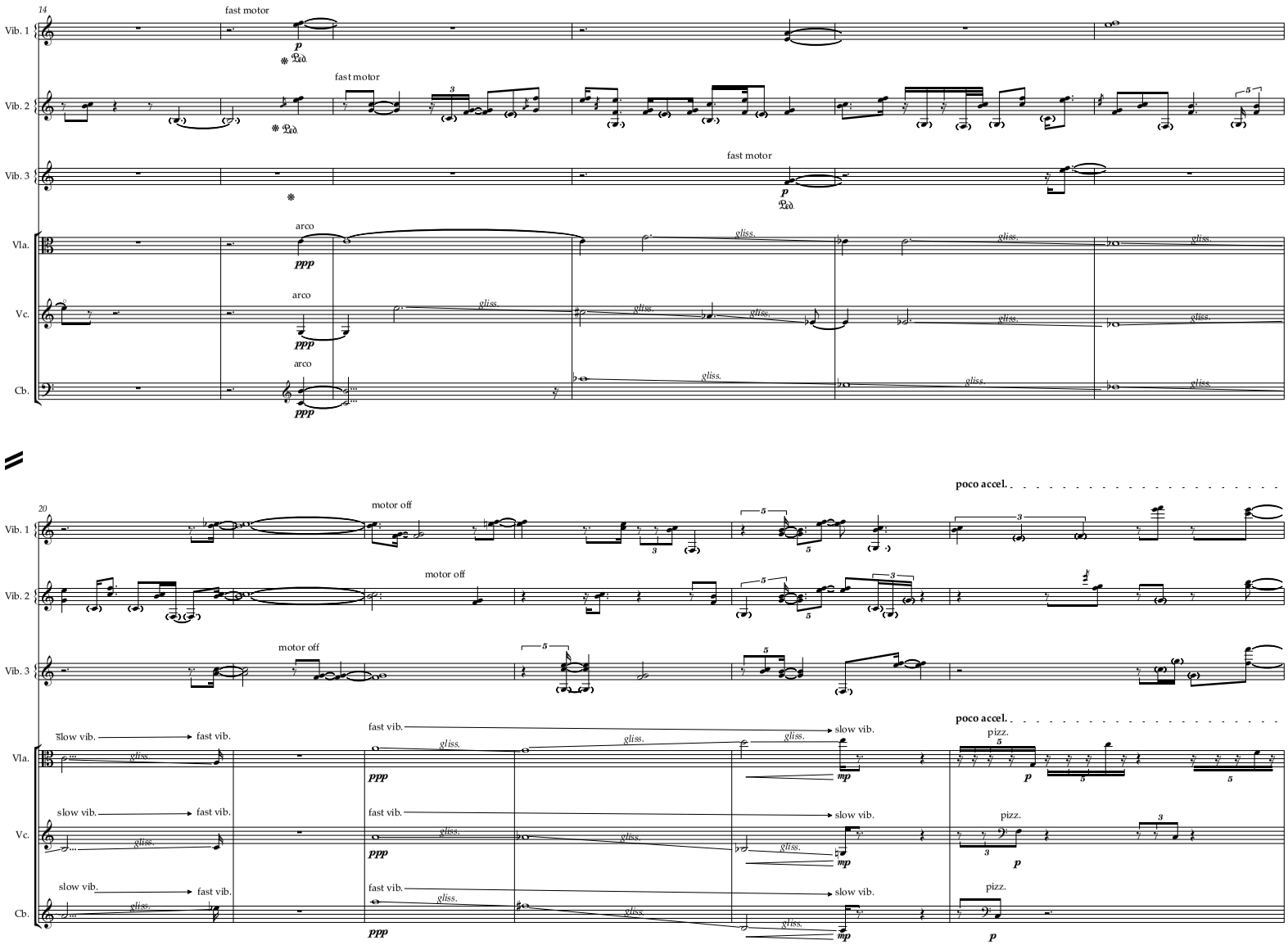
- Rhythmic specificity for each performer is vital for the distinctive ensemble effects in this work.
- Strings should aim for all pitches to sound clearly. This might mean accenting high pitched attacks.
- All moments of strummed activities in the strings and rolled chords in percussion (e.g., meas. 1) should always be performed with a little separation between individual notes for them to be clearly perceived as a gesture. All notes in these instances should be evenly sounded.
- All vibraphones require a variable-speed motor with at least three relative speeds (notated fast, medium fast/slow, and slow). All vibraphones are ideally at the same tuning to avoid a natural beating as this can lessen the impact of motor activation. At times, motor activations and speed modulations are rhythmically specified with the indication of activity placed over a tied rhythm, meaning to activate within a resonance.
- Each percussionist requires a soft mallet, a semi-hard vibraphone mallet, and hard rubber mallets.

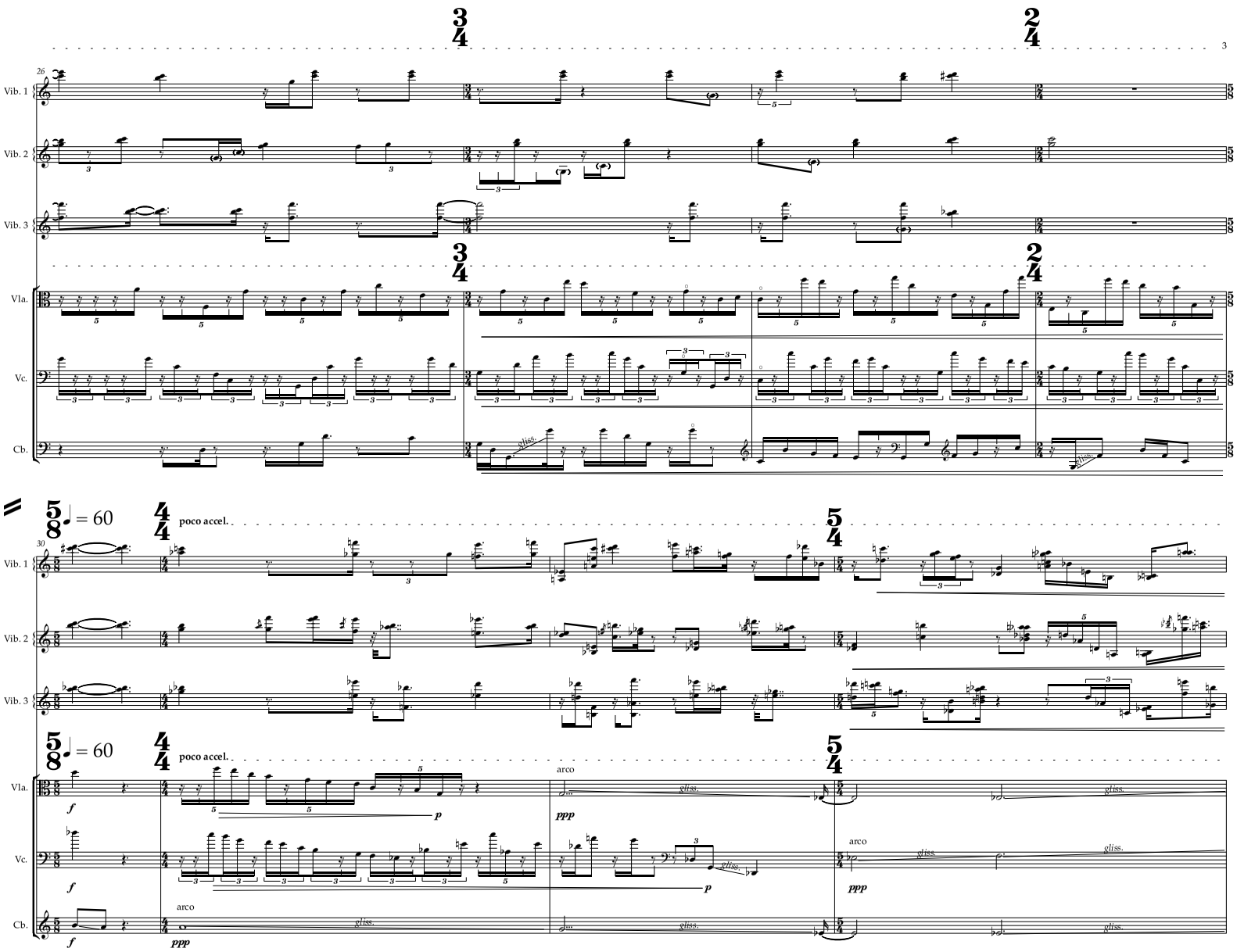
Constellations

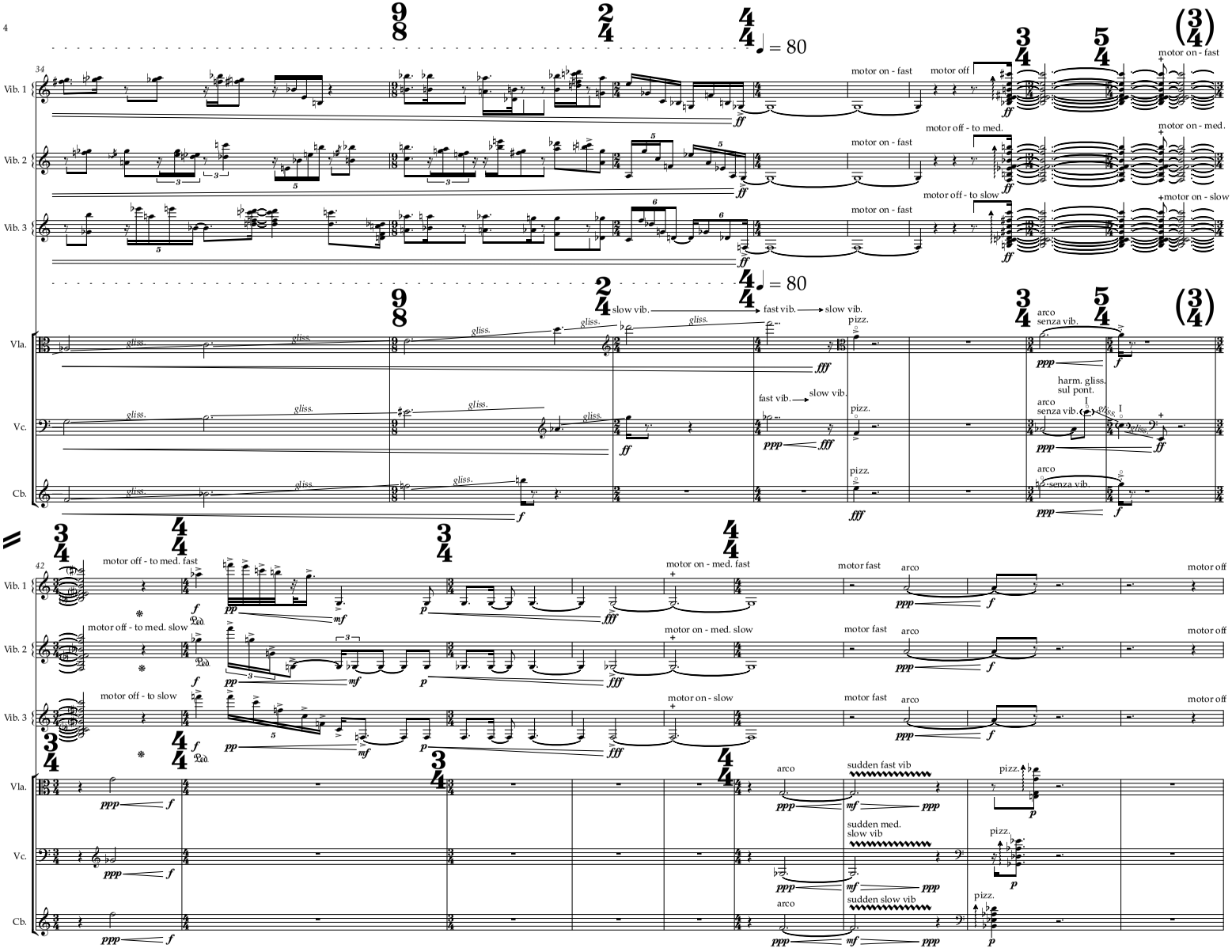
for Chamber Ensemble

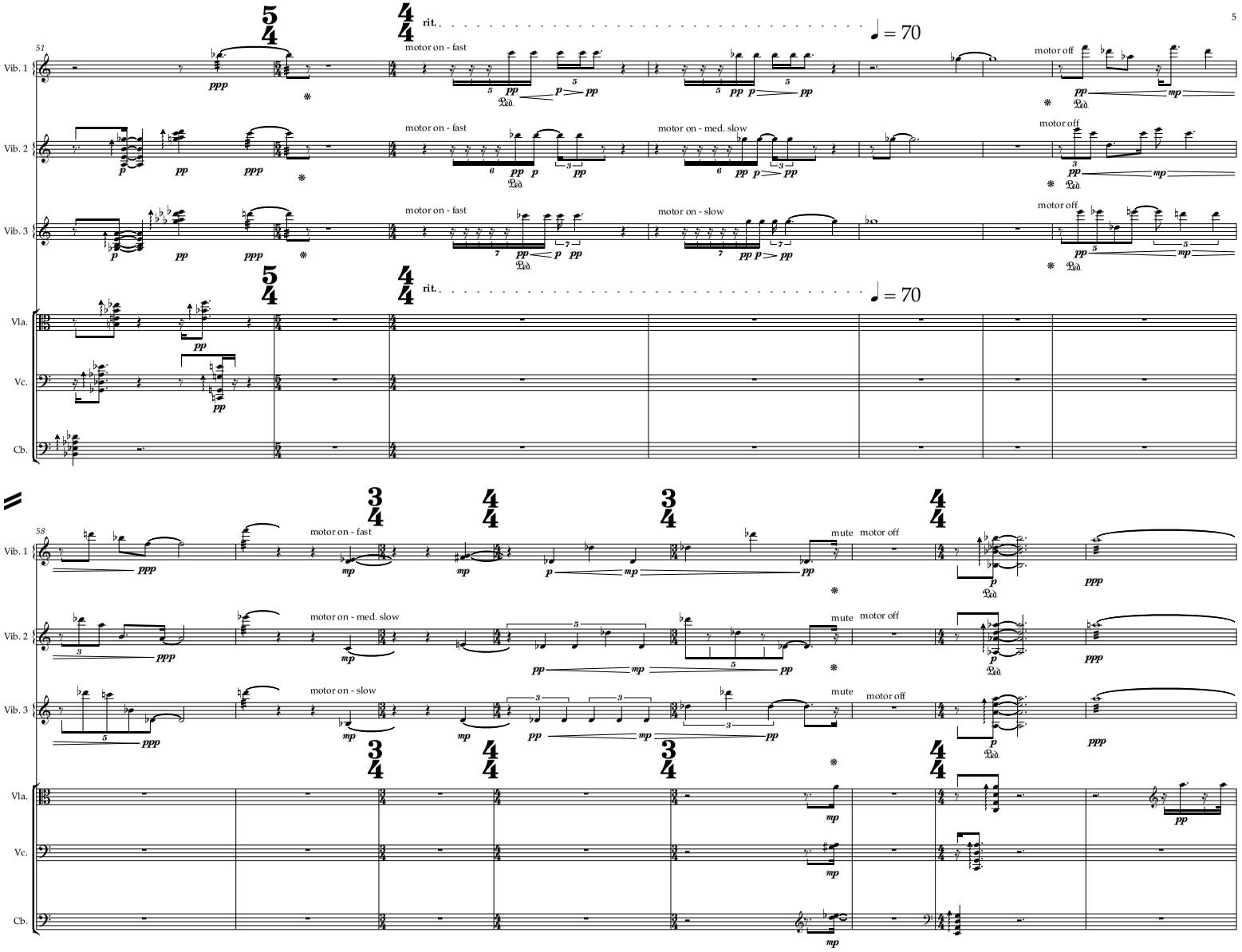
Zachary Konick
(2023)

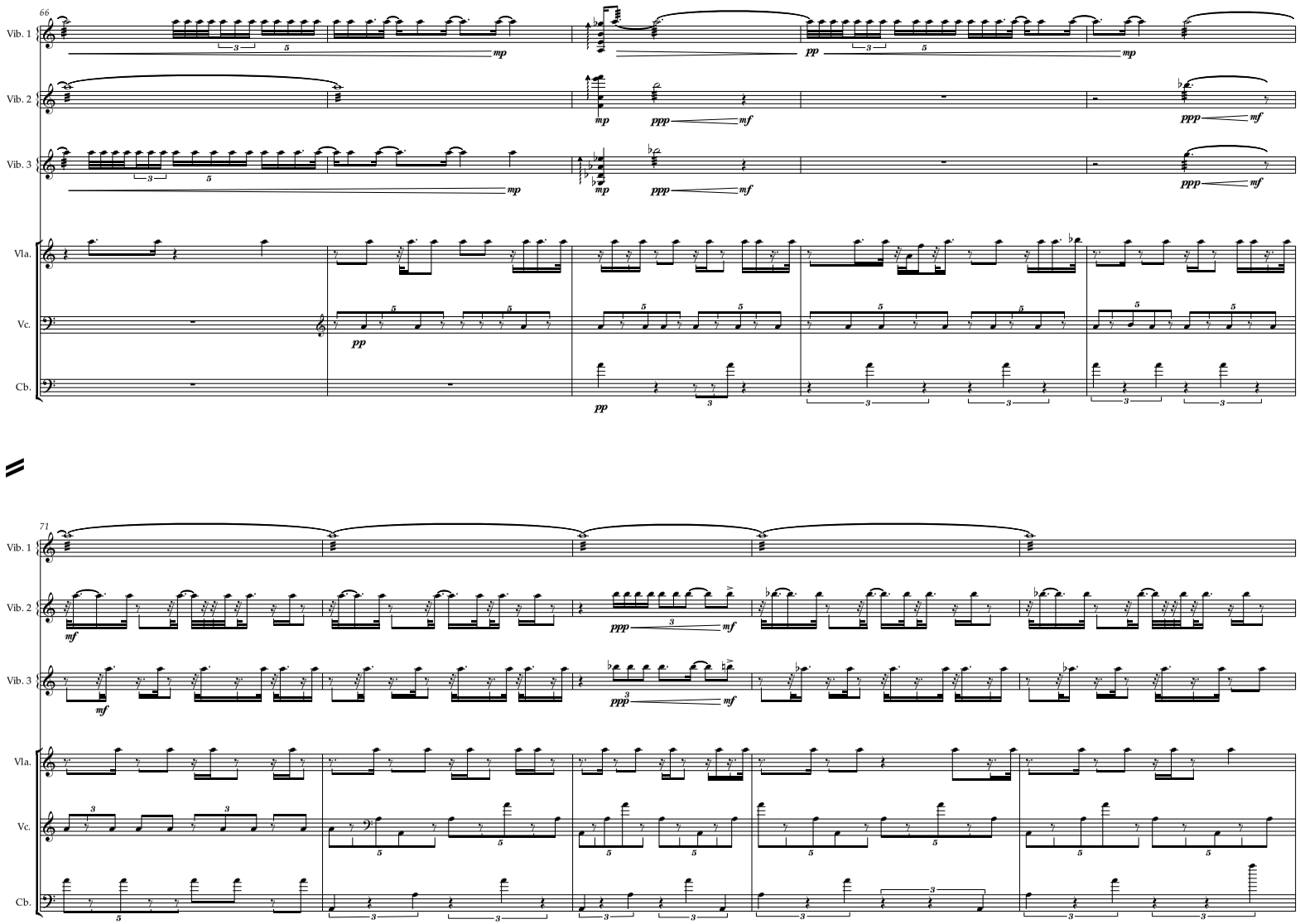


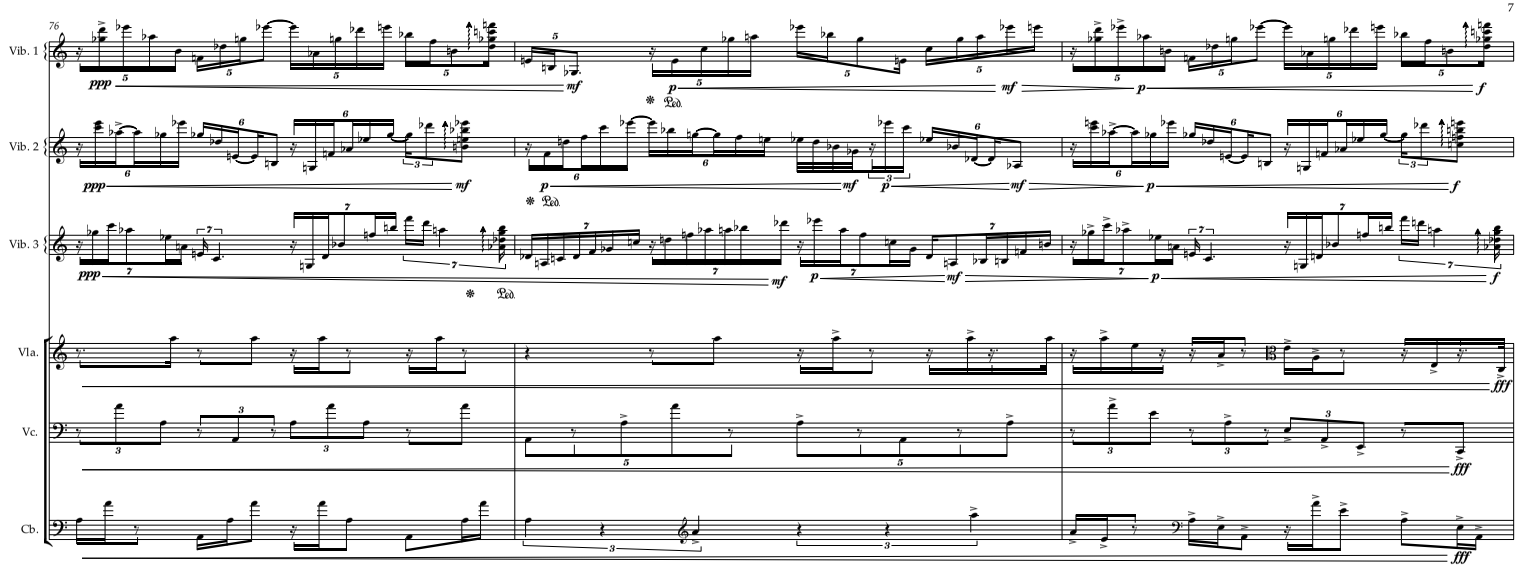

14
fast motor
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
arco
ppp
gliss.
20
motor off
poco accel.
slow vib.
fast vib.
pizz.
p
mp

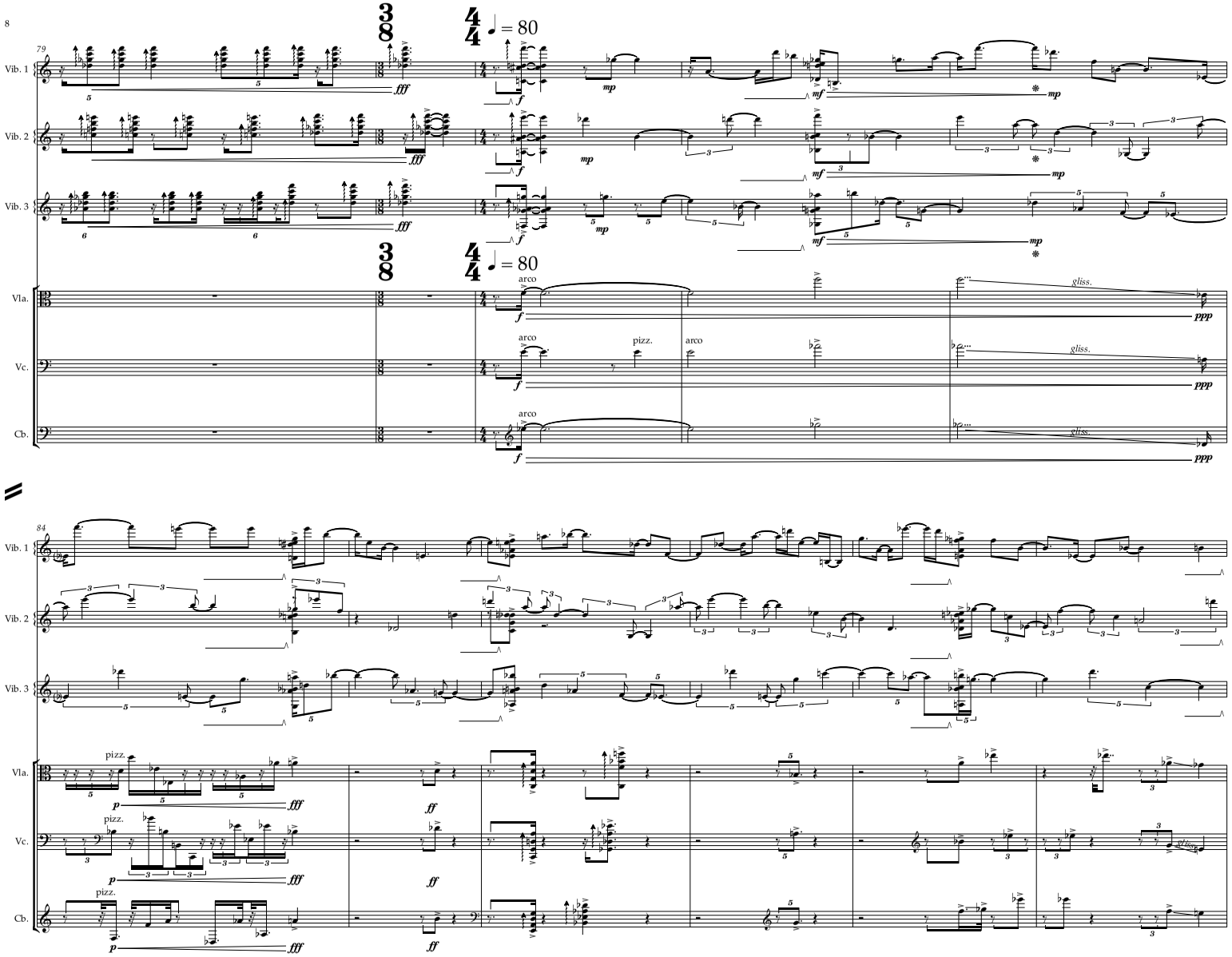

Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
poco accel.
arco
gliss.

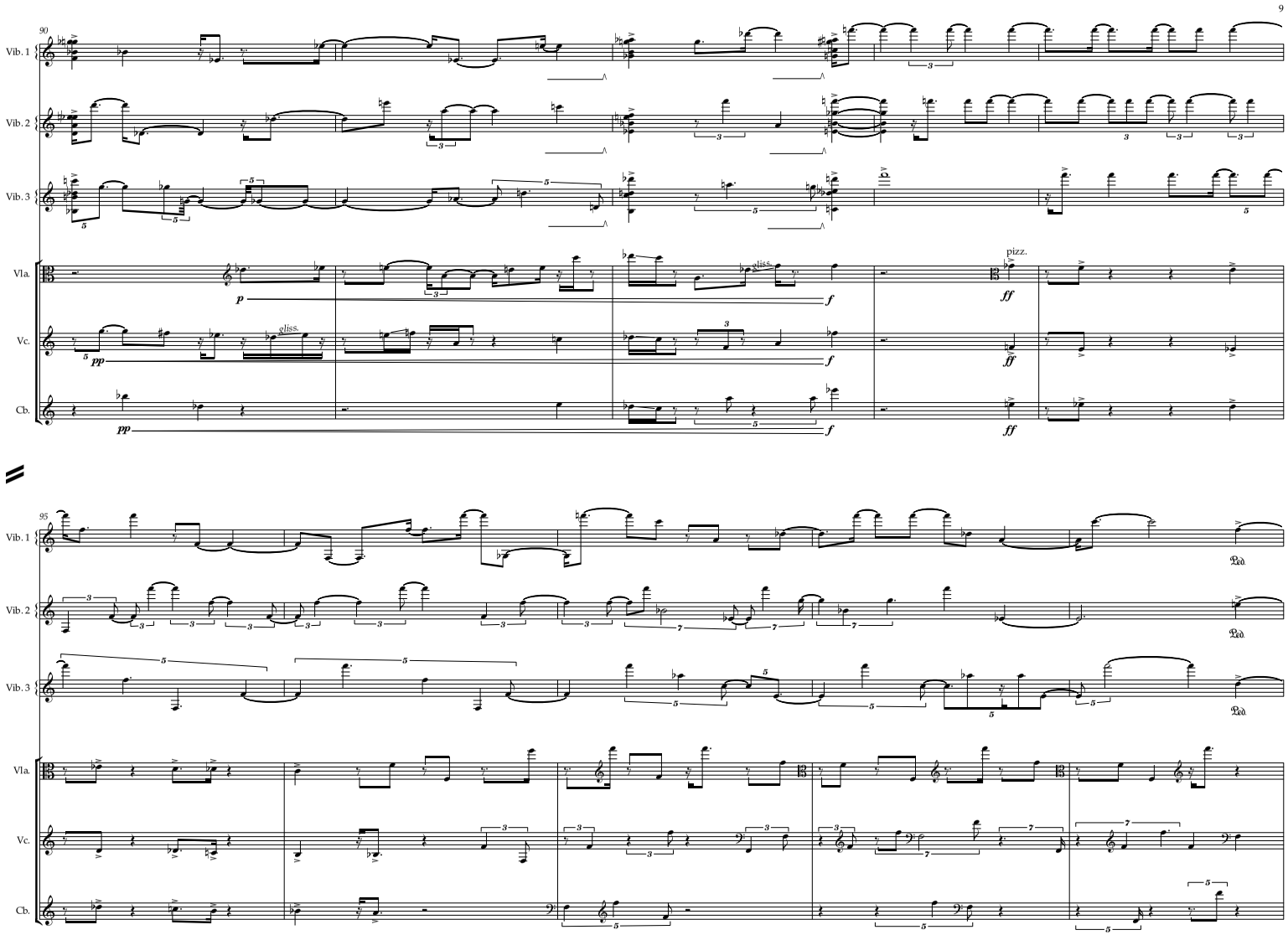

34
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
♩ = 80
motor on - fast
motor off
motor off - to med.
motor on - med.
motor off - to slow
motor on - slow
slow vib.
fast vib.
pizz.
arco
senza vib.
harm. gliss.
sul pont.
42
motor off - to med. fast
motor off - to med. slow
motor off - to slow
motor on - med. fast
motor on - med. slow
motor on - slow
motor fast
motor off
sudden fast vib
sudden med. slow vib
sudden slow vib

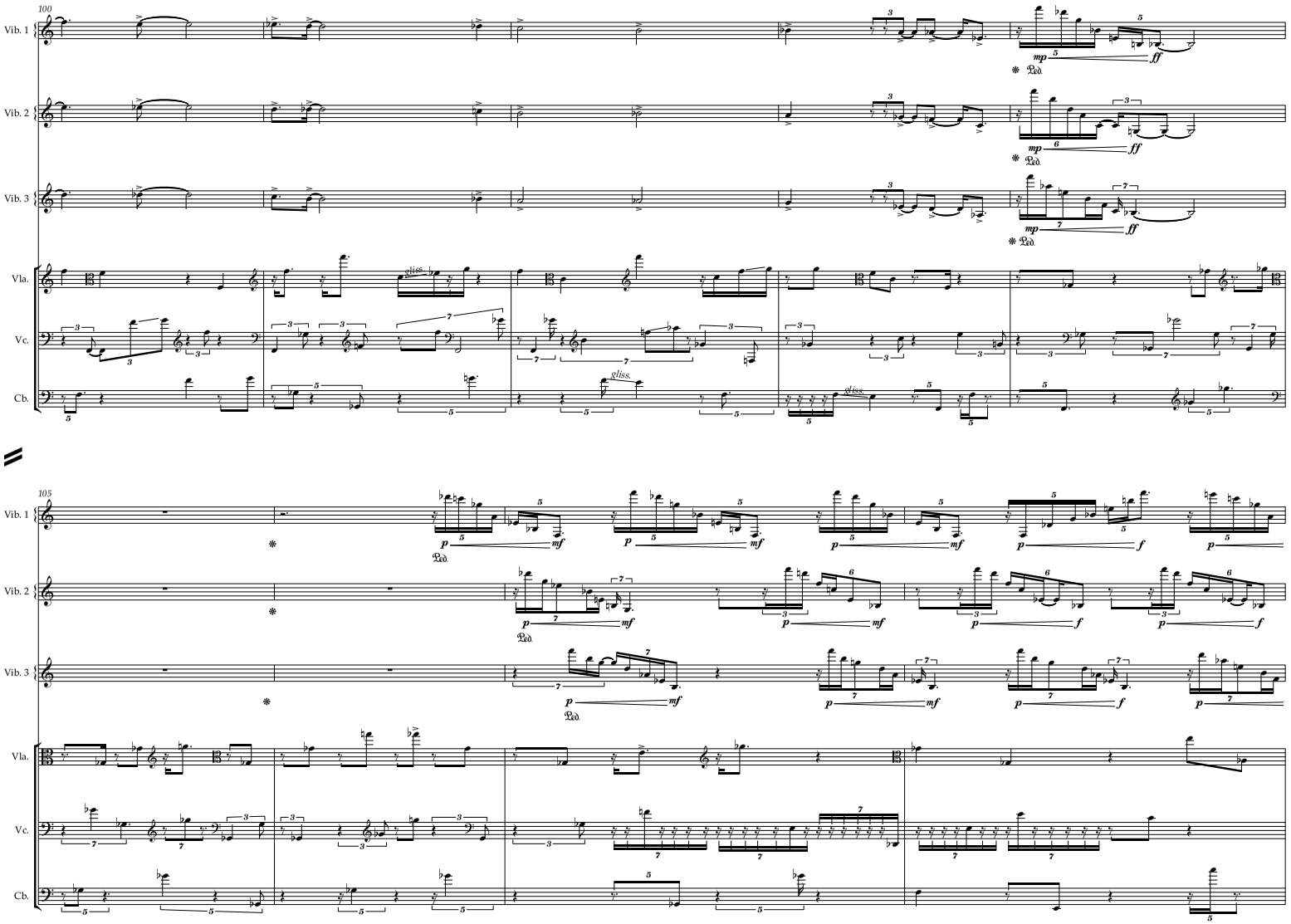

51
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
rit.
♩ = 70
motor on - fast
motor on - med. slow
motor on - slow
motor off
58
mute

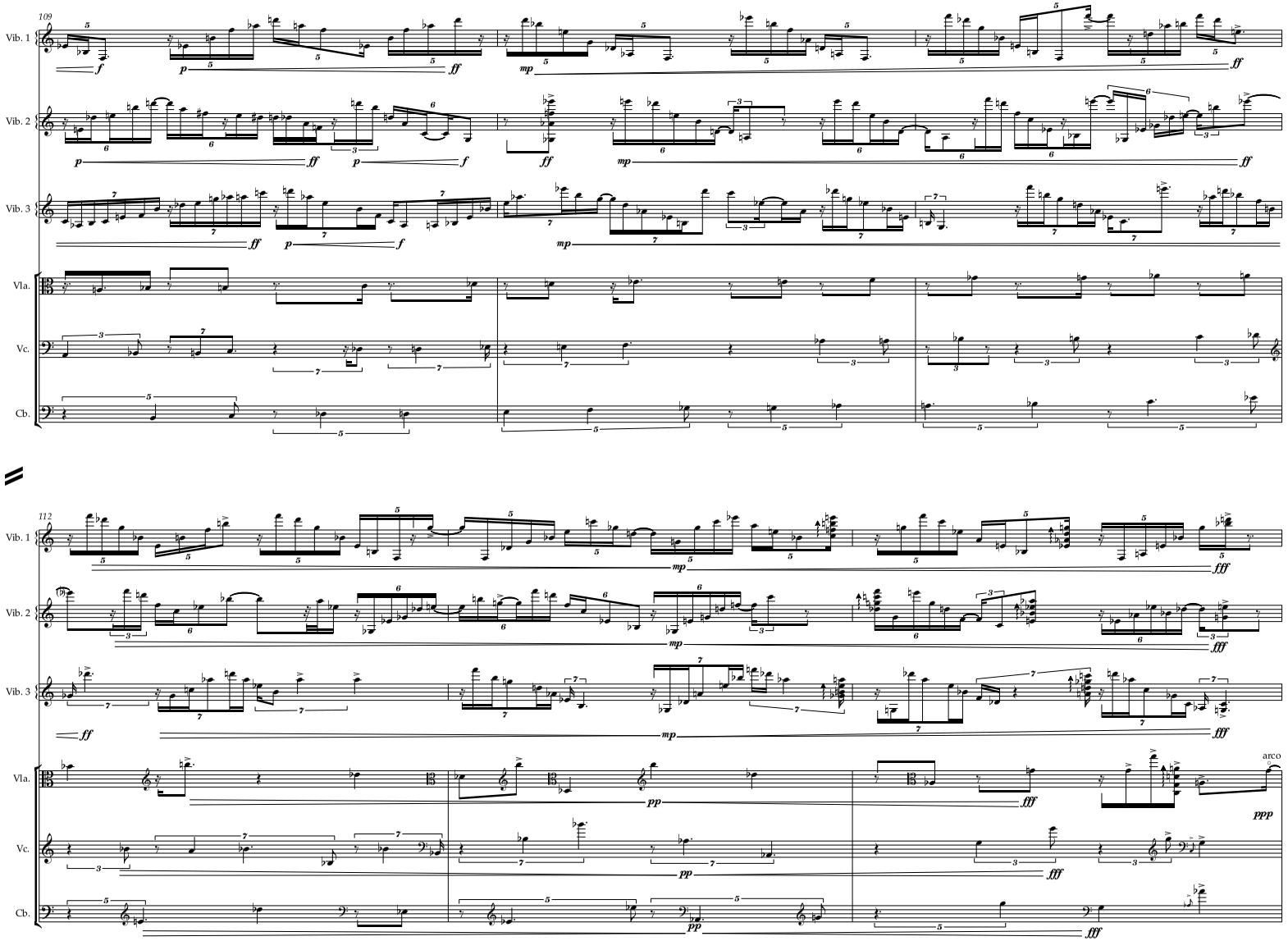

66
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
71
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.

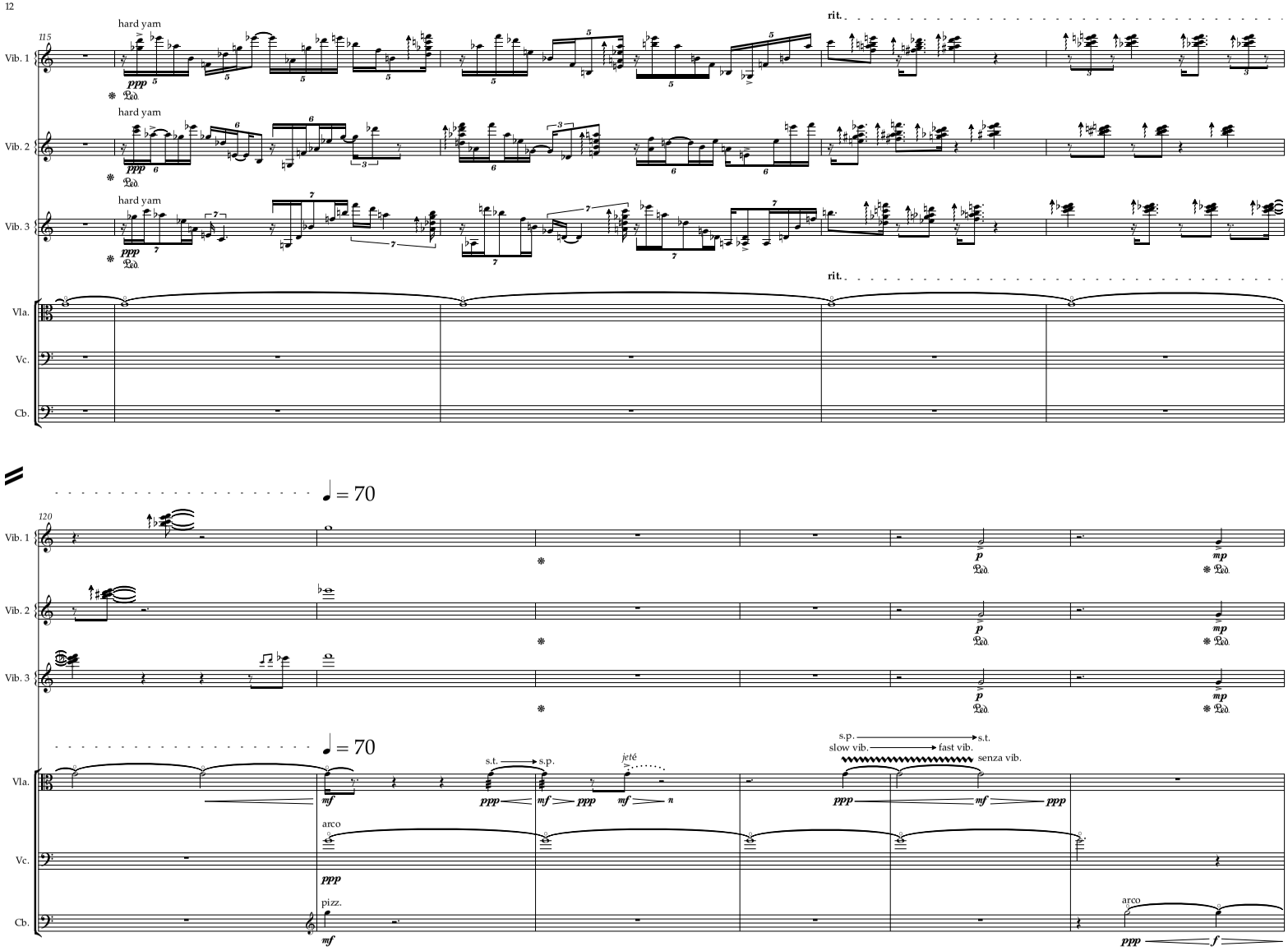

76
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
ppp
mf
p
f
fff
Ped.

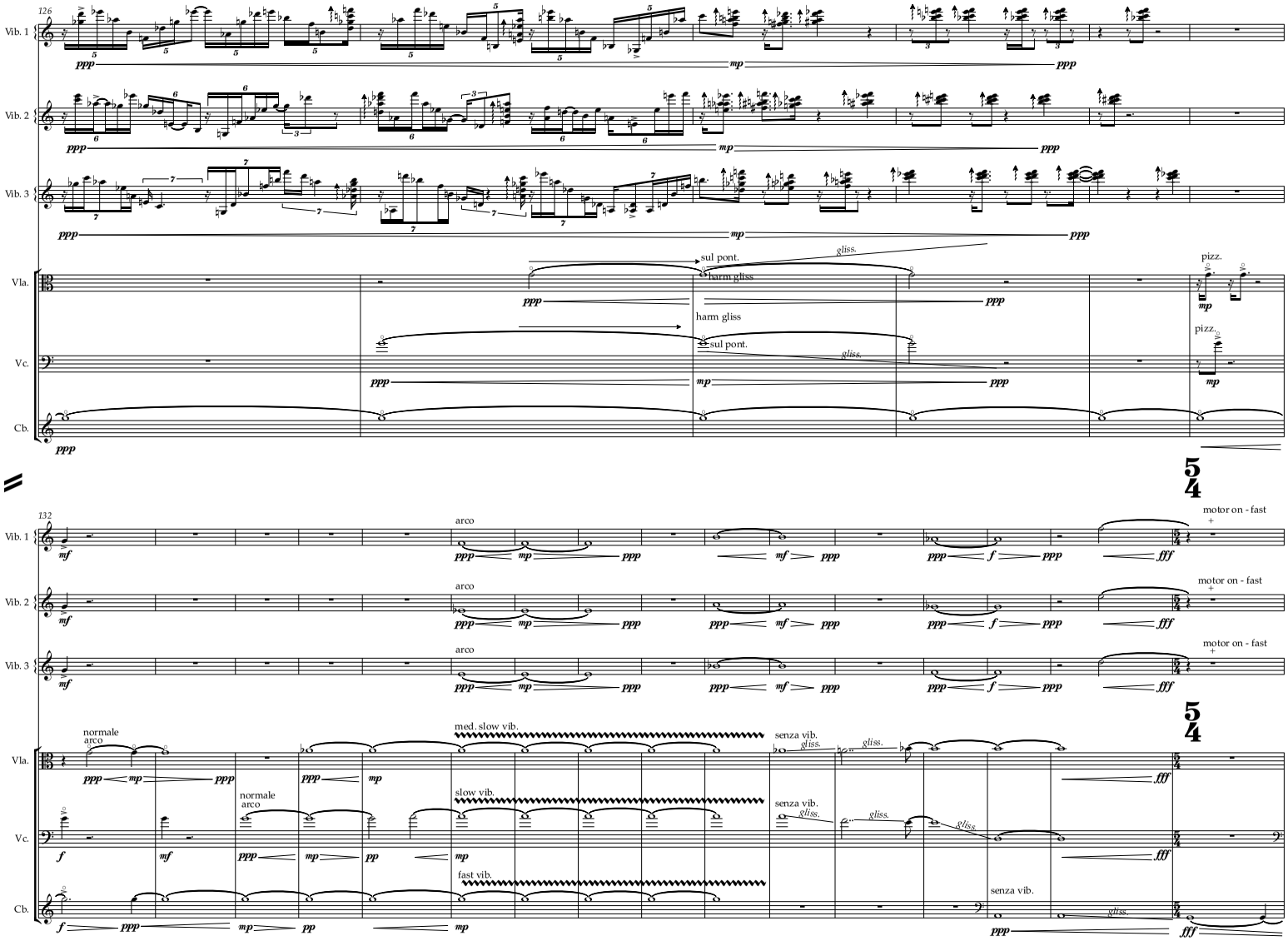

8
79
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
3/8
4/4
♩ = 80
fff
f
mp
mf
arco
pizz.
gliss.
ppp
84
p
ff

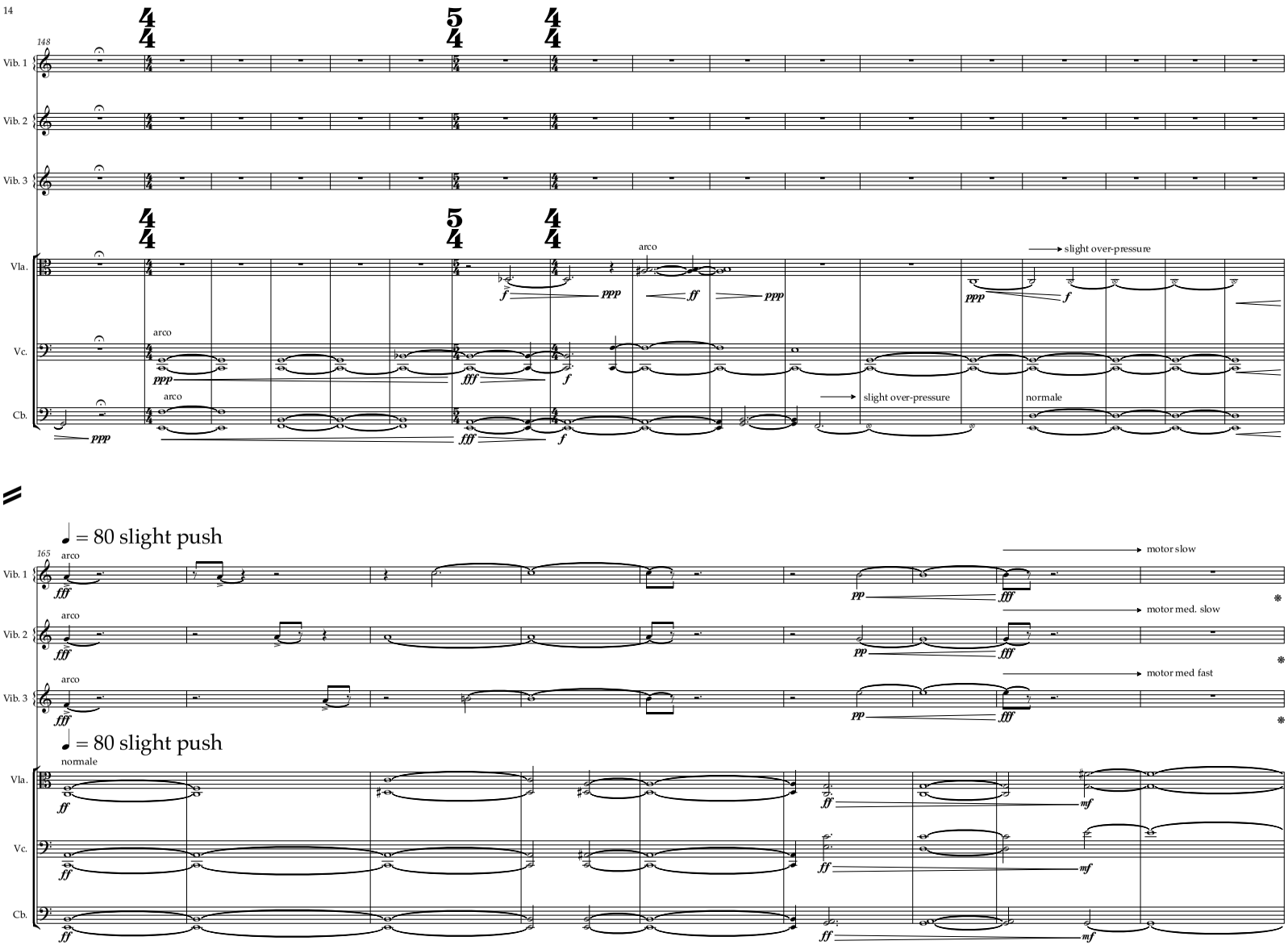

90
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
pizz.
gliss.
95
Ped.

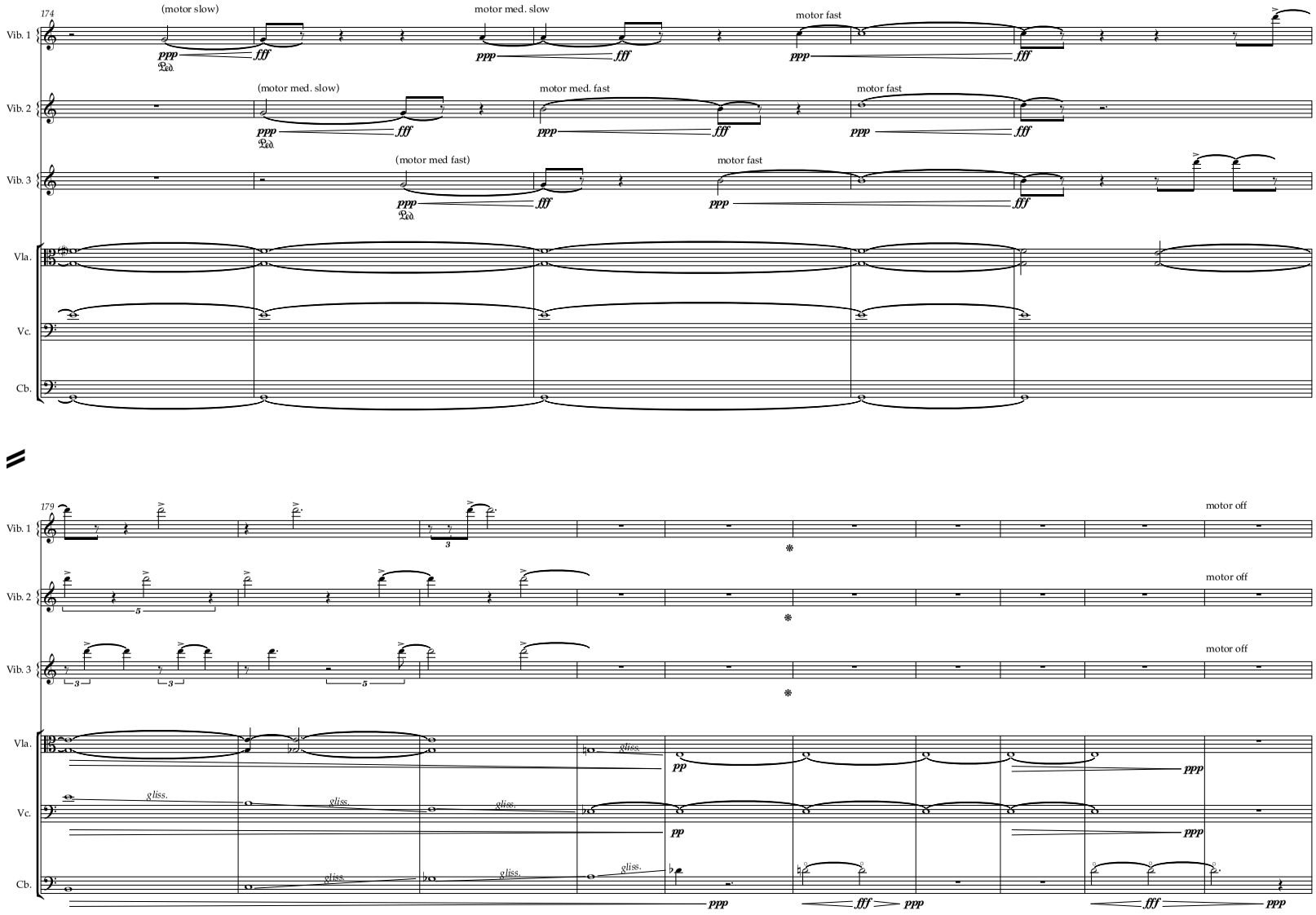

100
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
105
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.

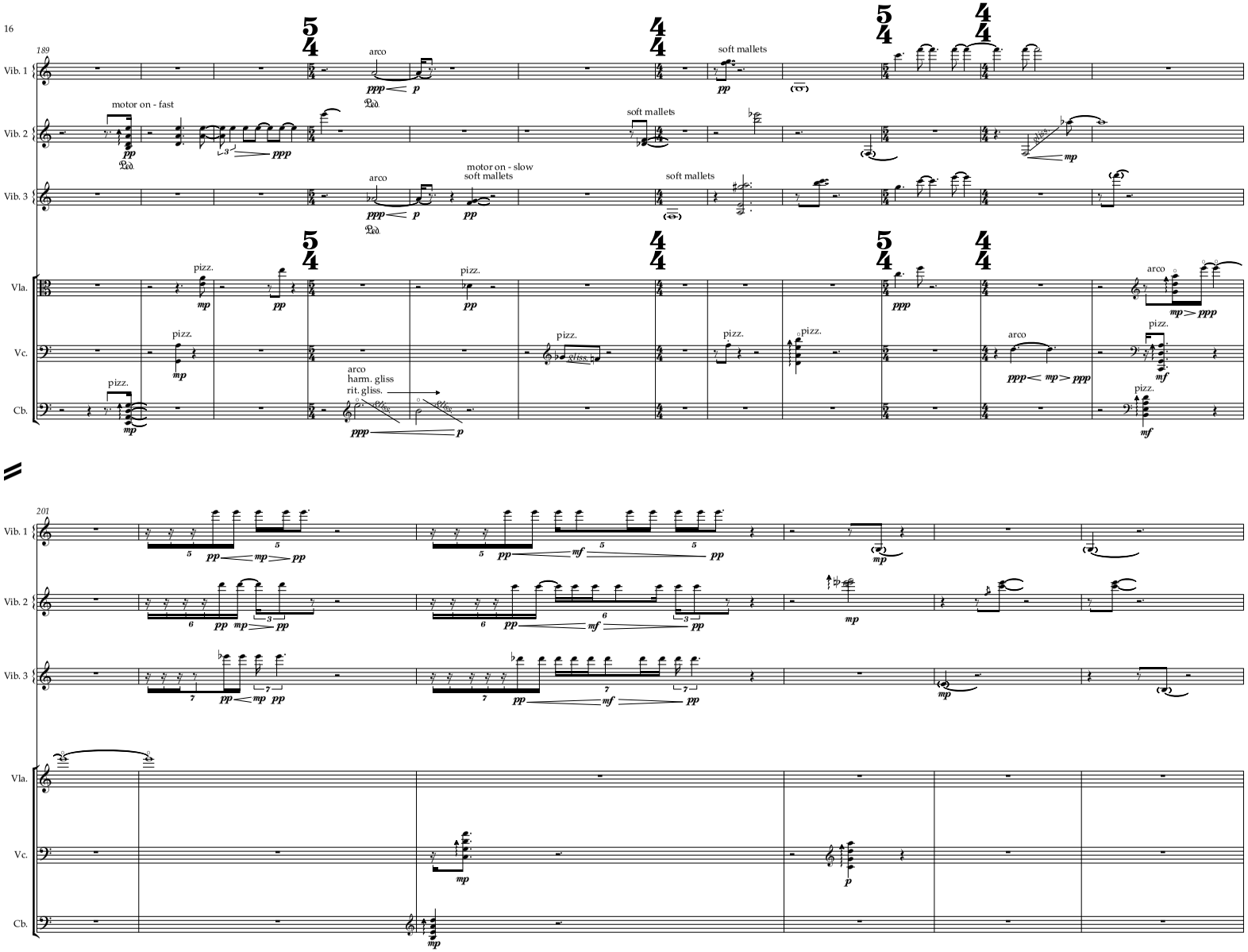

109
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
112
arco

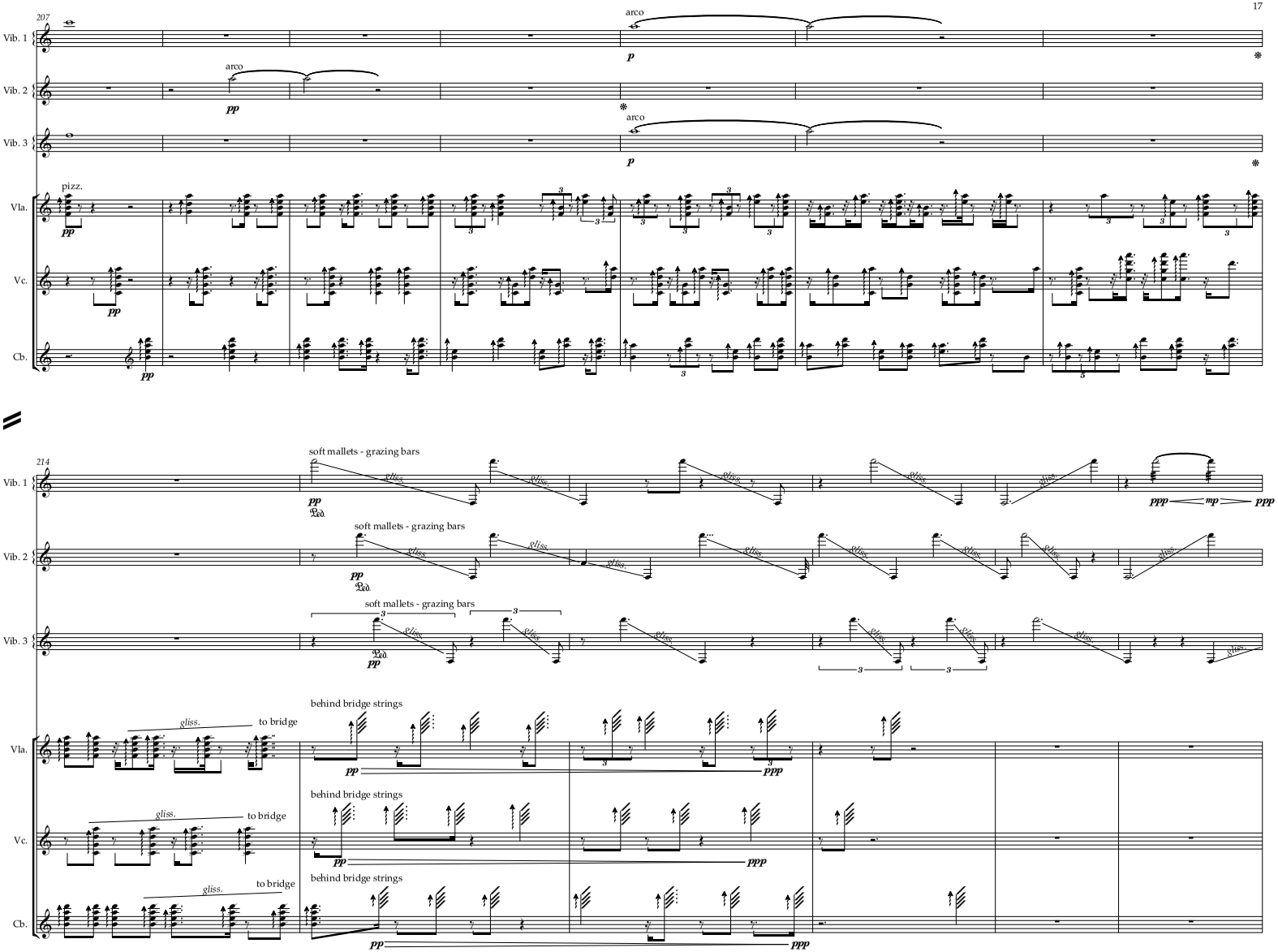

115
hard yam
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
rit.
120
= 70
s.t.
s.p.
jeté
s.p.
slow vib.
fast vib.
s.t.
senza vib.
arco
pizz.

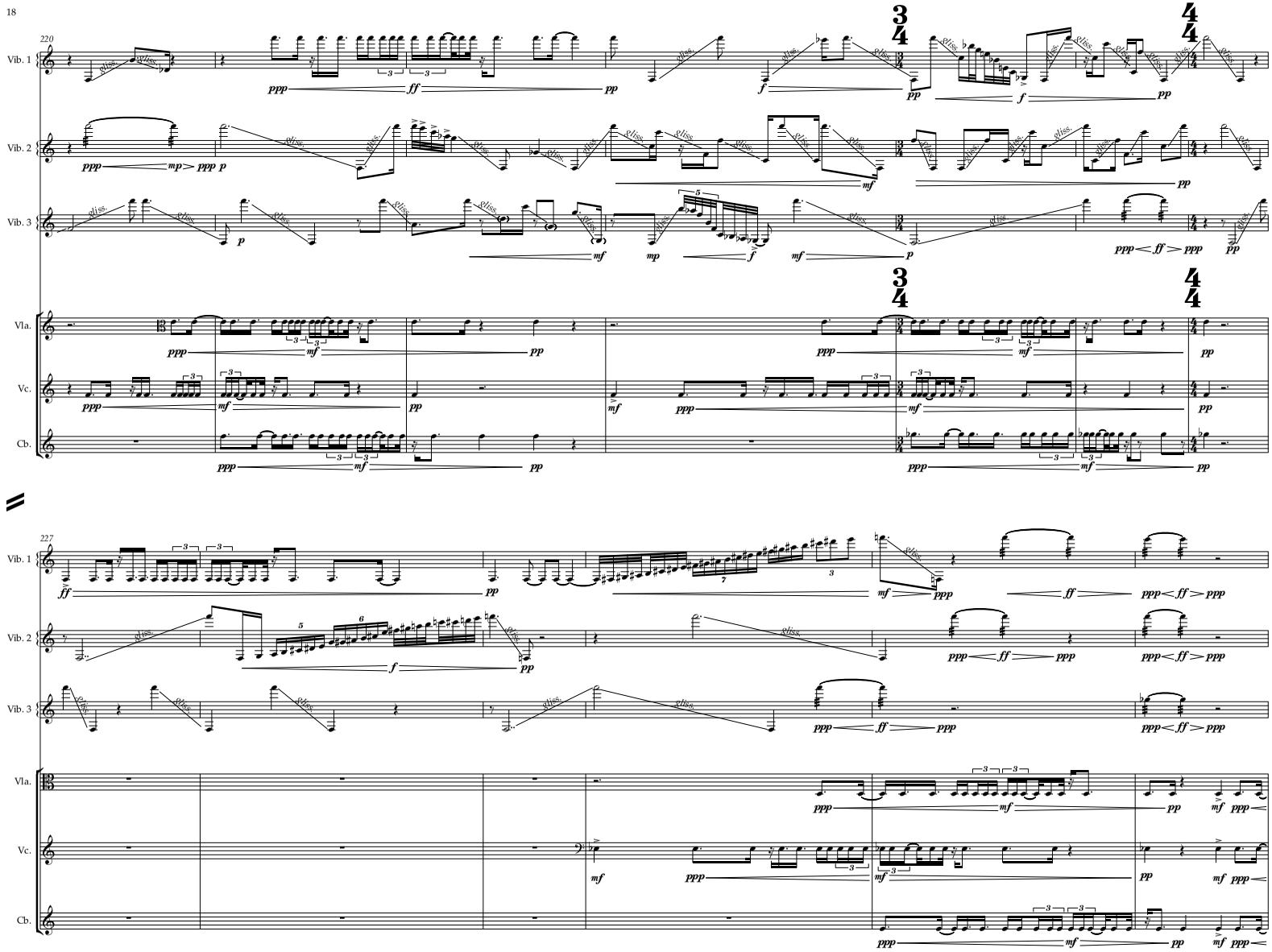

126
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
sul pont.
harm gliss.
gliss.
pizz.
harm gliss
sul pont.
132
arco
motor on - fast
normale
arco
med. slow vib.
senza vib.
slow vib.
fast vib.

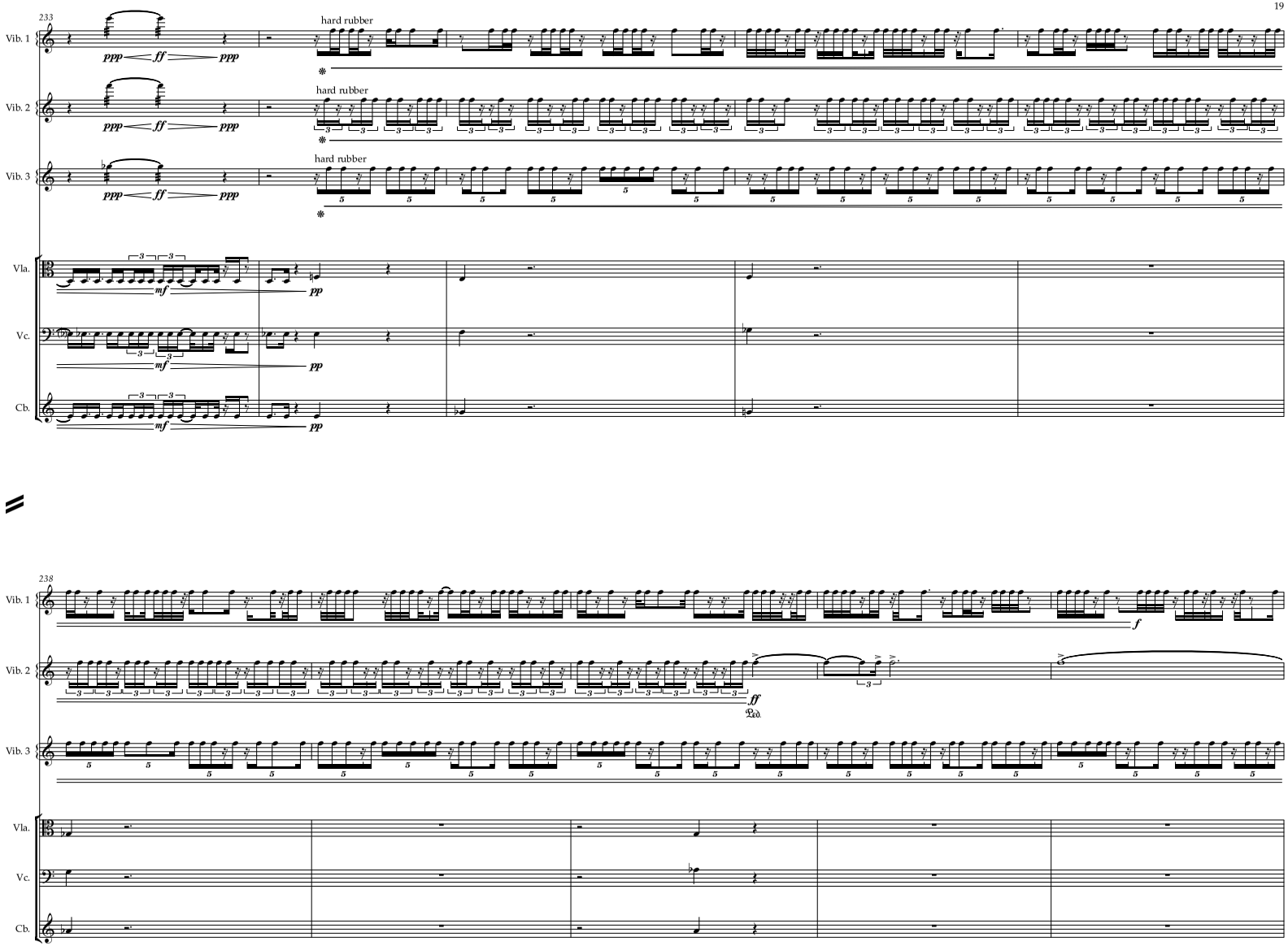

14
148
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
arco
slight over-pressure
normale
165
♩ = 80 slight push
motor slow
motor med. slow
motor med fast

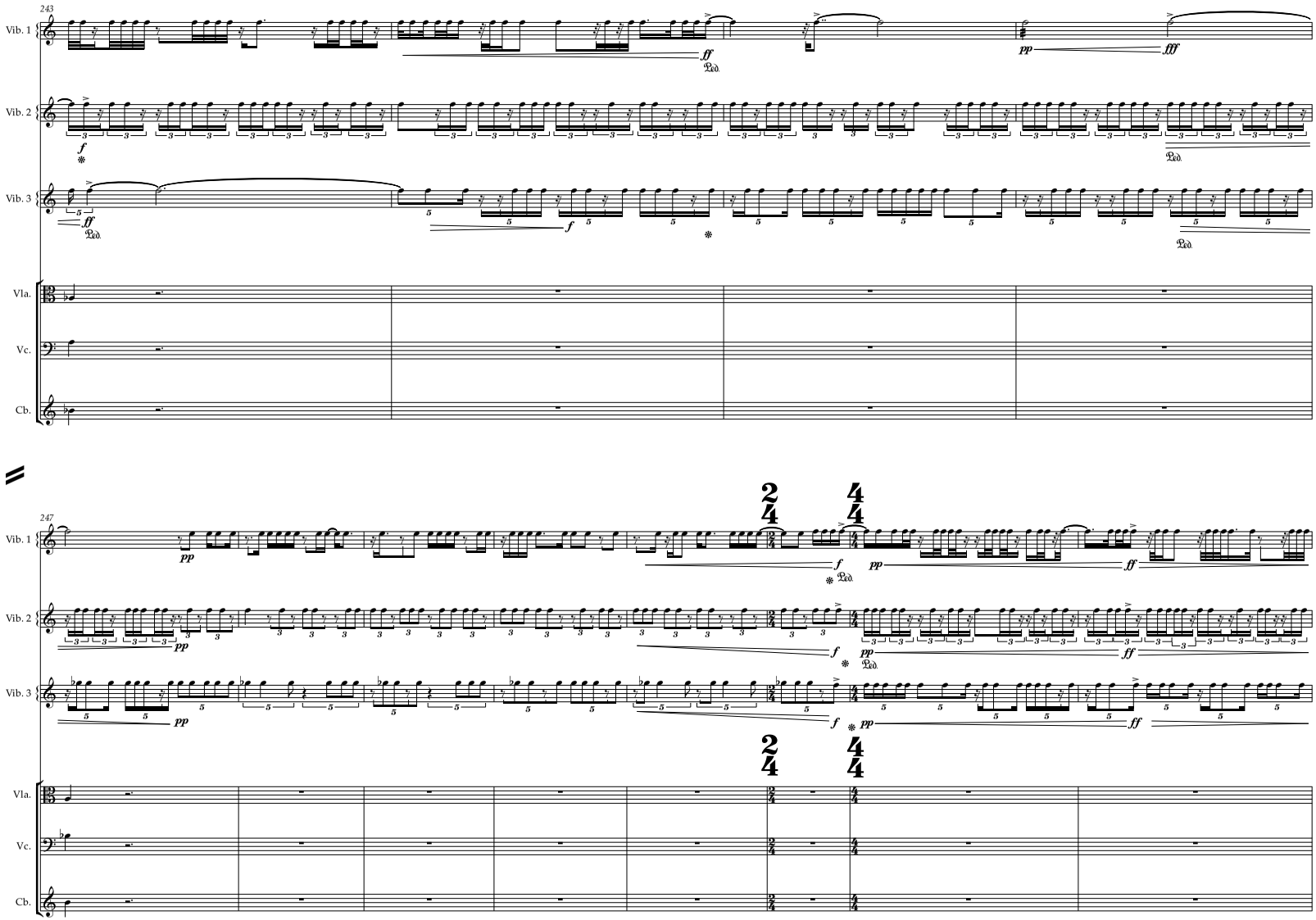

174
(motor slow)
motor med. slow
motor fast
(motor med. slow)
motor med. fast
motor fast
(motor med fast)
motor fast
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
179
motor off
motor off
motor off
gliss.
ppp
fff
pp

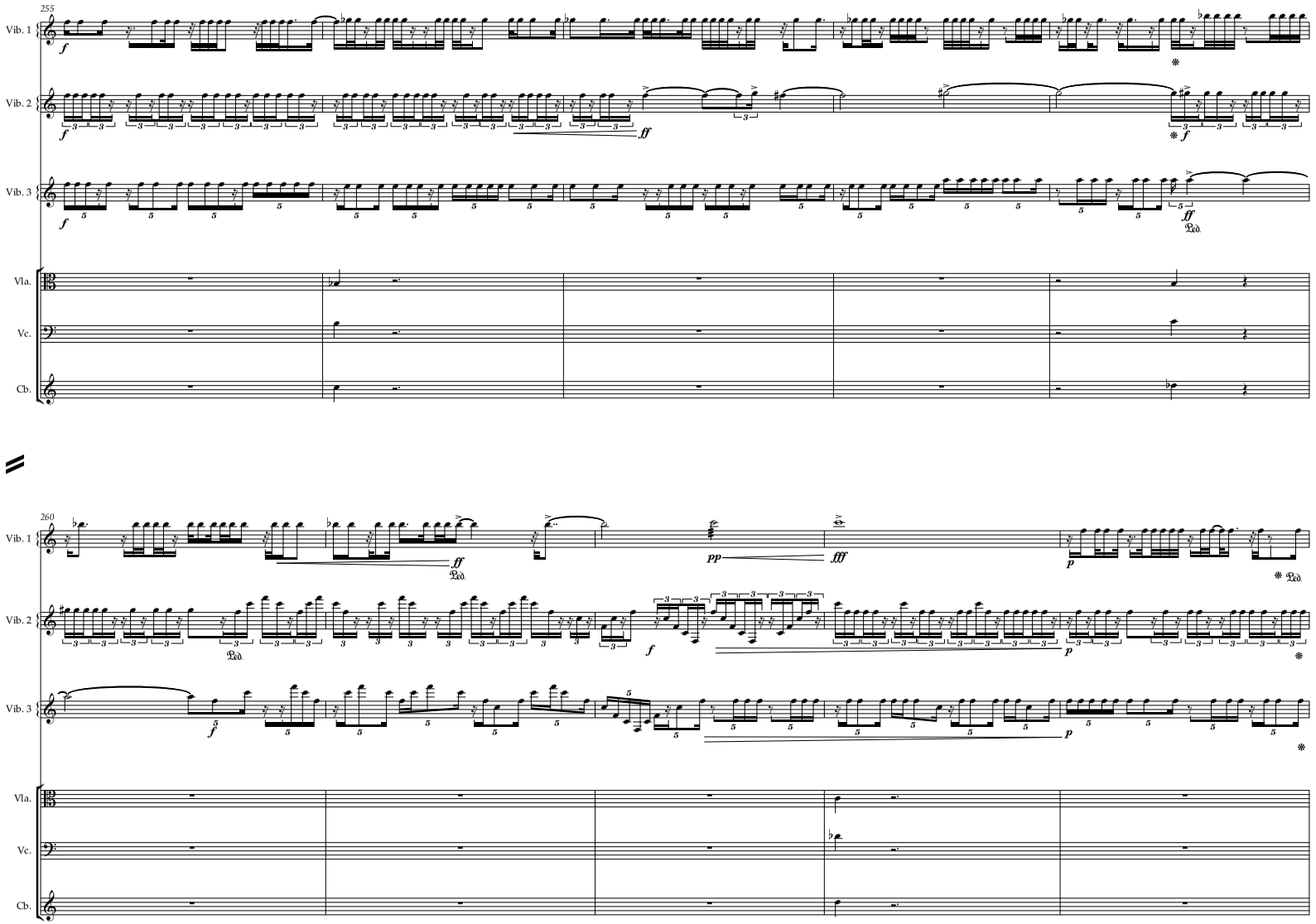

189
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
arco
soft mallets
motor on - fast
motor on - slow
soft mallets
pizz.
arco
harm. gliss
rit. gliss.
201

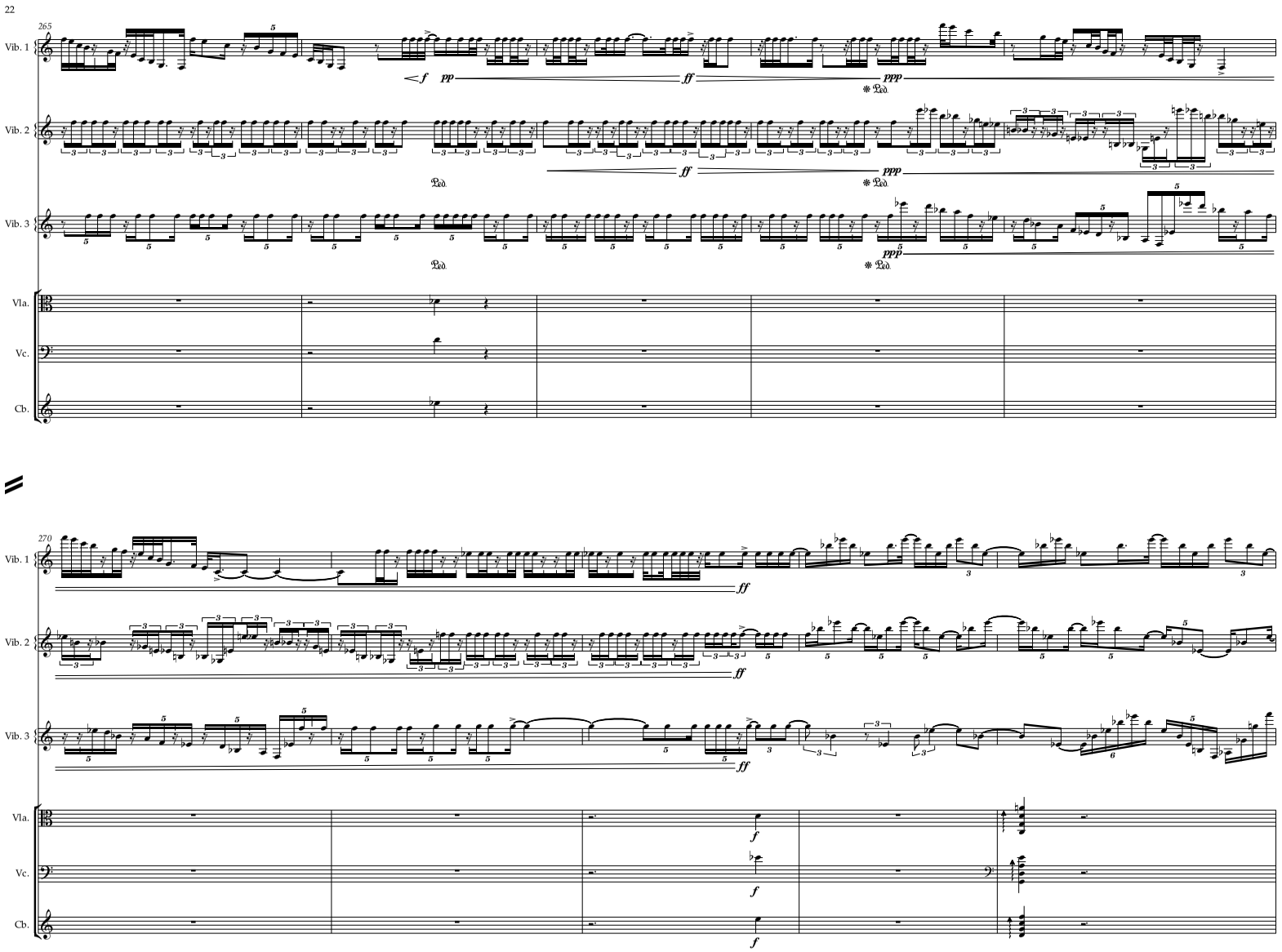

207
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
arco
pizz.
pp
p
214
soft mallets - grazing bars
gliss.
ppp
mp
behind bridge strings
to bridge

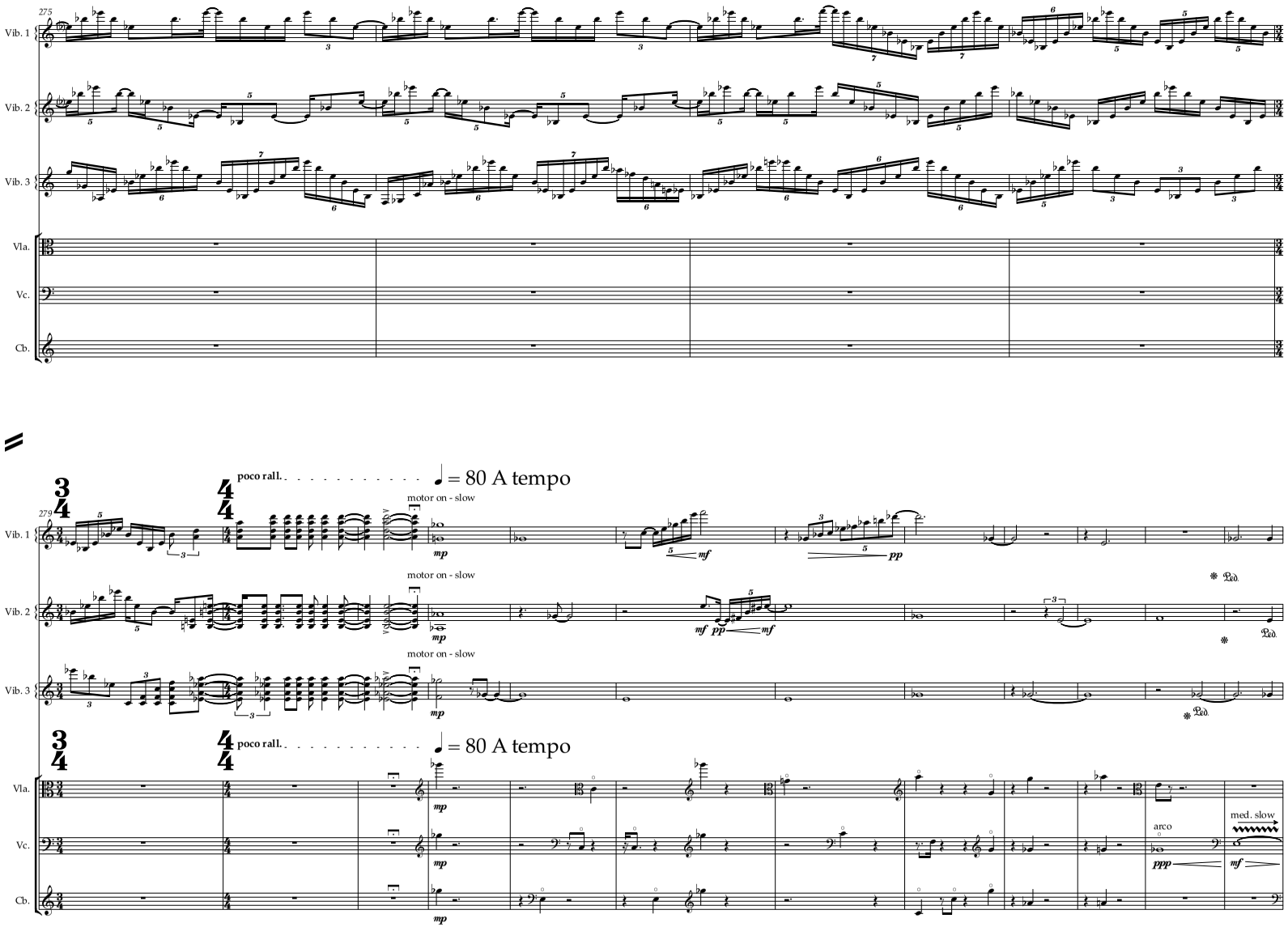

220
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
227
gliss.

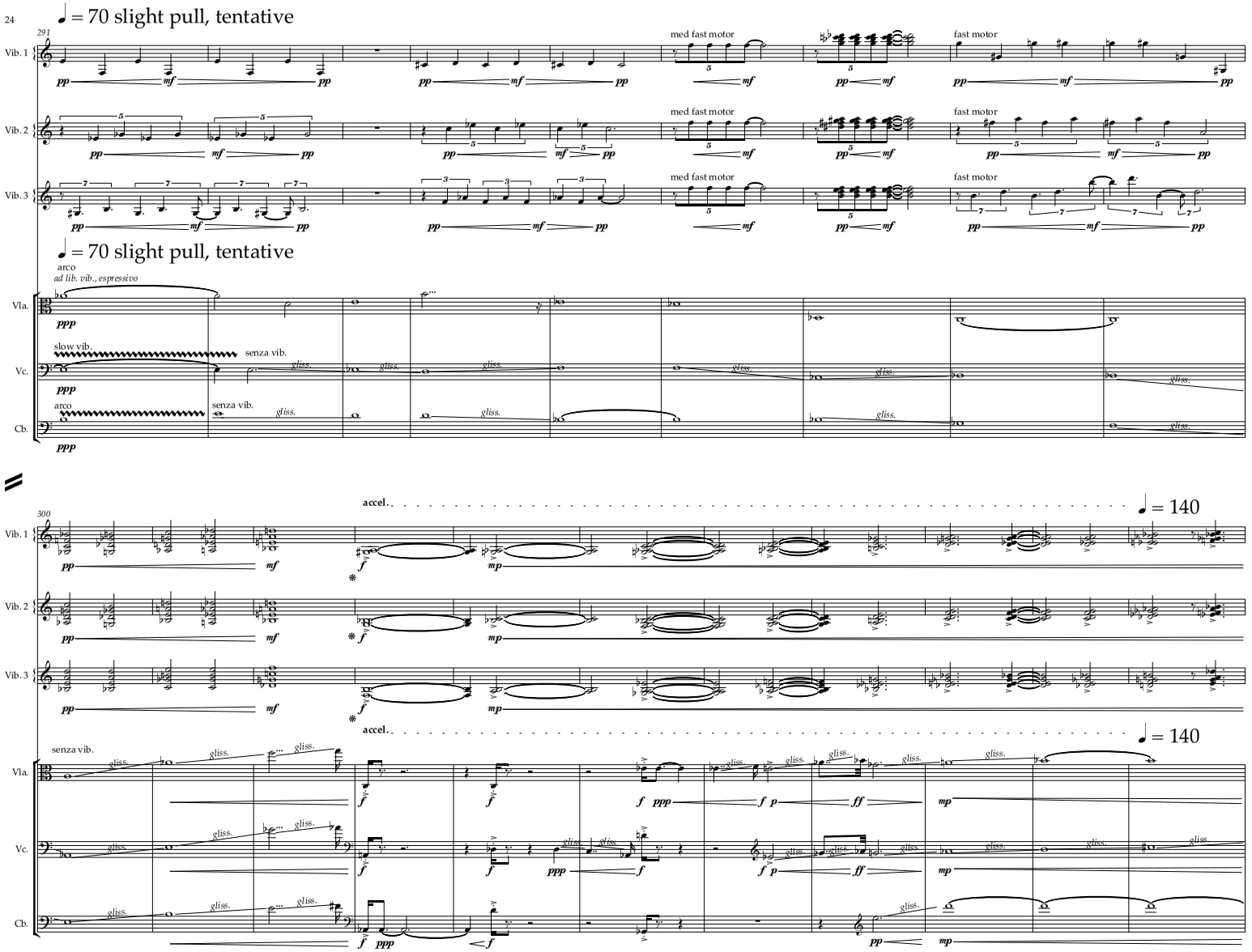

233
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
hard rubber
hard rubber
hard rubber
ppp
ff
ppp
mf
pp
238
f
ff
Ped.

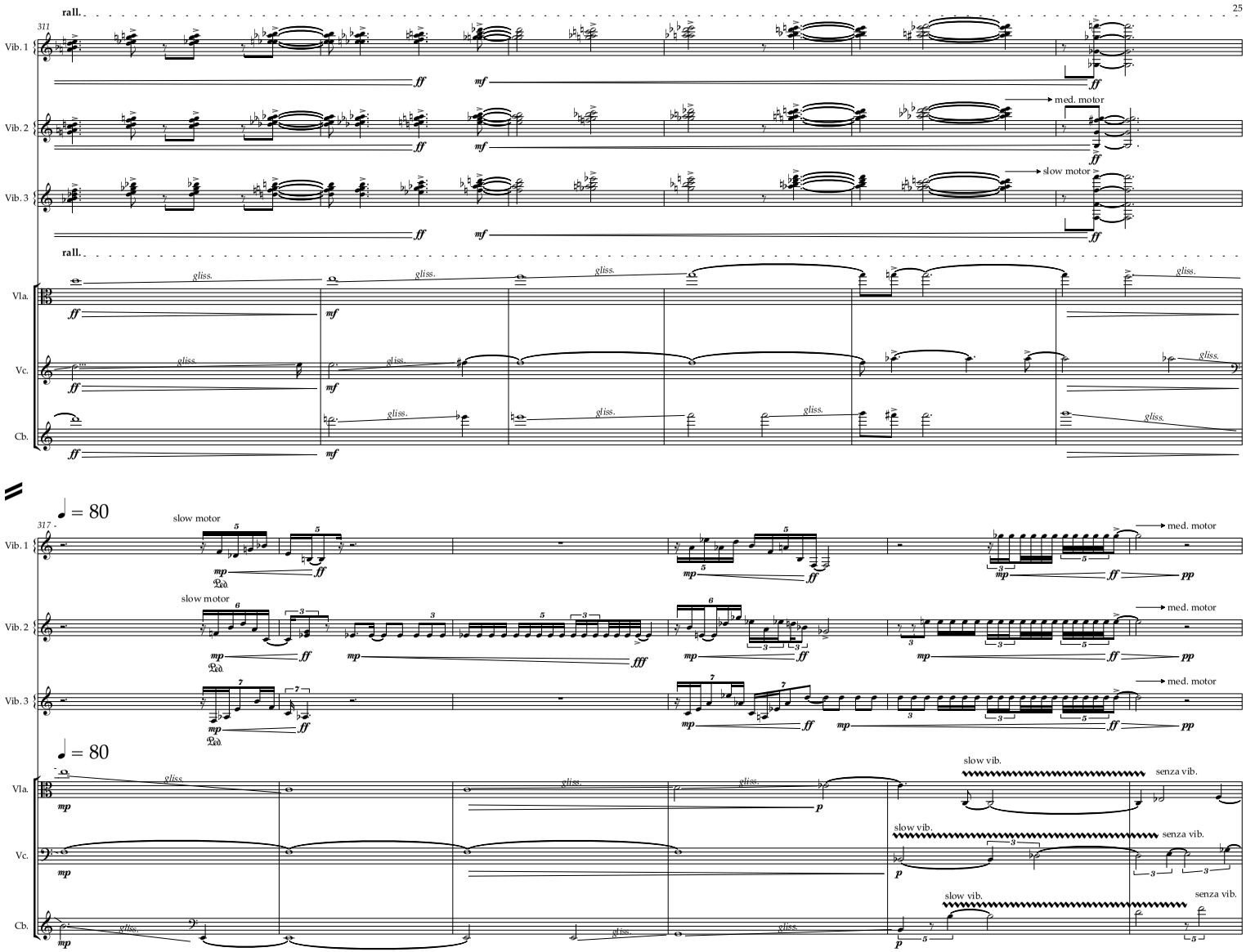

243
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
247
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.

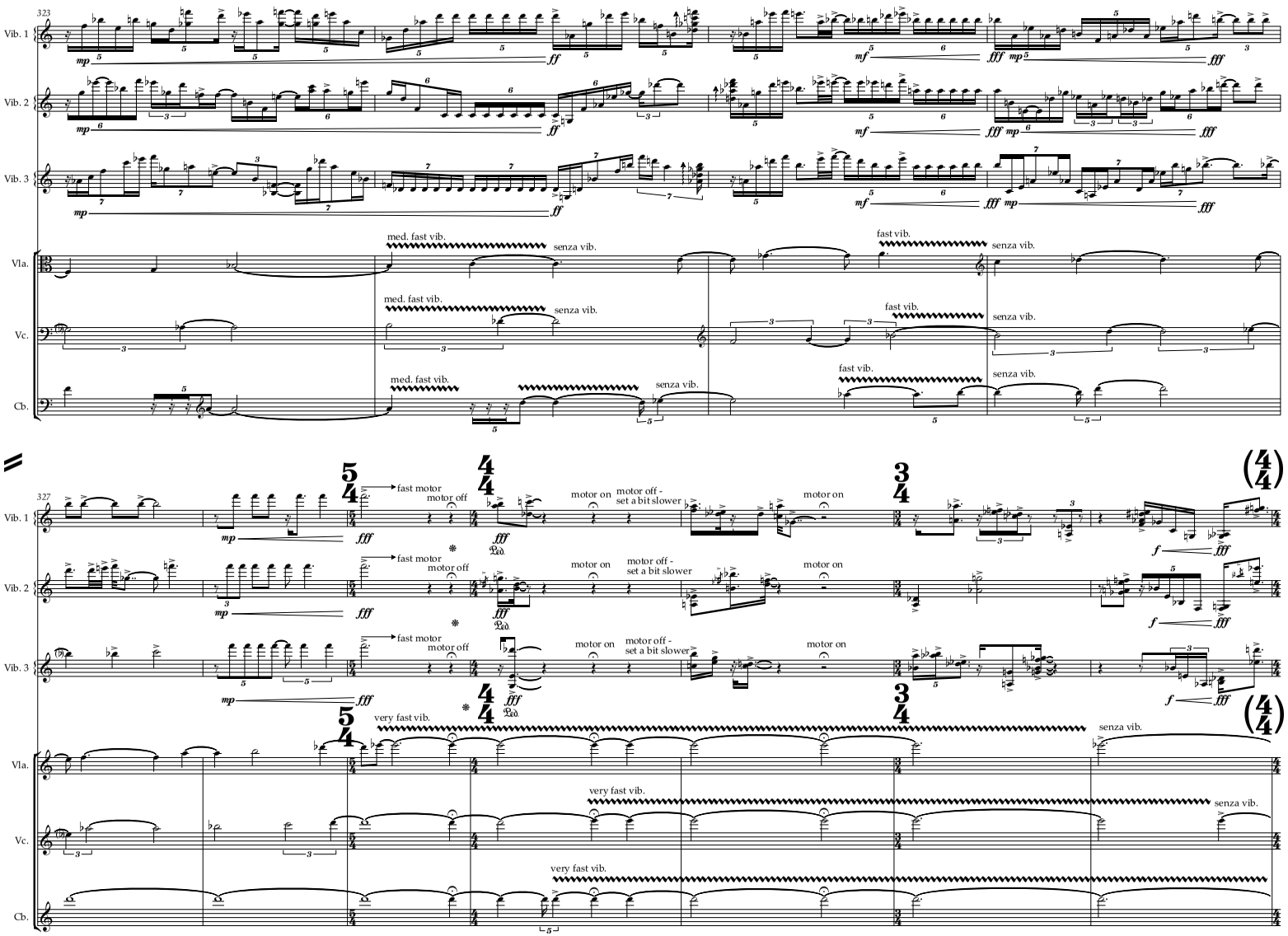

255
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
260
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.

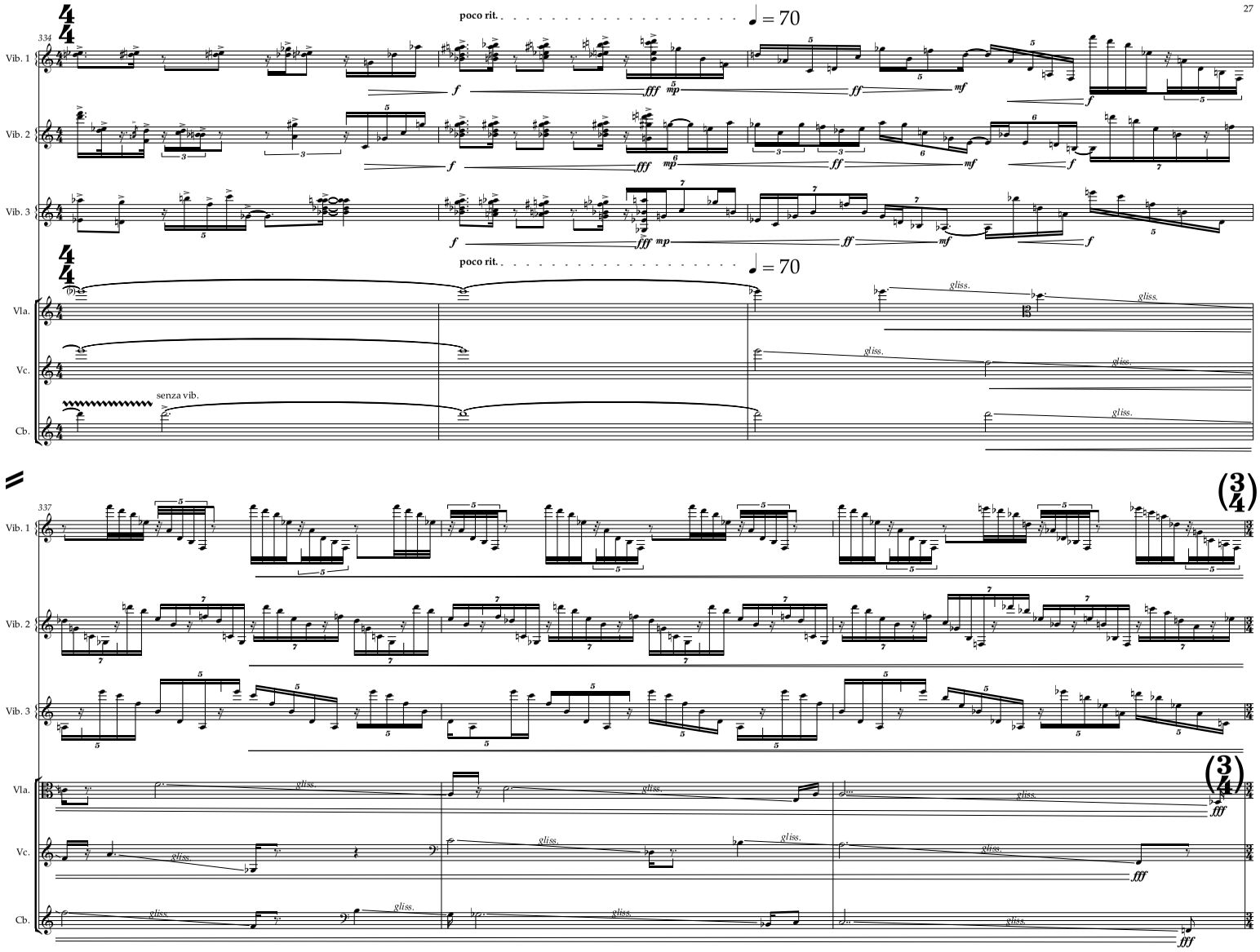

22
265
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
270
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.

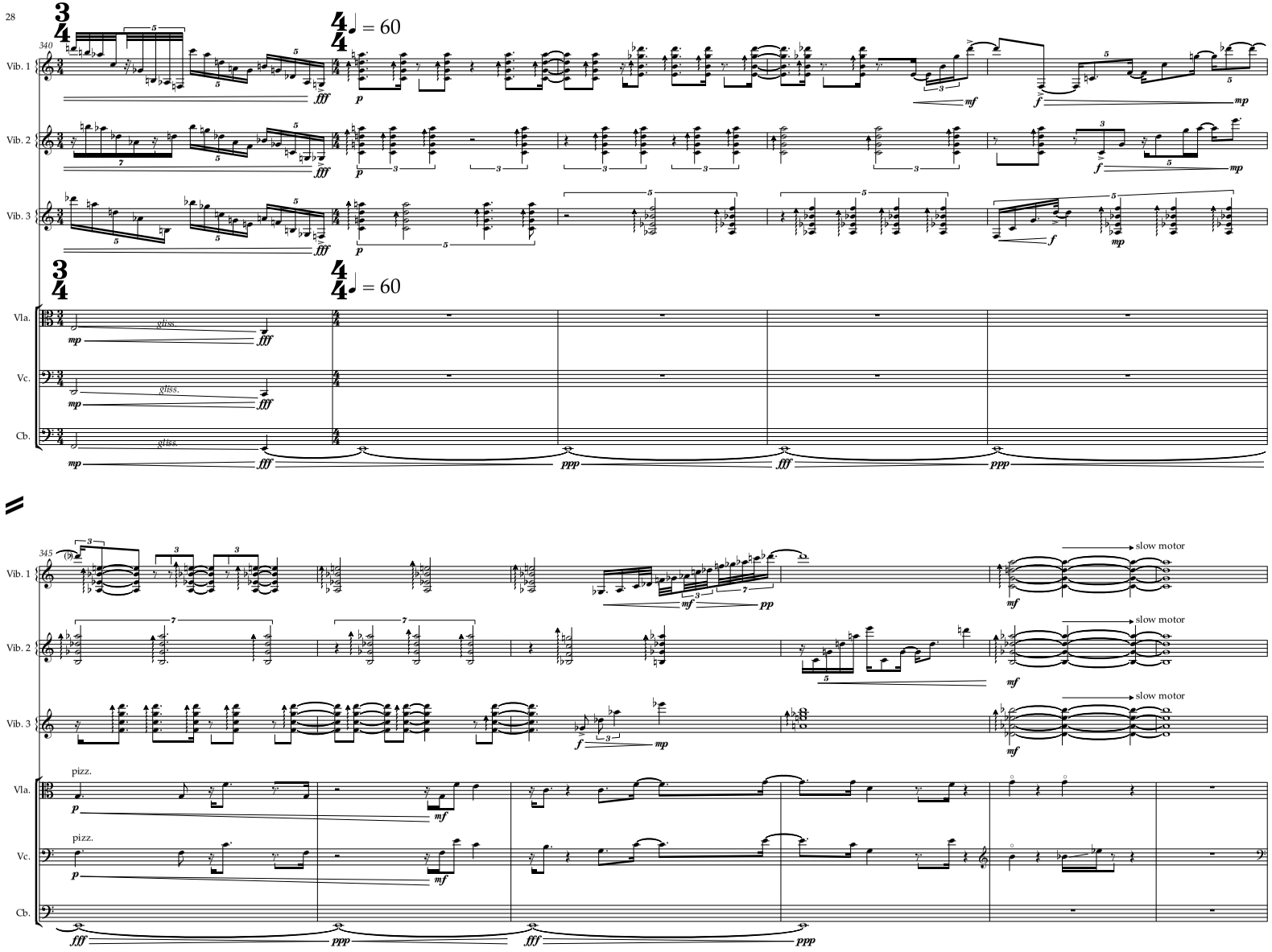

275
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
279
poco rall.
= 80 A tempo
motor on - slow
mp
mf
pp
Ped.
arco
med. slow
ppp

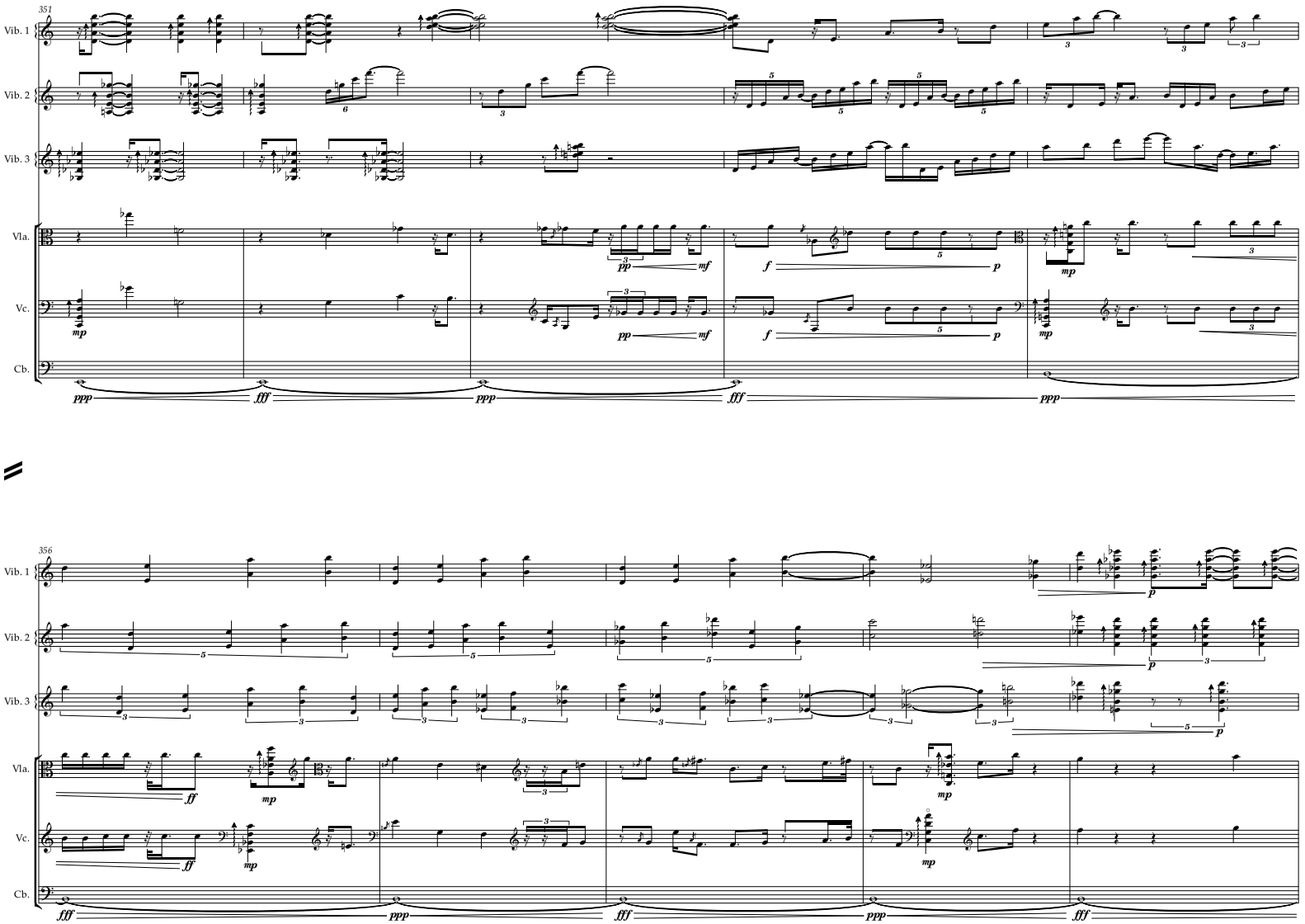

24
♩ = 70 slight pull, tentative
291
Vib. 1
Vib. 2
Vib. 3
med fast motor
fast motor
♩ = 70 slight pull, tentative
arco
ad lib. vib., espressivo
Vla.
slow vib.
senza vib.
Vc.
Cb.
gliss.
300
accel.
♩ = 140

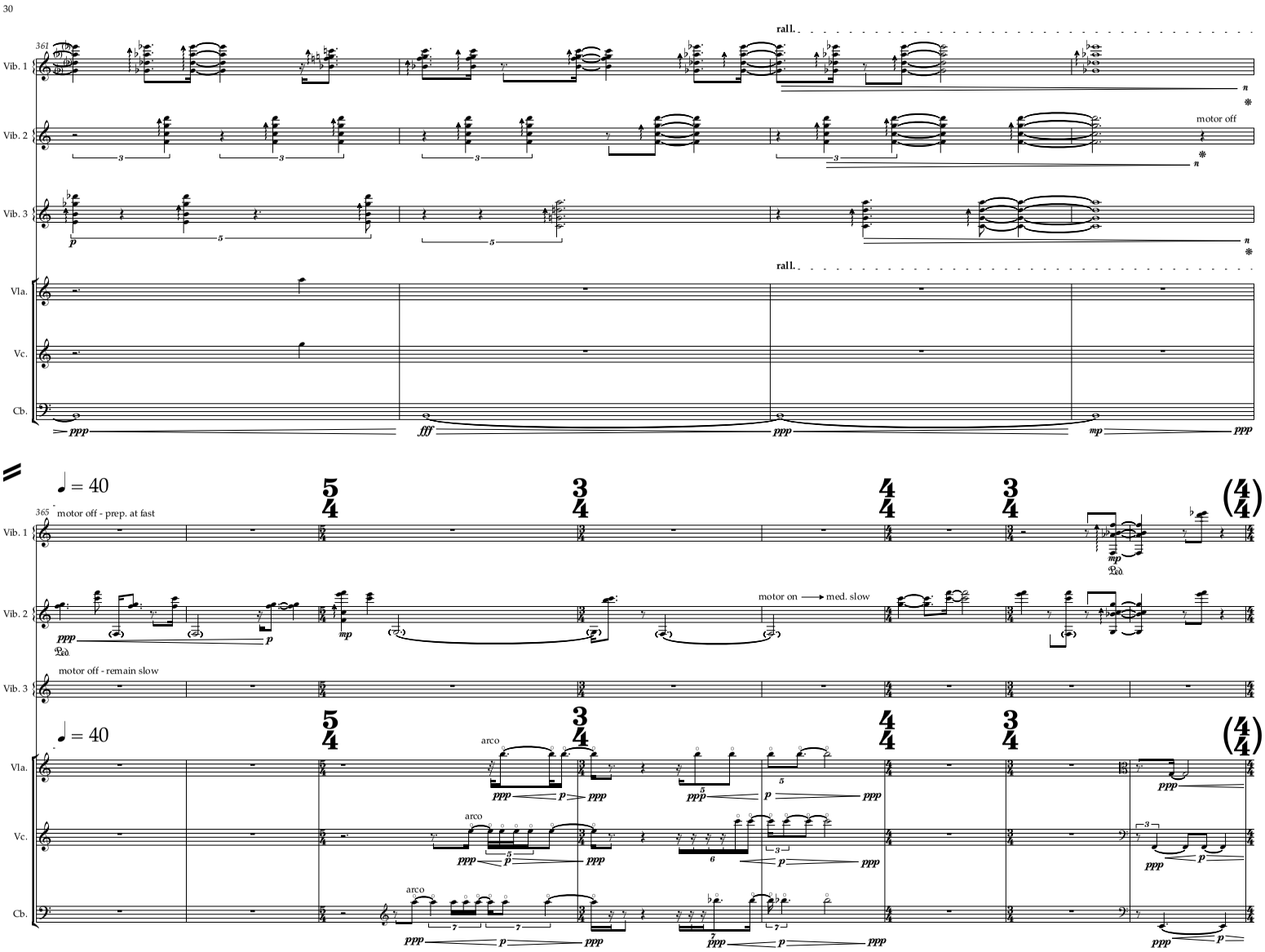

rall.
25
311
Vib. 1
Vib. 2
Vib. 3
med. motor
slow motor
rall.
Vla.
Vc.
Cb.
gliss.
317
♩ = 80
slow motor
med. motor
slow vib.
senza vib.

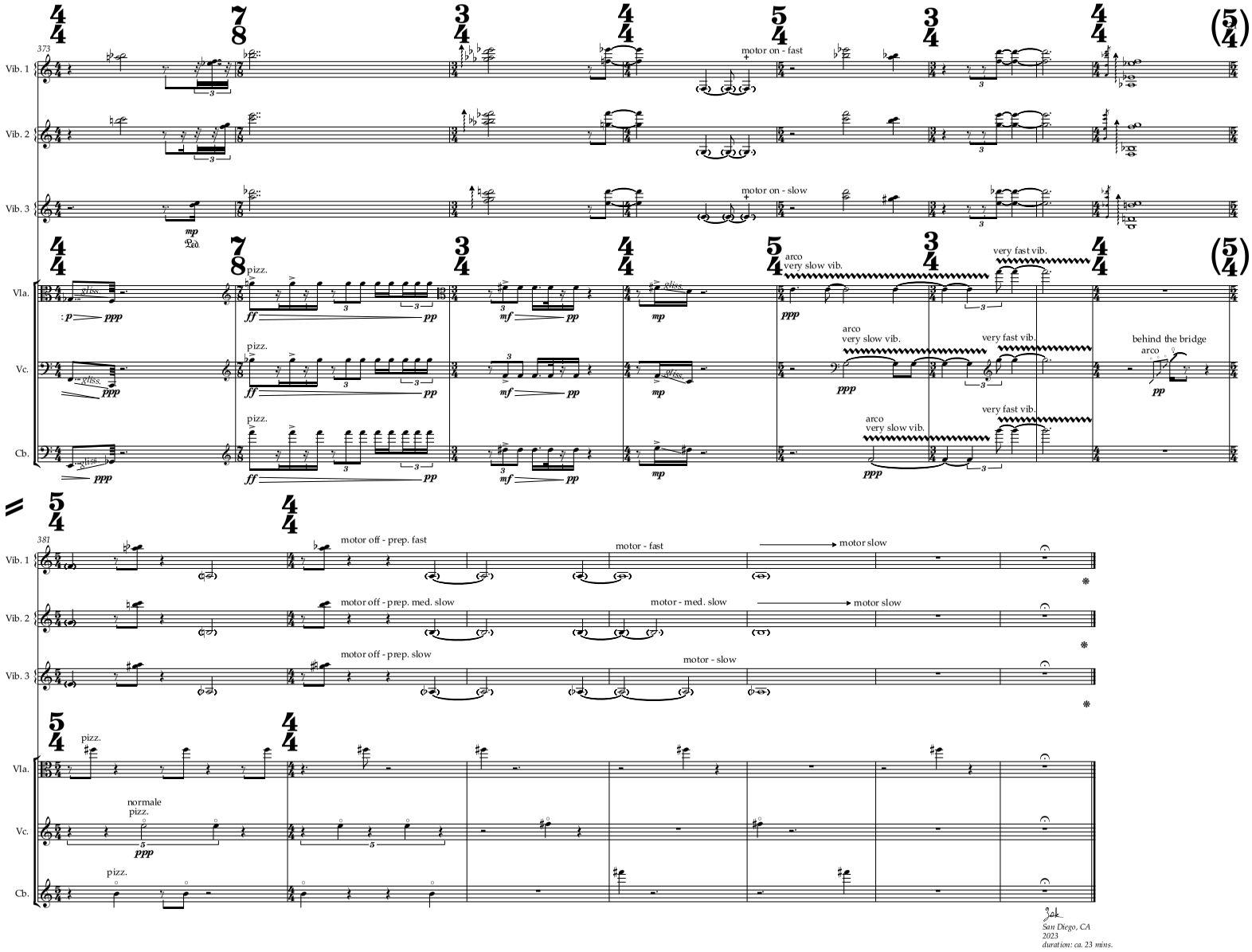

323
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
mp
ff
mf
fff
med. fast vib.
senza vib.
fast vib.
327
fast motor
motor off
motor on
motor off - set a bit slower
very fast vib.
Ped.


poco rit.
♩ = 70
334
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
senza vib.
337
(3/4)
gliss.
fff


28
340
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
= 60
gliss.
345
slow motor
pizz.


351
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
356


30
361
Vib. 1
Vib. 2
Vib. 3
Vla.
Vc.
Cb.
rall.
motor off
ppp
fff
mp
365
motor off - prep. at fast
motor on → med. slow
motor off - remain slow
♩ = 40
arco


373
Vib. 1
Vib. 2
Vib. 3
motor on - fast
motor on - slow
Vla.
Vc.
Cb.
pizz.
arco
very slow vib.
very fast vib.
behind the bridge
381
motor off - prep. fast
motor - fast
motor slow
motor off - prep. med. slow
motor - med. slow
motor off - prep. slow
motor - slow
normale
pizz.
San Diego, CA
2023
duration: ca. 23 mins.

REFERENCES

Bauer, AM. (2001). 'Composing the Sound itself;' Secondary Parameters and Structure in the Music of Ligeti. Indiana Theory Review, 22 (1), 37–64.

Bologne, Joseph. *Sonata*: for Flute and Harp in E–flat major. 1745 – 1799. Imperial Music House, 2021, mm. 35 – 51.

Pierre Boulez (1987) Timbre and composition - timbre and language, Contemporary Music Review, 2:1, 161–171.

Furrer, Beat. *Spur*: für Klavier und Streichquartett, 1998. Bärenreiter, 2007.

Goldenberg, Yosef. "'Negative Texture' and the Prolongation of Seventh Chords." Theory and Practice, vol. 29, 2004, pp. 95–123.

Hermann, Matthias. "Beat Furrer: *Spur* Für Klavier Und Streichquartett (1998)."

Konick, Zachary. *Constellations*: for chamber ensemble. 2023.

Maintz, Marie Luise, "Spurenseuche." Liner notes in CD booklet. *Beat Furrer*. Kairos, 2008. CD.

McAdams, Stephen. "Timbre as a Structuring Force in Music." The Journal of the Acoustical Society of America, vol. 133, no. 5_Supplement, 2013, pp. 211–243.

Schumann. *Faschingsschwank Aus Wien, Op.26*. CD Sheet Music, LLC, 2002, mm. 85 – 116.

BIBLIOGRAPHY

Bauer, AM. (2001). 'Composing the Sound itself;' Secondary Parameters and Structure in the Music of Ligeti. Indiana Theory Review, 22 (1), 37–64.

> This article by music theorist Amy Bauer offers an authoritative stance on the functionality of structural features relating to various musical parameters, including texture. Her primary scope in this article is of notable works by composer György Ligeti, who's music presents texture as a primary structural concern.

Bologne, Joseph. *Sonata*: for Flute and Harp in E–flat major. 1745 – 1799. Imperial Music House, 2021, mm. 35 – 51.

> This score provides a conventional example of a propulsive connector transition.

Pierre Boulez (1987) Timbre and composition - timbre and language, Contemporary Music Review, 2:1, 161–171.

> This article by the legendary composer and conductor Pierre Boulez offers his theories on the natural functions and common formal circumstances and requirements surrounding musical timbre. Due to the close linkage between musical timbre and texture, these considerations aid in my discussion of structure and relationships of structured musical textures.

Furrer, Beat. *Spur*: für Klavier und Streichquartett, 1998. Bärenreiter, 2007.

> This score for *Spur* by Beat Furrer serves as a basis for further analytical study and comparison on the concerns of textural-centric composition. Many principal similar features are exhibited in the design and formal strategies of this work in comparison to my dissertation work *Constellations*.

Goldenberg, Yosef. "'Negative Texture' and the Prolongation of Seventh Chords." Theory and Practice, vol. 29, 2004, pp. 95–123.

> This article by Yosef Goldenberg provides research on the topic of prolongation. Goldenberg's paper primarily concerns matters relating to harmonic progression. However, due to the linkage between conventional harmony and musical texture, the concerns between the two are highly similar, making this source a valuable basis in convention for discussion of a less–conventional idea.

Hermann, Matthias. "Beat Furrer: *Spur* Für Klavier Und Streichquartett (1998)."

> This article by Yosef Goldenberg offers an in–depth analysis and commentary on the work *Spur*. This provides a basis of formal concerns present in the work, which are pertinent to the concerns of my own composition and of this dissertation.

Konick, Zachary. *Constellations*: for chamber ensemble. 2023.

This score for my dissertation composition, *Constellations* serves as the basis for analytical study and comparison on the concerns of textural-centric composition.

Maintz, Marie Luise, "Spurenseuche." Liner notes in CD booklet. *Beat Furrer*. Kairos, 2008. CD.

These liner notes for the album "Beat Furrer" offers commentary on the composition *Spur* by musicologist Marie Luise Maintz. Here, Maintz notes salient features of the composition, including regarding formed tension in the work.

McAdams, Stephen. "Timbre as a Structuring Force in Music." The Journal of the Acoustical Society of America, vol. 133, no. 5_Supplement, 2013, pp. 211–243.

This chapter in the Journal of the Acoustical Society of America offers authoritative research on the perceptual issues regarding timbral blending and the segregation or integration of textural features.

Schumann. *Faschingsschwank Aus Wien, Op.26*. CD Sheet Music, LLC, 2002, mm. 85 – 116.

This score provides another conventional example of a propulsive connector transition.