FIDGET, *SWAY*, AND *SWERVE*: THREE WORKS INSPIRED BY MOVEMENT

FROM THE *INTRICATE MANEUVERS* SERIES

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Intricate Maneuvers is a series of musical works that were composed using movement as a model for compositional processes and forms. This essay presents in-depth analyses of three works from the series; *Fidget*, *Sway: The Mildest Form of Falling*, and *Swerve for Chamber Ensemble*. The analysis of each work highlights correlations between the musical characteristics of that work and the temporal, spatial, contextual, and psychological implications of the motion after which it was modeled. The third chapter also demonstrates the ways in which the creation of *Sway* was influenced by materials and processes taken from Ruth Crawford's String Quartet 1931.

In order to investigate the question of how life experiences can function as models for compositional processes, the essay examines precedents for the compositional modeling of extra-musical ideas and images in the works of Bedřich Smetana, Elliott Carter and Roger Reynolds. It also discusses approaches to modeling movement in music created for dance. Throughout the *Intricate Maneuvers* series, movement is modeled not merely to create an association between a musical work and a particular movement pattern, but rather to infuse the compositions with the dynamism that defines a particular kinetic experience.

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Chapter I

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The *Intricate Maneuvers* Series

Intricate Maneuvers is a series of musical works, all of which were composed using a specific type of motion as a model for musical materials and form. As of the writing of this paper, the series consists of four works; *Swerve* (*for Orchestra*), *Swerve* (*for Chamber Ensemble*), *Sway: the Mildest Form of Falling*, and *Fidget*. The latter three works in this series are composed for Pierrot ensemble with percussion so that they may easily be programmed in pairs or as a three-part set. The subject of this analysis are these three works for flute/piccolo, clarinet, violin, cello, piano, and percussion, and the modeling process by which they were composed.

Precedents for the Modeling of Extra-musical Experiences

In *Learning to Compose: Modes, Materials and Models of Musical Invention*, Larry Austin and Thomas Clark use the term "modeling" to describe the process by which a composer "imagine[s], then assimilate[s] the image of the form [a piece] will take."[1] They also propose that all music is by necessity self-modeled due to the fact that "music's sounds can't be seen or touched, can't really be understood as symbols representing anything."[2] The abstract nature of music that Austin and Clark describe does not, however, prevent composers from using extra-musical experiences and images to guide the design of compositional strategies. In an indirect way, the features of a musical work may therefore be modeled after images or ideas taken from

[1] Larry Austin and Thomas Clark, *Learning to Compose: Modes, Materials, and Models of Musical Invention* (Dubuque, Iowa: William C Brown Pub, 1989), 17.

[2] Ibid, 17.

outside the musical realm. In preparation for the analysis of *Fidget*, *Sway,* and *Swerve* as works modeled after movement, we first consider some of the many ways in which musical materials and compositional strategies can be metaphors for the images or ideas that inhabit a composer's consciousness. As a means to explore this, we examine the roles that metaphor and modeling played in the creation of four example works: Roger Reynolds' *Symphony [Myths]*, the tone poem *Vltava* from Bedřich Smetana's *Má Vlast,* and both Elliott Carter's Sonata for Cello and Piano and his String Quartet No. 1.

In his initial sketches for the movement titled "Futami ga Ura" from his *Symphony [Myths]*, Roger Reynolds drew a picture of the two rocks known as the Meoto Iwa or "wedded rocks" that stand off shore from the small Japanese town of Futami (Fig. 1). Reynolds visited this sacred site during his1966 tour of Japan. His drawing includes the rope that symbolically binds the two rocks together and the comment that "this rope is thought of as entwined." From left to right, the drawing consists of the rock representing Izanagi (the male figure in Shinto creation myth), the rope that tethers the two formations, and the rock representing Izanami (the female figure in the myth). The composer used brackets beneath the features of the drawing to indicate a compositional plan that would allot three minutes for a section corresponding with the Izanagi rock, six minutes for the space between the two rocks and two minutes for the Izanami rock. The three-part plan is essentially one that prescribes the translation of the spatial features of this very specific image into the temporal structure of a musical work.

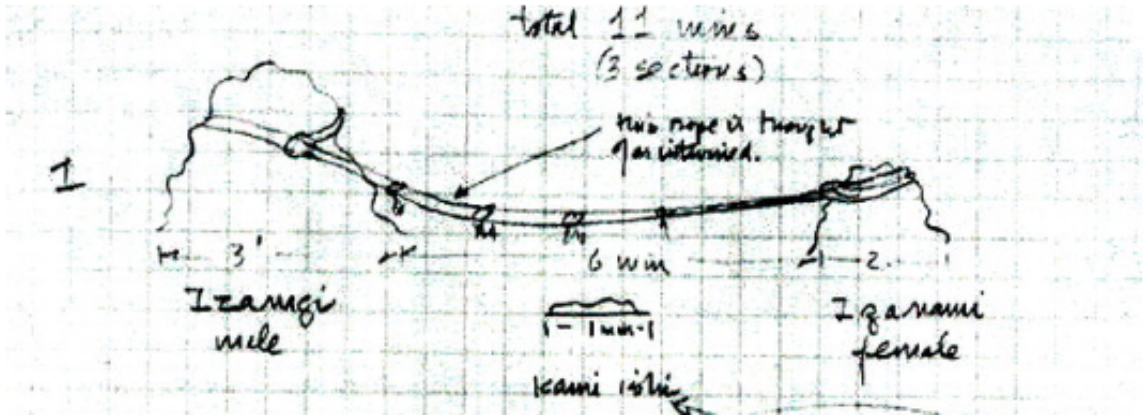


Figure 1. Roger Reynolds' initial sketch for "Futami ga Ura."[3]

Of the Meoto Iwa formation, Reynolds states that he "thought of the Japanese pair as being serene but filled with the potential for life…So [he] tried to make, in the first movement, stable things which were very multifaceted in terms of figuration and so on…"[4] The composer's interest in the Meoto Iwa as the inspiration for "Futami ga Ura" clearly extended beyond the physical dimensions of the site to its cultural significance as a sacred place. The multifaceted stability of which Reynolds speaks is evident in the first and last sections of the resulting symphonic movement. These outer sections of "Futami ga Ura," both marked with MM 60, share a densely stratified texture. Many independent voices create a complex counterpoint of rhythmic activity and sustained tones, yet there is a sense of stasis projected by the moving lines because they each tend to return repeatedly to a limited set of pitches. Conversely the sustained tones are imbued with a sense of direction through the use of dynamic swells. In this way, the paradox found in Reynolds' impression of the Meoto Iwa rocks brings a dynamic quality to the fabric of the movement's opening and closing sections.

[3] Roger Reynolds. *Manuscript Sketch of Symphony [Myths] by Roger Reynolds*. Internet, available from http://lcweb2.loc.gov/diglib/ihas/loc.natlib.ihas.200029047

[4] Roger Reynolds and Toru Takemitsu. "Roger Reynolds and Toru Takemitsu: A Conversation," *The Musical Quarterly*, Vol. 80, No. 1 (1996), 65.

Returning to the question of the temporal dimensions laid out in Reynolds' pre-compositional sketch, when performed at the indicated tempos, "Futami ga Ura" begins and ends with 3- and 2-minute sections, respectively, as was laid out in his initial plan. When the work is performed at the indicated tempos, the comparatively slower and less dense (rhythmically and texturally) middle section is, however, a mere four and a half minutes compared to the six minutes indicated in the composer's drawing. This discrepancy demonstrates the artist's need for flexibility during the refinement and execution of an artistic concept.

In the symphonic poem *Vltava* by Bedřich Smetana, the composer not only titled the piece after the great river that inspired it, but he also included seven subheadings within the score that show how he mapped specific details of his chosen model to guide musical form. Historical evidence that includes a letter from Mořic Anger and Smetana's own diary entry dated August 14, 1870 indicates that the composer had direct personal experience with the river, landscapes, and culture that inspired *Vltava*, the second symphonic poem in the *Má Vlast* cycle.[5] As a result of an aesthetic approach that embraces the story-telling power of music, many of Smetana's modeling techniques are readily apparent. Program music indeed provides one example of how the compositional process may be modeled after an extra-musical experience, but to be clear, the compositional modeling of extra-musical experiences does not necessarily yield a programmatic work, as Reynolds' "Futami ga Ura" demonstrates.

The subject matter of Smetana's *Vltava* enables the piece to function simultaneously as a metaphor for the physical characteristics of a river and as a musical narrative of a journey along that same waterway. A river provides an especially appropriate compositional model because its constant flow is an effective analogy for the passage of time, and time is the canvas onto which

[5] Brian Large. *Smetana*. (New York: Praeger Publishers, 1970), 261-262.

sound is cast in order to create music. In composing *Vltava*, Smetana consequently had no need to interpret the physical dimensions of the modeled object as temporal features within the musical form because the model already possessed a temporal dimension of its own. In the case of the *Intricate Maneuvers* Series, I was attracted to movement as a compositional model in part because it too has a transient quality that can easily be translated into music, which is by nature a transient art form.

The opening section of Smetana's tone poem is marked "Die beiden Quellen der Moldau," signifying its portrayal of the two tributaries that combine to form the Vltava river. In the first measure, and again in the second, Smetana presents a motive in the flute that ultimately becomes the primary means by which continuity is achieved throughout the work. In m. 3 the fluttering stepwise figure becomes a constant single stream of sixteenth notes (in 6/8 meter) until the clarinets join the flutes in m. 16. The clarinet line is in note-against-note counterpoint with the flute line, with melodic contours that tend to be roughly inverted from that of the flute melody. In this way, Smetana seems to have modeled the first thirty-five measures of the piece after a pair of streams that run alongside one another. The movement of the water manifests as a rapidly moving conjunct melodic figure while the autonomy of the two separate streams take musical form as contrary motion between the flute and clarinet lines.

The "flowing" motive that characterizes the opening section of *Vltava* recurs and is developed in later sections of the work. Only the composer can know the precise logic behind this unifying element, yet it quite convincingly suggests the constant flow of water as the river passes through a variety of Bohemian landscapes. At m. 85, during the section marked "Mondschein; Nymphenreigen" (Moonshine; Round of the Nymphs), the "flowing" motive is recast in 4/4 time so that the fluttering in the flutes occurs at a rate of four sixteenth notes per

beat as opposed to the original six. Coupled with a delicate song-like melody performed pianissimo in a high register of the strings, this slightly slower version of the flute motive supports the peaceful atmosphere suggested by the image of a rippling moonlit stream flowing through an enchanted forest.

In the seventh section of Smetana's tone poem (mm. 271-332), the "flowing" motive, having since reappeared in its original 6/8 metric setting, is altered to depict the "huge waves at high water"[6] on the St. John Rapids. The basic rhythmic content and stepwise motion that characterize the motive remain unchanged. Here, however, the motive's melodic contour no longer rolls gently upwards with downward turns along the way, but rather, it rises energetically in a direct fashion from the low, brooding registers of the strings. A fortissimo dynamic coupled with accented triplet figures at the peak of each melodic surge lends a violent intensity to the motive. These developments alter the "flowing" figure to depict the sense of danger and exhilaration one might experience while being tossed about by a choppy current. Tracing these developments of Smetana's "flowing water" motive shows how the transformation of a musical idea as a part of the modeling process can reflect the transformation of elements within a modeled narrative.

There are also portions of *Vltava* that model the changes that can occur in a person's perception of a particular experience. The "Country Wedding" section (mm. 118-180) is one of the work's most contrasting sections, featuring a change in metric feel that prepares the way for a cheerful country dance. This portion of the piece is a prime example of the use of music as a compositional model because the rhythmic, harmonic, and textural characteristics of Smetana's composition in these passages mimic the features of a particular folk idiom. However, when we

[6] Quotation from the composer's diary as cited and translated in Brian Large. *Smetana*, 262.

consider the transitions that gradually crescendo into (mm. 118-121) and decrescendo away from (mm. 145-181) Smetana's country-style dance, the composer also seems to have modeled the change in perception that accompanies a shift of one's attention away from the immediate surroundings and towards a distant object. The constant murmuring of the river all but disappears for the traveler who is fascinated by the festivities taking place on shore. It therefore makes good compositional logic for the "flowing water" motive to be absent from this portion of the tone poem.

While Smetana's country dance reflects a change in the perception of a spatial relationship (the object upon which we focus our attention seems closer than it actually is), the temporal aspect of music also makes it an ideal medium for expressing changes in the perception of time. Since the early 1940s, Elliott Carter has been particularly interested in "dealing with our experience of time."[7] He writes of his Sonata for Cello and Piano (1948) that one of his compositional goals was to explore "the contrast between psychological time (in the cello) and "chronometric time (in the piano)."[8] This relationship is particularly evident in the first movement of the sonata, in which an expressively lyrical cello part is juxtaposed against the metronomic regularity of the piano's staccato accompaniment. The rhythmic independence of the cello part seems not to conflict with the piano's regularity but rather to coexist with it, like a person quietly letting his mind wander, barely noticing a loudly ticking clock on the wall.

In the middle portion of his String Quartet No. 1, Carter again uses contrasting temporal layers to create counterpoint between individual voices but he also used the metaphor of

[7] Elliott Carter. Jonathan W. Bernard, ed. *Elliott Carter: Collected Essays and Lectures, 1937-1995*. (Rochester, NY: University of Rochester Press, 1995), 225.

[8] Ibid, 230.

"external time" versus "internal dream time"[9] to guide the formal design of the work. In his 1970 essay discussing his first two string quartets the composer describes the inspiration for the First String Quartet as follows:

> The general plan was suggested by Jean Cocteau's film *Le Sang d'un Poète* in which the entire dreamlike action is framed by an interrupted slow-motion shot of a tall brick chimney in an empty lot being dynamited. Just as the chimney begins to fall apart, the shot is broken off and the entire movie follows, after which the shot of the chimney is resumed at the point it left off, showing its disintegration in mid-air, and closing the film with its collapse on the ground. A similar interrupted continuity is employed in this quartet's starting with a cadenza for cello alone that is continued by the first violin alone at the very end.[10]

Music, of course, cannot actually change the way that time passes, but more than any other art form, it does have the power to influence our perception of the passage of time. Thinking metaphorically about the different ways we perceive and measure time has enabled Elliott Carter to develop new rhythmic means that have become both a hallmark of his style and a tremendous contribution to the art of composition as a whole.

Together, the works of Reynolds, Smetana, and Carter cited above, demonstrate that the spatial, temporal, and narrative aspects of an extra-musical experience can all be modeled compositionally. Furthermore, modeling processes of this sort can be executed in a way that imbues the resulting musical work with all the cultural, intellectual, and psychological nuance of human experience itself.

Movement as a Compositional Model

Movement is a particularly effective model for composing musical works because, like music, it unfolds over time. My experiences of composing and improvising music for dance have

[9] Ibid, 233.

[10] Ibid.

convinced me that the way that a moving body changes its shape and spatial orientation over time is quite naturally likened to the transformation of musical materials over time. Working with dancers has also given me the opportunity to experiment with constructing associations between sound and movement. Some such associations have in fact been established as conventions in the field of dance accompaniment. I have observed, for example, that seasoned dance accompanists and choreographers tend to overwhelmingly favor triple meter types over duple meter types as a support to fluid styles of movement.

While the rhythmic relationships between sound and movement tend to be seen and felt with relative ease, many of the most intriguing motions have subtle qualities whose musical equivalents are less clear. In *Dance Composition and Production*, Elizabeth Hayes suggests interpreting tension in the moving body with harmonic tension in the accompanying music.[11] While the solution Hayes suggests is by no means the only option available to the well-trained musician, it certainly constitutes one valid approach to the modeling of movement that has a strained quality. In *Sway*, an ABA' structure is conveyed in part by a marked decrease in both rhythmic and harmonic tension during the B section. During the compositional process, this contrast came about in part because I had envisioned the A sections as a reflection of the irregular swaying and straining of a tree branch in the wind. Conversely, the B section, with its steadily rolling triplet rhythms and comparatively open harmonies, was meant to suggest the relaxed way in which one might sway to a hypnotic piece of music. My experiences as a creator of music for dance similarly influenced my approaches to movement modeling in both *Fidget* and *Swerve*.

[11] Elizabeth R. Hayes. *Dance Composition and Production*. (Penington, New Jersey: Princeton Book Co.), 1993. 150-151.

Observing dance movement and listening to the instruction of dance classes has also taught me that the mechanics involved in the smallest or apparently simplest motion can actually be quite complex, involving various joints and muscle groups working together or independently from one another. It strikes me that a body in motion is therefore not unlike a carefully crafted chamber work that can travel between contrasting sound worlds the way that a body moves through space; sometimes moving in a clear unified direction, at other times exhibiting the most complex counterpoint. It is for this reason that I chose movement to be the subject of the three works for Pierrot ensemble that comprise, along with *Swerve* (*For Orchestra*), the *Intricate Maneuvers* Series.

Modeling Strategies Used in *Fidget, Sway,* and *Swerve*

When beginning a new project, I often operate under the theory that modeling the forms and processes of a particular composition after a compelling extra-musical experience tends to produce a work that is also compelling. Each work in the *Intricate Maneuvers* series is consequently named for and modeled after a motion that possesses some dynamic quality. This allowed me to create compositional plans and strategies that could yield dynamic results while remaining consistently true to their central concepts. In *Fidget*, for example, a collection of several contrasting motives reflects the wide variety of physical movements that can be considered "fidgets." But there is also a sustained high-tone motive that suggests the anxious state of mind from which all "fidgets" spring. Like the "flowing" motive in Smetana's *Vltava*, the "anxiety" motive in *Fidget* brings a continuous element to a work that incorporates a diverse range of materials.

When designing a musical work according to an extra-musical model, the perspective and insight that the composer brings to the inspirational image is just as important as the image itself. Anyone might look at the Meoto Iwa site and imagine an ABA' form. Roger Reynolds thought of the formation not only in this way but also from the artist's viewpoint, which considers the complex relationships between the physical characteristics of the site, the landscape it occupies, and the myriad cultural meanings that have been assigned to it. I similarly chose to explore "swaying" not merely as a linear side-to-side motion but as a fluid process that features a combination of perpetual and bidirectional elements. Just as Reynolds consulted Japanese legend to inform his process, so did I seek insight from a choreographer about the action of "swaying." Enlightened by her idea that "swaying" is essentially a form of falling, I was inspired to add yet another dimension to *Sway* by incorporating descending features into the work's compositional plan.

In *Swerve*, a perceptual experience associated with "swerving" influences musical form much in the way that the temporal concept of Jean Cocteau's film inspired the form of Carter's String Quartet No. 1. The psychological implications of swerving off course include the radical change in the perception of time that individuals often experience during life-threatening situations. The formal design of *Swerve* allows for the exploration of this aspect of human experience by featuring a sudden shift from heavily accented metric patterns to an ametric feel during mm. 175-216. In this way, the physical experience of "swerving" is explored as a metaphor for the related, but completely internal, psychological experience that often accompanies it.

In a conversation with Toru Takemitsu about his *Symphony [Myths]* Roger Reynolds remarked:

> It's the making of seemingly remote associations that's the most essential part of exciting art. I like art which is revelatory, and revelation often comes as a result of being shown that relationships exist which you had not at first imagined but which you immediately grasp and accept.[12]

As the examples above have shown and the forthcoming analyses of *Fidget, Sway*, and *Swerve* shall further demonstrate, the metaphorical modeling of a compelling extra-musical image or experience can be a valuable tool to the composer who wishes to discover and exploit the "seemingly remote associations" of which Reynolds speaks.

[12] Reynolds and Takemitsu. 63.

Chapter II

Critical Analysis of *Fidget*

Fidgeting as a Compositional Model

The first step in the compositional process for each of the works in the *Intricate Maneuvers* series was to reflect at length on the often complex, sometimes multiple, meanings of the word that would become the title of each particular piece. What most distinguishes the word "fidget" from "swerve" and "sway" is that it may be applied to more than one type of motion: squirming, tapping, shaking, twitching, wriggling, rocking, and nail-biting to name a few. Rather than choosing only one of these movements to dissect and use as a structural model, I decided to create a collection of musical gestures that would correspond with just three of the previously named movement types: squirming, rocking, and tapping. I then organized my musical ideas into a single work in a way that reflects that which makes all of these movements qualify as fidgets — that they are all functionless motions performed in an effort to relieve physical or psychological distress. In this way, I developed a compositional strategy that addresses both the diverse imagery that is suggested by the word "fidget" and the quest for a peaceful state of mind that defines it.

Fidget was composed using a process that reflects both the incremental and the continuous qualities of the self-placating aspect of fidgeting. Exchanges of one remedy, or fidgety motion, for another are reflected by shifts in emphasis from one motive to another often accompanied by a tempo change. Meanwhile, the continuity of a singular mind takes musical form as a limited yet versatile musical palette that persists despite numerous changes in tempo and mood. As a consequence of this process, *Fidget* endeavors to balance variety with continuity while fluidly and organically developing a small collection of musical materials.

Structural Overview

The interplay between contrast and continuity in *Fidget* cannot be fully understood without a basic understanding of the work's structure. The most significant characteristic of *Fidget*'s formal design is that it is constantly in transition, reflecting the fact that the work is modeled after a transformative process. That is to say, the piece is influenced by the idea that a fidget is not a bad habit to be suppressed, but rather that it is an effective means to exorcize excessive nervous energy — as when a basketball player shakes his limbs and bounces in place before sinking a game-making free throw. The form of *Fidget* is, consequently, very much a product of compositional process as opposed to architectural design. The three initial ideas, or "gestures," to which those processes were applied are thoroughly discussed under the subheading Gestures and Motives below. That later discussion of the work's musical materials and how they are developed benefits greatly from a prefatory survey of *Fidget's* overall structural landscape.

As we examine the formal characteristics of the piece, it may be helpful to refer to Figure 2. In this diagram, the major structural sections of the work are labeled A, B, C, D, Transition, and E. As these labels suggest, there are no definitive returns to previous material throughout the course of the work. Later discussion reveals that it is only through the smallest structural unit, the motive, that repetition occurs and unity is consequently achieved.

	A	B	C	D	Trans.	E
Tempo	Restlessly ♩ = 100	Slightly Slower ♩ = 96	(♩. = 96 ♩. = 64)	Energetically ♩ = 128	Calming Gradually (♩ = 128)	♩ = 96
Measures	1-27	28-85	86-101	102-193	194-204	205-234
Gestures: **Motives:**	**Squirming Gesture** a, b, c, x, y	**Rocking Gesture** a, b, x, y	a, b, c, x, y	**Tapping Gesture** a, b, c, x, y	b, c, x	a, b, c, x
Rhythm	-Un-metered feel. -Irregular rhythms and phrase lengths.	-Duple and some complex meters. -Mostly 4-bar phrases.	- 6/8 and 5/8 transitioning to duple feel. -Mostly 4-bar phrases.	-Changing duple meters.	-3/4 feel notated in 4/4. -Becomes less active.	-Slower 3/4
Pitch	Atonal, emphasizing [0,1,2] and [0,3,6] trichords.	Chromatic with extended tertian harmonies.	Melody-driven chromatic harmony.	Very unstable melody-driven chromatic harmony. Harmonic rhythm slowing gradually.	Harmony becomes less active, more consonant	Ends on D-flat major.
Texture	Features imitation and some cross-rhythms.	Mostly homophonic with contrapuntal details.	Heterophonic. Then 2-voice counterpoint.	Rhythmic hocket on 'a' and pulsing pedal point.	Marimba repeated pedal + simple wind lines.	2-voice counterpoint, sustained tones and interjections of fast motives.

Figure 2. Formal diagram of *Fidget*.

But first we shall walk through the entire form of the work starting with the A section, marked "Restlessly" in the score. Characterized by irregular rhythms that invoke an unmetered feel despite the 4/4 time signature, the A section features a multi-layered texture that introduces a wide variety of melodic ideas. The flute, clarinet, and violin form a counterpoint of spasmodic interjections while the piano very slowly builds momentum from single sustained tones towards rapid alternations of chords in the high and low registers. At m. 15, the marimba introduces a plaintive melody in triplet half-notes that further obscures the metric identity of section A. From m. 23 to m.27, a more unified texture combines with steadily increasing dynamic levels to create an emphatic transition into the B section, marked "Slightly Slower".

The B section (mm. 28-85), totaling 58 measures, is one of the longer portions of the work. It is characterized by a strongly metered feel, mostly in 3/4 and 4/4 with occasional

introductions of more complex meters beginning at m. 37. The texture is mostly homophonic with contrapuntal details and the chromatic harmonic language is now enriched by the addition of extended tertian harmonies, which first appear in the piano's statement of this section's main musical feature, (later referred to as the Rocking Gesture) in m. 28.

Although section C (mm. 86-101) does serve the important function of transitioning the tempo from MM 96 to MM 64, it is too substantial in length and idiosyncratic in character to be designated a mere transition. Here, material previously introduced in section B takes on the playful yet elegant mode of a slightly off-kilter waltz. The internal structure of Section C is driven by the formation of mostly 4-bar melodic phrases, making it perhaps the most "tuneful" of the work's five structural regions. In mm. 96-101, duple and quadruple divisions of the now dotted-quarter beat prepare the MM 128 tempo of the D section, marked "Energetically."

Unfolding over the next 92 measures, section D is characterized by the constant textural and harmonic transformation of simple yet rhythmically energetic materials. It would be possible to analyze section D as a sequence of sub-regions according to the contrasts in texture and melodic structure that develop within it; the problem with this analytical approach, however, is that the constant overlapping of ideas throughout the section makes it difficult to pinpoint precise moments of change. The gradual and fluid manner in which section D transforms from an energetically melodious to an almost static yet suspenseful quality is itself the most salient feature of the work's climactic structural region.

The evocation of a calmer state becomes more overt during the Transition section in mm. 194-204. In this passage, the flute and clarinet perform a slow two-voice counterpoint that suggests 3/4 meter against the notated 4/4. The marimba's pedal point meanwhile undergoes a subtractive process and gradually fades to nothing, leaving space for the re-entry of the piano at

m. 205. The final section of the work, Section E, may be regarded as a sort of postlude, wherein the tranquility of consonant harmonies and slow-moving melodic lines is periodically foiled by interjections of material echoed from the work's more agitated beginnings. Having identified the major structural regions of *Fidget*, we may now examine more closely the musical materials that form the vocabulary of those regions. Only then may we see how the composition process was designed to enable five contrasting structural parts not only to coexist, but also to flow organically from one to the next.

Terminology: "Motive" and "Gesture"

In order to better demonstrate the process by which *Fidget* was created and to reveal the structural characteristics that result from this process, it is helpful to consider the terms "motive" and "gesture" and to understand the roles they each play within the work. Arnold Schoenberg discusses motive both in terms of its inherent features and of the role it plays within a musical work:

> Motif is a unit which contains one or more features of interval and rhythm. Its presence is manifested in its constant use throughout a piece. Its usage consists of frequent repetitions, some of them unchanged, most of them varied.[13]

In *Fidget*, motives are typically distinguishable by just two or three musical parameters making them resilient to variation and recontextualization; that is to say, a motive may undergo significant alterations to rhythm, pitch, timbre and expression. As long as the motive's salient features are maintained, it may continue to be related it to its original form. Consequently, motives are very effective in achieving fluid transitions and overall cohesiveness within *Fidget*, a work that is built from numerous distinct parts (see Figure 2 for formal diagram).

[13] Arnold Schoenberg. Models for Beginners in Composition: Syllabus and Glossary. (New York: G. Schirmer, Inc. 1942), 15.

For the purposes of this paper, the term "gesture" refers to a musical idea that exhibits a distinct expressive quality invoked not merely by two or three musical characteristics, but rather by the sum of its multiple parameters (rhythm, pitch, dynamics, articulation, instrumentation and tempo). A gesture tends to be longer and more detailed than a motive, but not longer than a phrase. Unlike a motive, a gesture does not undergo rigorous variation and development because its identity depends upon the confluence of many musical traits. In *Fidget*, gestures often establish our arrival at a new structural area and epitomize the change in musical character that defines that region of the piece. In this way, the gestures used in *Fidget* function somewhat like themes do in classical forms.

The Role of Gestures and Motives in *Fidget*

Three distinct musical gestures (shown in Fig.3) were created at the start of the compositional process. These gestures are henceforth referred to as the Squirming, Rocking, and Tapping Gestures, according to the physical motions that inspired each. In order to understand the origins of both the form and materials of the entire composition, we must become familiar with these three essential musical ideas. The rhythmic vocabulary of the Squirming Gesture (mm. 1-2) includes both duple and triple divisions of the quarter note beat and, though notated in 4/4 time, lacks a clear metric feel. This gesture is also characterized by a mix of the quick accented rhythm of motive 'a' (in the flute and marimba) and the sustained tones that crescendo from m.1 to m.2 in the clarinet and the violin. Note that in the violin part, this dynamic growth culminates in a second, slightly varied statement of the energetic 'a' motive. The combined effect of these events is a musical gesture that, like the action of squirming itself, alternates unpredictably between louder, more active moments and quieter, less active moments, during

which tension slowly grows towards the next energetic burst.

The dichotomy between rapid movement and stillness characterizes not only this initial Squirming Gesture, but also the remainder of the A section. Throughout these first 27 measures, interjections of the 'a' motive enter unpredictably (sometimes from silence and sometimes from a crescendo) in the flute, clarinet and violin parts. Meanwhile, the piano part provides a very gradual increase in rhythmic and dynamic intensity. Alternations between the piano's high and low registers occur first at 8- or 9-beat intervals (mm. 2-6), then accelerate over the next 19 measures to a rate of a sixteenth note in m. 25. During this process, the dynamic level of the piano part also increases from *mezzo piano* to *fortissimo*, effectively stretching over 25 measures the crescendo that lies at the heart of the Squirming Gesture.

At m. 28, the tempo slows slightly as the piano presents the Rocking Gesture in its quintessential form (Fig. 3), marking the start of the B section. The Rocking Gesture is defined by the rhythmically even alternation between neighboring registers at a moderate tempo and dynamic level. While it may be better described as a fragment than as a full musical phrase, it is preceded and followed by rests, giving the impression of a complete and independent musical thought. If the Squirming Gesture sets the tone for the A section of *Fidget*, then the Rocking Gesture serves as a point of departure for the B section (mm. 28-85). The gesture's clear and steady quarter-note beat not only serves as a contrast to the irregular rhythms of the preceding A section, but also provides a simple-meter backdrop onto which compound beats may be introduced: first sparingly (beginning with an isolated 5/8 bar at m.37), then with increasing frequency until m. 84, where the dotted quarter is established as the predominant beat value, anticipating the waltz-like feel of section C. The details of this transformation will be explored

further when we examine the role and developments of motive ‘b,’ the motive most closely associated with the Rocking Gesture.

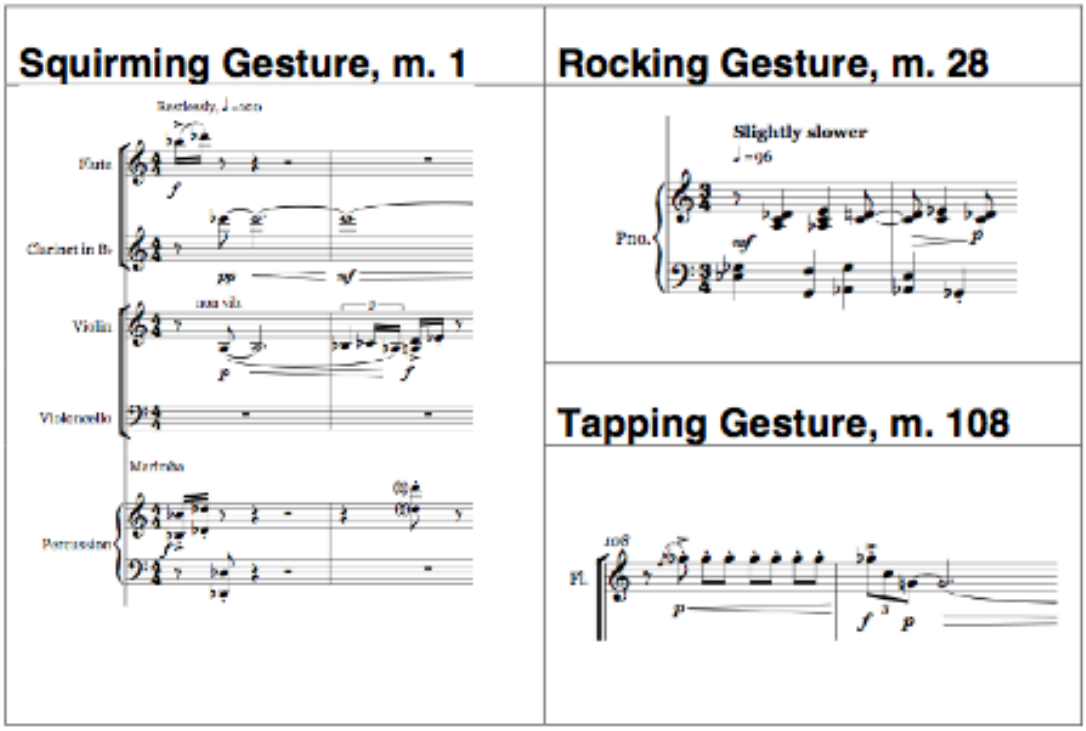


Figure 3. Three "Gestures" from *Fidget*.

The last of the three initial musical ideas, the Tapping Gesture, finally appears in the flute part at mm.108-110. The most essential feature of this gesture is the regular staccato repetition of a single pitch that begins on an upbeat and swells into an accented strong beat (mm. 108 into 109). A triplet figure on the downbeat of m. 109 serves to release the expressive tension accumulated in the preceding measure. This figure, later discussed in depth as the ‘y’ motive, was originally composed for purely musical reasons rather than to reflect the quality of an actual tapping motion. As we shall see, the ‘y’ motive nonetheless serves as an important element in the language of the piece. One could even argue that the role the ‘y’ motive plays in relieving musical tension at m. 109 enables the Tapping Gesture to function as a sort of microcosm of

Fidget's entire metaphorical meaning: that a nervous movement can ultimately lead to a more restful state of mind. The tempo increase associated with the Tapping Gesture in section D does, after all, help to raise the energy level of the piece to its climax, setting the stage for a transformative journey towards the work's placid conclusion.

During the compositional process, the three gestures not only provided structural landmarks, but they also yielded five simple, malleable motives that would easily withstand adjustments to the temporal, metric, and expressive characteristics of the music. These five motives are labeled and listed in Figure 4, which charts each motive's development throughout the piece.[14] When we examine Figure 3, we find that the Squirming Gesture is the shared parent of motives 'a' and 'x' while motives 'c' and 'y' are both children of the Tapping Gesture. That is to say that motives 'a' and 'x' were generated from individual voices within the whole texture of the Squirming Gesture while motives 'c' and 'y' were taken respectively from the beginning and ending portions of the Tapping Gesture (see Fig.4).

[14] Please note that the use of lower case letters to label the motives in *Fidget* does not indicate any special relationship between a particular motive and the structural section identified by the corresponding capital letter.

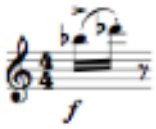
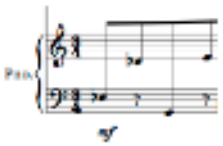
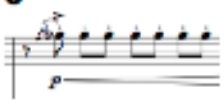
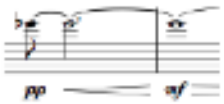
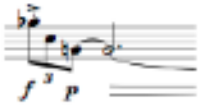
Motive	First in	Parent Gesture	In Sections	With These Variations
a 	m.1	Squirming (m.1)	**A**	-**Prime** form (m.1); contour compressed and expanded, sometimes in inversion (mm. 1-27)
			B	- Elaborating 'b' (m. 76)
			C	-Integrated into theme (vln. m. 86)
			D	-Merged with 'c' (m.104); elaborated in hocket-texture (m. 105); rhythmically augmented (m.130); Integrated into 'b' (m. 130).
			E	-Compressed to unison, juxtaposed with 'c' (mm. 135-177).
b 	m.2	Rocking (m. 28)	**A**	-Rhythmically aug. → dim. (mm.2-26).
			B	-**Prime** form (pno. mm.28-36 and 48-56); Simultaneous hocket of prime form in strings and aug. in winds. (mm.38-39); As "oom-pah" bass accompaniment (vcl. and pno. mm.71-72); embellished with 'a' rhythm.
			C	-"oom-pah" → "oom-pah-pah."
			D	-Dim. and merged with 'c' in pno. (m.109); Integrated into new theme in strings (mm.111-112); Compressed and dim. (cl, m.114 and m.121, strings mm.123-125).
			Trans.	-R Aug. as 3/4-feel hocket in winds.
			E	-**Prime** form raised two octaves in pno. (mm.205-206).

Figure 4. Chart of motives from *Fidget* (cont'd next page).

c 	m.14	Tapping (m. 108)	**A**	-In diminishing rhythms (fl. mm.14, vln. m.17).
			D	-Fragmented (winds, m.104); **Prime** form (fl., mm.108-109; Rhythm integrated into string melody (mm.109-113); R Dim. → repeated 𝅘𝅥𝅯 (perc. mm.134-135) pedal.
			Trans.	-R Aug. and slowly deconstructed (perc., mm.187-201).
			E	-Echoe of earlier variations in fl. (m.224)
x 	m.1	Squirming (m.1)	**A**	Present in all sections. Variations are limited to pitch transposition and alterations to timbre and dynamics.
			B	
			C	
			D	
			Trans.	
			E	
y 	m.15	Tapping (m.109)	**A**	-Intervals re-ordered (cl. m.15); R Aug. (m.19); Retrograde (vln., m.26).
			B	-R variation (cl., m.31); Integrated into melody (pno. m.67, vcl. m.81)
			D	-**Prime** form (m.109); Integrated into string melody (m.110); Octave displacement (m.130)

(Fig. 4 continued from previous page)

The relationship of motive ‘b’ to the Rocking Gesture, on the other hand, may be described as reductive rather than subtractive; motive ‘b’ represents the Rocking Gesture’s essence, an even alternation between pitches from two separate registers. In order for motive ‘b’ to be presented as the Rocking Gesture, it must also occur as an independent musical statement, at a moderate tempo, within a two-octave range, and voiced in closely spaced extended tertian harmony. As Figure 4 shows, motive ‘b’ occurs both in this form and in numerous other manifestations throughout the piece.

Development and Variation of Motives

In the following discussion of motives ‘b,’ ‘x,’ and ‘y’ and in the examples that accompany it, “prime form” refers not to the first form a motive takes within the score, but rather to the form it takes within the initial musical idea of which it is a part, the gesture. This will allow me to continue this analysis in a way that acknowledges the relationship between compositional process and musical results. Please note also that I have excluded motives ‘a’ and ‘c’ from the following discussion purely for the sake of efficiency. The development of these two motives is no less interesting or essential to the design of the piece, and is summarized in Figure 4.

In order to understand how compositional procedures affect musical results, we need only consider, once again, the first 26 measures of the piano part. Viewed on its own, this passage appears as a single, long acceleration process rather than as the presentation and development of a smaller self-contained idea. From the vantage point of m. 28, however, where motive ‘b’ is first presented in its prime form, one may recognize the opening passage of the piano part as in fact slowly evolving into the not yet introduced ‘b’ motive. Reverse development processes such as this provide greater cohesion throughout the work because they allow a motive to enter the work’s vocabulary well before the presentation of its parent gesture.

Once motive ‘b’ has been clearly stated at the start of the B section (m.28), it undergoes numerous transformations, sometimes asserting itself as foreground and at other times taking a more supportive role. In m. 38, motive ‘b’ forms both the foreground and background of the musical texture, as it colors both the two-voice pizzicato counterpoint in the strings and the alternating sustained tones in the clarinet and flute. Here the rhythm of the prime form is maintained in the strings while it is augmented by a factor of 4:1 in the winds. Now that the

motive has traveled from the piano to the melodic instruments, it is natural for it to lend its disjunct quality to melodic figures throughout section B. The boisterous lines of the flute and clarinet parts in mm. 42-44 offer examples of the influence of motive ‘b’ on the melodic character of section B.

In mm. 71-72, the spirit of the original ‘b’ motive seems very much intact as it appears in the cello and the bass staff of the piano; its function within the overall texture, however, has changed. The motive now serves as harmonic accompaniment to the melody found in the treble staff of the piano. This passage demonstrates how changing the musical context of an idea — in this case moving it from the foreground to the background of the overall texture — can appear as a variation of that idea. Later, in mm. 88-89, the accompanimental form of motive ‘b’ is recontextualized once again into 6/8 meter. A rhythmic reduction of the cello part in these measures (see Fig. 5) shows how the motive maintains its rhythmic regularity despite the newly established compound meter feel.

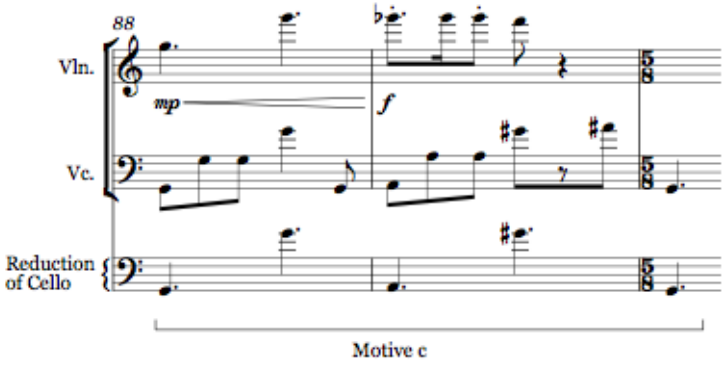


Figure 5. Strings in mm. 88-89 with rhythmic reduction of cello part.

In section D (beginning at m. 102), motive ‘c’ takes over as the most prominent material, the tempo increases to MM128, and the music proceeds in 4/4 time. Here motive ‘b’ is varied in ways that integrate it into the new, more energetic quality of the D section, and that allow it to

interact with the other more prominently featured motives. In the third and fourth beats of m. 109, motive ‘b’ appears in rhythmic diminution in the piano, much as it did in mm. 25-26. In this new context, however, the sixteenth-note permutation of motive ‘b’ is also functioning as a rhythmic embellishment of motive ‘c’ (see Fig. 6). As such, the clamorous version of the ‘b’ motive found here is supporting the characteristic crescendo of motive ‘c’. This region of the piece also features a recurring sixteenth-note figure that rocks back and forth between two pitches (see flute, m. 114; clarinet, m. 121; percussion, m. 122; strings, m. 123; percussion and piano, m. 130). While this figure lacks the registral breadth of motive ‘b’ in its prime form, one recognizes it as the newest permutation of the motive in part because the piano figure at m. 109 serves as a rhythmic bridge to this latest variation. We also relate the melodic figure at m. 114 to motive ‘b’ because it replaces the repetition of varying pitches within two adjacent registers with the repetition of two fixed pitches within a single register. The repetition of a specific lower and specific upper pitch allows the figure at m. 114 to come across primarily as an alternation between lower and higher pitch material, as do the more disjunct permutations of motive ‘b’ found earlier in the piece.

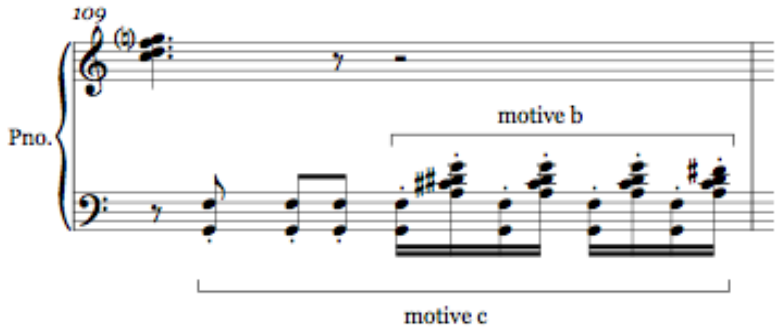


Figure 6. Motives 'b' and 'c' in m. 109.

At m. 193, as the music transitions towards its peaceful conclusion, the clarinet and flute revisit motive ‘b’ in slow two-part counterpoint. The three-beat alternation of registers defies the 4/4 time signature and lends the gentle lilt of a lullaby to the marimba’s decaying pedal point. Once the melodic instruments have created a peaceful backdrop of sustained tones at m. 205, motive ‘b’ returns only as an echo of its prime form in the piano. It is raised two octaves at m. 205 and later seems to struggle against fragmentation until it stutters into silence to conclude the piece.

Motives ‘a,’ ‘b,’ and ‘c’ are all prominently featured at the beginnings of the Squirming, Rocking, and Tapping Gestures, respectively. Consequently, all three motives are strongly identified with their corresponding parent gestures. Motives ‘x’ and ‘y,’ on the other hand, are very independent from both their parent gestures and from the extra-musical meanings associated with those gestures. Motive ‘x,’ for example, was conceived as a way to create musical tension that models the psychological distress that may motivate an individual to indulge in any sort of fidgeting behavior. It was incorporated into the Squirming Gesture that initiates the piece not because it is especially crucial to the squirming model, but because it is key to the meaning of the entire work. The independence of motive ‘x’ from the squirming model is proven by the fact that it occurs just as frequently (over twenty times in 91 measures) during section D, the climactic “tapping” section, as it does in the “squirming” section, section A (where it occurs six times in 27 measures).

Whereas motive ‘x’ holds its own extra-musical meaning independent from that of its parent gesture, motive ‘y’ was formed for the simple musical purpose of relieving the expressive tension created by the ‘c’ motive that precedes it within the context of the Tapping Gesture. Any extra-musical reading of motive ‘y,’ valid though it may be, is purely after-the-fact

interpretation. In its prime form, the motive appears as an eighth-note triplet that falls by a tritone followed by a descending perfect fourth. As a motive, 'y' is identifiable through the parameters of pitch and rhythm relationships alone; tempo, dynamics, articulation and timbre remain quite flexible. Because motive 'y' has the most striking pitch content of all the five motives used throughout the piece, it has a significant influence over the melodic and harmonic language of the structural regions in which it occurs.

Although *Fidget* was formed through motivic rather than thematic development, there are instances where a particular motive or group of motives forms the substance of a theme-like melodic line. One such melody, developed from the 'y' motive, is found in the cello at m. 81. Here the three-note 'y' motive is repeated in duple rather than triplet eighth notes, creating a syncopated melodic pattern that rhythmically drives the music forward and anticipates the introduction of the dotted quarter-note beat at m. 83. In mm. 109-113, a single melodic line in the strings features not only the contour and interval content of the 'y' motive, but also the anacrusis rhythm of motive 'c,' and the rocking contour of motive 'b.'

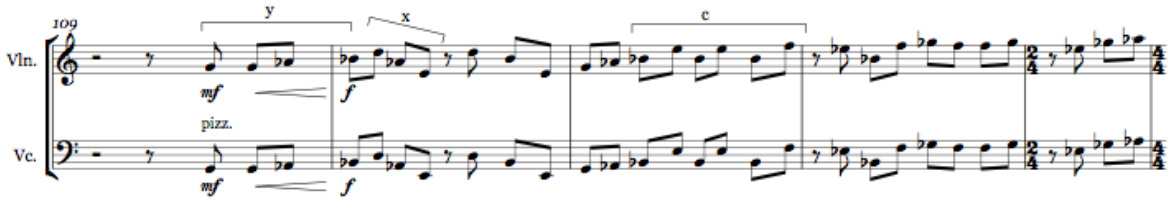


Figure 7. Motives 'y,' 'c,' and 'b' in mm. 109-113 of Fidget.

The example above illustrates an important point about the motivic palette as a whole; that the five motives compliment each other in such a way that allows them to be developed in either an independent, simultaneous, or integrated fashion. Motives 'x' and 'c,' for example, are very easily adapted to providing harmonic support because their pitch content is limited to a

single pitch class. The repetition embedded in both motives ‘b’ and ‘c’ prepare them to serve well as accompanimental figures, while the brevity of motive ‘a’ makes it ideal for embellishing or punctuating foreground material. The potential of motive ‘y’ for yielding melodic content has already been demonstrated. As a consequence of the collective versatility of these five motives, there is little need for the inclusion of purely “functional” material in *Fidget*: the motives can easily be varied and combined to fill all manner of compositional purposes. Not only does this facilitate the compositional process, but it also guarantees a consistent musical vocabulary that unifies the work. The final two columns of Figure 4, the Chart of Motives, shows just how pervasive all of the motives are by listing the sections in which they occur and the types of variations that are applied to each.

Chapter III

Critical Analysis of *Sway: The Mildest Form of Falling*

"Swaying" as a Compositional Model

Choreographer Lily Sloan once described "swaying" as the "mildest form of falling."[15] This image initiated my reflections on the word that would influence every aspect of *Sway* and ultimately became the subtitle of the resulting musical work. Further consideration of Sloan's rather poetic description lead me to conclude that the way a person might sway from side to side in response to an entrancing piece of music is also bi-directional and perpetual in nature. When we sway in this way, we drop our left hip causing the lower body to fall to the left. Before the upper body has completed its consequential fall to the left, we catch our weight and initiate a lower-body shift to the right. The cycle continues on alternating sides, the upper body always slightly behind the lower so that the two parts sometimes move together and other times move in opposite directions. The hips, meanwhile, swivel fluidly in a figure eight pattern so that the "falling" could continue indefinitely and with little effort.

The complex motion described above inspired a multi-layered compositional approach that not only features perpetually falling harmonic and melodic figures but also reflects the bi-directional and fluid qualities of a regular swaying motion. This analysis demonstrates how these qualities of "swaying" take musical form through the manipulation of multiple musical elements including dynamics, space, harmony, melody, instrumentation, and form. Also addressed in this analysis are the many ways in which *Sway* was influenced by the music of Ruth Crawford. The aesthetic values and ideals embraced by her and other ultra-modernist composers and theorists from the first half of the twentieth century, like Charles Seeger and Henry Cowell, were very

[15] Quotation of choreographer Lily Sloan from a conversation with the author in Fall, 2011.

influential in my approach to *Sway*. Crawford's String Quartet 1931 was particularly valuable as a source of materials and techniques that enriched and informed the compositional process.

Structural Overview of *Sway*

In order to provide a reference point for discussions of some of the subtler mechanisms of *Sway*, I will first provide an overview of the work's most readily apparent characteristics. Before the first note sounds, an audience member would notice *Sway*'s unusual stage set-up, in which the flute and violin are placed downstage, audience left and the cello and clarinet are downstage, audience right. The piano and marimba are side-by-side, upstage and center (Fig. 8). The work opens with a series of disjunct, atonal melodic flourishes in the piano that each end in a sustained trichord. These rhythmically irregular and sometimes rhapsodic figures are answered by three-note tone-pyramid-type gestures in the sustaining instruments. As the winds and strings sustain these trichords, the purpose for their unusual spatial placement becomes apparent. Instrumental pairs play overlapping dynamic swells on a unison pitch, creating the effect of a single sound that moves from one side of the stage to the other. The alternation of cadenza-like flourishes in the piano and sustained gestures in the melodic instruments defines the texture for the first 45 measures of the work.

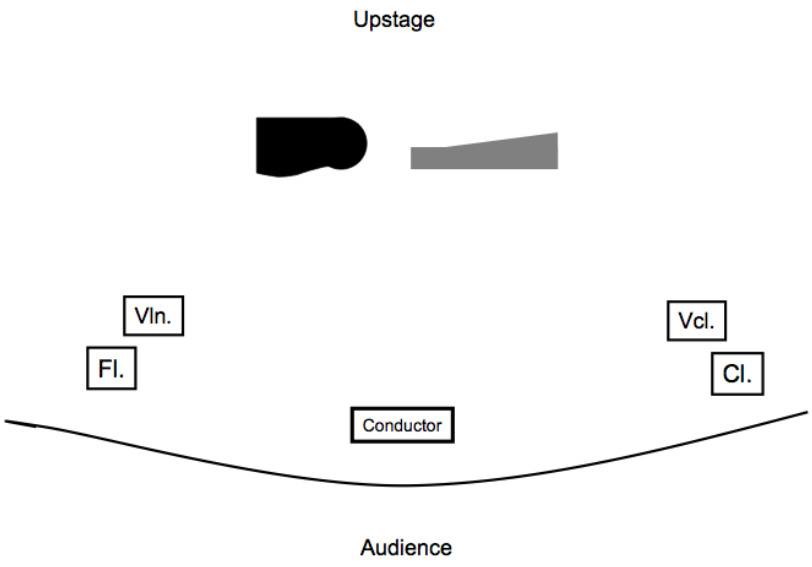


Figure 8: Stage set-up for *Sway*.

By m. 46, the marimba has overtaken the piano as the harmonic foundation within the overall texture. The piano's irregular rhythms are replaced by steady eighth-note triplet arpeggios in the marimba. Meanwhile, the panning gestures in the winds and strings have also ceased, giving way to a series of rhythmically simple sustained-note gestures. Over the next 80 measures (to m. 127), there are significant developments in all elements of this new texture. The wind and string parts gradually become more melodic, emphasizing 3- to 8-note step-wise descents. The marimba's triplet figures gradually devolve into sustained rolls as the piano reintroduces the rhapsodic melodic gestures that were featured in the first section of the work. At m. 127, a full return to the opening texture is evident as the marimba drops out, making way for the piano and upper voices to resume their initial roles. In this way, textural relationships help to define the work's ABA' form. The three-part form is also evident in the use of a denser, more dissonant harmonic language during the A sections as compared to the quasi-tertian sonorities of

the B section. The first portion of the following analysis explains the compositional process by which that contrast was achieved.

The Use of Pitch Material to Effect a Perpetual Descent

In the A sections of *Sway*, a repeated harmonic pattern that has no clear arrival points occurs simultaneously in its retrograde and prime forms. The desired effect of this harmonic scheme is to reflect both the perpetual and the bi-directional qualities of a swaying motion as it occurs in the human body. The first step towards creating this effect was to carefully construct a harmonic pattern that, when performed simultaneously in normal order and in reverse, would create compelling composite harmonies. When performed in normal order alone, as it is in the B section of the work, the harmonic pattern needed to create the aural effect of a continuous descent.

After much experimentation, I decided to derive all of the pitch material for *Sway* from a ten-note row used in the final movement of Ruth Crawford's String Quartet 1931. To Crawford's row, I first added B-flat and B-natural to form a complete 12-tone collection. In this form, the row is composed of three chromatic tetrachords: (2, 4, 5, 3), (6, 9, 8, 7), and (1, 0, 10, 11).[16] I have labeled these "tetrachords 1, 2, and 3" in Figure 9 below. With the goal of creating a harmonic pattern that has no clear arrival points, I preserved the chromatic lines inherent within these three tetrachords by stacking them to form four trichords. The four resulting trichords, are shown labeled as 'w,' 'x,' 'y,' and 'z' in Figure 10. Throughout this analysis, Arabic numerals are used in conjunction with these letters to indicate which tetrachord member is in the bass voice.

[16] Note that the pitch class analysis of these tetrachords have not been reduced

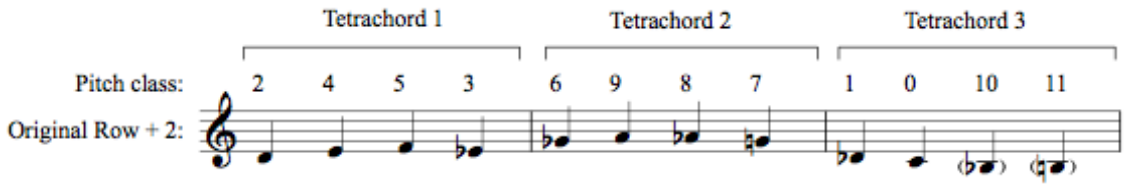


Figure 9. Division of Ruth Crawford's row into melodic tetrachords.

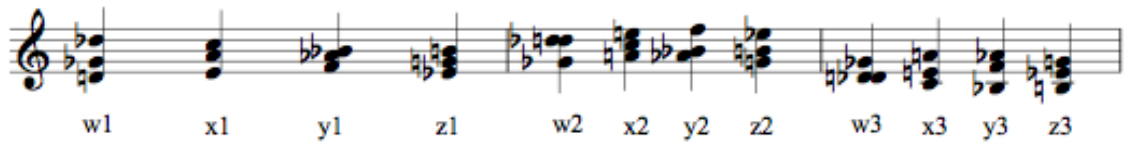


Figure 10. Four trichords resulting from "stacking" tretrachords 1, 2, and 3.

An important feature of the [w, x, y, z] trichord pattern is its resemblance to tonal harmony. Note that trichord ‘x’ is simply an A minor triad and trichord ‘z’ is an augmented triad built on E-flat. The ‘y’ trichord also strongly suggests traditional tertian harmony in the form of a B-flat dominant seventh chord with an omitted third. The juxtaposition of D and D-flat in trichord ‘w’ makes it the most dissonant of the four trichords and yet it, too, suggests extended tertian harmony as a D major seventh chord with an omitted fifth. This pervasive emphasis on tertian harmony allows the twelve-tone harmonic pattern to suggest directional harmony without establishing a tonal center. In this way, the pattern seems to progress without arriving at its destination, instead recurring perpetually throughout the work.

During the B section (mm. 46-128), the aural effect of a descent is achieved through voice-leading practices that take advantage of the chromatic vocabulary of Crawford’s row. The arrows in Figure 11 show how the pattern of four trichords, when presented in [w,x,y,z] order, includes a descending minor second at every chord change. Throughout *Sway*, Crawford’s row order has been preserved in the bass lines. In the upper voices, linear revoicings that would disrupt the melodic half-steps of the original row have also been avoided.

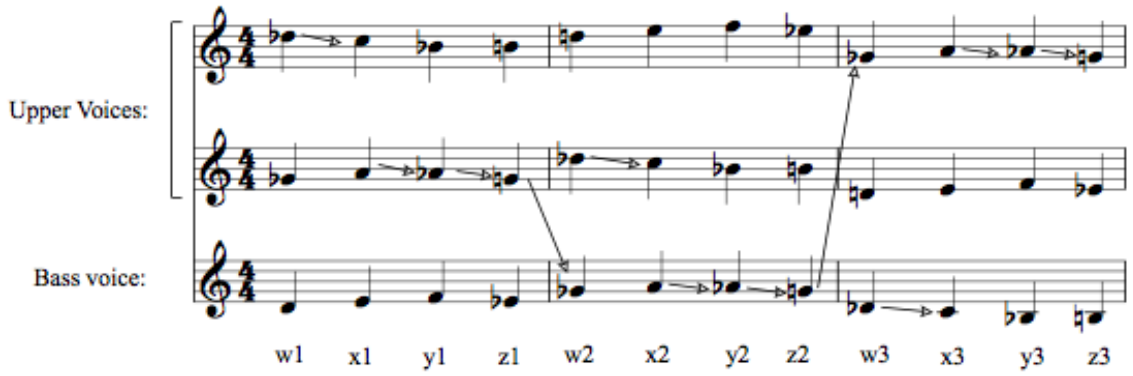


Figure 11. Descending half-steps in [w,x,y,z] order of trichord pattern as indicated by arrows.

The chromatically descending voice-leading of the [w,x,y,z] pattern receives extra emphasis during the B section (mm. 46-128) of *Sway*, where harmonic changes occur one voice at a time to create an effect like that of a suspension in tonal music. Here, steady triplet arpeggios in the marimba cycle through the four trichords, changing the pitch of just one of the three voices on the downbeat of each 4/4 measure. As a reflection of the "swaying" model, in which the lower body leads and the upper body follows, the pitch changes throughout this process always occur in bass/tenor/soprano order so that it takes three measures to transform from one trichord to the next. As previously mentioned, Crawford's row order is maintained in the bass; in the upper two voices, however, the line is strategically revoiced at three points, so as to emphasize the descending steps within the harmonic pattern. In m. 58, for example, the row's ascending leap from e-flat to g-flat is avoided in the soprano by an exchange of row order between the soprano and tenor voices. With the g-flat placed in the tenor voice, the half-step motion from e-flat to d that occurs between the 'z' and 'w'' trichords is highlighted by the soprano voice in the marimba's most prominent register (see Fig. 12). A similar revoicing in mm. 68-70 replaces leaps in the row with descending stepwise motion in both the tenor and soprano voices. The

revoicing found in m. 58 occurs again in m. 94, once more highlighting the descending half-step by placing it in the highest register of the instrument.

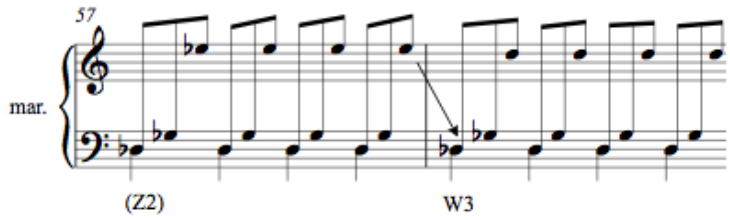


Figure 12. Re-voicing to preserve descending half-step motion in m. 57 to m. 58.

Over the course of the B section (mm. 46-128) in *Sway*, the marimba part creates a rhythmic and harmonic foundation by cycling through the [w,x,y,z] pattern six times. Meanwhile, the four melodic instruments develop gradually from simple sustained harmonic gestures to more complex linear counterpoint. A significant feature of these contrapuntal passages that begin in m. 73 is the descending stepwise line. It is important to note that this is the one feature of the piece that employs pitch content not derived from Crawford's row. In mm. 73-75, the flute introduces the descending scale motive by use of a passing tone on 'g' in between the 'a' from trichord 'x1' and the 'f' from trichhord 'y1.' In mm. 77-79, the clarinet echoes this three-note falling gesture in a rhythmically expanded form, as does the cello in mm. 80-82. The gesture is extended to become a four-note descent in the flute at mm. 82-85 and again in the violin at mm. 85-88. These descending lines include a mixture of major and minor seconds in a way that suggests diatonic harmony. The rhythmic relationships between the melodic lines and their coinciding harmonic changes also evoke the suspensions and anticipations of tonal counterpoint. Thus the textural layer found in the winds and strings in mm. 73-124 is influenced

more by sixteenth and seventeenth-century contrapuntal techniques than by the "dissonant counterpoint"[17] of Ruth Crawford's generation.

As a treble viol player, I have enjoyed many hours of reading and performing the works of seventeenth-century composers of English consort music such as Thomas Lupo, Giovanni Coperario, and William Lawes. While *Sway* as a whole is most pervasively influenced by the ideas and practices of early twentieth-century modernists like Ruth Crawford, this very significant portion of the B section is much more evocative of the English consort music with which I am so familiar. Unlike the use of Crawford sources, however, the counterpoint of descending-lines was employed not to evoke or pay special homage to a particular composer or style, but simply to fulfill the demands of the extra-musical idea of "swaying" as a perpetually falling motion. A lack of cadences resulting from the frequent elision of melodic phrases is a characteristic feature of much seventeenth-century viol consort music. This section of the piece consequently supports the guiding concept of "swaying" as an endless descent by modeling the perpetually moving counterpoint of an historical idiom.

Bidirectionality in *Sway*

In movement IV of her String Quartet 1931, Ruth Crawford divides the ensemble into two subgroups so that the first violin always functions as "voice 1" and the second violin, viola, and cello double each other in octaves, forming "voice 2." Throughout the work, the two voices undergo independent but related processes. That is to say that while the pitch content and phrase lengths of "voice 1" are determined by an additive process followed by a subtractive one, the pitch content and phrase lengths of "voice 2" are determined by a subtractive followed by an

[17] Charles Louis Seeger, "On Dissonant Counterpoint." *Modern Music* 7, No. 4 (1930). 25.

additive process. The beginning, ending, and turning point of both processes helps to articulate the symmetrical form of the movement.[18]

In *Sway*, I similarly divide the ensemble into two subgroups so that they may reflect the interaction between the lower and upper body during the course of a swaying motion: the role of the "lower" subgroup is to initiate movement while the "upper" subgroup follows in response. Throughout the work, the piano and marimba function as the lower body by providing a harmonic foundation and initiating harmonic changes. The winds and strings function like the upper body, their harmonic changes always lagging slightly behind changes in the "lower" instruments. The resulting texture can be found in the opening of the piece, where the piano performs very disjunct rhapsodic lead-ins (taken from fragments of Crawford's row) that end with the arpeggiation of the next trichord (in [z,y,x,w] order). It is only after the piano, functioning as the "lower" subgroup, has completed its motion to the next trichord that the winds and strings, functioning as the "upper" subgroup, can also make a harmonic change. In m.2, for example, the piano completes trichord 'z^2' on the second beat while the "upper" voices do not complete their first trichord, 'w^2' until the last triplet-eighth of beat three. The piano arrives on trichord 'y^2' on the third quarter-note triplet of m. 6. The upper voices complete their motion to 'x^2' on the last eighth-note of the same measure (Fig. 13). While there is a disruption in this "leading and following" pattern of harmonic motion during mm. 11-12, the two instrumental subgroups resume and continue to carry out their prescribed roles from m. 13 until the end of the first A section at m. 45.

The division of the ensemble into two subgroups also allows for a harmonic scheme that reflects how the lower and upper parts of a swaying body sometimes move in opposite

[18] Mark D. Nelson "In Pursuit of Charles Seeger's Heterophonic Ideal: Three Palindromic Works by Ruth Crawford." *The Musical Quarterly*, 72, No. 4 (1986): 465.

directions. During the A sections of the piece, the "upper" parts travel through the harmonic pattern in reverse order from the "lower" parts (mostly the piano); in the B section, however, the "upper" and "lower" subgroups move concurrently through the harmony in [w,x,y,z] order. In this way, the A sections represent those moments of a swaying motion when the upper and lower portions of the body are moving in opposite directions while the B section reflects those moments when the upper body dutifully follows the lower. The arrows in Figure 13 illustrate the harmonic relationship between the two instrumental subgroups. As in Crawford's work, the relationship between the processes being applied to each subgroup helps to articulate the form of *Sway*.

The musical element that most audibly reflects the bidirectional quality of "swaying" is the use of space. Spatial effects are most prominently featured during the A sections of the work. In these sections, dynamic swells are dovetailed between instruments placed on opposite sides of the stage in order to create the effect of a single sound that travels seamlessly from one side of the performance space to another. A similar effect is featured in the third movement of Crawford's *String Quartet* in which the composer uses what she referred to as "dissonant dynamics" to create a single melodic line that passes from part to part.[19]

Sway combines contrapuntal, or "dissonant," dynamics with the stereophonic placement of instruments in order to create an acoustic version of the technique known as "panning" in electro-acoustic music. While quite idiomatic in an electronic setting, creating this "panning" effect in an instrumental chamber work raises issues of notation and performance that needed to be addressed in the score. I first altered the standard score order by grouping the melodic instruments according to their spatial placement rather than their instrumental families.

[19] Judith Tick, *Ruth Crawford Seeger: A Composer's Search for American Music.* (New York: Oxford University Press, 1997), 358.

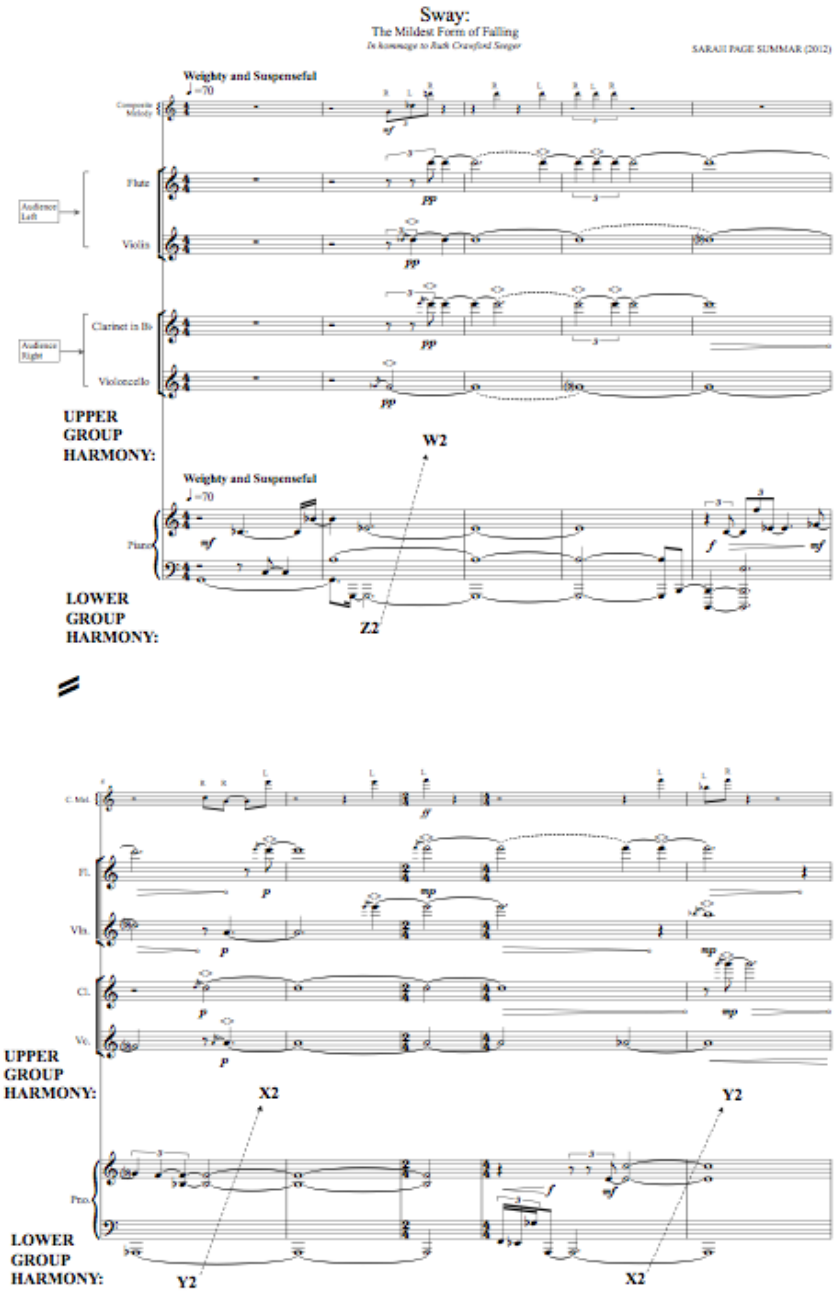


Figure 13. “Leading and following” relationship of harmonic motion in “lower” and “upper” instrumental subgroups as demonstrated in mm. 1-10.

Brackets on the first page of the score indicate the placement of the flute and violin audience left and the clarinet and cello audience right. Another notational concern was my desire to have the peaks of the dynamic swells occur with rhythmic precision so that the composite melody would

sound with rhythmic accuracy and clarity. To this end, I created a special articulation marking, < >, referred to in the performance notes as a "hairpin accent." This marking indicates that the performer is to perform a rapid crescendo followed by a decrescendo so that the dynamic level peaks at the start of the note over which the "hairpin accent" appears.

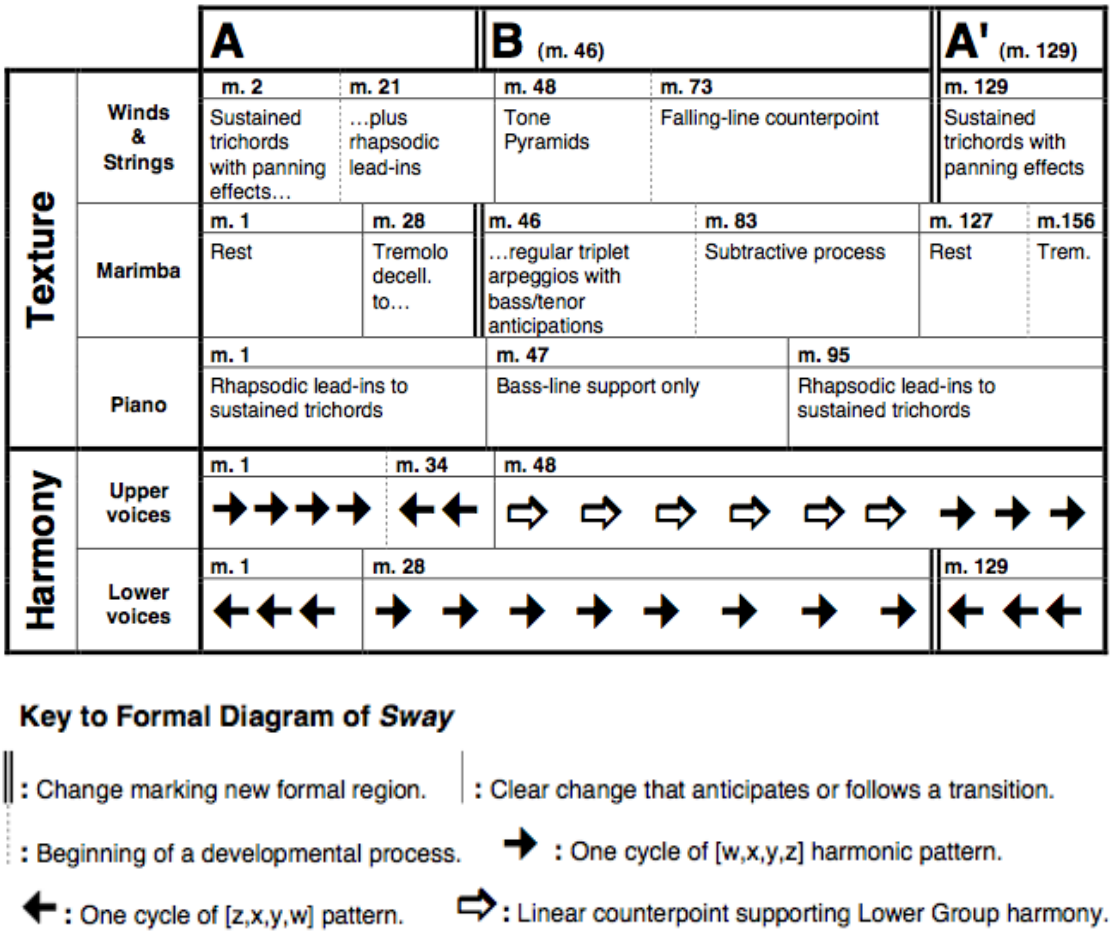


Figure 14. Formal diagram of *Sway*.

While the hairpin accents may indicate to performers how to time their own dynamic changes, they do not communicate to individual performers how their part fits into the composite melody that characterizes the A sections of the piece. For that purpose, a reduced staff is provided in the score, as well as in the flute, violin, clarinet, and cello parts. On this "composite

melody" staff, the letter 'R' above a note indicates a hairpin accent in one of the instruments placed audience right and the letter 'L' indicates a hairpin accent in one of the instruments placed audience left.

During rehearsals for the April 2012 premiere of *Sway*, the composite melody staff helped to compensate for some of the difficulties that tend to arise in the performance of spatial music. Normally, when placed in close proximity, performers can hear the parts of the other ensemble members almost as well as they hear their own. This allows them to easily adjust dynamics, articulation, intonation, and tone color to create the desired ensemble sound. It also makes it possible for individual players to learn aural cues from the other parts very easily. In an antiphonal set-up such as the one used in *Sway*, however, distance skews each performer's perception of sounds coming from the other instruments, making it difficult to learn the other parts or to judge issues of balance and blend. The composite melody staff saves rehearsal time by showing each performer what they need to know about the other parts without cluttering the page with excessive cues. In an effort to further facilitate performance of the antiphonal effects in *Sway*, the performance notes also recommend that the work be conducted.

Another performance challenge presented in the A sections of *Sway* is the use of prolonged successions of long sustained tones, often at a very soft dynamic. This is of particular concern to the wind players who require frequent opportunities to breathe. Dynamic control also becomes increasingly difficult on wind instruments as the performer tires. In order to assist the performers in coping with these challenges, I employed dotted ties in place of solid ties to indicate preferred moments to "sneak" a breath or bow change if needed (see Fig. 15). These dotted ties are strategically placed to align with rhythmic activity in another louder voice so as to disguise any subtle articulation that may otherwise have been detectable.

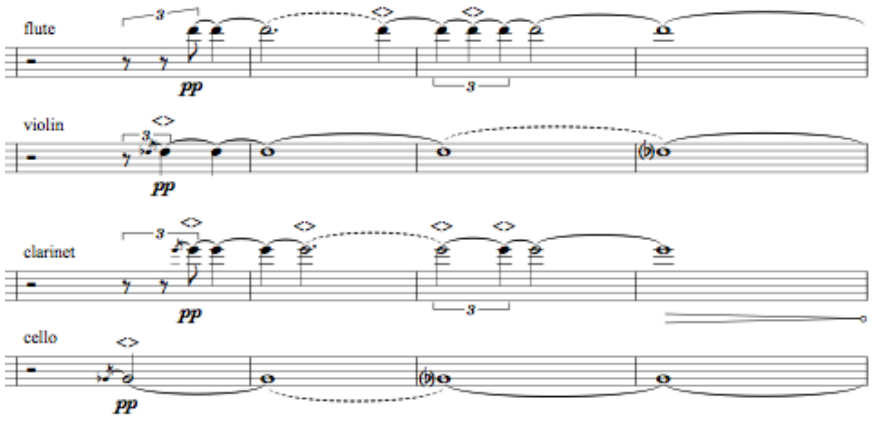


Figure 15. Dotted ties allowing for subtle breaths and bow changes.

Compositionally, several factors had to be taken into account in order to make the "panning" effects successful. I had previously used a similar effect in *Variations on a Theme*, a work for dance in which an accordion and an amplified violin were situated in opposite corners of the dance space so that they could "pass" sounds back and forth in a way that complimented movement choreographed along a diagonal. In creating *Variations*, I learned that while true "panning" can only be performed in an electronic setting, one can approximate the effect in an acoustic setting by making the sounds from the right and left sources as similar as possible in timbre and pitch. I also learned that instruments that generally have very disparate timbres and capabilities can sometimes blend quite well within a particular portion of their shared range, and that "non vibrato" indications can help create an effective timbral blend between strings and aerophones.

In creating *Sway*, I first considered very carefully my options regarding the spatial arrangement of the melodic instruments. I chose to separate the strings from one another and the woodwinds from one another so as to have similar timbral capabilities located on either side of the performance space. The violin and flute were placed audience left to accommodate the fact that the sound of both of these instruments is directed to the performer's right. Placing the

clarinet opposite both the violin and flute was appealing because the clarinet not only shares ranges with both of the other treble instruments but it also has the greatest capacity to blend with contrasting timbres. This allows the clarinet to effectively share "panning" gestures with both the flute and violin.

The first "panning" gesture occurs in mm. 2-4, where the concert 'd' accented in the clarinet (audience right) on the last triplet eighth of beat four dies away and then blossoms again on the second beat of m. 3. By the last beat of the same measure, the dynamic weight of that pitch has shifted to the flute, placed at audience left. Hairpin accents alternately in the clarinet and flute parts are used again in m. 4 to ping-pong dynamic emphasis of the 'd' in the rhythm of a quarter-note triplet. While slower stereophonic figures, as found in mm. 2-3, have more of an antiphonal than a panoramic effect, rapid alternations of emphasis, as found in m. 4, more closely approximate the effect of a single sound source moving through space (see to Fig. 15). The mixture of slower and faster stereophonic gestures is maintained throughout the A and A' sections evoking the irregular undulations of a tree in the wind.

Fluidity in *Sway*

In the simplest terms, "swaying" may be described as a motion from side to side. The alternation between two opposing points manifests structurally in *Sway* as an ABA' form. But what makes swaying an interesting motion to model is the dynamic way in which a swaying body travels between these two opposing points. Different parts of the body depart and arrive at different times, leading or following, triggering or resisting change. In *Sway*, various musical elements reach points of transition at different times, in effect simulating the dynamic fluidity of a swaying motion. Figure 14 illustrates how formal transitions are staggered between various

elements in the overall texture of the piece. The next portion of this analysis will examine more closely the two multi-layered transitions that create smooth connections between the work's contrasting A and B sections.

As Figure 15 shows, *Sway* opens with a texture that is defined by the alternation of rhapsodic melodic figures in the piano and sustained trichords with "panning" effects in the winds and strings. The first significant development in this texture occurs at m. 21 where the upper voices begin to incorporate rhapsodic lead-ins similar to those that were previously presented only in the piano. This is best described as a development of the initial A texture rather than a development towards the upcoming B texture because it does not introduce an entirely new element, but instead uses instrumentation to develop a previously established feature. The first development towards the B texture in fact occurs at m. 28 with the entrance of the marimba. Harmonically, the marimba is simply supporting the sustain of the piano by entering *de niente* at m. 28 and performing rolls primarily at a *piano* dynamic until the *mezzo piano* at m. 40. In mm. 40-45, feathered beams are used to instruct the percussionist to gradually transform the rolls into the steady ascending triplet arpeggios that form the harmonic and temporal foundation for the work's B section (Fig. 16).

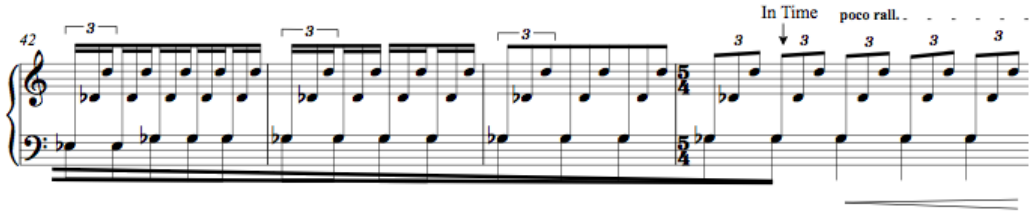


Figure 16. Feathered beams transitioning to triplet figures in marimba, mm. 42-45.

Another, perhaps more subtle, change that occurs at m. 28 is a reversal of the trichord pattern order in the harmonic instruments. Here the piano, which had previously been cycling through the pattern in [z,y,x,w] order, pivots on trichord W3 and proceeds in prime order. At the true start

of section B (m.46), there is consequently no need for a harmonic reversal to coincide with the changing texture and rhythmic vocabulary of the music.

The A' section of *Sway* is similarly preceded by a series of single-layer developments. At m. 73, the primarily harmonic gestures of the upper voices are developed into the falling-line counterpoint discussed earlier in this analysis. While this feature of the B section in no way anticipates the A' section of the work, it does in effect propel the music forward. At m. 83, the steady triplet arpeggios in the marimba part are subjected to a subtractive process by which notes within the repeated rhythmic pattern are gradually replaced with rests. By m. 124, the marimba has returned to its former role of providing harmonic support to the piano in the form of sustained rolls in octaves on the bass note. The marimba is able to take this subordinate role because the piano, as of m. 95, has endeavored to reclaim the foreground by re-introducing the rhapsodic lead-ins that initiated the piece.

The greatest compositional challenge presented by the second transition at m. 129 is the need to eliminate the perception of the quarter-note pulse that dominates the B section. Removing the marimba part by a very gradual subtractive process was one way to subvert the steady pulse. Re-introducing the piano's rhapsodic melodic figures at m. 95 (34 measures in advance of the actual A' section) also enable a gradual return to the more free-flowing rhythmic vocabulary of the work's opening passages. Another essential feature to this transition is the use of temporal fluctuations to obscure the beat. These take the form of *rallentandi* at mm. 122-124 and 127-128, a fermata at m. 125, and tempo changes in m. 126, m. 129, and m. 132. It is only at m. 129, with the return of the panning effects in the melodic instruments, that a return to the A material is completely apparent. At m. 156, the marimba re-enters the texture with harmonically supportive rolls suggesting the possibility of transitioning again to the B material. In this way,

the ending of *Sway* features the full coloristic spectrum of the ensemble while suggesting once more the fluid continuity of a swaying motion.

Chapter IV

Critical Analysis of *Swerve* (*for Chamber Ensemble*)

"Swerving" as a Compositional Model

Unlike a fidget or a sway, a swerve is not a motion contained within the personal space of the individual performing it. A swerve is, rather, a distinct trajectory of motion along a traveler's otherwise direct course. It is a diversion from an established norm soon followed by a return to that norm. The preceding chapter of this analysis discusses how *Sway* is a model of its namesake on both a formal and local level. *Swerve* was similarly constructed to exhibit swerve-like characteristics in both its large- and small-scale features.

As with the *Fidget* model, the "swerve" concept also prompted me to consider the circumstances under which a person experiences such a motion and the psychological effects of those circumstances. There are, consequently, portions of *Swerve* that use mixed meter to evoke the irregular yet graceful course of a runner or a cyclist on a crowded walkway, a section that suggests the quiet danger of highway travel, and a structural turning point (at m.175) that is meant to reflect the stretching of our perception of time when we sense an impending threat, like a high-speed collision. It is important to note that *Swerve* (*For Chamber Ensemble*) was composed after *Swerve* (*For Orchestra*), which was completed in 2010. The structural design and much of the material from the orchestral version was maintained in the chamber version, giving the work a somewhat "orchestral" sound. This analysis will address some of the symphonic characteristics that appear in *Swerve* (*For Chamber Ensemble*) as a result of the work's orchestral origins.

The "Swerve" as a Structural Design

The structure of *Swerve* reflects an understanding of a "swerve" as a diversion from, and subsequent return to, a prescribed path. The diagram below (Fig. 17) outlines the ABCA' structure of the piece and illustrates that the trajectory of a swerve is reflected in some of the small-scale features of the work, such as the irregular patterns of accent featured in both the A and B sections. That same trajectory manifests most significantly, however, as a radical contrast in musical materials and processes, occurring in section C (mm. 175-216). The following analysis will demonstrate how the "swerve" concept is reflected in the structural design of the work by exploring the rhythmic, textural and melodic features that distinguish each of its parts.

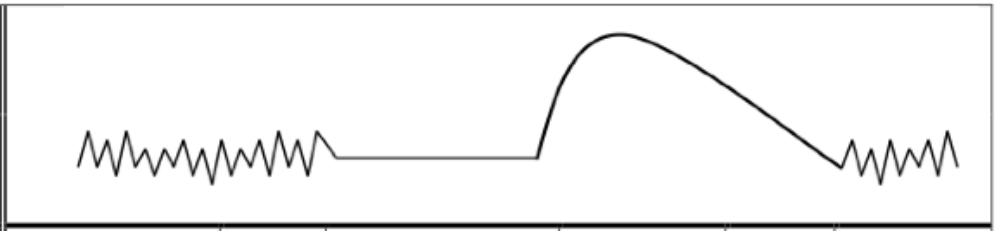
"Expanded" Temporal Plane: / **"Real" Temporal Plane:**						
Section:	**A**	**Trans**	**B**	**C**	**Trans**	**A'**
mm.#'s:	1-91	92-99	100-174	175-216	217-232	233-265
Tempo: Meter:	♩ = 168, ♩. = 112 mixed meters	Same 8/8 +4/4	♩ = 112 4/4 with 7/9/8 beat groups	♩ = 66 4/4 with ametric feel	♩ = 165 clear 4/4 meter	♩ = 165, ♩. = 110 mixed meters
Rhythm:	Irregularly accented	Preps B	Regular pulse; Previous accent patterns as ostinato	Beats obscured with ties and tuplets	Regular pulse returns	Mixed meter patterns from A section
Pitch:	[0,1,4] based pitch content featuring "Leap" motive	→	Modal moving to G auxiliary diminished scale with some [0,1,4] figurations	Based entirely on [0,1,4] trichord.	A minor sonorities to G minor →	[0,1,4] themes and motives from A section
Texture:	Melodically driven, mostly two-voice counterpoint or homophonic	Tutti that prepares new tempo	Quassi-minimalistic layering of ostinato patterns with allusions to metric patterns from A	3 elements: Conjunct bass line, disjunct "sweeps," & twitterings	Repeated 8th note on 'a.'	Collage of material from first A section.

Figure 17. Formal diagram of *Swerve*.

As Chapter II of this analysis explains, *Fidget* uses a consistent vocabulary of multiple motives to prevent the modeling of an inherently varied concept from yielding a disjointed and incoherent musical work. The radical contrast suggested by the "swerve" concept similarly

demands a compositional strategy that ensures some element of continuity throughout the piece. Two features, melodic presentations of the [0,1,4] trichord, and a 2+2+3 metric pattern, help to achieve coherency throughout *Swerve* despite the work's extreme contrasts. Both of these elements are prominently featured throughout the initial A section (mm. 1-91) of *Swerve* (see Fig. 17 for formal overview). A thorough analysis of the A section will therefore prepare the way for an understanding of the structural relationships that hold the work together.

Section A of *Swerve*

Swerve opens with a melody in the woodwinds that suggests the zig-zagging path of a fleet-footed messenger through a crowded street. Swift but uneven steps take musical form as a mixture of quarter-note and dotted quarter-note beats (mixed meter). Large ascending leaps in the melodic line presented by the clarinet in m. 1 and passed to the flute in m. 2 reflect the tension of a body that periodically finds itself dangerously off balance. As the first two measures demonstrate, the texture of this opening section is basically homophonic, yet the instrumentation of the foreground material tends to change frequently and unpredictably.

Although the A section of *Swerve* is not without melodic motives, it also features metric patterns that themselves function much as motives typically do in a musical work. Throughout the opening and in later portions of the work, the most significant metric "motive" is 7/8 meter subdivided into a 2+2+3 pattern of accent (first found in m. 1). Phrases throughout section A tend to begin with this pattern, as demonstrated in mm. 1, 22, 26, 39, 43, and 47. In mm. 69-85, the 2+2+3 pattern of accent occurs on repeated eighth notes in the violin and piano, forming a metric counterpoint to the square rhythms of the 4/4 theme found in the woodwinds and cello (Fig. 18).

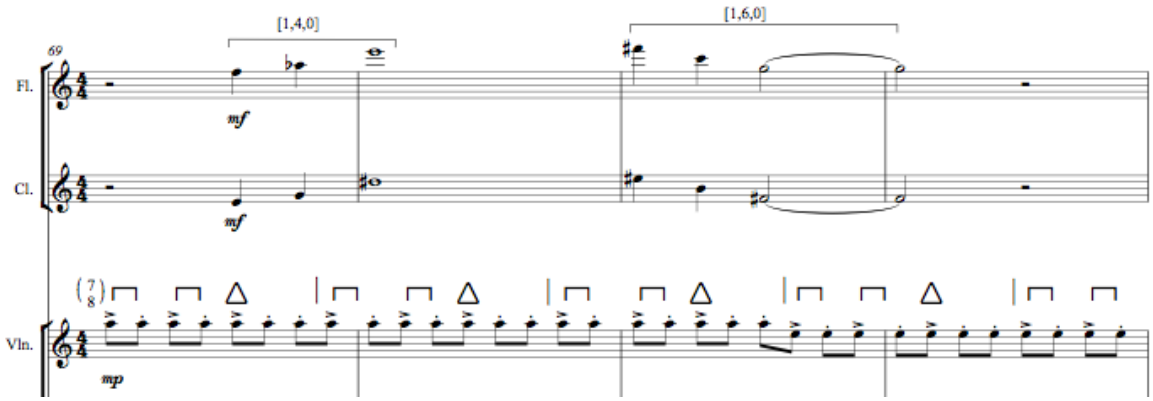


Figure 18. Accents forming 2+2+3 pattern in violin as counterpoint to 4/4 melody in winds in mm. 69-72.

Another significant instance of metric counterpoint occurs in the fourth measure of the piece, where the melodic line featured in the violin and piano fits neatly into the 4/4 time signature, while the bass line that accompanies it (in the cello and piano) forms a 3+3+2 accent pattern. This introduces early in the piece the significance of the relationship between 4/4 time subdivided 2+2+2+2 and 8/8 time subdivided 3+3+2. That relationship is key to the metric transition found in mm. 92-100. In this passage, an alternation between 8/8 and 4/4 first establishes the dotted quarter note as one of two beat values in regular use. This prepares the two 12/8 bars (subdivided into 3+3+3+3) that establish MM 112 as the new tempo at m. 100. (Fig. 19).

As was previously mentioned, the [0,1,4] trichord serves both as the primary source of pitch material found within the A and A' sections of *Swerve* and as a unifying element throughout the entire work. In m. 5, the trichord appears in the flute in a form that will herein be referred to as the "leap motive" (Fig. 20). Here the pitch class set appears in [1,4,0] order, manifesting as an ascending minor third followed by an ascending minor thirteenth. The same motive is varied slightly in mm. 31-32 where it appears in [0,4,1] order but with the consistently ascending contour maintained.

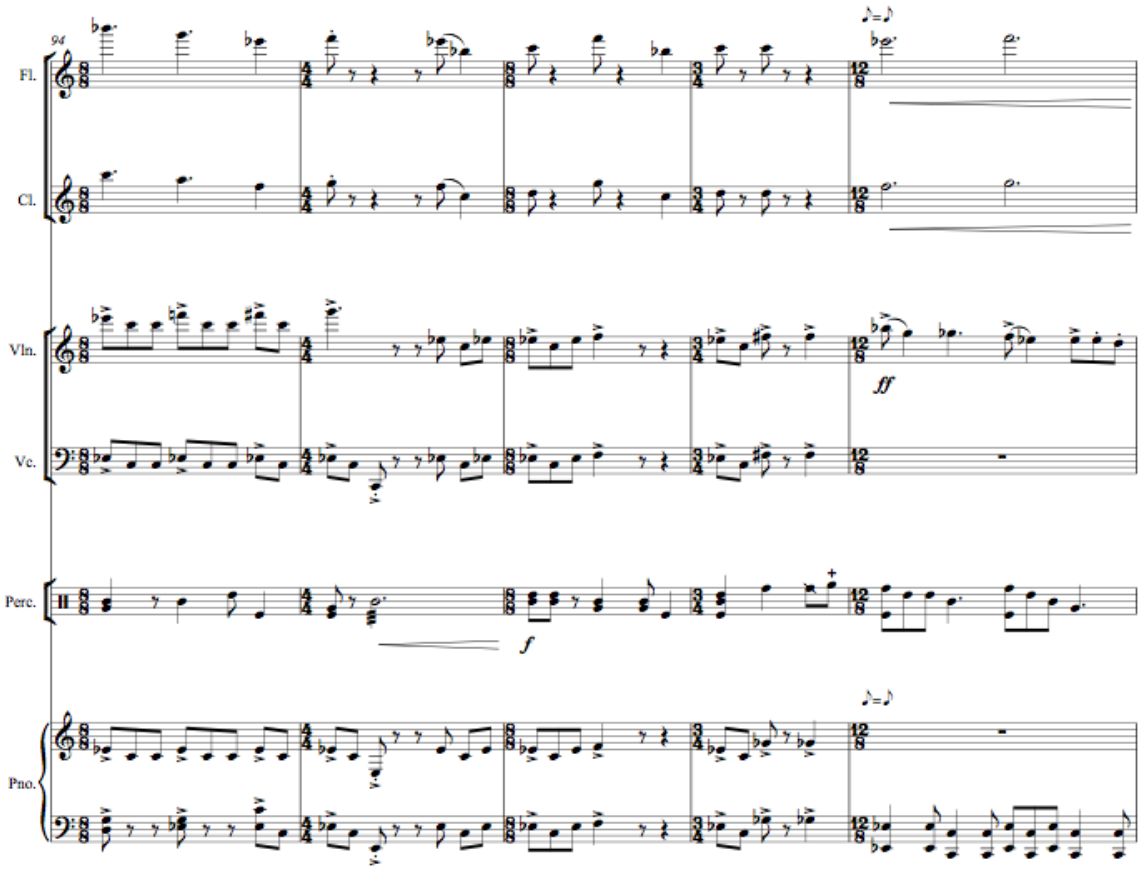


Figure 19. Alternation of 4/4 and 8/8 in preparation for 12/8 at m. 98.

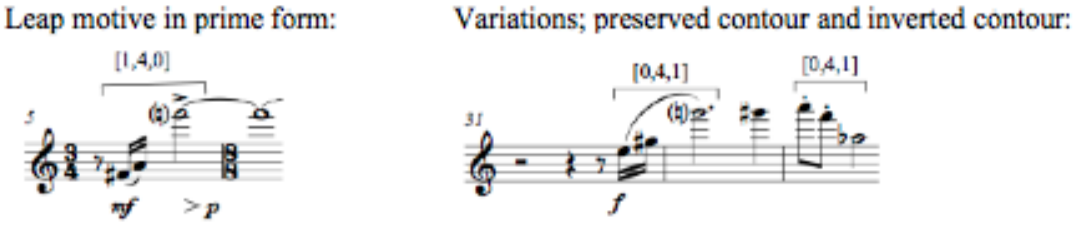


Figure 20. "Leap motive" as found in m. 5 and mm. 31-32.

It is worth noting too that the contour and interval content of the “leap motive” also initiates the first thematic statement of the work (found in the clarinet part in m. 1). The “leap

motive" is used again to generate thematic material in mm. 69-84 in the woodwinds and cello (Fig. 21).

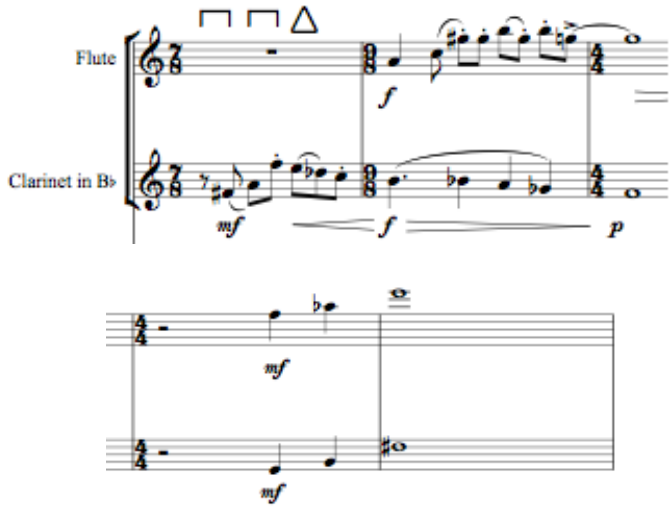


Figure 21: Themes featuring "leap motive" at m. 1 and m. 69.

As the pitch class set analysis of the first theme of *Swerve* suggests, the [0,1,4] trichord generates the pitch content of both the primary motives and the secondary melodic material within the A section. As was discussed in the previous chapter, *Sway* employs a twelve-tone collection to generate harmonic content that in some ways resembles tonal harmony. In *Swerve* the [0,1,4] pitch class set is similarly used to generate linear content, much as scales and arpeggios provide the bulk of melodic material found in a tonal work. That is to say that as scales and triads form the melodic substance of tonal music, the [0,1,4] trichord forms the melodic substance of *Swerve*. It can consequently be found prominently placed at the head of a thematic statement (as shown in Fig. 21) or subtly woven into the connective tissue that helps to form larger melodic structures like the transitional phrase found in the marimba in mm. 12-15

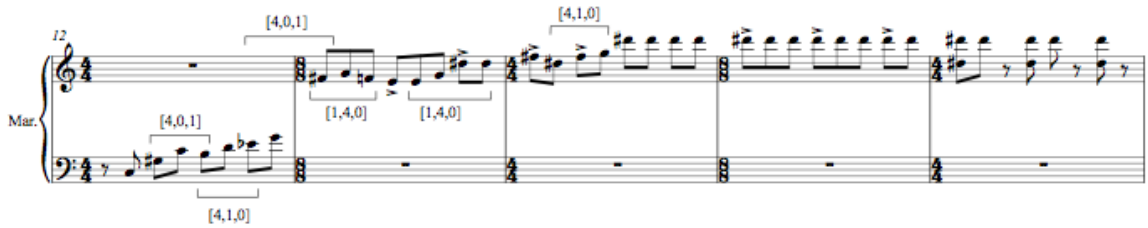


Figure 22. Marimba part in mm. 12-15 featuring [0,1,4] trichords as labeled.

The texture of the A section is melodically driven and rarely composed of more than two distinct voices. In the opening twelve bars, for example, a rhythmically sparse, staccato bass line accompanies the twists and turns of the main melody, presented by the woodwinds and violin. The percussionist's role within the texture is threefold: to present the melodic foreground (as in the marimba passages at mm. 12-17), to provide melodic support (as in mm. 31-35 where the marimba doubles the flute at the unison and the octave), and to support metric or dynamic accents found in the other parts (as in the wood block passages from mm. 3-8). At m. 7, the woodblock part simultaneously provides the notated 4/4 pulse (in the low block) and a 3+3+2 pattern of accent in the high blocks. This rhythmic gesture anticipates the polymetric feel created in m. 8 by a 3+3+2 bass rhythm (in the piano) that occurs despite the 4/4 feel of the foreground material (in the winds). Throughout the A and B sections of *Swerve*, the percussion part features passages such as this to reinforce the layering of multiple metric patterns within the overall texture.

Another significant characteristic of the percussion part for *Swerve* is its wide coloristic range accentuated by frequent timbral changes. In order to facilitate such changes, the percussion set-up includes a drum kit equipped with a kick drum, three tom-toms, high-hat cymbals, and a suspended cymbal. The decision to incorporate a drum kit into *Swerve* (*For Chamber Ensemble)*

was primarily a product of the orchestral origins of the work. *Swerve* (*For Orchestra*) was initially conceived for a percussion section that included a timpanist and three additional players.

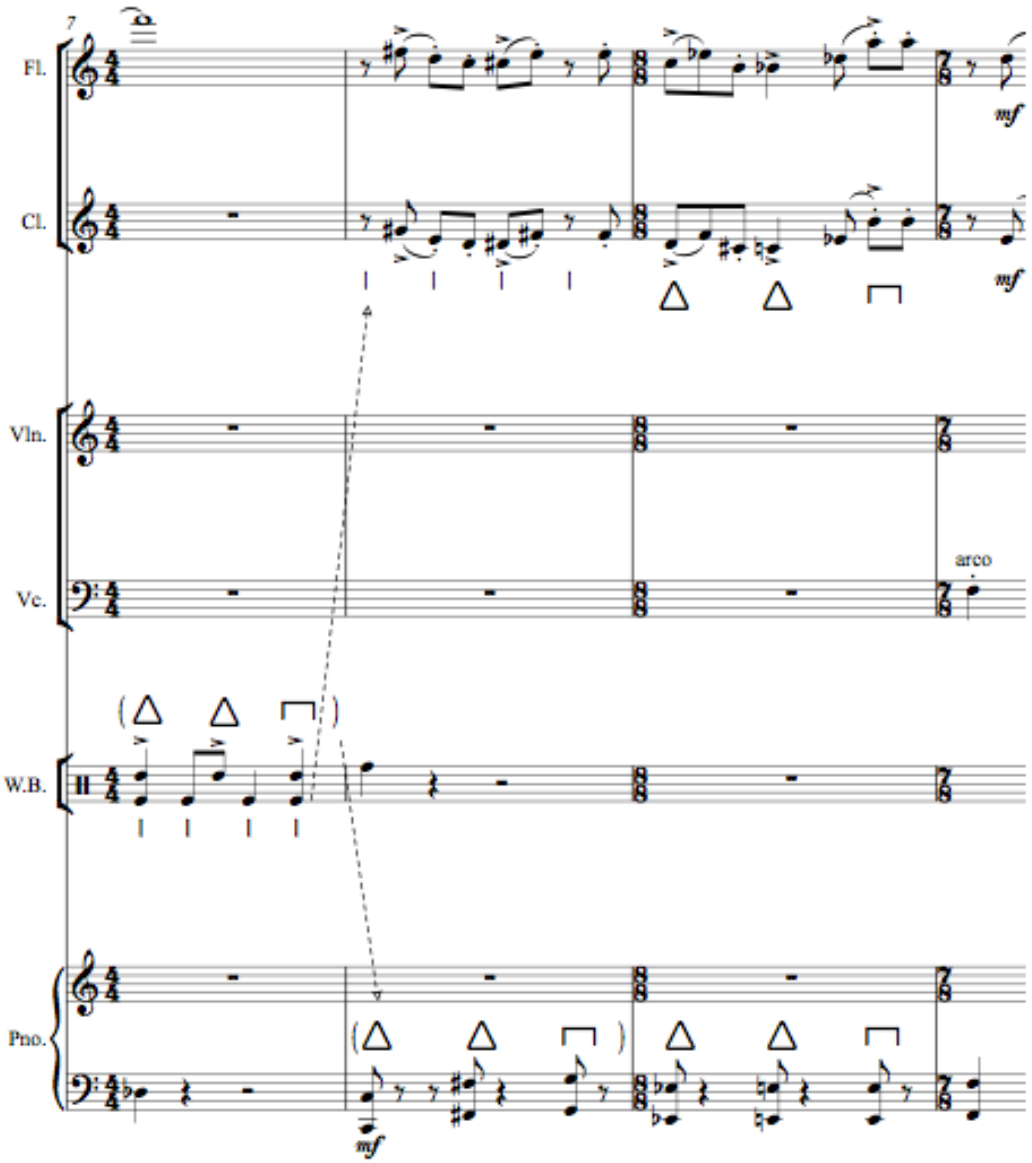


Figure 23. Rhythmic analysis of mm. 7-9.

Much of the material for the A sections of *Swerve* (*For Chamber Ensemble*) was drawn directly from the orchestral version. The drum kit offered the means to reasonably transcribe or re-invent for a single player some of the most percussively active portions of the work. The drum

kit passage in mm. 81-87 demonstrates the wide dynamic and coloristic range that this set-up affords (Fig. 24).

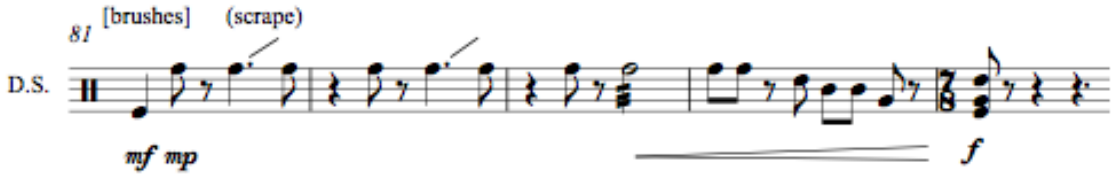


Figure 24. Drum kit passage in mm. 81-87.

The fact that the A section of *Swerve* was initially composed for full orchestra is as evident in the piano, strings and winds as it is in the percussion. In an orchestral setting, dynamic power is easily achieved without the need to compromise textural detail. The significantly smaller forces of a Pierrot ensemble, however, are limited in their ability to simultaneously convey both dynamic strength and contrapuntal richness. In re-composing *Swerve* for a smaller ensemble, I employed a strategy that would preserve the most essential layers of the texture. As a result of this approach, I was often able to use some of the instruments to provide support at the unison or octave in order to reproduce the dynamic range and resonance so naturally achieved by a full orchestra. This effect is most readily apparent where the doublings occur within a single instrument family, as in the winds in mm. 8-12 and the strings in mm. 18-25. In these instances, the doublings recall classic choir-based orchestration techniques. Initiating one such passage, the piano presents the opening 7/8 melody in octaves at m. 85. In m. 87 the strings (in octaves) forcefully reply to the piano's statement. The winds and piano, all doubled at the unison, take the foreground at m. 89-91 with a three-bar phrase that rises and then cascades into a dramatic tutti at m. 92. (Fig. 25)

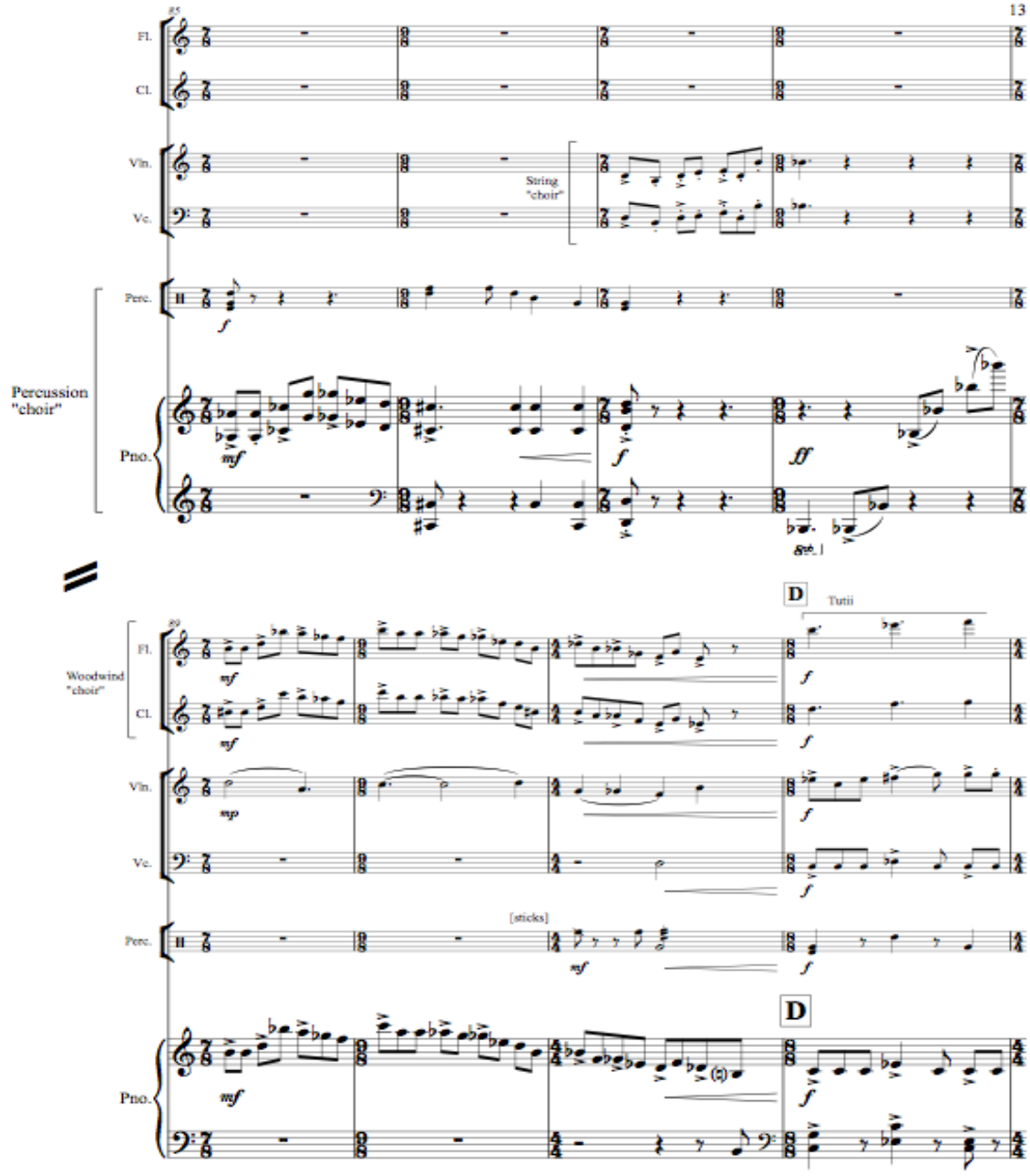


Figure 25. Choir-based doublings in mm. 85-92.

Section B of *Swerve*

In keeping with the concept of a swerve as a *sudden* change of course, the transition found in mm. 92-99 anticipates only the tempo of the B section by first establishing the dotted quarter as the new beat (m. 98) and then re-defining that beat as the new quarter note (in m. 100). The B section (beginning in m. 100), with its newly modal tonality, duple rhythms, and melodic repetition otherwise constitutes an unexpected stylistic turn. The texture of the B section is also very different from that of the A section, consisting of a polymetric layering of ostinatos at first reminiscent of American post-minimalism (as in John Adams' recent work), later resembling more closely the off-kilter folk-band sound of early Stravinsky (as in the "March" from his *L'Histoire du Soldat*.)

The B section of *Swerve* is meant to evoke the sensation of automobile travel at highway speeds, in which we move very swiftly yet have a feeling of stability created by the self-containment of the vehicle's cabin and the constancy of the body's driving position. When driving, we are vaguely aware of passing or being passed by other vehicles in neighboring lanes, but we maintain our speed and continue on course until circumstances absolutely demand otherwise. Traffic density may increase very gradually, and yet the point at which it becomes overwhelming always seems very sudden.

The first two measures of *Swerve*'s B section (mm. 100-101) function primarily to establish the newly duple beat at a tempo of MM 112. In the measures that follow, the cello presents the first iteration of a rhythmic ostinato derived from the mixed-meter patterns found in the A section of the work. While the parts of all the instruments are notated in 4/4 meter throughout the entire B section, the surface rhythms and pattern of dynamic accents in the cello part combine in m. 102-104, to form groupings of 7 (2+2+3), 9 (3+2+2+2) and 8 (3+3+2) eighth

notes. This 7/9/8 bass rhythm continues to be present in one form or another throughout the B section.

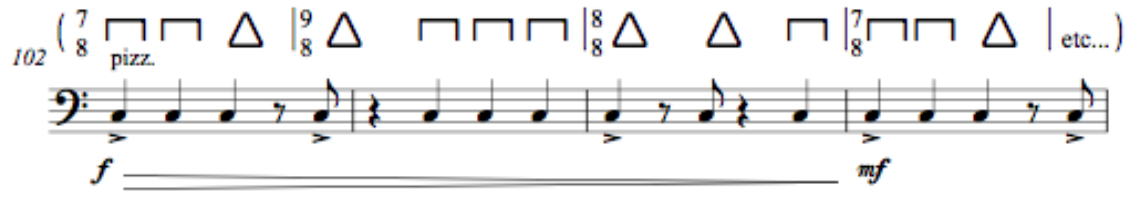


Figure 26. Rhythmic analysis of cello ostinato beginning in m. 102.

The first development in the bass ostinato comes at m. 131 where additional notes fill in the rests between articulations of the ostinato rhythm forming a second melodic voice. (Fig. 27). This second melodic line is doubled by the clarinet at the octave. The ostinato pattern is broken for one measure at m. 132 in order to accommodate the newly introduced melodic line. The ostinato resumes at 133 for two more iterations in the cello before it is passed to the piano in m. 140.

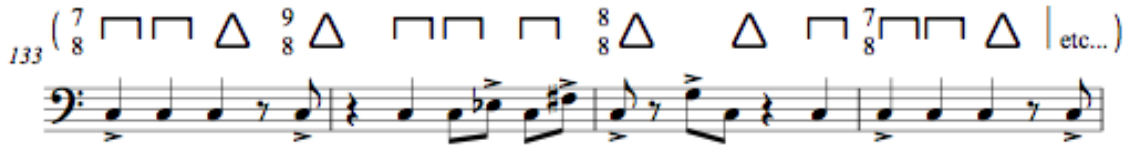


Figure 27. Cello ostinato with added melodic features.

Until this moment, the 7/9/8 pattern has been articulated almost entirely on a persistent ‘c’ pedal point. At m. 142, however, this previously static layer of the texture begins to drive the music harmonically towards a climactic arrival on G minor in m. 154.

The dynamically and harmonically forceful arrival on G minor at m. 154 also features the most significant development of the bass ostinato to occur within the B section. Here the rhythm appears once more in the cello, but now in diminution by a ratio of 1:2. In other words, it is now sixteenth notes, not eighth notes, that are grouped in a 7/9/8 rhythm. The new version of the pattern is interrupted at the end of m. 154 and then, beginning in m. 155, is stated several times in full. Before the end of the B section of *Swerve*, the persistent bass ostinato returns to its original proportions (see cello and piano parts in mm. 163-174).

Having now traced the progress of the bass ostinato featured in the B section of *Swerve*, this rhythmic and harmonic foundation can now serve as a reference point for understanding the metric implications of other layers of the texture. At m. 107, for example, the violin enters with the 1:2 diminution of the 7/9/8 rhythmic pattern, performing it *col legno battuto* on open strings and natural harmonics. In addition to being reduced to half the duration of the same pattern occurring simultaneously in the cello, the violin ostinato is also misaligned from the bass pattern so that the beginnings of the two patterns never coincide. The resulting counterpoint of phrase entrances gives a more dynamic quality to the interaction of these two ostinatos (Fig. 28). That interaction becomes even more complex at m. 115, where the violin ostinato is truncated to now span only 5 beats. This development not only eliminates the clear 2:1 ratio between the two ostinato rhythms, but it also subtly adds a sense of urgency to the overall texture.

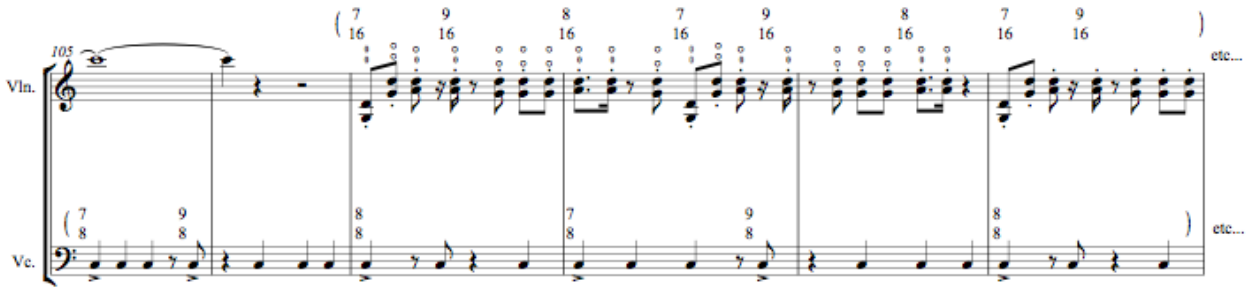


Figure 28. Rhythmic analysis of strings in mm. 105-110.

Throughout the B section, the remaining voices, though not subject to the literal repetition that defines an ostinato, do have ostinato-like qualities that allow the section to come across as a quassi-minimalistic polyphony rather than as a distinct and consistent foreground accompanied by an ostinato background. The flute and clarinet (beginning in m. 106), usually doubled at the perfect fourth or minor third, periodically introduce tones sustained for three to seven beats. These entrances are not timed according to any predetermined calculations, but their placement does evade alignment with the primary accents found in the previously discussed ostinato patterns (in the cello, violin, and piano parts). In this way, these rhythmically and melodically simple figures in the woodwinds mimic a phasing effect by adding a third layer of material whose phrase structure contradicts that of the existing two voices (the cello and violin as of m. 107).

The dynamic and rhythmic intensity of the B section increases with the addition of three more layers of activity to the overall texture in mm. 109-130. In the woodblocks, a three-bar ostinato is introduced first in fragments (starting in m. 109) then gradually resembling more and more closely the complete statement, first found in mm. 119-121. The piano meanwhile provides the remaining two elements to the six-layer texture: periodic upper register melodic statements in plaintive triplet-eighth rhythms, and more aggressive sounding disjunct figures (based on the [0,1,4] trichord) primarily in the lower register. Assigning two layers of activity to the piano was one way in which an effect originally conceived for orchestra was adapted to a six-piece ensemble. The B section is in fact the one portion of the chamber version of *Swerve* that is constructed from material that bears little resemblance to material found in the orchestral version of the piece. What the B sections of the two versions do share is a post-minimalist texture that creates a sense of perpetual motion. In order to accommodate the narrower dynamic range and

decreased color palette of the Pierrot ensemble, however, I composed a completely new B section that would begin with quieter dynamics and a thinner texture, so as to make room for a gradual development towards the dynamic climax found in mm. 154-167.

Forceful dynamics are coupled with the work's most harmonically stable material during mm. 154-167 in order to draw both amplitude and resonance from the ensemble. The overall sound is more unified than earlier in the B section due to the consistent use of G minor sonorities and a tendency towards six-beat phrases in all of the parts. At m. 167, the dynamic levels and textural density both decrease suddenly so as to allow for a second dynamic build that prepares the fortissimo tone cluster in the piano at m. 175.

Section C of *Swerve*

As a compositional model, I found the "swerve" intriguing in part because it is used to avoid a range of mishaps, from a spilled cup of coffee to a life-threatening high-speed collision. Regarding the latter, individuals often report experiencing a radical change to their perception of time during a moment of great peril. Researchers have learned that this phenomenon is most likely the result of "a richer encoding of memory… caus[ing] a salient event to appear, retrospectively, as though it lasted longer."[20] In our reflection upon such an event, however, time itself seems to have "swerved" momentarily into another dimension. It is this perceptual experience that inspired the material found in section C, *Swerve*'s structural turning point (found in mm. 175-216). This, the third portion of the work, relates to the two preceding sections in pitch content alone, making it possible for a completely new approach to rhythm and texture to be employed. The overall sound of section C is spacious and resonant, sharply contrasting the

[20] Chess Stetson, Matthew P. Fiesta, and David M. Eagleman. "Does Time Really Slow Down During a Frightening Event?" *PLoS ONE* 2, No. 12 (2007): Internet, available from http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0001295

crisply articulated motives and metric patterns of sections A and B.

Three distinct elements comprise the texture of section C. The cello performs a slow-moving bass-line sometimes ornamented with repeated notes (as in mm. 181-182) or dynamic swells and accents (as in mm. 185-186). The piano and vibraphone parts meanwhile combine to form a series of arpeggio-like gestures that follow an indirect path upward into the instruments' highest registers. The piano and vibraphone parts are both performed with the sustain pedals fully depressed so that the natural resonance of the instruments may add depth to the ensemble sound. The natural sustain of tones articulated in the piano or vibraphone is sometimes supported by one of the melodic instruments. In m. 178-179, the first of the upwardly sweeping arpeggio gestures is composed of five notes spanning from 'g 3' in the piano to 'c-sharp 6' in the vibraphone. The last three notes of this phrase are doubled in the piccolo, clarinet, and violin, respectively, enriching the timbral spectrum and reinforcing the sustaining power of the vibraphone's upper register. In addition to sustaining the B-flat first articulated in m. 178, the piccolo also elaborates upon, and then away from, that pitch in mm. 180-181 (Fig.29).

In the absence of any textural or rhythmic similarities to the preceding A and B sections, a pervasive use of the [0,1,4] trichord creates an element of continuity into, throughout, and away from section C. This trichord is in fact the primary source of pitch material in every thread of the fabric that forms mm. 175-216, the work's most dramatic structural "swerve." Both the bass line in the cello and the upward sweeps found in the piano and vibraphone consist entirely of juxtaposed and elided [0,1,4] trichords. The two lines are, however, very different from one another in both rhythmic content and tessitura. The bass voice moves very slowly in a conjunct manner while the bell tones of the piano and vibraphone are sounded at a more rapid rate across the broadest registral space available.

A trichordal analysis of mm. 178-181 (Fig. 29) demonstrates the linear application of the [0,1,4] trichord during the compositional process. It also shows the presence of the [0,1,4] trichord within the elaborative flourishes of the piccolo, clarinet and violin parts. These permutations of the trichord resemble those found in section A in contour but possess a rhythmic irregularity that sets them apart from any previous material within the work. Indeed, the rhythms of all three layers of section C's texture obscure the 4/4 meter through the use of triplets, ties, irregular phrase lengths, and entrances that rarely align with the quarter-note beat. The figures found in the winds and violin also feature quintuplets, tremolos, and feathered beams applied to repeated note gestures that, as shown below, ultimately perform an important transitional function.

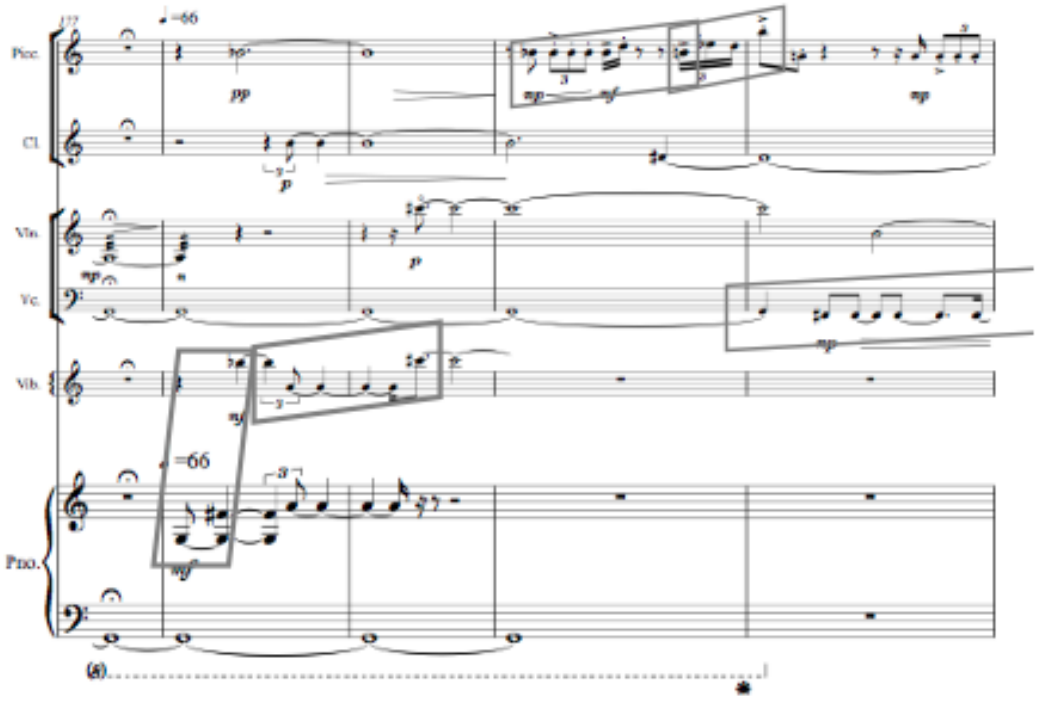


Figure 29. Presence of [0,1,4] trichord in all three layers of texture in Section C.

When first introduced by the piccolo in m. 180, the repeated note motif seems merely to provide rhythmic support to the crescendo that accompanies it. As section C develops, however,

repeated note gestures become increasingly frequent until they overshadow all other features in mm. 211-214. In mm. 215-216, a repeated note figure in the piano that uses feathered beams to accelerate and then slow to a quintuplet is used as a transitional device to prepare the steady eighth-note pedal point that initiates the return to a metered feel at m. 217. It is in this way that the C section's diversion from an audibly measured rhythmic language is brought to an end (Fig. 30).

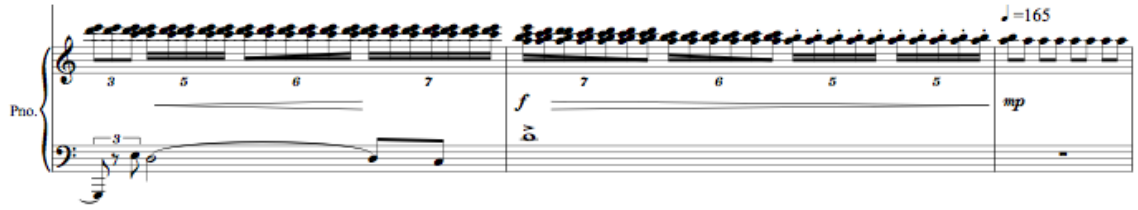


Figure 30. Repeated-note figure in piano transitioning to A' section.

Beneath the eighth-note pedal point in m. 211, the piano re-introduces a truncated version of the 7/9/8 rhythmic ostinato previously featured at the beginning of the B section. This brief allusion to the second portion of the work may be regarded metaphorically as the last segment of a "swerved" trajectory during which the stunned traveler cautiously returns to his original course. Beginning in m. 225, the A' section revisits much of the material that appears in the initial A section but moves through the many developments of that material much more rapidly.

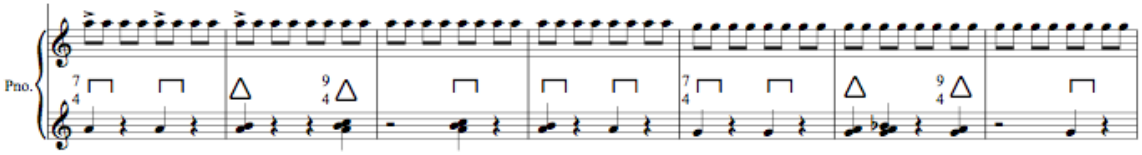


Figure 31. Allusion to 7/9/8 metric pattern established earlier, in Section B.

Section A' of *Swerve*

The final forty-nine measures of *Swerve* are organized not like a recapitulation in the traditional sense, but rather like a collage of previously introduced musical ideas, their order and proportions now altered. From m. 225 to m. 240 the woodwinds gradually revive the slow [1,4,0] theme that was initially presented in m. 69. Meanwhile, the violin recalls, in mm. 237-239, the delicate melodic line originally found in the flute part at m. 47. The entire texture previously found in m. 69 is recreated in mm. 245-250, giving way at m. 251, to the mixed meter cascading gesture originally found in mm. 89-91. As it had previously, the cascade of melodic [0,1,4] trichords leads once more into the raucous tutti passage that alternates between 8/8 and 4/4 meter (first found in mm. 92-97, now transposed down by a minor third). Whereas the original presentation of this passage began the transition into section B, this second version drives the work towards its climactic conclusion in which a variant of the "first theme" initiates a dynamic and textural crescendo into an accented triple forte on the final downbeat of the piece.

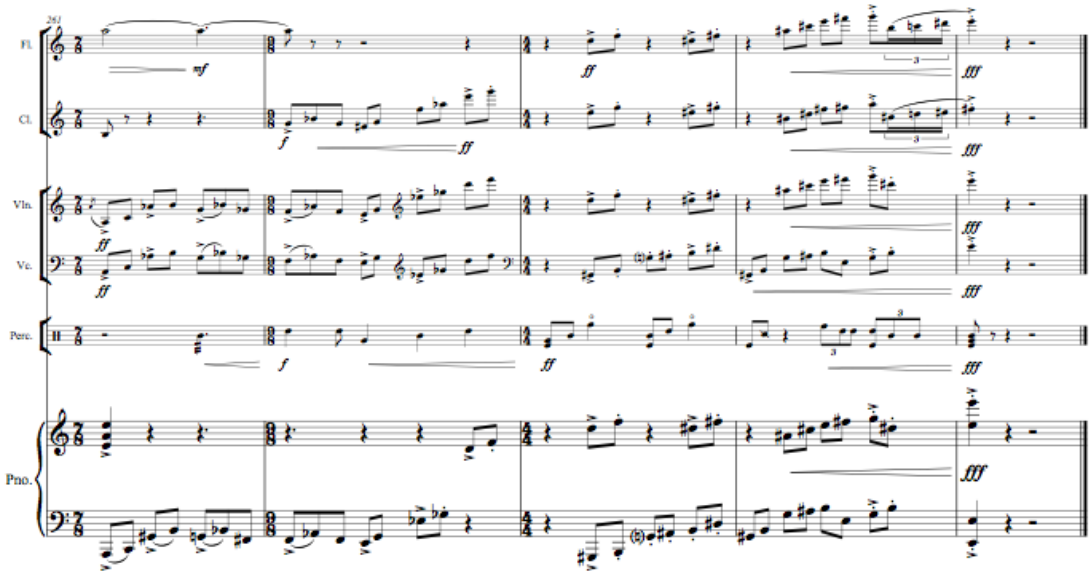


Figure 32. Final five measures of *Swerve* based on first theme from section A (mm. 261-265).

Kinetic Experience and Musical Experience: Finding Correlations

Sound and movement are both constantly present in human experience. While a concert hall may at times be very quiet, it is never truly silent. During a performance, what the listener experiences as a piece of "music" is actually a sequence of sounds to which the composer or performer—and arguably the listener—have assigned a perceptual framework. This framework is both temporal and contextual in nature. Only sounds that occur between the start and end of the performance (as signified by established cues like the raising of a baton or lowering of instruments) are considered part of the "music." Even within the temporal framework of a particular musical performance, sounds that seem not to belong within the established musical context, like a cough from an audience member or traffic noise from outside the theater, may be discounted as "incidental" and not part of the musical work.

Complete stillness, like silence, is also a state that human beings can only imagine experiencing. Even a sleeping body is in motion as a consequence of the life-sustaining functions of the heart and lungs. Consequently, just as we must apply a perceptual framework to a sequence of sounds in order to make it recognizable as a discreet musical event, we must apply a perceptual framework to a sequence of movements in order to make it recognizable as a discreet motion. Going one step further, we may apply such a framework to a particular sequence of sounds and call it "Sonata No. 1" or "Adagio." We may likewise frame our perception of a particular sequence of movements by assigning labels such as "fidgeting," "swaying," or "swerving." The perceptual framework of such motions is encoded in the definitions of the labels assigned to them. Our understanding of the word "swerve," for example, enables us to correlate dodging a patch of ice on a sidewalk with veering out of the path of a runaway truck on a highway because these actions share certain movement characteristics. We make such

correlations as easily as we recognize the *Star Spangled Banner* whether it is performed in a gymnasium by a middle school wind band or sung by Whitney Houston at a nationally broadcast sporting event.

The similarities between how we experience and think about both music and movement make the latter an ideal model for musical structures, materials, and forms. Modeling movement is, in other words, a way to create correlations, not mere associations, between human experience and musical experience. The temporal framework of a "swerve," for example, manifests in the work *Swerve* as a particular formal feature that contrasts radically with surrounding formal elements. In *Sway* the side-to-side spatial feature of a swaying motion takes form both as a spatial effect and as a reversible harmonic progression. Our understanding of a "fidget" as a category of movements that are distinguished by their cause and function rather than by their temporal or spatial traits is reflected in *Fidget* as a consistent motivic palette that spans across many contrasting formal sections.

The means by which movement is modeled within the *Intricate Maneuvers* series demonstrates my desire not to simply appeal to an audience's existing associations with particular movement terminology, but rather to explore and exploit the utterly complex and dynamic implications of that terminology. Music has the power to enrich our understanding of experiential events that we may otherwise take for granted. *Fidget*, *Sway*, and *Swerve* were consequently designed to be poetic studies, rather than descriptive representations, of the kinetic experiences that they model. Indeed my ambition for the *Intricate Maneuvers* series has been to compose music that is not only interesting and attractive to the listener, but that also has the potential to be, as Roger Reynolds put it, "revelatory."

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PART II

SCORES

Fidget

by Sarah Page Summar

Program note:

The word “fidget” calls to mind a wriggling, chair-rocking, pencil-tapping parade of images. While this piece features several musical motives inspired by some of those images, the central idea that unifies those motives and guides the trajectory of the composition is that a fidget is any functionless motion performed in an effort to relieve physical or psychological discomfort. The music consequently evolves gradually and with great effort from a very restless state to a more peaceful one.

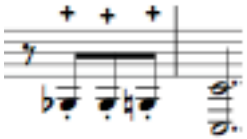
Fidget belongs to the Intricate Maneuvers series, a group of works inspired by and modeled after movement.

Performance notes:

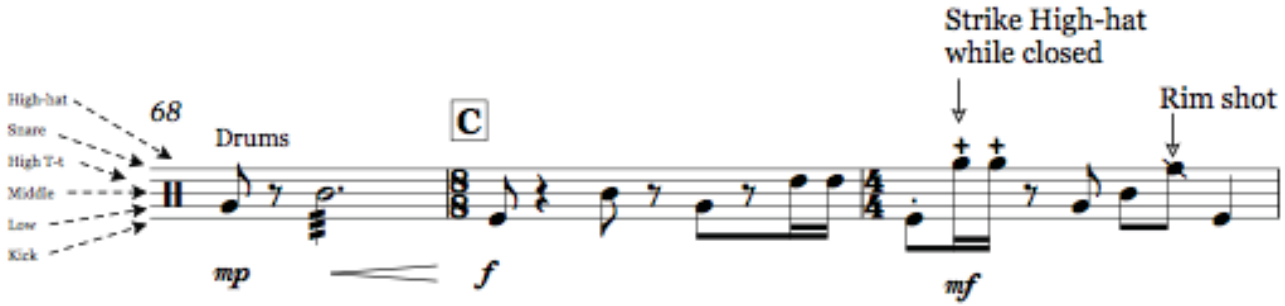
INSTRUMENTATION

Flute/piccolo
clarinet in B♭
violin
cello
piano[1]
percussion; marimba (5-octave), 3 wood blocks, high-hat, snare, 3 tom-toms (high, middle, low), kick drum[2], 2 dampened cymbals[3]

1. + This symbol, shown in m. 41 of the piano part, indicates that the player is to dampen the strings inside the piano with one hand while striking the keys with the other.



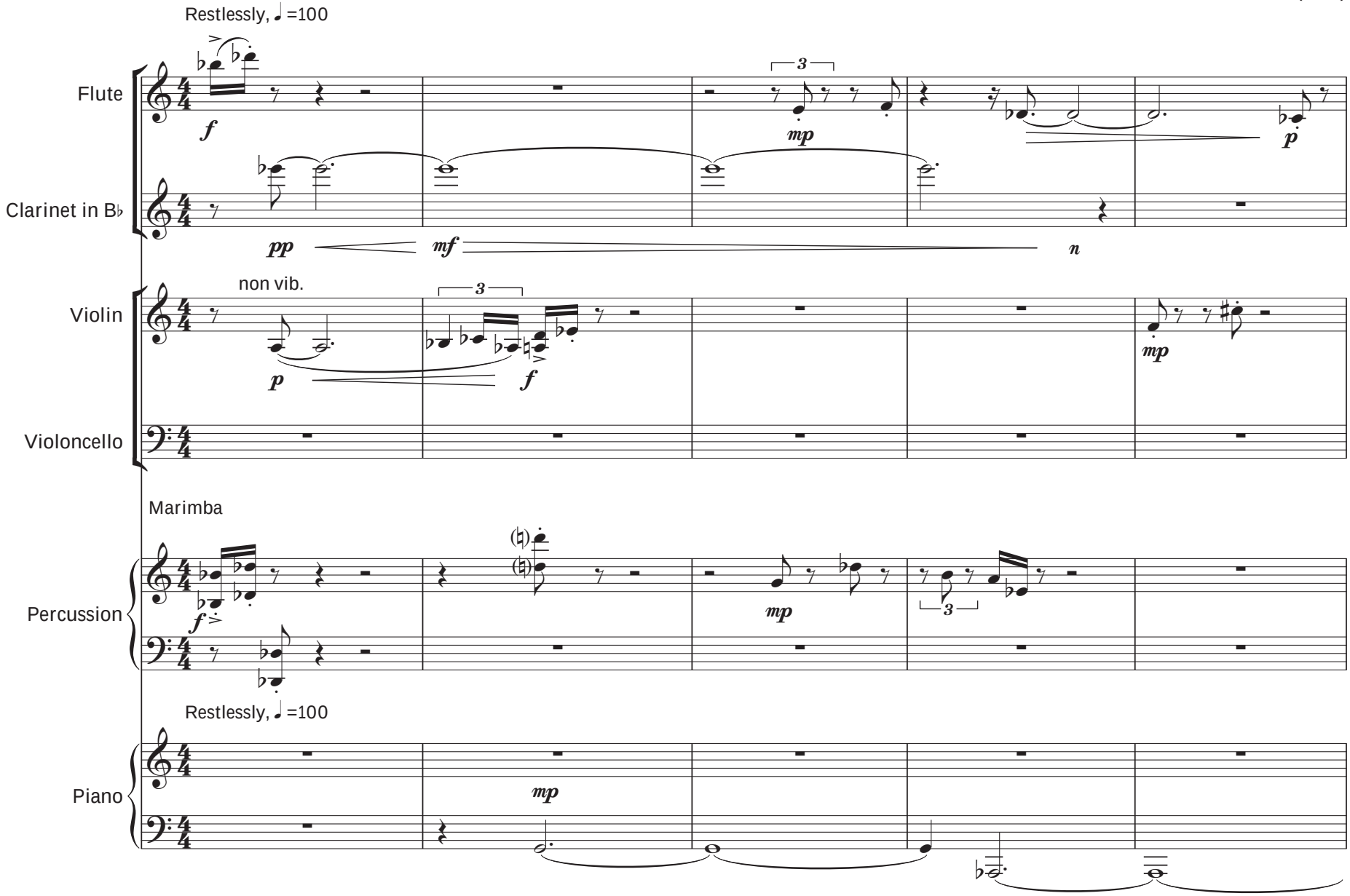
2. The high-hat, suspended cymbal, snare, 3 tom-toms, and kick bass function like a drum set and are notated on a five-line staff similarly to (but not exactly the same as) standard drum set notation.

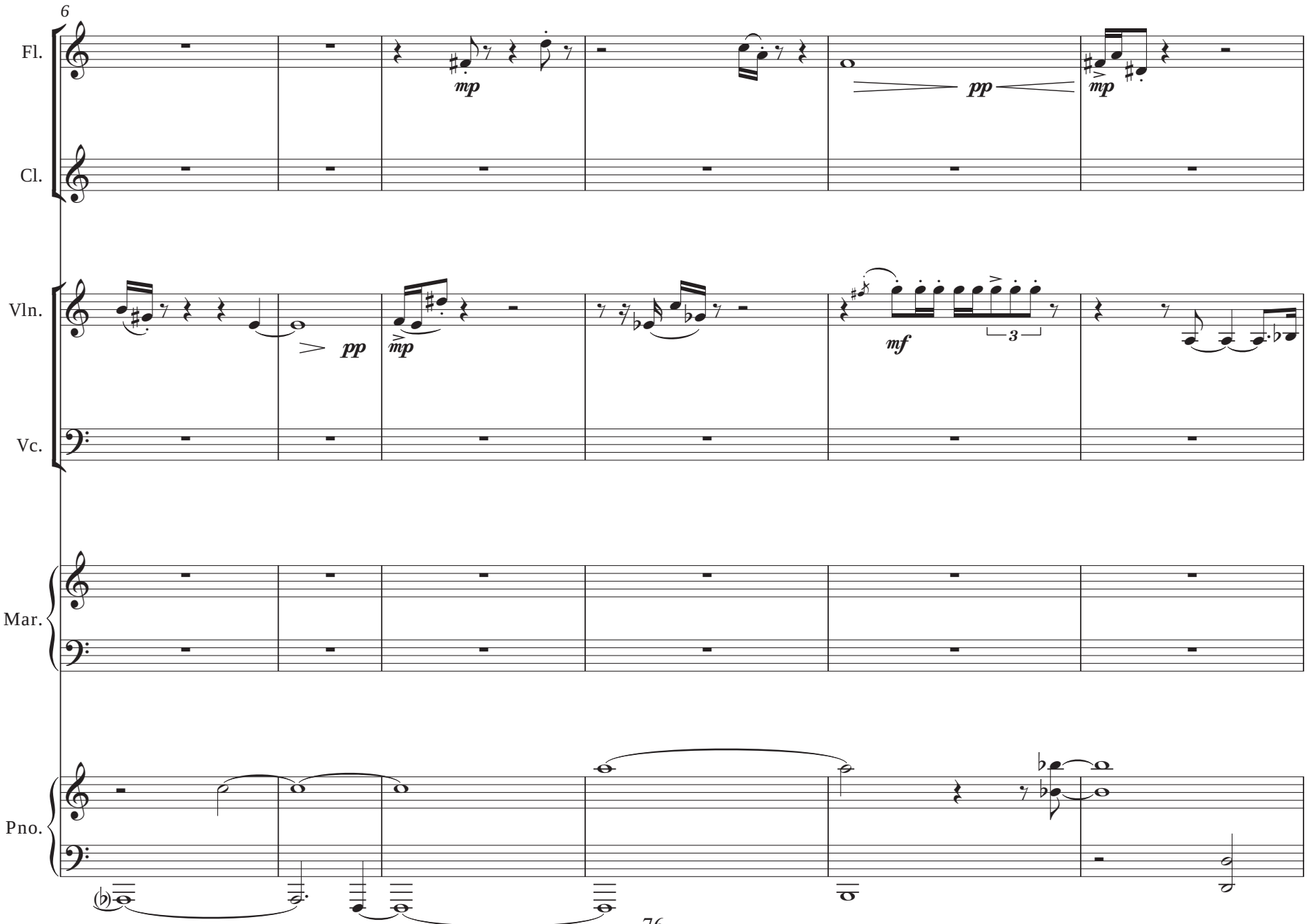


3. Two cymbals, (small and large) are to be placed, edges down, onto a table covered with a towel so as to dampen them completely. These should be struck with sticks close to the rim in order to create a bright but dry sound. Marimba passages include instructions with regard to tone. Mallet choices are otherwise left to the discretion of the performer.

Fidget

SARAH PAGE SUMMAR (2011)

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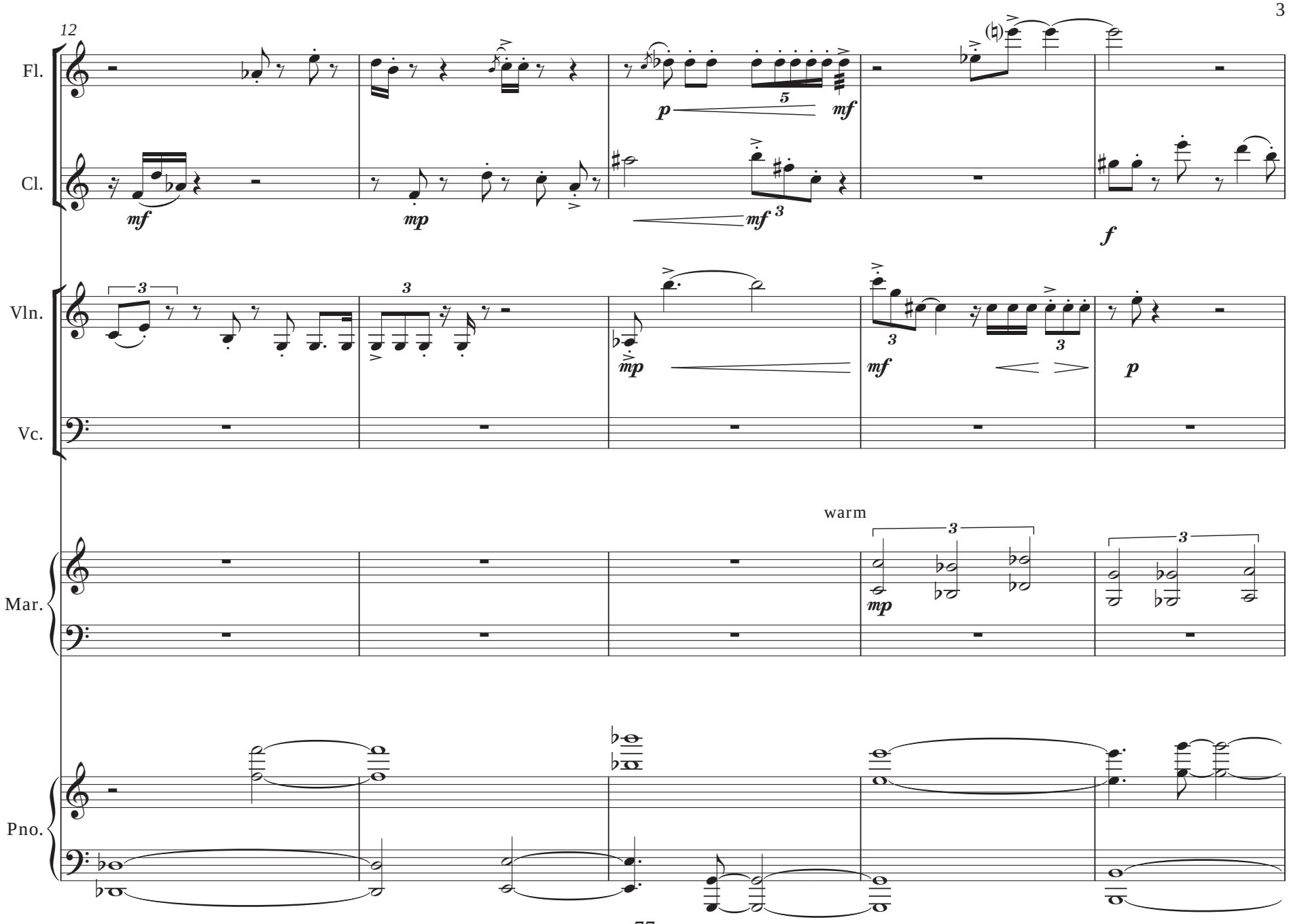
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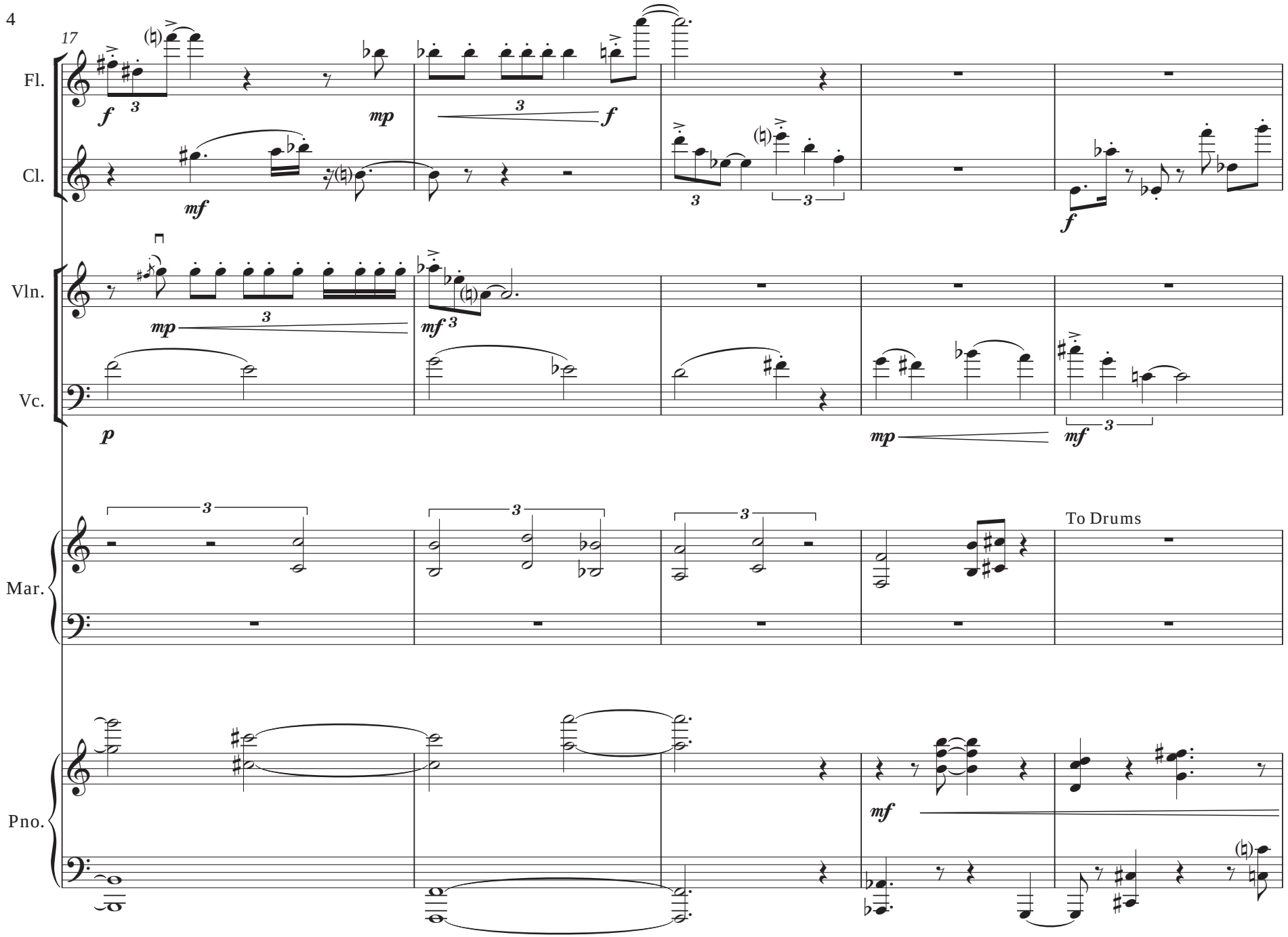
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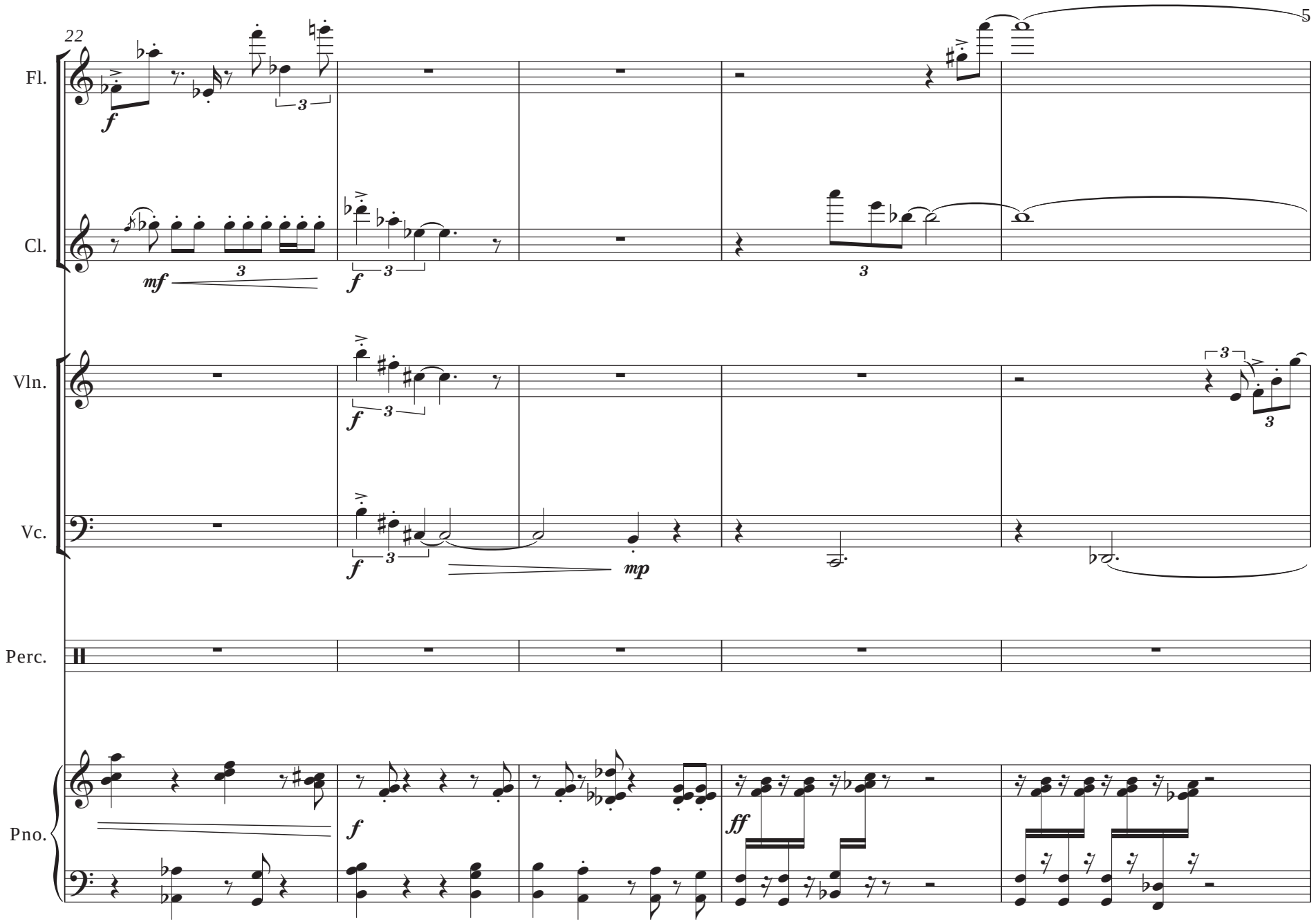
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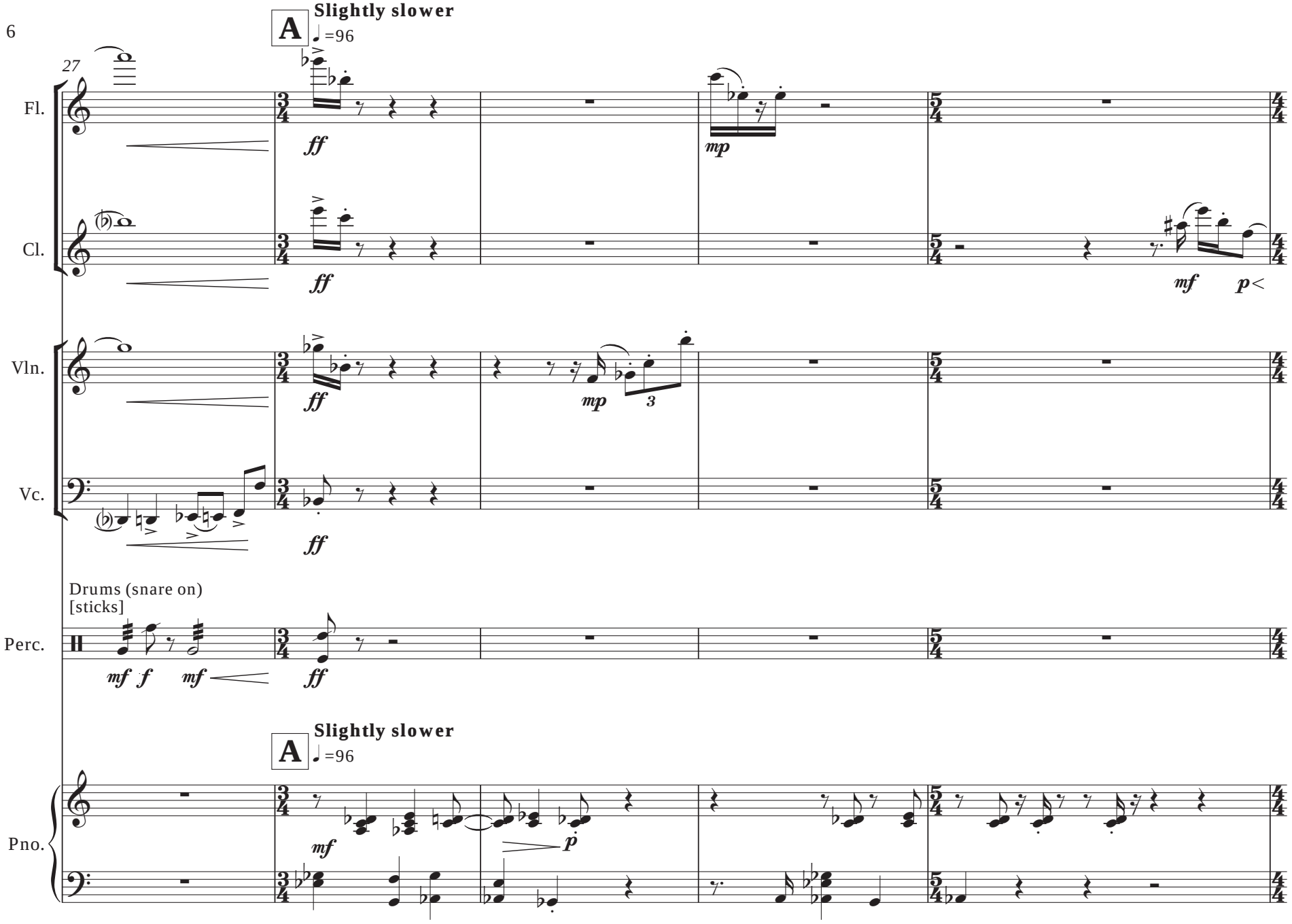
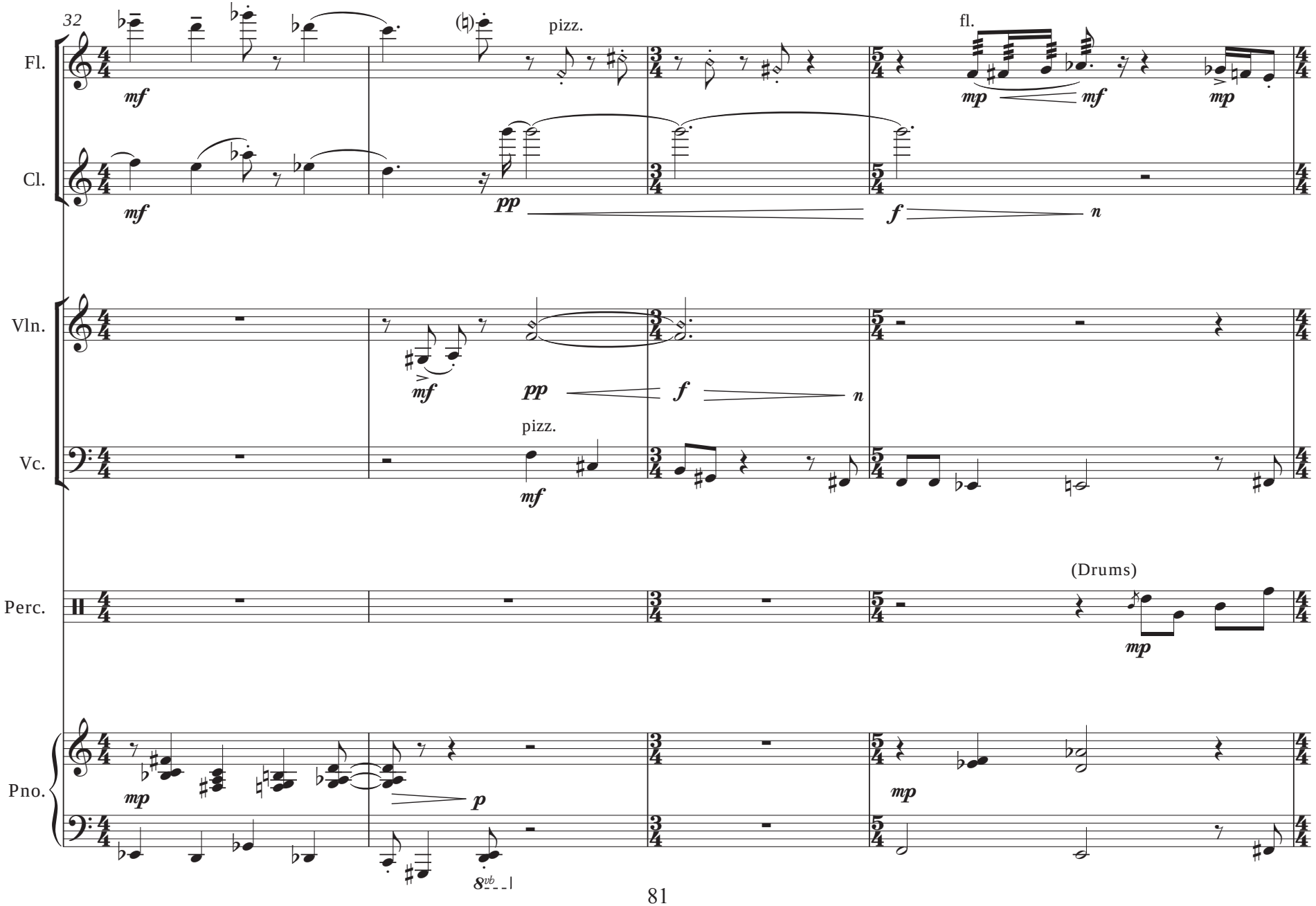
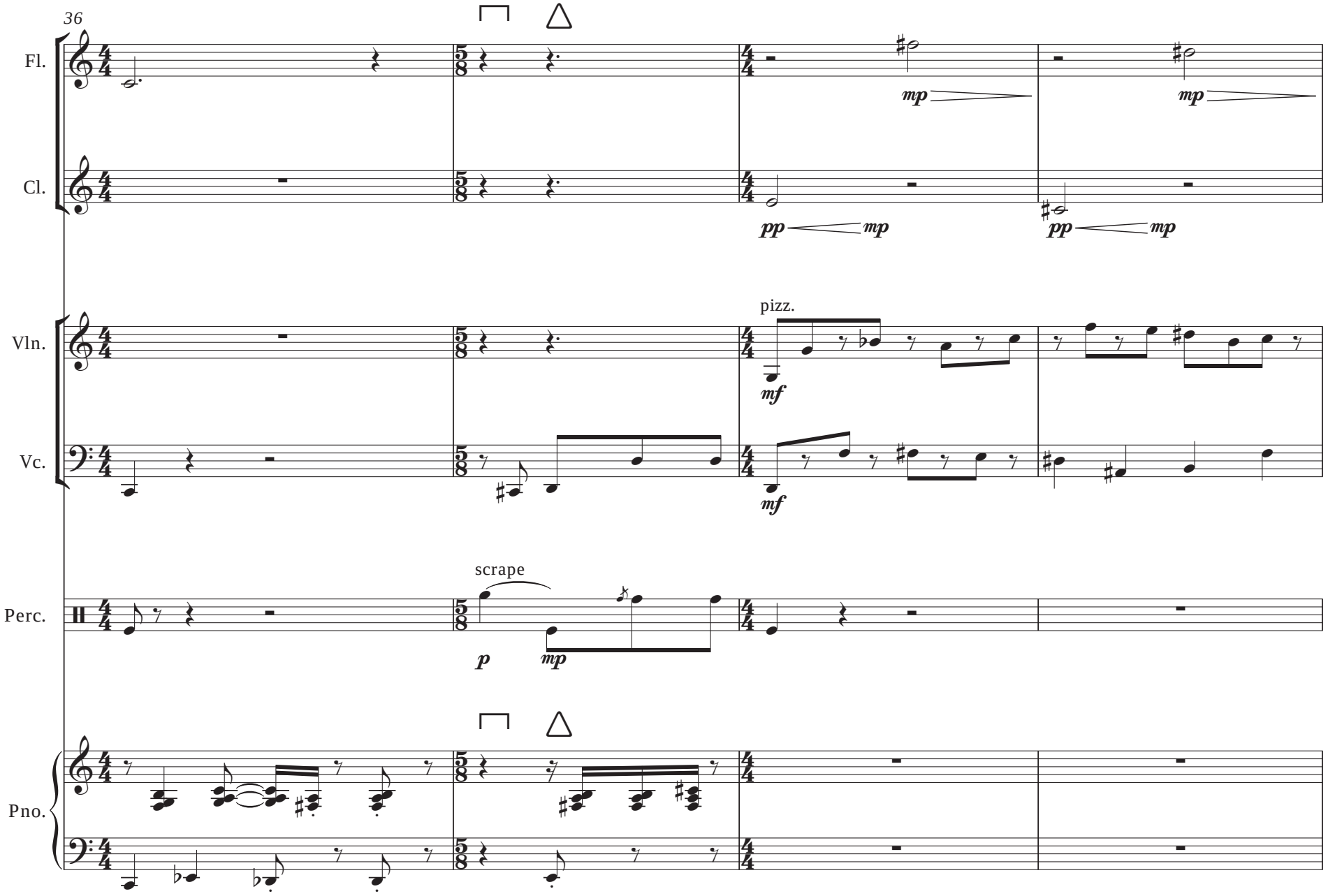
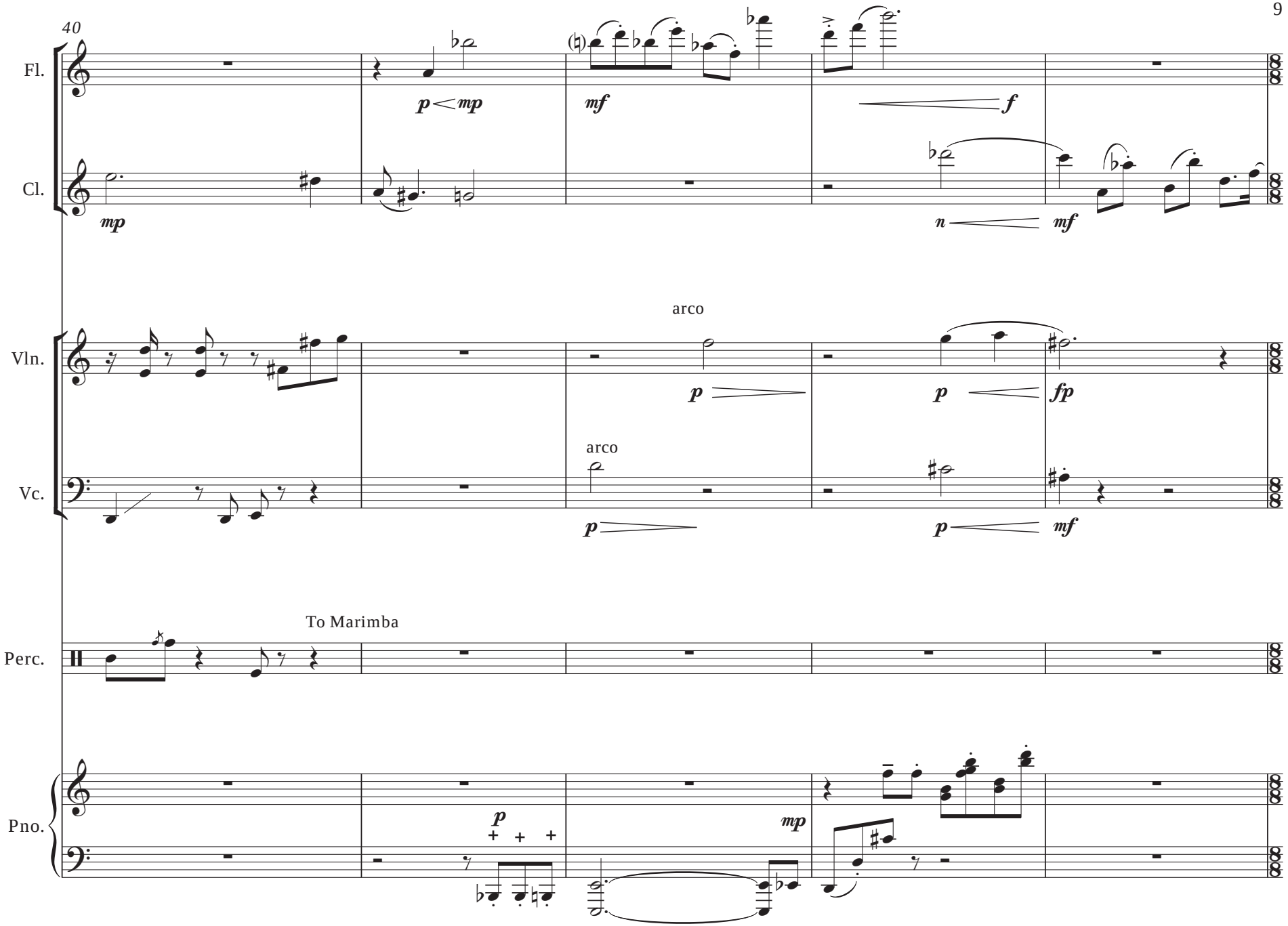
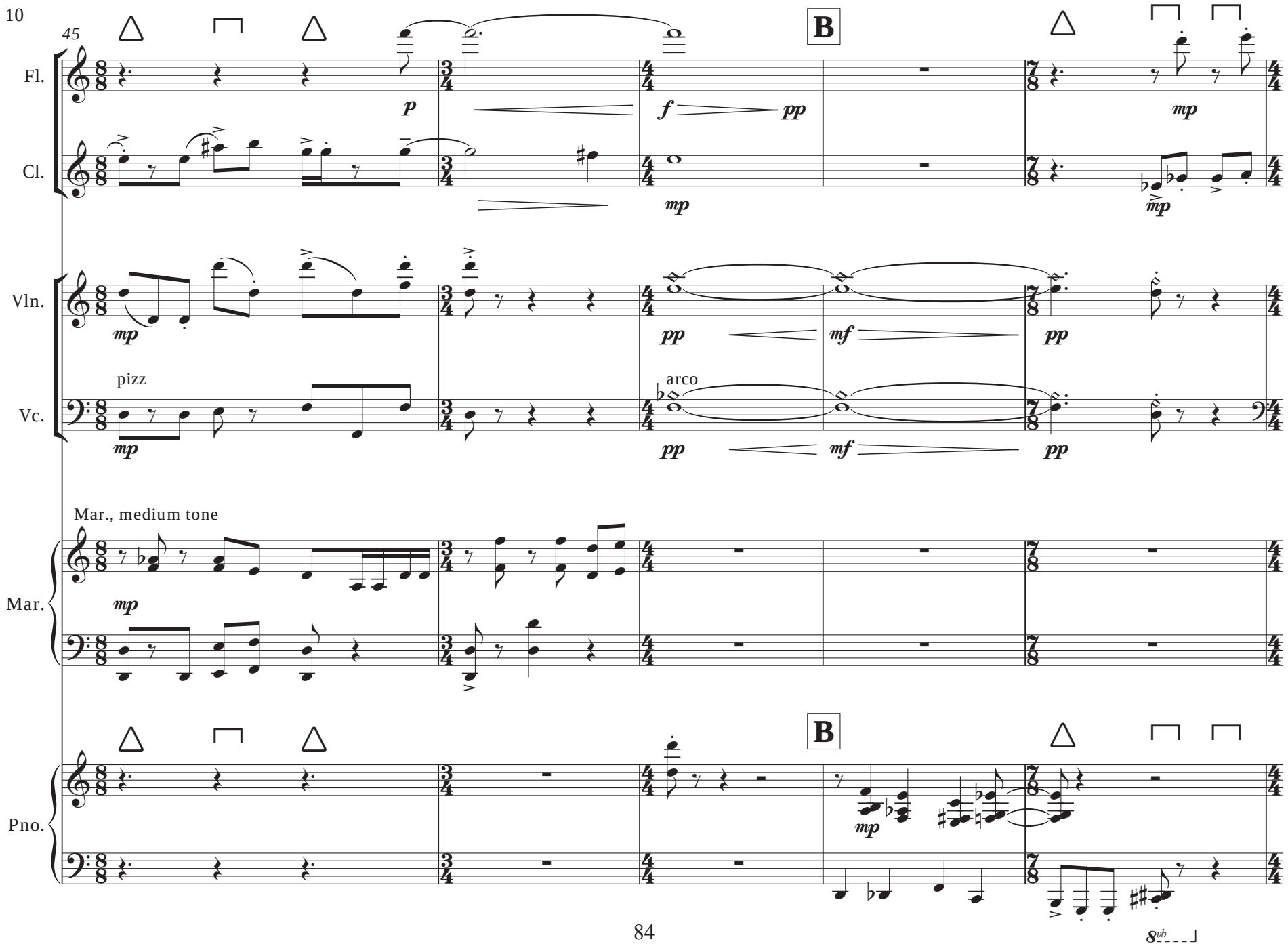
ff
3


27
A
Slightly slower
♩=96
Fl.
Cl.
Vln.
Vc.
Drums (snare on)
[sticks]
Perc.
Pno.
ff
mp
mf
p
f
3


32
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
pizz.
fl.
(Drums)
mf
pp
f
n
mp
p


36
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
mp
pp
mp
pizz.
mf
scrape
p
mp


40
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
arco
arco
To Marimba


45
B
Fl.
Cl.
Vln.
Vc.
pizz
arco
Mar., medium tone
Mar.
Pno.
p
f
pp
mp
mf

50

Fl.

Cl.

Vln.

Vc.

Mar.

Pno.

mf

mp

mf

p

54

Fl.

Cl.

Vln.

Vc.

Mar.

Pno.

mf *f*

3

mp

mp

mf

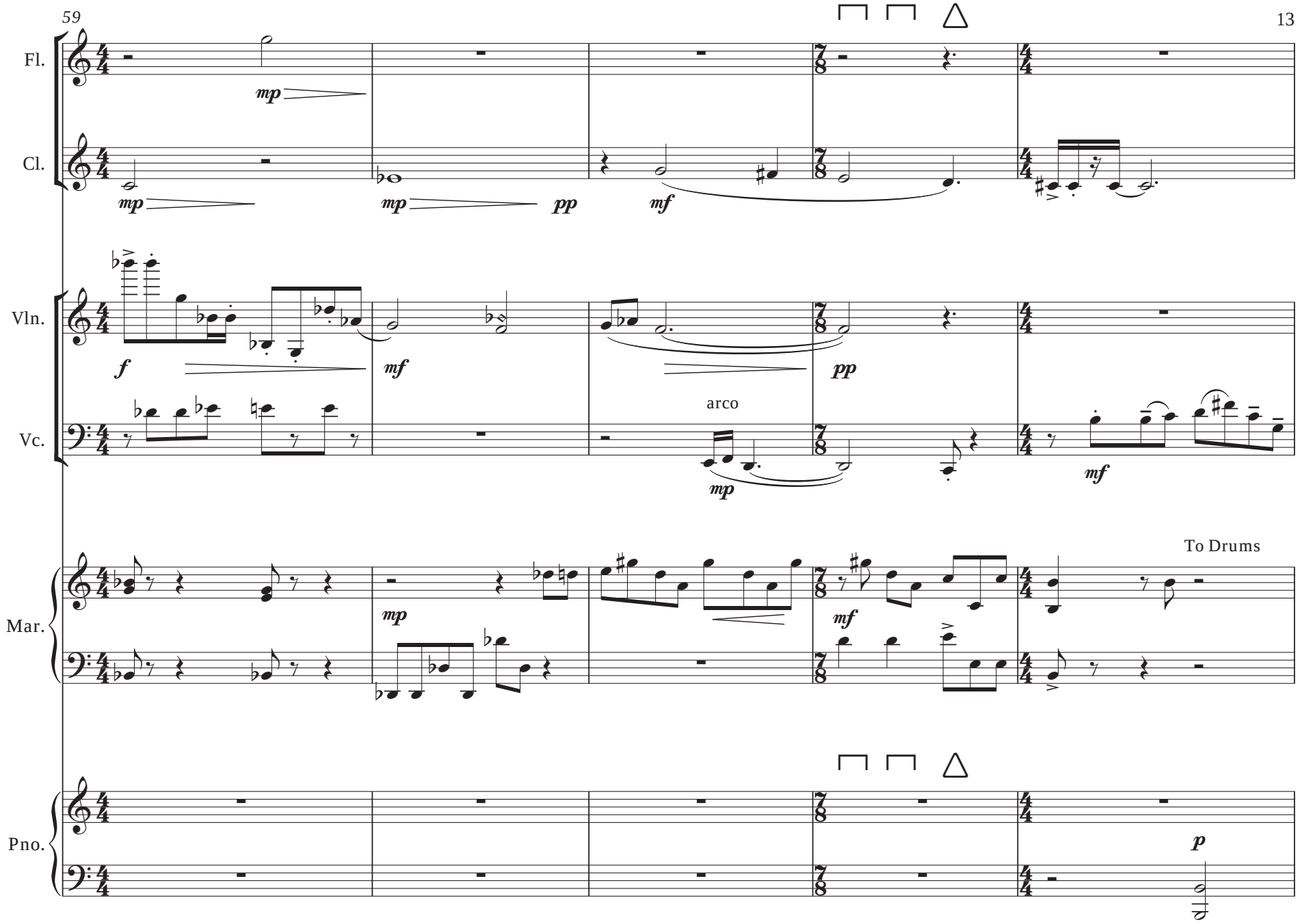
pizz.

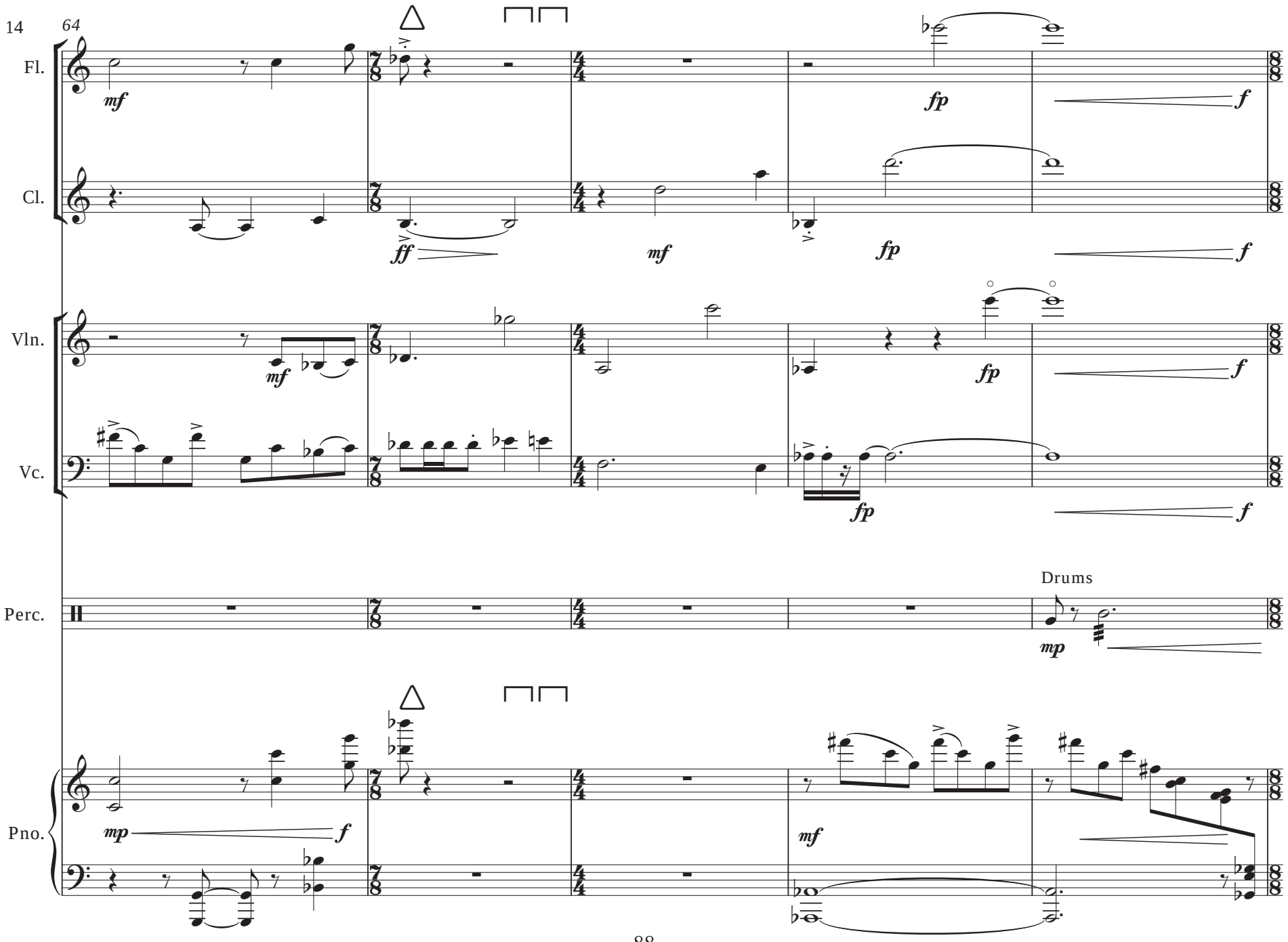
mf

mf

pp *p*

pp


Fl.
Cl.
Vln.
Vc.
Mar.
Pno.
mp
mp
pp
mf
f
mf
pp
arco
mp
mf
To Drums
p


14
64
Fl.
Cl.
Vln.
Vc.
Perc.
Drums
Pno.
mf
ff
fp
f
mp

69

C

Fl.

Cl.

Vln.

Vc.

Perc.

Pno.

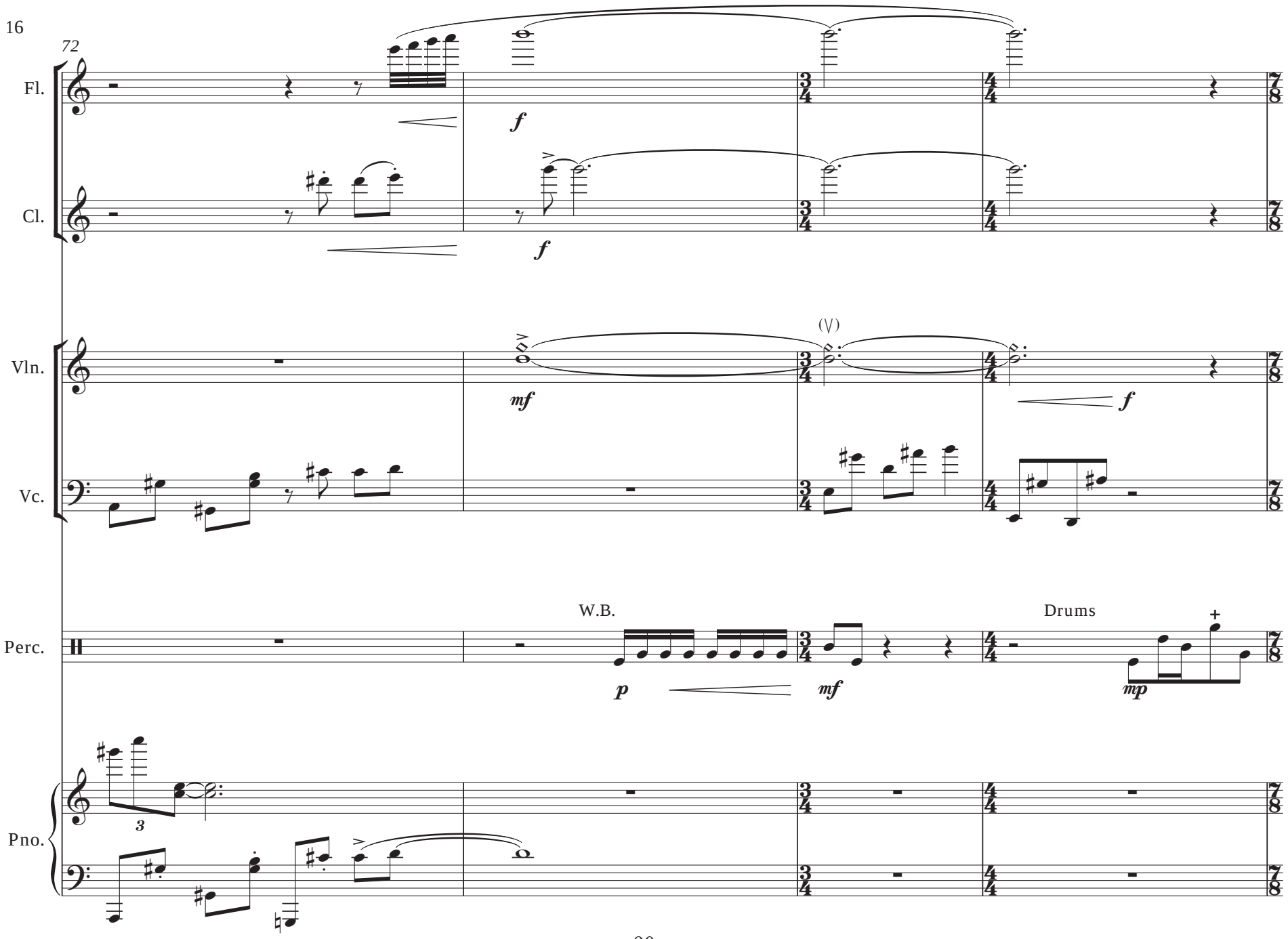
ff

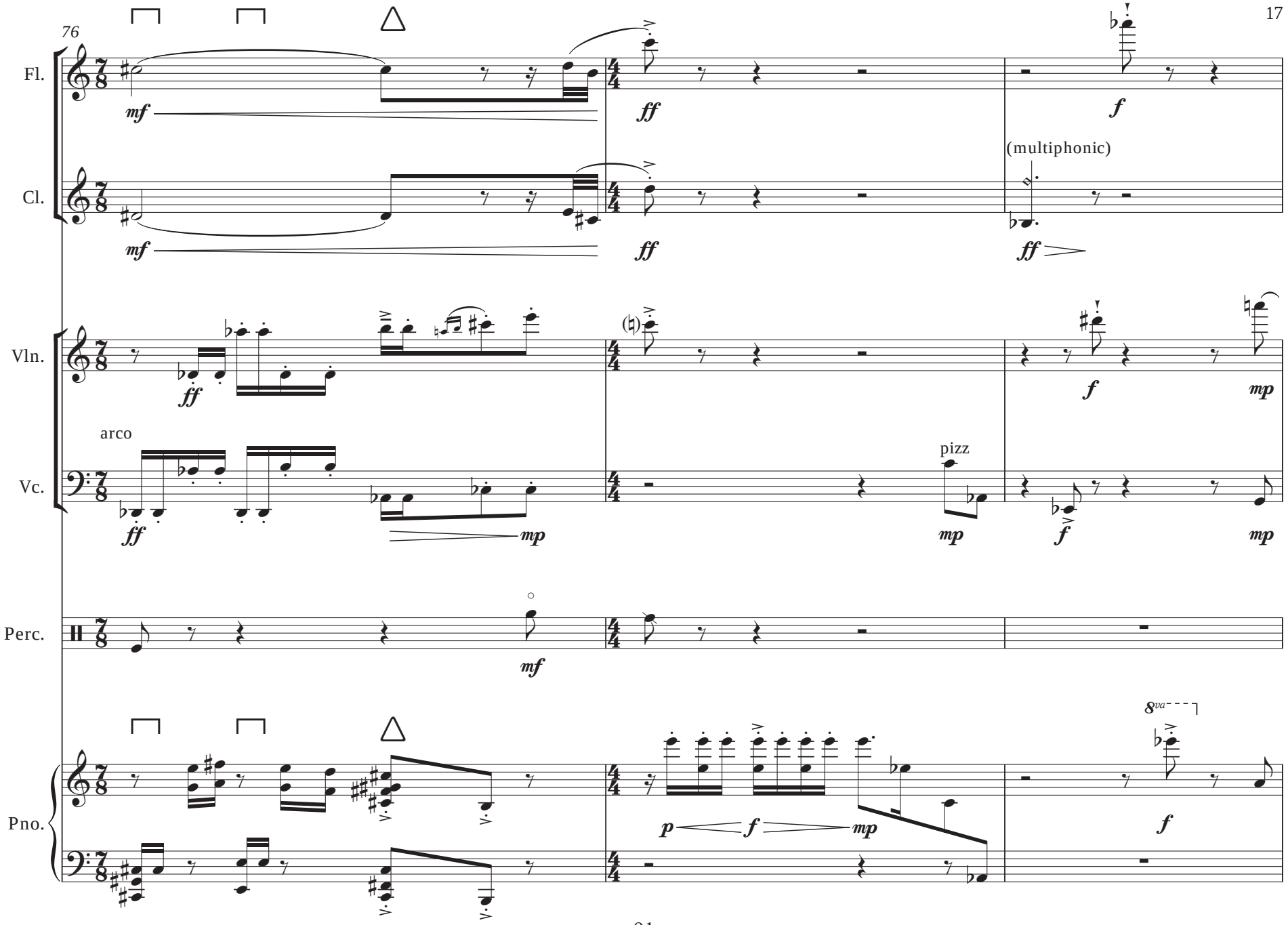
mf

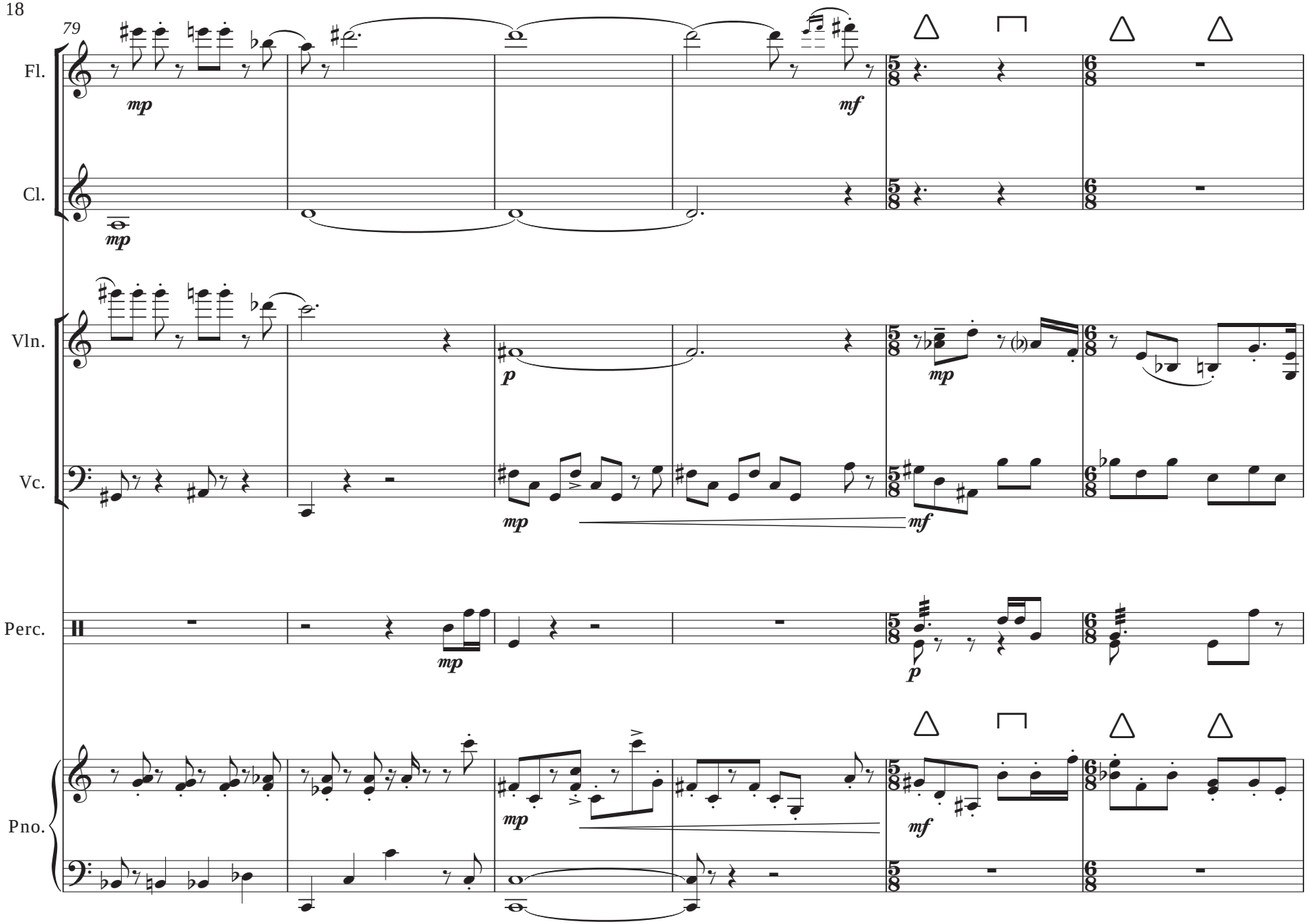
f

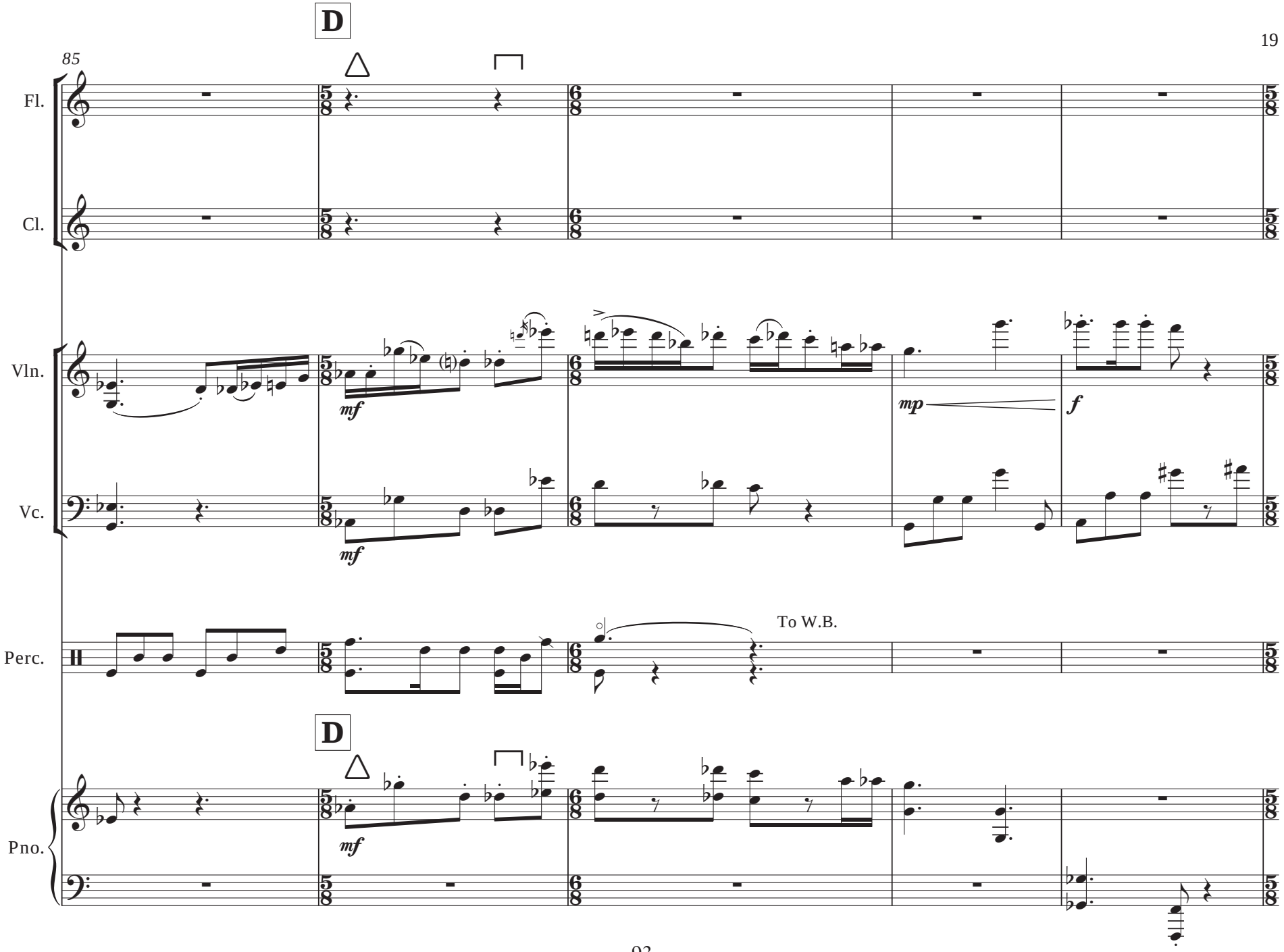
pizz.

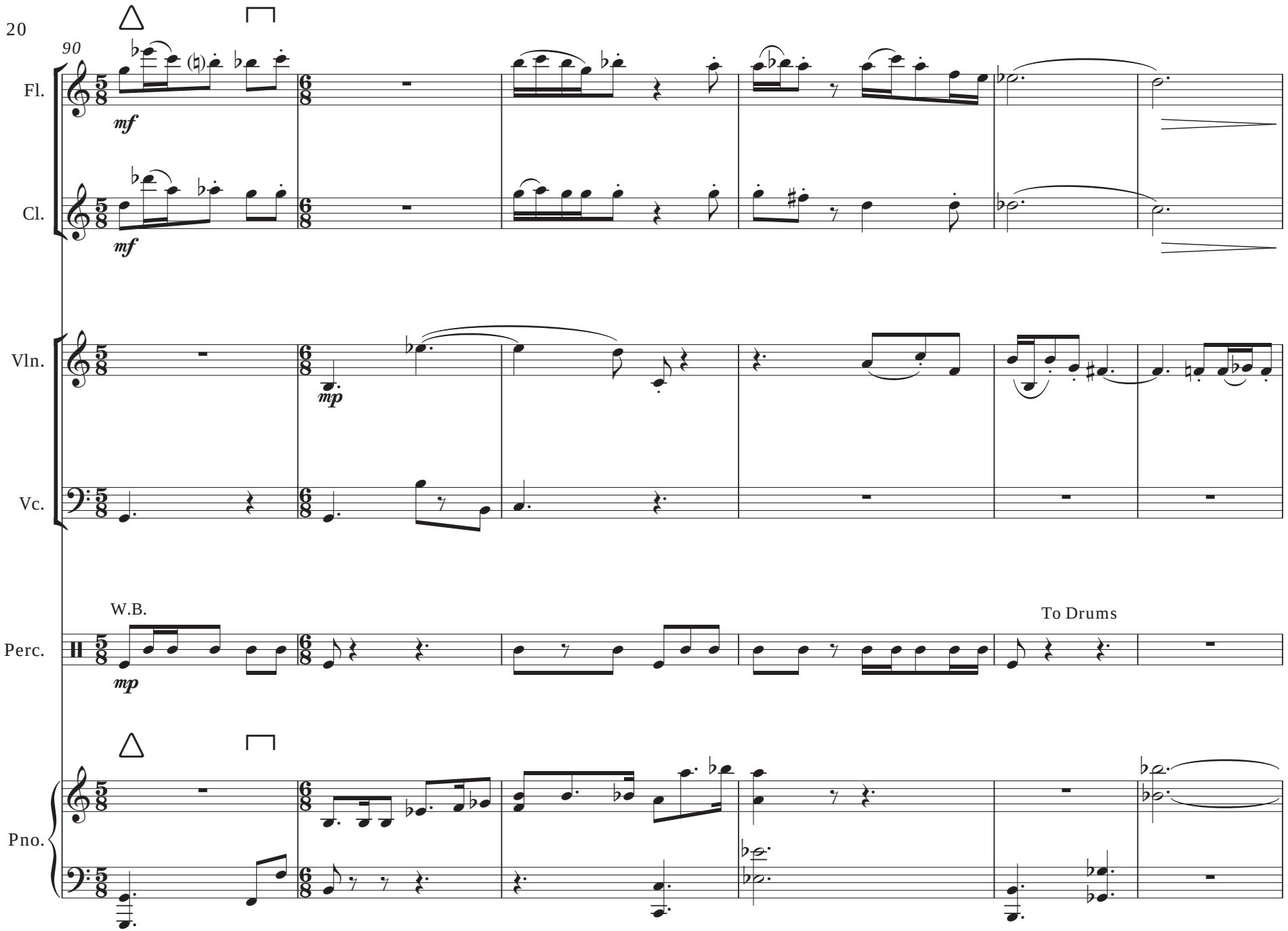
To W.B.

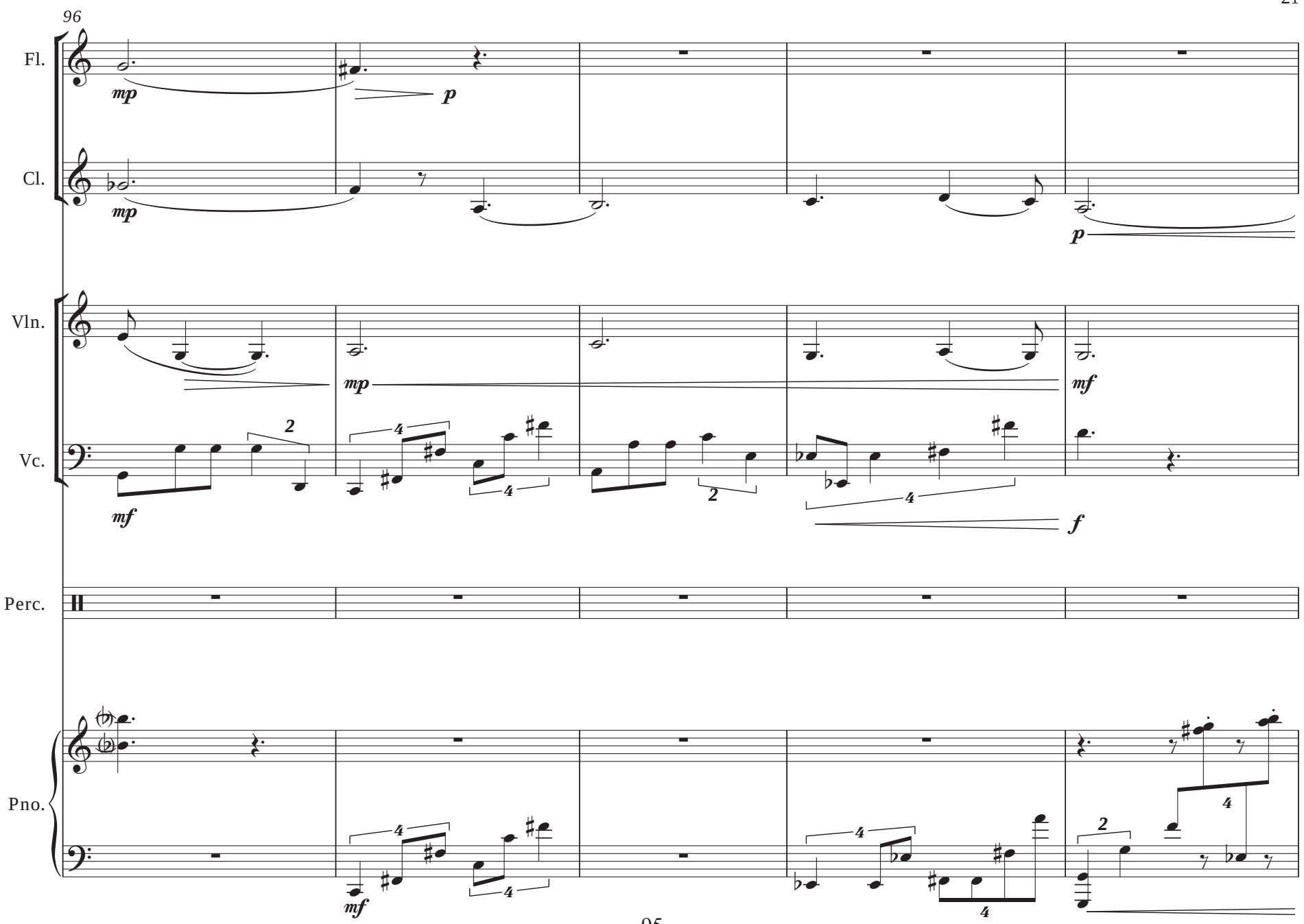

72
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
W.B.
Drums
(\/)

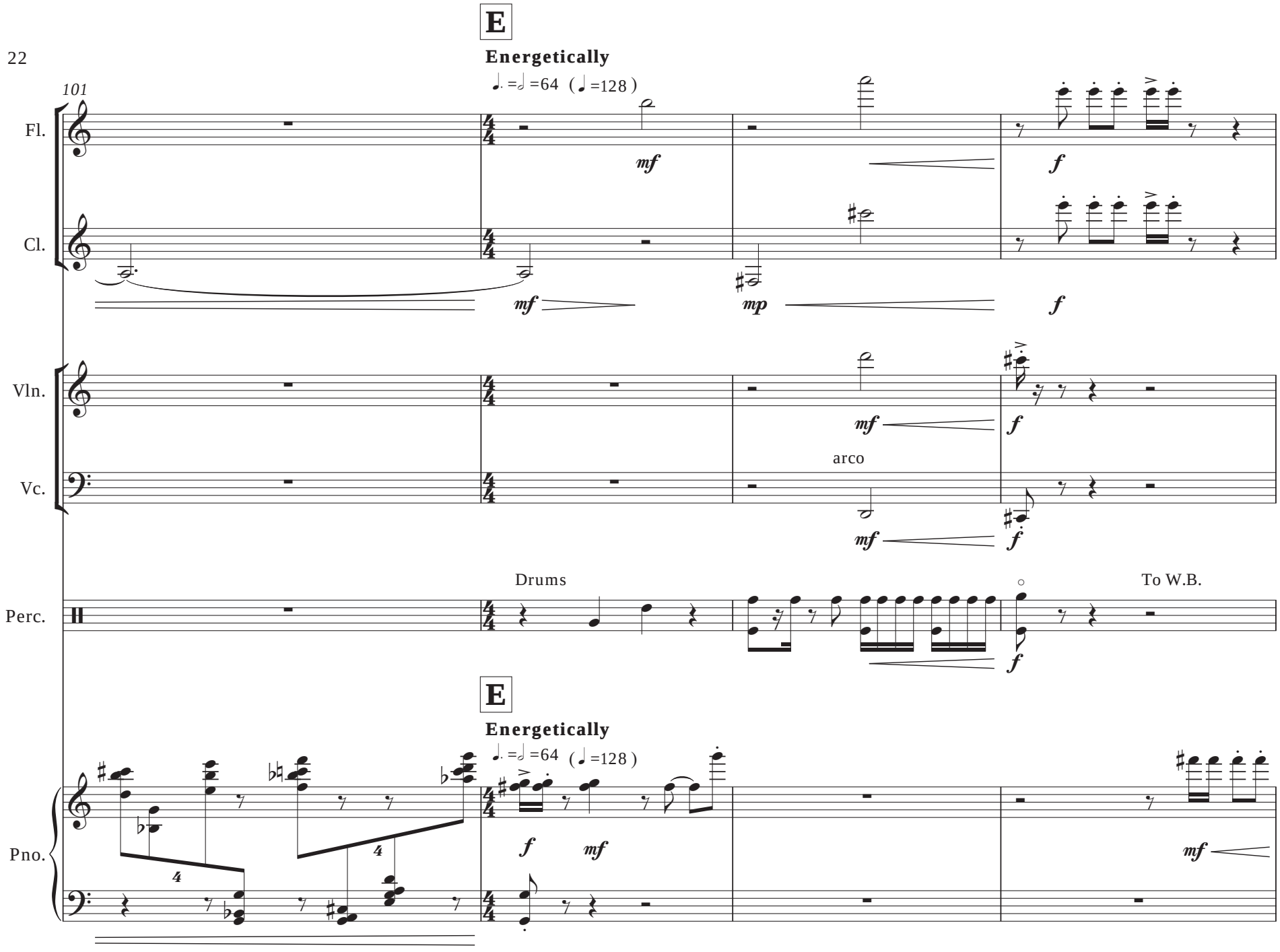

76
Fl.
mf
ff
f
Cl.
(multiphonic)
mf
ff
ff
Vln.
ff
f
mp
arco
Vc.
pizz
ff
mp
mp
f
mp
Perc.
mf
Pno.
8va
p
f
mp
f

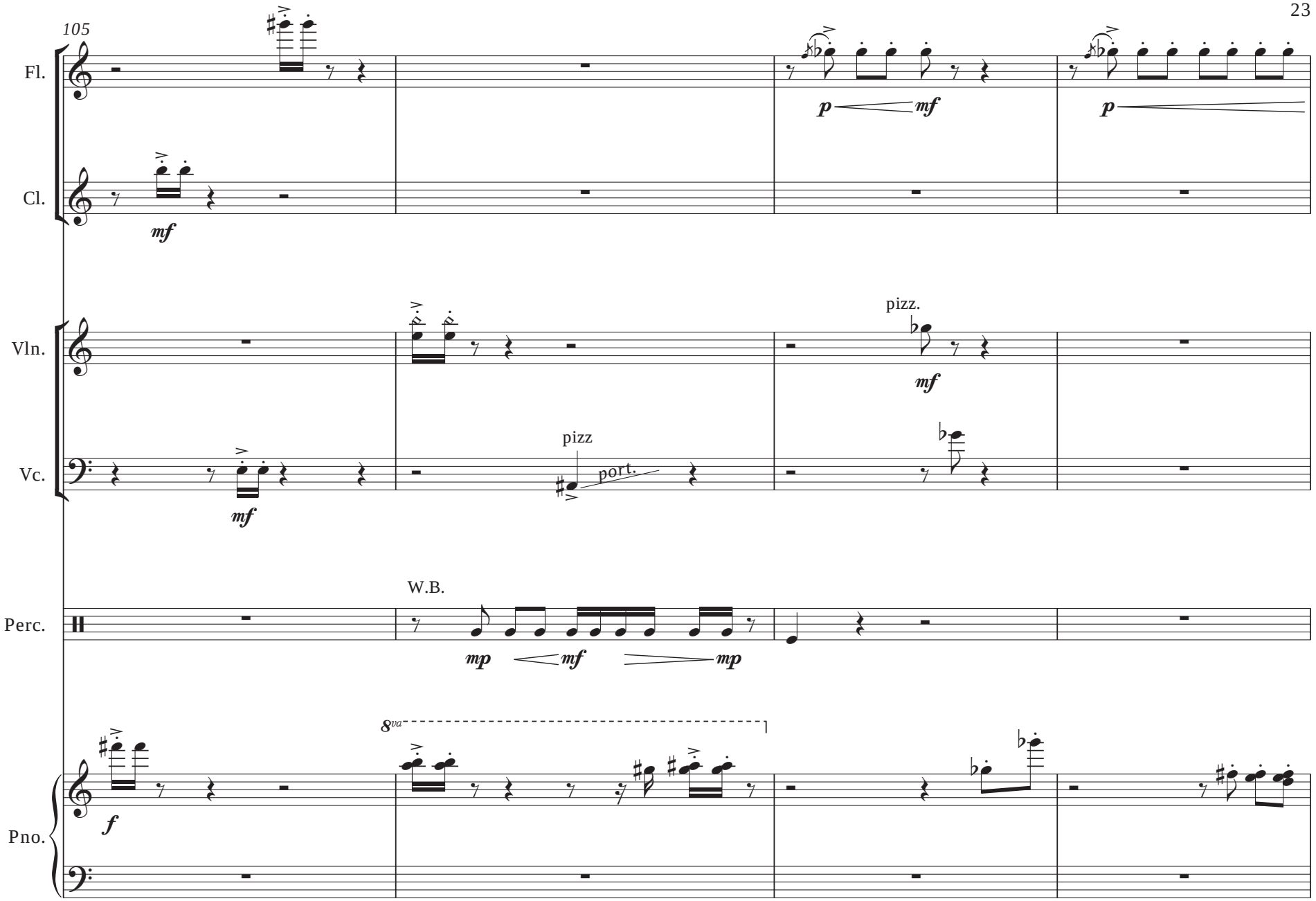

79
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
mp
mf
p

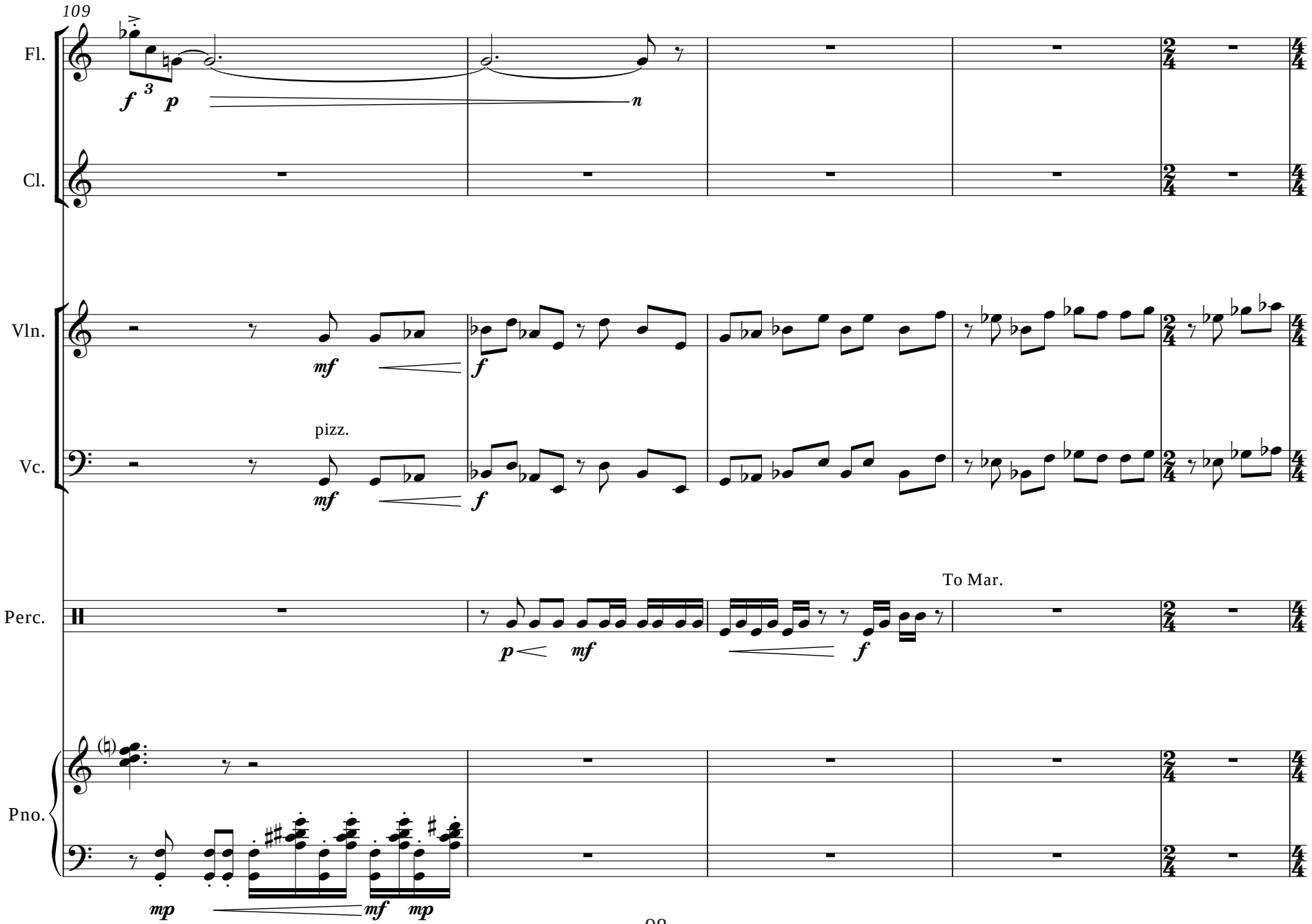

D
85
Fl.
Cl.
Vln.
Vc.
mf
mf
mp
f
Perc.
To W.B.
D
Pno.
mf

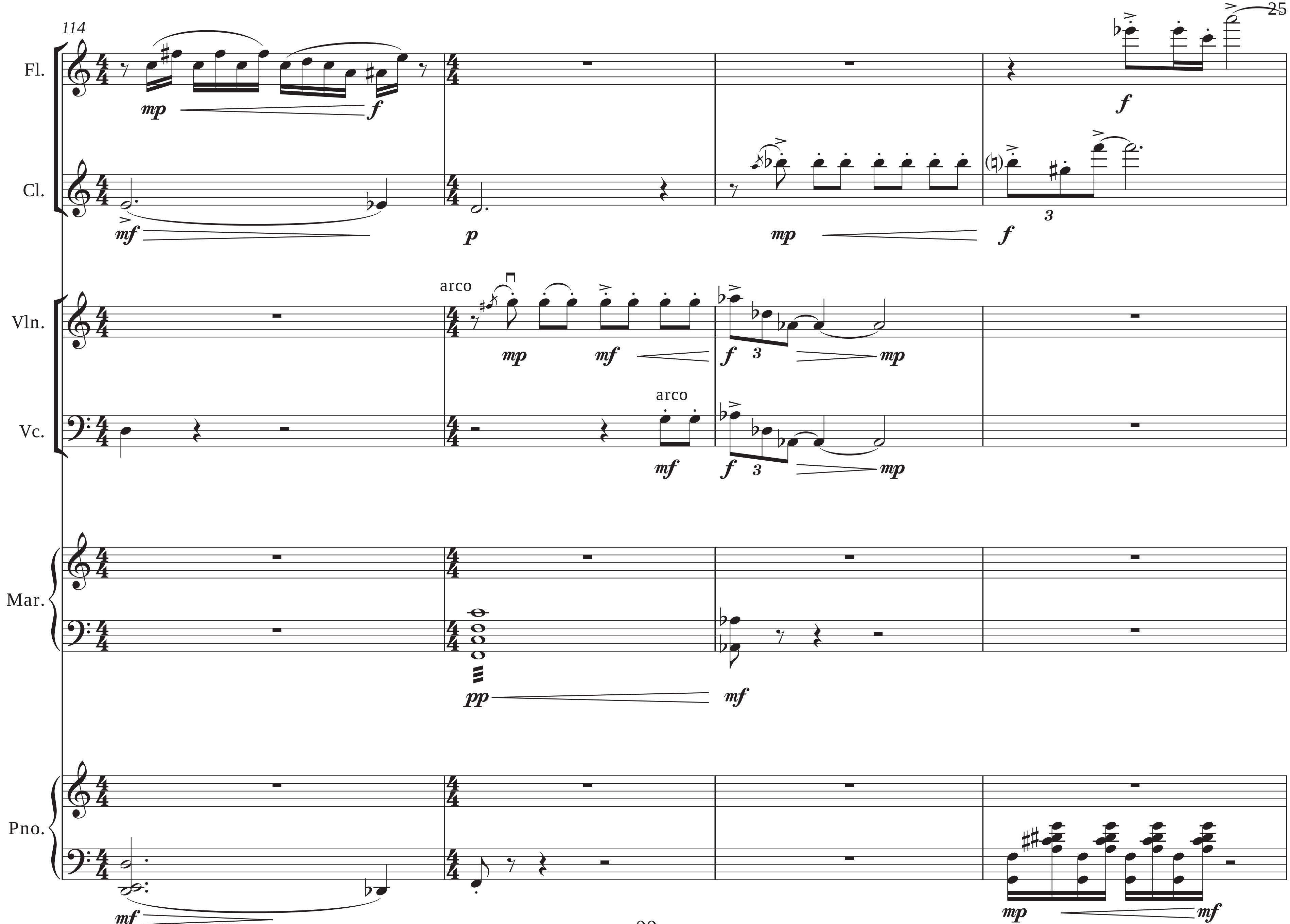

20
90
Fl.
mf
Cl.
mf
Vln.
mp
Vc.
W.B.
To Drums
Perc.
mp
Pno.

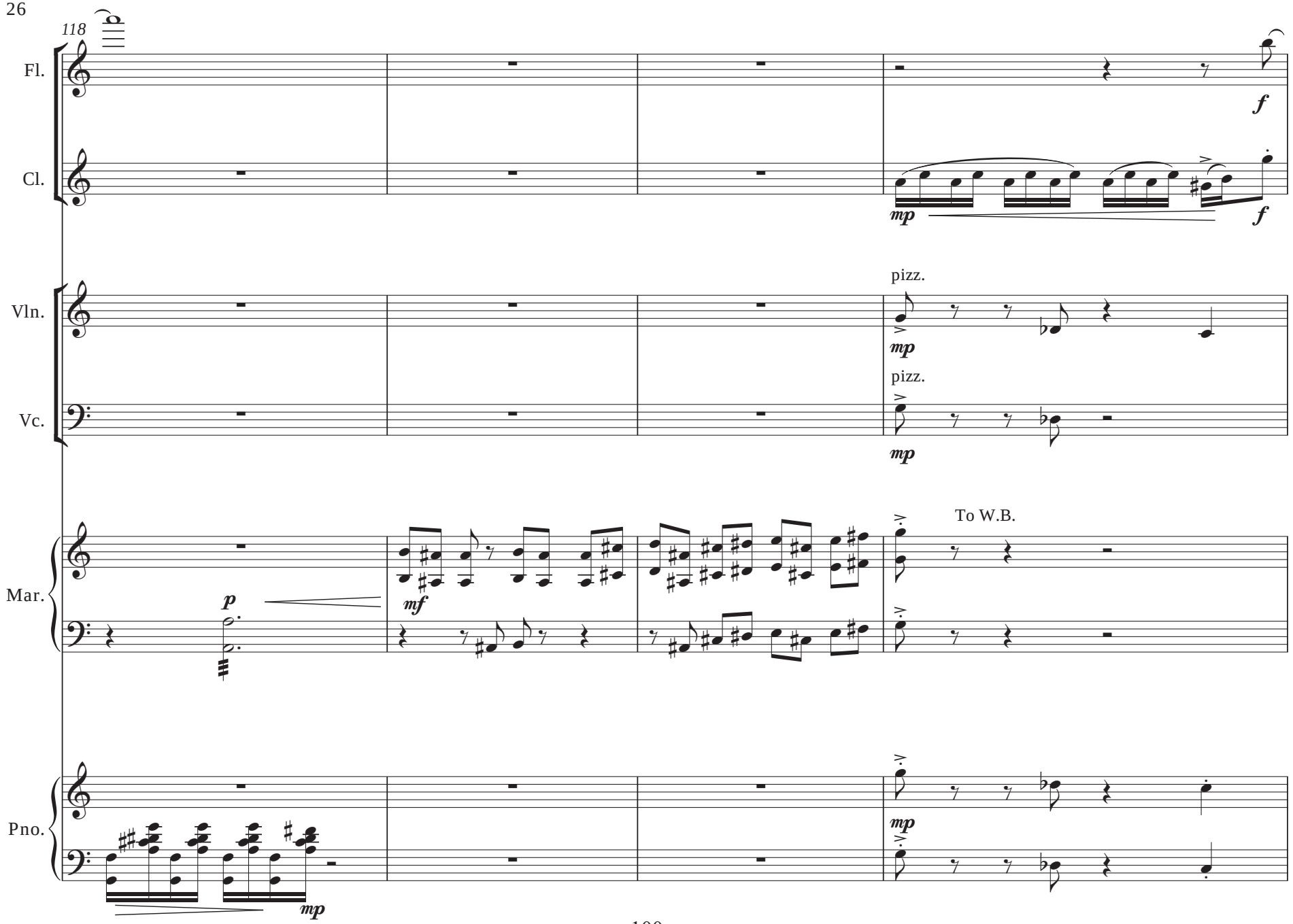

96
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
mp
p
mp
p
mp
mf
mf
f
mf

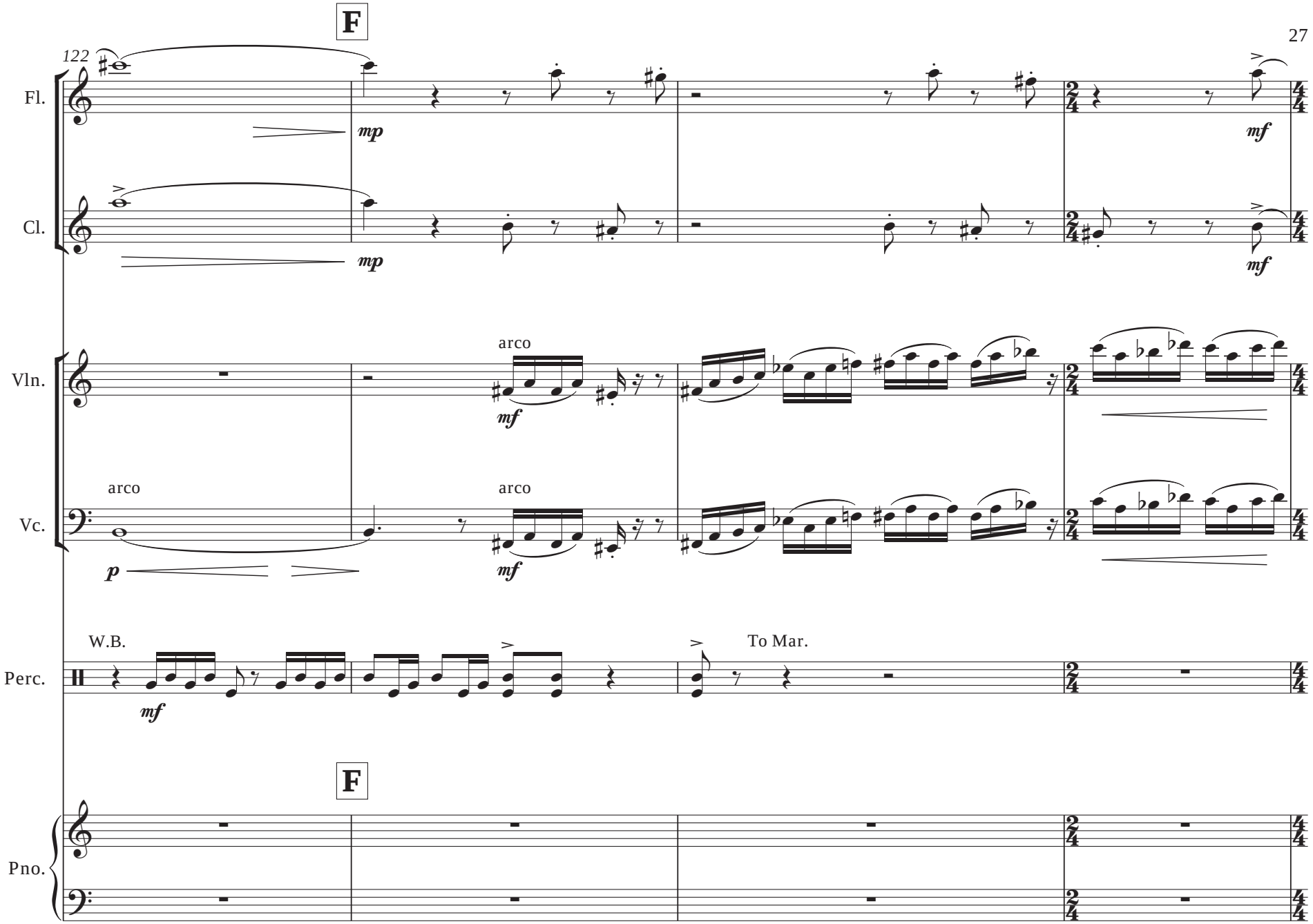

E
Energetically
101
Fl.
Cl.
Vln.
Vc.
Perc.
Drums
To W.B.
arco
E
Energetically
Pno.

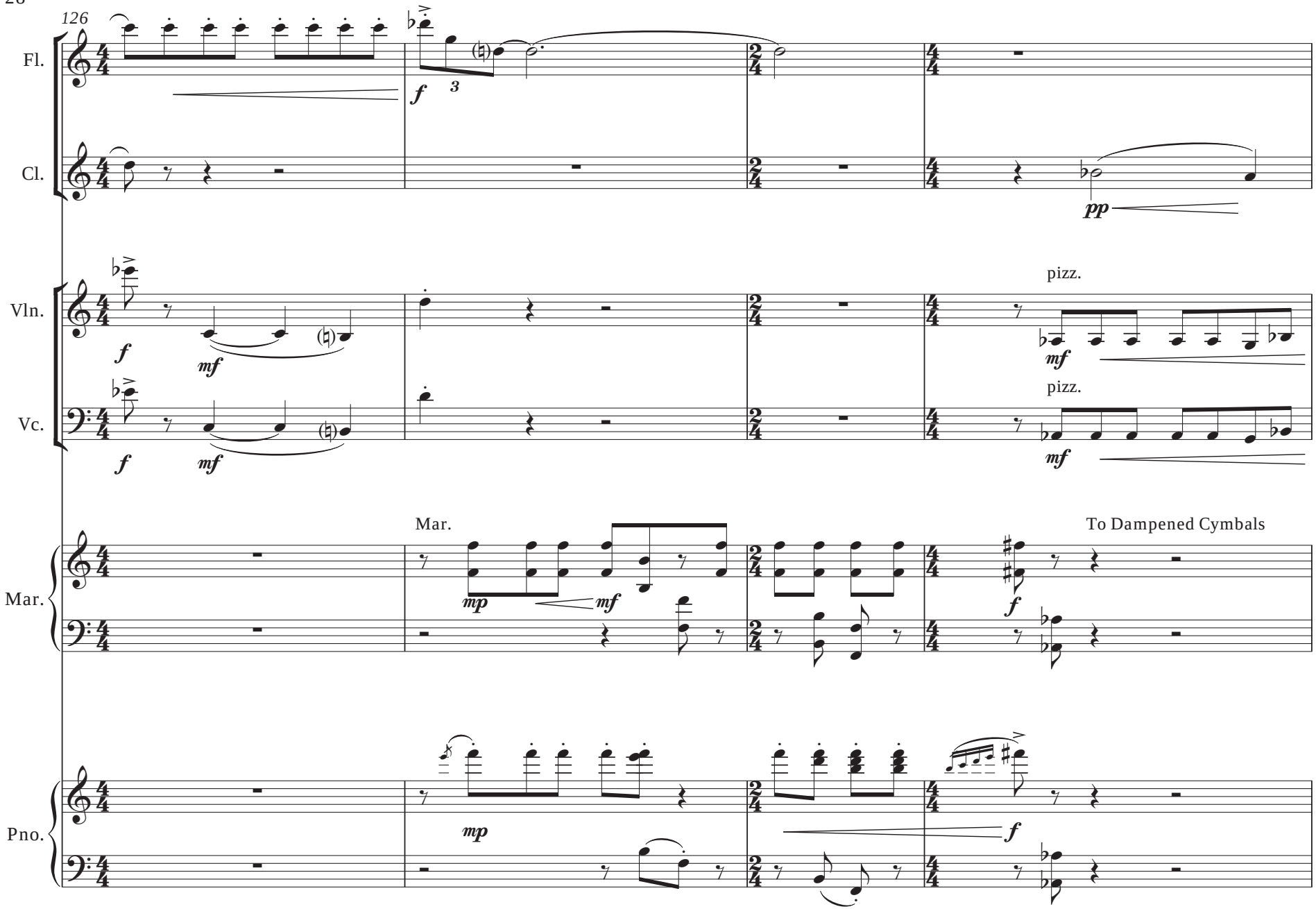

105
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
p
mf
p
mf
pizz.
mf
pizz
port.
W.B.
mp
mf
mp
8va
f

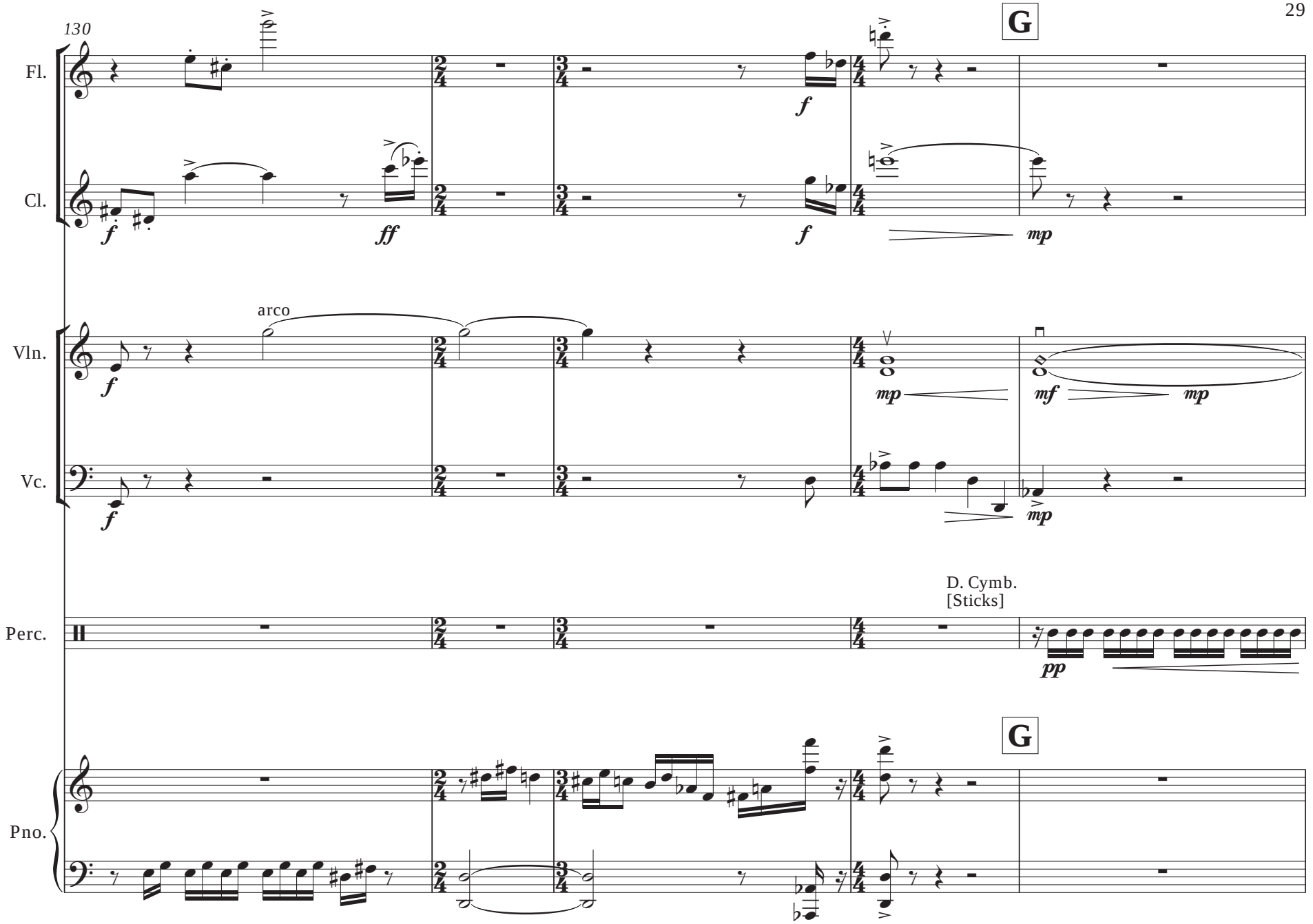

109
Fl.
Cl.
Vln.
Vc.
pizz.
Perc.
To Mar.
Pno.

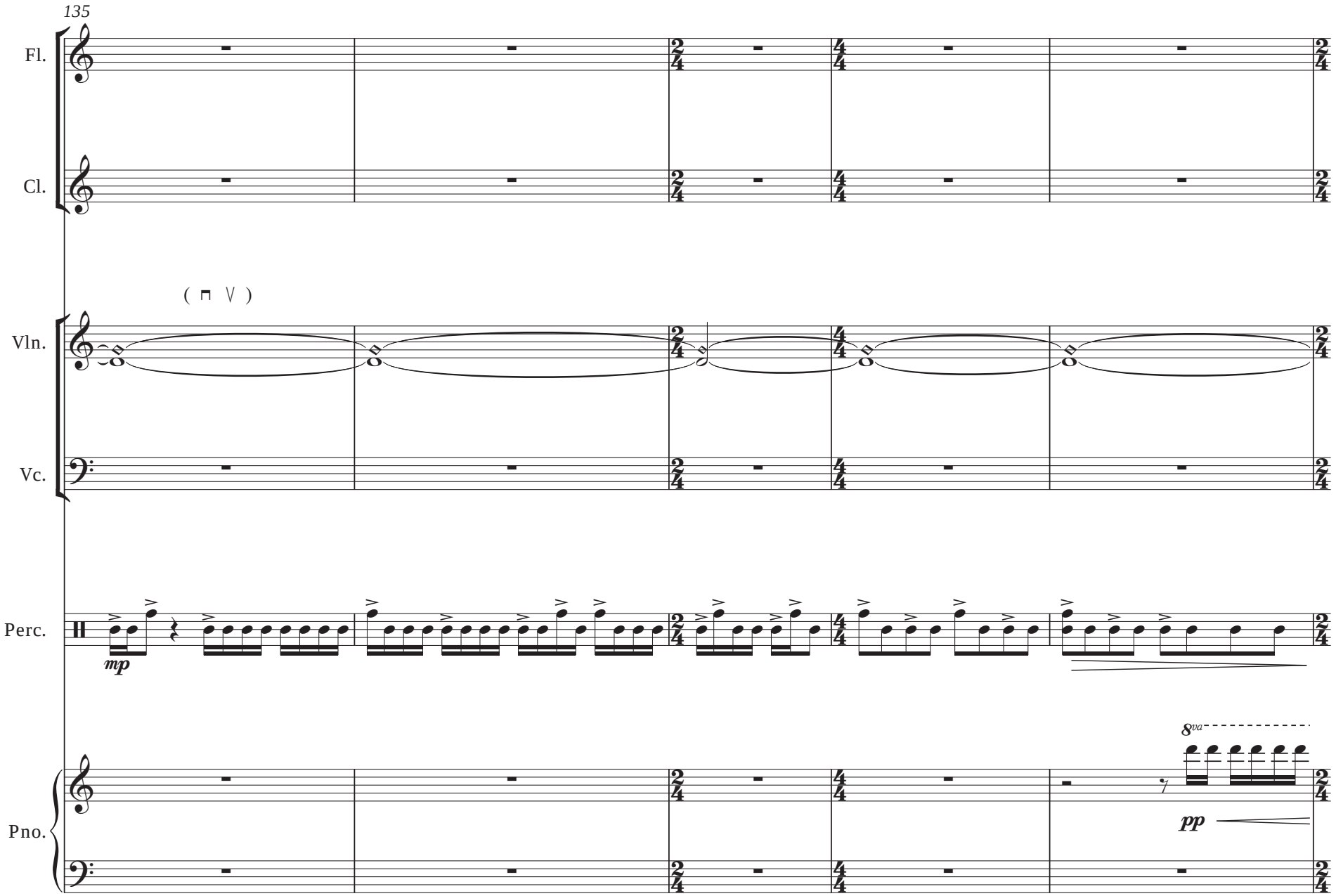

114
25
Fl.
Cl.
Vln.
Vc.
Mar.
Pno.
mp
f
mf
p
arco
pp
3

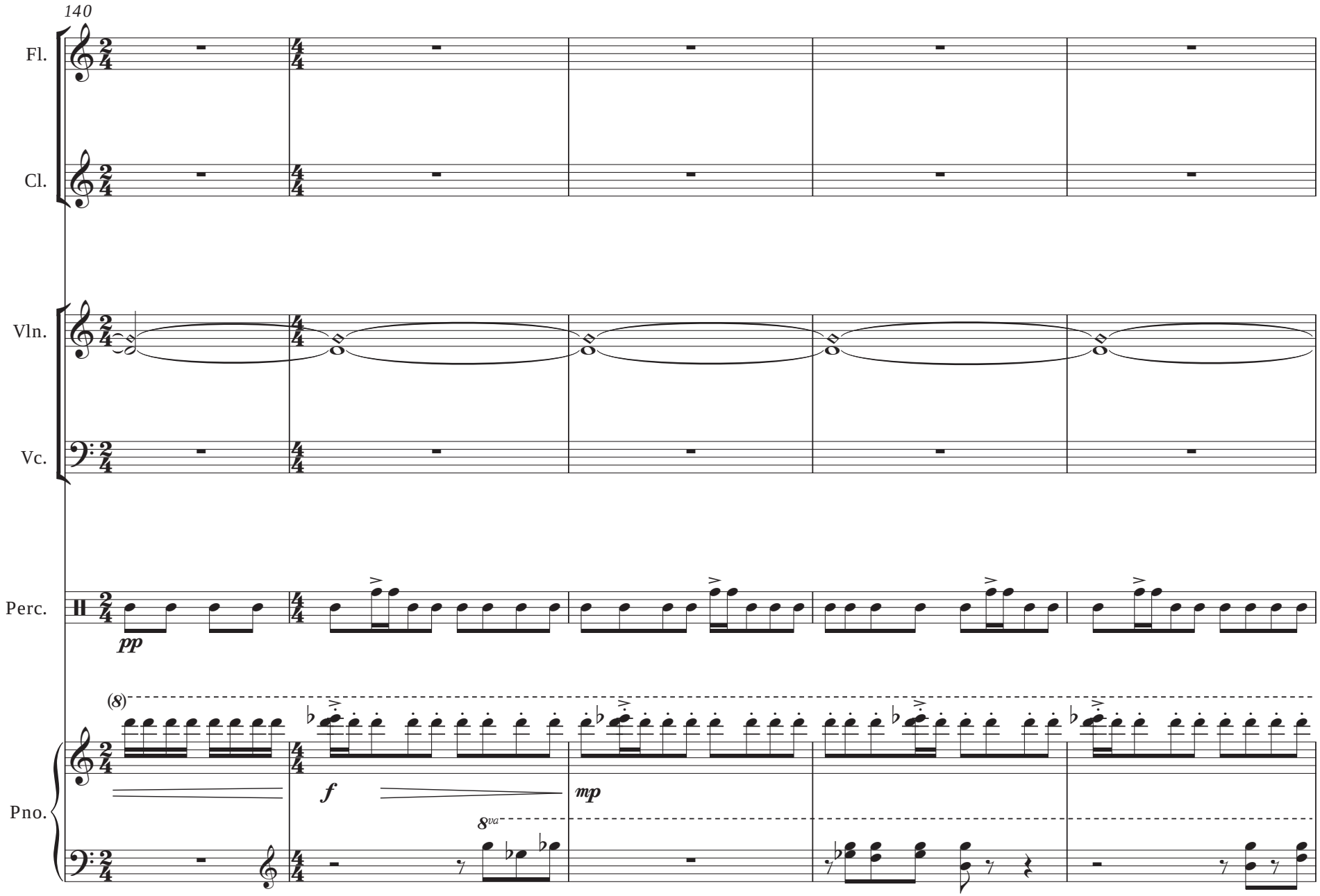

118
Fl.
Cl.
Vln.
Vc.
Mar.
Pno.
f
mp
f
pizz.
mp
pizz.
mp
To W.B.
p
mf
mp
mp

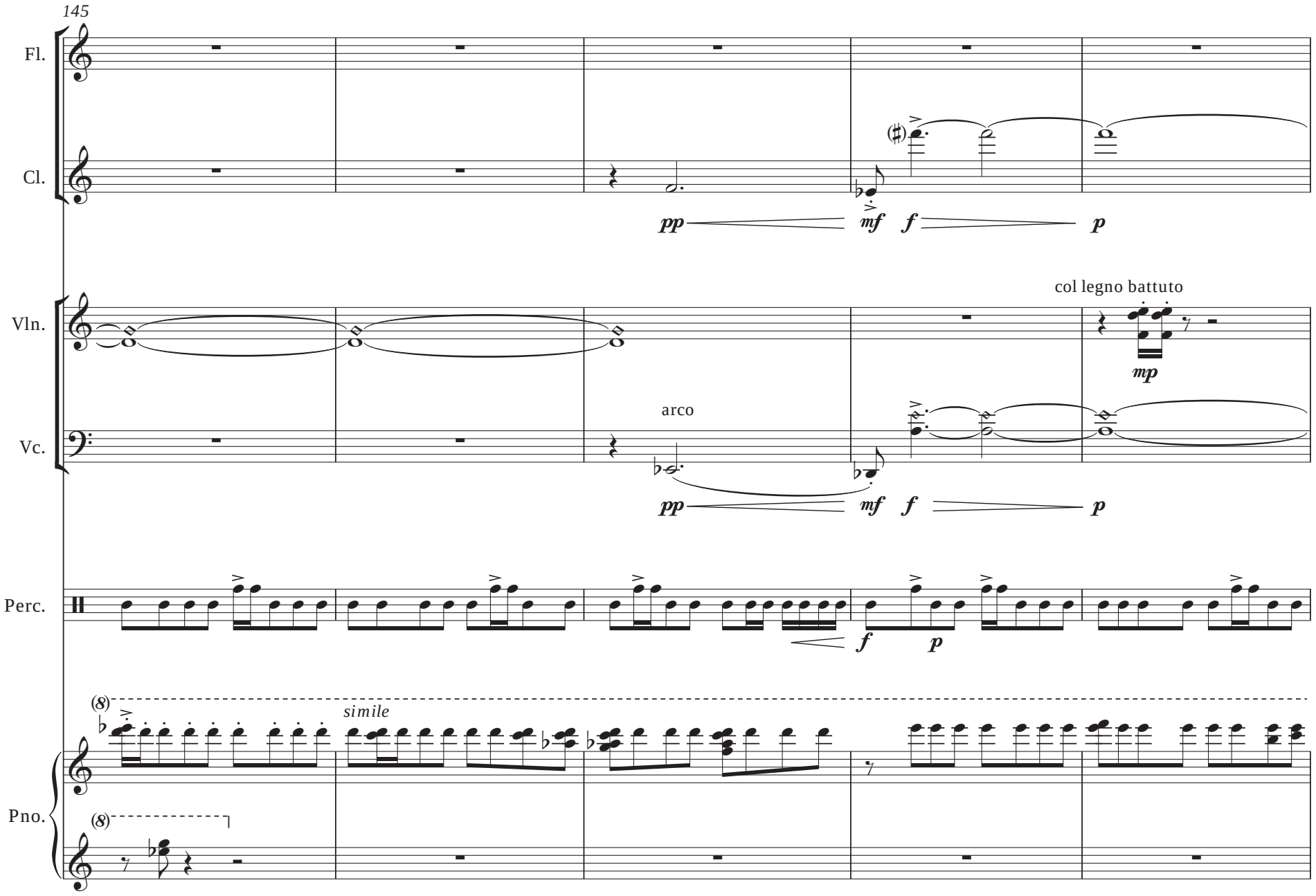

F
122
Fl.
mp
mf
Cl.
mp
mf
Vln.
arco
mf
Vc.
arco
arco
p
mf
W.B.
Perc.
mf
To Mar.
F
Pno.

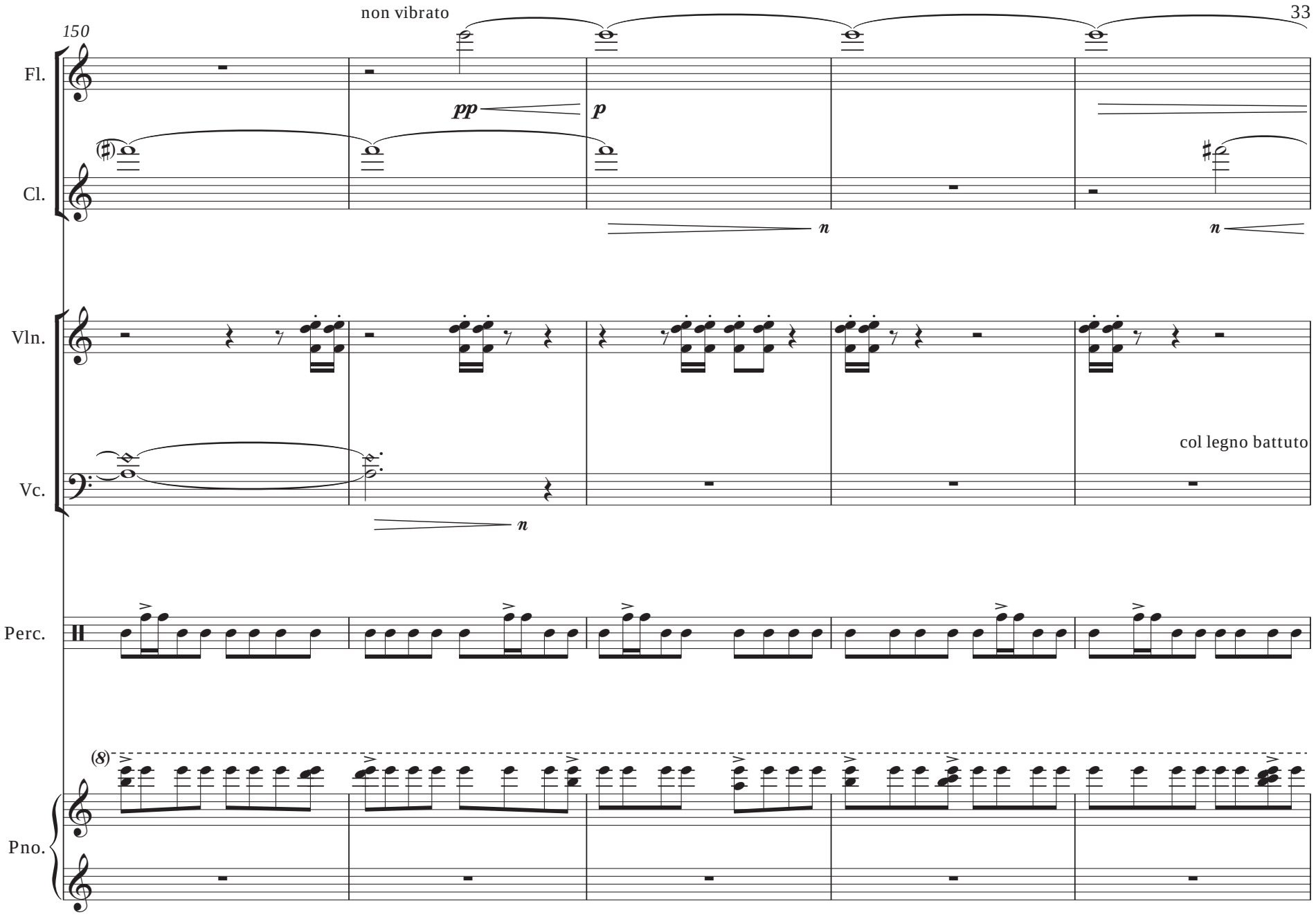

126
Fl.
Cl.
Vln.
Vc.
Mar.
Pno.
pizz.
pizz.
Mar.
To Dampened Cymbals

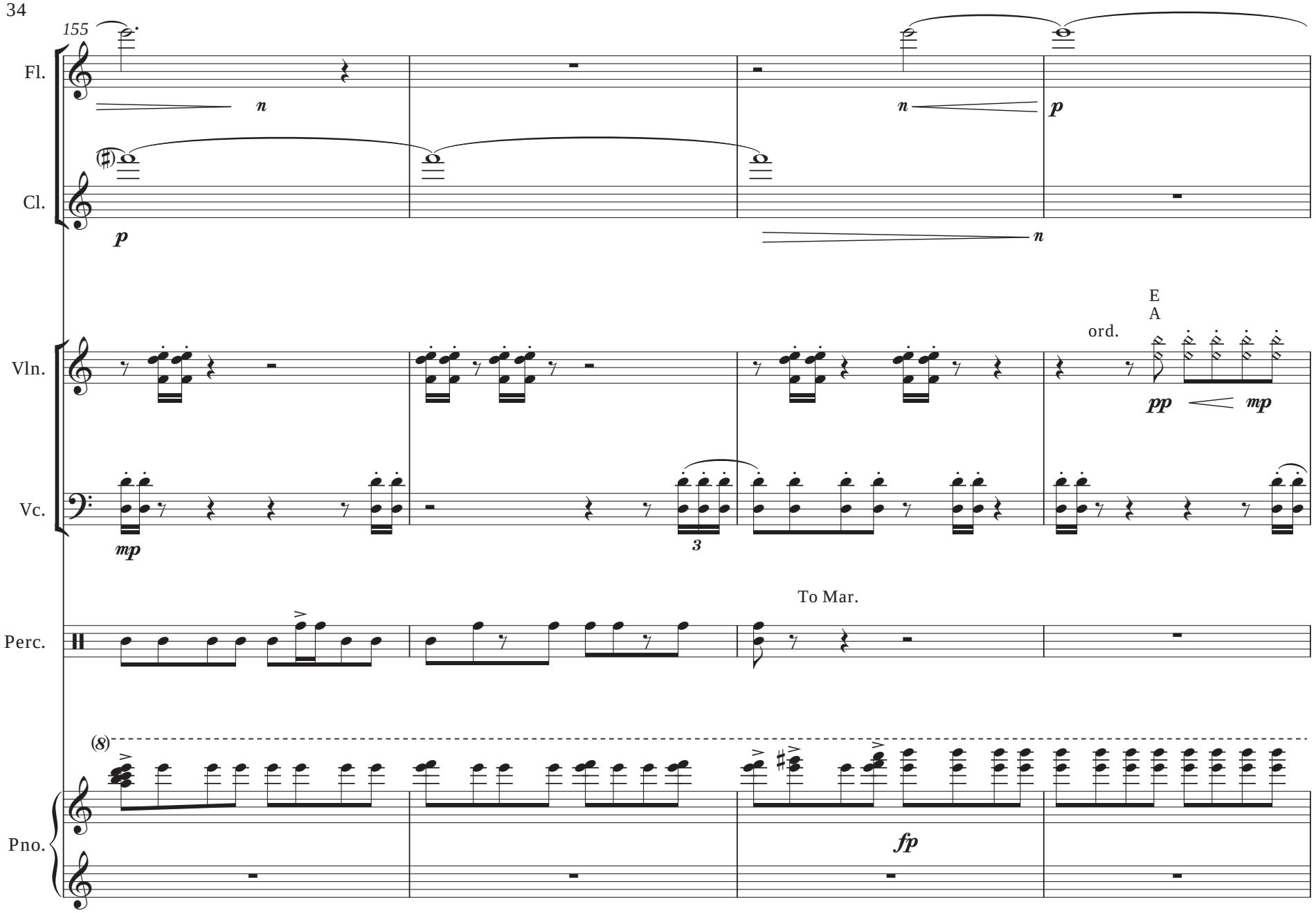

130
G
Fl.
Cl.
f
ff
f
mp
arco
Vln.
Vc.
mp
mf
mp
mp
D. Cymb.
[Sticks]
Perc.
pp
G
Pno.

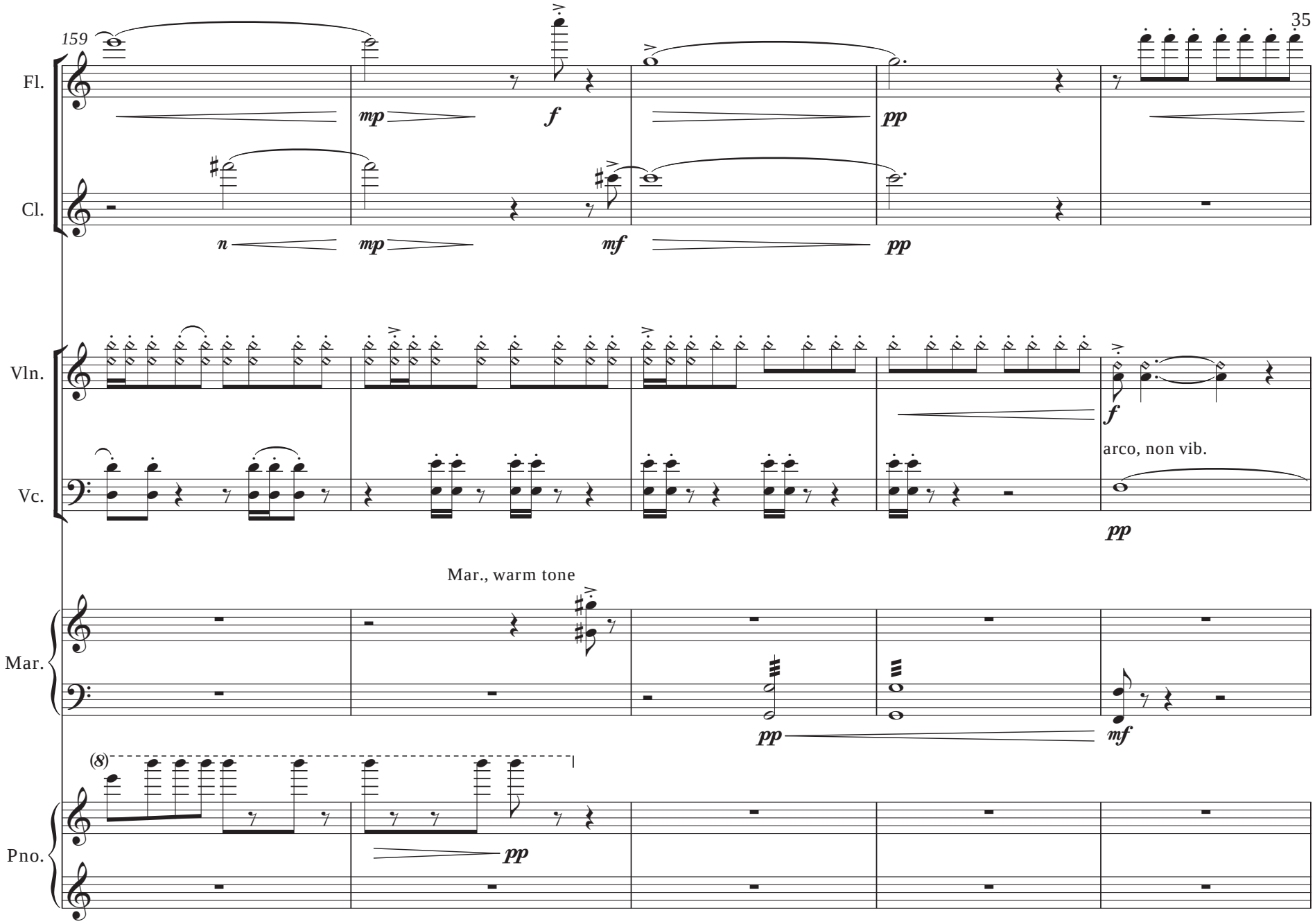

135
Fl.
Cl.
(⊓ ∨)
Vln.
Vc.
Perc.
mp
Pno.
8va
pp

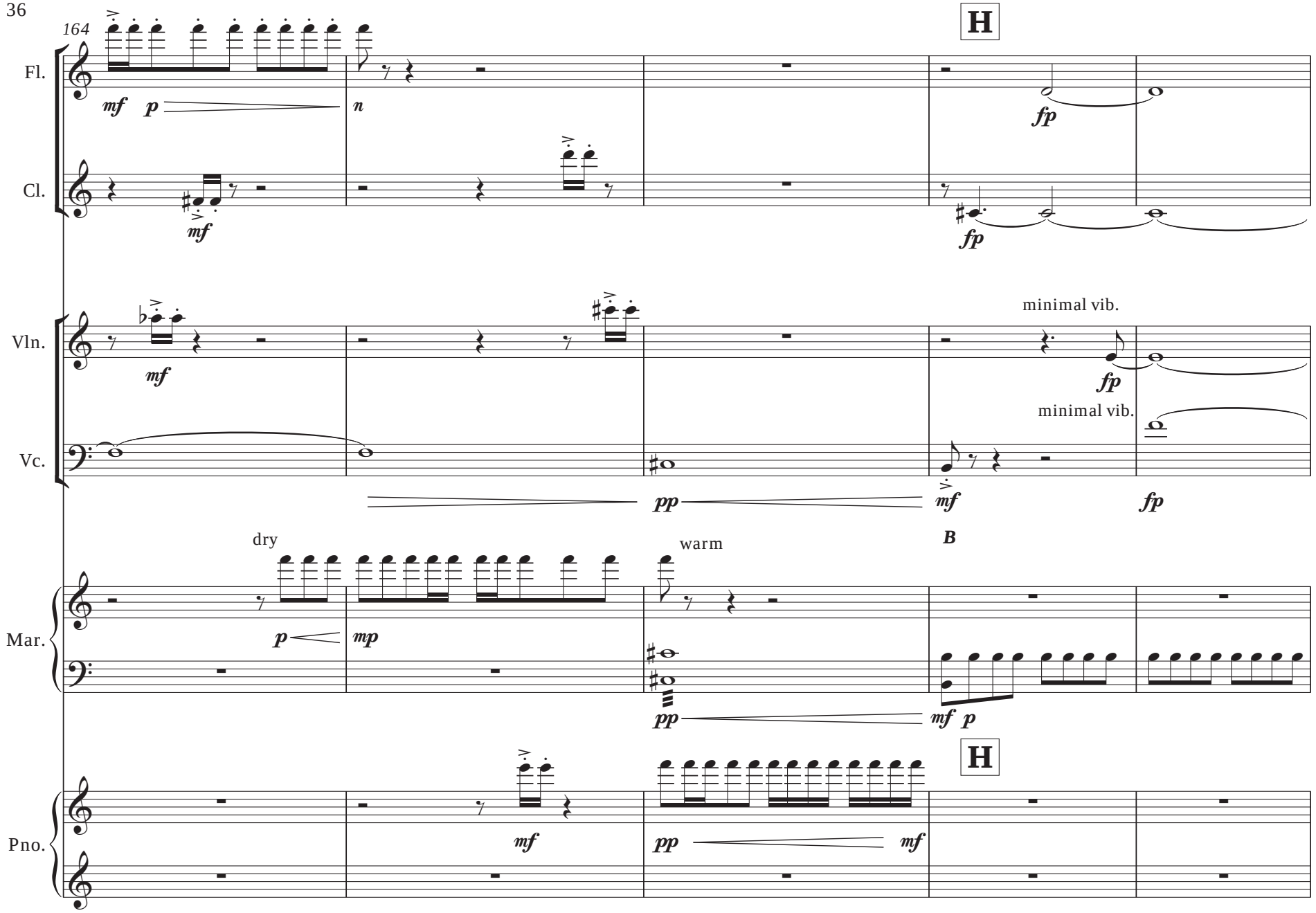

140
Fl.
Cl.
Vln.
Vc.
Perc.
pp
Pno.
(8)
f
mp
8va

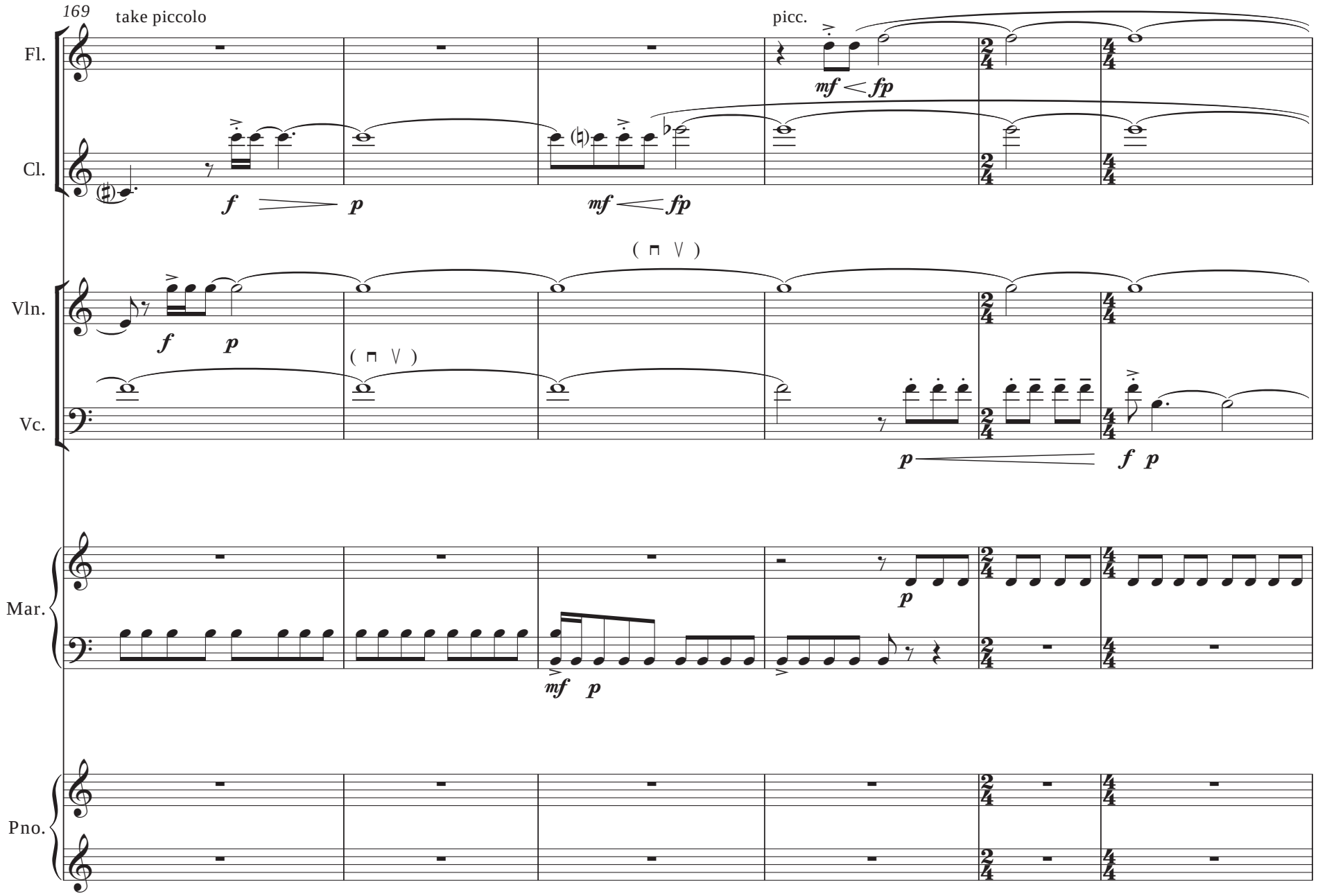

145
Fl.
Cl.
pp
mf
f
p
col legno battuto
Vln.
mp
arco
Vc.
pp
mf
f
p
Perc.
f
p
(8)
simile
Pno.
(8)

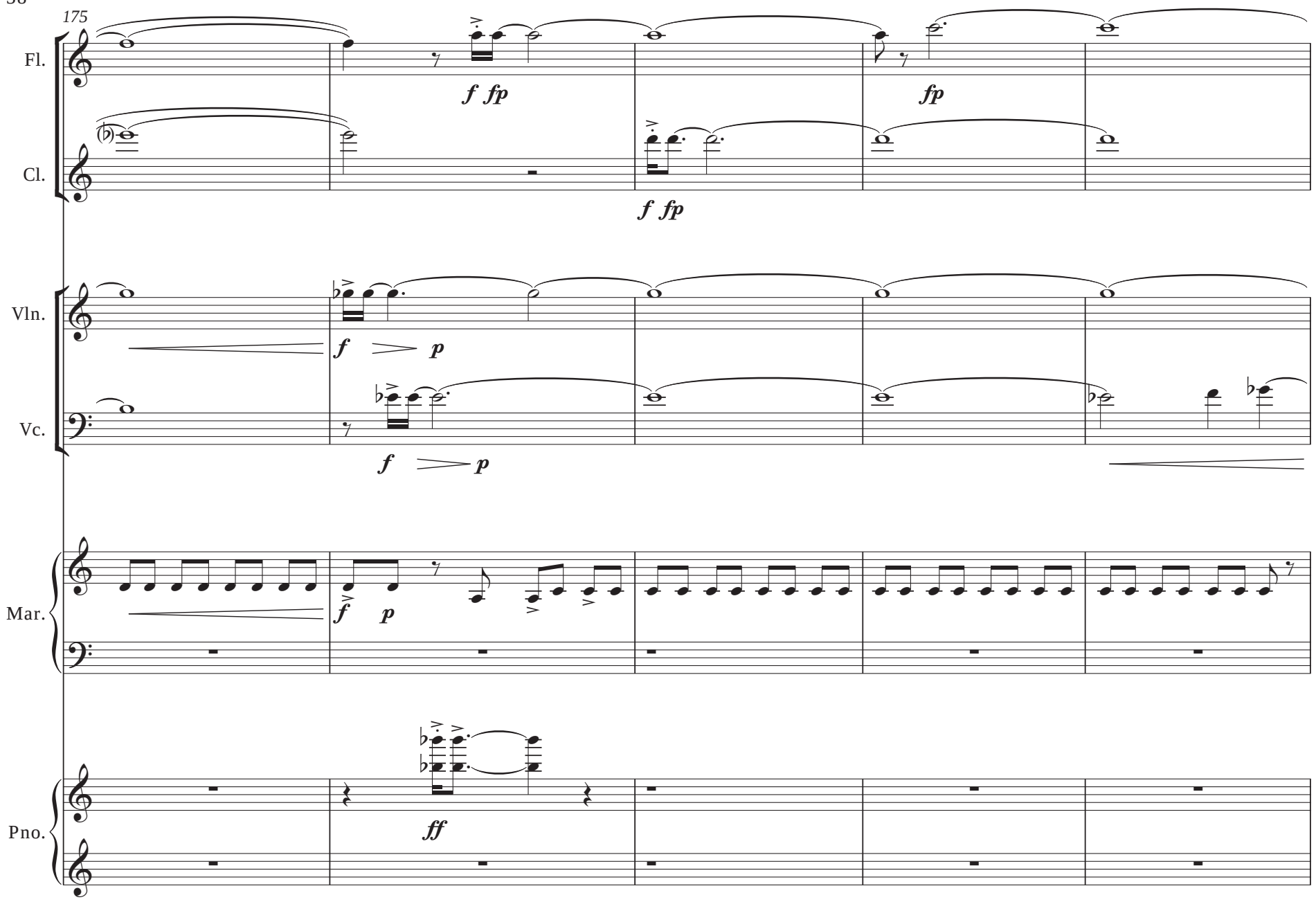

150
non vibrato
33
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
pp
p
n
n
n
col legno battuto
(8)

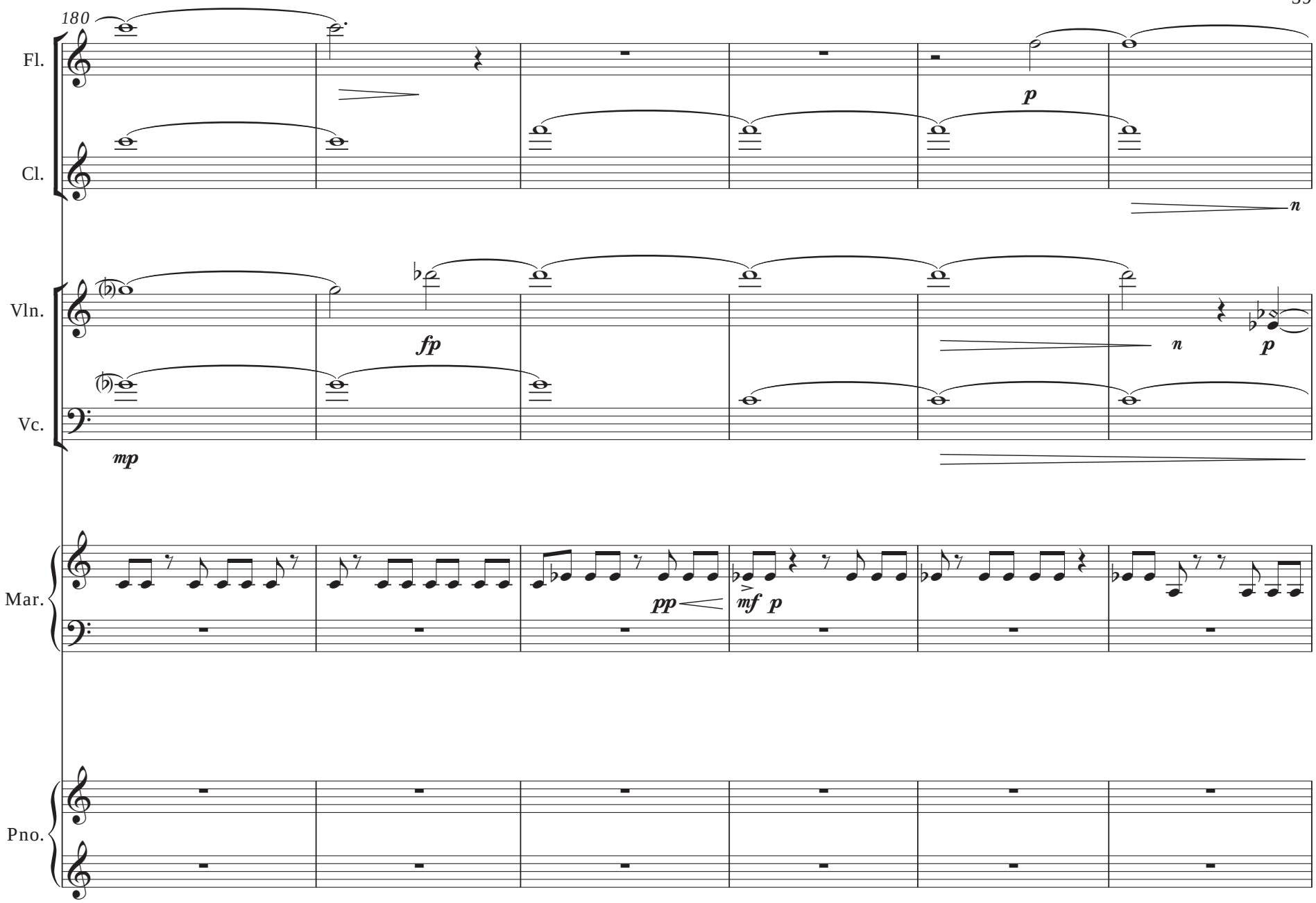

155
Fl.
n
n
p
Cl.
p
n
E
A
ord.
Vln.
pp
mp
Vc.
mp
3
To Mar.
Perc.
(8)
Pno.
fp

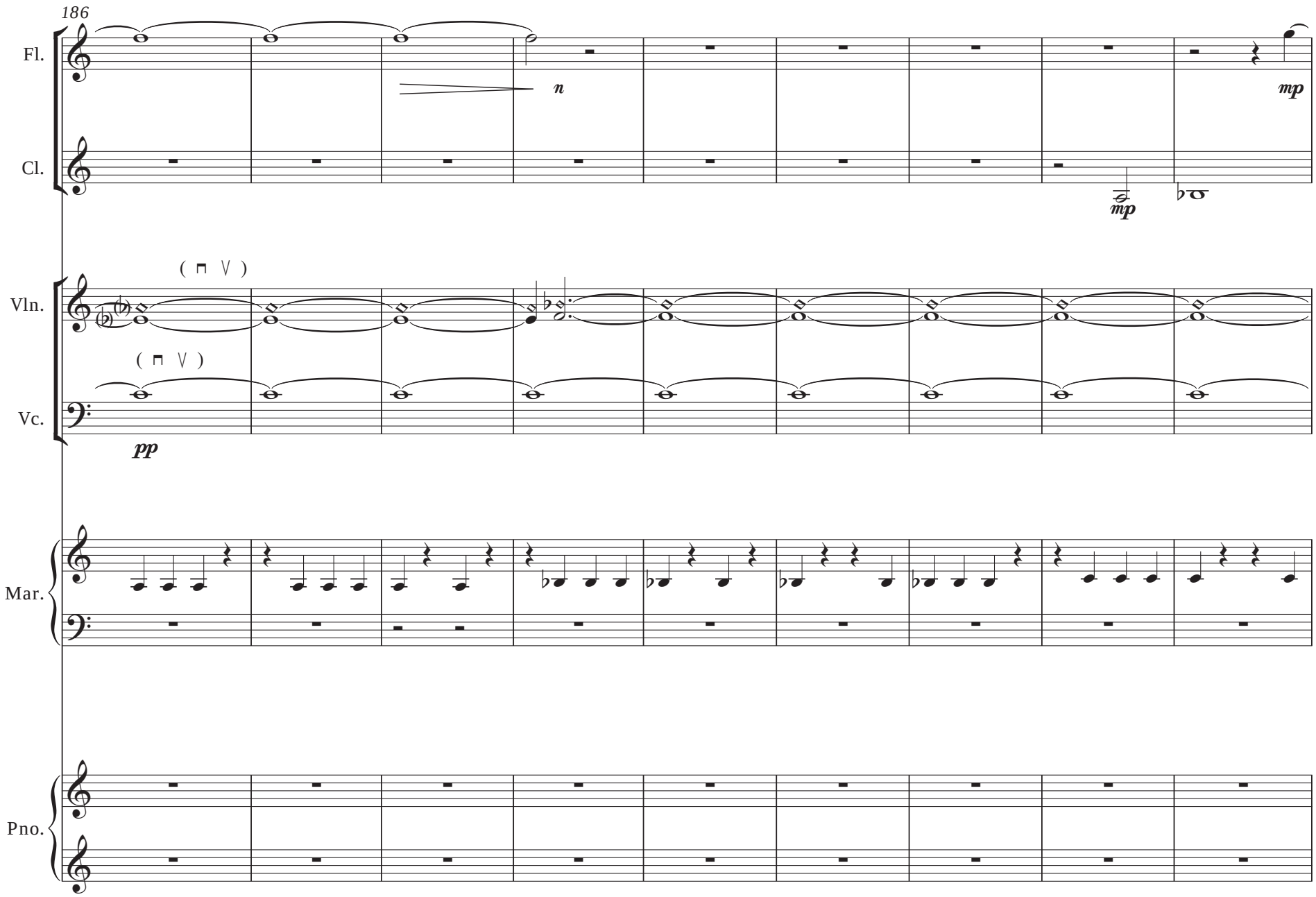

159
Fl.
mp
f
pp
Cl.
n
mp
mf
pp
Vln.
f
arco, non vib.
Vc.
pp
Mar., warm tone
Mar.
pp
mf
(8)
Pno.
pp

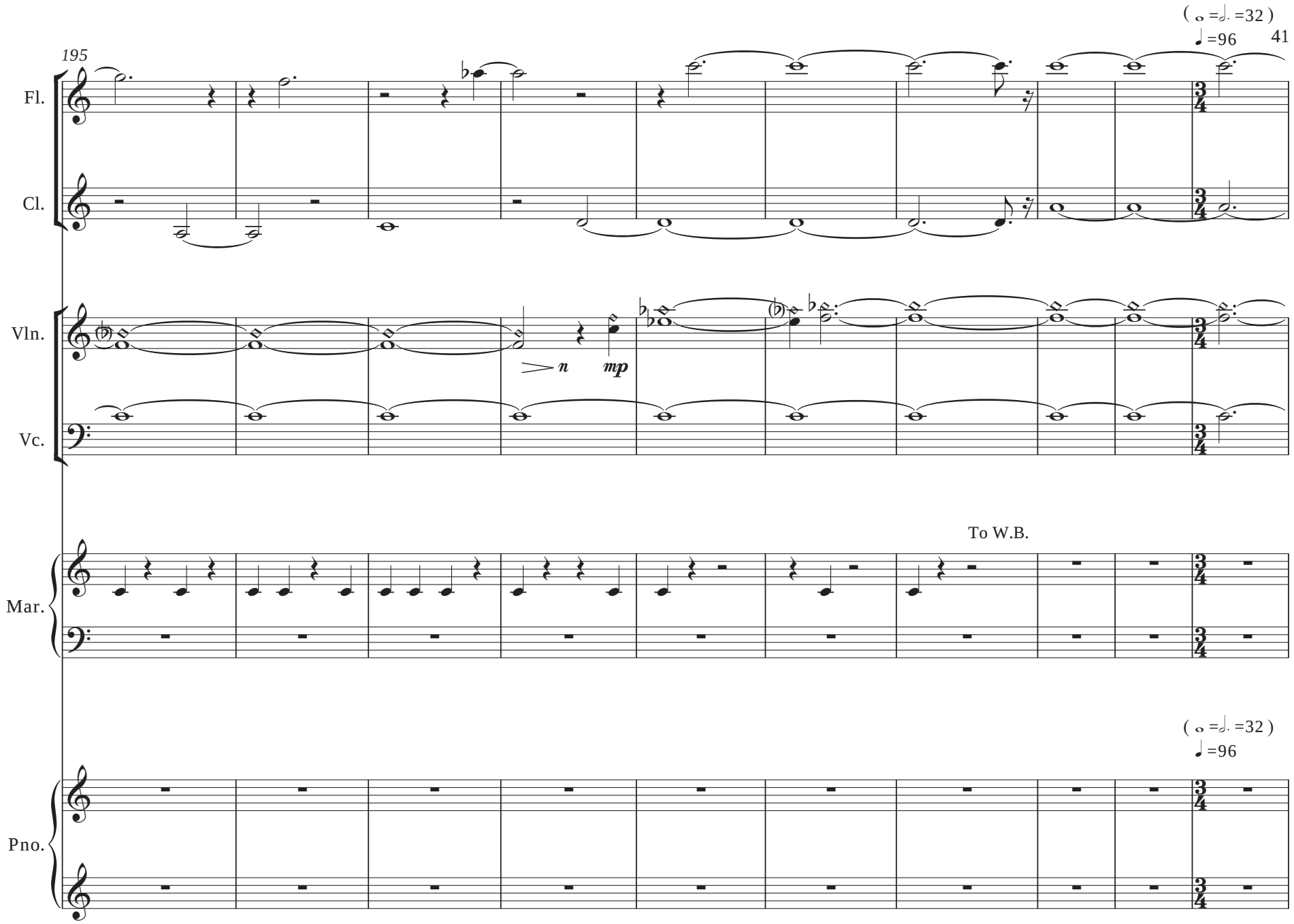

164
H
Fl.
mf
p
n
fp
Cl.
mf
fp
Vln.
mf
minimal vib.
fp
Vc.
minimal vib.
pp
mf
fp
B
dry
warm
Mar.
p
mp
pp
mf p
H
Pno.
mf
pp
mf

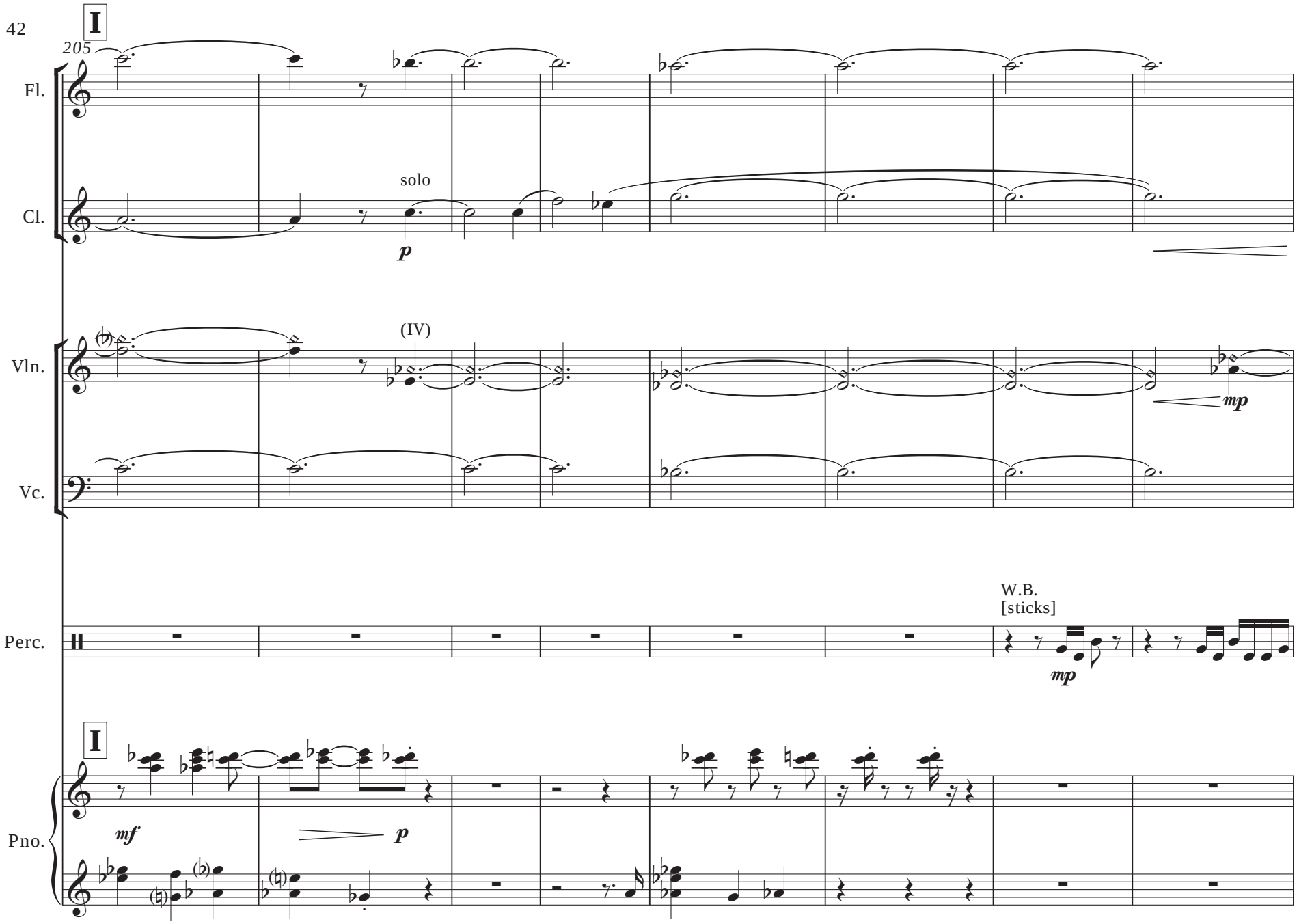

169
take piccolo
picc.
Fl.
Cl.
Vln.
Vc.
Mar.
Pno.
f
p
mf
fp
(⊓ ∨)

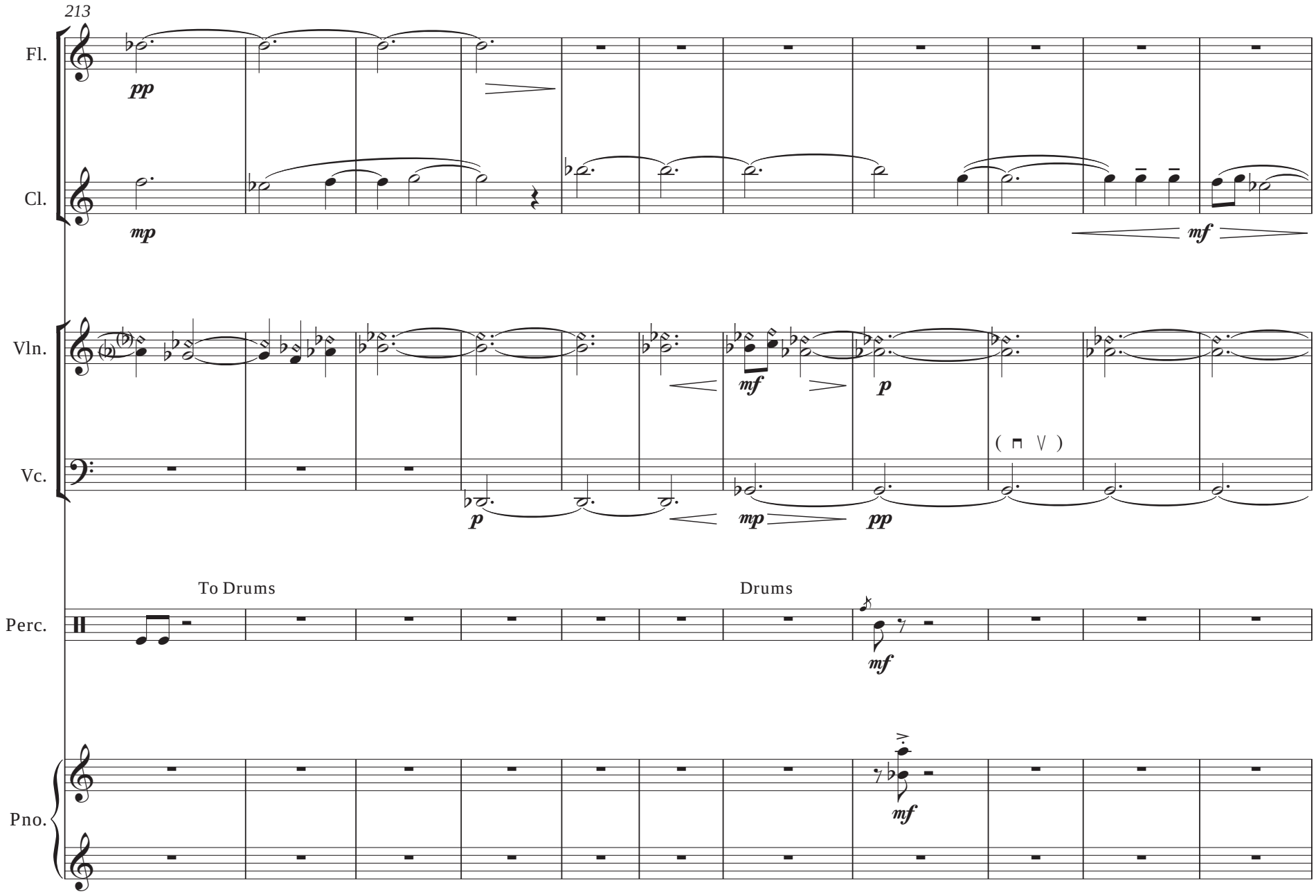

175
Fl.
Cl.
Vln.
Vc.
Mar.
Pno.
f fp
fp
f fp
f
p
f
p
f
p
ff

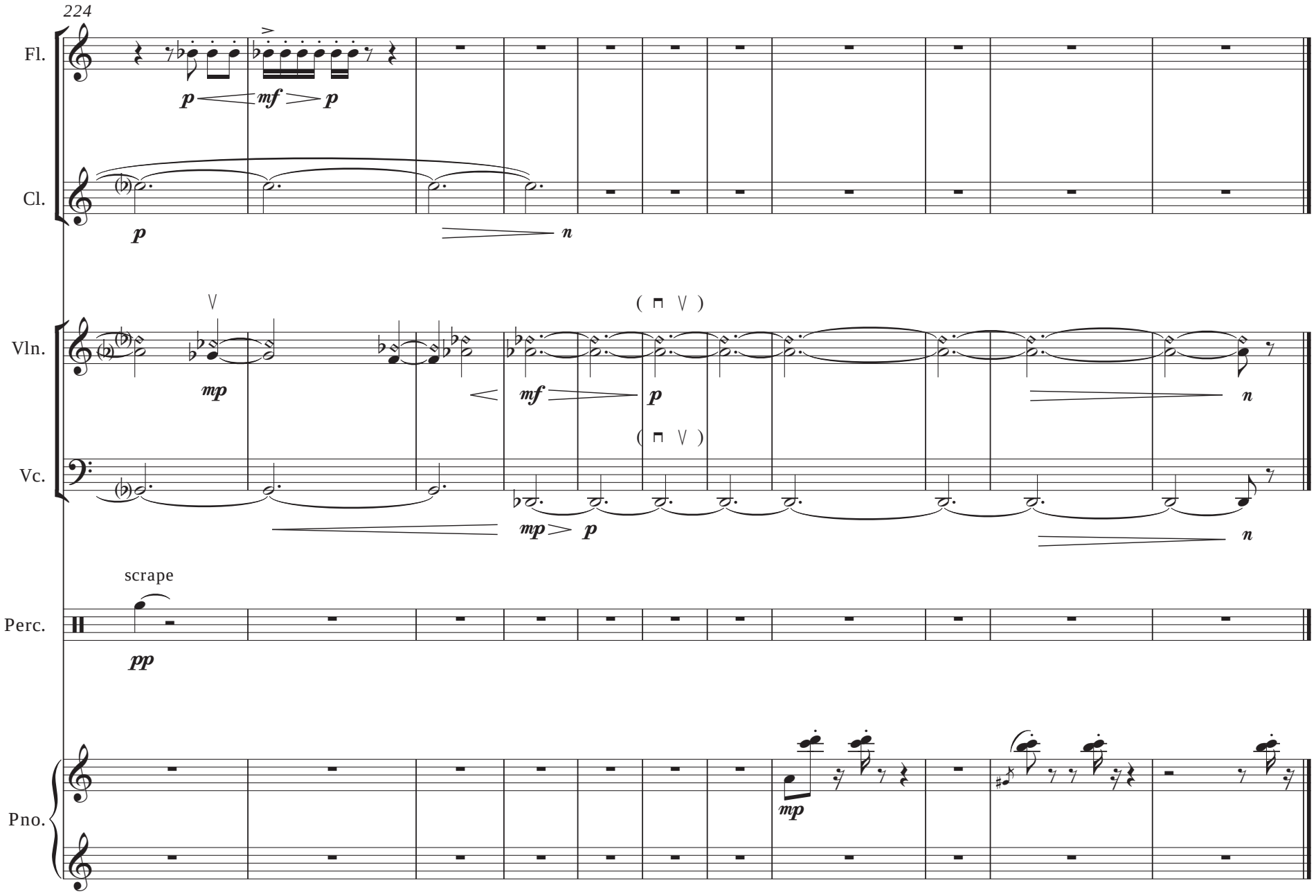

180
Fl.
Cl.
Vln.
Vc.
Mar.
Pno.
p
n
fp
n
p
mp
pp
mf p


186
Fl.
Cl.
Vln.
Vc.
Mar.
Pno.
n
mp
mp
(⊓ ∨)
(⊓ ∨)
pp


(𝅝 =𝅗𝅥. =32)
♩ =96
41
195
Fl.
Cl.
Vln.
Vc.
n
mp
To W.B.
Mar.
(𝅝 =𝅗𝅥. =32)
♩ =96
Pno.


I
205
Fl.
Cl.
solo
p
(IV)
Vln.
Vc.
mp
W.B.
[sticks]
Perc.
mp
I
Pno.
mf
p


213
Fl.
pp
Cl.
mp
mf
Vln.
mf
p
Vc.
p
mp
pp
To Drums
Drums
Perc.
mf
Pno.
mf


224
Fl.
Cl.
Vln.
Vc.
scrape
Perc.
Pno.

Sway: the Mildest Form of Falling
by Sarah Page Summar

Program note:

I owe the subtitle of Sway to my good friend, choreographer Lily Sloan. To her definition of "sway" I will add only that it is also a perpetual motion. As we catch our weight on the left, we begin to fall to the right. The hips swivel in a figure eight pattern and the falling could quite effortlessly go on forever.

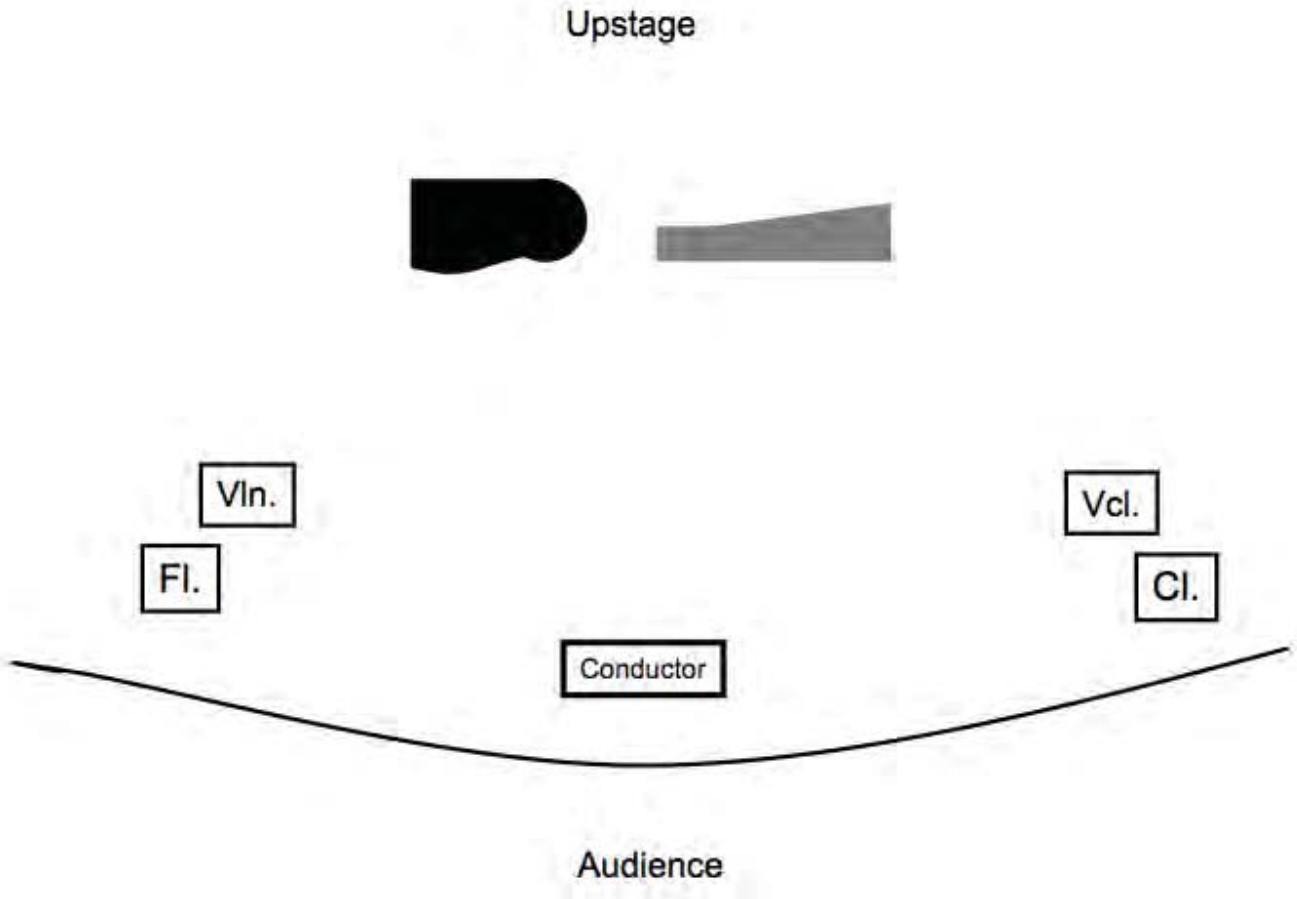
In *Sway*, a repeated harmonic pattern that has no clear arrival points combines with careful voice leading to create the impression of a gentle yet endless descent. The opening of the work also uses contrapuntal dynamics to create the spatial effect of a single tone moving from side to side within the performance space. This effect, along with some of the material and many of the compositional processes used in the creation of *Sway*, were inspired in part by Ruth Crawford's *String Quartet (1931).*

Sway belongs to the Intricate Maneuvers series, a group of works inspired by and modeled after movement.

Performance notes for Sway

INSTRUMENTATION
- flute
- clarinet in B♭
- violin
- cello
- marimba
- piano

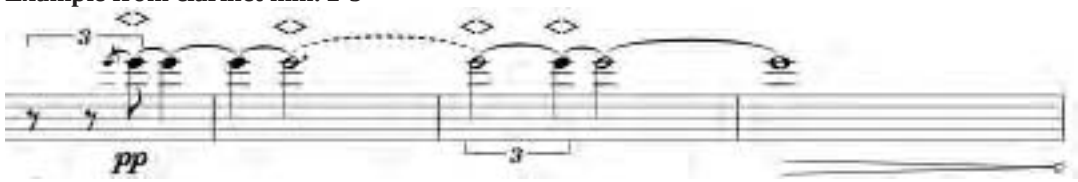
Instrument placement:
In order to create the impression that certain sounds in the piece are moving from side to side across the performance space, the flute and violin are to be seated downstage, audience left and the clarinet and cello downstage, audience right. This arrangement is reflected in the score by the ordering and bracketing of these two pairs of instruments. The piano and marimba are to be placed side-by-side upstage and center. A conductor is recommended but not required.


Upstage
Vln.
Fl.
Vcl.
Cl.
Conductor
Audience

Hairpin accent:
< > This symbol indicates that a rapid crescendo and decrescendo are to be performed, peaking at the note over which it appears. It is essentially a purely dynamic accent (as opposed to an articulation accent). Grace notes often appear before hairpin accented notes that are otherwise preceded by a rest in order to allow time to crescendo into the accented note. The peak of the accent should be approximately three dynamic levels louder than the last dynamic indicated and then return rapidly to that original dynamic. In the example below, the grace note would therefore begin ***pp*** and crescendo arriving on the triplet eighth-note at a ***f*** dynamic that then rapidly decreases to sustain at ***pp*** until the next < > on beat two of the following measure.

Composite melody:
The conductor's score as well as the flute, violin, clarinet and cello parts include a cue sized "Composite Melody" guide that shows the melody that is created by the hairpin accents that appear in the individual parts. A gesture that frequently occurs in the piece has two instruments on opposite sides of the stage performing hairpin accents in rhythmic counterpoint on a unison pitch to create a panning effect. The melody guide is provided to help coordinate precise timing of these gestures as well as to help each performer know when to focus particularly on matching their intonation, dynamics and tone color with a player performing the same pitch on the opposite side of the stage.

Example from clarinet mm. 2-5

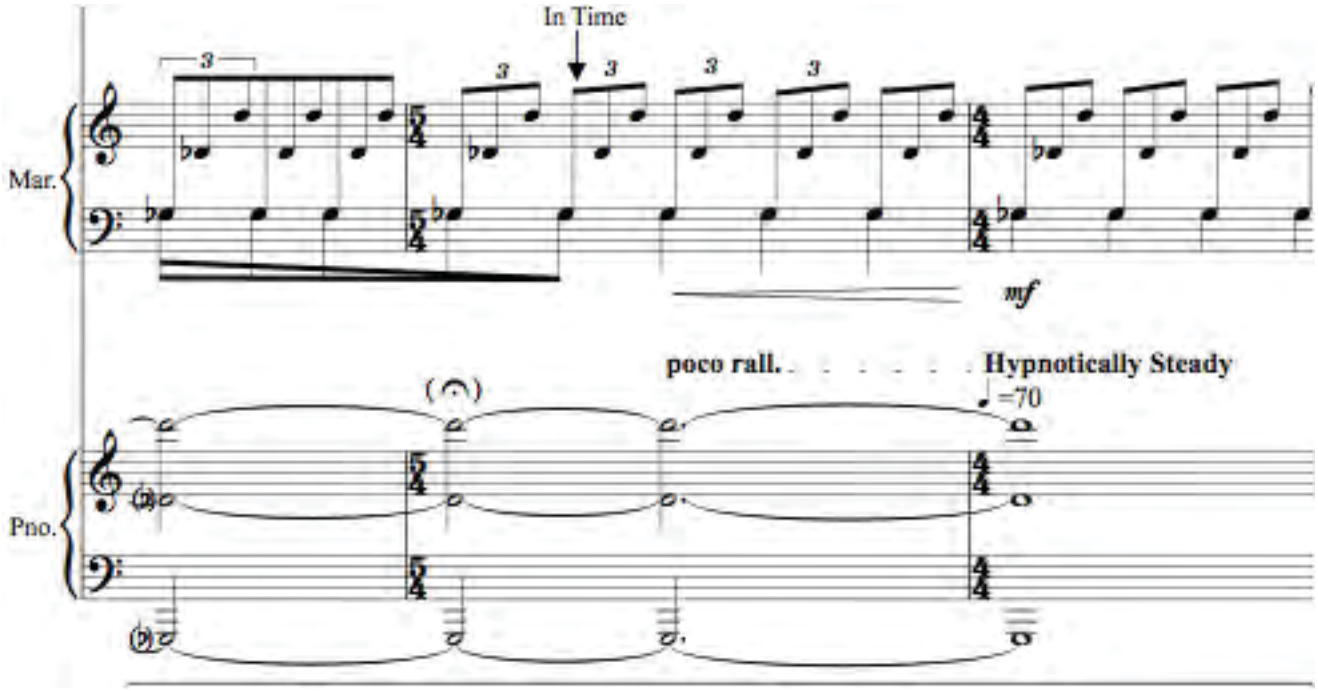


Dotted ties:
There are many places where a sustained effect is asked of the strings and winds for a longer duration than can reasonably be performed in a single bow or breath. Dotted ties are provided in such passages to show where it would be preferable for the player to "sneak" a breath or bow change. Should more breath or bow change be needed than are indicated by the dotted ties, the composite melody guide may help the performers find appropriate spots to place them as subtly as possible. In the example above, the clarinetist may sneak a breath just before the start of m. 3 so as to have time to create the hairpin accent on the downbeat of that measure.

De niente/A niente hairpins:
Crescendo and decrescendo marks that have a tiny circle on the closed end (as in the last measure of the example above) indicate that they begin from or end in silence.

Accidentals:
All accidentals apply until the next bar line and only in the octave where written. Courtesy accidentals are sometimes provided for clarification but always appear in parentheses.

Feathered beams:
This notation only occurs in the marimba part from mm. 40-45. The effect desired in this passage is one in which the percussionist performs the ascending triplet arpeggios first as rapidly as possible slowing gradually to arrive at an in-time triplet at beat 2 of measure 45. The number of arpeggios occurring within each of these measures may be adjusted from what is notated in order to create a smooth deceleration into the real triplet. The other instruments' parts remain in time throughout the entire passage but they are given a parenthetical fermata for the conductor to perform or not perform as needed to coordinate the return of the marimba to "in-time" performance.

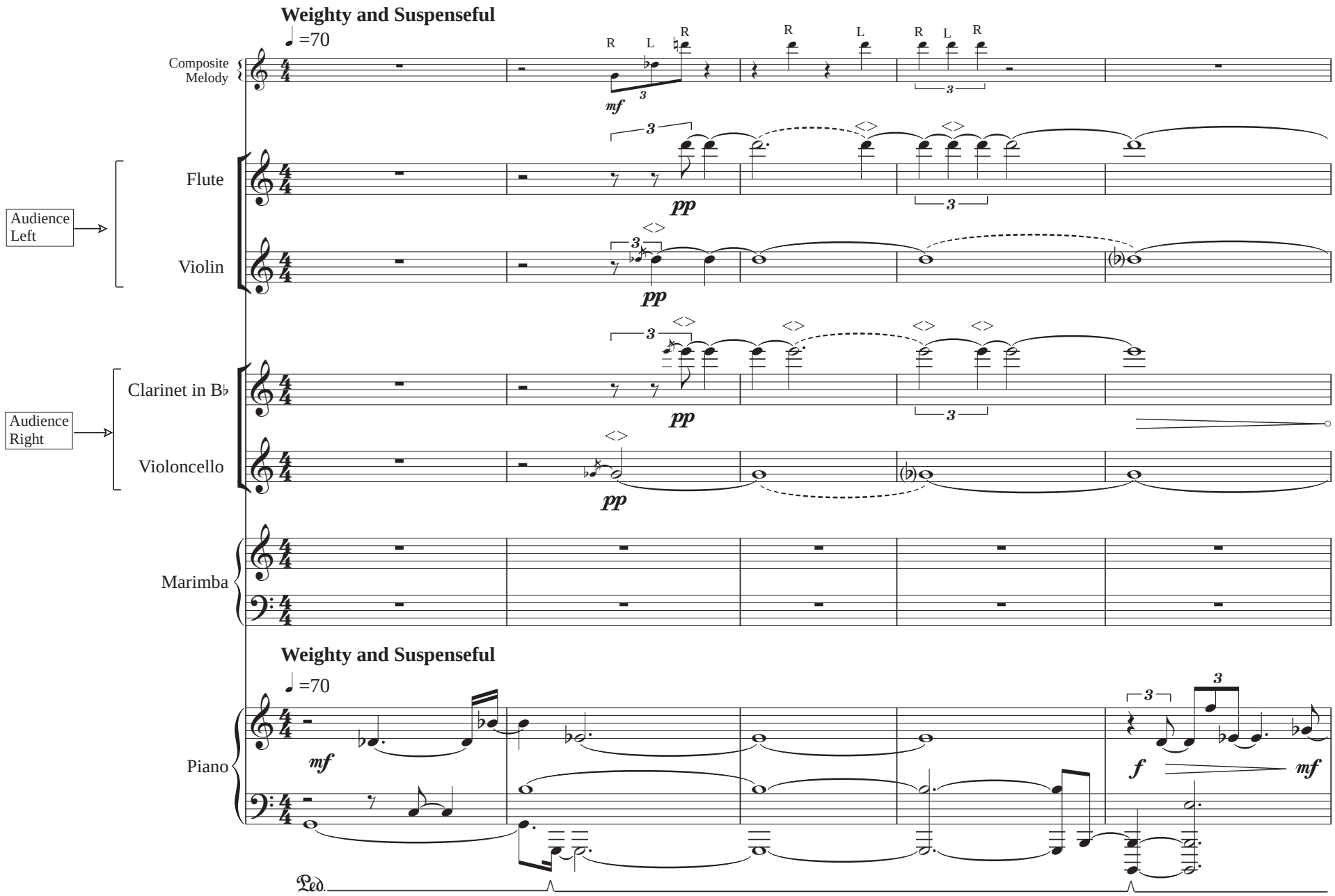


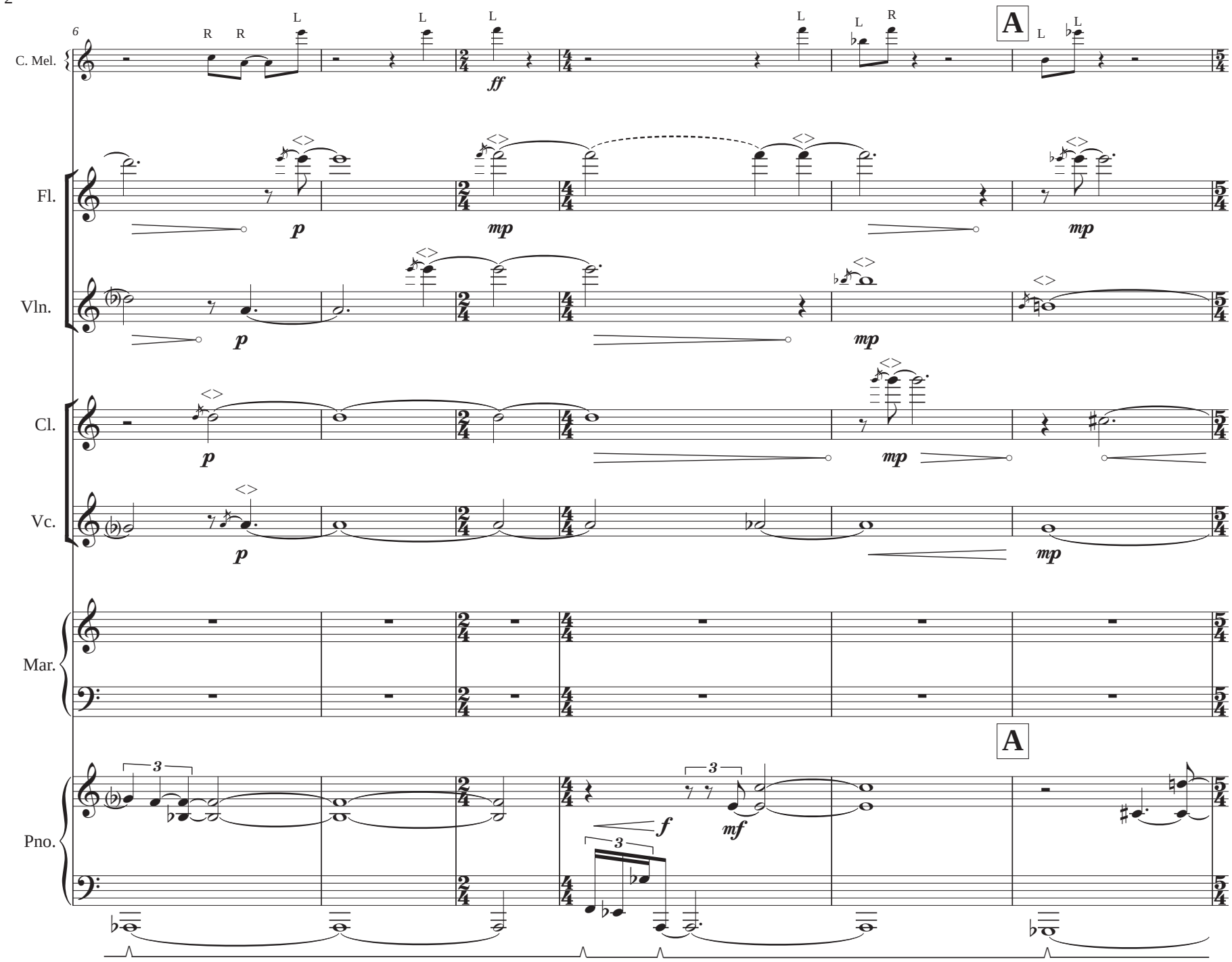
Sway:

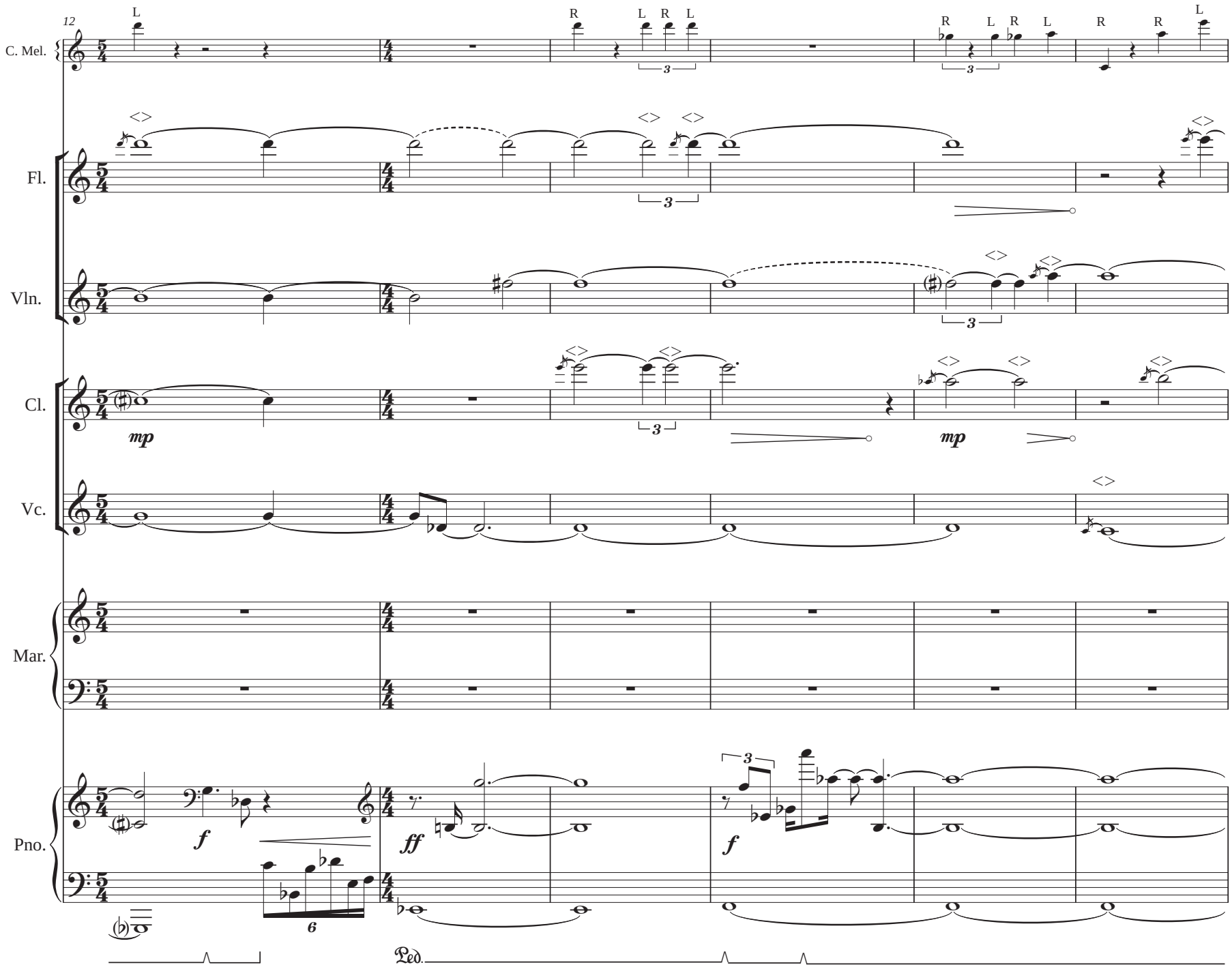
The Mildest Form of Falling

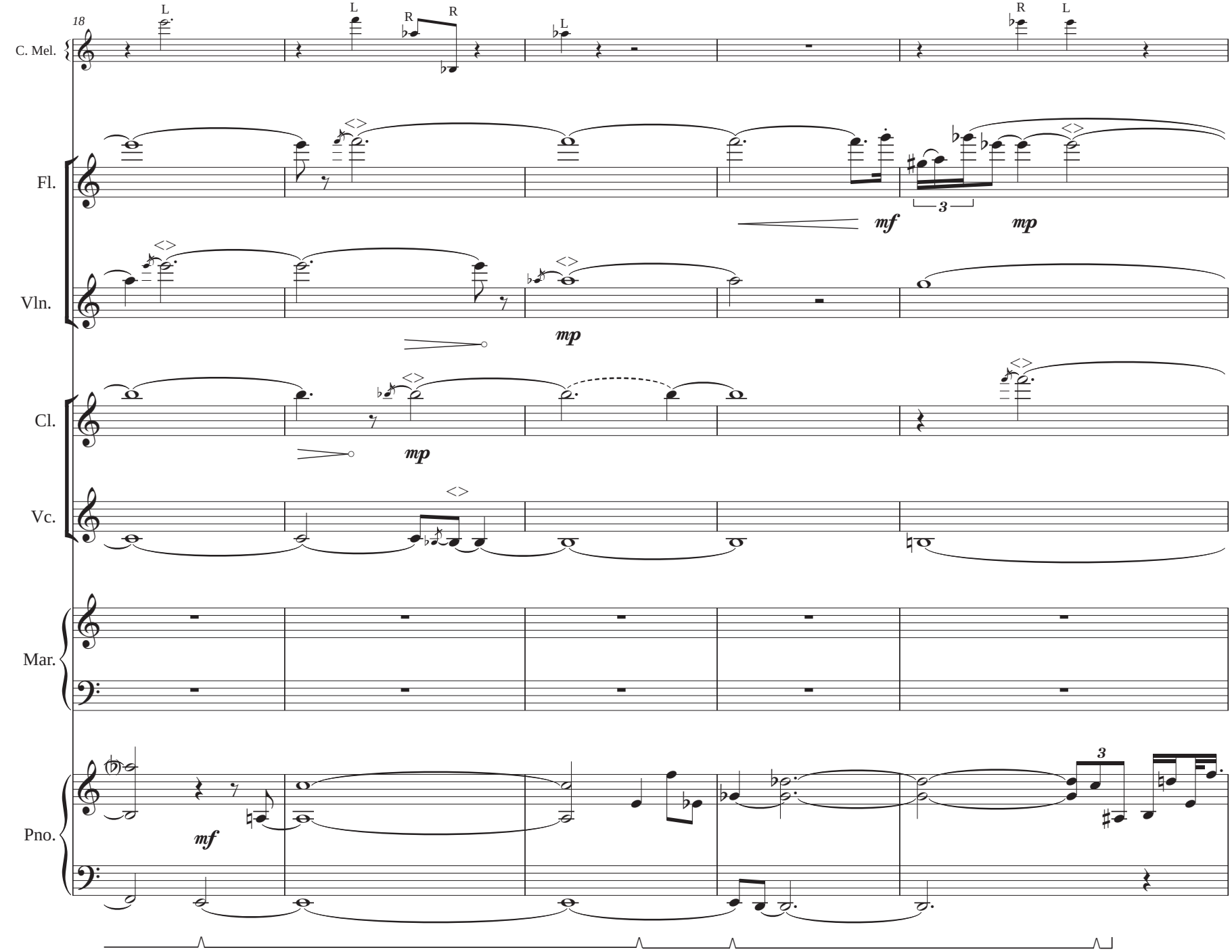
In hommage to Ruth Crawford Seeger

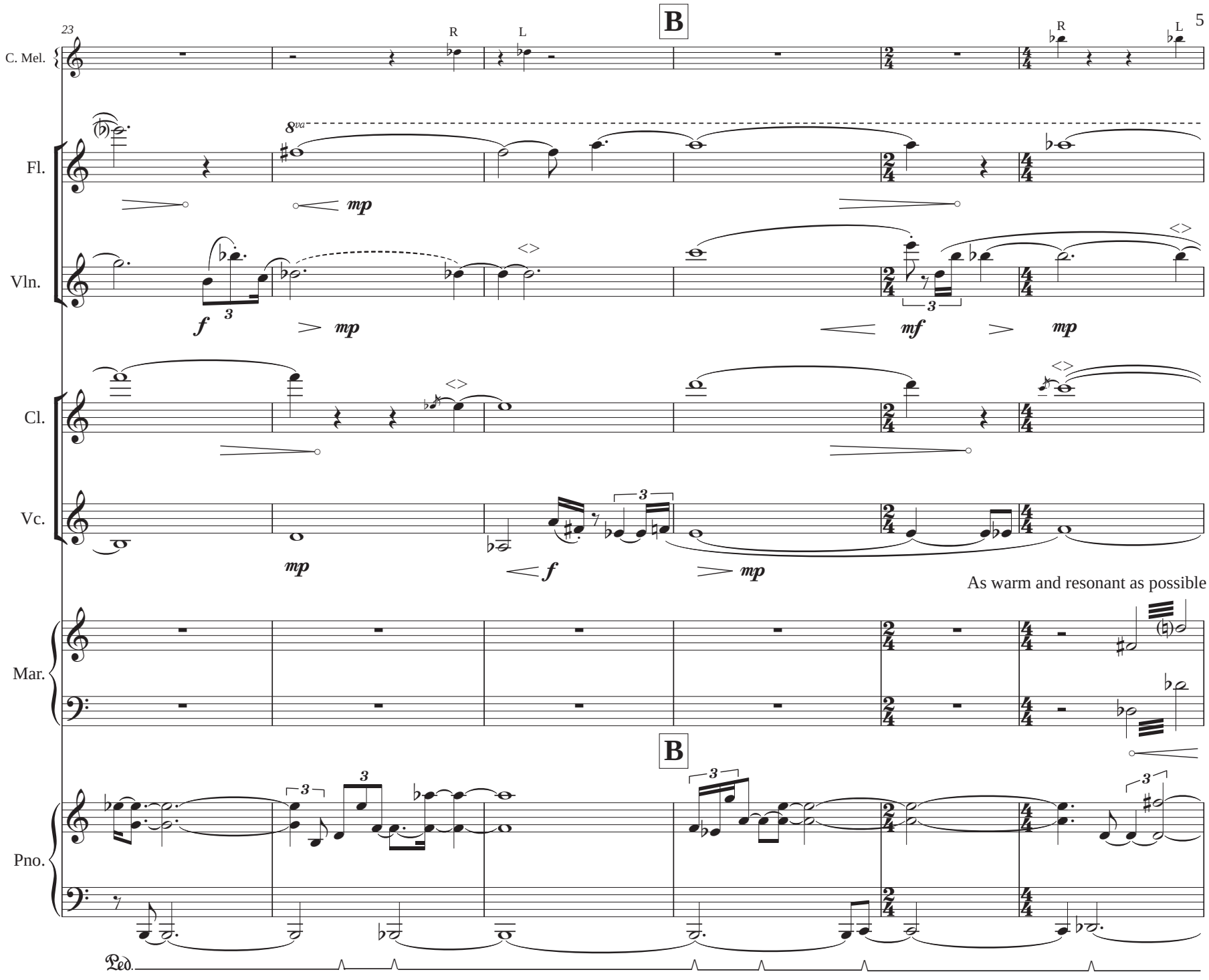
SARAH PAGE SUMMAR (2012)

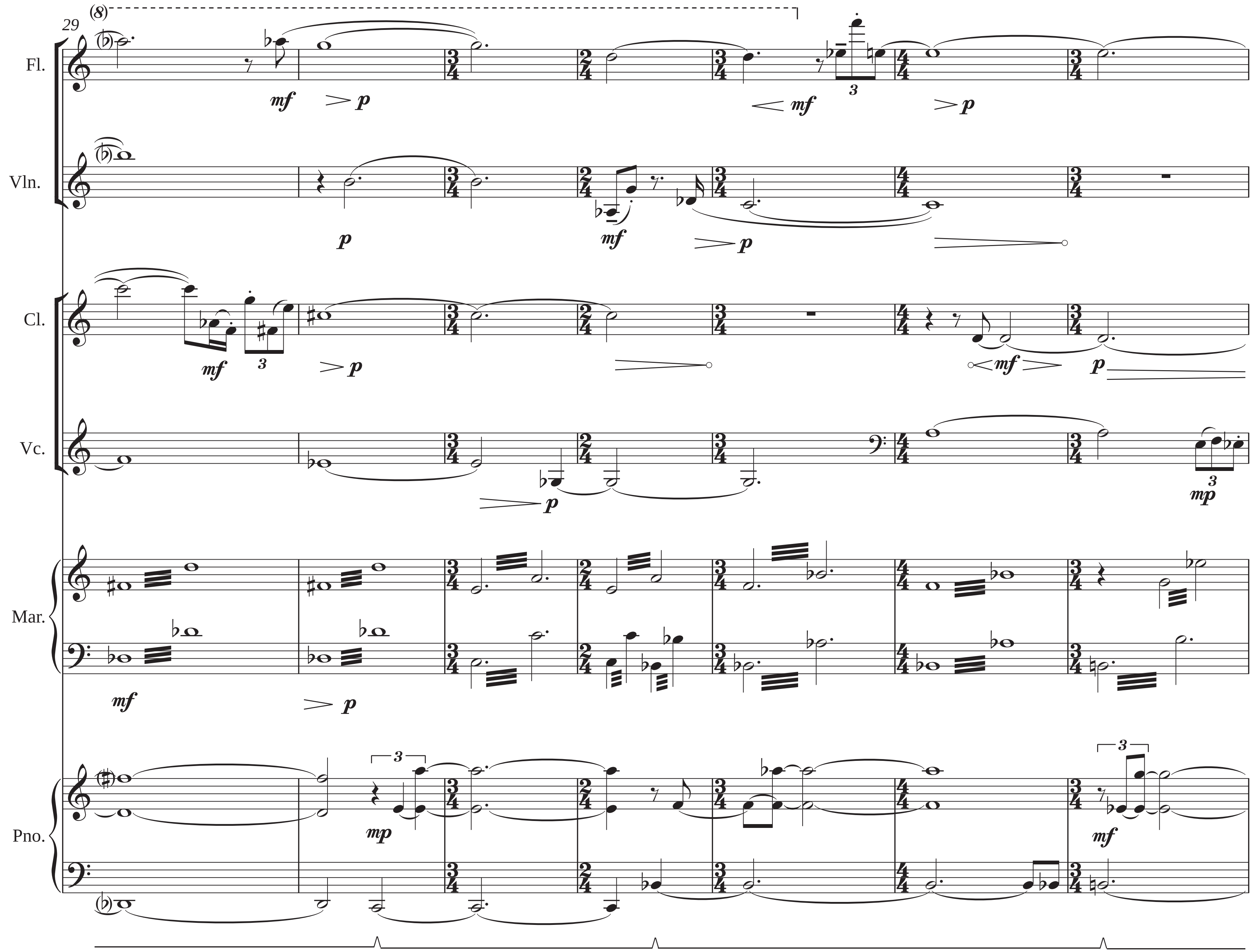


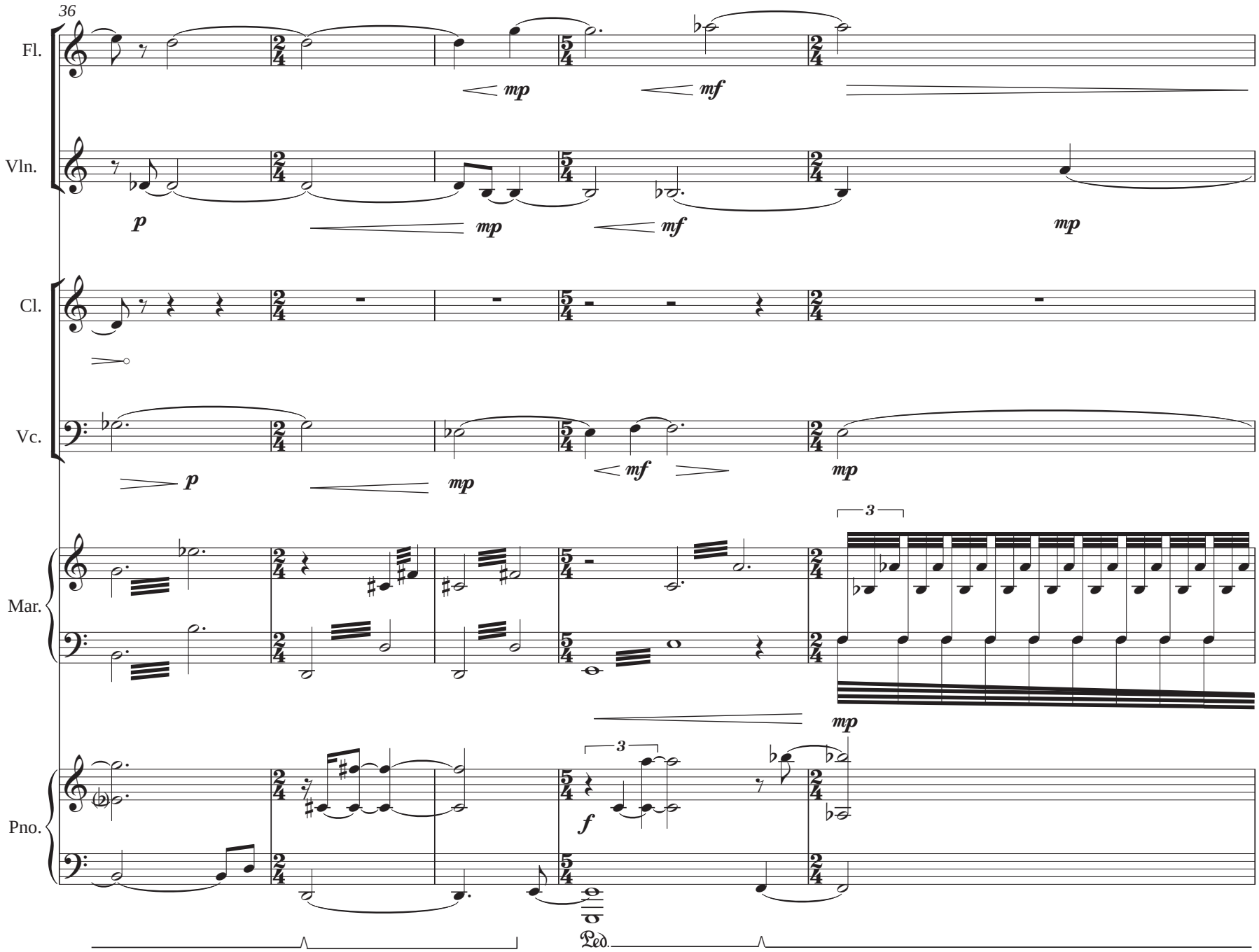

6
C. Mel.
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.
A
A
ff
p
mp
f
mf
3

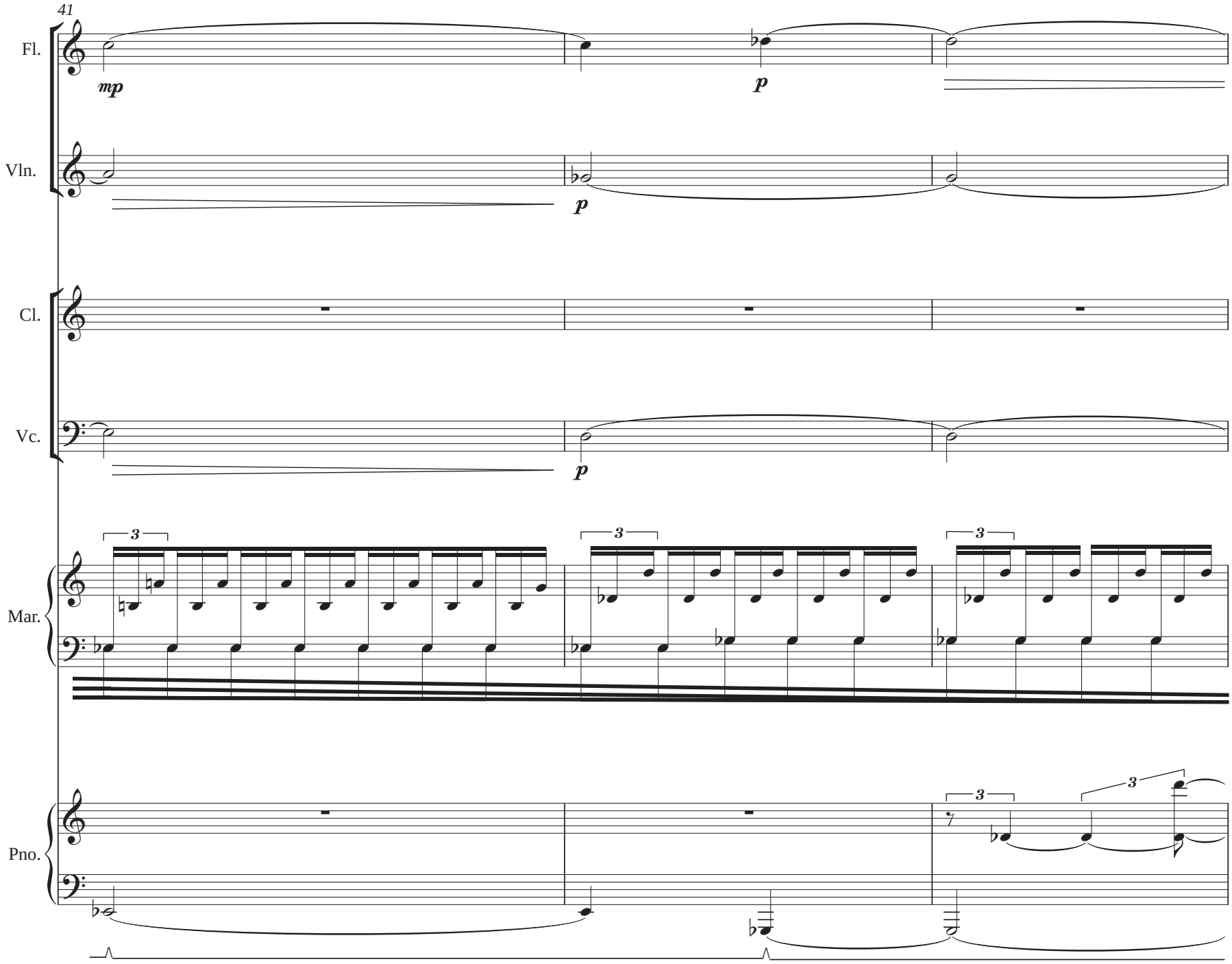

12
C. Mel.
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.
mp
mp
f
ff
f
Ped.

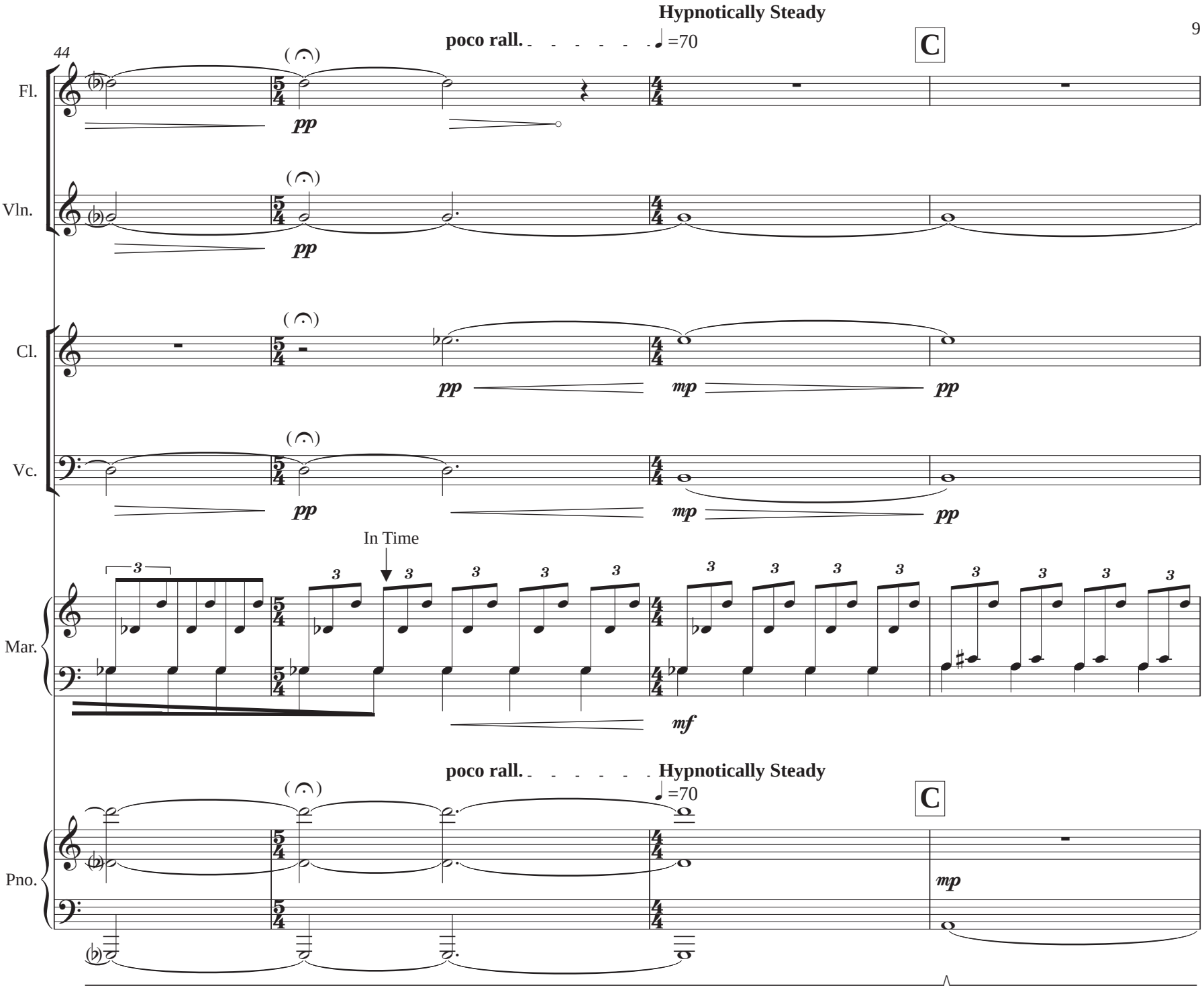

18
C. Mel.
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.
L
R
mf
mp
3

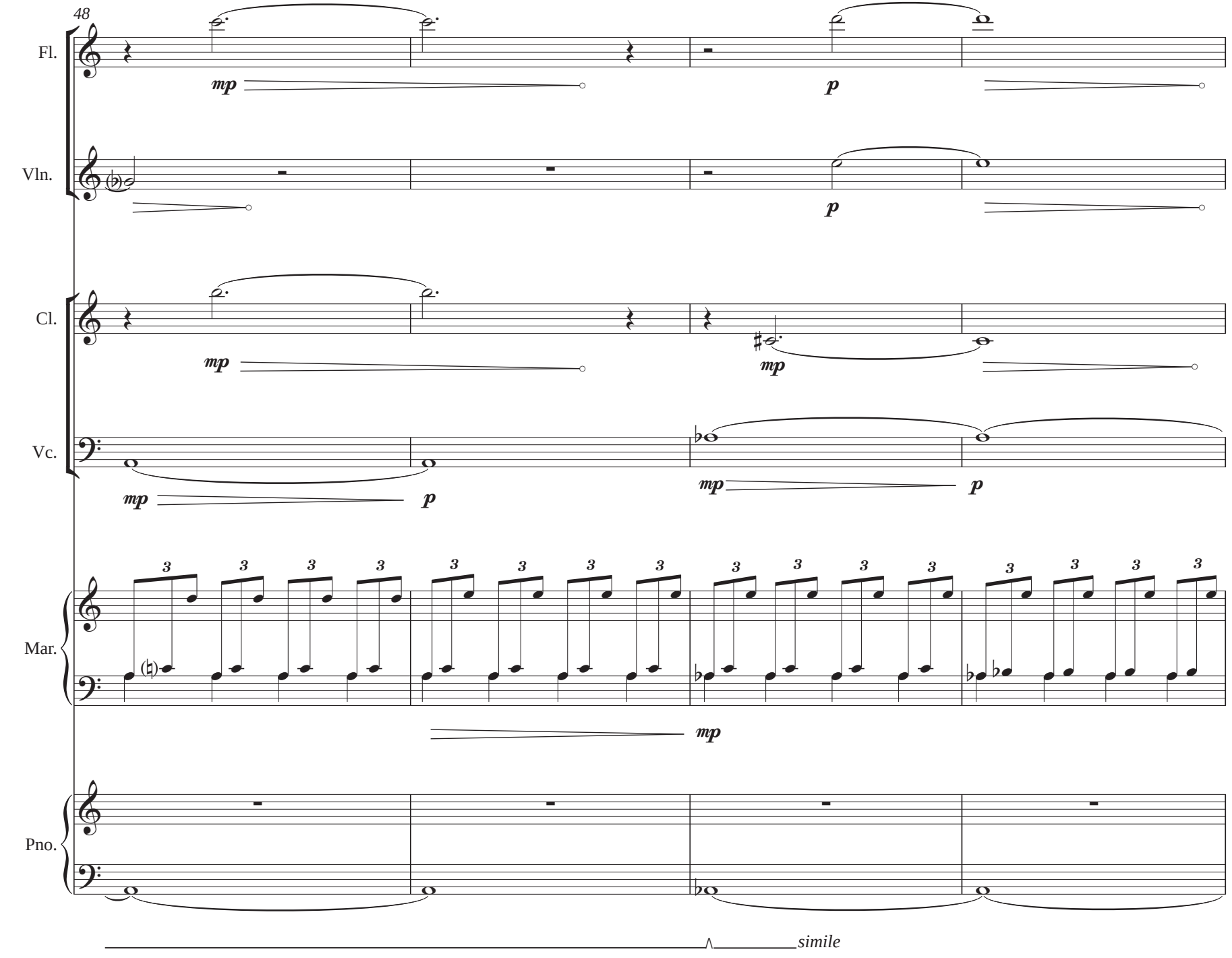

23
B
R
L
C. Mel.
Fl.
8va
mp
Vln.
f
3
mp
mf
Cl.
Vc.
As warm and resonant as possible
Mar.
Pno.
Ped.

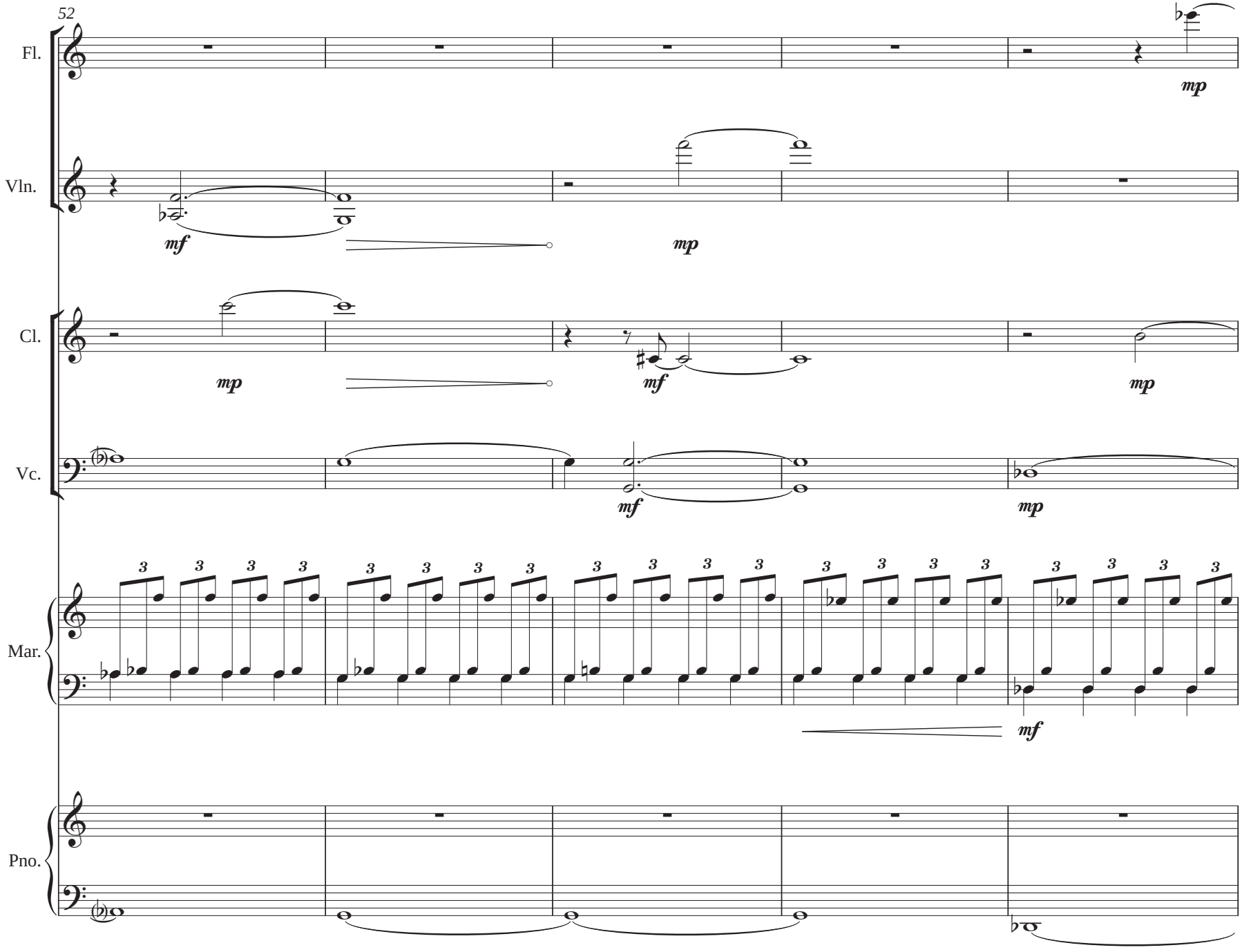

29
(8)
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.
mf
p
mp
3

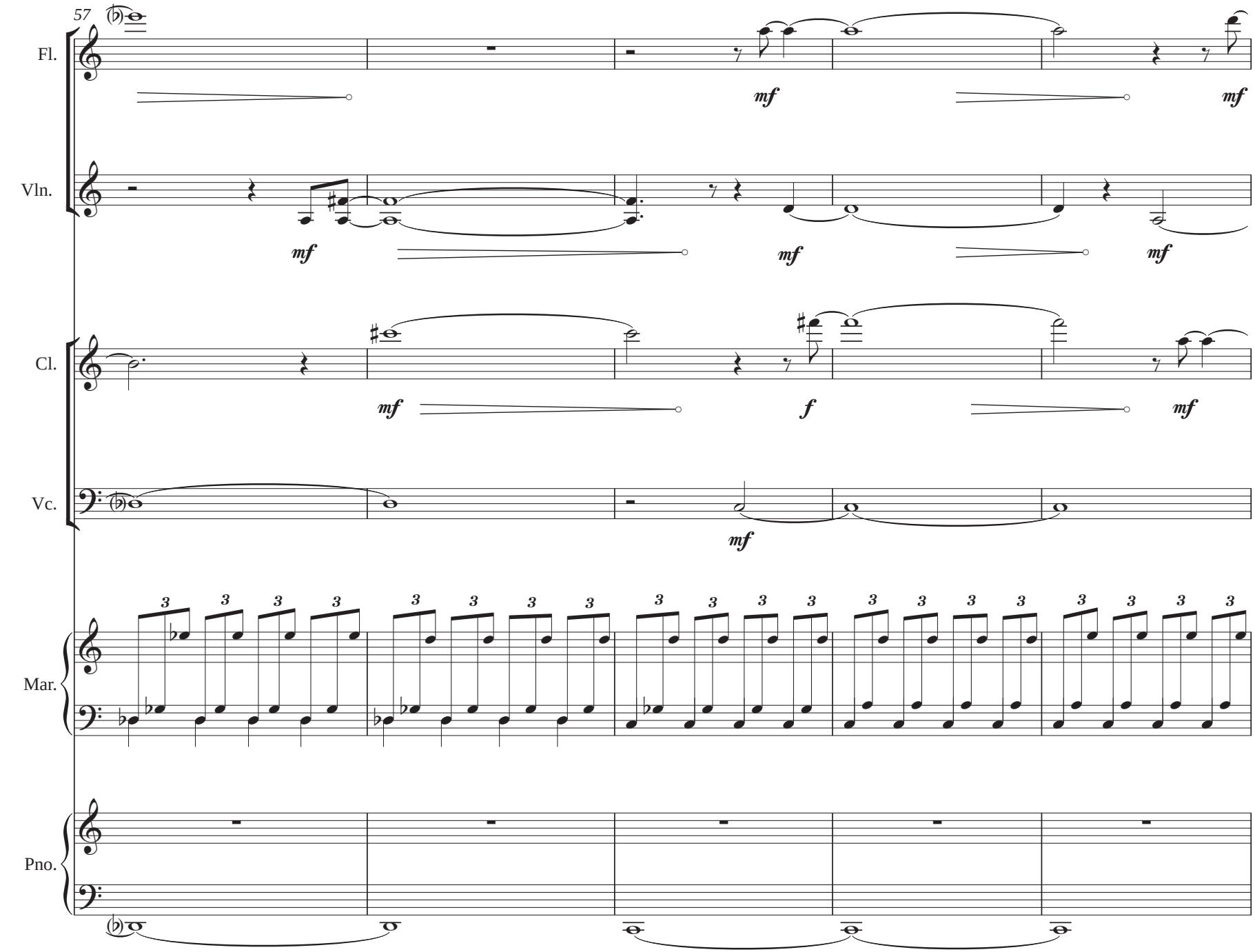

36
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.
p
mp
mf
mp
p
mp
mf
mp
3
mp
3
f
Ped.


41
Fl.
mp
p
Vln.
p
Cl.
Vc.
p
Mar.
3
3
3
Pno.
3
3

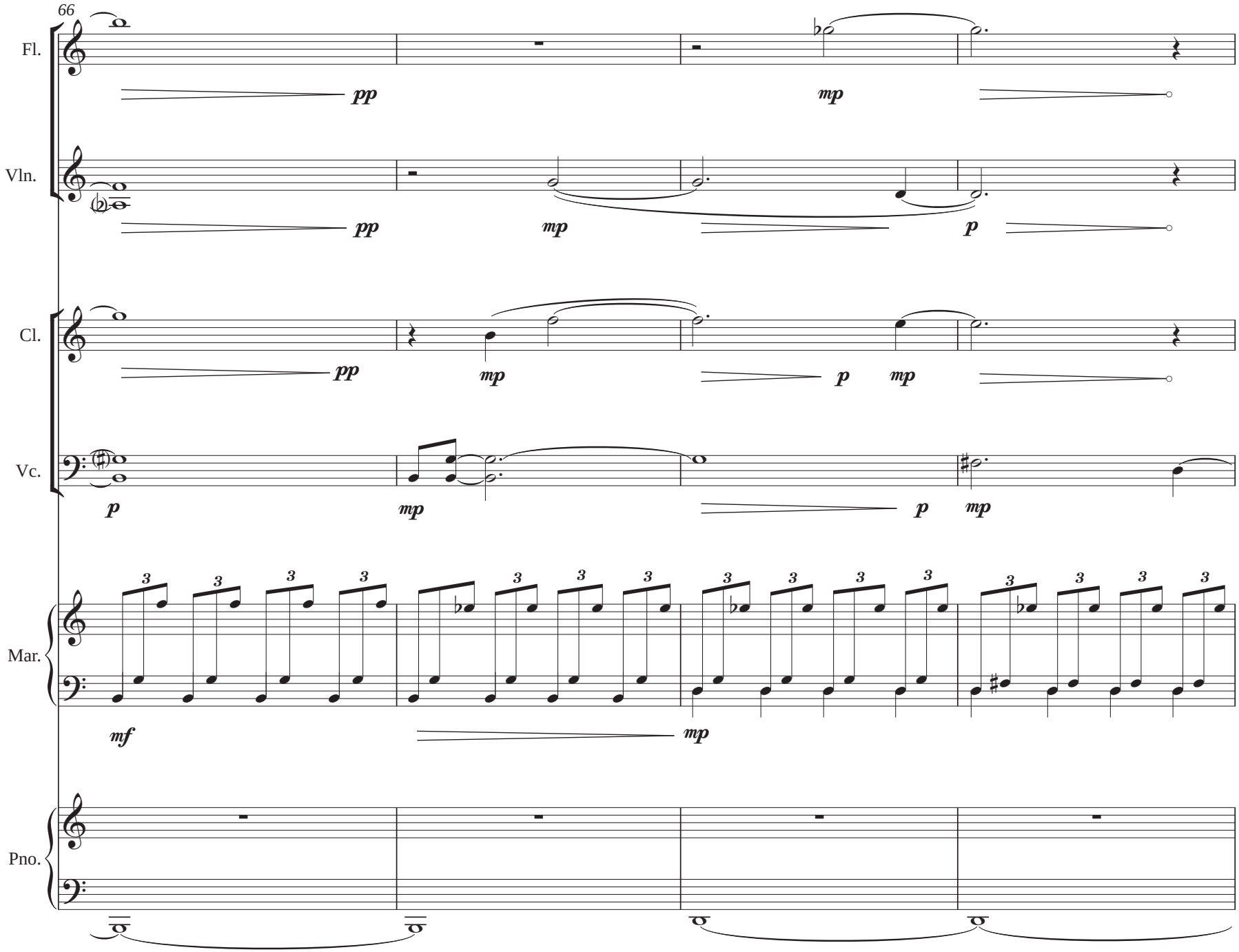

Hypnotically Steady
poco rall.
=70
C
44
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.
pp
mp
mf
In Time
3

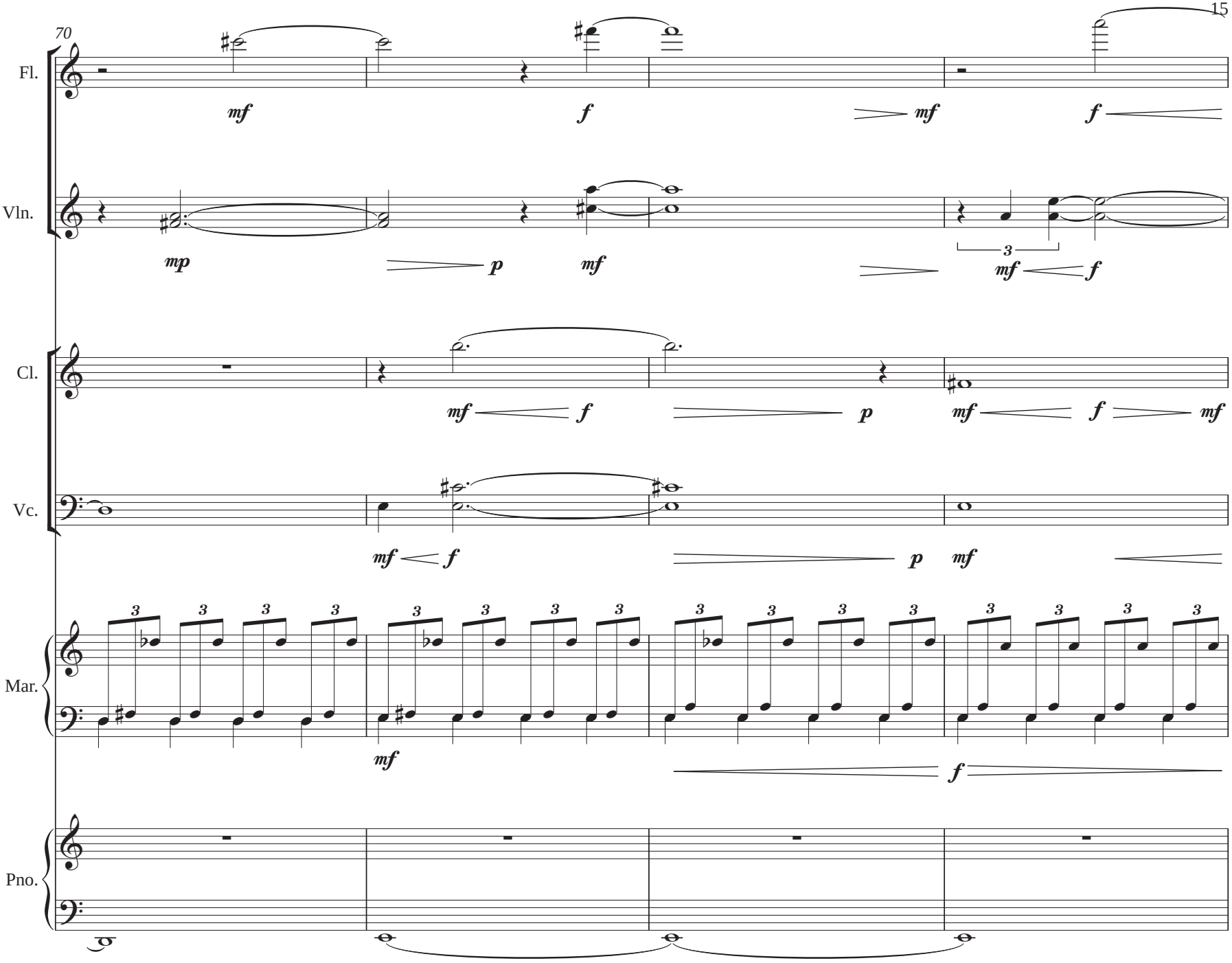

48
Fl.
mp
p
Vln.
p
Cl.
mp
mp
Vc.
mp
p
mp
p
Mar.
3
mp
Pno.
simile


52
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.
mp
mf
mp
mp
mf
mp
mf
mp
mf

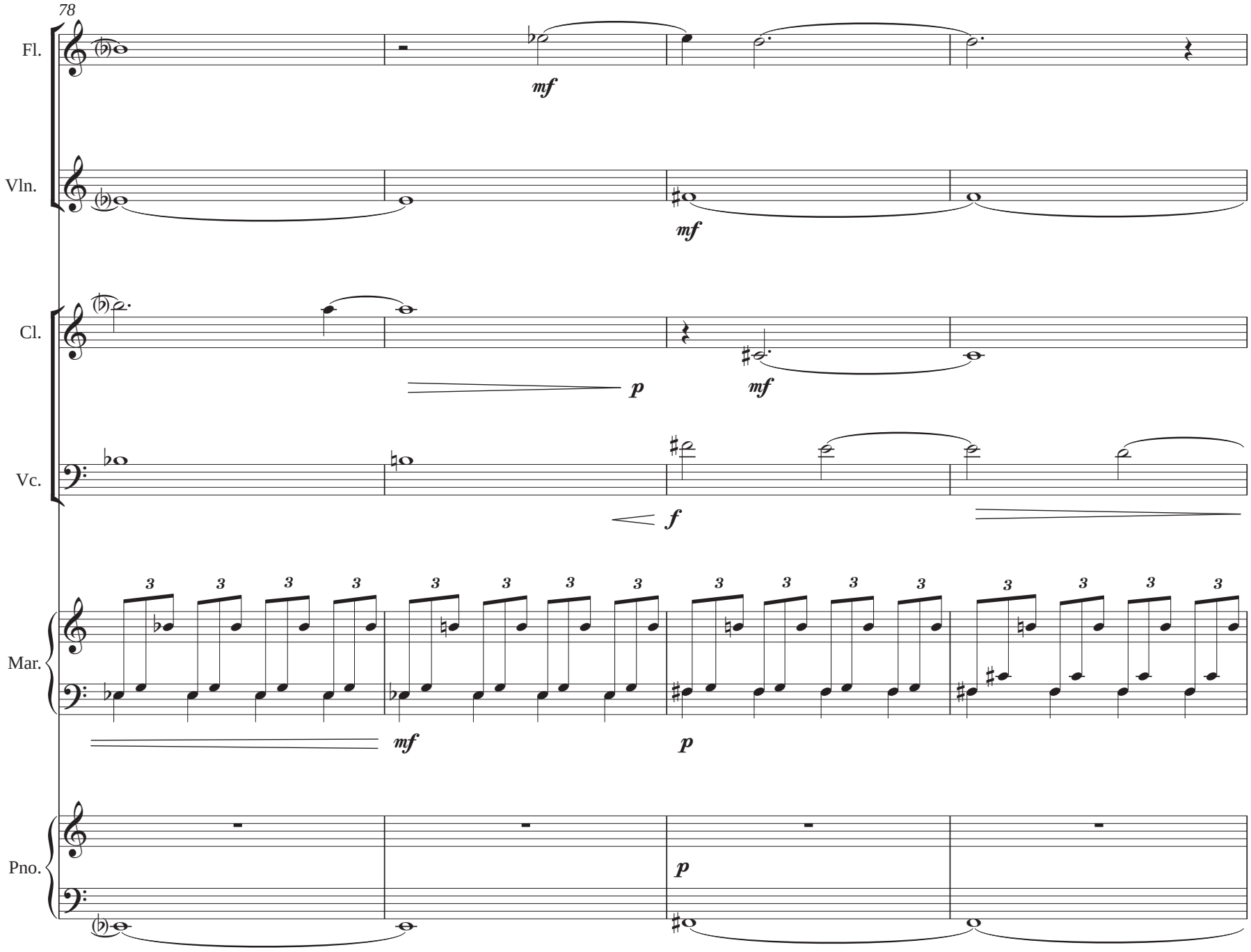

57
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.
mf
f

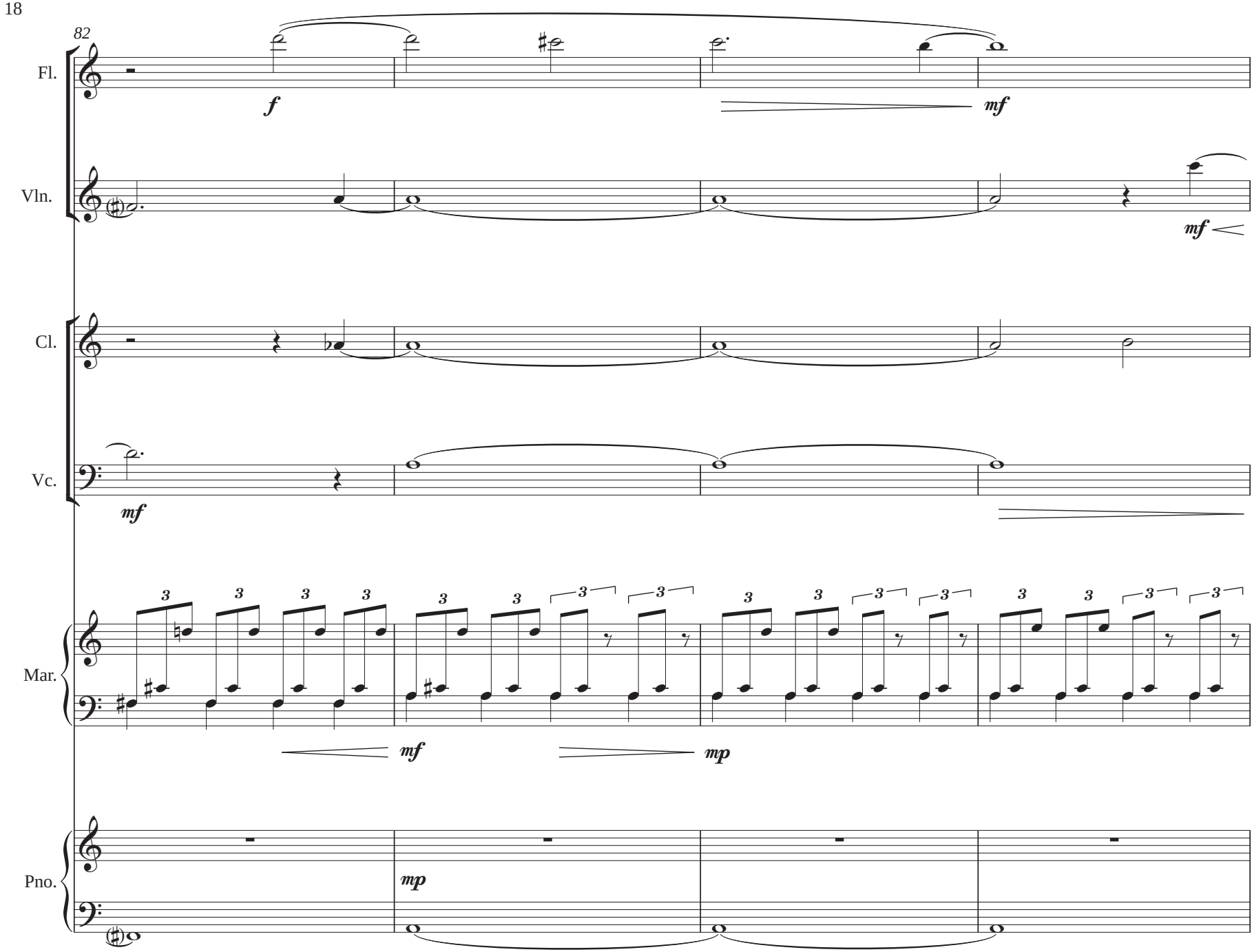

62
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.
f
mf
mf
mf
mf
mf
mf
3

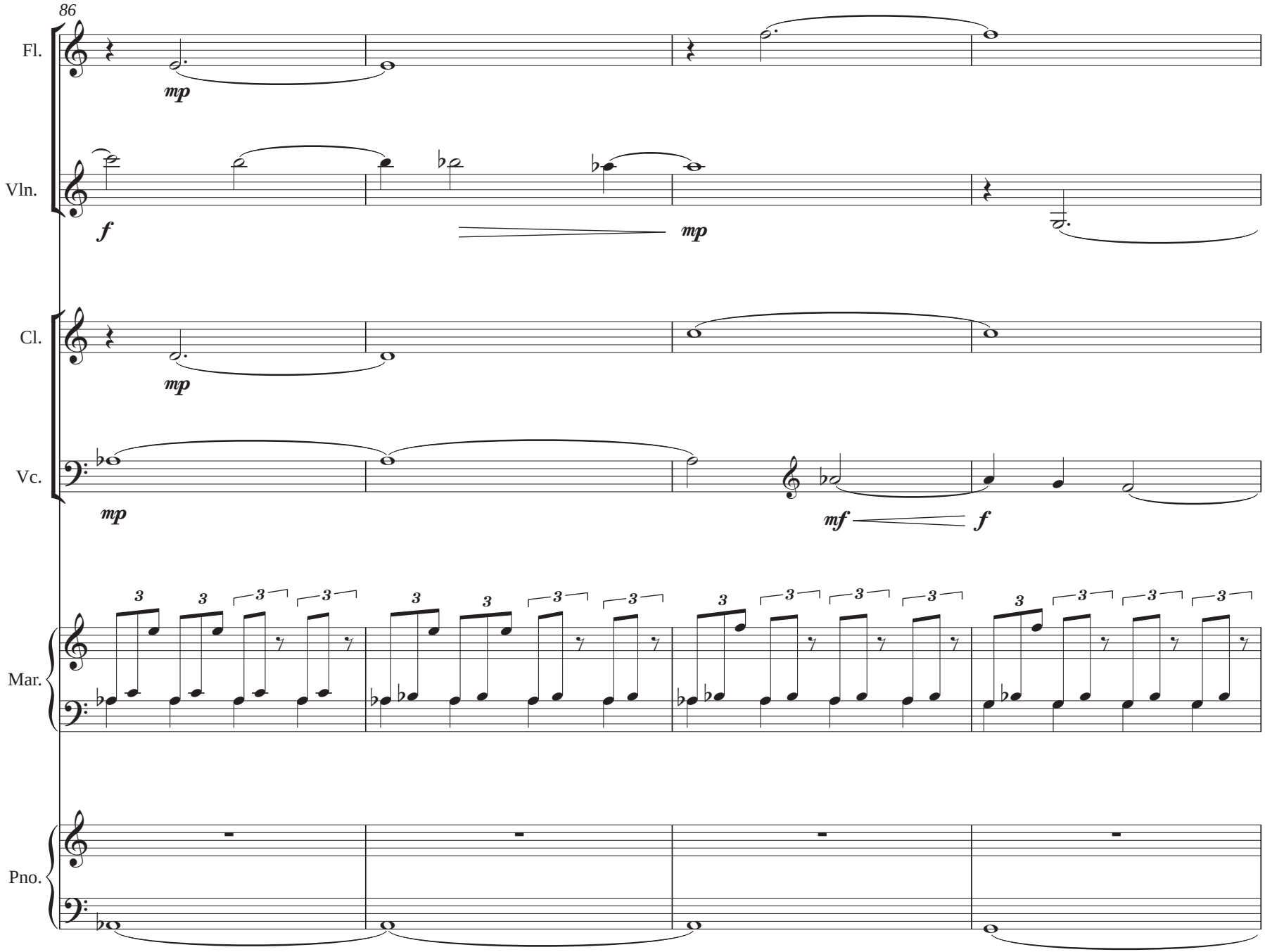

66
Fl.
pp
mp
Vln.
pp
mp
p
Cl.
pp
mp
p
mp
Vc.
p
mp
p
mp
Mar.
mf
mp
Pno.

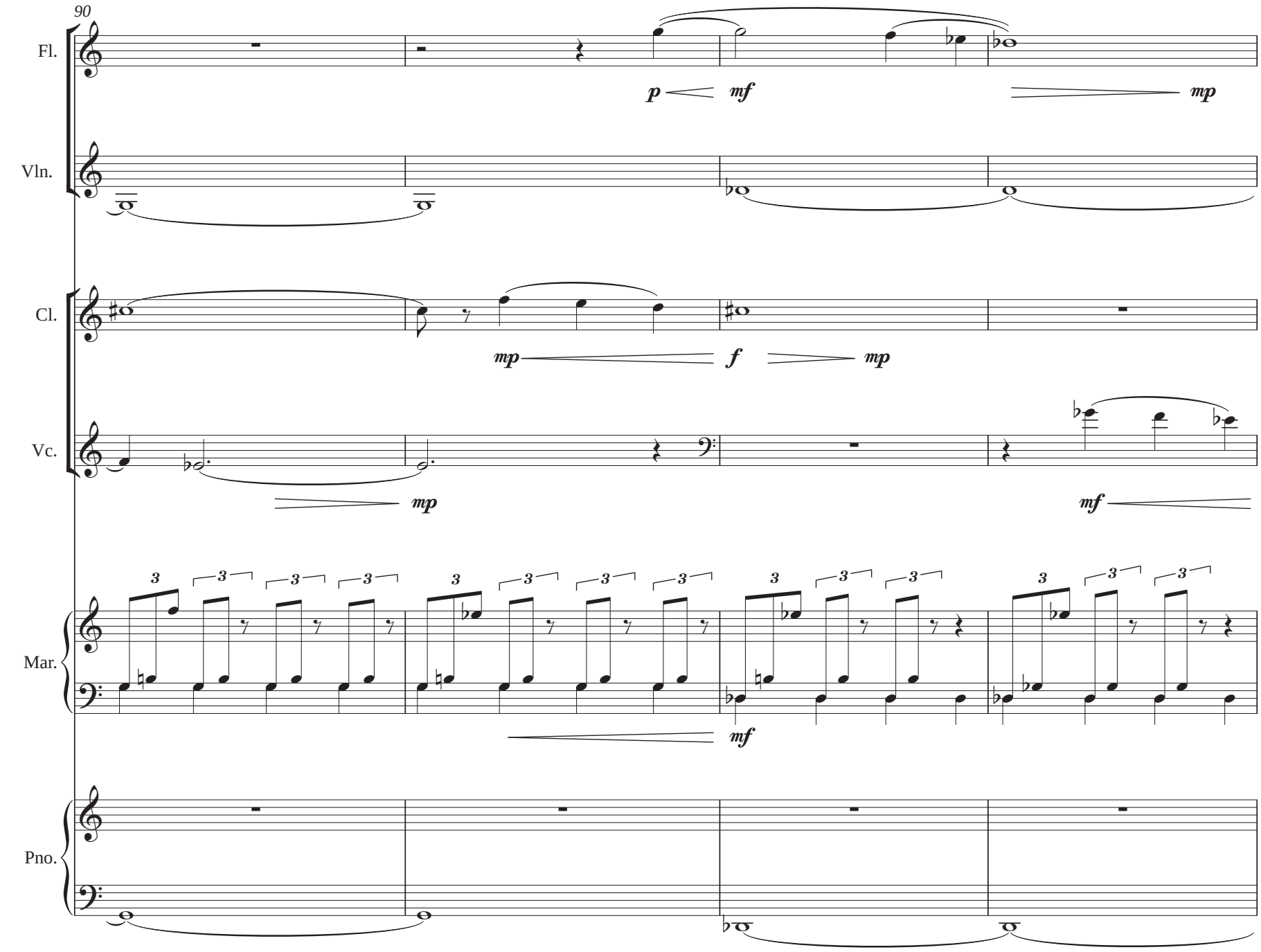

70
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.
mf
f
mf
f
mp
p
mf
3
mf
f
mf
f
p
mf
f
mf
f
p
mf
3
mf
f

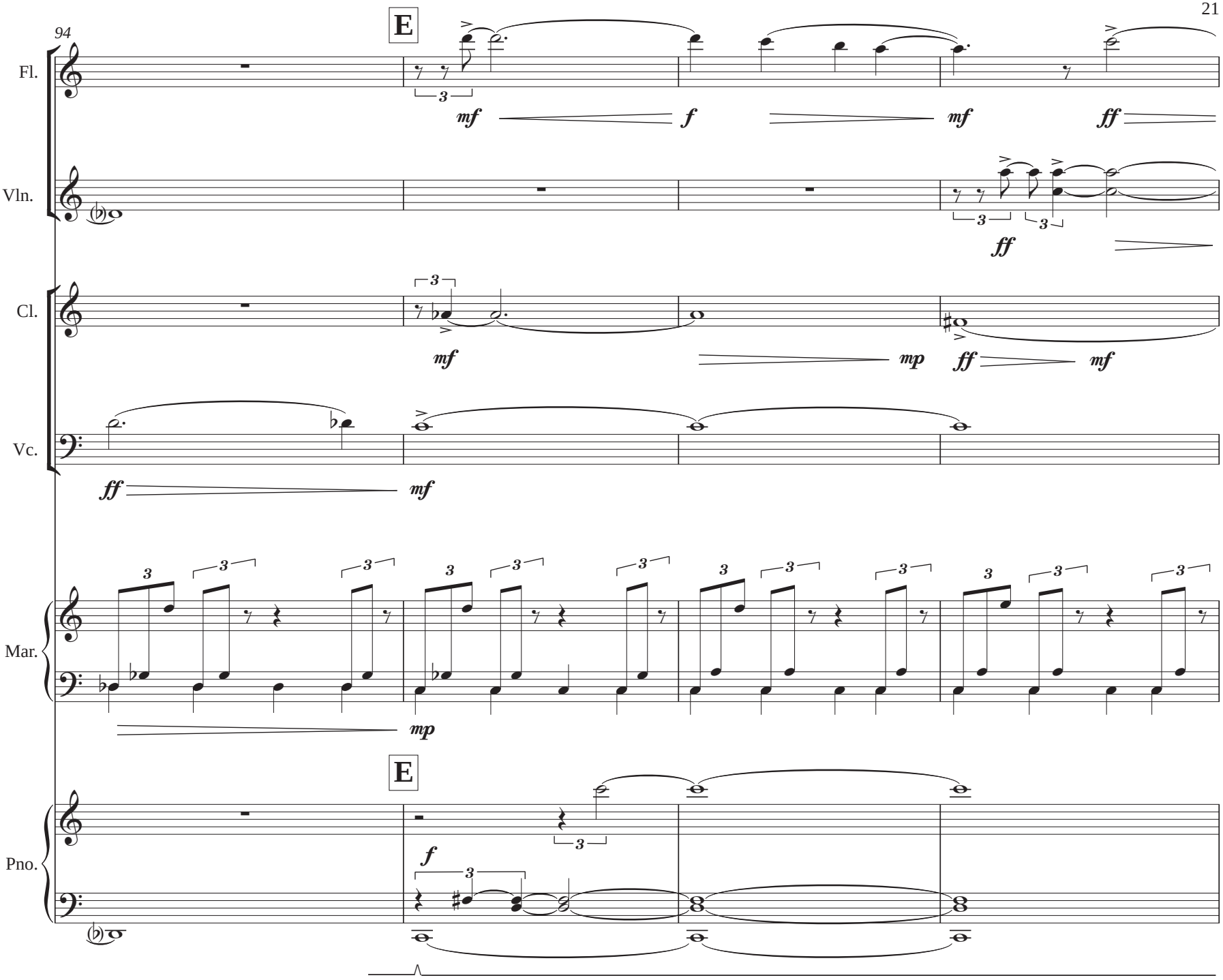

74
D
Fl.
ff
mf
mp
Vln.
f
mp
mf
mp
Cl.
f
mp
f
Vc.
ff
mf
p
mp
Mar.
3
mf
mp
D
Pno.

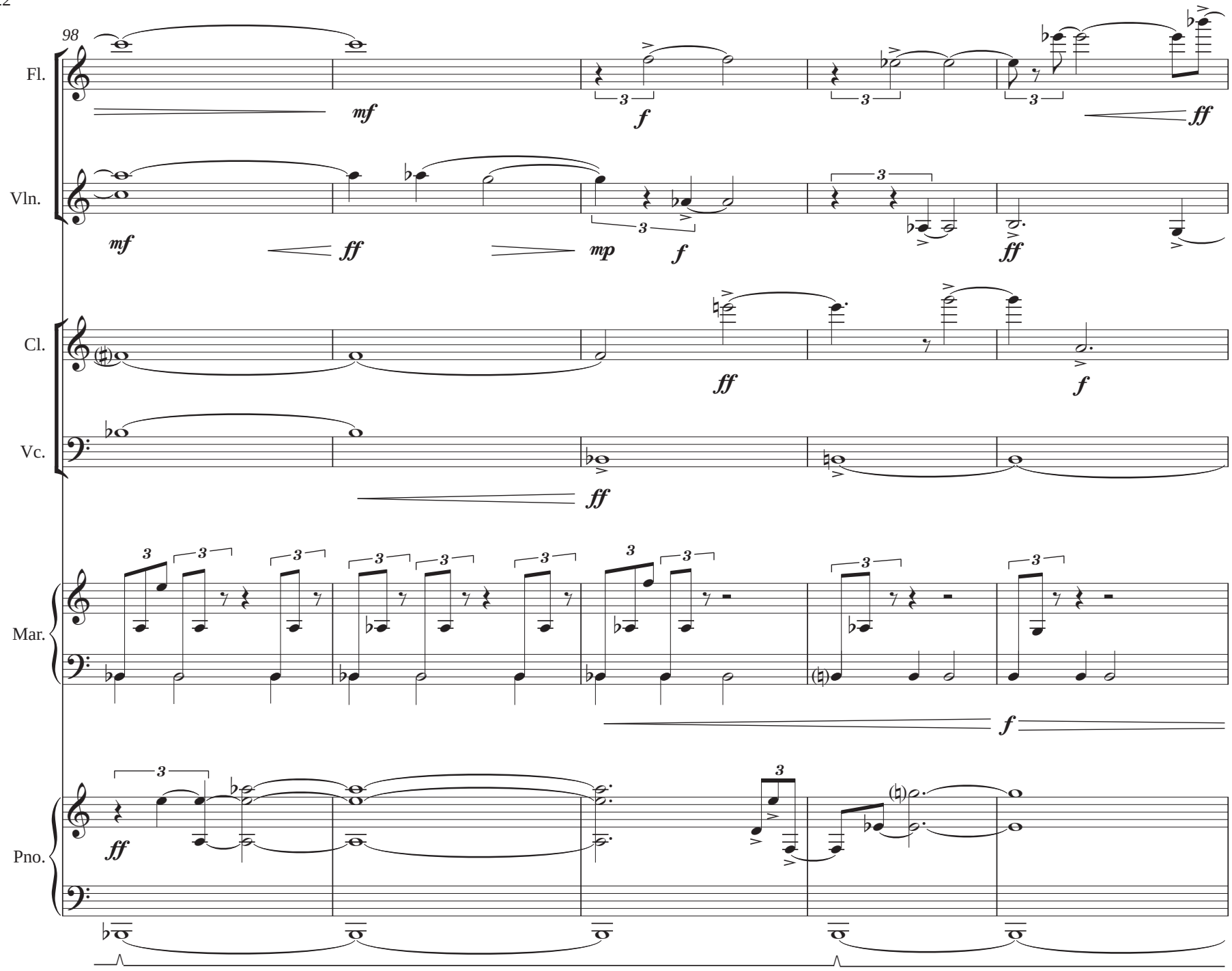

78
Fl.
mf
Vln.
mf
Cl.
p
mf
Vc.
f
Mar.
mf
p
Pno.
p

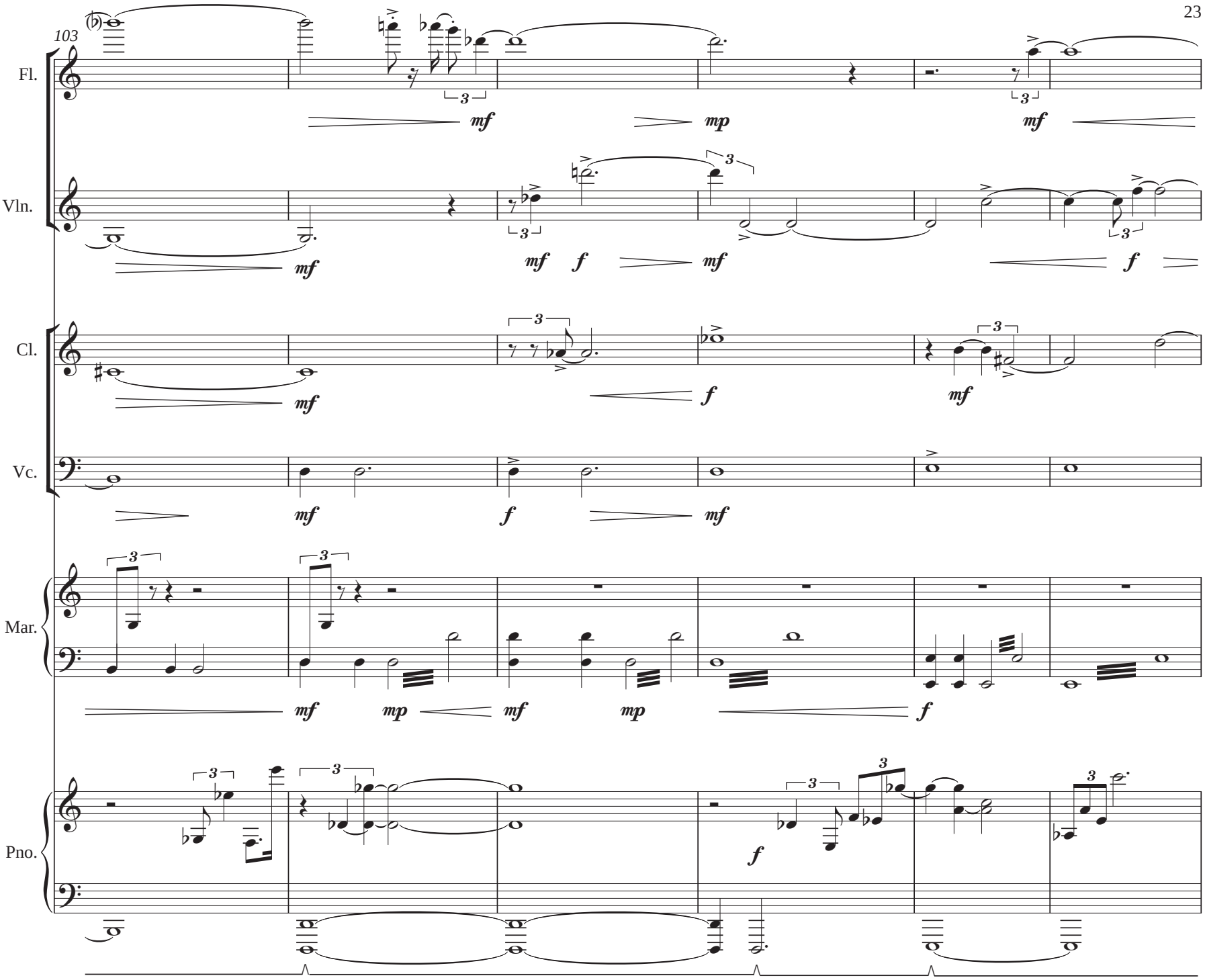

82
Fl.
f
mf
Vln.
mf
Cl.
Vc.
mf
Mar.
mf
mp
Pno.
mp

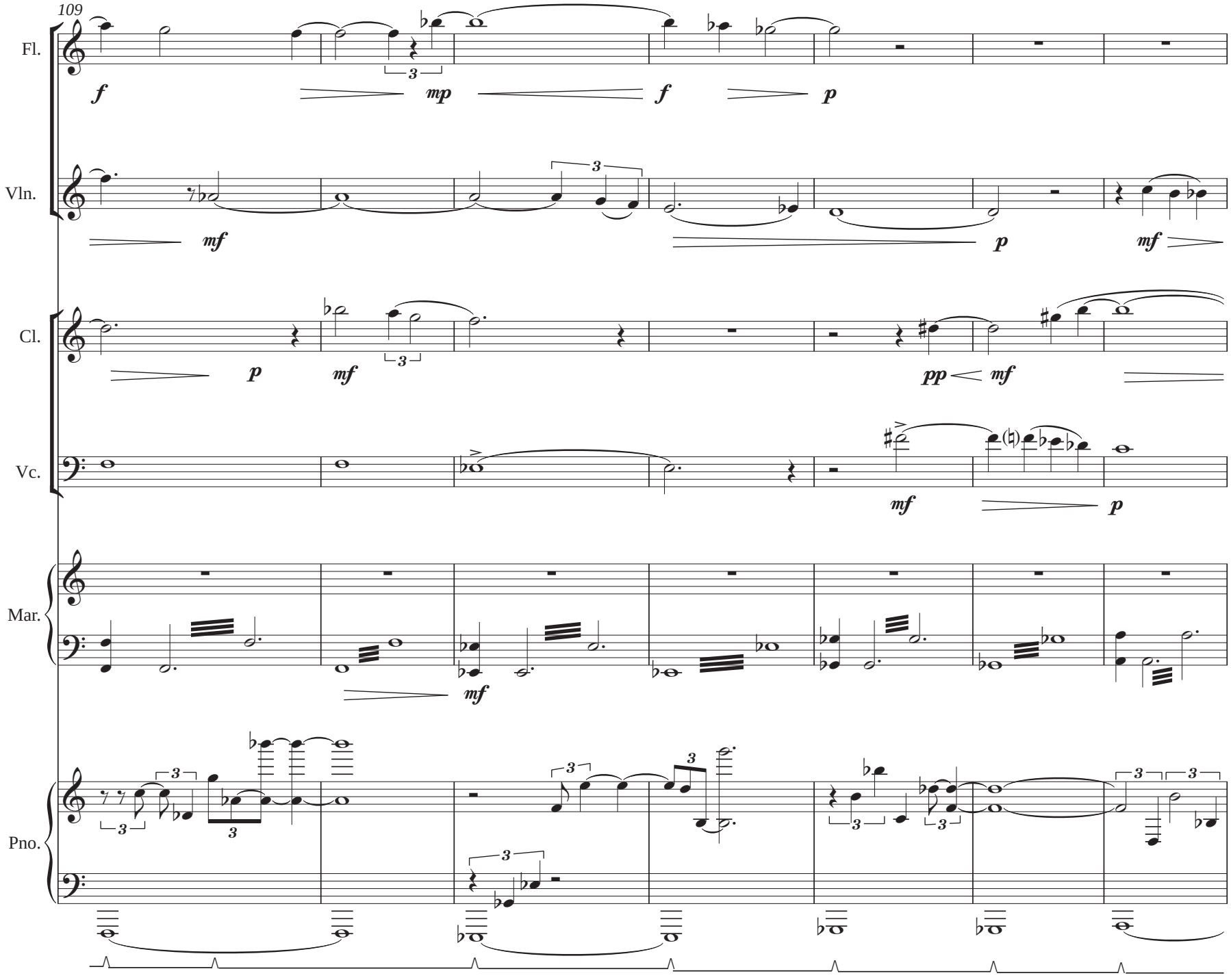

86
Fl.
mp
Vln.
f
mp
Cl.
mp
Vc.
mp
mf
f
Mar.
Pno.

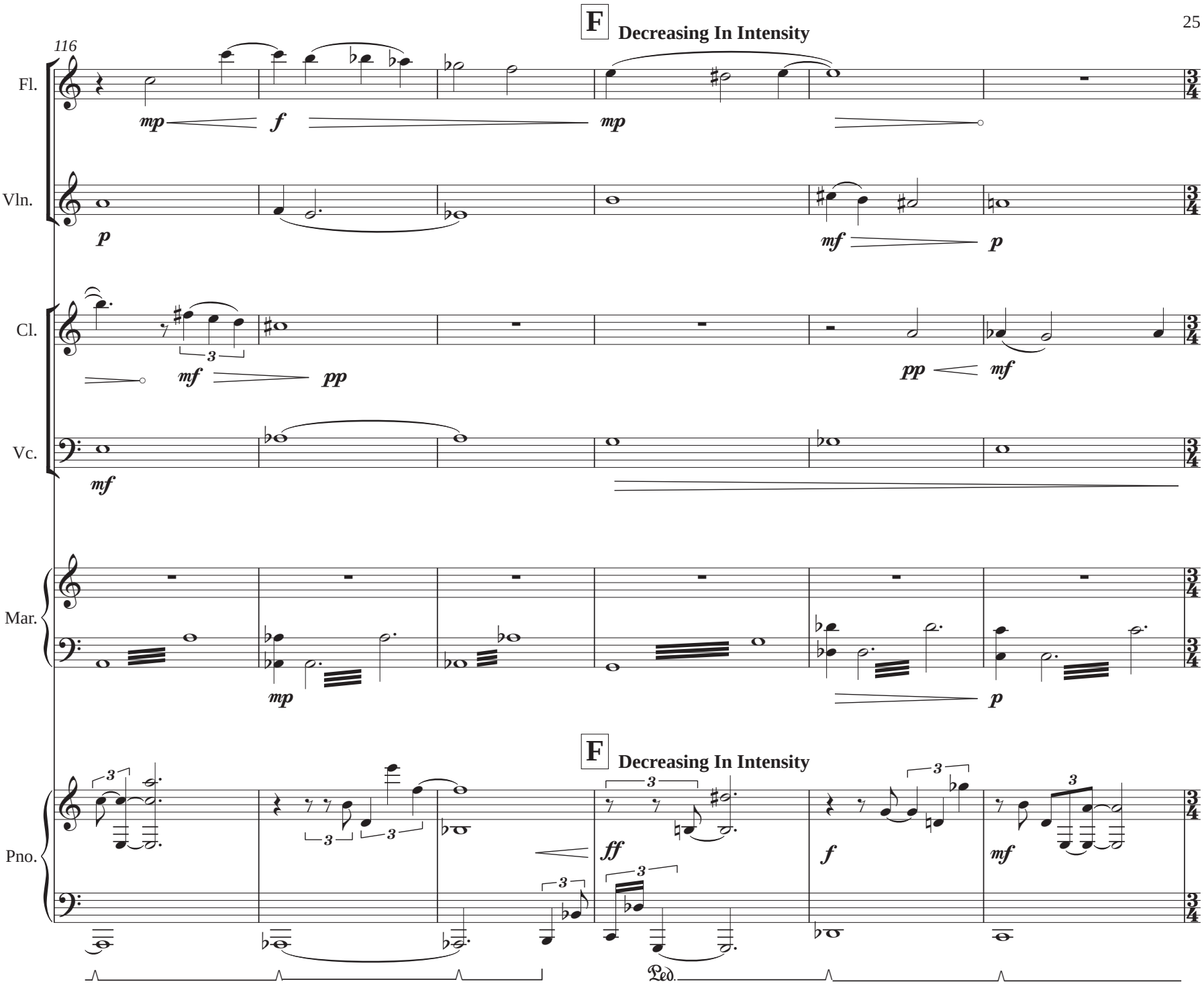

90
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.
p
mf
mp
mp
f
mp
mp
mf
mf
3

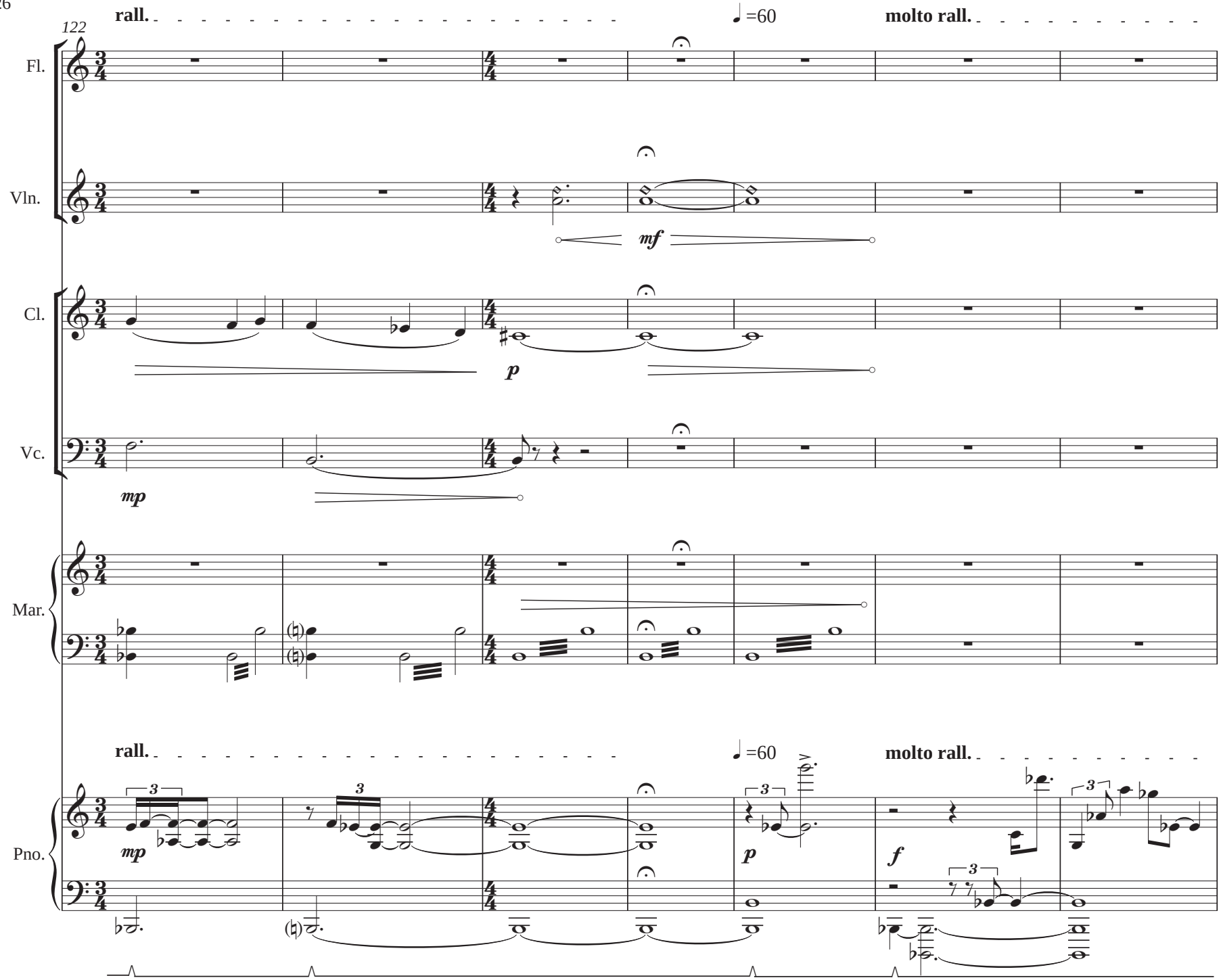

94
E
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.
E
mf
f
mf
ff
ff
mf
mp
ff
mf
ff
mf
mp
f

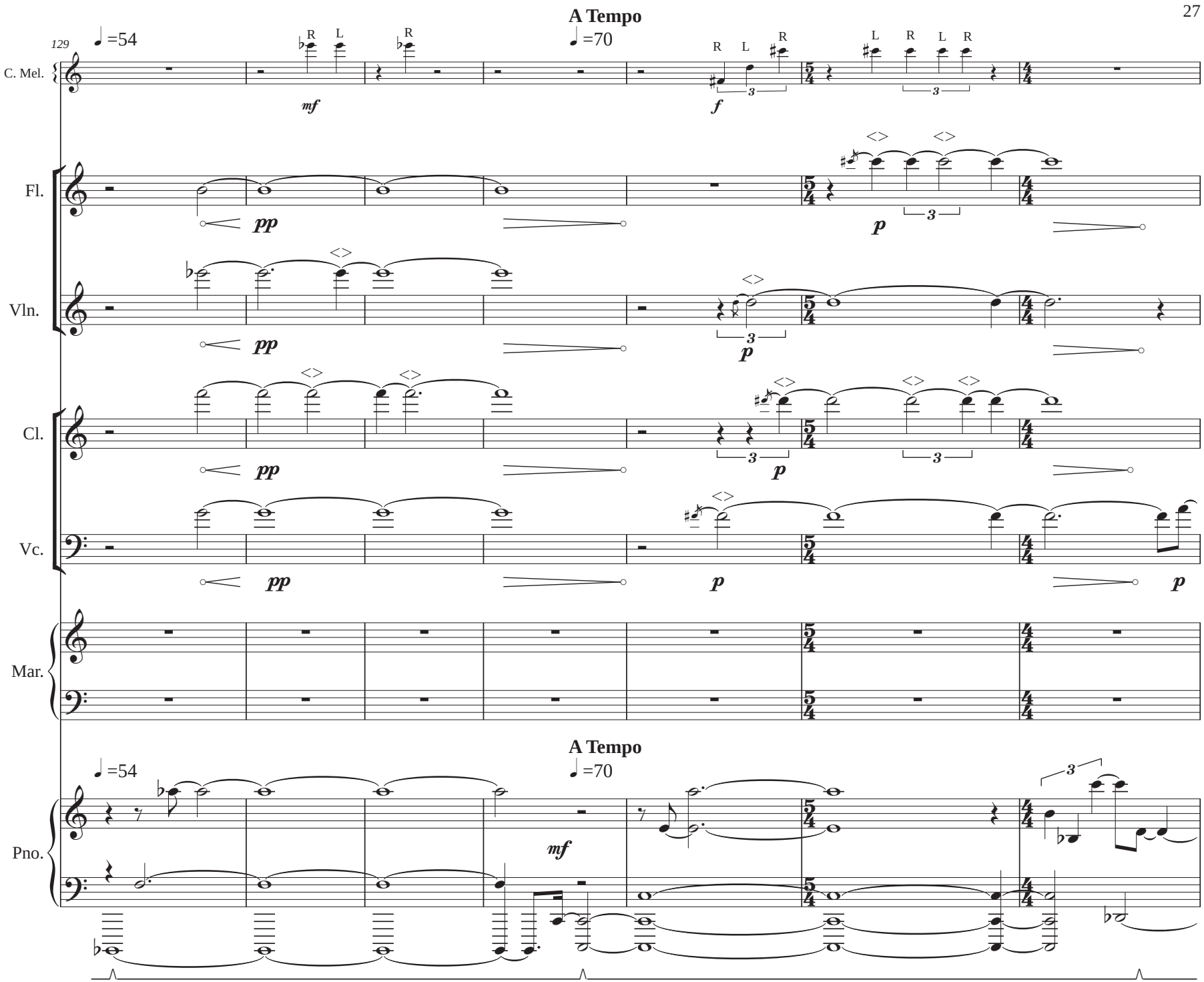

98
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.
mf
f
ff
mp

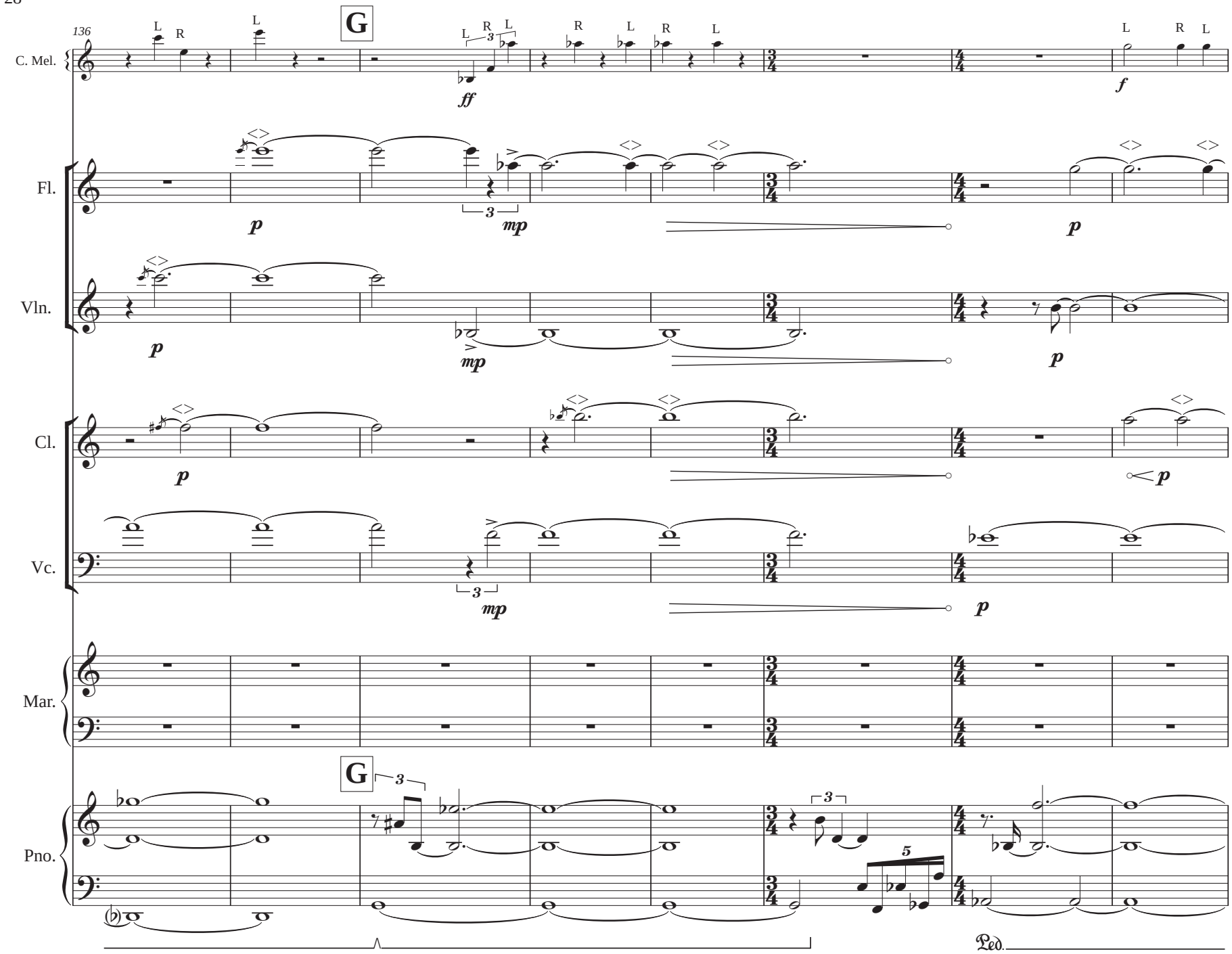

103
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.

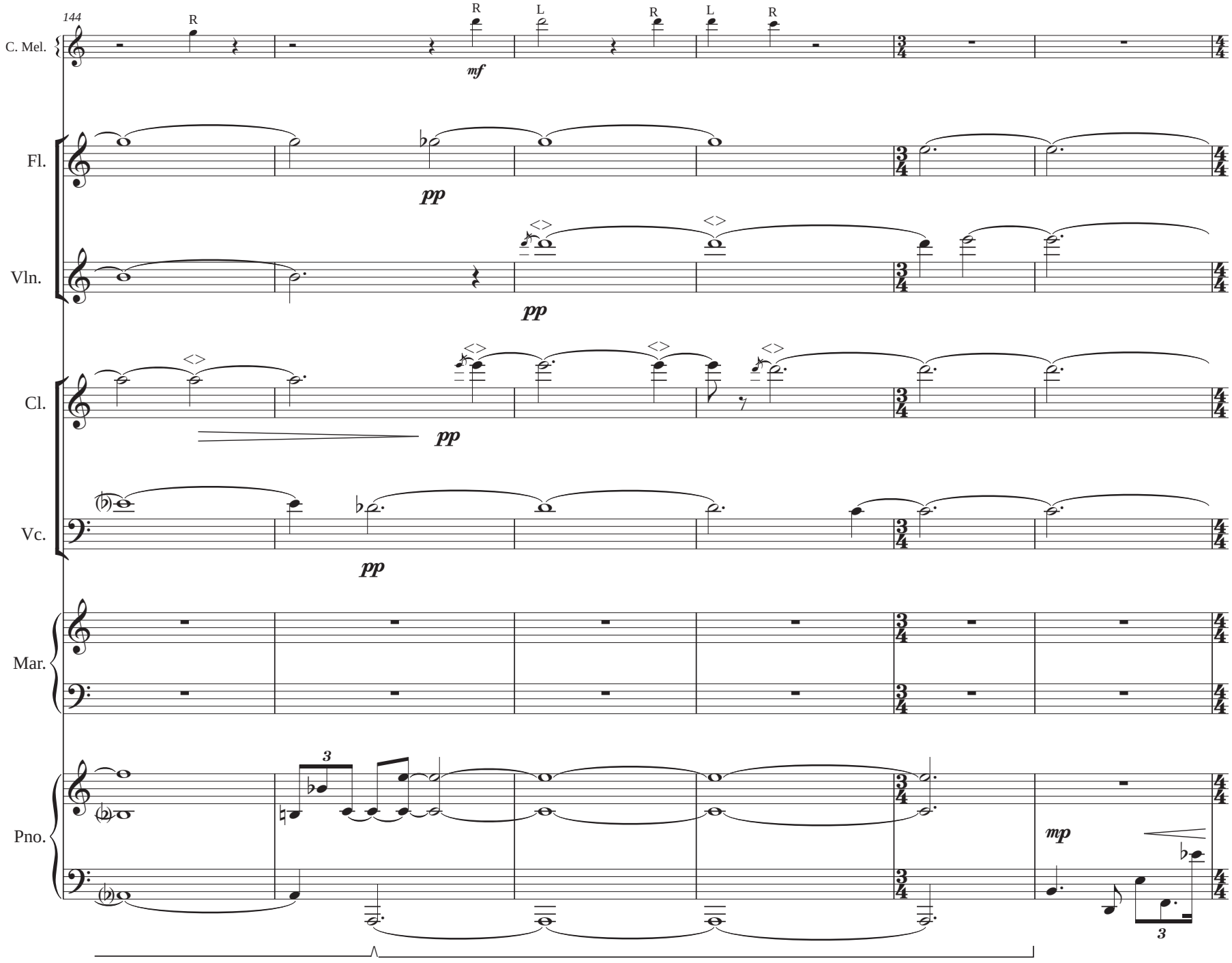

109
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.

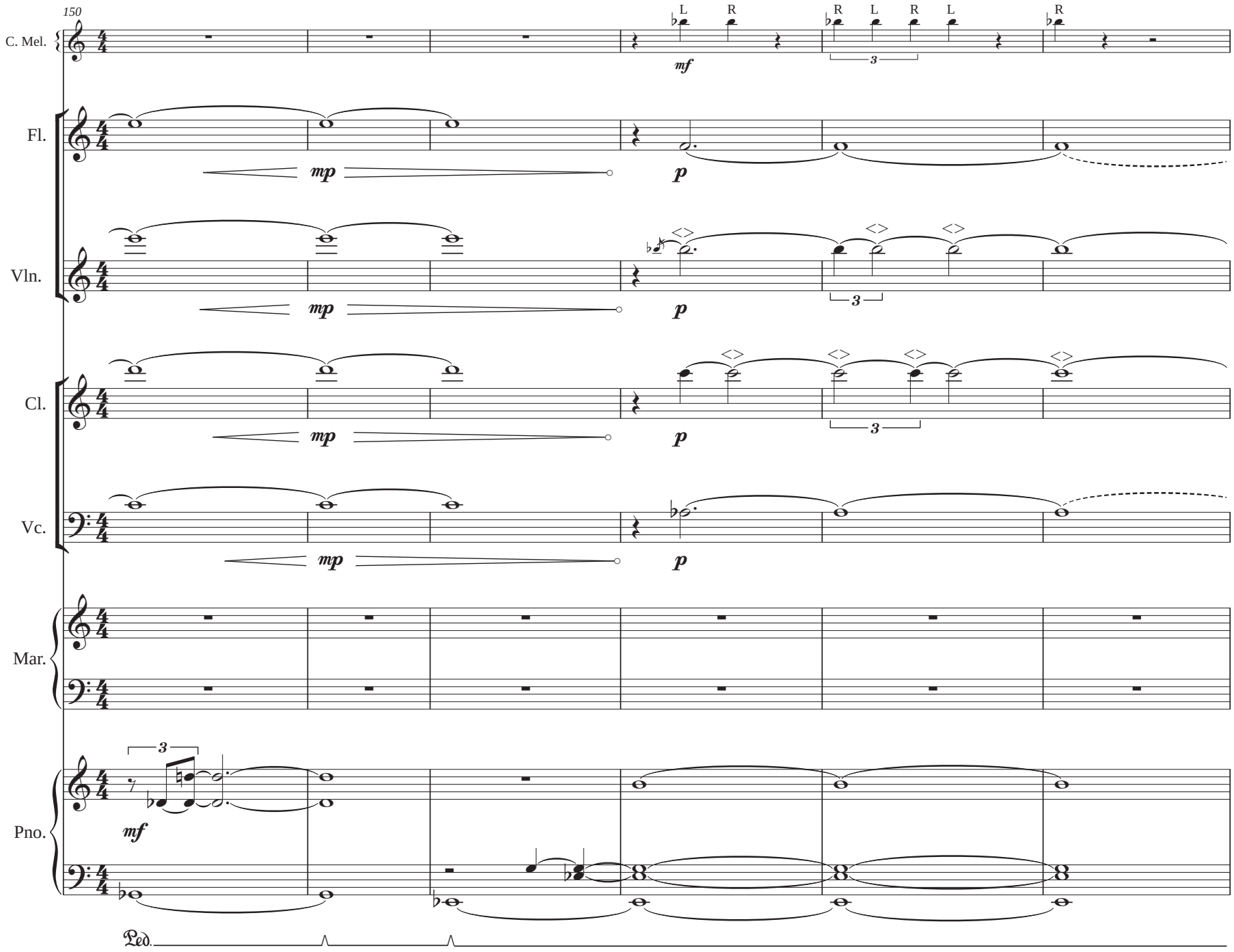

F
Decreasing In Intensity
116
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.
mp
f
mp
p
mf
p
mf
pp
pp
mf
mf
mp
p
F
Decreasing In Intensity
ff
f
mf
Ped.

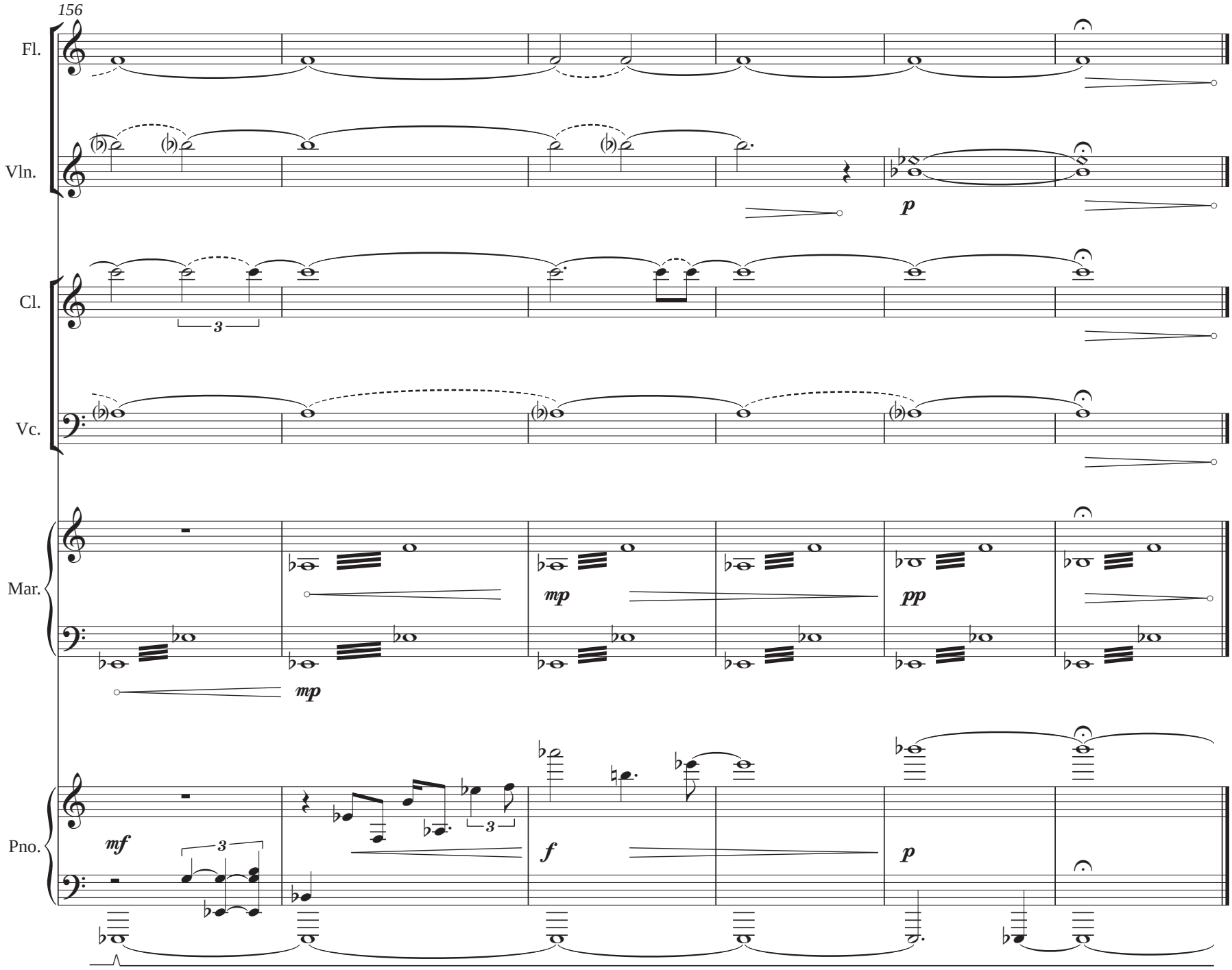

122
rall.
♩=60
molto rall.
Fl.
Vln.
mf
Cl.
p
Vc.
mp
Mar.
rall.
♩=60
molto rall.
Pno.
mp
p
f


A Tempo
129
♩=54
♩=70
C. Mel.
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.
mf
f
pp
p
R
L
3
A Tempo
♩=54
♩=70
mf


136
G
C. Mel.
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.
ff
f
p
mp
Ped.


144
C. Mel.
R
R
L
R
L
R
mf
Fl.
pp
Vln.
pp
Cl.
pp
Vc.
pp
Mar.
Pno.
3
mp
3


150
C. Mel.
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.
Ped.
mf
mp
p
L
R
3


156
Fl.
Vln.
Cl.
Vc.
Mar.
Pno.
p
mp
mp
pp
mf
f
p
3
3
3

Program note:

Originally conceived as an orchestral work, *Swerve* draws its structure and rhythmic content from the idea of a maneuver that momentarily diverts a traveler from his intended path. In everyday life, a swerve may save us the embarrassment of stumbling into an obstacle; or in the direst case, it may be our only hope of escaping a disastrous collision.

The opening of *Swerve* uses rapidly changing meters and large melodic leaps to zigzag gracefully through time and registral space. On the macro level, the work also features a structural "swerve" that is an expression of how our perception of time is altered when we sense the threat of bodily harm. At this moment in the piece, the expansion and contraction of time is portrayed by the slow unfolding of rhythmically and harmonically unpredictable ascents in the piano and vibraphone. The winds and strings sustain, echo, and embellish the bell-like intonations of the piano and vibes until a steadily repeated note pulls the work back onto its original path.

Swerve belongs to the Intricate Maneuvers series, a group of works inspired by and modeled after movement.

Performance notes:

INSTRUMENTATION

Flute/piccolo
clarinet in B♭
violin[3]
cello
piano
percussion; vibraphone[4], marimba (5-octave), 5 wood blocks, high-hat, snare, 3 tom-toms (high, middle, low), kick drum[5], egg type shaker

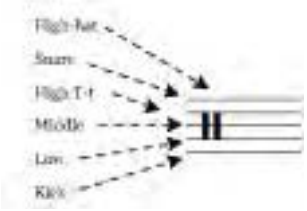
1. Subdivisions of irregular meter types are shown the first time a particular meter pattern appears. 9/8 is always divided 3+2+2+2, 8/8 is always 3+3+2 and 7/8 is USUALLY 2+2+3. Measures 45 and 50 are the only 7/8 measures that are divided 3+2+2.

2. In mm. 69-80, although all parts are notated in 4/4, the violin and piano parts are also equipped with an alternate meter of 7/8 (2+2+3) notated above the staff. This is a performance aid which clarifies the pattern of accents that appear on the staff.

3. In mm. 107-127, the violin part is marked "*col legno battuto.*" Here the performer should tilt the bow so as to strike the strings with both the hair and the stick. The desired sound is one that is equally percussive and pitched.

4. The vibraphone should be permitted to ring for the duration of the note written except where the direction "sempre L.V." is provided. The term "ord." is used to cancel out the "sempre L.V." instruction.

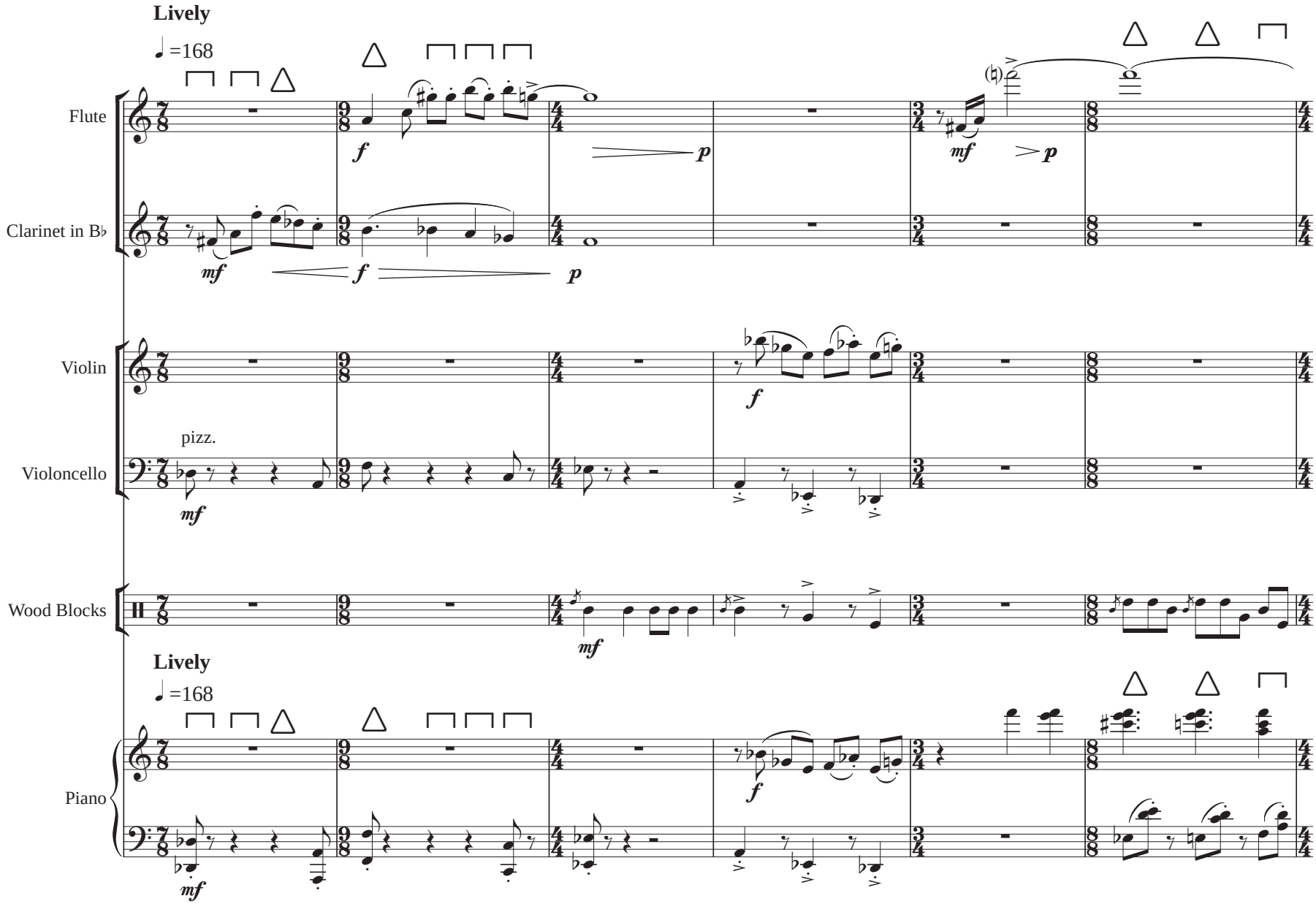
5. The high-hat, snare, 3 tom-toms, and kick bass function like a drum set and are notated on a five-line staff similarly to (but not exactly the same as) standard drum set notation.

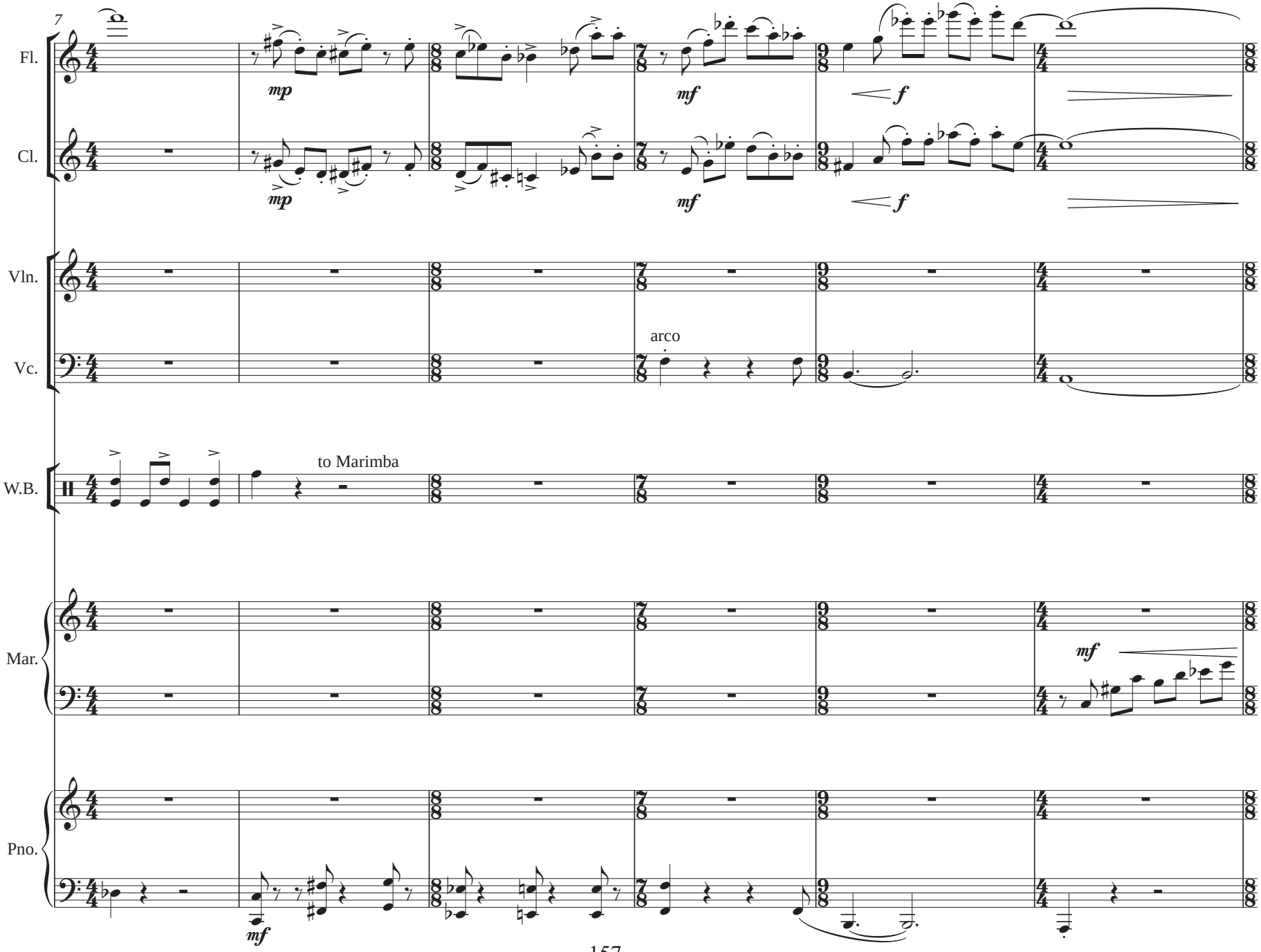


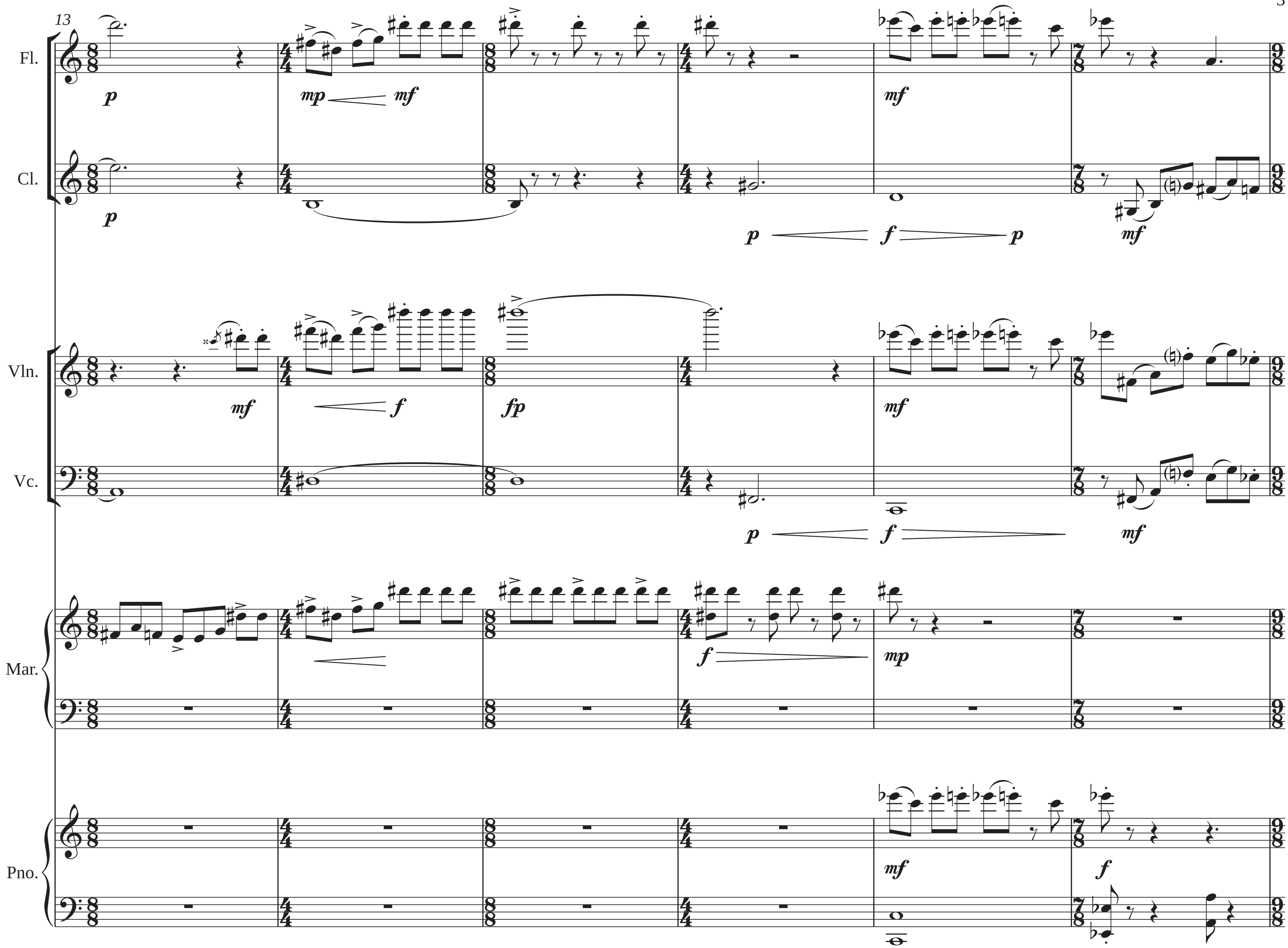
Swerve

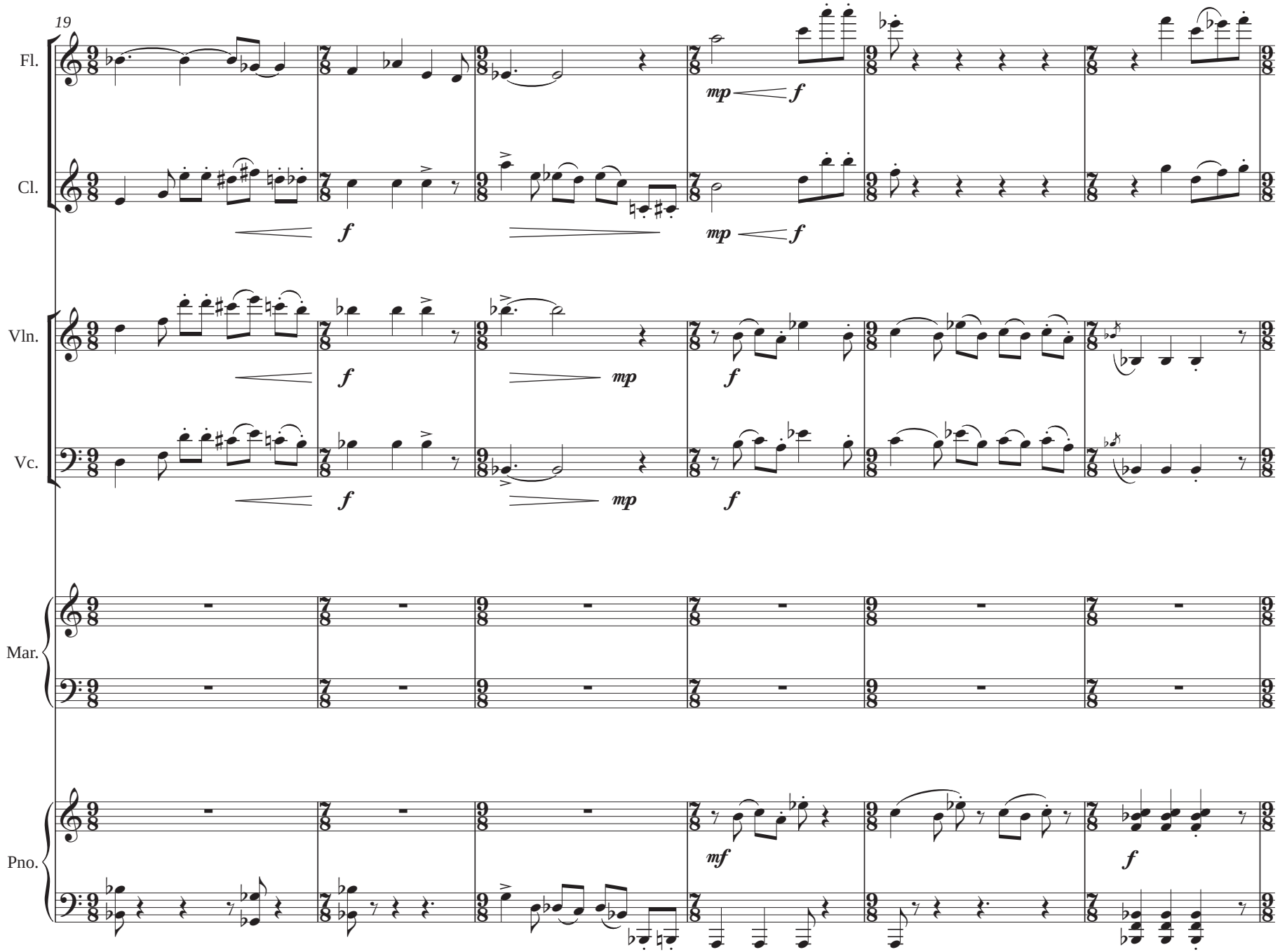
For chamber ensemble

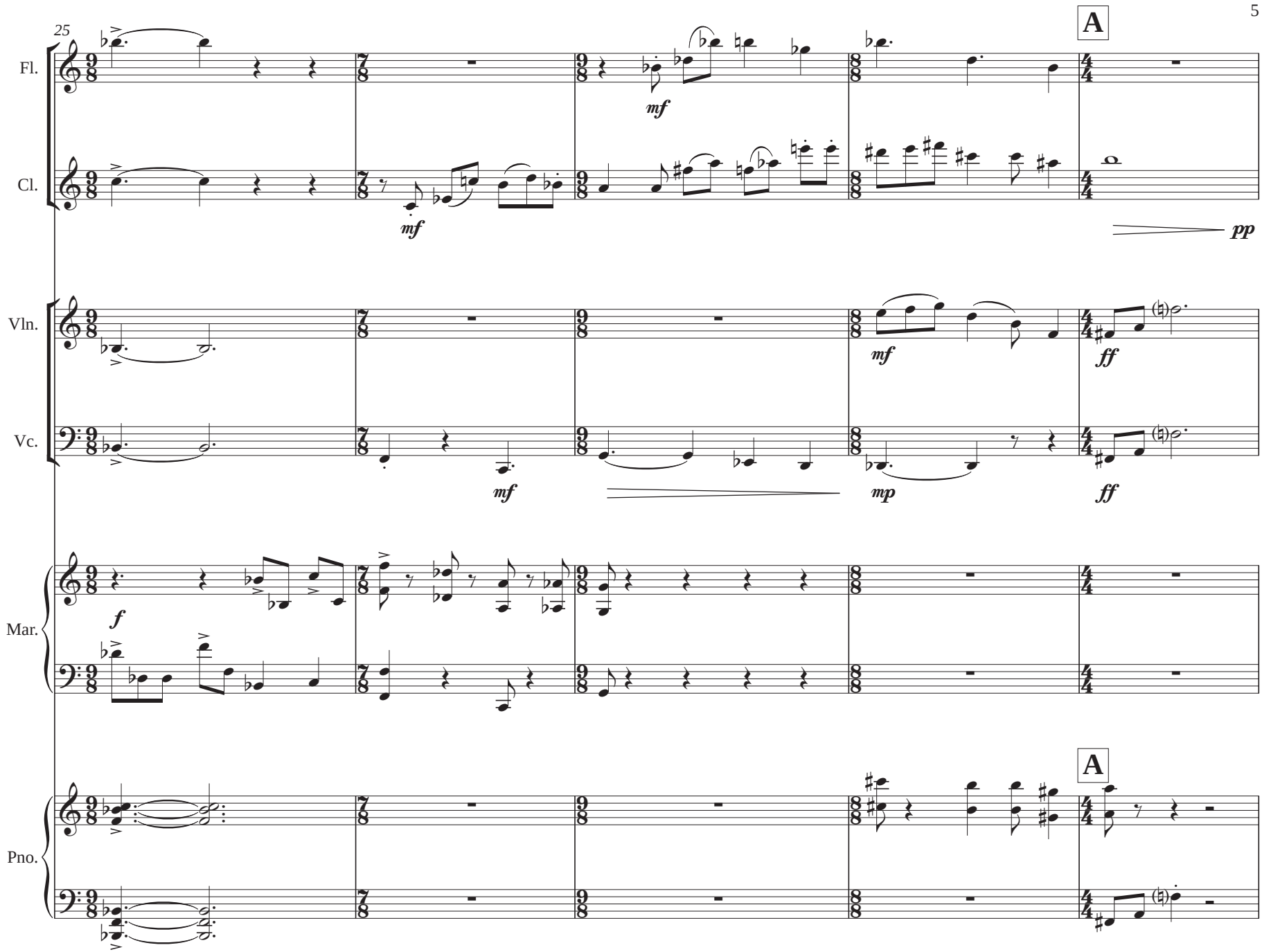
SARAH PAGE SUMMAR (2012)

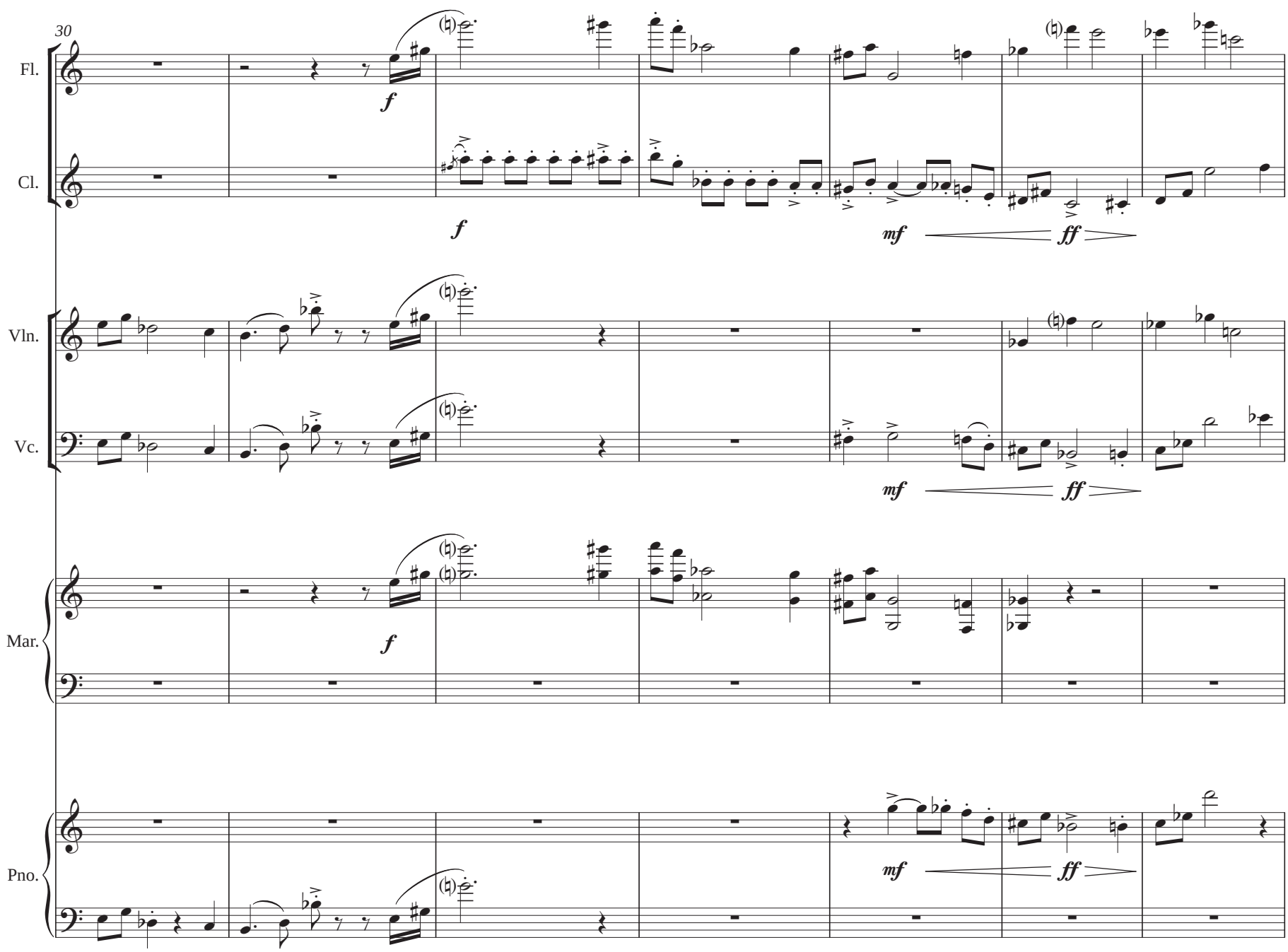


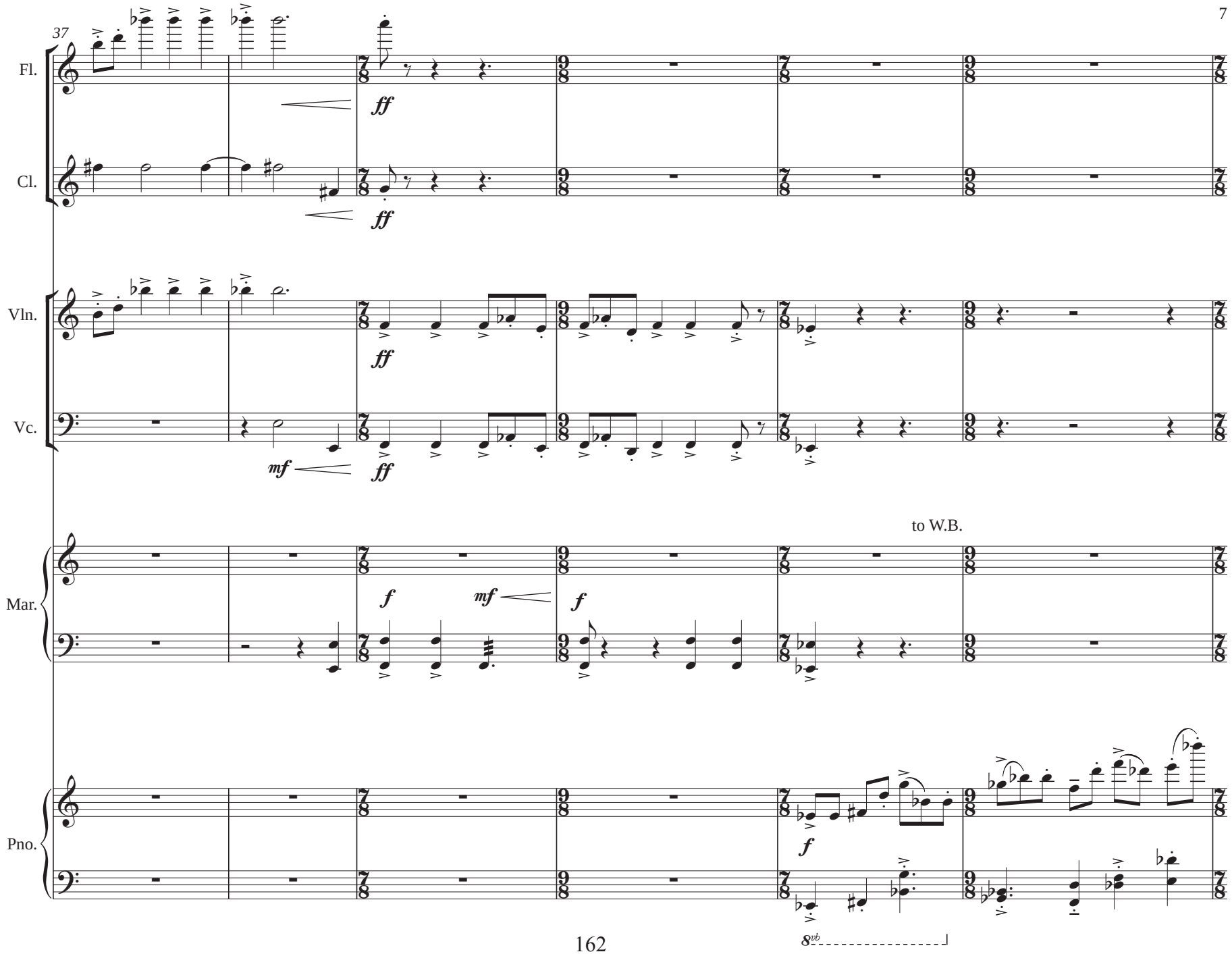

7
Fl.
Cl.
Vln.
Vc.
W.B.
Mar.
Pno.
mp
mf
f
arco
to Marimba

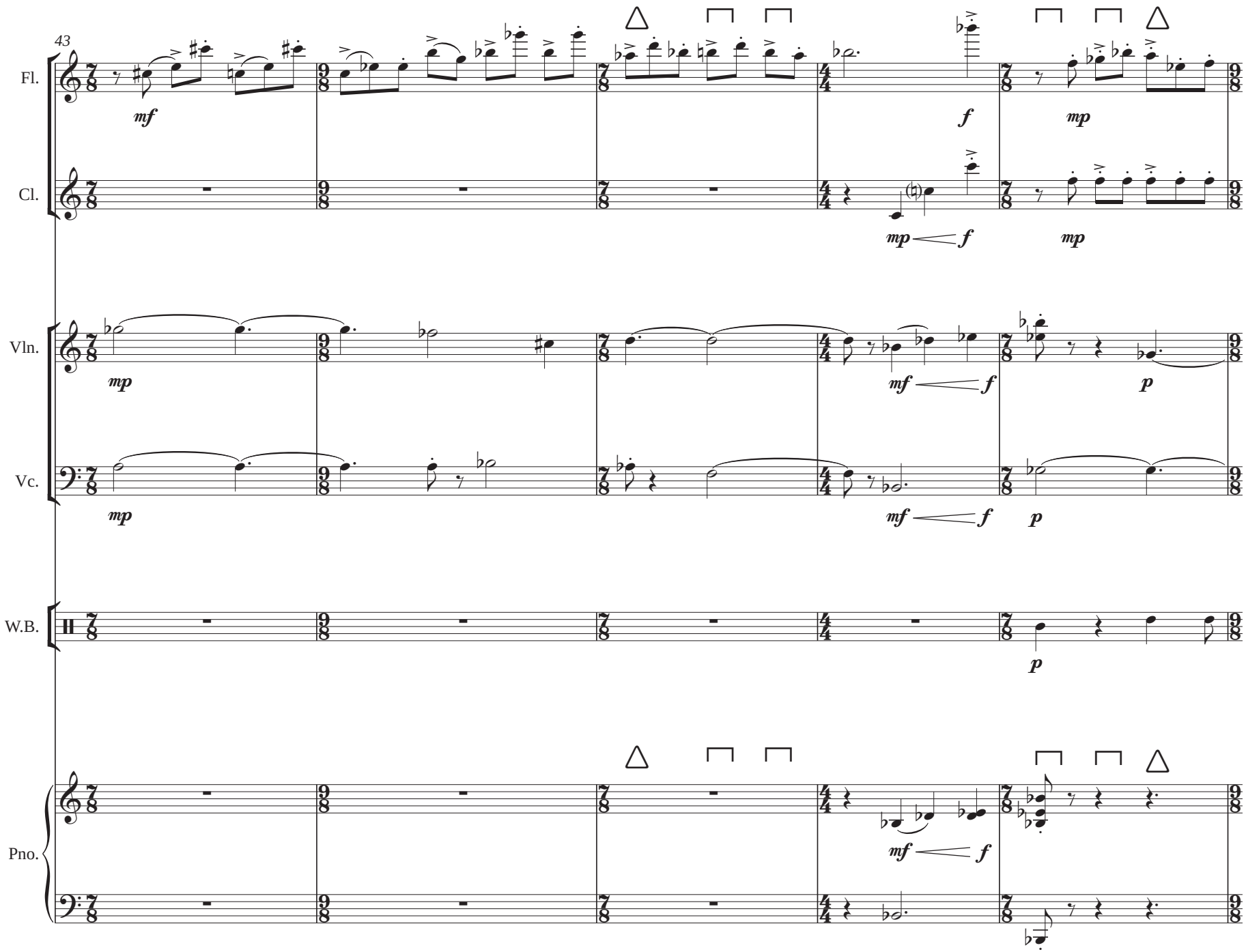

13
Fl.
Cl.
Vln.
Vc.
Mar.
Pno.
p
mp
mf
f
fp

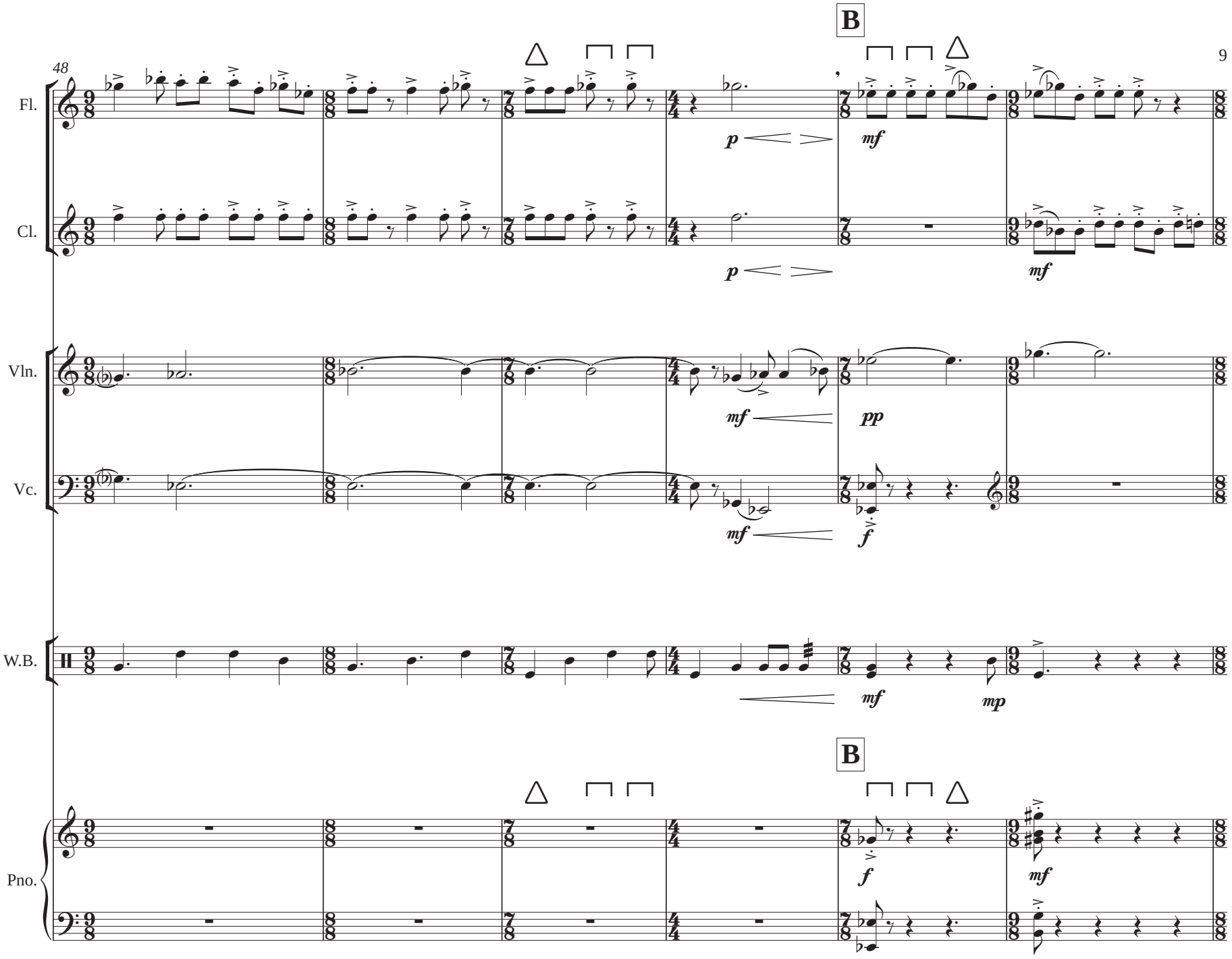

19
Fl.
Cl.
Vln.
Vc.
Mar.
Pno.
mp
f
mf

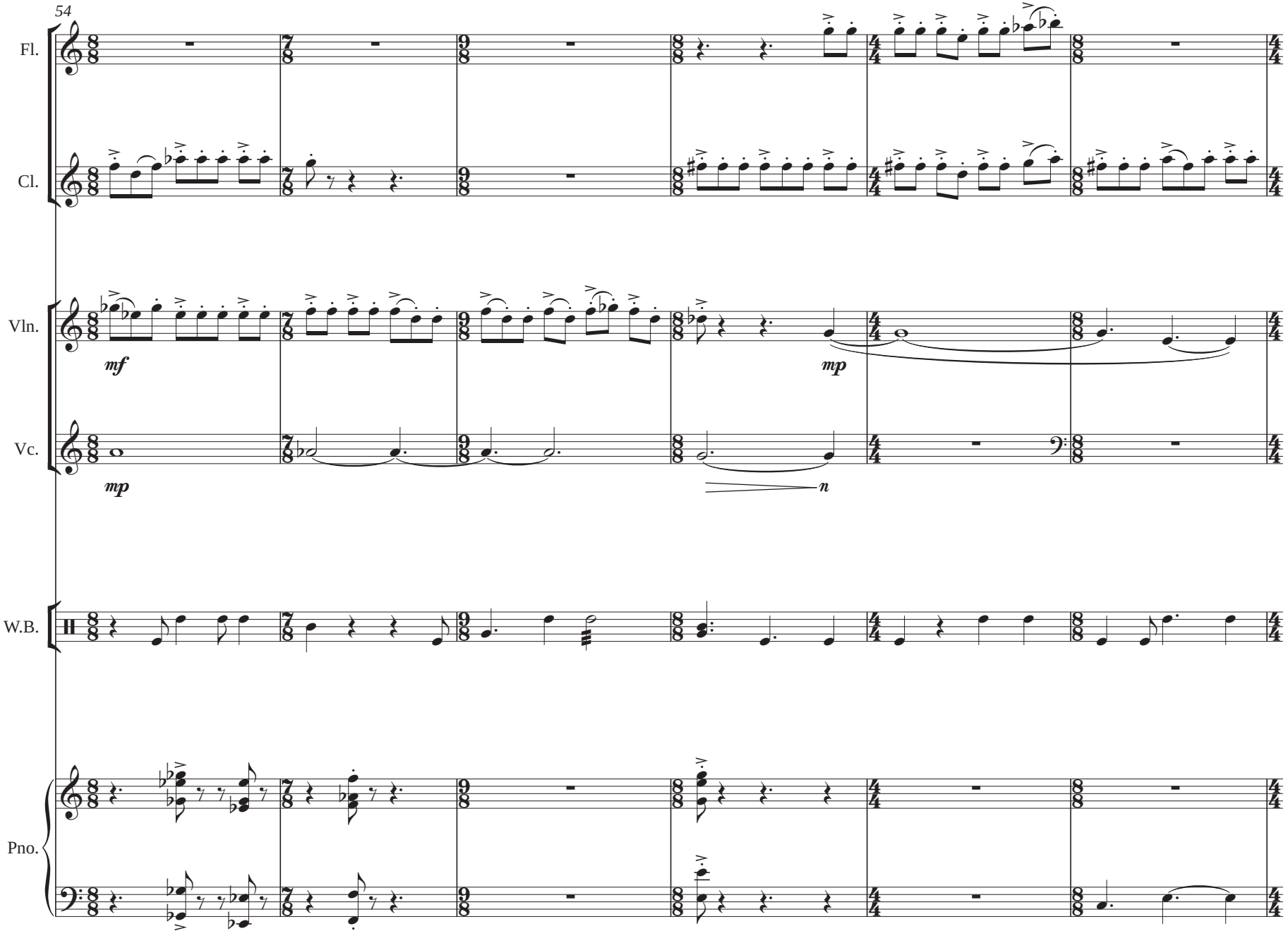

25
A
Fl.
Cl.
Vln.
Vc.
Mar.
Pno.
mf
mf
pp
mf
ff
mf
mp
ff
f
A

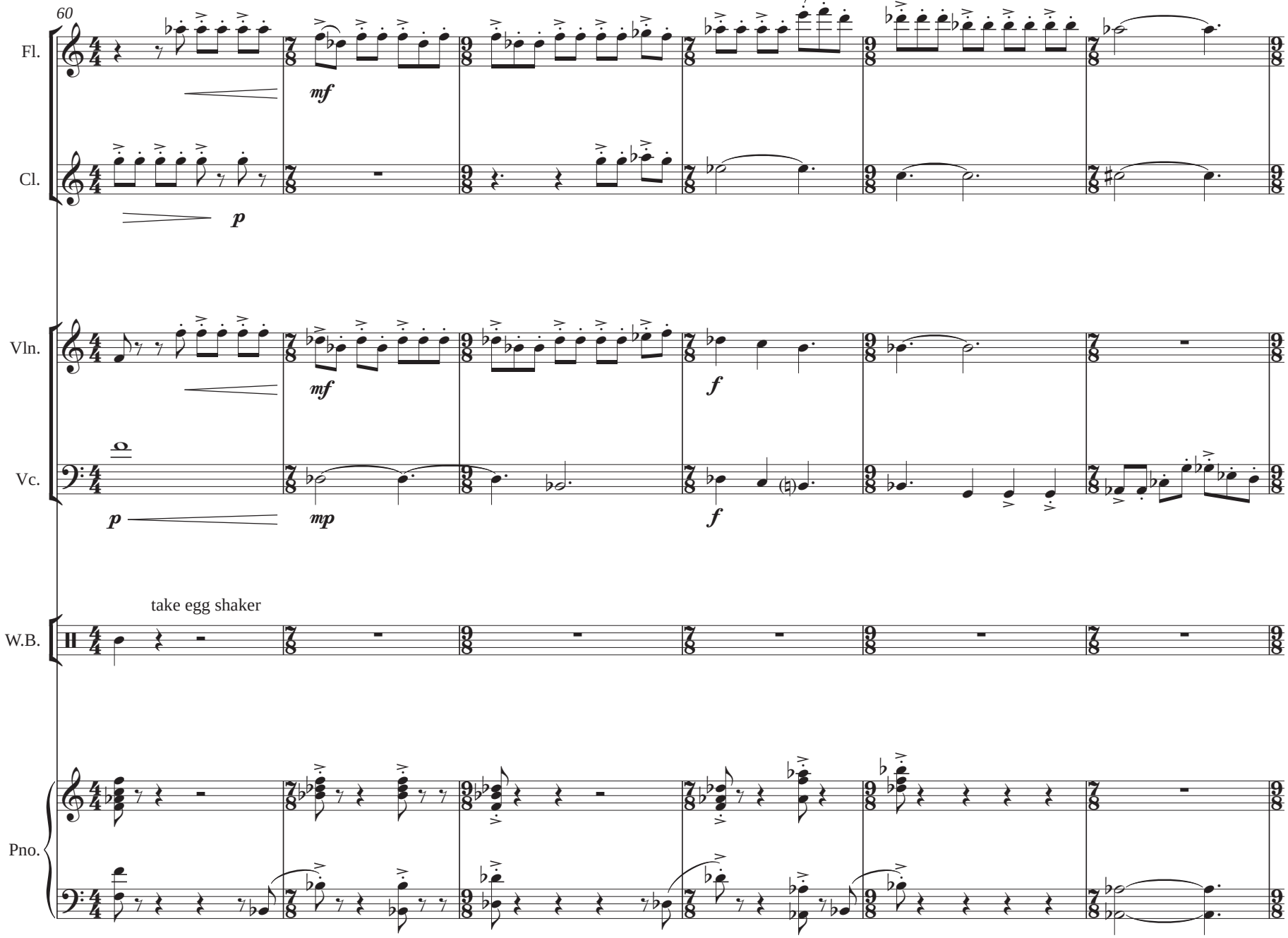

30
Fl.
Cl.
Vln.
Vc.
Mar.
Pno.
f
mf
ff

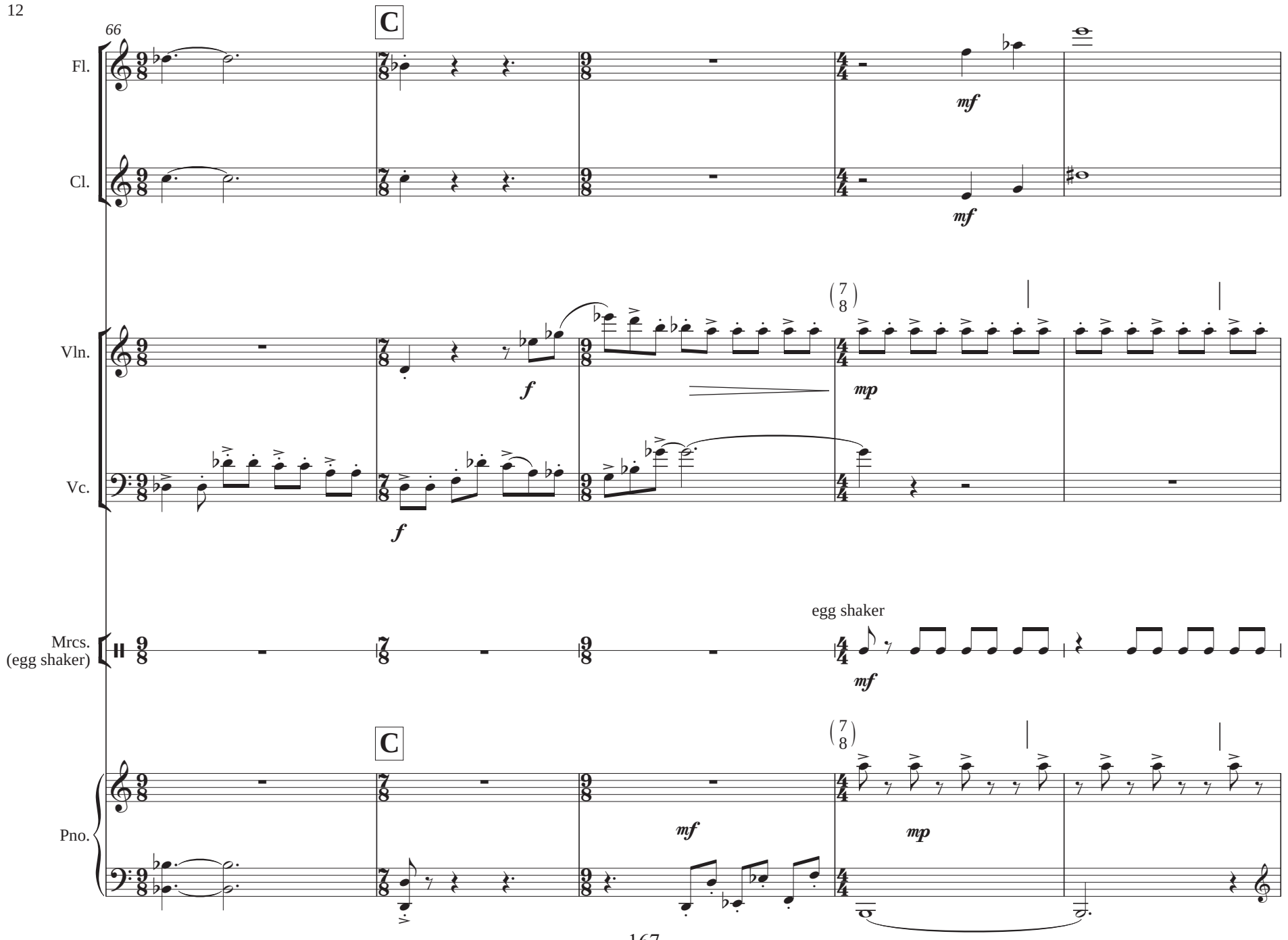

37
Fl.
Cl.
Vln.
Vc.
Mar.
Pno.
ff
mf
f
to W.B.
8vb

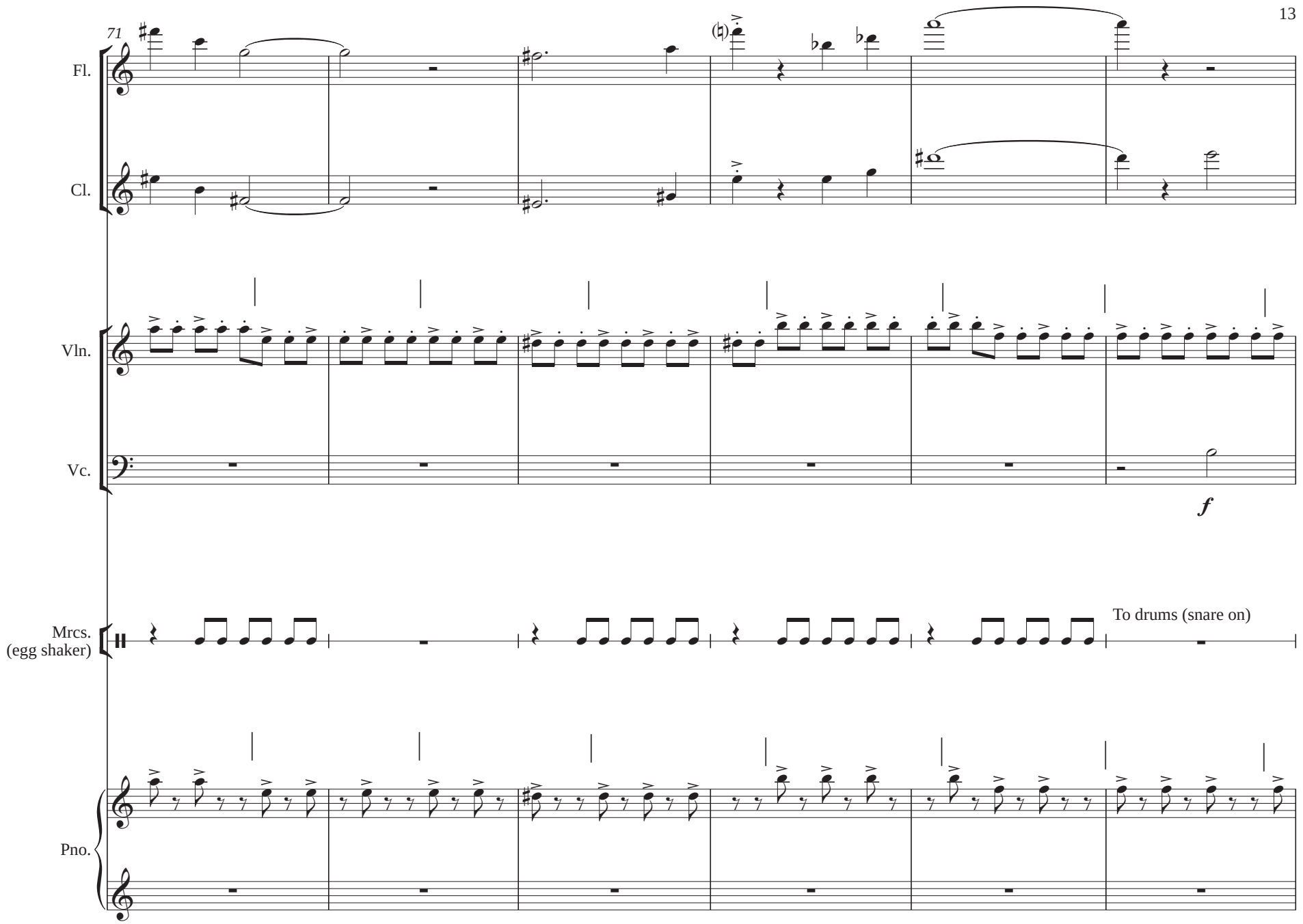

43
Fl.
Cl.
Vln.
Vc.
W.B.
Pno.
mf
f
mp
mp
f
mp
mp
mf
f
p
mp
mf
f
p
p
mf
f

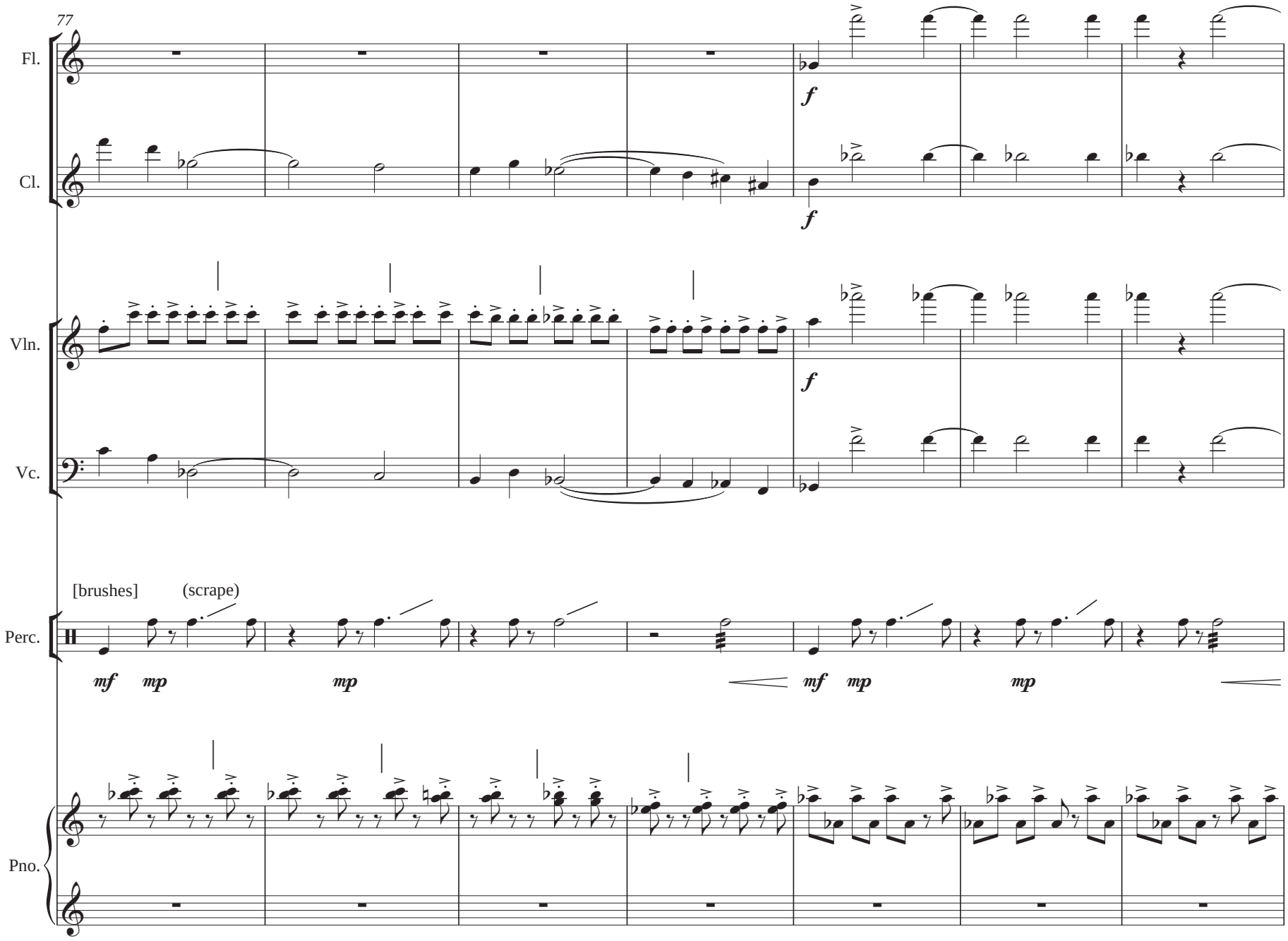

48
B
Fl.
Cl.
Vln.
Vc.
W.B.
Pno.
p
mf
pp
f
mp
B

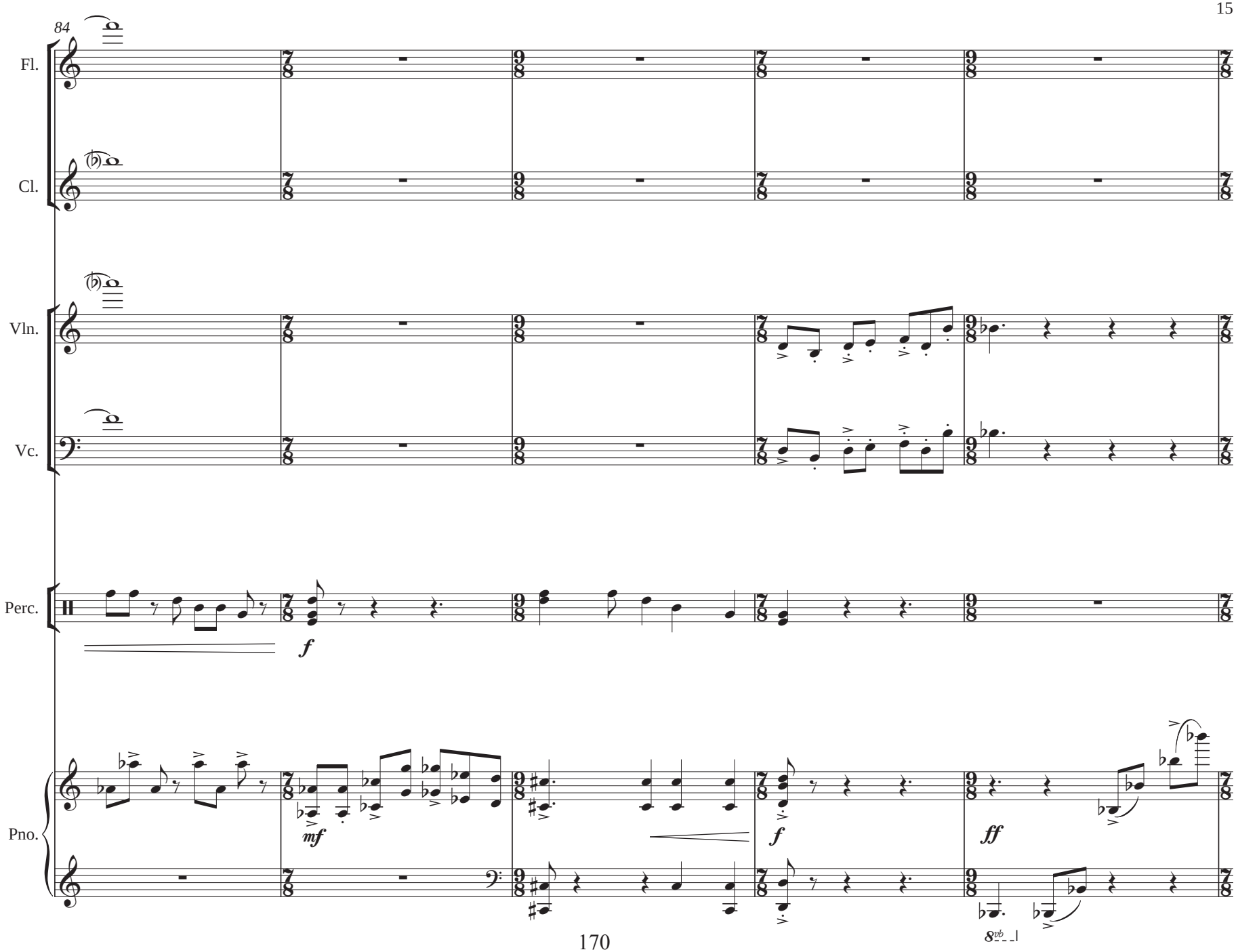

54
Fl.
Cl.
Vln.
mf
mp
Vc.
mp
n
W.B.
Pno.

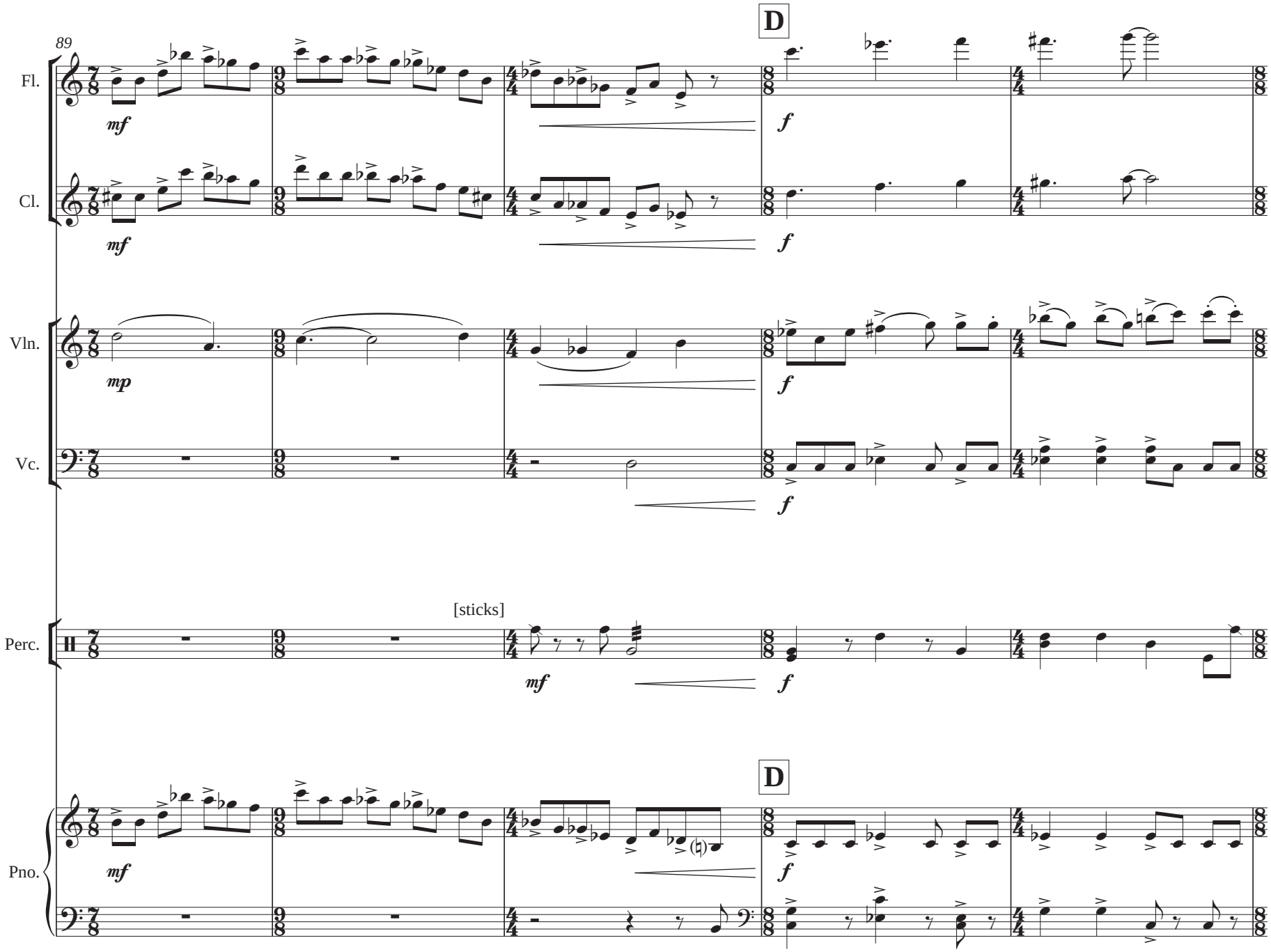

60
Fl.
mf
Cl.
p
Vln.
mf
f
Vc.
p
mp
f
take egg shaker
W.B.
Pno.


66
C
Fl.
Cl.
Vln.
Vc.
Mrcs.
(egg shaker)
Pno.
mf
f
mp
egg shaker
(7/8)


71
Fl.
Cl.
Vln.
Vc.
f
Mrcs.
(egg shaker)
To drums (snare on)
Pno.


77
Fl.
Cl.
Vln.
Vc.
[brushes]
(scrape)
Perc.
Pno.
f
mf
mp


84
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
f
mf
f
ff
8vb


89
D
Fl.
mf
f
Cl.
mf
f
Vln.
mp
f
Vc.
f
[sticks]
Perc.
mf
f
D
Pno.
mf
f

94

Fl.

Cl.

Vln.

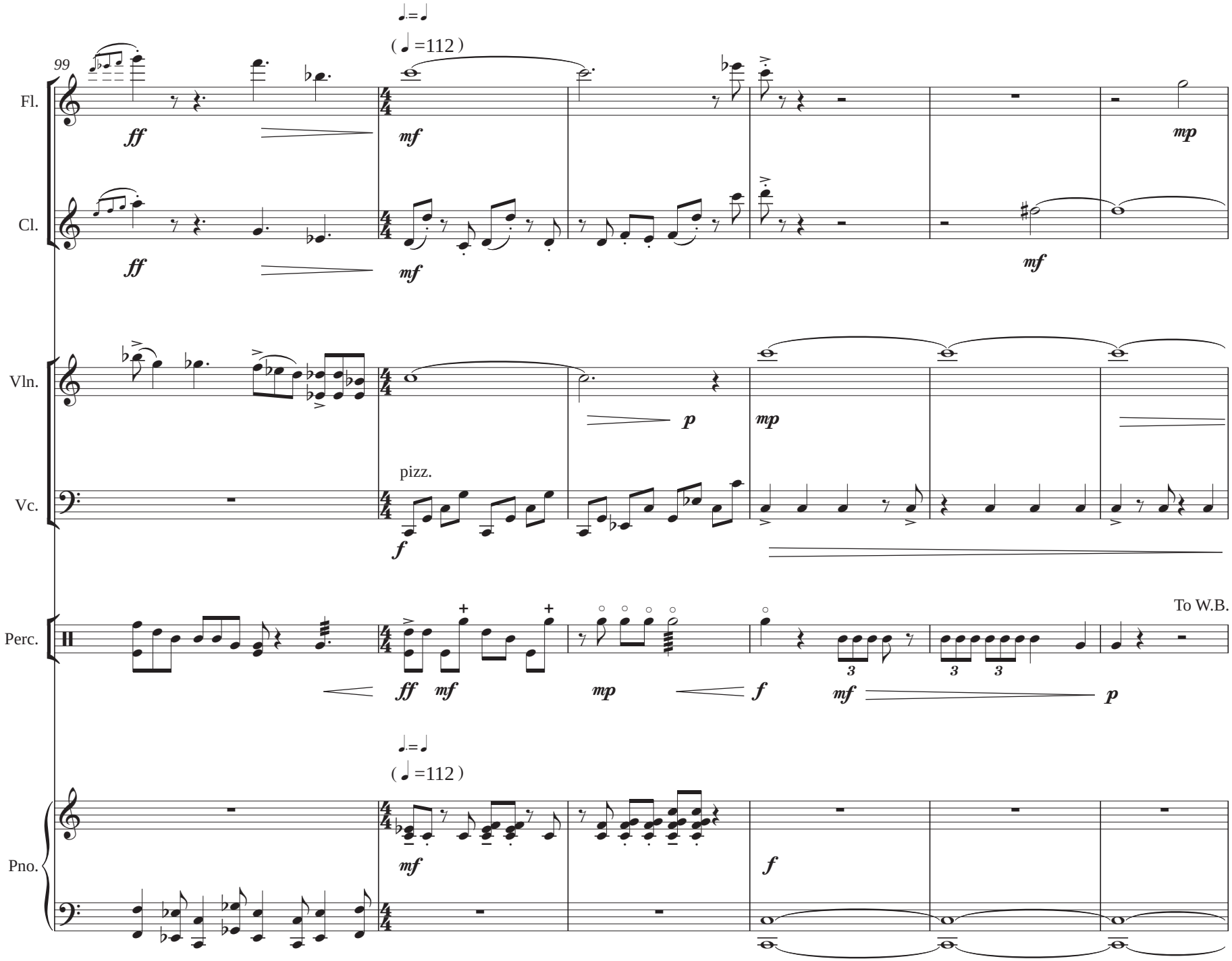
Vc.

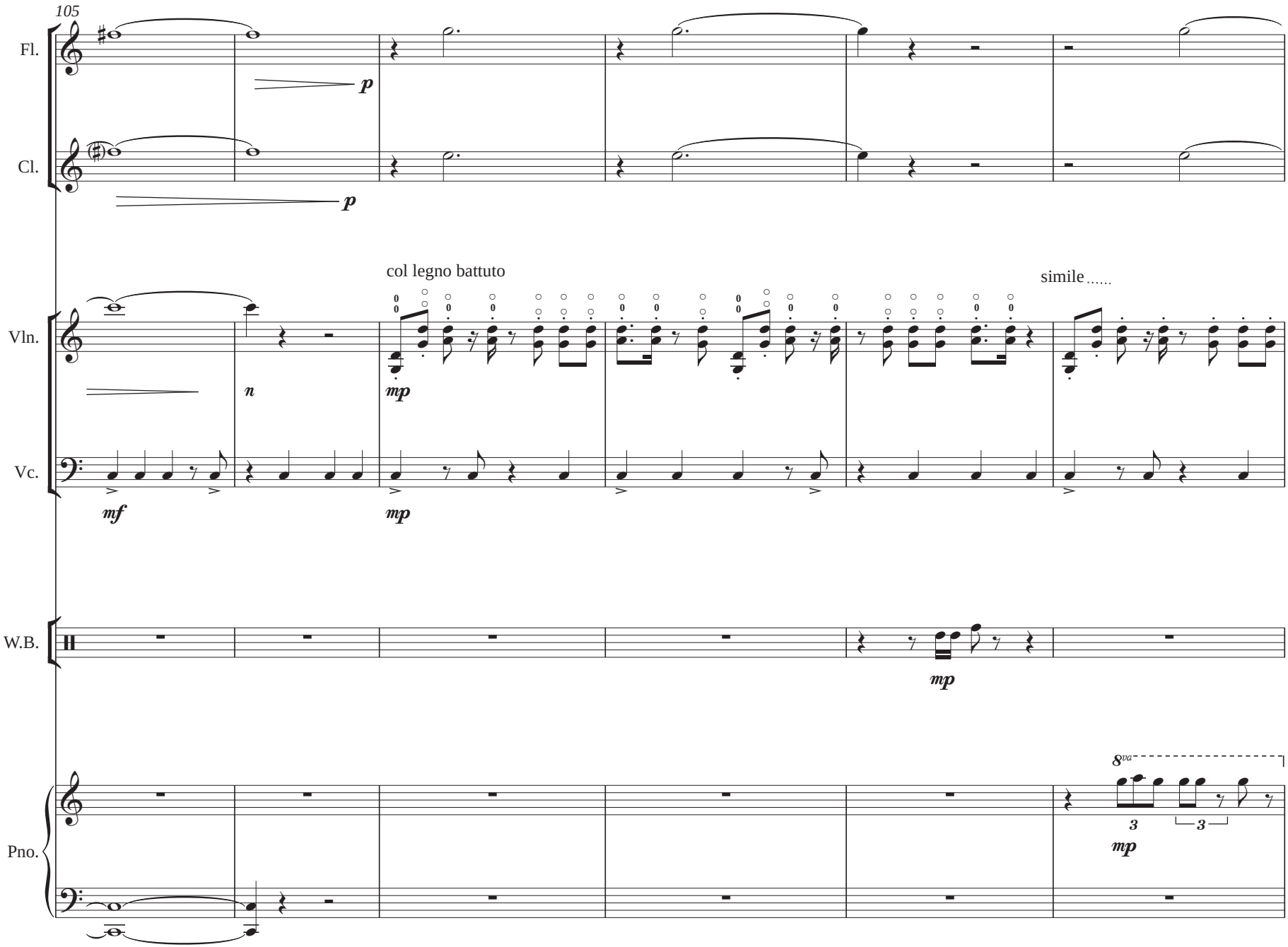
Perc.

Pno.

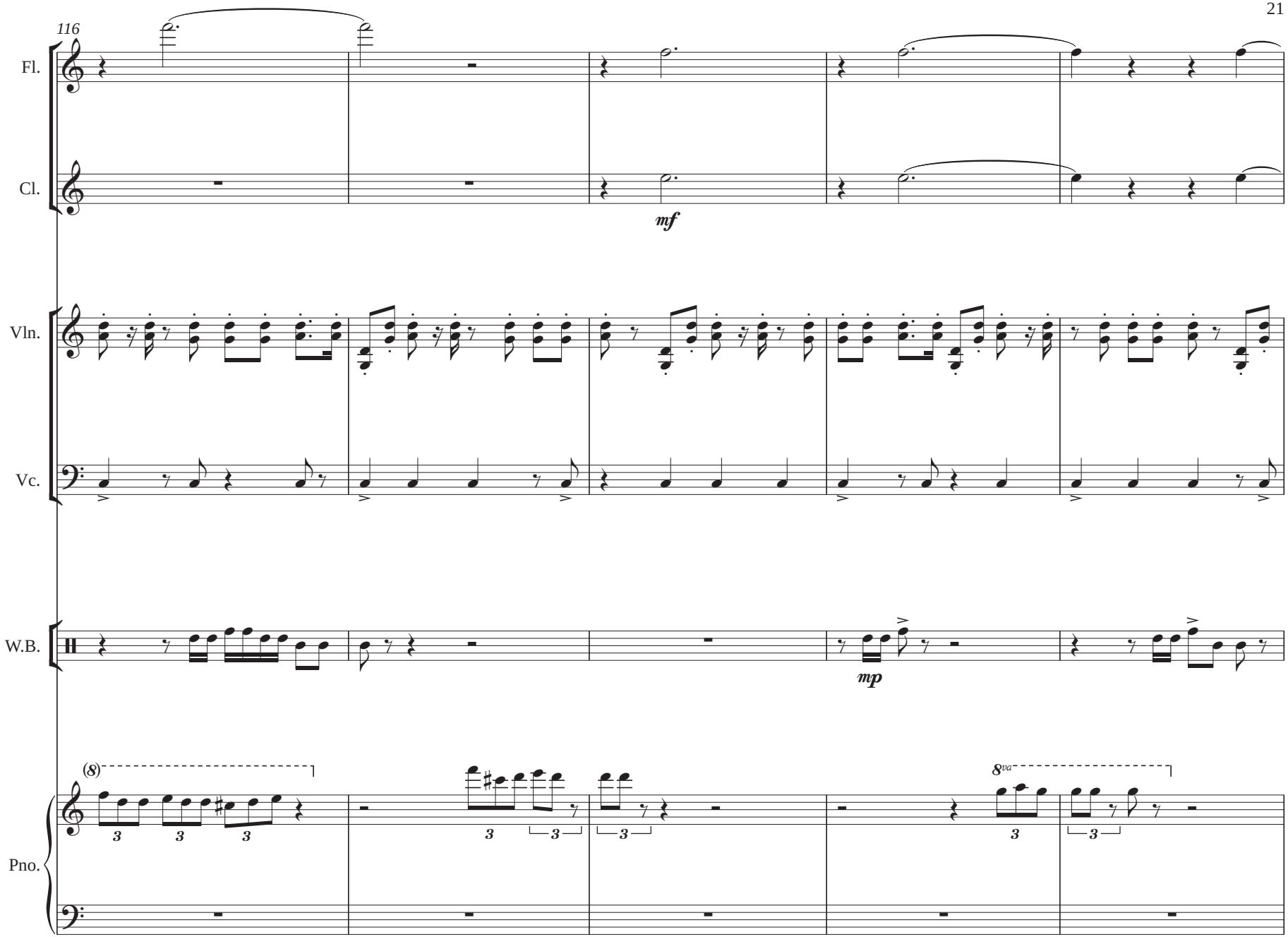
ff

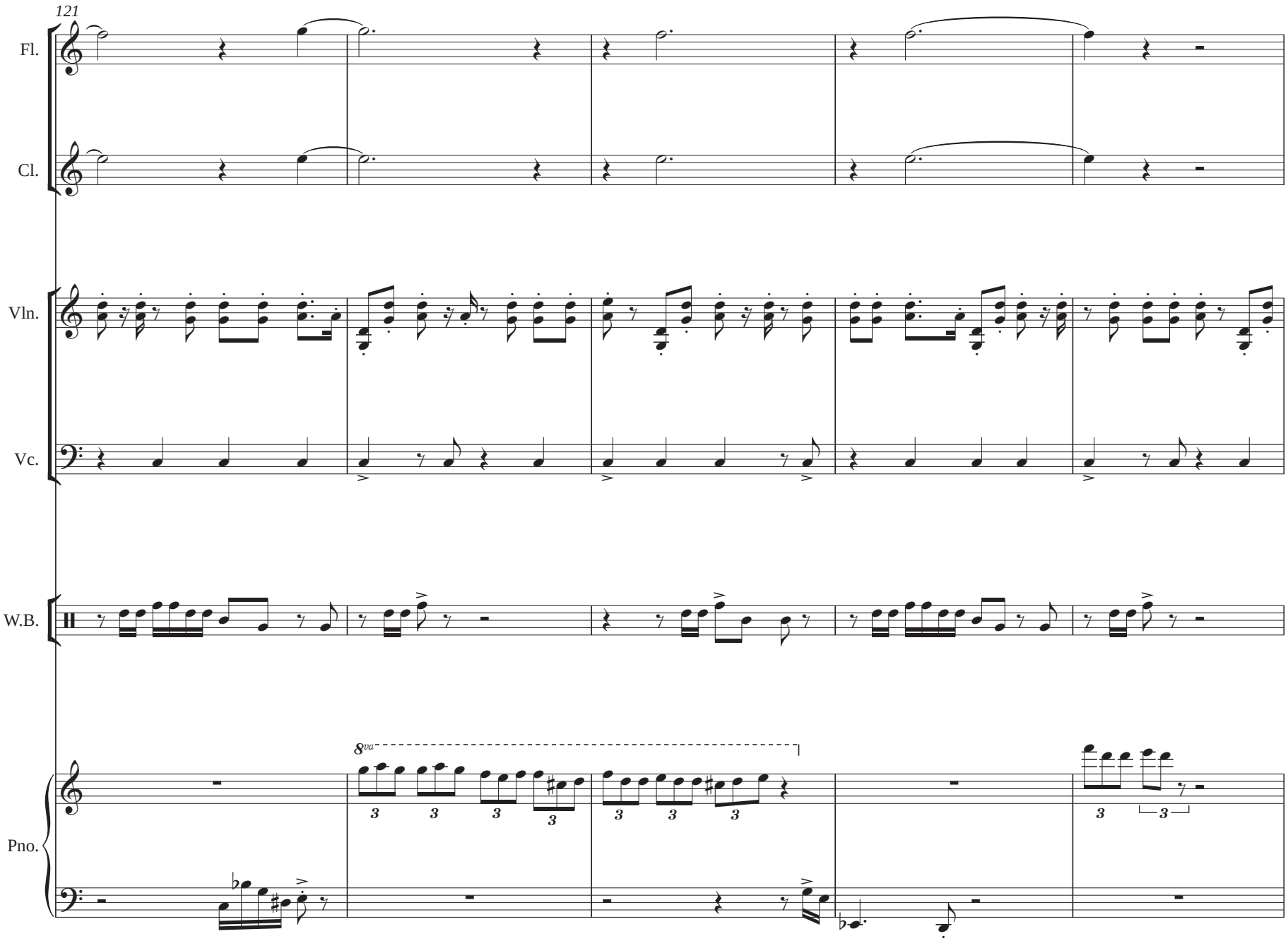
f

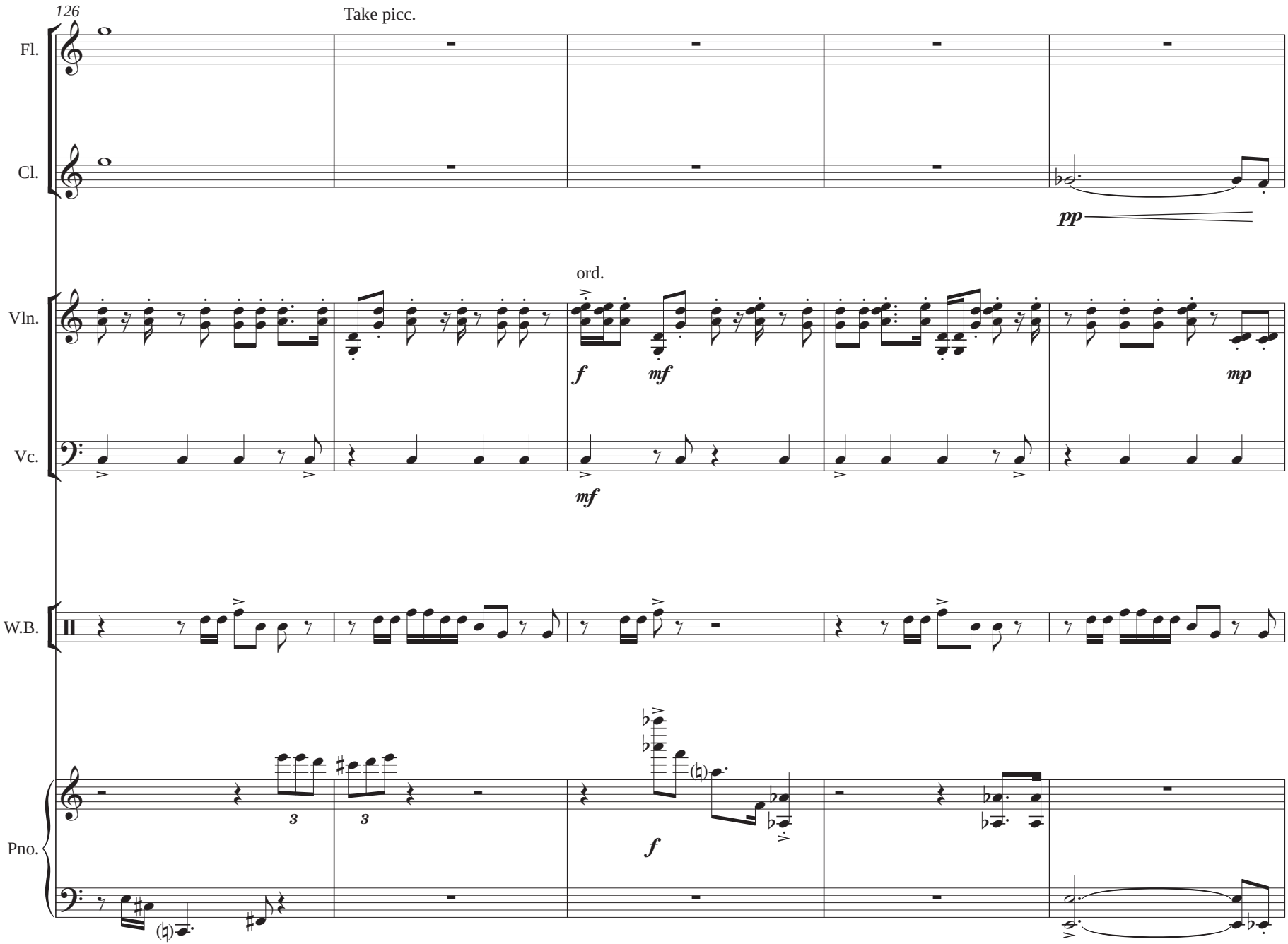

99
♩.=♩
(♩=112)
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
ff
mf
mp
p
f
pizz.
To W.B.
3


105
Fl.
Cl.
Vln.
Vc.
W.B.
Pno.
p
p
col legno battuto
simile .....
n
mp
mf
mp
mp
8va
3
3
mp

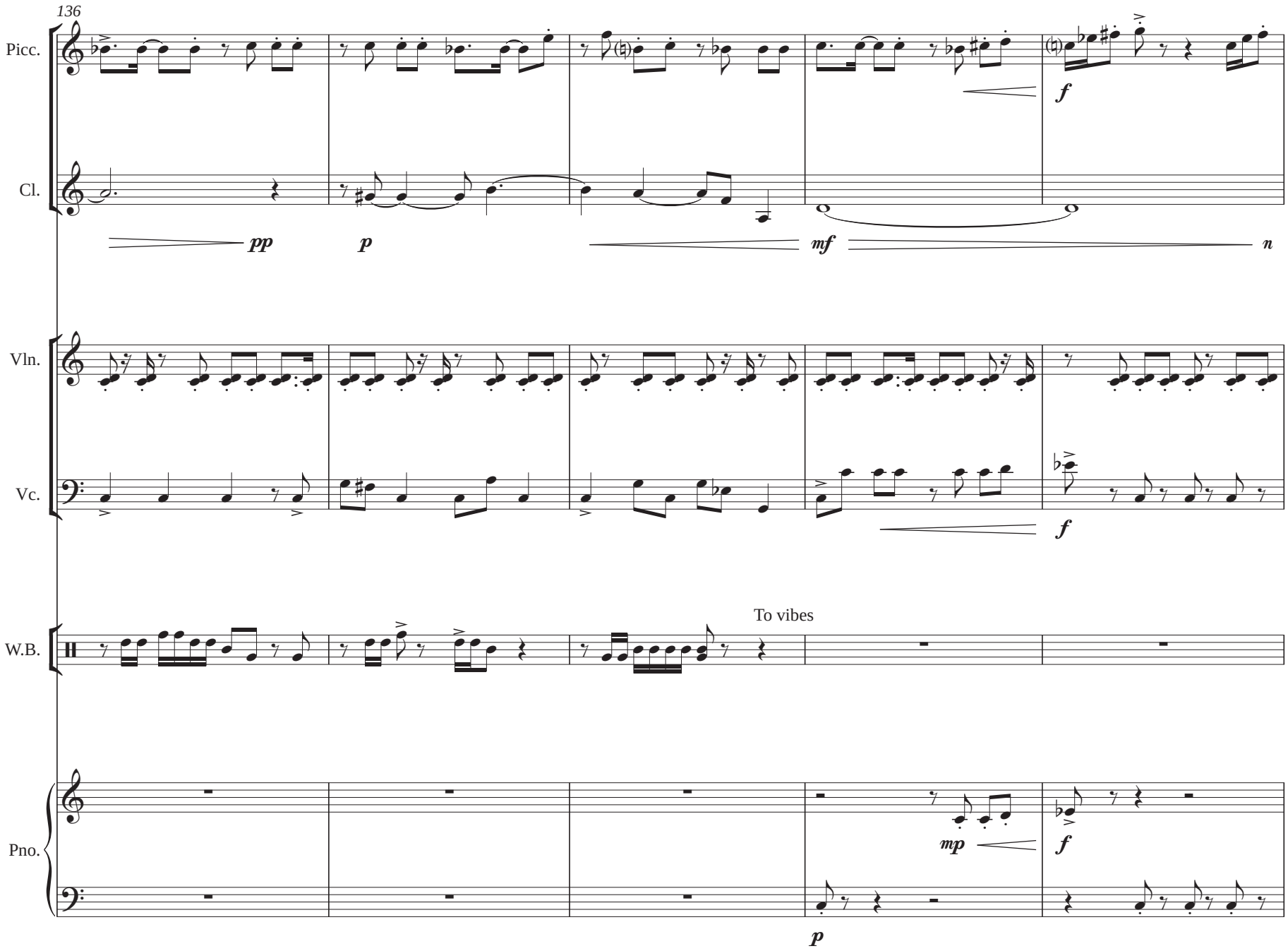

111
Fl.
Cl.
Vln.
Vc.
W.B.
Pno.
mf
8va

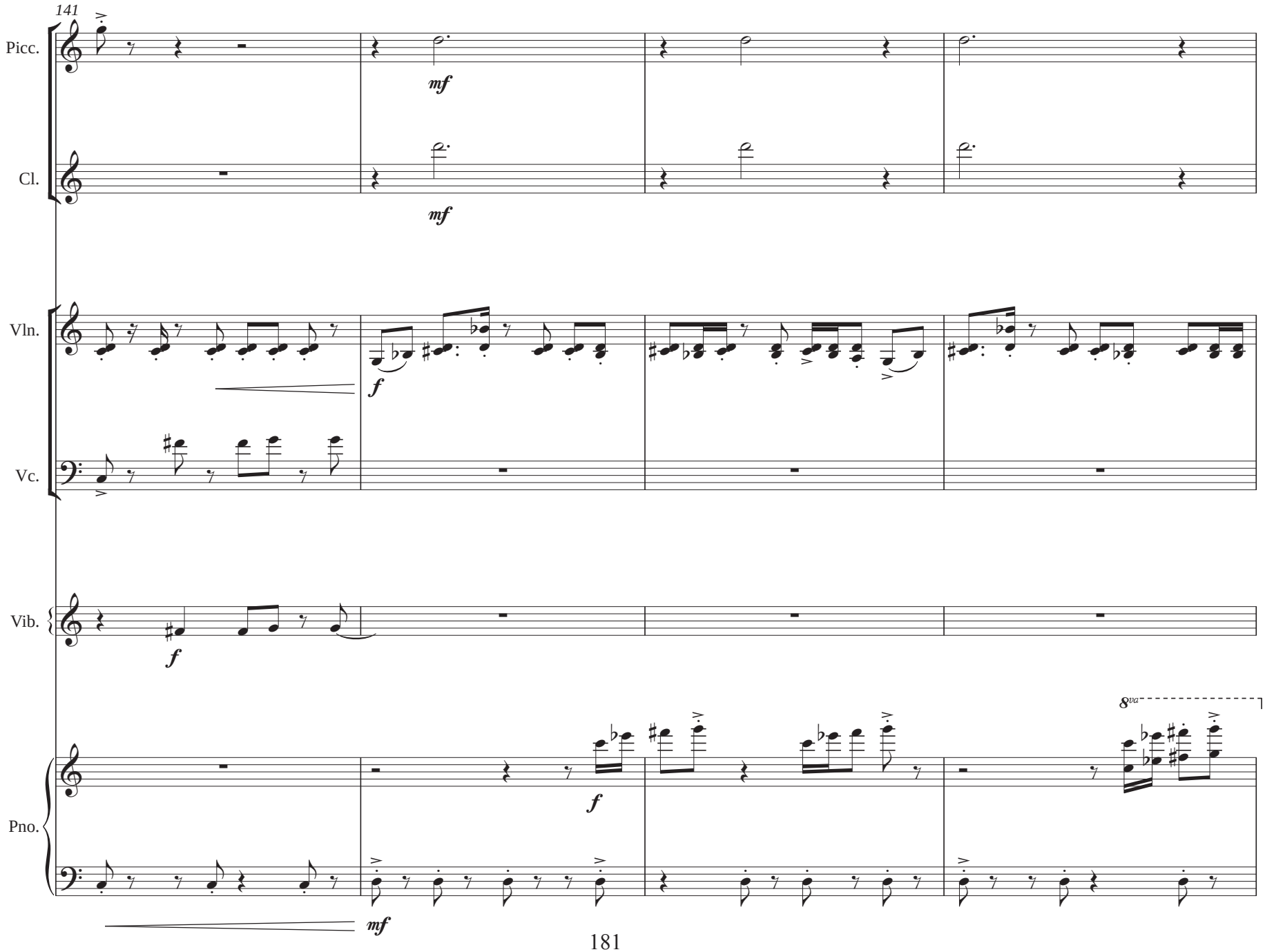

116
Fl.
Cl.
mf
Vln.
Vc.
W.B.
mp
(8)
8va
Pno.


121
Fl.
Cl.
Vln.
Vc.
W.B.
Pno.
8va

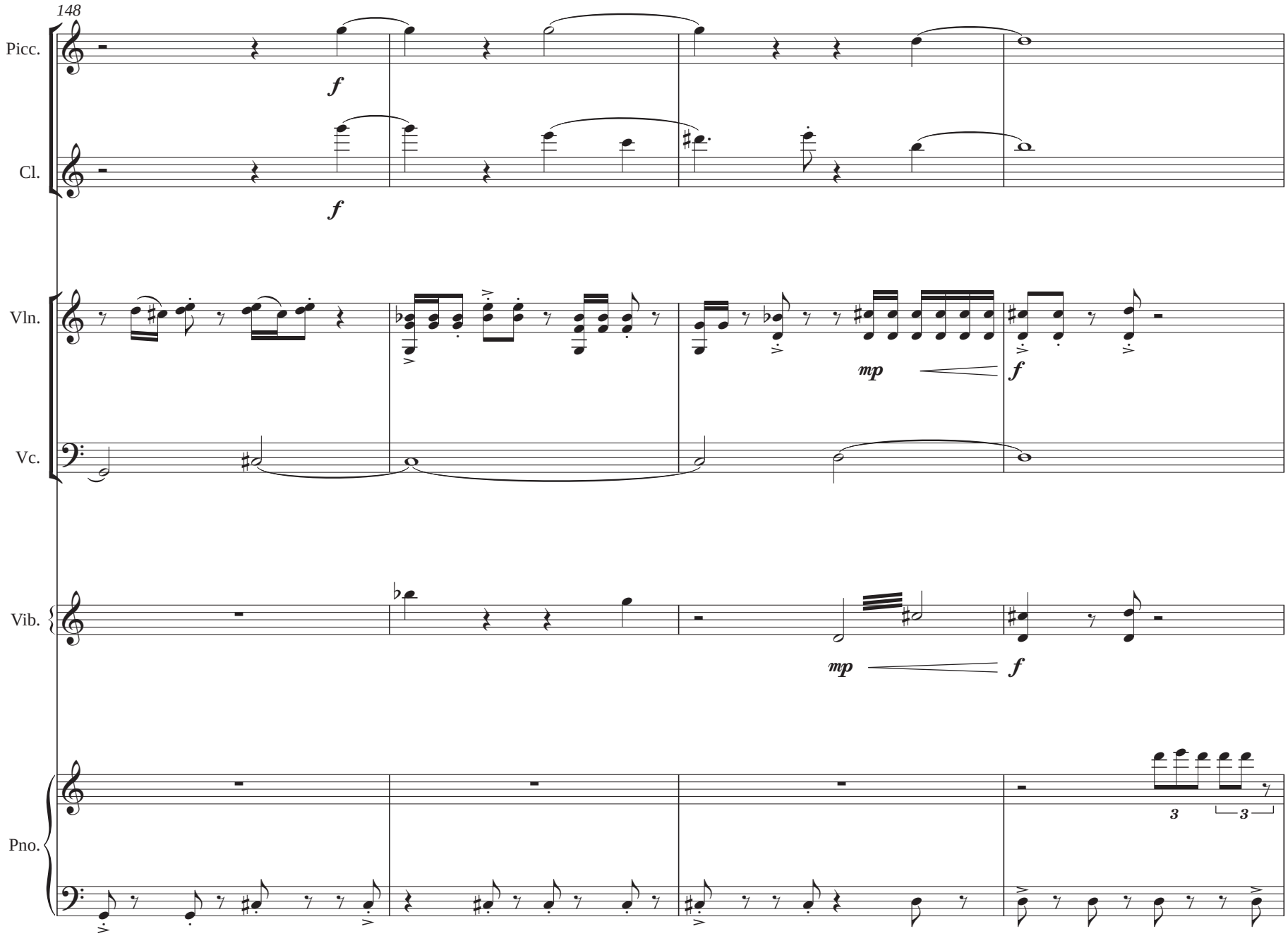

126
Take picc.
Fl.
Cl.
pp
ord.
Vln.
f
mf
mp
Vc.
mf
W.B.
Pno.
3
3
f

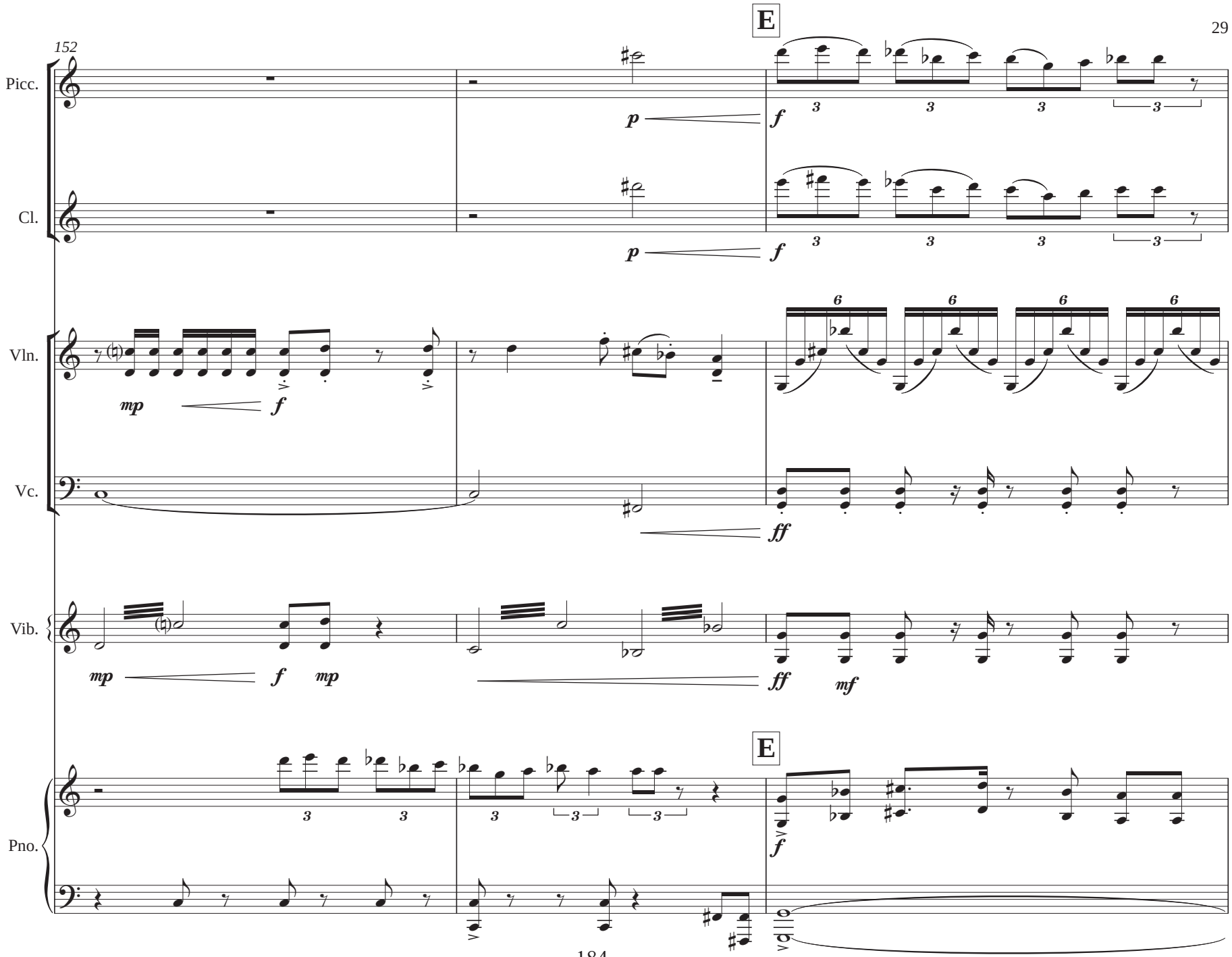

131
Picc.
Cl.
Vln.
Vc.
W.B.
Pno.
mp
mf
f

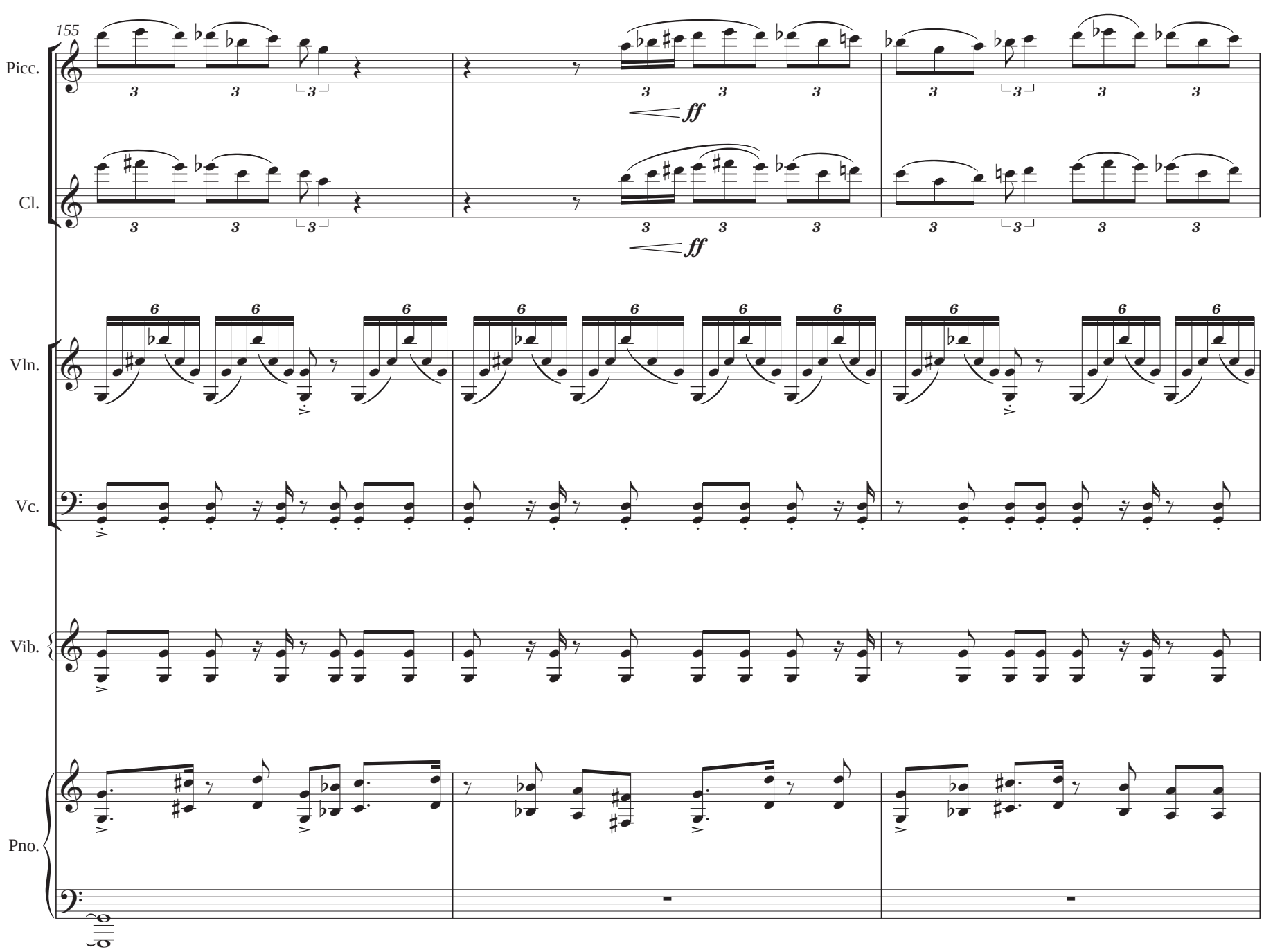

136
Picc.
Cl.
Vln.
Vc.
W.B.
Pno.
pp
p
mf
n
f
f
To vibes
mp
f
p

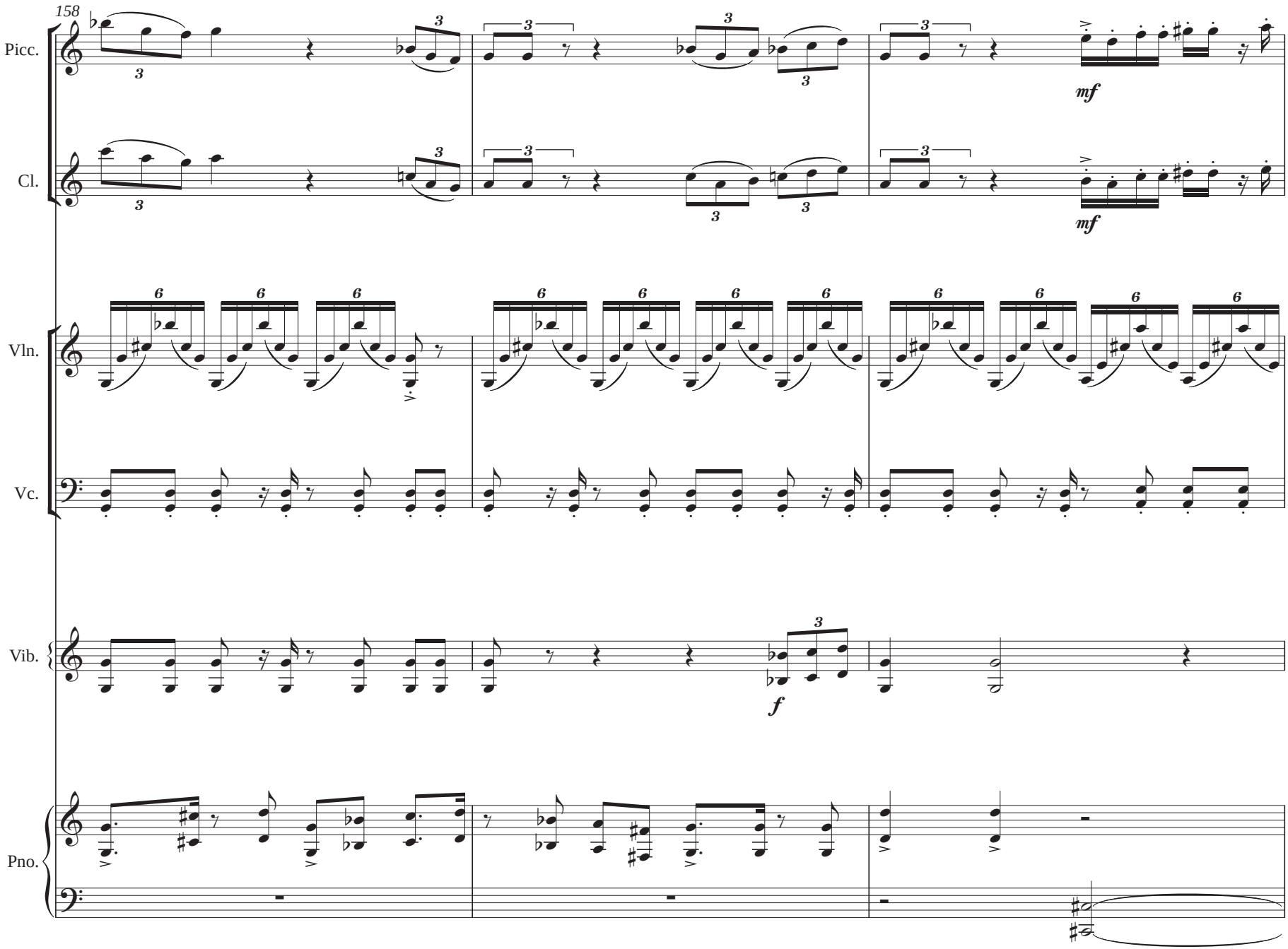

141
Picc.
Cl.
Vln.
Vc.
Vib.
Pno.
mf
mf
f
f
f
8va
mf


145
Picc.
Cl.
Vln.
arco
Vc.
mf
Vib.
Pno.


148
Picc.
Cl.
Vln.
Vc.
Vib.
Pno.
f
f
mp
f
mp
f
3
3


152
E
Picc.
Cl.
Vln.
Vc.
Vib.
Pno.
p
f
mp
ff
mf
3
6

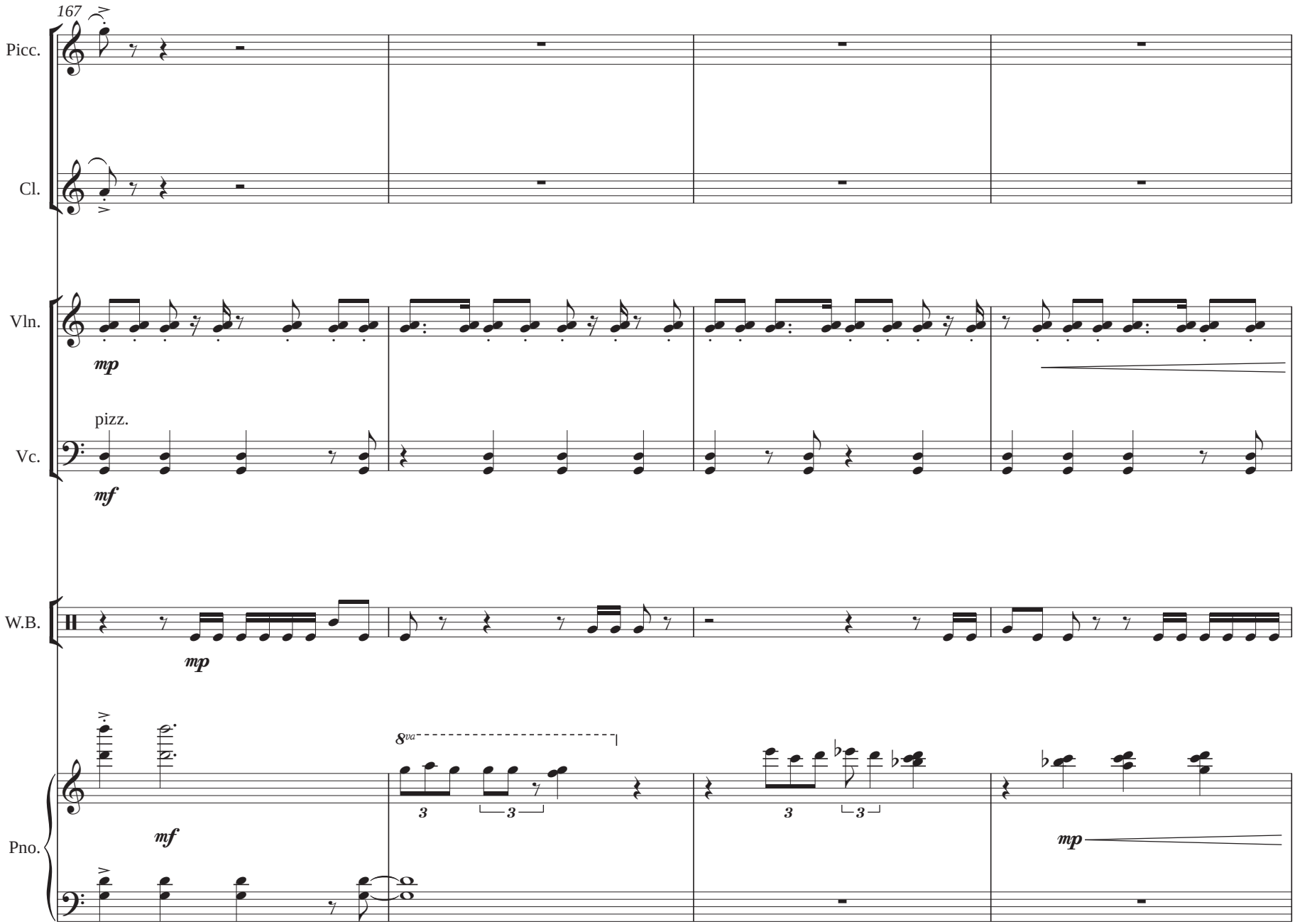

155
Picc.
Cl.
ff
ff
Vln.
Vc.
Vib.
Pno.

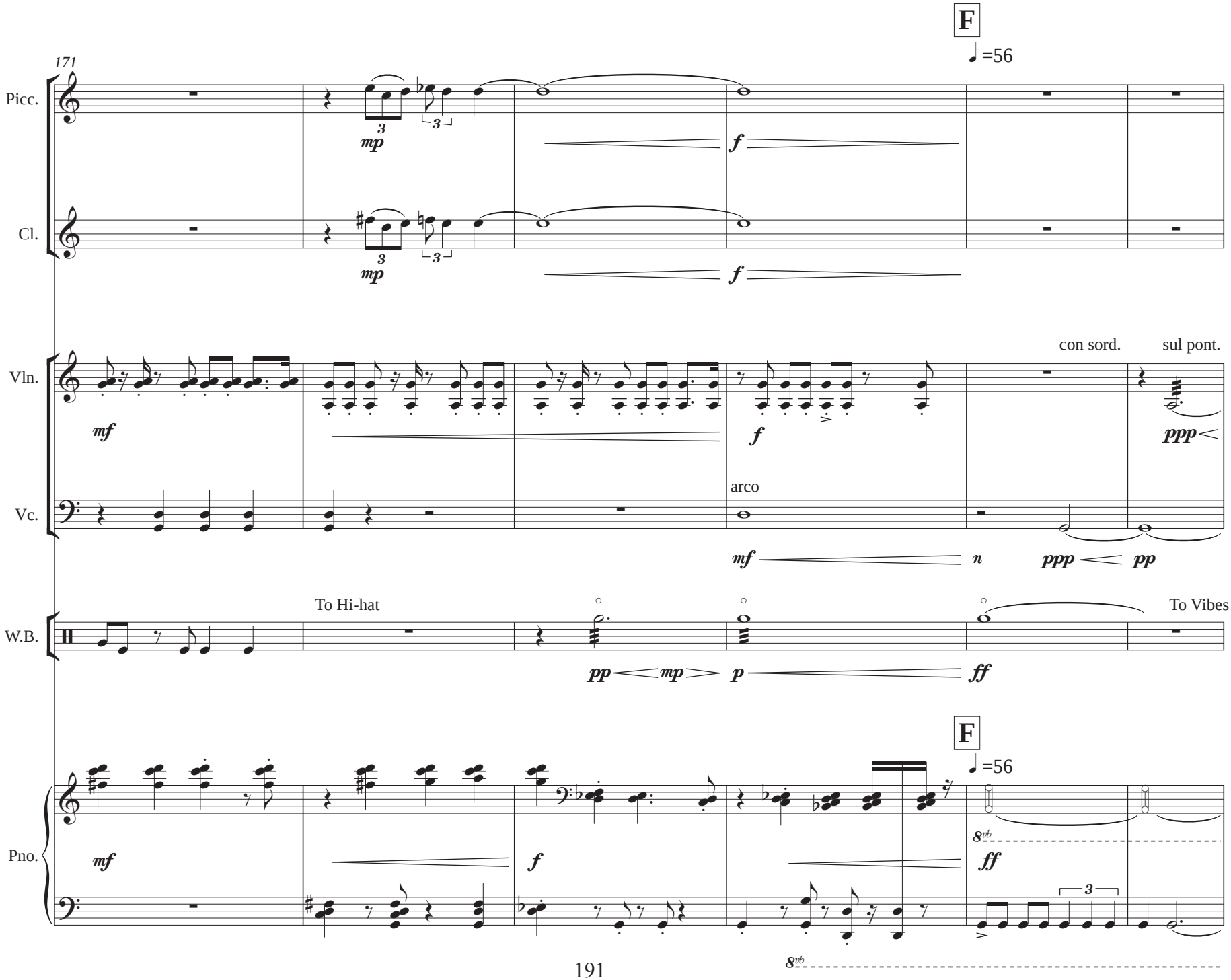

158
Picc.
Cl.
Vln.
Vc.
Vib.
Pno.
mf
mf
f

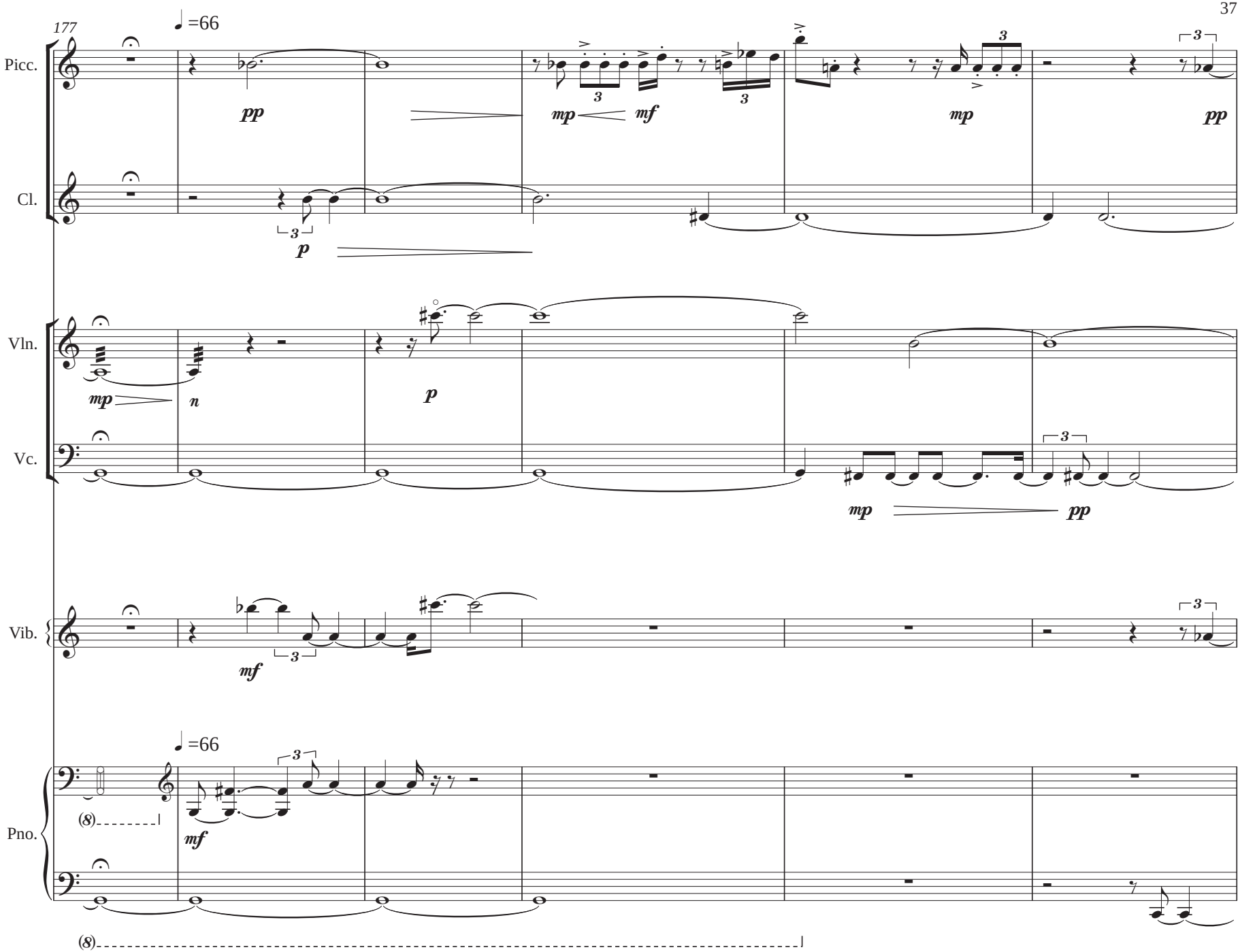

161
Picc.
Cl.
Vln.
Vc.
Vib.
Pno.
ff

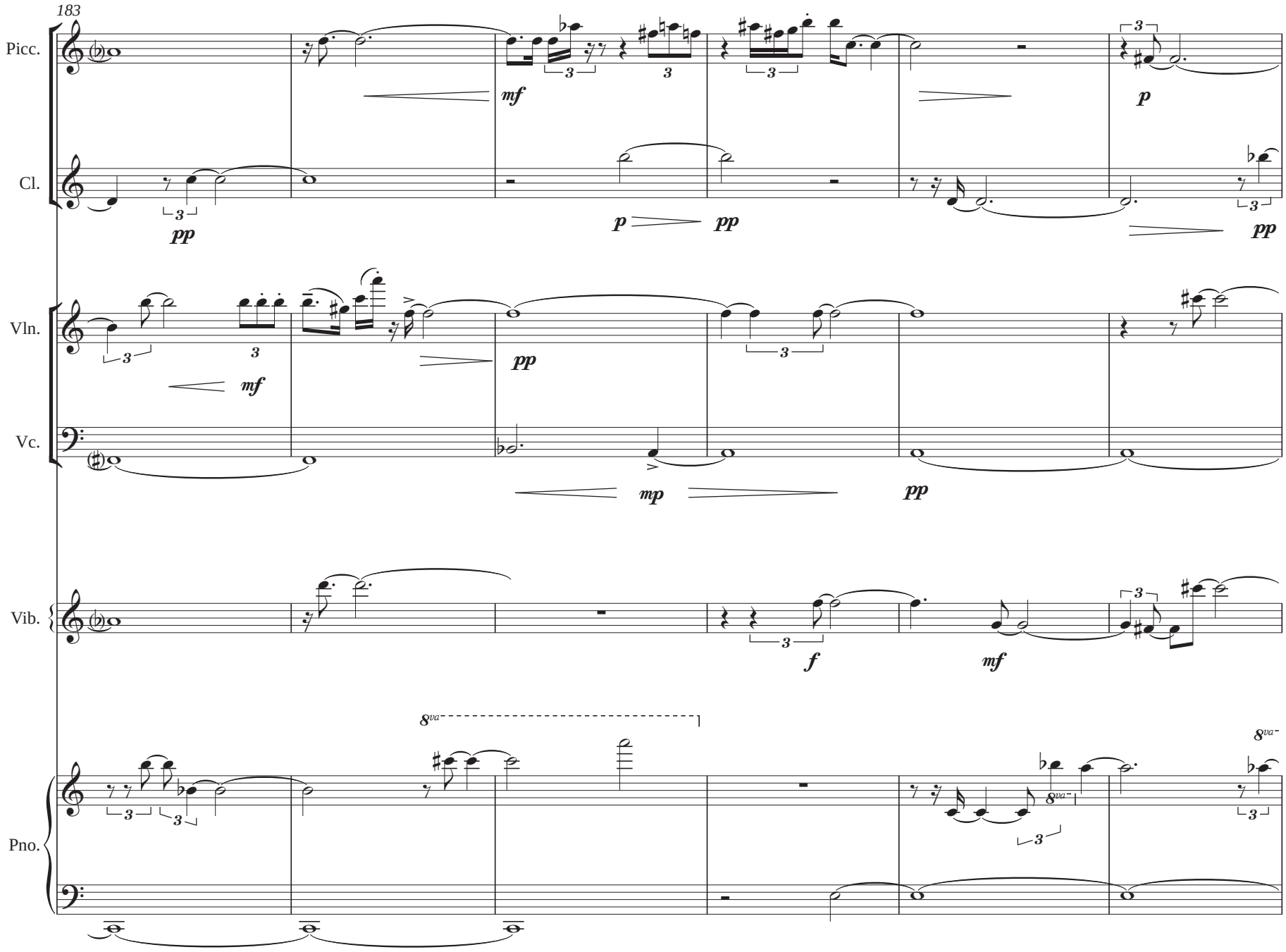

163
Picc.
Cl.
Vln.
Vc.
Vib.
Pno.
ff
ff
6
f
ff

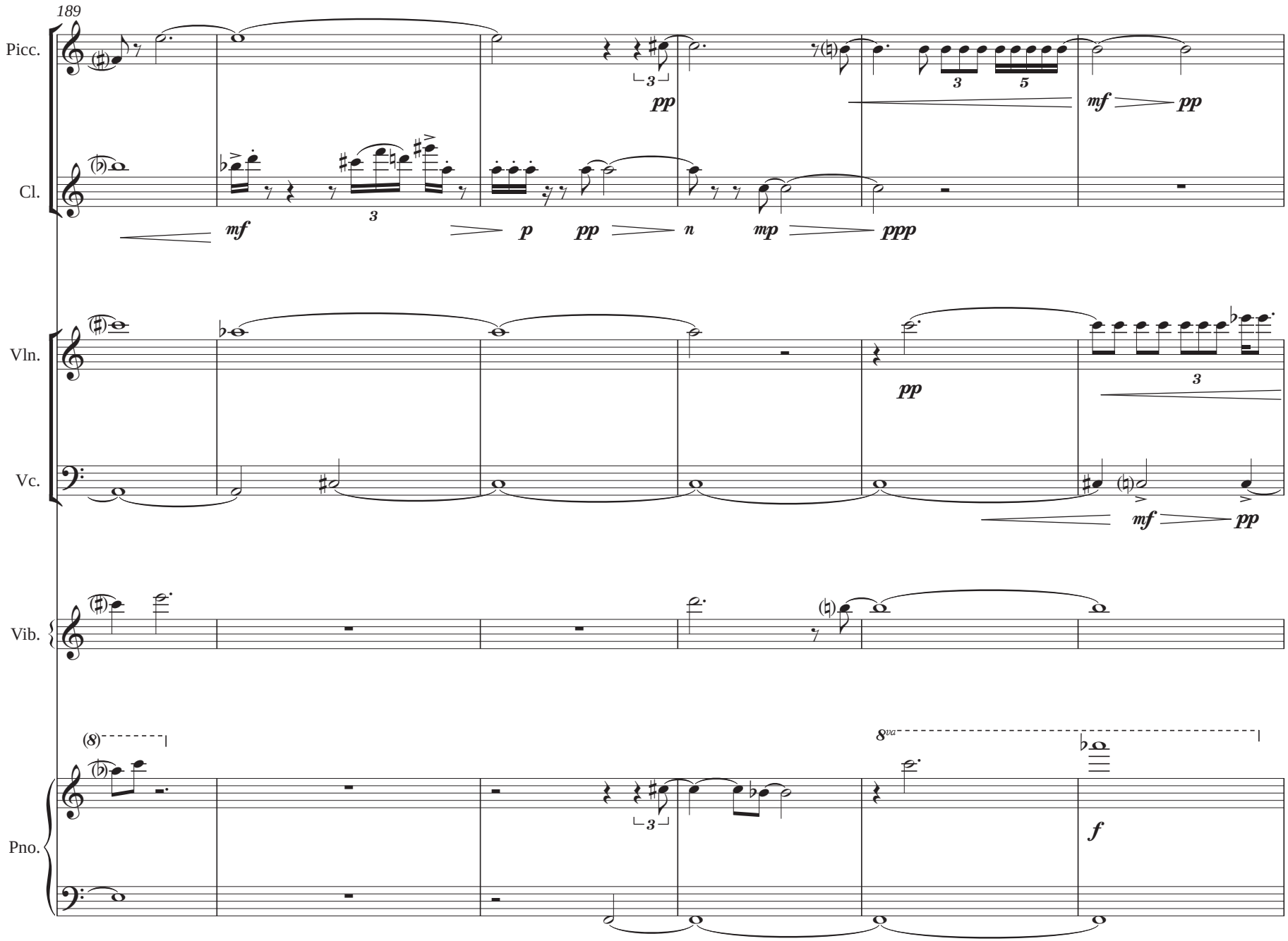

165
Picc.
Cl.
Vln.
Vc.
To W.B.
Vib.
Pno.

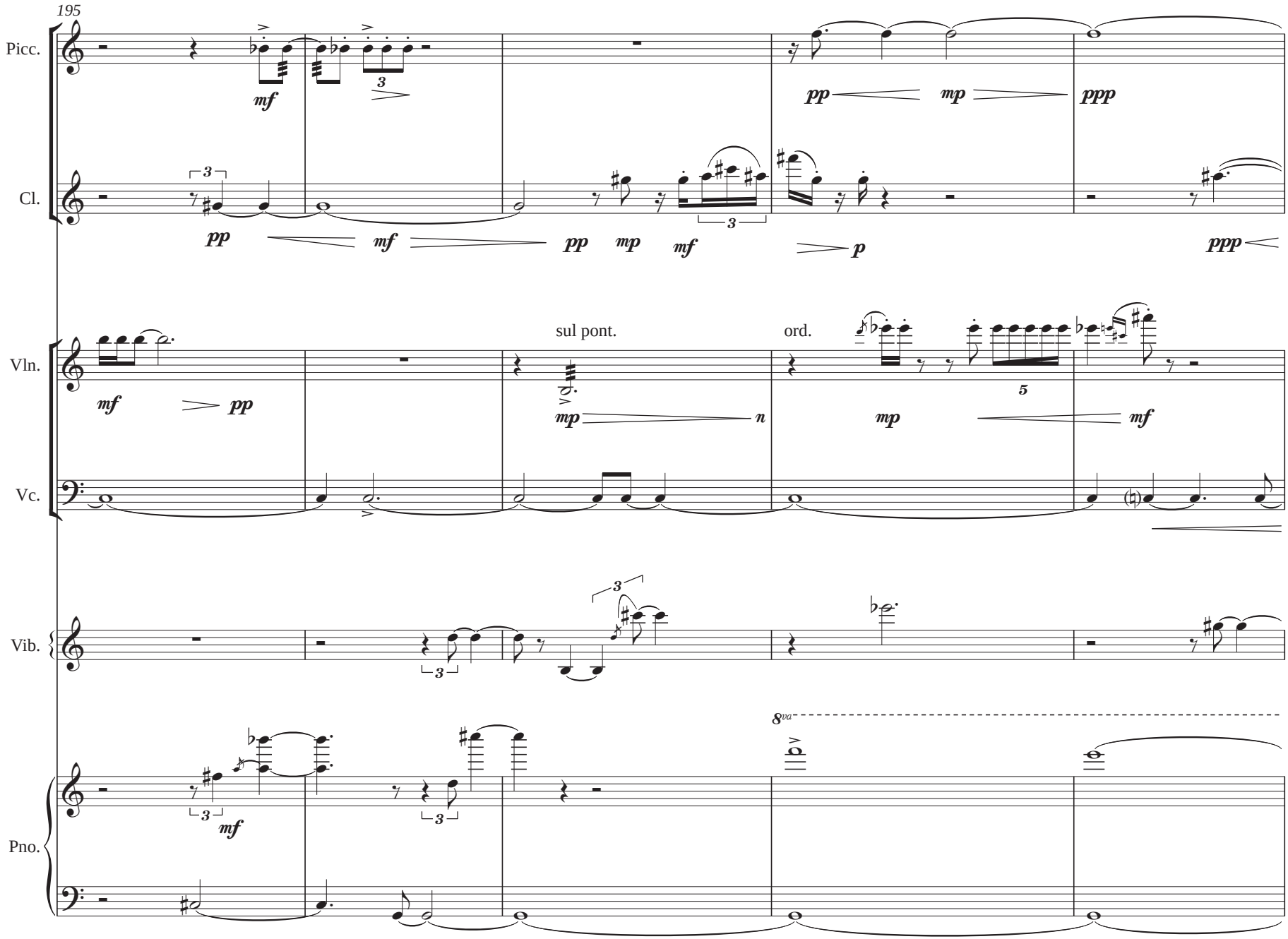

167
Picc.
Cl.
Vln.
mp
pizz.
Vc.
mf
W.B.
mp
8va
Pno.
mf
3
3
3
3
mp

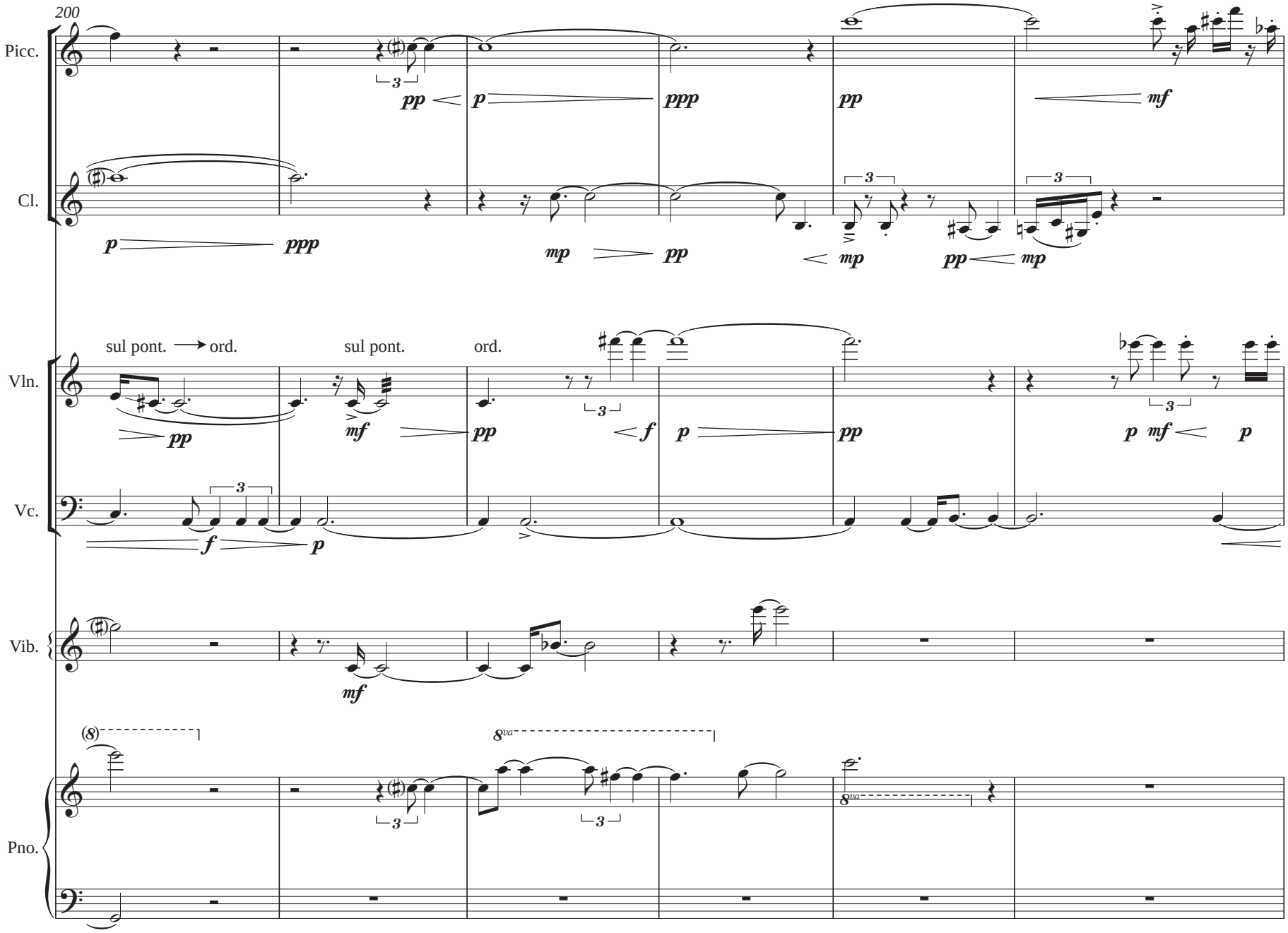

171
F
=56
Picc.
Cl.
Vln.
Vc.
W.B.
Pno.
mp
f
mf
con sord.
sul pont.
ppp
arco
pp
To Hi-hat
To Vibes
ff
8vb

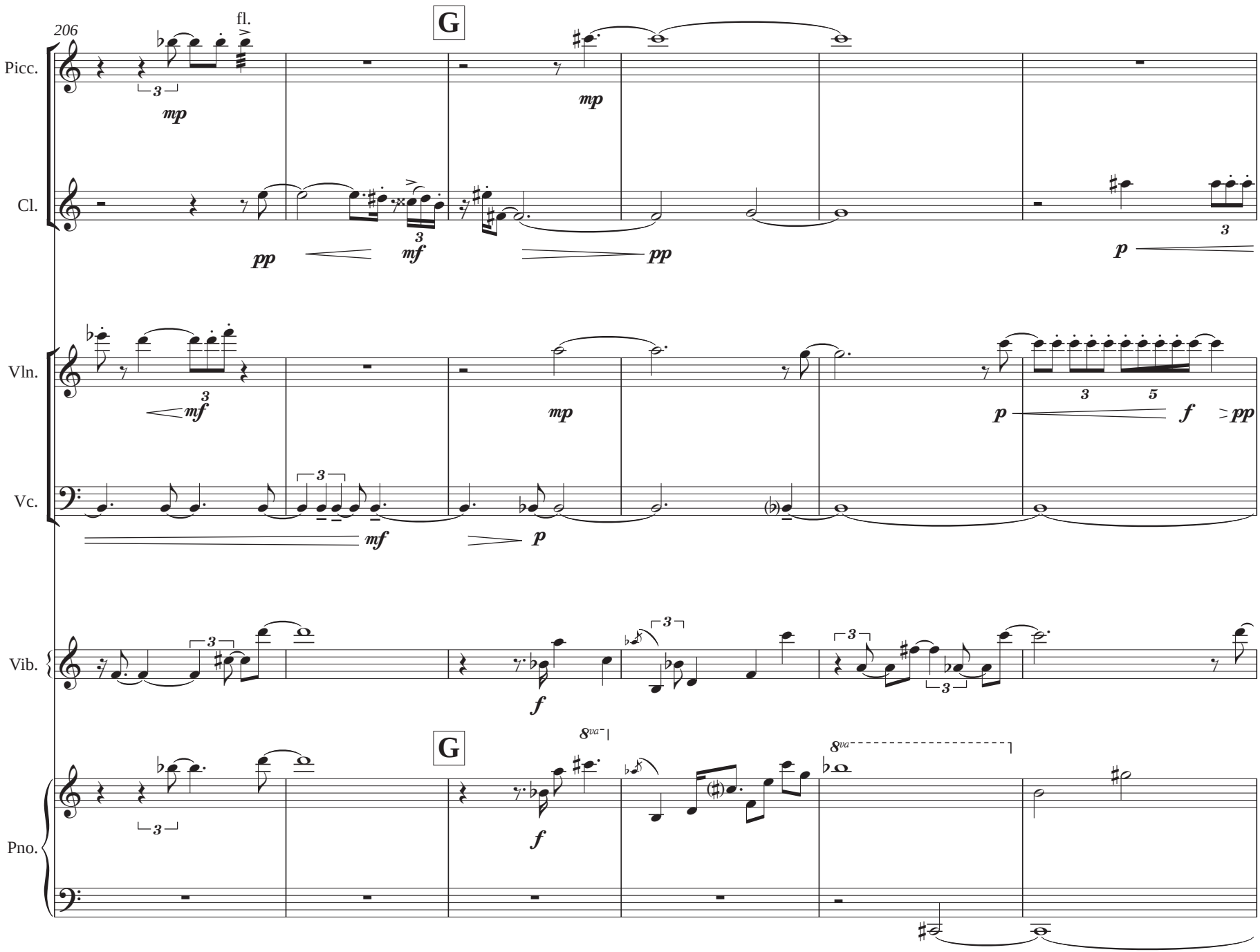

177
♩=66
Picc.
Cl.
Vln.
Vc.
Vib.
Pno.
pp
mp
mf
p
n
3
(8)

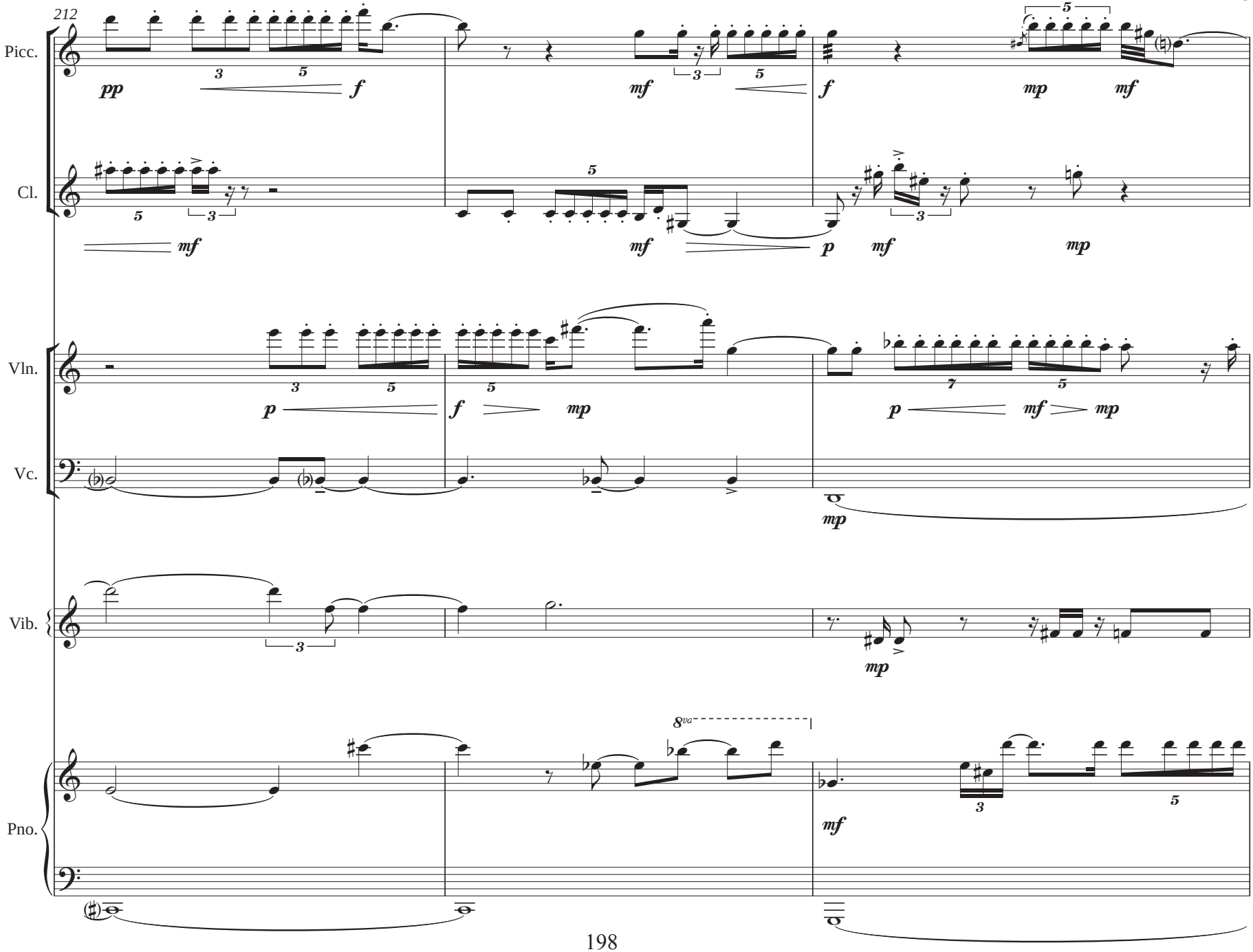

183
Picc.
Cl.
Vln.
Vc.
Vib.
Pno.
mf
p
pp
mp
f
8va

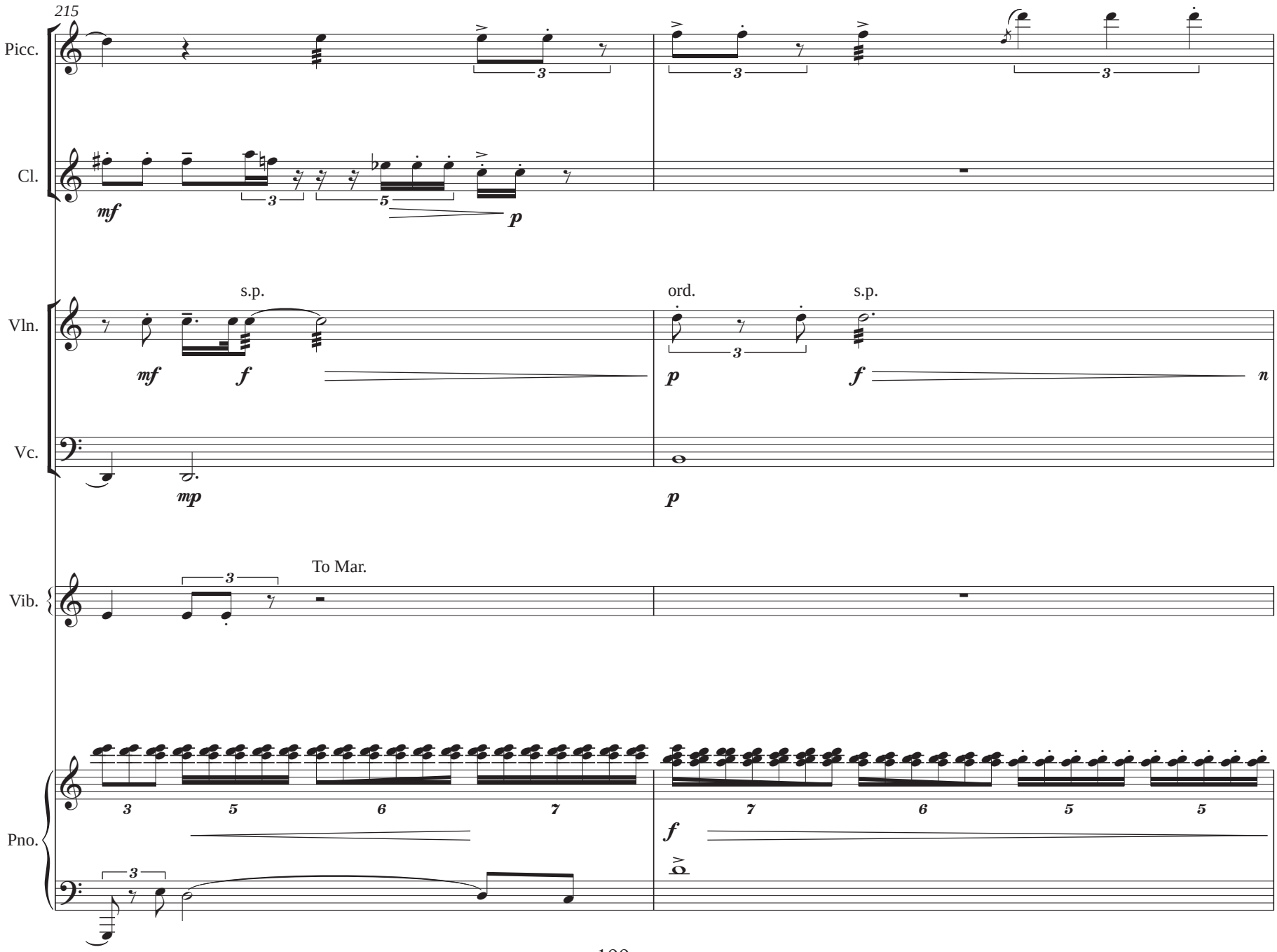

189
Picc.
Cl.
Vln.
Vc.
Vib.
Pno.
mf
p
pp
n
mp
ppp
mf
pp
3
5
(8)
8va
f

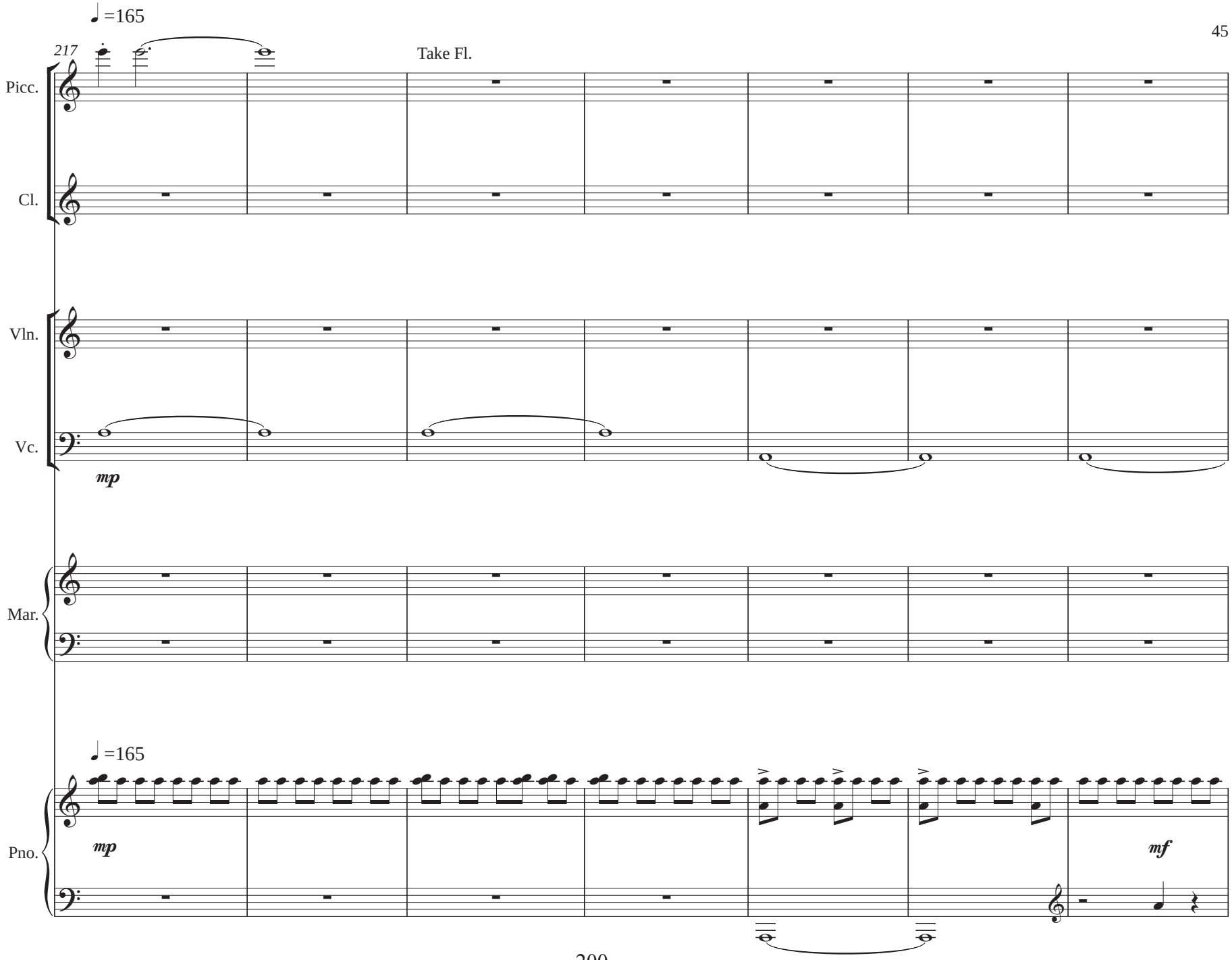

195
Picc.
Cl.
Vln.
Vc.
Vib.
Pno.
sul pont.
ord.
8va

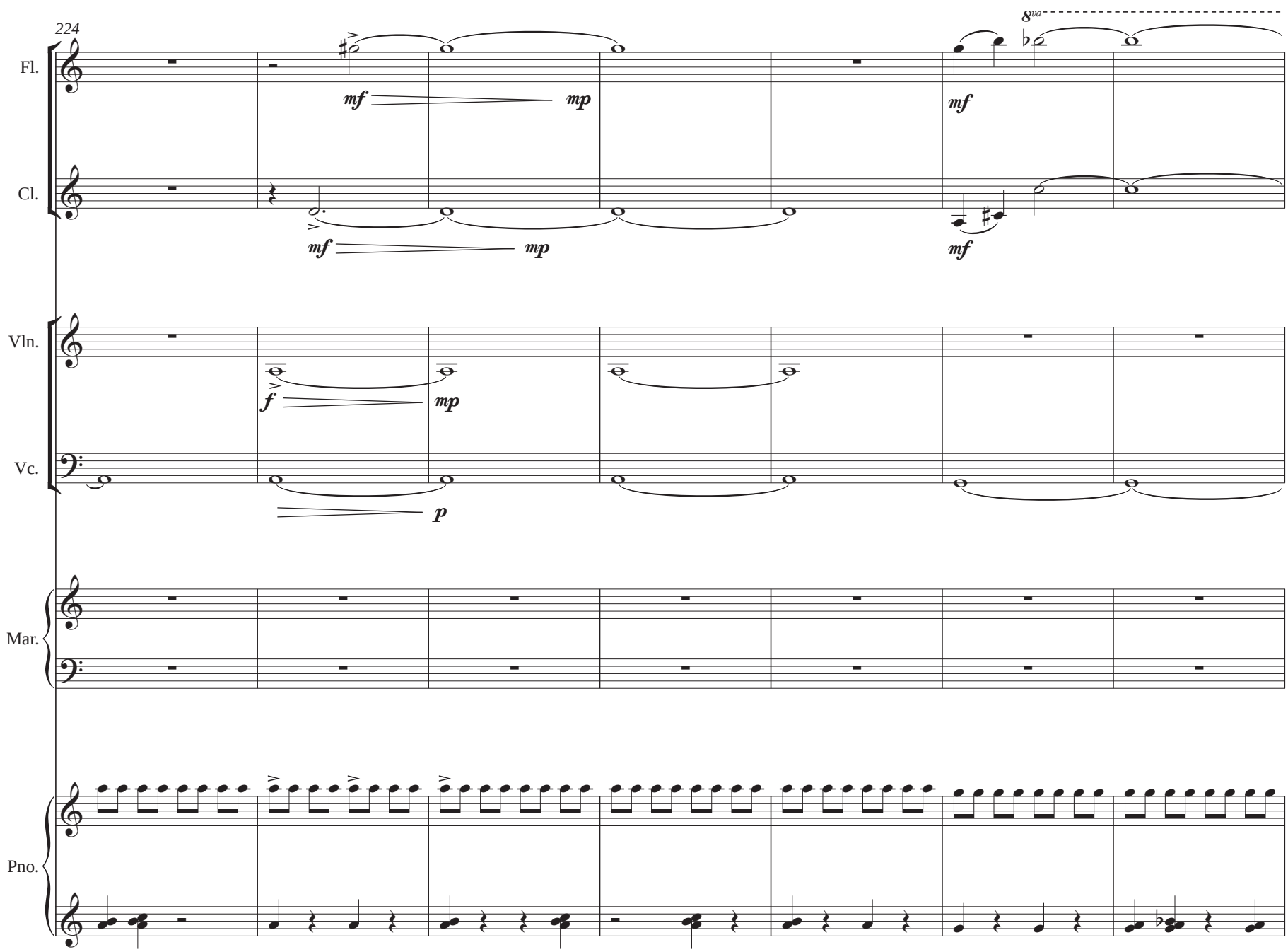

200
Picc.
Cl.
Vln.
Vc.
Vib.
Pno.
sul pont. → ord.
sul pont.
ord.
pp
p
ppp
mf
mp
f
(8)
8va

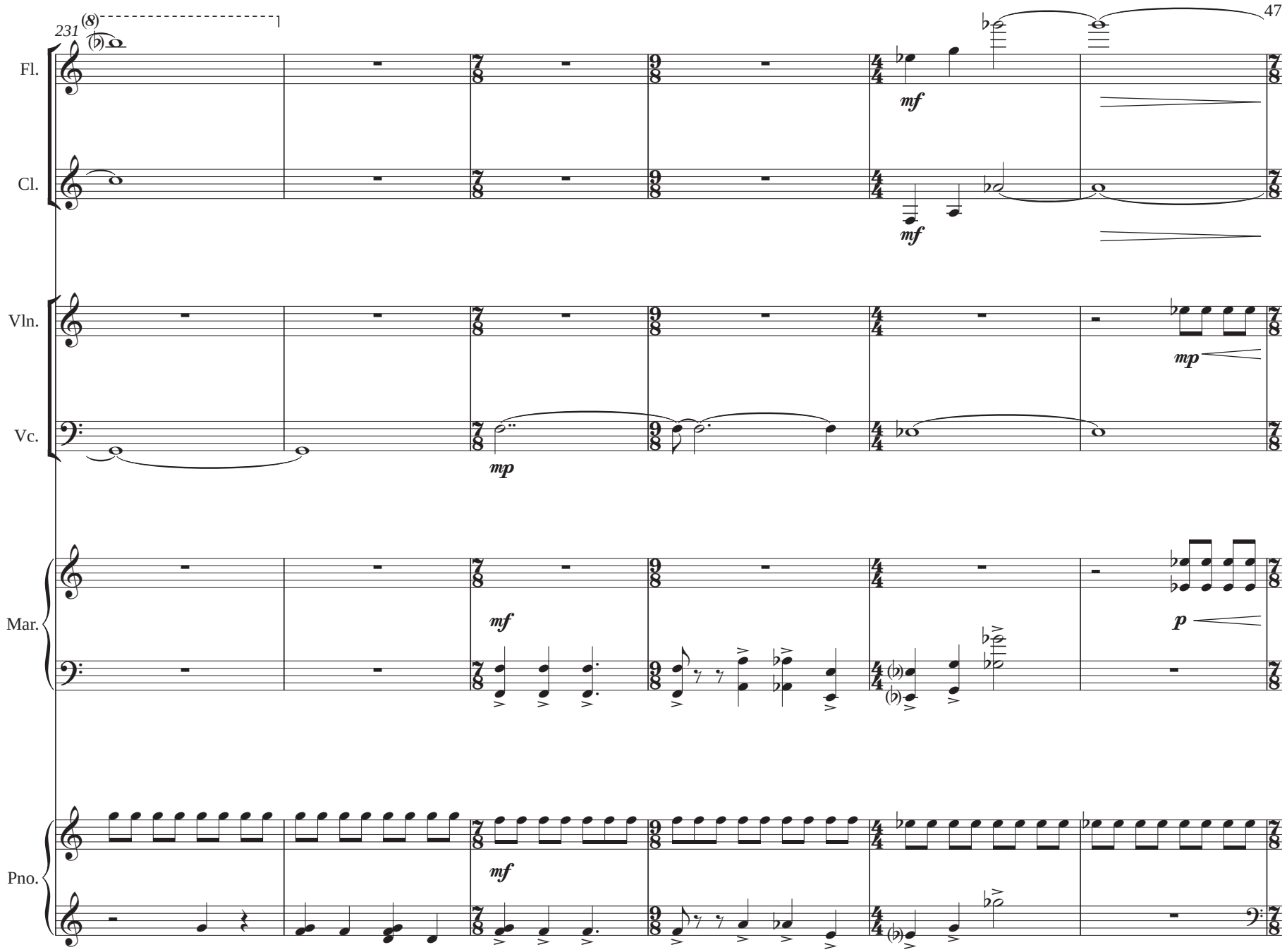

206
fl.
G
Picc.
Cl.
Vln.
Vc.
Vib.
Pno.
mp
pp
mf
p
f
8va

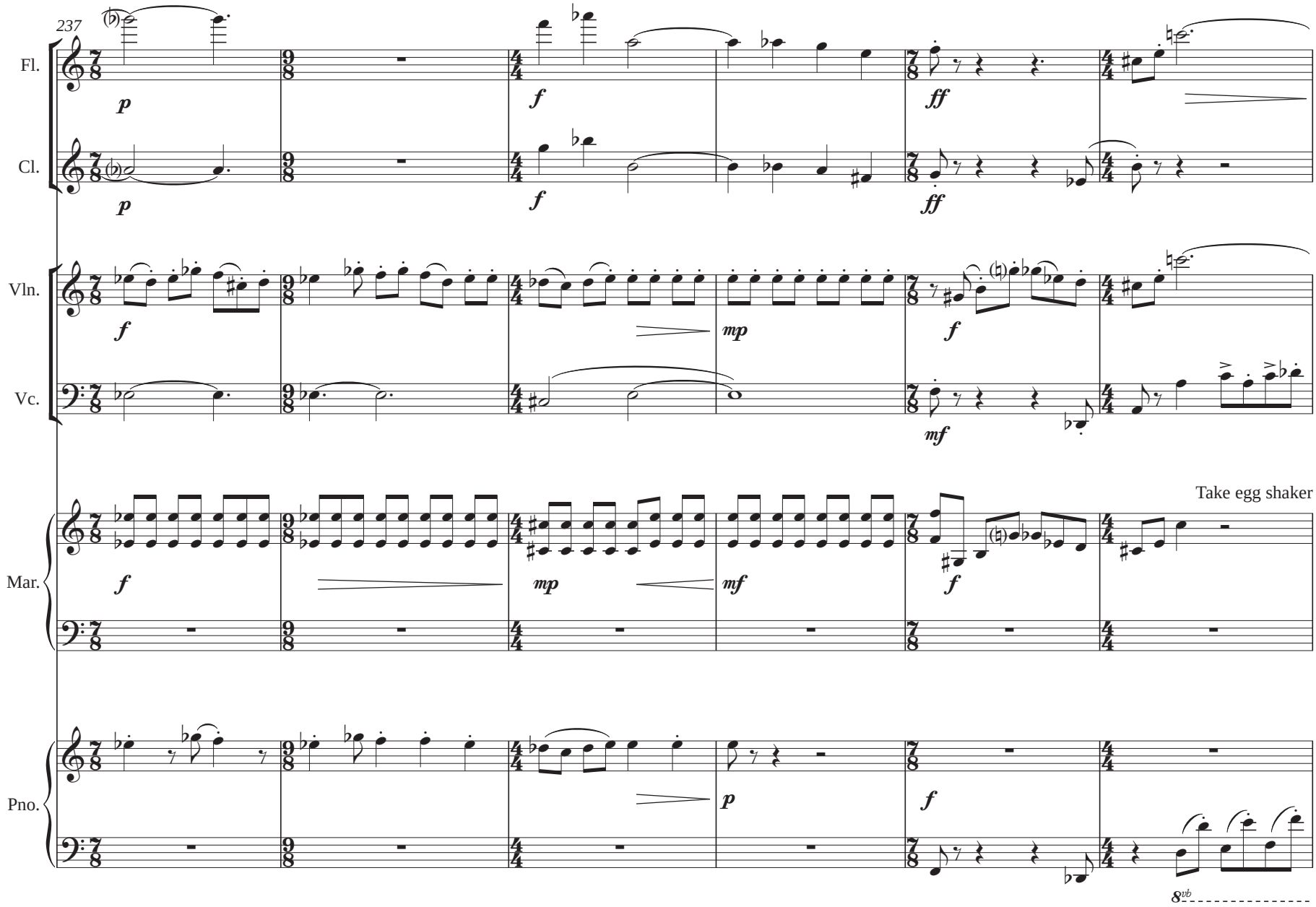

212
Picc.
Cl.
Vln.
Vc.
Vib.
Pno.
8va

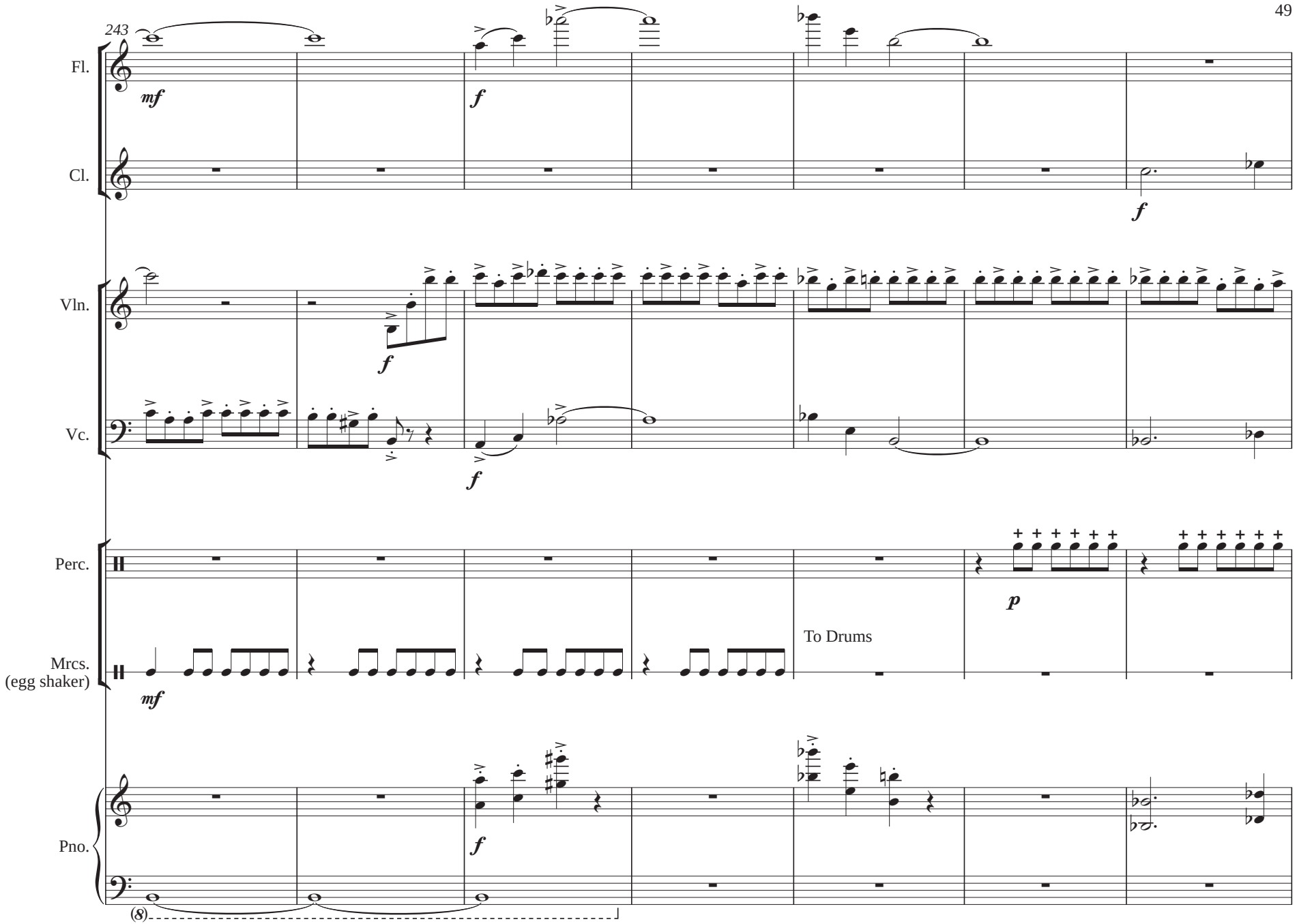

215
Picc.
Cl.
mf
p
Vln.
s.p.
mf
f
ord.
p
s.p.
f
n
Vc.
mp
p
Vib.
To Mar.
Pno.
f

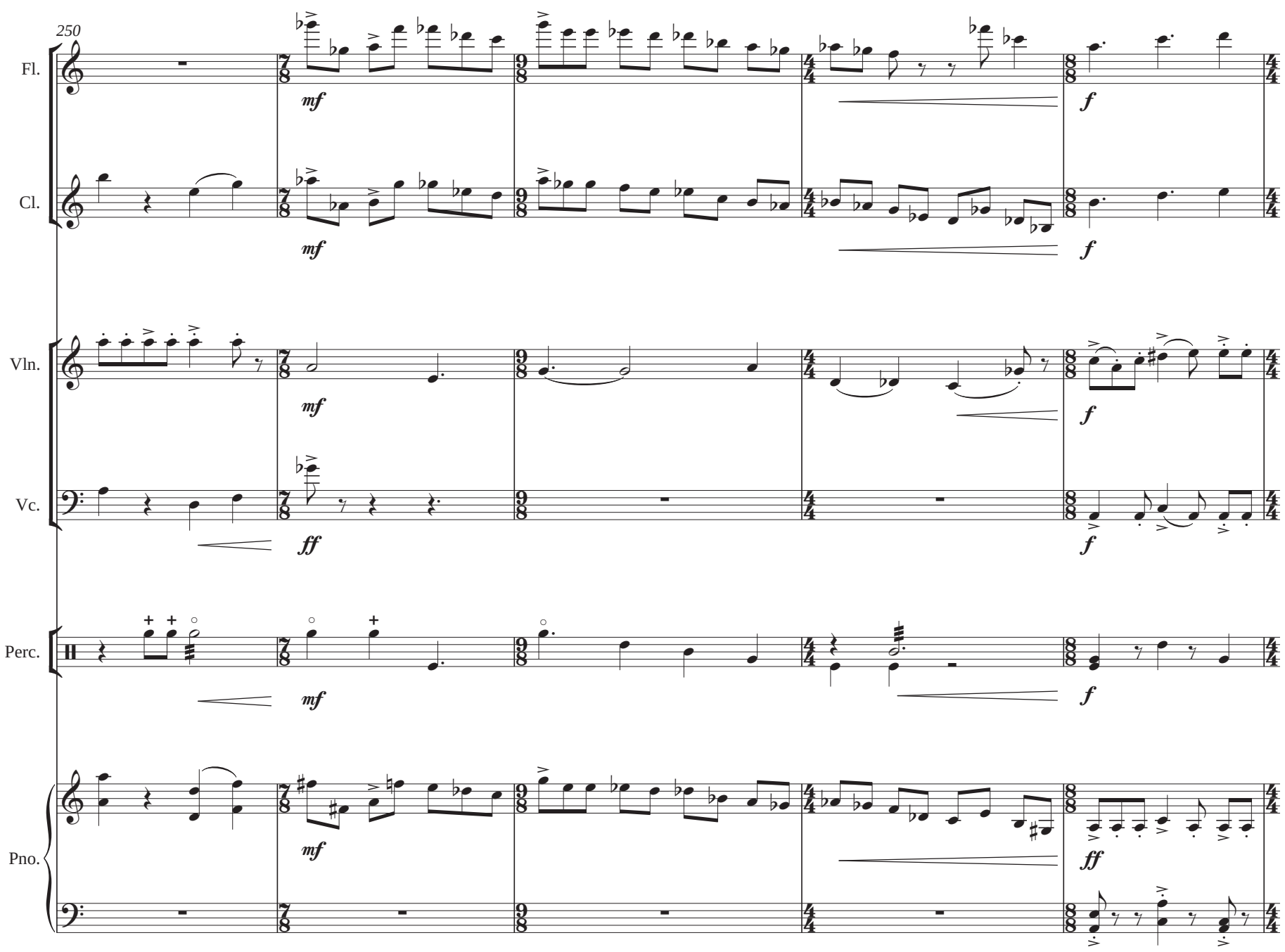

♩=165
217
Take Fl.
Picc.
Cl.
Vln.
Vc.
mp
Mar.
♩=165
Pno.
mp
mf

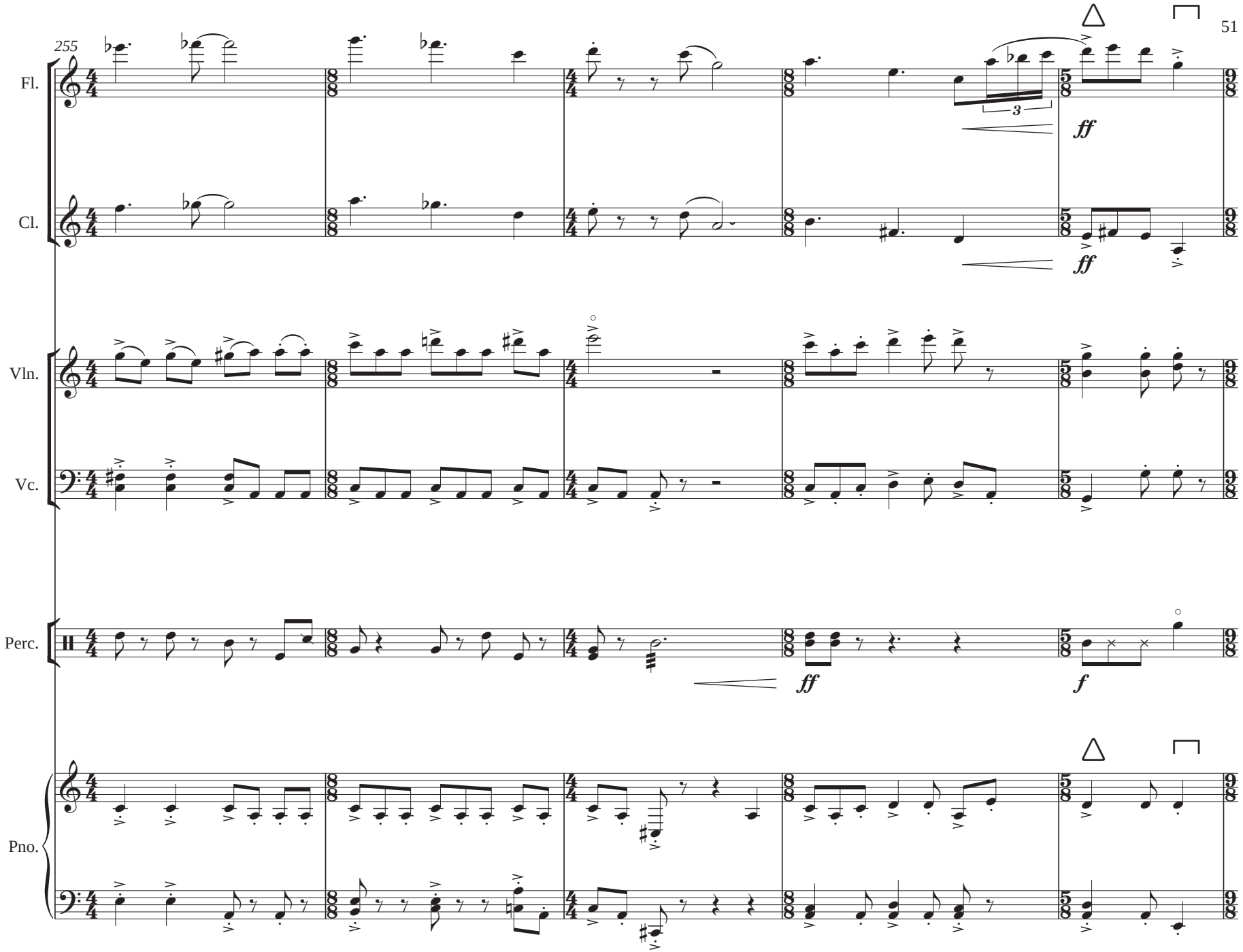

224
Fl.
Cl.
Vln.
Vc.
Mar.
Pno.
8va
mf
mp
mf
mp
mf
f
mp
p

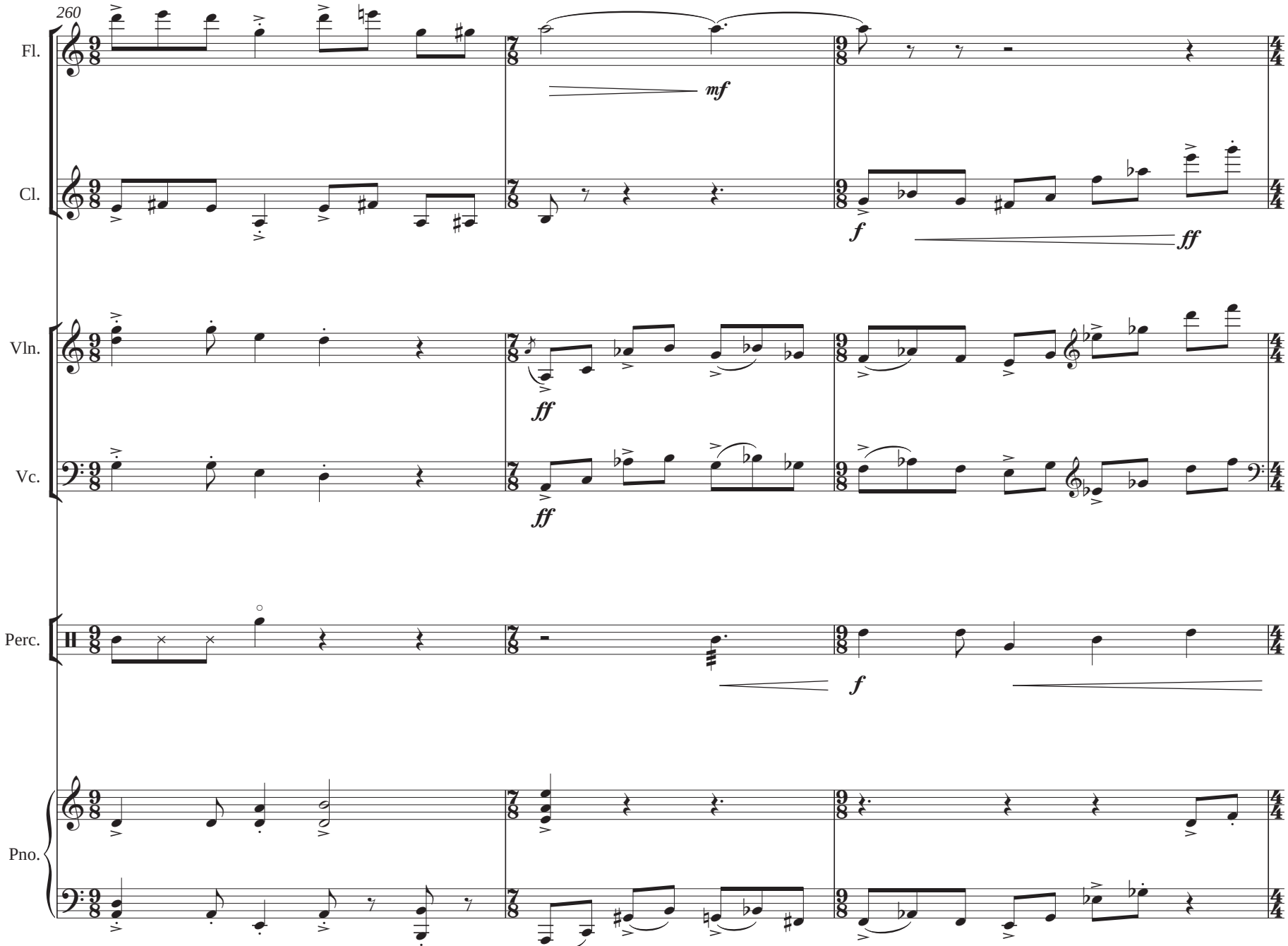

231
(8)
47
Fl.
Cl.
Vln.
Vc.
Mar.
Pno.
mf
mf
mp
mp
mf
p
mf

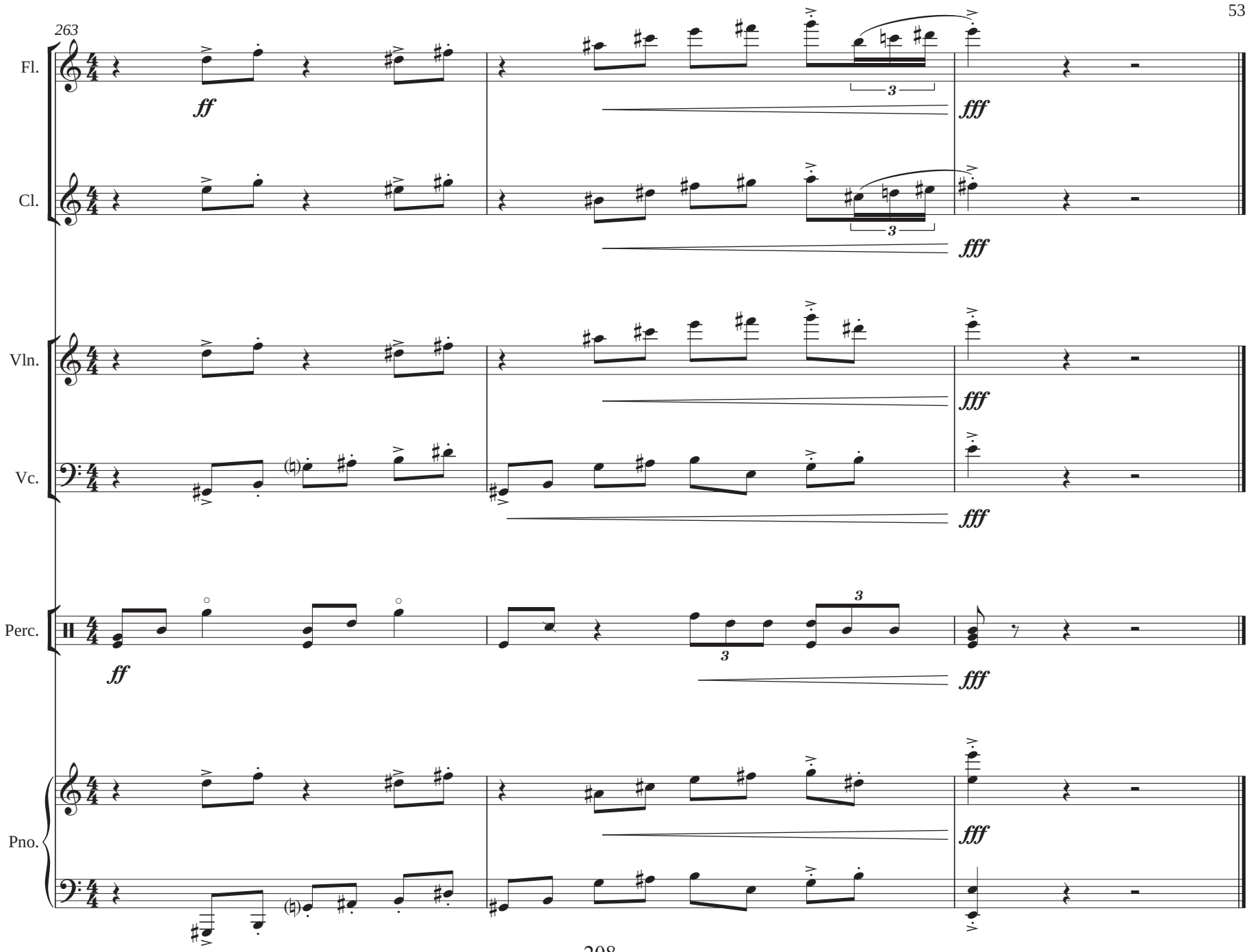

237
Fl.
Cl.
Vln.
Vc.
Mar.
Pno.
Take egg shaker
8vb


243
Fl.
mf
f
Cl.
f
Vln.
f
Vc.
f
Perc.
p
Mrcs.
(egg shaker)
mf
To Drums
Pno.
f
(8)


250
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
mf
f
ff


255
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
3
ff
ff
ff
f


260
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
mf
f
ff
ff
ff
f


263
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
ff
fff
3