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Long Distance

for Solo Percussion, Wind Ensemble, and Electronics

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Long Distance

for Solo Percussion, Wind Ensemble, and Electronics

by

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Long Distance

for Solo Percussion, Wind Ensemble, and Electronics

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Long Distance is a work for solo percussion (marimba and vibraphone), wind ensemble, and electronics consisting of four movements and lasting approximately twenty minutes. Each movement is designed to be able to stand on its own and, when multiple movements are performed, their order is flexible. A version of this piece with no wind ensemble also exists and was commissioned by a consortium of 33 percussionists. From its inception, this solo version was composed with the possibility of expansion to a larger instrumentation in mind.

In this paper, I will discuss and analyze many of the factors and influences involved in my composition process for this piece. This will include performance techniques, extracting and utilizing musical material from field recordings, audio processing techniques, orchestration, drawing musical inspiration from non-musical sources, and stylistic juxtaposition. In addition, I will provide some background on how this commission came about and how composition as a collaborative process shaped this piece especially in the context of working with such a large and diverse consortium.

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Origins and inspiration for *Long Distance*

Programmatic inspiration

Whether it's a stenographer's shorthand technique, delightfully horrific and antiquated children's stories, or hobos of the great depression era, I find myself consistently drawn toward the nostalgia of vanishing subcultures as a source of inspiration for my music. There is something particularly vivid and inspiring to me about imagining a time in which certain practices or forms of communication were staples of our society. However, their perceived permanence was actually just a passing phase, swallowed up by the inevitable evolution of culture and technology. In the case of *Long Distance,* my interest turned toward a much more recent shift than mentioned in the examples above. Rather than my usual vantage point of three or four generations in the future, this particular wave of obsolescence is something that we have observed in our lifetimes and is still in its late stages today.

> Once upon a time, in the days before the ubiquitous and invisible internet, there was only one network. It was made of long-distance lines — actual wires — and it was ruled by an absolute monarch, Ma Bell. Most people traveled the network along conventional channels. But there were also explorers, a small group of curious misfits eager to map the darkest, most obscure corners of this evolving global net. Harvard students, blind

> teenagers, budding engineers — eventually they came together and formed a subculture. They became phone phreaks.
>
> - Jesse Hicks, The Verge

I first learned about phone phreaks a couple of years ago and was immediately fascinated by their tenacity and boundless curiosity. By hacking the inner workings of pay phones, building small electrical devices, or even whistling repeated tones at specific frequencies, they were able to manipulate this analog technology to connect with others in far away places or simply listen in on the pops, clicks, and hums produced by the machinery of distant networks. These sonic identifiers were unique to each of the hundreds of long distance networks in the United States and (luckily for me) it was quite common for phreaks to make high quality reel-to-reel recordings of what they heard.

After a bit of research, I eventually found a tremendous archive of these recordings made by one of the most prolific phreaks of the 1970's who went by the name Evan Doorbell. Evan kept extremely meticulous records of nearly every aspect of his vast collection and also documented many details about his solitary childhood and how phreaking allowed him to explore the places he dreamed of someday seeing from the telephone in his grandmother's apartment in Long Island, New York.

Over several years he accumulated an elaborate list of the specific kinds of sounds produced when connecting to various networks around the United States. He was eventually able to identify the distinct combinations of equipment used by these networks and began to imagine what these far away places must be like based upon these unique sonic identifiers. I spent hours upon hours repeatedly listening to these recordings and arrived at two basic aspects of his collection that I found to be particularly ripe for musical exploration and expression.

Extracting musical material from field recordings

In many of my previous pieces involving electronics, I have taken a keen interest in discovering and extracting musicality of the sounds that surround us in everyday life. By highlighting the musical attributes of the banal, I'm attempting to recontextualize objects or ideas and, in some small way, shed new light on our surroundings. Though the focus of my concepts is often quite specific, I hope that it can have broader applications by acting as a metaphor for an entire category of ideas. In the case of *Long Distance*, my target was recordings of pay phones in the 1970's. However, in a broader sense, I see this as representative of the way in which communication technology affects the nature of our personal interactions as well as the depth and scope of our worldview.

My process for choosing recorded source material does not start with these kind of philosophical questions. Rather, I am initially drawn to the musical possibilities of recorded sounds. In the case of the source material for *Long Distance,* the prospects for musical discovery were readily apparent. Before I move on to discuss specifically what elements I utilized for this piece, I should mention that nearly all of the source recordings came directly from the handset of these pay phones and not external mechanical sounds.

Rhythm

Because every call had to be routed from network to network by analog machines, chains of repeated rhythmic patterns permeated the lines while the caller was waiting to be connected. Additionally, it was common for multiple incoming calls to be handled by machines on adjacent circuits, so that the pulsations of other connections would bleed over into the primary call as a result of crosstalk interference. The patterns and rhythmic textures that emerged were quite intriguing to me and served as the basis for much of the rhythmic material throughout this entire work.

Pitch

There were a few common sources of pitch that eventually worked their way into *Long Distance* as a basis for melodic and harmonic material. First was the playback of pre-recorded messages from operators in different regions of the country. As has been demonstrated in many pieces before, speech can be a

fruitful source of melodic inspiration. I used this material extensively in *Atlanta, GA - 1972* and I'll discuss that in detail later in this paper. Multi-frequency keypad and dial tones were also a prevalent part of many recordings and I employed them throughout *Monroe, NC - 1977.* Finally, sounds produced by steady electromagnetic interference were a common part of these recordings, producing steady drones with a wide variety of timbres. In some cases these drones were high, and delicate, while In other cases, they were booming with low frequency energy. These drones became the sonic foundations for *Panorama, VA - 1976* and *Brooklyn, NY 1975.*

Texture

For me, texture was initially the most intriguing musical aspect of this source material. There was a particular class of recording in these archives commonly referred to as "trunk noise". To access this particular kind of noise, it was common for phreaks to navigate their way to a kind of dead end on the phone network. Either they would seek out a disconnected number whose "I'm sorry. Your call cannot be completed" message was mysteriously not set to repeat or trick an operator into transferring them to a line that was dormant or didn't exist. By reaching this dead end, they could listen at length to the uninterrupted sound of the network's machines busily routing calls.

Depending on the types of machines used, the resulting textures often sounded quite organic and reminded me a lot of nighttime field recordings of bustling insect or amphibian life. These textures also often included faint voices from other calls and again, this was all a byproduct of crosstalk interference on adjacent circuits. This particular class of sounds proved to be extremely useful in laying down a foundation of texture for the soloist and the ensemble.

Though much more abstract, I found an equal amount of inspiration in the personalities ascribed to these networks by those who recorded them. Many phreaks were teenagers with limited opportunities to explore the world outside of their local areas. For them, phreaking was a way to investigate new places they may never visit in person and see these distant lands from a very unique perspective. Eventually, communities of phreaks formed with the discovery of party lines, another phenomenon of crosstalk interference. This subculture continued to grow and eventually some even journeyed to the physical location of the more mysterious networks to gather recordings of pay phones in that area for documentation and comparison.

I saw this particular aspect of these recordings as a great way to organize my musical ideas. I had briefly considered writing multiple movements based on categories of sounds, one movement for trunk noise, one for ringtones and one for operator recordings, etc. However, I was really intrigued by the way in which

phone phreaks described these different networks. Through repeated interactions, they began to ascribe unique personalities to each network according to its specific sounds and routing behaviors. That was a signal to me that perhaps I should explore the idea of approaching this work as a kind of character piece based on the different geographic locations of each pay phone. The locations I selected are Brooklyn, NY, Atlanta, GA, Monroe, NC, and Panorama Virginia.

Practical performance considerations

Like many composers, I'm interested in maximizing performance opportunities for my music without compromising my artistic vision. Because *Long Distance* was commissioned by a large consortium this was on my mind quite frequently during the composition process and I arrived at a few basic approaches to help to facilitate that.

Software and audio flexibility

First of all, because the original commission was for just solo percussion and electronics, I wanted to make sure that this scaled down version would easily stand on its own. The consortium consists of graduate students, professors, and professional soloists, so I knew that there would be wide range of experience levels in terms of familiarity in working with electronics. Because of this, I wanted to be sure to include extensive instructions and tutorials. Additionally, I built in a wide variety of options for sound output depending upon the experience level of the performer and the performance venue.

In its simplest form, this entire piece could be performed using an iPod and cheap stereo splitter. However, those who want more options can use the included Max/MSP patch to adjust individual elements of the headphone output and click track, use a visual metronome, select multiple audio output options, choose the movement order, and even automate the wait time in between

movements. In order to facilitate more efficient practice sessions and rehearsals, I also included a feature that will allow a user to start the piece two measures before any rehearsal marking in the score.

Movement order

My initial concept for this piece was for four self-contained movements, with two for vibraphone and two for marimba. Because of this, I have encouraged performers to experiment with programming the movements in a variety of different orders, only performing two or three of the movements, and even interspersing each movement among other pieces throughout their concert. All of these approaches have been tried with the solo percussion and electronics version of this piece and the response from performers and audiences has been positive in every case. Going one step further, I also created an alternative marimba version for *Atlanta* and vibraphone version for *Monroe* so that any three of the four movements could be performed on the same instrument.

Instrumentation

From a practical standpoint, writing for wind ensemble is a logical choice for any composer. My decision to write this piece for that instrumentation (rather than orchestra) is based upon many of the same factors that are frequently discussed, so I don't feel that I need to go into that here. However, I do think it's worth mentioning how including electronics has influenced my approach to writing for this instrumentation. Some composers say that the wind ensemble

simply lacks some essential musical elements without strings. I would argue that this viewpoint is built on the idea that the orchestra sits on a pedestal as some kind of ideal sound that every ensemble should strive for. Rather, I believe that other large ensemble instrumentations are simply different, not lesser.

Many composers have come up with compelling ways to combat this misconception of sonic limitation and that has often come in the form of creative use of percussion. The incorporation of electronics has also emerged as a way to greatly expand the sonic palate of this ensemble. This presents some technical challenges as well, but I feel that this approach is reaching fairly wide acceptance among the wind ensemble community.

In the initial stages of orchestrating this piece, I imagined that I would include three or four percussionists but I ultimately decided that it simply wasn't necessary and may even be detrimental to the piece. All of the musical elements I would want to use percussion for in this piece were already present in the electronics. Doubling those elements or adding more simply for the sake of giving the percussionists something to do would ultimately reduce its overall clarity and simply create additional complications for the ensemble.

In addition to serving as the time keeper and purveyor of non-pitched musical material, electronics play a vital role in the expansion of the sonic palate of this piece. From sustained sounds in extreme registers to delicate and

complicated textures to bursts of inhumanly rapid rhythmic figurations, electronics are able to add a new dimension to live performance. In addition, I think one of the most exciting things about using recorded and manipulated audio with live performers is the ability to explore a new layer of audience perception through the mimetic properties of sound.

By exploring the gray area between abstraction and recognition of a sound's source, I believe that new avenues have become available for the portrayal of character and atmosphere in a piece. Despite my own excitement for the unique musical opportunities afforded by the use of technology, I made it a goal to use electronics as a natural extension of artistic expression rather than using the piece as a means to simply display what technology can do.

General approach to instrumentation and orchestration

Though still within the bounds of the traditional wind ensemble, I chose to keep the instrumentation fairly limited in this piece. One major factor for this decision was the limited upper dynamic range of the marimba and vibraphone. However, this relatively small ensemble could still easily overpower the soloist, so I was careful to keep the orchestration fairly transparent for most of the piece.

Monroe, NC - 1977

Programmatic inspiration and character

In this movement, I focused on one very specific aspect of the original field recording as a basis for musical material and general atmosphere. I felt that the way in which this network dealt with multi-frequency tones was particularly interesting and, aside from 14 seconds of the unaltered recording at the beginning, these mf tones make up almost the entirety of the electronic accompaniment. In the 1970's, ring tones and dial tones weren't yet standardized and this recording from a pay phone in Monroe, NC presented extreme dynamic contrast. While the dial tone and residual line noise was quite subdued and pleasant, the ring tone was abrupt, brash, and quite startling. I decided to make this dichotomy a primary feature of this movement, presenting two contrasting states in abrupt juxtaposition.

Pitch and rhythmic content

Dual-tone multi-frequency signaling systems were the standard way in which telephone systems would communicate with each other from the 1960's through the mid 1990's. Rather than counting bursts of clicks as in older systems, or digital data transmission in modern networks, this approach transmitted user input by combining two frequencies that corresponded to a simple grid on the keypad. Understanding this system allowed phreaks at this time to build devices called "blue boxes" that could emulate these frequency

combinations and bypass the billing mechanism of pay phones or home phones and allow them to place calls for free. In the chart below, I mapped these frequencies to their closest musical pitch according to our modern tuning system based upon A-440. (example 13.1)

Example 13.1

DTMF keypad	1209 - D#6	1336 - E6	1477 - F#6	1633 - G#6
697 - F5	1 (D# + F)	2 (E + F)	3 (F# + F)	A (G# + F)
770 - G5	4 (D# + G)	5 (E + G)	6 (F# + G)	B (G# + G)
852 - G#5	7 (D# + G#)	8 (E + G#)	9 (F# + G#)	C (G# + G#)
941 - A#5	* (D# + A#)	0 (E + A#)	# (F# + A#)	D (G# + A#)
Busy	480 + 620	(D# + A#-B)		
Ringback	440 + 480	(D# + A)		
Dial tone	350 + 440	(A + F)		

This chart shows the standard numerical layout of the keypad including the # and * symbols as well as busy tones, ringback tones, and dial tones. Additionally, I incorporated the letters A, B, C, and D. These letters were a part of the original mf tone system and included on telephone keypads, but they fell out of common use in the 1960's.

This became the basis for my pitch language in *Monroe, NC - 1977,* and I was particularly interested in exploring the use of two three-note clusters as the foundation for the "startling" material that would open and close the movement. These were derived from the second row (F#, G, G#) and third column (F, F#, G)

of the keypad. For the more serene middle section, I chose to utilize the major 6th produced by the dial tone.

Orchestration

Similar to the abrupt and persistent alarm-like quality of the ring tone in the recording, I wanted to create a rhythmic texture that would augment rapid alternations of mf tones. However, I also chose to build in a gradual evolution of texture over time while maintaining their core incessant nature. To do this, I staggered repetitions of uneven rhythmic cycles within the upper woodwinds so that no two measures within each “ring” phrase would be an exact repetition.

Because the time between rings in the recording is predictable and steady, I wanted to maintain a clear sense of pulse throughout, so that, despite a few meter changes, the quarter note is clearly reinforced by rhythmic figurations in the electronics, solo marimba, and wind ensemble. This kind of rhythmic undulation within static harmonies persists throughout most of the piece in the wind ensemble in order to give a sense of constant motion and continually reinforcing the underlying pulse.

Audio processing

This movement focuses primarily on a few basic processes in audio manipulation, the most pervasive of which is the use of altered amplitude envelopes for multi-frequency tones. The most widely used of these mimicked

the amplitude envelope of the marimba in order to blur the sonic boundaries between the soloist and the electronics. This can be heard at the first “startling” section at measure 15.

For the “serene” section beginning at measure 50, I employed two highly contrasting versions of this mf tones sampler. One uses an amplitude envelope that is so short and abrupt that pitch is not easily perceived, resulting in a very percussive quality. The attack time of this envelope was then randomized within a very narrow margin to add some variety and give it a slightly organic quality. The amplitude envelope of the other sampler also has a very short attack time, but in this case its sustain can be looped and prolonged indefinitely. This instrument was derived from the dial tone and produces the harmonic accompaniment. To produce the repeated cycles of harmonic material, pitch shifting was also applied along with time stretching of the source material to produce variations in timbre during sustained portions of the envelope.

Brooklyn, NY - 1975

Programmatic inspiration and character

My programmatic approach to this movement was directly inspired by a story in which Evan Doorbell recounts one of his first experiences of listening in on the trunk noise on his grandmother's phone in Long Island when making a call to Brooklyn. This proved to be a hugely influential moment in which he came to the realization that most of the activity in his world consisted of things he couldn't even see and went largely unnoticed by everyone else around him.

I tried to imagine myself in his shoes, hearing this bustling mechanical and human chatter for the first time. I really wanted to evoke the sense of wonder that might come with the new found realization of the sheer magnitude of humanity in a place like New York City. I likened it to seeing the city from a plane for the first time. When you're on the ground it can seem fairly small and intimate in day to day life. You see the same people, go to the same stores and subway stations. Your concept of what the city is (especially as a kid) consists mostly of your neighborhood. Seeing it from the window of a plane may give you an idea of its sheer physical mass. However, I think that hearing something like this might evoke an even stronger response by providing a brief glimpse into the vast networks we never see. It's as if there's a city within the city always pulsing and throbbing beneath our feet and above our heads.

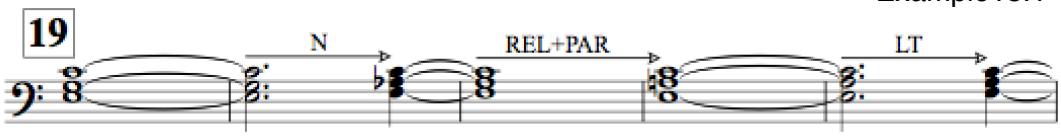
I felt that perhaps the most effective way to represent this musically was in terms of form and gesture. The initial single-note gesture in the marimba is intended to narrow the listener's focus and provide a point of origin from which all subsequent material would grow and evolve. The climax of this gesture at the beginning of measure three brings about a sudden (though subtle) burst of new timbres which begins the gradual unpacking of additional pitch material centered around the high drone of C. This faint drone persists throughout nearly the entire movement and is only subverted around the climax beginning in measure 41.

Harmonic language

Despite frequent use of triadic harmony, most of this movement does not rely on tonal dominant-tonic harmonic relationships. My approach to harmony in this movement (as well as Panorama, VA - 1976) is perhaps best described by the principles of Neo-Riemannian theory. In this way, changing harmonies are considered closely related not by their tonal relationships, but rather by triadic transformation via common tone connection. For example, I frequently present a major or minor triad and its parallel in succession with the implication that they are closely related to each other. While this is not true in a traditional tonal sense, parallel transformation is one of the base level operations of Neo-Riemannian theory.

For example, in the marimba at measure 19, I move from C-major to f-minor in measure 20, then to a-minor in measure in 22 and then to f-major in measure 23. If analyzed using traditional tonal theory, this progression doesn't necessarily make a lot of sense because none of these chords are closely related. However, if analyzed using Neo-Riemannian theory, these can all be easily describe as primary or secondary operations. In this case the operations are, N (Nevenverwandt), R (relative) and P (parallel) in tandem, and LT (leading tone exchange). (example 18.1)

Example18.1

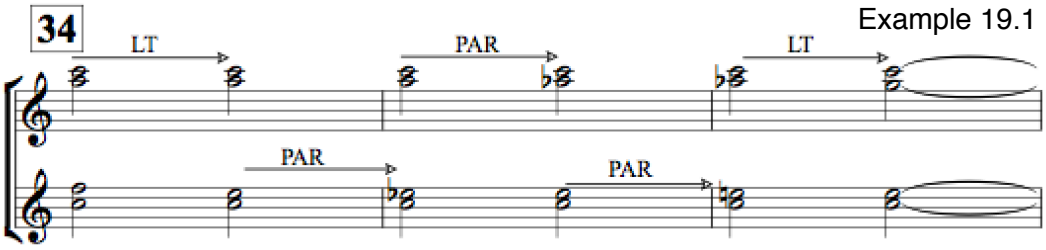


These kind of non-functional harmonic relationships continue with alternating Leading Tone transformations from measure 27 to 33. (example 18.2)

Example 18.2

However, at measure 34 Parallel and Leading Tone transformations become independent in the left and right hand so that the harmonic palate begins to incorporate chords beyond just major and minor triads. This serves to add tension in the approach to the climax at measure 41. (example 19.1)

Example 19.1



At measure 41, I opted for a I-V-I harmonic relationship in order to create a stronger sense of forward momentum. However, by measure 54, there is a reemergence of harmonic relationships governed common tones. This return to non-functional harmonic relationships reinstates the gradually drifting atmosphere found in measure 27.

Audio processing

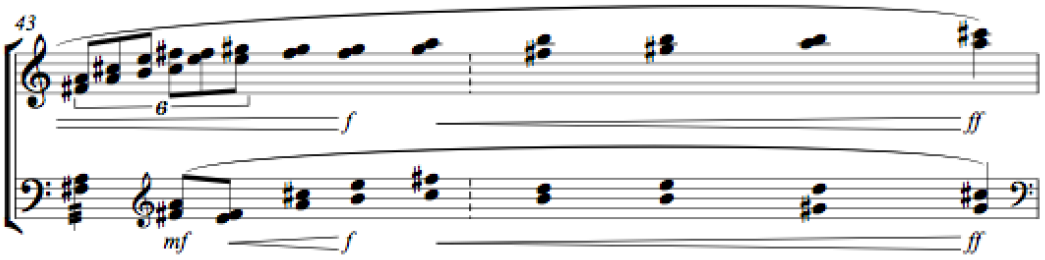
The original recording is trunk noise from a Brooklyn pay phone that is rich with organic sounding clicks and chirps. The drone that pervades most of this movement also exists in this particular recording, though I used a very narrow band pass filter to isolate that drone and emphasize its pitch center. I

used a similar process to isolate and extract other layers of the recording so that I could control the texture's density over time.

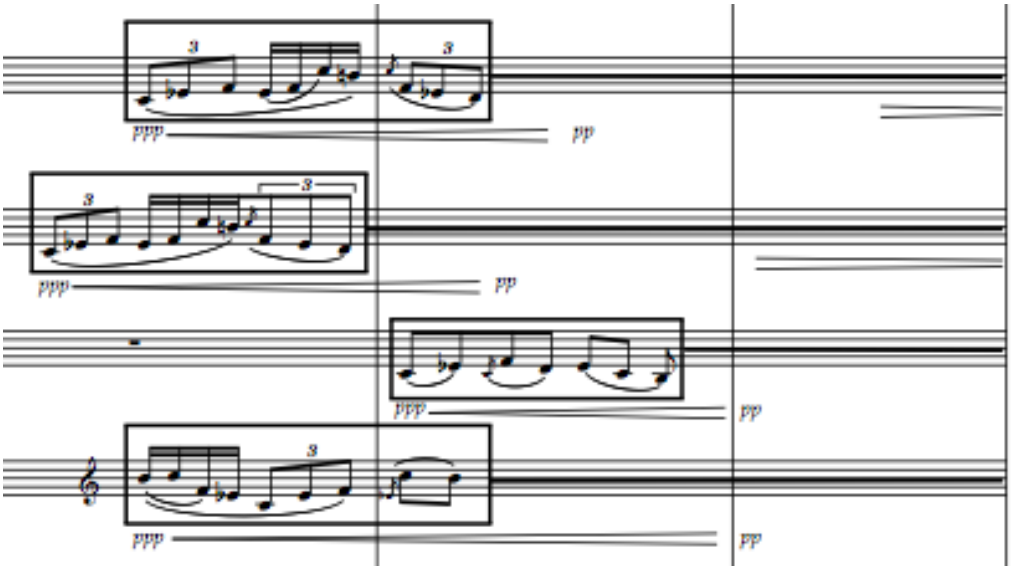
The original recording is less than a minute long so this approach also allowed me to weave these layers together and produce a sustained texture that could last indefinitely without any direct repetition. Pitch shifting, additional EQ and comb filtering of that original drone also produced the low sustained tones at the climax section from measures 41 - 54.

In contrast to the mechanical precision and regularity of *Monroe, NC - 1977,* I wanted to emphasize the organic and unpredictable nature of the original recording in this movement. This took the form of semi-improvisatory rhythmic figures in the marimba like feathered beaming (example 20.1) and proportional notation as well as box notation in the woodwinds. (example 21.1)

Example 20.1



Example 21.1



In order to achieve the right kind of impact at the climax, I chose to restrict the use of un-muted brass until measure 41. As a kind of residual effect of this opening up of the low register, I decided to include the bottom C of the marimba at measure 60. However this note is sustained by rolling with a bass drum mallet so that it would be heard or felt more as a soft rumble. Throughout much of this movement, I wanted the listener to perceive the soloist, winds, and electronics as interweaved components of the same texture, using rhythmic flexibility and exaggerated gesture to only occasionally bring their focus on the soloist.

Atlanta, GA - 1972

Programmatic inspiration and character

This movement was inspired by a recording from an Atlanta pay phone that was routed (using a blue box) to a few different long distance locations and finally to a large office building on the other side of the city. What was unique about this building is that it was a call center with 50 dedicated phone lines. At the time this call was made, all of the lines were busy. Because this building had a dedicated set of switches on the Atlanta network, the call was rapidly routed to every line in the building before determining that all of the lines were in use and finally returning the busy signal. As a result, the recording consists of a series of rapid and unpredictable changes in texture that I thought would be fruitful material for musical exploration.

Audio processing

Aside for some time stretching and a bit of reverb on occasion, the audio files remained largely unchanged. However, I built a few extensive samplers based on categories of sounds taken from the original field recording. The most prevalent of these comes from the voice of Jane Barbe. Barbe's voice was used by Bell Telephone Systems for nearly every pre-recoded message through the 1970's - 1990's and was arguably the most recognizable voice in the US at that time. Her delivery was articulate and expressive, spanning over an octave in

some recordings, which provided me with excellent source material. I built four samplers using her voice for this movement.

In the most widely used of these, I cut out around 100 different single syllables from various messages. I then determined the pitch that most closely matched each syllable and mapped that onto the pitch grid of the sampler to create what I referred to as the “musical Jane machine”. I followed a similar process using cropped samples of entire words as well as vowel sounds with no consonants and finally one with just consonants for a more percussive quality. I also created samplers using mechanical sounds from the recording and these provided much of the non-pitched material in this movement.

With the major exception of this movement and the very beginning of *Monroe, NC - 1977,* it was my intent to divorce the recorded sounds’ sources from their sonic content, thereby simply adding to the sonic palate of the instrumental parts or providing a textural backdrop for the soloist. Using strategic editing and processing techniques, I chose to present this audio in such a way that it would simply be an augmentation or extension of the live performers.

However, in this movement, I wanted to draw the listener’s attention to a new and persistent kind of relationship between the electronics, live performers, and the programmatic inspiration for the piece. I felt that letting just a glimmer of humanness shine through in the electronics would cause the listener to try and

find meaning in the fragments of words presented throughout the movement and ascribe some degree of personality to the electronic track. In doing this, I wanted to heighten the manic, unpredictable, and humorous character of this movement.

The term *uncanny valley* is used to describe objects with human characteristics that look and behave almost, but not exactly like real human beings. Humanoid objects like robots, ventriloquist dummies, or even computer animations that fall into this uncanny valley will often elicit a reaction of uneasiness or even revulsion. My treatment of the human voice in this movement strives to tap into that in some small way. By blurring the lines between human and machine, my goal was to create a general sense of unease without crossing over to revulsion.

Orchestration

My decisions concerning orchestration mostly followed stylistic changes, such that sections containing rapid alternations of style contain abrupt changes in color as well. I was also careful to keep the orchestration fairly thin and varied throughout, even during moments of high dynamic intensity. My reasoning for this was twofold. First, I wanted to maintain clarity amongst rhythmically complex passages in combination with a wide variety of timbres. From a more practical standpoint, I simply didn't want the soloist to become completely overwhelmed

by the ensemble. The only time the entire ensemble plays together is in the penultimate measure.

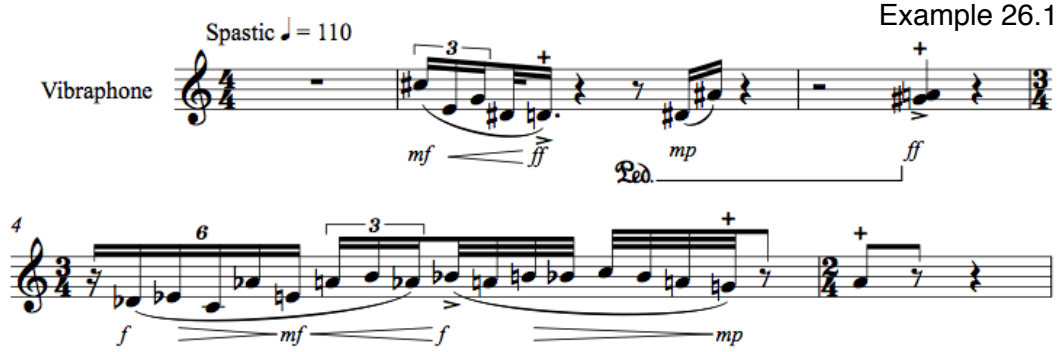
Pitch and rhythmic content

At the outset, I knew that I wanted to juxtapose several distinct styles of music in this movement with a particular emphasis on popular styles with which the vibraphone is often associated, like cool jazz, bop, blues, and funk. To further exaggerate this juxtaposition, I made it a point to emphasize abrupt switches in playing technique and timbre as well. This is especially true for the first 40 measures. My goal for this section was to alternate between two sound-worlds that appear to exist on opposite ends of the spectrum in terms of character. One is spastic, fast, and dry, while the other moves much more slowly and relies heavily on the sustain pedal of the vibraphone. Over the course of these first 40 measures, I wanted to gradually invert the proportions of the appearance of these styles so that the slow and smooth material gradually overtakes the fast material and eventually evolves into something akin to a jazz style with a clear pulse, syncopated rhythms, and extended tertian harmonies.

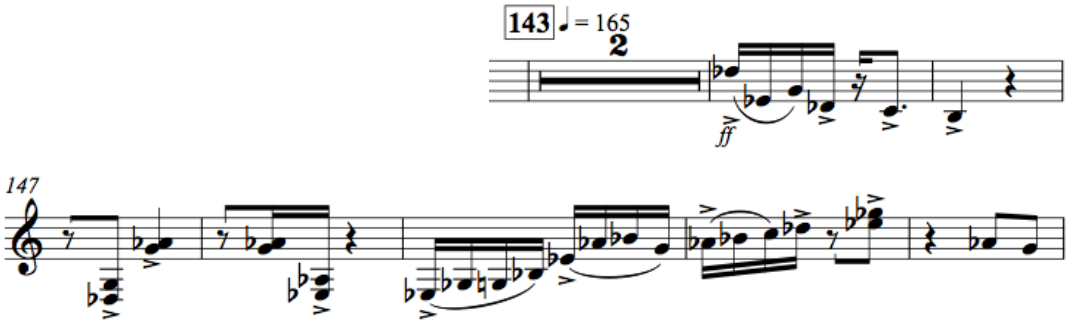
Along with featuring stylistic juxtaposition in this movement, I wanted it to have continuous forward momentum and a general sense that it is in a constant state of transition. However, I saw the tempo change at measure 143 as a point of arrival in which these styles coalesce. For example, the melodic figure in the

vibraphone in measure 145 (example 26.2) has a similar rhythmic profile and pitch contour to the gesture in measure three. (example 26.1) However, its reappearance contains the syncopation and harmonic language featured in the “funky” section at measure 90 as well as the mechanical sounds and pulse-based electronic accompaniment found in the “brilliant” section in measure 67.

Example 26.1



Example 26.2



Panorama, VA - 1976

Programmatic inspiration and character

This movement is quite different from the others on several levels. This pay phone, located at a restaurant in an isolated area of Shenandoah National Park, was one of the last of its kind when Evan Doorbell happened upon it in 1976. Rather than inserting coins to make a call, you had to let the operator talk to the restaurant staff so that she could tell them what amount to charge for the call. Additionally, no local calls could be made from this phone because it existed outside of any designated area code. In fact the phone itself had no keypad and the only way to make a call was to simply pick up the phone and ask the operator to connect you.

I saw this as an interesting opportunity to add some contrast to the work as a whole. All of the previously described movements focused on the idea of technology facilitating easy connections between many people via access to a vast and bustling network. By contrast, this recording and the story behind it represented one tenuous connection from a place that was barely even recognized by the all-seeing eye of Ma Bell. To further illustrate its isolation, Bell Telephone only called this place Panorama, VA because that was the name of the restaurant. There was no town or village there and all that now stands at the location is a gas station overlooking a wide valley of green and highway 33.

In reaction, I imagined a desolate musical landscape that portrayed the kind of serenity tinged with uneasiness that comes from inward reflection when confronted with nature on a massive scale. Rather than juxtaposing several contrasting ideas and timbres, I wanted to focus on the purity of the vibraphone's sound and greatly limit my harmonic, melodic, and rhythmic material, allowing it to naturally and slowly unwind over the course of the movement.

As with the pitch material, I decided to work with very limited source material from the original recording. For only a few key moments, I used a texture generated from the operator's voice and applied a comb filter to give it a sense of focused pitch. The only other part of the recording I used was the quiet hum of the phone before the operator answered. This hum was then granulated and fed through comb filters to match the timbre of the bowed vibraphone and ultimately produced all of the sustained pitch material in the electronics.

Orchestration

The most obvious difference between this movement and the others is that it is for vibraphone and electronics alone. While the other movements easily lent themselves to an expansion of timbre and volume with the incorporation of wind ensemble, this movement simply did not. My original concept for the sound world of this movement was one of focused timbral homogeneity in which every subtle nuance of the vibraphone’s sound would be readily audible to the listener.

I spent quite a bit of time sketching out how I could delicately add in instruments from the ensemble to enhance this, but I realized that I was doing it merely to follow convention rather than serving my vision for the work as a whole. However, I think it would still work quite well in the program as the second movement if three or four or four of the movements were performed in succession.

Pitch and rhythmic content

Like the harmonic and melodic language for *Brooklyn, NY - 1975,* this movement can be best described with triadic transformations commonly described in Neo-Riemannian theory. I have often gravitated toward this kind of harmonic language often in my music over the past few years, and this approach is particularly well suited to utilizing pitch bending techniques on the vibraphone. To achieve this effect, the player uses a hard mallet to put pressure on the middle of a bar to lower its pitch by a half step. Then, as she or he slides the mallet toward the edge of the bar, the pitch gradually returns to its natural state. Because this effect can only bend the pitch up or down by a half step, the only Neo-Riemannian operations that can be performed are Parallel Transformation (in which the vibraphone is playing the third of the triad) and Leading Tone Exchange Transformation (in which the vibraphone is playing the root of a major triad or fifth of a minor triad)

Starting in measure 38, the movement settles into a drone on A until measure 63. In this section, harmonic treatment is still largely triadic and hovers ambiguously around A-minor and A-Major. In doing this, my goal was to instill a sense of arrival tinged with a general feeling of trepidation.

Composition as a collaborative process

Throughout my studies and work as a composer at UT Austin, I have seen again and again how important it is to grow and maintain close relationships with performers. Not only are they able to provide valuable information about the technical limitations and abilities of their instrument or voice-type, but they provide unique insight about what it means for them to get up on stage to perform a work that has never been heard before. When it comes to commissioned works, I believe that these relationships take on even greater importance. Commissioning performers become more than simply a resource for technical information. They can be a source of inspiration for all aspects of the work and their particular style flavors nearly every decision in the compositional process. This leads to a highly personalized approach to composition that is, in my opinion, extremely rewarding for all parties involved.

This kind of approach has encouraged me to open up all aspects of the composition process to performers. While this degree of openness removes much of the mystique of composition, I believe that it has ultimately led to better pieces and better performances. Aside from the obvious benefits of having easy access to information about the instrument for which I'm writing, this approach allows me invite the performer into the creative process. By having direct access and influence in the compositional process, the commissioning performers

develop a strong sense of ownership and attachment. This leads them to work harder on the piece and dig deeper into its meaning, ultimately resulting in better performances. Perhaps just as important, they become long-term advocates for the piece and are eager to make it known among their colleagues, thereby increasing its impact and longevity in their particular field.

Because of the (near) ubiquitousness of high-speed internet in recent years, I have taken advantage of an online approach toward collaboration. By simply setting up a private blog for each new piece and documenting the composition process as it unfolds, performer/composer interaction is able to easily bridge geographical divides with the added bonus of serving as a thorough reference for future performances or additional collaborations. This aspect of online collaboration was particularly important for me during the composition of *Long Distance.*

Mike Truesdell and Tim Briones approached me nearly two years ago about commissioning new works for keyboard percussion and electronics. Though they contacted me within only a few days of each other, neither of them was aware of the other's proposal. Because they both were students at the time, (Truesdell was a DMA student at Juilliard and Briones was a master's student at Eastman) their access to funds for the commission fee was limited. I decided to put them in contact with each other and start discussing the idea of forming a

consortium to commission one twenty minute work rather than two ten minute works.

Over the next few months, they assembled a consortium of 33 percussionists ranging from undergraduate students to seasoned professionals. Wishing to stay true to my collaborative approach, I created user accounts for each of them on an extensive blog where they could observe, comment, and participate in the composition process. This approach proved to be particularly useful because I was living in Portugal while composing much of the piece and most of the consortium members were living in North America.

While some of the consortium members chose to take a fairly passive approach and simply watch the composition unfold over time, many were quite active on the blog. They were very quick to answer any technical questions I had about marimba or vibraphone, post recordings of little-known pieces they considered to be particularly effective and relevant, and would even send me recordings they had personally made demonstrating different mallet options or extended techniques.

In one particular instance, I posted a question about pitch bends and harmonics on vibraphone and within an hour, Thad Anderson (percussion professor at the University of South Florida) asked if I wanted to Skype with him and try a few things out on the vibraphone in his office. As a result, we

collaboratively devised a performance technique and notation method that eventually became a part of this piece. Without a doubt, approaching this piece as a collaboration with the consortium was a major influence on its construction and execution. Though it was sometimes a bit uncomfortable for me to openly discuss the false starts and dead ends of my composition process as the piece progressed, I think it was a highly rewarding approach and ultimately resulted in a better piece.

Conclusion

Upon a bit of reflection, I can confidently say that this piece represents a culmination of my development as a composer since beginning studies at the University of Texas at Austin. I have taken a collaborative and practical approach toward the composition process while utilizing a wide variety of musical styles and performance techniques. Furthermore, I have approached the use of electronics as an integrated musical element such that listeners and performers could perceive their combination to be a natural extension of my musical language rather than simply a novelty or experiment. Composing this piece was an extremely rewarding experience for me and I am optimistic that it will be received favorably by listeners and performers alike.

Steven Snowden

Long Distance

For Solo Percussion,
Wind Ensemble, and Electronics

~Long Distance~

Atlanta, GA – 1972
Vibes or Marimba + Electronics (5 min)

Brooklyn, NY – 1975
Marimba + Electronics (6 min.)

Monroe, NC – 1977
For Marimba or Vibes + Electronics (4 min.)

Panorama, VA – 1976
Vibes + Electronics (6 min.)

Total duration – 20 min.

Wind Ensemble Instrumentation:

Flute 1-2
Flute 3/Piccolo
Oboe 1-2
B♭ Clarinet 1-3
Bass Clarinet 1-2
Bassoon 1-2
Soprano Saxophone
Alto Saxophone
Tenor Saxophone
Baritone Saxophone

Horn in F 1-2
B♭ Trumpet 1-3
Trombone 1-3
Bass Trombone
Euphonium 1-2
Tuba

This piece was commissioned by an international consortium led by

Mike Truesdell and **Tim Briones**

Consortium members:

Mike Truesdell
Tim Briones
Aaron Butler
Josh Spaulding
Thad Anderson
Megan Arns
Alexv Rolfe
Adam Groh
Nancy Zeltsman
George Nickson
Benjamin Fraley
Jeff Sass
Joe Millea
Chris Jones
John Corkhill
Pedro Carneiro
Ryan Truesdell
Lucas Garner
Aaron Ragsdale
Abby Fisher
Sean Connors
Logan Ball
Omar Carmenates
Colin Walker
Oliver Molina
Neil Sisauyhoat
Tyson Voigt
William Moersch
David Stevens
Andy Bliss
Michael Ptacin
Joint Venture Percussion Duo
(Laurent Warnier
and Xi Zhang)

Program Notes:

"Once upon a time, in the days before the ubiquitous and invisible internet, there was only one network. It was made of long-distance lines — actual wires — and it was ruled by an absolute monarch, Ma Bell. Most people traveled the network along conventional channels. But there were also explorers, a small group of curious misfits eager to map the darkest, most obscure corners of this evolving global net. Harvard students, blind teenagers, budding engineers — eventually they came together and formed a subculture. They became *phone phreaks*." - Jesse Hicks

I first learned about phone phreaks a couple of years ago and was immediately fascinated by their tenacity and boundless curiosity. By hacking the inner workings of payphones, building small electrical devices, or even whistling repeated tones at specific frequencies, they were able to manipulate this analog technology to connect with others in far away places or simply listen in on the pops, clicks, and hums produced by the machinery of distant networks. These sonic identifiers were unique to each of the thousands of long distance networks and (luckily for me) it was quite common for phreaks to make high quality reel-to-reel recordings of what they heard. All electronic sounds used in this piece come from these recordings and each movement is based upon the unique sonic qualities of calls from payphones in various locations in the US in the 1970's. – Steven Snowden

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Technical Requirements:

I've designed the electronics for this piece to be very flexible and to work with a variety of setups. Running the included application from a computer will provide you with the most options, however this piece can be performed using just an mp3 player. Check out the included Long_Distance_read_me_first.txt file for all of the details.

Performance Notes:

Movement selection and order:

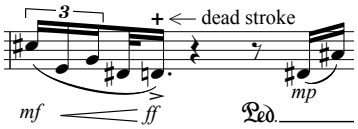
These movements can be played in any combination and in any order and it's up to the performer to decide what will work best for his or her program. (It would even work to separate these movements with other pieces if desired) Additionally, any of these movements can be performed individually, in pairs, threes, or as a complete suite. If three or more movements are performed, it would probably be best to separate the two slow movements. (*Brooklyn* and *Panorama*)

Instrumentation:

Brooklyn and *Monroe* were originally written for marimba while *Atlanta* and *Panorama* were originally written for vibes. However, I have written an optional vibes part for *Monroe* and an optional marimba part for *Atlanta*. With that in mind, it would be possible to program a performance of *Monroe, Brooklyn,* and *Atlanta* with only marimba. Likewise, it would be possible to program a performance of *Monroe*, *Panorama*, and *Atlanta* with only vibes. Finally, *Atlanta* was originally written for 3.5 vibes, but it can be performed on a 3-octave instrument. Optional notes for 3-octave vibes are give in parentheses except for measures 49-52 where the optional passage is shown in floating ossia measures in the part.

Notation:

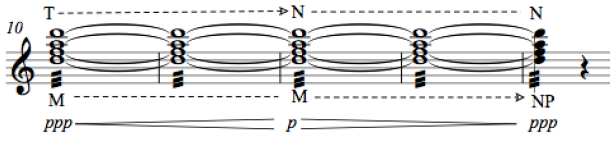
Dead Stroke: (Monroe and Atlanta)



Notes with a + sign over them are to played as dead strokes.

Mallet angle and placement: (Brooklyn)

In several sections of *Brooklyn*, I have specified the angle at which the mallets are to be used as well as where their placement on the bars of the marimba. The letter *T* indicates when the thicker top part of the mallet should be used and *N* indicates when they should be at normal playing position. (with the shafts more parallel to the bars of the marimba) Likewise, the letter *M* indicates when the bars should be struck toward the middle and *NP* indicates when they should be struck at the nodal point near the string.

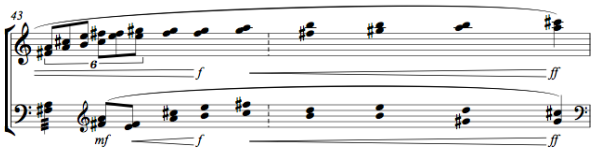


In this example, the roll begins near the middle of the marimba bars and gradually moves to the nodal point from measure 12-14. Also, the roll begins at the top of the mallets and gradually shifts to normal position from bar 10-12.

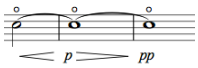
Spatial notation: (Brooklyn)

In a few sections of this movement, spatial notation (indicated by stemless noteheads) is used to allow for more rhythmic freedom and increased dramatic intensity. Horizontal placement of the noteheads gives a rough indication of duration between notes, however it is up to the player to decide what is musically most effective.

In this example, the player should adhere to the notated rhythm for the first two beats of measure 43. Though the next two beats correlate roughly with triplets, there should be a bit more space between the penultimate and final chords of that measure. That same sort of freedom applies to the following measure. You could think of this a bit like a written out ritard, though the clicktrack will continue with the same tempo.



Harmonics: (Panorama)



Harmonics are indicated by an open circle over the note. All harmonics are excecuted by touching the "center-node" with your finger, producing a sounding pitch that is two octaves above the written pitch.

Pitch bend: (Panorama)

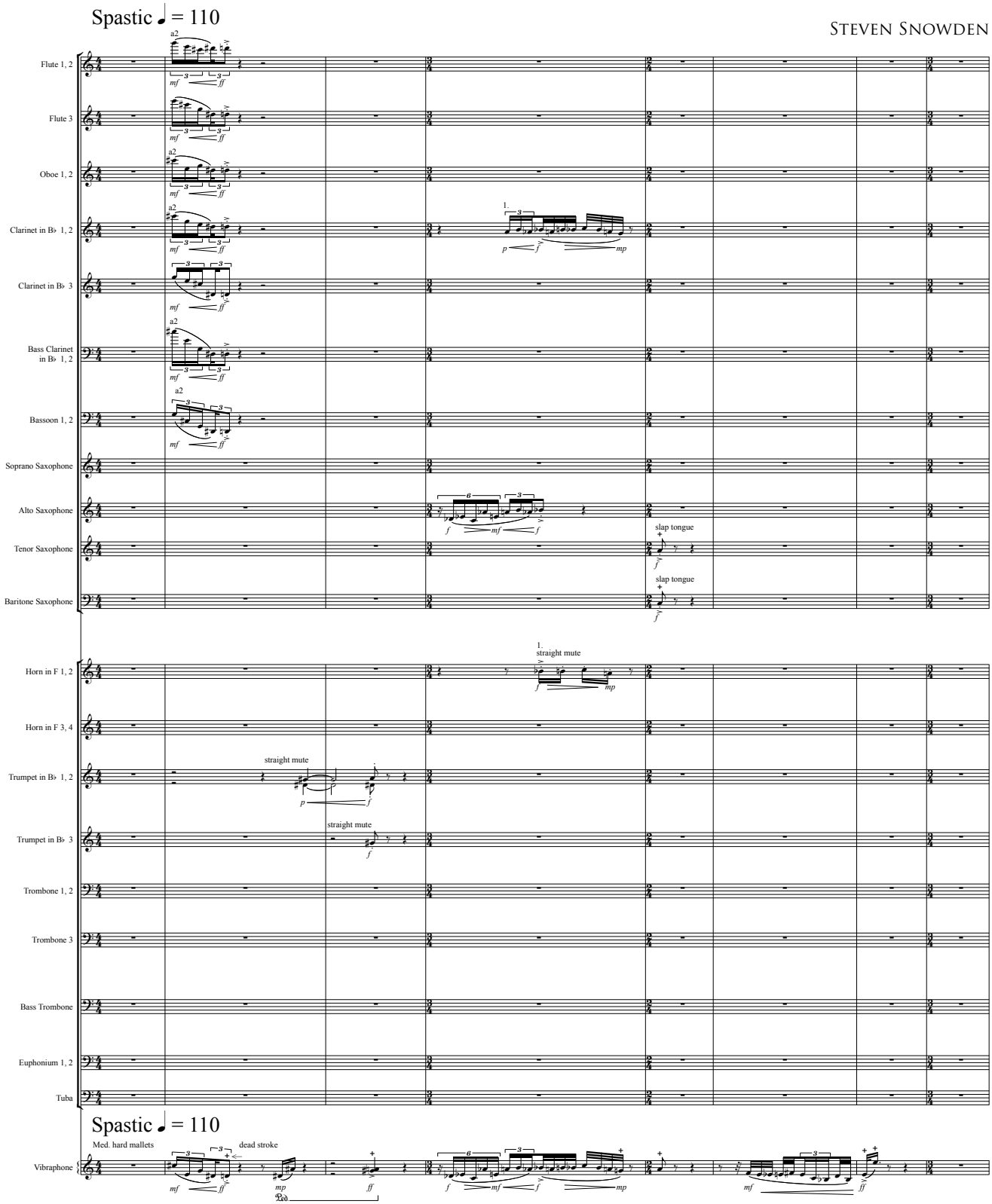
Pitch bends play a prominent role in *Panorama* and should be executed applying pressure to a given bar with a hard mallet. However, because some of the pitch bends occur in very soft passages, it may be necessary to attach a small piece of moleskin to the head of the hard mallet to ensure that its contact with the bar isn't audible.

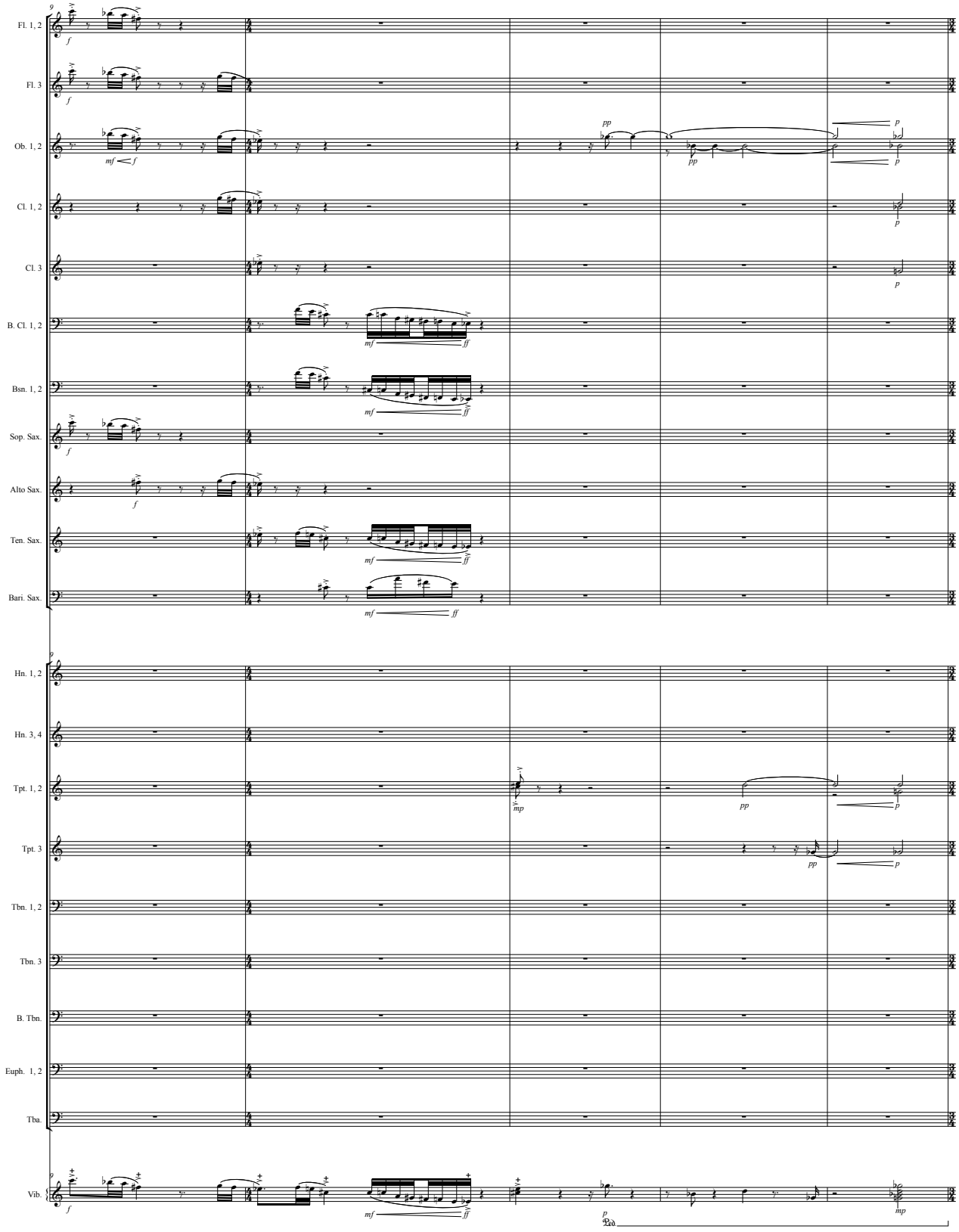
In this example, pressure is placed towards the middle of the bar before it is bowed. The hard mallet is then pulled very slowly towards the player to facilitate a very gradual rise in pitch over eight beats. The quarter sharp in the second bar merely indicates that the sounding pitch should not have yet reached the natural pitch of the bar.

Long Distance

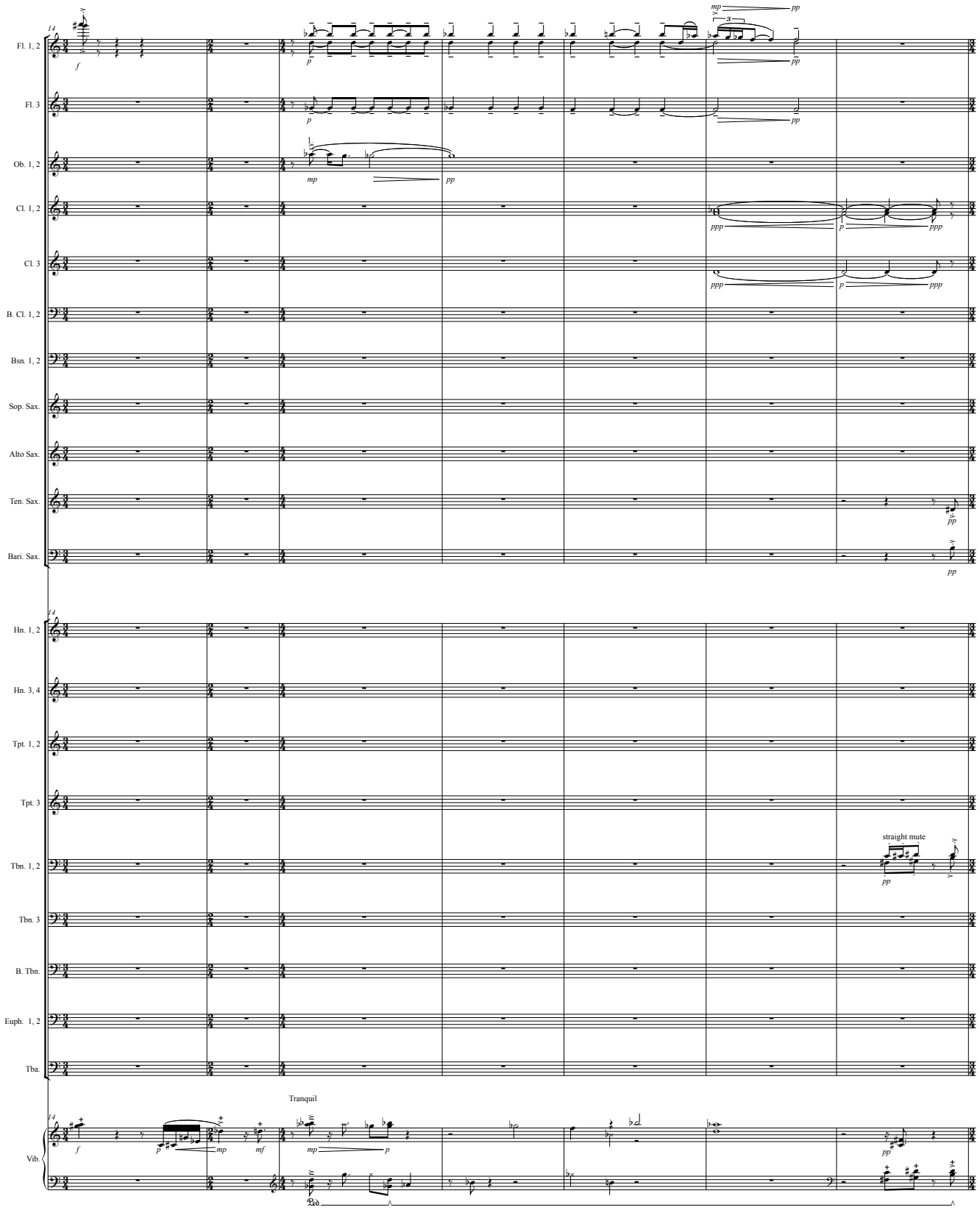
Atlanta, GA - 1972

Steven Snowden

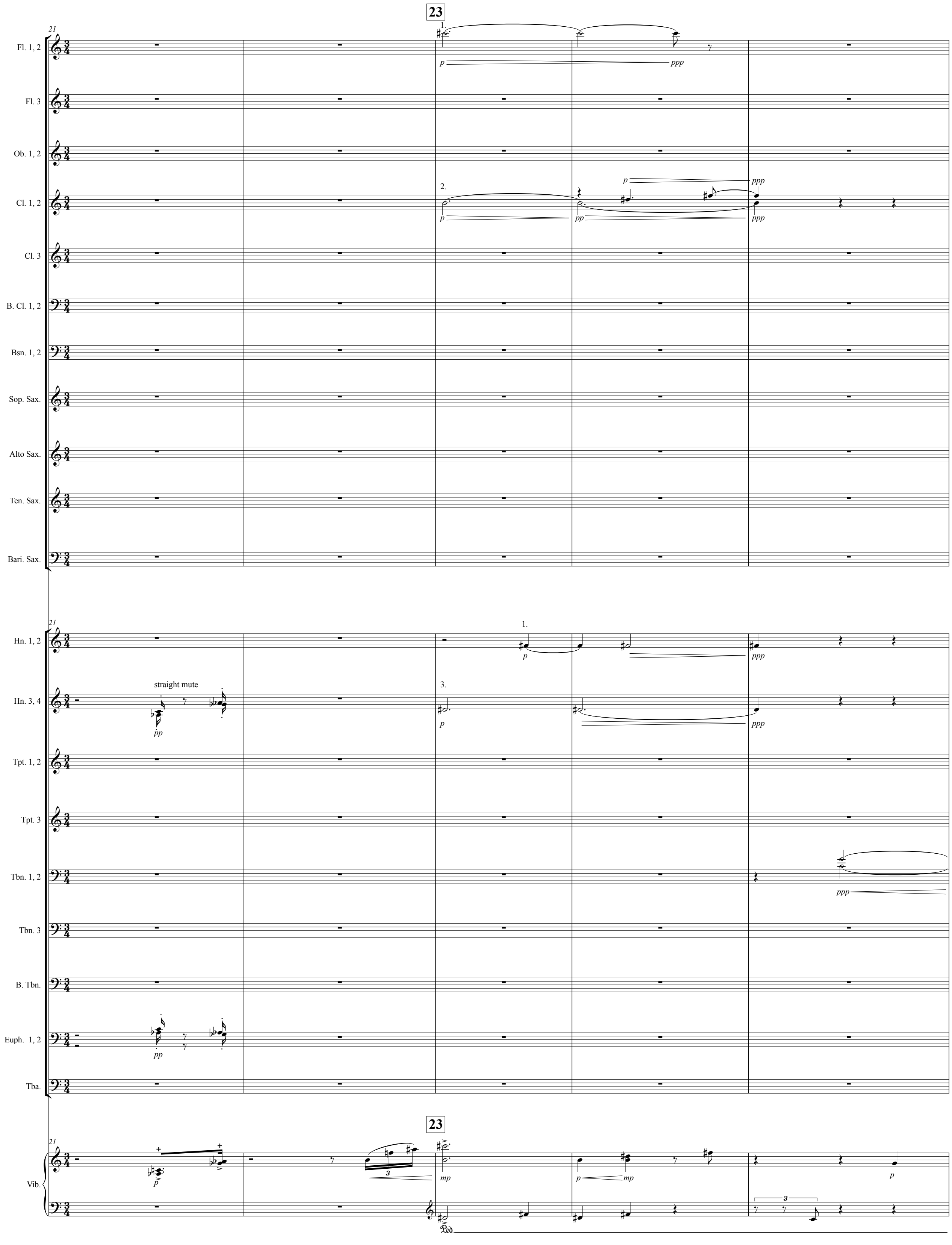


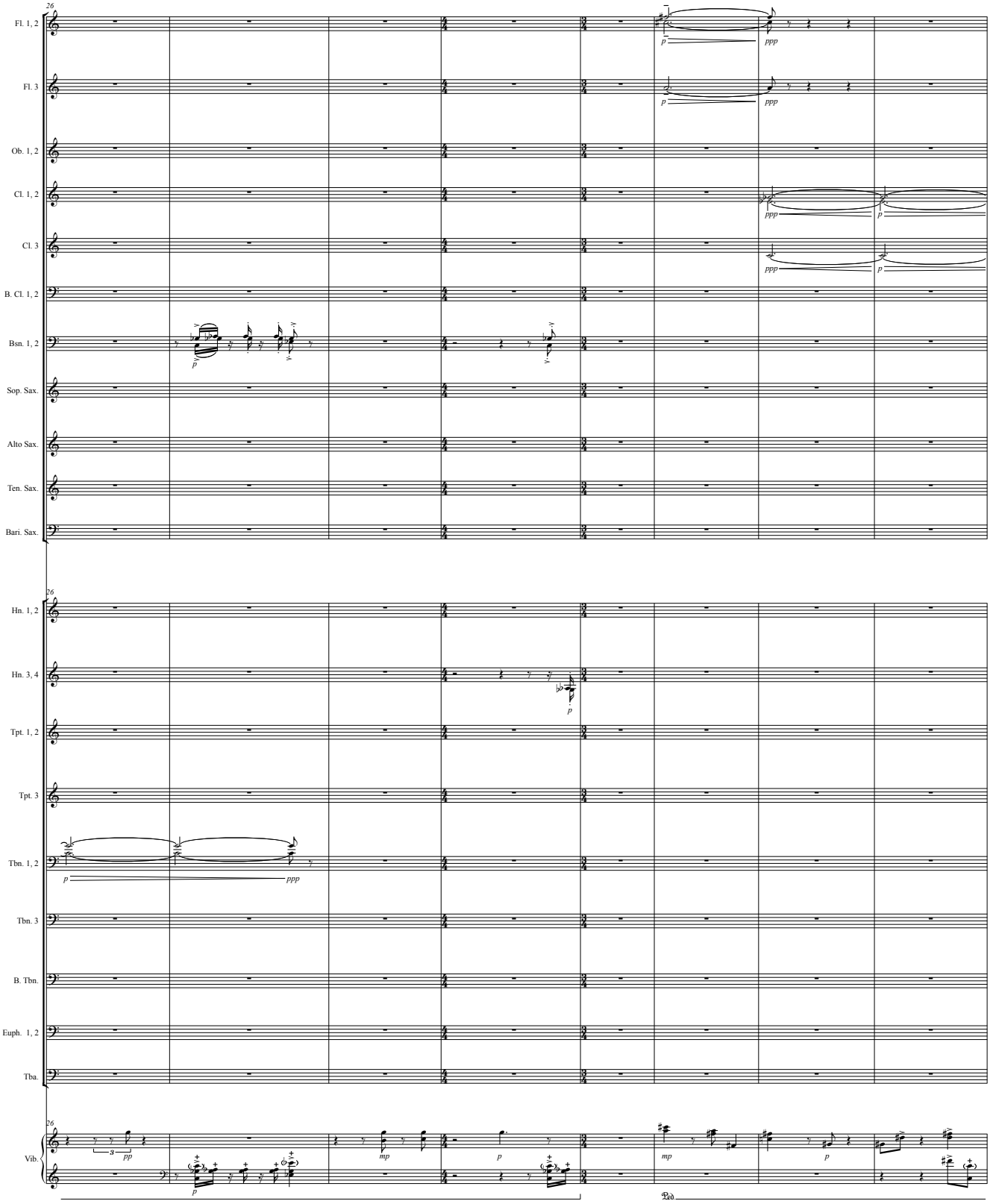

9
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
9
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
9
Vib.

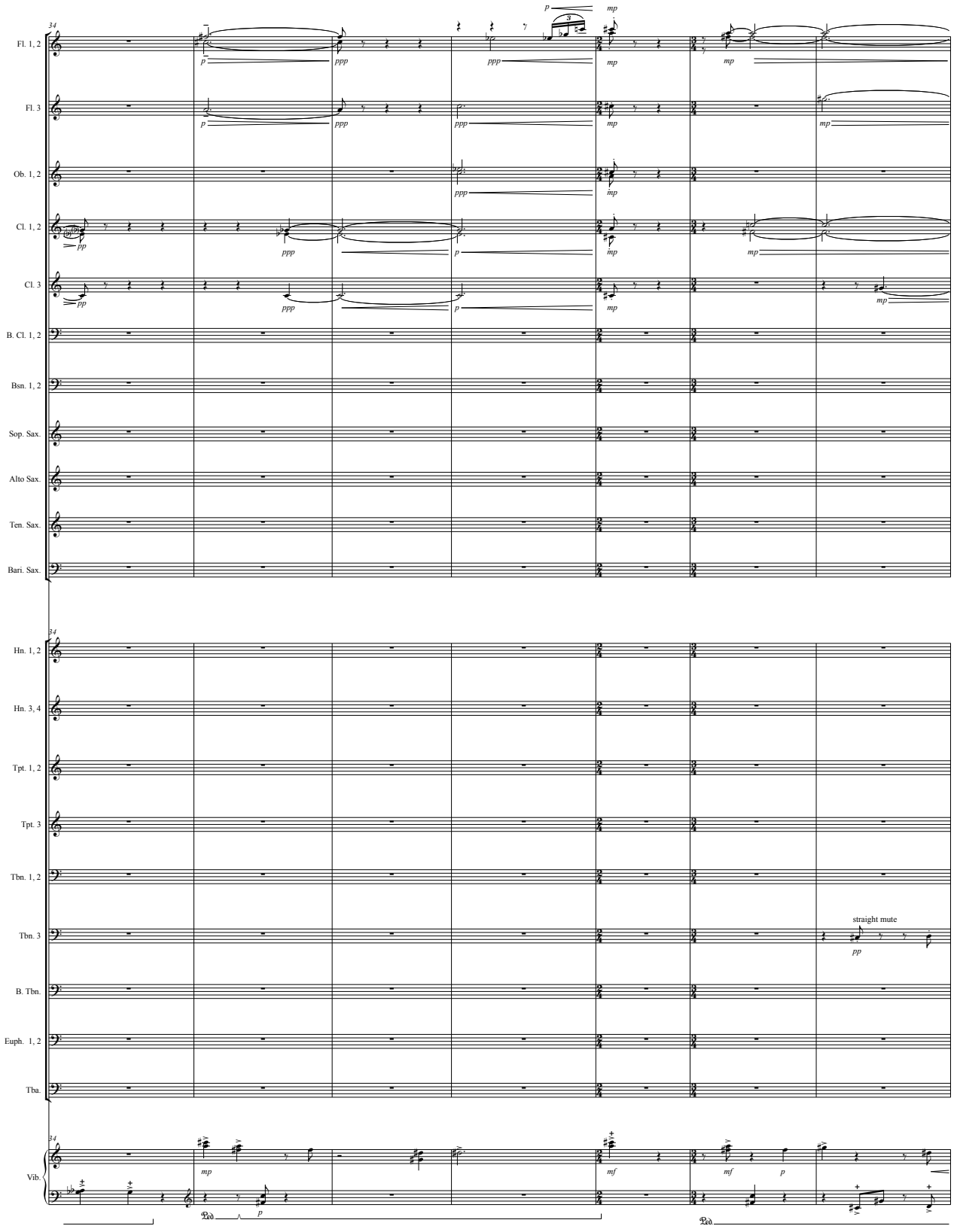
Long Distance
Atlanta, GA - 1972

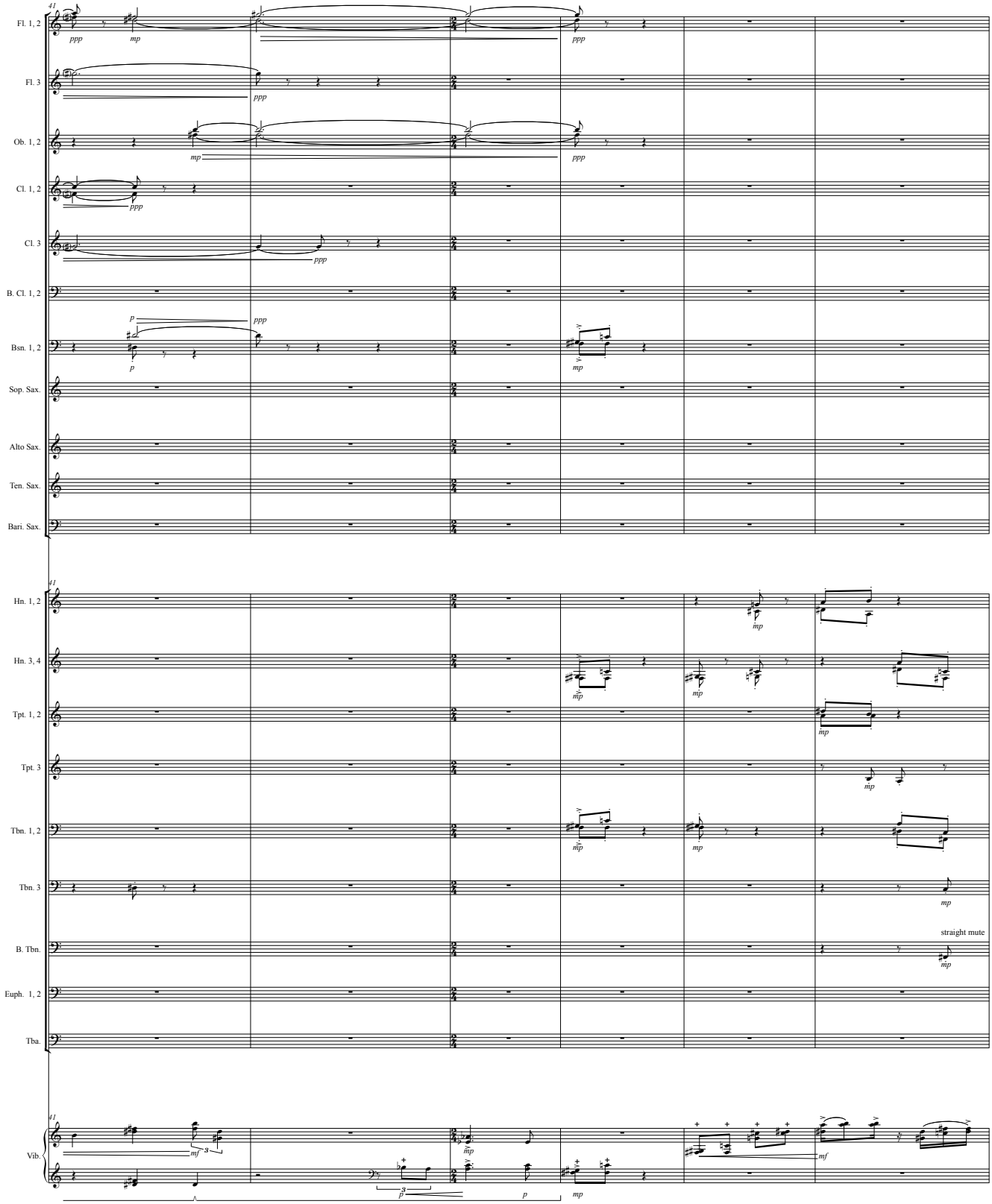


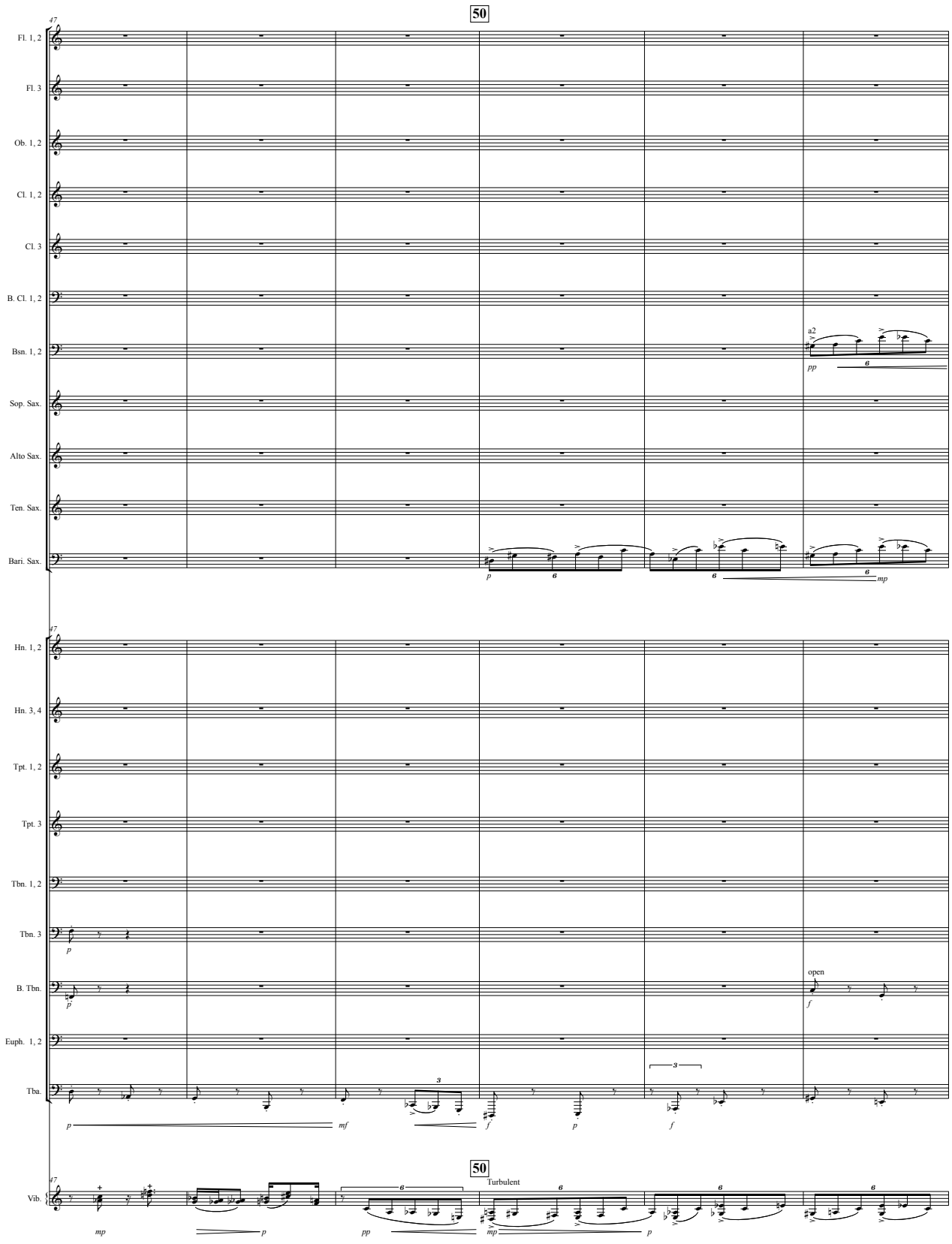
Long Distance
Atlanta, GA - 1972

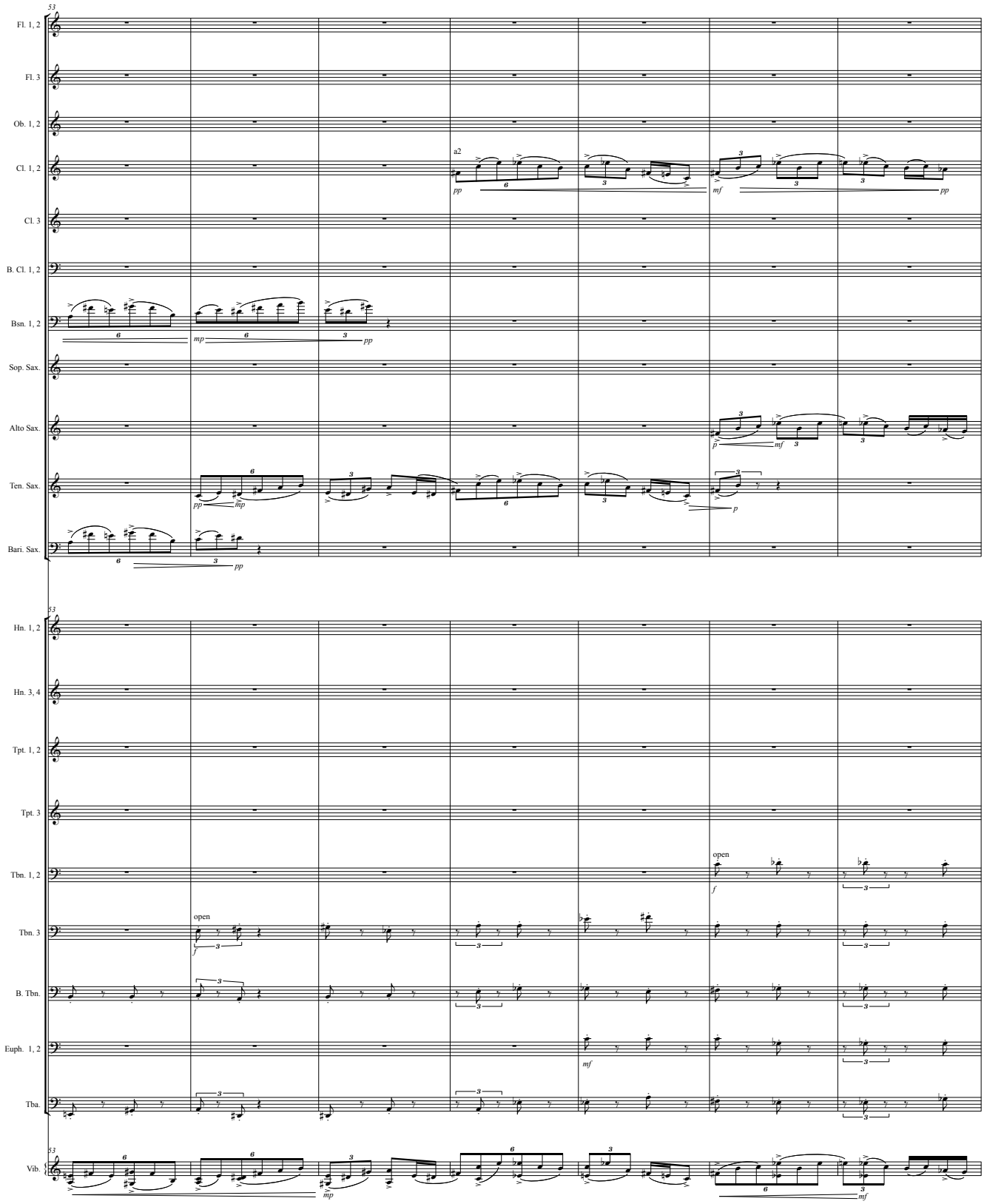


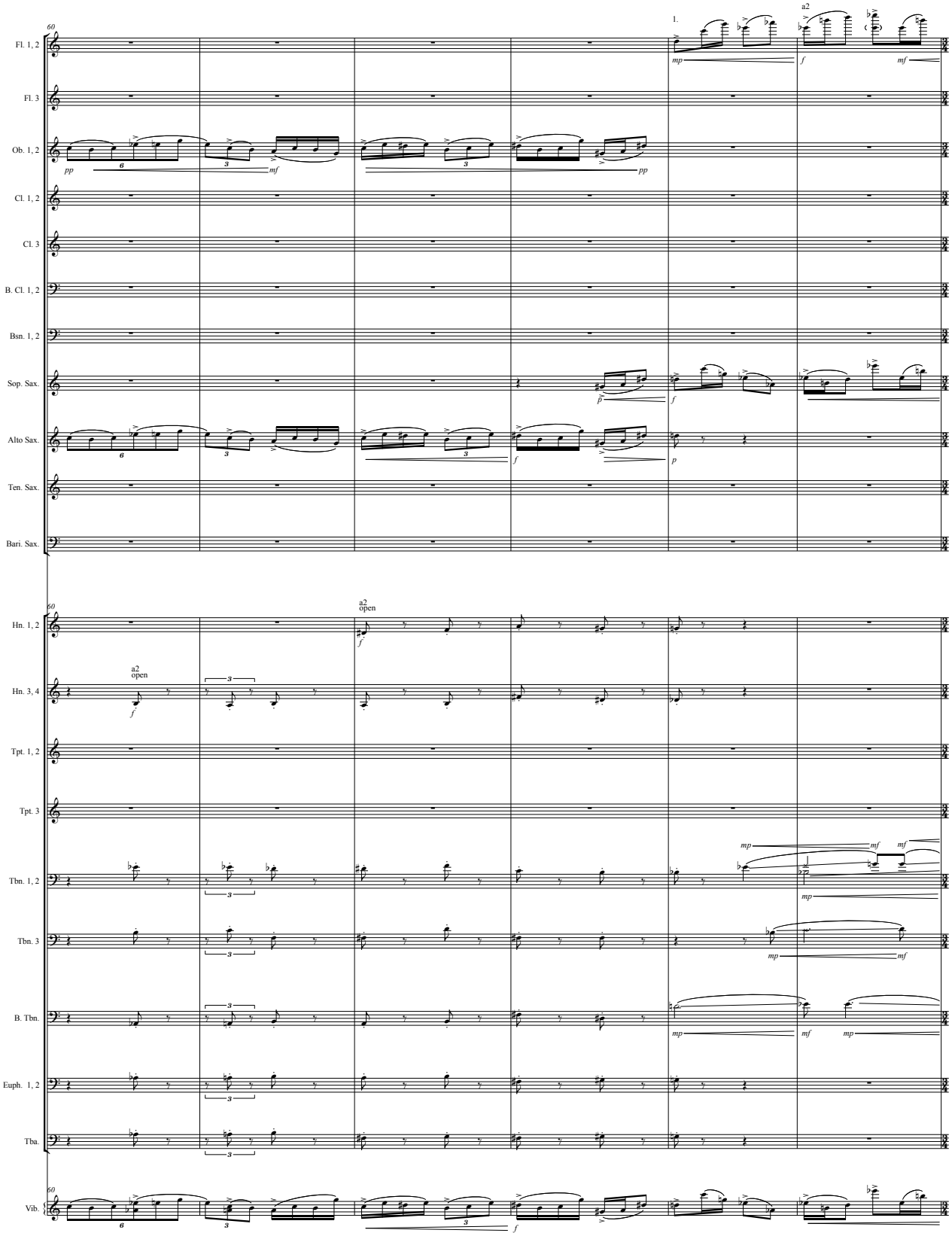

26
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
26
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
26
Vib.
p
ppp
pp
mp
Ped.

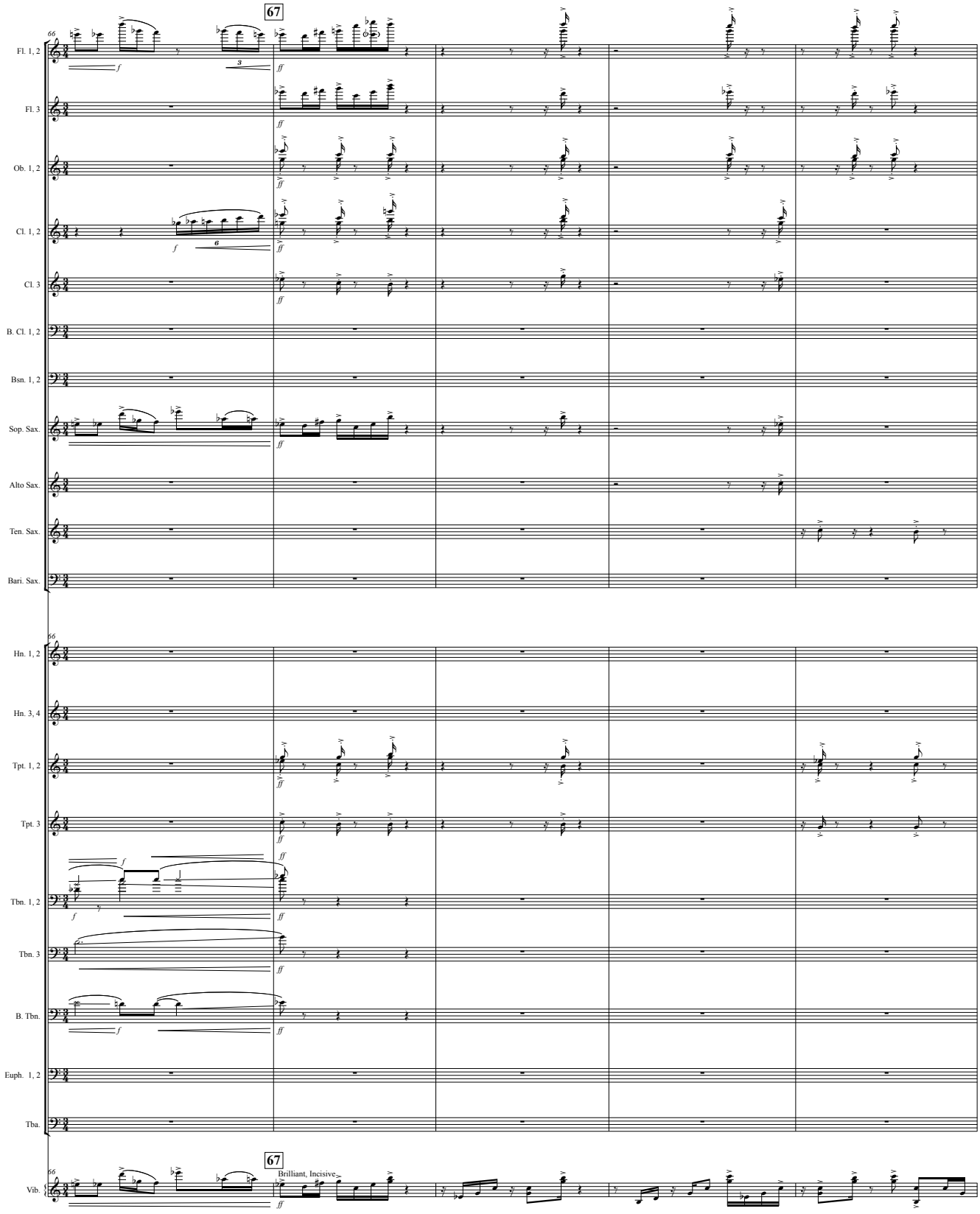

34
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
straight mute
B. Tbn.
Euph. 1, 2
Tba.
Vib.
Ped.

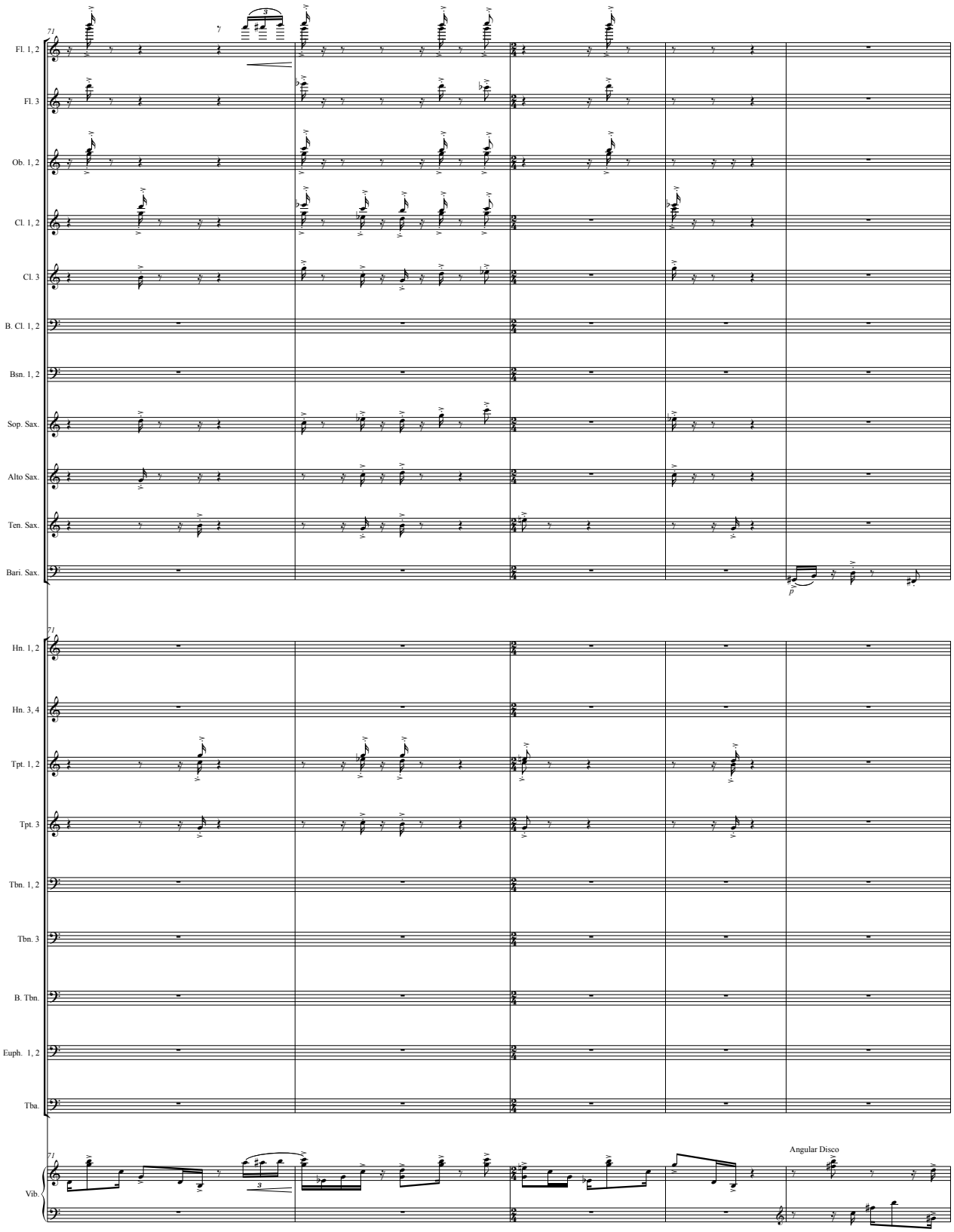

41
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
straight mute
Euph. 1, 2
Tba.
Vib.


50
47
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
a2
pp
p
mp
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
open
f
mf
Vib.
Turbulent

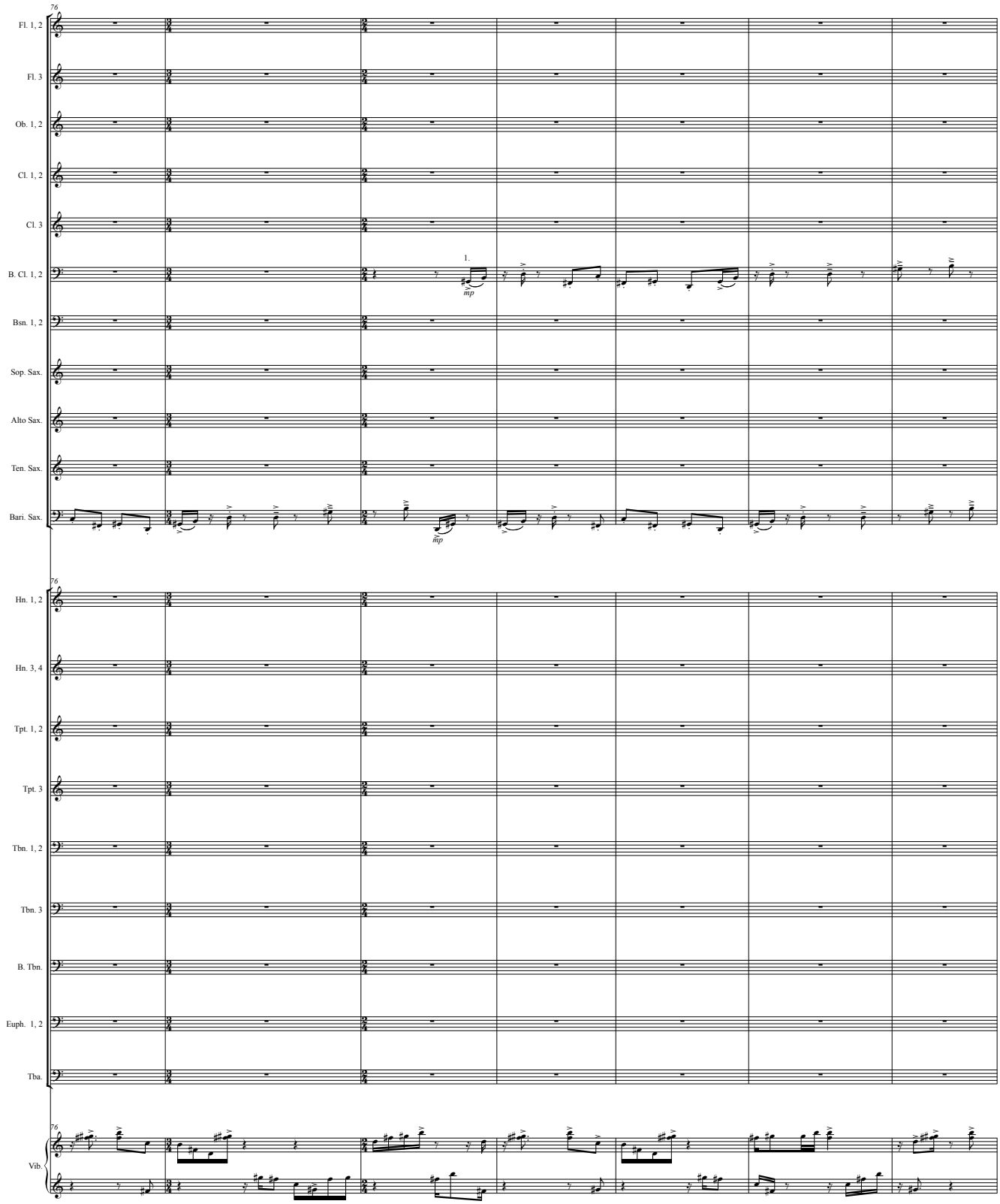

53
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
a2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
53
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
open
Tbn. 3
open
B. Tbn.
Euph. 1, 2
Tba.
53
Vib.

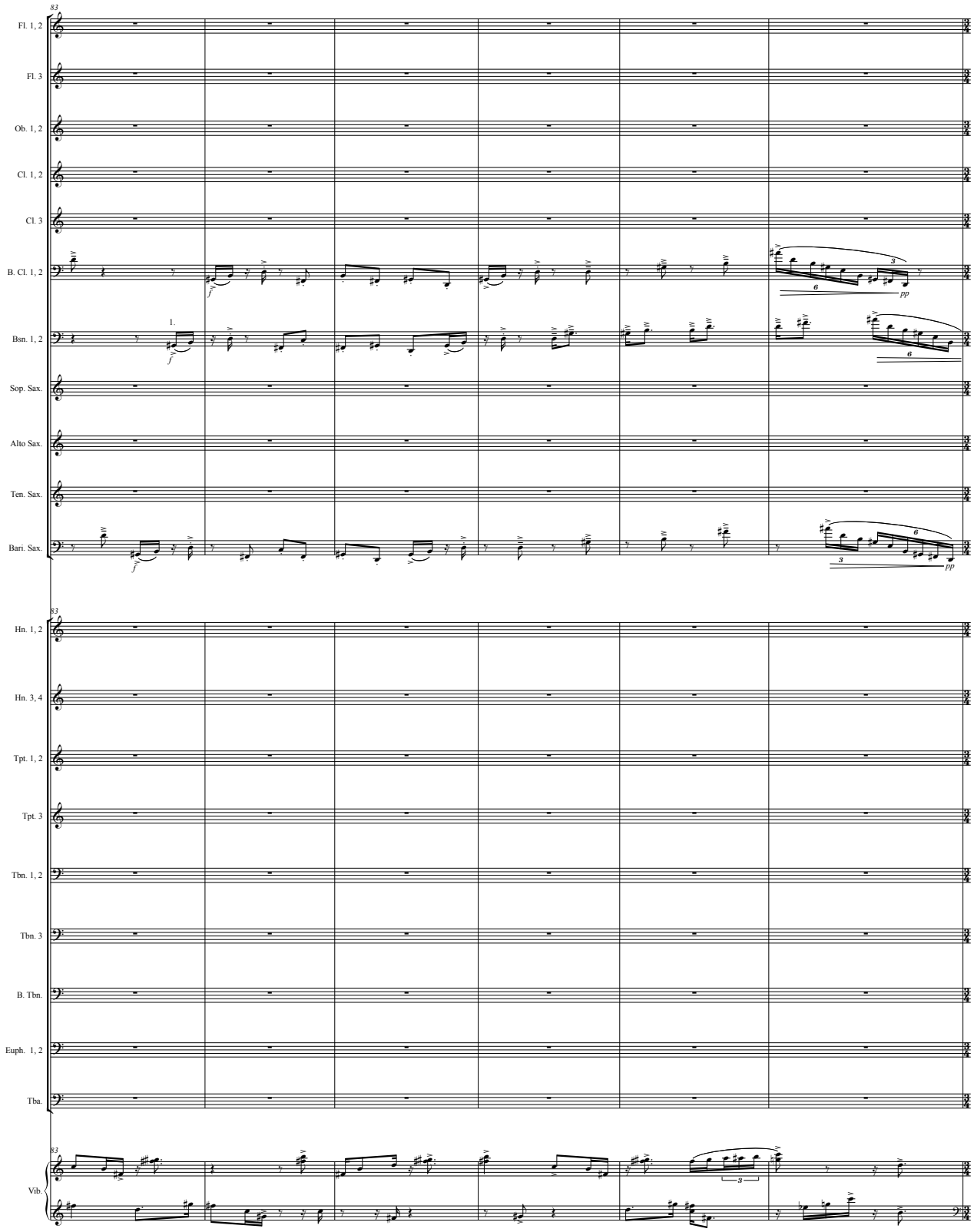

60
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
1.
a2
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
Vib.
a2 open

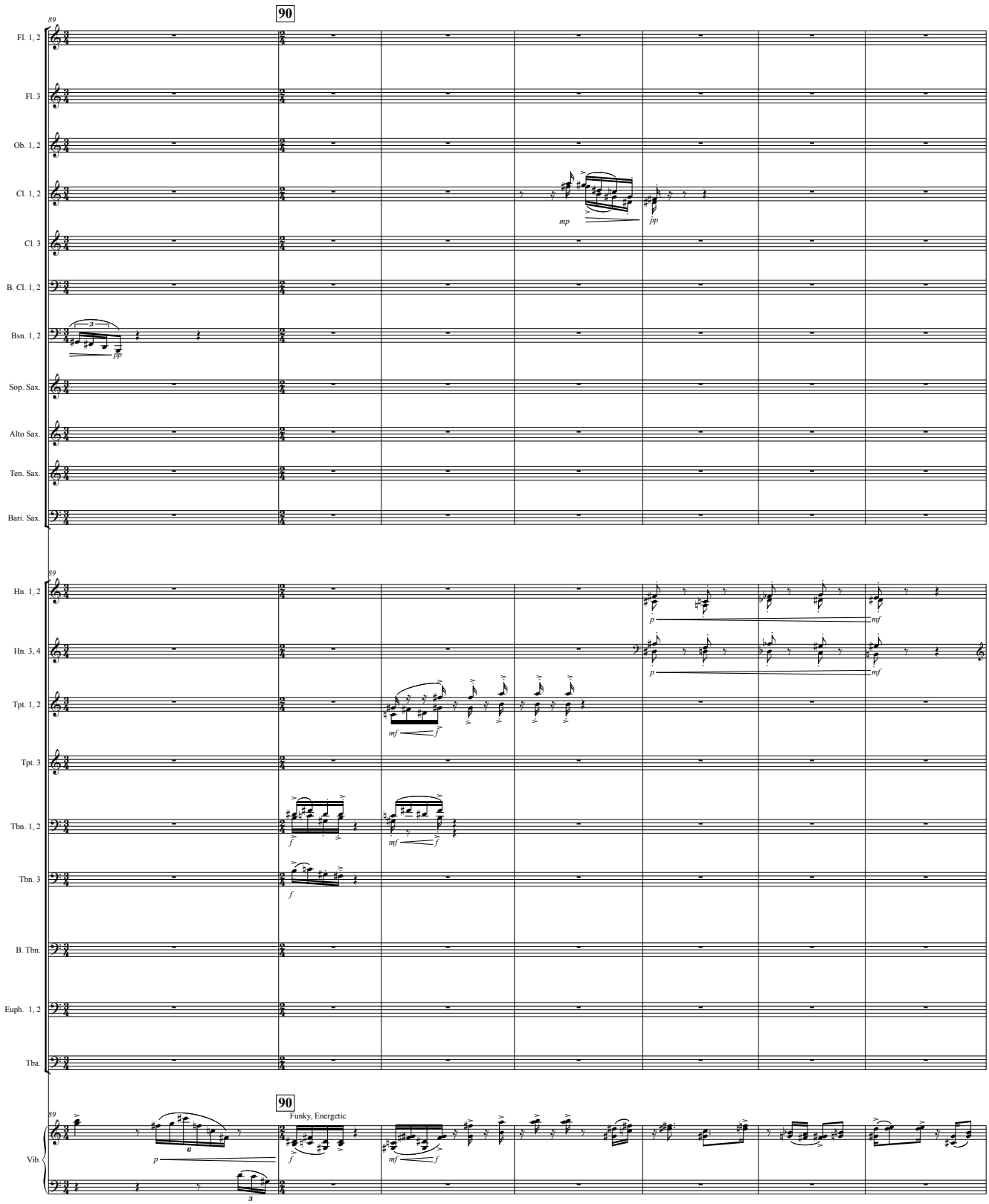

67
66
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
Vib.
Brilliant, Incisive

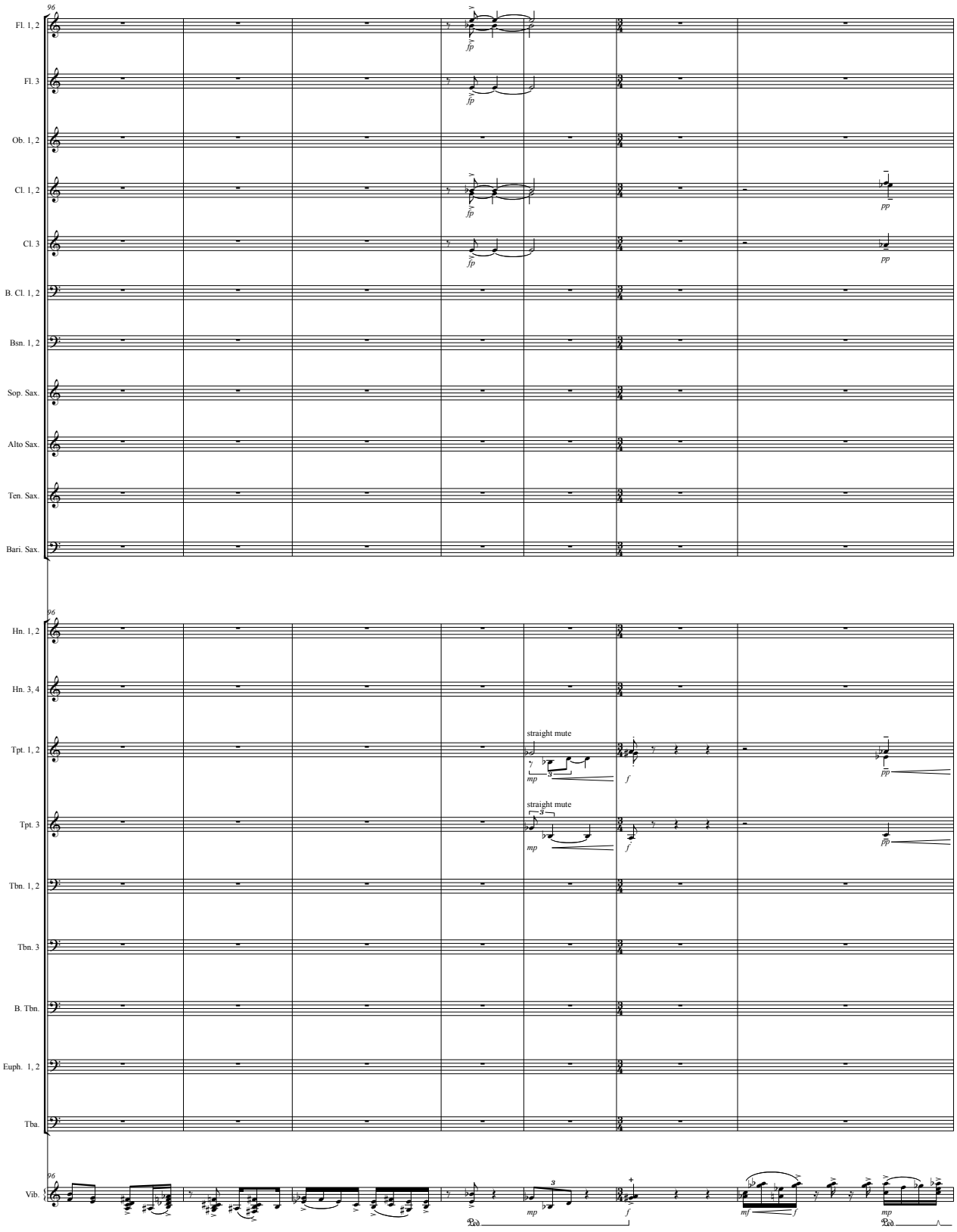

71
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
p
71
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
71
Vib.
Angular Disco

Long Distance
Atlanta, GA - 1972

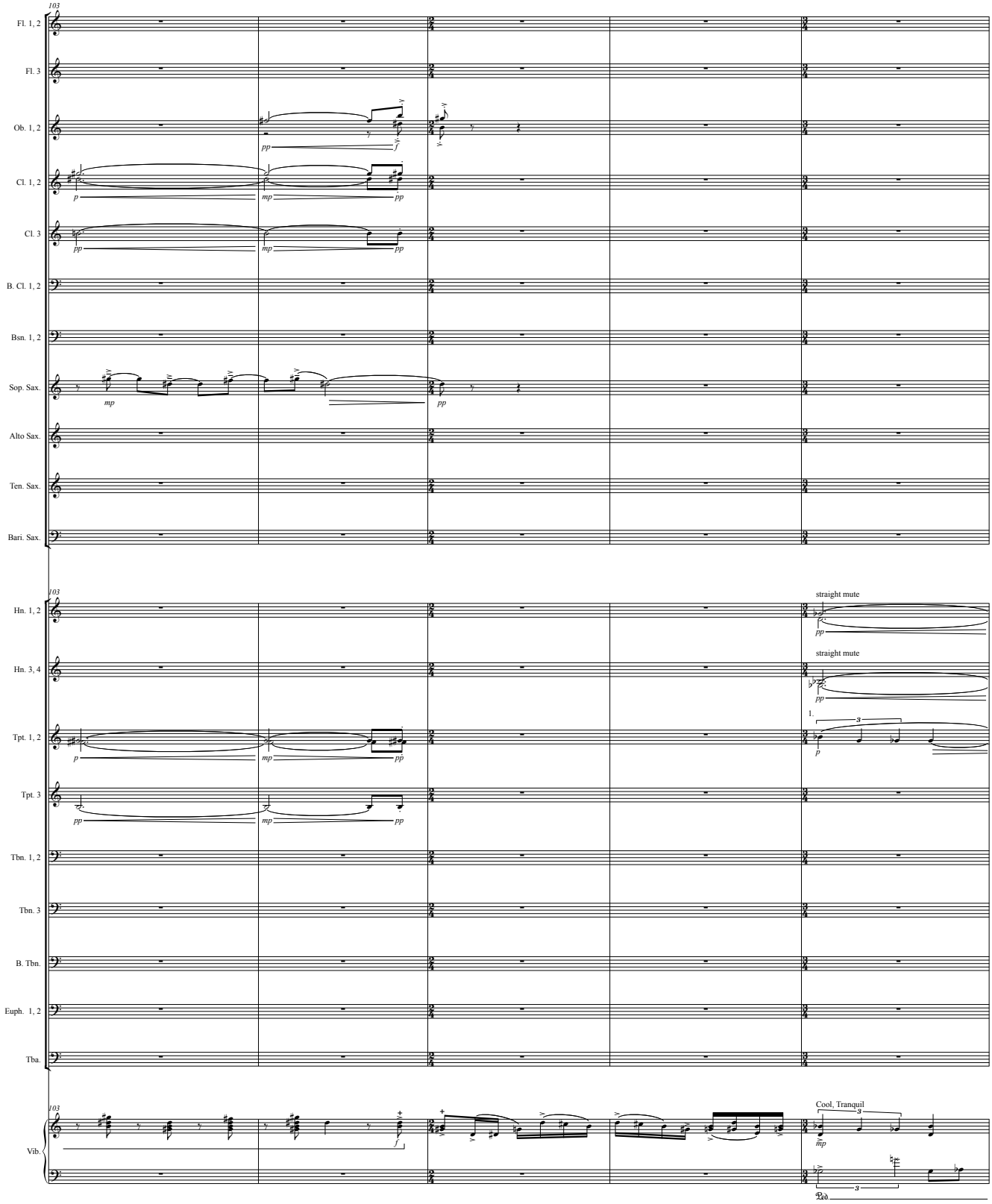


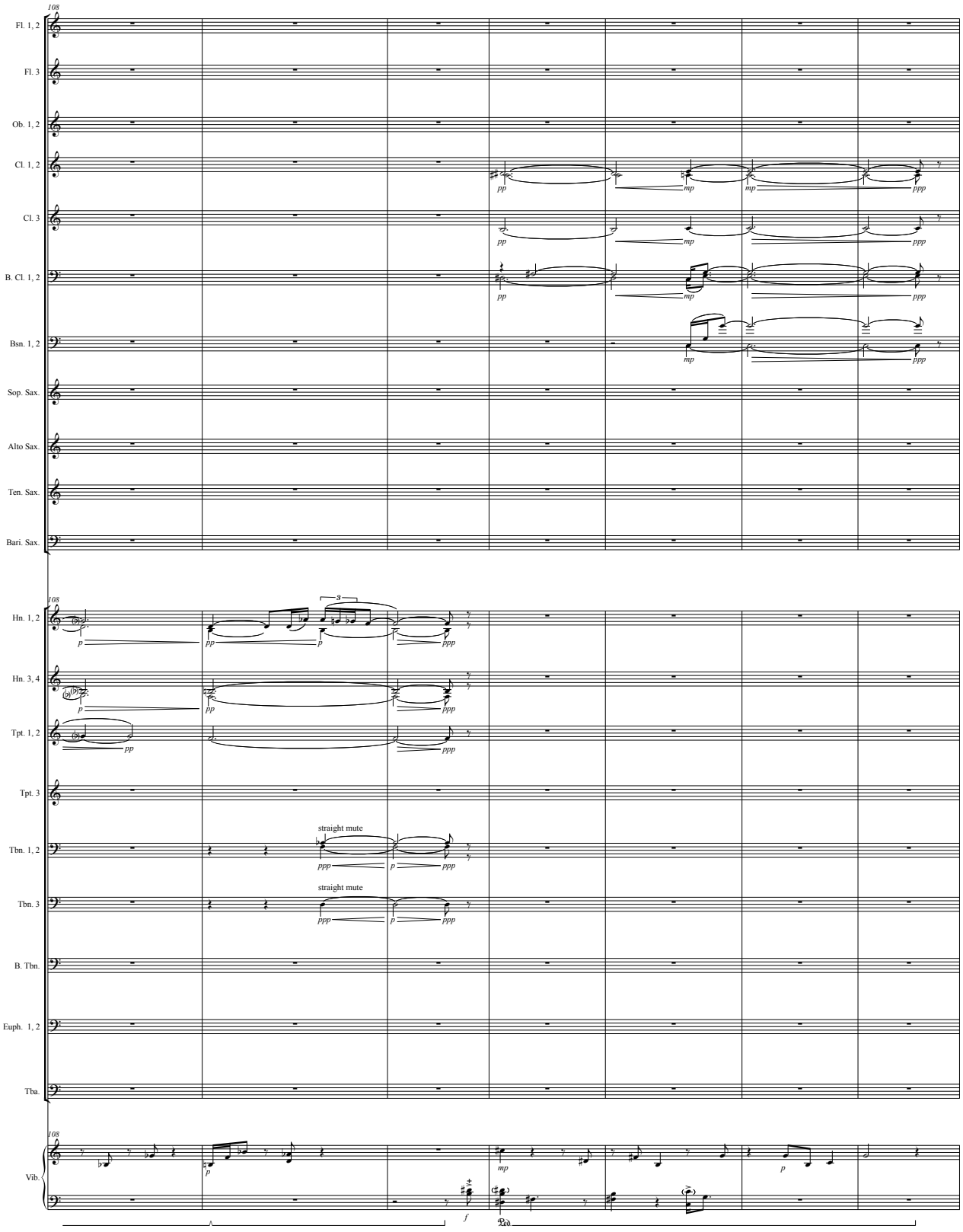

83
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
1.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
f
pp
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
Vib.


90
89
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
Vib.
Funky, Energetic
mp
pp
mf
f
p

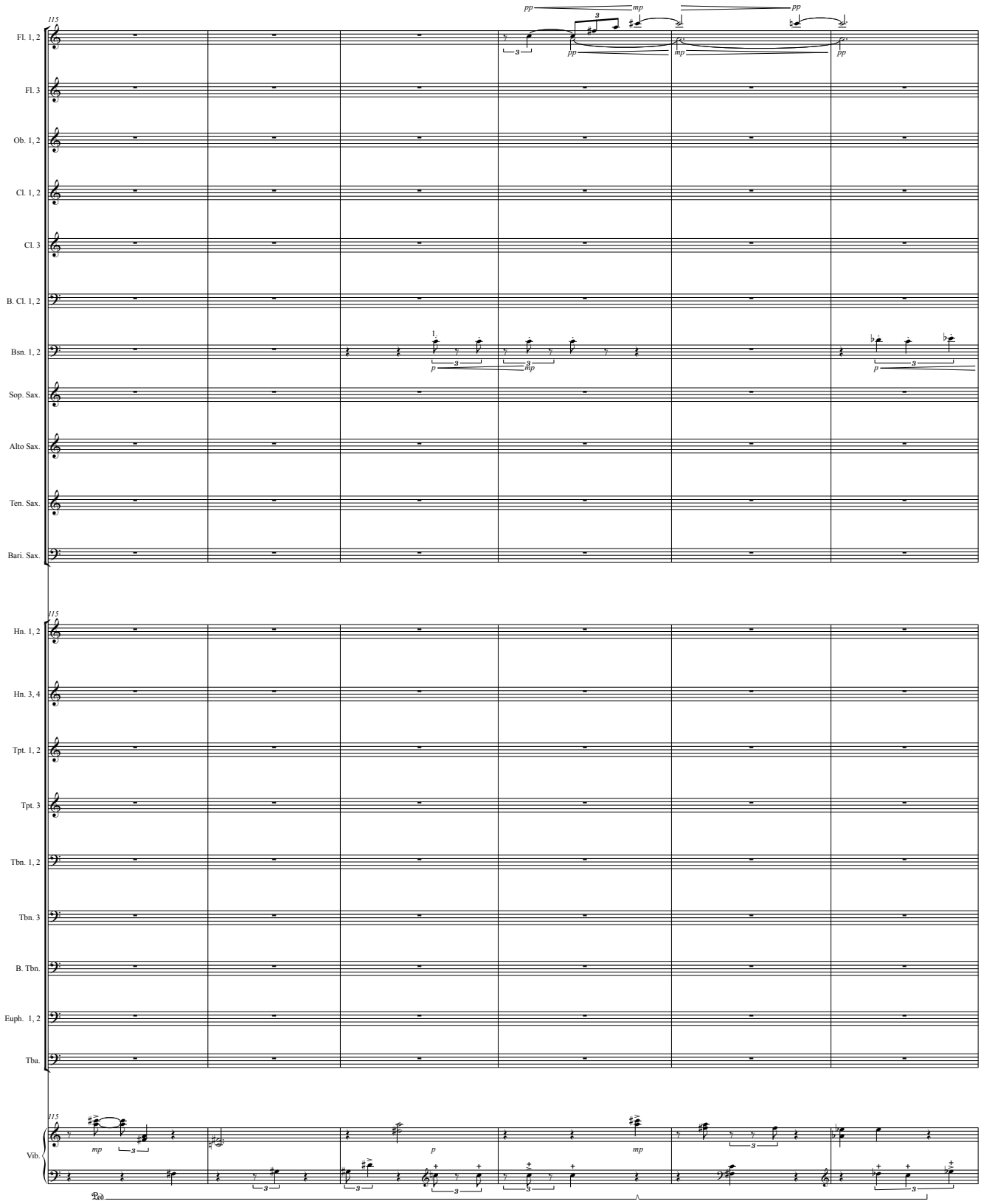

96
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
fp
pp
96
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
straight mute
straight mute
mp
f
pp
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
96
Vib.
mp
f
mf
f
mp
Ped
Ped

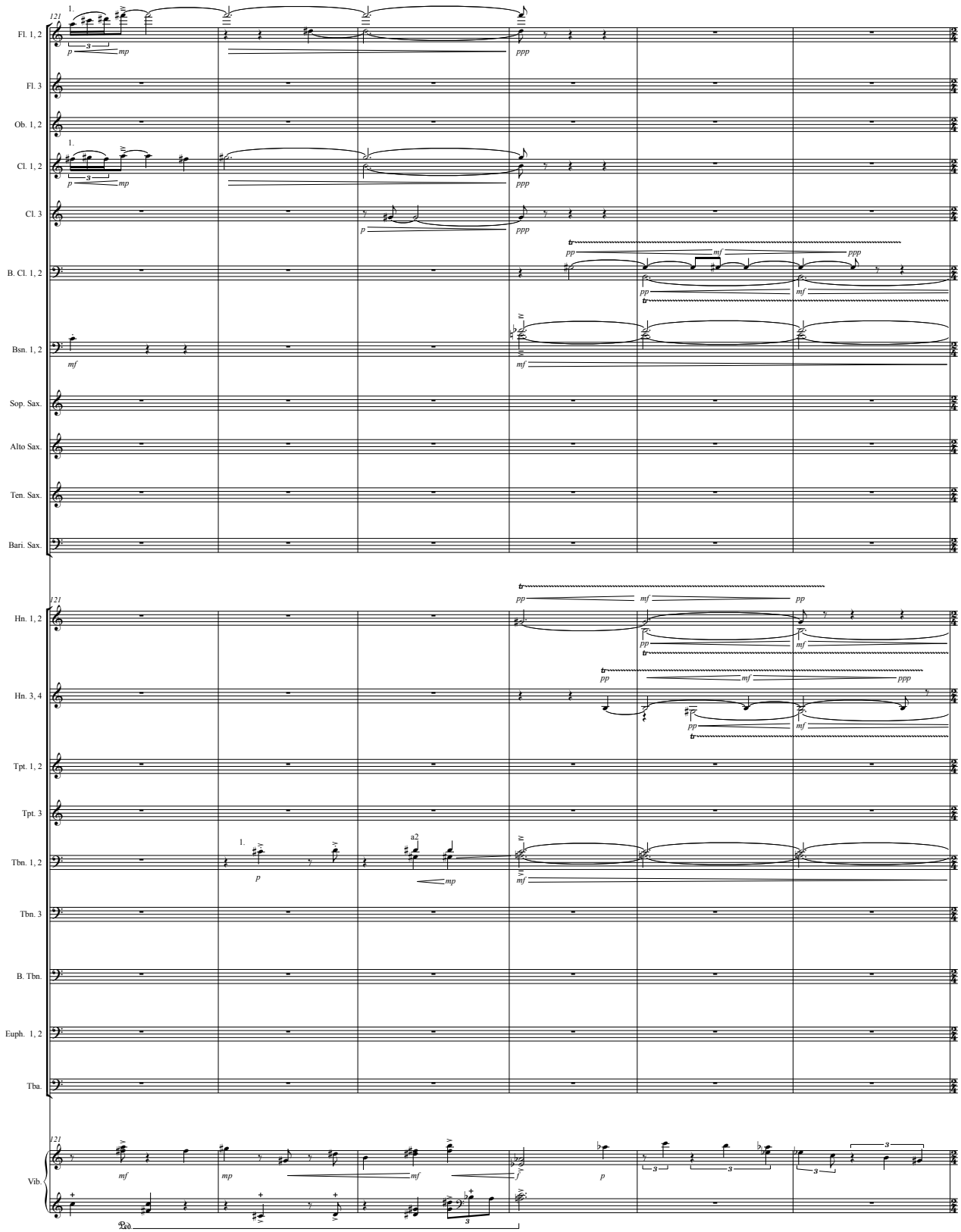
Long Distance
Atlanta, GA - 1972

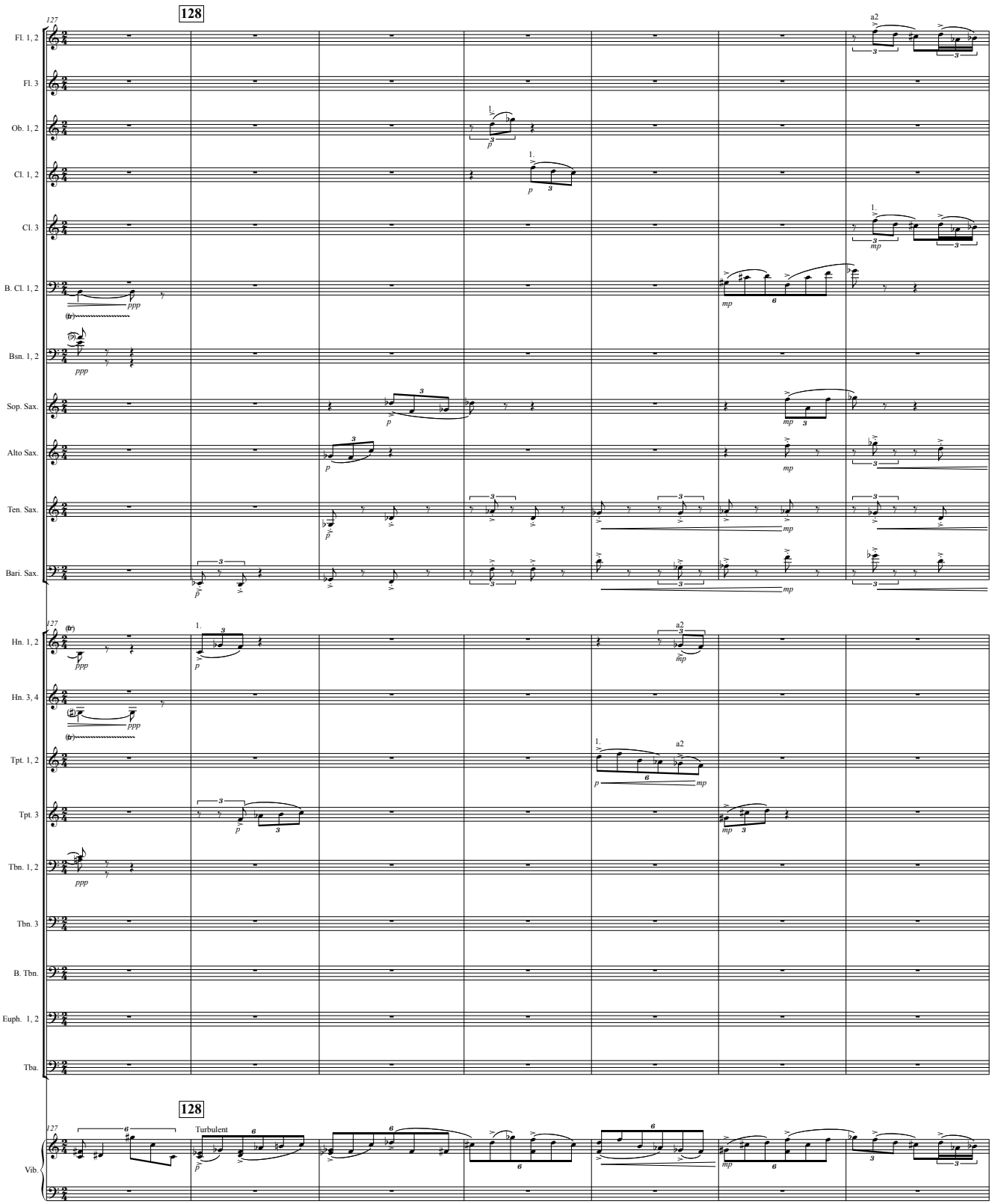


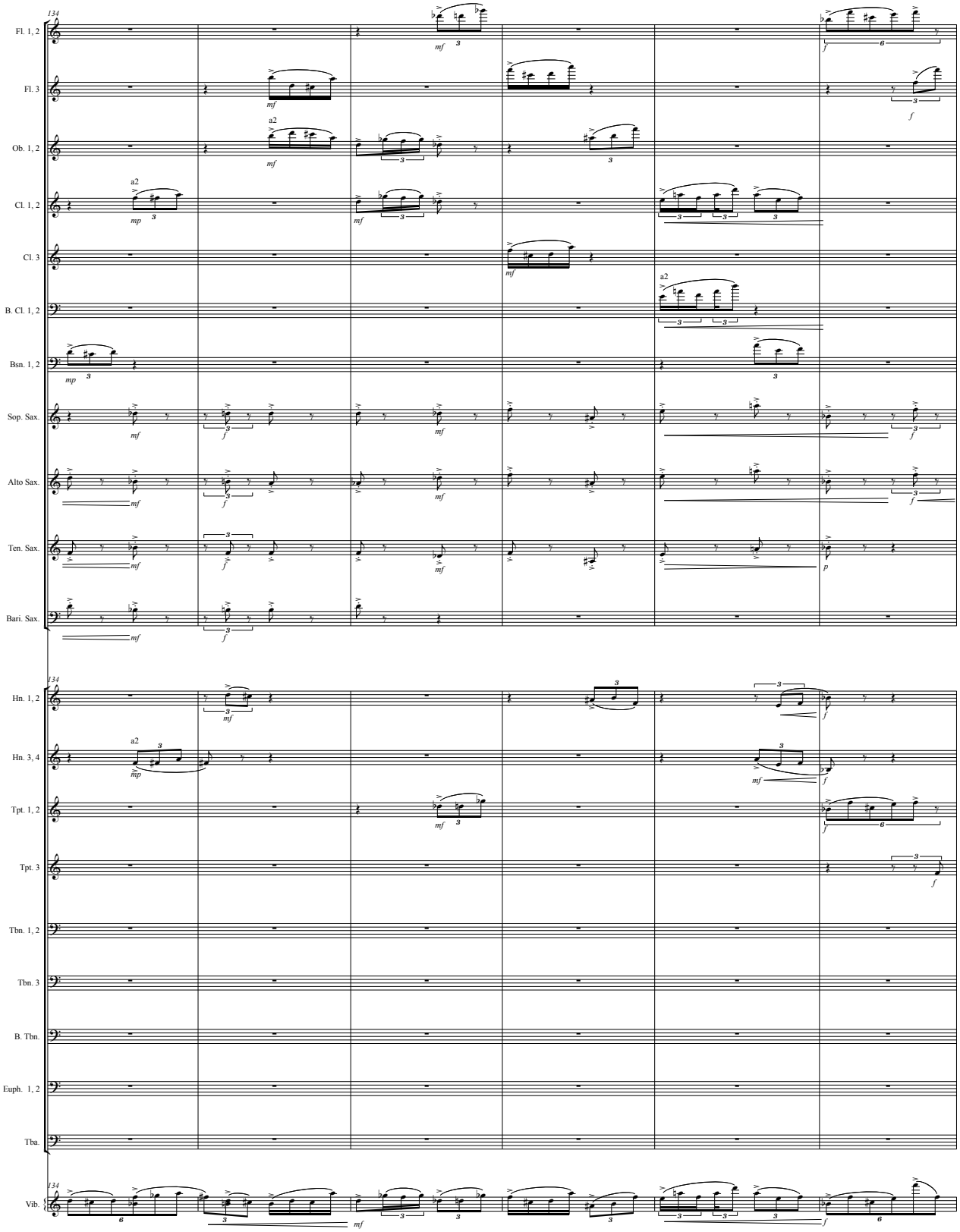

108
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
108
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
straight mute
Tbn. 1, 2
straight mute
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
108
Vib.

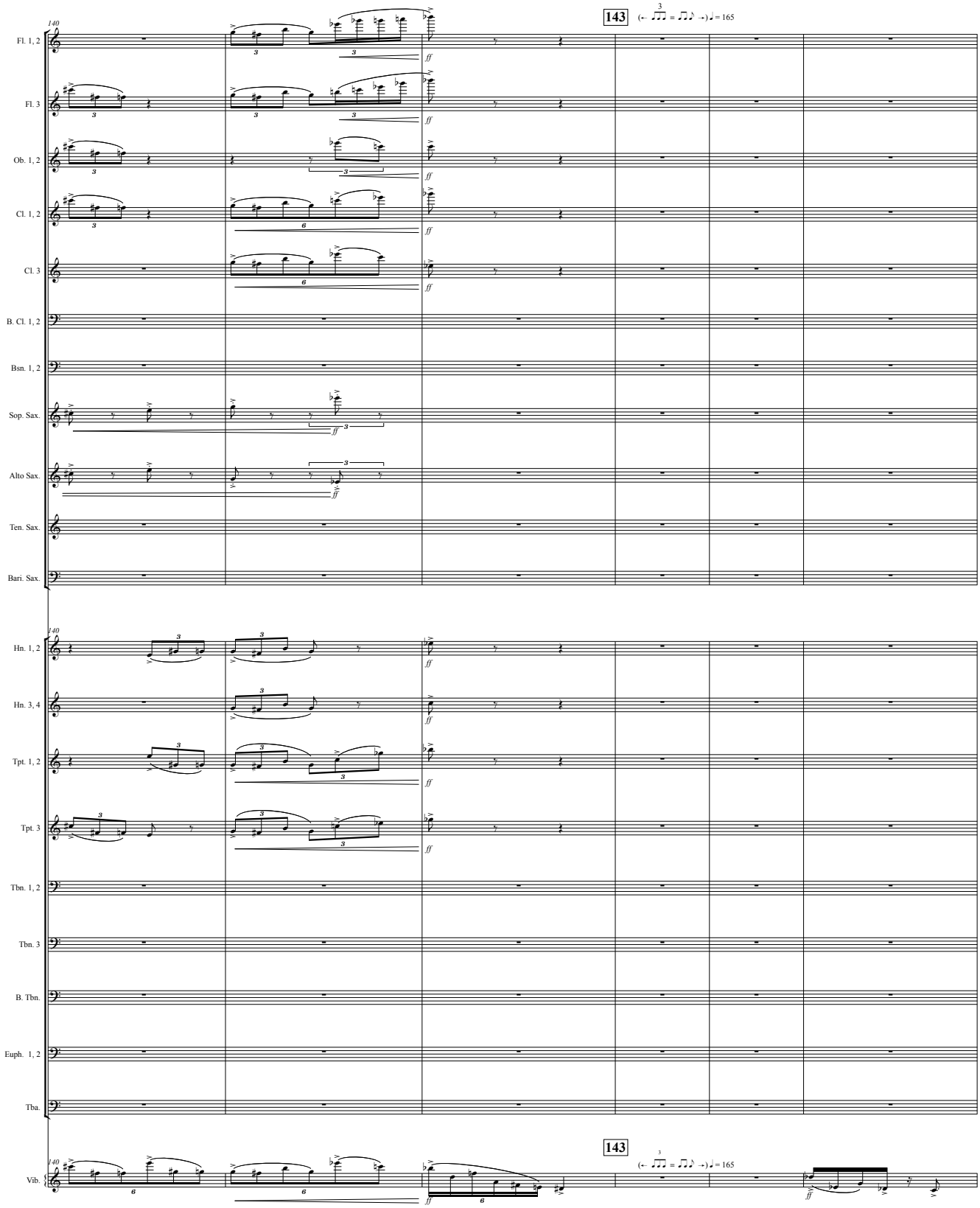
Long Distance
Atlanta, GA - 1972

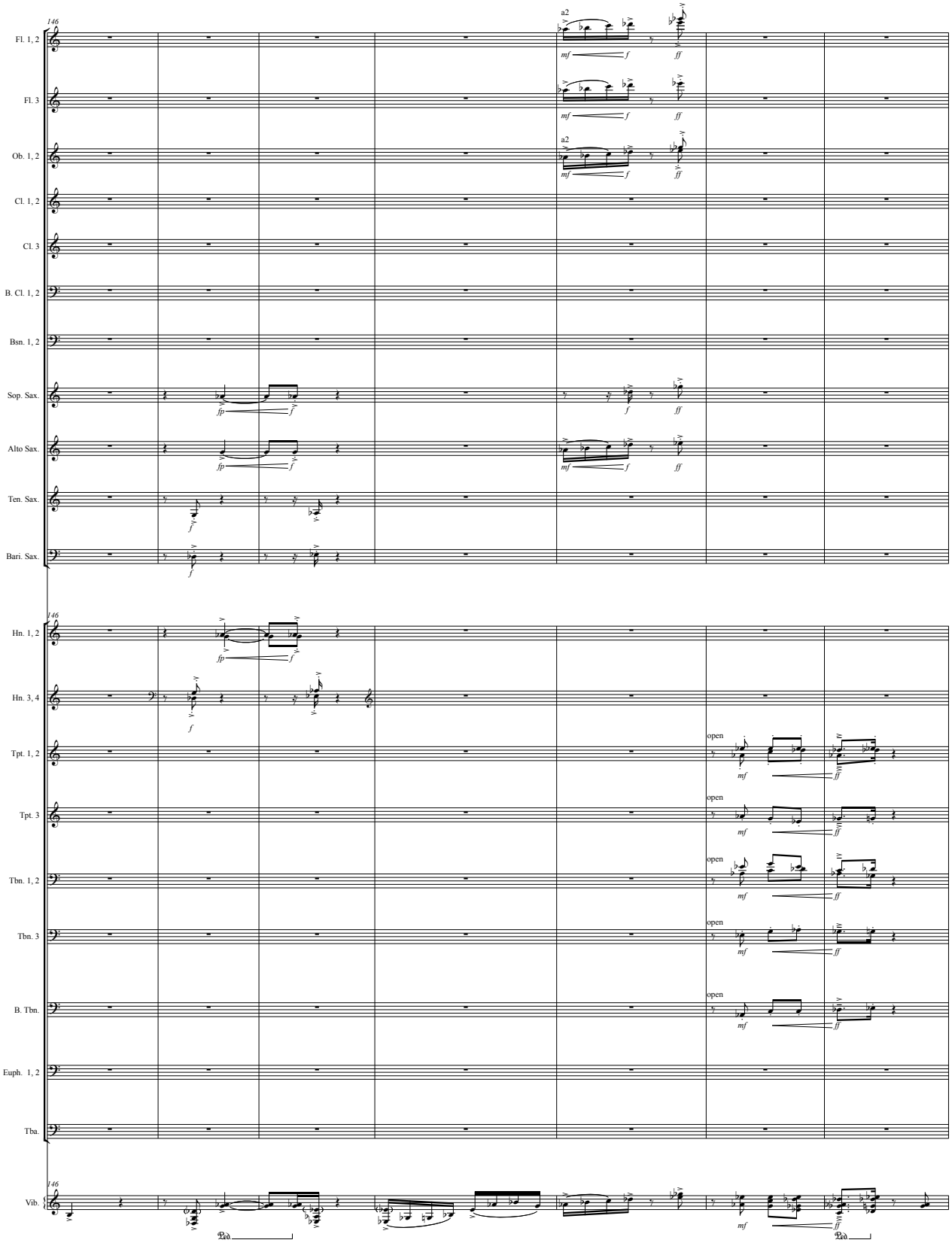


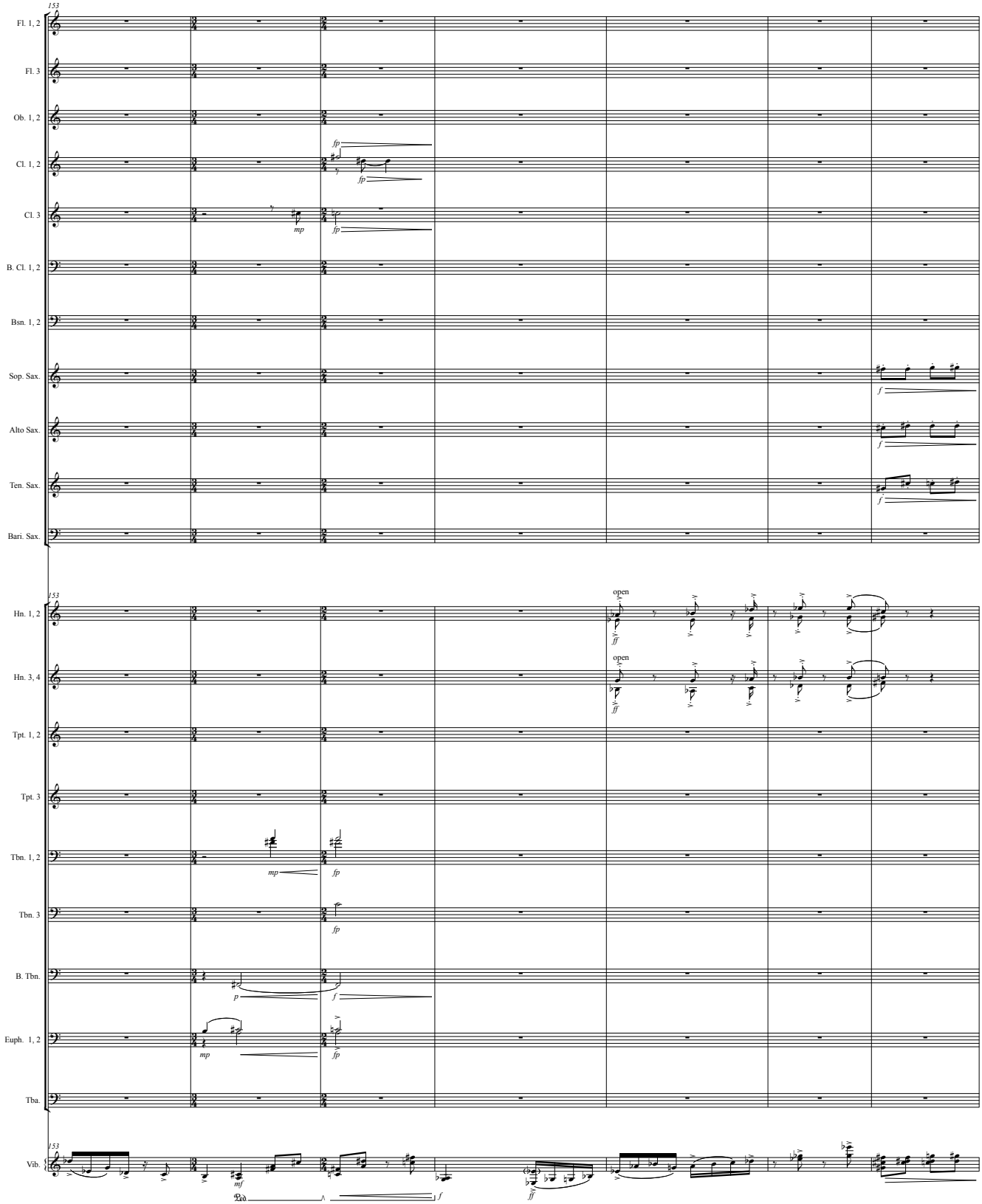

121
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
Vib.
a2

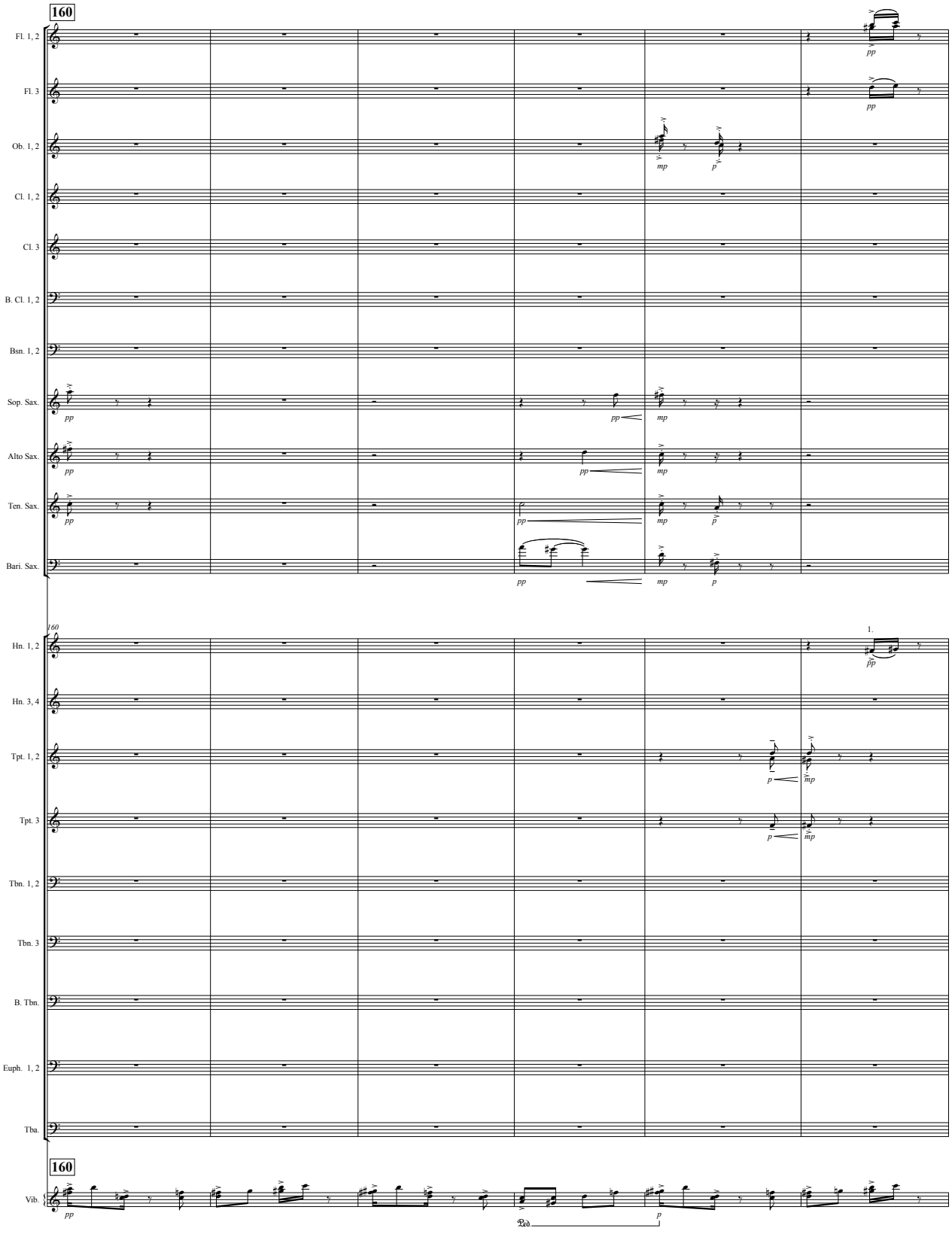

128
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
128
Turbulent
Vib.

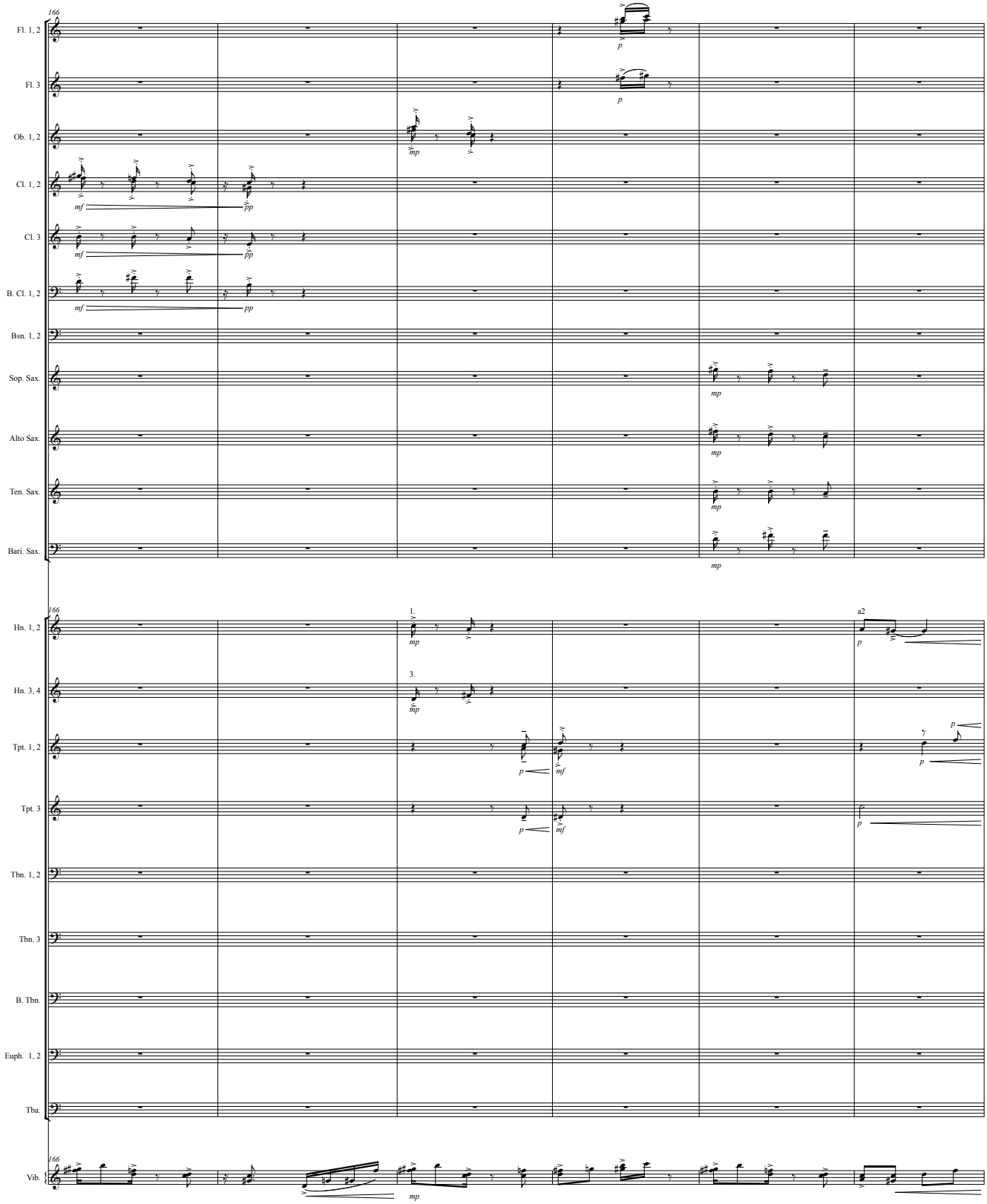

134
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
134
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
134
Vib.

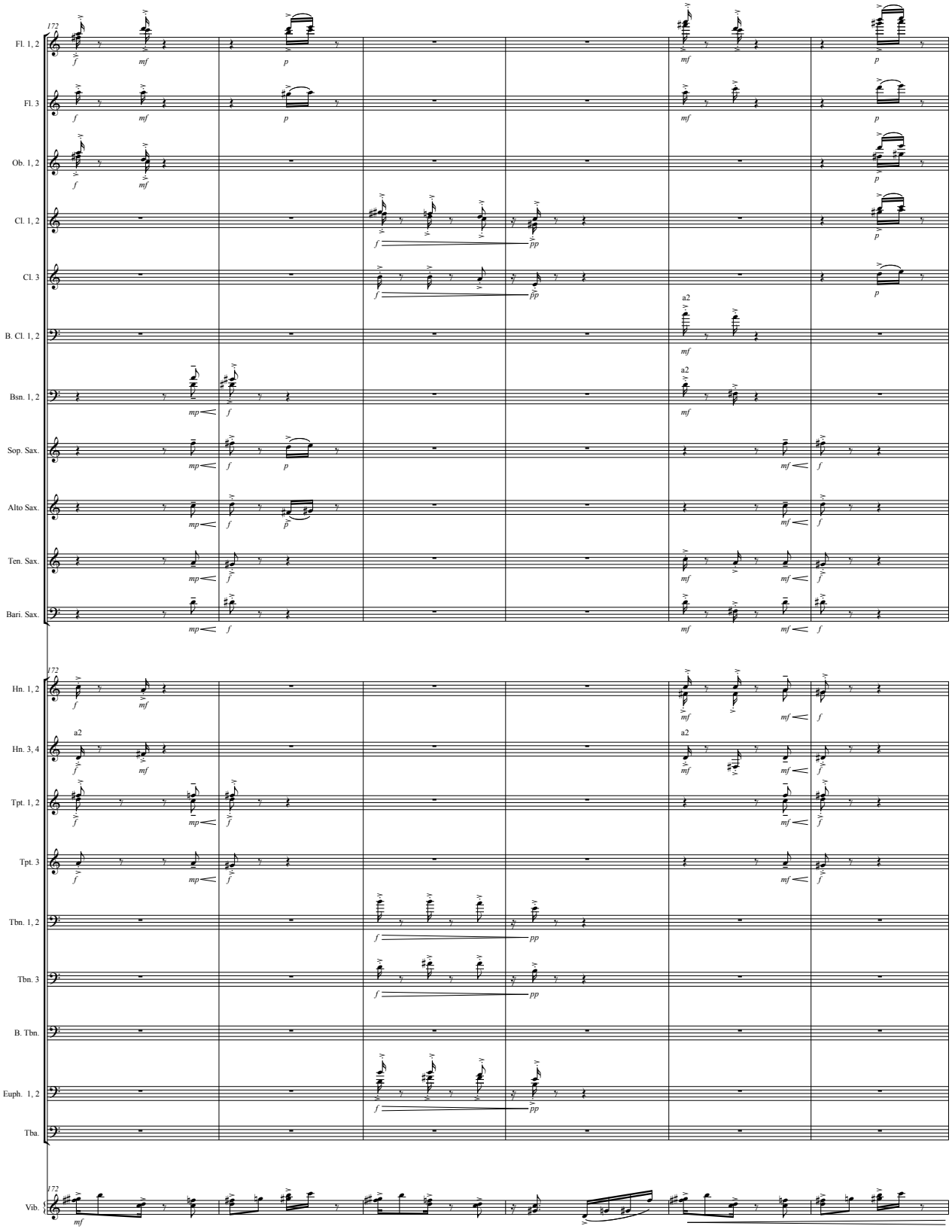

140
143
(← 3 = ♪♪♪ = ♪♪♪ →) ♩ = 165
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
Vib.
ff

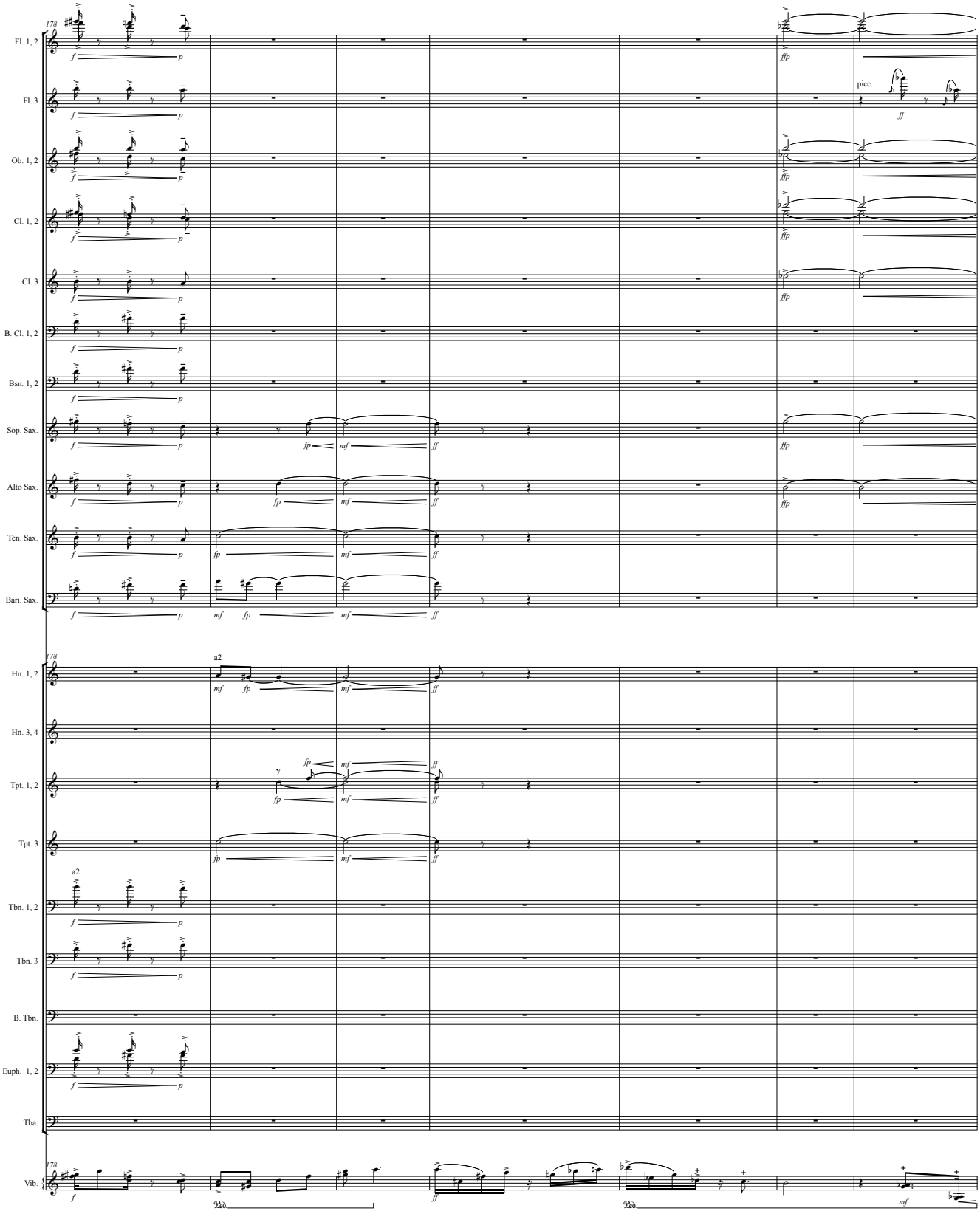

146
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
Vib.
a2
open
mf
f
ff
fp
Ped

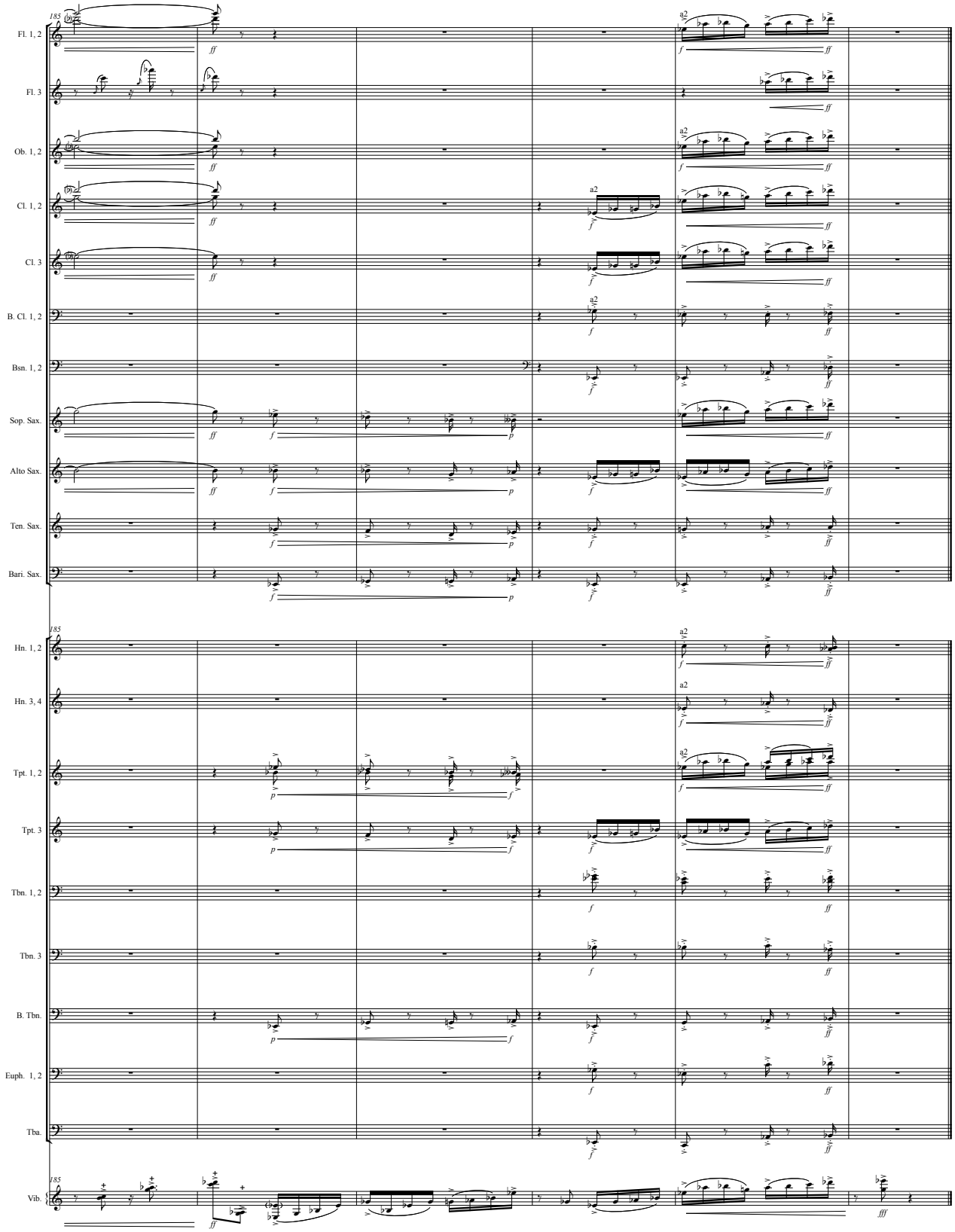

153
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
153
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
153
Vib.
open
open
fp
mp
f
ff
mf
p
Ped.


160
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
160
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
160
Vib.
1.
pp
mp
p
Ped.


166
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
166
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
166
Vib.
1.
3.
a2
mp
mf
pp
p


172
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
172
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
172
Vib.
a2

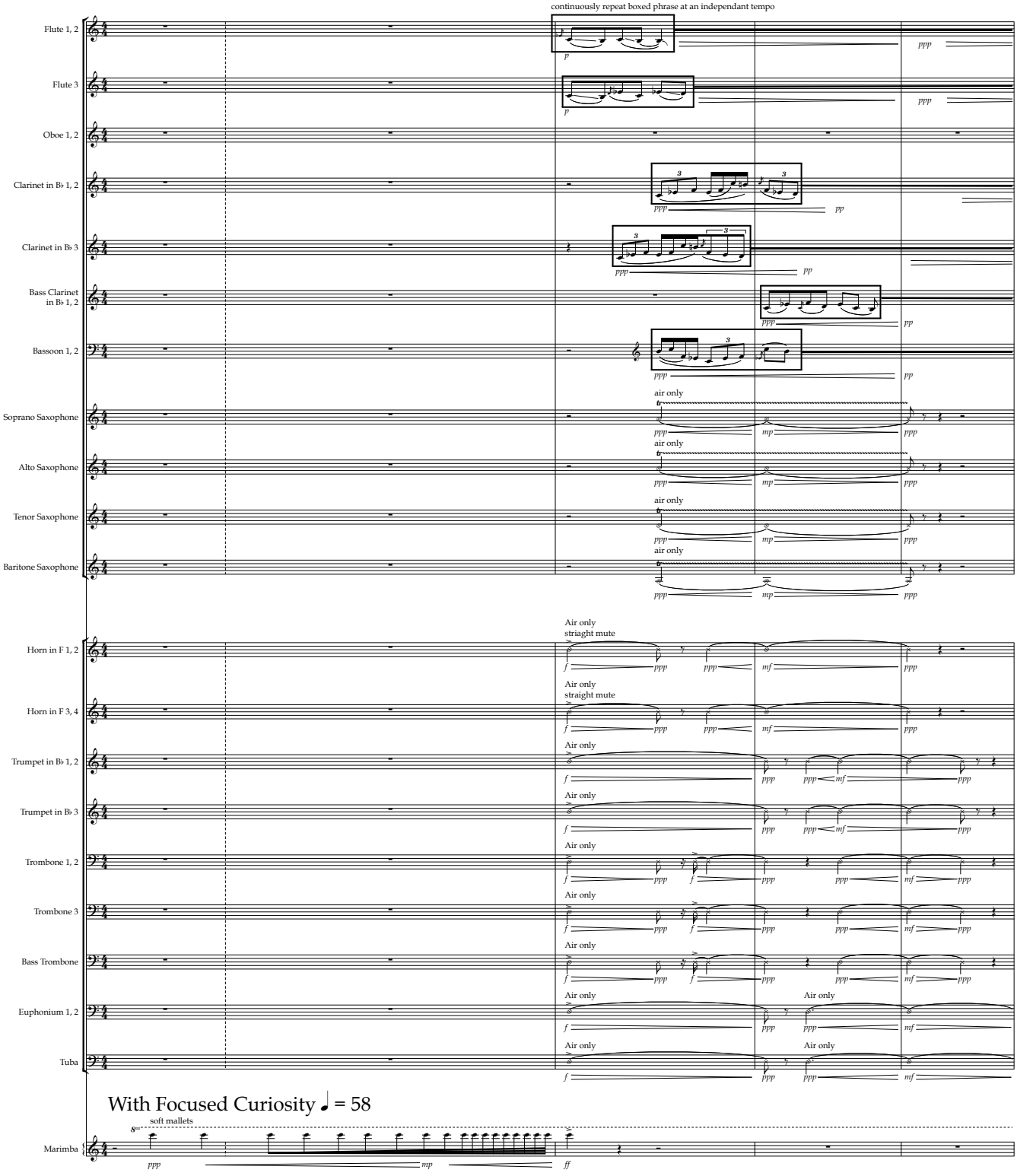

178
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
Vib.
a2
picc.
Ped
Ped

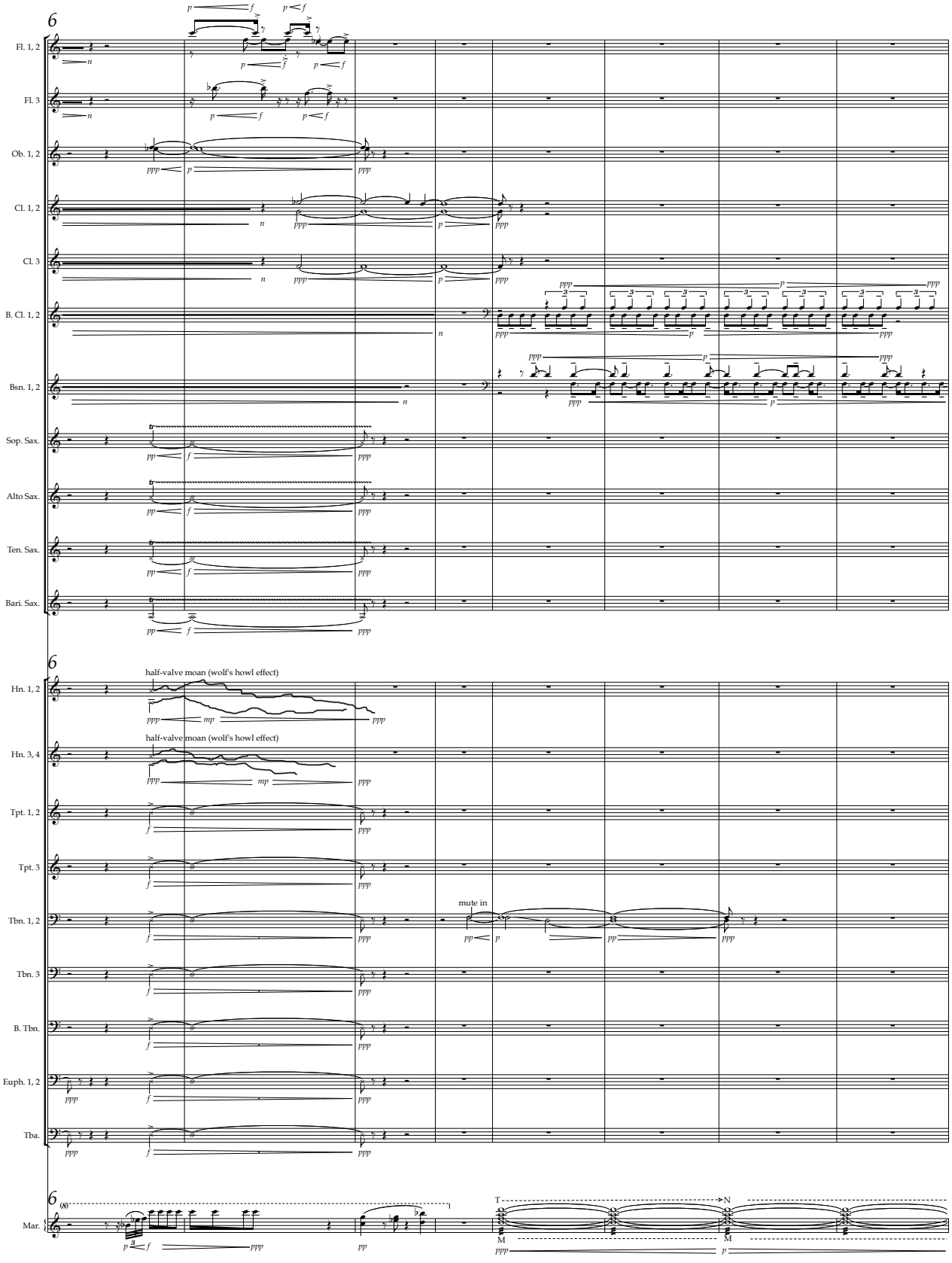

185
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
185
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
185
Vib.

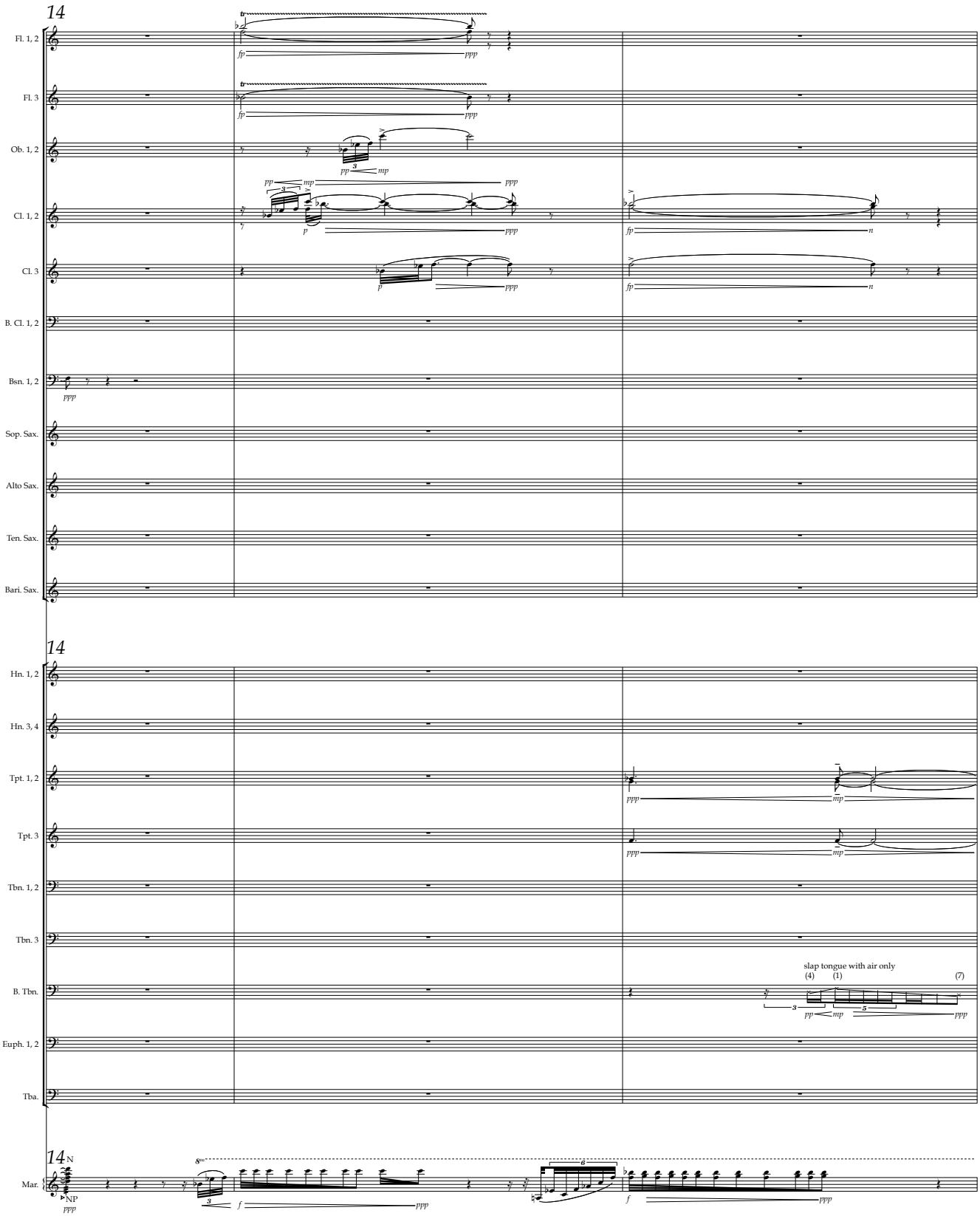
Long Distance
Brooklyn, NY - 1975

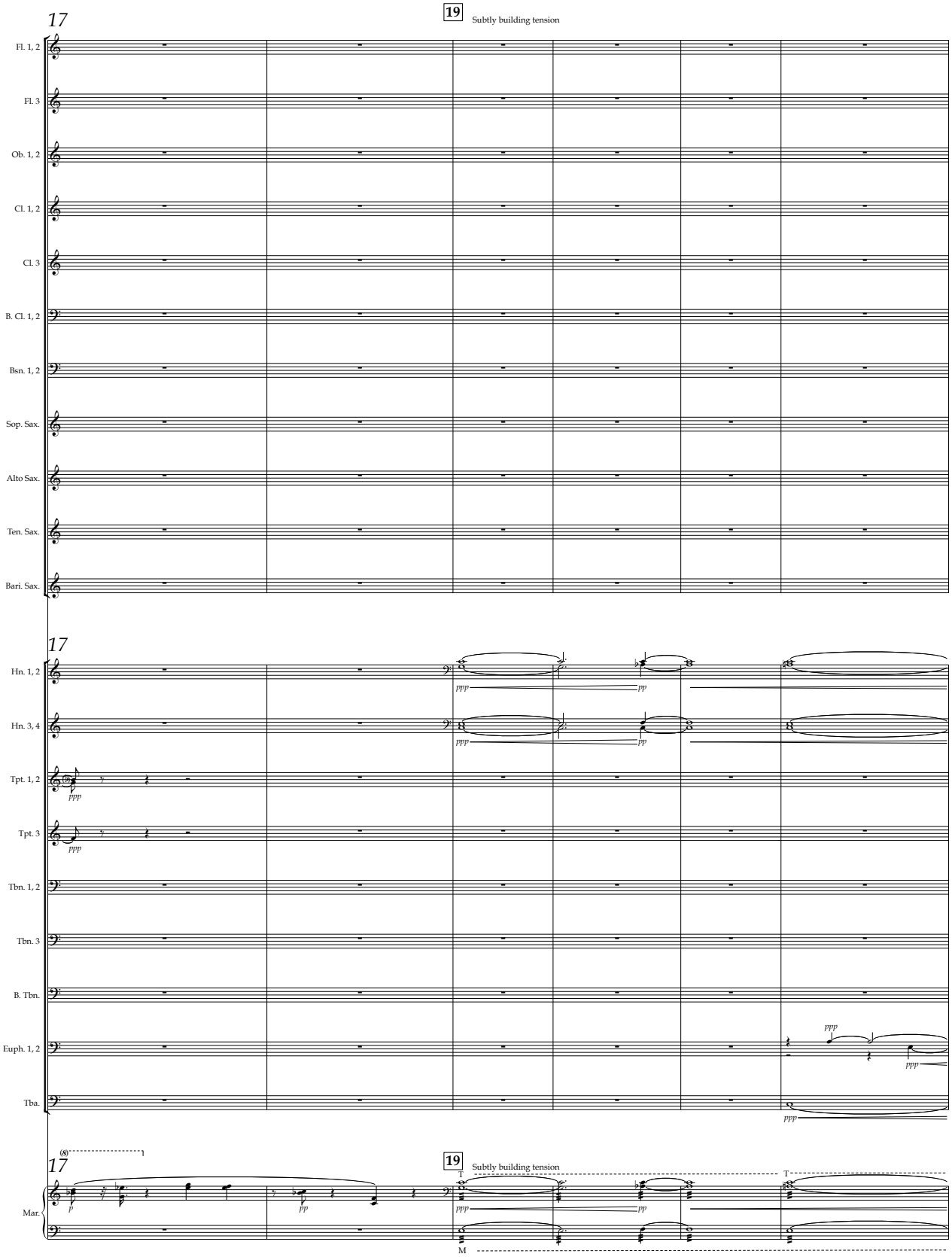
With Focused Curiosity ♩ = 58

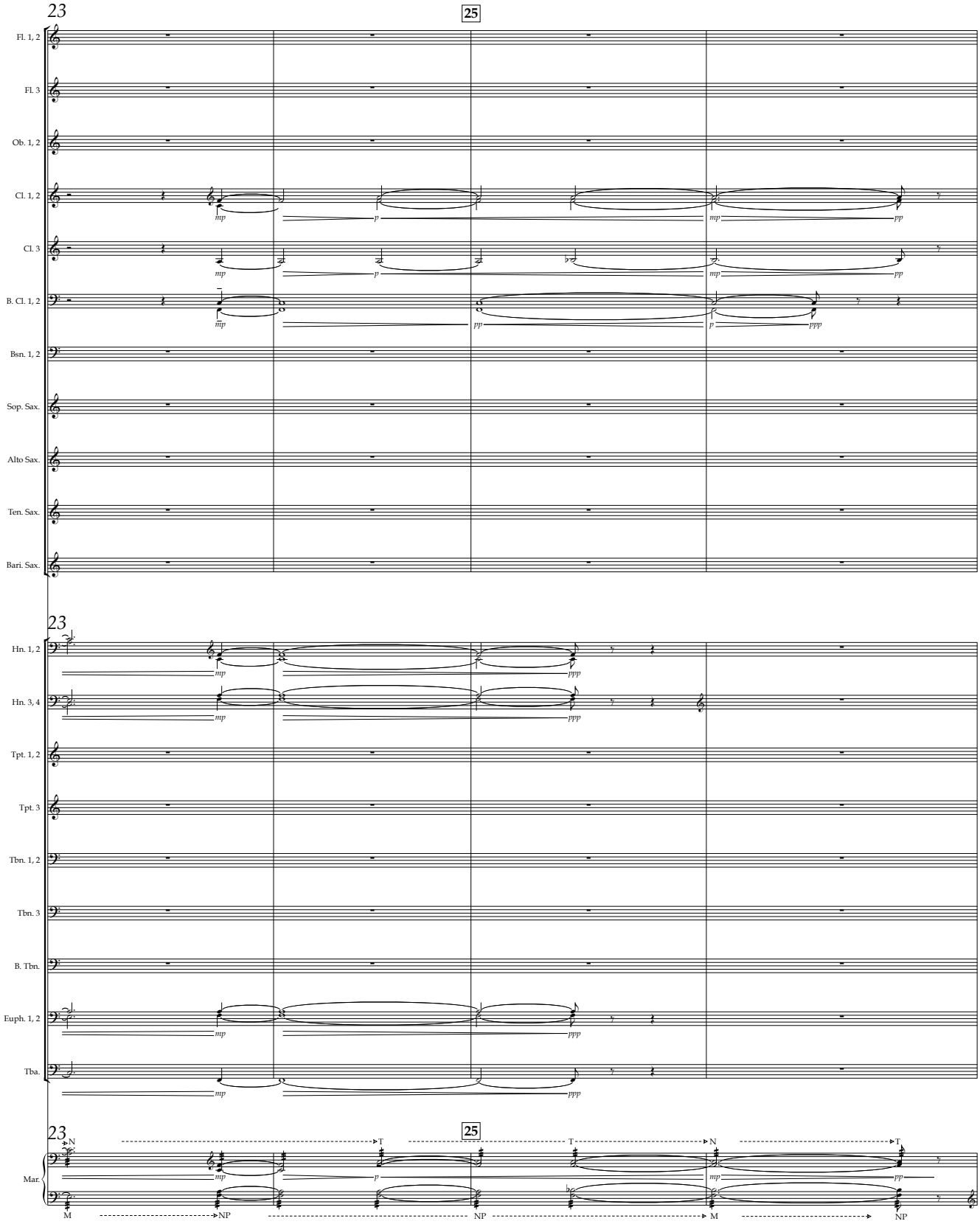
Steven Snowden

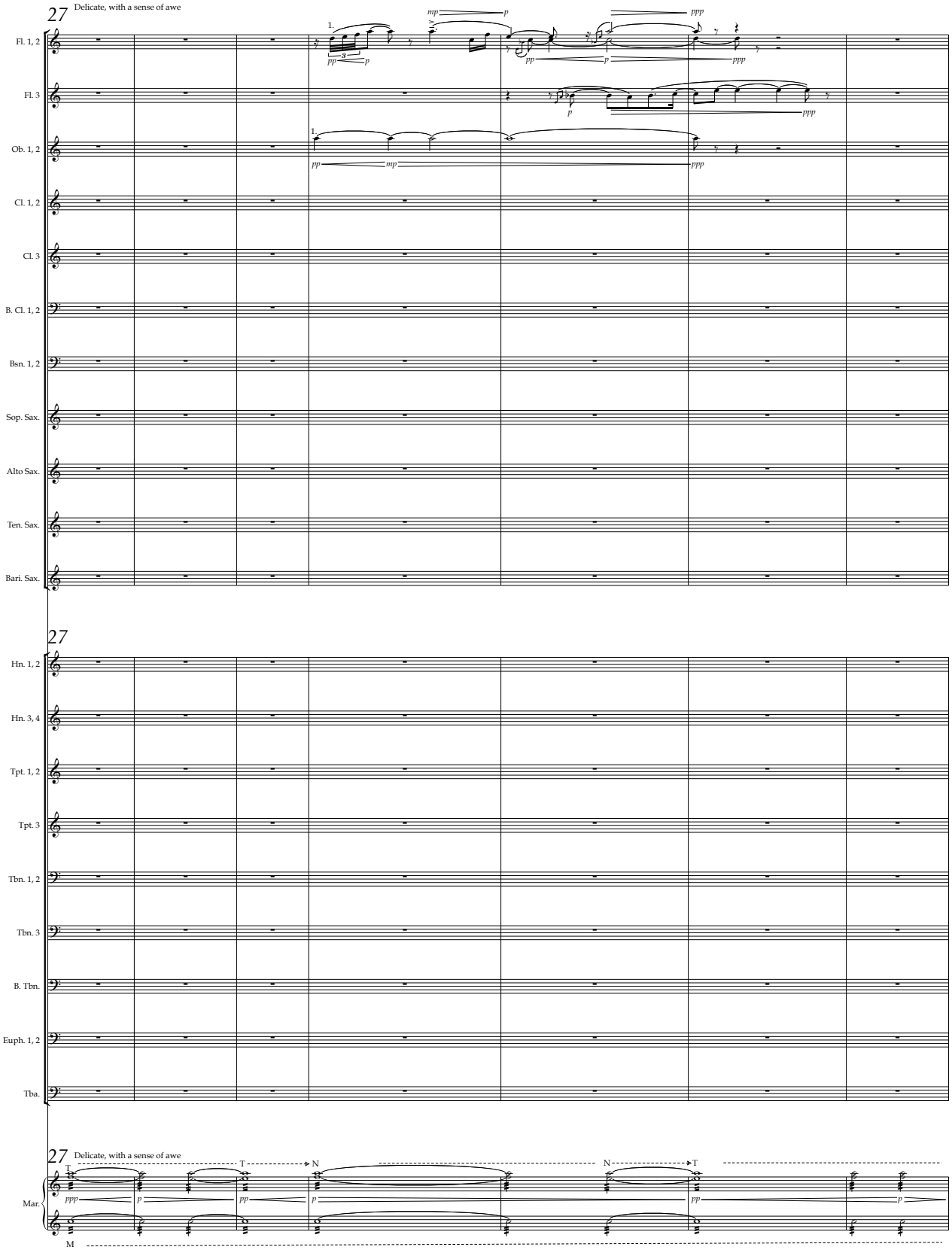


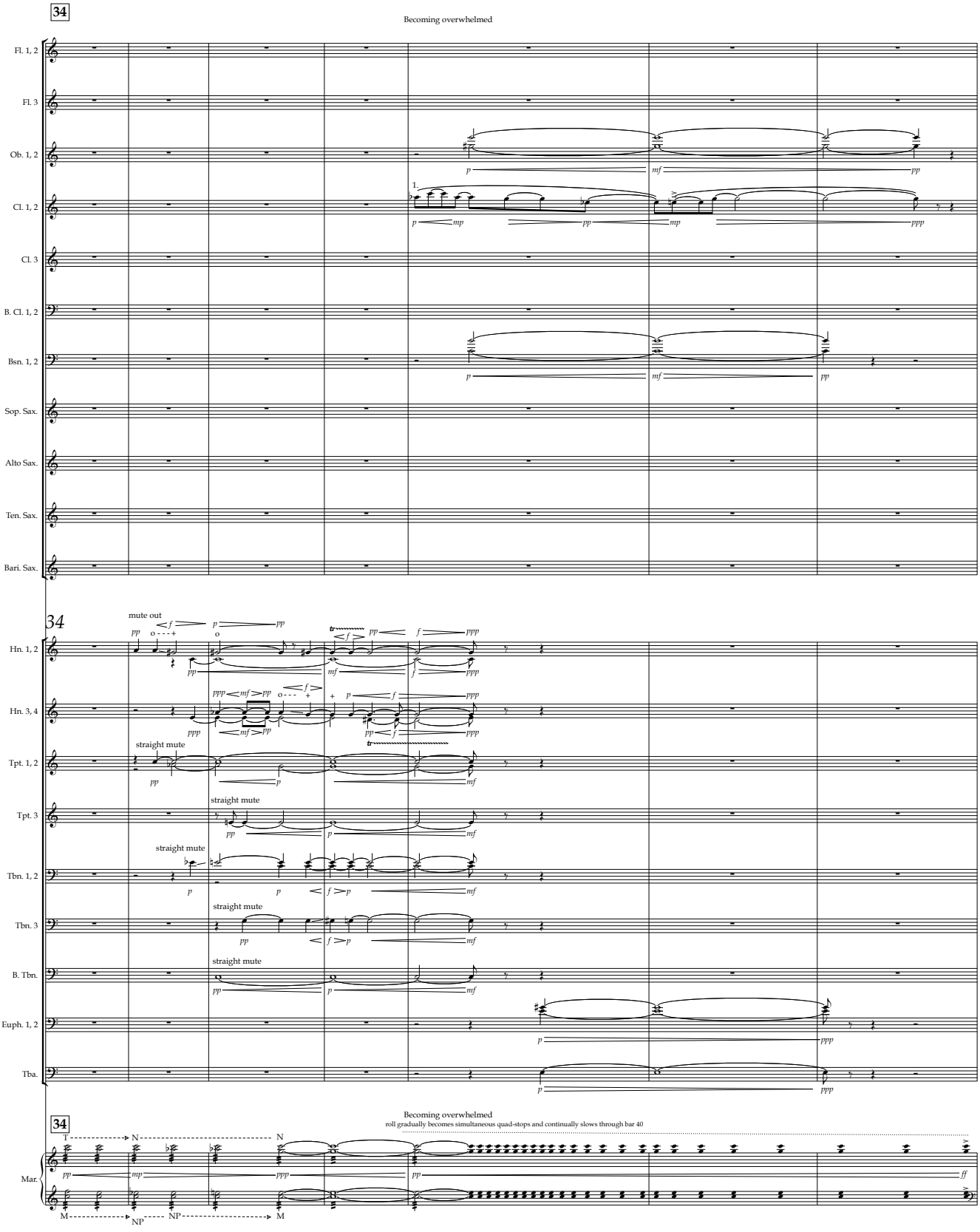

6
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
6
half-valve moan (wolf's howl effect)
Hn. 1, 2
half-valve moan (wolf's howl effect)
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
mute in
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
6
(8)
Mar.
T
N
M
M

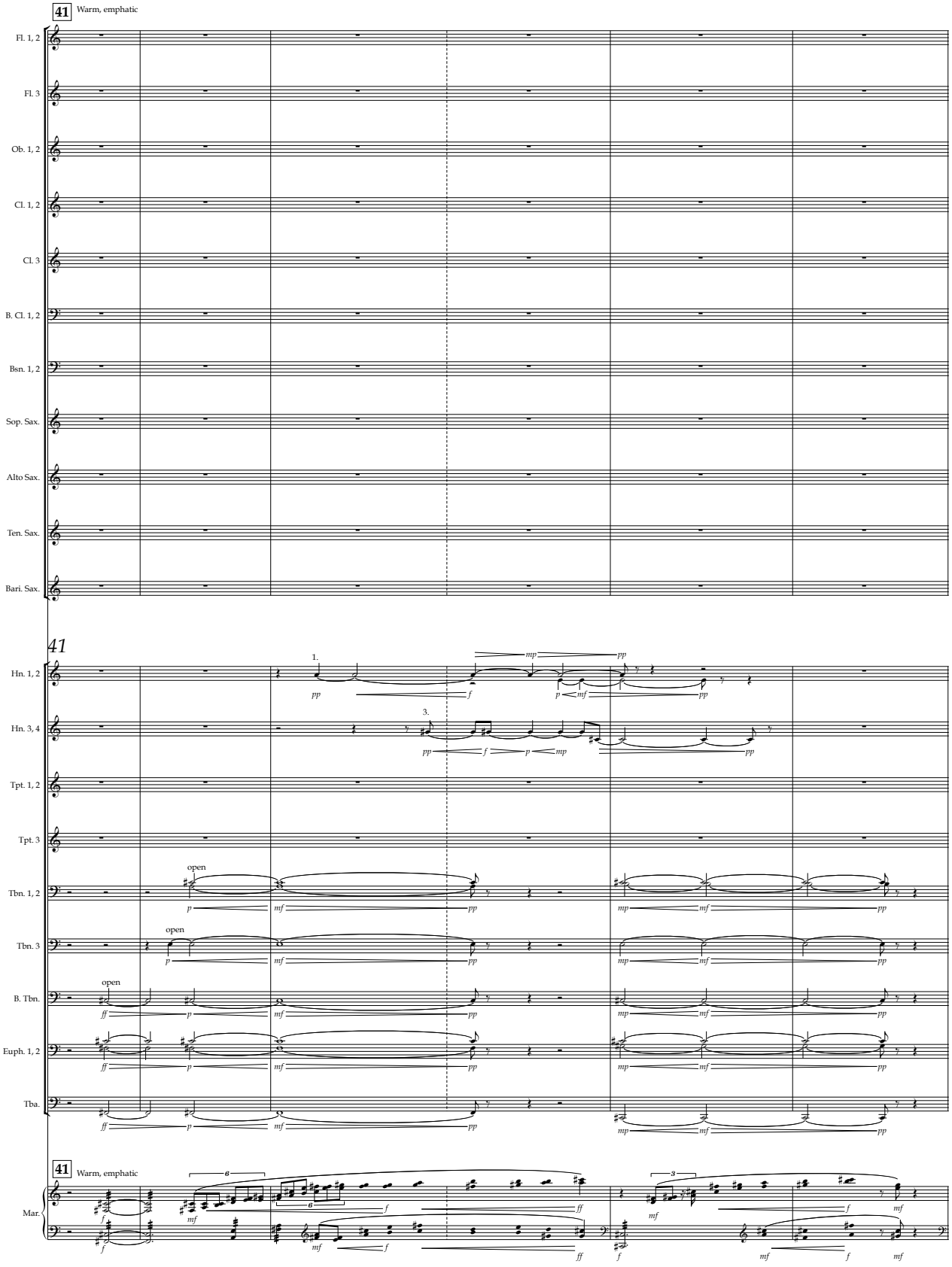

14
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
14
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
slap tongue with air only
14N
Mar.
NP

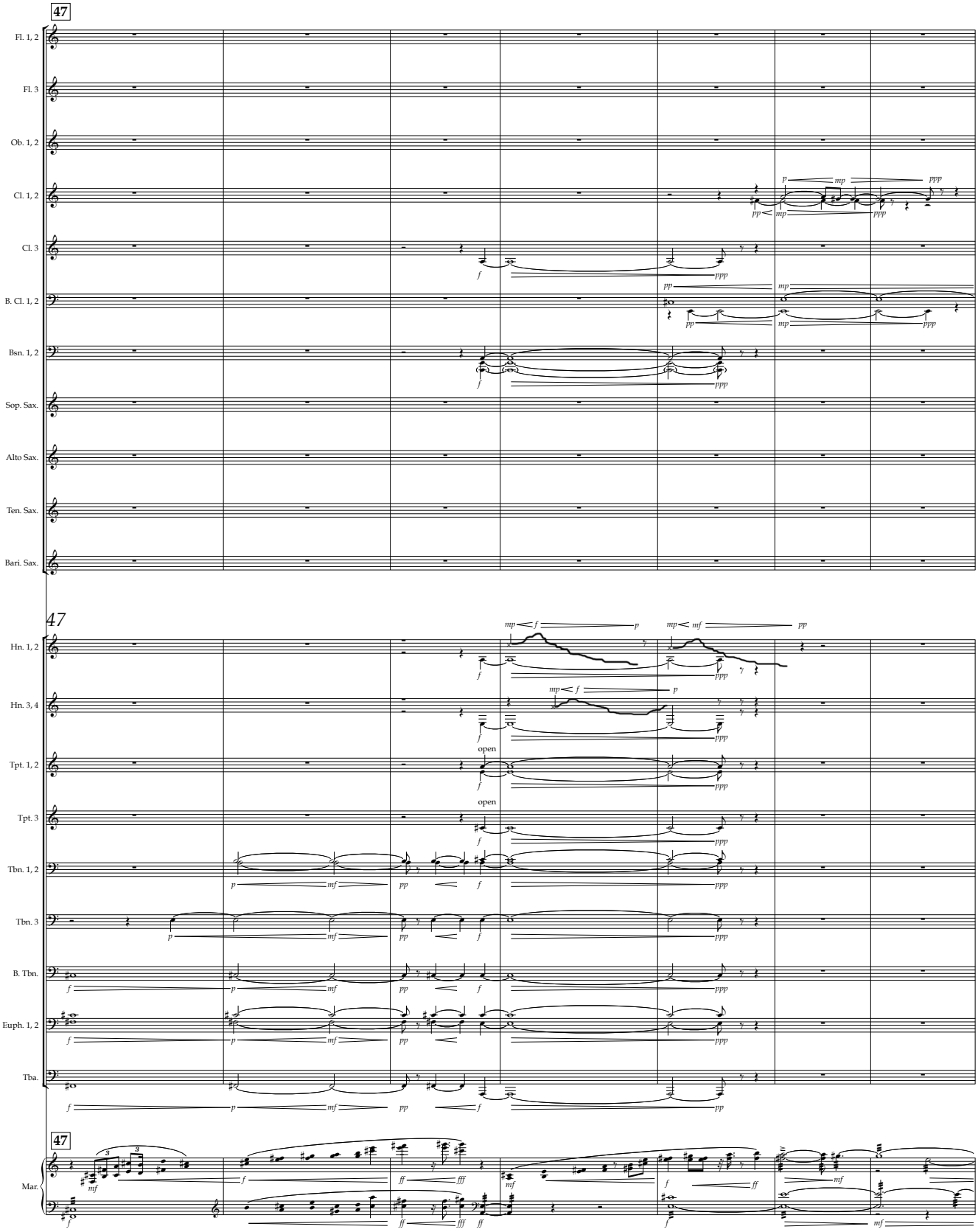

17
19
Subtly building tension
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
Mar.
ppp
pp
p

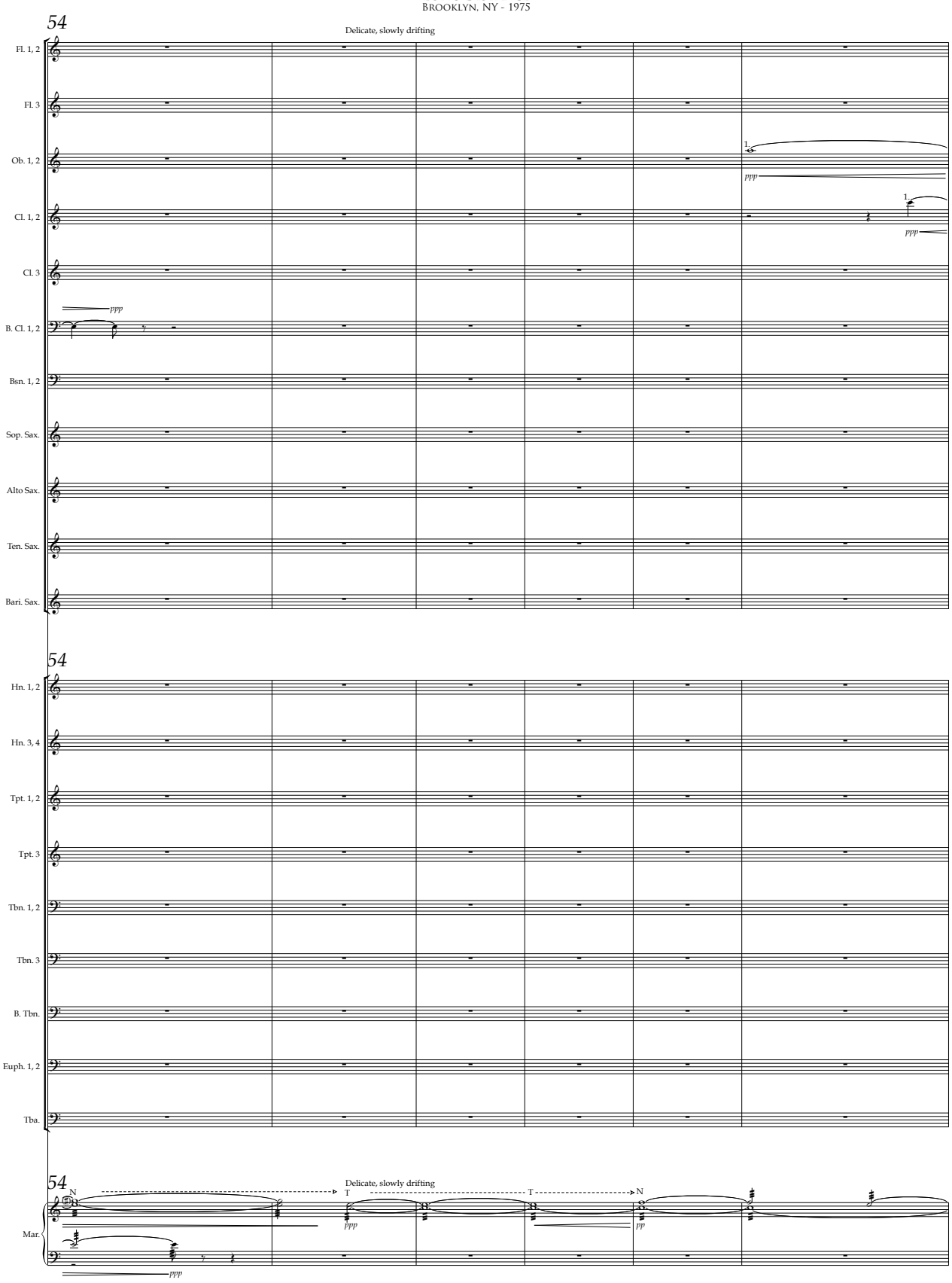

23
25
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
23
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
23
25
Mar.
N
T
N
T
M
NP
NP
M
NP

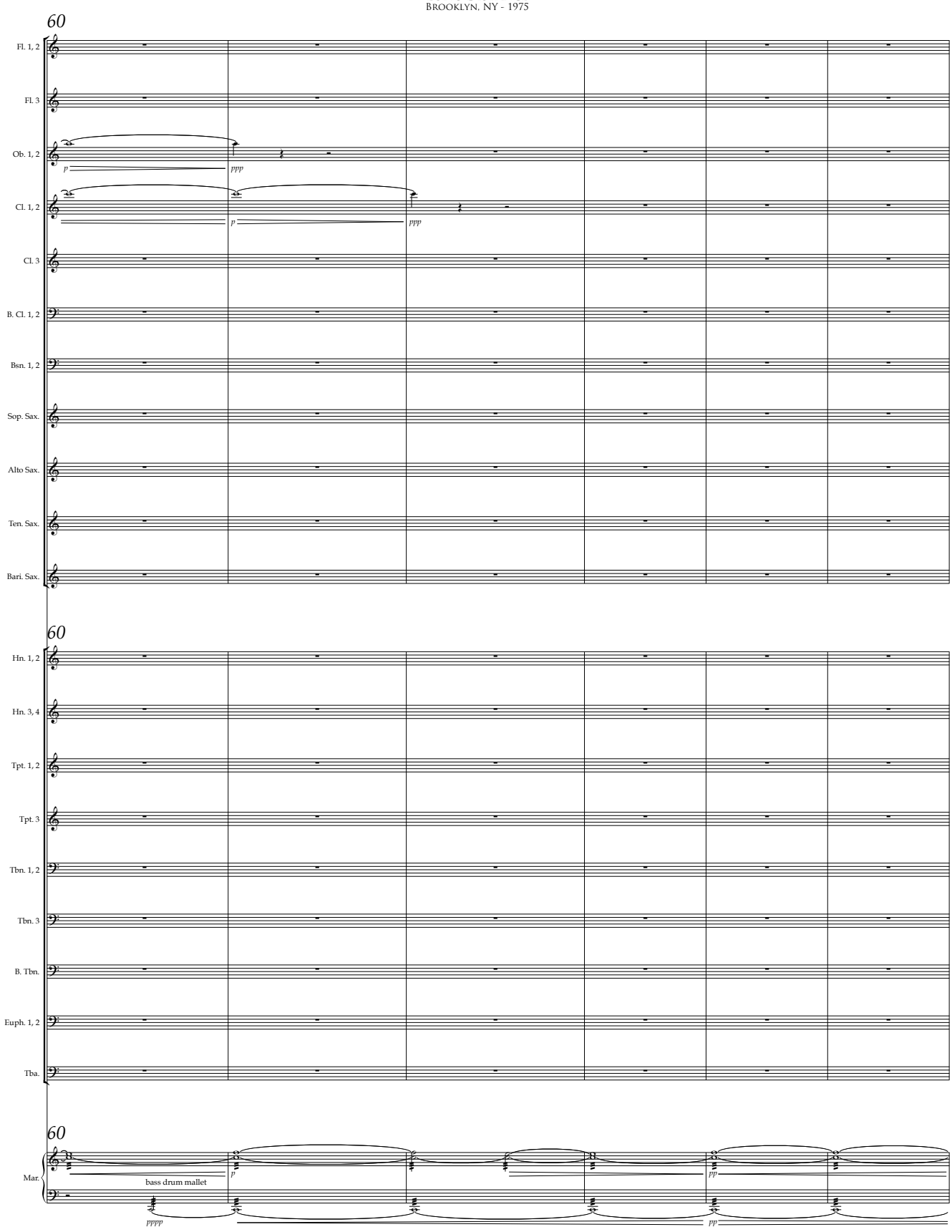

27
Delicate, with a sense of awe
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
27
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
27
Delicate, with a sense of awe
Mar.
T
N
N
T
M

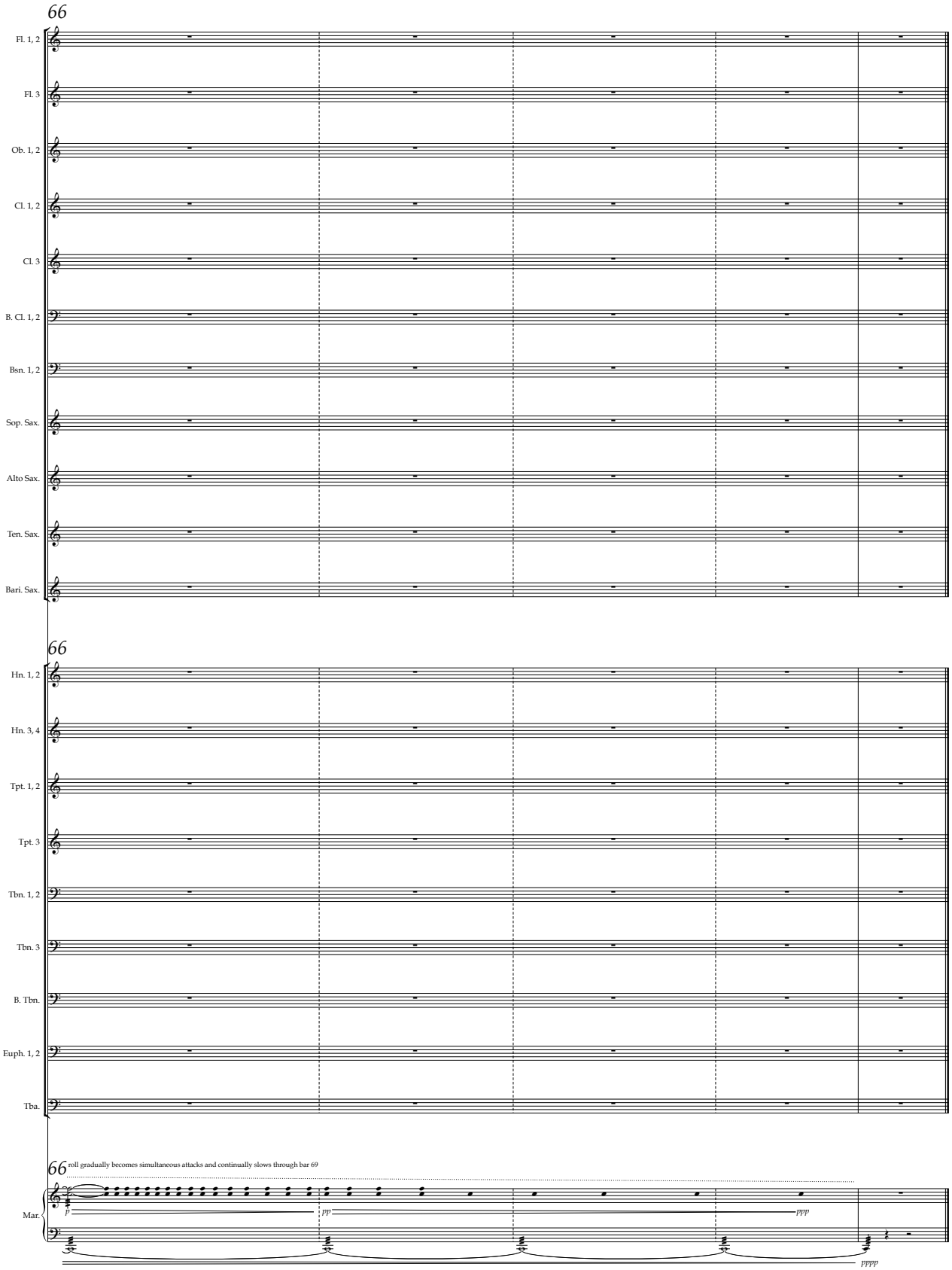

34
Becoming overwhelmed
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
34
mute out
Hn. 1, 2
Hn. 3, 4
straight mute
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
34
Becoming overwhelmed
roll gradually becomes simultaneous quad-stops and continually slows through bar 40
Mar.
T
N
NP
M


41
Warm, emphatic
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
41
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
open
41
Warm, emphatic
Mar.


47
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
47
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
open
47
Mar.


54
Delicate, slowly drifting
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
ppp
54
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
54
Delicate, slowly drifting
N
T
T
N
Mar.
ppp
pp
ppp


60
Fl. 1, 2
Fl. 3
Ob. 1, 2
p
ppp
Cl. 1, 2
p
ppp
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
60
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
60
Mar.
bass drum mallet
p
pp
pppp
pp


66
Fl. 1, 2
Fl. 3
Ob. 1, 2
Cl. 1, 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
66
Hn. 1, 2
Hn. 3, 4
Tpt. 1, 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
66
roll gradually becomes simultaneous attacks and continually slows through bar 69
Mar.
p
pp
ppp
pppp

Long Distance

Monroe, NC - 1977

Steven Snowden

15 **Startling, Incessant**

Payphone recording alone (approx. 15 seconds)

♩ = 92

Piccolo

Flute 1

Flute 2

Oboe 1, 2

Clarinet in B♭ 1

Clarinet in B♭ 2

Clarinet in B♭ 3

Bass Clarinet in B♭ 1,2

Bassoon 1,2

Soprano Saxophone

Alto Saxophone

Tenor Saxophone

Baritone Saxophone

Horn in F 1,2

Horn in F 3, 4

Trumpet in B♭

Trumpet in B♭ 1,2

Trumpet in B♭ 3

Trombone 1,2

Trombone 3

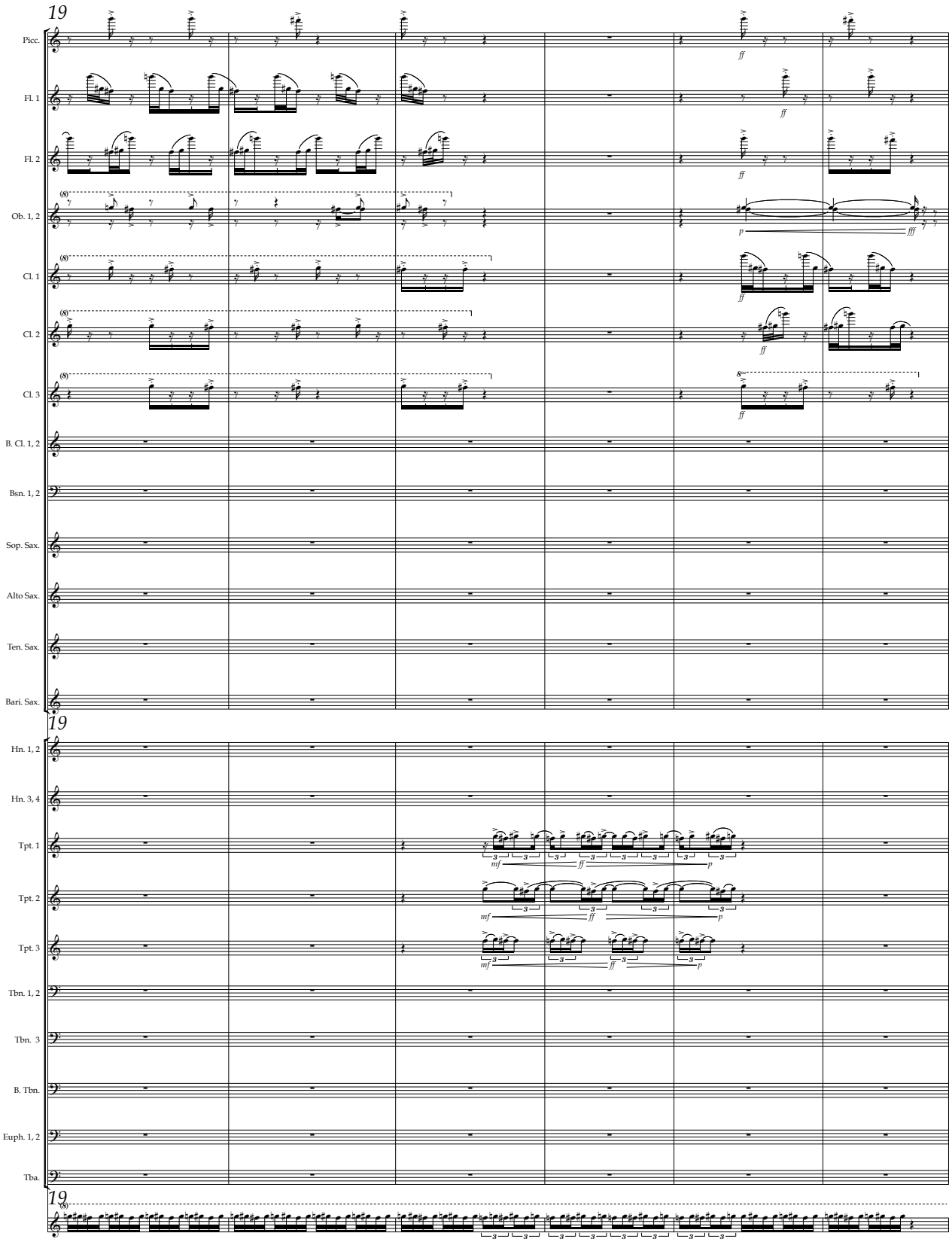
Bass Trombone

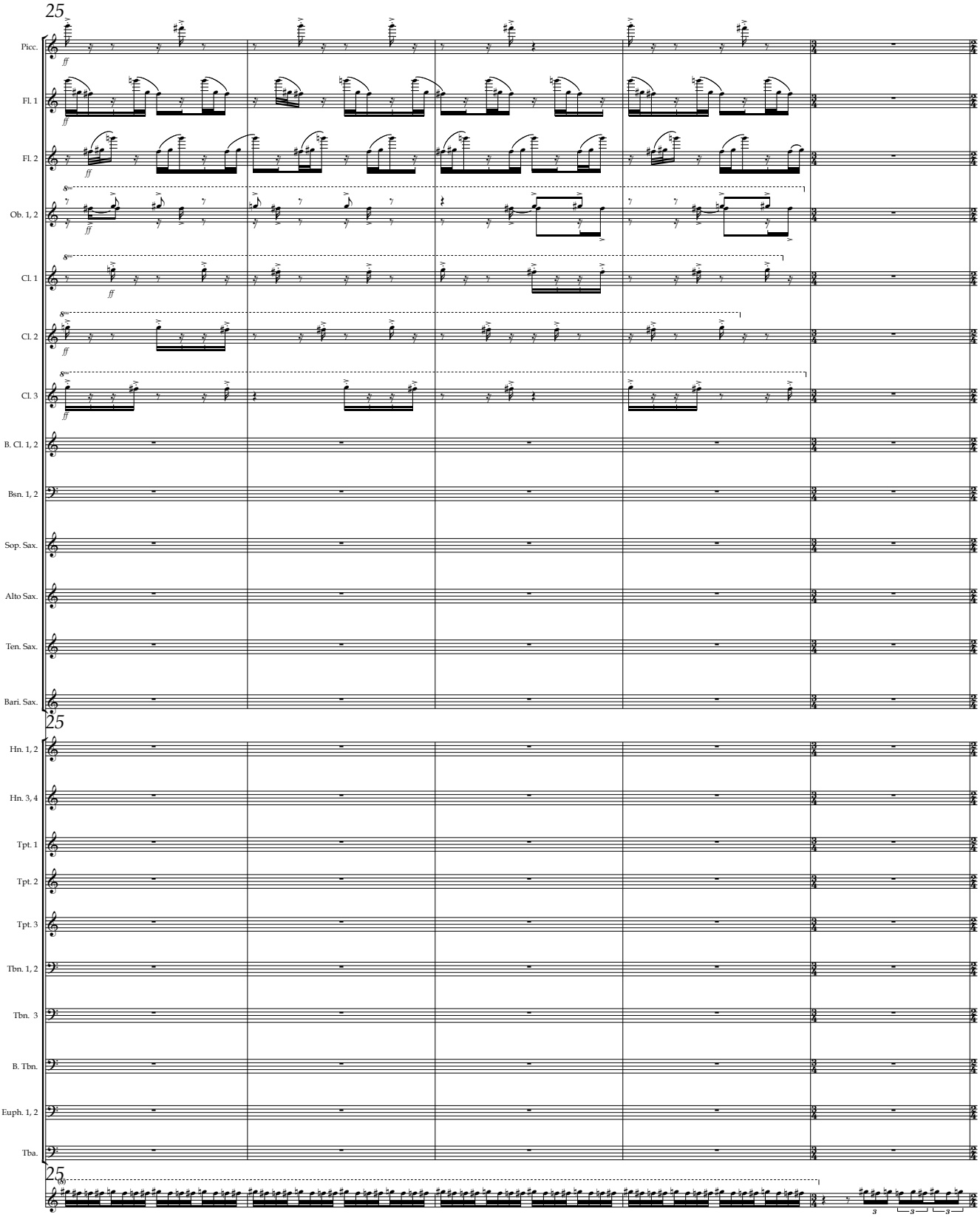
Euphonium 1,2

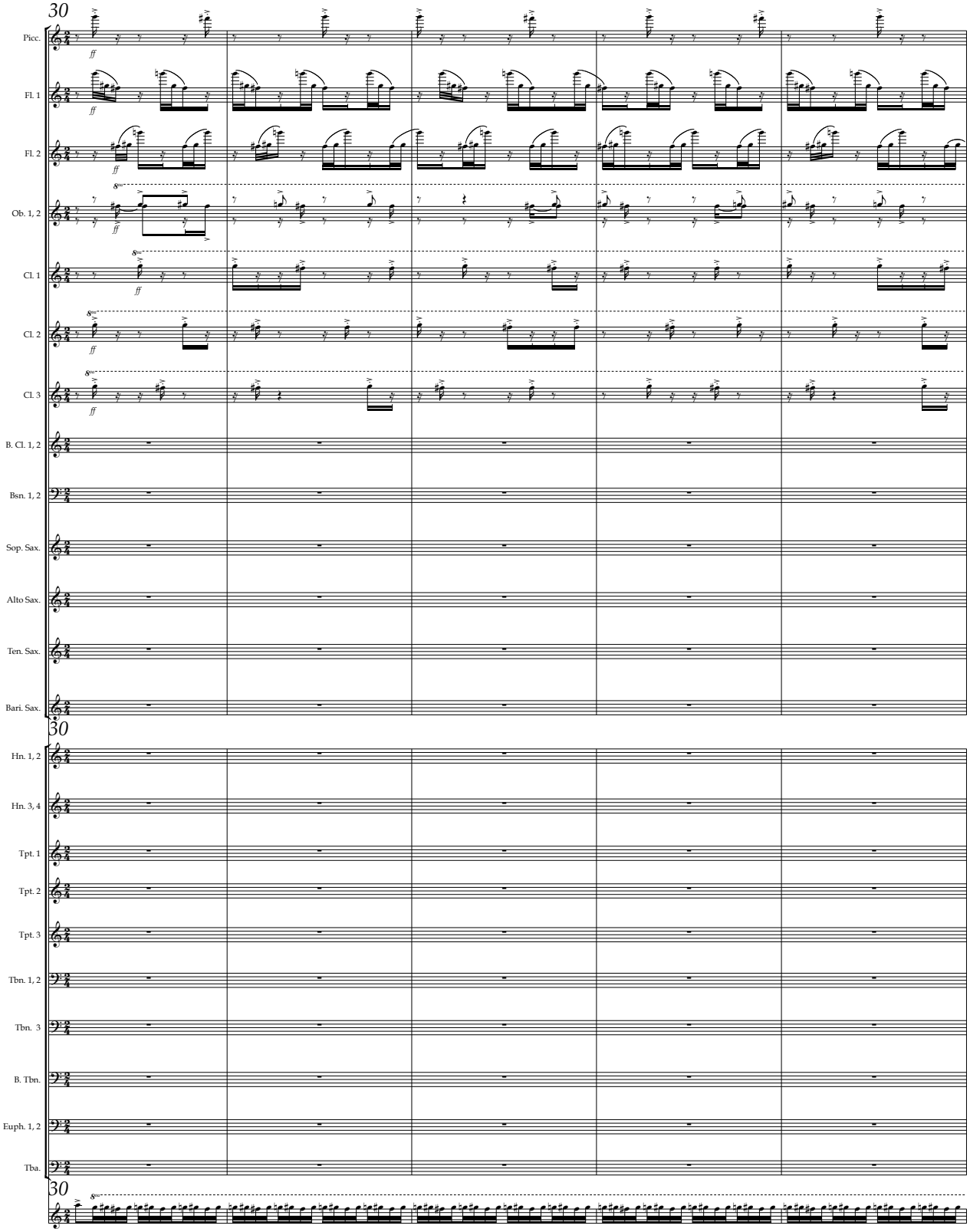
Tuba

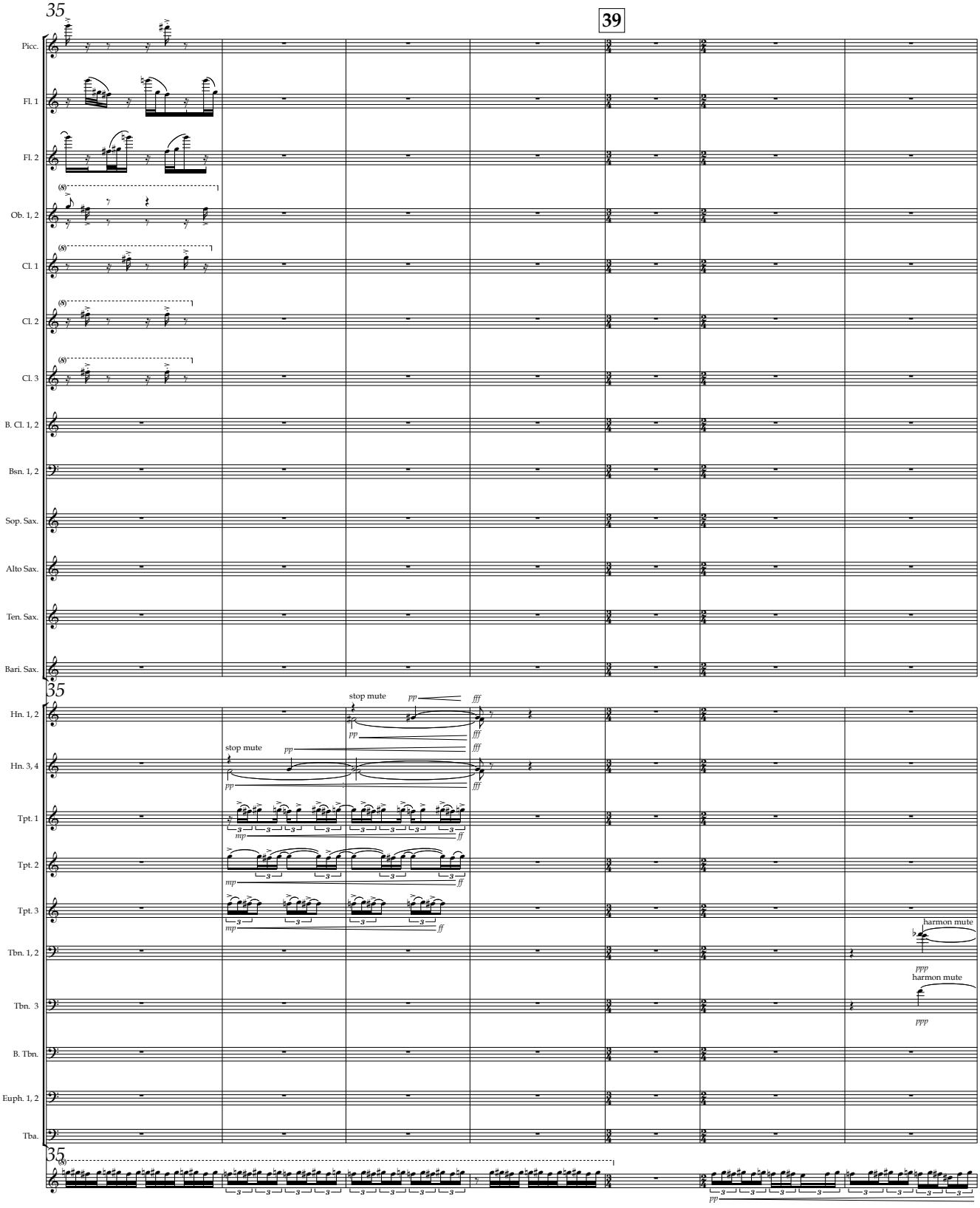
Hard mallets
Startling, Incessant

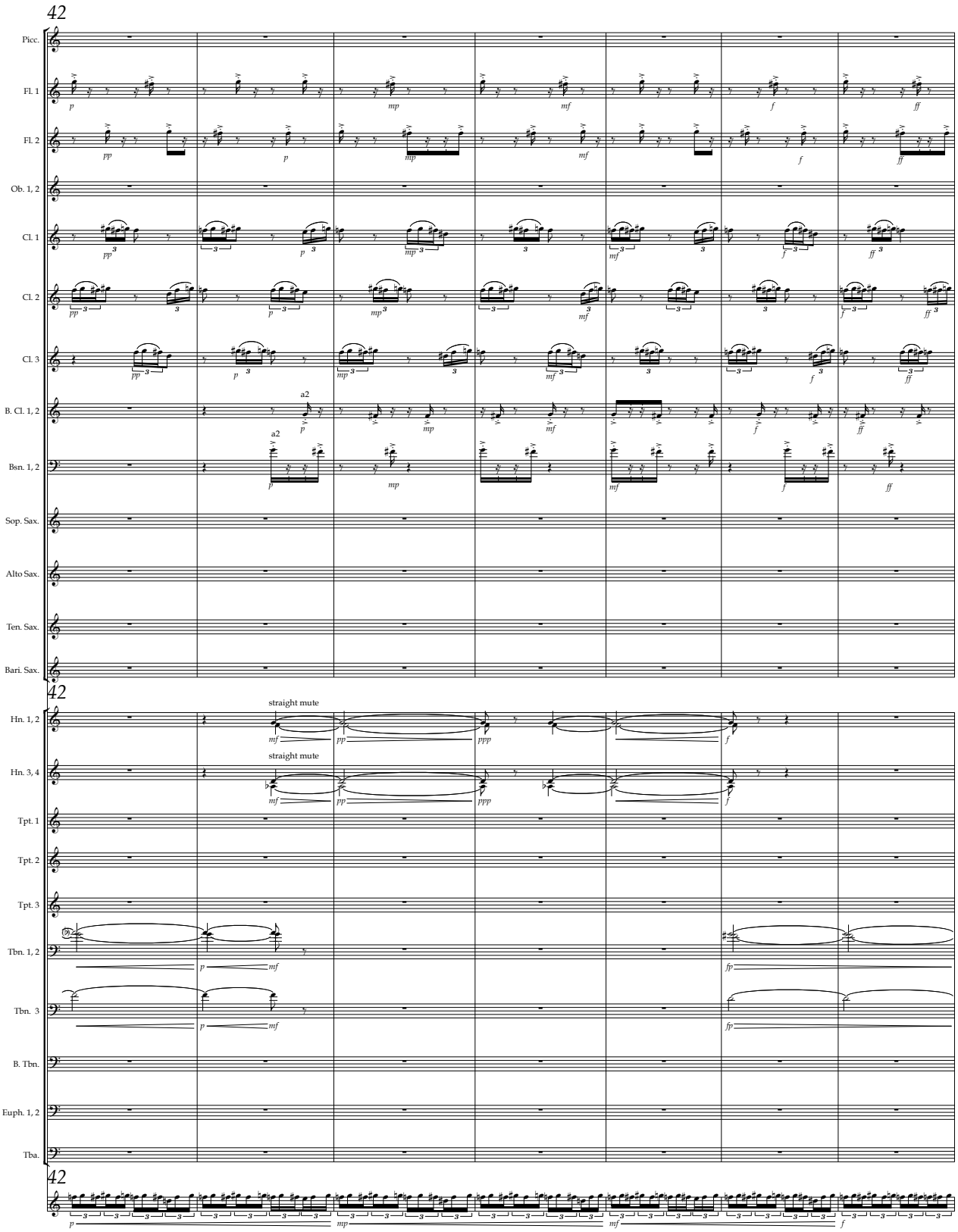
Marimba

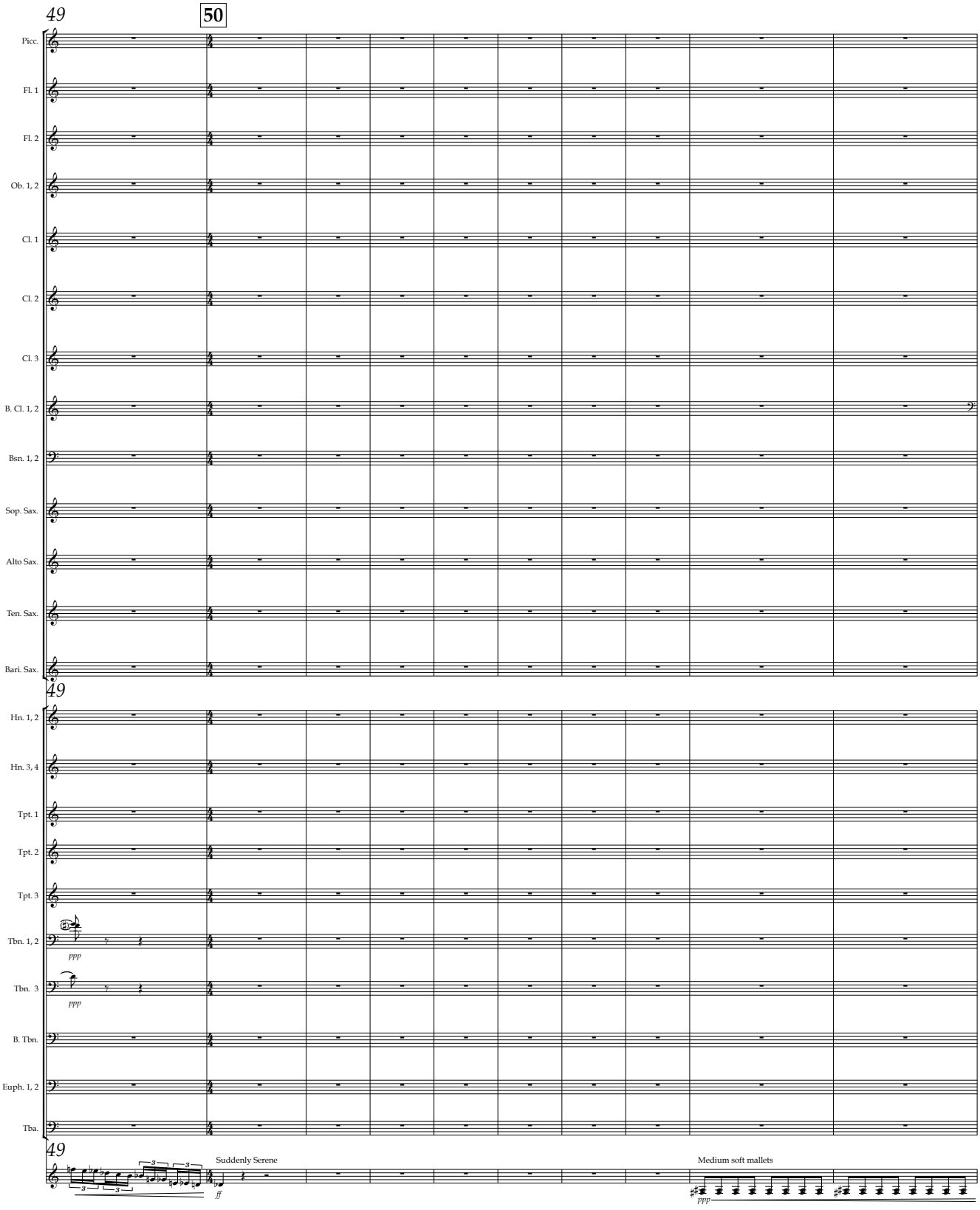

19
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
19
Hn. 1, 2
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
19

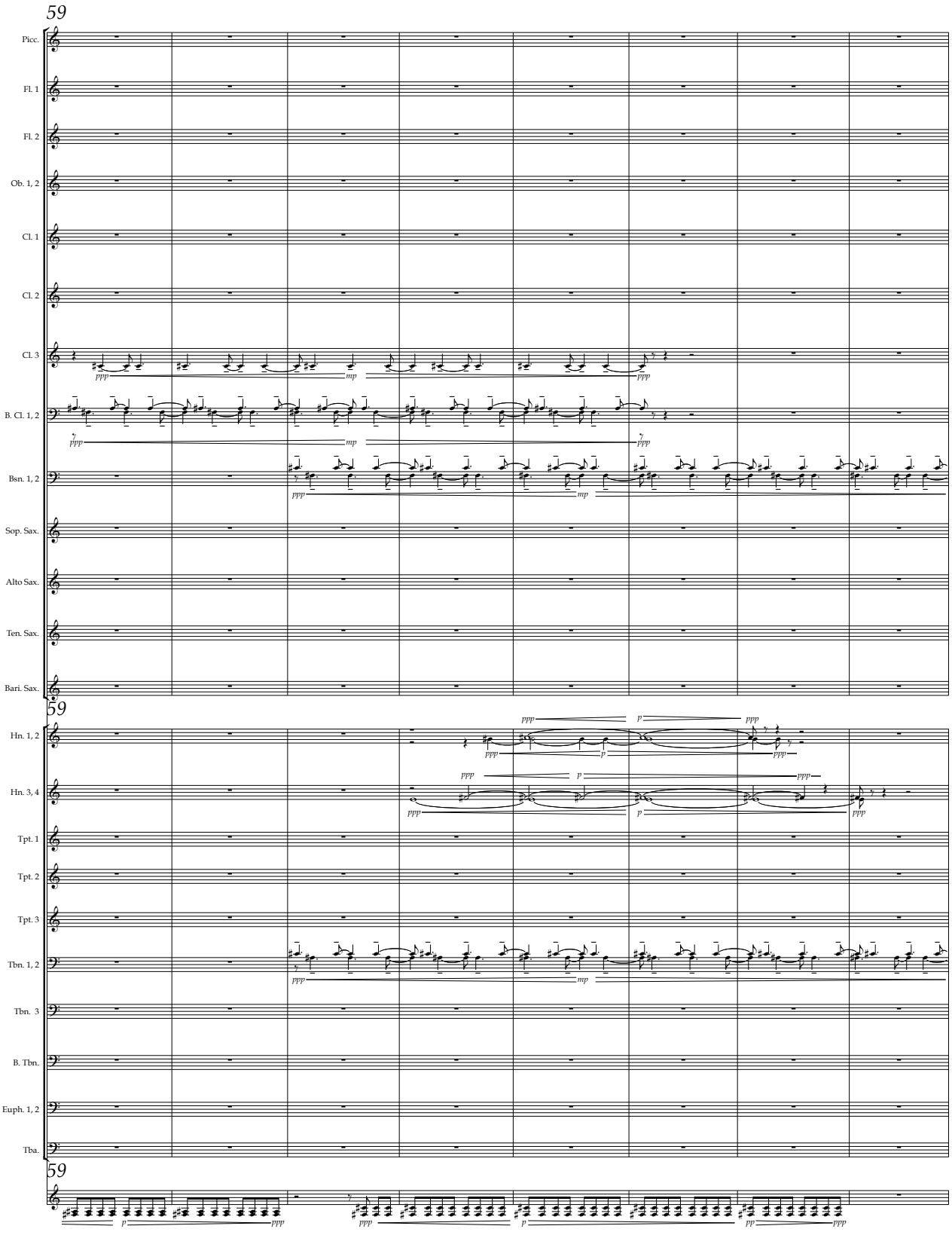

25
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
25
Hn. 1, 2
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
25

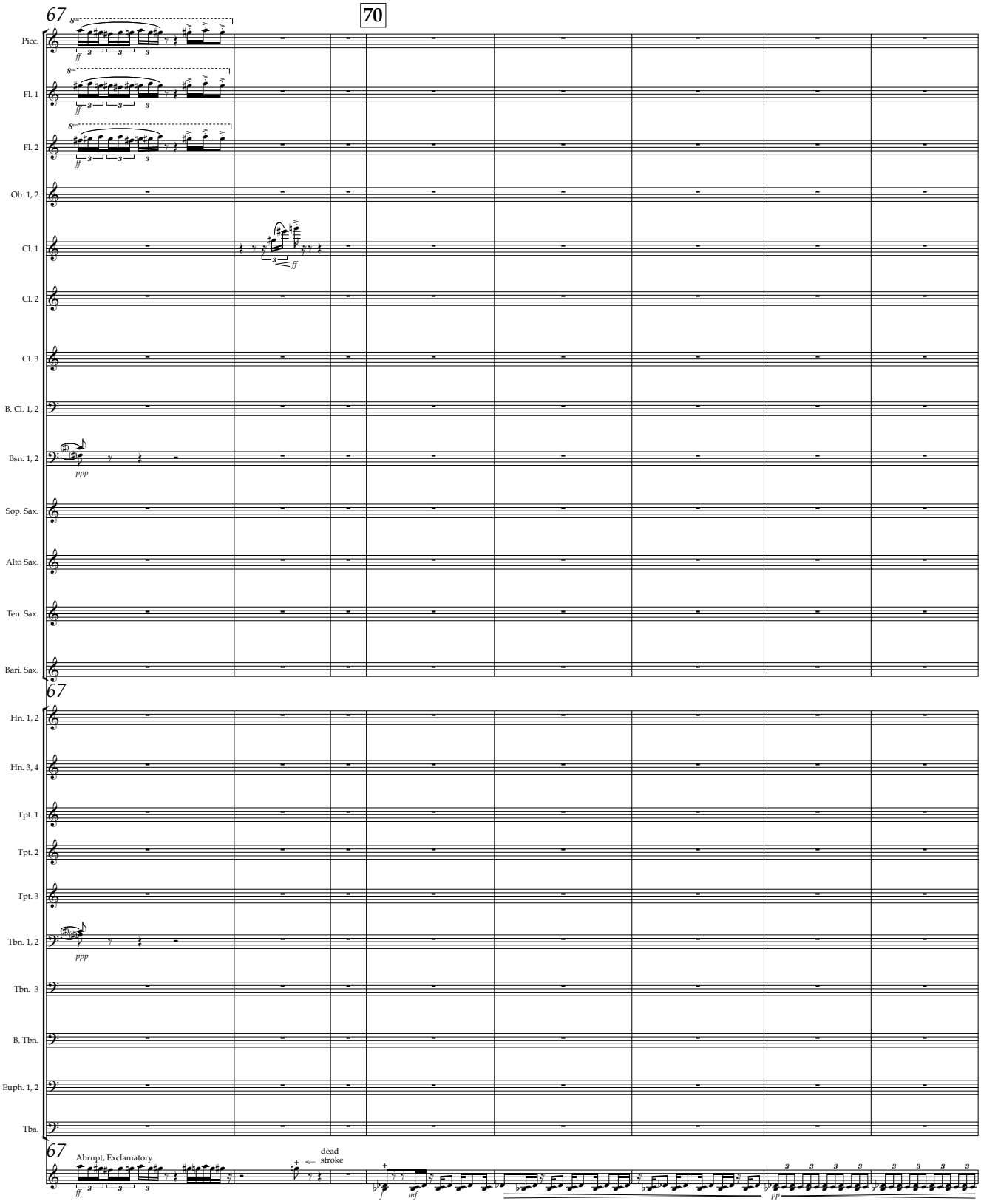

30
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
30
Hn. 1, 2
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
30

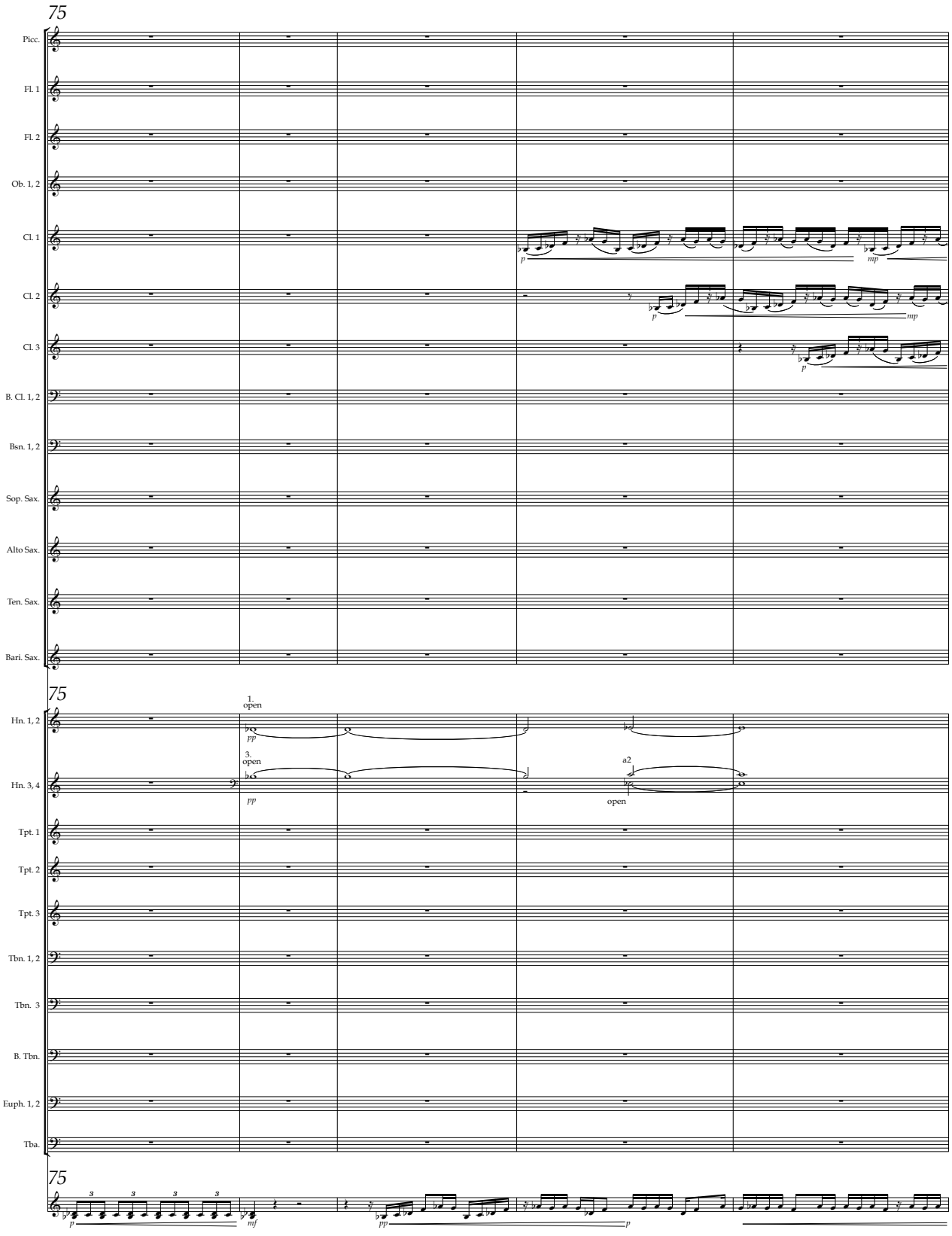

35
39
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
35
Hn. 1, 2
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
35
stop mute
pp
fff
mp
ff
harmon mute
ppp

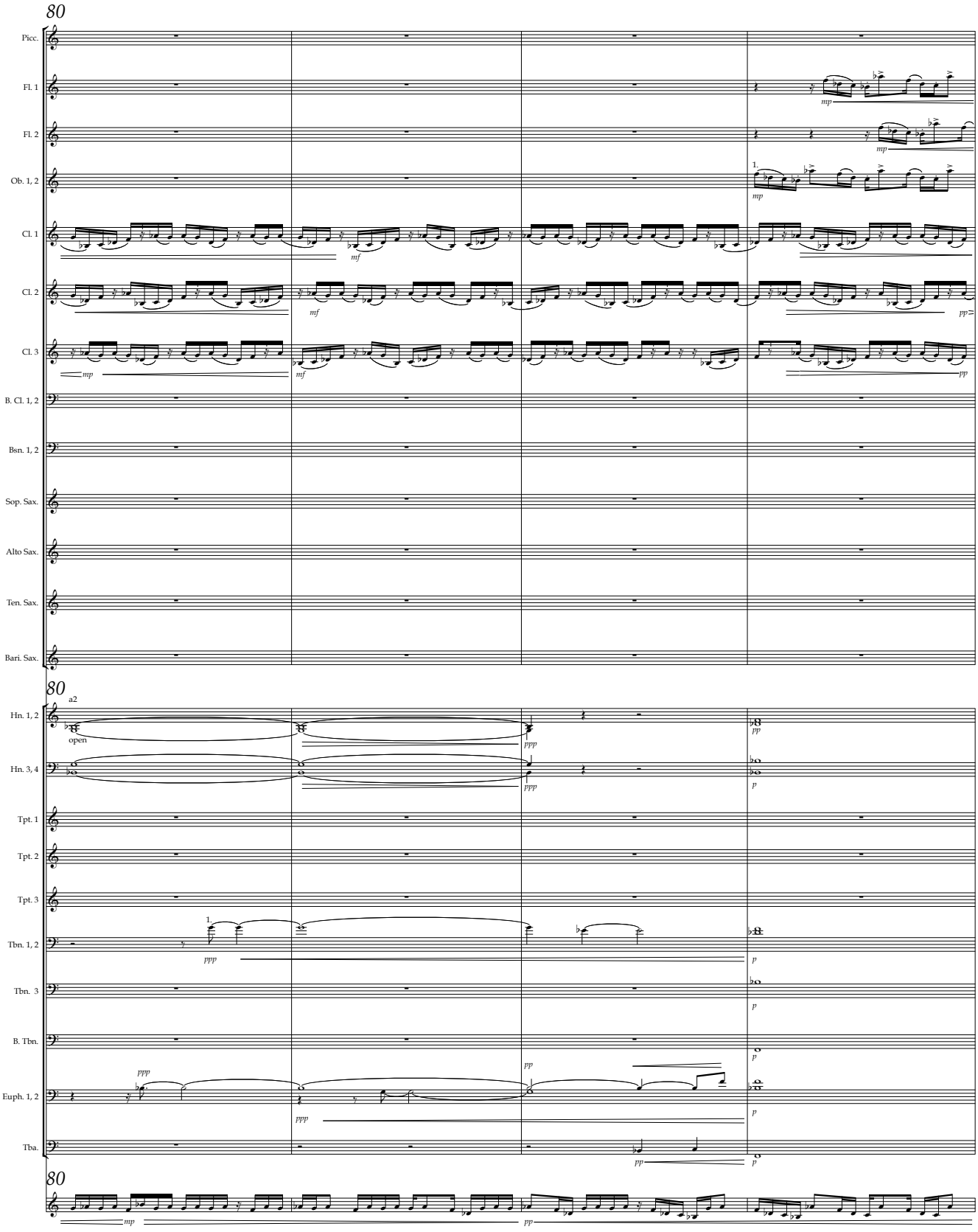

42
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
a2
Bsn. 1, 2
a2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
42
straight mute
Hn. 1, 2
straight mute
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
42

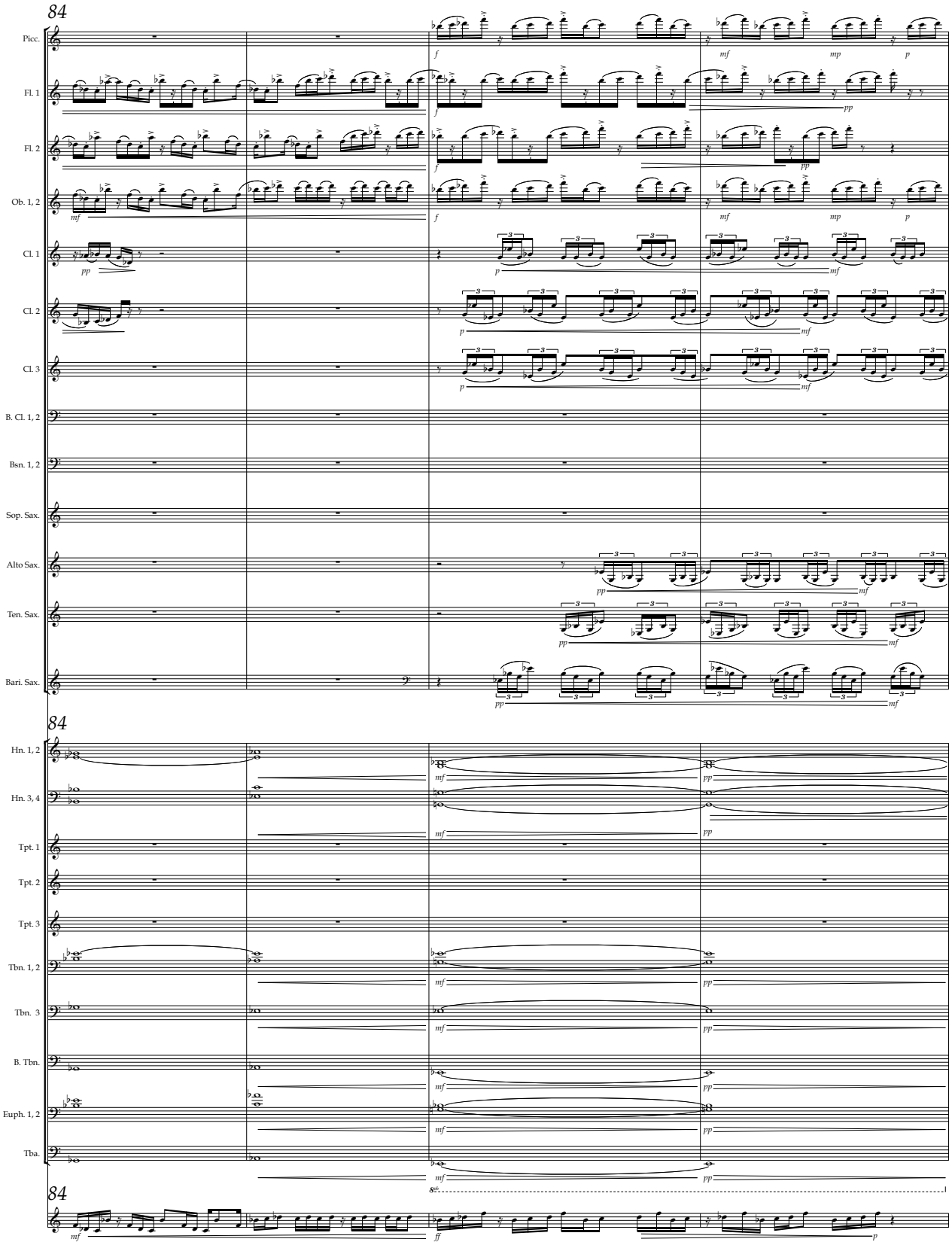

49
50
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
49
Hn. 1, 2
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
ppp
Tbn. 3
ppp
B. Tbn.
Euph. 1, 2
Tba.
49
Suddenly Serene
ff
Medium soft mallets
ppp

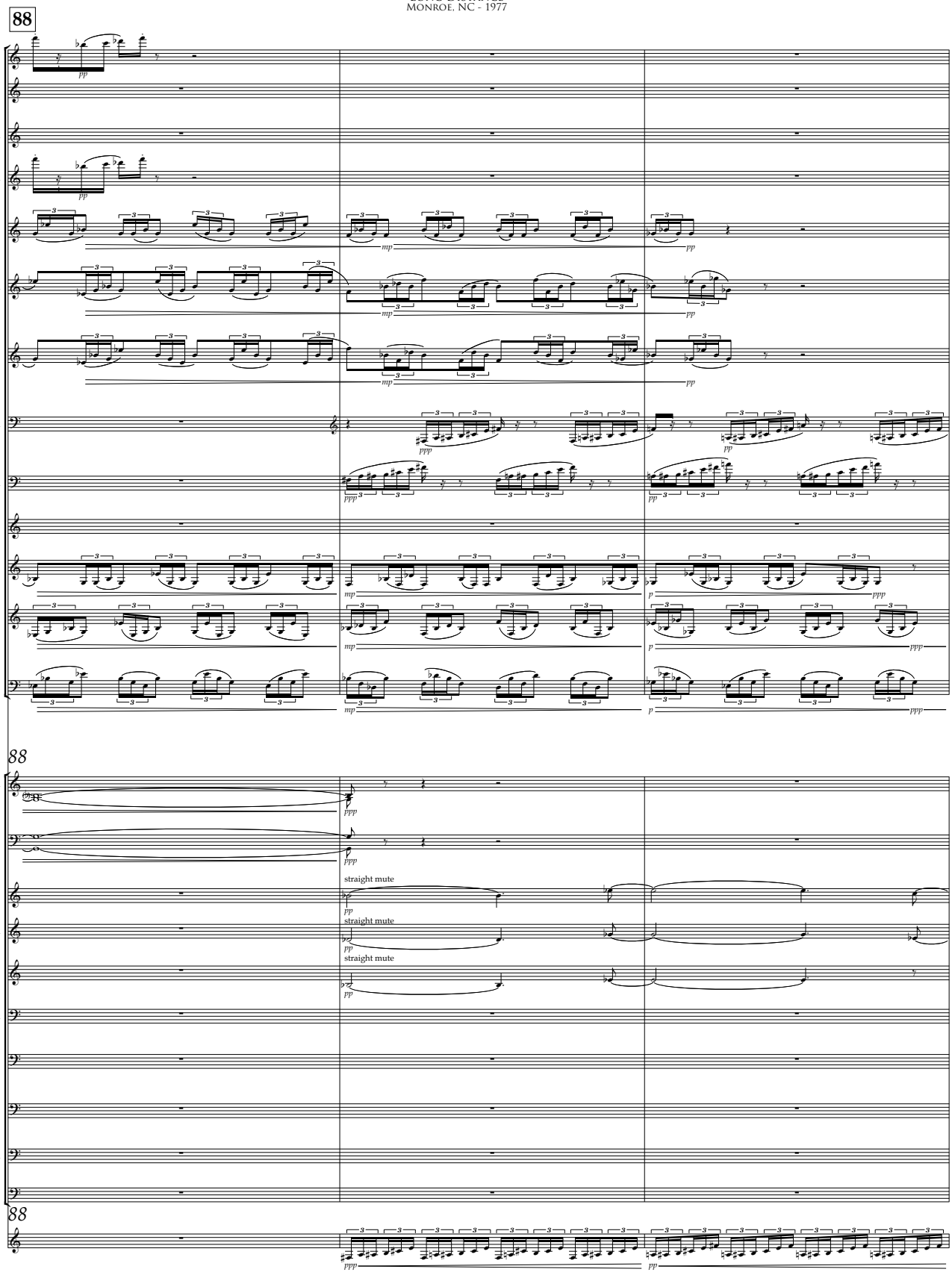

59
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
59
Hn. 1, 2
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
59

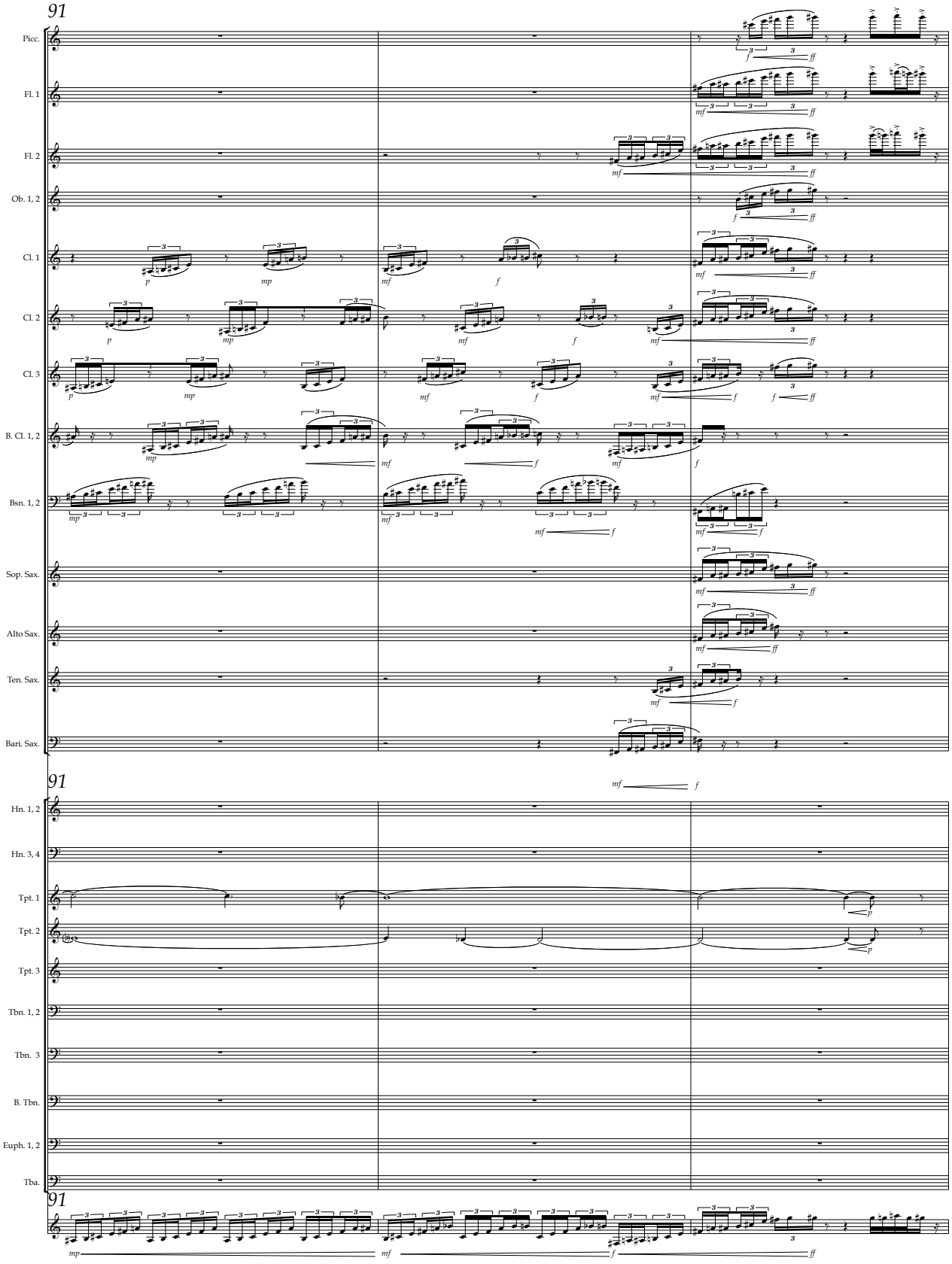

67
70
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
67
Hn. 1, 2
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
67
Abrupt, Exclamatory
dead stroke

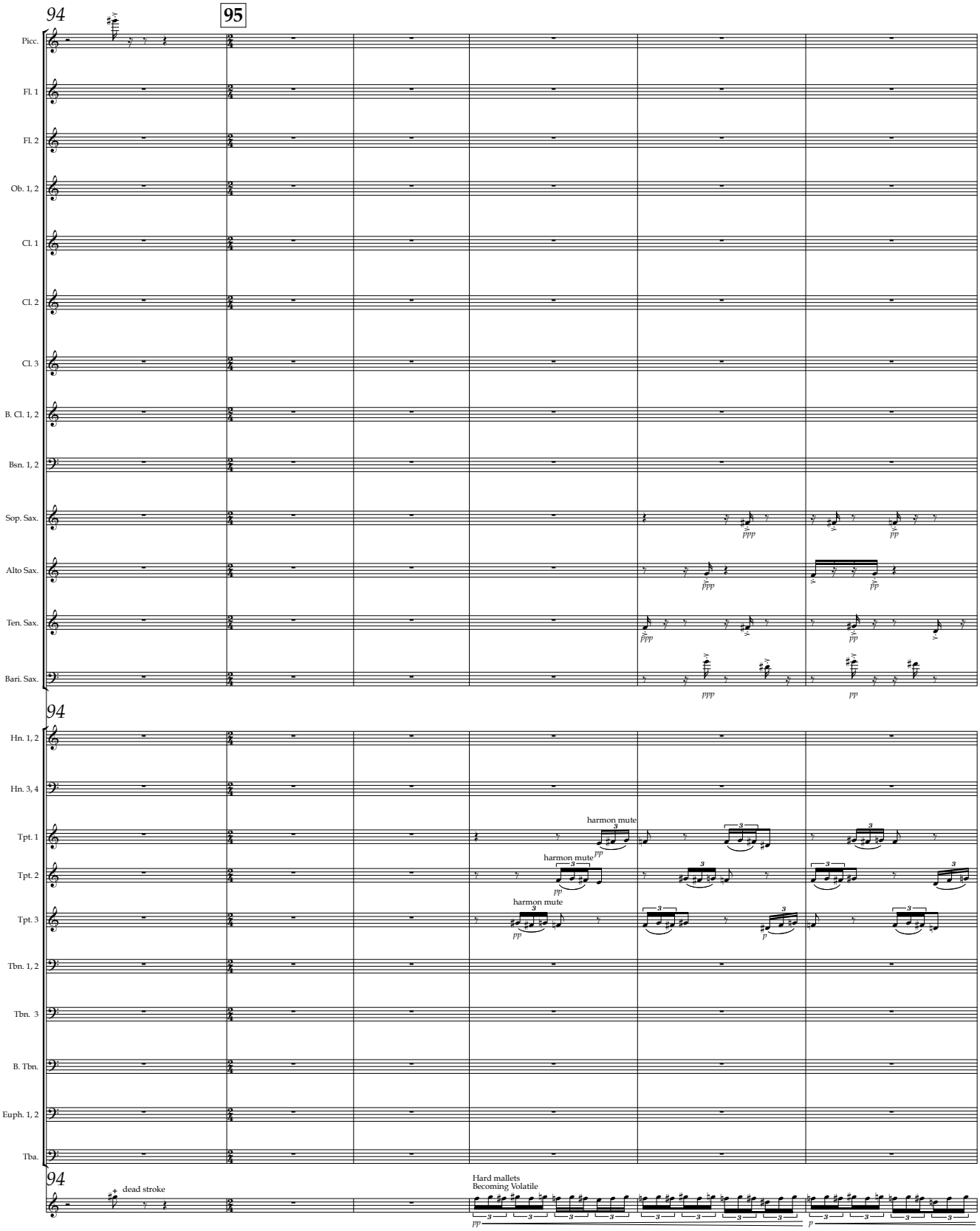

75
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
p
mp
75
Hn. 1, 2
1.
open
pp
Hn. 3, 4
3.
open
pp
a2
open
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
75
3
3
3
3
p
mf
pp
p

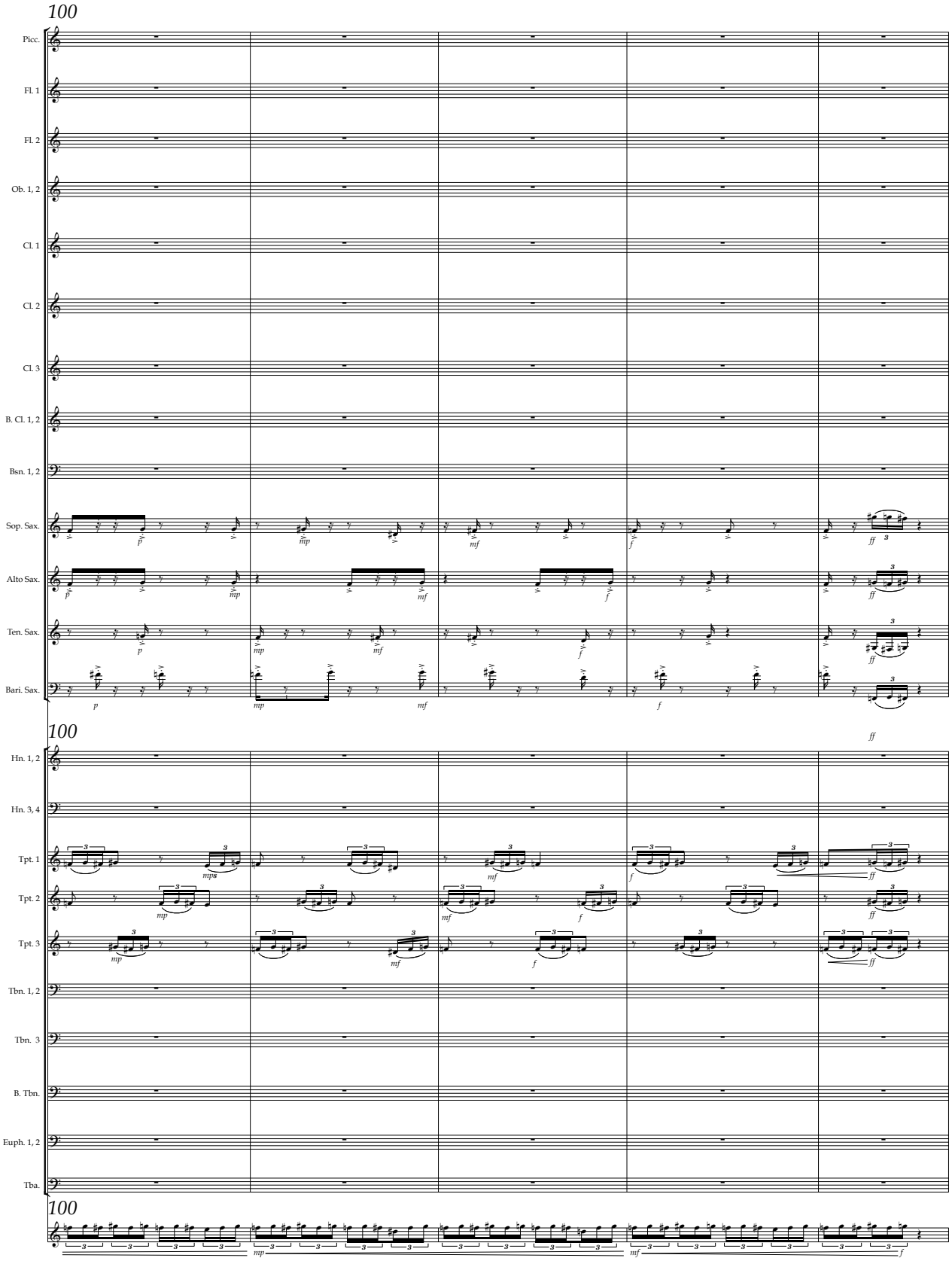

80
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
80
a2
Hn. 1, 2
open
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
80

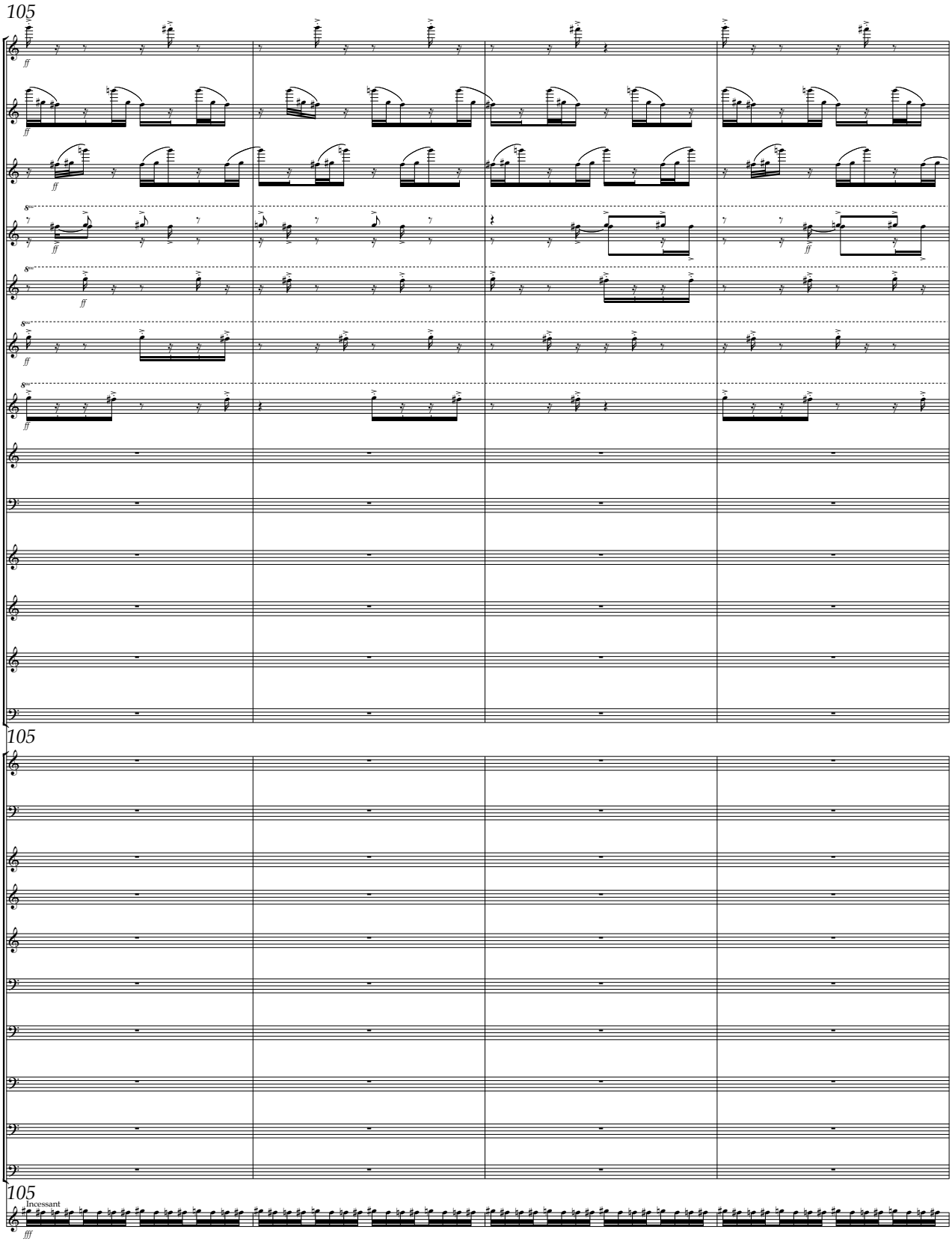

84
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
84
Hn. 1, 2
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
84

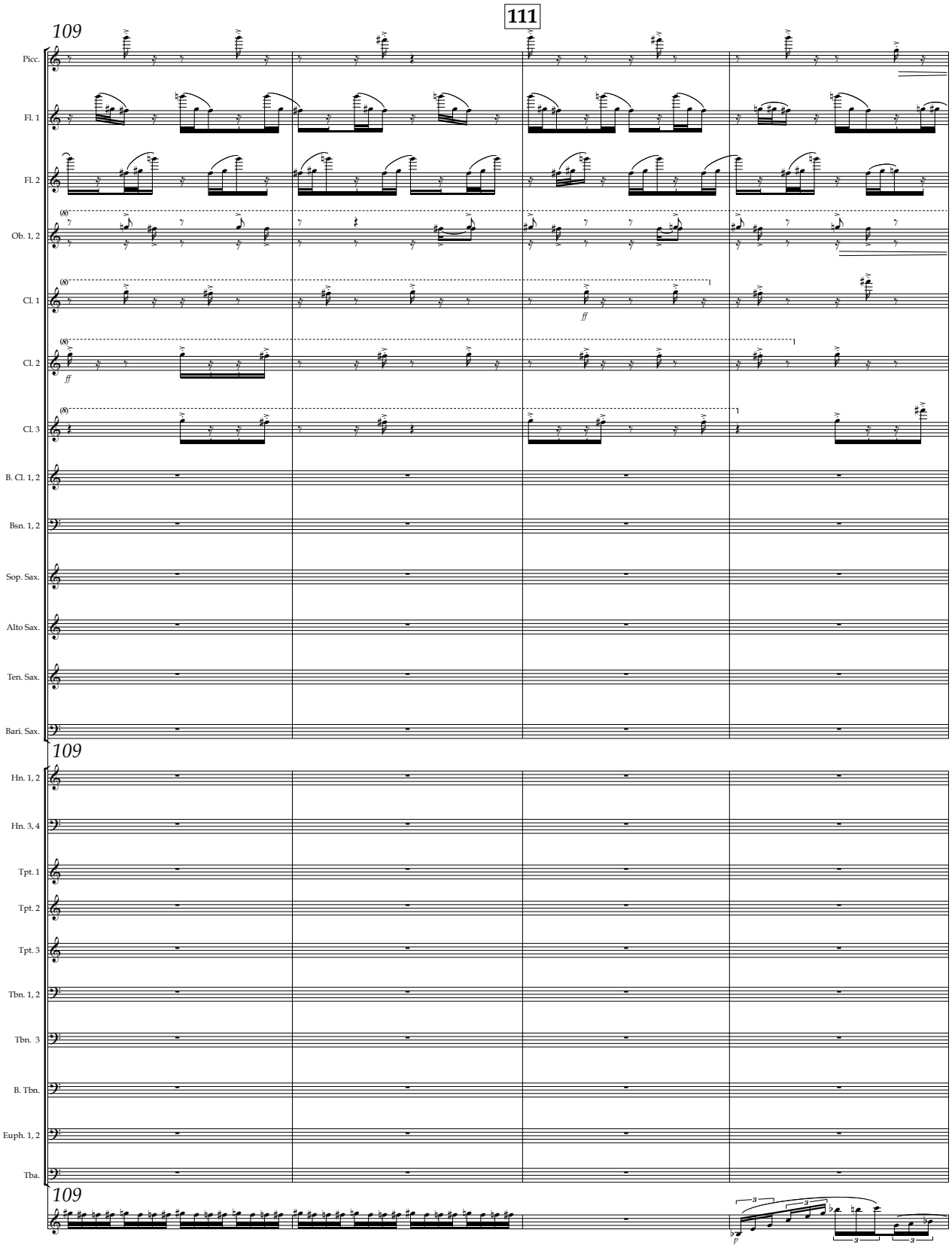

88
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
88
Hn. 1, 2
Hn. 3, 4
straight mute
Tpt. 1
straight mute
Tpt. 2
straight mute
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
88

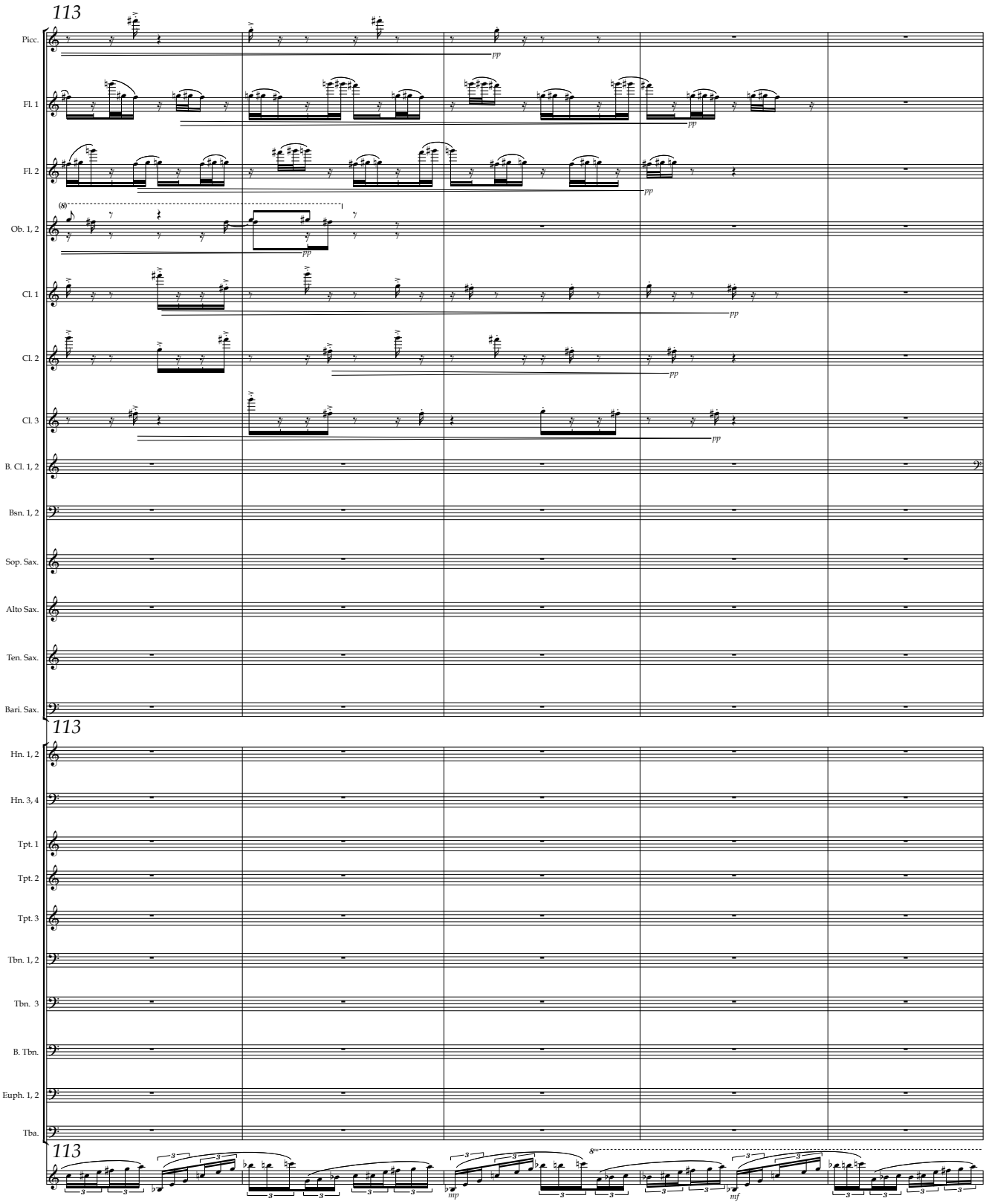

91
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
91
Hn. 1, 2
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
91

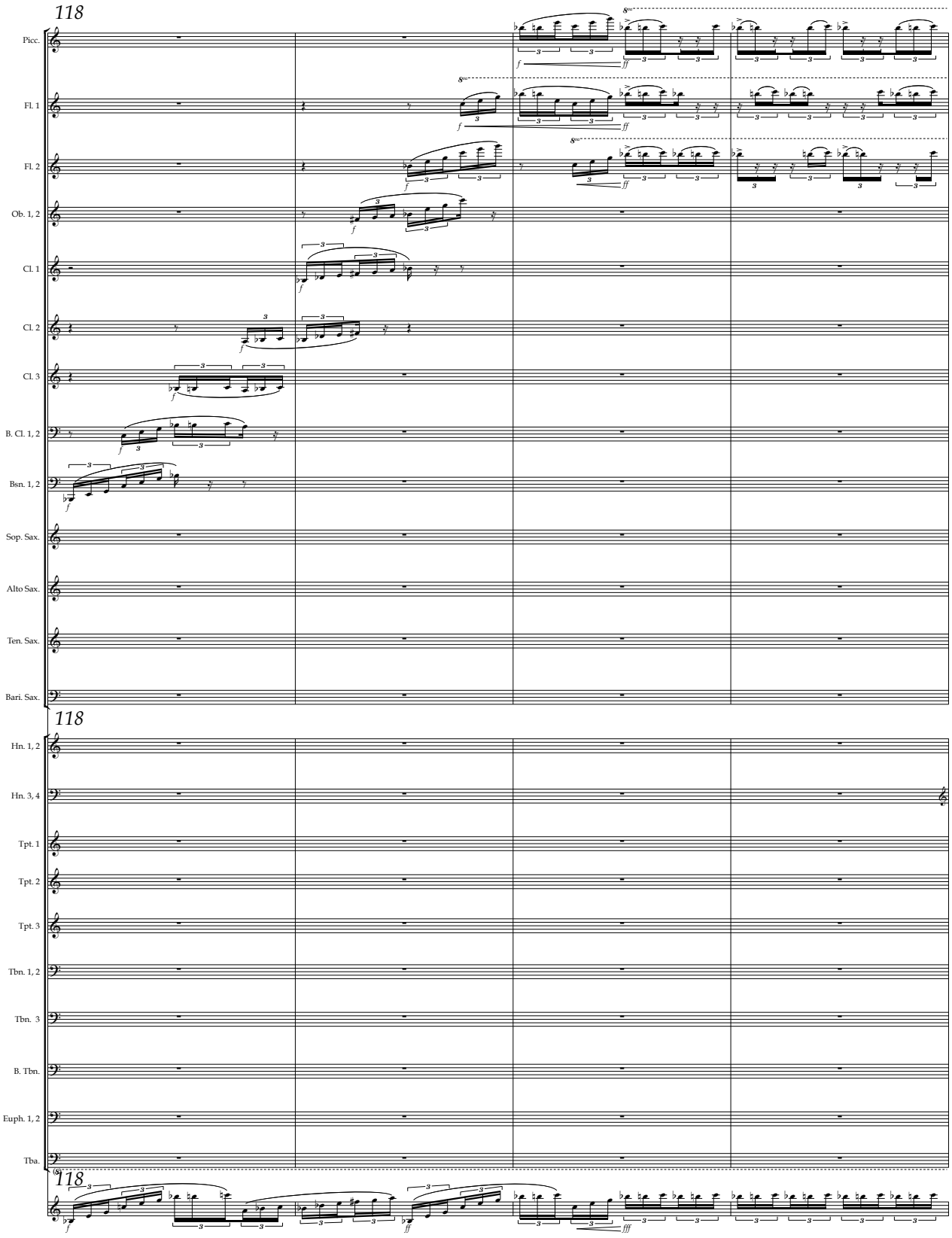

94
95
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
94
Hn. 1, 2
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
94
dead stroke
harmon mute
harmon mute
harmon mute
Hard mallets
Becoming Volatile

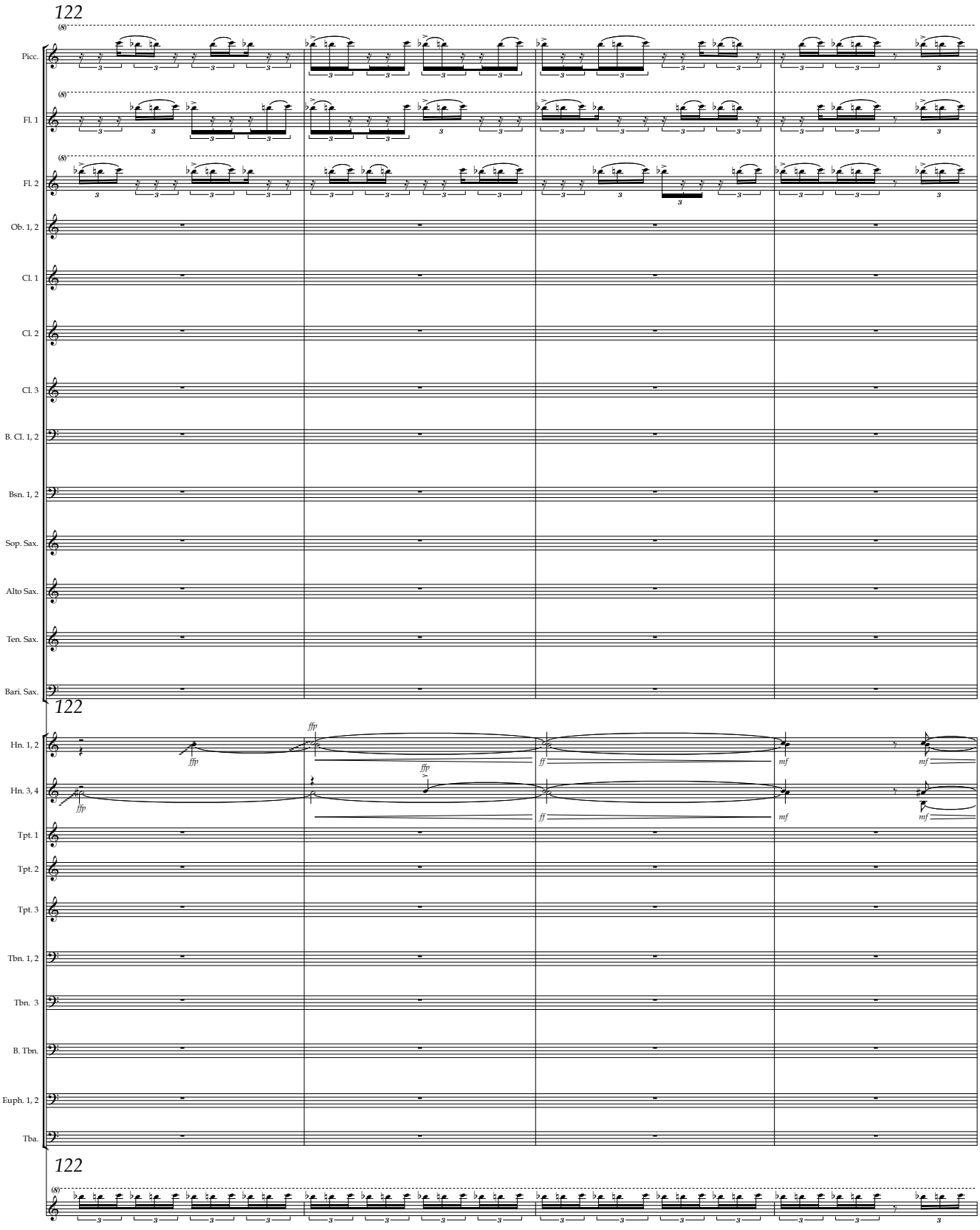

100
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
100
Hn. 1, 2
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
100

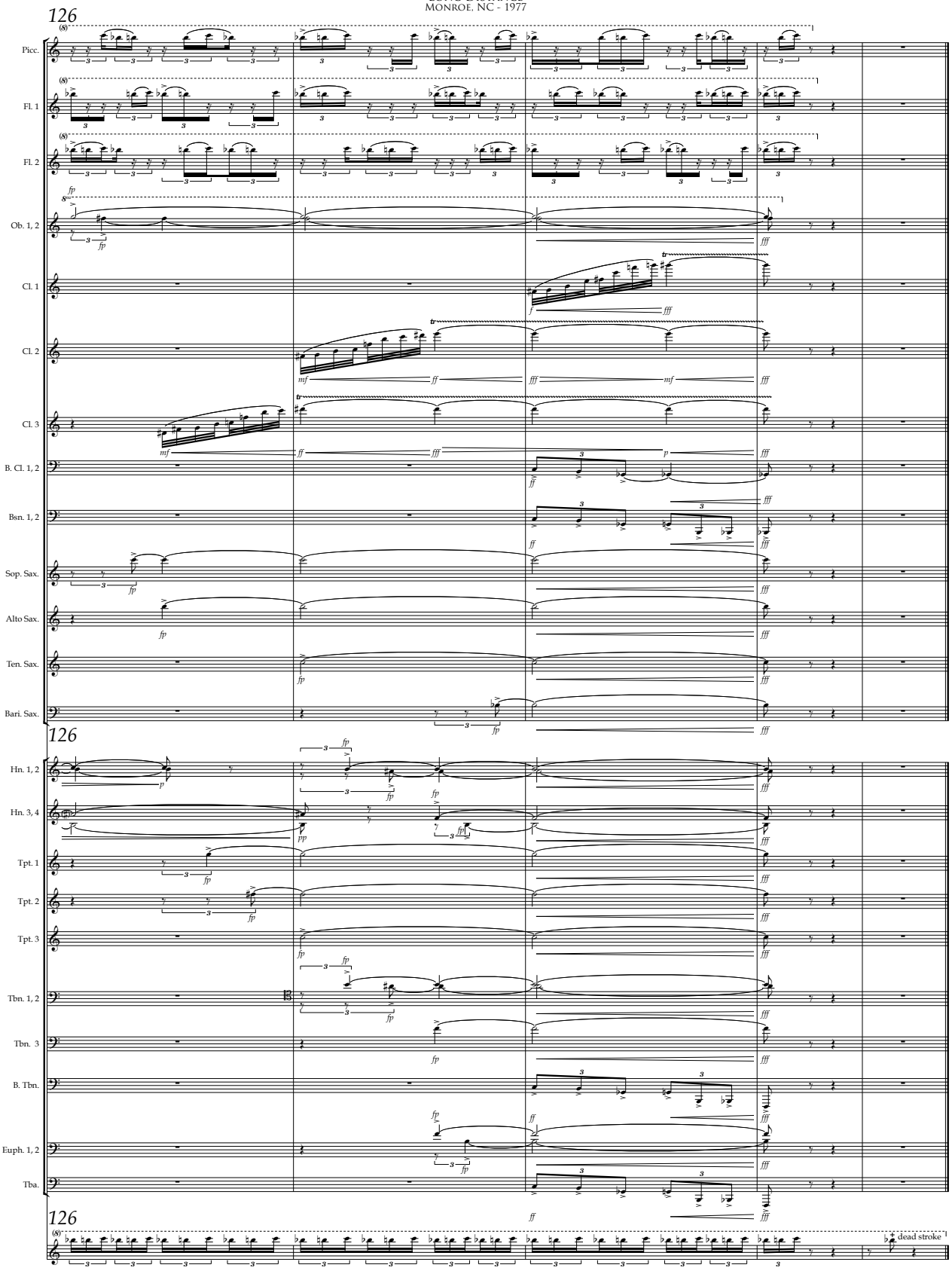

105
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
105
Hn. 1, 2
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
105
Incessant


111
109
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
ff
ff
109
Hn. 1, 2
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
109
p


113
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
113
Hn. 1, 2
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
113
pp
mp
mf


118
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
118
Hn. 1, 2
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
118


122
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
122
Hn. 1, 2
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
122


126
Picc.
Fl. 1
Fl. 2
Ob. 1, 2
Cl. 1
Cl. 2
Cl. 3
B. Cl. 1, 2
Bsn. 1, 2
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
126
Hn. 1, 2
Hn. 3, 4
Tpt. 1
Tpt. 2
Tpt. 3
Tbn. 1, 2
Tbn. 3
B. Tbn.
Euph. 1, 2
Tba.
126
dead stroke

Vibraphone

Steven Snowden

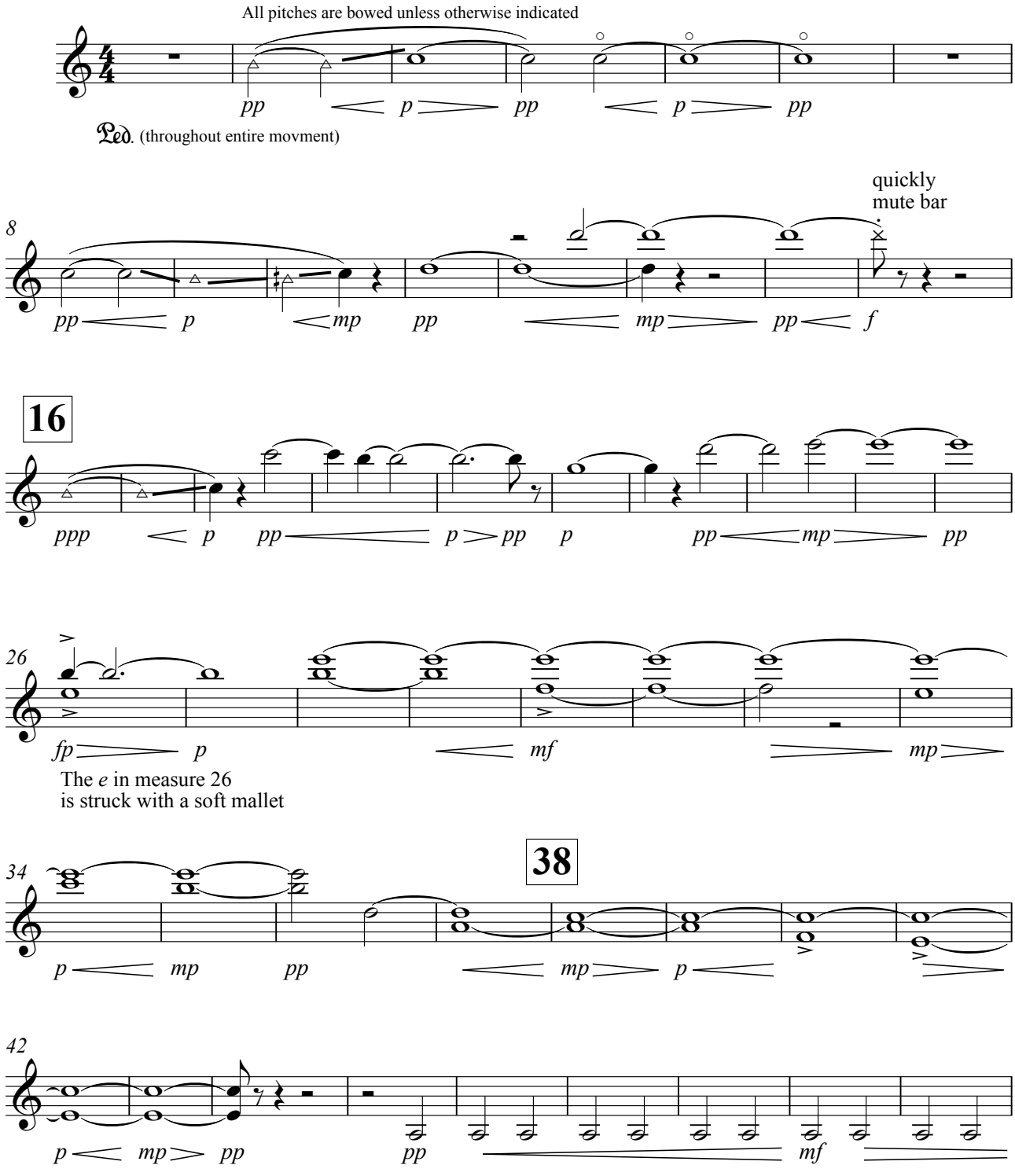
Long Distance
Panorama, VA - 1976

VIBRAPHONE

LONG DISTANCE

PANORAMA, VA - 1976

STEVEN SNOWDEN



all stem-up notes from measure 53-61 are struck with a soft mallet