A CONTINUUM OF TONAL COHERENCE: PITCH ORGANIZATION IN 'GENERAL WILLIAM BOOTH ENTERS INTO HEAVEN' BY CHARLES IVES AND 'CHIAROSCURO' FOR CHAMBER ENSEMBLE

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The first part of this dissertation examines the pitch language of Charles Ives' song *General William Booth Enters into Heaven*, a work in which tonal and atonal elements are frequently juxtaposed and combined. It is the author's view that the music is neither tonal nor atonal, but rather that it lies on a continuum of tonal coherence, in which the sense of functional tonality appears and recedes. This continuum constitutes the actual pitch language of the work, rather than any traditional processes of tonal or atonal organization.

Chapter Two describes this continuum in general terms, identifying five types of music based upon the degree to which tonal elements audible. Chapter Three examines how Ives manipulates tonal elements such as dominants, certain melodic figures, and modulations, to create a sense of functional tonality, even when the music itself is not tonal. Chapter Four discusses how the composer employs elements typically associated with atonal music (atonal pitch-class sets, quartal and secundal harmony, and whole-tone or chromatic sets); it is shown that these elements were chosen so that they can easily combine with tonal elements, so that the continuum between tonality and atonality becomes seamless. Chapter Five examines Ives' use

of voice-leading to create formal links between tonal and atonal sections, allowing the work to retain formal coherence despite its surface contrasts.

The second part of the dissertation is ‘Chiaroscuro’, a work for eleven musicians. The title refers to the contrast between light and shadow which is explored in the piece. In a similar manner to the Ives song discussed in the first part of the paper, light and shadow represent opposite ends of a continuum, which is manipulated primarily through changes in texture, timbre, and harmony.

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1.0 INTRODUCTION

In this paper, I will analyze pitch organization in Charles Ives' song for voice and piano, *General William Booth Enters into Heaven* (1914), from the standpoint that the song is neither 'tonal' nor 'atonal' in any meaningful sense, but rather that it consists of a continuum of tonal coherence, ranging from moments in which the music is functionally tonal, to moments in which all suggestion of tonality is absent, with an essentially seamless transition between the two. It is my view that the processes by which Ives creates and manipulates this continuum are central to the work, and that the musical language of the work – in spite of a chaotic surface – has a carefully-crafted internal logic and coherence.

I use the term 'tonal' to refer to what is often called 'common practice' or ‘functional’ tonality, not simply the presence of a central pitch; more specifically, one may think of the tonality embodied in many familiar church hymns as the purest expression of tonality in terms of this song (such hymns being the source from which Ives draws much material in the work.) In contrast, 'atonal' in this paper refers to music which is to a greater or lesser degree foreign to that type of tonality and its most recognizable processes: the hierarchical relationship of the tonic triad to the other triads, and the use of the dominant, both the fifth scale-degree and its associated triad or 7^{th} chord, which creates the tension requiring resolution to the key-defining tonic.

The song is a setting of Vachal Lindsay's poem of the same name, and depicts William Booth, a founder of the Salvation Army, marching his congregation of beggars, prostitutes, drug

addicts into heaven, where they are blessed and healed by Jesus Christ. The text is frequently interrupted by the question "Are you washed in the blood of the Lamb?;" this is taken from the hymn of the same name by Elisha A. Hoffman, and Ives associates this text with another hymn, Lowell Mason's arrangement of 'There is a Fountain.' In the context of Ives' raucous and often humorous setting of the text, the question seems irreverent, though by the end of the song it is clear that the marching sinners are indeed washed in the blood of the lamb, and, by implication, are as deserving of dignity as any other men.

I will deal with the text itself only incidentally, when specifically relevant to the music under discussion. I will not concern myself in this paper with the various sources of Ives' melodic material; whatever the source of the melodic material, Ives selected it, reworked, shaped, fragmented or combined it for his own uses, and I will therefore treat the material as Ives' own creation.

Existing analyses of this song (and Ives' other works) typically concentrate on either explicating its large-scale structure, or the importance (both musical and extramusical) of the borrowed hymn tunes and how they are utilized[1]. A detailed examination of the actual pitch language of the song, and how the diverse elements of that language are synthesized, is lacking. Furthermore, while the stylistic diversity of Ives' work has long been noted, the idea that the

[1] Gayle Magee describes *William Booth* as sonata form, with mm. 1-39 as the exposition, mm. 40-90 the development, and mm. 91-113 the recapitulation. Burkholder describes the song as an example of 'cumulative form', in which melodic fragments are gradually developed and assembled into a statement of the fundamental melody near the *end* of the song (mm. 97-105), so that in effect the 'exposition' is preceded by its 'development.' In my view, Magee's analysis obscures the issue by alluding to a tonal process which does not operate in the song; 'ternary form' might be more apt, though Burkholder's analysis seems much nearer to how Ives actually uses his melodic material to create a large-scale form. Neither author goes into detail in terms of how tonality and atonality are employed in this work. Magee (2008), pp. 106-113; Burkholder (1995), pp. 253-262.

composer himself created a language which can accommodate such diversity – rather than simply selecting points an existing continuum – has yet to be explored.[2]

This paper is not the first work to account for the juxtaposition of tonal and atonal elements in Ives' work. Larry Starr has written much about the 'stylistic heterogeneity' of Ives' music, which he states is a basic principle of his compositional process.[3] Starr doubts that any useful, unifying principles can encompass such music, but suggests instead that it is the lack of unification – and the disruption of musical comprehension which follows – which is central to Ives' compositional processes. In his discussion of the song *Ann Street* – which displays stylistic heterogeneity to a similar degree as *William Booth* – Starr demonstrates that by traditional modes of analysis (examining intervallic structure, demonstrating the presence of pitch centers, etc.) one can show that the song is, in his view, well-made.[4] He argues however, that in order to do so one must largely ignore the song's substance, preferring to emphasize that the sharp contrasts in musical styles are arranged to create a coherent overall form. Starr also cites *William Booth* as a good example of this, though he states that "a step-by-step analysis of this piece seems unnecessary, if not sacrilegious."[5]

Without contradicting the idea that the song's surface disunity is to some degree what it is 'about,' I hope to show that it is possible to view the pitch material of the work in its entirety, without denying the existence of this disunity. Furthermore, *William Booth* is particularly well-suited for such examination, because the full range of the continuum between tonality and

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[2] Phillip Lambert mentions Ives' use of this continuum in his comparison of Ives with Alban Berg, noting in passing that in his *Fourth Symphony*, Ives selects three points on this continuum as the basis for the three final movements: general avoidance of tonality in the second movement, functional tonality in the third, and non-functional tonal centricity in the fourth. He does not suggest that this continuum actually exists in the symphony as an overall musical language, much less that Ives consciously created or manipulated such a continuum. Lambert (1996), p. 111.

[3] Starr (1977, 1992).

[4] Starr (1992), pp. 24-25.

[5] Starr (1992), p. 93.

atonality is utilized – not only the extremes, but a wide range of points in between – and a new window may be opened into other works, which may use smaller portions of this continuum, or use it in different ways.

There is a sizable body of research which examines issues of tonal coherence in the music of other 20th-century composers, and it is important to distinguish what is meant by these scholars, and what I refer to in this paper.

An important such work is *Structural Hearing: Tonal Coherence in Music*, by Felix Salzer, which seeks to explicate the theoretical ideas of Heinrich Schenker, and to apply them to music of Stravinsky, Bartók, and other composers from the first half of the 20th century (as well as music from well before the 18th century). He attempts to demonstrate that these works have a surface structure which is a prolongation of a single fundamental pitch or harmony, analagous to viewing a Beethoven symphony as a prolongation of its tonic triad, and that this music is therefore tonal in a deep and meaningful sense.

In a similar vein, Roy Travis examines music of Stravinsky and Bartók and concludes that the surface structure of the music, however much divorced from the functional tonality of the preceding centuries, represents a prolongation of "tonic sonorities" which form the basis of the works. He does not suggest, however, that these composers initially sought out such sonorities, and only then set about elaborating them; rather, he suggests that both the background and foreground structures probably were created simultaneously, influencing and reinforcing each other during the process of composition, thereby creating an impressive tonal unity.[6]

These studies essentially seek to extend the definition of "tonality" to encompass music which forgoes to some degree the processes of functional tonality found in music of the 18th and

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[6] Travis (1959), 284.

19th centuries. In the views of these scholars, such music of the 20th century remains tonal in a fundamental sense, even if the manifestation of tonality is quite different on the surface; and (in the view of Salzer at least) that tonality remains the defining characteristic of Western art music.[7]

While I do not deny that such an approach might yield valuable insights into *General William Booth*, or Ives' music in general, this is not the aim of this paper. By "tonal coherence," I do not refer to a fundamental structure in which some element of the work's pitch language serves as the basis for the various structural layers closer to the surface. I mean simply the degree to which the music is, or is not, comprehensible in terms of functional tonality as found in the hymns from which Ives drew so much of his material. It is the manifestation on the surface of this narrow definition of tonality – rather than a broadened definition of tonality on the deepest level – with which I am concerned here.

It is not my ambition to explain the presence and origin of every note in the song; rather, it is the rules to which Ives evidently submitted himself that concern me, the principal rule being that the continuum between tonality and atonality must be, and appear, as seamless as possible. The means and processes by which Ives achieves this, as well how he maintains cohesion between different points in the continuum, is the purpose of the paper.

In Chapter Two, I will describe the continuum in general terms, identifying five basic categories of music in the song, based upon how coherent those categories are in relation to functional tonality or atonality, including the characteristics of each category and variations in either direction. In Chapters Three and Four, I will examine the typically tonal and atonal

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[7] See also Rifkin (2000), who attempts to account for the 'wrong notes' in music of Prokofiev, concluding that these notes are in fact an integral part of an expanded functional tonality; and Hale (2002), which shows that despite the presence of tertian harmonies in Wladimir Wogel's *Cello Concerto* (suggesting at times common practice tonality), the structure of the work is entirely dodecaphonic. In both cases, as well as in the writing of Salzer and Travis, the music is analyzed as having an more or less homogeneous pitch language, whereas I argue that the opposition of essentially different types of music itself forms the basic language of *General William Booth*.

elements, which are employed by Ives to create this continuum, and show how these elements are used both within and outside their usual contexts. Finally, in Chapter Five, I will examine the role of voice-leading in maintaining organic links and coherence between strongly contrasting sections. This is essentially a matter of musical syntax, and I will discuss further what this suggests about how Ives views the dramatic and rhetorical roles of the tonal and atonal ends of the spectrum.

2.0 DESCRIPTION OF THE CONTINUUM

In this chapter, the principal types of music in *General William Booth Enters Into Heaven* are categorized, based on the degree to which tonality is present, and the means by which the coherence of that tonality is created, maintained, or minimized. By 'coherence,' I mean the degree to which recognizable elements of tonality are present, and likely to be audible.

On this basis, I have identified five broad categories of music which are found in the song, from the most tonally coherent to the least:

1: Passages which employ clear functional tonal processes, in all parts of the texture.

2: Passages in which the principal melody is tonal, and which will be heard as such, but which is contradicted by other elements in the texture.

3: Passages in which the principal melody is mostly triadic, though not having clear tonal implications, while the rest of the texture works against tonality.

4: Passages in which melodic material is primarily composed of stepwise motion – either parts of major or minor scales, or whole-tone or chromatic pitch collections – suggestive of tonal melodies or having weakly defined pitch centers, but which defy analysis in terms of functional tonality.

5: Atonal passages (passages which are inexplicable in terms of functional tonality).

The table below organizes the song in terms of these five broad categories. It is not intended as an analysis of the song's structure, but simply shows the sequence of types of music with respect to the degree to which tonality is present, and may be useful as an overview. The

apparent key of each section, if any, is given in parentheses, along with any important qualifying details.

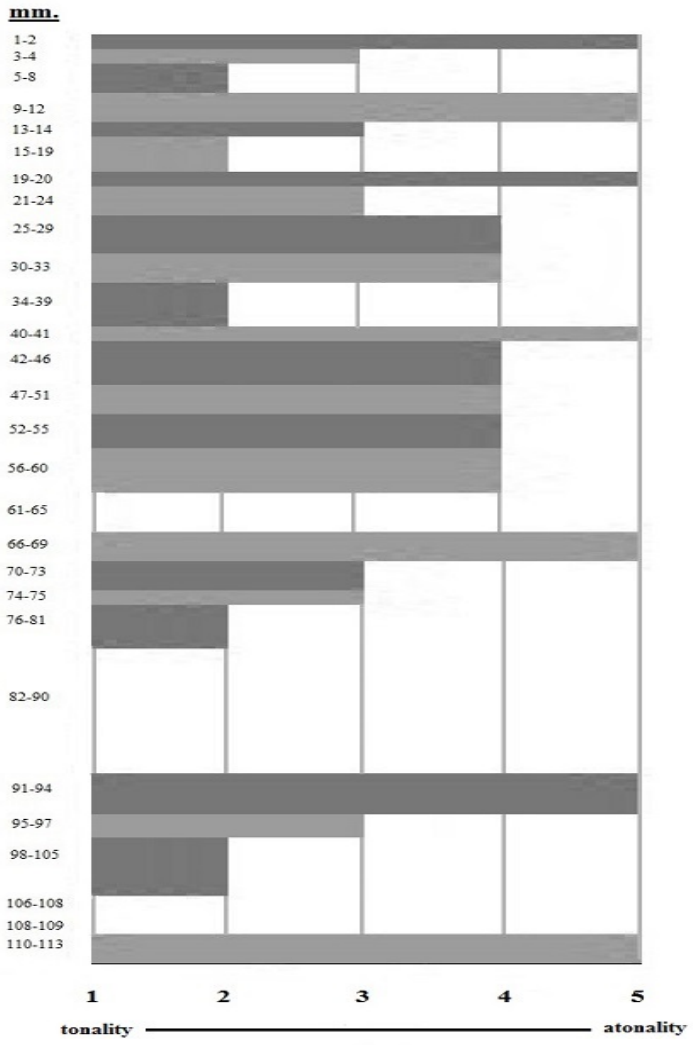
Table 1. Types of music in *General William Booth Enters Into Heaven*

Measure	Type	
1-2	5	Atonal (percussive piano chords built from 2nds)
3-4	3	Triadic melody (tonality ambiguous, suggesting B minor or D major)
5-8	2	Tonal melody (C major, partially confirmed by harmony)
9-12	5	Atonal (percussive piano chords built from 2nds)
13-14	3	Triadic melody (tonality ambiguous, suggesting B minor or D major)
15-19	2	Tonal melody (E major, harmonized by G major)
19-20	5	Atonal piano interlude (emphasizing [016] and [056])
21-24	3	Triadic melody (B minor/D major, with atonal accompaniment)
25-29	4	Scalar melody (diatonic character, key undetermined)
30-33	4	Scalar melody (with pitch center C)
34-39	2	Tonal melody (E major, with non-functional bitonal harmonies)
40-41	5	Atonal accompanimental figuration (F major and D major triads)
42-46	4	Scalar melody (with pitch center D)
47-51	4	Scalar melody (built from whole-tone scale, as is accompaniment)
52-55	4	Scalar melodies (suggesting both B minor and D major)
56-60	4	Scalar melody (with atonal accompaniment)
61-65	1	Tonal (G major, tonic harmony)
66-69	5	Atonal
70-73	3	Triadic melody (B flat major, with atonal accompaniment)
74-75	3	Triadic melody, triadic accompaniment
76-81	2	Tonal melody (Eb major, tonic & dominant harmonies superimposed)
82-90	1	Tonal (Ab major, with distinct harmonic rhythm in each layer)
91-94	5	Atonal (percussive chords built from 2nds)
95-97	3	Triadic melody (F# major, with atonal accompaniment)
98-105	2	Tonal melody (C major, partially confirmed by harmony
106-108	1	Tonal (E major, functional harmonies mixed with foreign pitches)
108-109	1	Tonal (E major)
110-113	5	Atonal

Although this paper is primarily about the song's pitch language rather than formal structure, the above chart shows that the form is intimately related to the continuum of tonal coherence. There is a general progression from atonality to tonality, with the most tonally intelligible passages occurring in the second half of the piece. It is also clear that the middle of the song is dominated

by scalar melodies, often with only weak suggestions of tonality, while both the beginning and end of the song tend to have melodies which are explicitly tonal, or at least triadic. Furthermore, in the beginning of the song (mm. 1-39), there is a repeated pattern of atonality - triadic melody - tonal melody (types 5-3-2); in the last part of the song (mm. 66-113), this pattern returns, but is followed by functionally tonal passages (type 1). The movement from atonality to tonality is suggested at the beginning, then made more explicit near the end. Table 2 illustrates this graphically, showing the prominence given to tonality in the latter half of the song:

Table 2. Types of music in *General William Booth Enters Into Heaven*



2.1 TONAL PASSAGES

There are relatively few moments in *William Booth* in which tonal processes are operating fully: that is, where tonal implications (especially dominants) are exploited, and where traditional procedures of control of dissonance and harmonic rhythm are employed, without significant atonal elements added. In these passages, the immediate effect is that of tonal music of some variety, although the actual importance of this tonal intelligibility will depend upon its context within the piece.

The most obvious such moment occurs with the last line of text near the end of the piece, at the final repetitions of 'Are you washed in the blood of the Lamb?':

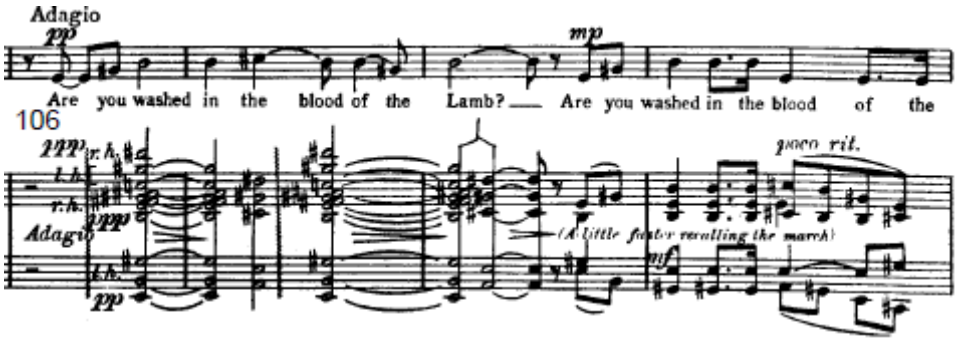


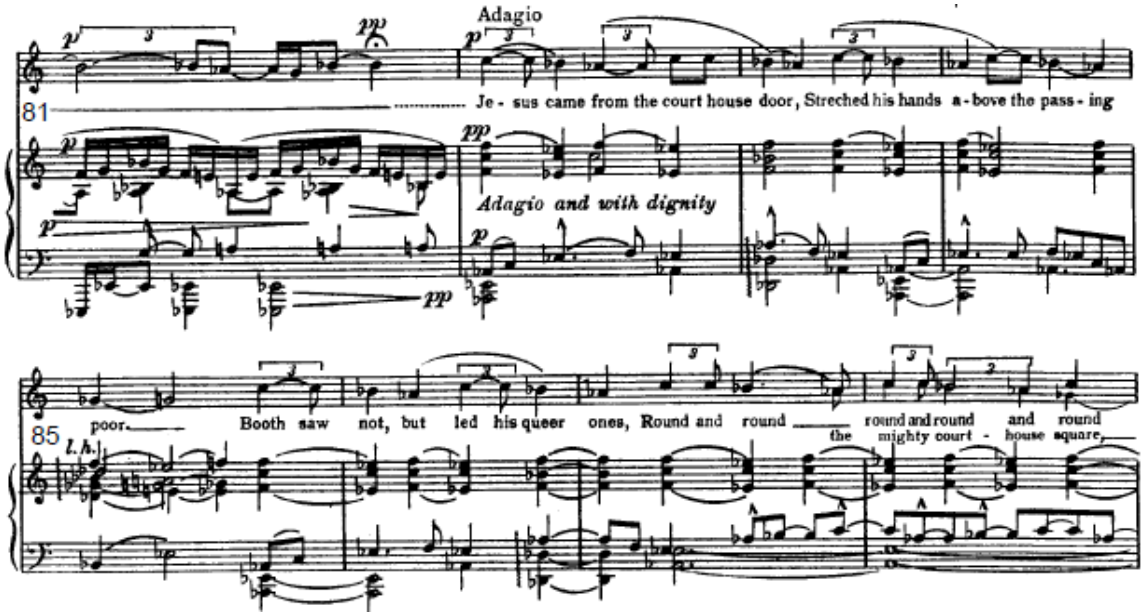
Figure 1. Tonality**,** Mm. 106-109

The vocal line outlines an E major triad, which is clearly understood as the tonic, even without a dominant to prepare it, as versions of this tune have already been heard in which the tonic is clearly alluded to. The piano accompanies the first phrase of this passage with alternating tonic and sub-dominant chords; the foreign pitches in the upper voices of the piano texture (A# and C over E major, D# and G# over A major) cloud the harmony only slightly, as the fundamental harmonies are strongly emphasized in the bass. In the answering phrase at mm.

108-9, the piano presents a hymn-like texture, again outlining tonic and sub-dominant harmonies, now with no pitches foreign to the prevailing key.

The voice-leading is simple and direct, as one would expect in a hymn – contrary motion between the outer voices to open the phrase followed by parallel thirds, with the inner voices remaining essentially static. The texture itself serves to emphasize this brief moment of 'pure' tonality in the most direct manner. Ives has chosen the clearest possible tonal utterance, both harmonically and texturally, to set the final phrase of text, suggesting an affirmative answer to the question posed throughout the song. Tonality, or the outward symptoms of tonality, is a symbol of certainty, comfort, assuredness. It is as one extreme of a continuum that the passage is effective, not as an actual demonstration of the process of tonal organization; to say that the song ends in E major misses the point.

A more problematic passage is found at mm. 81-90:



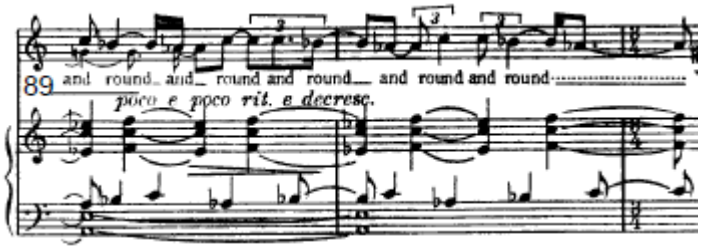


Figure 2. *Adagio* passage, mm. 81-90

This is the climactic moment of the song, both musically and textually. The Lord emerges to survey and bless Booth and his congregation; the frenetic and raucous march gives way to a serene *adagio*. This passage is also, at the slower tempo, the longest section of a sustained texture in the song, giving it even more weight.

That the passage is in Ab major hardly need be demonstrated; most importantly, the dominant E-flat functions clearly, both in the measure preceding the section, and at the half cadence in m. 85.[8] Melodically, the tonality is clear; the voice outlines C-Ab throughout and the tenor voice of the piano presents a hymn tune as a counter-melody which outlines the tonic triad; the upper voices repeat F-Eb throughout, which are clearly scale-degrees $\hat{5}$ and $\hat{6}$.

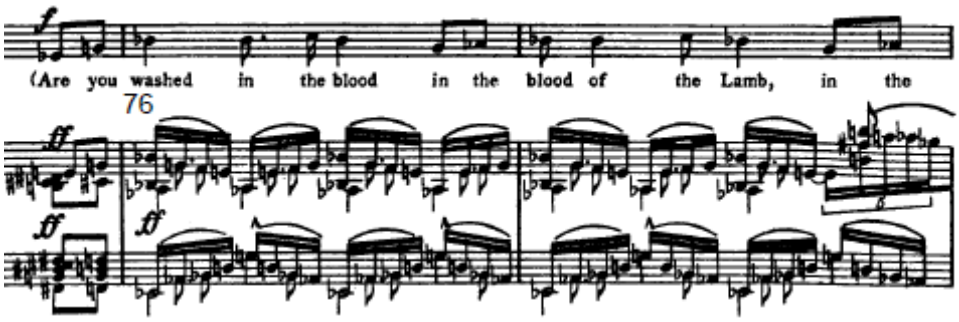
However, the effect of the passage is quite different than mm. 108-9, not only because of the slower tempo and greater weight, but because the harmonic rhythm is subtly unsettling throughout. The four separate layers of music (vocal melody, piano right hand, the counter-melody in the piano tenor voice, and the bass voice of the piano) move in contrasting meters, with phrases endings and beginnings slightly offset in relation to one another. Harmonies implied

[8] The chromaticism at this half cadence, though not entirely explicable in Ab major (in particular, the function of the A natural on beat two is not clear), nevertheless does not impede one's understanding in terms of tonality. The movement from Bb to Eb in the piano's bass line and the emphasis on the leading-tone G in the vocal line, leave no doubt about the dominant function of the harmony.

in one layer are contradicted in another, providing in reality four distinct, simultaneous presentations of the same key. (This passage will be dealt with in more detail in Chapter Three.)

2.2 TONAL MELODY

This category includes sections in which the principal melody (in each case, the vocal line) is a coherent tonal statement, even if the remainder of the texture works against tonality in some way[9]. In mm. 76-80, an extended presentation of the main hymn tune is found in the voice, in Eb major, accompanied by simultaneous arpeggiations of both I and V^7 in the piano throughout:



[9] In his discussion of *William Booth*, Starr notes the importance of triadic melodies, stating that they function as "an instantly recognizable stylistic reference point for the listener", which remain comprehensible despite their tonal implications being distorted or undermined. This seems to counter somewhat his assertion that a general view of the song's pitch language is neither necessary nor illuminating, for it is unlikely that these melodies would remain comprehensible by accident. It is because Ives took care to create a seamless continuum, with common elements uniting each end, that these melodies can retain their tonal character to a greater or lesser degree. Starr (1992), p. 96

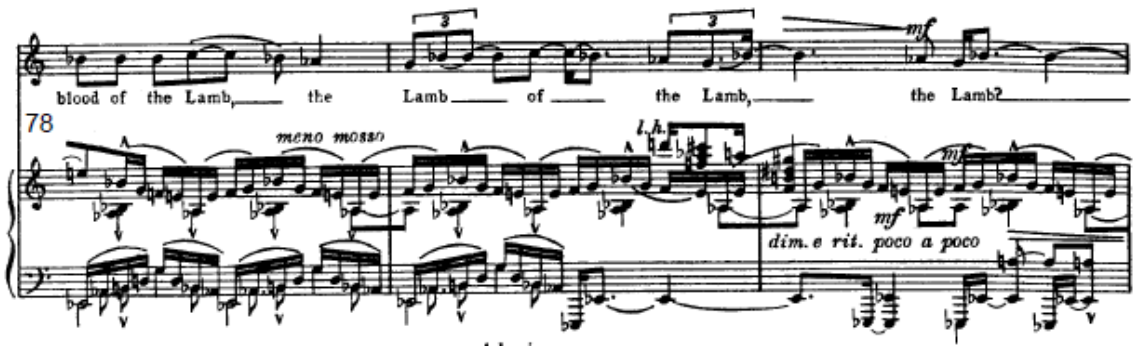


Figure 3. Tonal melody, mm. 76-80

This passage cannot be said to be entirely 'in' Eb major, however, as the essentially static harmony of the piano (combining both tonic and dominant harmonies throughout the passage) serves only to confirm the *key* of the melody, while the functional significance of the harmonies is minimal.

A more overt instance of tonal melody being subverted by the accompaniment is found in mm. 5-8:

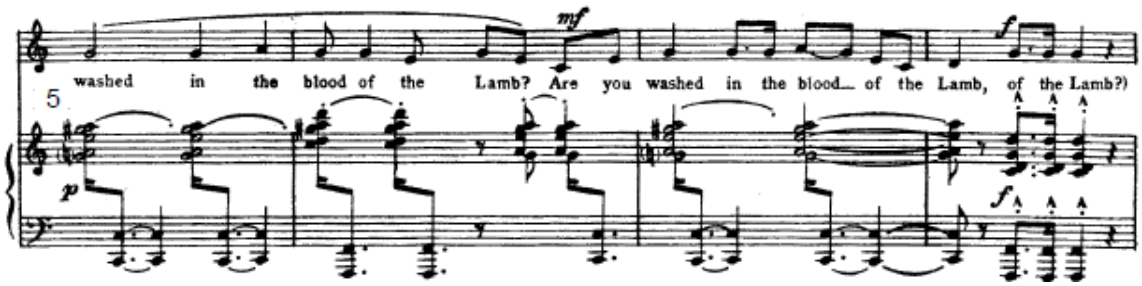


Figure 4. Tonal implications of melody subverted by accompaniment, mm. 5-8

The same hymn tune is here utilized, now with even clearer harmonic implications; the melody alone in mm. 5-7 suggests a tonic chord, while m. 8 would most likely imply an emphatic half-cadence and dominant chord, as it was in Lowell Mason's arrangement of the hymn (see Appendix "A"). This harmonic scheme is partially confirmed by the piano

accompaniment. Measure 5 confirms the tonic C major chord suggested by the melody, while m. 6 is harmonized awkwardly by the subdominant F. Measure 7 again confirms the tonic, while the half cadence at m. 8 is harmonized by a chord suggestive of both dominant and sub-dominant but, due to the F in the bass, and the absence of the leading tone B, it is much more strongly suggestive of the latter. Unlike mm. 75-80, in which the piano passively undermines the tonal implications of the melody, the accompaniment is here actively subverting them, particularly the need for a dominant chord at m. 8. The tonal melody itself acquires a dissonant relationship with its accompaniment, putting the passage's overall intelligibility as a tonal statement in some doubt.

2.3 TRIADIC MELODY

This category includes passages in which the vocal melody is composed largely of triadic material, suggestive of tonal implications, but without being understood in any particular key. Tonality is hinted at, but its reality is blurred by a variety of means.

Beginning on beat two of m. 34, the voice has the hymn-tune, now distorted so that what were scale-degrees $\hat{5}$ and $\hat{6}$ are now $\hat{6}$ and $\hat{7}$ in E major:

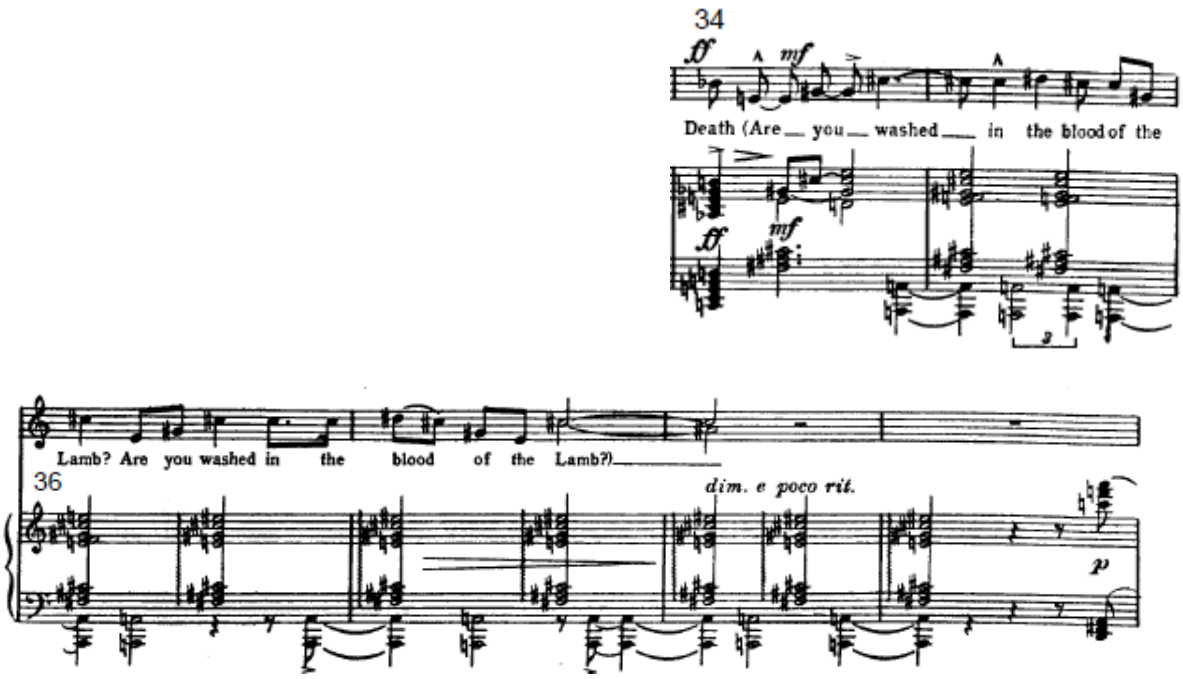


Figure 5. Triadic melody, mm. 34-39

Having heard the tune twice already (mm. 5-8, and mm. 15-19), with its underlying harmonies suggested if not actually played, similar harmonies are implied here, even though the actual pitches make those harmonies unlikely in this instance, particularly at the end of the phrase, where the C# after the leap up of a sixth does not suggest a half cadence as in the earlier statements of the tune.

The piano chords which accompany the melody here do not clarify E major as the key; the As in the bass emphasize the subdominant, while the pitches in the upper voices – F#, A#, C#, E, and G# in particular – form a dominant ninth chord in B major. There is no means by which common-practice tonality can reconcile these two opposing sonorities. Only the triadic character of the melody, and the memory of its earlier tonal implications, provide any sense of tonality; it is an overlapping complex of contradictory tonal "signals" (both melodic and

harmonic), without the necessary elements to confirm the tonality and clarify the function of the different parts of the texture.

In mm. 70-73, the vocal line imitates the trumpets referred to in the text with a melody reminiscent of a bugle-call, consisting of a Bb major triad:

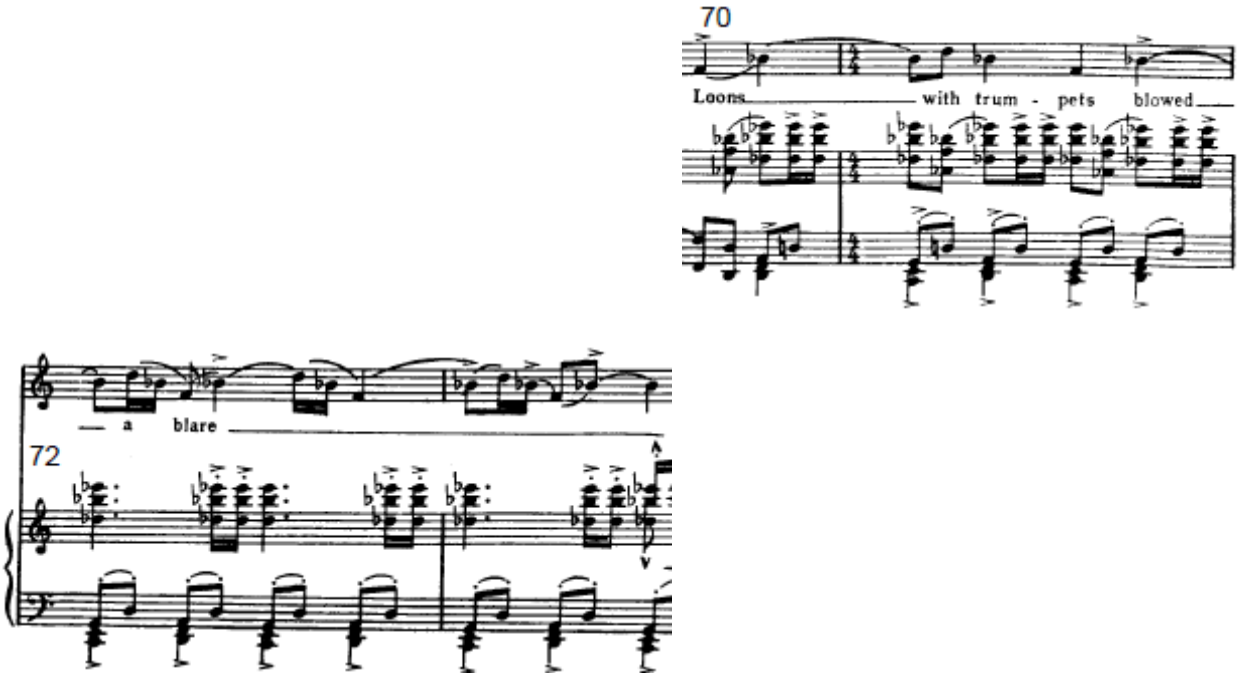


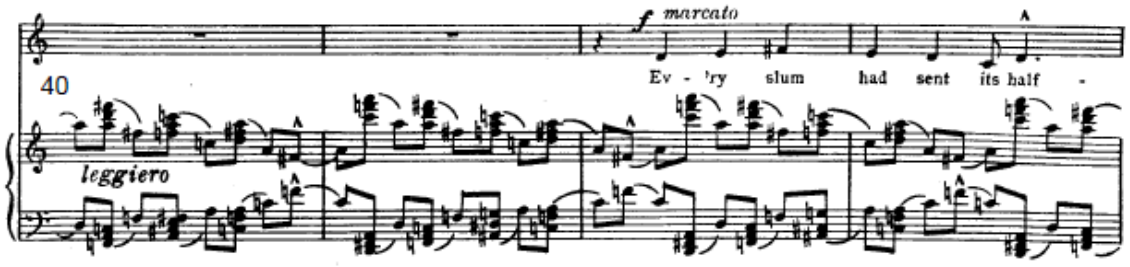
Figure 6. Triadic melody, mm. 70-73

There are no inherent tonal implications inherent in this melody, as it consists only of a major triad. It is by recognizing it as a bugle-call that the phrase is comprehensible as a tonal utterance. The piano's own trumpet motif both melodically complements the vocal line (by emphasizing the melodic fourth) and contradicts it harmonically, with only the Bb shared between them. Again, it is only the presence of melodic triads, and the reference to a trumpet call, which create the sense of tonal melodies, without any actual underlying tonal properties.

2.4 SCALAR MELODY

This category includes passages in which step-wise movement is especially prominent, and thus suggestive of tonality; that is, scales or step-wise motion may be heard as symptomatic of tonal music, though generally not to the same degree as triads. In these passages, there may or may not be a fairly clear pitch center. The stepwise movement employed may comprise parts of major or minor scales, whole-tone or chromatic scales, or a combination. This category is of particular importance due to the ease with which stepwise linear motion can be transformed from non-tonal material into more explicitly tonal material and vice versa.

In mm. 42-51, the voice has a simple rising and falling stepwise melody which begins with D as the clear pitch center, confirmed in part by the repeated piano chords made primarily of D major and F major triads:



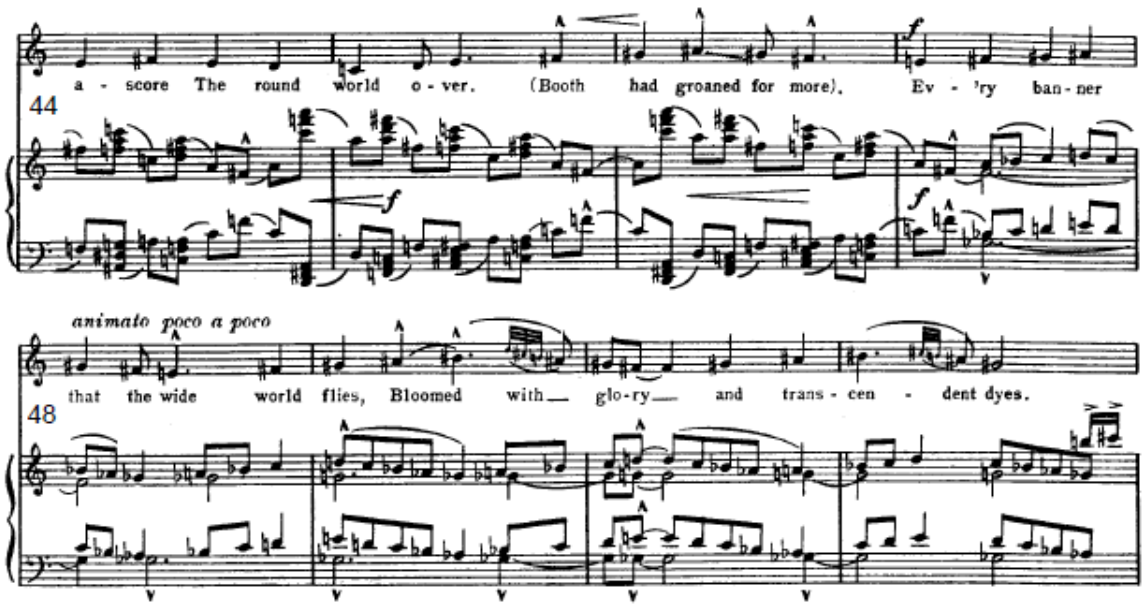


Figure 7. Scalar melody with pitch center, mm. 40-51

There is no 'key' here; D is the most important pitch, but we cannot say that the passage is in D major; if anything, the piano harmonies in combination with the voice suggest a V^7 chord in G. As with the triadic melodies before, there is only the illusion of tonality, which is compromised in m. 46 as the melody extends upward to encompass G# and A# to form a complete whole-tone scale (C-D-E-F#-G#-A#). In mm. 47-51 ('Ev'ry banner'), the material in both voice and piano is comprised almost exclusively of this scale, therefore removing any sense of possible tonal implications.

At m. 52, the voice continues its generally rising stepwise motion, though a sense of tonality returns forcefully (mm. 52-54):

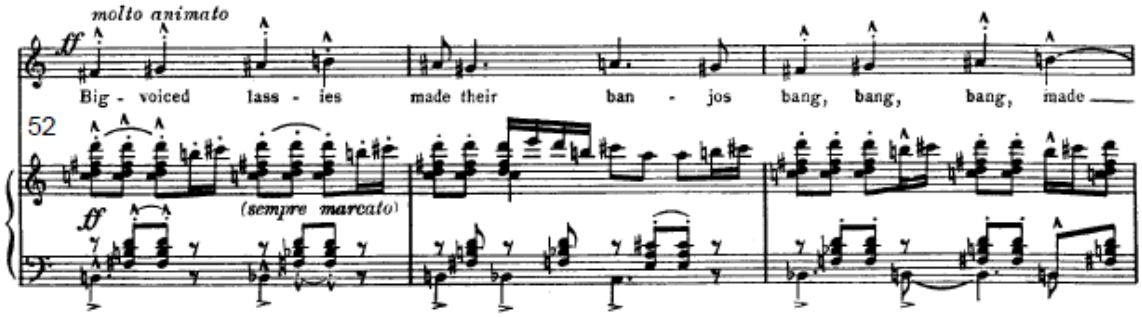


Figure 8. Bi-tonal passage, mm. 52-54

This passage is more properly considered bi-tonal, as the voice outlines the upper portion of a B major or minor scale (supported in part by the piano left hand), while the melody in the upper voice of the piano is in D major (supported in part by the piano left hand).

Throughout this section beginning at m. 42, consistently stepwise or scalar melodic material in the voice is used as a framework upon which Ives creates rapidly changing levels of tonal coherence: from vaguely tonal melodic and harmonic elements, to a complete absence of tonal coherence, then abruptly to more tonally intelligible music, reflecting the diverse body of sinners described in the text.

2.5 ATONAL PASSAGES

In the last category, I examine sections in which tonality – both the reality of it, in terms of actual tonal processes being employed, and the illusion of it – are absent.

The song begins with two bars of repeated chords in the piano, evoking the percussion in a marching band:

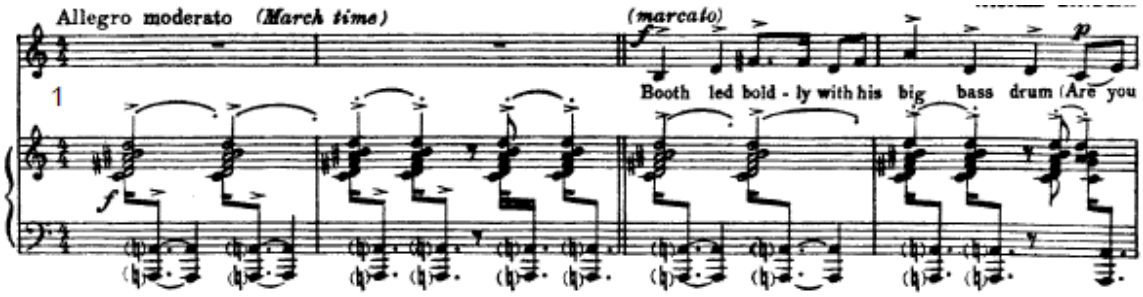


Figure 9. Atonal accompaniment, mm. 1-4

The harmonies in this passage are ambiguous; there is simply not enough information for the listener to easily hear any tonal implications in this harmony, and coming at the beginning of the piece with no context in which to place it, the opening two bars must be considered atonal. That the harmony is not a functioning dominant is made clear when the voice enters at m. 3, outlining a B minor triad, with the opening chords continuing as accompaniment. The same piano texture, using similarly constructed harmonies, does continue into mm. 5-8, where it serves to both confirm and contradict the tonal melody in those bars, this illustrates the fluidity of Ives' material, which helps to make the continuum of tonal coherence possible.

The most tonally inexplicable passage in the song occurs at the very end, just as the voice and piano conclude the piece's most tonal moment::

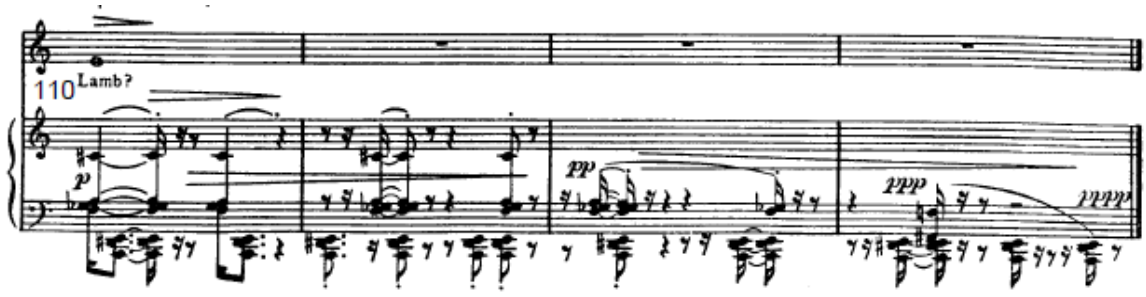


Figure 10. Atonal conclusion, mm. 110-113

The C# in the piano at m. 110 and the E in the voice carry over from the preceding passage, but their tonal significance in m. 109 vanishes immediately when placed in chords built from the typically atonal sets [014] and [056].

That Ives places the most atonal music of the song immediately following the most explicitly tonal is not accidental. In terms of the text, the assurance and confidence symbolized by the latter is challenged by the doubt symbolized by the opposite end of the continuum. In purely musical terms, the full range of the song's musical language is made manifest at the end of the work.

3.0 USE OF TONAL MATERIALS

In this chapter I will examine the principal ways in which musical elements generally characteristic of tonality are employed, both in tonal and atonal contexts. These include elements of the melodic material which are associated with tonal melodies (in particular accented embellishing tones and descending melodic thirds), dominants, and modulation. I will also examine how the manipulation of rhythm and phrase length affects tonal intelligibility.

3.1 TONAL CHARACTER OF THE MELODY

Perhaps the element of *General William Booth* most immediately suggestive of tonality, even at moments when the music is not clearly tonal, is the style of melody generally employed throughout the work. As much of the melodic element (especially in the vocal line) is taken from hymn tunes, one is constantly hearing outward symptoms of tonality, regardless of whether tonal processes are actually operating at any given moment. I will focus here on the use of descending melodic thirds, and the use of accented non-chord tones. Examination of these aspects will of necessity touch on other elements of the work, which will be dealt with more fully elsewhere.

3.1.1 Accented non-chord tones

The accented non-chord tone – an accented dissonance resolving in ascending/descending step-wise motion to a pitch of the underlying harmony – is a common element of tonal melodies, and are found throughout *William Booth*, most often as an upper neighbor. The most widespread and most easily recognizable use of this device in a tonal context is found in the second phrase of the tune generally associated with the text 'Are you washed in the blood of the Lamb?':

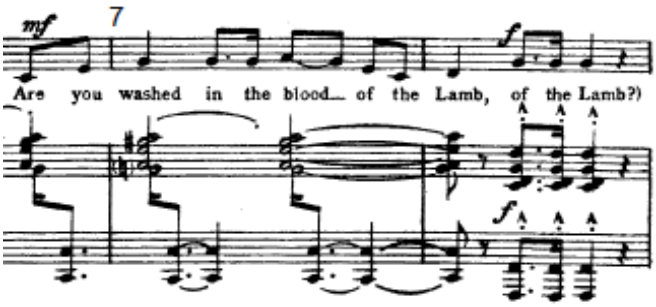


Figure 11. Accented neighbor tone in m. 7

As noted in the preceding chapter, this passage is not purely tonal, with its functional harmony subverted at times by the piano bass, especially at the implied dominant harmony in m. 8. The accented upper neighbor on A (on 'blood') has an important role in creating these implications, as it serves to highlight and confirm the underlying C major triad as the tonic, and more generally serves as a signal that the music in this passage is in fact tonal.

A version of this phrase returns, more ambiguously, in m. 36, where the triadic melody is distorted, and its thereby reduced tonal implications are themselves further undermined by the accompanying extended tertian harmonies (mm. 36-38):

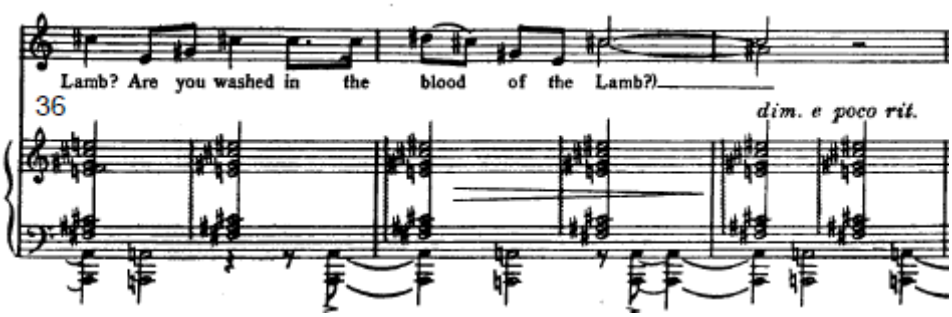


Figure 12. Accented upper neighbor in m. 37

Having already heard the tune once in a more or less tonally coherent context, the listener will to some extent supply tonal implications to this melody where they do not actually exist. The expected tonic triad E-G#-B is distorted so that $\hat{5}$ becomes C#, turning a root position major triad into a first-inversion minor triad, thus weakening any sense of key or function.[10] It is the accented upper neighbor on 'blood' which signals a relationship with tonality. Despite the distortion of the hymn tune in this phrase, the D# still functions as an such a non-chord tone should – it is the upper neighbor of the top note of the triad (whatever its 'function') outlined by the melody, and just as significantly, it is dissonant. The D# is dissonant in terms of the melody and also the accompanying harmony, which, for all its richness and ambiguity is nevertheless triadic, but contains no D#. The C# in the melody, despite its ambiguity in terms of a tonal melody, is not dissonant, being amply represented in the harmony. The accented upper neighbor gives the melody, and therefore the entire phrase, a tonal significance that it would not otherwise have.

[10] Burkholder simply states that this passage is in C# minor, without further elaboration. With the bottom note of the triad in this melody having previously represented the tonic, it is difficult to see how the top note of the triad could now be heard as the tonic, without confirmation from the underlying harmony. Burkholder (1995), p. 255.

As noted earlier, the B minor triad with which the vocal melody begins in m. 3 is tonally ambiguous. This triad returns in m. 13, now embellished by an appogiatura on G# which resolves to the fifth of the chord:

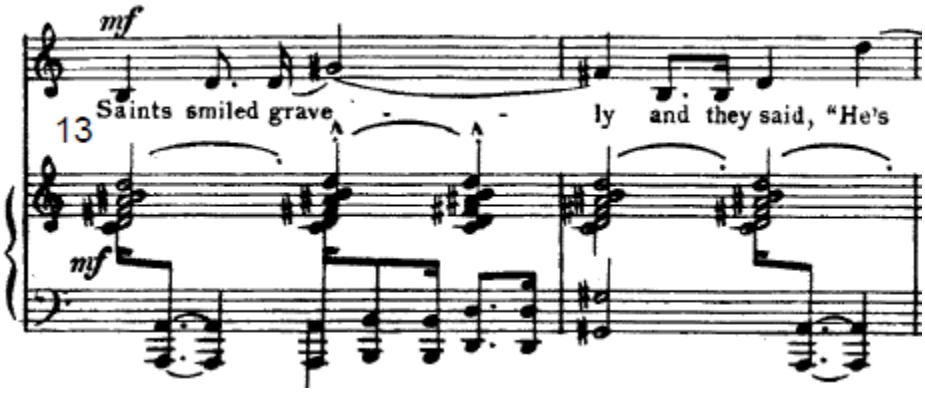


Figure 13. Appoggiatura in m. 13

Although this passage still is not in B minor in a functional sense, the appoggiatura gives the triad a more distinctly tonal character than it previously had; the dissonance resolving to a consonance is suggestive of tonal processes which are not actually present.

3.1.2 Descending Melodic Thirds

The interval of the third, being the interval from which functional triads are constructed, is employed heavily throughout the work, not only within explicitly tonal contexts, but also in more ambiguous moments to signal tonality where it is not actually present, or where its presence is unclear. The distinctiveness of the descending melodic third as a tonal element, and its consistent presence throughout the song will be examined in detail.

The centrality of the descending third is first hinted at in m. 6; the text "...blood of the Lamb?" is nearly always associated with this interval. Though part of the larger C major triad, its use at the end of the phrase in this measure highlights its presence as an independent melodic idea.

The descending third occurs again at mm. 9-10 with the vocal line's "Halleluyah" on D and B, which, along with the new and ambiguous harmonies in the piano, seems to come from nowhere.[11] It can be argued that harmonically it clarifies the subverted dominant chord in m. 8 by providing the missing leading-tone, and, more importantly, that the melodic idea is actually 'completed' in mm. 14-5 with the descending D-B on the words "He's come!" Ives highlights the relation between these two ideas registrally, as the vocal line between these two moments is in its lowest register, and must leap an octave to the high D-B in m. 14. It also suggests that the initially ambiguous "Halleluyah!" in mm. 9-10 is actually "Halleluyah! He's come!" This D-B also marks the resolution of the D^7 chord to a G major chord – both the poetic and harmonic dissonance of the 'Halleluyah' is resolved by a descending melodic third.

In mm. 21-25, the descending melodic third continues to invade the fabric of the music, again closing each two-bar melodic phrase (m. 22 and m. 24). The earlier emphasis of the third D-B is referenced in m. 24, with the B now flattened, making it dissonant with the prevailing harmony. That this third is heard as dissonant is important in creating a (retroactive) sense of tonality; having heard this melodic figure three times previously, the chromatic alteration of it creating a strong dissonance is suggestive of familiar tonal processes (e.g. the shift of major to minor, or a deceptive cadence on the flattened submediant).

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[11] The small note-heads here indicate that this "Halleluyah!" are to be sung by a chorus if available. In every performance of the song I have heard without chorus, the solo vocalist sings these pitches.

In m. 31 and m. 33, Ives develops this motif further, now altering it to Db-Bb, and again using it to round off two-bar phrases. These pitches return (enharmonically spelled) at mm. 37-8 at the return of the question “Are you washed in the blood...?” to end the phrase.

In mm. 58-65, the interval D-B emerges fully with the ecstatic repetitions of “Are you washed in the blood...?” and “Hallelujah!”, though it has been present all along and set up from the beginning of the song. It is now fully understood within a tonal framework, helping to confirm G major as tonic in mm 61-65.

In the *adagio* (mm. 82-90), the descending third (C-Ab) comprises virtually the entire vocal line, the Ab embellished each time with an accented passing tone on Bb. The descending third, instead of representing the less-salient upper half of a tonic triad, (or else simply suggesting tonality in the abstract), now represents the bottom of the tonic triad, obsessively emphasizing and confirming the tonic.

At mm. 106-9, the tune first heard in mm. 5-8 returns. At the end of the second phrase in m. 109, Ives now *removes* the descending thirds we have come to expect in the vocal line (they remain in the background with the piano), instead having the vocal line drop directly from the dominant to the tonic. Having throughout the song associated the descending third with tonality and all the extramusical associations which come with it, the absence of it when its presence is near certain adds a stark element of uncertainty to this most 'tonal' phrase of the song, and foreshadows the atonal ending in the piano. The descending thirds in the piano in m. 109 in fact continue through this atonal conclusion in Schumannesque fashion, by the removal of the pitches C#-A-Gb from the right hand chord.

3.2 DOMINANTS

Because of the central function of the dominant in creating the tonic, and therefore the sense of key, in tonal music, it is a powerful device for signaling tonality. Functioning dominants and dominant harmonies are quite rare in the song; in many cases the dominant is merely hinted at. In other cases, functioning dominants do not actually function in a particular key, but simply suggest tonality in the abstract. Ives finds numerous ways to obtain the benefit of the dominant, in terms of suggesting a key, without often having the dominant explicitly present.

The most overt use of a functioning dominant occurs in the *adagio* section in Ab major (mm. 81-90); the section has been prepared by an extended passage with an Eb pedal in the piano's bass (mm. 75-80). It is worth noting, however, that even here, the dominant-tonic relationship is not nearly so strong as it might be; the leading-tone G is weakened by the constant presence of Ab in mm. 81-89, and in fact it does not resolve to the new tonic Ab – this voice is left unresolved in the piano texture. The A-natural which emerges in the piano's tenor voice in m. 79 further weakens the dominant preparation. Finally, it is noteworthy that there is no Db in these bars to create a stronger dominant 7^{th} harmony.

The preparation of Ab major is just strong enough that it feels organic, stable, and satisfying. Beyond that it must seem to simply emerge, dream-like, as a moment set apart from the rest of the song; to employ all the potential strength of the dominant in this instance would make that impossible.

A rather less clear example of a functioning dominant-tonic relationship occurs prior to the bi-tonal section at m. 52; this passage is both in B minor and D major, in different strands of the texture, with each tonality taking turns emerging and receding. The preceding five bars have

a Gb (=F#) pedal tone in the piano, which prepares the B minor harmony at m. 52, making its arrival as (one) tonic a relatively strong one.

Again however, Ives has taken pains to not telegraph this dominant preparation; the Gb pedal, though the lowest voice in the texture, is in the mid register of the piano, not the bass, and moreover is underneath a texture composed primarily of whole-tone scales of which Gb is a part. Only with the arrival of the B minor harmony is it clear that it has been prepared. Having followed a lengthy whole-tone passage, B minor seems to mostly have burst out of nowhere, despite its relative stability. As noted earlier, some of this apparent stability derives from the sudden shift to a strongly articulated quadruple meter (though this is soon undermined in the piano left hand) and clear two-bar phrases, but it is the dominant preparation which specifically marks B as the clear tonic at m. 52, though this clarity is soon undermined.

In mm. 25-30, Ives employs a similar, but clearer dominant-tonic relationship to help create a sense of tonality where no actual key can be said to exist in any traditional sense:

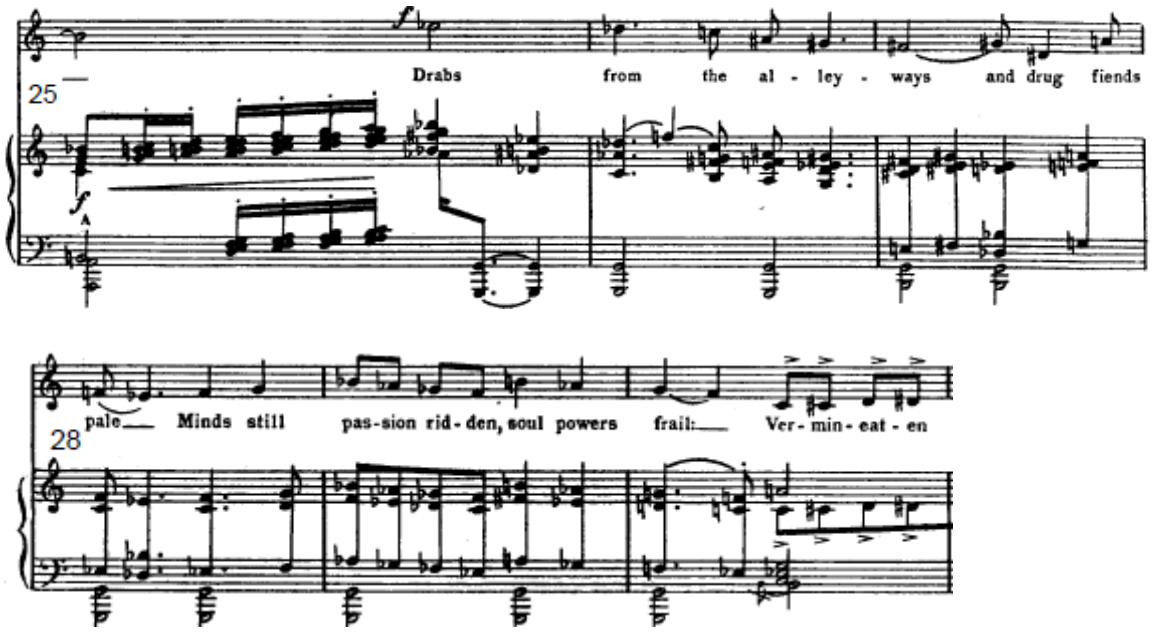
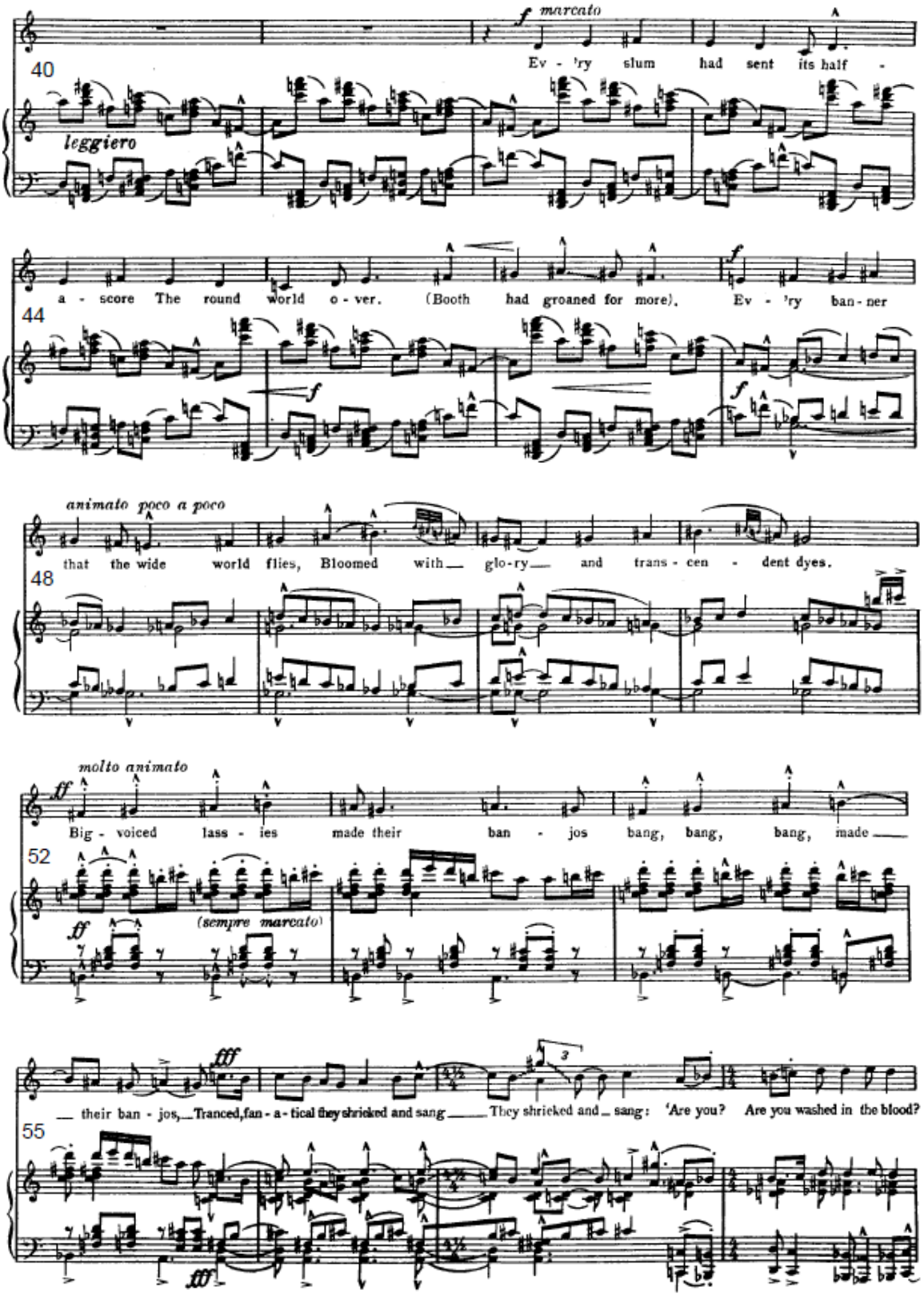


Figure 14. Dominant-tonic relationship in mm. 25-30

As noted earlier, the scalar melody and presence of appoggiaturas suggest a familiar type of tonal melody, though the scale and key cannot necessarily be identified. Once the G pedal resolves to C at m. 30, a key is clarified, strengthened by the persistent C minor chords in the piano left hand in the following measures. The sense of C minor is immediately distorted by the pitch material of the vocal line in mm. 30-33, composed of chromatic and whole-tone scales outlining a minor ninth from C to Db. The stability of C as a tonic remains due to the C minor chords, and also the dominant preparation in the preceding bars. Whereas previously we saw the character of the melody giving tonal relevance to an atonal harmonic landscape, here harmony and the preceding dominant impart a tonal character to melodic material which is not tonally explicable by itself.

3.3 PHRASE LENGTH AND RHYTHM

Though not inherently related to the song's pitch material, the manipulation of rhythm and phrase structure is nevertheless an important means by which tonal implications are either strengthened or minimized. Although any phrase length may occur within both tonal or atonal idioms, two-and four-bar melodic statements are typical of much tonal music, and in particular hymns. Similarly, the tonality of such music typically relies upon a rhythmic premise in which beats one and three are strongly emphasized throughout (in quadruple meter); again, this is not only true of tonal music, but is particularly likely to be associated with the type of tonality Ives has drawn upon in this work. A good example of this process may be found throughout mm. 40-64:


f marcato
Ev - 'ry slum had sent its half -
40
leggiero
a - score The round world o - ver. (Booth had groaned for more). Ev - 'ry ban - ner
44
f
animato poco a poco
that the wide world flies, Bloomed with glo-ry and trans - cen - dent dyes.
48
molto animato
ff
Big - voiced lass - ies made their ban - jos bang, bang, bang, made
52
(sempre marcato)
fff
their ban - jos, Tranced, fan - a - tical they shrieked and sang They shrieked and sang: 'Are you? Are you washed in the blood?
55

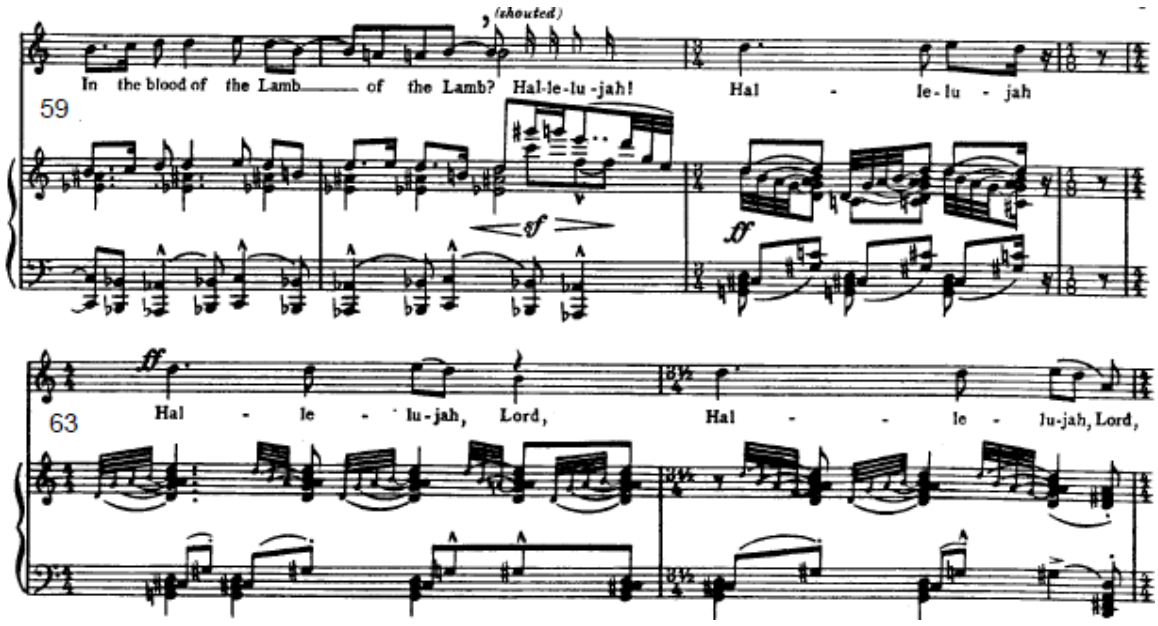


Figure 15. Mm. 40-64

As noted in the previous chapter, the first seven bars of this passage, though not in D major or minor, do provide more than a hint of D as the tonal center, and in a percussive march style of the sort which he has encountered already in the work.

The two bars of piano figuration in mm. 40-1 begin on an upbeat, which in performance inevitably sounds like a downbeat after the substantial rest which precedes it, with the triads seeming to mark each beat. When the vocal melody enters on beat two in m. 42, there is immediately some uncertainty regarding where the beat lies, and on what beat of the measure the voice enters (this uncertainty being heightened by the 'hiccup' in the piano one beat before the voice enters). The natural primacy of the vocal line in the texture soon resolves this ambiguity, and it becomes clear that the beat generally follows that part, with the triads in the piano now representing persistent off-beats.

More important than this momentary half-beat readjustment is the entrance of the vocal line, which immediately begins to undermine the apparent clarity of the piano figuration's two-bar phrase and quadruple meter. Though written in 4/4, the actual meter is constantly changing. The meter of the vocal line in mm. 42-51 (beginning with beat two of m. 42, which due to the accentuation of the text becomes an effective downbeat) might be experienced as:

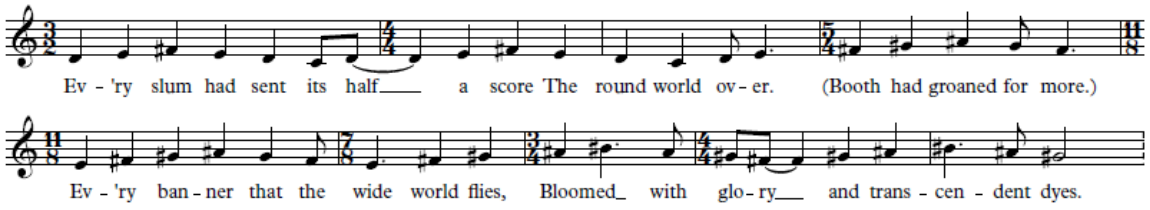


Figure 16. Actual meters in mm. 42-51

This complicated scheme is further confused in these bars by the piano figuration shifting to a regular five-beat pattern in mm. 42-46. Furthermore, the grouping of these measures into phrases is antithetical to any comprehension of the passage in terms of traditional tonality. In relation to the metrical scheme outlined above, the phrase-lengths are 3 + 1 + 3 ½ + 1 ½ bars.

This complexity does not represent the last word, however, as the passage paradoxically seems to maintain a relatively 'steady' beat throughout; in part because of the regular off-beats of the piano, but also due to the accent patterns of the text, which is almost invariably a simple alternation of strong and weak syllables. Ives has taken a passage with a fairly clear tonal center, and by means of meter and phrasing, gradually removed the rhythmic predictability generally associated with tonality, while maintaining the illusion of regularity associated with the ongoing march itself.

In mm. 47-51, any immediate tonal associations are removed by a shift to almost exclusively whole-tone materials in all parts, as well as the shift of the piano texture from

persistent offbeat chords to less rhythmically marked material, momentarily leaving only the accentual regularity of the text itself to carry the suggestion of the march.

In m. 52-55, both tonality and regular meter and phrase-lengths return abruptly. The passage is bitonal, suggesting B minor (most strongly) and D major (less so). The tonal clarity of these measures, tonally-speaking, isa obtained less from the melodies and harmonies present, which coming from two different keys are necessarily ambiguous, than from the regularity of the meter and phrase-lengths.

These bars consist of two two-bar phrases, which harmonically emphasize a B minor triad for six beats, followed by two beats of an A major triad; that is, the phrases begin with the tonic of the primary key, with a half-cadence in the secondary key to round the phrase off. The assumed rhythmic regularity of a specific type of tonal phrase and cadence is thereby employed to create the sense of two keys truly operating at one time. The Bb in the bass of the piano helps to maintain this sense as well, acting in turn as the leading-tone of B, then as a chromatic passing tone to the dominant of D.

A sudden change in harmony, texture, and melody occurs on beat four of m. 55. The piano has a V^7-ish harmony in G, realized in dense chords in its middle register, while the melody shifts its prevailing four-note motif up a half-step (made more stark by the sudden leap from G# to C). In terms of harmony and voice-leading however, this is tonally-speaking a fairly plausible shift; the dominant A major harmony on beat three of this bar resolving to what then becomes a secondary dominant in G major is entirely comprehensible as a tonal progression.

Measure 55 is cut short metrically (on beat four) and it is therefore unclear where the phrase ends and where the new one begins, or whether the word 'Tranced' falls on the downbeat or an upbeat. The strong 4/4 meter of the preceding bars suggests an upbeat into the next

measure, but the sudden emphasis in all aspects of the music on beat four suggests a downbeat; this is not simply a matter of elision between two phrases, but a deliberate disruption of the listener's understanding of meter to create the more frenetic and delirious character suggested by the text.

The effect made by ambiguity between upbeat and downbeat is exploited further in mm. 57-58. The A-Bb in the vocal line (“Are you?) on the last two eighths of m. 57 is clearly an upbeat. Every instance of those two words in the song is set in this manner, with the following word 'washed' placed on a strong beat. The repetition of these two words on beat one of m. 58 instantly turns what should be a downbeat into another upbeat, creating the comical effect of the singer coming in too soon with the chorus “Are you washed in the blood of the Lamb?” and having to begin it again on the proper beat.

The downbeats of mm. 58-59 are actually on beat two, though the sense of meter is weakened considerably by the persistent quarter-eighth rhythm of the piano left hand. This rhythm grows directly out of the false upbeat in m. 56 and creates the sense that the bass line is, like the voice, unsure and trying to catch up to the proper beat. The vocal line in mm. 58-69 is clear in terms of meter (though not in relation to the written barlines), and the two-bar phrase strengthens the tonal character of the melody (outlining $\hat{3}$, $\hat{5}$ and $\hat{6}$ in G) despite the tonal confusion underneath it. After these two bars of clarity from the singer, at m. 60 the meter and phrasing become confused again with the repetition of 'of the Lamb?' The recurrence of these words is not problematic in itself, as they are repeated in mm. 78-80. This repetition in m. 60 extends the preceding two-bar phrase to three bars, heightened by the seemingly arbitrary setting of these words on $\hat{2}$ and $\hat{3}$, which is something of a melodic *non-sequitur* in relation to the preceding bars, and which has no precedent in the song as a whole. M. 60 is indicative of the

singer's uncertainty, both with respect to the question itself perhaps, as well as to exactly where he or she is in the music. The singer rounds off this awkward extension of an otherwise coherent two-bar phrase essentially by fiat, shouting 'Hallelujah!' without warning at the end of the bar.

This is followed in mm. 61-65 by ecstatic repetitions of 'Hallelujah!', now evidently in G major, and emphasizing as usual scale degrees $\hat{3}$, $\hat{5}$ and $\hat{6}$ of that key. The tonal strength and stability here comes from the repeated G major harmony, the strength of the dominant preparation of G, and from the clear four-bar phrase and quadruple meter. That the written meters (3/4 + 1/8, 4/4, 3 ½/4, 4/4) contradict this is irrelevant; the repetition of the melodic motive leaves no doubt where the true downbeats are. The slight lengthening or shortening of the first and third bars of the phrase does no essential harm to the overall scheme, but rather serves to make the meter slightly ragged in performance, suggesting the ecstasy and fervor with which the singer is now possessed.

As was alluded to in the previous chapter, the contrasting meters and harmonies subtly undermine the Ab major tonality at the climactic *adagio*. This is the most spectacular and ingenious example of this type of process in the work. The tonality is never in question here.

The various strands of the texture move in contrasting meters in mm. 82-84 – the piano chords in both hands on beat one of m. 82 mark a downbeat resolution of the dominant in the preceding bar, but the melody in the tenor voice of the piano begins with an upbeat (on “Jesus”), with its downbeat on beat two of that bar (marked with an accent.) The vocal melody is more ambiguous, as the C on beat one seems like a downbeat that resolves the dominant of the preceding bar, but the Bb on beat two is an appoggiatura, suggesting that it is the strong beat instead. In m. 83, all layers mark beat one as a strong beat, but the voice’s next strong beat is on

beat four, as is the bass of the piano, while the piano's tenor melody has an upbeat on beat four, with its next downbeat at the beginning of m. 84.

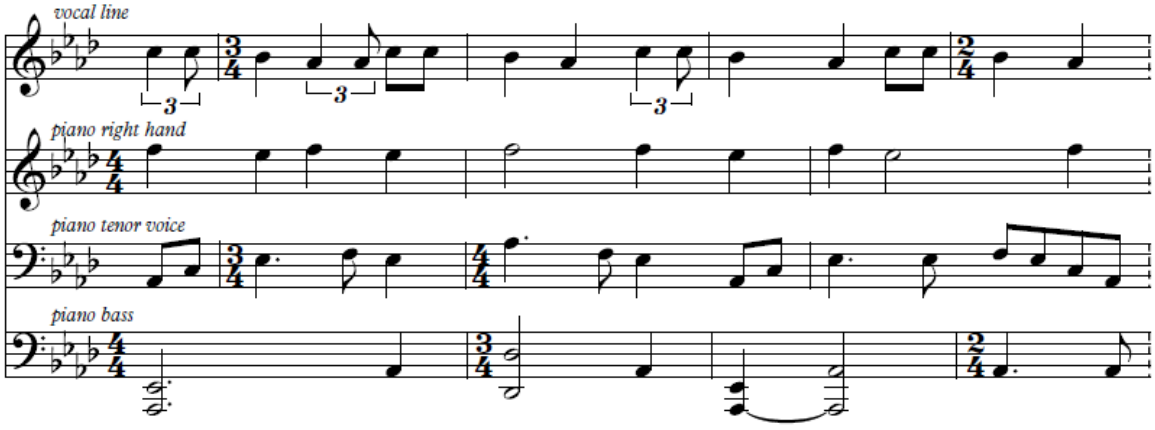


Figure 17. Metrical scheme for each layer in mm. 82-84

A similar pattern repeats in mm. 85-87, after which all sense of meter breaks down. Despite the tonal harmony throughout these bars (I-IV-I-V in mm. 82-84), the contrasting meters in each part of the texture create distinct harmonic rhythms, which in effect creates four contrasting versions of the same key simultaneously.

In mm. 97-105, the counter-melody in the piano left hand from the *adagio* returns in C major, now *forte*, in the vocal line. The accompaniment is similar to that found in mm. 5-8, discussed in Chapter Two, with percussive harmonies largely built from 2nds, and the dominant subverted by $\hat{4}$ in the bass at the half-cadence in m. 101. The actual notes which make up the accompaniment are largely foreign to the tonality of the melody. Nevertheless, the sense of C major, and the understanding of that key in terms of tonality, however muddied on the surface by the piano chords, is as immediate and complete to any listener as the *adagio*, though in a different way.

In the *adagio*, the pitches themselves make Ab major clear despite the contradictory meters and phrase-lengths in each voice; in mm. 97-105, the clear two-bar phrases and emphasis on beats one and three, along with the absolutely tonal melody, make the key certain as a tonal statement, despite the foreign pitches. In mm. 104-5, the piano accompaniment introduces chords entirely foreign to C major; they have a linear, as opposed to largely percussive, function, the key largely maintains its integrity, even as it the melody cadences on a subdominant-type harmony instead of the tonic. By maintaining the two-bar phrase and rhythmic framework associated with quadruple meter, Ives makes it possible to hear the dissolving harmony in terms of a key which can no longer be said to truly exist.

In manipulating meter and phrasing, both subtly and not-so-subtly, Ives has created a means by which tonality, and its associations with certainty and stability, can appear or recede to various degrees at any given moment, and to an extent independently of the actual pitch material.

3.4 MODULATION

A central process of tonality which Ives generally forgoes in the song is modulation. Though different keys are suggested and juxtaposed, it is difficult to say that many of these juxtapositions can be related to any process of modulation typical of functional tonality. More often, a new key is simply established by fiat, as in m. 97, where the persistent bugle call in F# major is interrupted by its most distantly-related key of C major without any preparation.

An instance in which something analogous to modulation may be felt to occur, though without any traditional processes of modulation being present, occurs in mm. 42-56. The song moves from a passage in which there is a fairly clear pitch center (D, in mm. 42-46), to a

whole-tone passage (47-51), followed by the bi-tonal passage (in B minor and D major) beginning in m. 52. The persistent Gb (representing the dominant of B) in the whole-tone section, and the resumption of the strong quadruple meter in m. 52 give the sudden emergence of B minor a sense of stability and arrival, such as often accompanies a modulation in functional tonality. Ives creates the illusion of having moved through two keys to a more stable one, despite the absence of a key in terms of functional tonality in the first two sections – and the presence of two keys in the third.

The one explicit instance of modulation occurs prior to the adagio, where the preceding tonic Eb becomes the dominant of Ab. The resolution of this dominant harmony to its implied tonic in m. 82 further strengthens the overall key of Ab major in the following measures, not only by establishing the key in the first place, but also by placing both keys in a larger tonal context (i.e. they are clearly related to one another). The modulation itself – a tonic becoming a dominant – is one of the simplest possible in functional tonality; it is enough to create a sense of tonal movement (and thus a stronger sense of functional tonality), without any complex key structure necessary.

Though the passage in Ab major has more weight in the song, there is no way to determine whether Eb major or Ab major represents the fundamental key in this relationship. Mm. 75-90 function as a window into a more purely tonal world than exists elsewhere in the song, with not only functioning triads and a hierarchy of scale-degrees, but the suggestion of a hierarchy of keys as well, even if the precise relationship of these keys is not clear. As will be shown in Chapter Five, both the transition into Eb major in m. 75 (from tonally-ambiguous material), and the transition out of Ab major in m. 90 (also to tonally-ambiguous material) are

accomplished by means of voice-leading procedures which are not inherently related to tonal processes, further separating the Eb major and Ab major sections from the rest of the song.

Despite the tonal character of so much of *General William Booth*, and the variety of means by which Ives manages the relative intensity of that character, there is very little working out of tonal *processes*. There is no actual modulation apart from the simple one described above, and, despite the presence of dominants throughout much of the song, either explicit or implicit, there is virtually no predominant preparation of these dominants (m. 85 being the only exception). There are also very few leading tones in the song, either in the melody, or as part of a dominant harmony. By largely forgoing the central processes of tonality, and instead emphasizing the audible results of those processes (as well as rhythmic premises often associated with tonality), Ives is able to create a more seamless continuum between tonality and atonality.

4.0 USE OF ATONAL MATERIALS

In this chapter, I will examine three elements typical of atonal music which are used in *William Booth*: chromatic pitch-class sets; quartal and secundal harmony; and the use of whole-tone and chromatic scales. None of these elements is necessarily incompatible with tonality however, and therefore it will be shown that Ives uses these elements in a variety of ways to further blur the distinction between tonality and atonality along the continuum.

4.1 PITCH CLASS SETS

There are three atonal pitch-class sets Ives uses frequently in the song, in a variety of contexts: as melodic material and vertical sonorites, overtly as foreground material, and embedded within more important material to change its character.

The set [025] and its inversion [035][12], are heard throughout the work; most audibly [035] occurs in the context of the hymn tune generally associated with the text "Are you washed

[12] [025]/[035] are not properly speaking 'atonal' pitch-class sets, as the following discussion makes clear they can move quite easily between different pitch languages. They are perhaps most characteristic of pentatonic melody and harmony, which in its simplest uses can present a stable tonic without the interference and tension of dissonant scale-degrees such as the subdominant and leading tone.

in the blood...?", and representing $\hat{3}$, $\hat{5}$ and $\hat{6}$ of whatever key is being suggested at a given moment. Its use to subvert the understanding of tonality is seen early on, however, at the half cadence at the end of the first statement of that melody, in m. 8, where the dominant G is harmonized by a chord in the piano built of C, D, and F [025]. Despite the 'wrong' harmonization of the chord, and the disruption of a central tonal process, the harmony nevertheless retains kinship to the melody it contradicts by means of its intervallic structure.

In the *adagio* in mm. 82-90, [035] is constantly present in the piano right hand as an ostinato on $\hat{3}$, $\hat{5}$ and $\hat{6}$ (C-Eb-F). Ives could have chosen any number of pitch-class sets to create connections between tonal and atonal melodic materials, but he selected one which could be used to emphasize some of the tonally least salient degrees of a major scale; the sixth scale degree has little inherent implications in itself, and the third and fifth scale-degrees are inherently stable in the context in which they occur melodically in the song. The need to resolve dissonance in functioning tonality is generally avoided, and we hear only the resolution itself.

In mm. 97-105, [025] expands the hymn tune into a grand summarizing statement (if one accepts Burkohlder's view of the song as a cumulative form), representing $\hat{5}$, $\hat{6}$ and $\hat{8}$ in C major. [035] continues to represent $\hat{3}$, $\hat{5}$ and $\hat{6}$, and the two sets combine to encompass a full octave, with the tonic emphasized at both top and bottom. Two sets which have only a casual relationship to tonality are used to make the hymn tune into an even stronger tonal statement.

[016] and [014] (and their inversions [056] and [034]) are more likely to be directly associated with atonality than [025]; the semitone combined with a tritone or major 3rd cannot be rationalized within the traditional processes of triadic harmony. As Ives is not much concerned with melodic dissonance in the song, these sets are generally employed to add

percussiveness to harmonies (whether suggestive of tonality or not), or to act as a basic signal of atonality. Both sets are used in the final four bars of the song to accomplish both tasks:

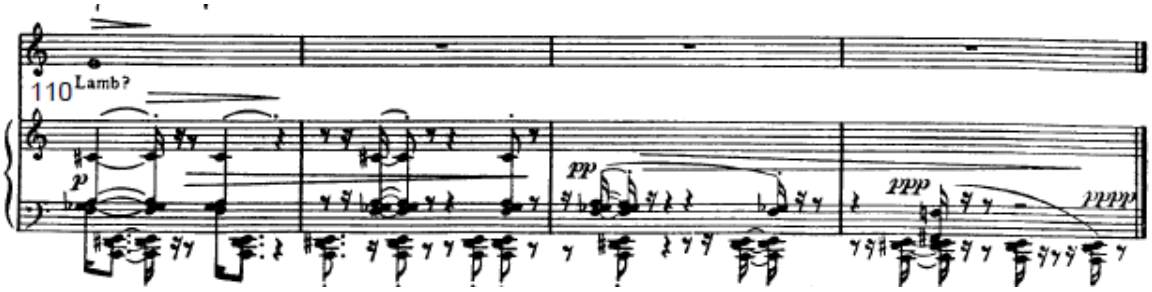


Figure 18. Mm. 110-113

Aside from the faint hint of a chain of descending thirds mentioned in the previous chapter, there is nothing in these bars which suggests tonality. The pitch material is, apart from the C# which remains from the preceding bar, wholly made up of [056] and [034], with no possible rationalization into tonal harmony. This provides the strongest possible contrast with the tonal chorale which precedes it. These chords serve to depict the sinners marching away until only Booth's bass drum is heard faintly, and to suggest that, in the final analysis, there are no easy answers to the question “Are you washed in the blood of the Lamb?”

The use of [016]/[056] as a percussive element is seen in mm. 61-65 (G-G#-C#-D), this time distorting the root and fifth of the G major harmony in the piano left hand. The distortion is entirely on the surface, however, as the effect is really to amplify the prevailing harmony, to make it ring as if strummed by 'big-voiced lassies.' This passage which on paper appears – metrically and harmonically, with its lack of an overt dominant preparation – tonally unstable, is in fact the strongest and most stable tonal utterance in the song prior to the *adagio*.

In mm. 19-20, [016] and [014] appear in the brief piano interlude to signal atonality, while paradoxically also providing a hint of tonality carried over from the previous phrase. The

preceding bars (mm. 15-18) are bitonal, suggesting G major in the piano and E major in the vocal line, which ends its phrase on a half-cadence on F# in m. 19. The harmony in m. 19, consisting of A, F# and F-natural [014], provides no strong sense of the dominant harmony implied by the cadence (the two most important pitches B and D# are missing when sung by a solo voice); however, the F#s and Bs in the piano beginning on beat two, though soon in conflict with C and G (creating interlocking [016] and [056]), do allow a sense of the implied dominant harmony to permeate. The increased agitation and sudden change of texture make it clear that we are hearing a new type of music, however, which is explicitly atonal. [016] and [056] allow Ives to create an atonal harmony while allowing the implication of tonality to remain.

4.2 QUARTAL AND SECUNDAL HARMONY

Harmonies built from fourths and seconds are used extensively in the song, in a variety of ways and contexts. Perhaps the simplest use of these sonorities is to create piano accompaniments with a percussive character, and with primarily rhythmic function, as throughout the first eighteen measures of the song. Virtually every bar has its strong beats marked with chords in the piano right hand built from collections of seconds and, though the exact intervallic structure of these chords is not always the same, neither are they arbitrary clusters; in the majority of them, the bottom note of the chord has either a major seventh or minor ninth above it, giving the sonorities more pungency and a character not unlike that of non-pitched percussion. At the same time, these sonorities do support the vocal melody, as the vocal pitches are almost all found in the piano accompaniment. For example, it is the bass in m. 6 and the harmonization of the half-cadence at m. 8 that most work against the understanding of the phrase as a tonal statement, not

the secundal harmony; the seconds intrude on the listener's consciousness primarily in terms of their extramusical content, while simultaneously reinforcing the melodic material of the voice.[13]

In mm. 27-30, the vocal line is doubled by a series of parallel chords built from fourths and major ninths; these chords also make up the set [035].[14] The vocal melody in these bars is vaguely tonal, as discussed in the previous chapter. The chords accompanying it undermine any explicit harmonic support for any putative key, and as the vocal line and bass pedal are suggestive of an as yet undetermined tonality, the parallelism of these chords helps to create a tonal 'smear.'

Identically constructed sonorities occur in mm. 67-70, again as chords encompassing a ninth, and this time in an atonal fashion, as the pitches in these chords directly contradict any lingering sense of G as a tonic. In mm. 70-73, these chords transform into another line of 'trumpets' above the vocal line's trumpet call; the doubling of the top line at the ninth, serves to make the trumpets sound out of tune in the midst of the chaotic march.

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[13] Starr asserts that the pitch content of these chords is arbitrary and that Ives merely wishes for the pianist to create a percussive noise, that the style is more significant than the substance. As Ives often asks explicitly for tone clusters when he wishes for this effect in other works, and since the pitches written here strongly correlate with the pitches found in the vocal melody throughout these measures, it must be assumed that he actually wanted them heard. By insisting that it is a mistake to seek general principles of organization in the song, Starr overlooks the clear relationship between the atonal clusters and the more or less tonal melodies which they accompany. Starr (1992) p. 111.

[14] Starr refers to the melodic third as a 'stylistic chameleon' in this song, due to its ability to suggest tonality, or tonal melody, regardless of the context. I do not disagree, but would argue that [025]/[035] is a better example of this, as they are explicitly used to both strengthen and weaken the sense of tonality. Starr (1992) pp. 64-5.

4.3 CHROMATIC AND WHOLE-TONE SETS

Chromatic and whole-tone pitch collections are, because of their symmetry, antithetical to tonality built on major or minor scales, which are necessary to create dissonance and resolution, ultimately to the tonic. Ives is nevertheless able to employ these symmetrical collections to create melodies which appear to have tonal characteristics, without strongly suggesting a key, or to distort an otherwise clear tonal center. Both chromatic and whole-tone sets are used in mm. 30-33:

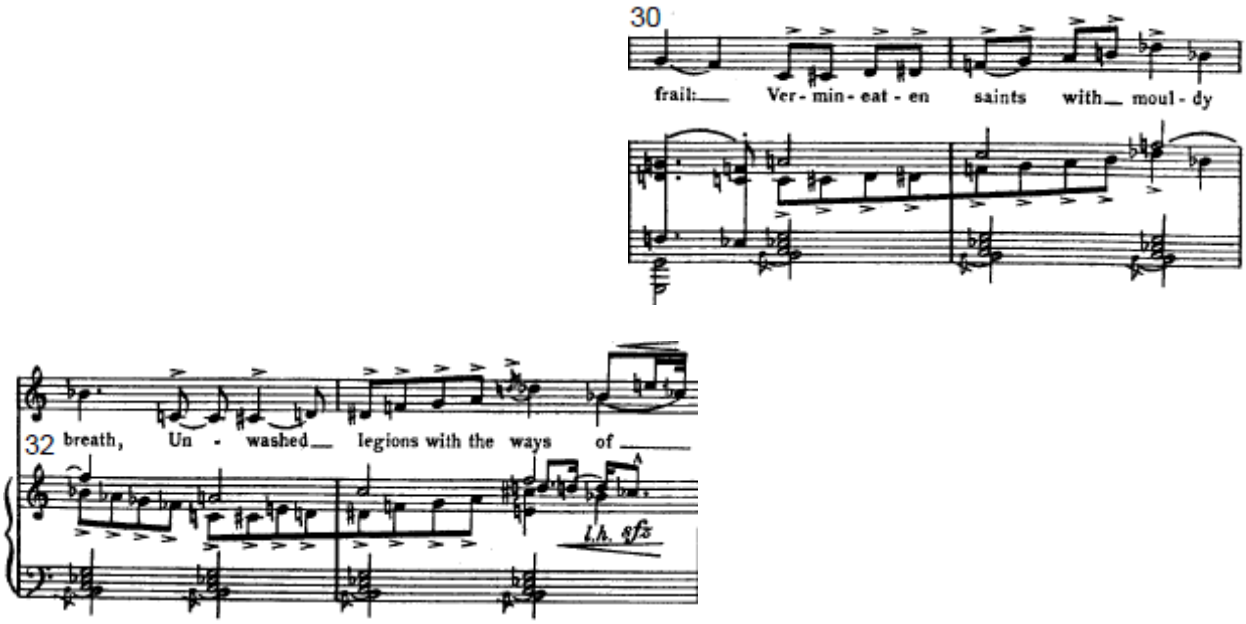


Figure 19. 'Distorted' C minor scale, mm. 30-33

The dominant preparation and C minor triads in the piano left hand provide a strong sense that C is the tonic. In this context, the sequence of a rising chromatic tetrachord beginning on C followed by a whole-tone tetrachord produces the effect of a distorted C minor scale ending

on Db. Had Ives actually employed an ascending C minor scale, with Db in place of the tonic C, the Db might simply have sounded dissonant, rather than distorted.[15]

The whole-tone sets in mm. 42-51 have already been discussed in the previous chapter in relation to the prominence of thirds within the whole-tone melody of the vocal line. In addition, this vocal melody creates a seamless and convincing transition between mm. 42-46 and the second half of this section at mm. 47-51 with their contrasting textures and pitch materials. As noted previously, mm. 42-46, though not conventionally tonal, strongly imply D as a tonal center due to the piano chords and the melodic emphasis on D. The vocal melody is in fact not clearly part of a larger whole-tone scale until m. 46; until then it seems to be a D major scale with a flattened leading-tone, suggestive of the mixolydian mode. It is only after m. 46, where the entire texture adopts the whole-tone set for its material, and the vocal melody extends to encompass the full six-note collection, that we become aware of the whole-tone set, even though it has been employed in the preceding measures. The symmetry and tonal neutrality of the whole-tone scale is being exploited so that it can absorb the character of the material around it.

[15] Timothy Johnson analyzes how Ives chromatically alters *borrowed* tonal melodies, while allowing them to retain their tonal implications to some extent, terming the resultant melodic material 'refracted tonality.' He does not examine whether Ives uses a similar procedure with melodies he has invented, as appears to be the case in mm. 30-33. Johnson (1996) pp. 236-61.

5.0 VOICE-LEADING

With so many contradictory elements, tonal and atonal, existing simultaneously or following upon one another in close succession, it is remarkable that *General William Booth* is such an immediately coherent work. Much of this is certainly due to the clear dramatic arc of the song and the text in a broad sense, and the frequent march-like rhythms. Also, as shown earlier, much of the song's materials are employed in both tonal and atonal sections, so that even strongly contrasting moments often share common elements. There is one other aspect of the work not previously touched on which is essential to linking disparate elements, both on the small and large time-frames: the use of voice-leading to create logical connections when other elements of the music might otherwise suggest no such connections. Often this voice-leading is quite simple, immediate, and easy to demonstrate; other times it is quite complex and takes place over comparatively long stretches of time.

The simplest use of voice-leading involves either the expansion or contraction of the outer voices (the vocal melody and the piano's lowest voice) at moments when the character of the music changes abruptly. This provides the most direct and immediate means of making the change of character seem organic, if still surprising; this is particularly important when, as often occurs, one or more voices (especially the vocal line) do not exhibit 'good' voice-leading at that particular moment. Ives also employs this process entirely within the vocal line, expanding or

contracting the 'outer voices' of the vocal melody by stepwise motion, to both set off and link contrasting sections.

5.1 EXPANSION

The use of step-wise voice-leading to expand the overall register is often found when the character of the music shifts from less to more tonal, though the more tonal-sounding music in two instances is really a static 'tonic' harmony:

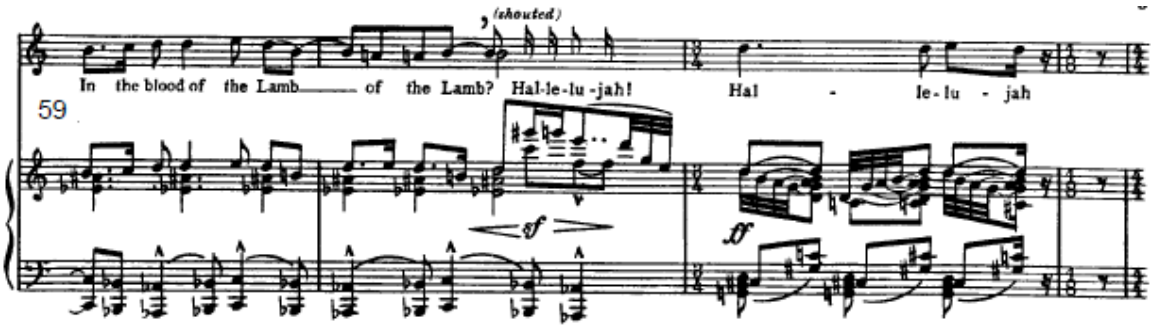


Figure 20. Voice-leading expansion between mm. 60-61

In mm. 58-61, the vocal line and piano left hand are essentially mirroring one another, and there has been no immediate suggestion of a tonality, as the pitches of these two voices are quite foreign to one another (Ab, Bb, C, D vs. B, C, D, E). The B-D-E emphasized by the vocal line is suggestive of $\hat{3}$, $\hat{5}$, and $\hat{6}$ in G major, the key we in fact seem to arrive at in m. 61. The expansion outward of B to D in the vocal line and Ab down to G in the piano left hand prepares this abrupt transition from a tonally ambiguous to much more direct and stable suggestion of tonality. The G major harmony in the five bars following m. 61 is constantly reiterated, and

though muddied somewhat by foreign tones for percussive effect, is never in doubt as the prevailing harmony.

Beginning at m. 73, there are two consecutive voice-leading expansions between sections, each of which is more tonally coherent than the preceding section. In m. 73, stepwise expansion into a new section is accomplished by the piano alone (the vocal line drops a diminished octave to begin the new phrase). The piano left hand moves from C^2 down to B, while the right hand has a rapid scale in parallel fourths up to the high B, giving as impeccable an instance of traditional voice-leading as one finds in the piece, a sixth expanding outward to an octave.

Although m. 74 does not actually turn out to be in B minor, the B minor triad is strongly enough emphasized in all registers, including the vocal line. As the B minor harmony dissolves in m. 75 with the addition of increasingly foreign tones, it feels far more tonally stable than the complex (though static) polychordal texture of the preceding bars.

After the B minor harmony recedes, the music veers sharply again in the second half of m. 75, this time to the extended passage built from a hybrid dominant/tonic harmony in Eb major, again approached by outward stepwise motion, now by the vocal line from A (on the word 'air') to Bb (on 'washed') and the piano left hand (G-F#-F-Eb).

Since the dominant and tonic are not opposed linearly but rather are combined in one harmony throughout, the passage is still more easily understood tonally than the preceding B minor harmony, in large part due to the outlining of the Eb major triad melodically. The passage is the presentation of the key of Eb major in its entirety, rather than as a tonal utterance.

Finally, in mm. 95-8, where the bugle call on an F# major triad is interrupted by the hymn tune in C major, the expansion of the vocal range by stepwise motion provides the necessary links between the two musics so that the abrupt shift in character does not feel arbitrary: C# moves down to C-natural, F# up to G, and over a slightly longer period of time, A# up to the upper C in mm. 97-8. Here, voice-leading expansion is employed within a single voice to transition to a more expansive and explicitly tonal passage.

5.2 CONTRACTION

In contrast to Ives' use of voice-leading to expand the range between the primary voices, the contraction of those voices is often employed to mark the transition to less tonal music. There are important exceptions to this process, however, and his use of contraction is on the whole more varied and complex.

The clearest example of this process may be found near the end of the song (mm. 89-92), after the tranquil section in Ab major when Jesus has appeared to bless the poor, and the march of the congregation begins again:

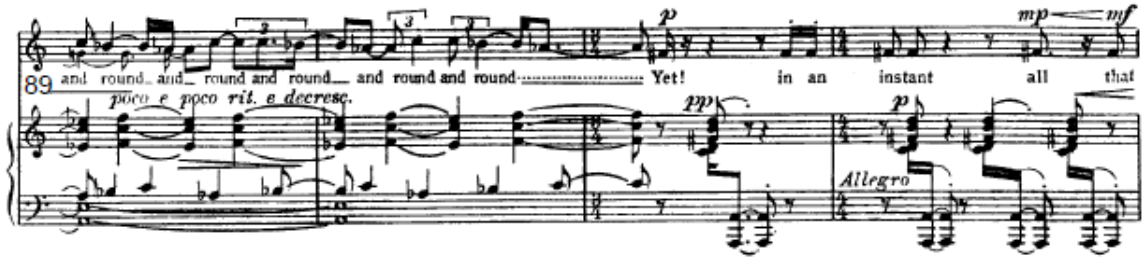


Figure 21. Voice-leading contraction in m. 91

The percussive D^7-ish piano harmonies have nothing in common with the extended Ab major harmony which precedes it. They make dramatic sense of course, as they have been associated with the march depicted in the text since the opening bars of the song. But, as a logical outgrowth of the preceding harmony, there is nothing to link the two sections except the stepwise voice-leading between the vocal line down from Ab to F#, and the piano bass up from Ab to A-natural.

A final example occurs in mm. 18-19. After four bars of more or less static harmony with bi-tonal implications (G-major in the piano, overlaid with a vocal melody strongly suggesting E major), at the implied half-cadence (in E major, m. 19) the music shifts to a distinctly atonal character, where the harmony is primarily composed of sets derived from [016] or [056] (pitches B, C, F, F#, and G), over a persistent A in the bass. The voice-leading contraction occurs in the vocal line (G# to F#) and the bass of the piano (G to A):

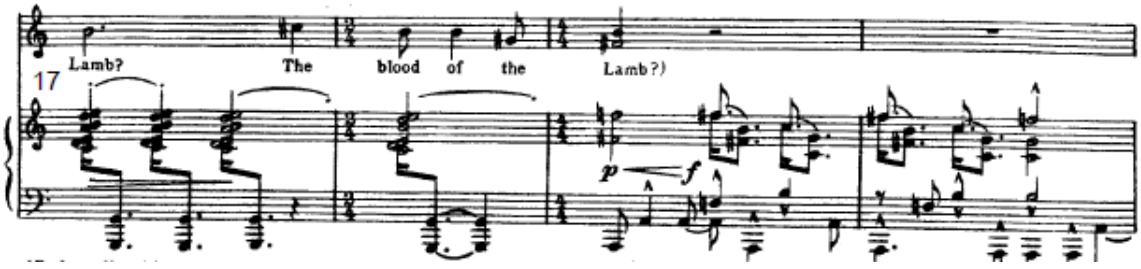


Figure 22. Voice-leading contraction in m. 18-19

A notable exception to the tendency of contraction to mark the transition to less tonal music occurs in the vocal line's opening phrase. Outlining a seventh chord (B-D-F#-A), on beat four of m. 4, the voice then outlines a simple triad (C-E-G), introducing the principal hymn tune which pervades the work. The C major phrase is far more tonal than the preceding two bars,

which as we have seen are tonally quite ambiguous. Although the C major passage is subverted harmonically with the subdominant in the bass when both tonic and dominant harmonies are implied, there is little doubt about the tonic or its stability. The contraction of vocal register here is necessary because of the text. "..Boldly with his big bass drum" is sung *forte* with an angular melody outlining the seventh chord, while 'Are you washed in the blood of the lamb?" must be set off somehow, as the author's parentheses suggest. Ives does this by changing the dynamic to *piano*, and immediately shifting to a more stable tonality, but also by contracting the vocal range from a seventh to a fifth.

5.3 OTHER USES OF VOICE-LEADING

It has already been shown that Ives uses longer-range voice-leading in the bass to create effective dominant-tonic relationships, even when the music above it has an ambiguous or even contradictory relationship to the putative tonic established. Though having somewhat less weight than such voice-leading in the bass, there is an impressive example of similar long-term voice-leading in the vocal part which helps to connect several contrasting sections from mm. 42-58.

The gradual, inexorable, step-wise movement of the vocal line over these bars from the low D up to the high D is not particularly subtle or well-concealed. Rather, it serves to unite five tonally quite distinct types of music into what is clearly meant to be heard as a single formal structure, culminating in the strong statement of G major as tonic at m. 60 (see Figure 20), and it is no accident that the vocal range outlines an octave from D to D over these bars. This emphasis on D throughout the melody allows Ives to forgo an explicit dominant harmony to prepare the

arrival of G major at m. 61 (which would represent too dogmatic a use of tonal processes), while still having that arrival feel as if there had been such preparation.

One important instance of step-wise voice-leading between contrasting sections which employs neither expansion nor contraction occurs near the end of the song, before the final iterations of “Are you washed in the blood of the Lamb” (mm. 105-8):

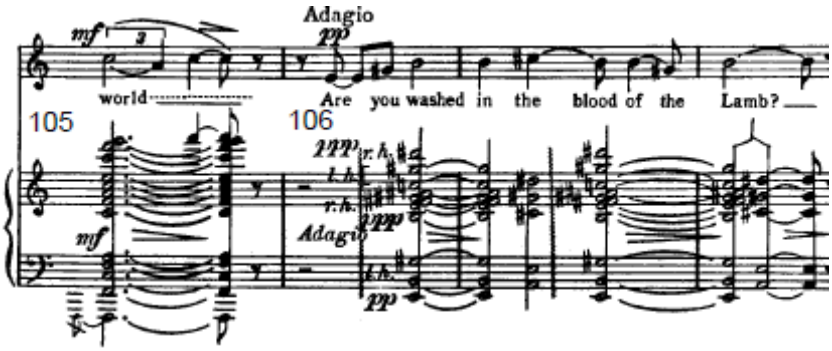


Figure 23. Parallel voice-leading in outer voices, mm. 105-106

Technically, the register contracts rather dramatically here between the outer voices of the piano. This recalls the contraction of the vocal line's register at the first iteration of 'Are you washed...?' near the beginning of the song, which is similarly highlighted by a dramatically reduced dynamic. However, it is the movement in the piano bass from F down to E, and the vocal line down from C to B which most stands out.

This is the only significant use of parallel motion between principal voices between adjoining, contrasting sections in the work. The harmonic and dramatic effect is striking. That the voice-leading creates parallel fifths is not as important as the parallel major triads in root position which result (F major to E major, clouded somewhat by foreign pitches in the upper register of the piano); the immediate foreignness of the one harmony to the other, together with

the *pianissimo* dynamic and the two beats rest between them gives this final statement of the question 'Are you washed...?' an ethereal, distant, and tranquil quality that has not been heard thus far.

It must be noted, however, that while the E major harmony is quite clearly a tonic (clear if only because we have heard this tune outlining a tonic triad so many times during the course of the song, despite the lack of a dominant preparation here), the preceding F major chord is not; rather it is the subdominant in place of the anticipated tonic, so that the shift in *keys* is actually a mediant relationship (C major to E major), a slightly less abrupt shift than F major to E major. This transition is thus a carefully calibrated juxtaposition of both stark contrast of triadic harmonies (creating a sense of rhetorical distance), coupled with a more subtle juxtaposition of keys - still foreign to one another, but a familiar enough relationship from much previous tonal music that it is not jarring– paradoxically repairing somewhat the links between the two passages which the parallel triads serve to weaken. Only parallel voice-leading between the primary voices can efficiently make this delicate balance between C major, F major and E major work in practice.

The contrast of voice-leading expansion and contraction is clearly aligned with the juxtaposition of tonal and atonal materials – expansion being related to shifts toward tonality, stasis, and broadness, and contraction with atonality, agitation, and movement (as well as distance or parentheses). These processes are ideal for creating organic links between disparate materials without undermining the dramatic effect of the juxtaposition of those materials. Finally, the use of longer-range voice-leading, in bass or vocal line, provides an essential means for dealing with the problem of dominants; problematic because the dominant and its implied harmonies can be too suggestive of tonality and creating too sharp a distinction within the

continuum of tonal coherence. Through long-range voice-leading, Ives can create dominant preparation of a stable tonic without having to use an obtrusive V7 chord, and likewise can create the illusion of a dominant-tonic relationship without an actual key or tonic ever being firmly established. This ability to elide the challenges presented by the importance of the dominant in tonal harmony is essential in creating a more seamless continuum.

6.0 CONCLUSIONS

Ives has long had a reputation as a messy or imprecise composer, a reputation which in some respects is understandable. There are details in this work, as in many of his other works, which remain seemingly inexplicable and arbitrary. As I hope this paper has helped demonstrate, this reputation is unjustified in many respects; the exactness with which Ives manipulates his diverse materials to create precisely the degree of tonal stability or instability needed at a given moment represents the very model of compositional craft.

Because the tonal and atonal aspects of the song are primarily referential – they are meant to evoke by themselves other music or types of music, and the associations that come with them – only the outward results of tonality and atonality can reasonably be utilized, with their deeper processes largely irrelevant to this work. The underlying organicism that one looks for in a musical work must come from other sources, and Ives finds it in elements that can inform the entirety of his musical language in this song – tonal or atonal elements used both in and outside of their normal contexts, and above all through voice-leading – so that the language, in spite of its surface contradictions and messiness, is primarily built upon just a few elements.

Although in Chapter Two I sketched a rough outline of the continuum between tonality and atonality, this continuum cannot be viewed only in two dimensions; the Ab major *adagio* is absolutely tonal by any reasonable standard, but is muddied by the contrasting meters and phrase-lengths in its four voices, while mm. 97-105 are just as, if not more clearly tonal due to

the tonal melody set within four-bar phrases and a strong quadruple meter. Ives has undermined the pitch element of tonality in these bars, but it is impossible to say that these bars are really more or less tonal than the preceding *adagio*. Because our sense of tonality in this song does not depend on the actual presence of tonal procedures, but rather on being manipulated into taking the outward symptoms of tonality as we understand them at face value, we are free to apply the associations one draws from tonality to the music and text.

Ives generally associates tonality in this song with emotions such as stability, comfort, ecstasy, and familiarity; and atonality with instability, agitation, and uncertainty. The fact that his equation of tonality with generally positive emotions or images, and atonality with negative ones, is a naïve and simplistic one is not a drawback either, for in most of the song both ends of the continuum are blended together to evoke complex and often ambiguous, or even contradictory, images and emotions. In a work which draws heavily on tonal elements and expects understanding of tonality on the part of the listener, only a musical language in which that tonal coherence can be manipulated with the utmost precision can allow such an experience.

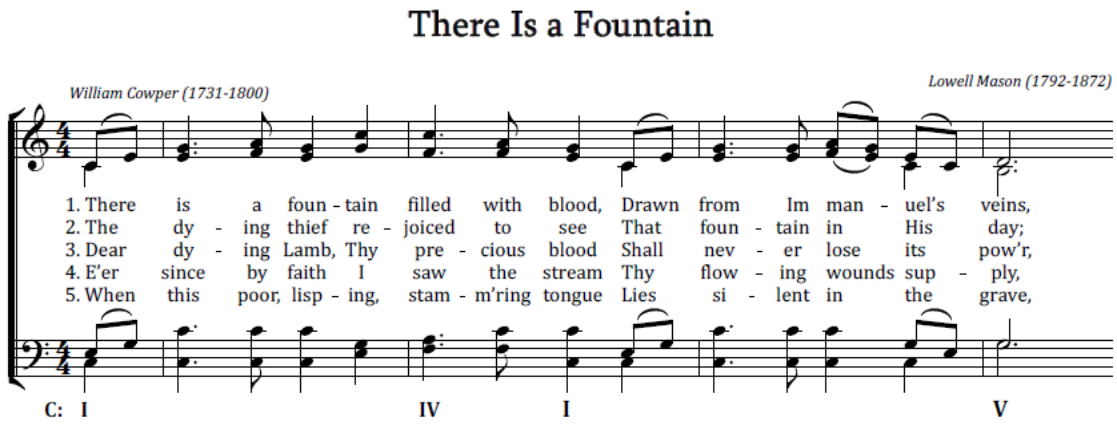
I believe that the type of analysis I have employed in this paper could shed further light on the nature of many other works of Charles Ives; while some of his works are entirely "tonal" (in the sense used in this paper) and some are entirely "atonal," many largely inhabit the complicated grey area between these extremes, though in quite different ways and degrees than *General William Booth*. For instance, the song *Ann Street* (referenced in Chapter One), seems almost entirely to fall somewhere between tonality and atonality, while, somewhat paradoxically, a sense of functional tonality never seems absent. It is worth noting that the melodic material of *Ann Street* heavily employs elements which are found in *General William Booth* (e.g. descending thirds, the set [035]). Indeed, Ives' songs as a whole would seem to lend themselves to this type

of analysis; as so many of them deal with themes such as childhood memories or idealized recollections of the past, while various contrasting themes and images compete with them, it is not surprising to find juxtapositions of tonality and atonality similar to those found in *General William Booth*.

As noted in my introductory chapter, Ives' use of such a continuum as I have described had already been perceived by other scholars (for instance in the *Fourth Symphony*), but only in a cursory manner. If such a view of Ives music were undertaken more thoroughly, further steps might be taken towards a deeper understanding of this often confusing and seemingly contradictory music, yet without denying that it is these apparent contradictions which form the substance of much of his work.

APPENDIX A

LOWELL MASON'S ARRANGEMENT OF 'THERE IS A FOUNTAIN'



The first line of the hymn, from which Ives drew much of the melodic material in *General William Booth Enters Into Heaven*, with Roman numeral analysis.

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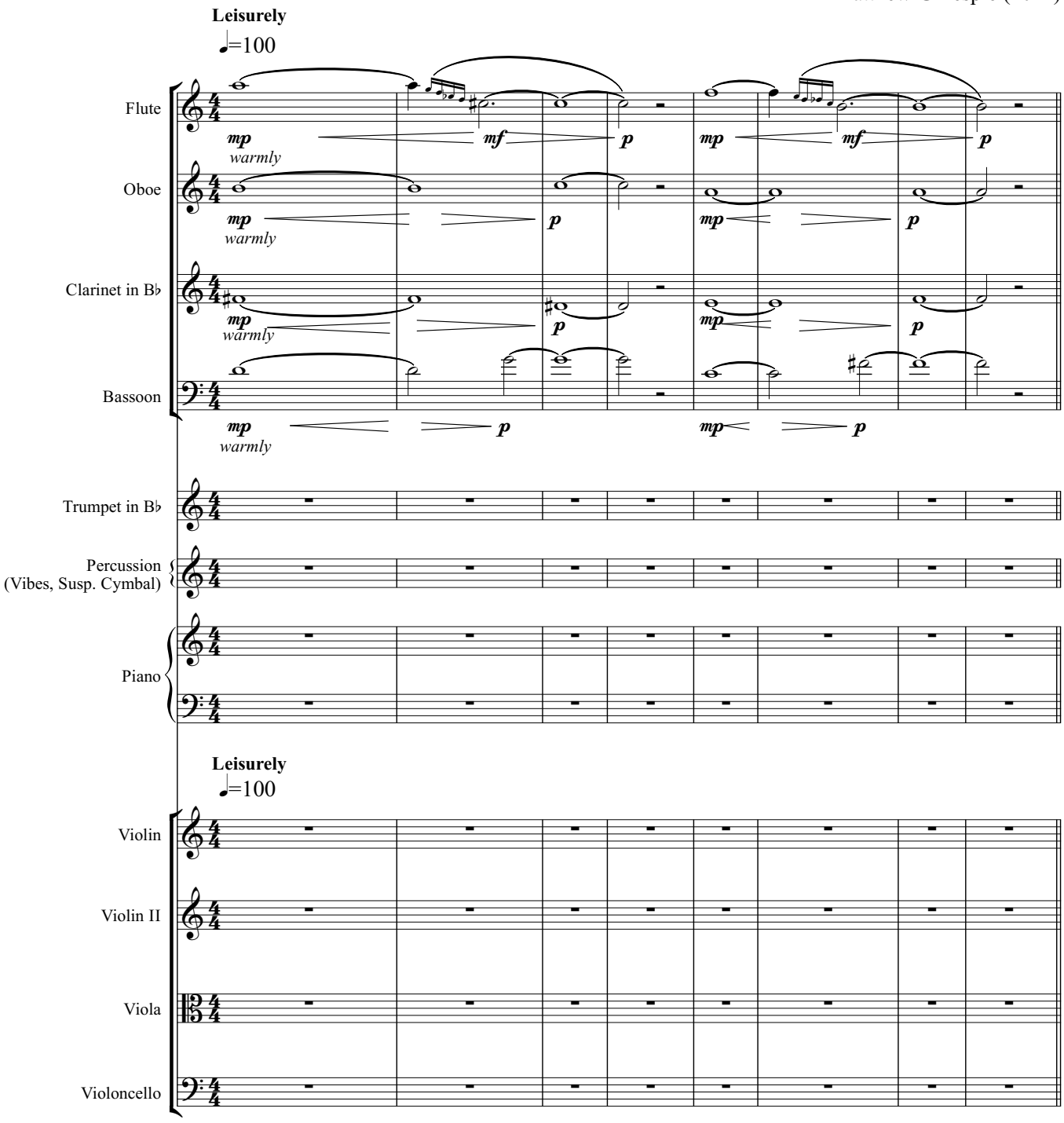
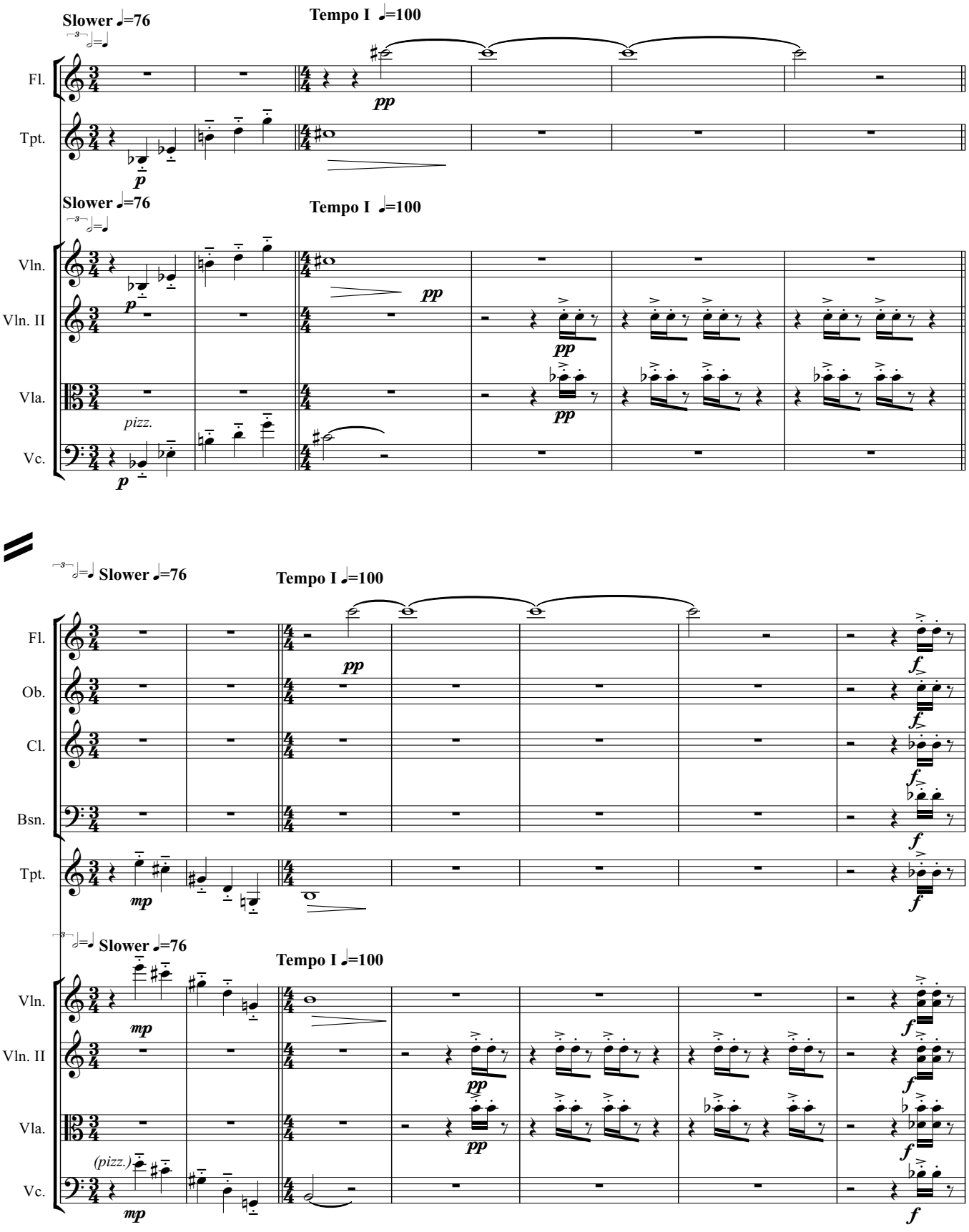
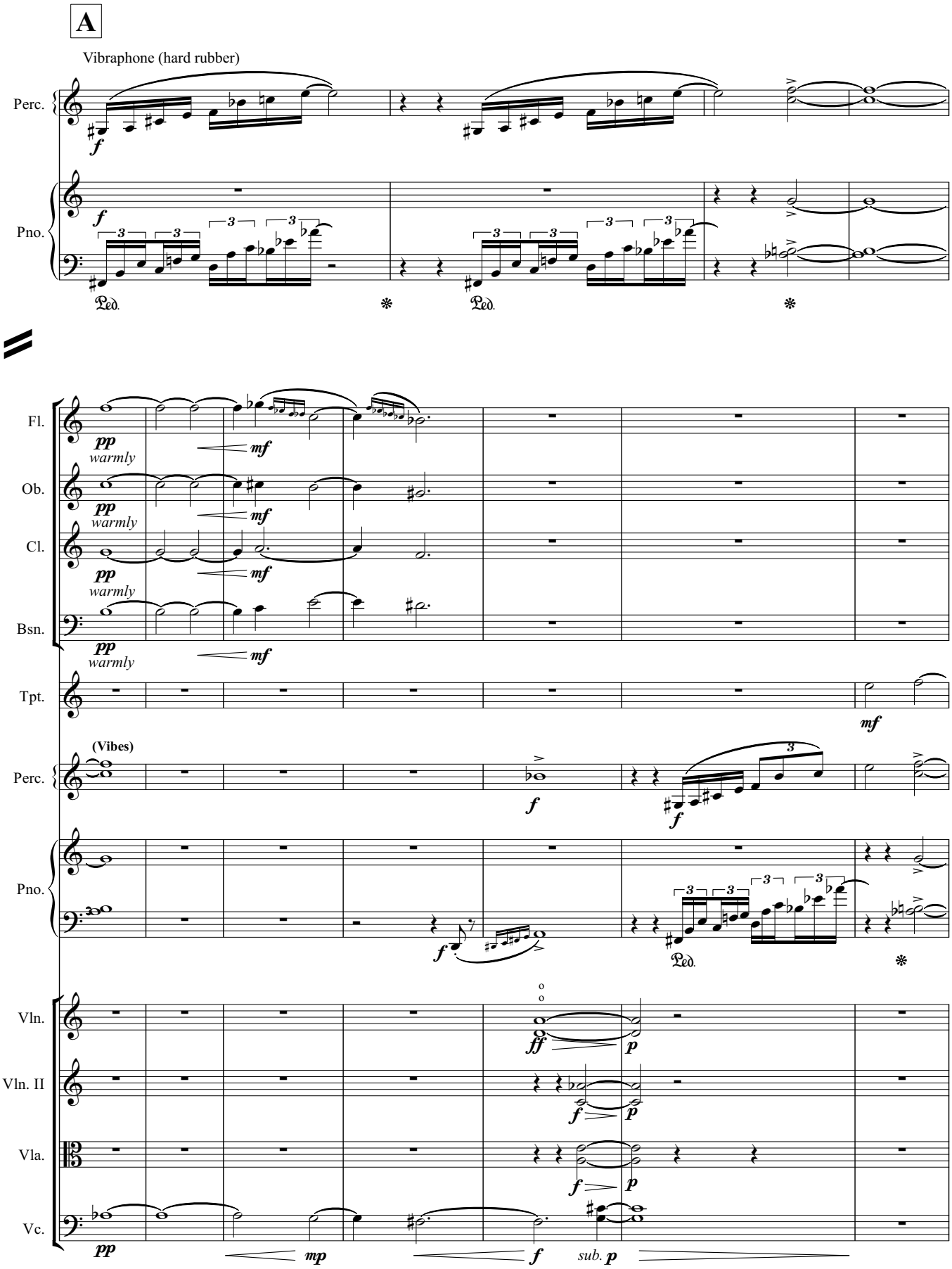
CHIAROSCURO

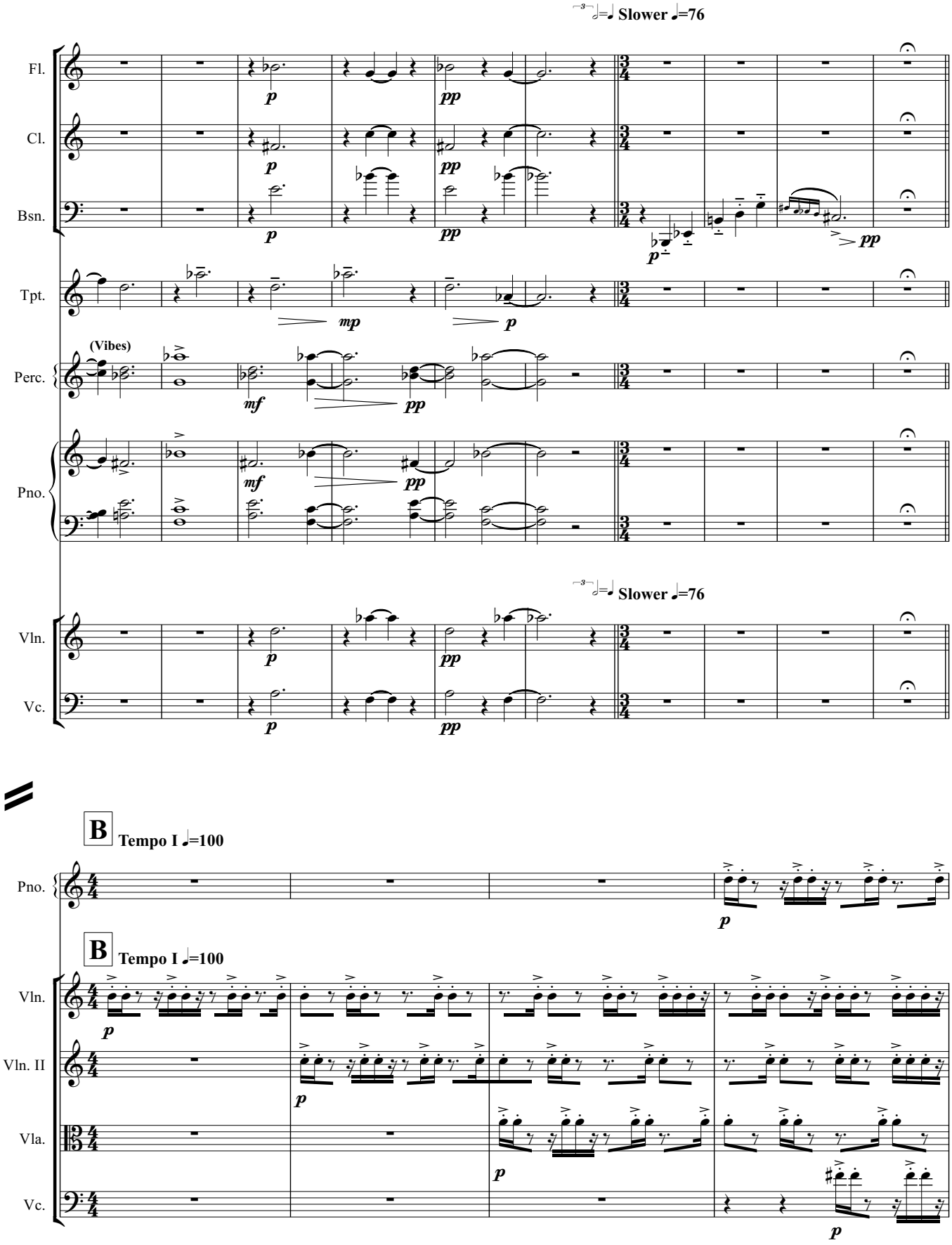
for Chamber Ensemble

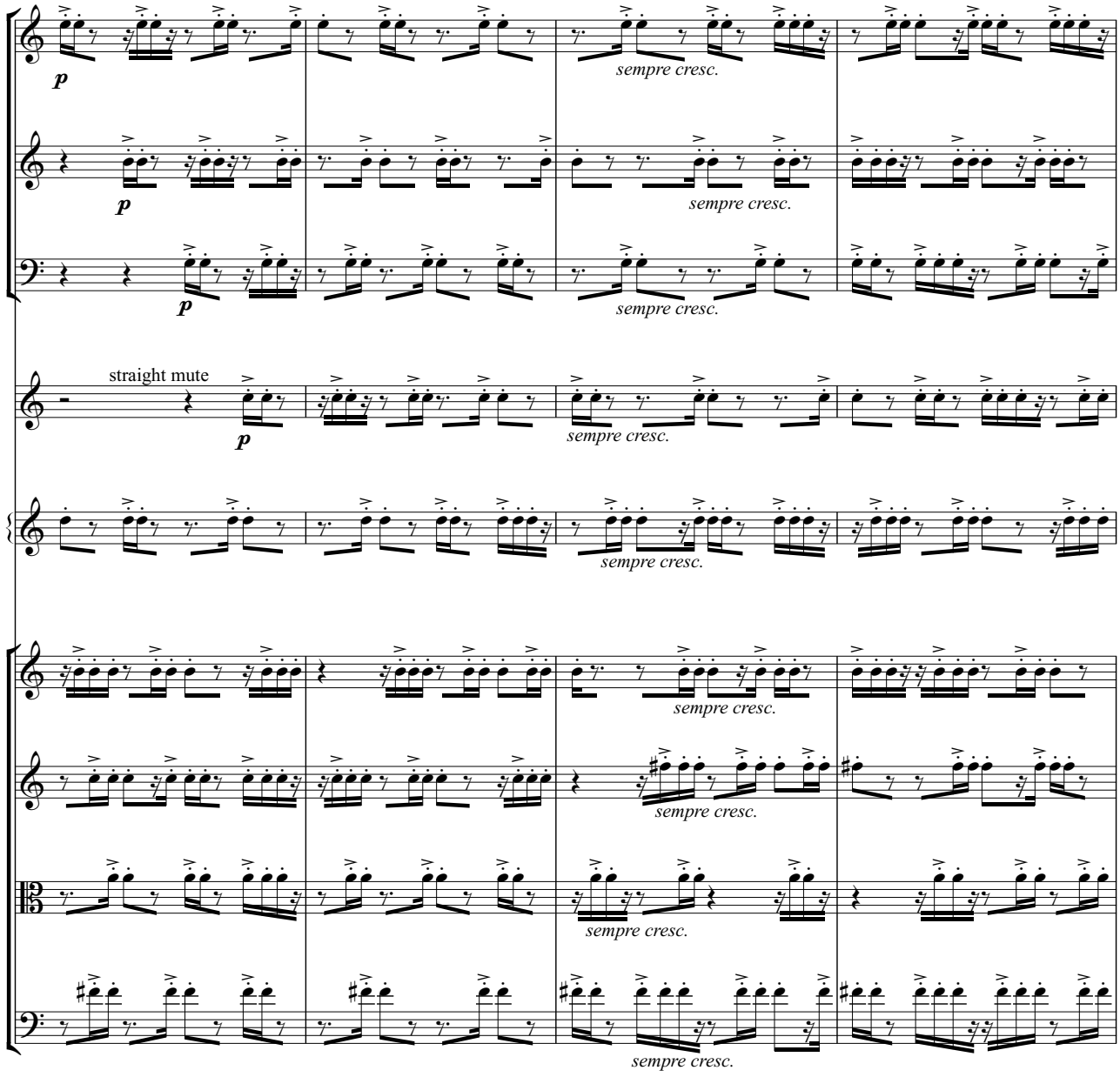
Matthew Gillespie (2011)

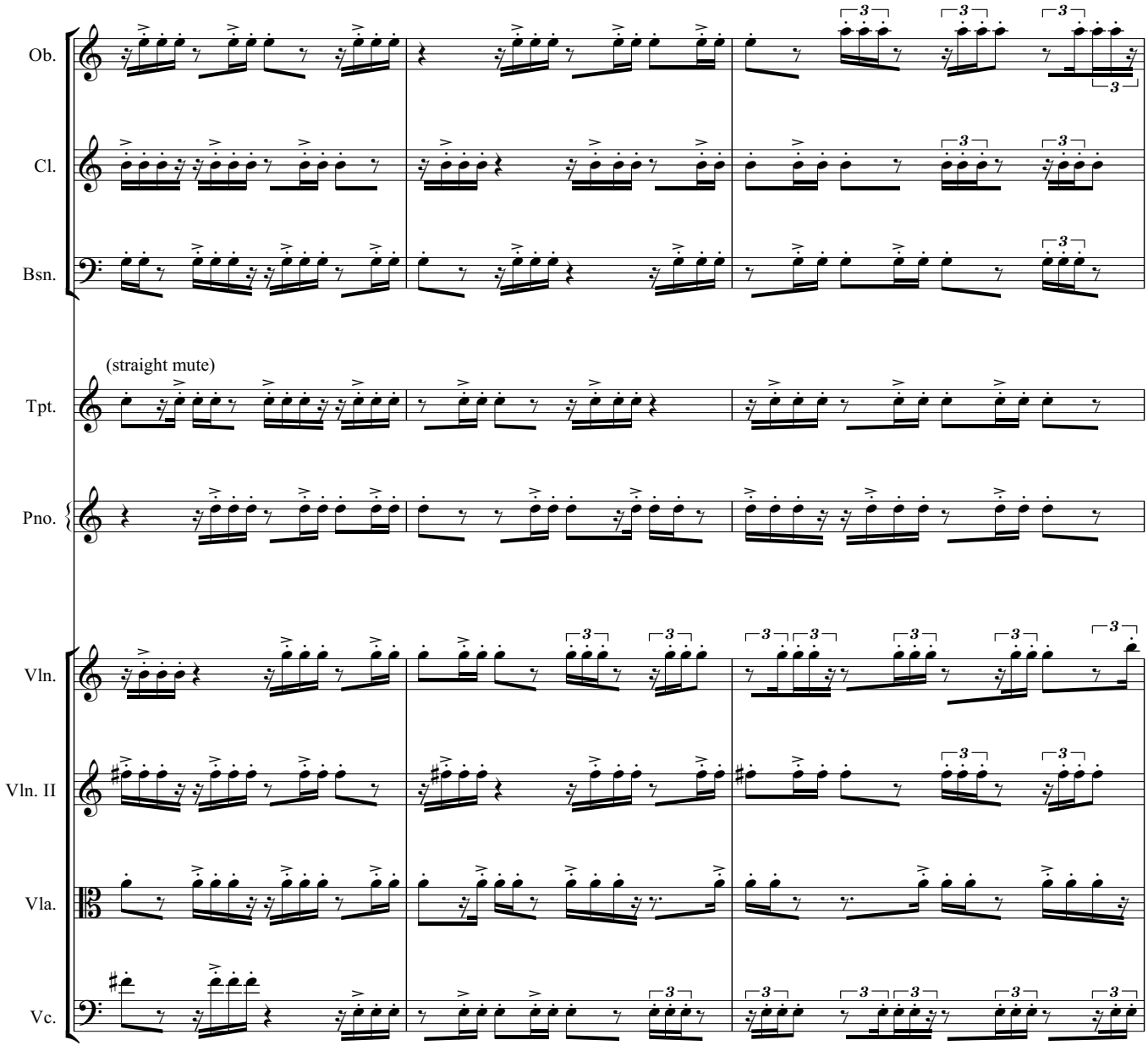


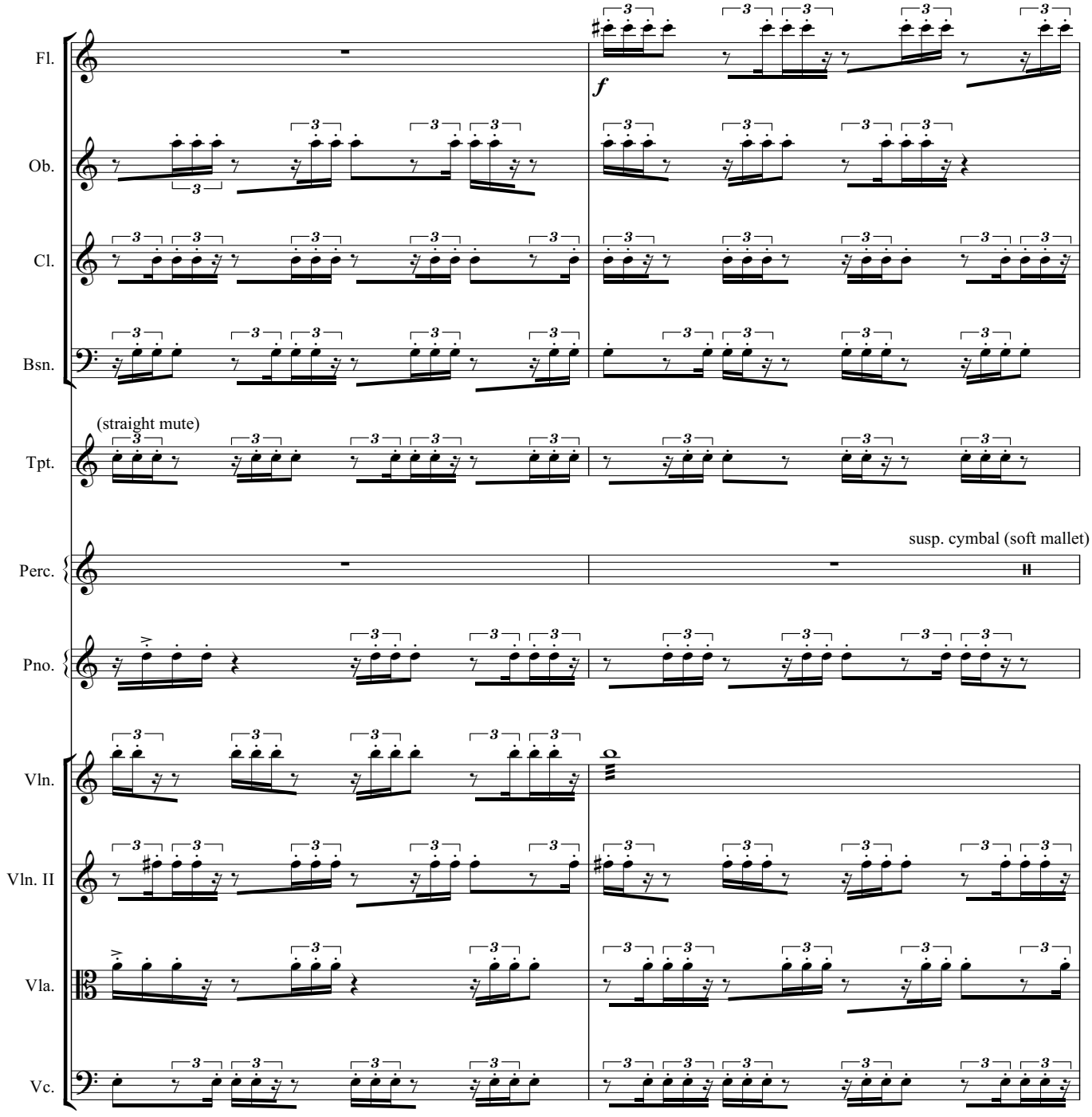

Slower ♩=76
Tempo I ♩=100
Fl.
Tpt.
Slower ♩=76
Tempo I ♩=100
Vln.
Vln. II
Vla.
pizz.
Vc.
Slower ♩=76
Tempo I ♩=100
Fl.
Ob.
Cl.
Bsn.
Tpt.
Slower ♩=76
Tempo I ♩=100
Vln.
Vln. II
Vla.
(pizz.)
Vc.

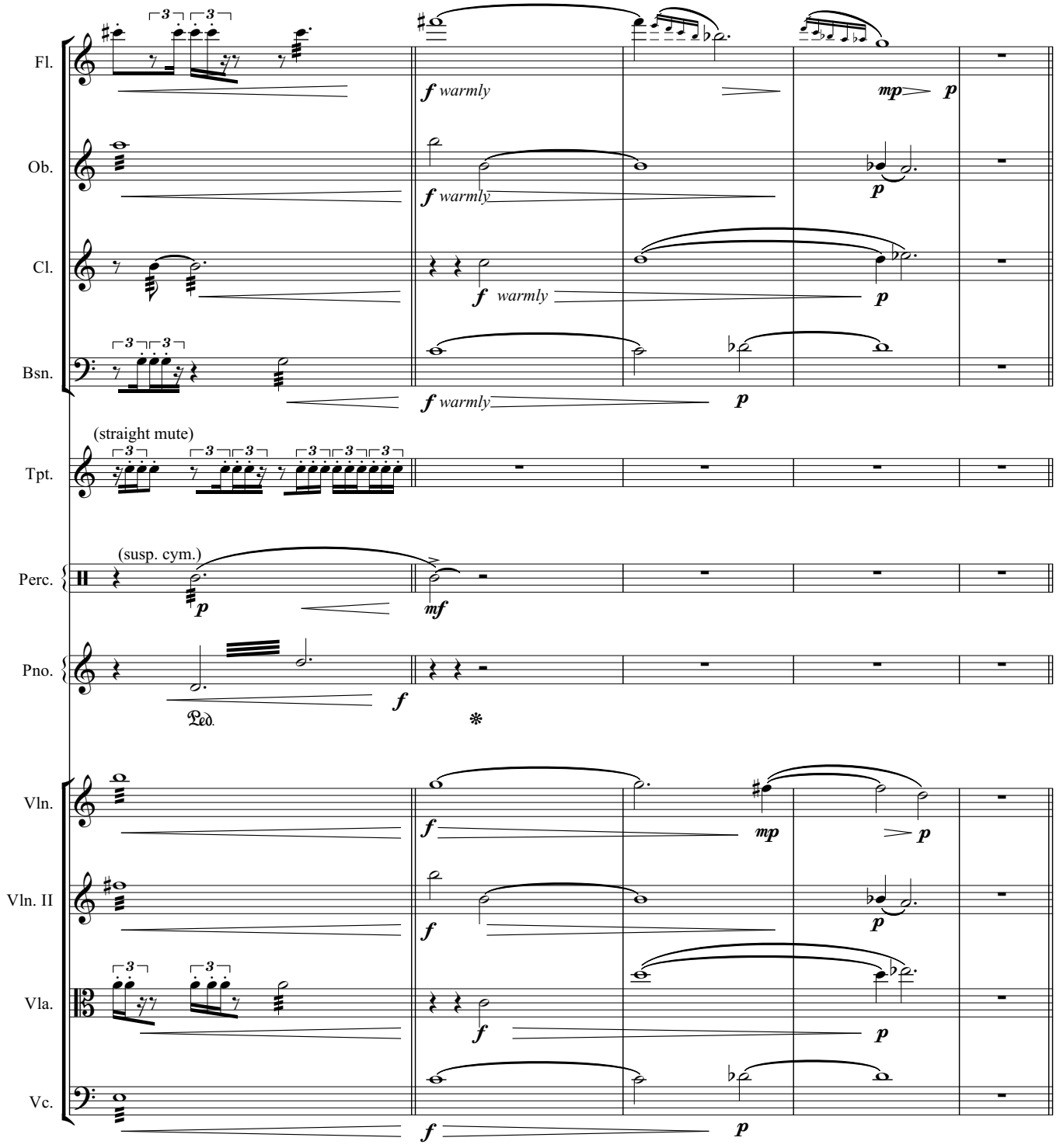

A
Vibraphone (hard rubber)
Perc.
Pno.
Fl.
Ob.
Cl.
Bsn.
Tpt.
(Vibes)
Vln.
Vln. II
Vla.
Vc.
warmly
sub. p

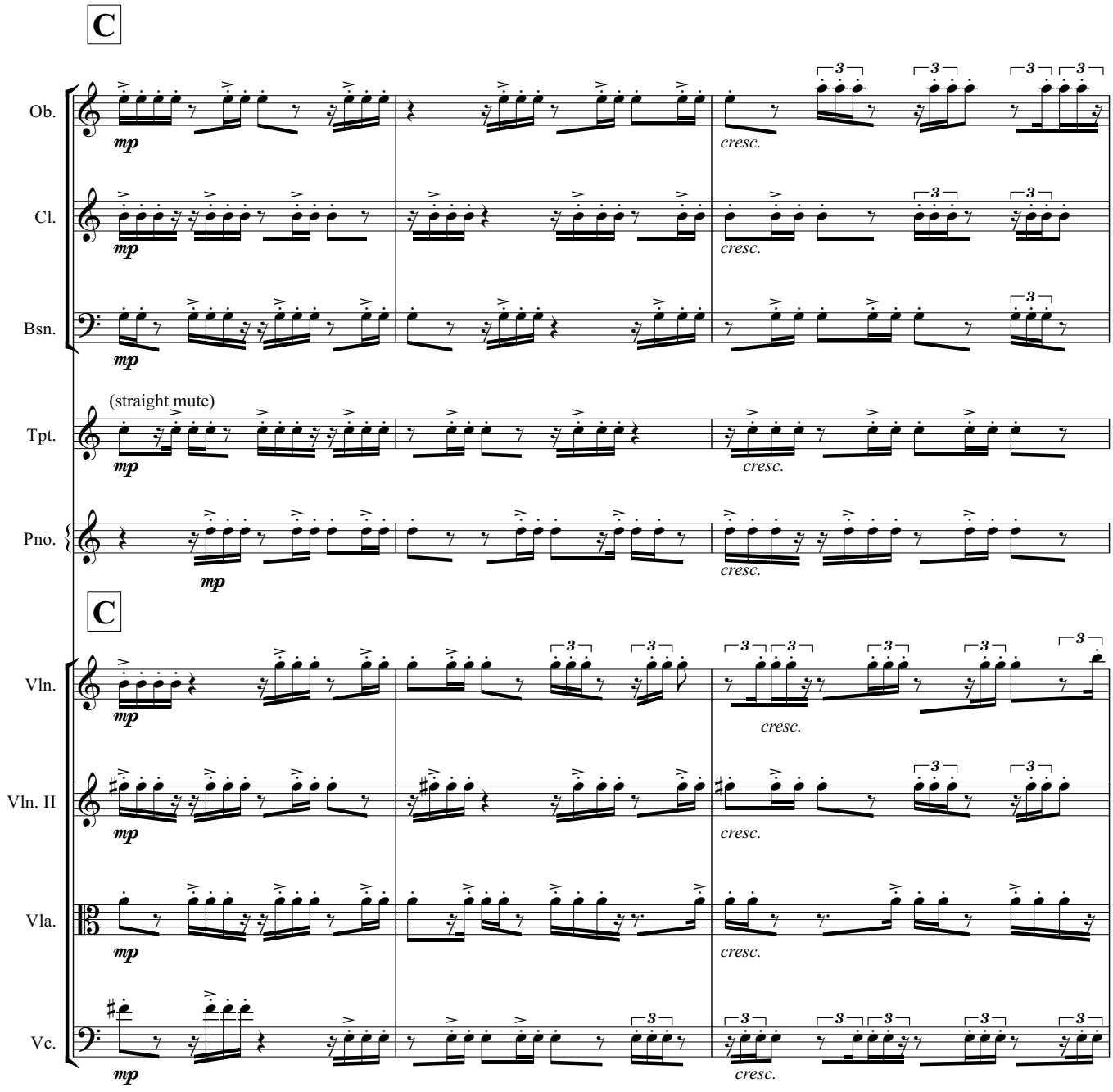

Slower ♩=76
Fl.
Cl.
Bsn.
Tpt.
(Vibes)
Perc.
Pno.
Slower ♩=76
Vln.
Vc.
B
Tempo I ♩=100
Pno.
B
Tempo I ♩=100
Vln.
Vln. II
Vla.
Vc.

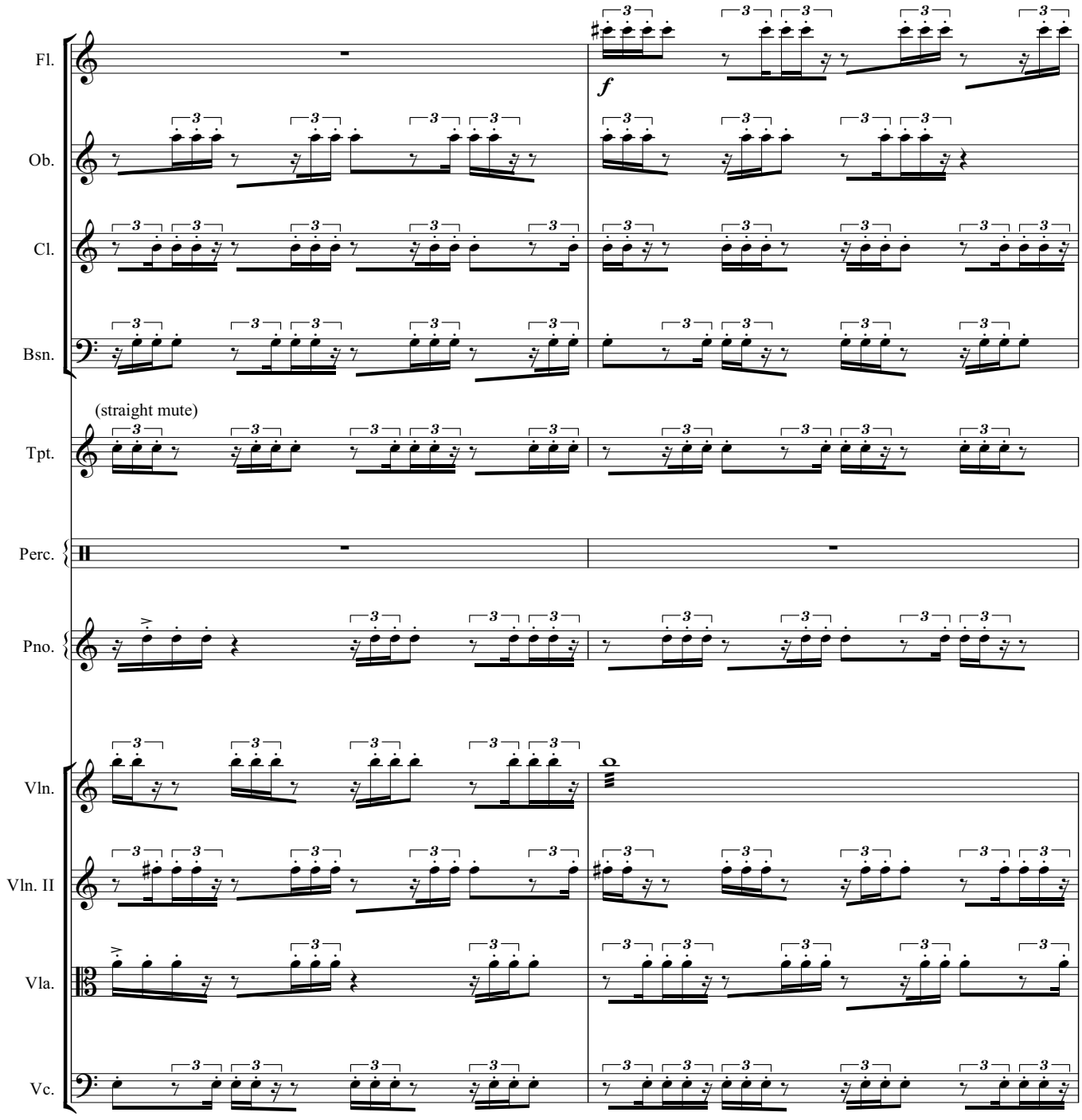

Ob.
Cl.
Bsn.
Tpt.
straight mute
Pno.
Vln.
Vln. II
Vla.
Vc.
p
sempre cresc.

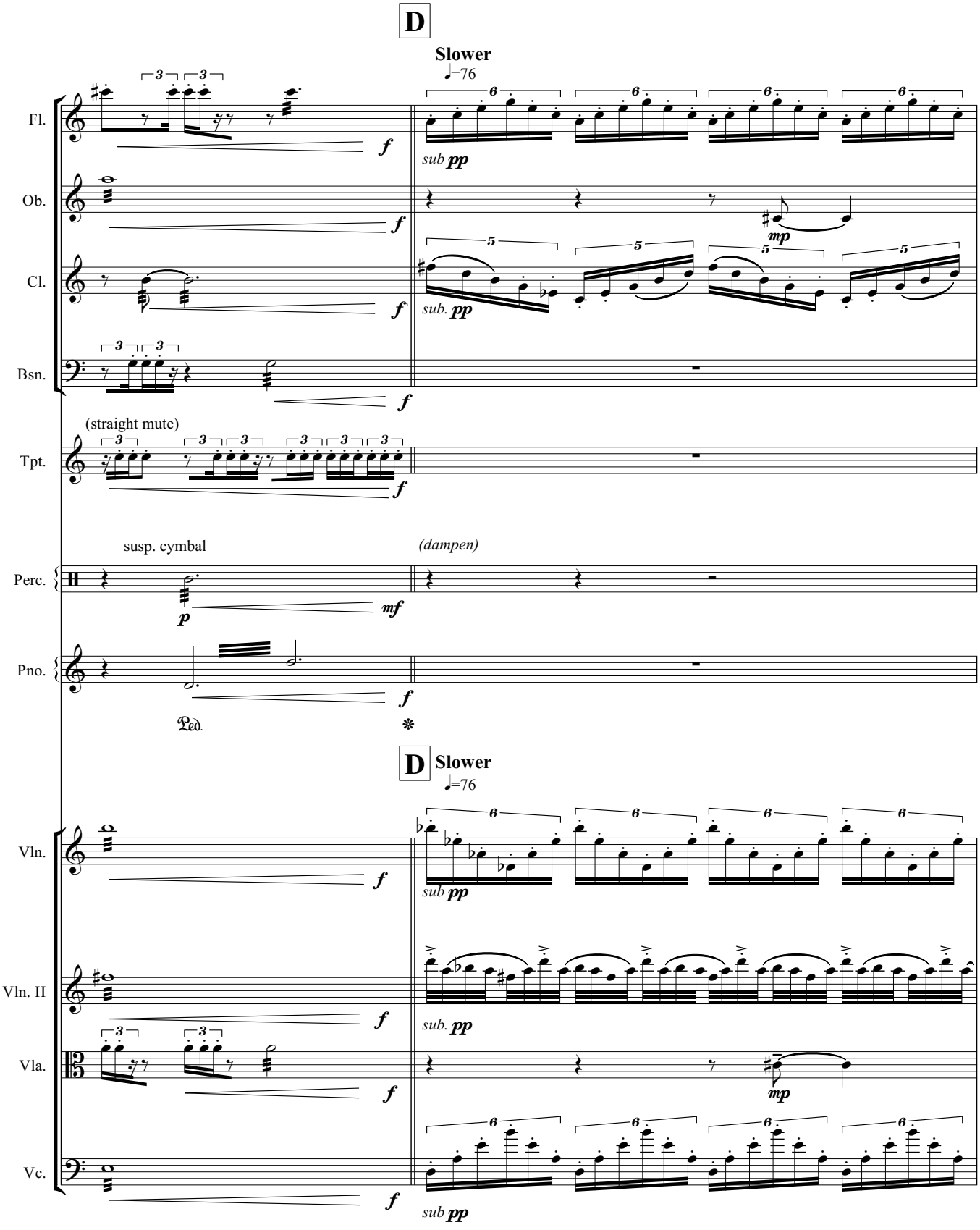

Ob.
Cl.
Bsn.
(straight mute)
Tpt.
Pno.
Vln.
Vln. II
Vla.
Vc.

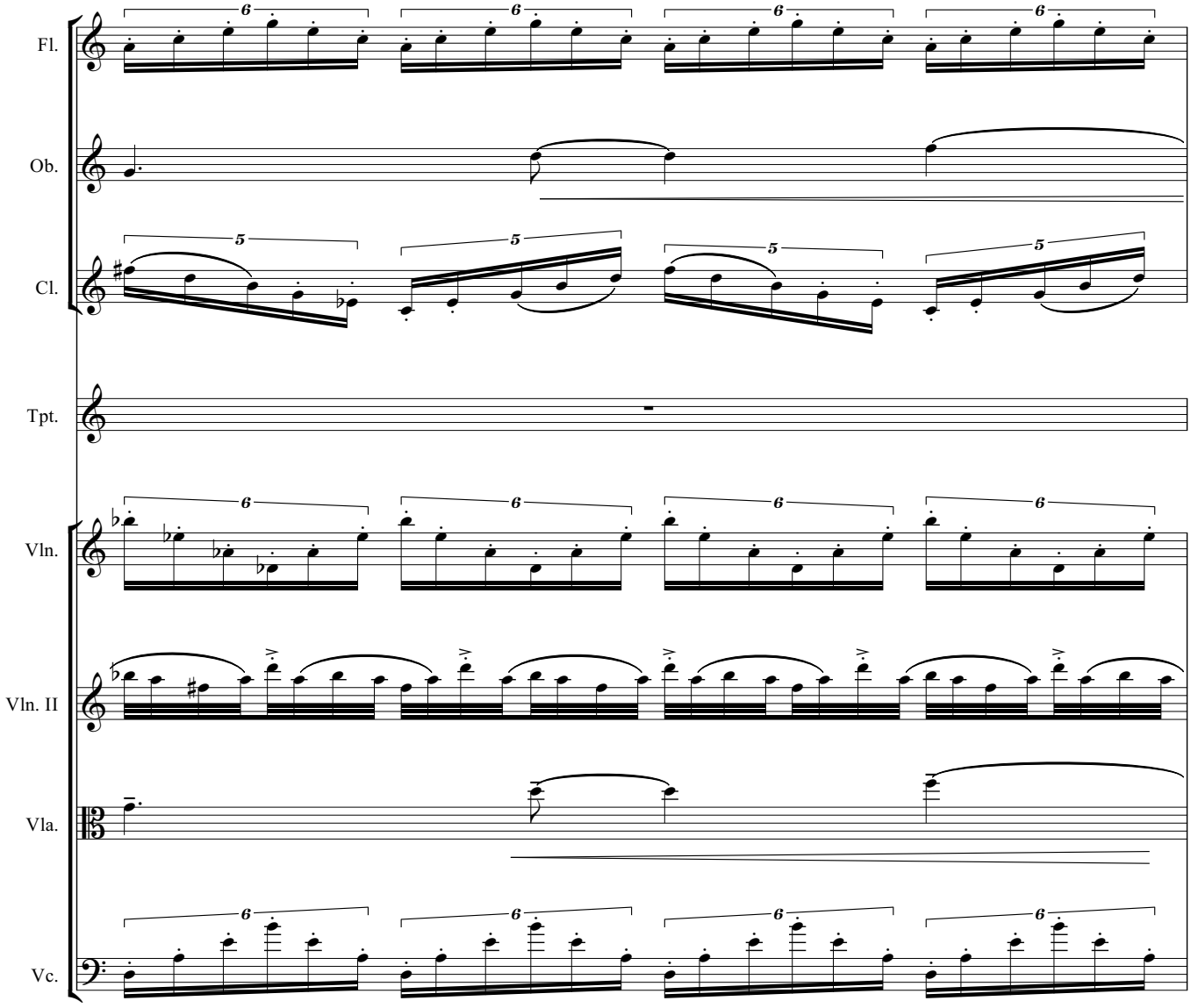

Fl.
Ob.
Cl.
Bsn.
(straight mute)
Tpt.
susp. cymbal (soft mallet)
Perc.
Pno.
Vln.
Vln. II
Vla.
Vc.

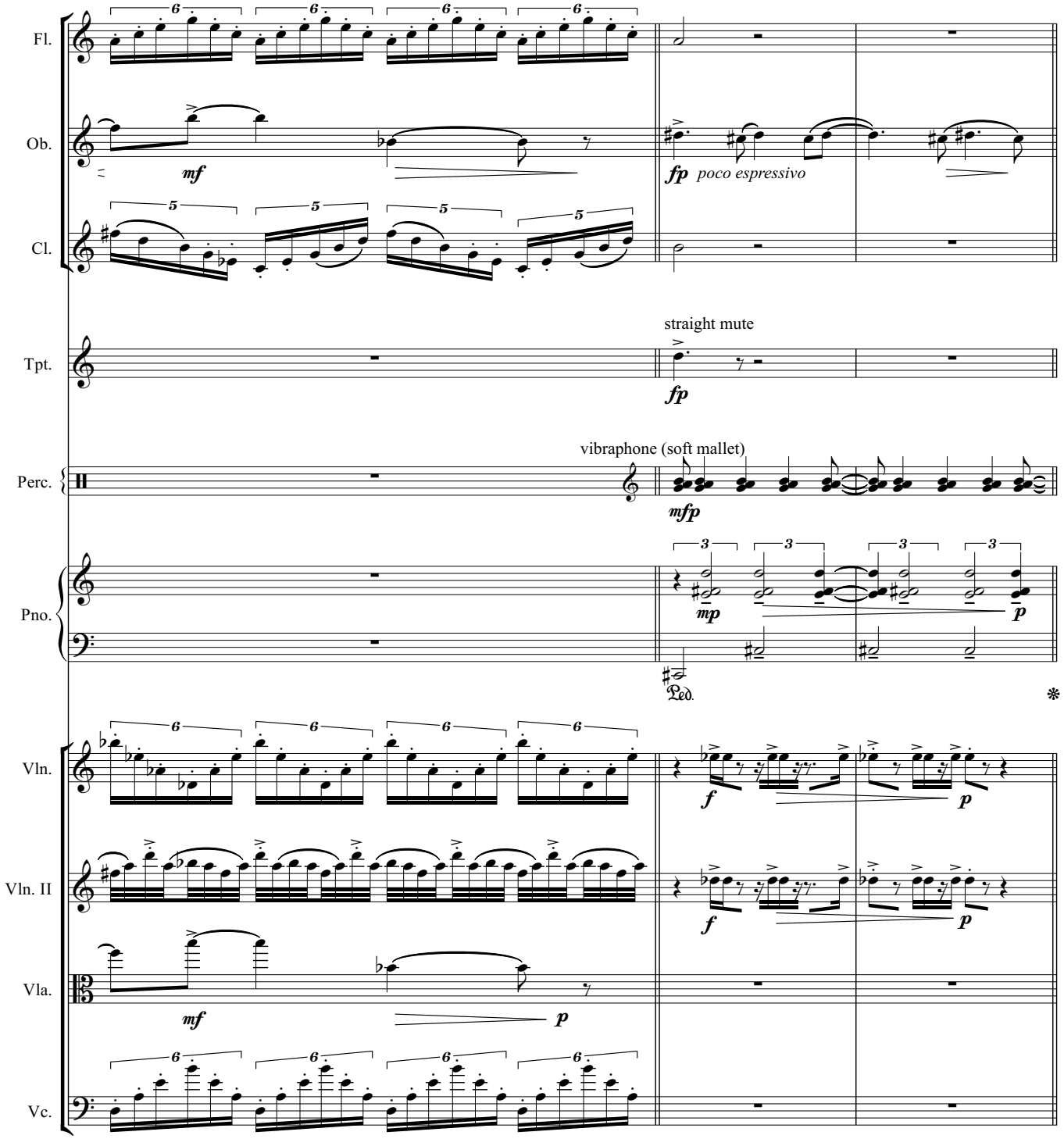

Fl.
Ob.
Cl.
Bsn.
Tpt.
Perc.
Pno.
Vln.
Vln. II
Vla.
Vc.
f warmly
mp
p
(straight mute)
(susp. cym.)
mf
Ped.
*

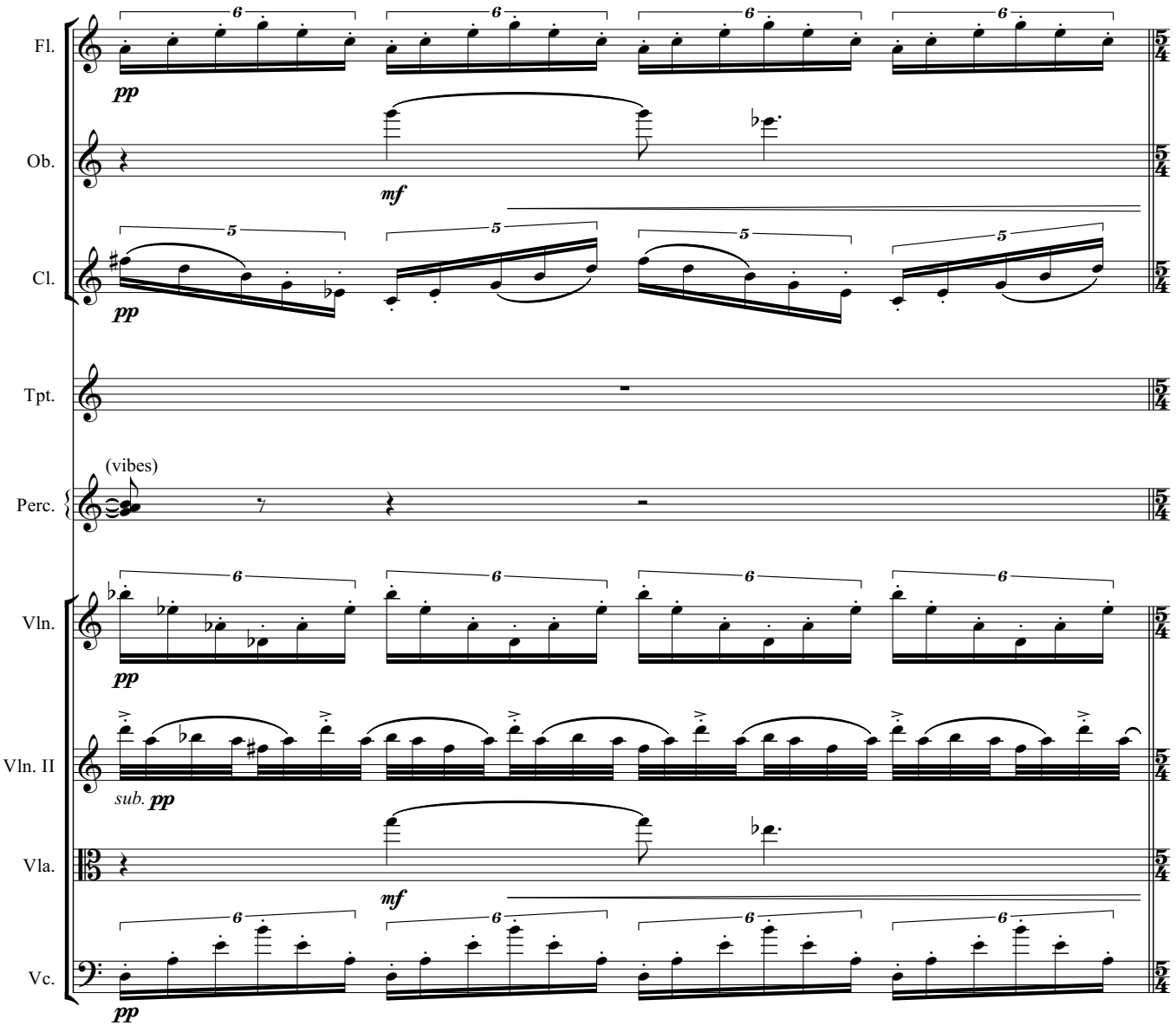

C
Ob.
Cl.
Bsn.
(straight mute)
Tpt.
Pno.
C
Vln.
Vln. II
Vla.
Vc.
mp
cresc.

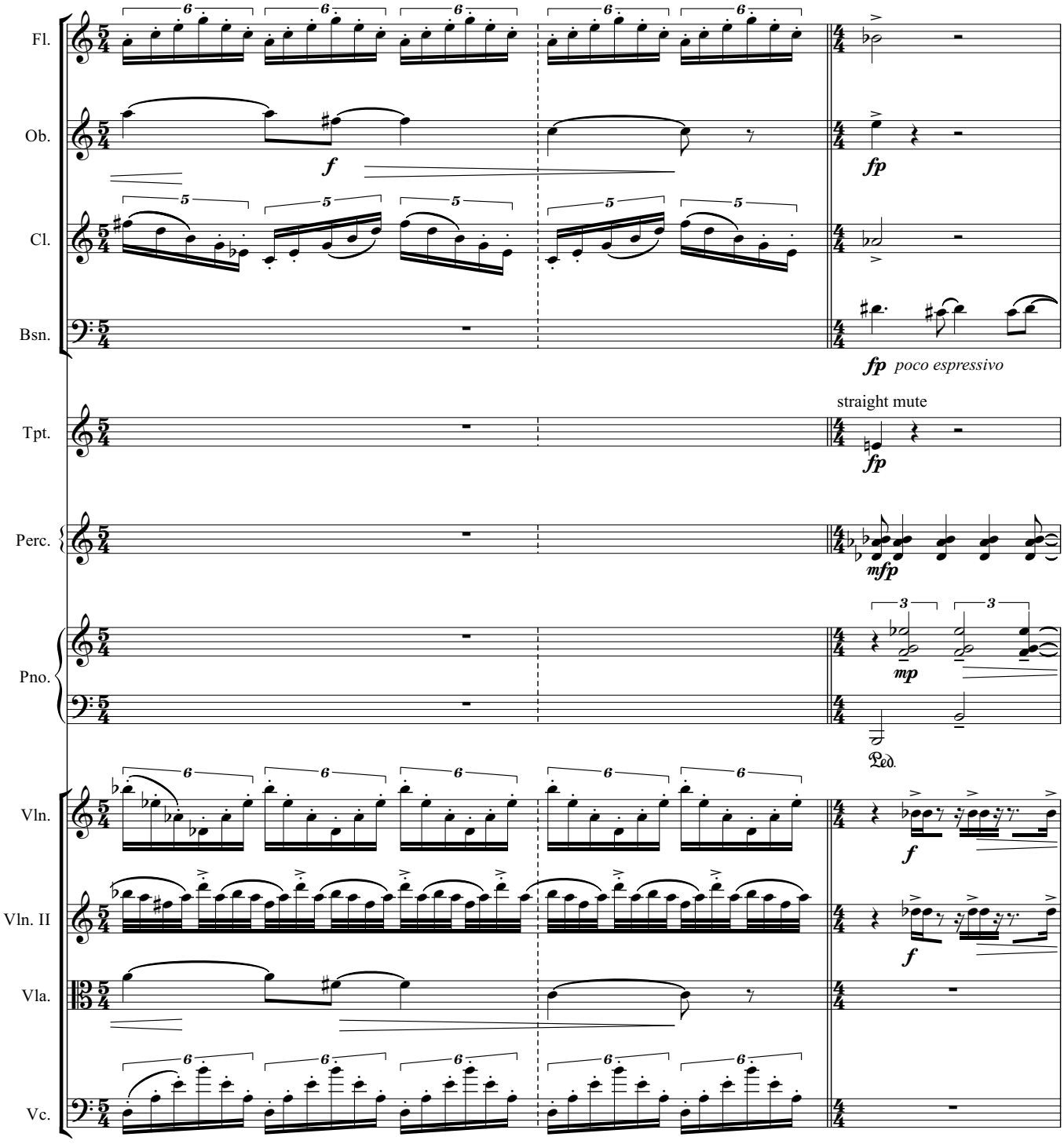

Fl.
Ob.
Cl.
Bsn.
(straight mute)
Tpt.
Perc.
Pno.
Vln.
Vln. II
Vla.
Vc.
f

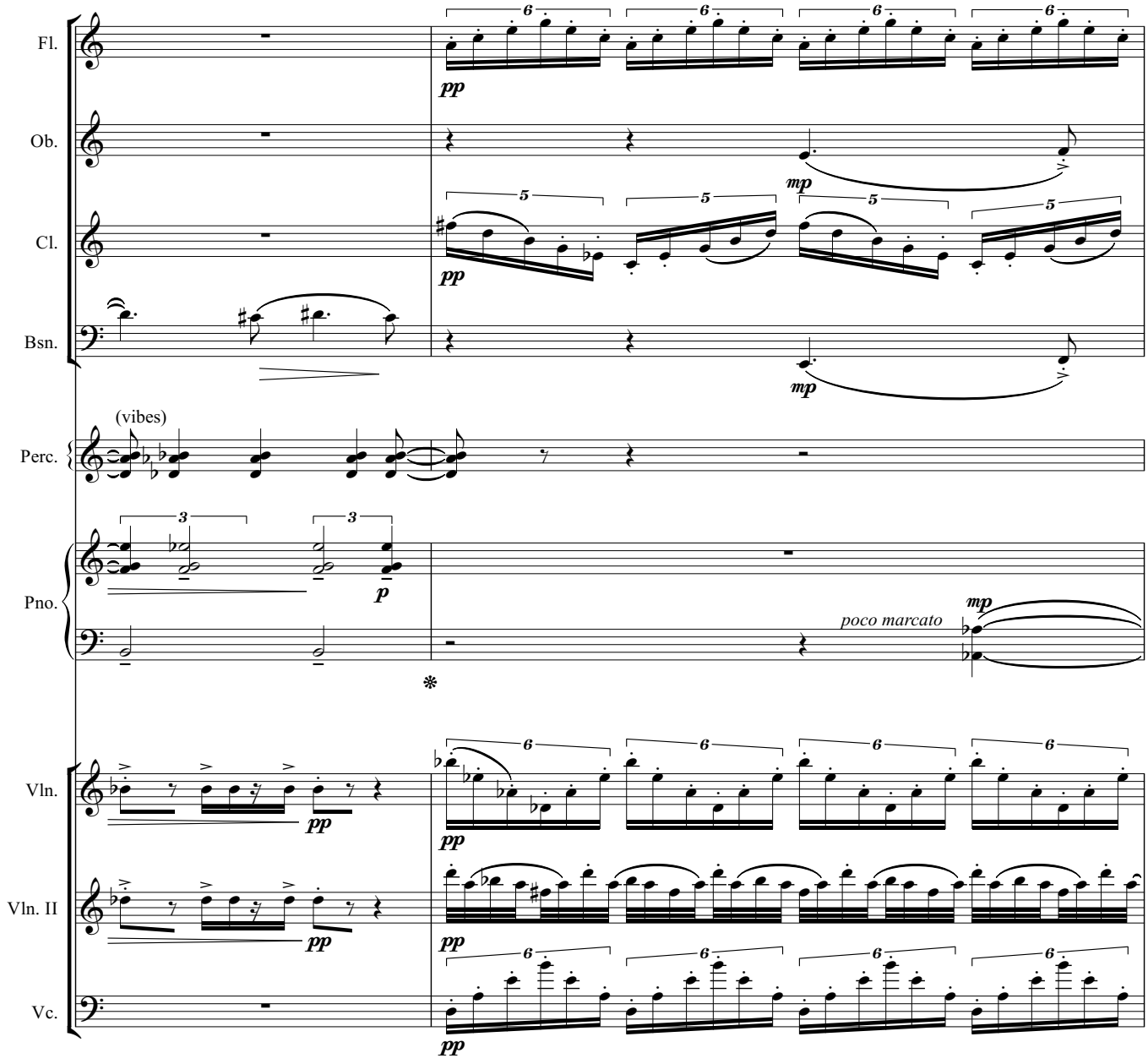

D
Slower
♩=76
Fl.
Ob.
Cl.
Bsn.
(straight mute)
Tpt.
susp. cymbal
(dampen)
Perc.
Pno.
Ped.
D
Slower
♩=76
Vln.
Vln. II
Vla.
Vc.

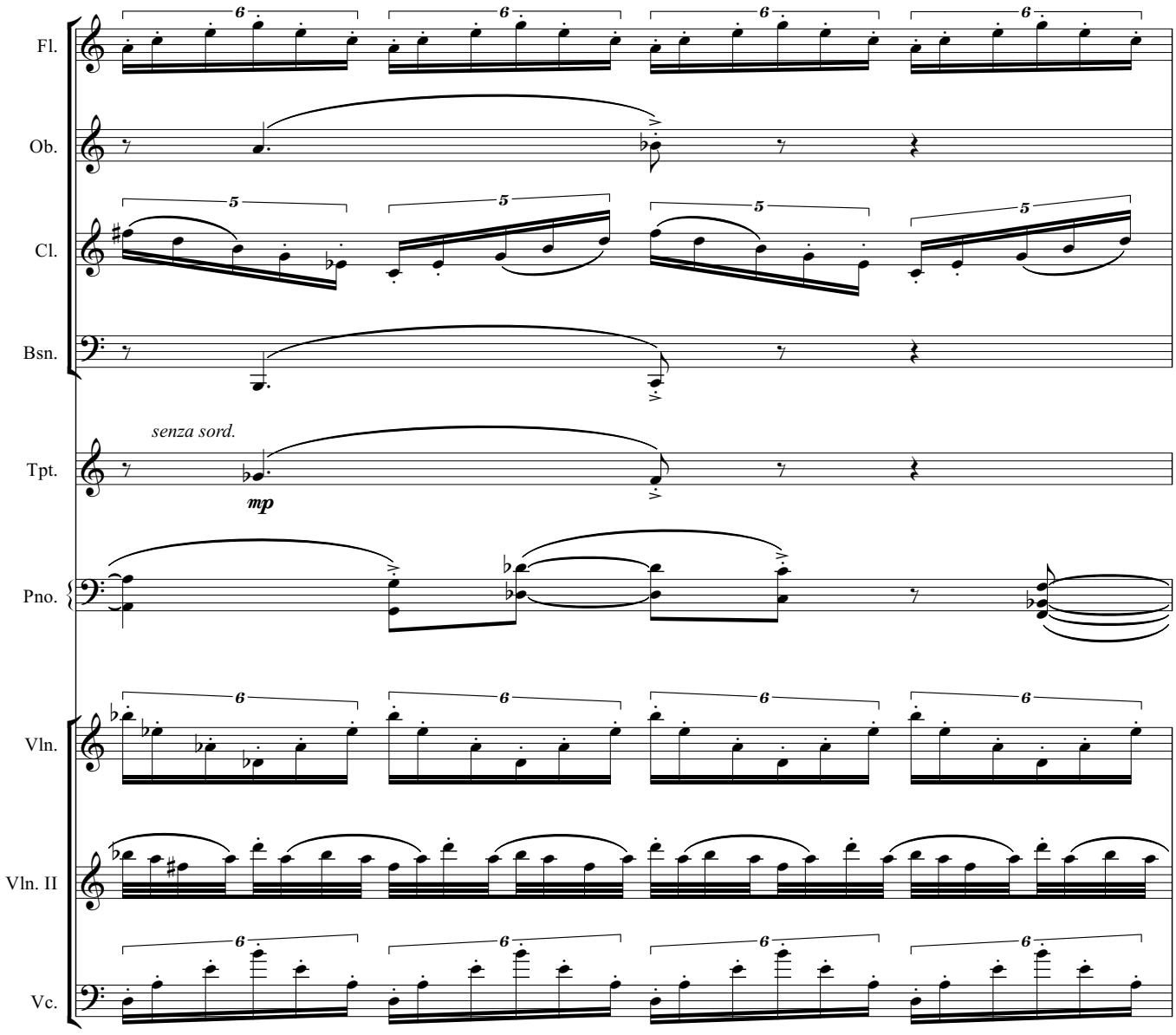

Fl.
Ob.
Cl.
Tpt.
Vln.
Vln. II
Vla.
Vc.

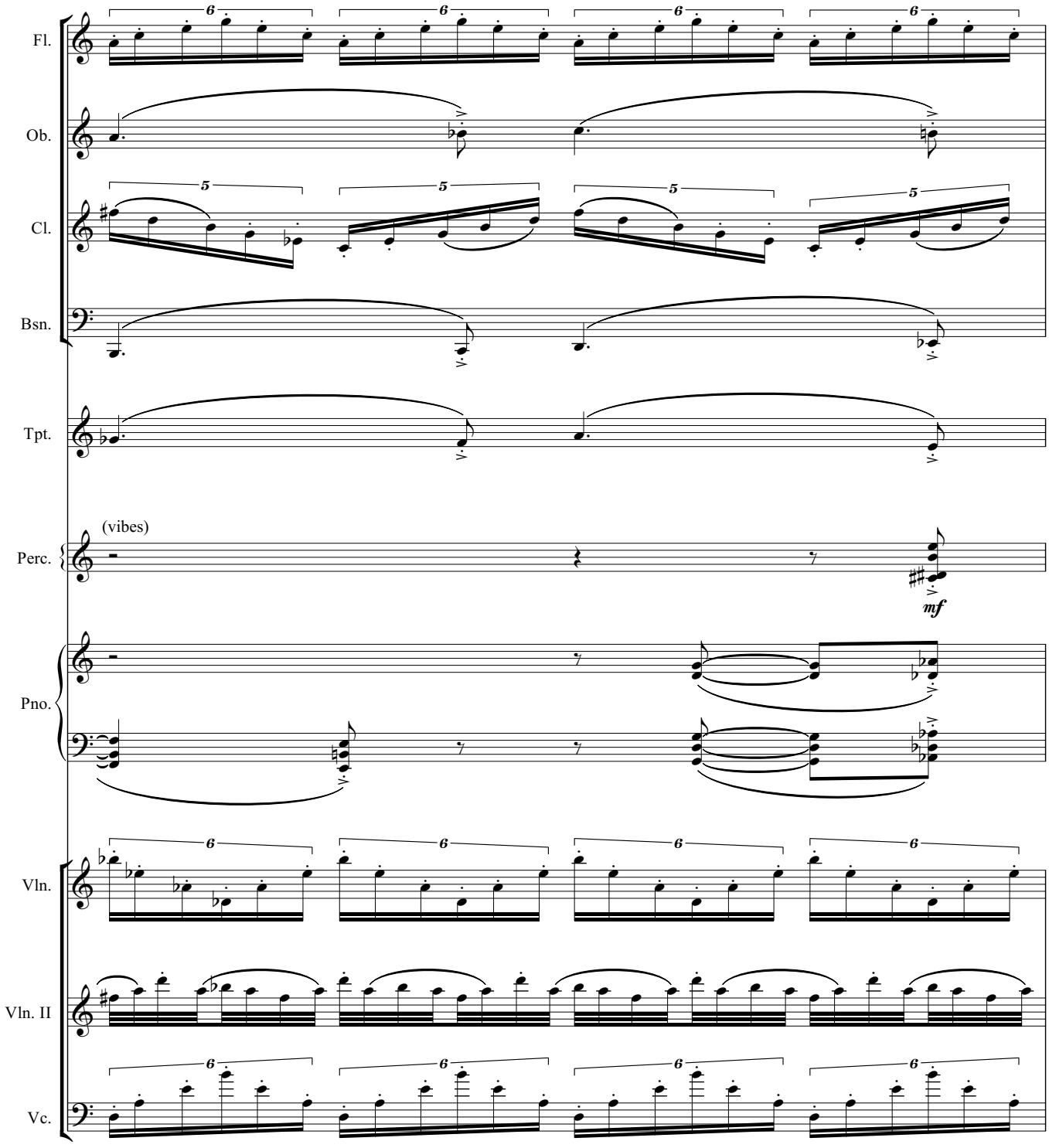

Fl.
Ob.
Cl.
Tpt.
Perc.
Pno.
Vln.
Vln. II
Vla.
Vc.
mf
fp
poco espressivo
straight mute
vibraphone (soft mallet)
mfp
mp
p
f
Ped.

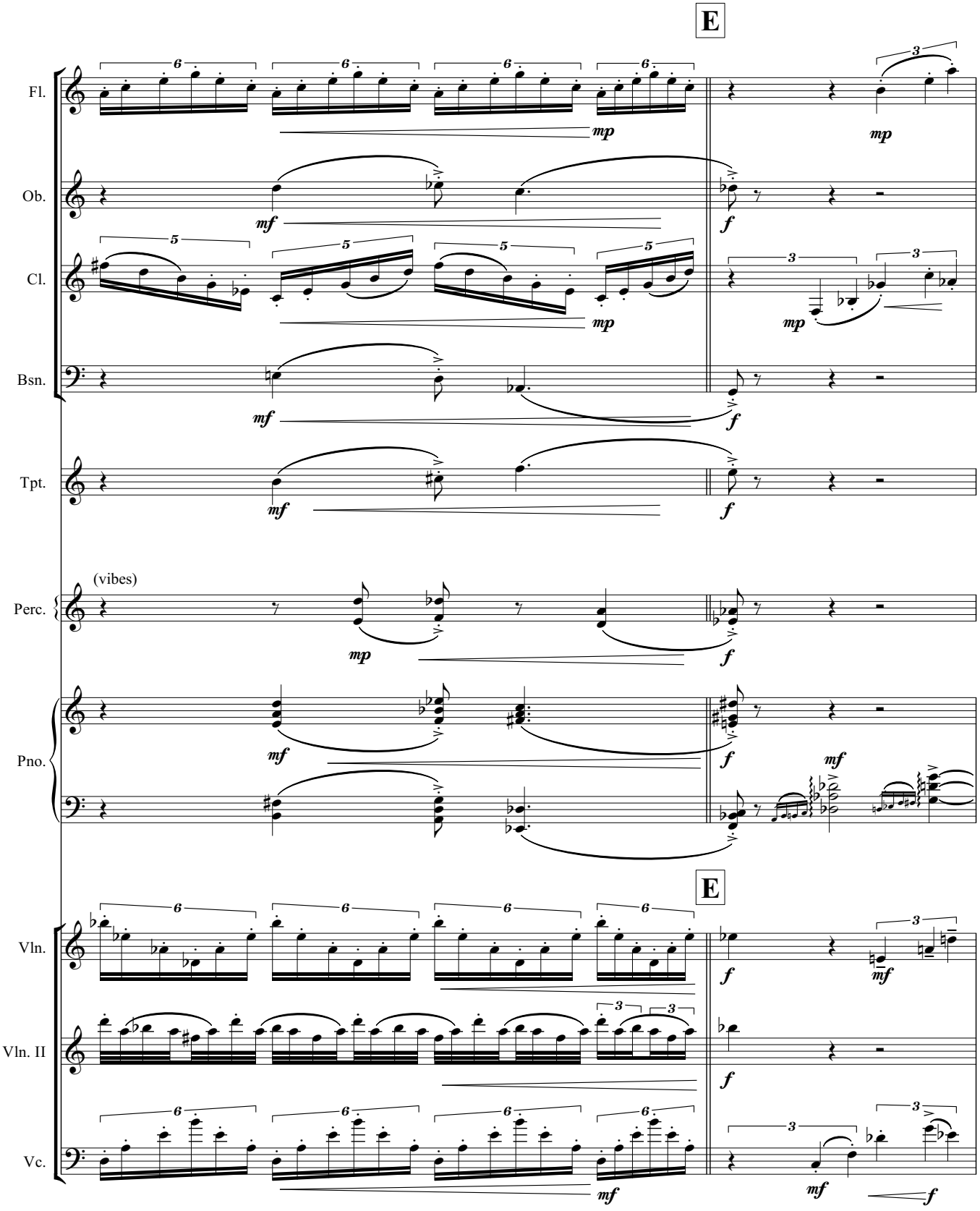

Fl.
Ob.
Cl.
Tpt.
(vibes)
Perc.
Vln.
Vln. II
Vla.
Vc.
pp
mf
sub. pp

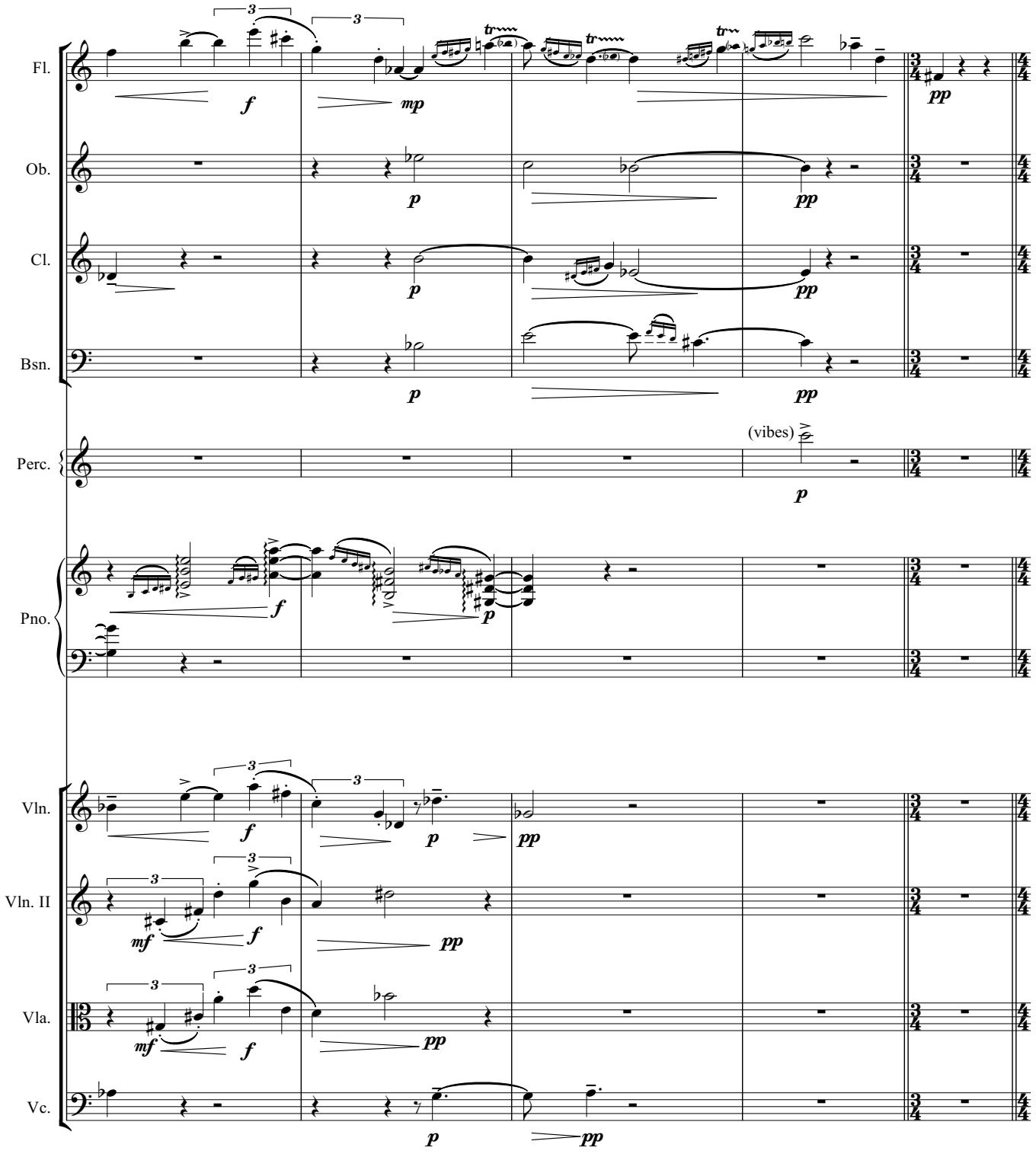

Fl.
Ob.
Cl.
Bsn.
Tpt.
Perc.
Pno.
Vln.
Vln. II
Vla.
Vc.
f
fp
fp poco espressivo
straight mute
fp
mfp
mp
Ped.
f
f

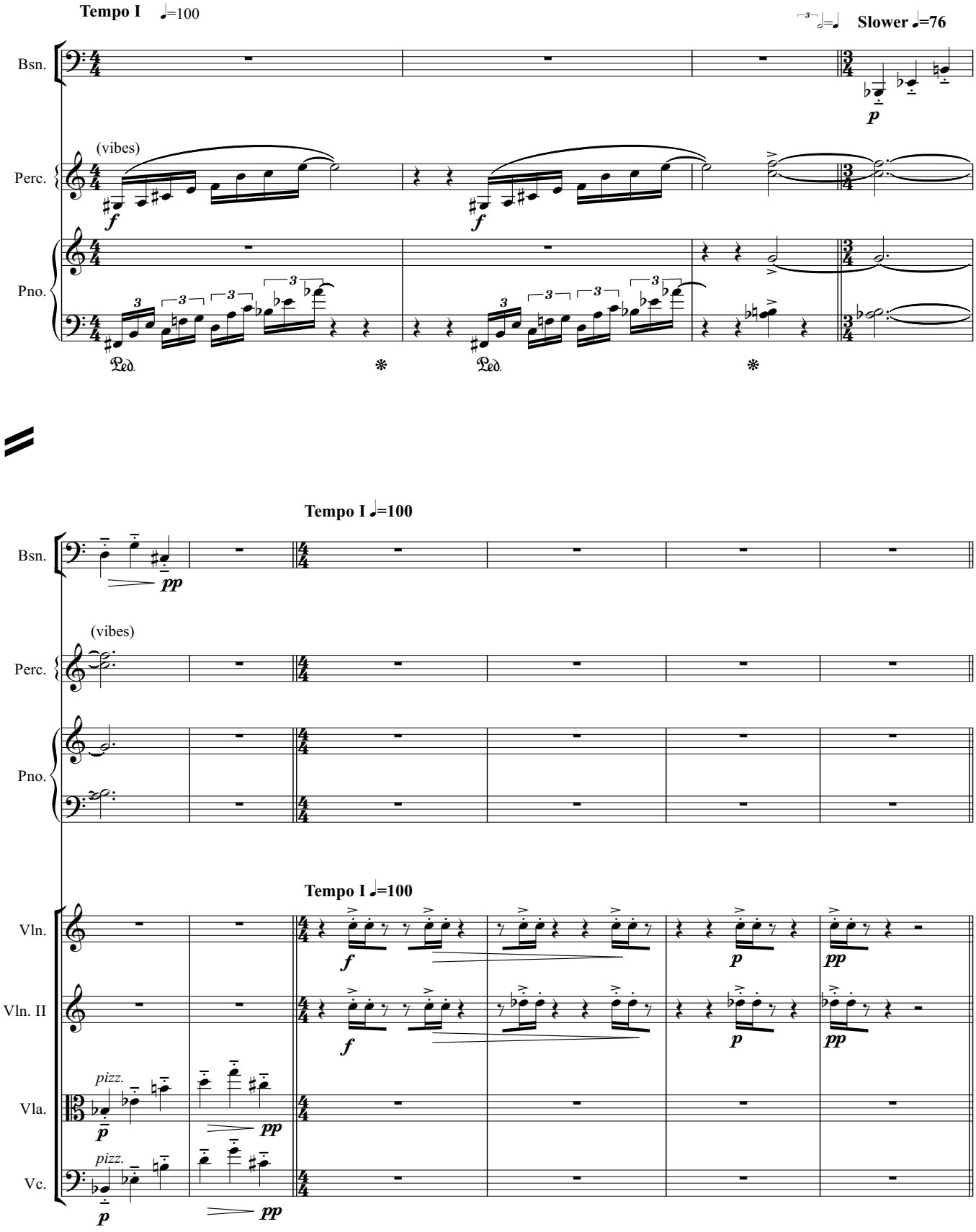

Fl.
Ob.
Cl.
Bsn.
(vibes)
Perc.
Pno.
poco marcato
Vln.
Vln. II
Vc.

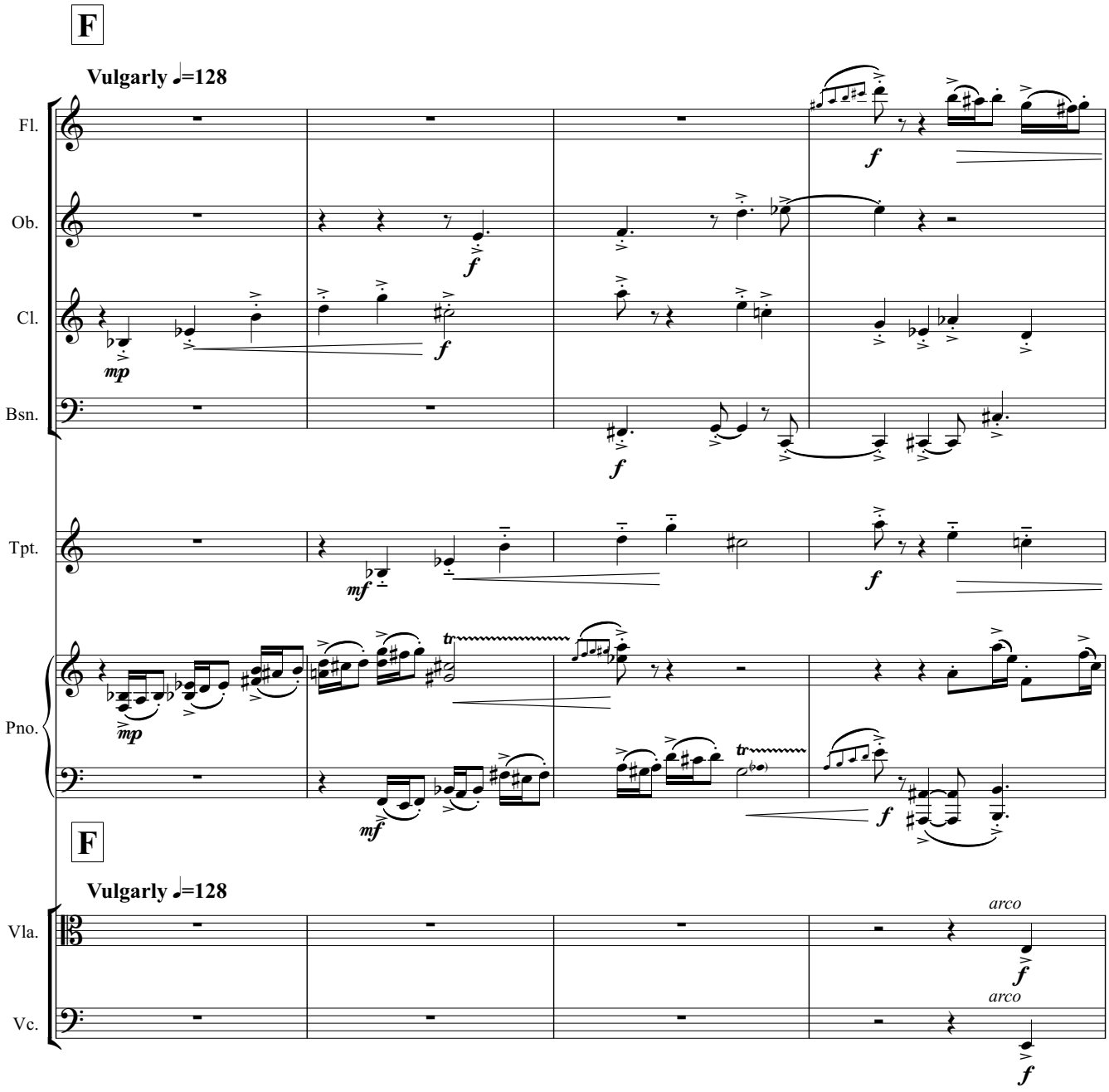

Fl.
Ob.
Cl.
Bsn.
senza sord.
mp
Tpt.
Pno.
Vln.
Vln. II
Vc.

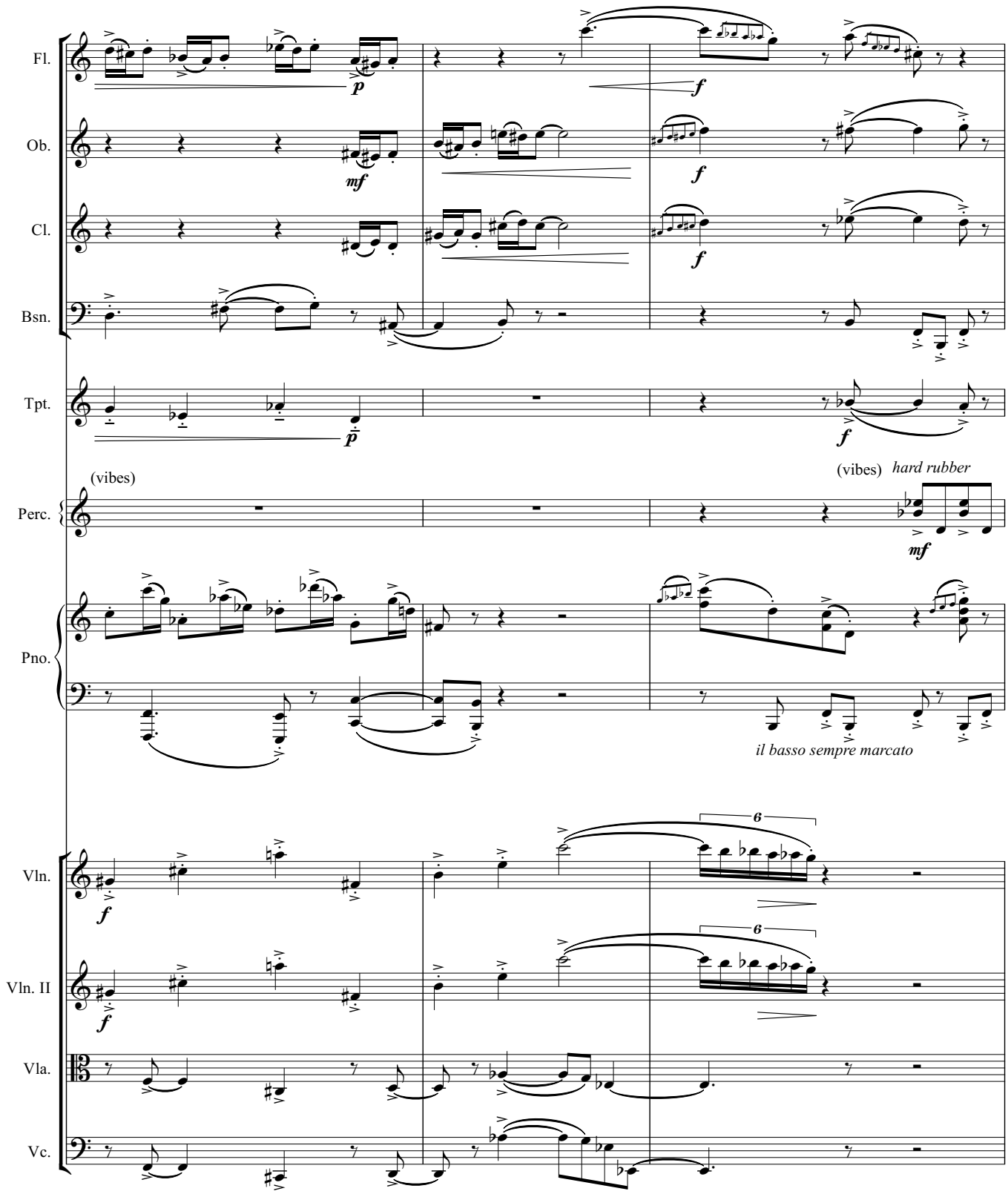

Fl.
Ob.
Cl.
Bsn.
Tpt.
(vibes)
Perc.
mf
Pno.
Vln.
Vln. II
Vc.

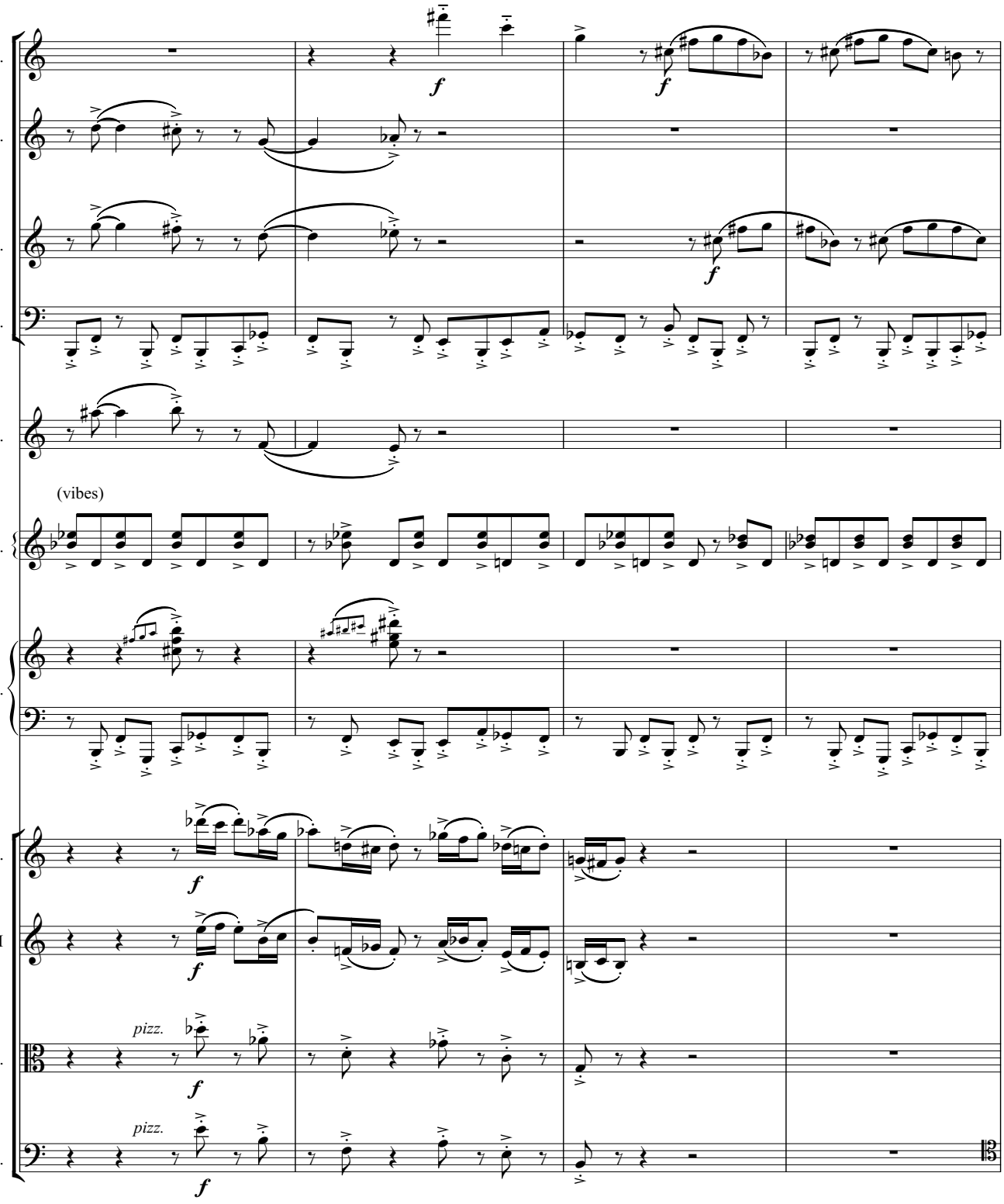

E
Fl.
Ob.
Cl.
Bsn.
Tpt.
(vibes)
Perc.
Pno.
E
Vln.
Vln. II
Vc.

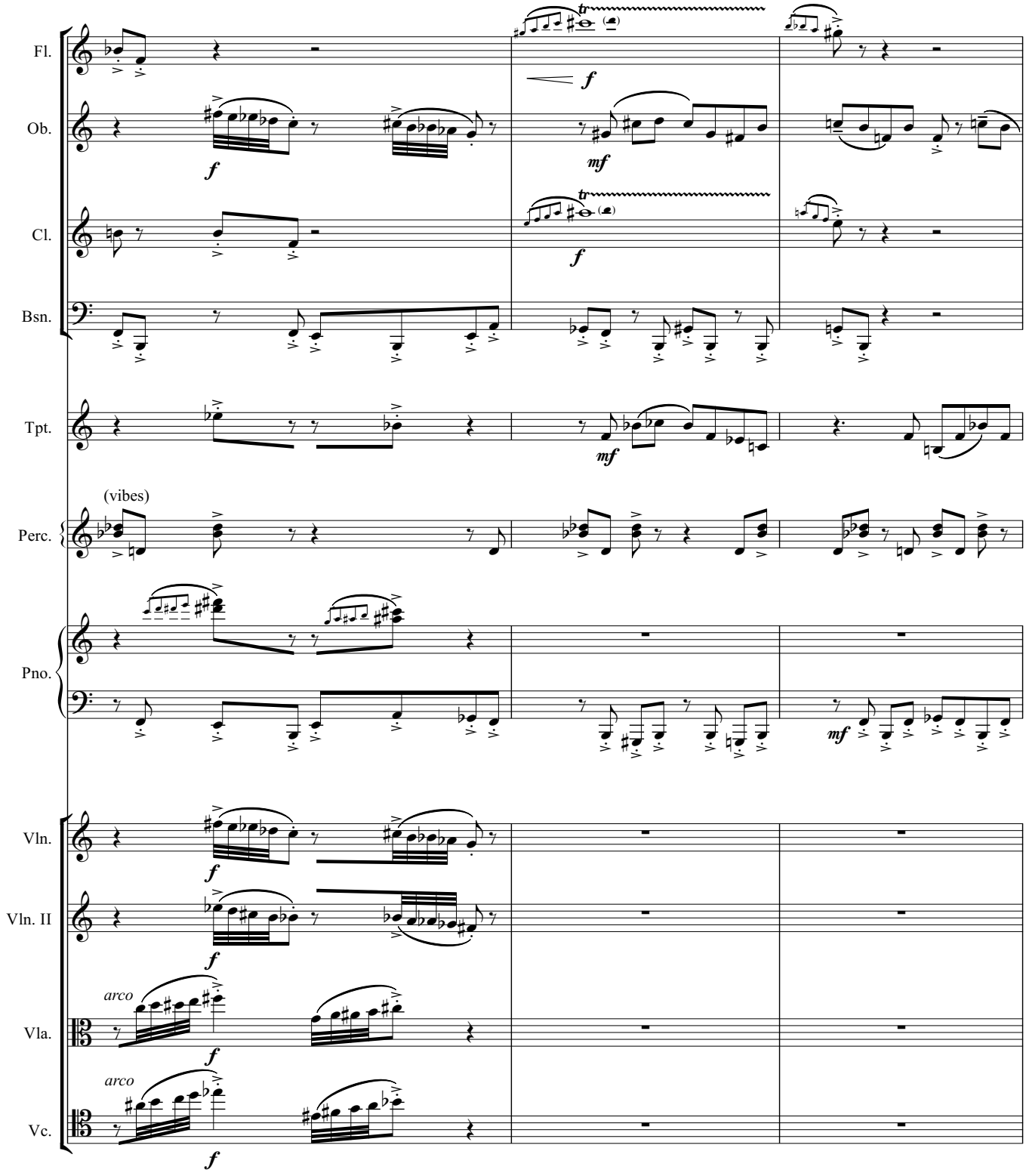

Fl.
Ob.
Cl.
Bsn.
Perc.
(vibes)
Pno.
Vln.
Vln. II
Vla.
Vc.

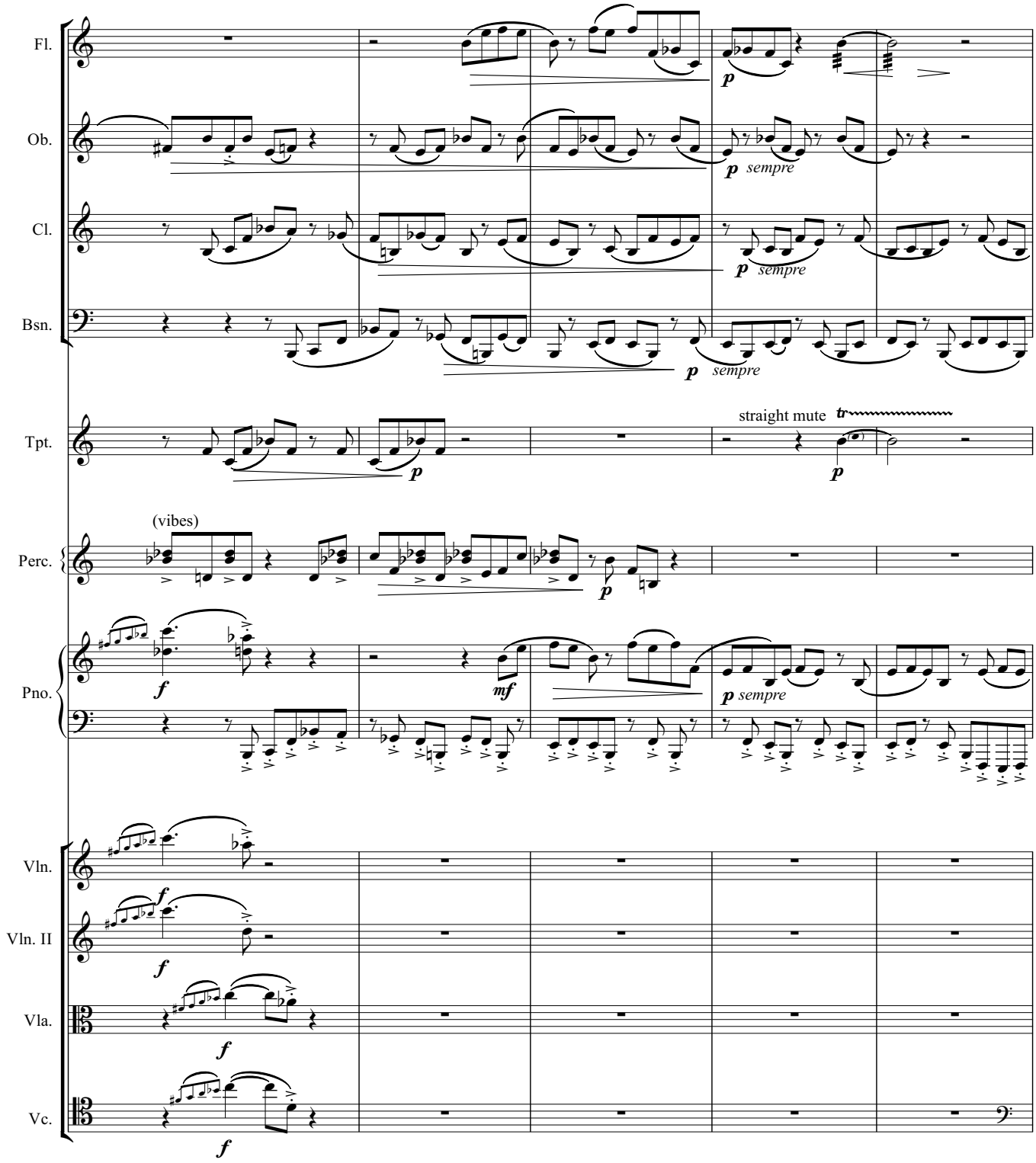

Tempo I ♩=100
Slower ♩=76
Bsn.
Perc.
(vibes)
Pno.
Ped.
Tempo I ♩=100
Vln.
Vln. II
Vla.
Vc.
pizz.

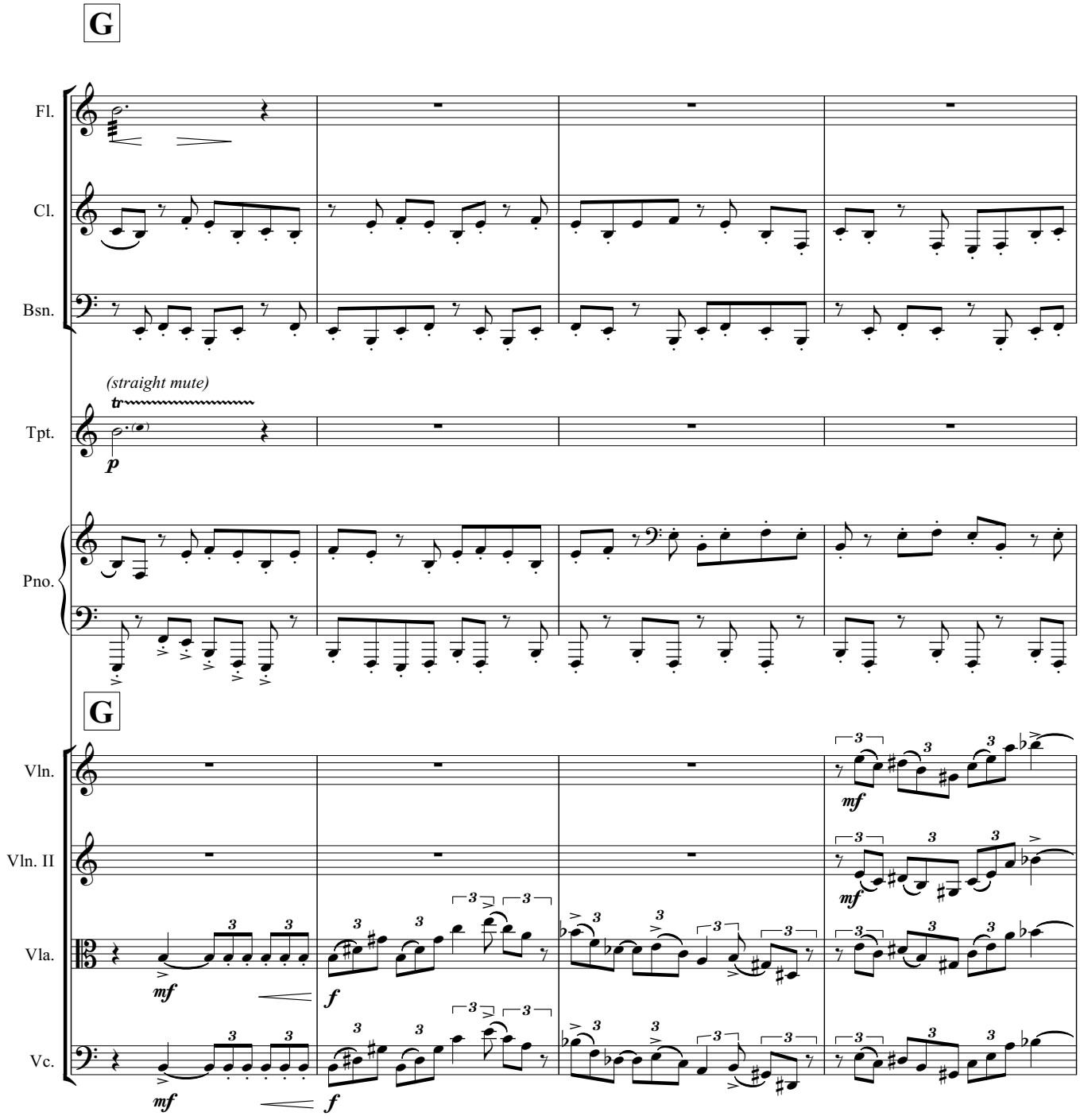

F
Vulgarly ♩=128
Fl.
Ob.
Cl.
Bsn.
Tpt.
Pno.
F
Vulgarly ♩=128
Vla.
Vc.
arco
arco

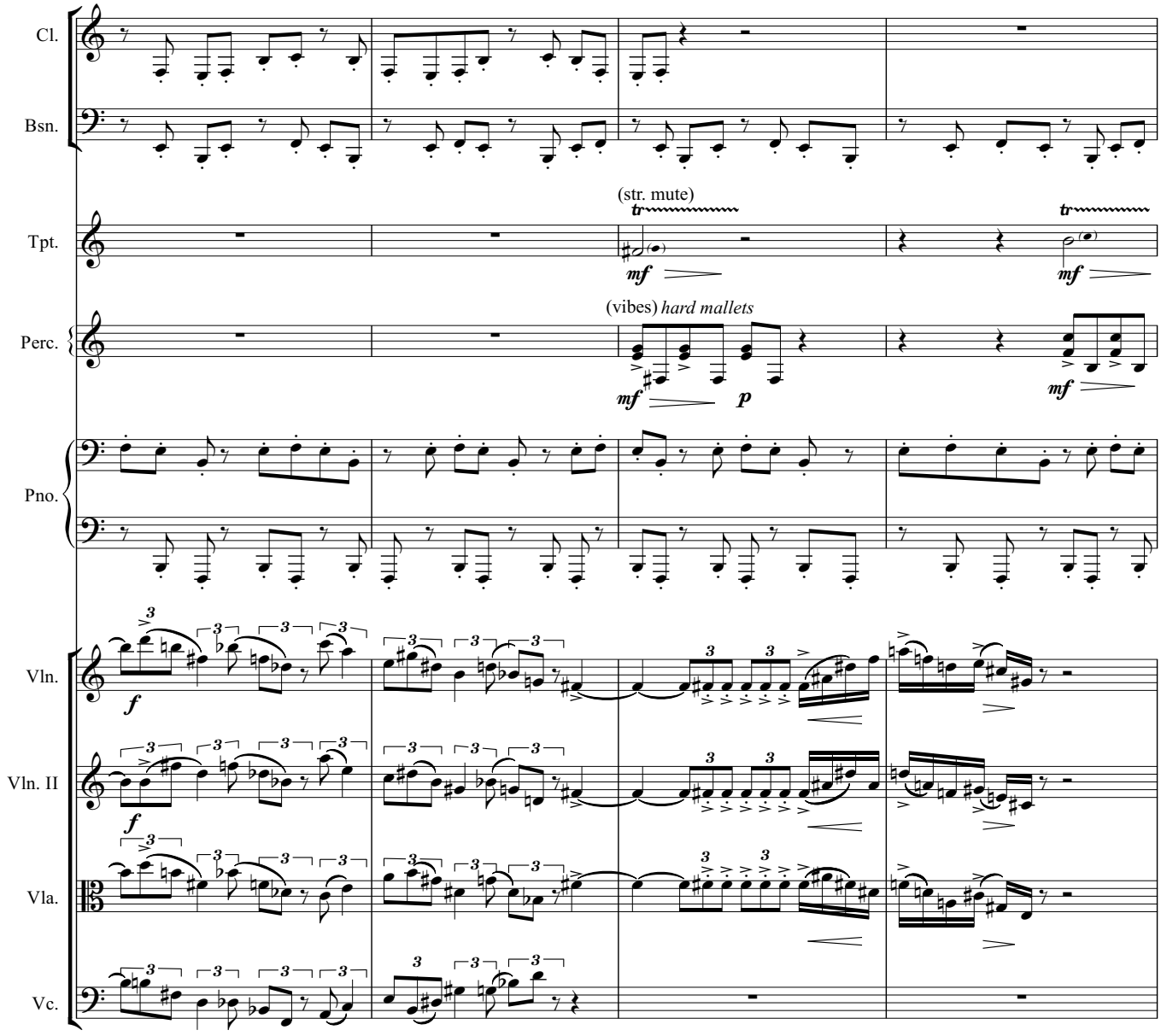

Fl.
Ob.
Cl.
Bsn.
Tpt.
(vibes)
Perc.
(vibes)
hard rubber
Pno.
il basso sempre marcato
Vln.
Vln. II
Vla.
Vc.

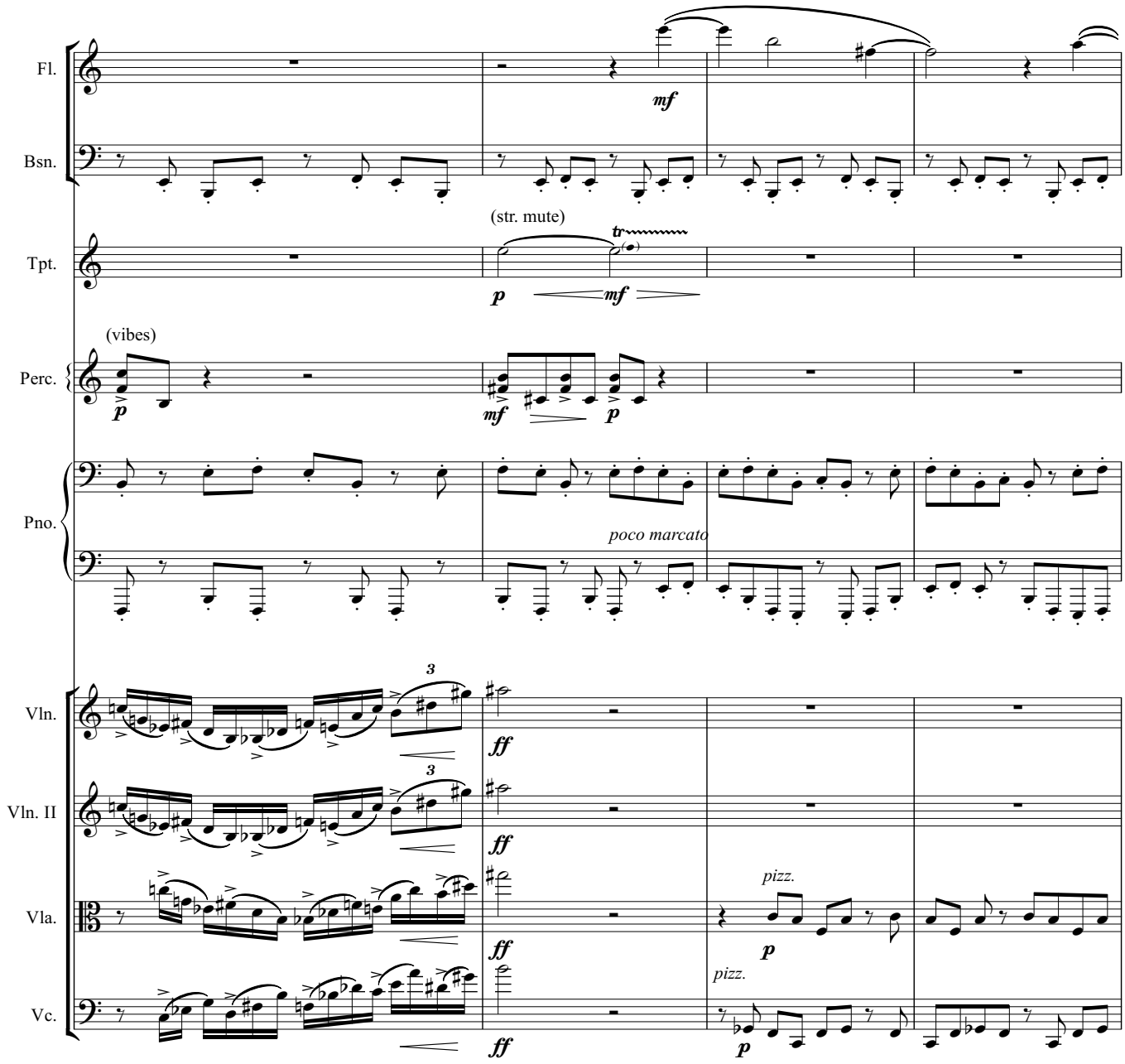

Fl.
Ob.
Cl.
Bsn.
Tpt.
(vibes)
Perc.
Pno.
Vln.
Vln. II
Vla.
Vc.
pizz.
pizz.

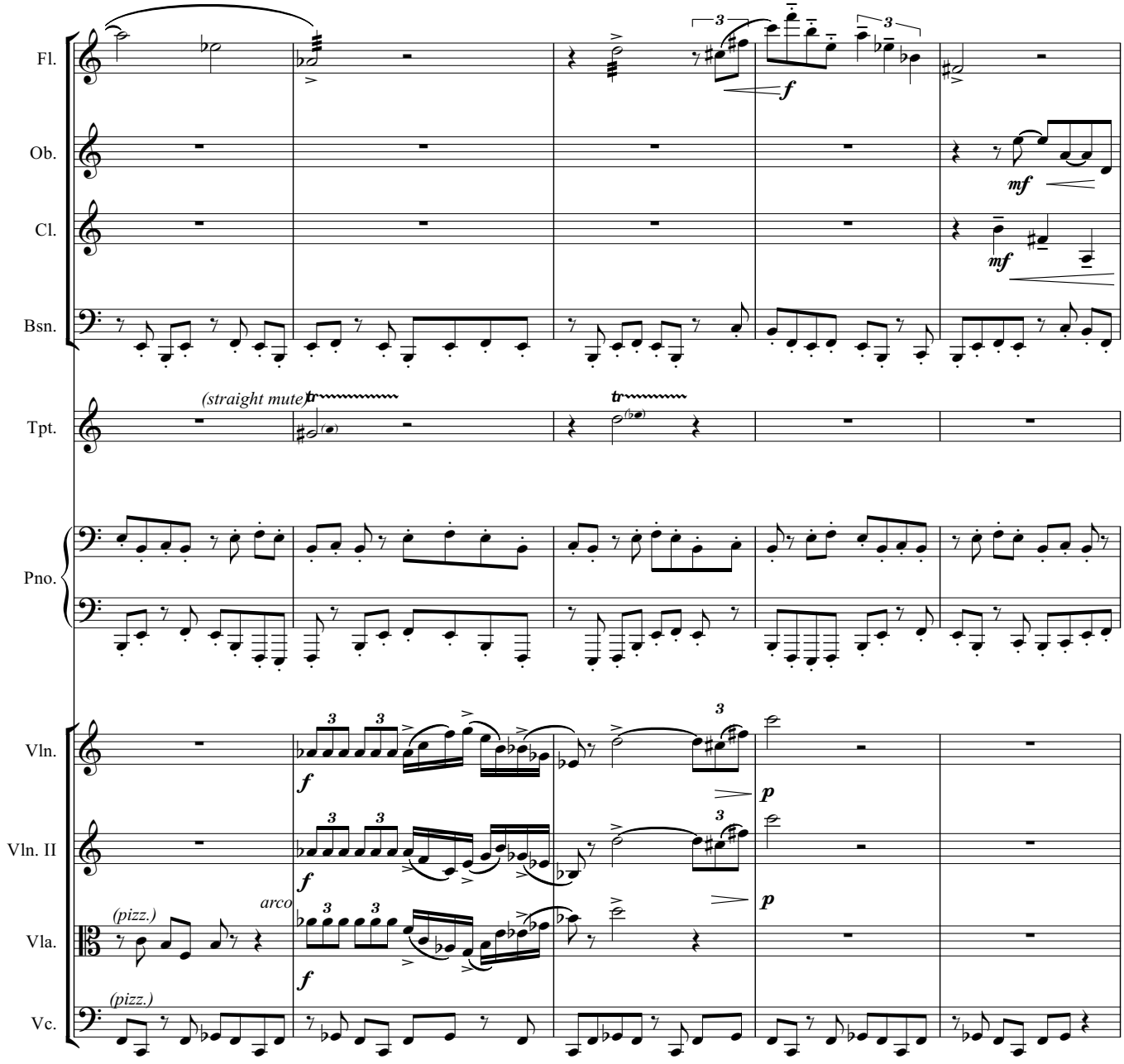

Fl.
Ob.
Cl.
Bsn.
Tpt.
(vibes)
Perc.
Pno.
Vln.
Vln. II
Vla.
Vc.
arco
arco

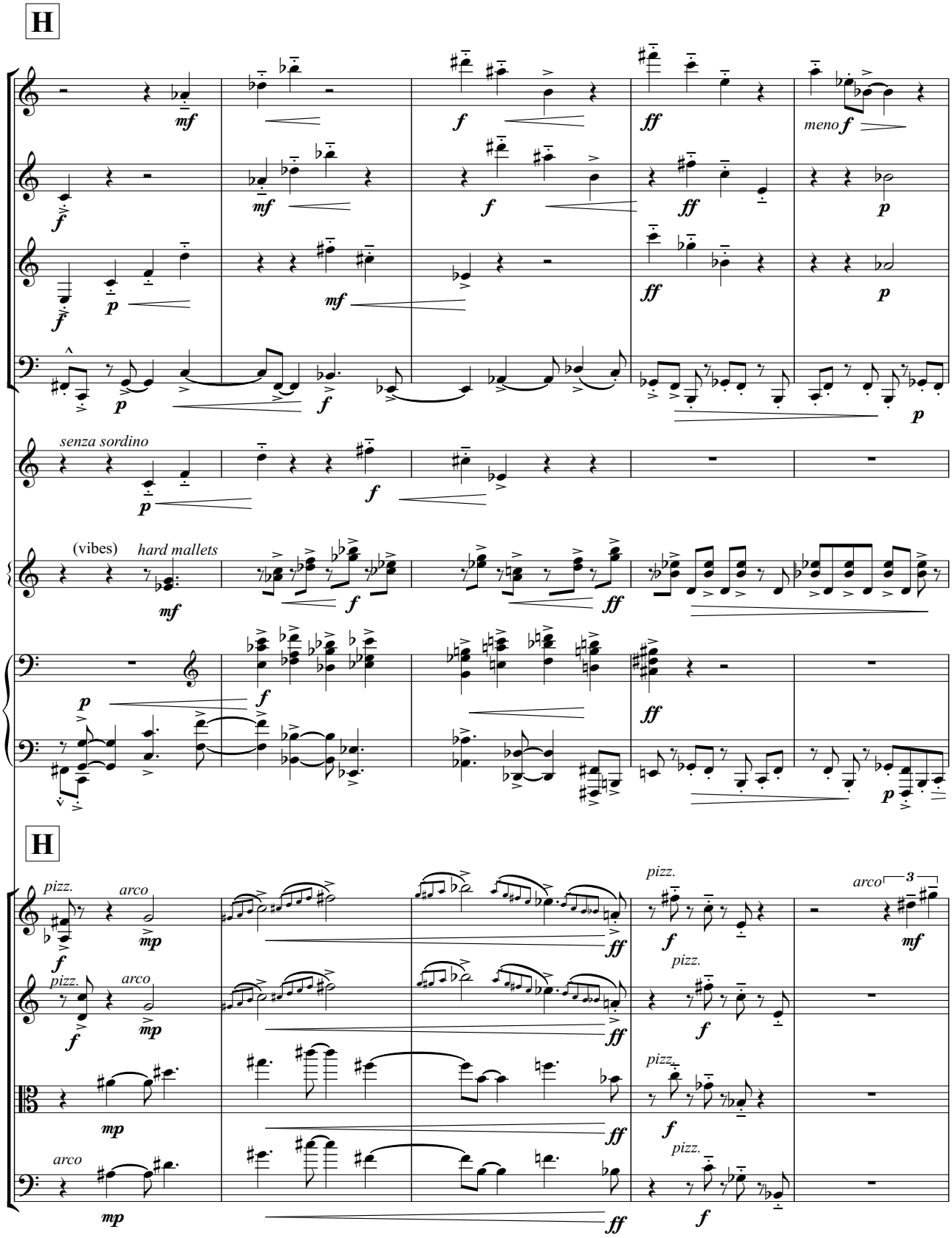

Fl.
Ob.
Cl.
Bsn.
Tpt.
straight mute
Perc.
(vibes)
Pno.
Vln.
Vln. II
Vla.
Vc.
p
sempre
mf
f

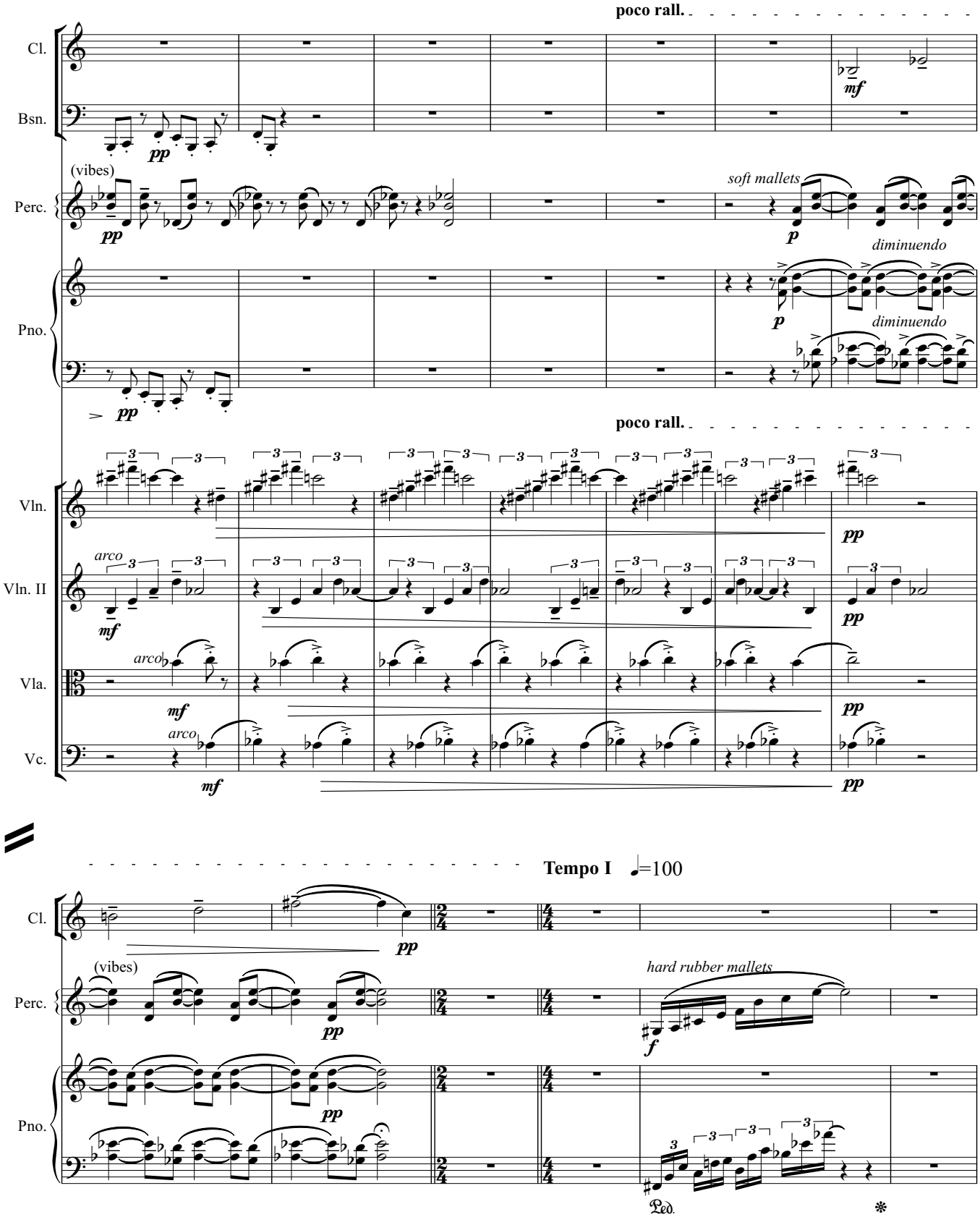

G
Fl.
Cl.
Bsn.
(straight mute)
tr
p
Tpt.
Pno.
G
Vln.
Vln. II
Vla.
Vc.
mf
f
mf
f
mf
f

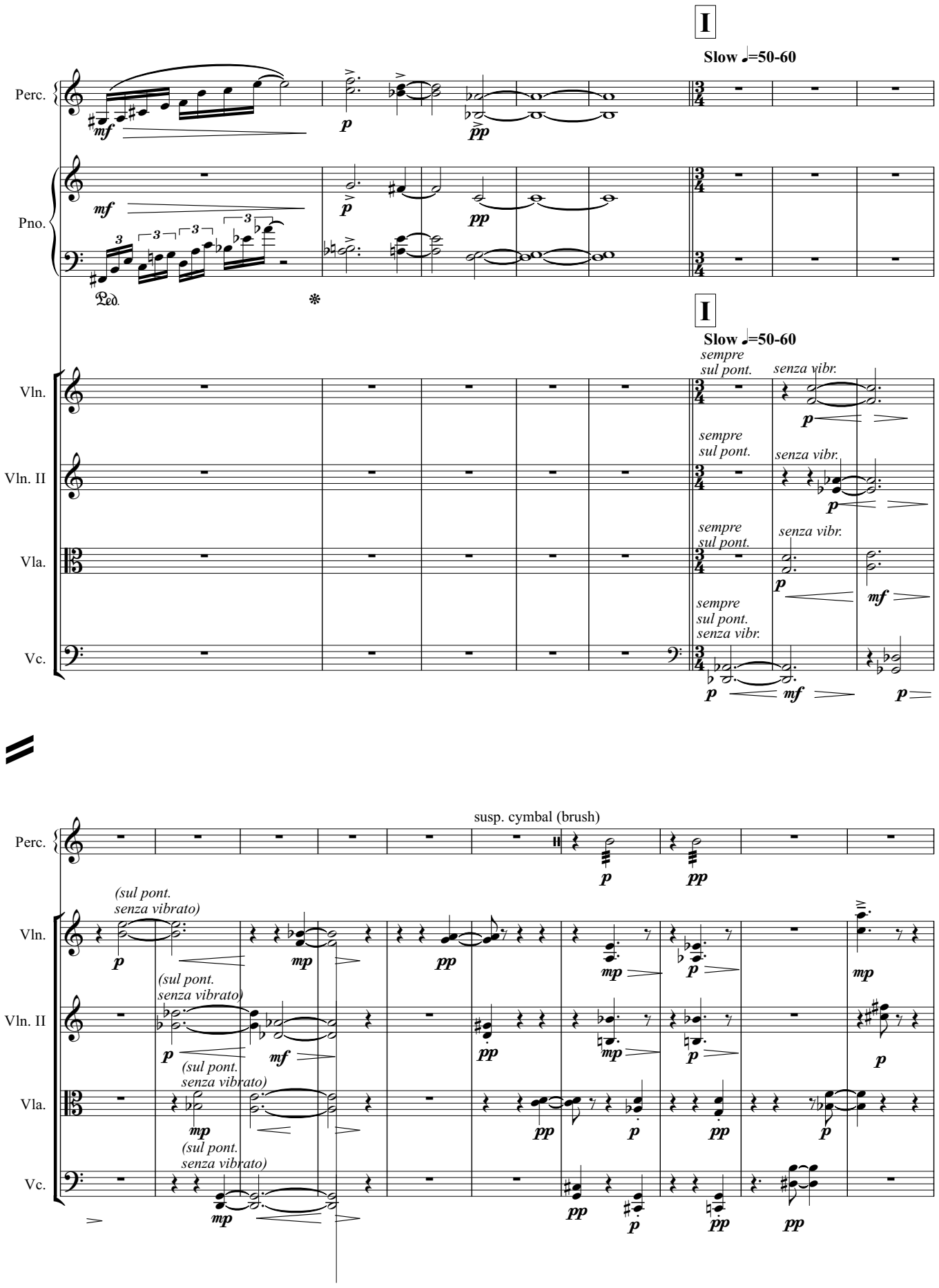

Cl.
Bsn.
(str. mute)
Tpt.
mf
mf
(vibes) hard mallets
Perc.
mf
p
mf
Pno.
Vln.
f
Vln. II
f
Vla.
Vc.

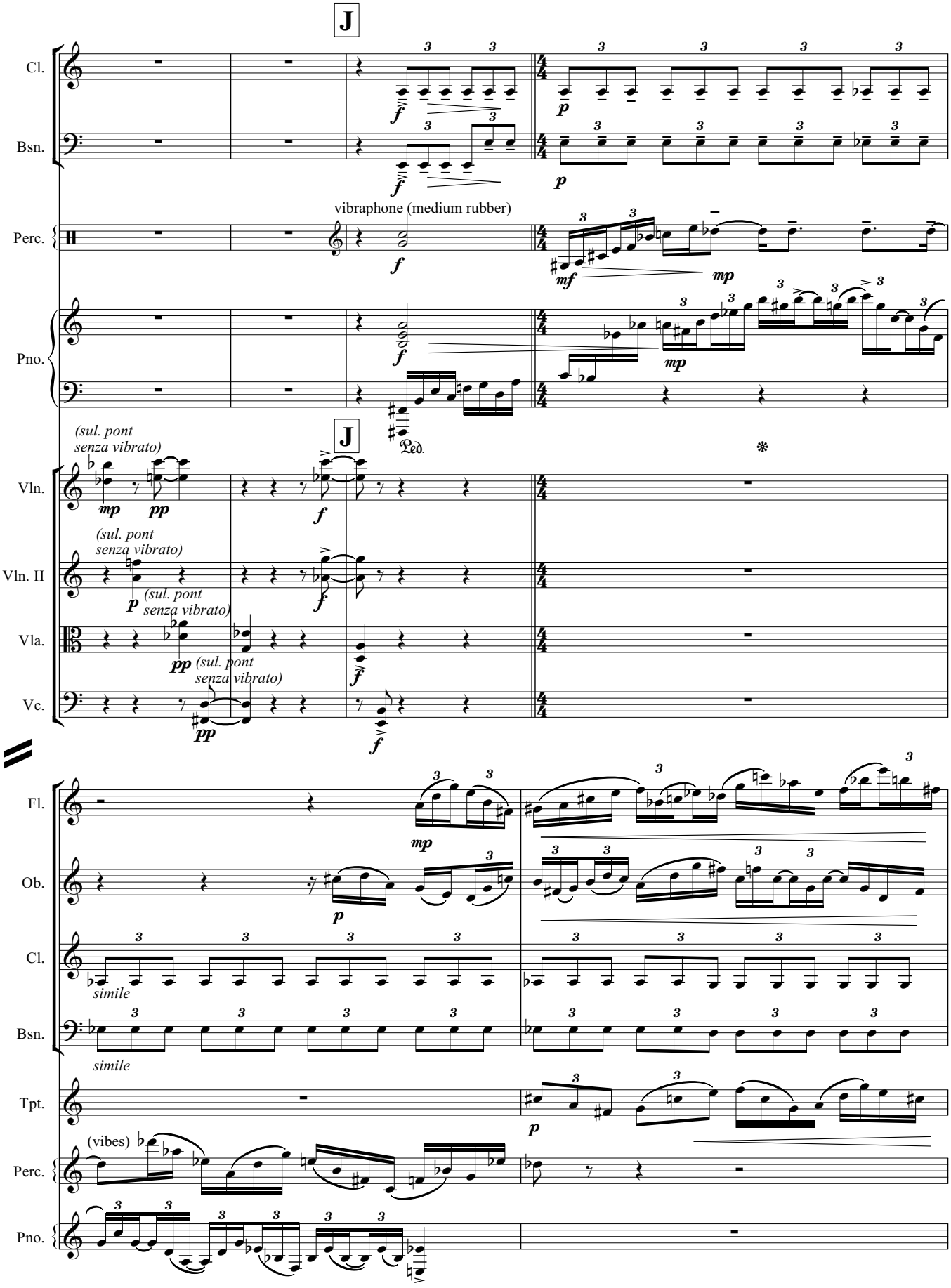

Fl.
Bsn.
Tpt.
(str. mute)
Perc.
(vibes)
Pno.
poco marcato
Vln.
Vln. II
Vla.
Vc.
pizz.
pizz.

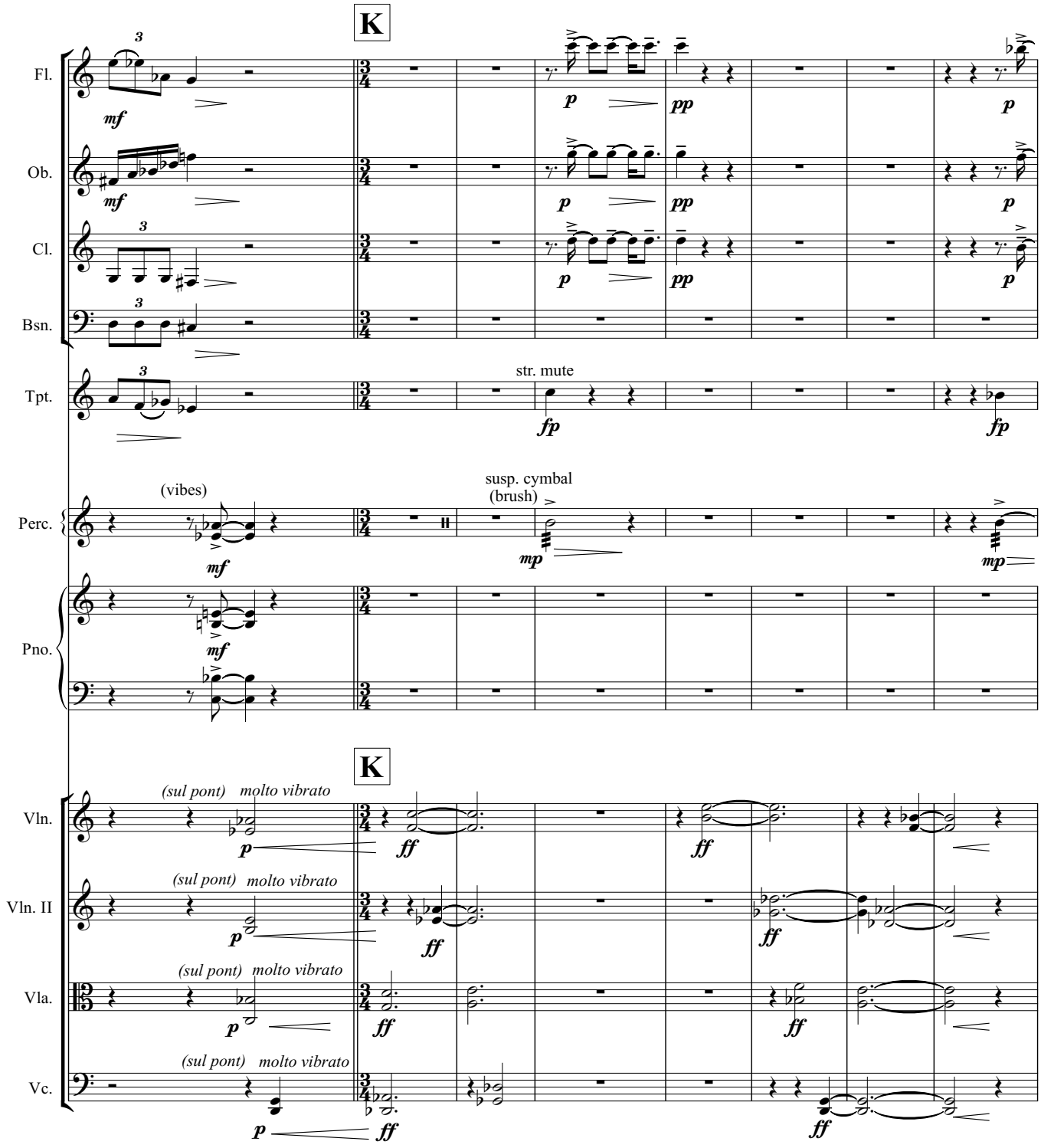

Fl.
Ob.
Cl.
Bsn.
Tpt.
Pno.
Vln.
Vln. II
Vla.
Vc.
(straight mute)
(pizz.)
arco
(pizz.)
f
mf
p

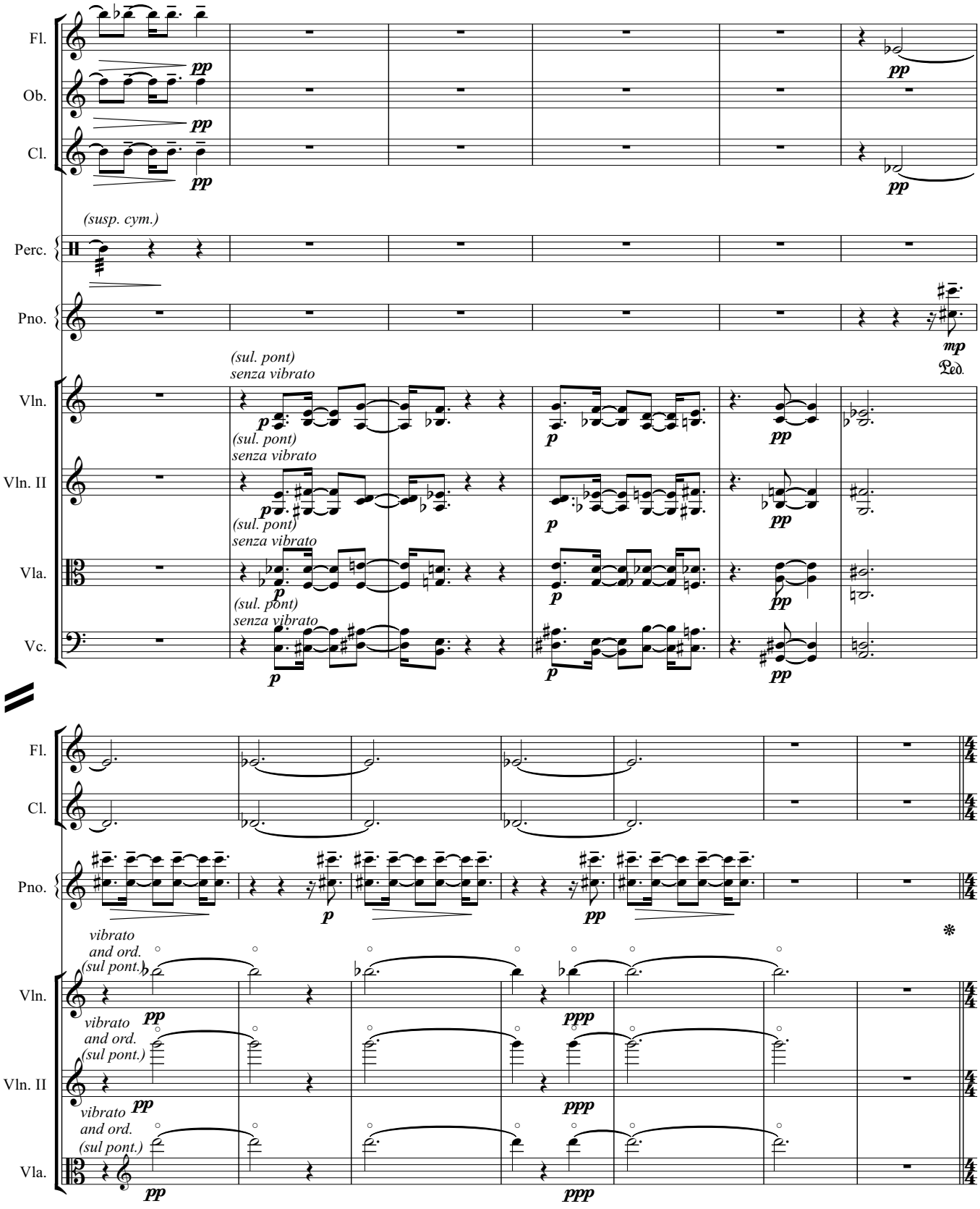

H
Fl.
Ob.
Cl.
Bsn.
Tpt.
Perc.
Pno.
senza sordino
(vibes)
hard mallets
meno
H
Vln.
Vln. II
Vla.
Vc.
pizz.
arco

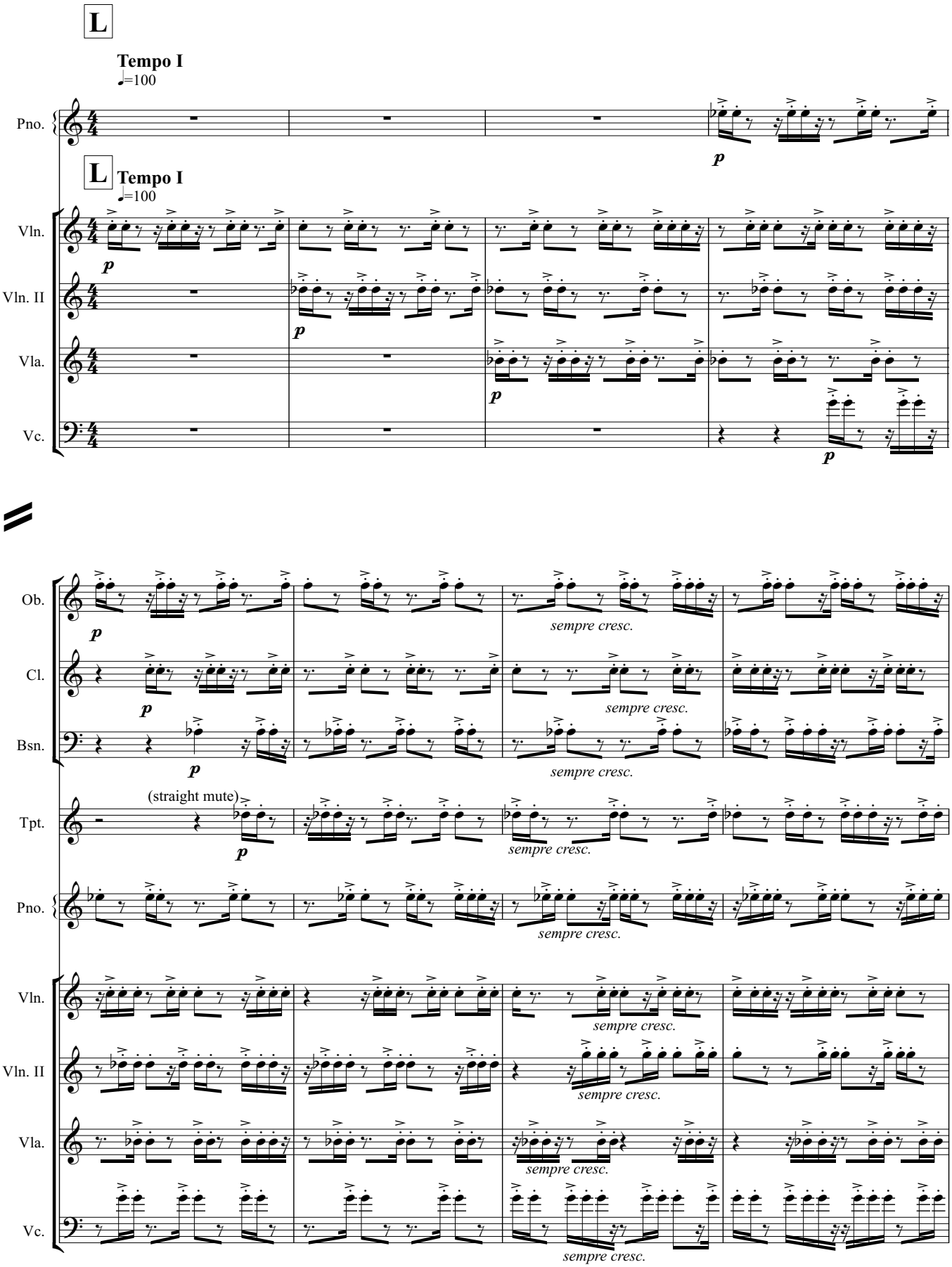

poco rall.
Cl.
Bsn.
(vibes)
Perc.
soft mallets
Pno.
diminuendo
poco rall.
Vln.
Vln. II
arco
Vla.
Vc.
Tempo I ♩=100
hard rubber mallets
Ped.

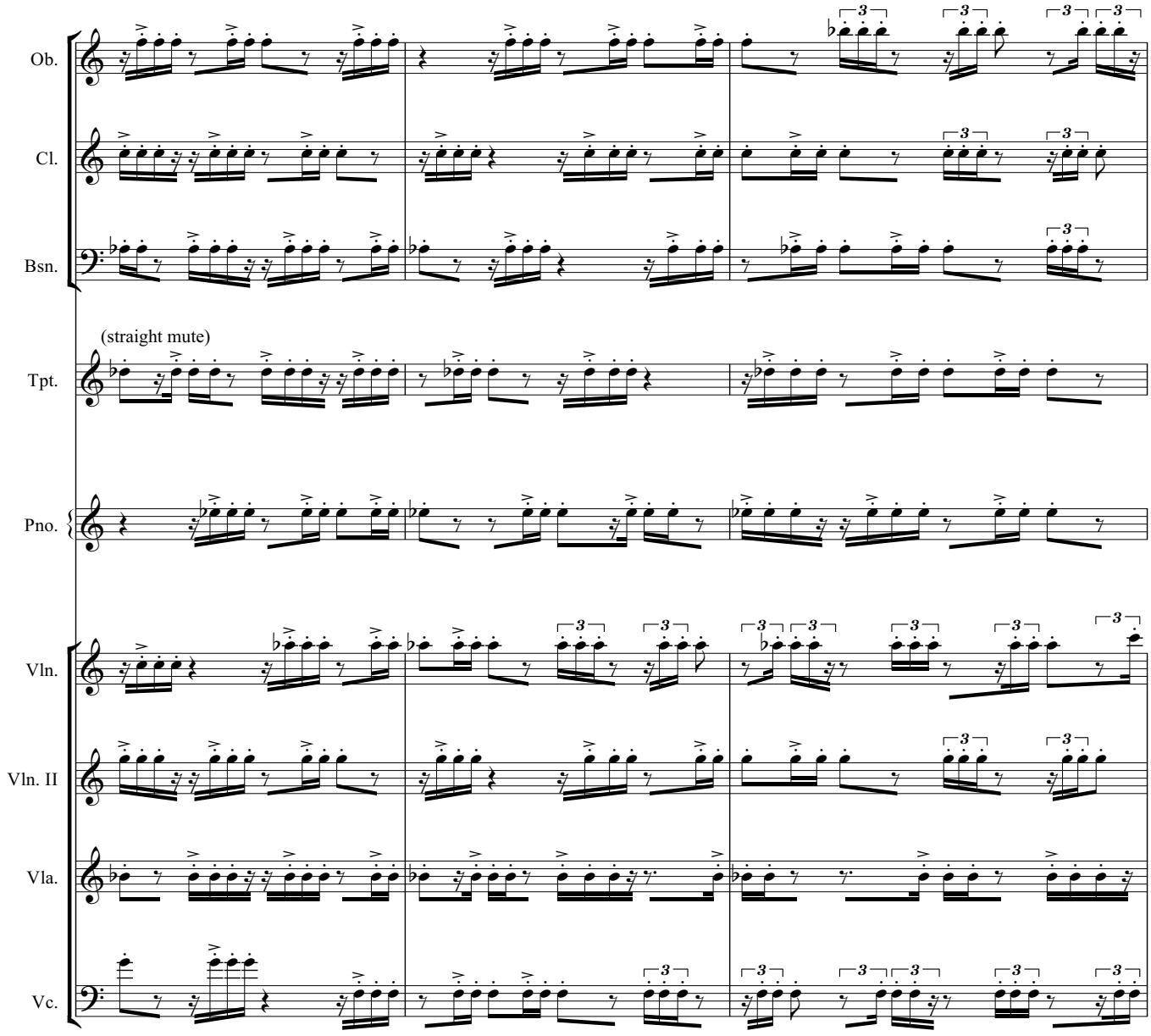

I
Slow ♩=50-60
Perc.
Pno.
Vln.
Vln. II
Vla.
Vc.
sempre sul pont.
senza vibr.
susp. cymbal (brush)
(sul pont. senza vibrato)

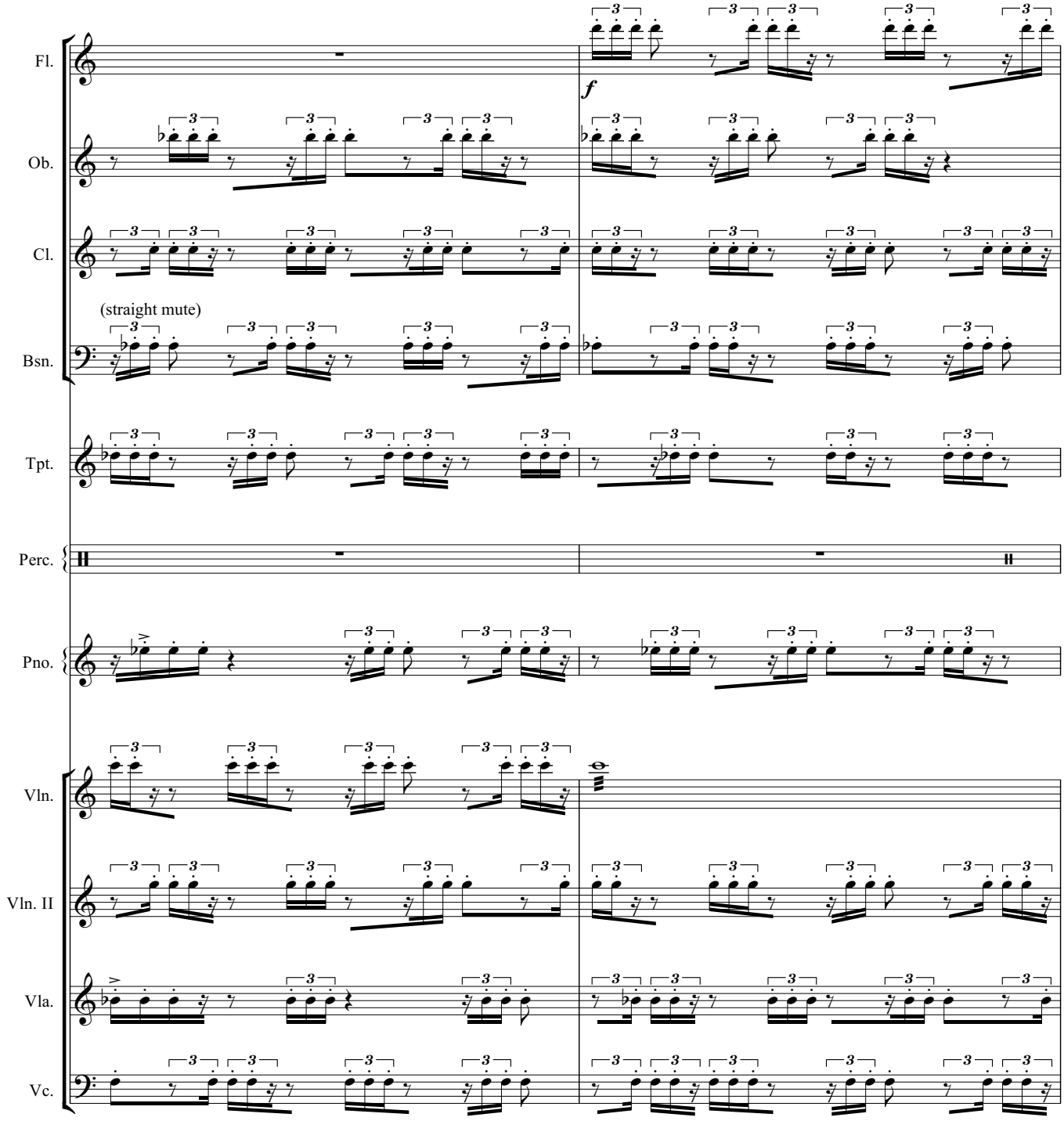

J
Cl.
Bsn.
Perc.
vibraphone (medium rubber)
Pno.
Ped.
J
(sul. pont senza vibrato)
Vln.
Vln. II
Vla.
Vc.
Fl.
Ob.
Cl.
simile
Bsn.
simile
Tpt.
(vibes)
Perc.
Pno.

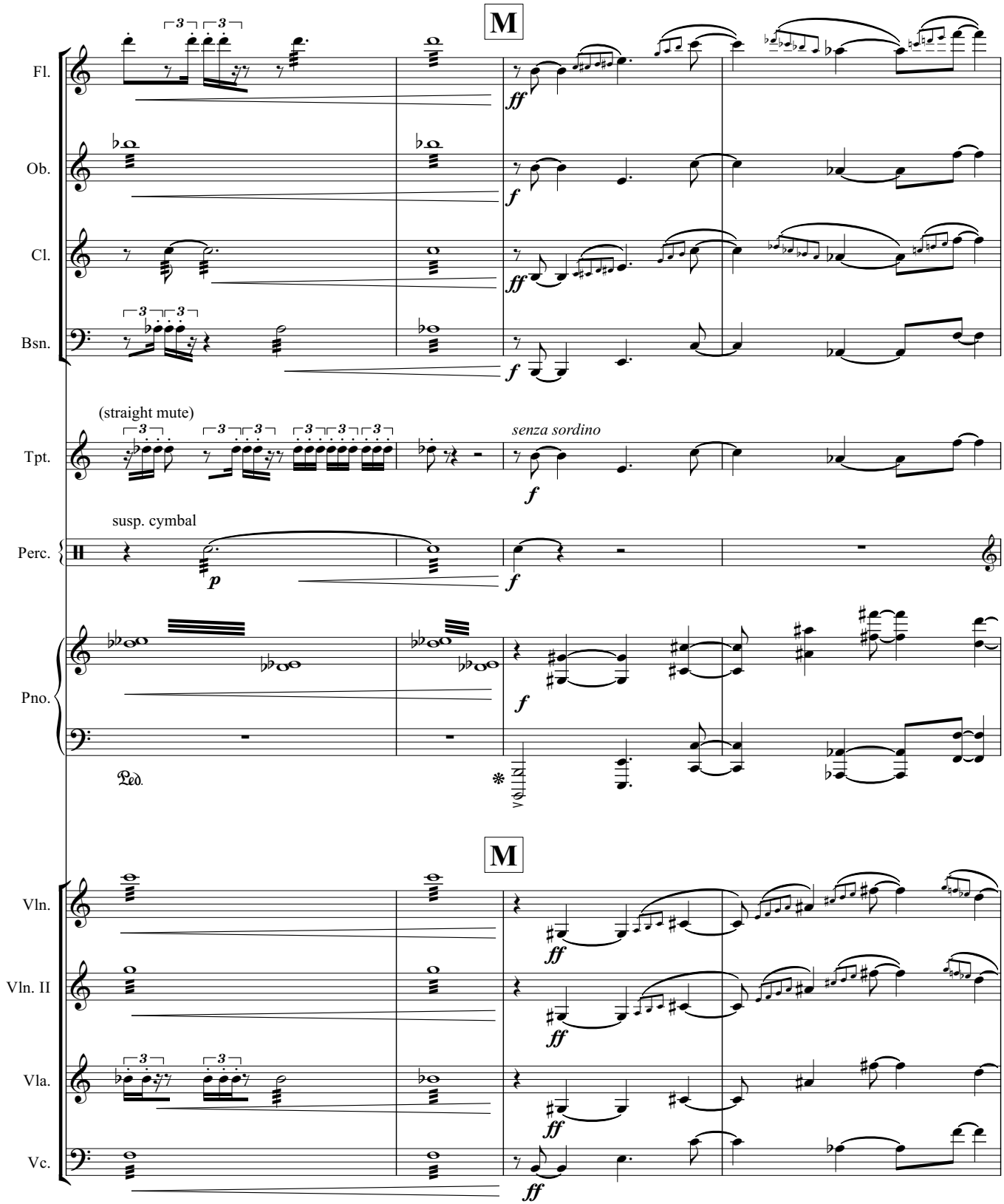

K
Fl.
Ob.
Cl.
Bsn.
Tpt.
Perc.
Pno.
Vln.
Vln. II
Vla.
Vc.
mf
p
pp
fp
mp
ff
str. mute
(vibes)
susp. cymbal
(brush)
(sul pont) molto vibrato

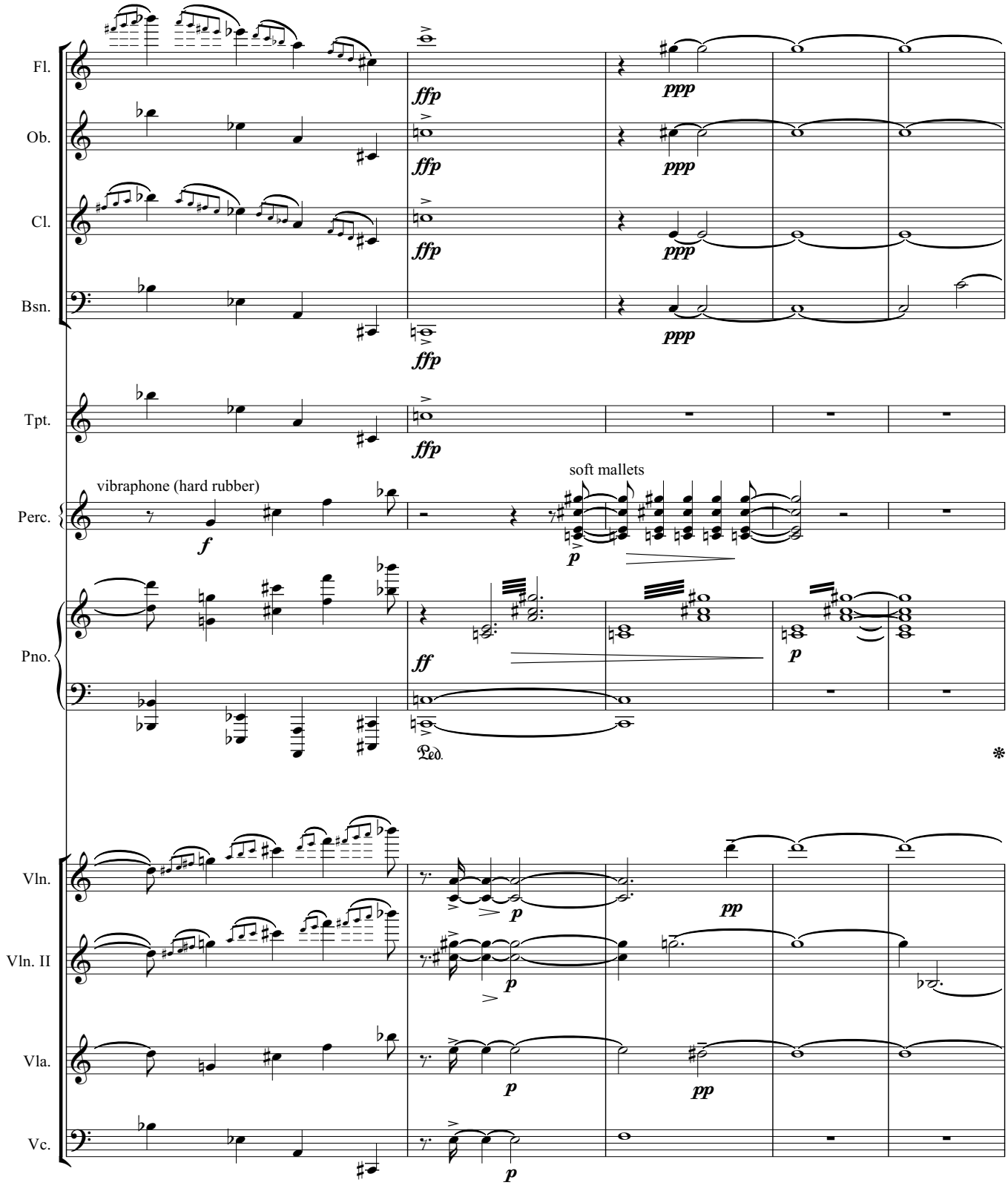

Fl.
Ob.
Cl.
(susp. cym.)
Perc.
Pno.
Vln.
Vln. II
Vla.
Vc.
(sul. pont)
senza vibrato
(sul pont)
senza vibrato
vibrato
and ord.
(sul pont.)

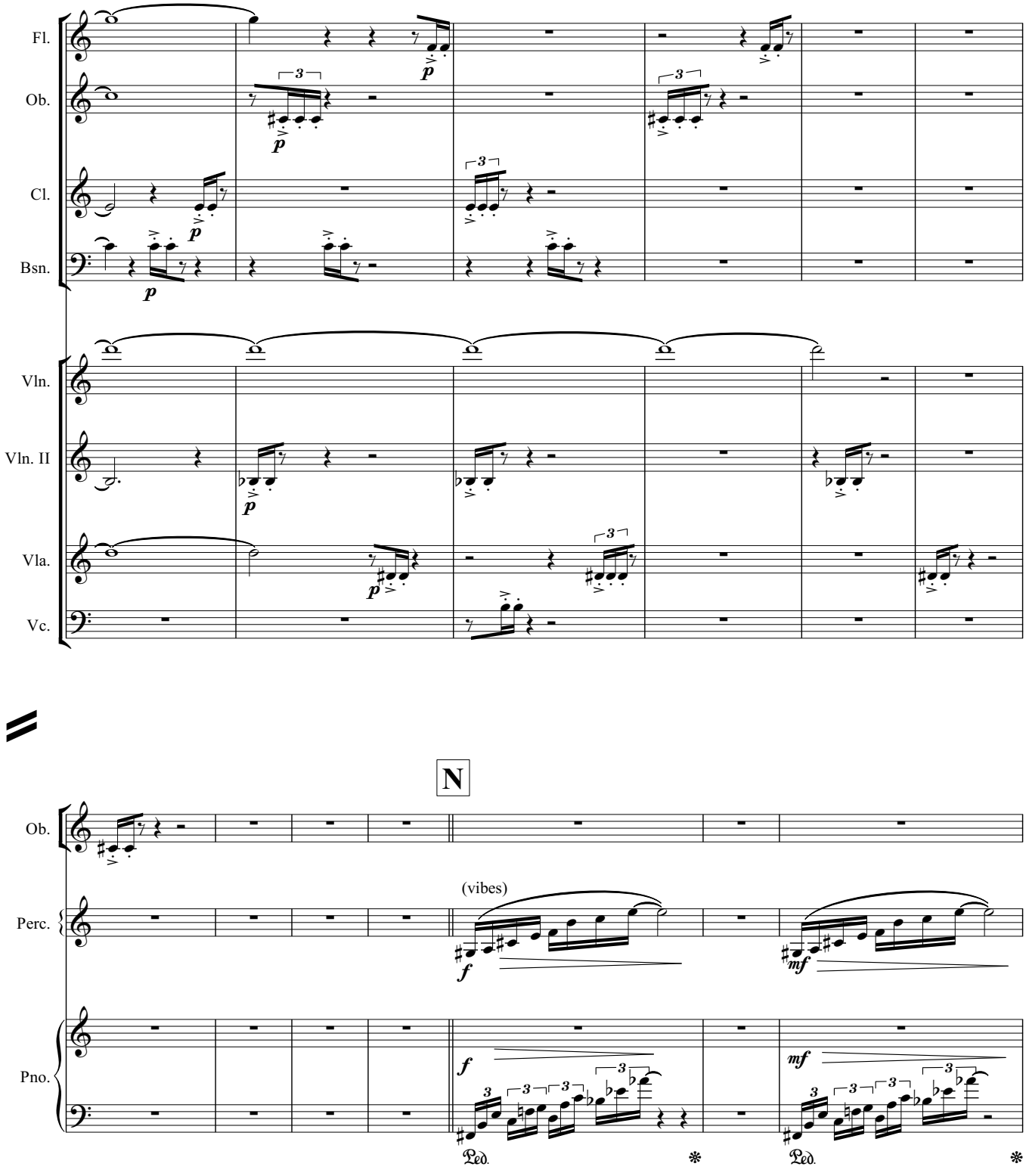

L
Tempo I
♩=100
Pno.
L
Tempo I
♩=100
Vln.
Vln. II
Vla.
Vc.
Ob.
Cl.
Bsn.
Tpt.
(straight mute)
Pno.
Vln.
Vln. II
Vla.
Vc.
sempre cresc.

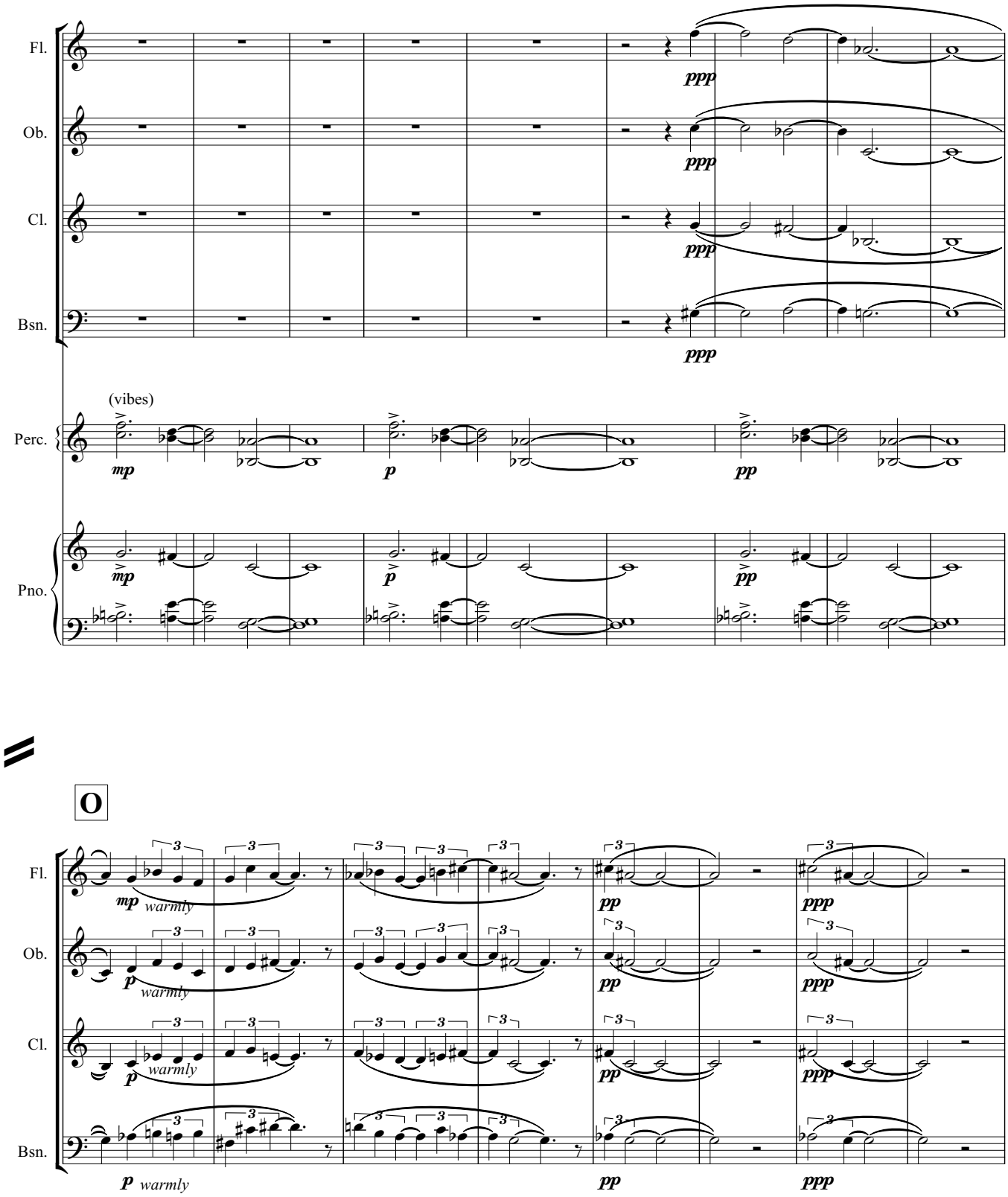

Ob.
Cl.
Bsn.
(straight mute)
Tpt.
Pno.
Vln.
Vln. II
Vla.
Vc.

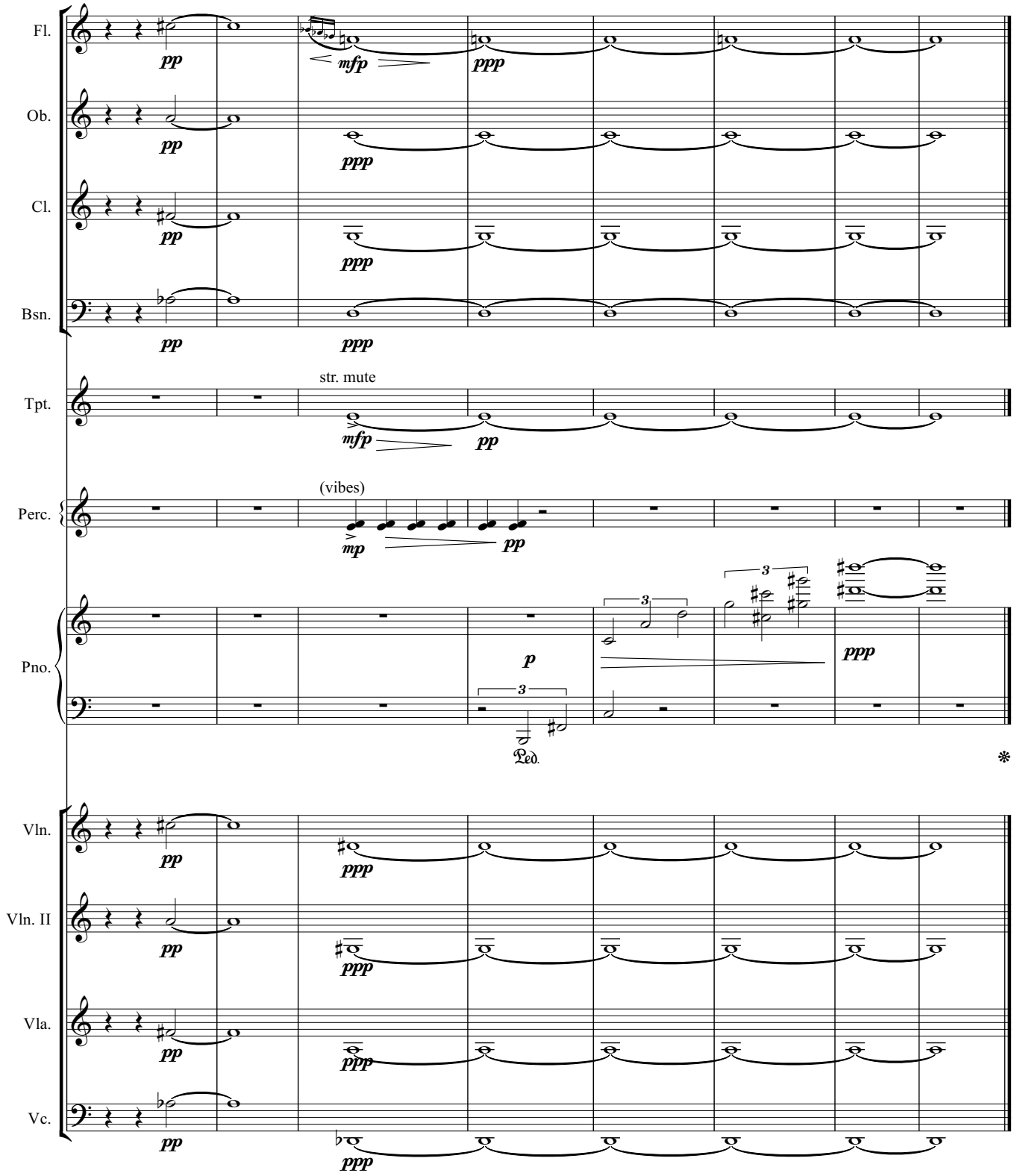

Fl.
Ob.
Cl.
(straight mute)
Bsn.
Tpt.
Perc.
Pno.
Vln.
Vln. II
Vla.
Vc.
f


M
Fl.
Ob.
Cl.
Bsn.
(straight mute)
Tpt.
senza sordino
susp. cymbal
Perc.
Pno.
Ped.
M
Vln.
Vln. II
Vla.
Vc.


Fl.
Ob.
Cl.
Bsn.
Tpt.
Perc.
Pno.
Vln.
Vln. II
Vla.
Vc.
vibraphone (hard rubber)
soft mallets
ffp
ppp
f
p
ff
pp
Ped.


Fl.
Ob.
Cl.
Bsn.
Vln.
Vln. II
Vla.
Vc.
N
Ob.
Perc.
(vibes)
Pno.
Ped.
Ped.


Fl.
Ob.
Cl.
Bsn.
Perc.
Pno.
(vibes)
O
warmly


Fl.
Ob.
Cl.
Bsn.
Tpt.
Perc.
Pno.
Vln.
Vln. II
Vla.
Vc.
pp
mfp
ppp
str. mute
(vibes)
mp
p
Ped.
*