Four Seasons after Haiku of Basho for Ensemble of Chinese Instruments and Spring Air and Winter Night for Dizi, Zheng and String Quartet

by

Janet Jieru Chen

Department of Music

Duke University

Date:_____

Approved:

_____

Stephen Jaffe, Supervisor

_____

Philip Rupprecht

_____

Scott Lindroth

_____

Jonathan Kramer

Dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Music in the Graduate School of Duke University

2012

ABSTRACT

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ABSTRACT

Four Seasons after Haiku of Basho for ensemble of Chinese Instruments and *Spring Air* and *Winter Night* for Dizi, Zheng, and String Quartet were created in 2011-12. The compositions are related through shared material, but explored in different instrumental and developmental contexts. Loosely inspired by haiku of Matsuo Basho (1644-94), *Four Seasons* is a work for large ensemble featuring Dizi, Suona, Gaoying Sheng, Zhonghin Sheng, Percussion, Pipa, Zheng, Erhu and Zhonghu. Each of the movements features one soloist or small groups of soloists within the Chinese ensemble, somewhat analogous to the *concerto grosso.* The piece also uses timbre and sonority to depict the vivid colors of the four seasons. In contrast, *Spring Air* and *Winter Night* blend two Chinese instruments, Dizi and Zheng, with four Western ones, instruments comprising a string quartet. The brief movements of *Spring Air* depart from the *Spring* and *Winter* movements of *Four Seasons* in a chamber music context, rather than an orchestral one. The composer's attempt was to rethink her material for different ensembles.

Technically, both compositions are characterized by the application of Asian principles of heterophony and single-tone timbre within the context of Western contemporary music. Formal procedures were suggested by twelve *I Ching* hexagrams corresponding to the twelve months. In addition, I creatively explore for the first time the application of Chou Wen-chung's *variable modes* theory, separately considered in two articles comprising Chapters III and IV. Chapter III is analytical. "A Contemporary Practice Rooted in Chinese Aesthetics: The Evolution of Constructive Rhythms in Chou Wen-chung's Composition," reflects analysis of archival research conducted in the Chou

Wen-chung Collection, Paul Sacher Stiftung, Basel, Switzerland. Chapter IV, by contrast, comprises an interview with Professor Chou about the development of his method.

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During my doctoral studies at Duke University (2006-2012), I was supported by a Duke University Graduate Fellowship in the Department of Music. At Duke, I was lucky to hear my music performed by Eighth Blackbird, Alarm Will Sound and faculty groups. Especially my thanks go to the Ciompi Quartet, Jennifer Chang, *zheng*, and flutist De'Shaun King for their kind readings of *Spring Air* in April, 2012. I am also thankful to my colleague Kelley Tatro who read chapters III and IV, and offered commentary. In addition, fellowships and/or performances from the Millay Colony, the Composers Conference at Wellesley College, June in Buffalo, the American Composers Orchestra, and the National Taiwan Symphony Orchestra enriched my study of composition.

The composition of *Four Seasons* and *Spring Air* and *Winter Night* were made possible through the collaboration of Taipei Chinese Orchestra and Spring Autumn Music, Taiwan. From the orchestra members and from the *zheng* player Yeh Jiuan-reng I was able to learn idiomatic writing for Chinese instruments during visits to Taipei in 2011. A scholarship from the Paul Sacher Stiftung allowed me to do research on Chou Wen-chung's manuscripts in Basle, Switzerland during the months of October and November 2011. The results of my research have culminated in the analytical paper comprising Ch. III. In addition, Prof. Chou permitted me a series of three interviews, held in New York in 2011 and 2012. Chapter IV is based on an English language interview

held in February 2012. Two earlier interviews, held in 2011, were in Chinese, and I hope to publish them at later date.

I am truly indebted and thankful to my Ph. D committee members: Prof. Philip Rupprecht gave me extensive guidance in manuscript study and analysis; Prof. Jonathan Kramer of North Carolina State University provided encouragement as well as insight into the practices of other Asian music cultures. Prof. Scott Lindroth's kind concern, compositional expertise, and consideration were consistently evident.

I owe sincere and earnest thanks to Prof. Chou Wen-chung, Fritz Reiner Professor Emeritus of Musical Composition, Columbia University. Through the Taipei Chinese Orchestra and my organization Asian Young Musicians' Connection, I was able to work with Prof. Chou to develop a new version of *Eternal Pine* (*Eternal Pine* III) for Chinese instruments. Under the auspices of the Council for Cultural Affairs, Taiwan, and the Taipei City Department of Cultural Affairs, the Taipei Chinese Orchestra and Asian Young Musicians' Connection will present three versions of *Eternal Pine* on May 26, 2012: *Eternal Pine* for traditional Korean instruments, *Ode to Eternal Pine* for Western sextet and *Eternal Pine* III for Chinese instruments. Prof. Chou's kindness to me personally is surpassed by the inspiring example his art has given to entire generation of Asian composers. I would like also to thank my former teacher, Prof. Pan Shyhji, Taipei National University of the Arts, who introduced Prof. Chou to me ten years ago and opened a window for me to engage in studying Asian music.

Most importantly, I would like to thank my family for their tremendous support and love.

Chapter I

Introduction

Four Seasons for Ensemble of Chinese Instruments: Dizi, Suona, Gaoying Sheng, Zhongyin Sheng, Percussion, Pipa, Zheng, Erhu and Zhonghu was created in 2011-12. The work was co-commissioned by the Taipei Chinese Orchestra and the Asian Young Musicians' Connection.

Loosely inspired by Basho's haiku, *Four Seasons* comprises four movements. Each represents one season, moving chronologically from spring to summer, autumn and winter.

Spring

Flowers of what tree

I know not —

Yet the fragrance!

Summer

As I clap my hands

With the echoes, it begins to dawn —

The summer moon.

Autumn

Spider!

What sound, how do you cry?

Autumn wind.

Winter

When I drink

Even more I awake —

Snowfall at night.

(Basho's "Spring", "Summer", "Autumn" and "Winter" translated by Takafumi Saito and William R. Nelson in "1020 Haiku in Translation", copyright © 2006 by BookSurge, LLC. Used with permission.)

In *Four Seasons*, I continue to explore the possibilities of a compositional approach I have been developing since 2002 in pieces such as *Isolated Island for Seven Instruments* (2007), *Beyond Distance* for Orchestra (2008, 2009) and *Twilight of the Fifth Spring* for Brass Quintet and Bass Drum (2009). These works are characterized by the application of Asian principles of heterophony and single tone timbre with the context of Western contemporary music. In *Four Seasons*, a response to a commission for the Taipei Chinese Orchestra, I have applied my ideas to the context of Chinese instrumental ensemble. In addition, I explore for the first time the application of Chou Wen-chung's *variable modes* theory. Prof. Chou's theory, described by the author in several

publications, fuses Chinese aesthetic principles with practical applications of music theoretical concepts affecting pitch, rhythmic design, timbre, and dynamics.[1]

Chou's modal system is a result of many years of cross-cultural studies of Chinese, Asian and Western contemporary practices and concepts. He strives to distill in his music the essence of both Chinese and Western cultures. In Chou's estimation, this is feasible largely because "the tradition of Eastern and Western music once shared the same sources, and … after a thousand years of divergence, they are now merging to form the mainstream of a new musical tradition." Chou refers to this phenomenon as "re-merger."[2]

The hexagrams of the Chinese *I Ching* (*Book of Changes*) serve as a backbone for Chou's system. The composer applies them to the various parameters of music: pitch, rhythm, register, dynamics, etc.

Following Chou's example, the temporal aspects of my composition *Four Seasons* were suggested by twelve *I Ching* hexagrams corresponding to the twelve months. Specific hexagrams symbolize each of the months, with three hexagrams forming a season (see Table 1.1).

[1] See Eric Lai, *The Music of Chou Wen-chung*, Vermont, USA: Ashgate, 2009. Also see Peter Chang, *Chou Wen-chung: The Life and Work of a Contemporary Chinese-Born American Composer*, Lanham: The Scarecrow Press, 2006.
[2] Chou, Wen-chung, "Towards A Re-merger in Music" in *Contemporary Composers on Contemporary Music*, E. Schwartz and B. Childs, eds. New York: Da Capo Press, 1978: p. 311.

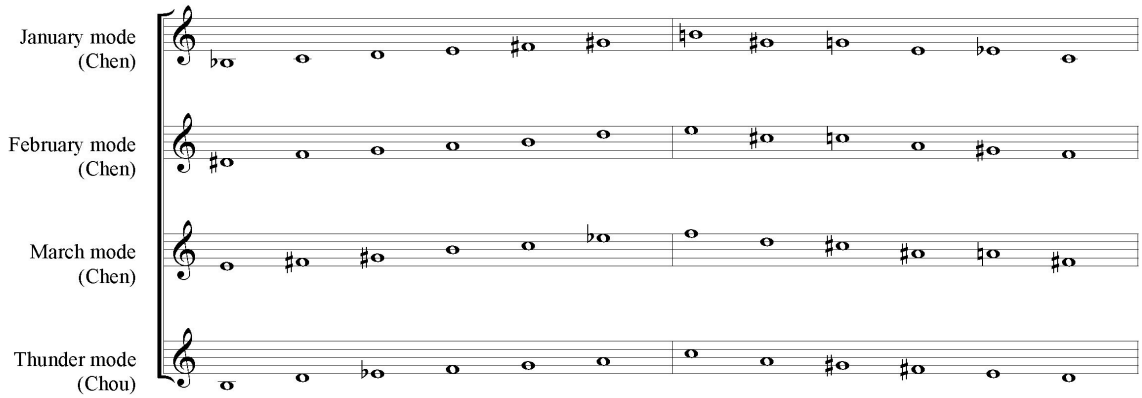
Table 1.1: A list of hexagrams of the twelve months in the *I Ching*

Season	Month	Hexagram in *I Ching*
Spring	January（正月）	
	February（二月）	
	March（三月）	
Summer	April（四月）	
	May（五月）	
	June（六月）	
Autumn	July（七月）	
	August（八月）	
	September（九月）	
Winter	October（十月）	
	November（十一月）	
	December（十二月）	

I use Chou's *variable modes* to derive modal pitch collections, which provide a foundation for the harmonic materials comprising each movement. However, I do not use

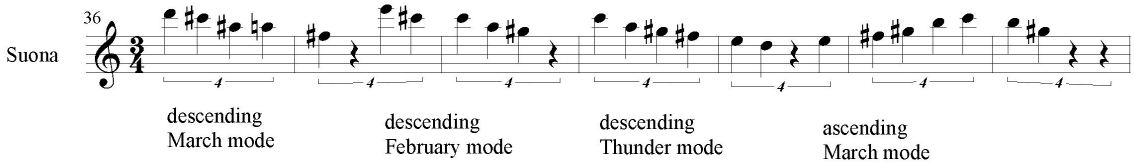
the system exclusively to generate all the pitch collections for the entire piece. Instead, I utilize Chou's *variable modes* in combination with other available pitch collections, including various types of pentatonic scales. For example, some of the principle pitches I use in movement I. *Spring*, blend the thunder/mountain modes from Chou's modal system and a mode derived from the January hexagram in the *I Ching* (see Ex. 1.1).[3] In mm. 36-42, the Suona plays the last five pitches D-C#-A#-A-F# of the March mode in descending form (mm. 36-37), followed by the first five pitches E-C#-C-A-G# of the February mode (mm. 37-38); subsequently the Suona plays C-A-G#-F#-E-D (mm. 39-40), the descending form of Chou's Thunder mode. Finally, the Suona plays E-F#-G#-B-C, the ascending form of the March mode (mm. 40-41) (see Ex. 1.2).

Example 1.1: Modes used in mm. 36-42, mvt. I. *Spring*



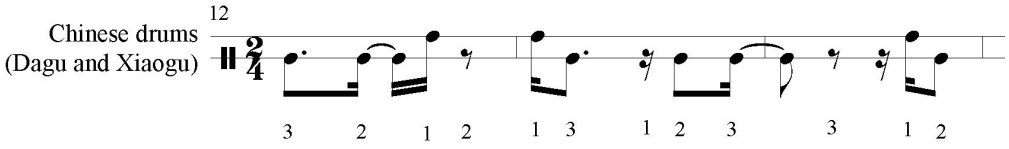
[3] In Chou's variable modes theory, the composer's practice is to use major second as *yin* <0, broken line> and minor third as *yang* <1, unbroken line>. I apply this basic intervallic concept to the January hexagram in *I Ching*. Thus the January mode is comprised of three major seconds in the ascending form and three minor thirds in the descending form. In Chou's system, the second six notes yield a complimentary hexachord. Mine allow repetition of notes.

Example 1.2: Suona melody in mm. 36-42, mvt. I. *Spring*



Moreover, I apply Chou's *variable modes* to obtain the rhythmic structure for *Four Seasons*. This may be observed at several points in the composition. Exemplary is the rhythmic pattern heard at mm. 10 in mvt. II. *Summer*. Citation of the Chinese drums dagu and xiaogu are illustrative (See. Ex. 1.3).

Example 1.3: Chinese drums in mm. 12-14, mvt. II. *Summer*



My purpose is not to strictly follow the rules of Chou's system, but rather to develop and evolve the idea of rhythms following the proportion 1:2:3. The proportion forms the basis of Chou's rhythmic structure and the spirit of the *I Ching*.

Each movement of *Four Seasons* features one soloist or small groups of soloists. Similar to Western forms such as *concerto grosso*, and more recent approaches in contemporary music, this compositional foray allowed me to explore poetic and music-acoustic concepts related to Asian practices (see Table 1.2).

Table 1.2: A list of solo instrument(s) featured in the four movements of *Four Seasons*

Movement	Featured instrument(s)
I. *Spring*	Suona
II. *Summer*	Gaoyin Sheng (Soprano Sheng), Zhongyin Sheng (Baritone Sheng), Percussion
III. *Autumn*	Xiao, Erhu, Zhonghu (Alto Erhu)
IV. *Winter*	Pipa, Zheng

The main instrument or instrumental group interacts with the rest of the ensemble, as in *concerto grosso*. Setting up different instrumental combinations in four movements, the piece also uses timbre and sonority to depict the vivid colors of the four seasons. Basho's haiku provide poetic inspiration on beyond these technical facets of the music organization.

Four Seasons will receive its premiere on May 25, 2012 in Taipei, Taiwan and will also feature in the Taipei Chinese Orchestra's 2012 Europe on concert tour program in June, 2012.

Instrumentation

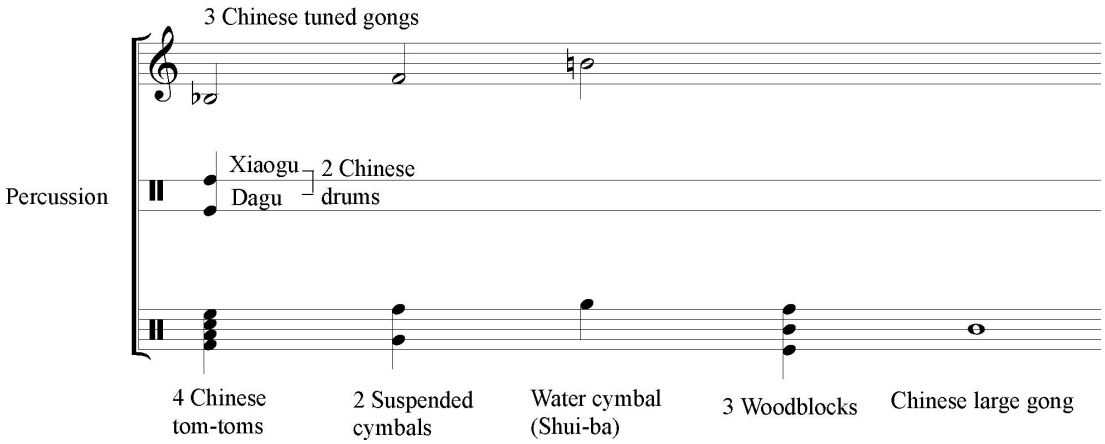
Dizi/Xiao (One performer playing A Dizi, Small D Dizi and Small Bb Dizi)

Suona/Alto Suona

Gaoyin Sheng

Zhongyin Sheng

Percussion



Pipa

Zheng

Erhu

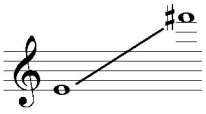
Zhonghu

Duration: ca. 12 min.

Notes on Instruments and Notation

Dizi/Xiao

A Dizi
Range:



Small D Dizi
Range:

Small Bb Dizi
Range:

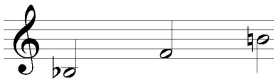
Suona/Alto Suona

1. Flutter tongue
2. "Huo" sound

Percussion

I. Instruments

3 Chinese tuned gongs



4 Chinese tom-toms

2 Chinese drums (1 *Dagu* and 1 *Xiaogu*)

2 Suspended cymbals

1 Water cymbal (Shiu-ba)

3 Wood blocks

1 Chinese Large Gong

II. Notation for Chinese drums (1 *Dagu* and 1 *Xiaogu*)

D *Dagu* open tone sound

$\bar{D}$ *Dagu* closed tone sound

$\mathring{D}$ *Dagu* light open tone sound

T *Dagu* rim sound

d *Xiaogu* open tone sound

$\bar{d}$ *Xiaogu* closed tone sound

Pipa

1. * Rolls with circular finger movement

2. ㄴ Use right hand thumb to lift up the string

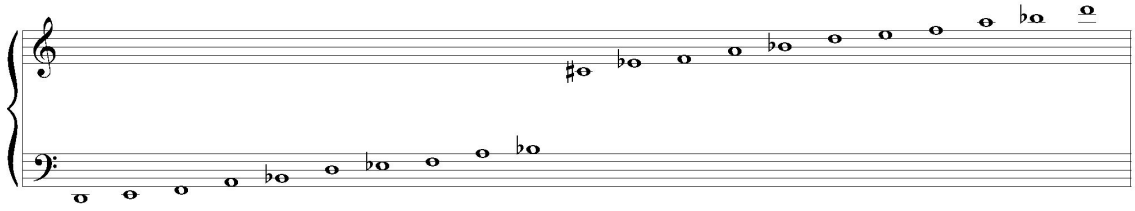
3. ⊭ Twist the neighboring strings

4. Shuangtan and shuangtiao (Tan-tiao across two strings. In Tan the forefinger flicks one single string outwards from right to left from the player's viewpoint. In Tiao thumb plucks one single string from left to right from the player's viewpoint.)

5. ㅏ Tapping on the instrument

Zheng:

I. Tuned as follows:



II. Notation

1. Harmonics

2. Vibrato

3. Stop sound

4. Pluck the specific string (as it is numbered) from left to right

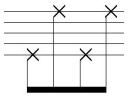
Erhu and Zhonghu

1. ↗ Slide up

2. ↘ Slide down

3. Right hand pizzicato

4. Tapping on the instrument

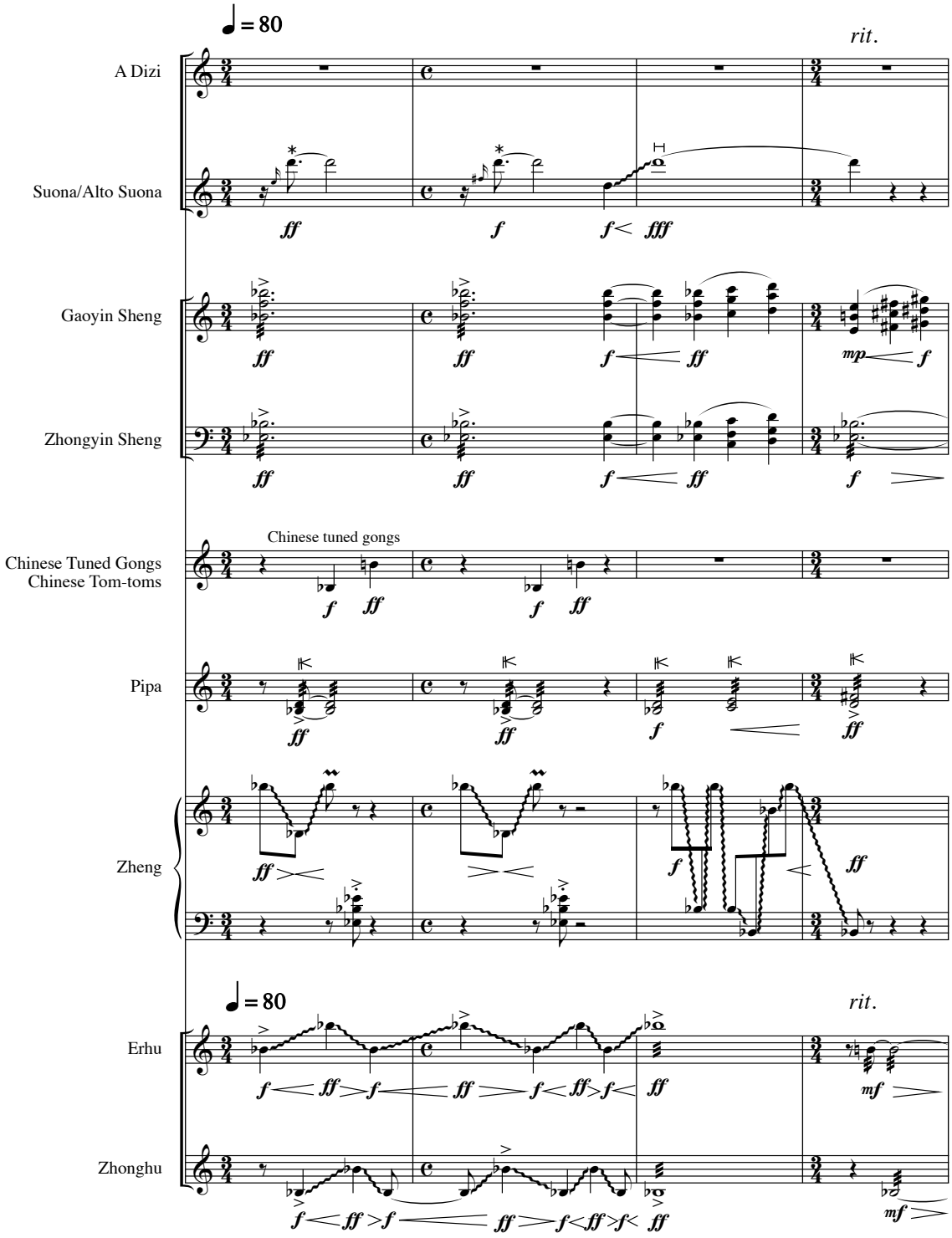
5.  Strike and rub the strings repeatedly, producing a sound like wood blocks or the horse's clop.

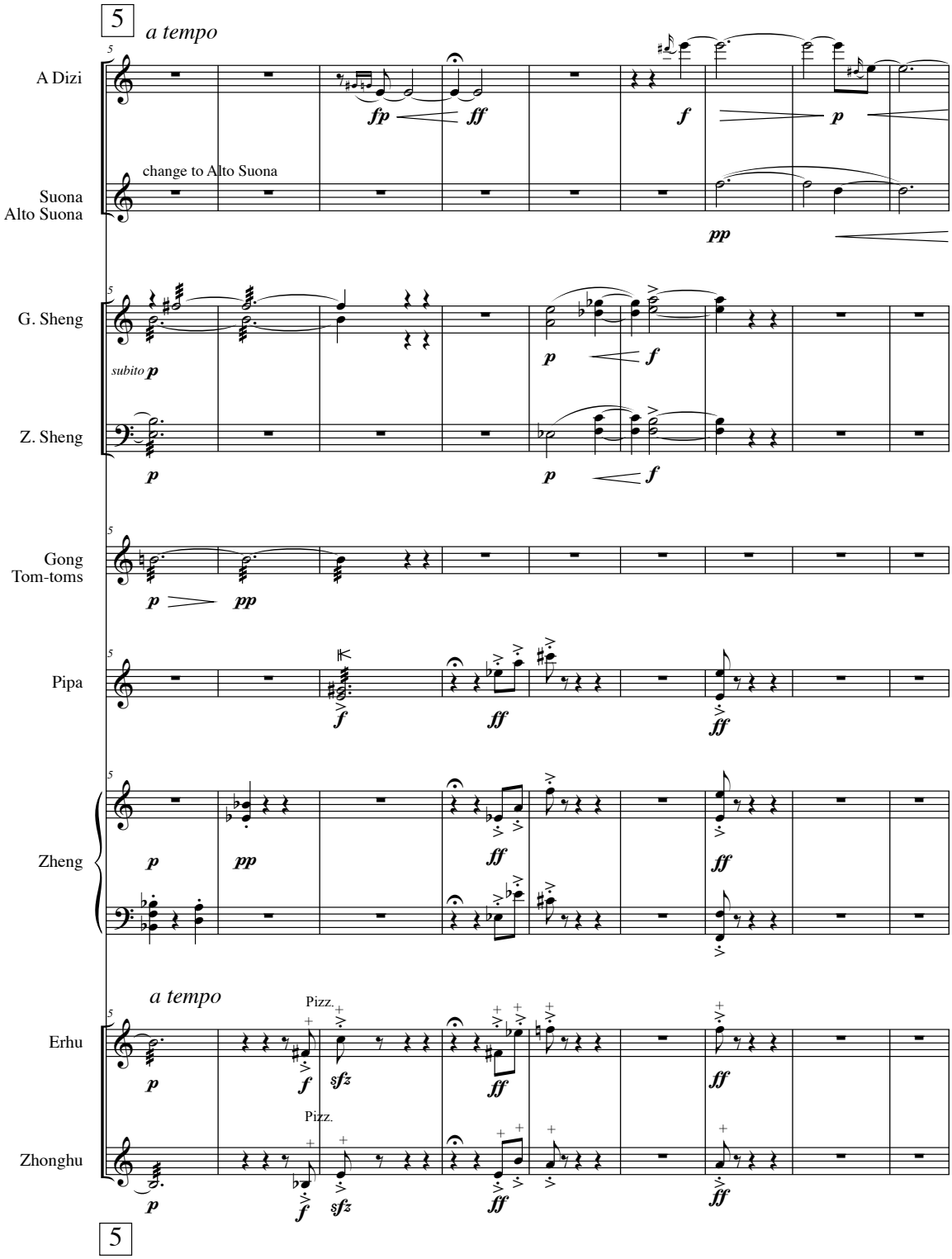
Commissioned by Taipei Chinese Orchestra

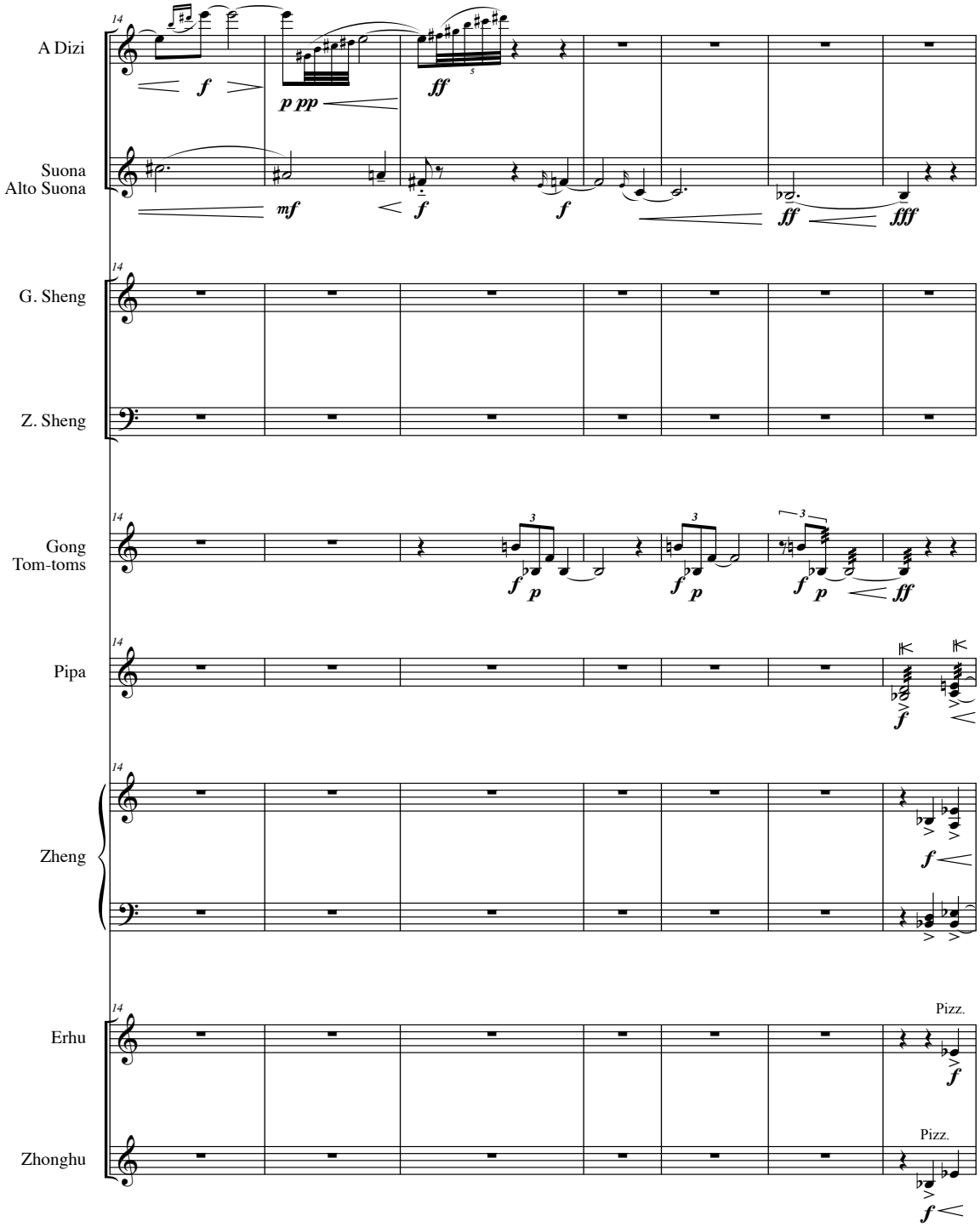
Flowers of what tree
I know not -
Yet the fragrance!
-Matsuo Basho

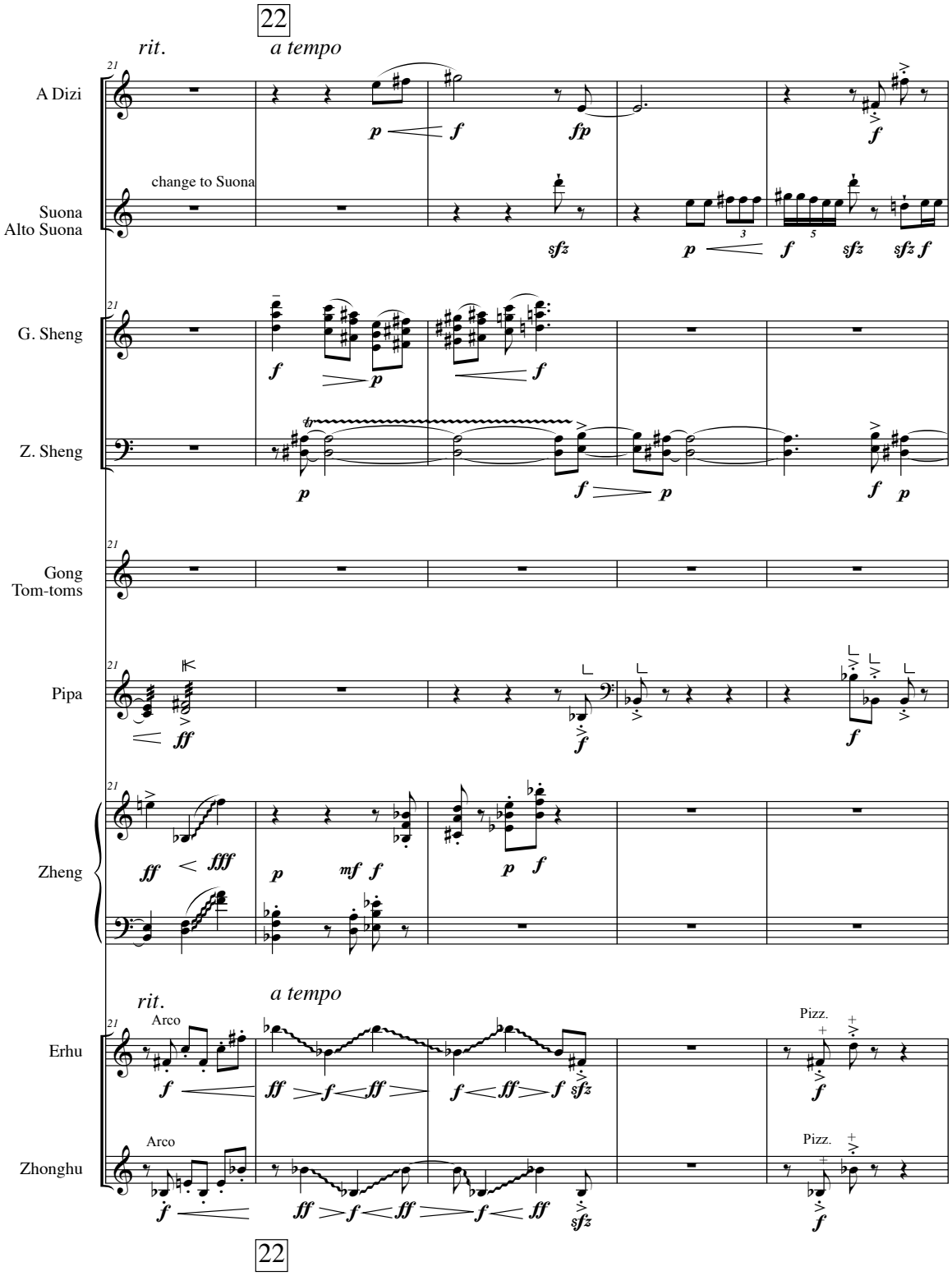
I.
Spring
(with Suona solo)

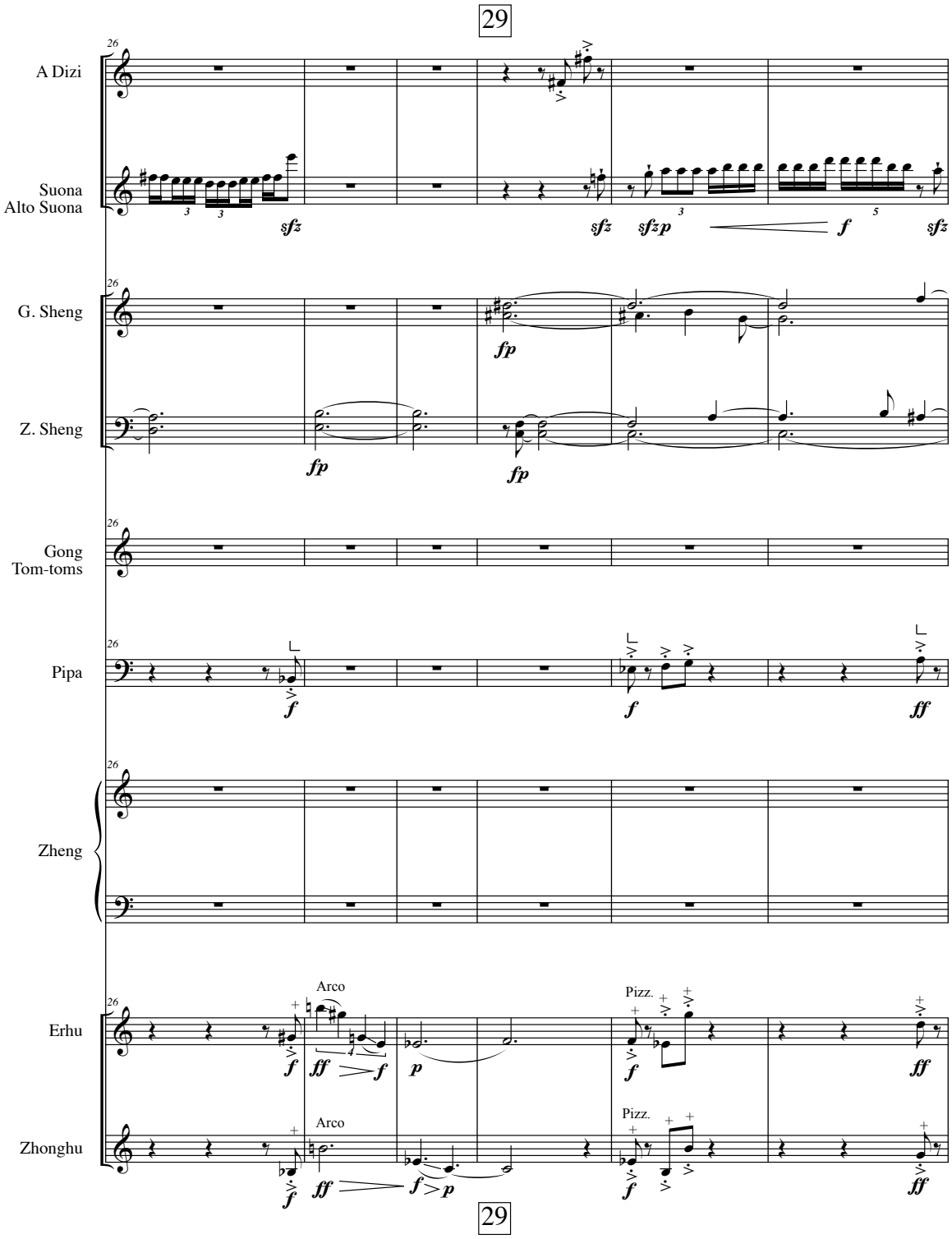
Janet Jieru Chen

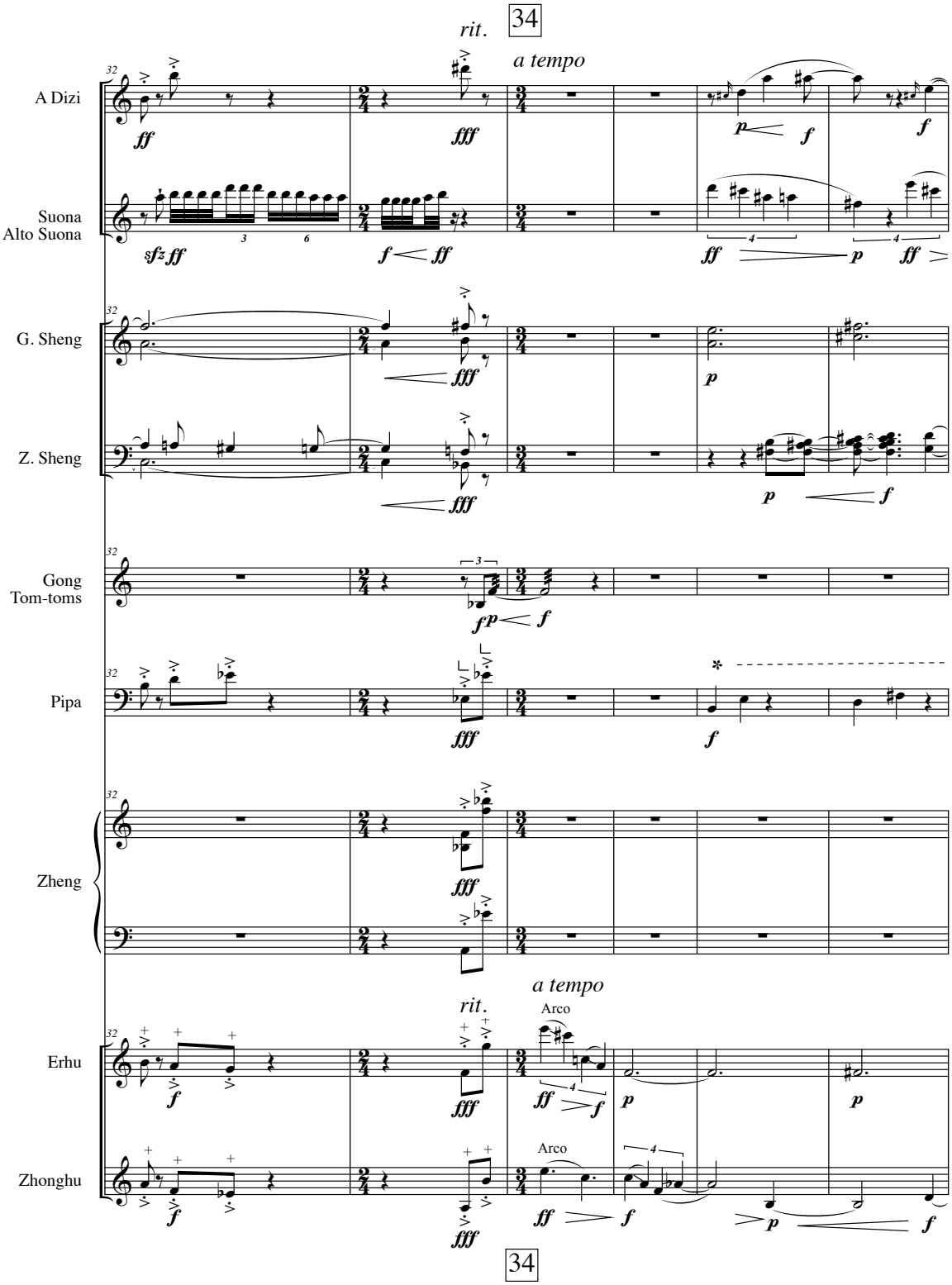


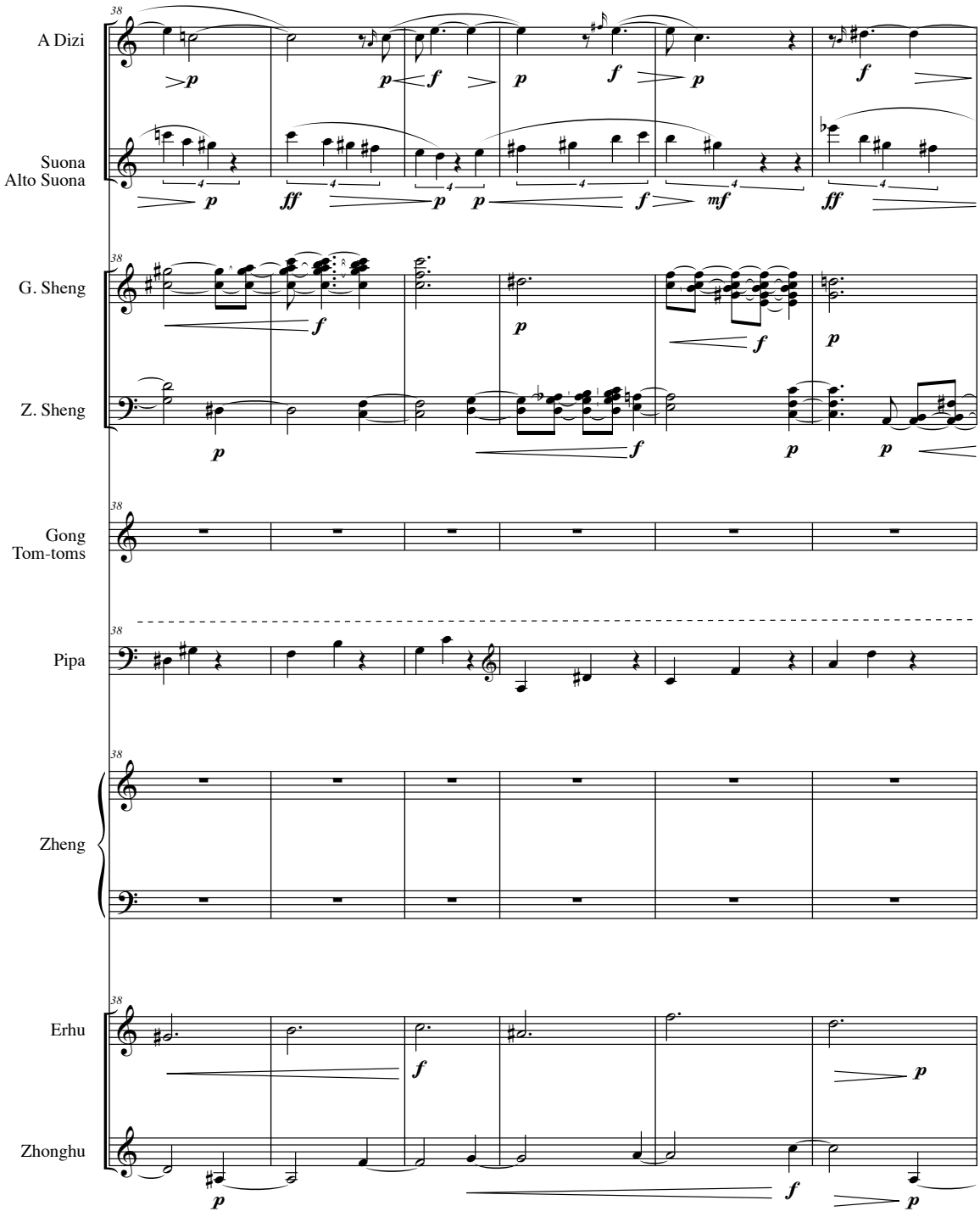

5
a tempo
A Dizi
fp
ff
f
p
Suona
Alto Suona
change to Alto Suona
pp
G. Sheng
subito p
p
f
Z. Sheng
Gong
Tom-toms
Pipa
Zheng
a tempo
Pizz.
sfz
Erhu
Zhonghu
5

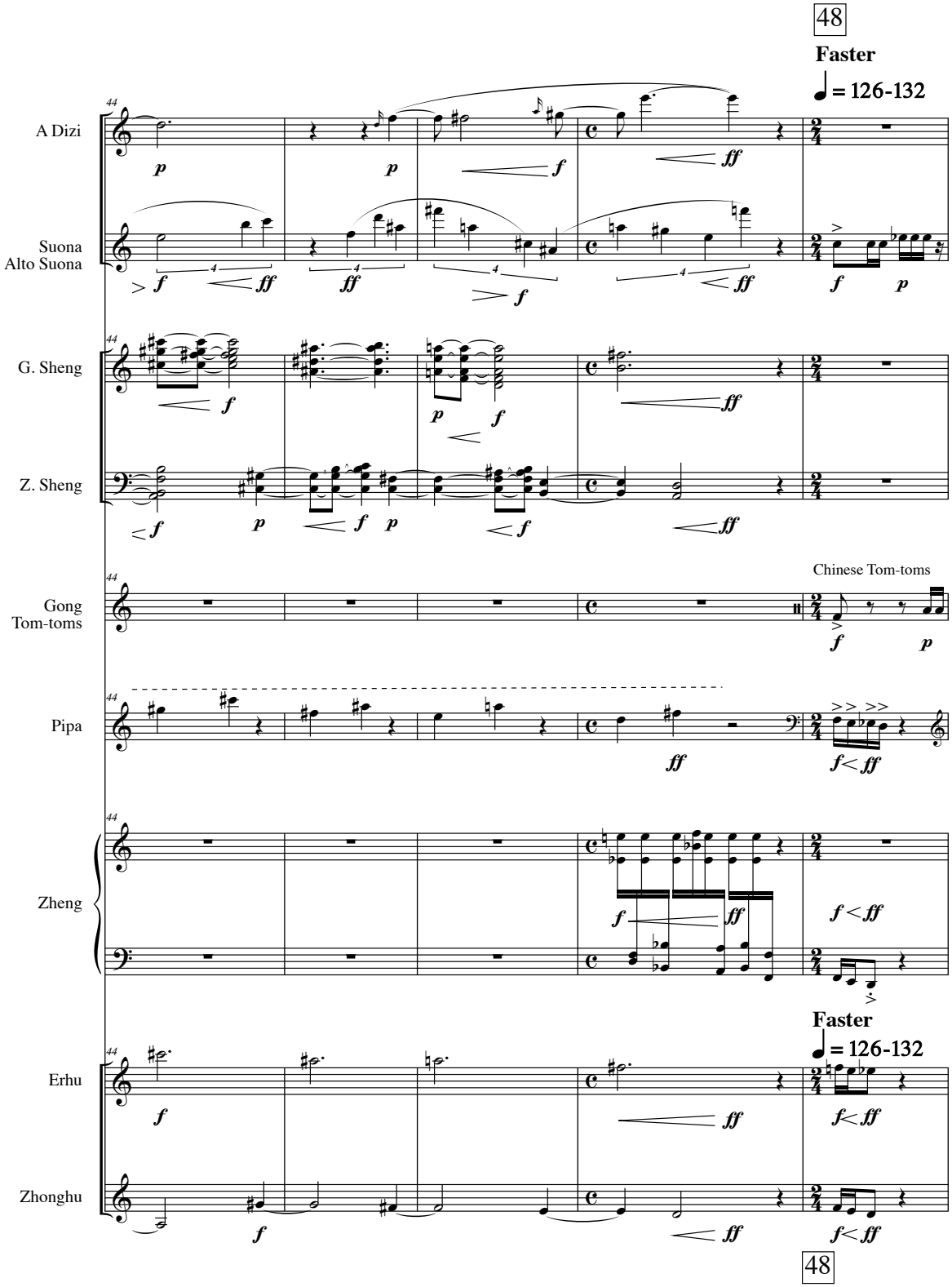

A Dizi
Suona
Alto Suona
G. Sheng
Z. Sheng
Gong
Tom-toms
Pipa
Zheng
Erhu
Zhonghu
Pizz.
Pizz.

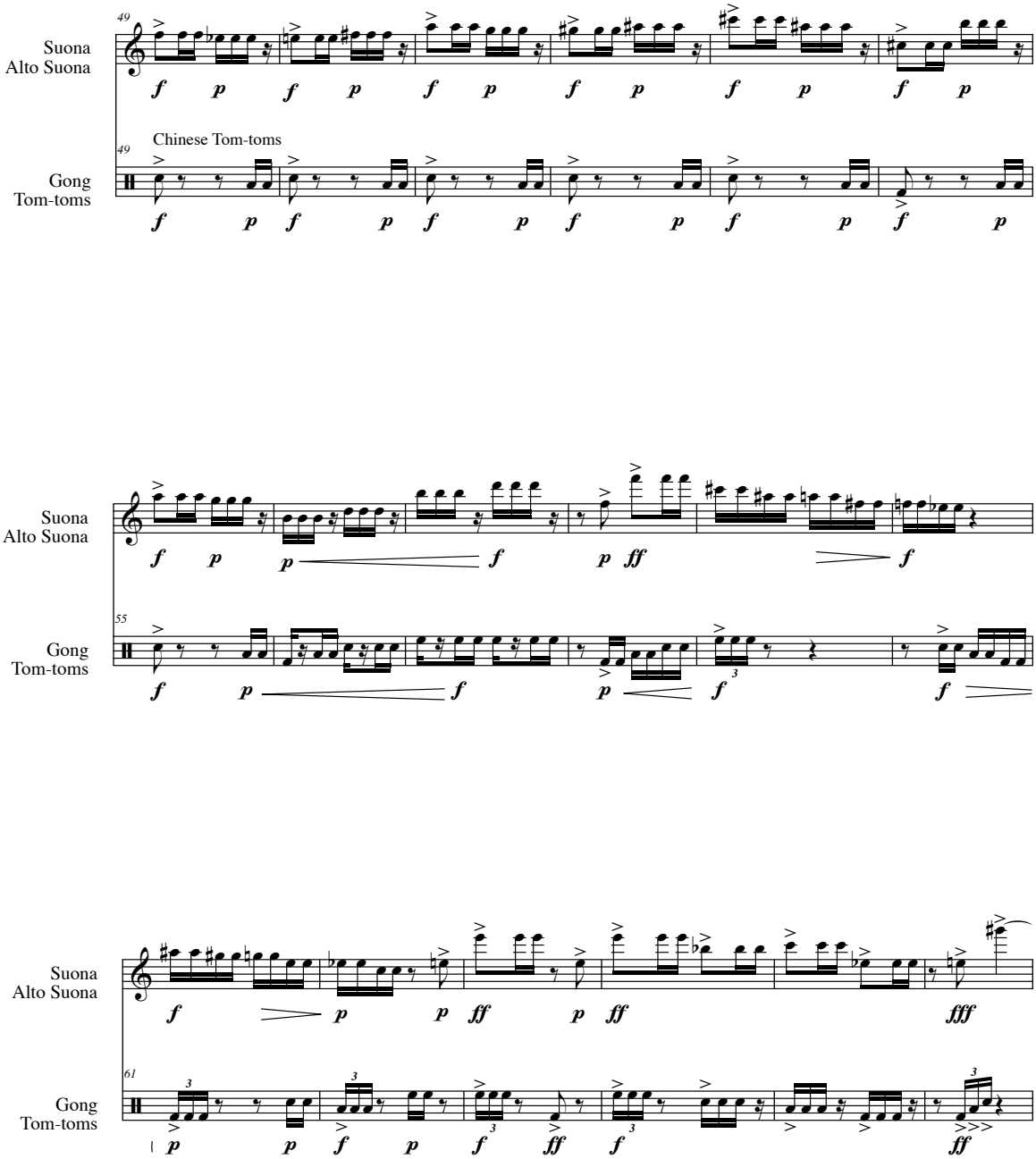

22
rit.
a tempo
A Dizi
change to Suona
Suona
Alto Suona
G. Sheng
Z. Sheng
Gong
Tom-toms
Pipa
Zheng
rit.
a tempo
Arco
Pizz.
Erhu
Arco
Pizz.
Zhonghu
22

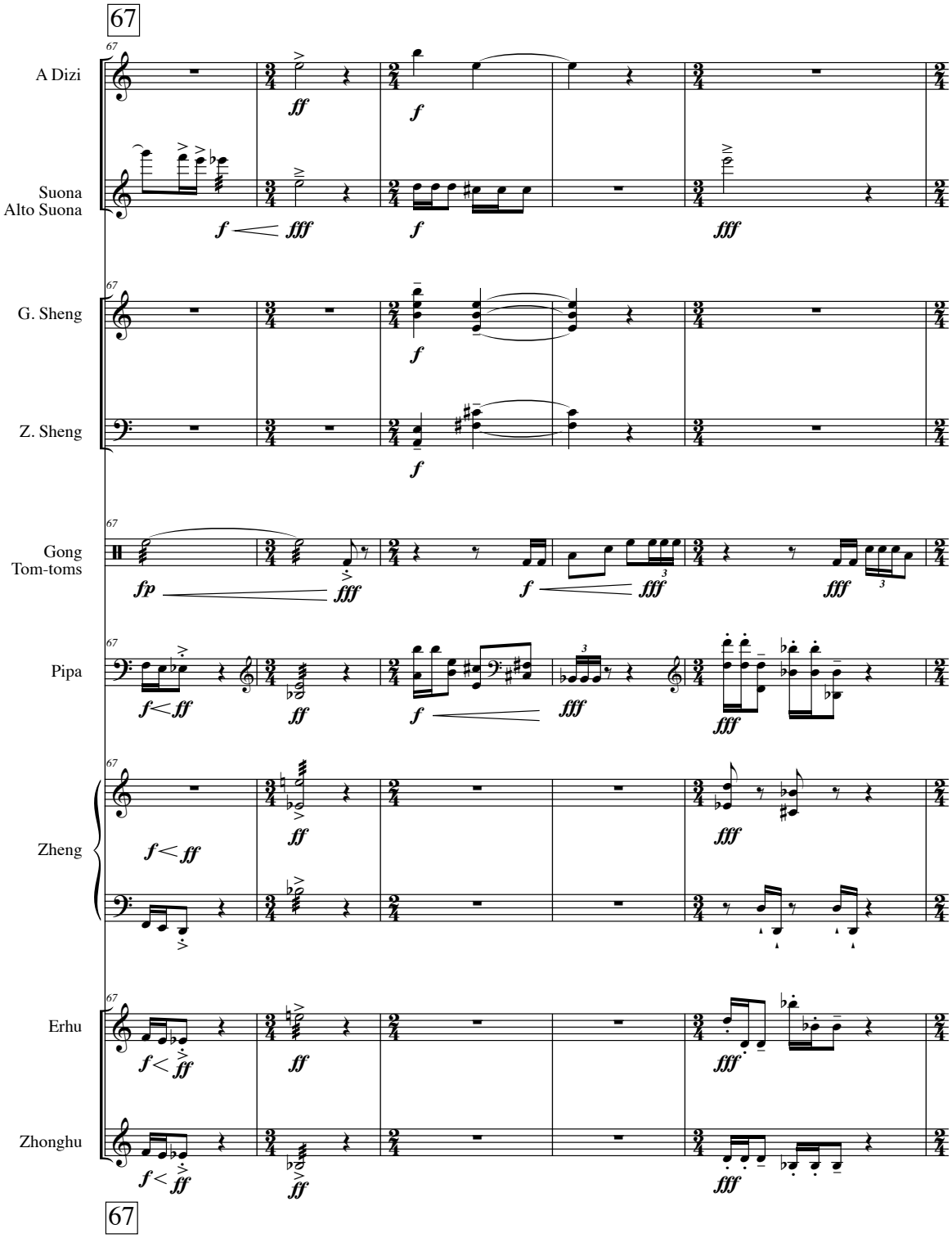

29
A Dizi
Suona
Alto Suona
G. Sheng
Z. Sheng
Gong
Tom-toms
Pipa
Zheng
Erhu
Zhonghu
Arco
Pizz.
29

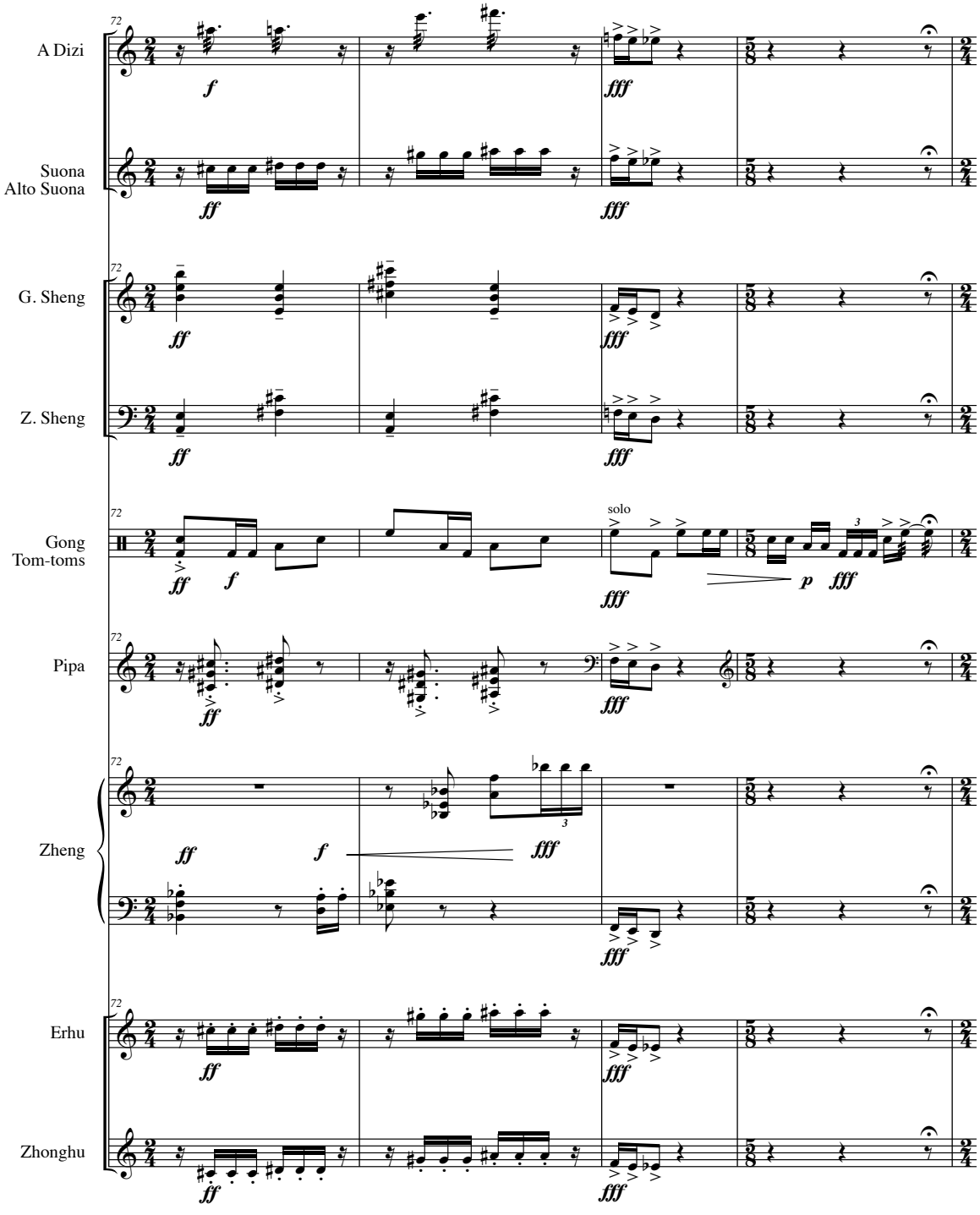

34
rit.
a tempo
A Dizi
Suona
Alto Suona
G. Sheng
Z. Sheng
Gong
Tom-toms
Pipa
Zheng
Erhu
Zhonghu
Arco
Arco
34

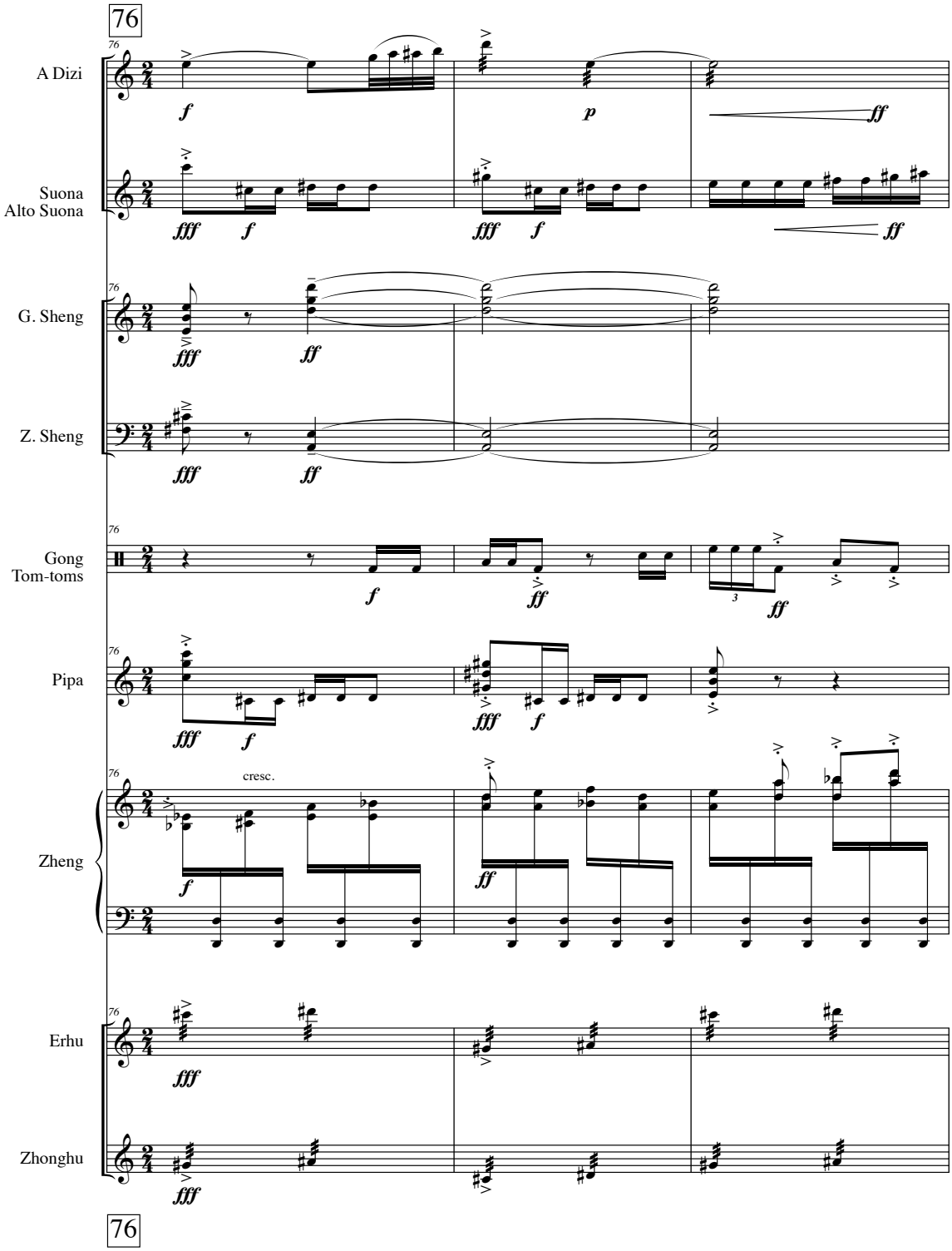

A Dizi
Suona
Alto Suona
G. Sheng
Z. Sheng
Gong
Tom-toms
Pipa
Zheng
Erhu
Zhonghu

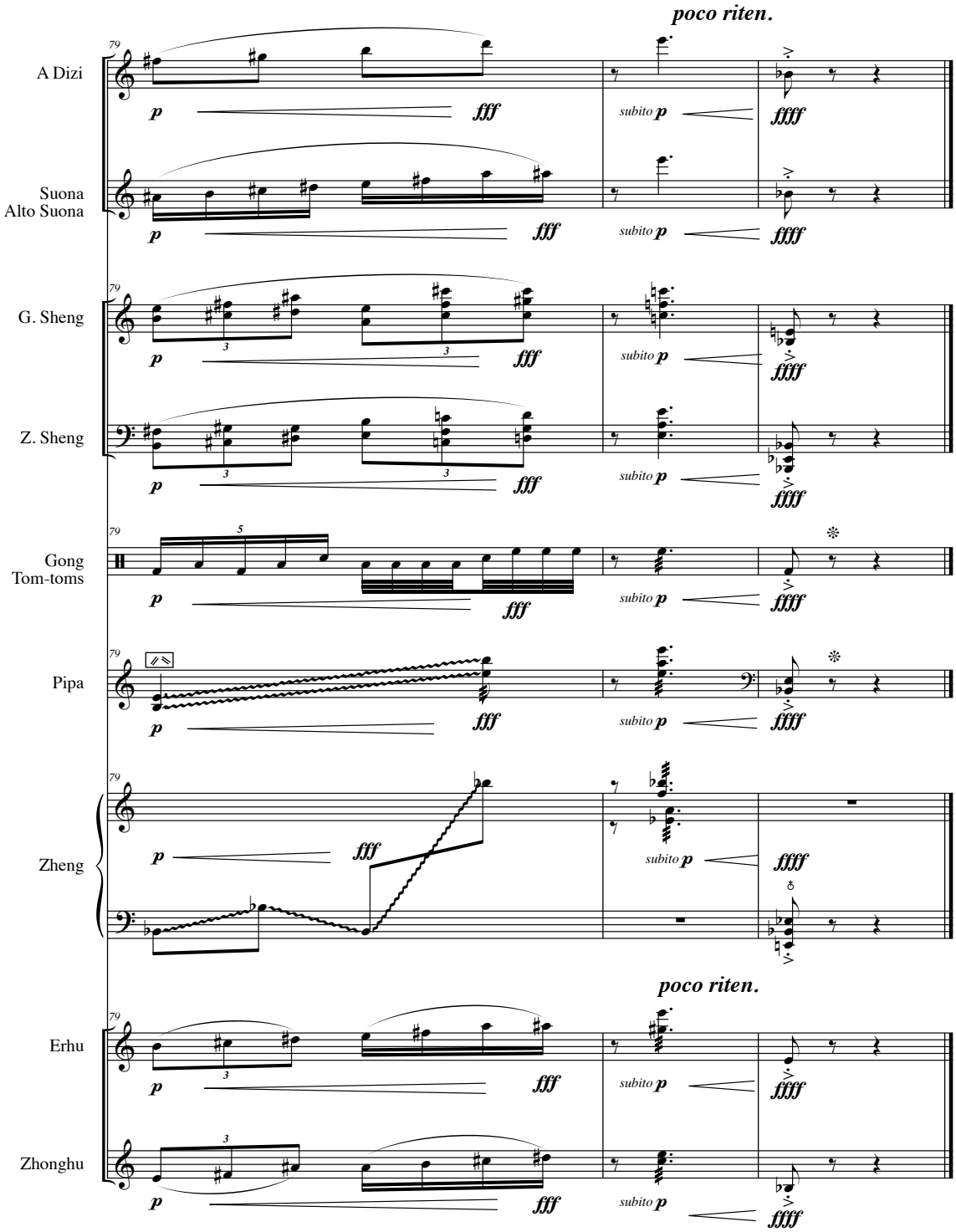

48
Faster
♩ = 126-132
A Dizi
Suona
Alto Suona
G. Sheng
Z. Sheng
Chinese Tom-toms
Gong
Tom-toms
Pipa
Zheng
Faster
♩ = 126-132
Erhu
Zhonghu
48


49
Suona
Alto Suona
Chinese Tom-toms
Gong
Tom-toms
55
61


67
A Dizi
Suona
Alto Suona
G. Sheng
Z. Sheng
Gong
Tom-toms
Pipa
Zheng
Erhu
Zhonghu
67


A Dizi
Suona
Alto Suona
G. Sheng
Z. Sheng
Gong
Tom-toms
Pipa
Zheng
Erhu
Zhonghu
solo

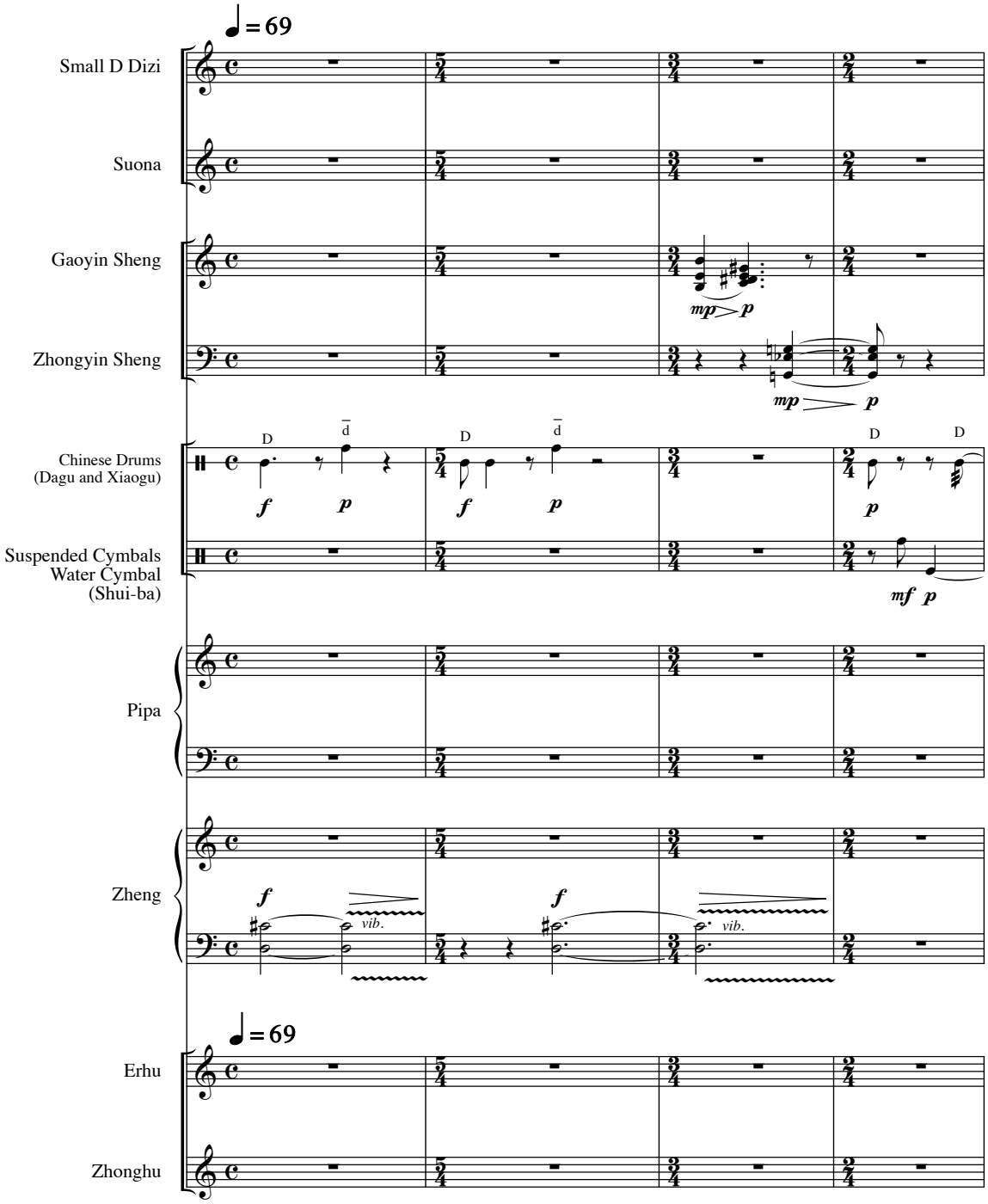

76
A Dizi
Suona
Alto Suona
G. Sheng
Z. Sheng
Gong
Tom-toms
Pipa
Zheng
Erhu
Zhonghu
cresc.
76

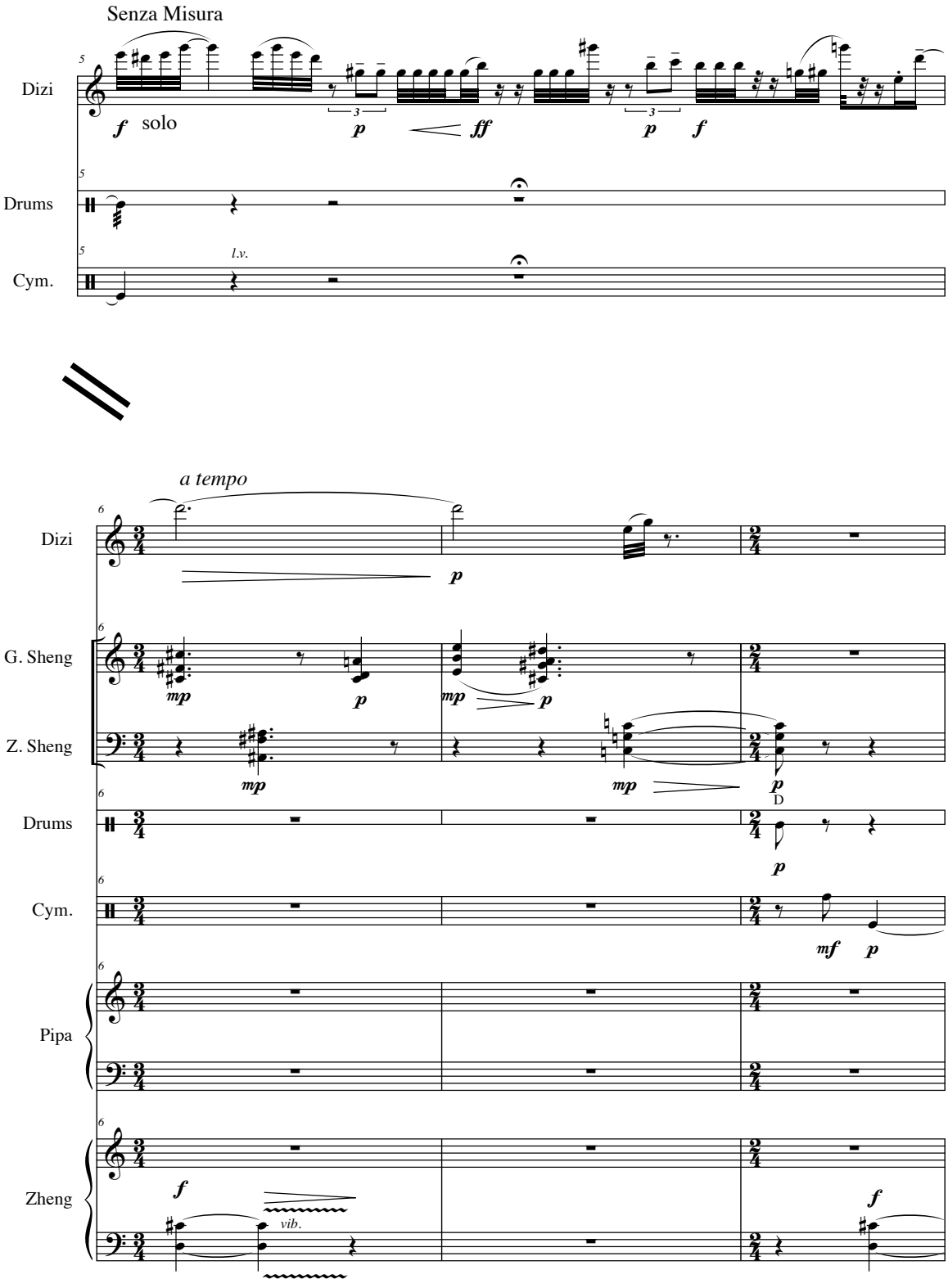

poco riten.
A Dizi
Suona
Alto Suona
G. Sheng
Z. Sheng
Gong
Tom-toms
Pipa
Zheng
poco riten.
Erhu
Zhonghu
79
p
fff
subito p
ffff

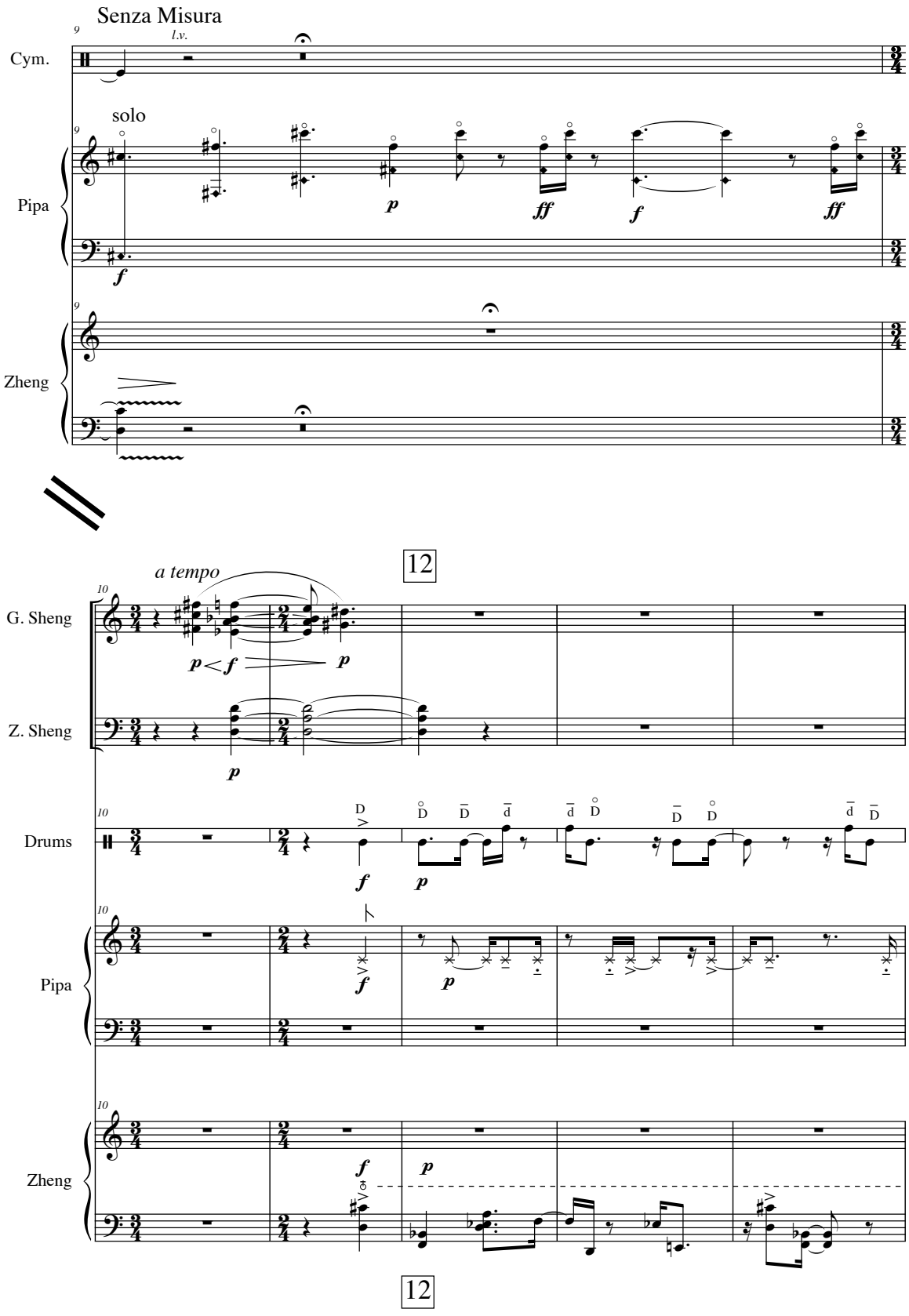
I clap my hands
The day dawns with the echo -
The summer moon.
-Matsuo Basho

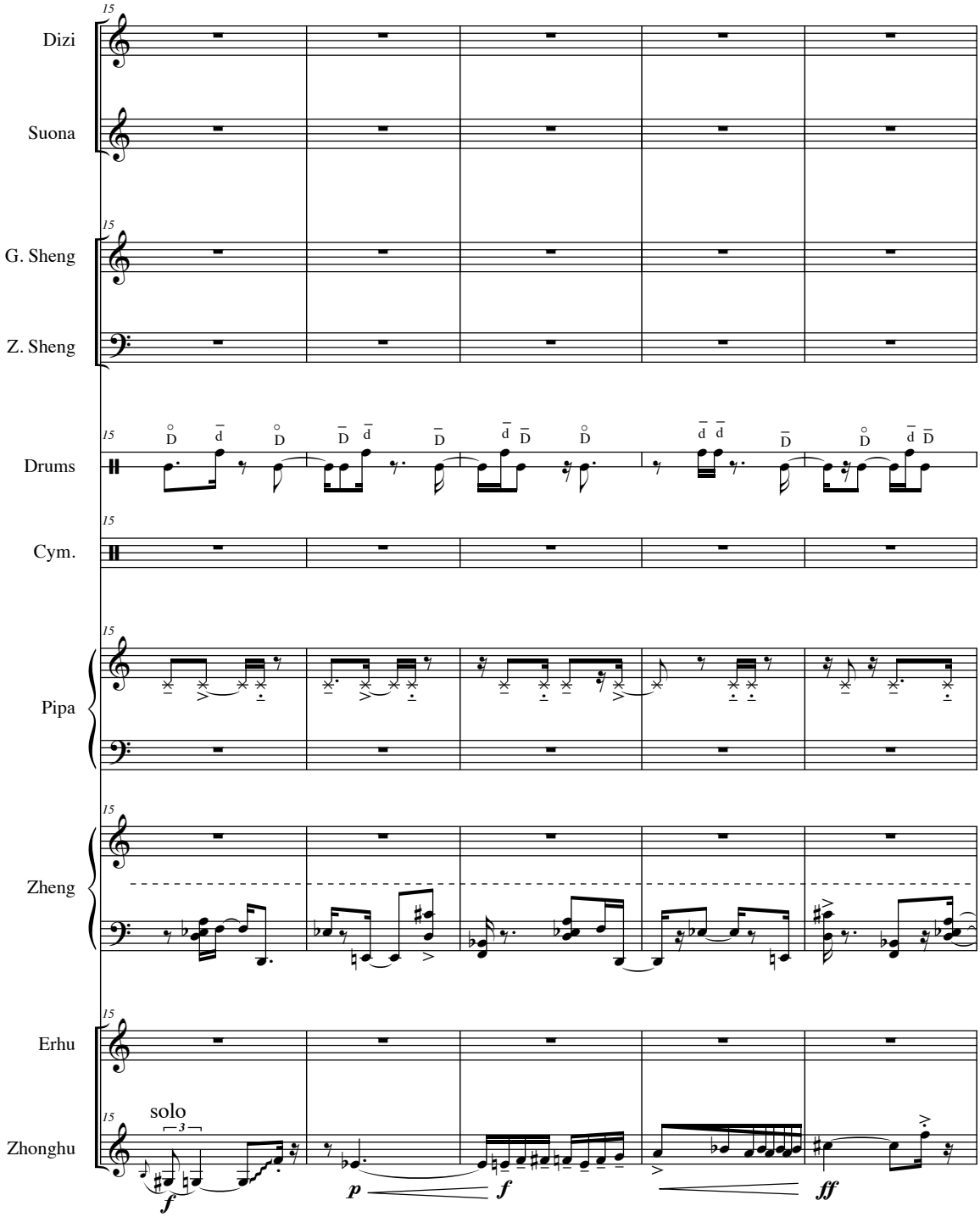
II.
Summer

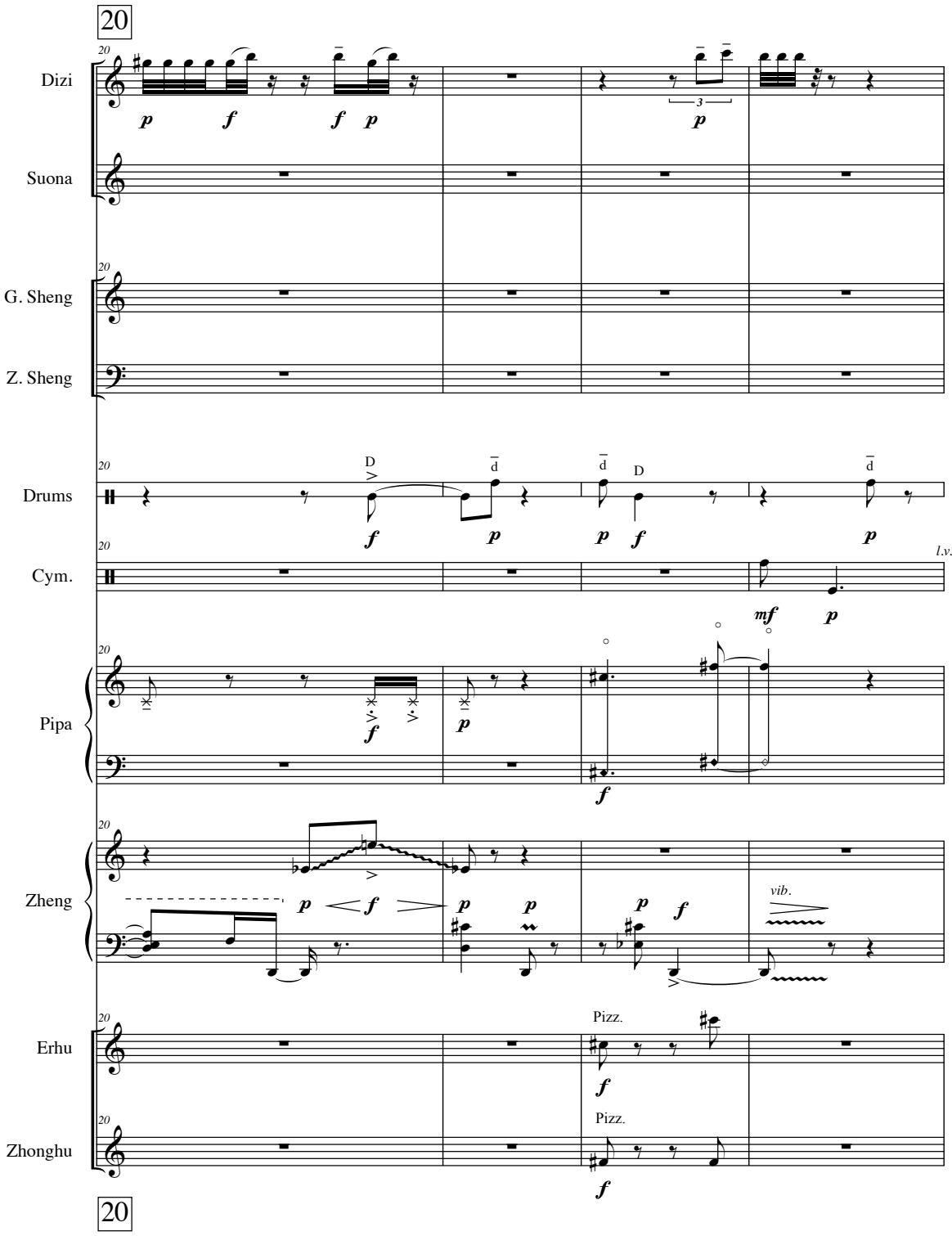
(with Gaoyin Sheng, Zhongyin Sheng and Percussion soli)

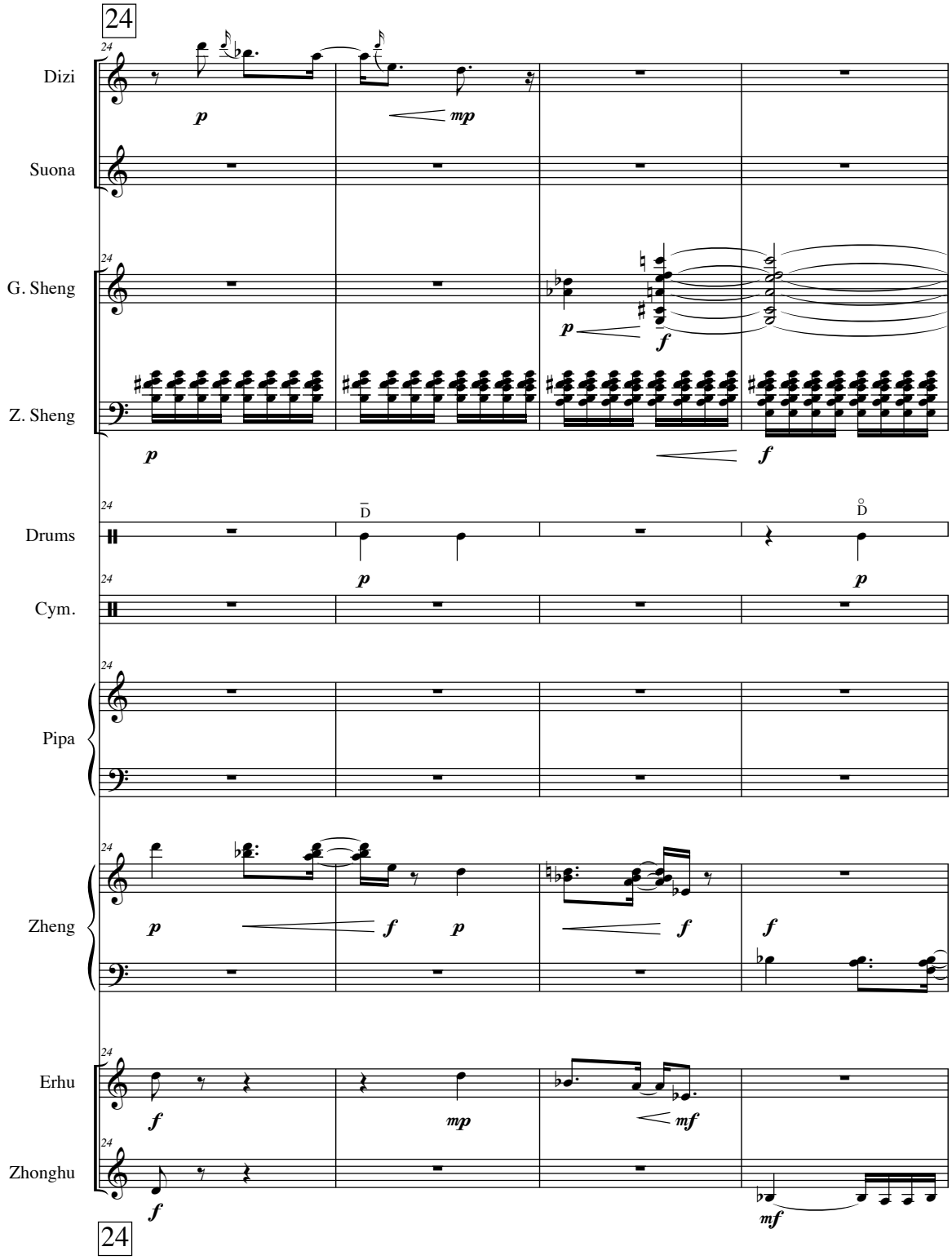


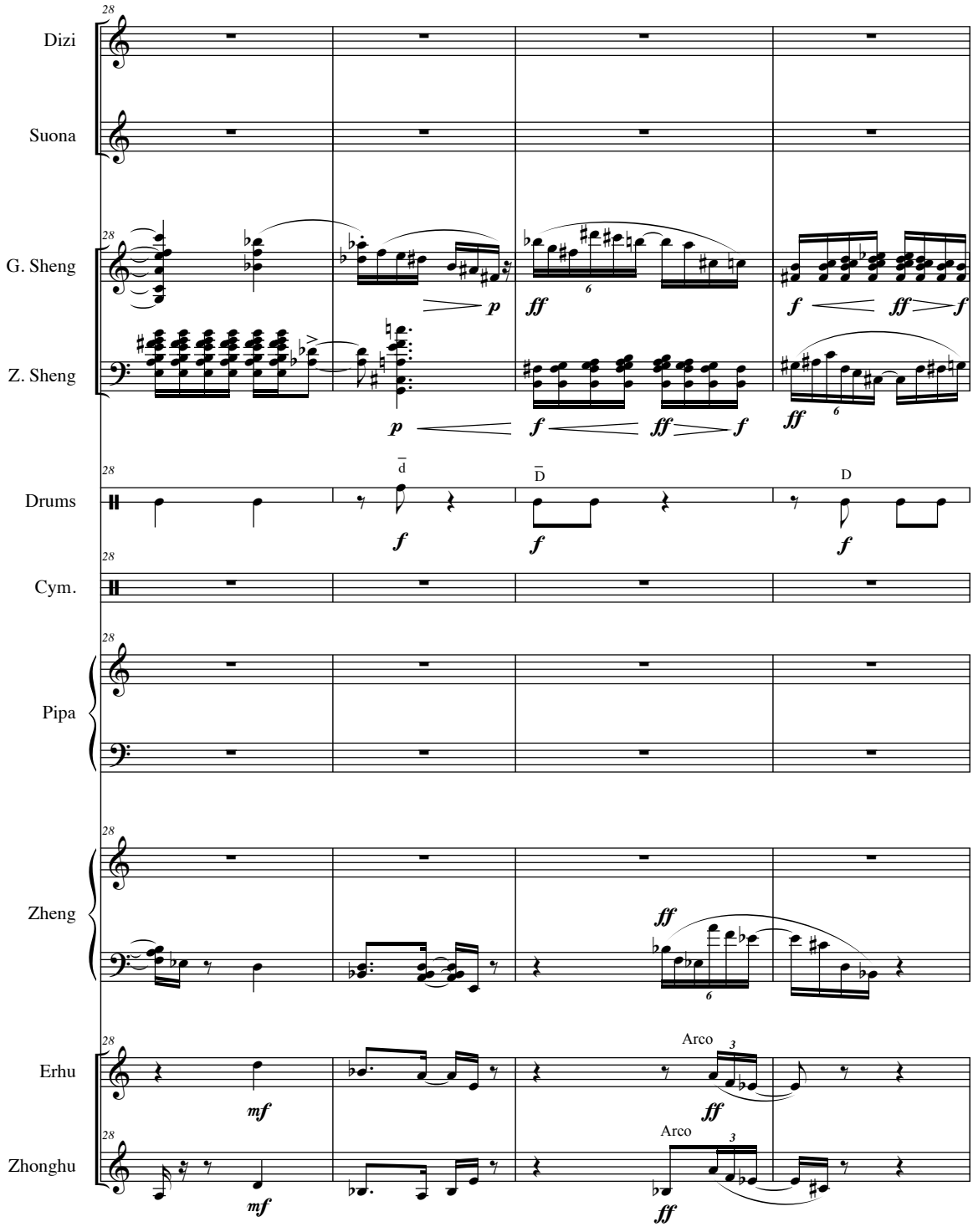

Senza Misura
Dizi
Drums
Cym.
f solo
p
ff
p
f
l.v.
a tempo
Dizi
G. Sheng
Z. Sheng
Drums
Cym.
Pipa
Zheng
mp
p
mp
p
mp
mp
p
D
p
mf
p
f
vib.
f

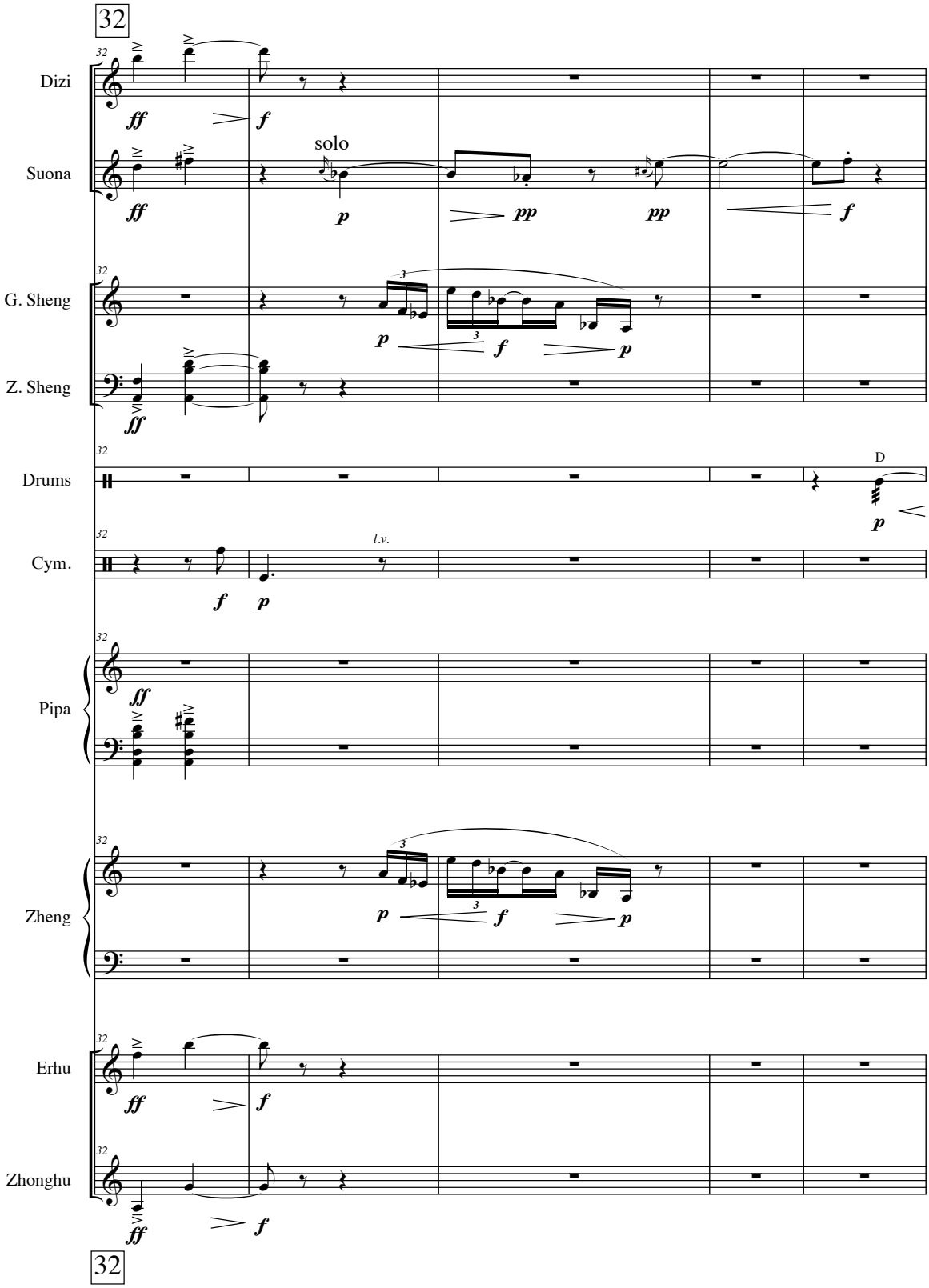

Senza Misura
l.v.
Cym.
solo
Pipa
Zheng
12
a tempo
G. Sheng
Z. Sheng
Drums
Pipa
Zheng
12

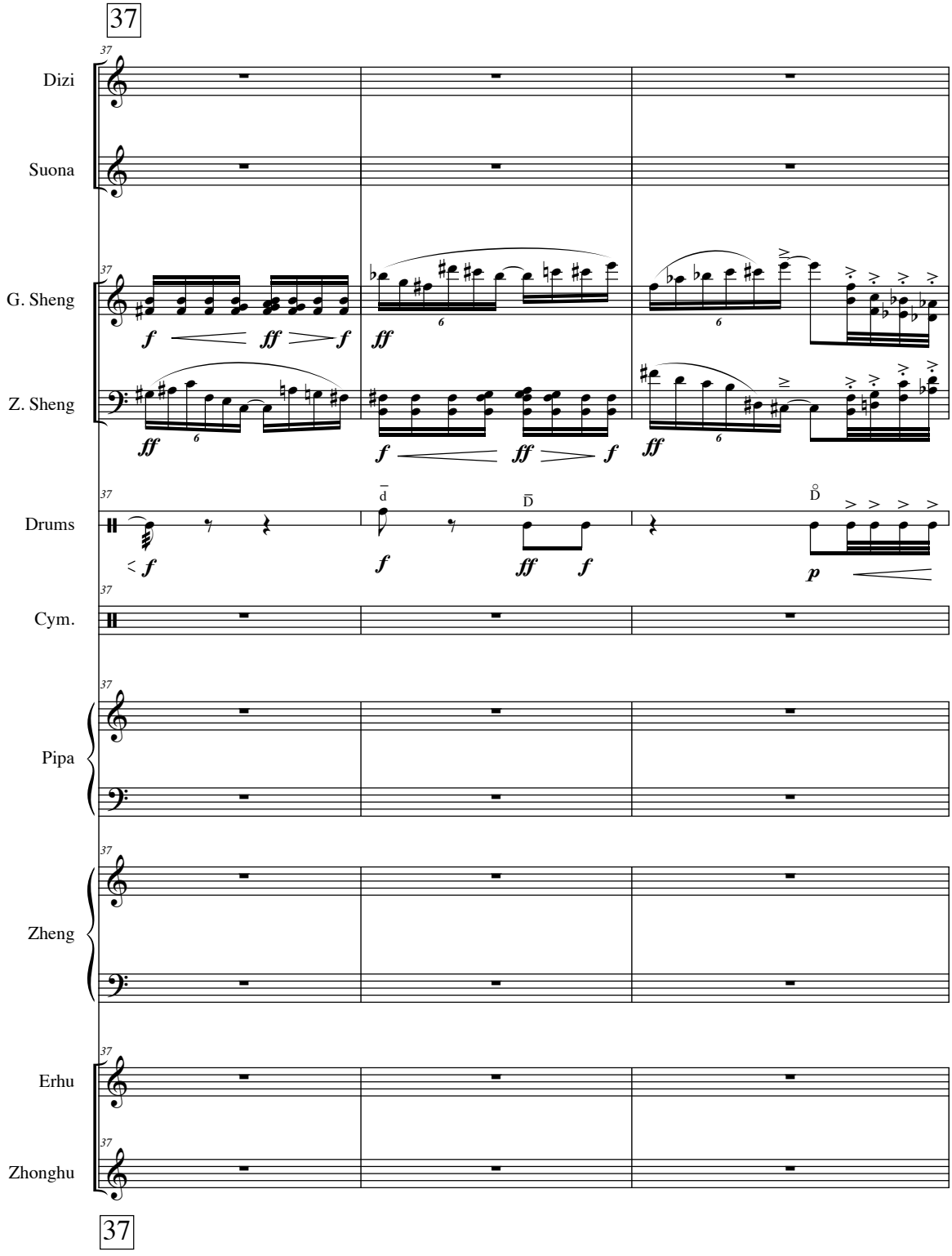

15
Dizi
Suona
15
G. Sheng
Z. Sheng
15
Drums
15
Cym.
15
Pipa
15
Zheng
15
Erhu
15
Zhonghu
solo
3
f
p
f
ff

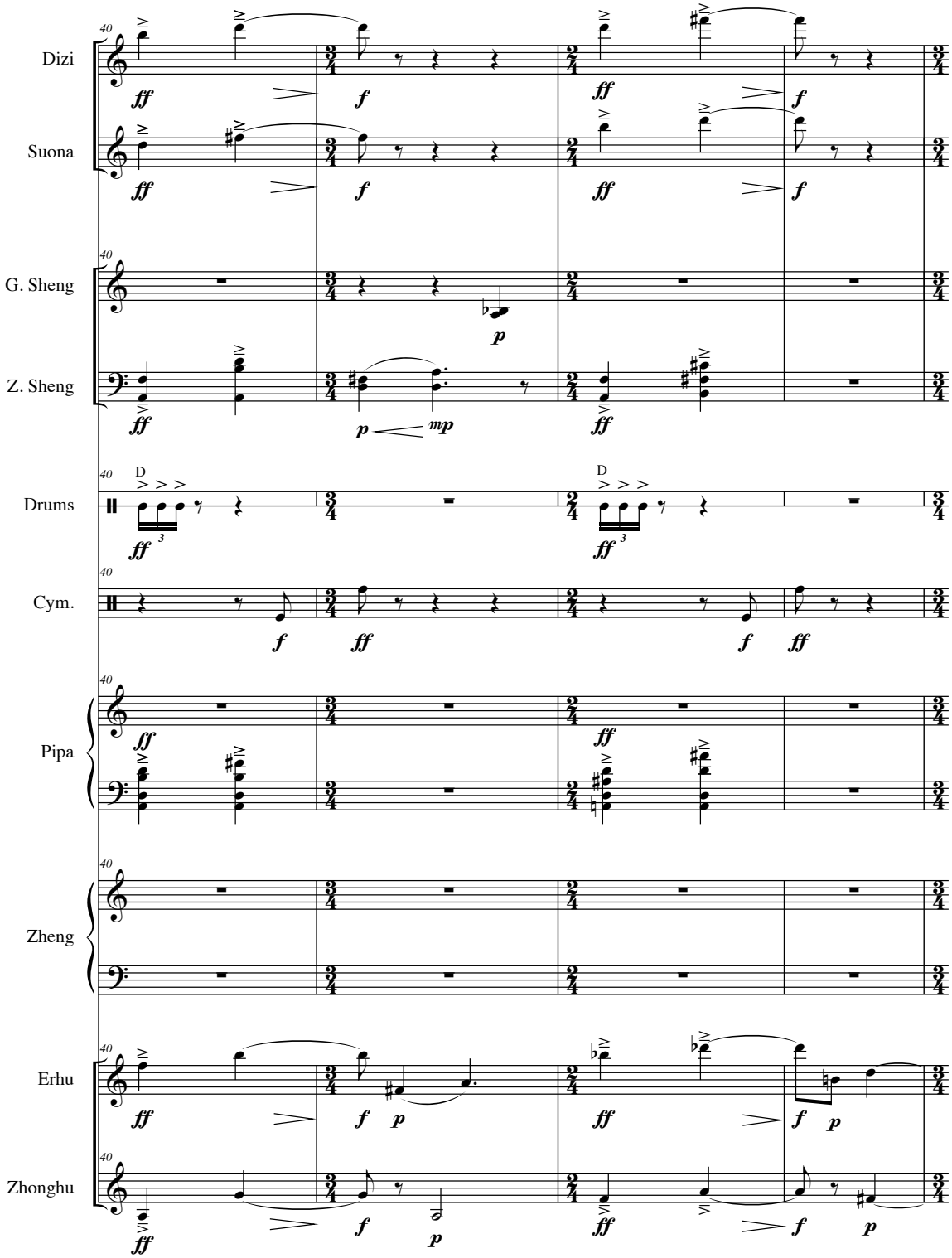

20
Dizi
Suona
G. Sheng
Z. Sheng
Drums
Cym.
Pipa
Zheng
Erhu
Zhonghu
l.v.
vib.
Pizz.
Pizz.
20

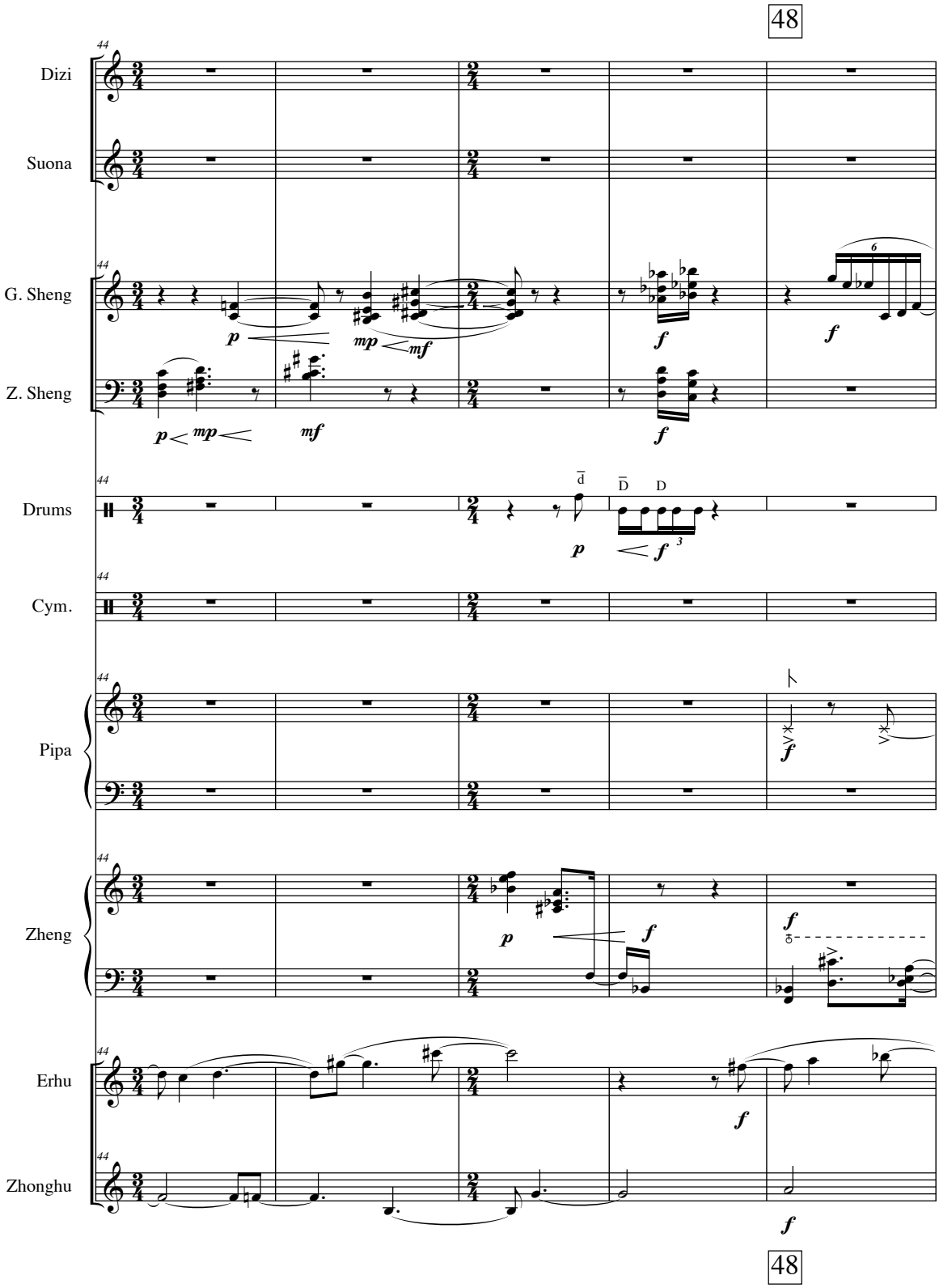

24
Dizi
Suona
G. Sheng
Z. Sheng
Drums
Cym.
Pipa
Zheng
Erhu
Zhonghu
p
mp
f
mf

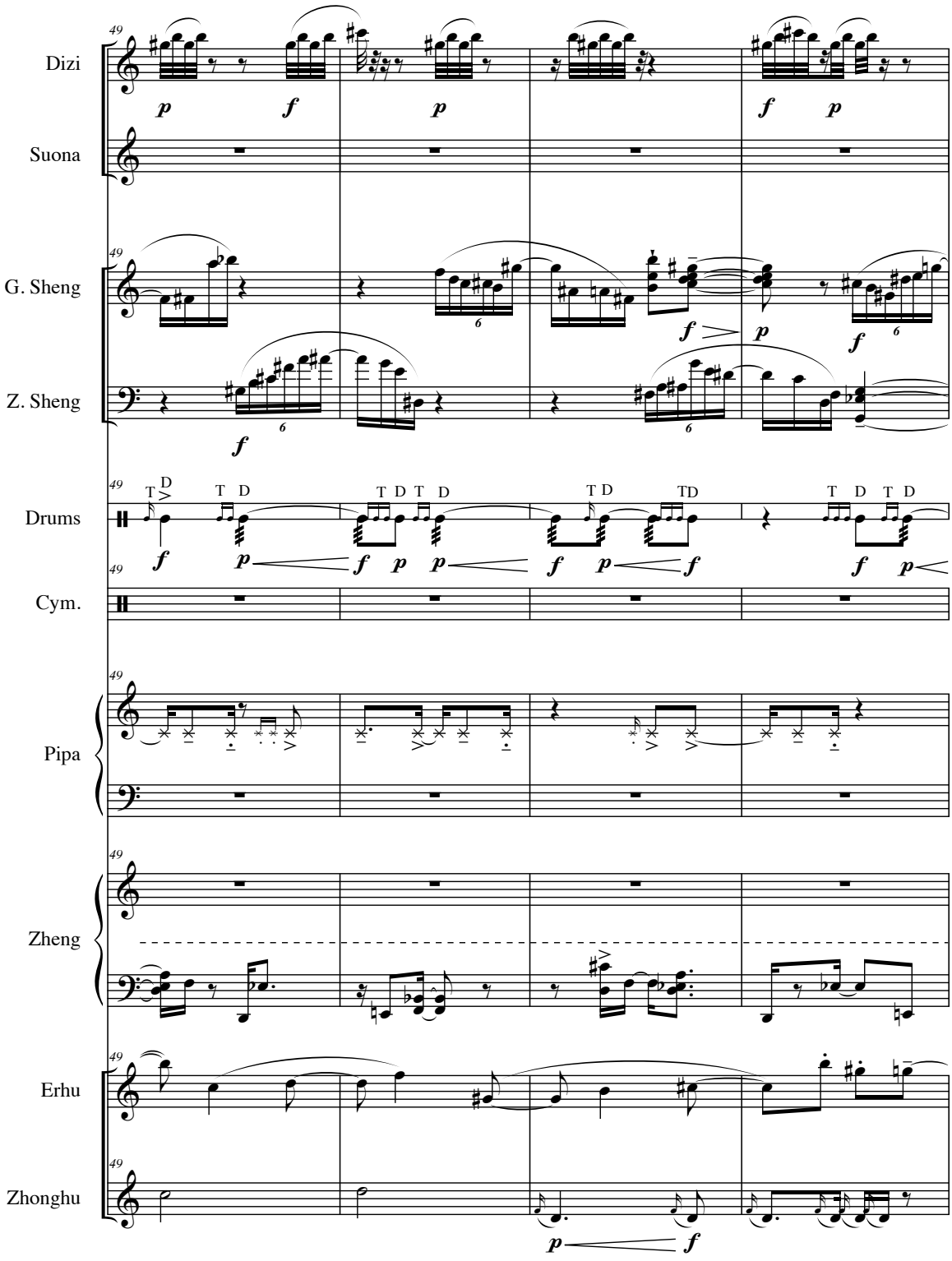

28
Dizi
Suona
G. Sheng
Z. Sheng
Drums
Cym.
Pipa
Zheng
Erhu
Zhonghu
p
ff
f
ff
f
p
f
ff
f
ff
d
D
D
f
f
f
ff
mf
Arco
3
ff
mf
Arco
3
ff

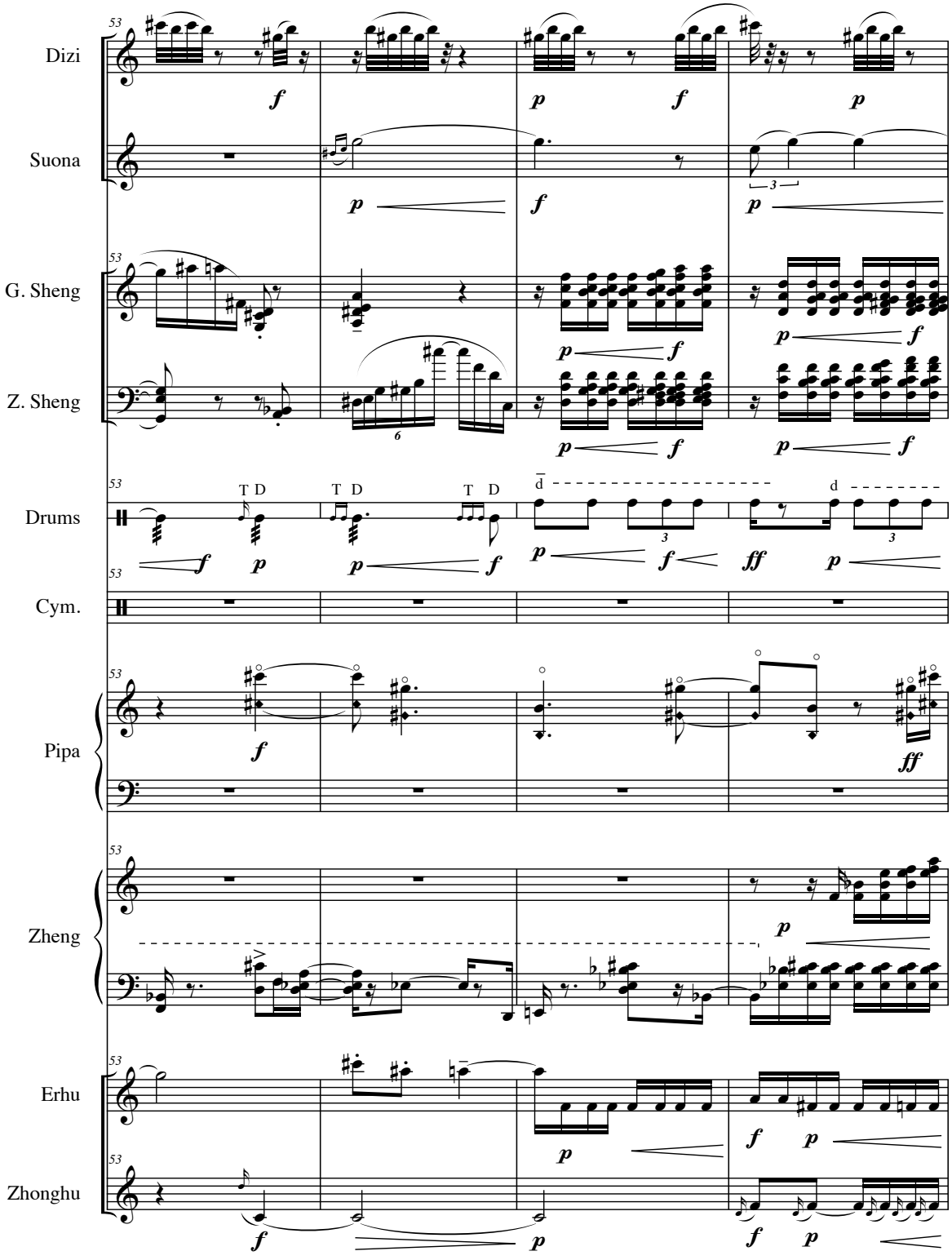

32
Dizi
Suona
G. Sheng
Z. Sheng
Drums
Cym.
Pipa
Zheng
Erhu
Zhonghu
solo
D
l.v.
32

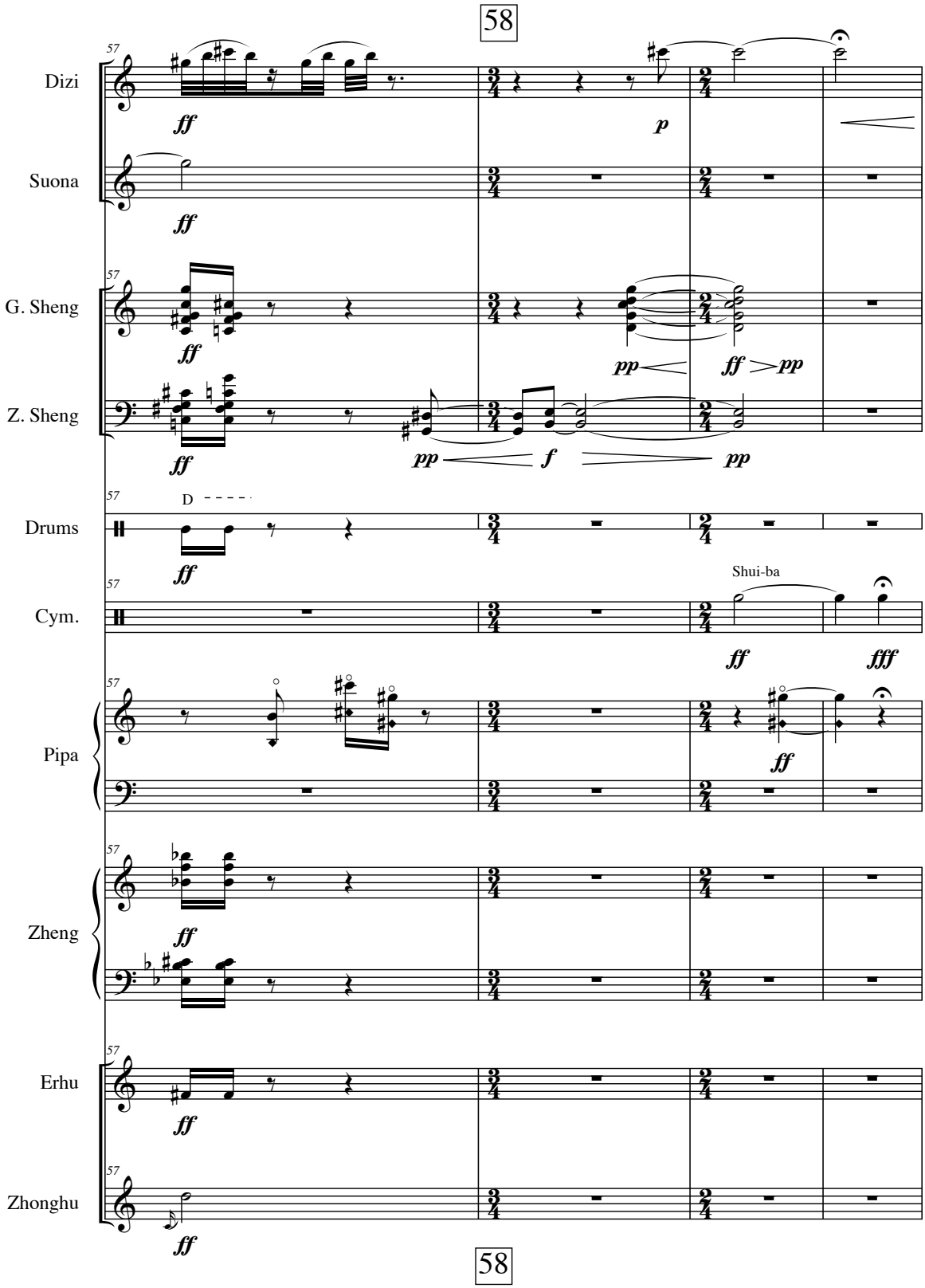

37
Dizi
Suona
G. Sheng
Z. Sheng
Drums
Cym.
Pipa
Zheng
Erhu
Zhonghu
37

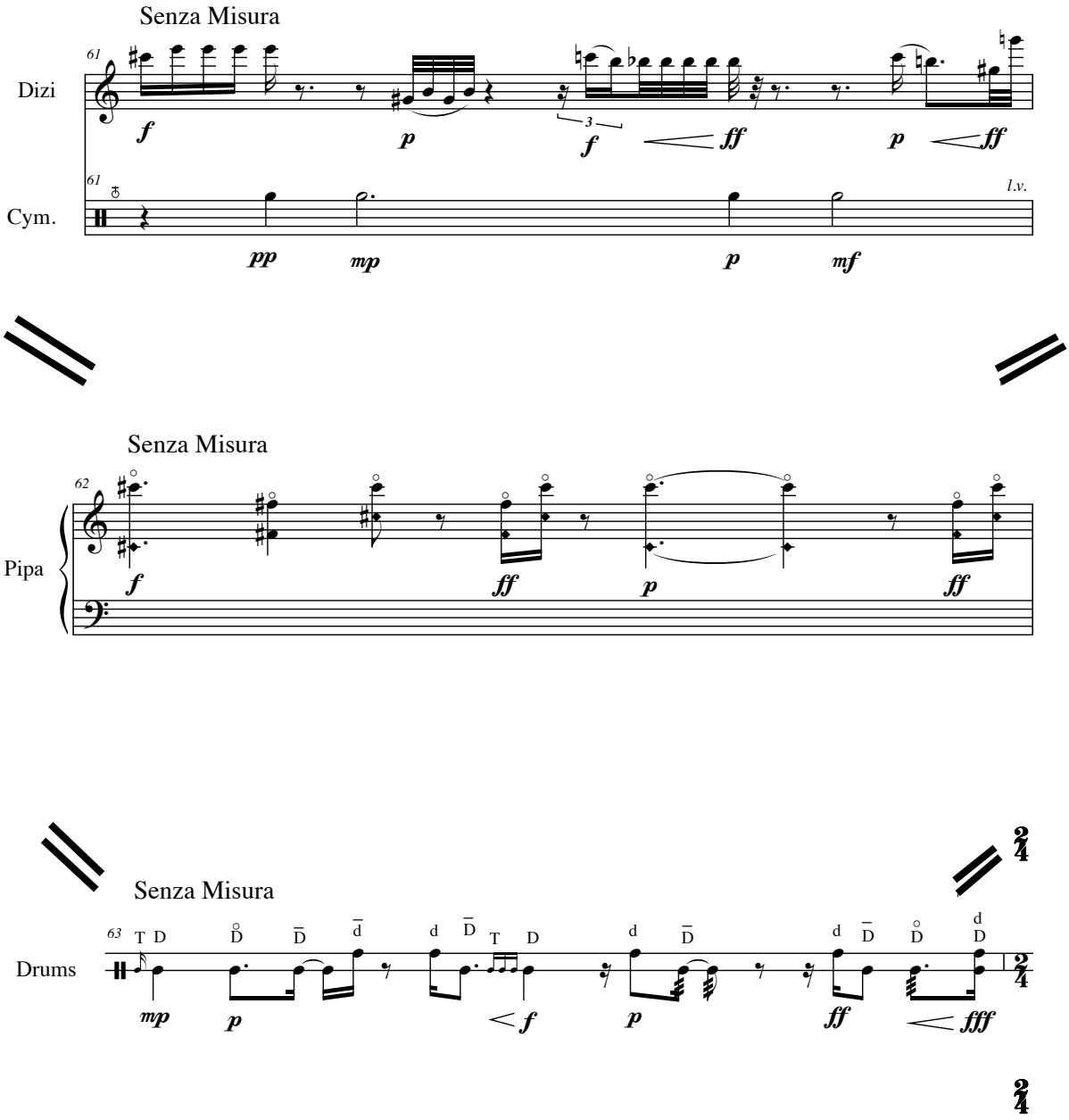

Dizi
Suona
G. Sheng
Z. Sheng
Drums
Cym.
Pipa
Zheng
Erhu
Zhonghu

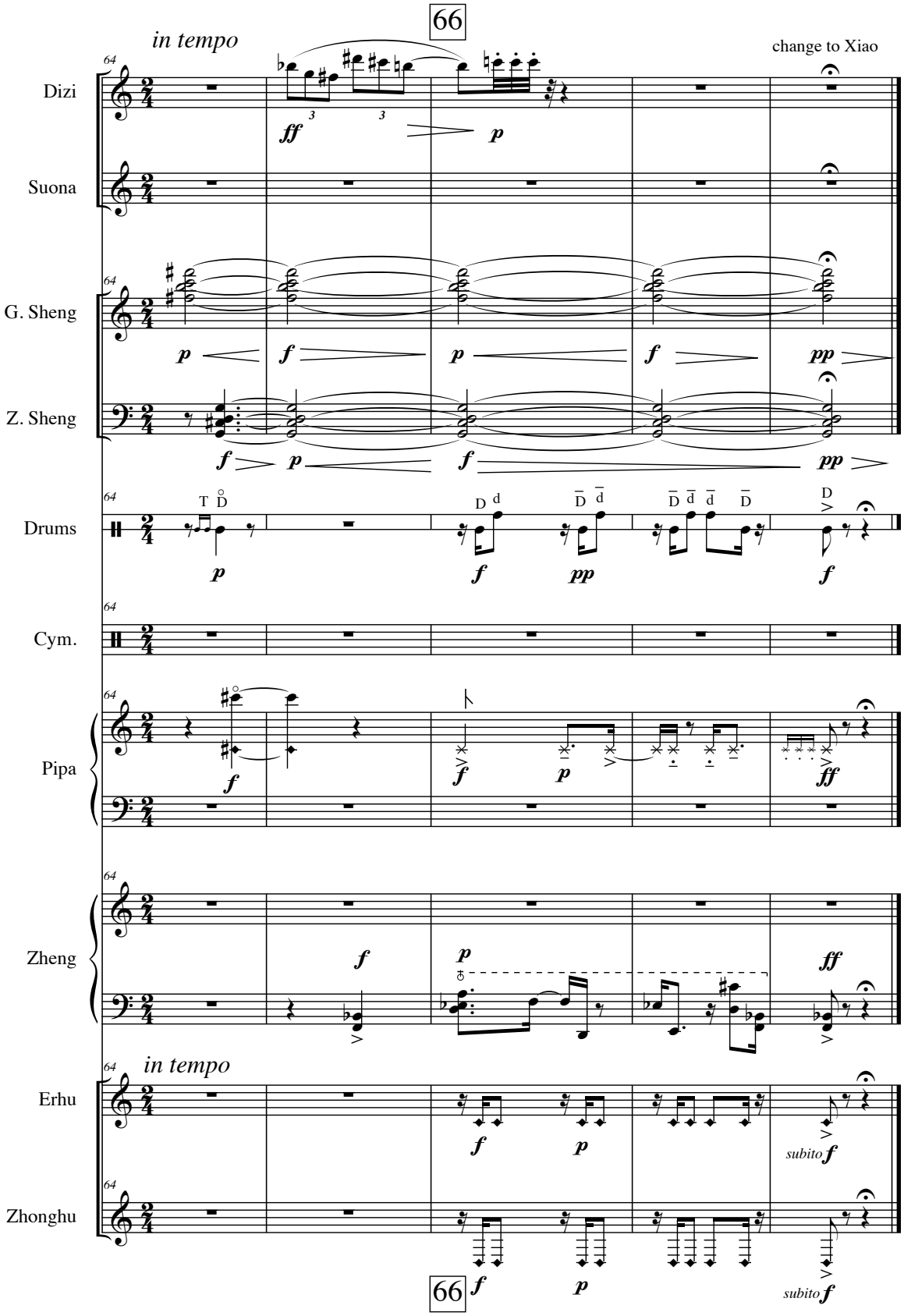

48
Dizi
Suona
G. Sheng
Z. Sheng
Drums
Cym.
Pipa
Zheng
Erhu
Zhonghu
48


Dizi
Suona
G. Sheng
Z. Sheng
Drums
Cym.
Pipa
Zheng
Erhu
Zhonghu


Dizi
Suona
G. Sheng
Z. Sheng
Drums
Cym.
Pipa
Zheng
Erhu
Zhonghu

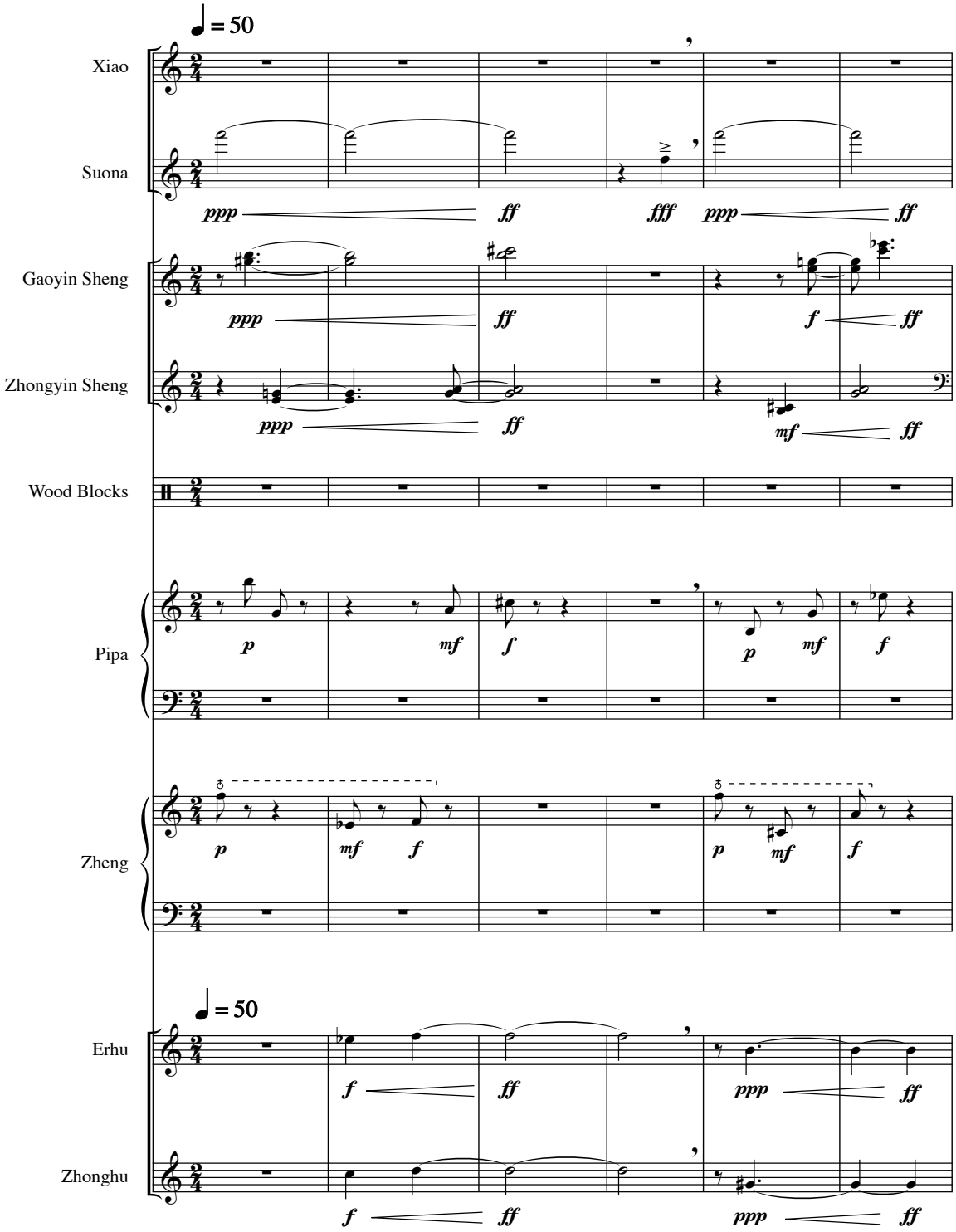

58
Dizi
Suona
G. Sheng
Z. Sheng
Drums
Cym.
Pipa
Zheng
Erhu
Zhonghu
57
D
Shui-ba
ff
fff
p
pp
f
58

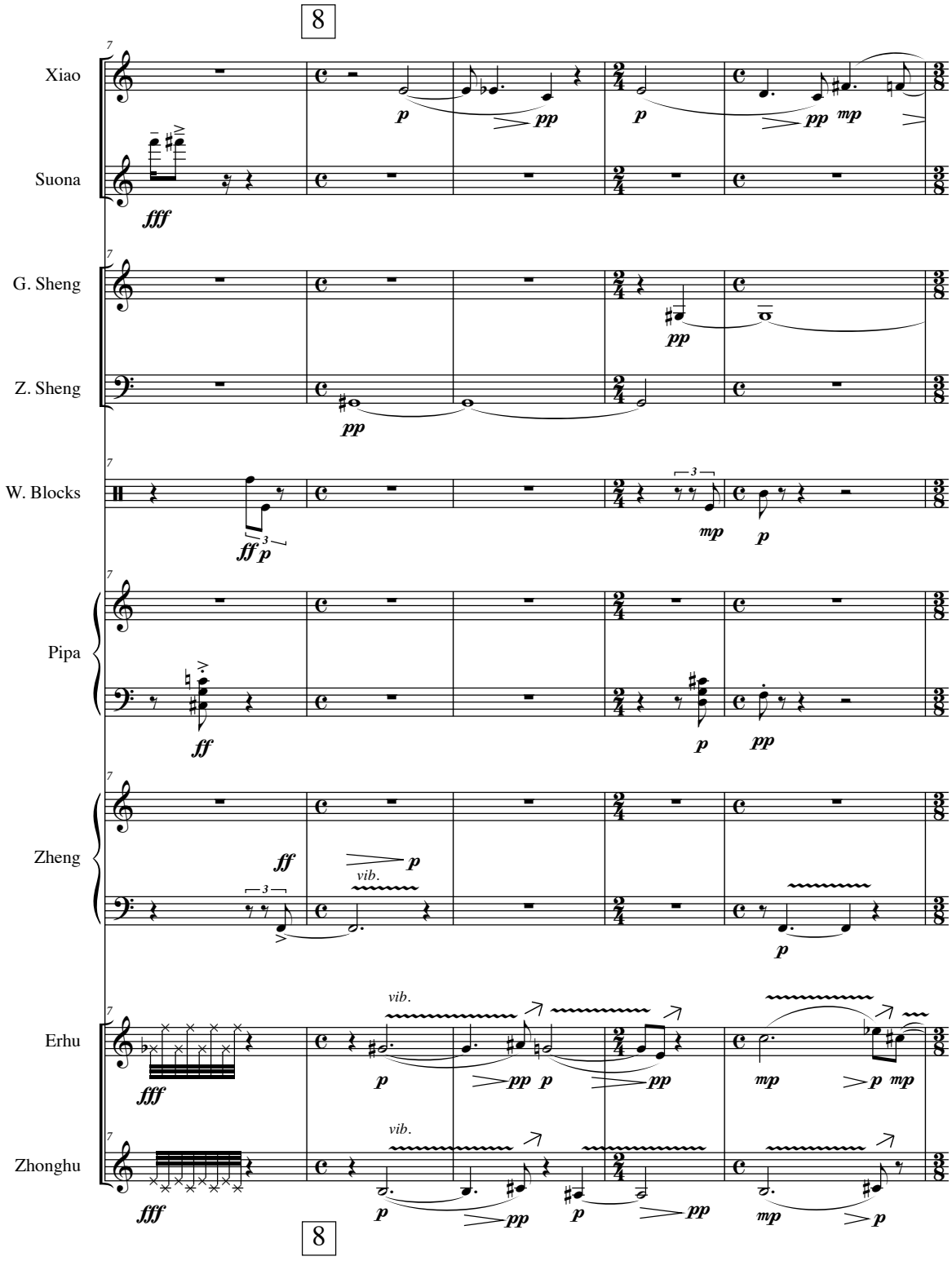

Senza Misura
Dizi
Cym.
l.v.
Senza Misura
Pipa
Senza Misura
Drums

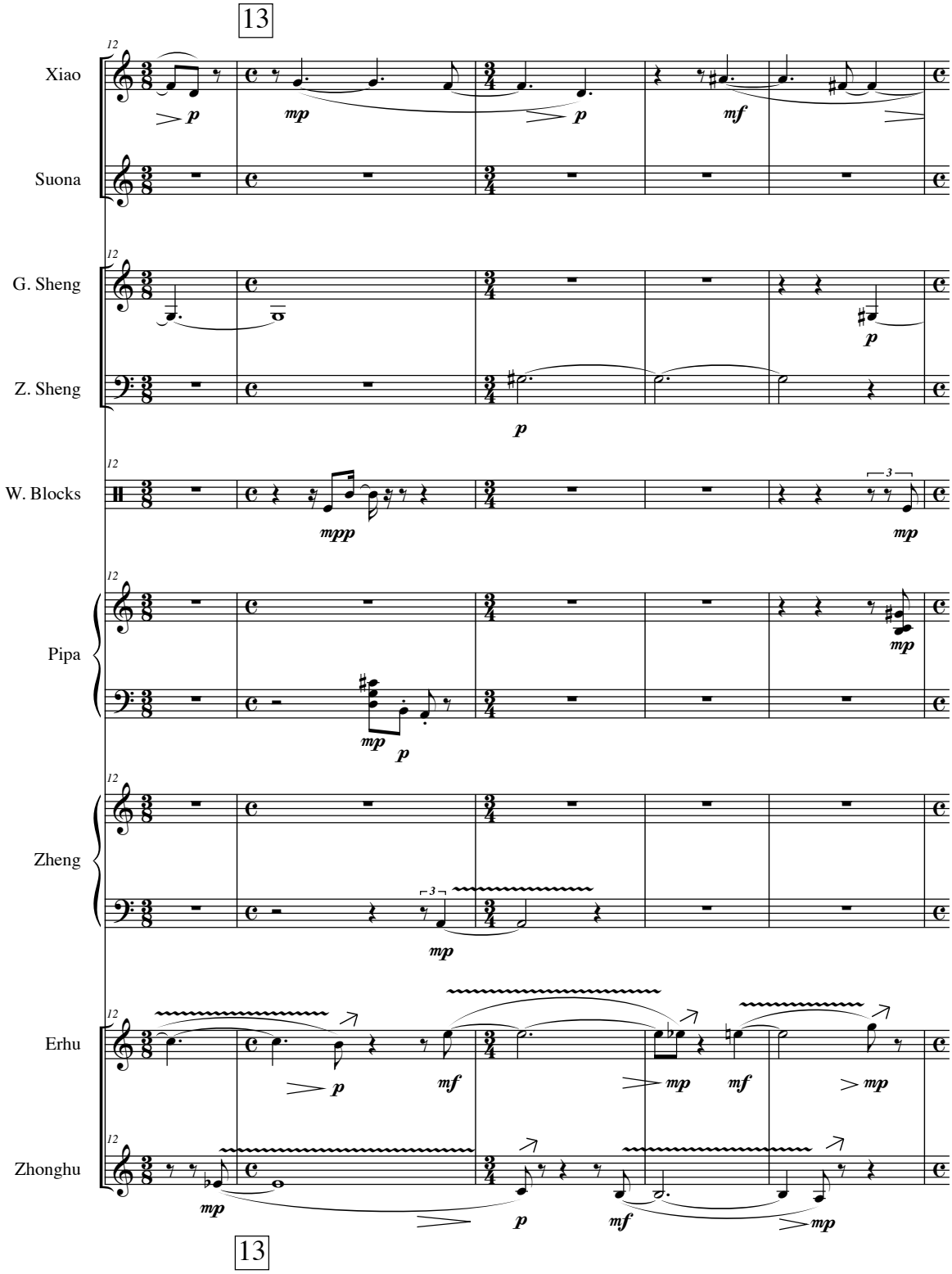

66
in tempo
change to Xiao
Dizi
Suona
G. Sheng
Z. Sheng
Drums
Cym.
Pipa
Zheng
in tempo
Erhu
Zhonghu
subito f
subito f
66

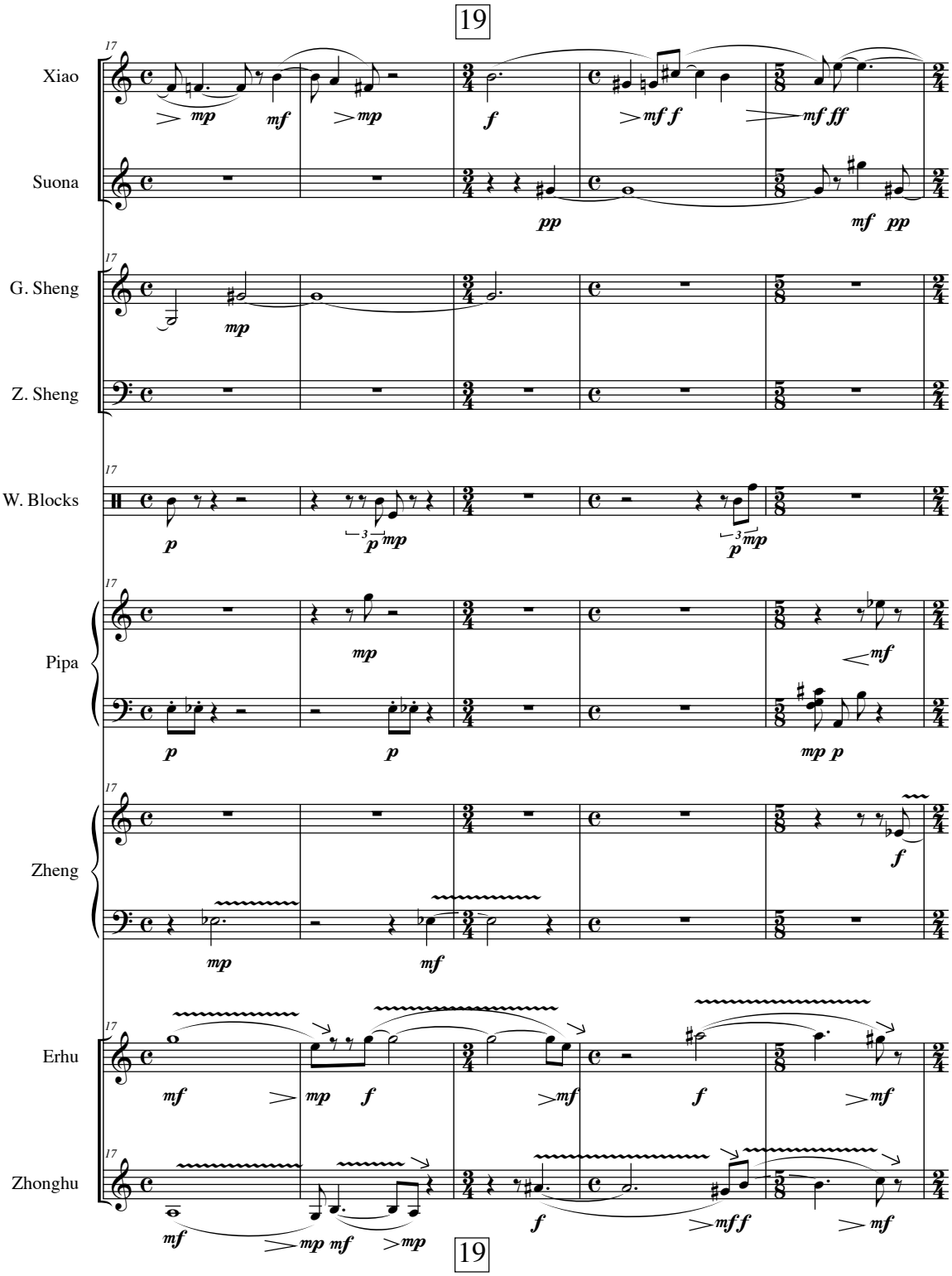
Spider!
What sound, how do you cry?
Autumn wind.
-Matsuo Basho

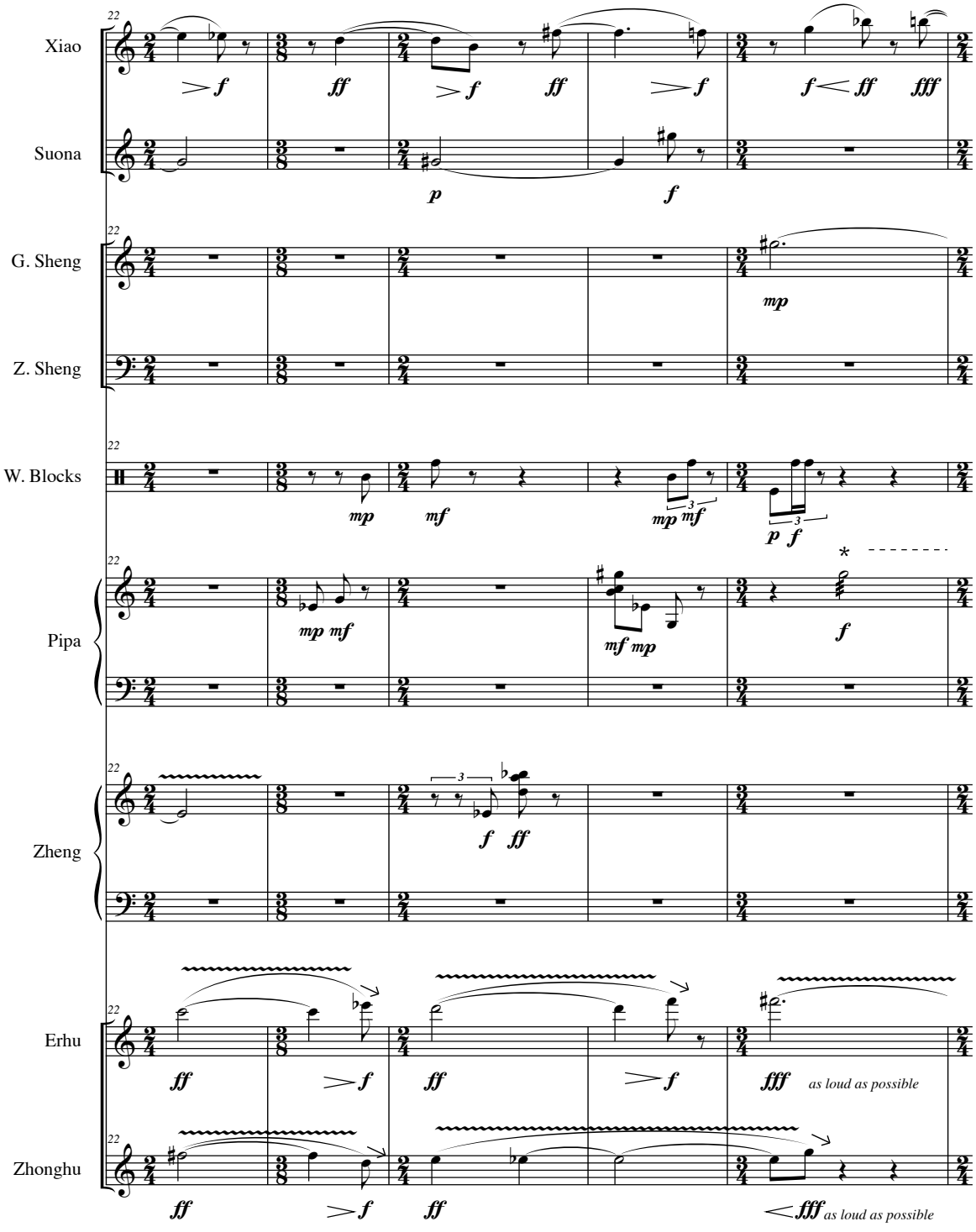
III.
Autumn
(with Xiao, Erhu and Zhonghu soli)

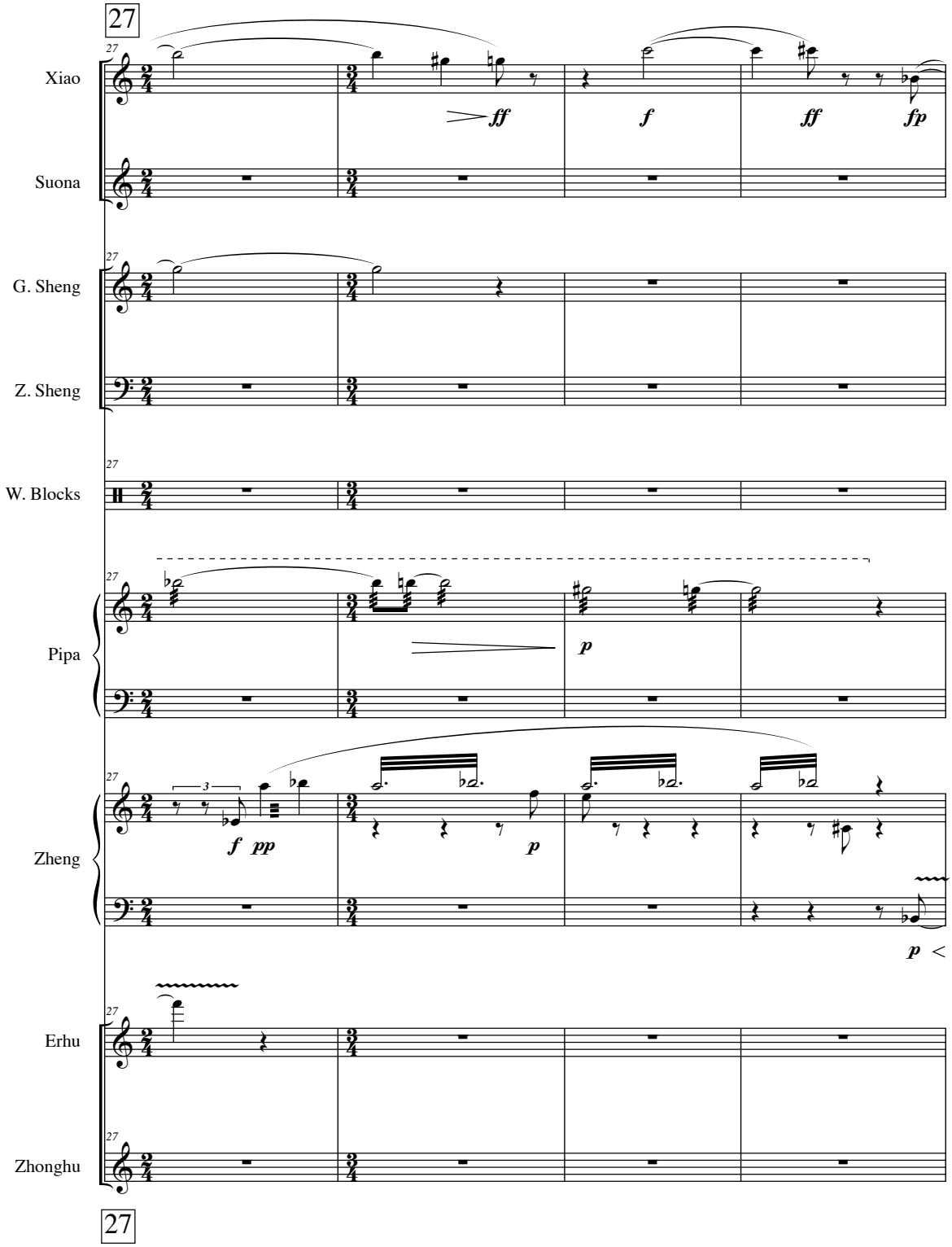


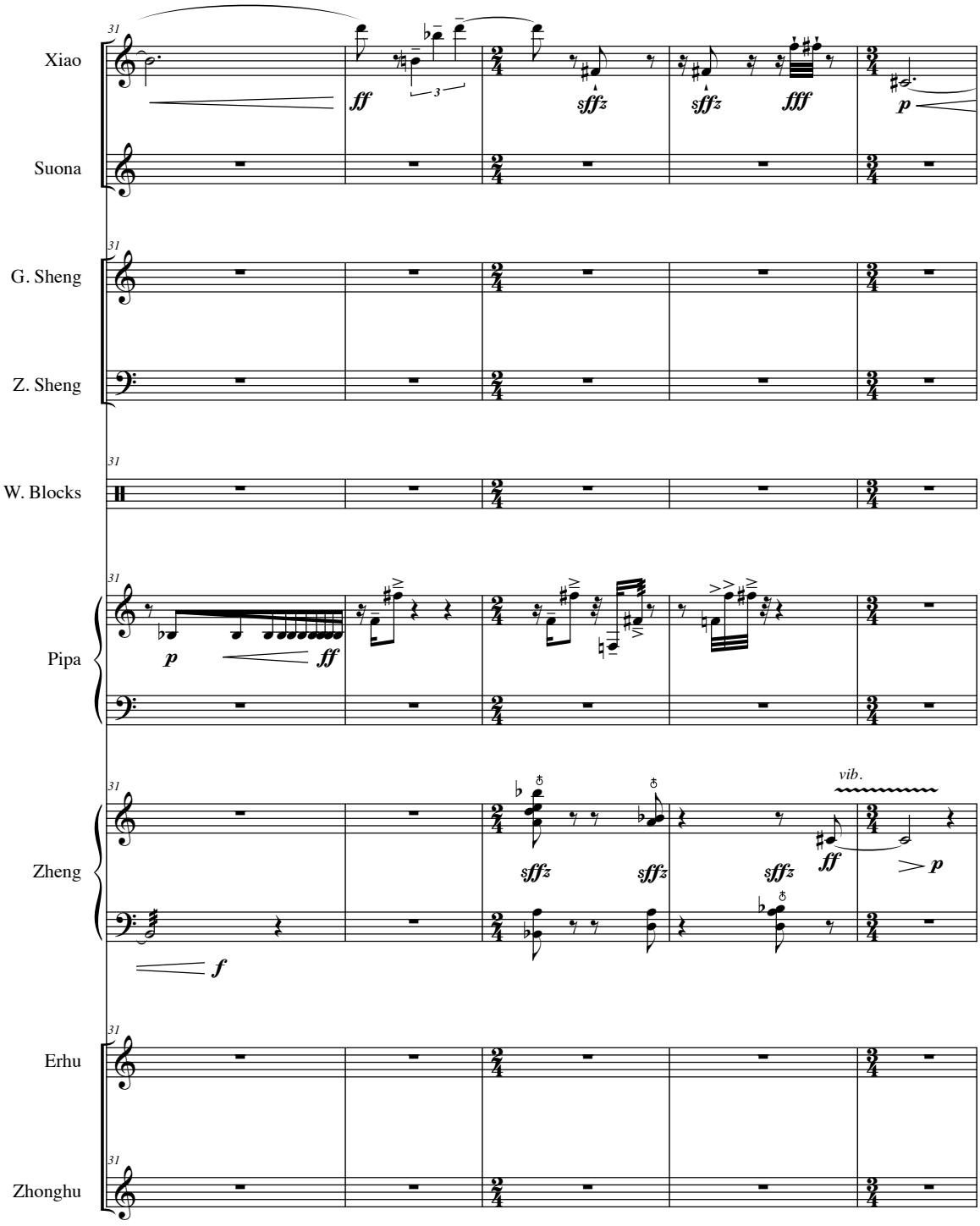

8
Xiao
Suona
G. Sheng
Z. Sheng
W. Blocks
Pipa
Zheng
Erhu
Zhonghu
8

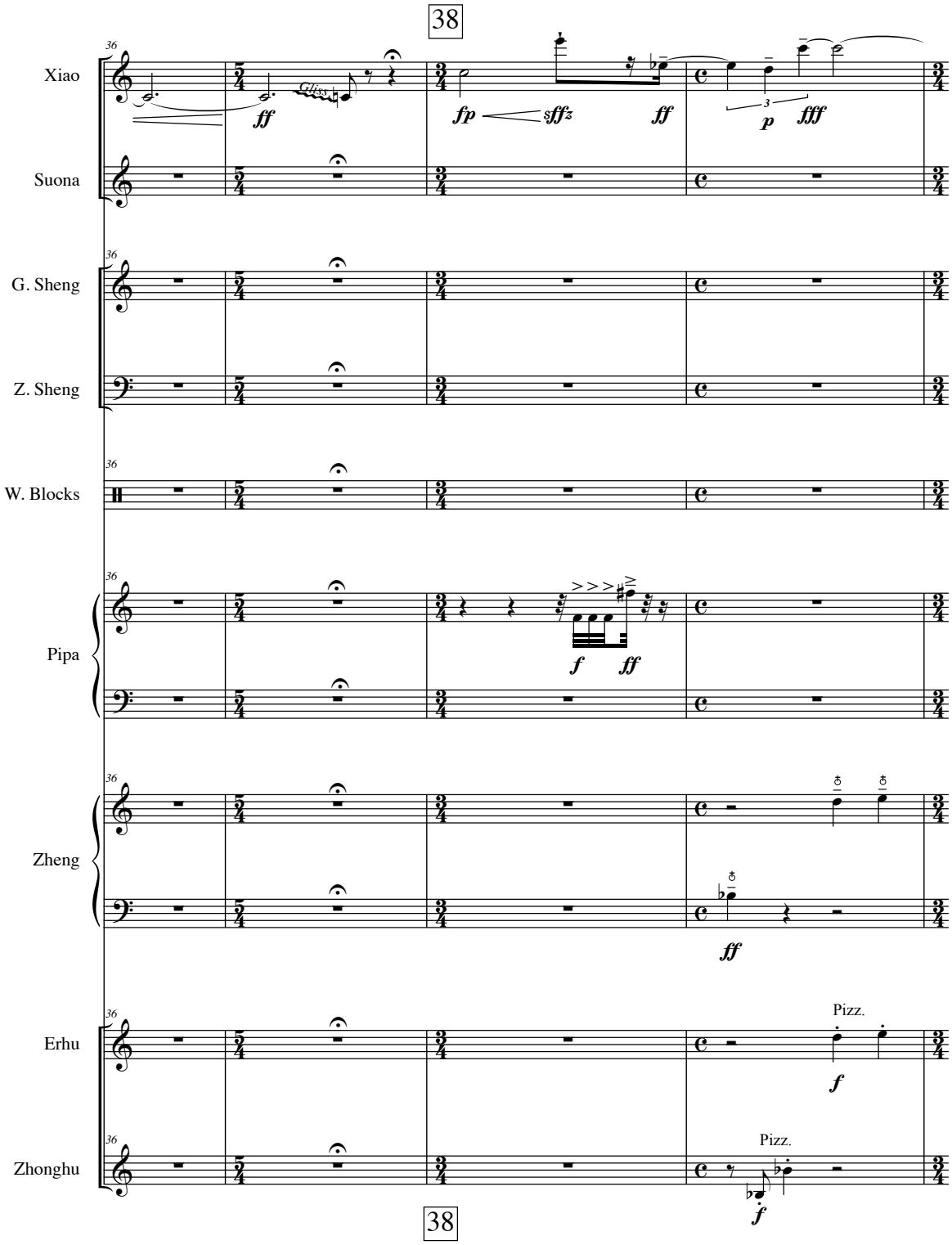

13
Xiao
Suona
G. Sheng
Z. Sheng
W. Blocks
Pipa
Zheng
Erhu
Zhonghu
13

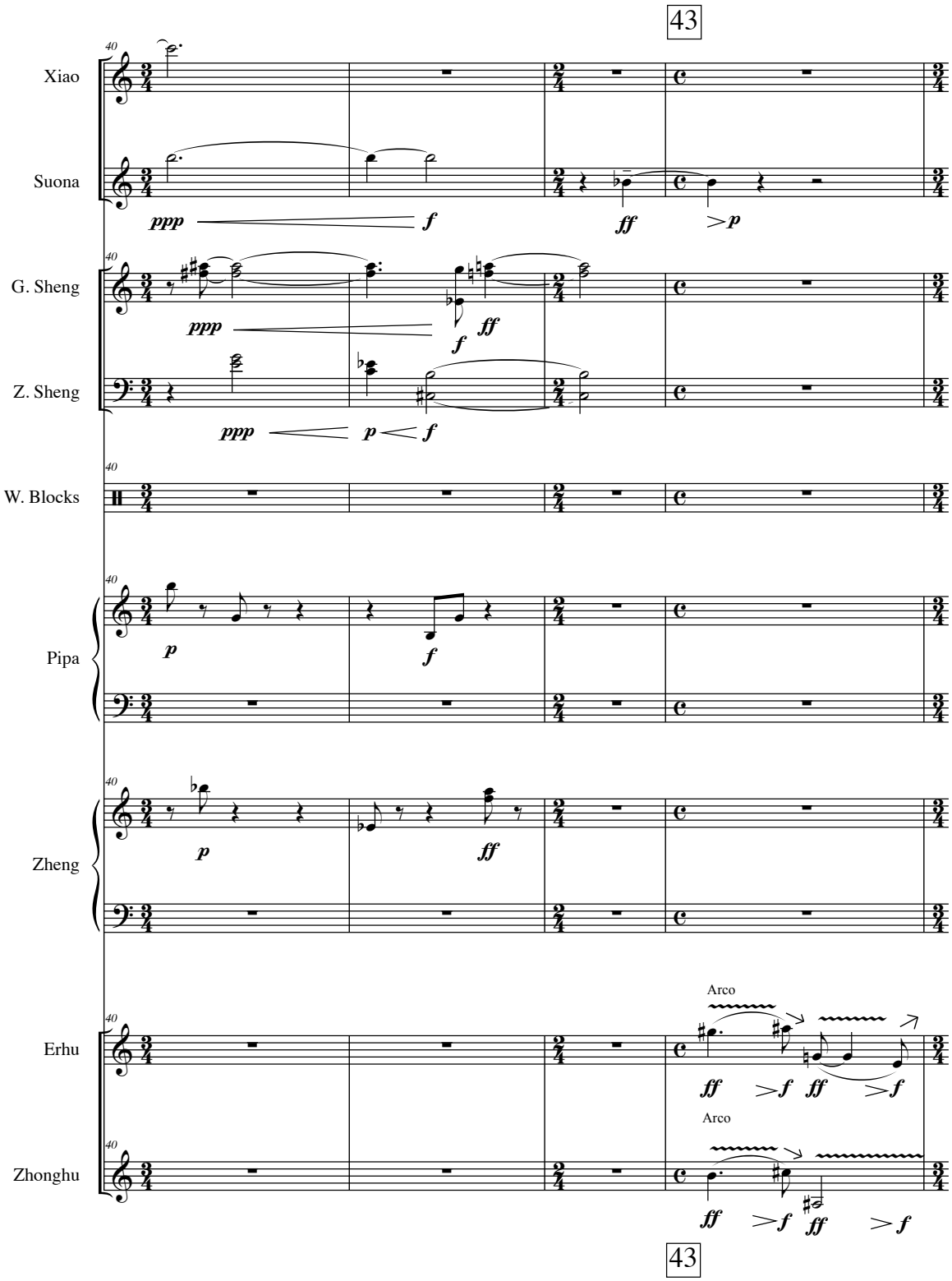

19
Xiao
Suona
G. Sheng
Z. Sheng
W. Blocks
Pipa
Zheng
Erhu
Zhonghu
19

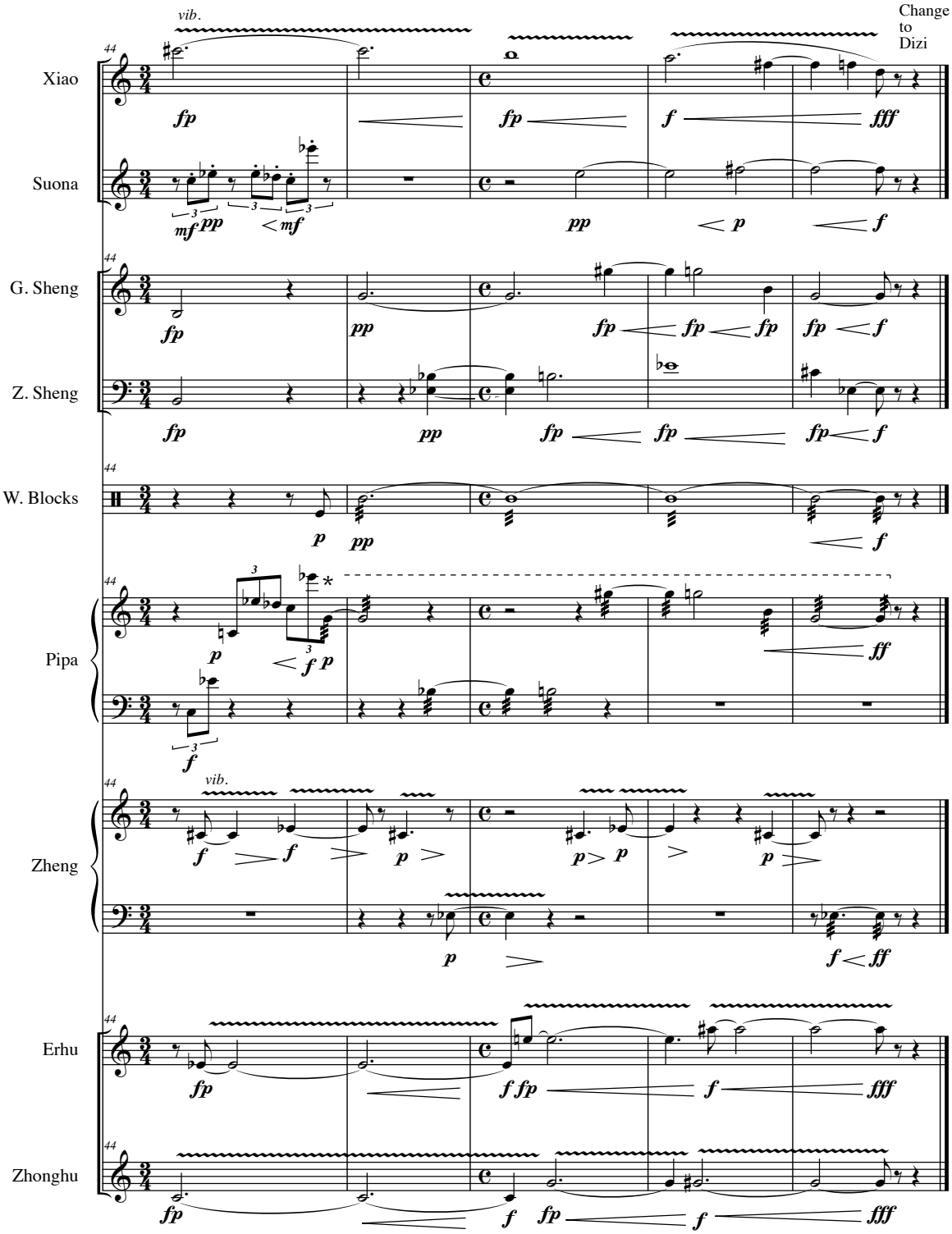

22
Xiao
Suona
G. Sheng
Z. Sheng
W. Blocks
Pipa
Zheng
Erhu
Zhonghu
as loud as possible
as loud as possible


27
Xiao
Suona
G. Sheng
Z. Sheng
W. Blocks
Pipa
Zheng
Erhu
Zhonghu
ff
f
ff
fp
p
f pp
p
p
27


Xiao
Suona
G. Sheng
Z. Sheng
W. Blocks
Pipa
Zheng
Erhu
Zhonghu
31
ff
sffz
fff
p
f
vib.


38
Xiao
Suona
G. Sheng
Z. Sheng
W. Blocks
Pipa
Zheng
Erhu
Zhonghu
Gliss.
ff
fp
sffz
ff
p
fff
f
ff
ff
Pizz.
f
Pizz.
f
38

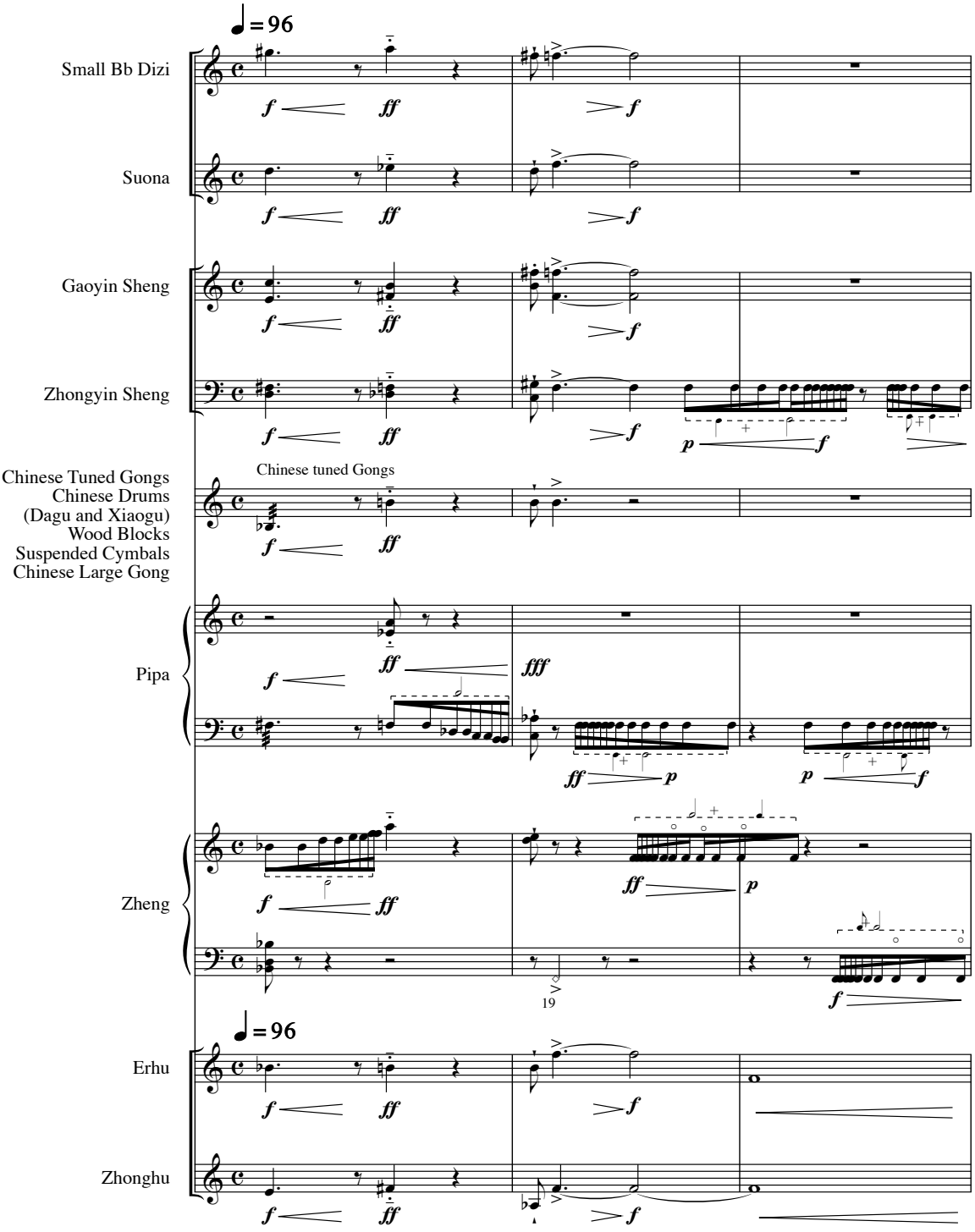

43
Xiao
Suona
G. Sheng
Z. Sheng
W. Blocks
Pipa
Zheng
Erhu
Zhonghu
Arco
Arco
43

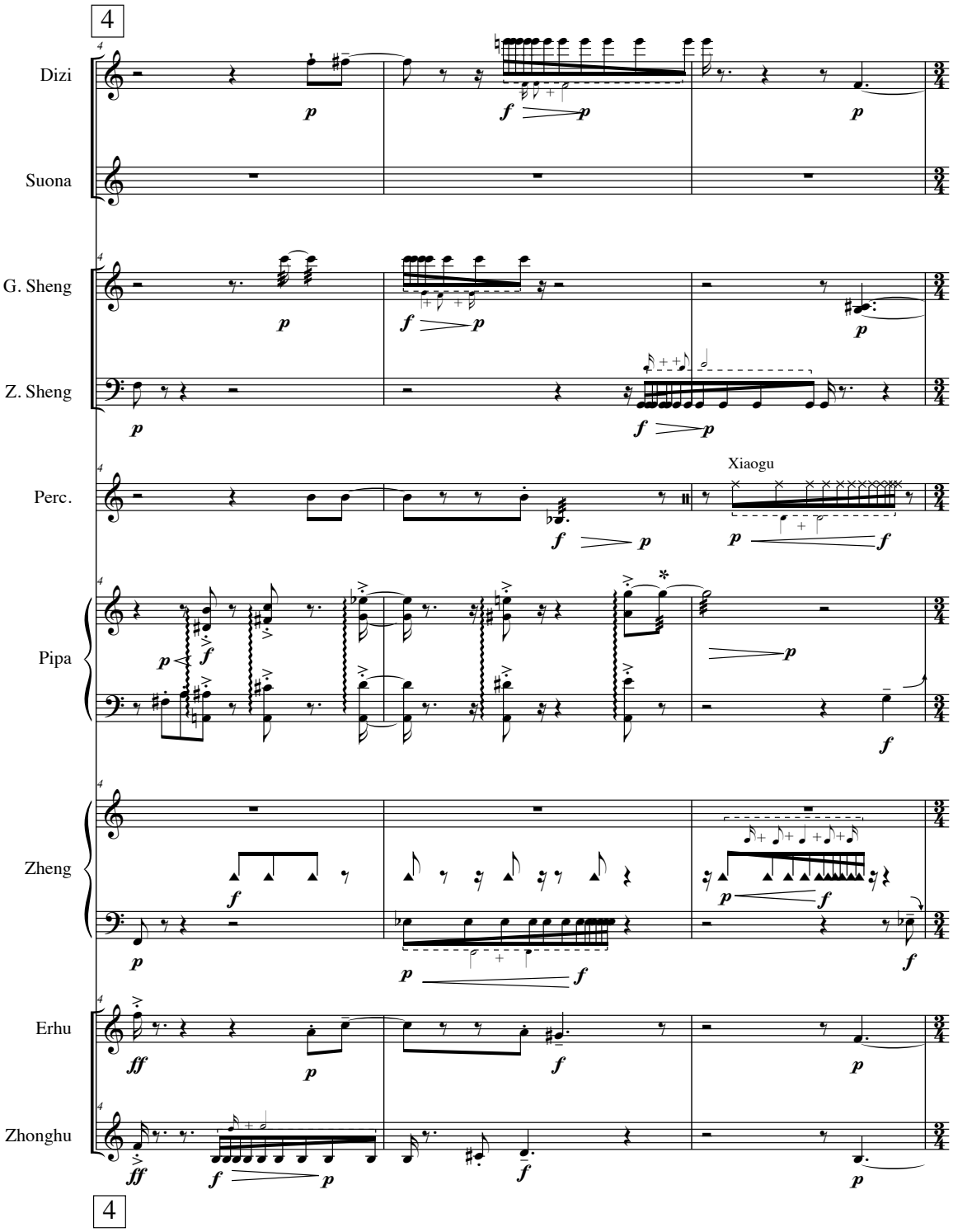

Change to Dizi
Xiao
Suona
G. Sheng
Z. Sheng
W. Blocks
Pipa
Zheng
Erhu
Zhonghu
vib.

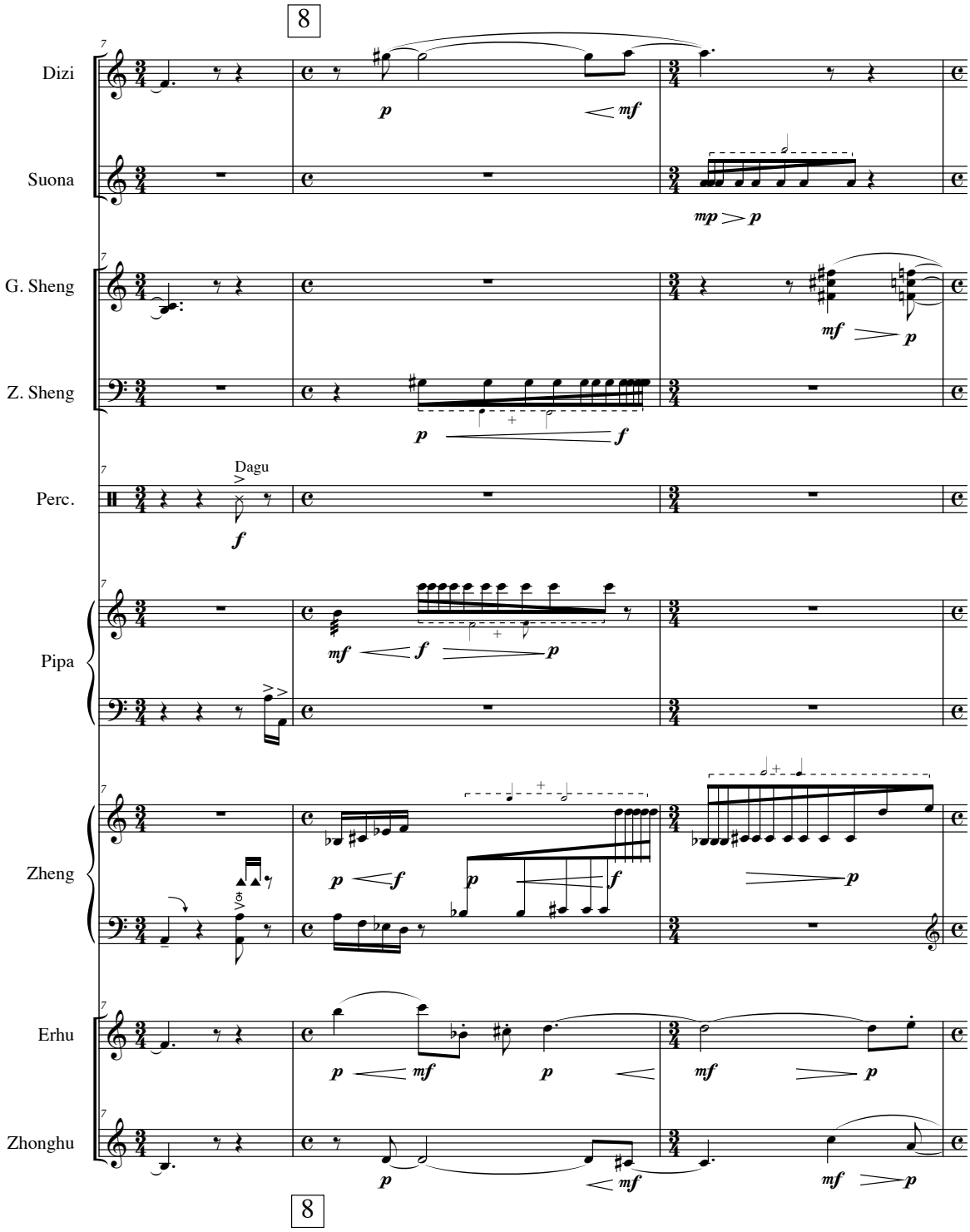
IV.
Winter

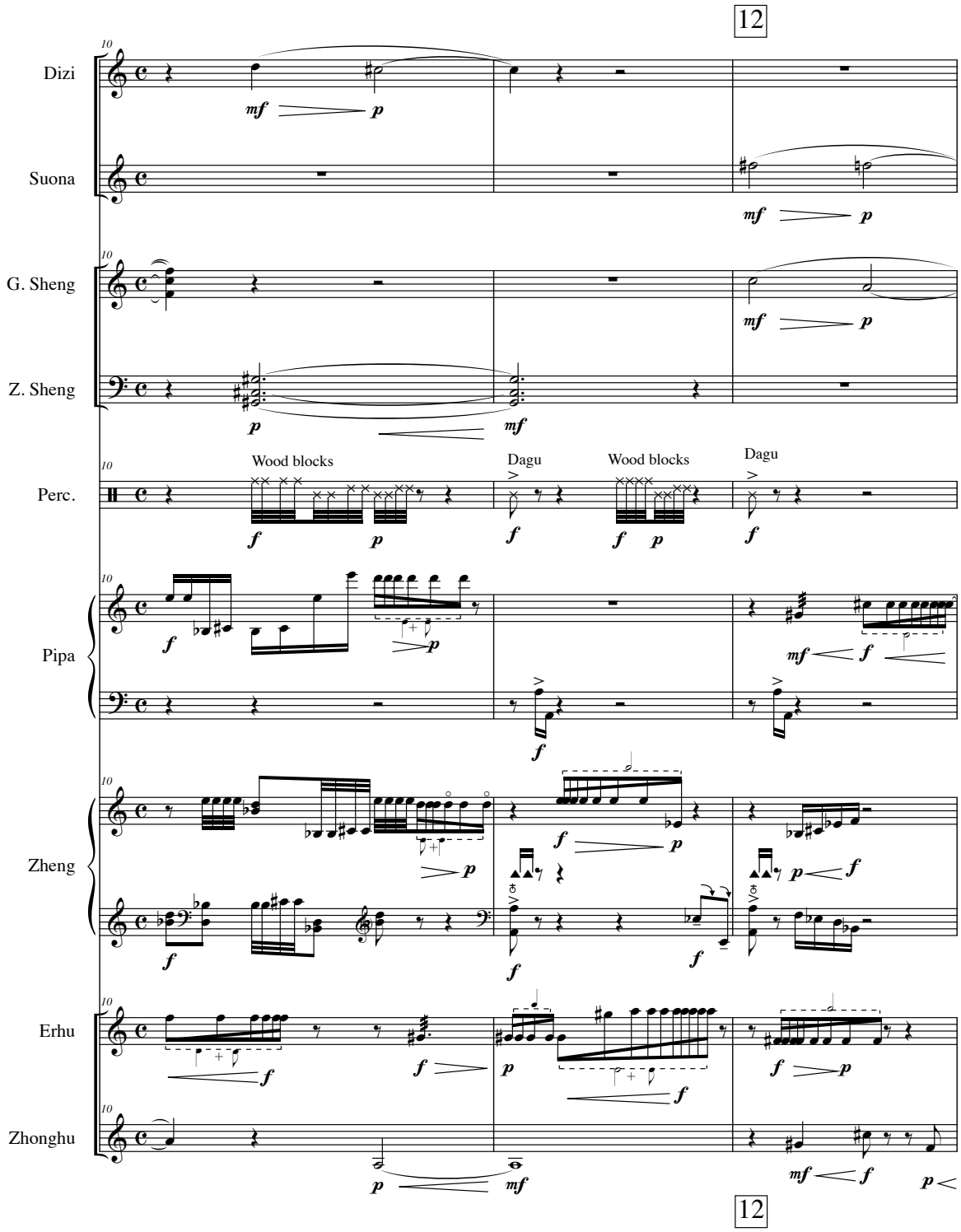
(with Pipa and Zheng soli)

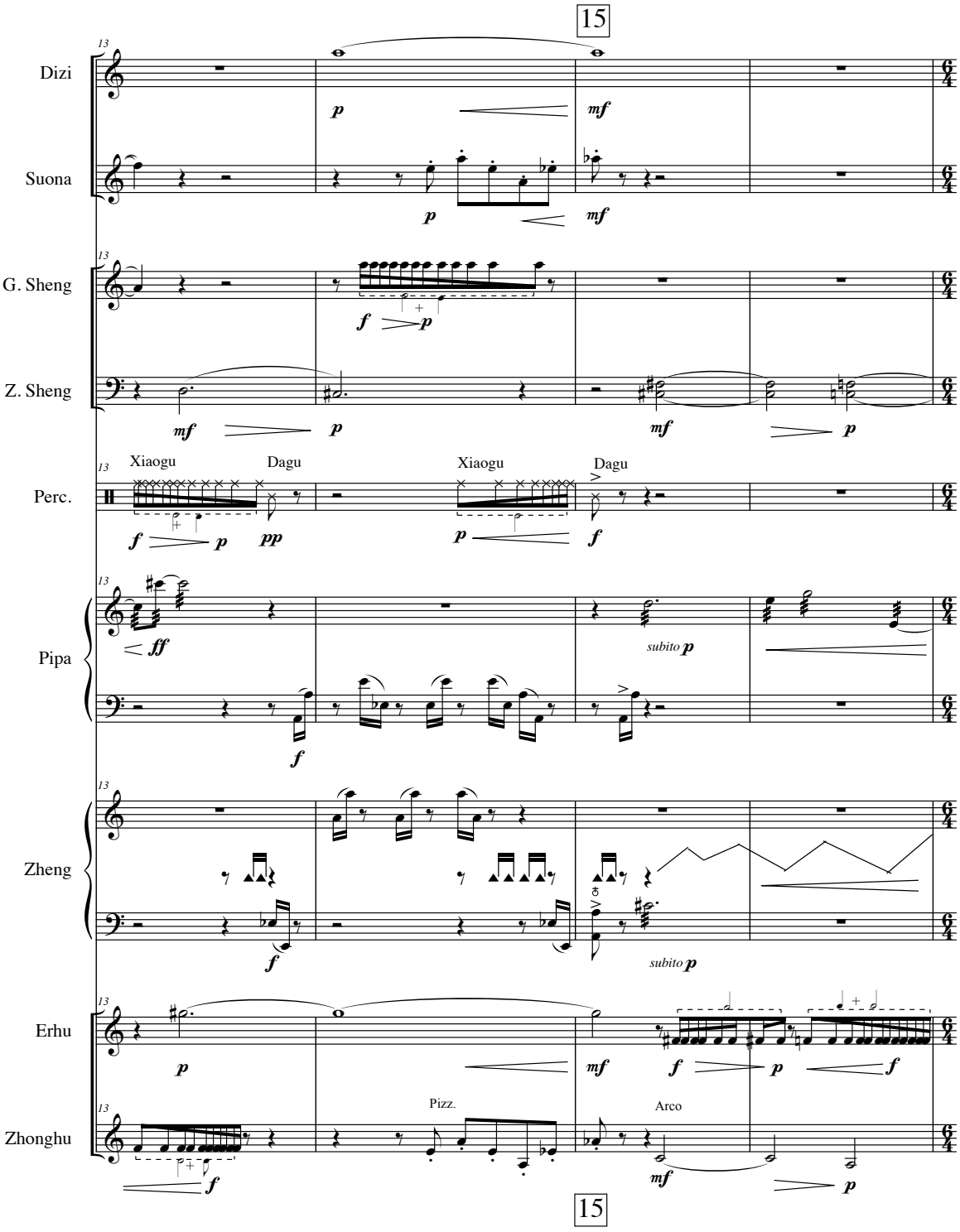
Even more I awake -
Snowfall at night.
-Matsuo Basho

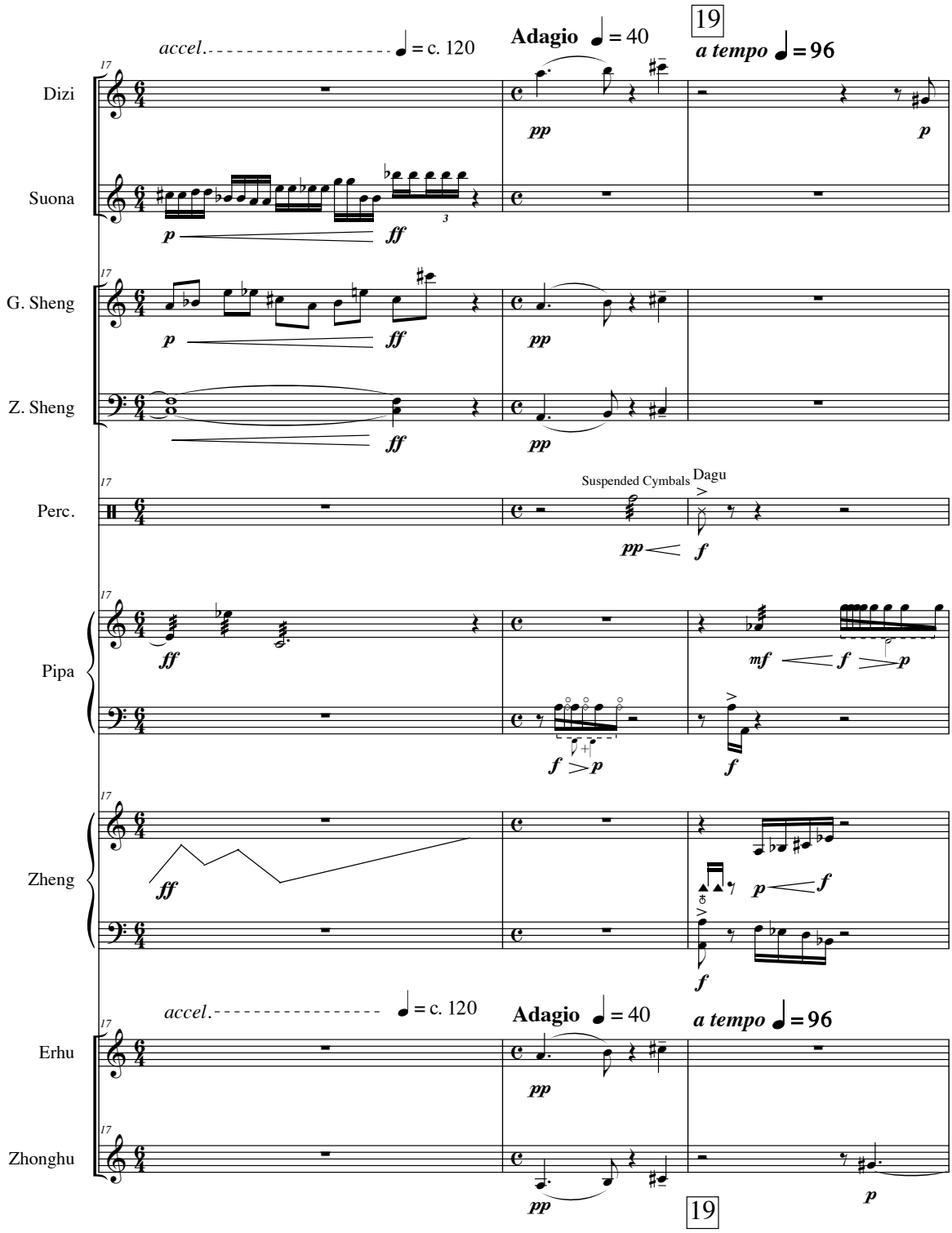


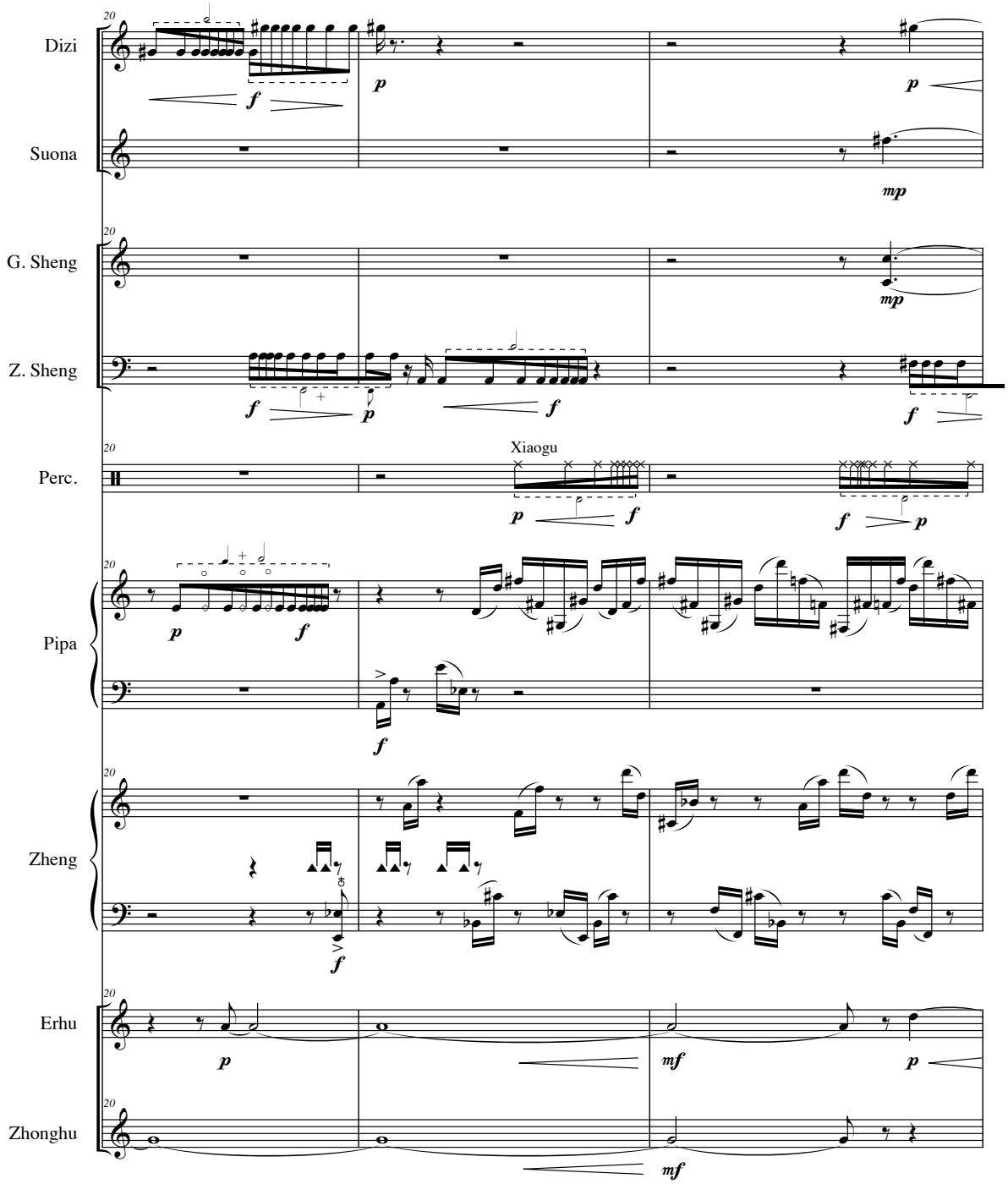

4
Dizi
Suona
G. Sheng
Z. Sheng
Perc.
Xiaogu
Pipa
Zheng
Erhu
Zhonghu
4

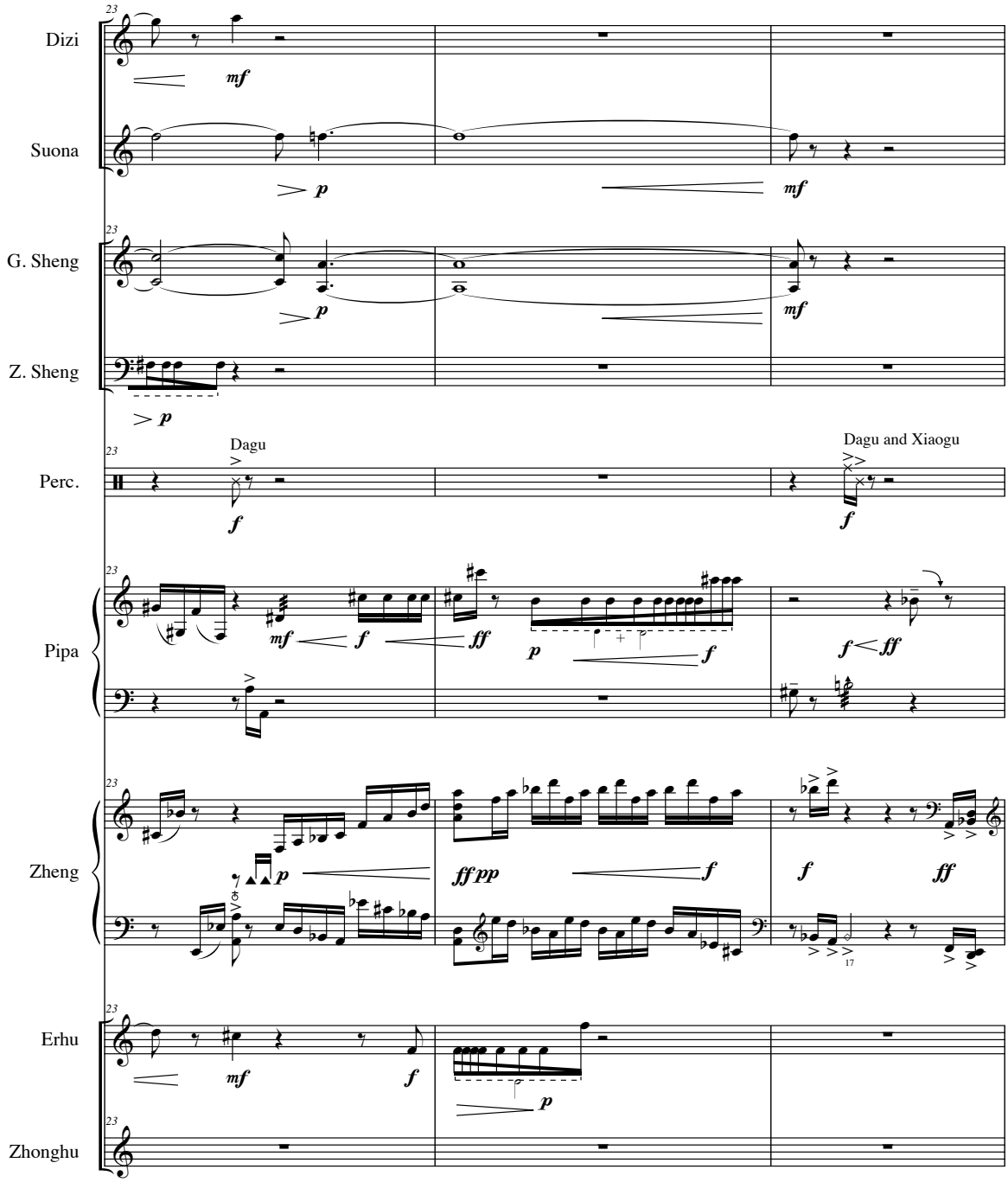

8
Dizi
Suona
G. Sheng
Z. Sheng
Perc.
Dagu
Pipa
Zheng
Erhu
Zhonghu
8

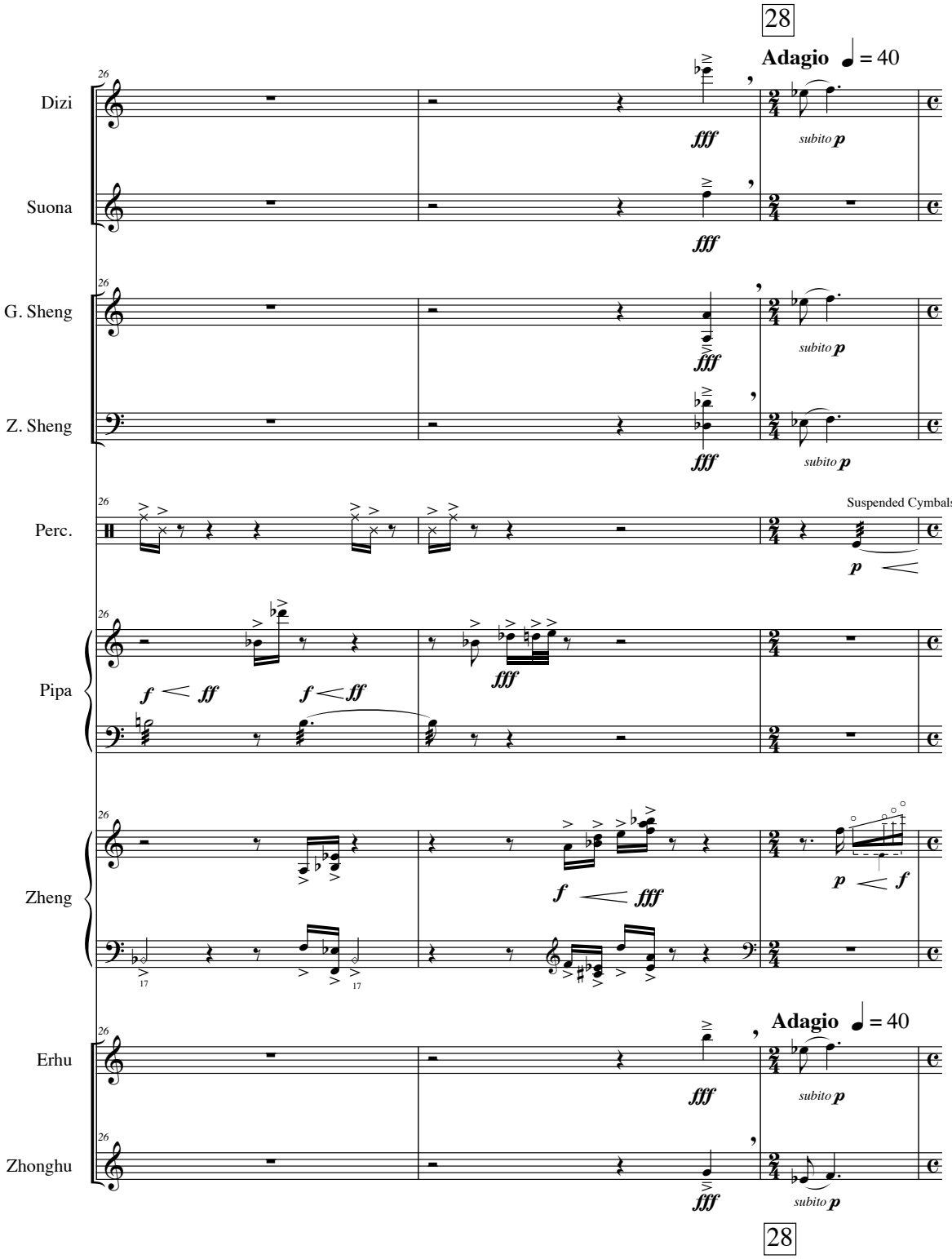

12
Dizi
Suona
G. Sheng
Z. Sheng
Perc.
Wood blocks
Dagu
Wood blocks
Dagu
Pipa
Zheng
Erhu
Zhonghu
12

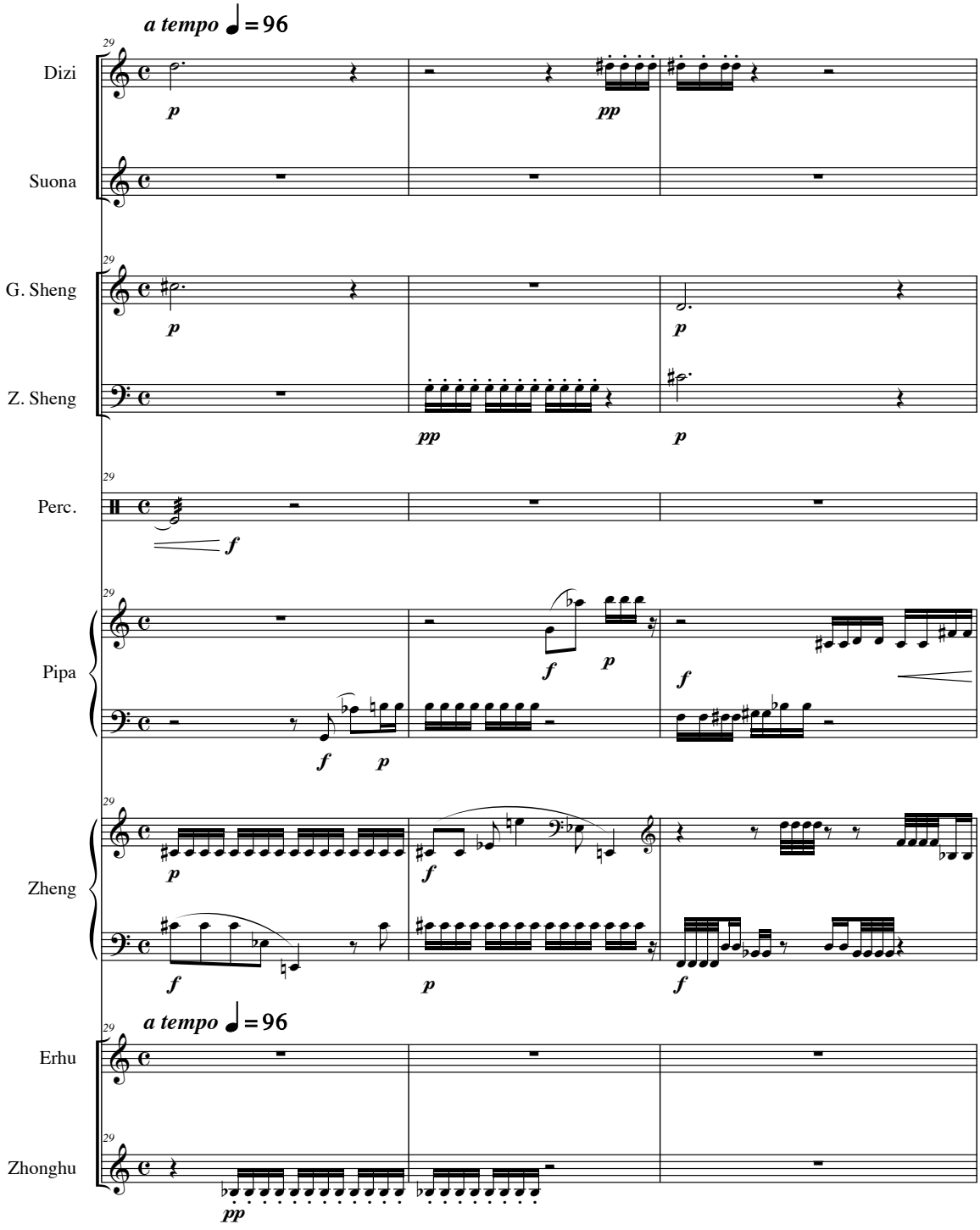

15
Dizi
Suona
G. Sheng
Z. Sheng
Perc.
Xiaogu
Dagu
Xiaogu
Dagu
Pipa
subito p
Zheng
subito p
Erhu
Zhonghu
Pizz.
Arco
15

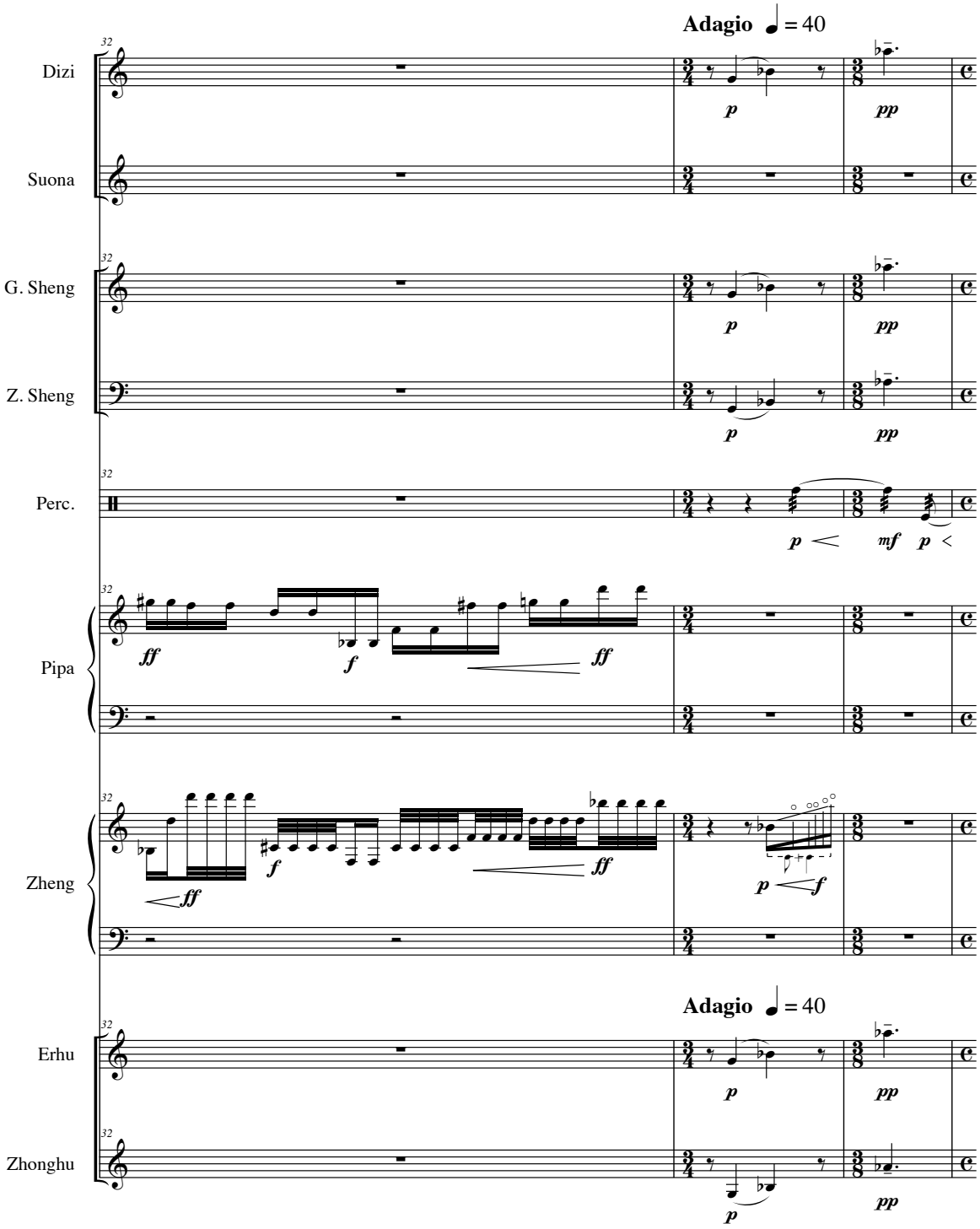

accel. ♩ = c. 120
Adagio ♩ = 40
19
a tempo ♩ = 96
Dizi
Suona
G. Sheng
Z. Sheng
Perc.
Suspended Cymbals
Dagu
Pipa
Zheng
Erhu
Zhonghu
accel. ♩ = c. 120
Adagio ♩ = 40
a tempo ♩ = 96
19

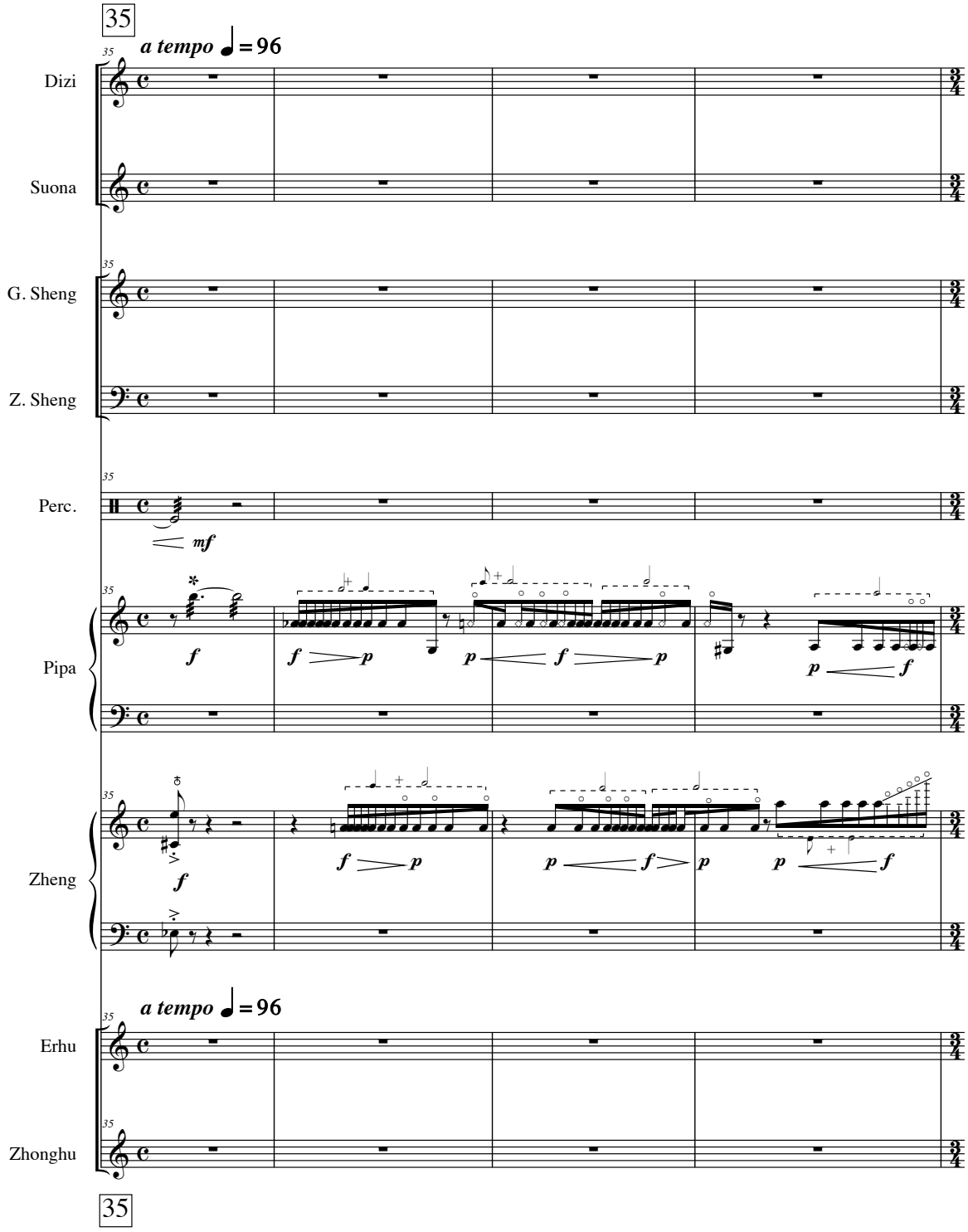

Dizi
Suona
G. Sheng
Z. Sheng
Perc.
Xiaogu
Pipa
Zheng
Erhu
Zhonghu

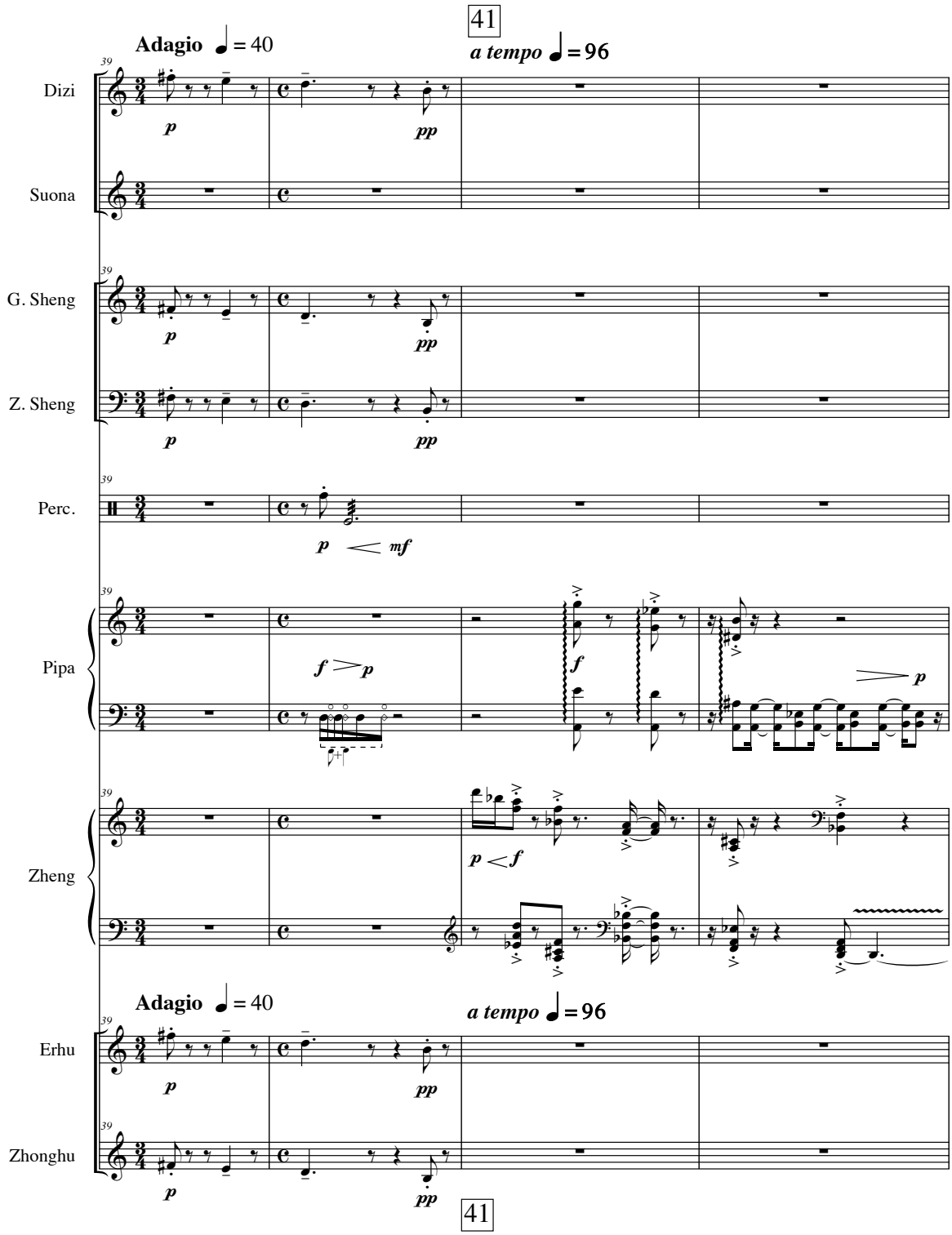

Dizi
Suona
G. Sheng
Z. Sheng
Perc.
Dagu
Dagu and Xiaogu
Pipa
Zheng
Erhu
Zhonghu

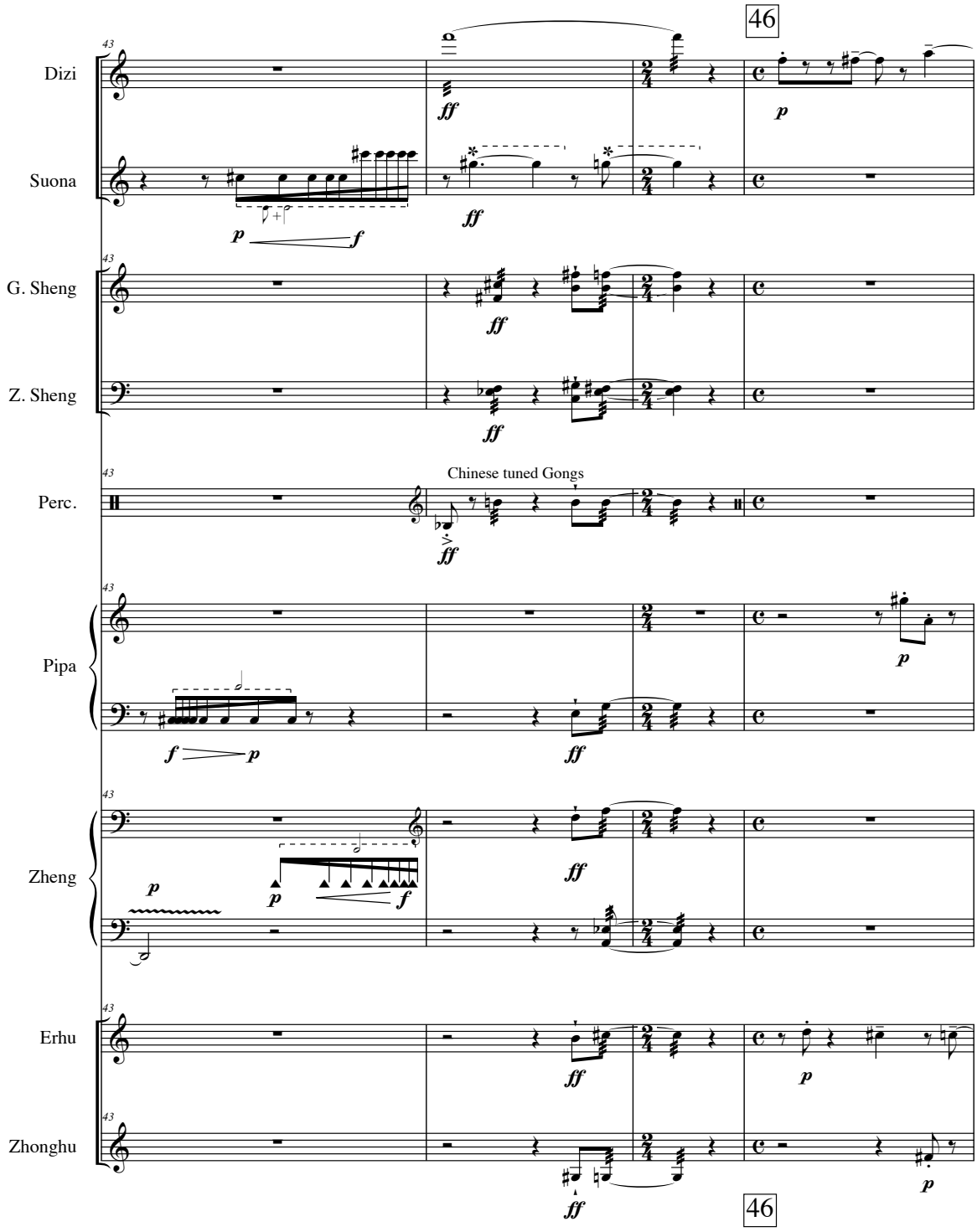

28
Adagio ♩ = 40
Dizi
Suona
G. Sheng
Z. Sheng
Perc.
Pipa
Zheng
Erhu
Zhonghu
Suspended Cymbals
fff
subito p
f ff
p f
Adagio ♩ = 40
28

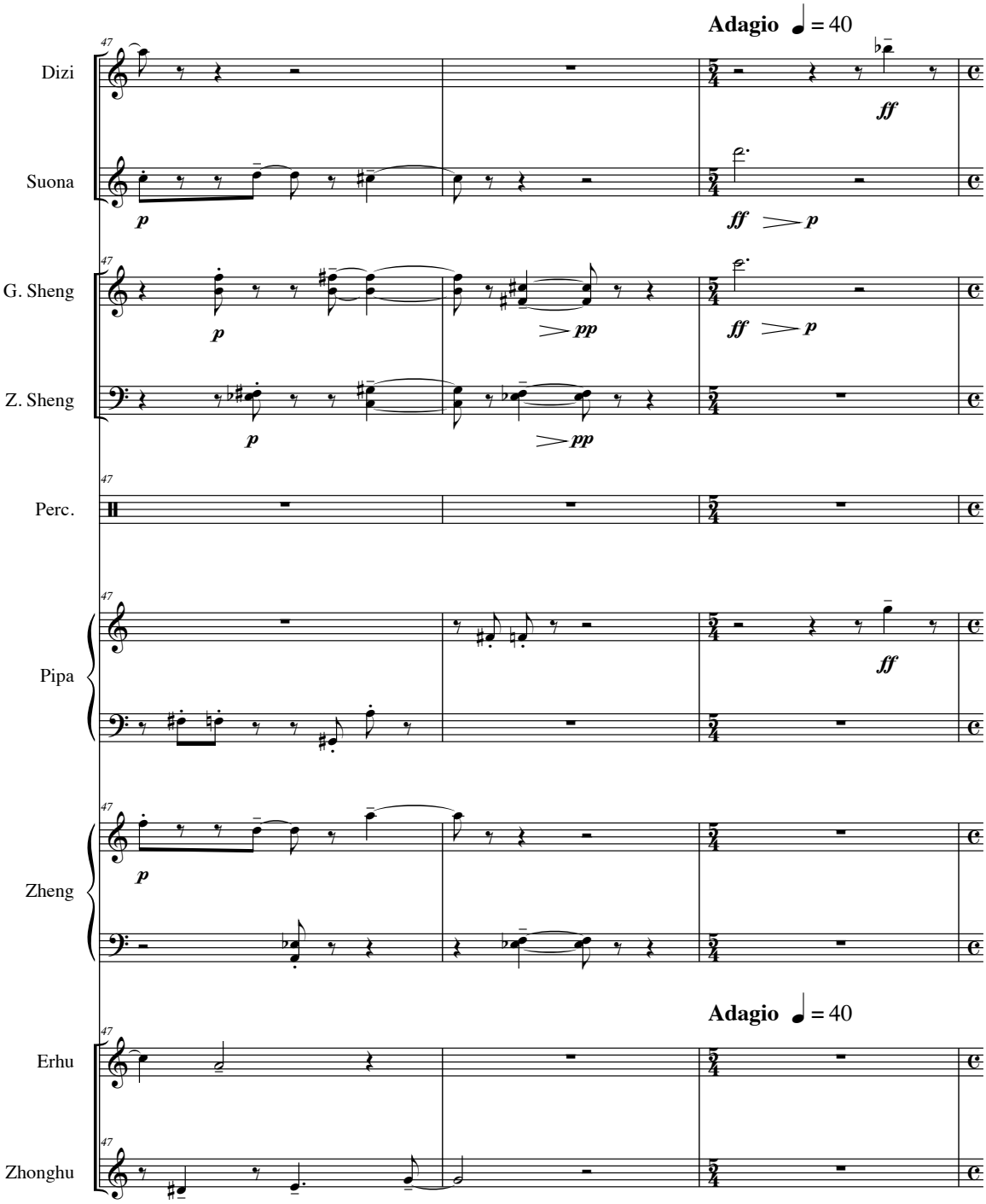

a tempo ♩= 96
29
Dizi
Suona
G. Sheng
Z. Sheng
Perc.
Pipa
Zheng
Erhu
Zhonghu
p
pp
f

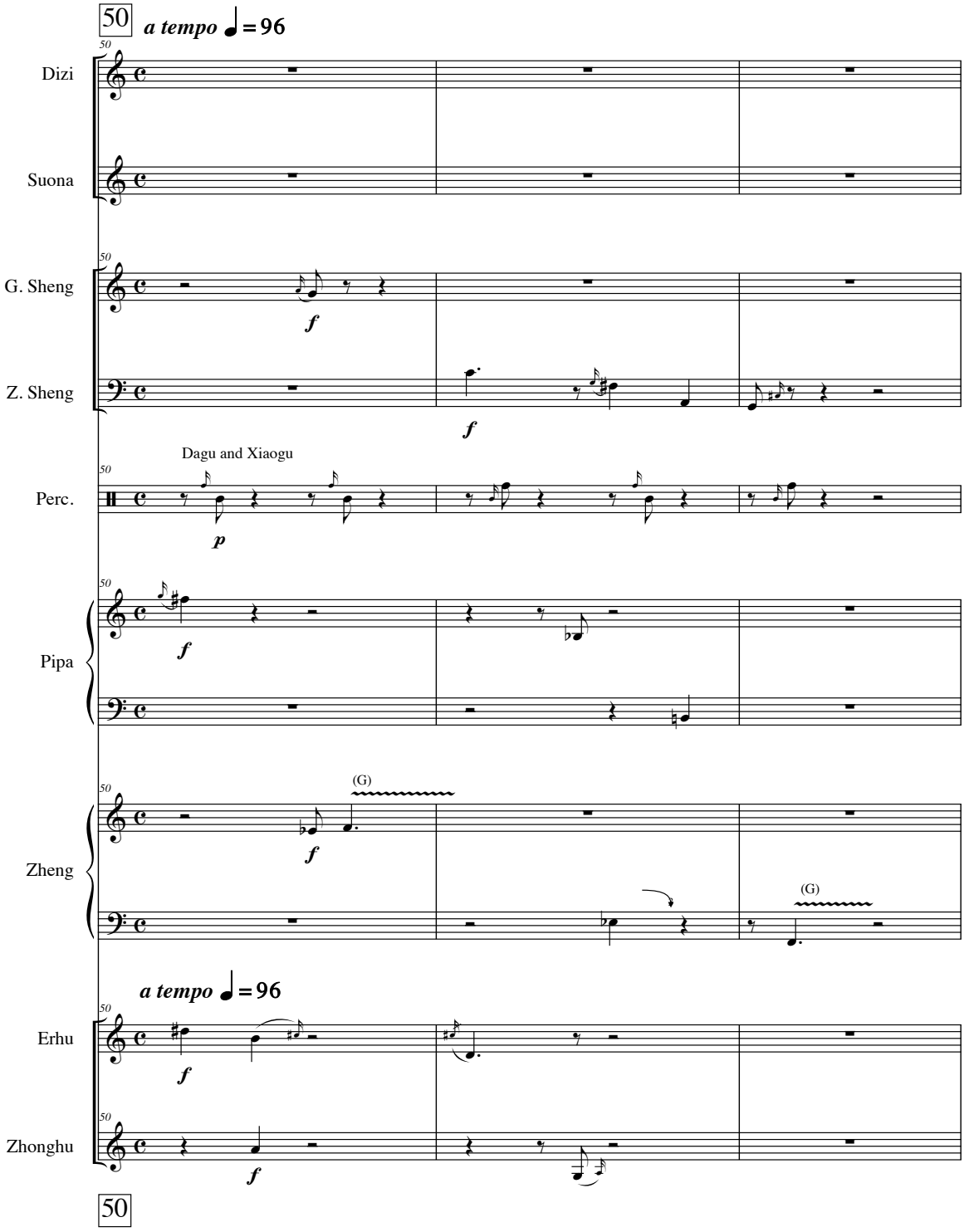

Adagio ♩ = 40
Dizi
Suona
G. Sheng
Z. Sheng
Perc.
Pipa
Zheng
Adagio ♩ = 40
Erhu
Zhonghu

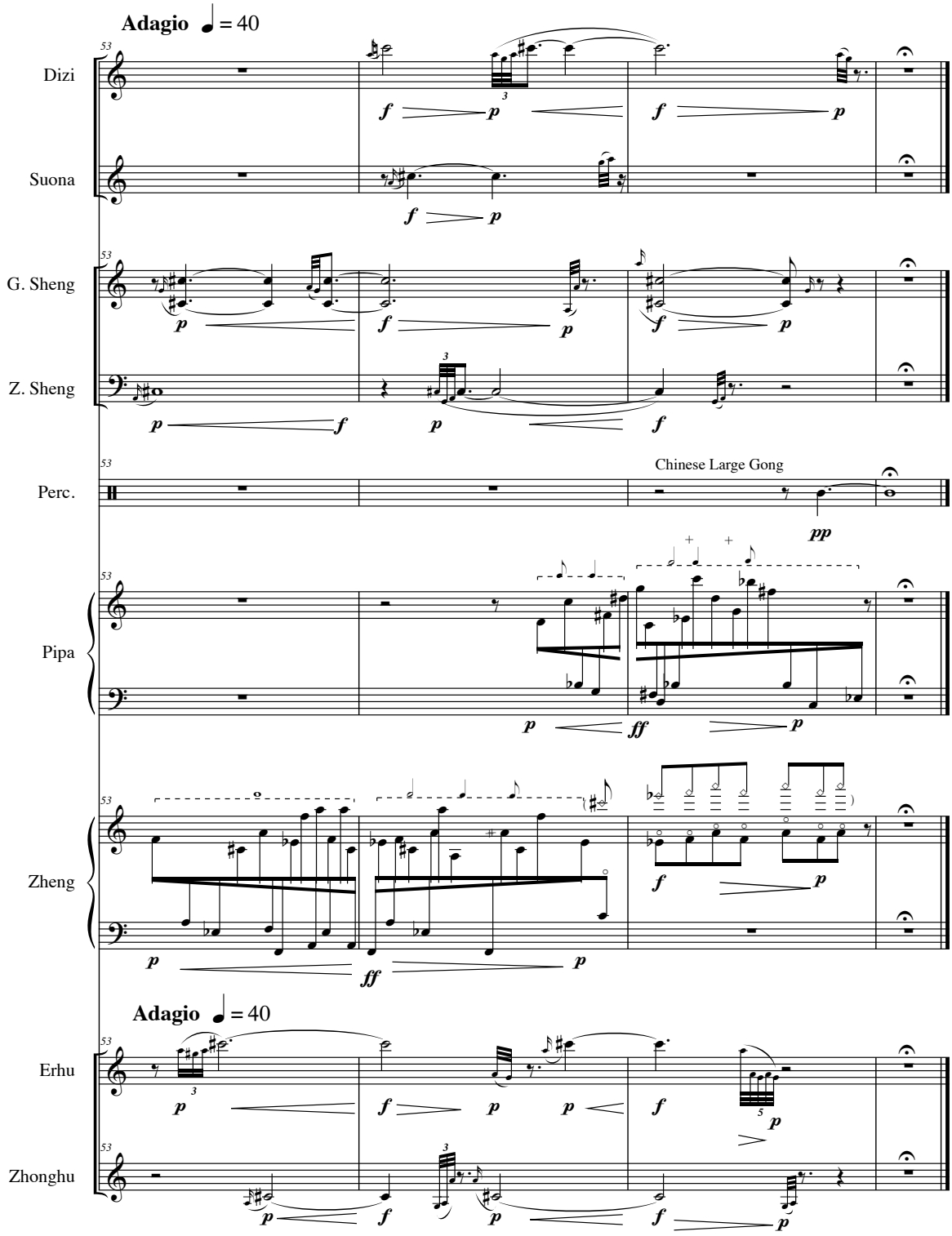

35
a tempo ♩= 96
Dizi
Suona
G. Sheng
Z. Sheng
Perc.
mf
Pipa
Zheng
a tempo ♩= 96
Erhu
Zhonghu
35


41
Adagio ♩ = 40
a tempo ♩ = 96
Dizi
Suona
G. Sheng
Z. Sheng
Perc.
Pipa
Zheng
Erhu
Zhonghu
Adagio ♩ = 40
a tempo ♩ = 96
41


46
Dizi
Suona
G. Sheng
Z. Sheng
Perc.
Chinese tuned Gongs
Pipa
Zheng
Erhu
Zhonghu
46


Adagio ♩ = 40
Dizi
Suona
G. Sheng
Z. Sheng
Perc.
Pipa
Zheng
Erhu
Zhonghu
Adagio ♩ = 40


50
a tempo ♩=96
Dizi
Suona
G. Sheng
Z. Sheng
Dagu and Xiaogu
Perc.
Pipa
Zheng
(G)
(G)
a tempo ♩=96
Erhu
Zhonghu
50


Adagio ♩ = 40
Dizi
Suona
G. Sheng
Z. Sheng
Perc.
Chinese Large Gong
Pipa
Zheng
Adagio ♩ = 40
Erhu
Zhonghu

Chapter II

JANET JIERU CHEN

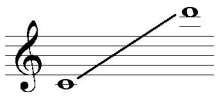
SPRING AIR
and
WINTER NIGHT

Dizi, Zheng and String Quartet
(2012)

Notes on Instruments and Notation

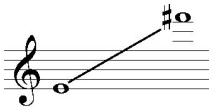
Dizi:

F Dizi
Range:



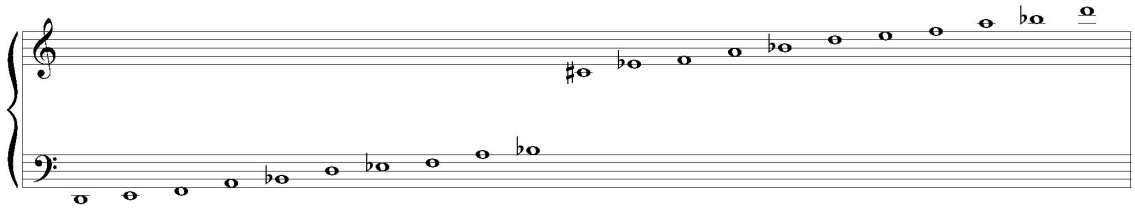
Small D Dizi
Range:

Big A Dizi
Range:



Zheng:

I. Tuned as follows:



II. Notation

1. Harmonics

2. Vibrato

3. Stop sound

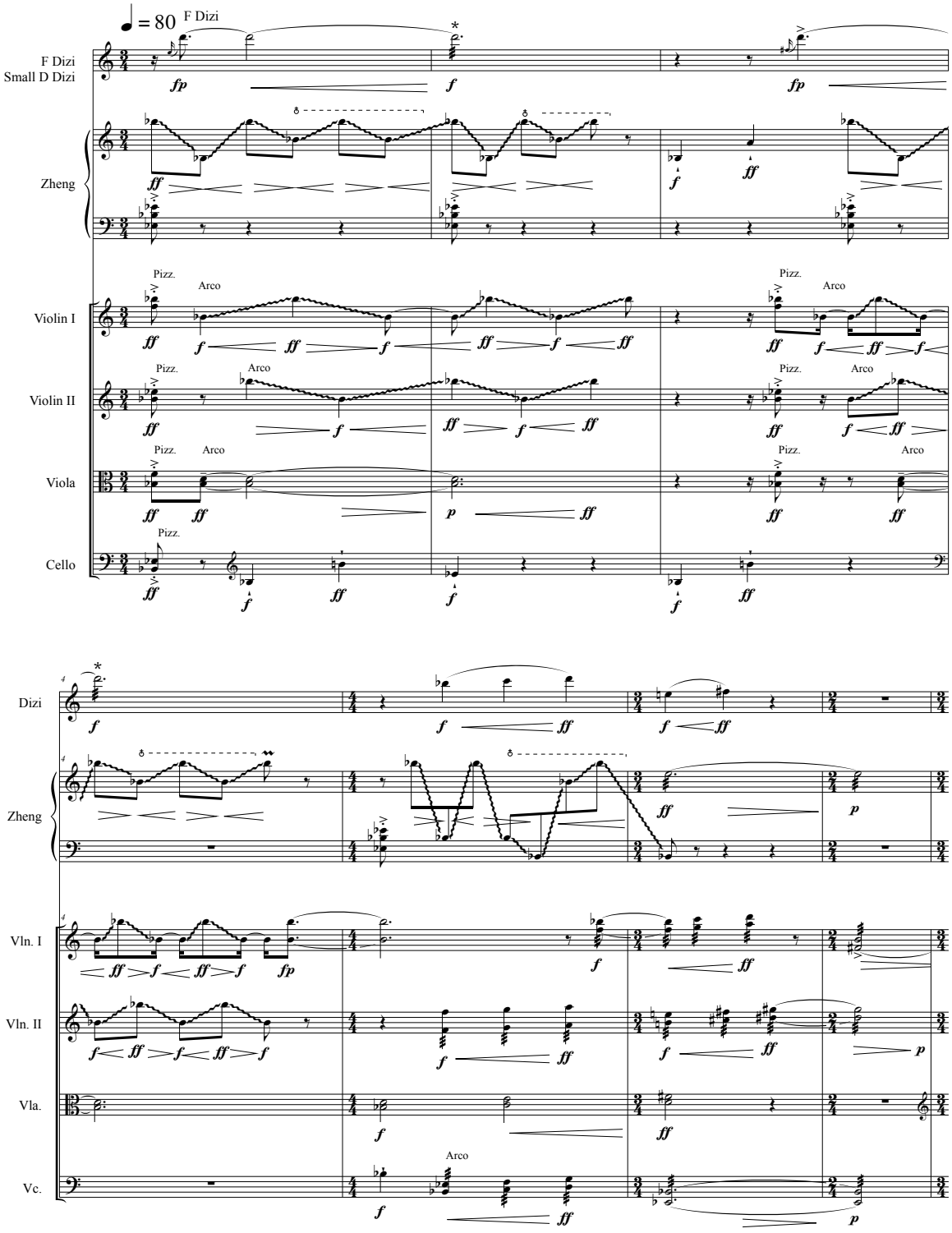
4. Pluck the specific string (as it is numbered) from left to right

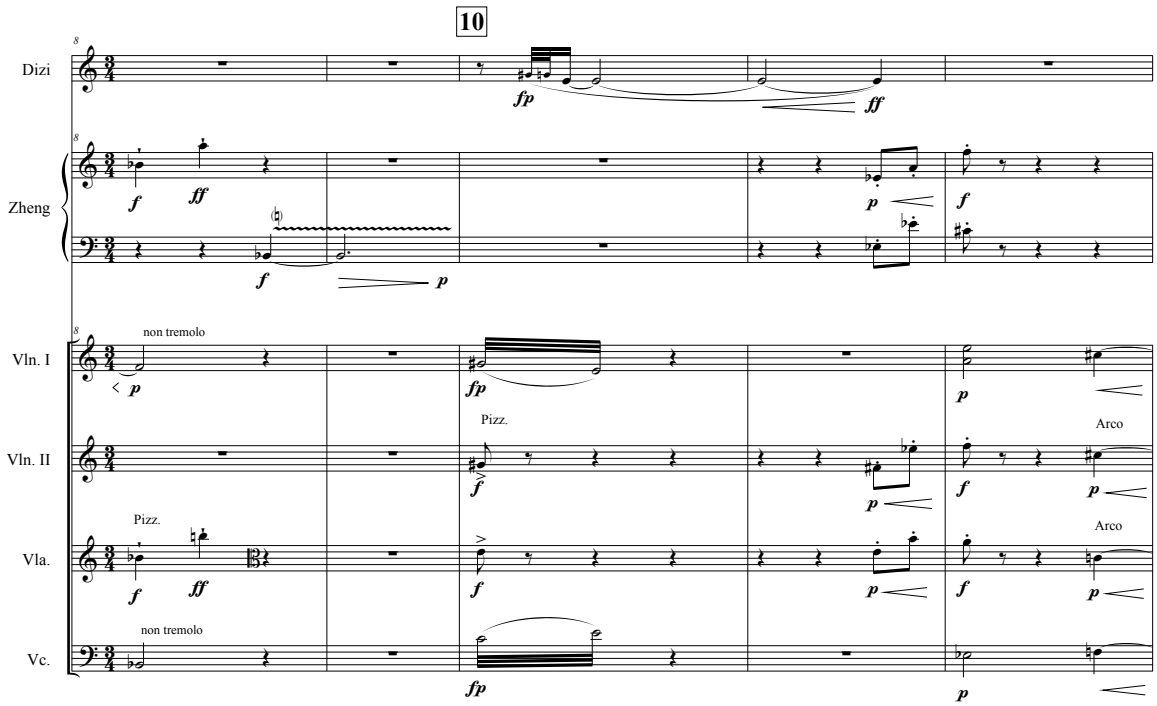
commissioned by Spring Autumn Music, Taiwan

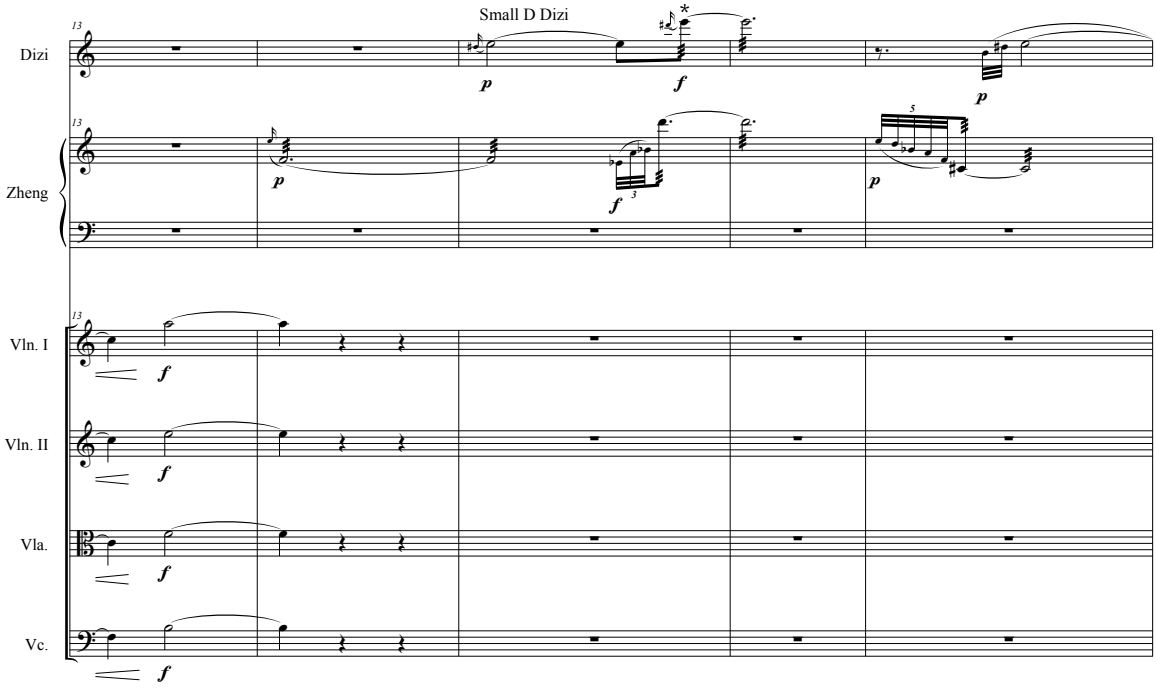
I.

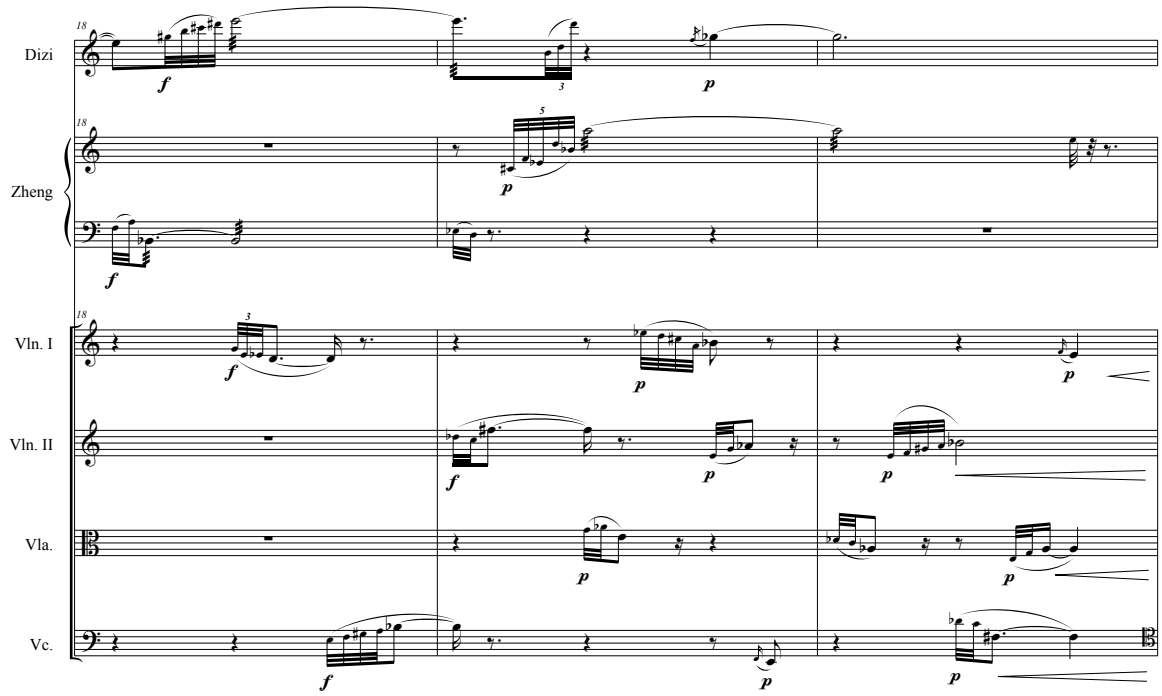
Spring Air

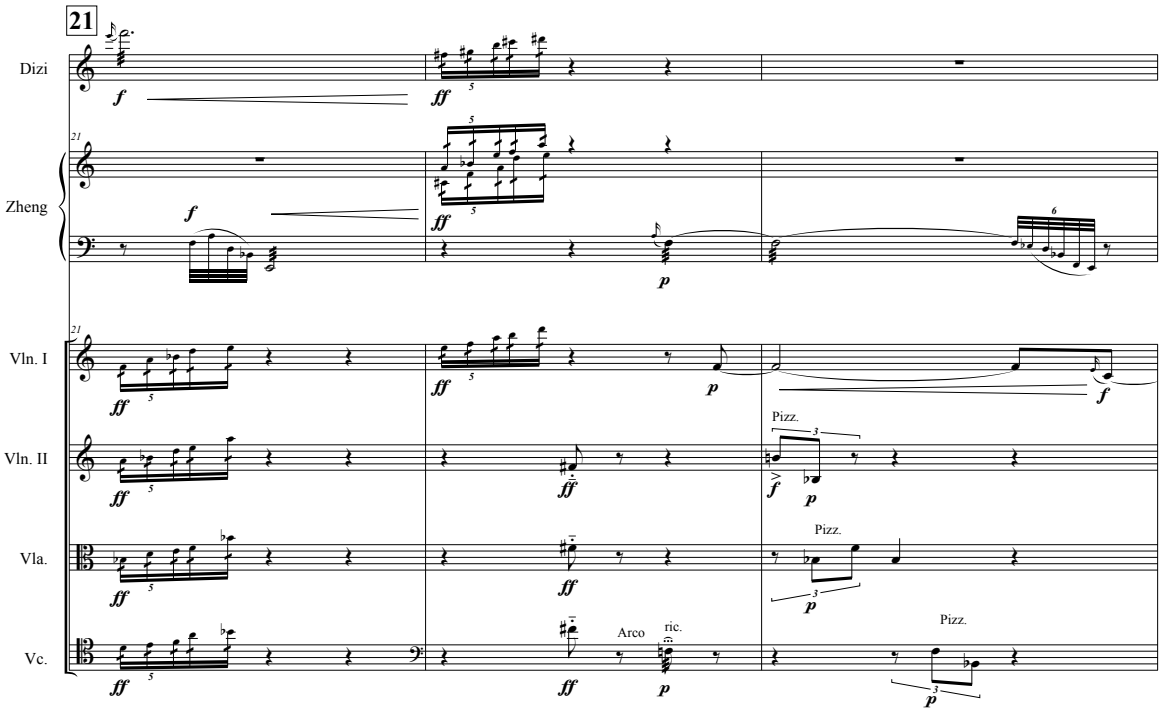
Janet Jieru Chen

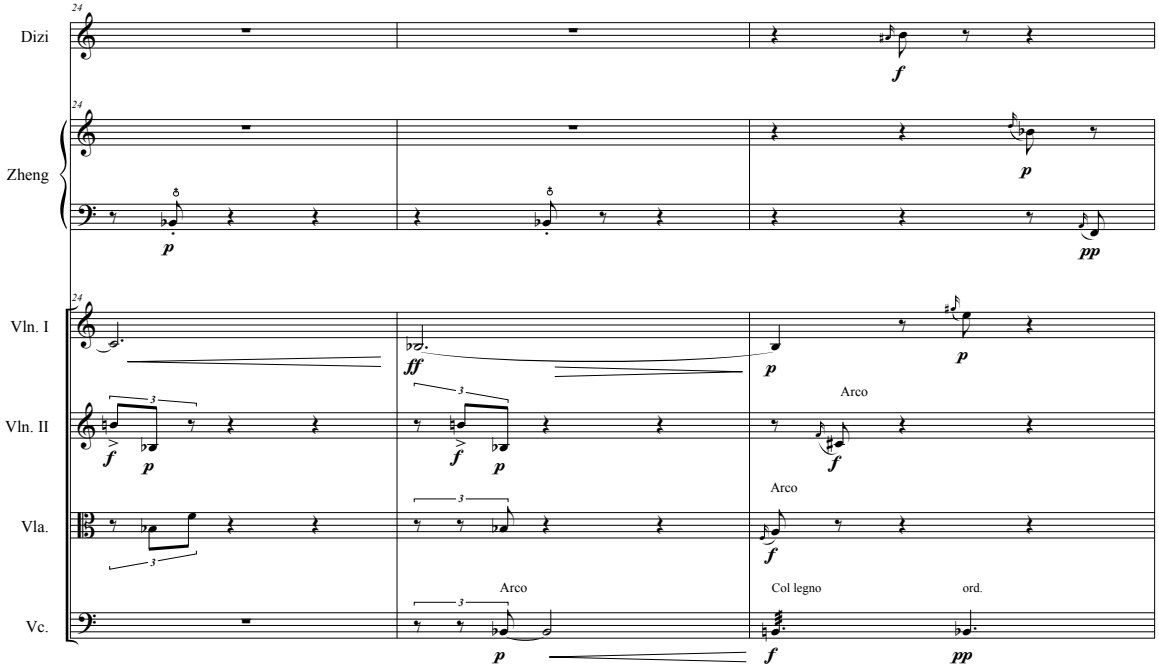


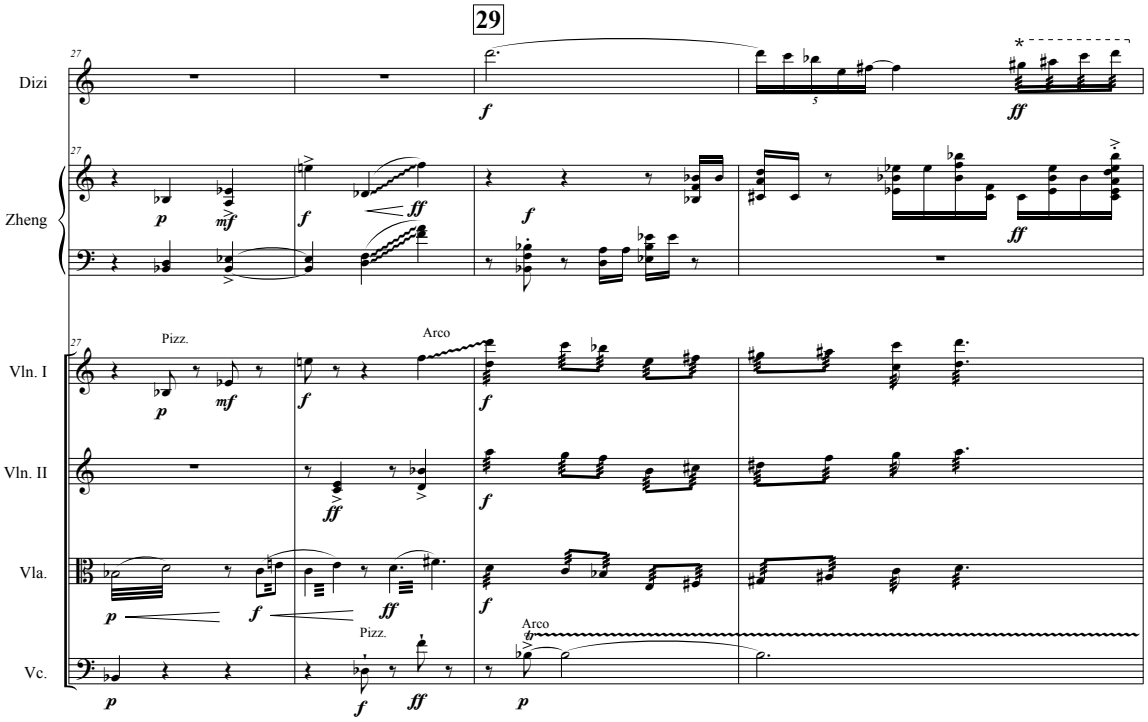

10
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
non tremolo
Pizz.
Arco

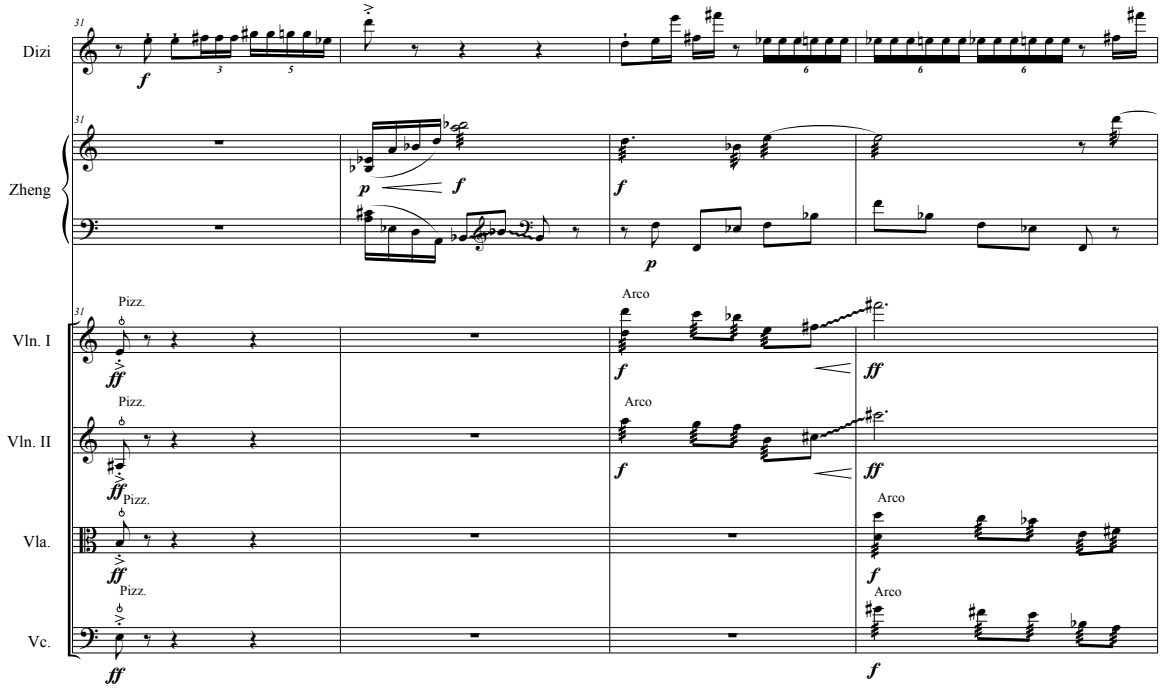

Small D Dizi
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.

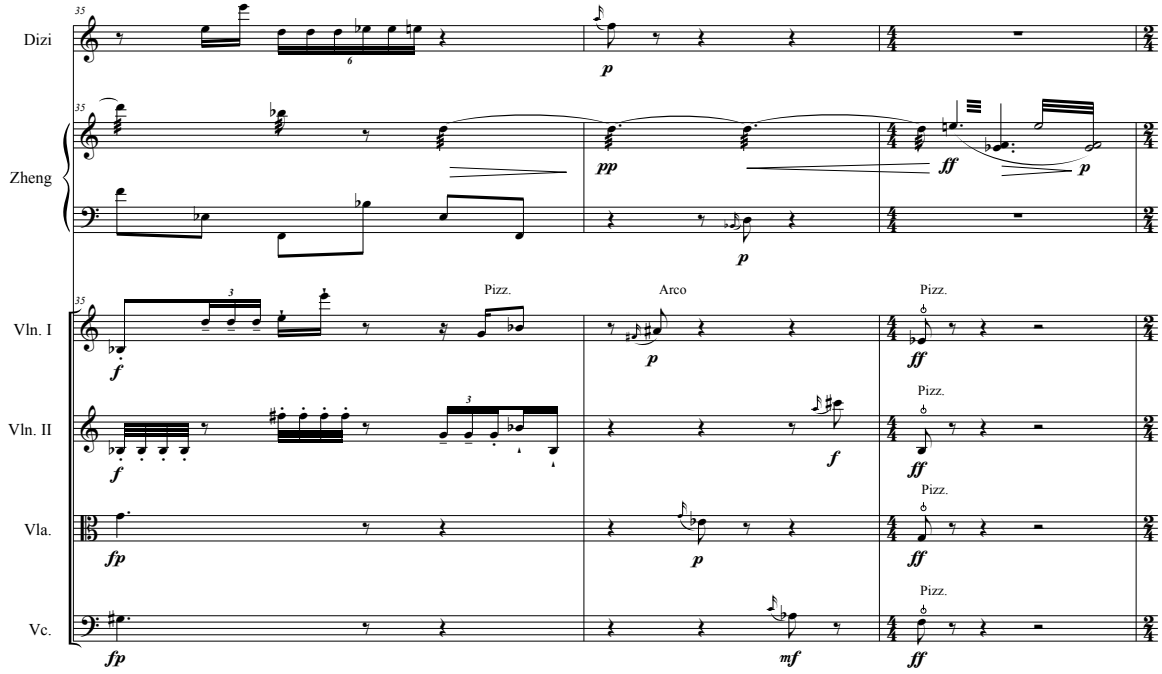

18
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.

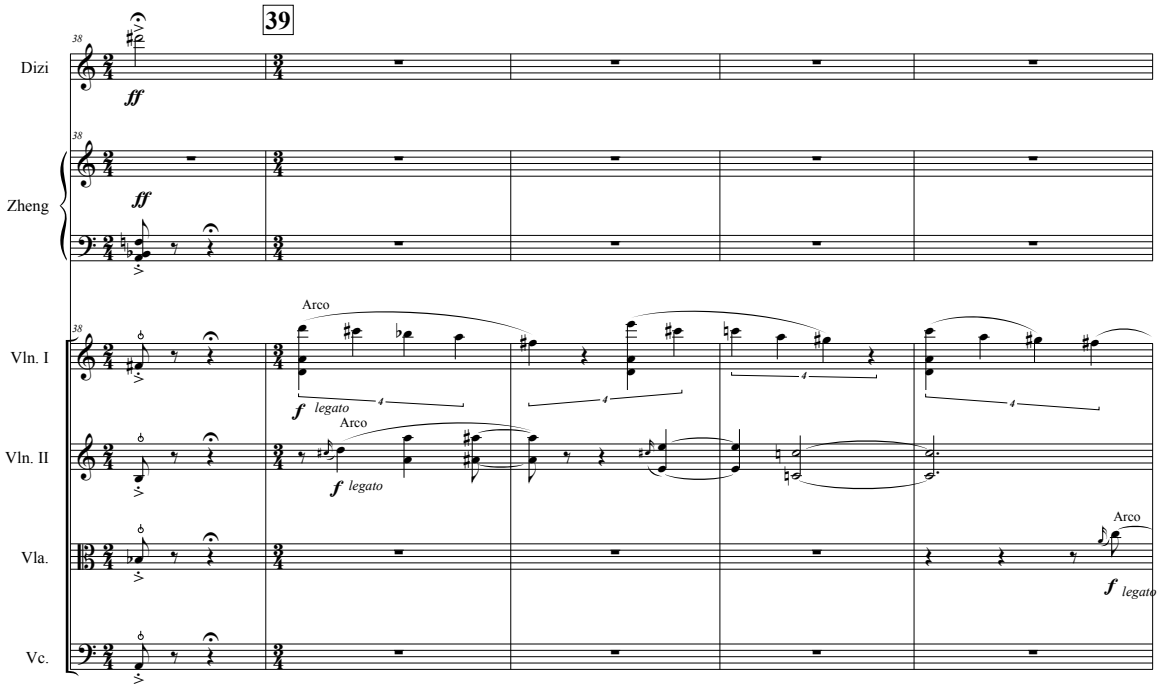

21
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
Pizz.
Arco
ric.
Pizz.
Pizz.

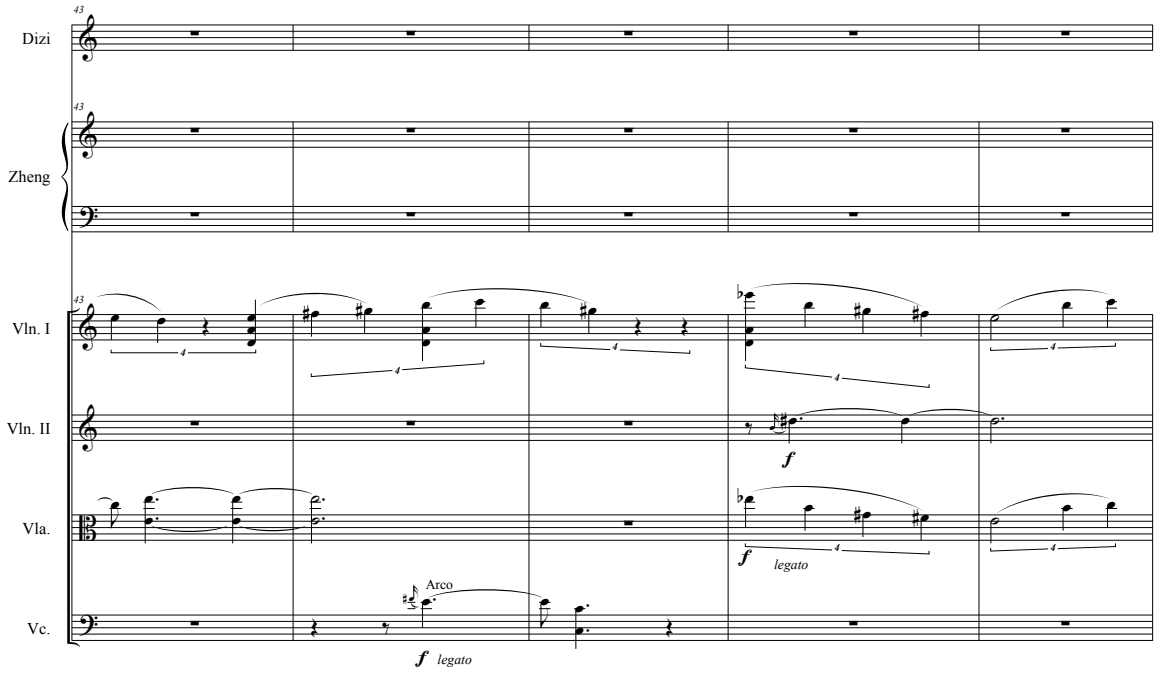

Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
Arco
Arco
Arco
Col legno
ord.

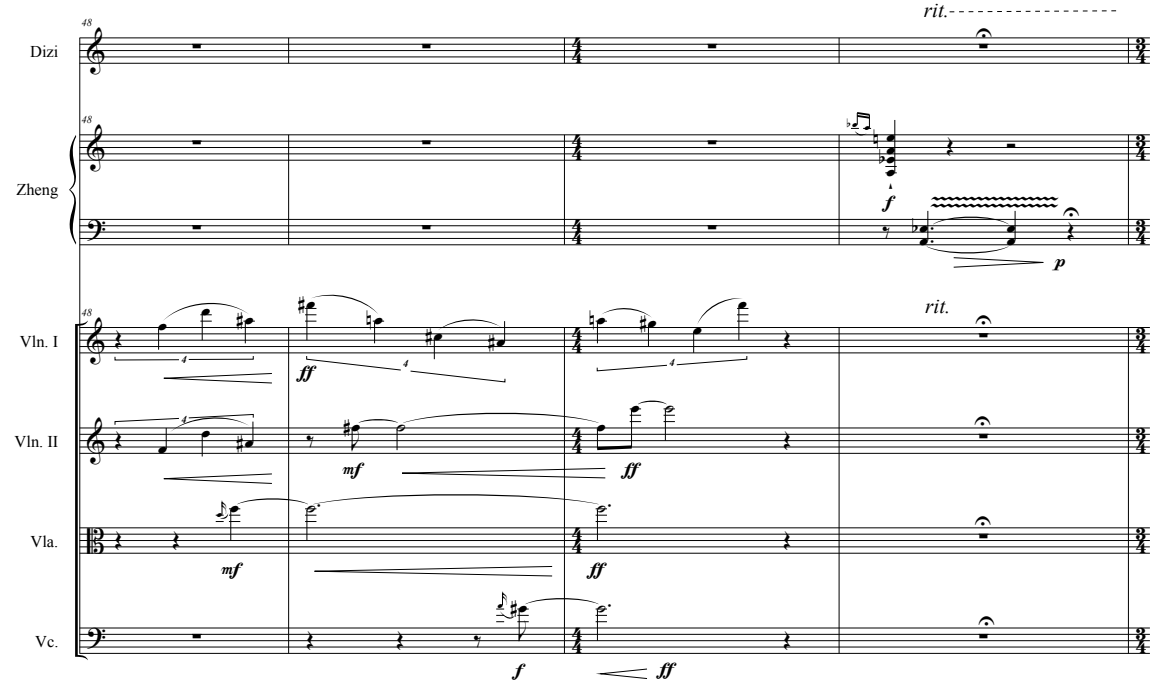

29
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
Pizz.
Arco
Pizz.
Arco

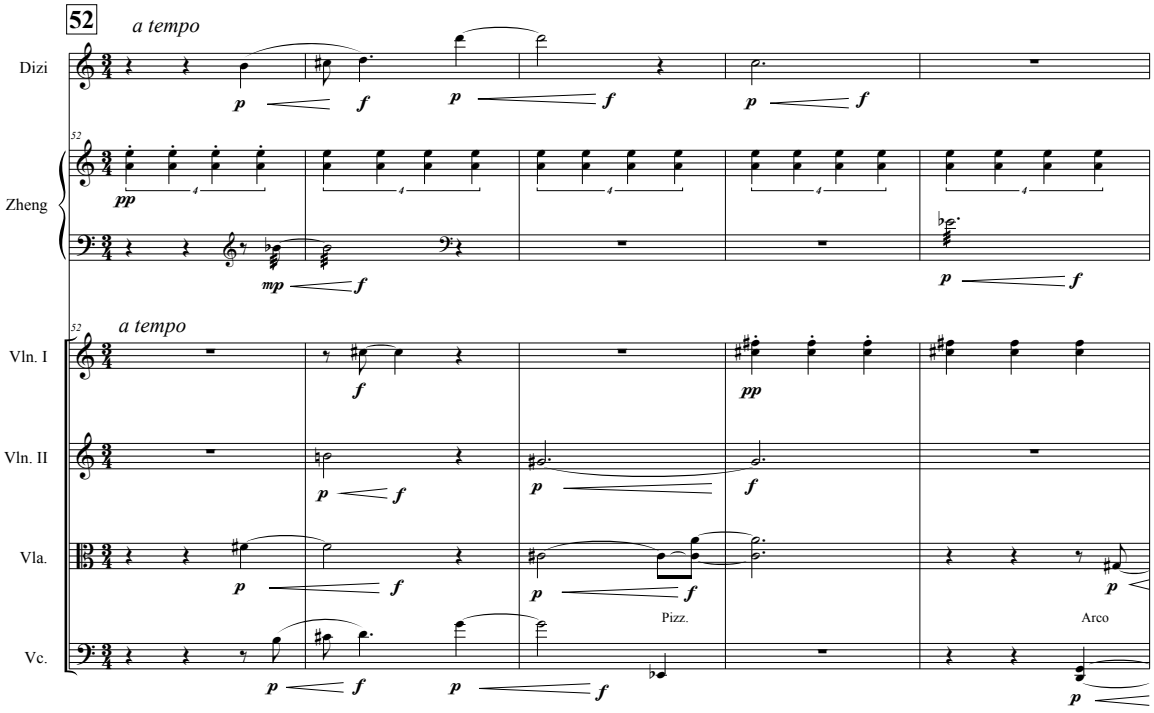

Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
Pizz.
Arco

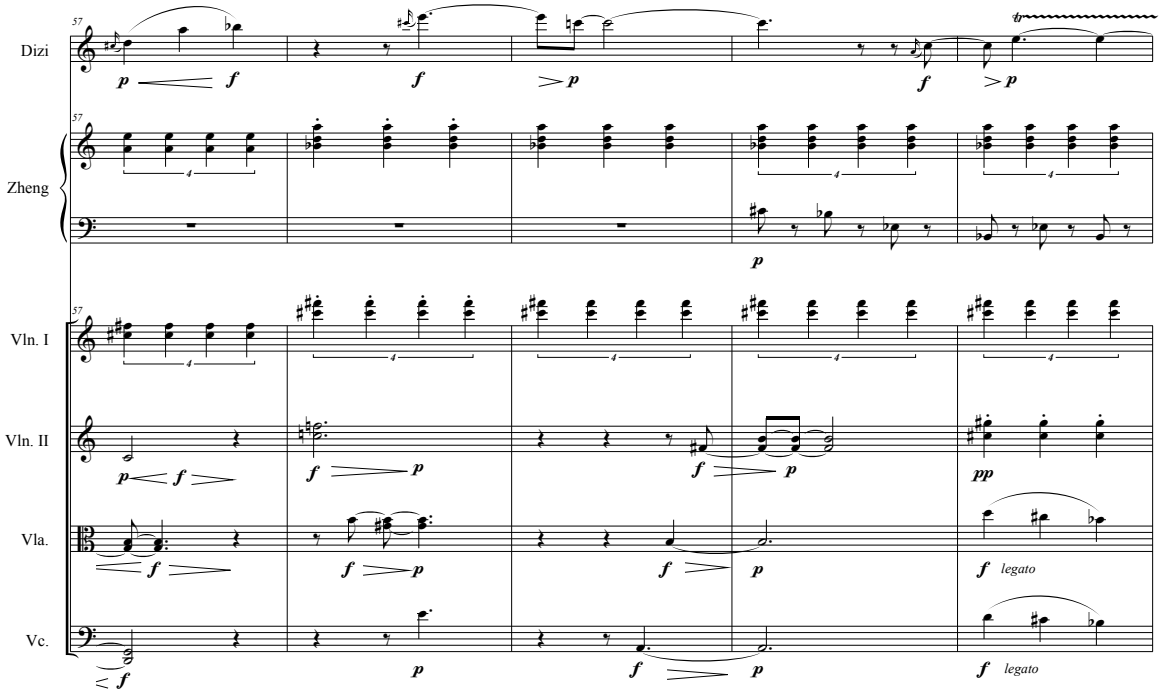

Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
Pizz.
Arco

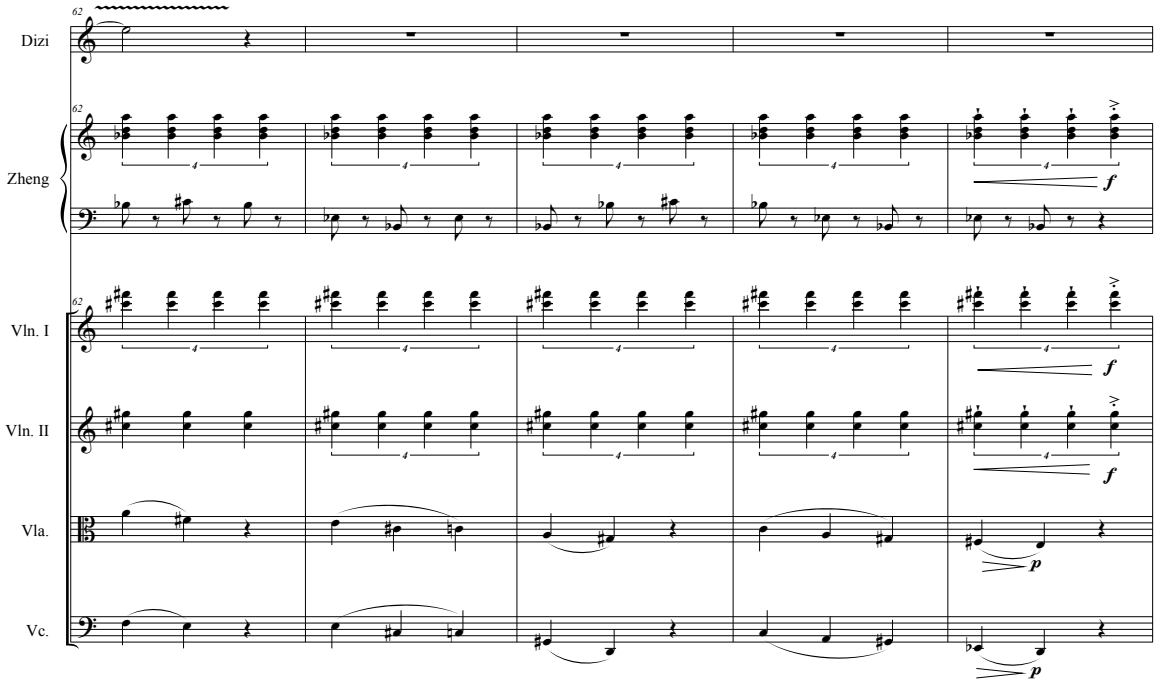

39
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
ff
Arco
f legato

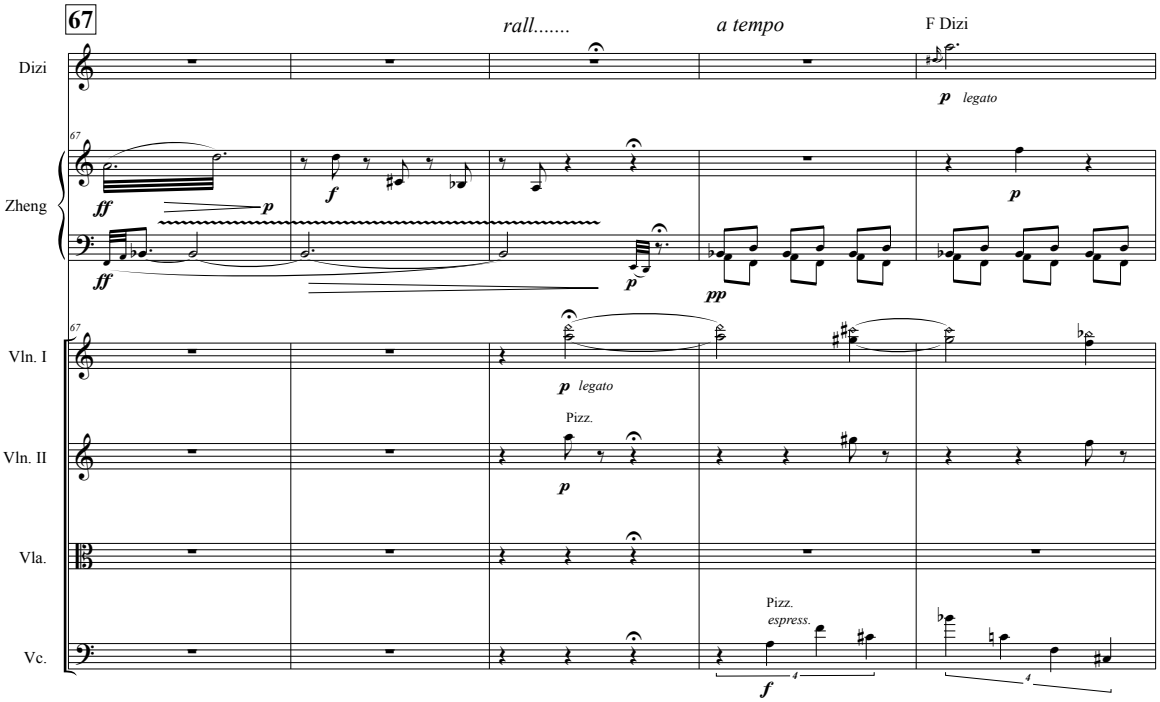

Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
Arco
f legato

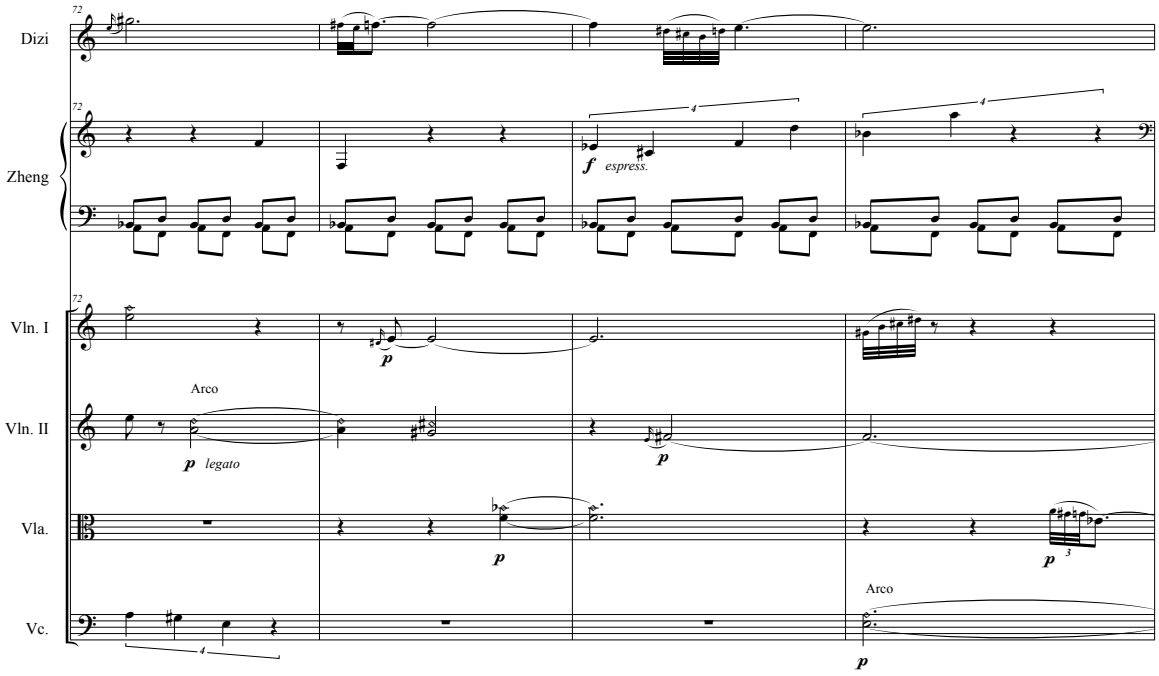

rit.
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
rit.

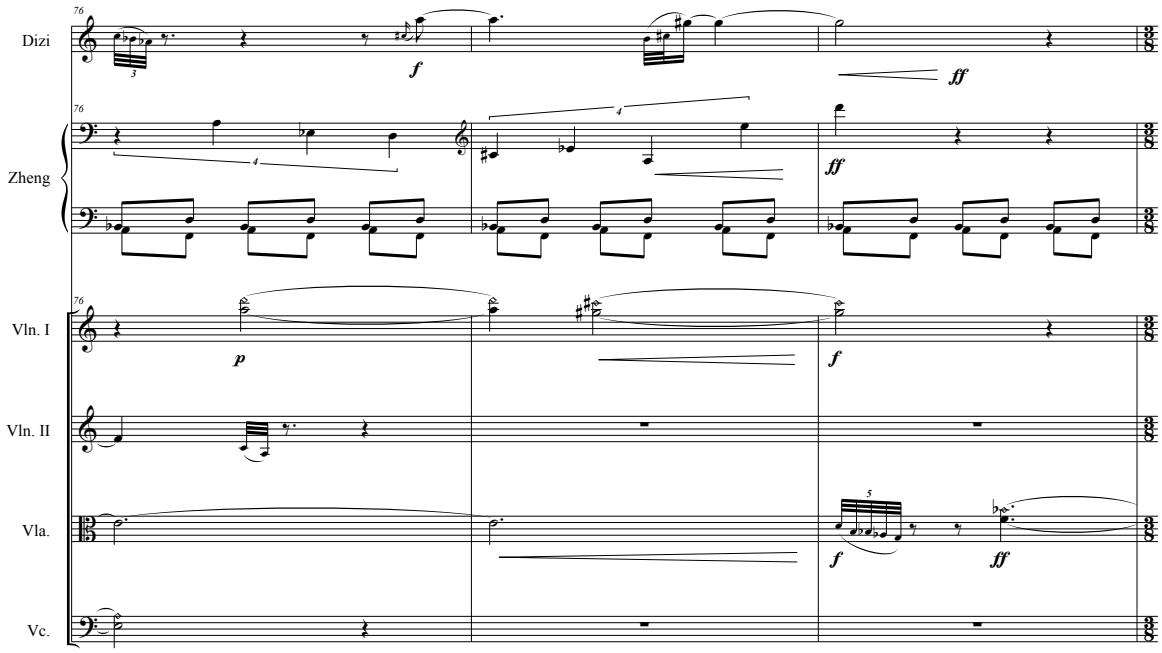

52
a tempo
Dizi
Zheng
a tempo
Vln. I
Vln. II
Vla.
Vc.
Pizz.
Arco

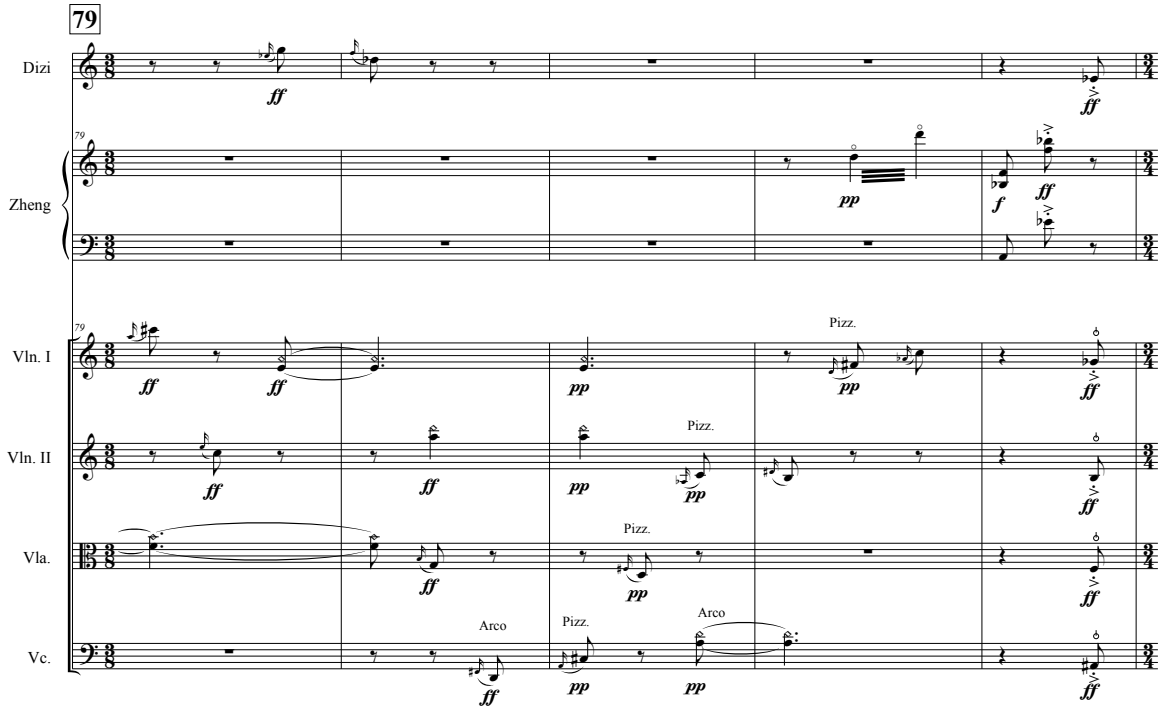

57
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
legato
legato

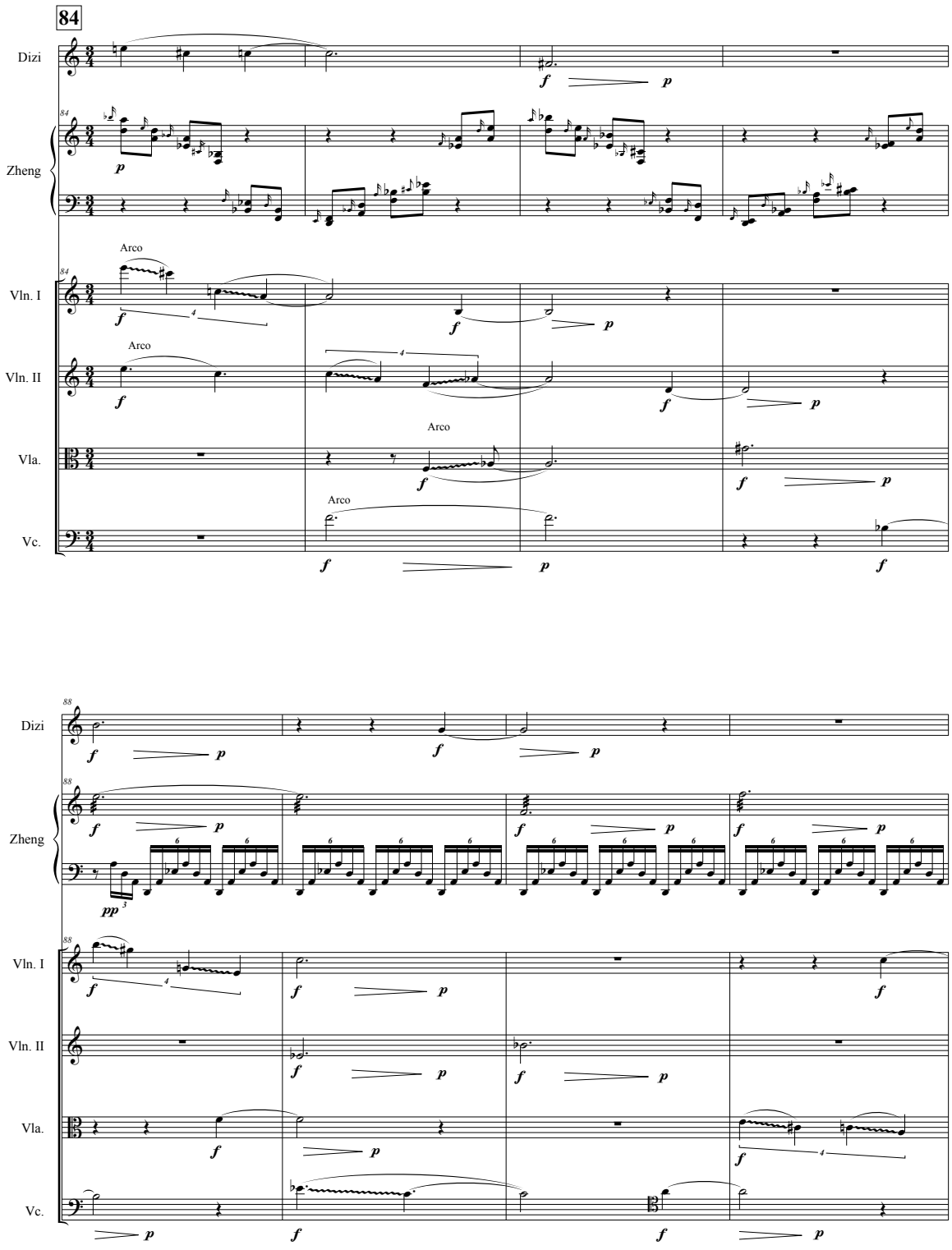

62
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.

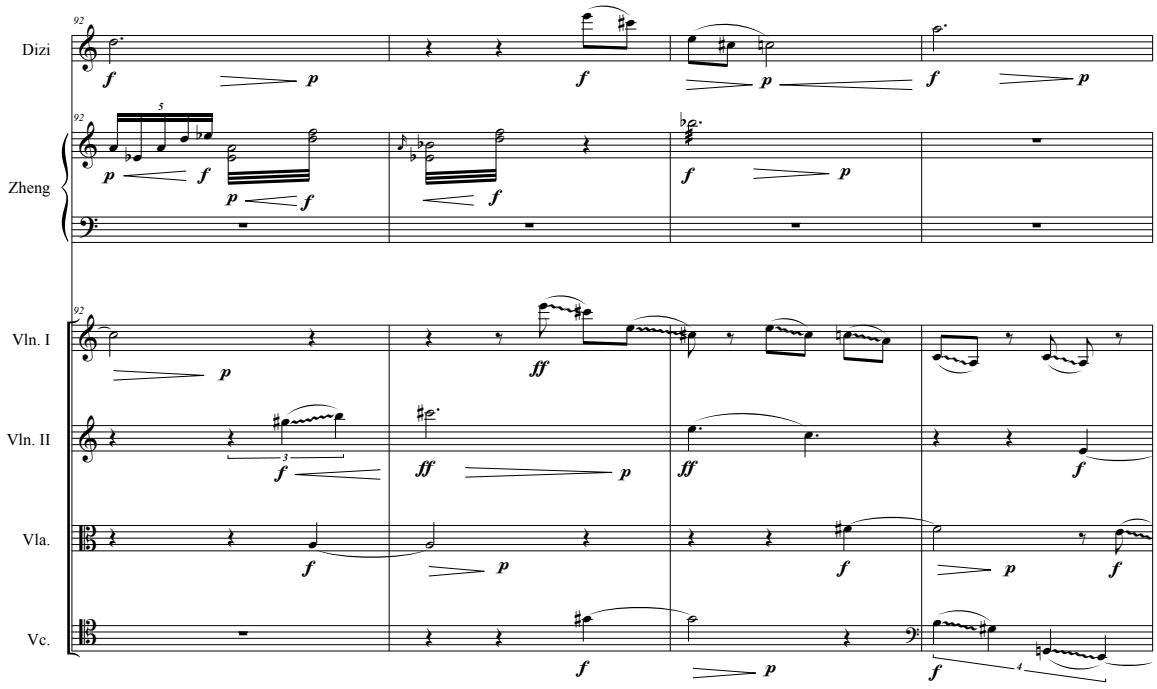

67
rall.....
a tempo
F Dizi
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
legato
Pizz.
espress.

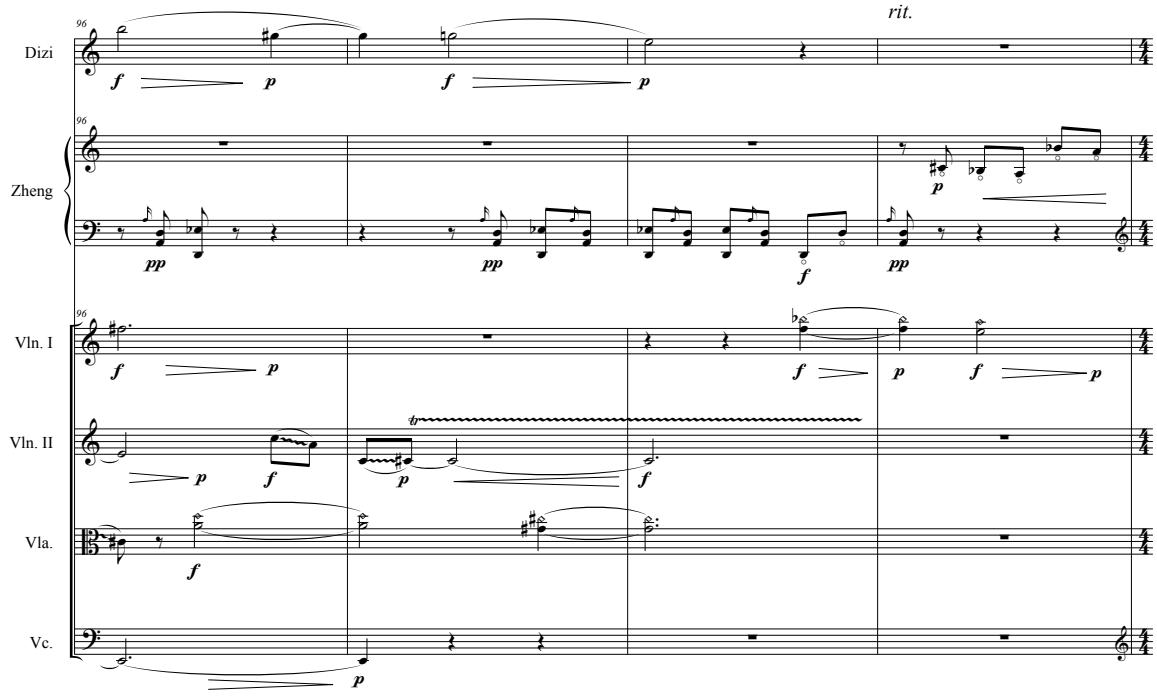

72
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
espress.
Arco
legato

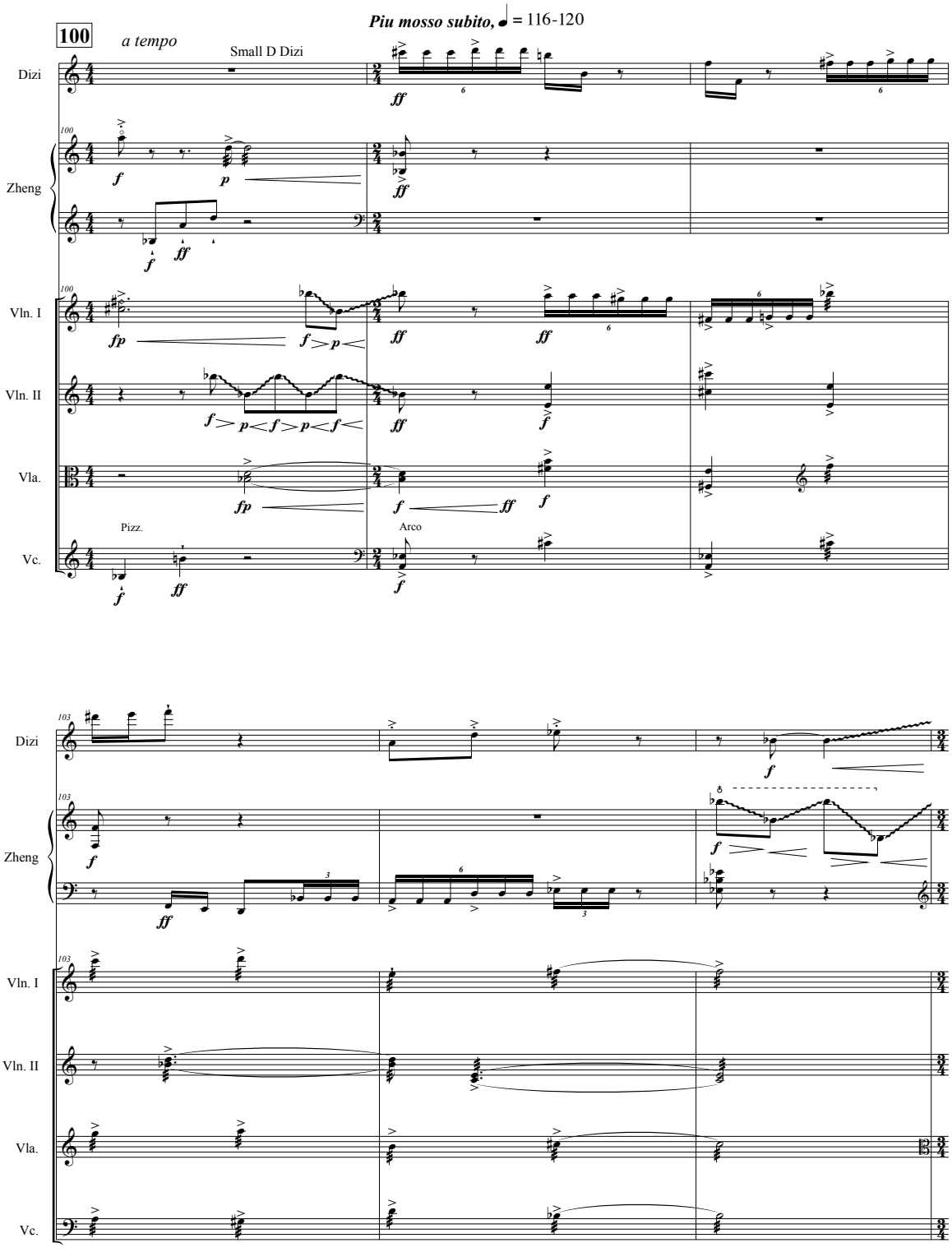

Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.

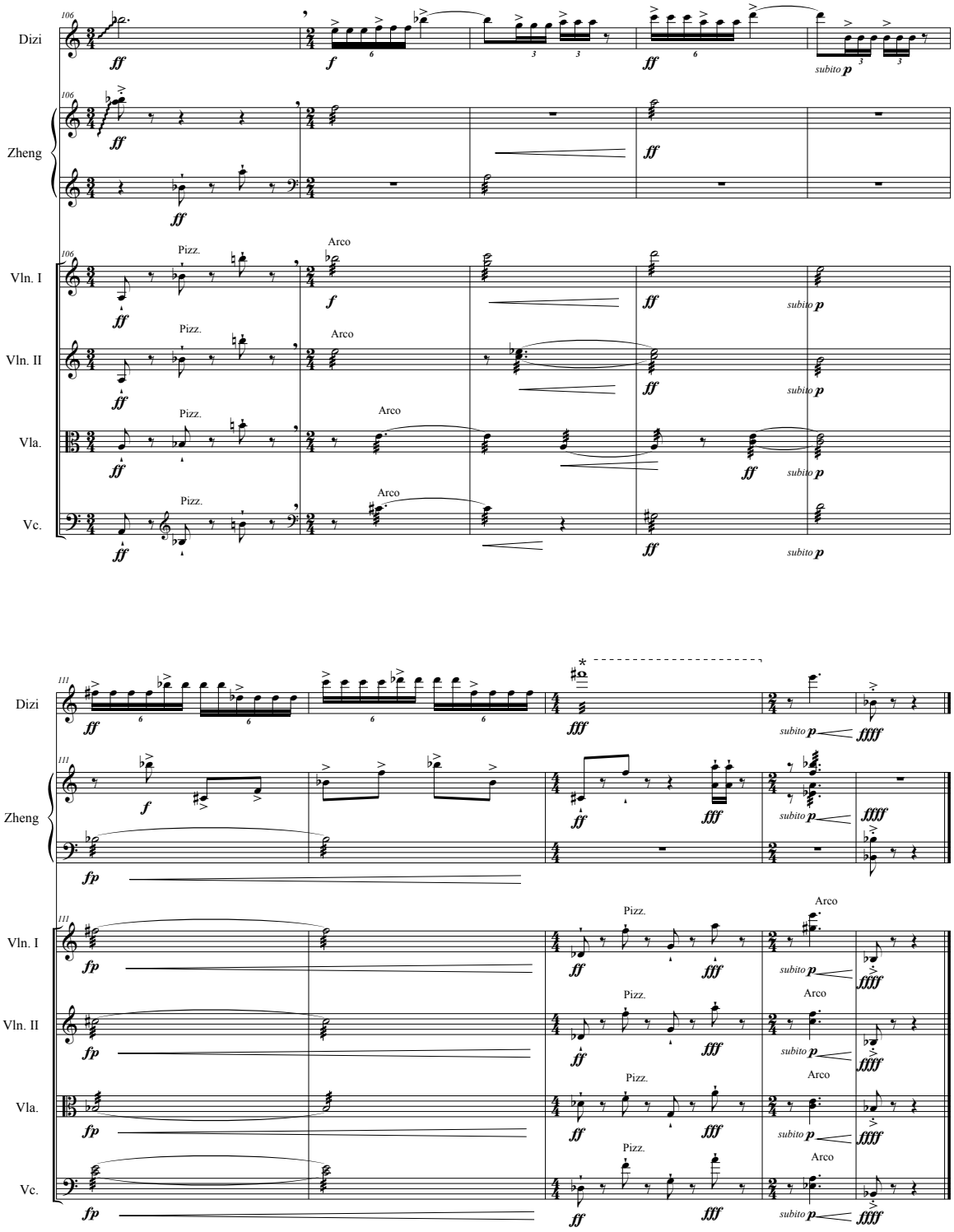

79
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
Pizz.
Arco


84
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
Arco
88

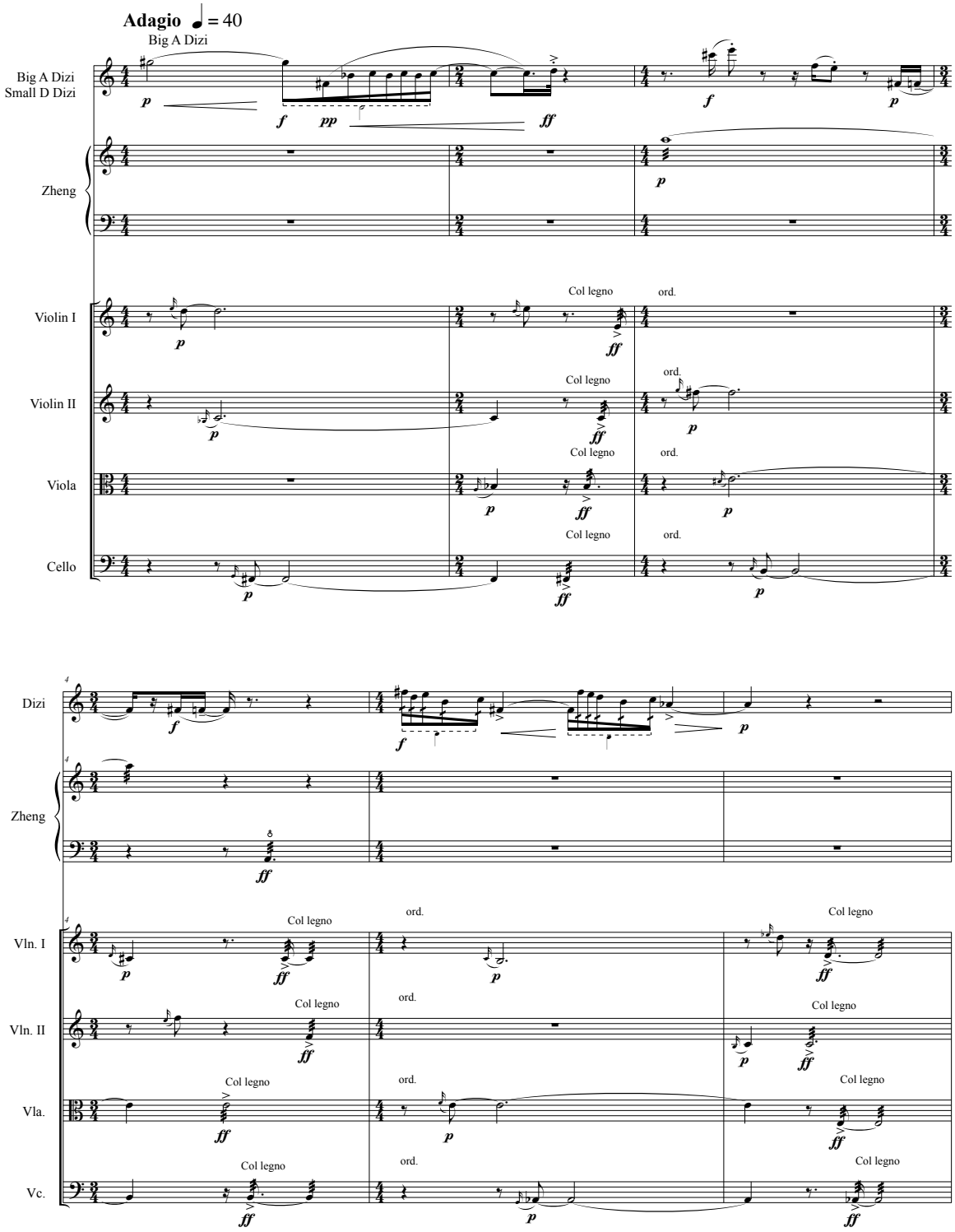

92
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.

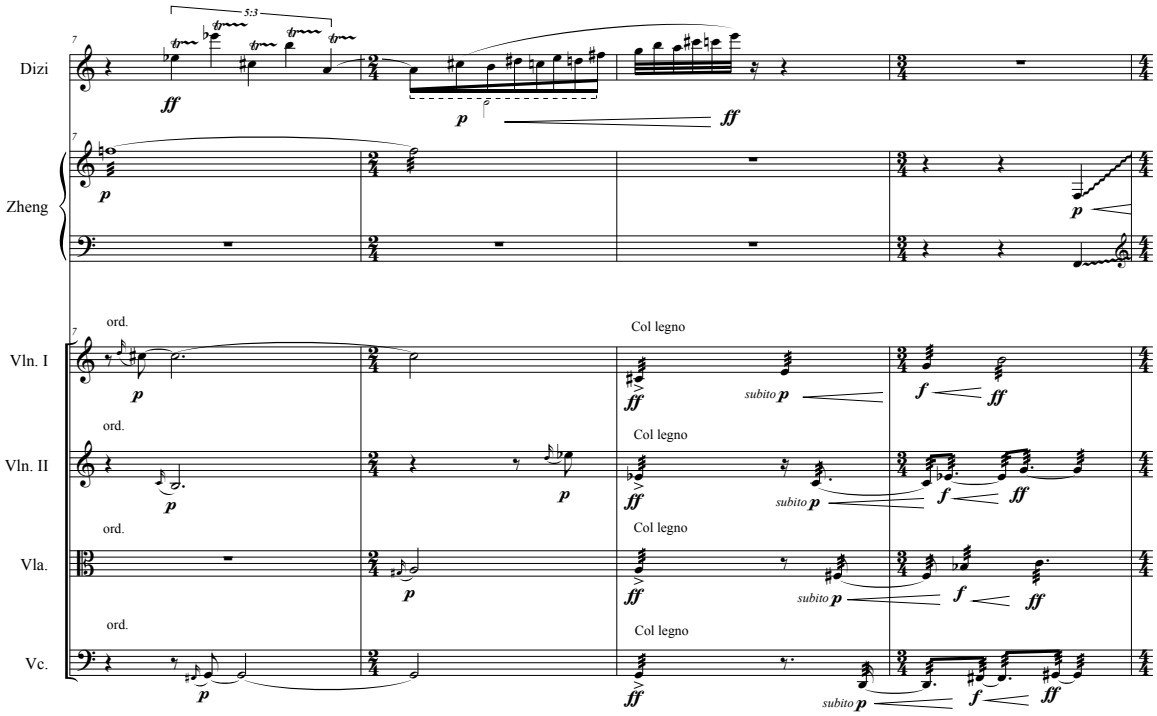

96
rit.
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.

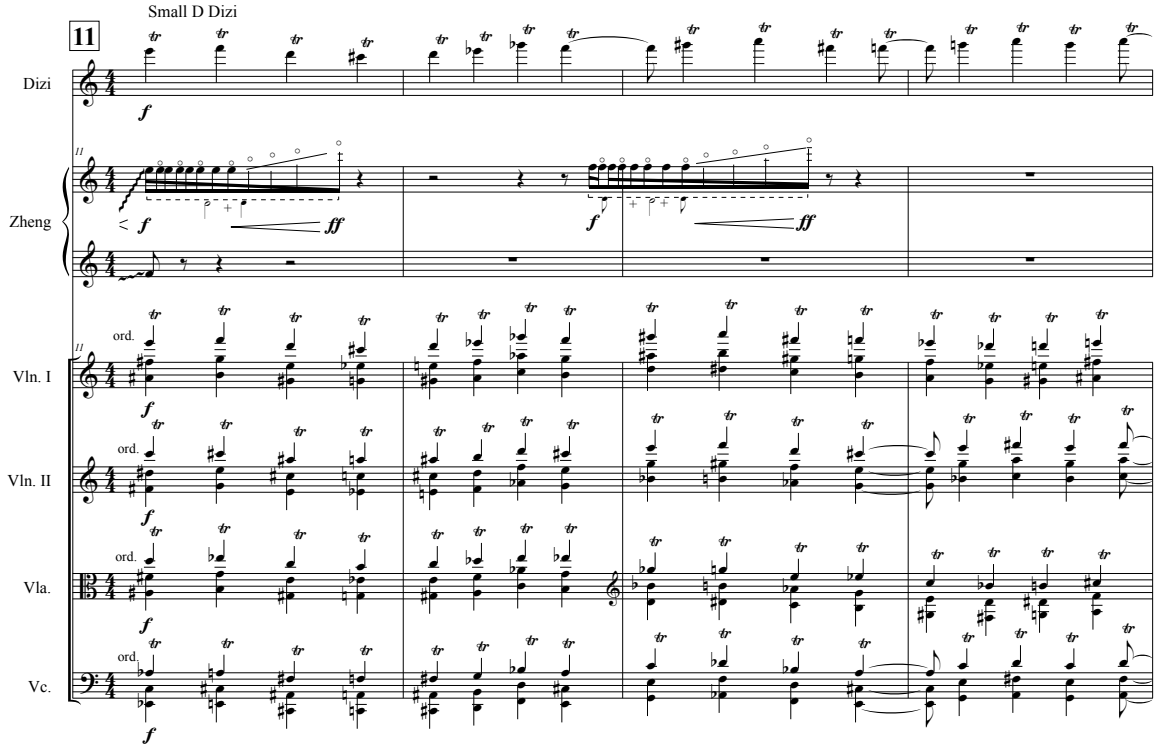

100
a tempo
Small D Dizi
Piu mosso subito, ♩ = 116-120
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
Pizz.
Arco
103

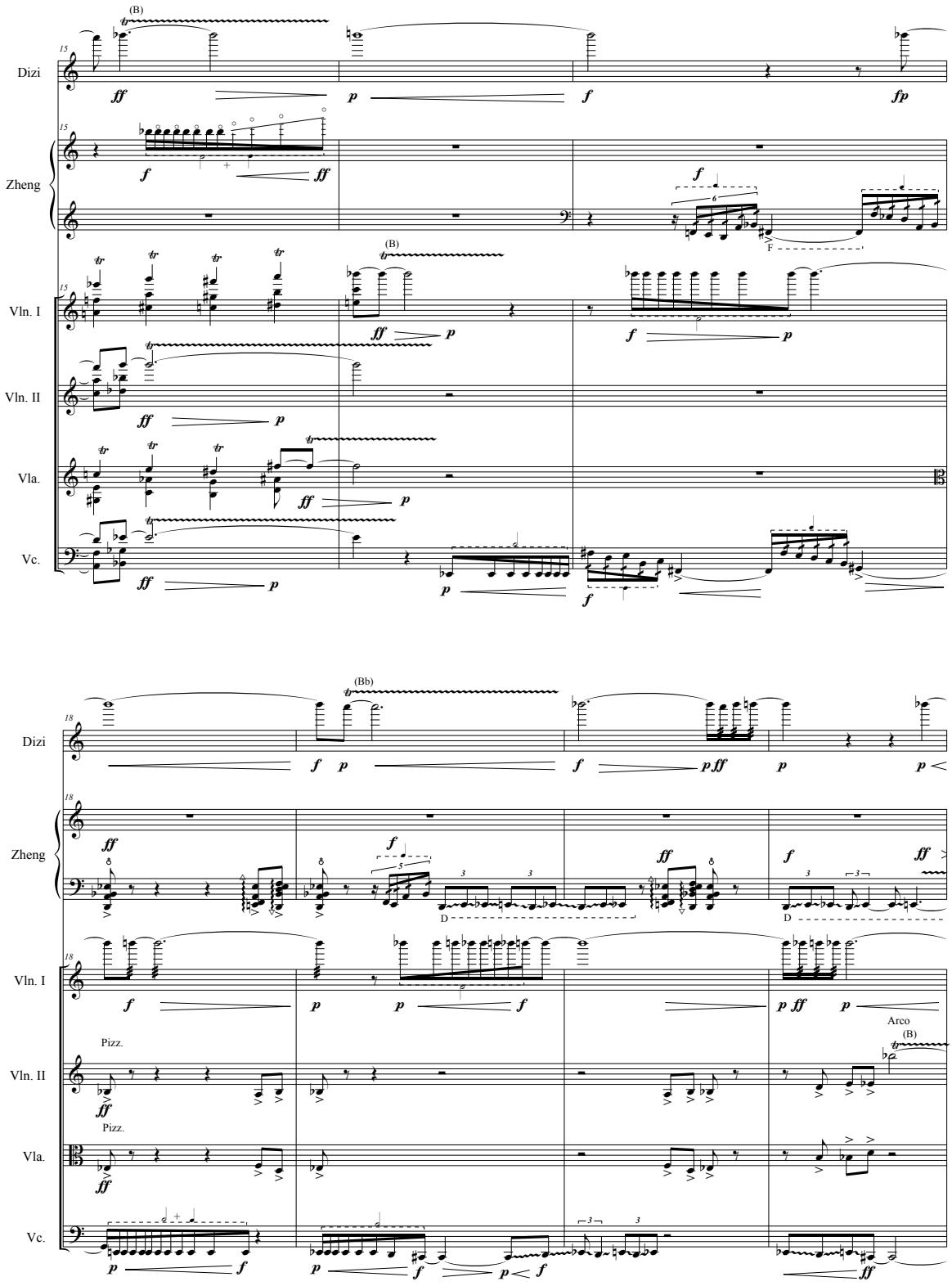

106
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
ff
f
fp
Pizz.
Arco
subito p
111
fff
ffff

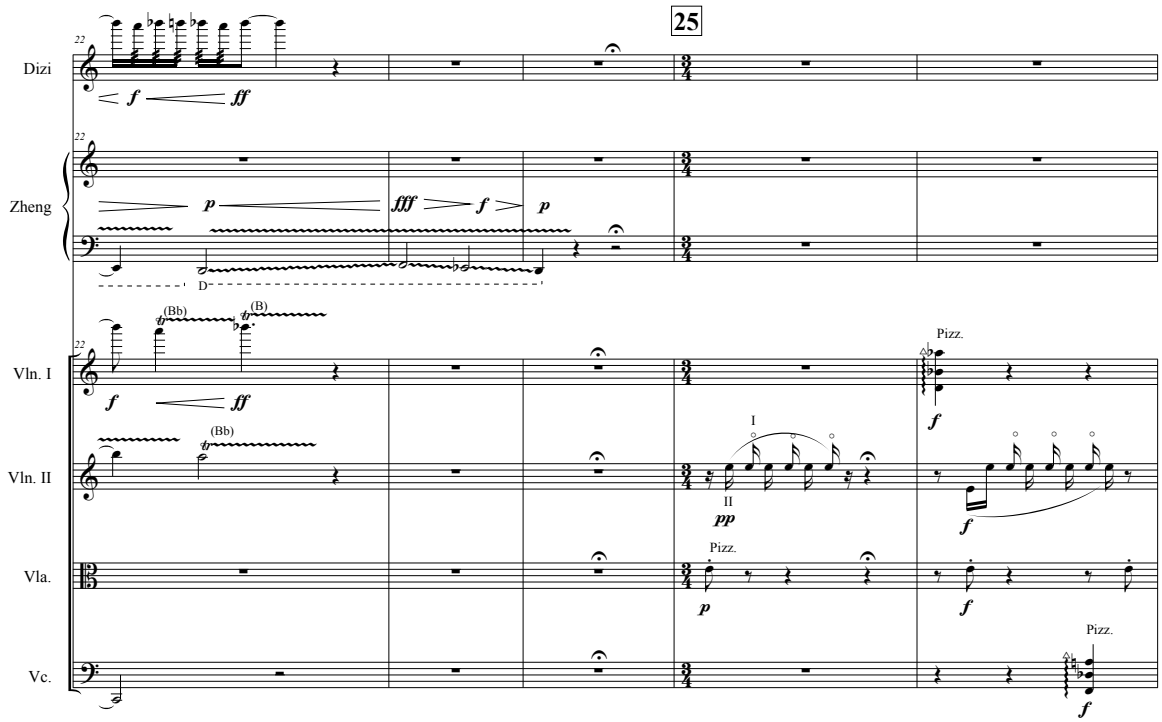
II.
Winter Night

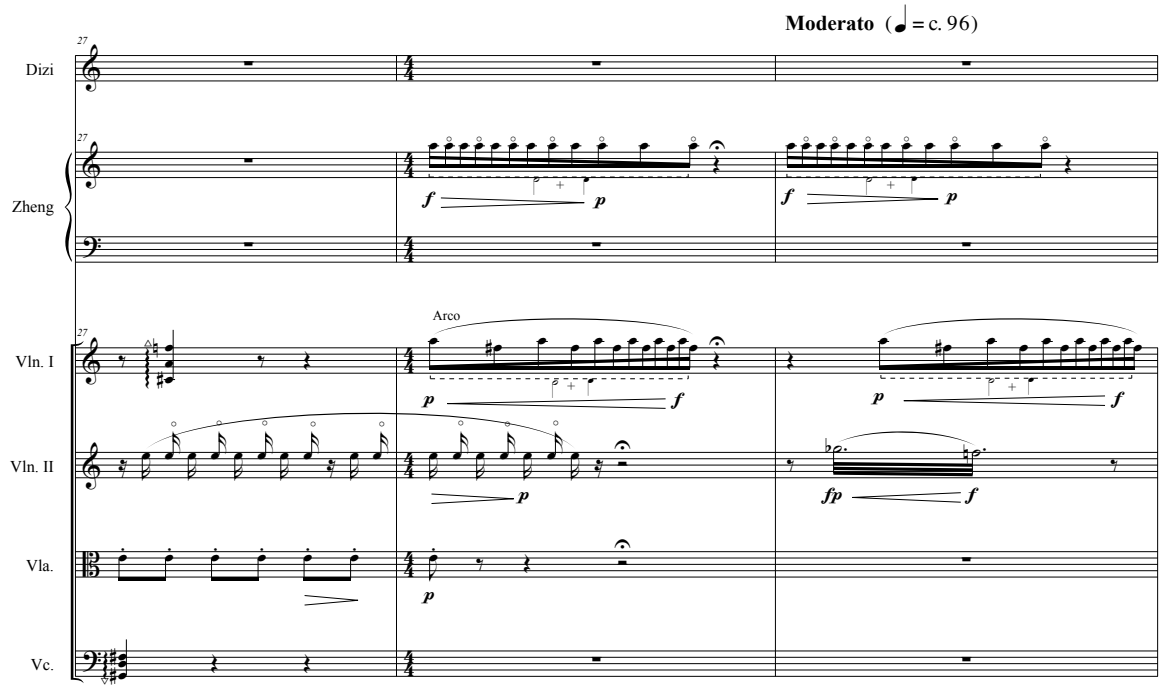


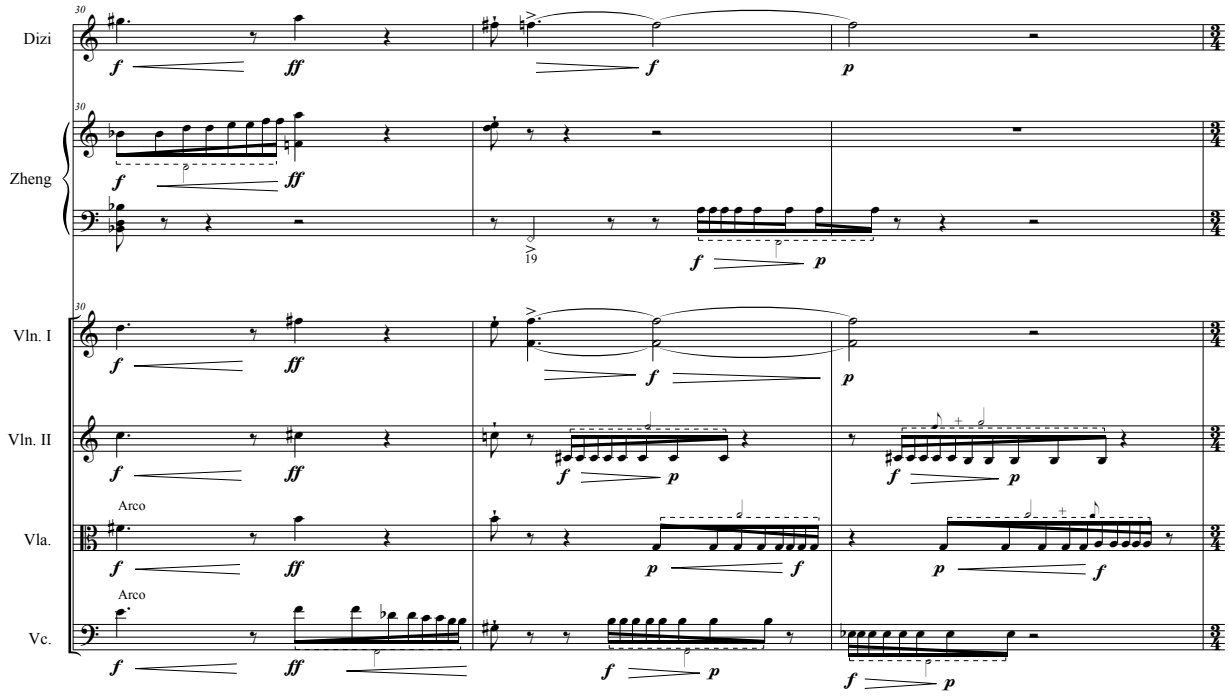

7
Dizi
5:3
ff
p
ff
Zheng
p
p
Vln. I
ord.
p
Col legno
ff
subito p
f
ff
Vln. II
ord.
p
p
Col legno
ff
subito p
f
ff
Vla.
ord.
p
Col legno
ff
subito p
f
ff
Vc.
ord.
p
Col legno
ff
subito p
f
ff

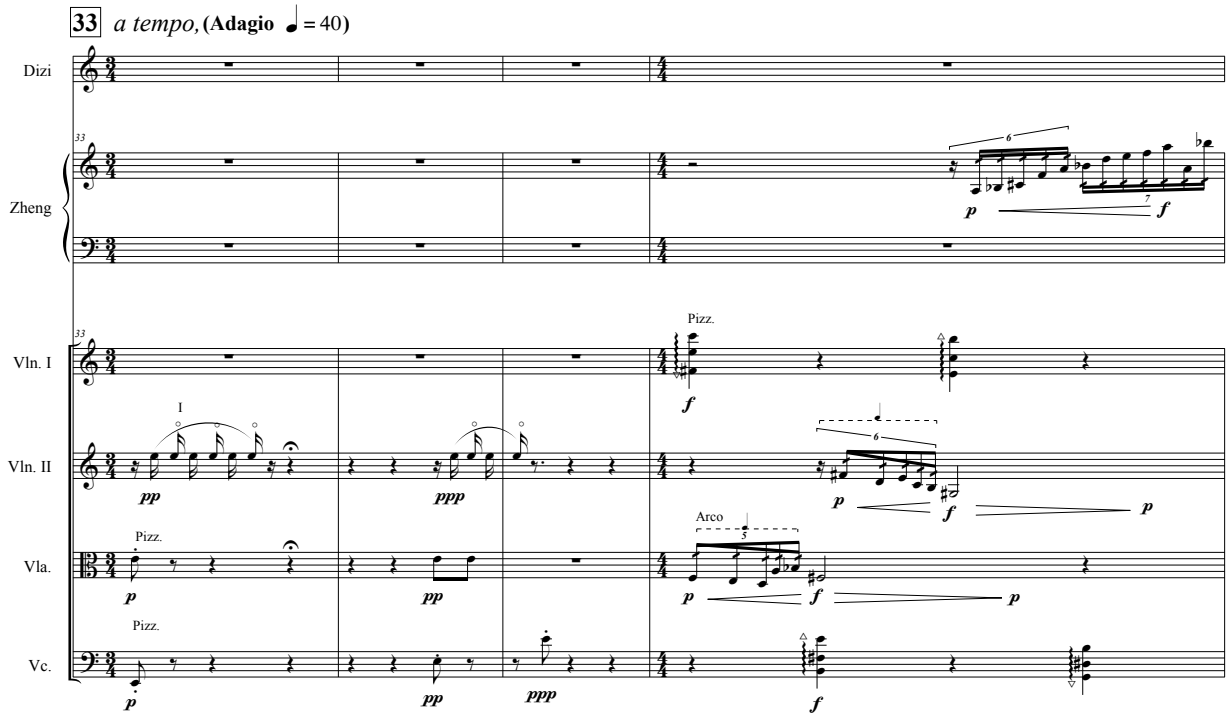

Small D Dizi
11
Dizi
f
11
Zheng
f
ff
f
ff
Vln. I
ord.
f
Vln. II
ord.
f
Vla.
ord.
f
Vc.
ord.
f

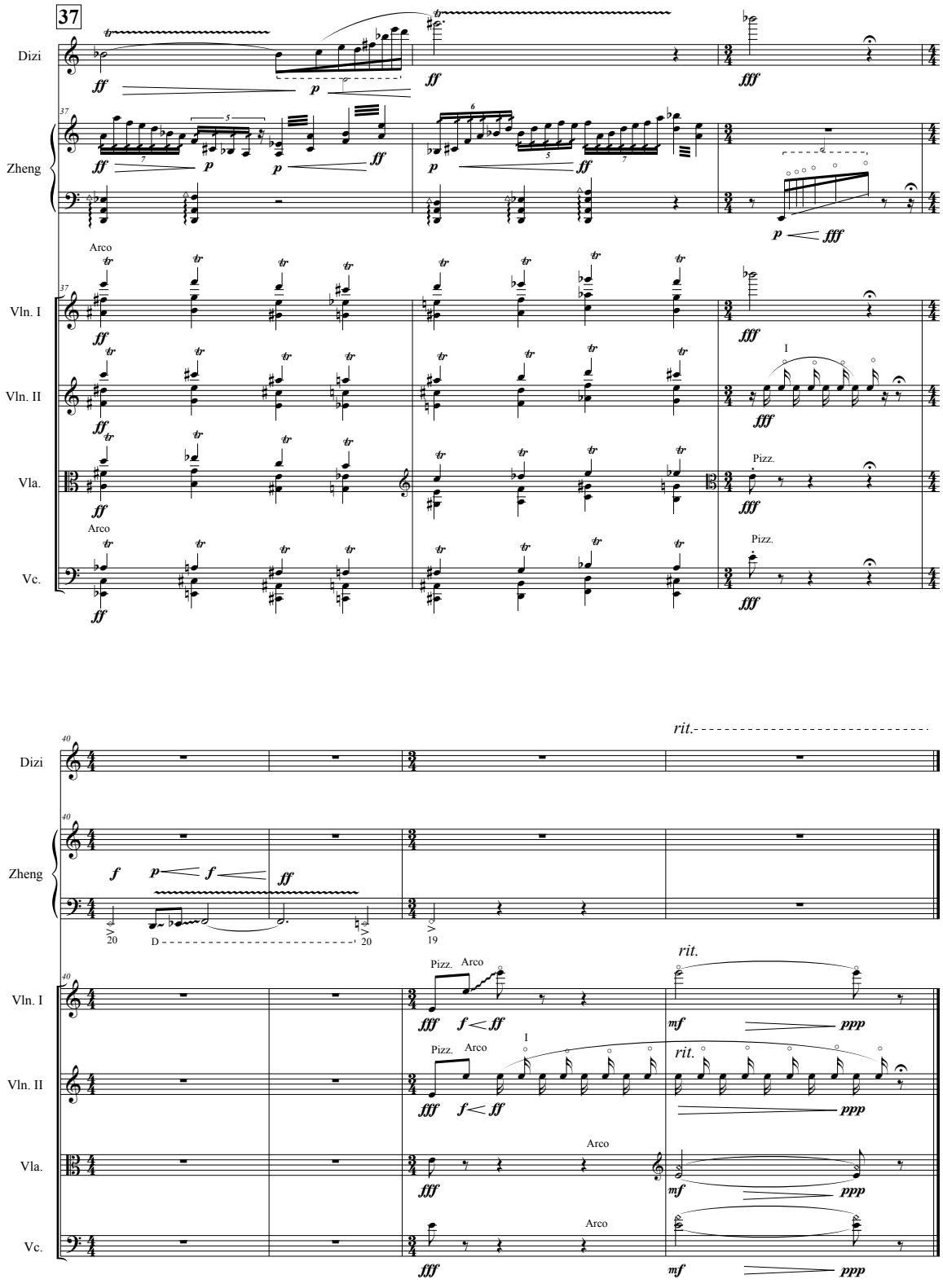

Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
(B)
(Bb)
Pizz.
Arco
D
F


25
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
(Bb)
(B)
Pizz.
I
II
D


Moderato (♩= c. 96)
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
Arco


30
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
Arco
Arco


33 a tempo, (Adagio ♩ = 40)
33
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
Pizz.
I
Pizz.
Arco
Pizz.


37
Dizi
Zheng
Vln. I
Vln. II
Vla.
Vc.
Arco
Pizz.
I
40
rit.
D
20
19
Pizz. Arco
Arco

Chapter III

A Contemporary Practice Rooted in Chinese Aesthetics: The Evolution of Constructive Rhythms in Chou Wen-chung's Compositions

After successful premieres of Chou's orchestra pieces, *Landscape* (1949) and *And the Fallen Petals* (1954), Nicolas Slonimsky proclaimed that "(Chou is)….possibly the first Chinese composer who has attempted to translate authentic oriental rhythms into the terms of modern Western music."[1] And H. H. Stuckenschmidt called Chou "a musical calligrapher."[2]

However, Chou was not completely satisfied with his compositional approach at that time; he dreamed of a synthesis of Eastern and Western musical concepts and practices that could become a universally accepted style.[3] What Chou envisioned as "East meets West" was not a "Turkish Marches" of twentieth-century style.[4] Chou believed that "the beauty of music lies in the mathematics of simplicity rather than complexity, and in the growth and flow from the germinal idea rather than a collage of unrelated ideas."[5]

Chou's belief – in the mathematics of simplicity and the germinal idea- logically led him to look into the Chinese *I Ching* (*Book of Changes*) and music theories of other cultures (for instance, Chinese *Yayue*, Japanese *Gagaku*, Indian *Raga*, and others) for a possible convergence attempt. The essence of the composer's *variable modes* theory,

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[1] "Chou Wen-chung," *American Composers Alliance Bulletin* 9/4 (1961), p. 2.
[2] Han Heinz Stuckenschmidt, *Frankfurter Allgemeine Zeitung*, 28 June 1960.
[3] Chou Wen-chung, "Toward A Re-merger in Music" in *Contemporary Composers on Contemporary Music*, eds. E. Schwartz and B. Childs (New York: Da Capo Press, 1978), p. 311.
[4] Chou Wen-chung, "East and West, Old and New" in *Asian Music*, 1/1, 1968, p. 22.
[5] Shyhji Pan-Chew, "Chou Wen-chung- The Musical Calligrapher," in *Musik Texte*, 118 (August, 2008), p. 83.

which Chou has been developing since 1950s, lies in: 1) the ever-changing principle of the *yin-yang* (0 and 1) polarities in the *I Ching*; 2) the prominence of the ratio of 1:2:3 in the *I Ching*; 3) the pairing of modes derived from Asian modal systems which includes different ascending and descending directions; and 4) the concept of Chinese *pien-tone* (i.e. a device that inflects a pitch by a semitone). Although Chou's *variable modes* theory has undergone several stages of development, these four indispensable aspects of *variable modes* have not changed since its onset.[6] Those four concepts constitute the basis of Chou's musical language.

Basics in Chou's *variable modes* theory

The basic unit of the *I Ching* is the trigram, which is made up of three *yao* segments reading from bottom-up (Earth-Man-Heaven), and three lines either representing the *Yin* (- -) as <0> or the *Yang* (—) as <1>, broken or unbroken, as shown in Figure 1. At first Chou followed strictly the principles of the *I Ching* in deriving his modes from a trigram and later to form the Modal Complex from hexagrams.

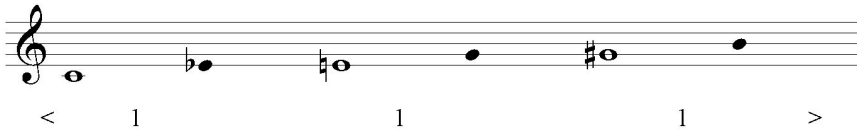
Figure 3.1: An *I Ching* trigram

Heaven	天	———	*Yang* yao 陽爻 <1>
Man	人	— —	*Yin* yao 陰爻 <0>
Earth	地	———	*Yang* yao 陽爻 <1>

[6] Eric Lai, "The Evolution of Chou Wen-chung's *Variable Modes*," in Yayoi U. Everett and Frederick Lau, eds, *Locating East Asia in Western Art Music* (Middletown, CT: Wesleyan University Press, 2004), pp. 150-154.

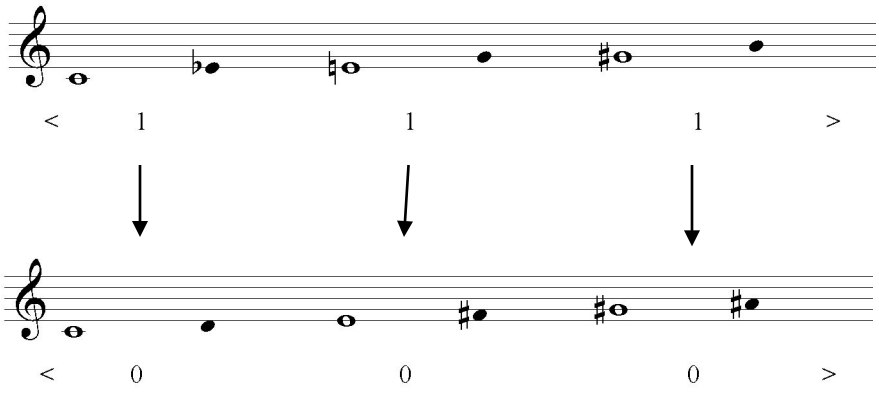
The same order of the Earth, Man, and Heaven shown above is used as the basis of constructing his modes. That is to say, regardless of its direction, the musical order of the Earth-Man-Heaven always proceeds from left to right. What he calls his *variable mode* was first constructed with a succession of three ascending pairs of the *yang yao* trigram, each represented by a minor third interval as shown in Example 3.1. The resulting hexachord splits the octave into three even minor third segments, built around an augmented triad.

Example 3.1: Three ascending minor thirds of the Qien (Heaven) mode <111>



By applying the *pien* tone, lowering the second note of each segment to a semitone, Chou is able to derive the Kun mode of <000> (see Ex. 3.2).

Example 3.2: The Kun (Earth) mode <000> as derived from the Qien (Heaven) mode <111>



Both the Qien and the Kun modes shown in Example 3 contain three pitches, unchanged: C-E-G#. These three pitches form an augmented triad and their role has become more and more important throughout Chou's development of his theory. For instance, in his later development found in the *Windswept Peaks* (1990), the chains of two different sets of augmented triads define the pitch structure at the macro-level.[7] Just as there are eight trigrams available in the *I Ching*, there are eight *variable modes* in Chou's system (see Figure 3.2)

Figure 3.2: The *I Ching*'s trigrams with Chou's *variable modes* and corresponding binary codes

***I Ching*'s trigrams**		**Chou's *variable modes***	**Corresponding binary codes**
Qien	乾	Heaven (h)	<111>
Dui	兌	Lake (l)	<110>
Li	離	Sun (s)	<101>
Zhen	震	Thunder (t)	<100>
Xun	巽	Wind (w)	<011>

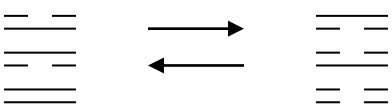
[7] Two augmented triads are D-F#-A# and Eb-G-B.

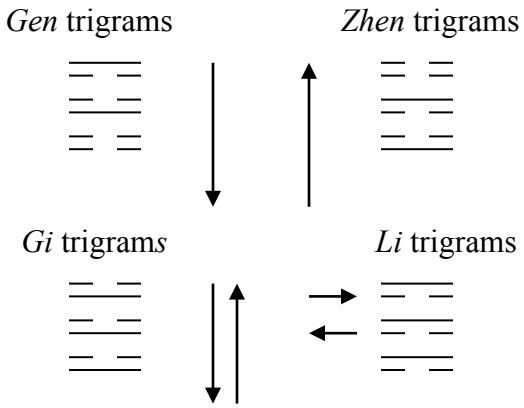
Kan	坎		Rain (r)	<010>
Gen	艮		Mountain (m)	<001>
Kun	坤		Earth (e)	<000>

In the *I Ching*, the basic structure is a hexagram, formed by the superimposition of two trigrams from the basic eight. A hexagram is made up of two trigrams. The upper one is characterized as going, the lower one as coming. The two stages of equilibrium of going and coming according to time and space constitute the basic structure of hexagrams. The hexagram is a representation of equilibrium condition that operates certain stages (cyclic or sequential) of change in the organic world. Different ways of combining trigrams form the sixty-four hexagrams. As is discussed later, Chou is particularly interested in the symmetrical structure of two hexagrams in *I Ching*. (see Figure. 3.3).

Figure 3.3: Symmetrical structures among the *I Ching*'s hexagrams

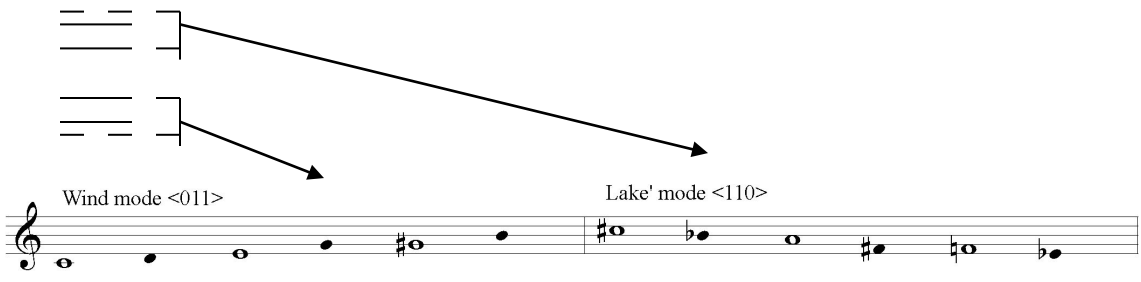
Dui trigrams *Gen* trigrams





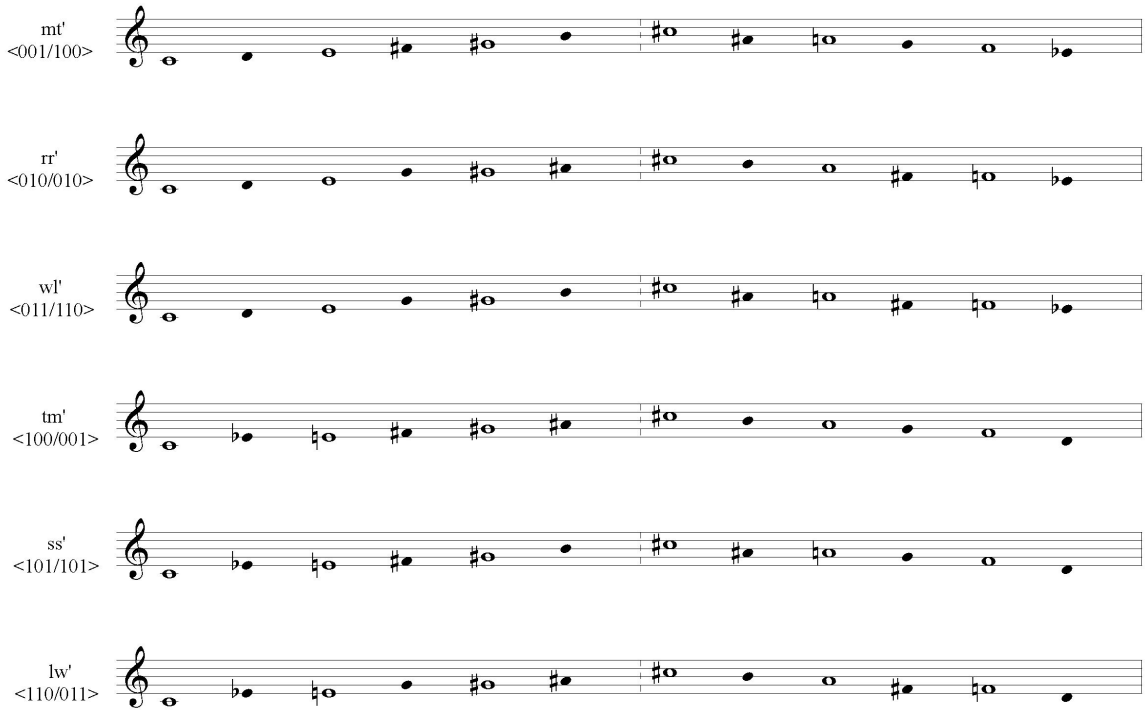
To form a larger, and basic Modal Complex based on *I Ching*, Chou followed the same principle of superimposition outlined above, placing one trigram on top of the other. For instance, an ascending Wind mode ＜011＞ is paired with a descending Lake mode ＜110＞ as shown in Example 3.3. It is interesting to note that this hexagram exhibits a symmetrical property: the first line of the first trigram is the same as the last line of the second, the middle line of the first trigram is the same as the middle line of the second, and the last line of the first trigram is the same as the first line of the second (see Ex. 3.3). Other common pairs of trigram used in Chou's Modal Complex are Mountain/Thunder', Rain/Rain', Wind/Lake', Thunder/Mountain', Sun/Sun', Lake/Wind' (see Ex. 3.4).

Example 3.3: Wind/Lake mode <011/110>



Just as the sixty-four hexagrams in *I Ching* are the result of various combinations of two trigrams, the modal pairs of Chou's Modal complexes are the result of the combination of two pitch collections, one ascending pairing with one descending form, indicated with an apostrophe sign next to the mode, as shown in Example 3.4. These pairs have two conspicuous features: 1) together, they include all twelve chromatic tones, and 2) the succession of intervals in the second hexagram is an inversion of intervals of the first hexagram. One may see that Chou created the descending forms through inversion based on an initial tone transposed a semitone higher.

Example 3.4: Chou's Modal Complex: pairing modes of Mountain/Thunder', Rain/Rain', Wind/Lake', Thunder/Mountain', Sun/Sun', Lake/Wind'



In Example 3.4, each mode (Mountain mode <001>, Rain mode <010>, Wind mode <011>, Thunder mode <100>, Sun mode <101> and Lake mode <110>) is made up of a combination of three segments. The three segments can either be *yin* (broken) or *yang* (unbroken).[8] That is the inherent asymmetric quality in a trigram (i.e. mode) inclining to either *yin* or *yang*, which provides a natural forward motion in Chou's musical elaboration.[9]

[8] Chou has called a mode with its majority segment inclining to *yin* a *yin* mode and to *yang* a *yang* mode. For instance, a Mountain mode is a *yin* mode since it consists of two *yin* segments and one *yang* segment. A Lake mode is a *yang* mode since it consists of two *yang* modes and one *yin* mode.

[9] Asymmetry, on the other hand, as exemplified in many Chinese art forms, such as calligraphy, landscape painting, music of the *qin*, and poetry, has been a trademark in Chou's music as well. Chou's concept of asymmetry is based on the "water image" where the objects remain unchanged. However, all the images in water are distorted through the refraction of light. Also see Kenneth Kwan, *Compositional Design in*

I have demonstrated, with the above examples, how Chou derives his modal theory based on the principles expounded in *I Ching*. The aesthetic of Chou's *variable modes* clearly reflects in his belief in the mathematics of simplicity and in the growth and flow from the smallest germinal idea of the polarity of *yin-yang* (0 and 1). To understand how the composer's modal system is variable, we turn now to a brief discussion of *yin-yang* duality.

Change, according to the *I Ching*, is understood as mobility or as *yang*, and stasis as quiescence or as *yin*. Since a trigram or one of a Chou's modes is comprised of three segments of either *yin* or *yang*, the mobility/tendency to incline to either side of *yin* or *yang* then depends on the internal structure of the segment or mode. For example, ䷀ inclines to *yang*, and ䷁ inclines to *yin*. This constant interplay of the duality of *yin-yang* (change/stasis), refers to *I* of the *I Ching*, and has served as a foundation for Chou's theory.[10] Not only aesthetic concept is embedded in the *I Ching*, it is also the basis of asymmetry, which is fundamental to Chou and other Chinese artists.[11]

Thus, the gradual process of change (or transformation), through the constant interplay of the *yin-yang* interchangeability, in which *yin* becomes *yang* and *yang* becomes *yin*, has provided Chou's modal system a continuous controlled flow of organized complexity, "like the shifting patterns in a steadily flowing current."[12] His

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Recent Works by Chou Wen-chung, Ph. D dissertation in Music Theory, State University of New York at Buffalo. 1996, p. 358.

[10] *I* of *I Ching* means transformation or change in Chinese.

[11] "The application of water-image symmetry in actual music refers to changing musical parameters in temporal and/or spatial relations in both micro- and macro-levels in order to create a sense of instability within symmetry. Similarly, this change will affect the state of equilibrium and will result in movement between polarities of instability and stability, flux and stasis, asymmetry and symmetry." See Janet Jieru Chen and Shyhji Pan-Chew, "An Introduction to Chou Wen-chung's Concept of "Water-Image" Symmetry," *Mitteilungen der Paul Sacher Stiftung*, Nr. 19, April 2006, p. 44.

[12] Chou Wen-chung, "Towards a Re-merger in Music" in *Contemporary Composers on Contemporary Music*, eds., E. Schwartz and B. Childs (New York: Da Capo Press, 1978), p. 312.

aesthetic principle of asymmetry has become the shaping force of musical realization in all levels of musical parameters and, is a unique contribution to the language of re-merger.[13]

Chou's fondness for numbers 1, 2, and 3 is rooted in Chinese *Dao-te Jing* (*The Classic of the Way and Virtue*) written by Lao Tzu in 6th century BC.

"Way gave birth to one,

and one gave birth to two,

Two gave birth to three,

and three gave birth to the ten thousand things.

Then the ten thousand things shouldered *yin* and embraced *yang*,

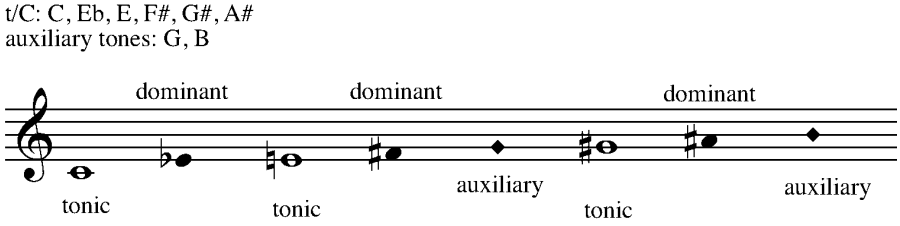
blending *ch'i* to establish harmony."[14]

As related by Lao Tzu, the creation of the world grew from one, two and three. So Chou's system has been created. As outlined above, Chou applied a 1:2:3 ratio to the modal hierarchy within the *variable modes* theory. Other elements of music are also shaped by the 1:2:3 in Chou's practice, including rhythm, register, timbre and dynamics. The rhythmic design was first to coincide with it. In Chou's rhythmic system, each mode consists of three levels: three initial pitches that form an augmented chord are given the

[13] Chou has developed a system of variable modes from which all other musical parameters, such as pitch, rhythm, timbre, micro- and macro-level structures, and so on, are derived. These and other parameters grow from the smallest organic unit with a ratio of 1:2:3.
[14] Lao Tzu, *Tao Te Ching*, translated by David Hinton (Washington, D.C., USA: Counterpoint, 2000), p. 51.

most important role. Chou called them “tonics”. The other three pitches are “dominants”, and are given secondary emphasis. Last, the auxiliaries (i.e. non-modal notes) yield the third level. For instance, a Thunder mode in C (t/C) can have a rhythmic structure according to Chou’s rhythmic ratio of 1:2:3. The ratio “3” will be given to three tonics (C, E, G#), and ratio “2” to three dominants (Eb, F#, A#), and the smallest ratio “1” to auxiliaries (G, B) (see Ex. 3.5).

Example 3.5: Placements of tonic, dominant and auxiliary tones in the Thunder mode in C (t/C)



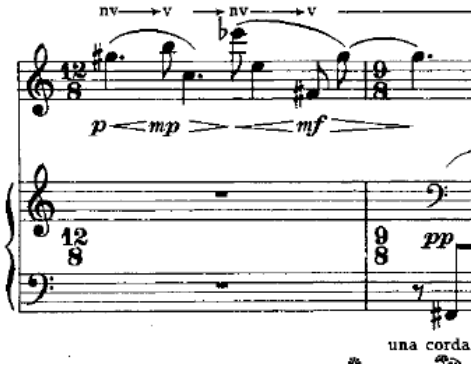
This article explores the development of Chou Wen-chug’s rhythmic modes, and the composer’s understanding of the basic ratio 1:2:3 in different compositional periods. I am concerned not only with constructive rhythms and their derivation, but also their application. The chronological order I have followed designates the early rhythmic development as Period I (works of the 1960s); later rhythmic development as Period II (works of the 1980s and 1990s); and the most recent rhythmic development as Period III (works of the 2000s). Two pieces from each period form the basis of my analysis.

Period I. Works of the 1960s: *Cursive* (1963) and *Riding the Wind* (1964)

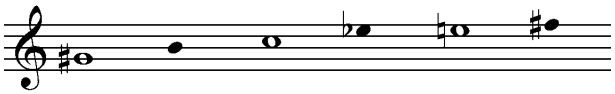
In the early 1960s, based on his *variable modes* system, Chou began to develop his rhythmic structure by applying intervallic relationships to rhythm. Chou's earliest attempt was to determine rhythmic duration by the sequential intervallic distance between two conjunct modal tones. Thus, there were only three different types of intervals available for a mode: minor second (ic1), major second (ic2) and minor third (ic3).

In *Cursive* (1963), the rhythmic structure of a mode follows the same hierarchical approach as just described. For example, the mode used for the flute line in mm. 6-7 is the Lake mode in G# as l/G# (G#, B, C, Eb, E, F#). One sees clearly that G#, C# and E are given longer rhythmic values, while B, Eb, and F# are assigned the shorter rhythmic values of eighth notes (see Ex. 3.6).

Example 3.6: mm. 6-7, *Cursive*



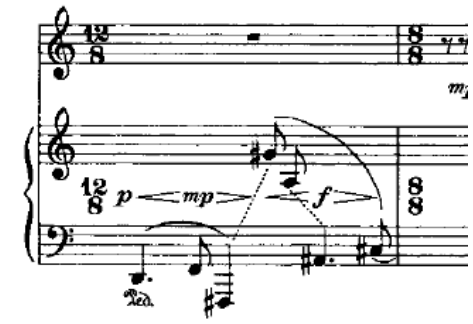
l/G#: G#, B, C, Eb, E, F#



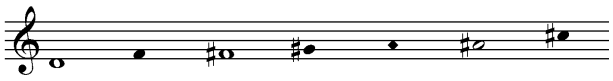
Flute: mm. 6-7, *Cursive*

The piano part in m. 18 is another example where Chou applies the same ratio of 1:2:3 to design his rhythmic mode from the Sun mode s/D. The Sun mode (D, F, F#, G#, A, A#, C#) used here includes one dominant auxiliary tone A. Three tonic pitches (D, F#, A#) are given longer rhythmic values. All three dominants (F, G#, C#) and the auxiliary tone (A) are given eighth-note rhythmic values (see Ex. 3.7).

Example 3.7: m. 18, *Cursive*



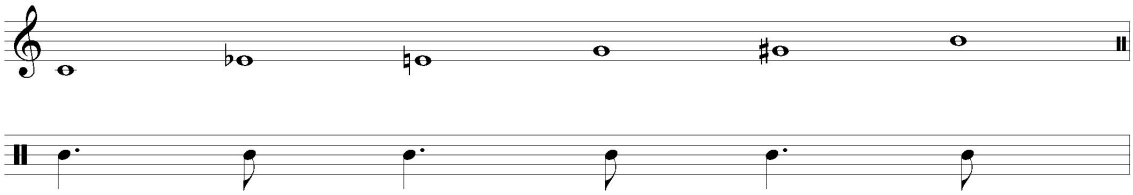
s/D: D, F, F#, G#, A#, C#
auxiliary tones: A



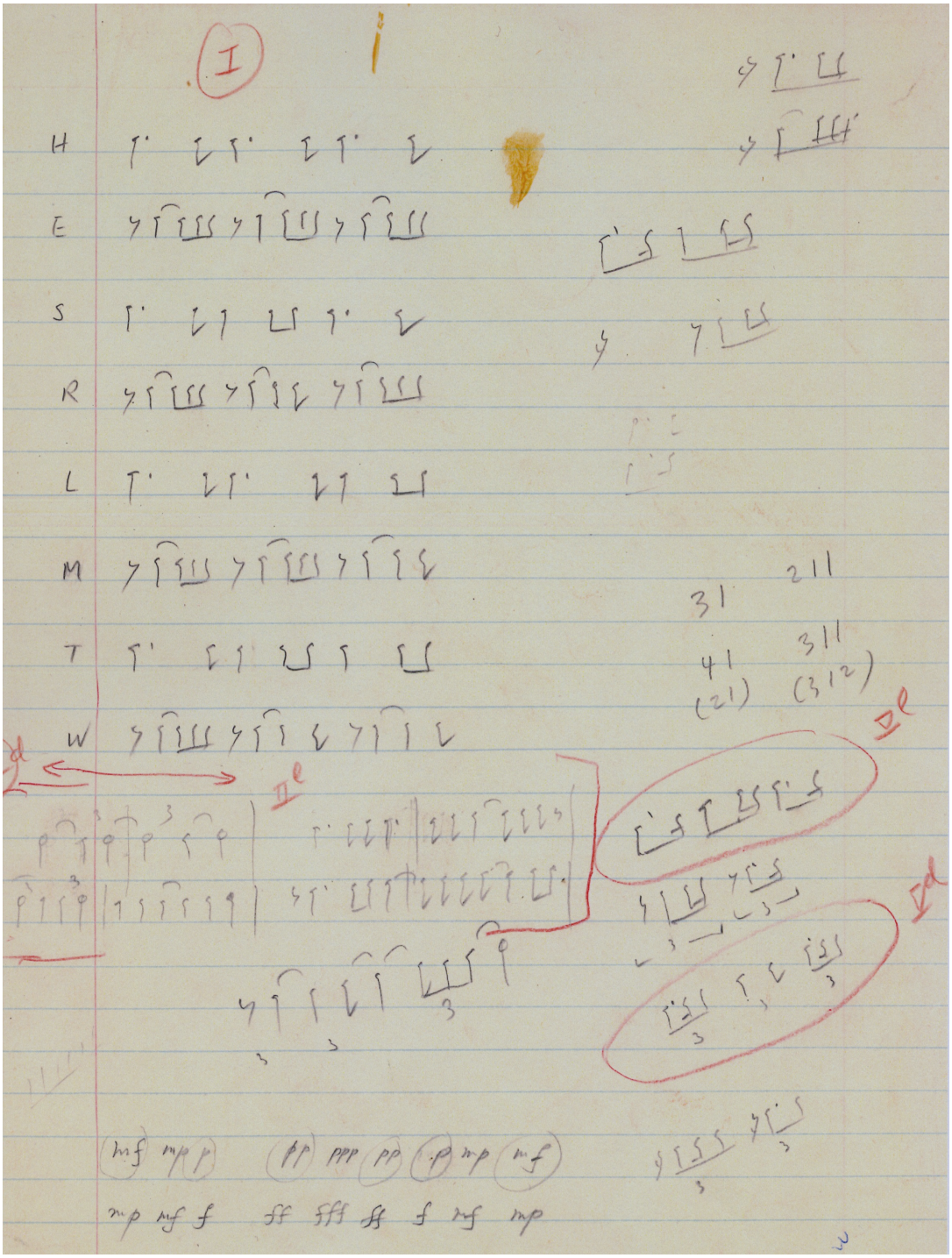
Piano: m. 18, *Cursive*

Another instance can be observed in Chou's wind orchestra piece *Riding the Wind* (1964). Following the intervallic structure of his variable modes, Chou here assigns weighted durational units to the components of the mode (e.g. 3, 2, or 1). As the Heaven mode contains consecutive minor thirds, its corresponding rhythmic mode then becomes a repeating dotted-quarter and eighth progression. This is revealed in Examples 3.8 and 3.9.

Example 3.8: The Heaven mode with assigned rhythm



Example 3.9: Preliminary rhythmic sketch of *Riding the Wind* (excerpted from sketches of *Riding the Wind*, and reproduced by kind permission of Chou Wen-chung Collection, Paul Sacher Stiftung)

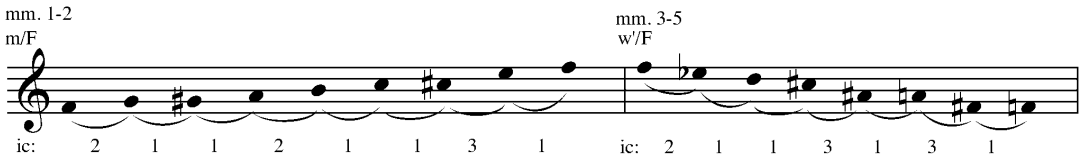


Illustrative of Chou's constructive method is *Riding the Wind*. It features two modes: the Mountain mode (m/F) and the Wind mode (w'/F). The Mountain mode contains the following pitches: F-G-G#-A-B-C-C#-E-F. Hence, the rhythmic schema corresponding is 2-1-1-2-1-1-3-1. If an eighth note is considered as the basic durational unit, then the following rhythmic mode results: quarter-eighth-eighth, quarter-eighth-eighth, dotted-quarter-eighth. This is assigned to the marimba and the trumpets (see Ex. 3.11). The pitches of the descending form of the Wind mode paired with the Mountain mode, in mm. 3-5 are F-Eb-D-C#-A#-A-F#-F. Their interval class succession is 2-1-1-3-1-3-1, from which the rhythmic structure is derived as quarter-eighth-eighth, dotted-quarter-eighth, dotted-quarter-eighth (see both Ex. 3.10 and 3.11). Example 3.11 shows the reduction of mm. 1-5, demonstrating the attack points of the ascending form of the Mountain mode in F and the descending form of the Wind mode in F with corresponding interval classes.

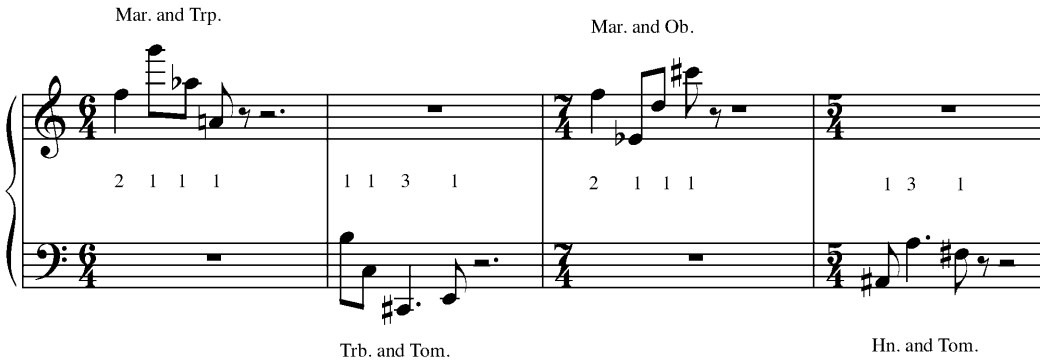
Example 3.10: Mountain/Wind mode: relationship between interval class succession and rhythm, mm. 1-5, *Riding the Wind*

mm. 1-2 m/F: F G G# A B C C# E F
→ ic: 2 1 1 2 1 1 3 1

mm. 3-5 w'/F: F Eb D C# A# A F# F
→ ic: 2 1 1 3 1 3 1



Example 3.11: Attack points of mm. 1-5, reduction of *Riding the Wind* (sustained notes omitted)



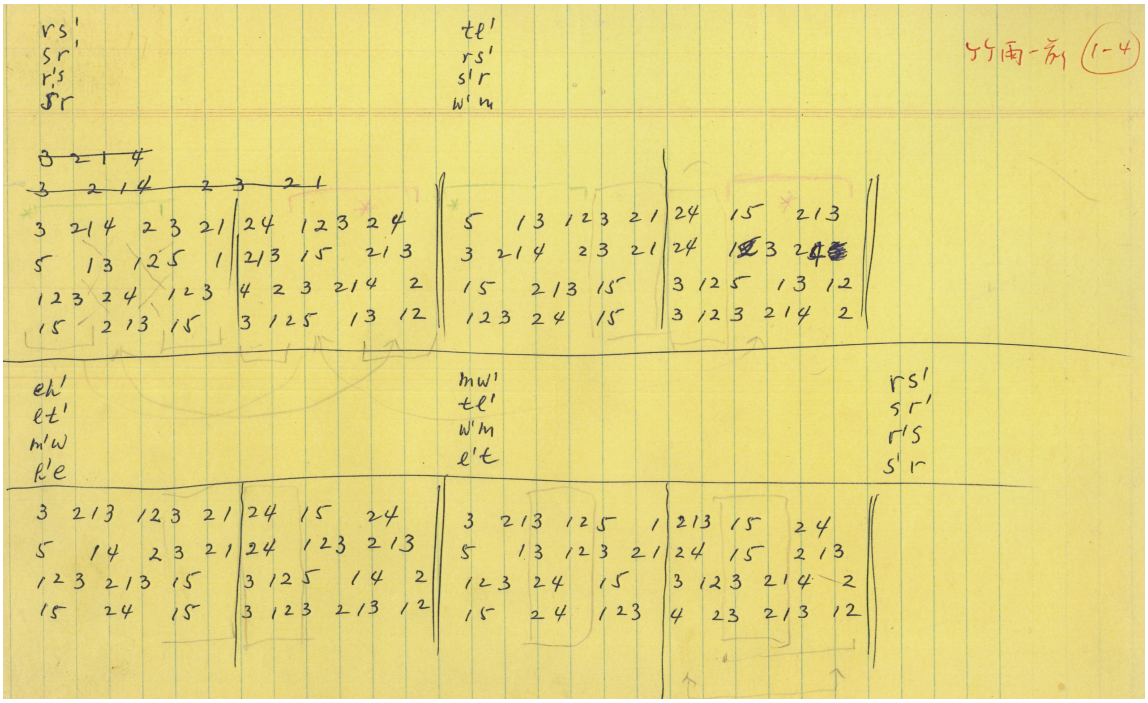
From these short examples, we can see that the composer was attempting to develop a relationship between the intervals of his modes, and constructive rhythms. Neither the silences between iterations, nor the mutation of the modes appear to have concerned the composer at this juncture, but his next pieces clearly demonstrate an evolution towards a more flexible application of basic principles.

Period II. Works of the 1980s and the 1990s: *Echoes from the Gorge* (1989) and *Windswept Peaks* (1989-1990)

Since the 1980s, Chou has developed his hexagrams of structuring further. His rhythmic structures remain based on the interval class of each mode, but are often and newly combined with a divisor in the ratio 1:2:3. That is, he takes the number 6 as the greatest common divisor of the ratio 3:2:1. Next, Chou subdivides the number 6 into either two or three units. Through this mathematical process, Chou forms five sets of arrangements: 3-2-1, 3-1-2, 5-1, 4-2 and 3-3. Moreover, Chou categorizes them in two groups respectively: *yin* and *Yang*. A *yin* group contains rhythmic schemas 3-2-1, 3-1-2, 3-3 and a *yang* group has rhythmic schemas 4-2 and 5-1.

Echoes from the Gorge (1989) for percussion quartet demonstrates Chou's second phase of rhythmic development. The composition was written for non-pitched instruments. In this case, Chou precisely conceived his rhythmic modes to create constructive rhythms by using five rhythmic schemas (3-2-1, 3-1-2, 5-1, 4-2, 3-3) and assigning them to four percussion groups (see Ex. 3.12, Chou's sketch at PSS).

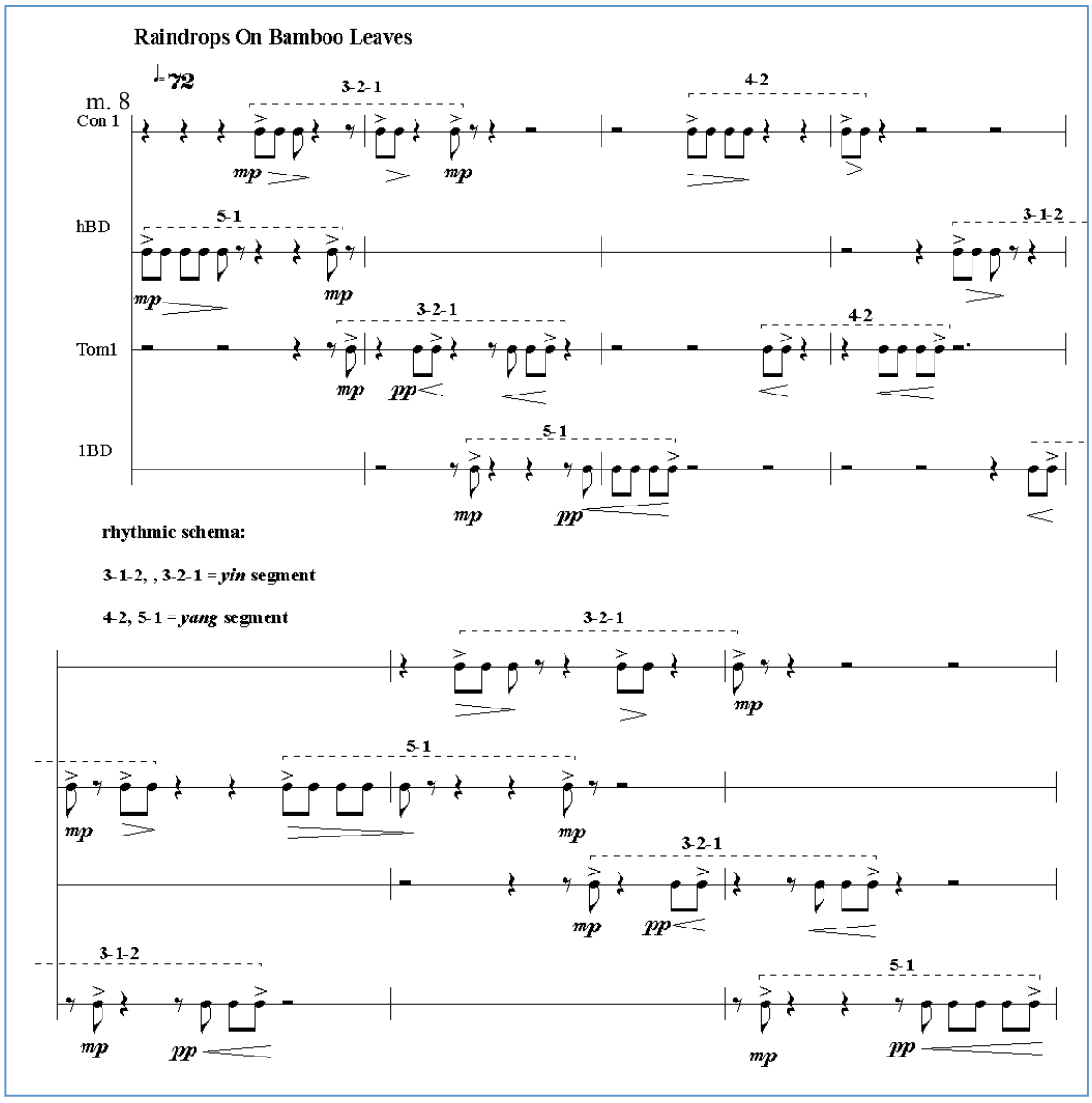
Example 3.12: Sketch of rhythmic design in *Echoes from the Gorge* (excerpted from sketches of *Echoes from the Gorge*, and reproduced by kind permission of Chou Wen-chung Collection, Paul Sacher Stiftung)



Measures 8-14 of *Echoes form the Gorge* illustrate how Chou applies the ratio of 1:2:3 to form the constructive rhythms. The two modes used here are the Rain mode <010> (*yin-yang-yin*) and the Sun mode <101> (*yang-yin-yang*). As I explained earlier, the rhythmic schemas for *yin* could be 3-2-1, 3-1-2, 3-3 and the rhythmic schemas 4-2, 5-1 are representative of *yang*. Here, Chou only chooses two rhythmic schemas for his constructive rhythms, 3-2-1 and 3-1-2, for ascending *yin* <0>. Likewise, 4-2 and 5-1 represent ascending *yang* <1>.

The reason to design two different sets of rhythmic schemas is for differentiation. Through such design, it becomes easier to differentiate the two modes used here, the Rain mode and the Sun mode. That is, the *yin* segment of the ascending Rain mode presents a rhythmic schema of 3-2-1, while the *yin* segment 3-1-2 in the ascending Sun mode (see Ex. 3.13).

Example 3.13: Rhythmic schemas producing different constructive rhythms, mm. 8-14, *Echoes from the Gorge*

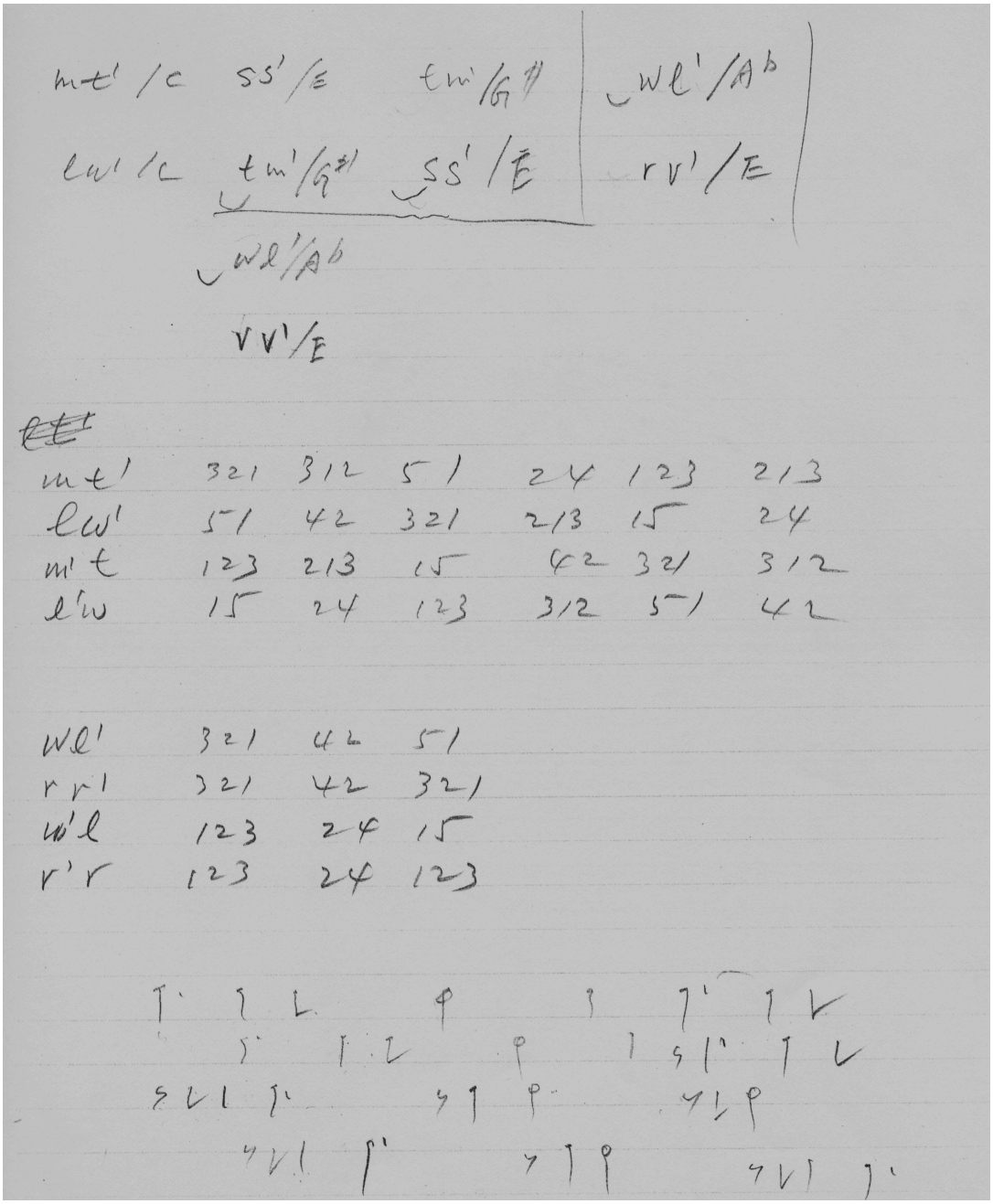


In Example 3.13, Chou assigns two rhythmic schemas to make the *yin* segment constructive rhythms (3-1-2 and 3-2-1). The other two rhythmic schemas (4-2 and 5-1) present the *yang* segment. Percussion I plays the Rain mode <010>; its modal structure is

yin (0) – *yang* (1) – *yin* (0). Thus, its constructive rhythms are derived from rhythmic schemata as follows: 3-2-1 (mm. 8-9) – 4-2 (mm. 10-11) – 3-2-1. In contrast, Percussion II plays the Sun mode <101>, which yields *yang* (1) – *yin* (0) – *yang* (1) as modal structure. Percussion II's rhythmic schemas are 5-1 (m. 8) – 3-1-2 (mm. 11-12) – 5-1 (mm. 12-13).

Similar constructive rhythmic structures can be found in *Windswept Peaks* (1990) as well (see Ex. 3.14, Chou's sketch at PSS).

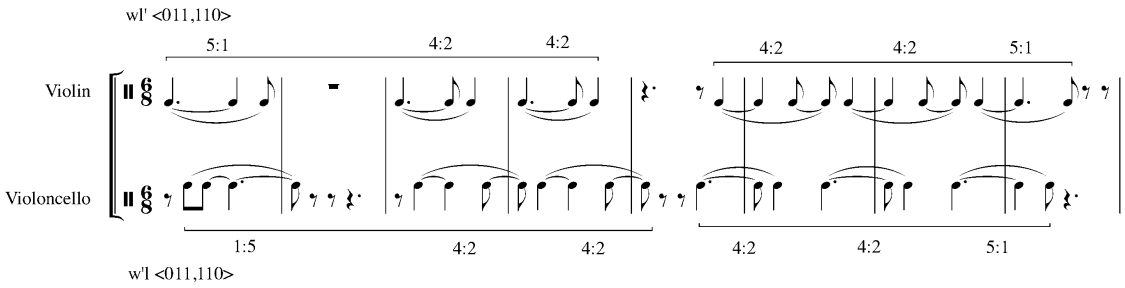
Example 3.14: Rhythmic sketch of *Windswept Peaks* (excerpted from sketches of *Windswept Peaks*, and reproduced by kind permission of Chou Wen-chung Collection, Paul Sacher Stiftung)



Here, the rhythmic schemas for mm. 34-79 contain only two types: 5:1 and 4:2. The constituent Modal Complexes are made up of eight *variable modes* ss', rr', s's, r's, tm', wl', t'm, and w'l. As in *Echoes form the Gorge*, here; Chou assigns different proportions to the *yin* and *yang* segments. The *yin* segments are assigned a 5:1 proportion, and the *yang* segments are assigned a proportion of 4:2. For example, in mm. 63-71, the Rain mode yields <010> (*yin – yang –yin*) and is assigned the proportions <5:1 – 4:2 – 5:1>; the Sun mode yields <101> (*yang – yin – yang*) and is assigned <4:2 – 5:1 – 4:2>. The *yin* segment for both modes is 5:1 while the *yang* segment is 4:2. Beginning in m. 72, the *variable mode* of the violin part is wl'/Bb and the cello is w'l/D. In following the modal structure, the rhythmic schema for the ascending Wind mode <011> (*yin – yang – yang*) becomes <5:1 – 4:2 – 4:2> and the descending Wind mode becomes <1:5 – 4:2 – 4:2>, yielding the patterns outlined in Example 3.15.

It is worth mentioning an exception in the use of ratio. Instead of the ratio 5:1, applied in most of his music, Chou used the ratio of 1:5 to represent the *yin* segment of the descending Wind mode for a musically expressive purpose. In order to create rhythmic momentum to connect the previous section with the *poco piu mosso* section, Chou adjusts the ratio in the cello part to fit his musical purpose. In contrast to *Echoes from the Gorge*, where both *yin* segments of the Wind and the Lake modes utilize the same rhythmic schema of <5:1> and both *yang* segments of the Wind and the Lake modes utilize the same rhythmic schema of < 4:2 >, in *Windswept Peaks*, we can detect Chou's evolving his rhythmic structure with flexibility to suit his musical goals.

Example 3.15: Durational structure in violin and cello, mm. 72-79, *Windswept Peaks*



Vln and Vc: mm. 72-79, *Windswept Peaks*

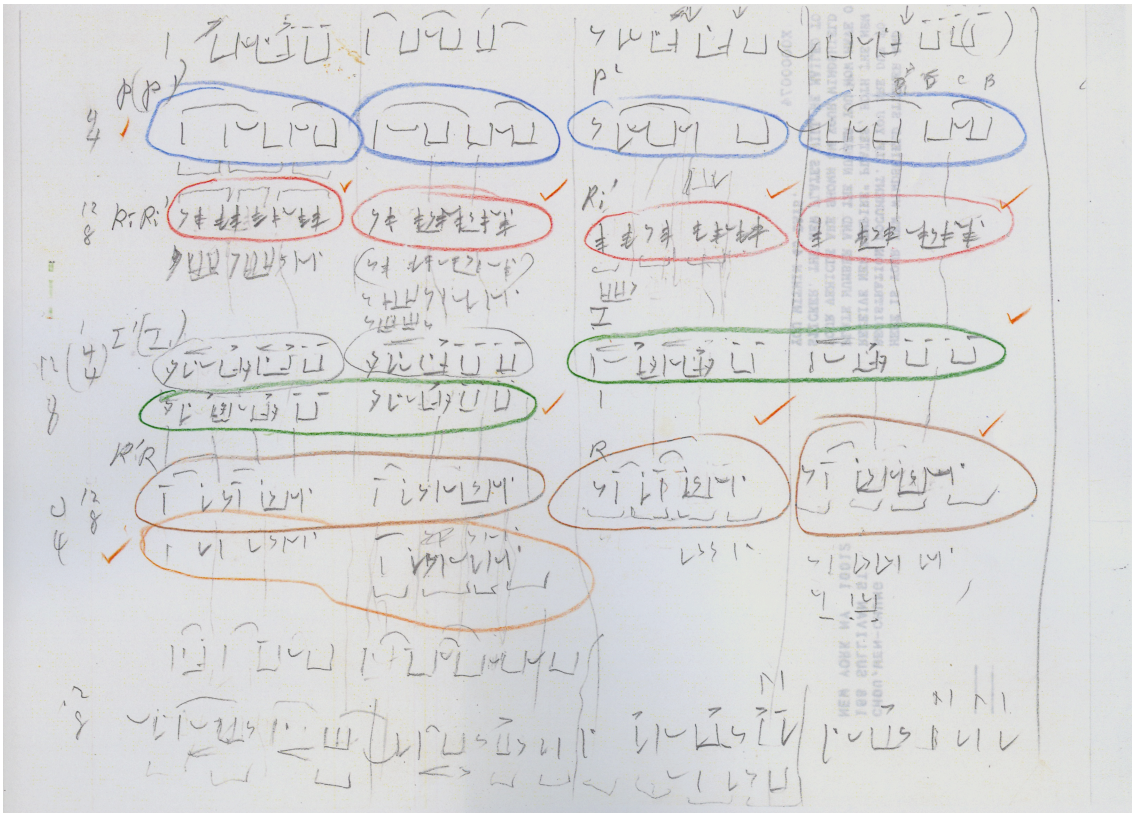
Through the two examples above, one may gain a better picture of how Chou applied the aesthetic concept of asymmetry to rhythmic structures. In the case of *Echoes From the Gorge,* to obtain constructive rhythms, Chou assigned different rhythmic schema to the *yin* segments in the Rain and the Sun modes. In *Windswept Peaks*, the Wind mode and the Lake mode are assigned identical rhythmic schema. It is not inconsistency in the use of rhythmic structures that governs Chou's rhythmic design in these two examples. Rather, choices indicate an aesthetic reflection on this inconsistency at the foreground level. The durational ratio 1:2:3 serves to control the static background in both pieces, while the local need for rhythmic flexibility has led to the composer's variable interpretation of the proportion. Thus, Chou Wen-chung demonstrates that his system allows different expressive and emotional shades of musical meaning. From the foregoing we can understand Chou's aesthetic concept of asymmetry: the process of change results from the constant interplay of the duality of *yin-yang* (change v.s. stasis) at phrase and structural levels.

Period III. Works of the 2000s: String Quartet No. 2 *Streams* (2003), *Twilight Colors* (2007)

After nearly four decades of devoting himself to developing the *variable modes* theory, Chou has recently emancipated himself from it. Starting with String Quartet No. 2, *Streams*, in 2003, Chou associated his modal theory with writing for a larger range of musical genres, styles, and instrumentation. Some of his new works have even been inspired by different cultures, such as *Eternal Pine* for traditional Korean ensemble. No matter how the theory has been transformed, Chou's aesthetic remains consistently rooted in the *yin-yang* concept from the *I Ching*. Likewise, Chou still applies the ratio 1:2:3 of *I Ching* to rhythm.

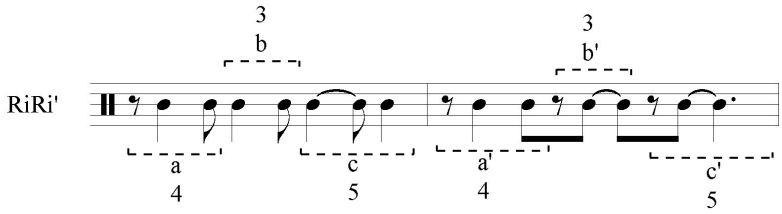
Looking closely at the rhythmic sketch in *Streams*, I observe Chou's attempt to assign the rhythmic groupings in both ascending and descending lines based on *variable modes* theory (see Ex. 3.16, Chou's sketch at PSS).

Example 3.16: Rhythmic sketch of String Quartet No. 2 *Streams* (excerpted from sketches of String Quartet No. 2 *Streams*, and reproduced by kind permission of Chou Wen-chung Collection, Paul Sacher Stiftung)



In the third row of the sketch, Chou marked RiRi', as the presentation of ascending and descending modes. Three segments a, b, c in ascending mode later alter notes with the replacement of a quarter rest in descending mode. In order to present the subtle change in the descending mode, Chou utilized two quarter-rests in b' and c' segments. Nevertheless, the total values of the rhythms in ascending and descending modes are equal (see Ex. 3.17).

Example 3.17: Constructive rhythms deriving from the Rain mode and its inversion, from the sketch, String Quartet No. 2 *Streams*

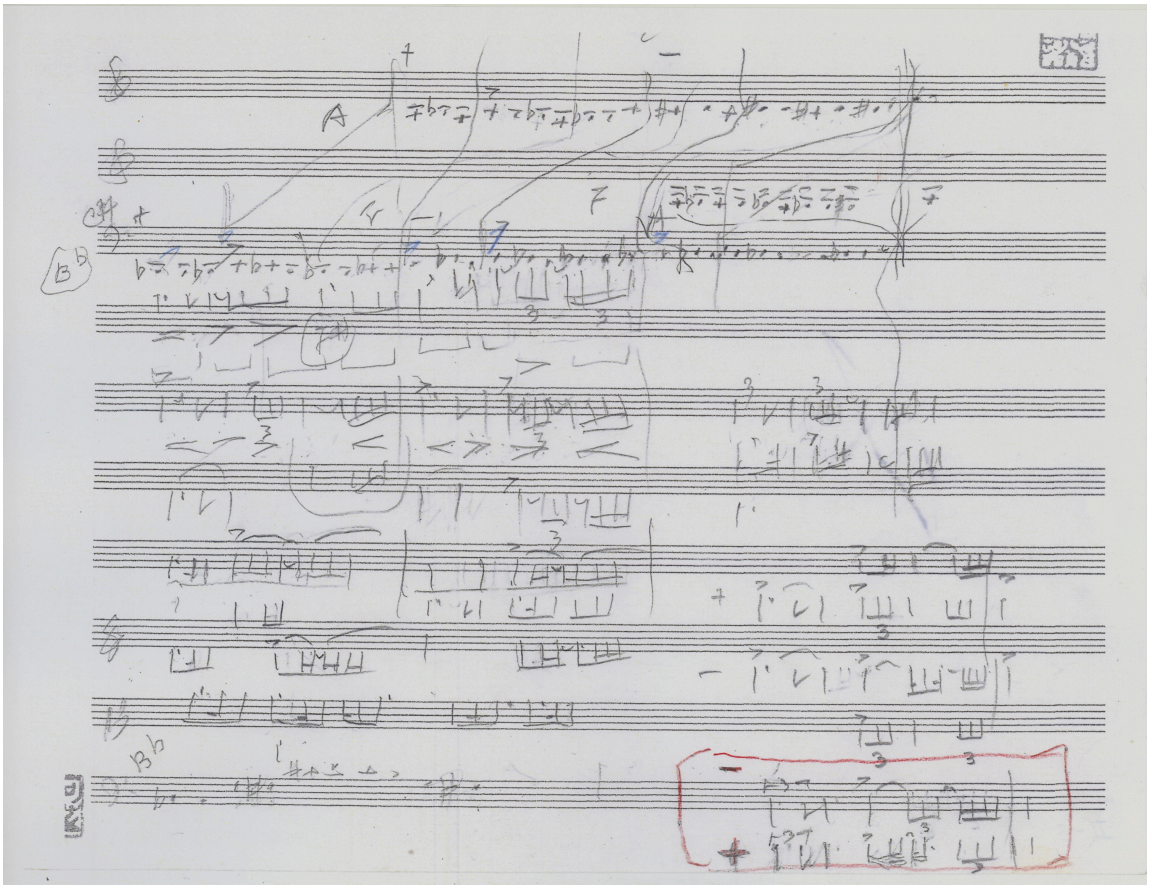


Moving forward to the second piece in this period, *Twilight Colors*, a double trio for winds and strings (2007) is an extraordinary example of Chou's recent practice. In order to decipher the secrets of *Twilight Colors*, I conducted an interview with Prof. Chou via email for my presentation in the colloquium of Paul Sacher Foundation in November 2011.

In my first study of the rhythmic sketch of the *Colors of Dawn* of the *Twilight Colors* below, the "plus +" and "minus -" markings caught my attention. According to Chou, the positive and negative signs refer to the *yang* and *yin* of *I Ching*. Every complete rhythmic mode contains a *yin* and a *yang* segment. Moreover, those *yin* and *yang* segments interact and blend with each other in different voicings[15] (see Ex. 3.18, Chou's sketch at PSS).

[15] "…..Rhythmically, this short movement ("Colors of Dawn") occupies an enormous amount of time just in the first page. ….But the principles are very simple here, namely, there are 6 independent parts, which suggest 6 rhythmic entities that interact quickly with each other through transformation. ….I tried to develop the same idea into two versions, positive and negative or yang and yin, marked by the plus and minus signs as I recall." Chou Wen-chung's email on October 26, 2011.

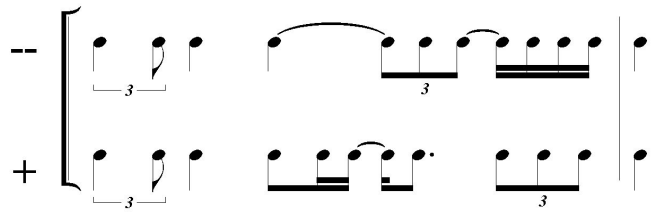
Example 3.18: Rhythmic sketch of *Twilight Colors* (excerpted from sketches of *Twilight Colors*, and reproduced by kind permission of Chou Wen-chung Collection, Paul Sacher Stiftung)



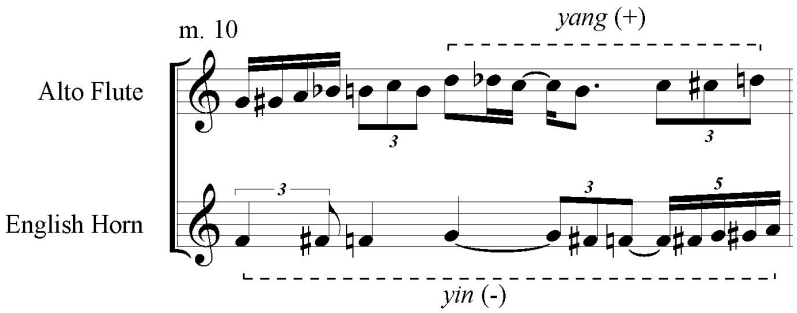
In Example 3.18, a rhythmic sketch of the *Colors of Dawn* in the *Twilight* Colors, most of the rhythmic entities include one negative, as *yin*, and one positive, as *yang* of a mode (see Ex. 3.19). A rectangular box in the bottom of the sketch, colored red, *yin* (-) and *yang* (+) shows as well. Applying the rhythmic mode in the box to the music, it appears in the alto flute and the English horn in m. 10, the second movement, "Colors of Dawn" of *Twilight Colors*. Chou utilized a complete *yin* (negative) segment with a slight variation in the last beat in the English horn part. The four sixteen notes become a

quintuplet. At the same time, the alto flute plays an incomplete *yang* (positive) segment. Thus, a complete *yin* (negative) segment played by the English horn coincides with an incomplete *yang* (positive) segment played by the alto flute, together forming a complete *yin-yang* rhythmic mode in vertical voicing (see Ex. 3.20).

Example 3.19: Rhythmic transcription of Chou Wen-chung's sketch in *Twilight Colors*



Example 3.20: Alto flute and English horn m. 10, movement II, *Twilight Colors*



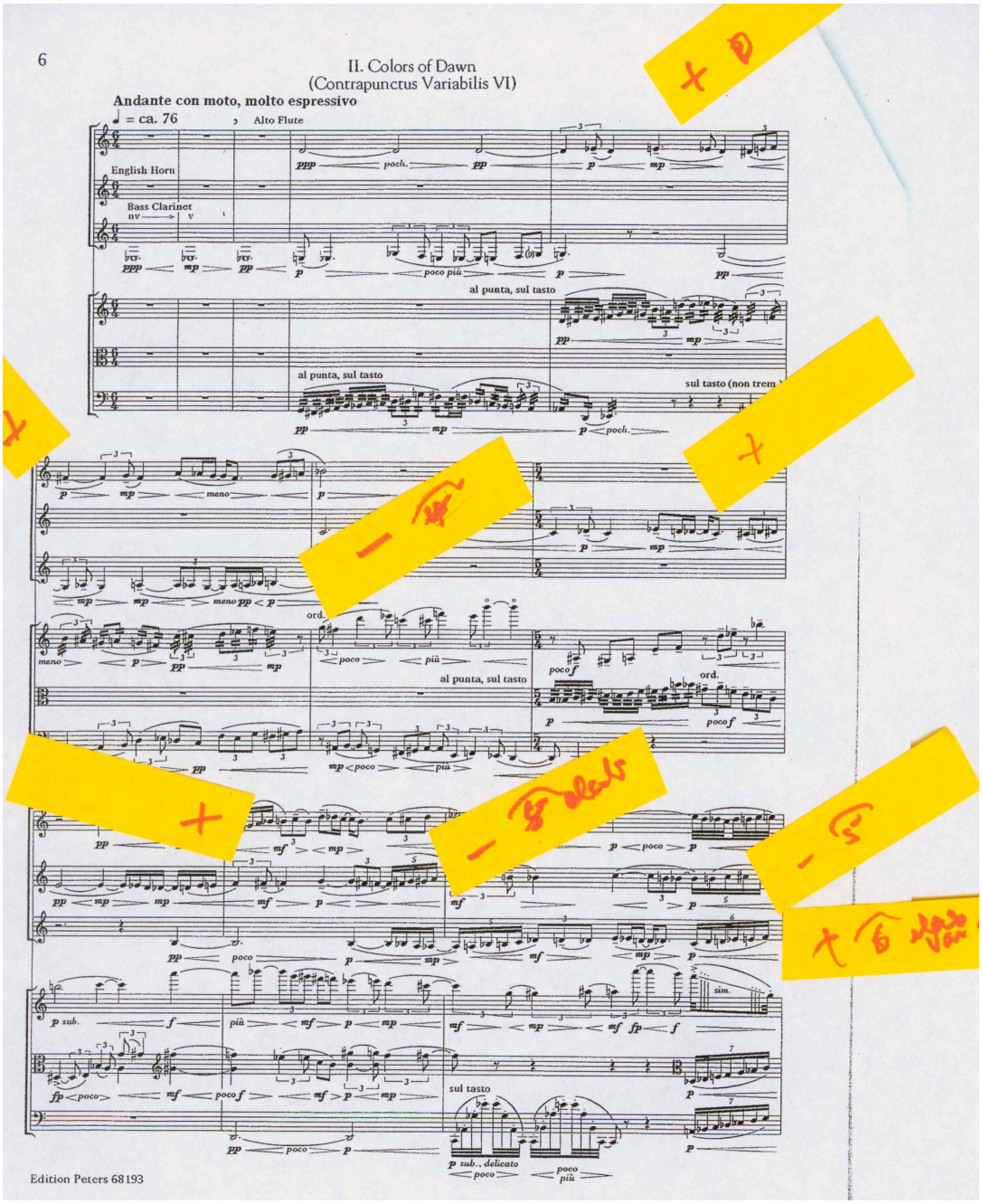
Chou explained some more obvious placements of *yin* (-) segment and *yang* (+) segments in the first page of movement II, *Colors of Dawn* in the *Twilight Colors*:

> *"…….In the score, the positive version of the motif actually shapes up by the 5th measure. Thereon you should be able to easily identify the various versions of the positive and negative motifs. For example, the obvious ones are the positive in m.*

5 and m. 6 for alto flute, and the negative in m. 6 for the bass clarinet. You'll then find more elaborate versions such as the positive in m. 10 for the alto flute and negative in the same measure for the English horn, to be followed in the next measure by the positive in bass clarinet again"[16] (see Ex. 3.21).

[16] Chou Wen-chung, email of October 26, 2011.

Example 3.21: Composer's annotated score with positive (*yang*) and negative (*yin*) rhythmic markings on the first page of movement II, *Colors of Dawn*, *Twilight Colors*[17]



[17] This is Prof. Chou's annotation using sticky notes to indicate the *yin* and *yang* segments of rhythm. In m. 5 and m. 6 the *yang* segment is indicated in the alto flute. In m. 7, the composer indicates the *yin* segment as violin I and *yang* segment in as English horn (mm. 8-9). In m. 10, Chou indicates *yin* segment in both the alto flute and the English horn, and in m. 11, he shows the bass clarinet playing the *yang* segment.

Besides some spots in which the rhythmic modes are directly applied in the manuscript, I detect numerous kinds of transformations within. Based on the *yin-yang* rhythmic prototypes in his sketch, Chou evolved them by juxtaposition, permutation, superimposition and distortion to fulfill his musical needs:

> *".....This is only the central part of the rhythmic structure of each version, which allow for considerable variation and elaboration so that when they're blended together you hear a new formation like a fresh new cloud formation. .....Yet, they are forged into interactions of numerous versions of the same idea-- which at first is structured simply as one positive and one negative element. The purpose is to show how these 2 versions of the same idea, seemingly very close to each other, can in fact interact and develop into music of no more than a couple of bars/measures suggesting how colors change quickly at dawn over the mountain peaks of the Catskills."*[18]

> *".....Among the other interesting rhythmic devices in this short movement are consistent tremolos that serve as a kind of counterpoint in rhythm. Of course to explain this short movement, one would have to take into consideration other aspects such as the nature of each instrument and their effective registers, etc. In a sense, the sudden burst of elaborate rhythmic structure serves a contrast to the first movement, which fundamentally deals with the sky that is still static."*[19]

[18] Chou Wen-chung, email of October 26, 2011.
[19] Chou Wen-chung, email of October 26, 2011.

Conclusion

After several decades of experimentation with his *variable modes* theory, Chou has thoroughly mastered his process. His lifetime endeavor reflects his full understanding of both Eastern and Western cultural and musical traditions. His theory is based on the *I Ching*, where the internal logic of the music is based on the premise of continuous, subtle changes and movements of recurrent and non-recurrent polarities of the *yin-yang*, resulting in asymmetry at multiple structural levels. His aesthetic concept of asymmetry is profoundly rooted in Asian culture, particularly in the Chinese *I Ching*. When the concept of asymmetry is applied to both spatial and temporal dimensions, I sense the kaleidoscopic phenomenon in the foreground level.[20]

The *variable mode* theory is Chou's personal interpretation and realization of *I Ching*'s philosophy and aesthetics. Chou fully understands the essence of the duality of *yin* and *yang* in the *I Ching*. When there is a static subject, the other corresponding part changes to offer flexibility. The extension of certain chords or the repetition of some rhythmic patterns offers another example of flexibility. This duality of change versus stasis does not cause Chou's music to seem like a "lifeless" system. On the contrary, deviation from the norm becomes a vital component of Chou's system, which consistently reveals Chou's aesthetic belief in the concept of asymmetry as the underlying principle of the *I Ching*. This duality of change/stasis is what brings Chou's music its vitality.

[20] See Chapter 5. "Timbre, Texture, and Imagery" in *The Music of Chou Wen-chung*, Eric Lai (Vermont, USA: Ashgate, 2009), pp. 107-144.

Throughout two months of study on Chou's manuscripts at Paul Sacher Stiftung in 2011, I sometimes found "incorrect" correspondences between sketches and the actual music. Especially in Chou's later compositions, it is challenging for the analyst to follow the rules of *variable mode* theory in his music. Chou explained the reasons in the following statement and *Twilight Colors* illustrates his concept:

> *".....My very early rhythmic concept evolved out of my studies-- certainly not limited to those of eastern origins, but the moment my idea could be developed into guidelines for creative activities, I inevitably move beyond what can be explained by math and physics because I'm a person. I have feeling and moods, which cannot be put into any square box. This is why with my more recent works, composed once I was free from my preoccupation with working on Varèse's music, I began to seriously evolve my own theories and techniques beyond the point where they can be analyzed on the basis of normal western cultural heritage. This can be detected in the string quartets but particularly in* Twilight Colors*, where I'm even more free-- or rather more aware of cultural heritages.* Twilight Colors *is actually even more precisely composed than any of the earlier works, but yet seems so free as to appear contradictory to my own theory in my earlier works. This can be explained by what I've done for decades, watching the interaction between the light of the setting sun and the moving clouds above the Catskill Mountains. It appears that nothing that goes on in the summer evening sky, which I observe whenever I'm in Rhinebeck can be analyzed, expected or explained. Yet we know at any single moment, the clouds change shape because of numerous atmospheric forces-- many of these forces come from far away and*

their interaction creates the visual and emotional impact I feel when I watch the sky. I'm very pleased with what I evolved in writing this piece, because I've made my rhythmic theory as well as the rest into an art in itself rather than a set of rules and modes to be followed."[21]

Therefore, the seeming "inconsistency" in Chou's musical creation is often the result of the aesthetic reflection, which also inevitably involves emotion. The concept of *yin-yang* interchange in the *I Ching* serves as the backbone of his music. The analyst should approach the music through the theory, but at the same time, should not be trapped by the theory alone. In Chou's theoretical method, we have seen that his aesthetics often serve to express underlying theory for practice. The resulting rhythmic structure is just an evolution of its basis.

[21] Chou Wen-chung, email of October 26, 2011.

Chapter IV

Chou Wen-chung's *Eternal Pine*: An Interview with the Composer

This interview is focused on Chou Wen-chung's three most recent pieces for different instrumentations falling under the same title, *Eternal Pine*. Each of the three pieces belongs to a particular genre. They are: *Eternal Pine* for traditional Korean instruments (2008, 2009), *Ode to Eternal Pine* for Western sextet (2009), and, *Eternal Pine III* for Chinese instruments (2012, work in progress). The interview was held on February 12, 2012 in Chou Wen-chnug's place, New York City.[1]

Janet Chen: Using the same theme, you composed three versions of *Eternal Pine* for different kinds of ensembles. There is no other composer who has ever done this before, that is to reconceive the same music for both Asian and Western ensembles. It is an unprecedented achievement. Was it your own idea to do it at the very beginning?

Chou Wen-chung: Not at all. I have always been interested in East Asian instruments, particularly Korean and Japanese as well as Chinese since they are so closely related in history. And I have been reasonably familiar with all three kinds of music. In the 1950s, early in my career, I was interacting a lot with scholars, traditional musicians from Korea and Japan. Some of them were moving to this country and worked

[1] The following transcript is lightly edited and formed with Prof. Chou's permission in original language: English. Additional conversations in Chinese were held on November 11 and December 14, 2011. I plan to publish the Chinese language interviews at the later time.

together at universities. Others I met in other occasions. From then on, I visited quite a few East Asian musical centers to study local traditional music. So I have always been fascinated with those kinds of music. I was interested in them because the musical traditions in those three countries – China, Korea and Japan – have been historically rather close. There are very important Chinese music traditions that you could not find any residual traces of China. And yet, you do find them in Japan and Korea. You also realize that Korean versions, Chinese versions and Japanese versions would not always coincide. Because they developed in different periods in history. So, it's been very much on my mind. Especially in developing my own musical concept and aesthetics, I did not just rely on the history of Western music or Chinese music. I really paid considerable attention all along to how it was developed in Korea, or in Japan. In fact, I went to those countries to study the music. At that time, I was fortunate to meet with important musicians in their traditional institutions. How the music developed in those societies, in those cultures and histories has been very much on my mind. So I do have that background and that interest. But I never thought of writing for these instruments. This happened really like a kind of surprise. It was only because I happened to be in Korea a few years back. A very well-known *gayageum* player, Yi Ji-young, heard that I was there. Somehow she managed to call me and insisted that I listen to her, and

her group played because she wanted me to write the piece. I made it very clear I had other pieces on my mind and wasn't going to do that. But then, I decided, yes, I would like to interact with them.

JC: That's really a surprise. Could you tell us more about how it began?

CWC: First of all, she (*gayageum* player, Yi Ji-young) invited me to her concerts. And I was greatly impressed with her performances. I knew her reputation. She is a very serious performer, dedicated to her art, and I was nonetheless, or more impressed with her personally once I got to know her. She was very insistent that I hear them rehearse. So I went there. I spent an afternoon hearing them rehearse, and talking to every member of the group about the instruments and so on. I came out very much impressed and found it attractive to do something for them. But still, I said no. But somehow, in the end, I found it very hard to continue to say no. She was so insistent and then I said let me think about it. Finally, we managed to agree on it. I decided to do it.

JC: Before actually writing for Yi Ji-young's ensemble, what did you do as pre-compositional work?

CWC: I made it very clear that I would not write a piece for their instruments, for their kind of ensemble, until I really understood how they function together. So they agreed I should feel free to raise questions with every individual member of the group. They were all very nice. I literally spent the next year and a half in communication with them and demanding quick email responses. Sometimes I got very good explanations of things, other times I would have to experiment to find out about it. She was so anxious as I was coming back home to my study. I

realized that a *gayageum* instrument was delivered just for me to experiment on. By that time, there was no way not write the piece for them.

JC: Then you composed *Eternal Pine*? What does the title mean?

CWC: Yes. I cannot write the piece until I have clear idea as to what I want to say. Not so much in terms of music, or in terms of pitches, melodies, etc. But in terms of what it means to me. What is the feeling, the mood, the ambiance, the imageries and the sounds I hear before writing a piece? I have to create mental work of my own before I can write such a piece. Therefore, the mental images are extremely important. When you talk about Korea and Japan, the image of an old tree on the top of mountain – is always a concept. That's a typical kind of imagery, which represents eternity, the endless and how the time goes through the universe and in our lives. Just like a tiny dot in a whole passage of time. Nonetheless, the pine, especially the old pine, on top of mountain, it symbolizes the permanency of humanity. So, for a Chinese artist, that's always the first thing that comes to your mind. I say for a Chinese. But I mean for an old-fashioned guy like me. For most young Chinese, probably the imagery could be quite different. I have to say, whenever I think about something, the imagery is a hundred percent Chinese and historic rather than modern.

JC: Even though you have lived in US for over sixty years, your musical ideas remain very Chinese. How did you preserve your way of thinking?

CWC: For example, I was inspired by Costume Mountain on a summer day at sunset, but immediately in my mind, the imagery is transformed into typical Chinese imagery. And that's what we call heritage. I don't think we should fight against it.

We should start with that. And then bring it into our life today rather than the other way around. Well, for people who say, "I am born in our time, I don't care about the past", I will say you are going to miss a lot. The present comes out of the past. Without the past, there is no future. So without knowing your past, you don't know your future. That's very important.

JC: So this piece is also a representation of this heritage?

CWC: That's what happened to me immediately when I finally decided to write the piece on this heritage. Why do you write for Korean instruments? They have their history, heritage, and cultural historical development. You have to respect that. All that should be your source of expression. So the title was thought about very quickly. With the title, musical ideas.

JC: I know it was your first time to write for Korean instruments. Can you tell us more about writing music for *gayageum* and an ensemble of *daegeum*, *piri*, *shaengwhang*, and *changgu*?

CWC: When I decide to do something, I also ask myself what I really know about the instruments and how much time it would take me to learn the instruments. Or, would it be ever possible for me to develop conventional ideas for the instruments? And I did think of that right away. I knew *gayageum*'s history. I studied *koto*, and I played around with Chinese instruments. So I had the feeling for that. I used to be very critical about how the Chinese instrument *zheng* has been played in modern times. In my own time, which means decades ago. Whenever you hear a new piece for Chinese *zheng*, you hear endless *glissandi*. I am very much aware of that. In *gayageum*, the wonderful thing about it is the

pressure you put on the string to change the pitch. The implication of that is enormous. You can't play like that on the piano. The sound is nothing compared to what you can do with the *gayageum*.

JC: What are the most difficult parts to write for them?

CWC: As I said with *gayageum*, the interest to me is a little bit different from some other similar zithers of this nature. Just because of the high bridge and tension on the string. You can raise and lower the intervals to even beyond a minor third. Just think of that possibility, and of course, we have to be careful whether the player can actually control the pitches correctly with the lack of tension on the string. So I had a clear idea of all the kinds of sounds and performance techniques I was going to deal with. And with other instruments, which may not be as complicated as *gayageum*, but nonetheless, I needed to understand. So I made the request that they would respond to my questions, which could be very detailed. In the next year, during the year I was working on that. By the way, people say, "Do you really spend so much time on it?" Yes, I do. I have to study it from scratch. I have to learn about the instruments. I have to review the history, culture, and all kinds of things. In fact, what attracted me to do this piece is something else that I have not mentioned. Namely, this *gayageum* ensemble, the traditional called *Cheng-Yue*（正樂）, represents a kind of intellectual music. Intellectual music for artists started in China, consisting of a small ensemble of instruments. The purpose of writing that music was not to entertain a large audience. It was not supposed to entertain. It was for really intellectual, emotional communications between the performers and listeners. It's like a *Gu Chin*, Chinese zither, *qin*. Usually if you

see it in a painting, either the *qin* player, who is always a composer himself or herself, plays the music for him/herself. Or, it could be a single person sitting there listening. It was a mind-to-mind communication and that's very important. Later on, the ensemble got extended. By the Song dynasty, in the 12th century, this was a standard form for intellectuals, artists and scholars to communicate musically. They played for each other. That attracts me. I realize that tradition is similar to the beginning of chamber music in Europe. I always love Western chamber music. So this is another attraction. Therefore, the details of performers' techniques are so important. You are not looking for effects. You are looking for how you can create your language as subtly as possible. When we speak, the inflection is very important. It reflects your emotion and so on. We (the members of ensemble and I) really spent a lot of time. I have stacks of communications during that period. Out of which I shaped my own compositional attitude or compositional ideas, depending on their answers. To give you one very important example, the *daegeum* player, called a traditional Korean flute player, was very meticulous in giving me a complete picture of the tonal qualities of whole range. He meticulously indicated on which notes, which pitches are *forte*, or *forte* to what degree and so on. Or, whether it can be controlled or not controlled and when it will be risky to use. With that consideration, I was not going to discard the question of pitches. I began to think how I could use those pitches by knowing which are controllable, and which are going to be flat or sharper. It helps in my whole tonal concept about the piece. Once you have an idea of that part, for instance, because of a *forte* pitch, you have to think about the other instrumental

parts as well. Composing is a very internally inter-related issue. You deal with one instrument if you want to bring all its characteristics. You have to bring all the pitches that are not accurate. Or else you lose the character. But then how you deal with that pitch or those pitches. That's part of your technique. That's part of your compositional grammar. That's how I developed the whole attitude about the piece.

JC: It seems quite different from composing for Western instruments, isn't it?

CWC: In the West, everything is so scientific we don't have to worry about anything other than which fingering is difficult. But in the East, yes, you have to think about that. That creates the characteristics of that particular instrument. If you don't take that into consideration, you shouldn't write for that instrument. Whether you think it's a *forte* pitch, but that's part of it and you have to live with it.

JC: Let's move to your second version for Western instruments, which is *Ode to Eternal Pine* for Flute, Clarinet, Violin, Cello, Piano and Percussion. What brought you to write this?

CWC: I had a conversation with the New York New Music Ensemble. I brought it up that I was writing a piece for the Korean ensemble. That was right after I started the *Eternal Pine* for Korean instruments. When I was asked what I was doing, I described what I was doing and my concerns with it and so on. I said, "I wish I could express the same musical ideas for modern instruments." They said, "So then, why not? We will commission you to do that." I said, "I am joking. I don't think I have time to do that and would rather not." And that was that. I was

driving to Rhinebeck. When I arrived in my country home in Rhinebeck, I sat on the deck and was going to see Costume Mountain tops from where I was. I looked at that. And suddenly an idea came to my mind. Yes, indeed, why should I not write a piece for a modern ensemble after having the Korean version to see how would that affect me? How can I express the same aesthetics, the same feelings and the same kind of desire of a modern composer for modern Western instruments? So I literally called them back and said, "Ok, I am willing to think about this." Then we got started on that.

JC: But do you regard *Ode to Eternal Pine* as a fully different piece from the first one, *Eternal Pine*?

CWC: When I started to say I would write another piece based on these ideas, I didn't know what I was going to do. But it just sounded fascinating to me. Because I think, to me, you write for whatever, because you like that thing. You like those instruments. So you want to really know about those instruments. What can you can do with them? What do you understand about them? What you can express through it? Not through something else. Once you have that, you really want to achieve that. For me to do that, means however, I have to transpose and transfer all the feelings and composer's concerns for the Korean ensemble to the modern ensemble. Therefore, it's almost like explaining yourself in another language according to the culture of that language. And that's not an easy thing to do.

JC: How did you deal with the differences between traditional Korean instruments and Western instruments? Such as the issues of register, timbre, tuning, techniques, skills, performing training and so on?

CWC: The first thing is not to be slavish. It's not a transcription. I don't think any composer should ever consider writing a transcription, something for something. I think you are bound to fail. You have to think from that instruments' point of view. So, it's re-creating. I decided not to follow what I was writing for the Korean instruments. I started it over again but with the same mental imagery, the same feeling, mood, the same kind of expressions and all that. My principle is to avoid literally using the original material. I started with the original material, started to understand and then said, "Ok, I am going to express it this way." As you are re-telling a story in another language, in order for people who speak that language to understand you, not in terms of just technical meaning, but in terms of emotion and cultural background, how do you express yourself? Later on, in Los Angeles on the occasion when both pieces were played, and both of groups of performers were on the stage, the performers were amazed. They thought the two pieces were completely different. And they should be!

JC: As you mentioned, the *gayageum* is the main instrument in *Eternal Pine*. And how did you apply it to the Western version? Because the Western instrument doesn't have the capacity to create those pitches.

CWC: Western instruments are wonderful instruments. I love that. But they have a major default. They are not flexible. I have a memory that in the 1950s, I had been fighting with performers about inflection. But today everyone does those things. But the composer has to make sense. If you just make it a demand, and you don't have a commitment, you are not going to win over the performer. When I get inside of the piano, it's not because I want to be fashioned according to the 1950s.

It's just because I can do things that the ivory keyboard would not be able to do. That's why, when it comes to the piano, replacing the *gayageum* for the American version, you will see the pianist launching inside the piano. That was not for show. That was not fashionable. If I want to be fashionable, it's half a century too late. The main point is how to make instruments flexible. And also, how that flexibility is actually heard. And to be heard not as a kind of curiosity, not as a mistake, but as designed expression in your music. You need clear aesthetic principles to create your art, and need a personal technique for each piece to make sense out of that. I think for a composer to think that separately is very important.

JC: The latest one that you are working on, *Eternal Pine*, is the third version, for Chinese instruments, including zheng, guanzi, dizi, sheng, pipa and drums. Is this your first composition for Chinese instruments?

CWC: Yes. In fact, the reason I am doing it is partly because I love punishment.

JC: Have you not written for Chinese instruments before?

CWC: Not that I can remember. When I was a kid, I experimented with all kinds of things. When I was around ten years old, including a *musical saw* in China. I used to just play around with instruments. *Musical saw* is an extreme. So, for me, it just means challenge. I don't mean to really know how to write a virtuoso piece for instruments I don't know about. But, I try to learn the character, the spirit, and the soul of an instrument. I don't mean it's necessarily always hands on. Hands on is very helpful, but some related instruments you have knowledge about them. You can begin to figure out what they might inspire you to do. From my point of view, I never thought about this before. I never thought of even writing a Chinese piece,

a piece for Chinese instruments. For example, though Chinese *qin* music influenced me tremendously, I have never written a piece for it. I was not attracted to it. I do not feel I am qualified to do that. To a logical extent, because I feel that to obtain a proper Chinese *qin*, you have to work for decades. That was when I tried to get it initially. I just gave up. And because I don't have an instrument to inspire me. I just have never written for it. And yet, its aesthetics, technique and so on have influenced me tremendously. So this is the same thing when I write for different groups.

JC: Among the instruments you picked for the Chinese version, the Korean instrument *gayageum* corresponds to the Chinese instrument *zheng*. The *deageum* became *dizi*, the *piri* became *quanzi*, the *sacnghwang* became *sheng*, and the *changgu* became Chinese drums. But why did you add the *pipa* to the Chinese ensemble?

CWC: As you know the history, I really did not think I would write another version for Chinese instruments. By that time, I had written the Korean ensemble, for the solo version for *gayageum* and *changgu*, and the Western version. So I thought that was it. My first idea was to find similar instruments that would be able to play in those registers. I wasn't thinking of re-writing it. But you know the rest of the history.[2] As I got into it again, I just felt unable to resist the temptation. Because it

[2] Co-funded by composers Janet Jieru Chen and Koji Nakano, *Asian Young Musicians' Connection*, holds annual events every year. When I got the official invitation to collaborate with the Taipei Chinese Orchestra for our 2012 annual event, I thought it would be great if TCO could play Prof. Chou's piece in one of our concerts. But, at that time, Prof. Chou did not have any pieces written for Chinese instruments. First, I convinced him to transfer the Korean instruments of *Eternal Pine* to the corresponding Chinese instruments and to see how it would go. I then managed a tryout session with TCO musicians that let performers only play the same notes of *Eternal Pine* in Taipei. It was successful and attracted musicians' attention greatly. Then, I thought it would be wonderful if Prof. Chou can take this commission to write a

is a temptation. First of all, you can find the similar instruments. But even the *zheng*, a more traditional kind of *zheng*, it is not as same as *gayageum*. Therefore, you really have to get into the instruments. In this case, I think Yi Ji-young was very smart to ship me a *gayageum*, so that attracted me. Finally I agreed with her request. Then, I began to think about the ensemble. All these instruments are related. On the other hand, a Chinese *zheng* is different from a *gayageum*. That is a serious consideration for me when the other instruments are reasonably similar. To think about the chamber ensemble in China after the Tang dynasty, *pipa* has always been an important instrument. Not to hear the *pipa* sound, to me, would be a little odd in an ensemble. I thought because the Chinese *zheng* is different from the *gayageum* in character, and the *pipa* is typical of a so-called modern Chinese sound. Here, "modern" means from the 12th century to now. So I felt *pipa* should be in. But once I said that, I realized that *pipa* brings different kinds of sound, tuning system, and finger technique. It again started another process of renewal and changing the whole concept. Because I needed to make those changes to make this piece sound more Chinese than Korean.

JC: For you, in this case, what are the differences between arrangement and composition?

CWC: It's quite different. In the original piece, because of the nature of the Korean ensemble, the *gayageum*, I felt the need of *pipa* and once you have *pipa*. You are bringing another kind of element, another factor. *Pipa* and Chinese *zheng* share a

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"real" Chinese version of *Eternal Pine*. The premiere of the third version of *Eternal Pine* for Chinese ensemble will be on May 27, 2012. The concert will not only present the latest version of *Eternal Pine*, we will also have *gayageum* player Yi Ji-young and a Korean drum player come perform original version and moreover, the Western version will be performed as well.

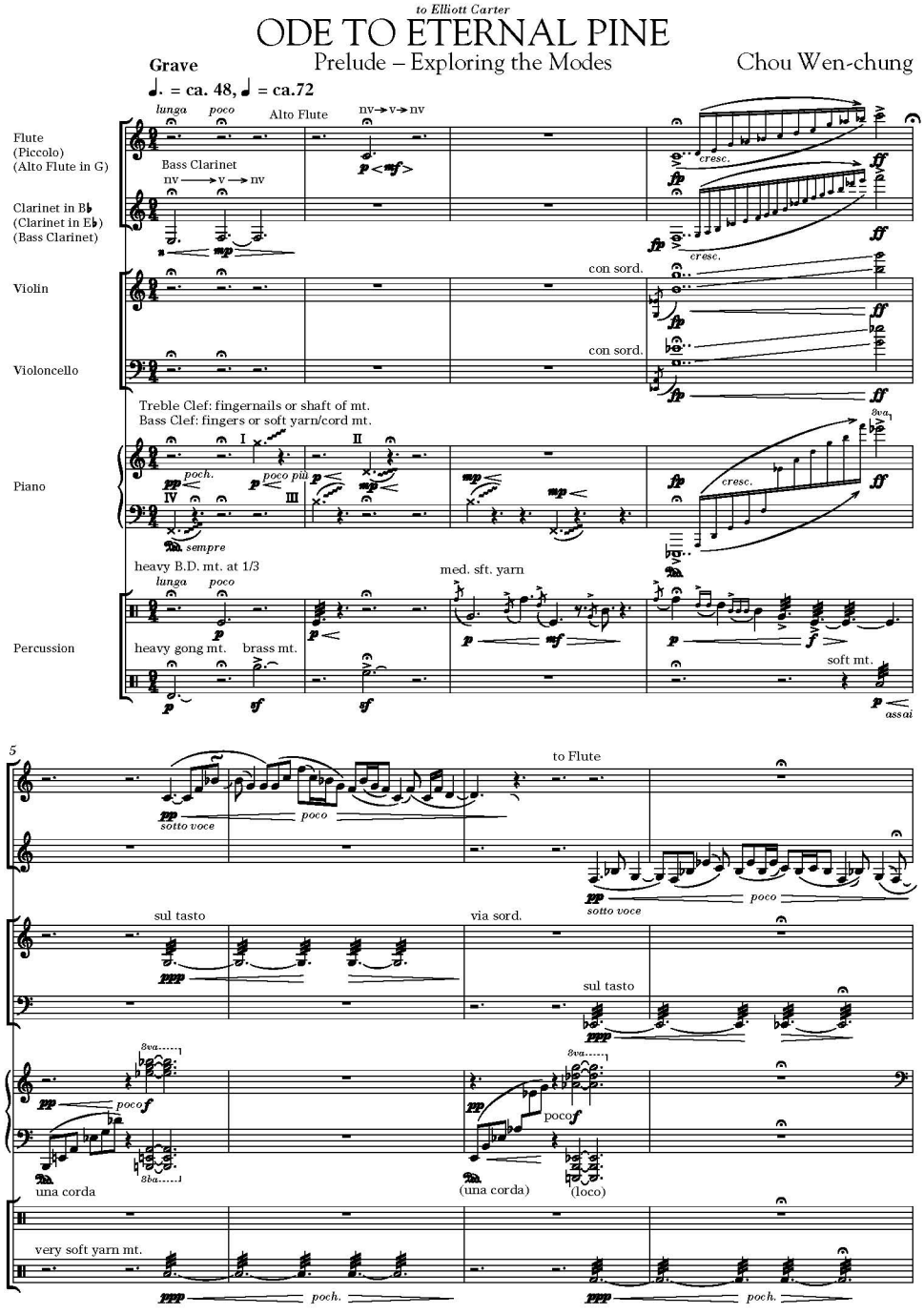
role but each will present the role quite differently. That changes the character of the piece as well. And, this to me is creativity. You really interact with all the material you use. With instruments and with what it represents historically. That's my attitude. We are in a post-modern period. But we are still always talking about something new and something old. But no technological experiments will help if you are not coming through from your own heritage. For me, to compose means going back and figuring out what the heritage is. It's almost unthinkable and criminal to impose on an instrument sounds that cannot be integrated into its own heritage. You can introduce new ideas. But to me, the new ideas, new sounds and new techniques would have to be able to merge, to come from inside its own heritage.

JC: Could you give us some specific examples to demonstrate how the music transforms in three different pieces?

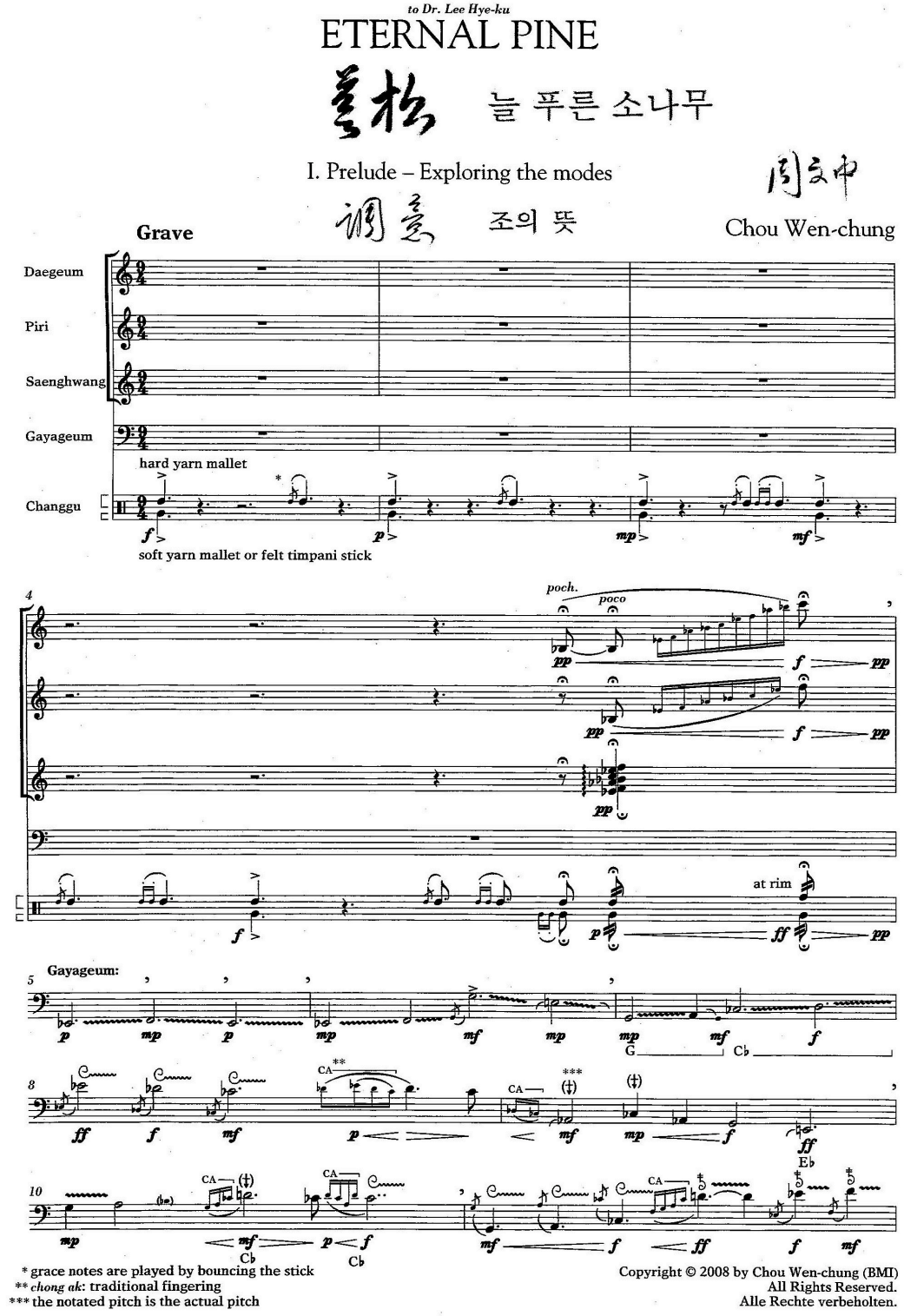
CWC: Take the opening passage of the three pieces. Here are the two versions.[3] Just as different as they are, they are still somewhat similar. The idea really for me was to digest both pieces and then to evolve them for different instrumental groups. But you can see the percussion instruments here (see Ex. 4.1). Using instruments in this passage, which is similar to that one (see Ex. 4.2). And then, later on, these things (see Ex. 4.2) are expressed in a traditional way through the piano (see Ex. 4.1) and so on. This is roughly to show how different they can be even though they are based on similar material to start.

[3] *Eternal Pine* for Korean ensemble and *Ode to Eternal Pine* for Western ensemble.

Example 4.1: Score of the 1st page, *Ode to Eternal Pine* for Western instruments



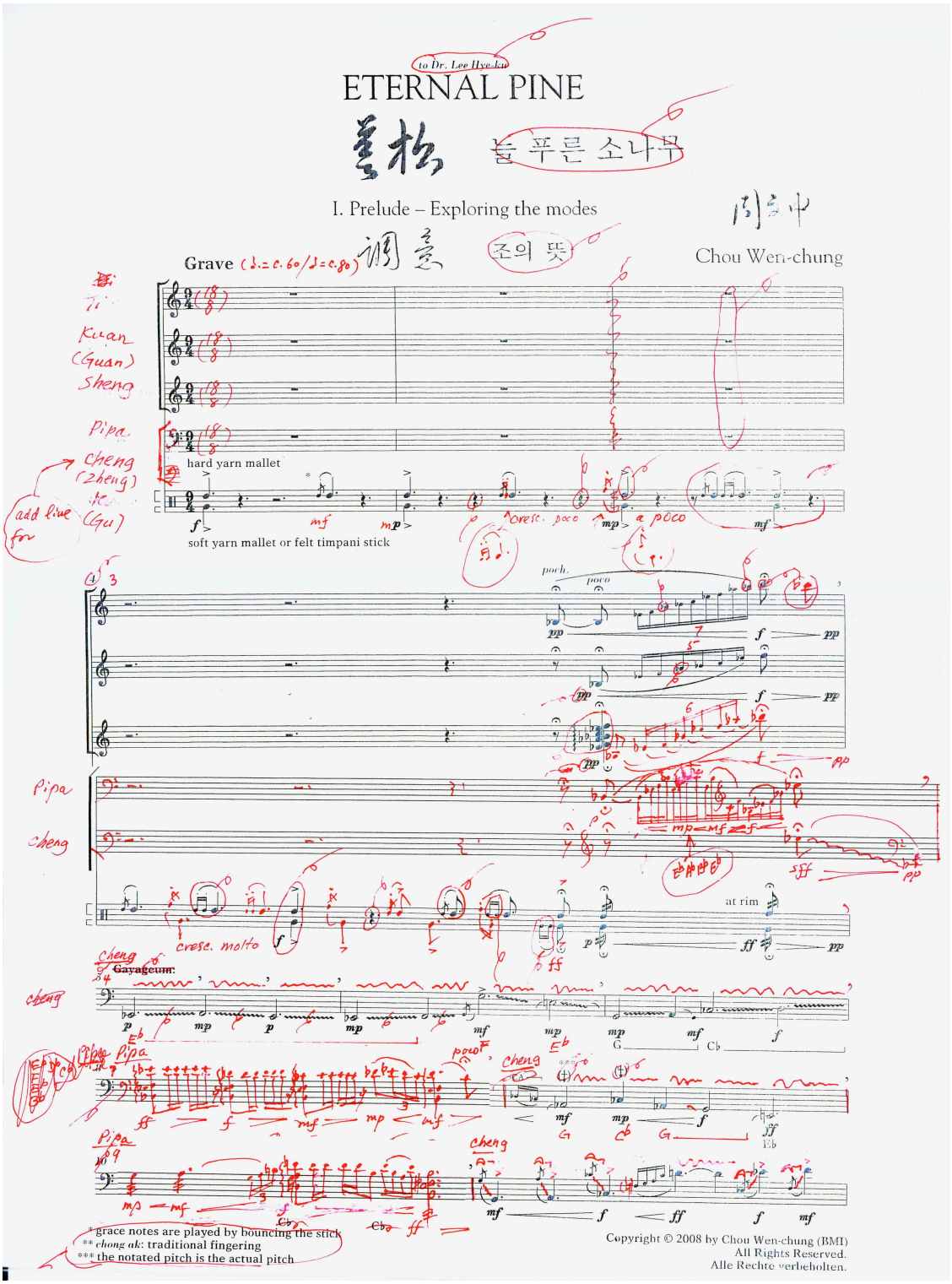
Example 4.2: Score of the 1st page, *Eternal Pine* for traditional Korean ensemble



JC: And, how about the Chinese version?

CWC: This Chinese version, in fact, is my hand-written notes on the Korean printed version (see Ex. 4.3). As you can see, the percussion remains the same, this scalar movement going up is more elaborate because I brought in both of the other instruments taking part. Originally the *gayageum* is silent here. (see Ex. 4.2) We have the *pipa* and *zheng*, however, this remains the same when the *zheng* comes in, then it's taken over by the *pipa* (see Ex. 4.3). The *pipa* part therefore appears to be very different. But in sound, that's a very traditional *pipa* sound. It can still mesh with the *zheng*.

Example 4.3: Manuscript of the 1st page, *Eternal Pine* for Chinese ensemble



JC: How was your writing experience overall? Did you consider different cultures and aesthetics as issues when you composed? How did you resolve them? Is there anything you want to add?

CWC: We were talking about how I would deal with the music itself, according to the instruments and the genre of the music. Its own cultural heritage. I think it's very important to decide beforehand if I am going to write for all kinds of instruments and disregard where they came from, what characters they have, what history they might have and so on. How would they have been used initially? I don't think that way. Because I have always have great respect for instruments, since childhood. Most of the stories involved me dealing with instruments so I always respect instruments' heritage. I learn what they are and then use them accordingly. I evolve not by imposing my own ideas on them but by evolving all their capabilities. This is very important for me in the compositional aesthetics of instruments. I think they came out of my childhood. My early experience was with an instrument in China, in a very old part of China. It was a harmonium with keyboard and pedal. I was so small I could barely reach the keys and pushed my foot on the pedal. I did not play a single melody on the keyboard. I was fascinated with the pedal. Because I realized that the tension changes the dynamics. I played with it all the time. I am just using that as an example of how to learn from what you find unique of a particular instrument. From that, my sense of dynamics, which is clearly revealed in all my scores probably it started with that. Therefore, that's my habit. And *gayageum,* as we said, is a principle instrument in the Korean version, and I had to deal with it. So were *dageum* and *piri* and other instruments. But *gayageum* is particularly interesting in the sense of personality, you play different pitches on the same

string and it can go up to a major third without a problem. Then, the question is how accurately a performer can control the pitch. And it was obviously not precise, not for some kinds of difficult rhythms, and not in a big ensemble situation. So that becomes a big question mark for a composer. How do you deal with that? To extend what you want to be heard? Otherwise, what's point? So that you cannot just double another with it because the two pitches may not exactly match. In the orchestra it may not mean much, but in an ensemble it will unless that's designed. So that started the whole interaction in terms of composing technique and aesthetics. How do you justify any deviation from the pitches? That affected my whole concept and theory. For example, when I write a linear line for *gayageum*, being a principle instrument, I have to think which notes are created by pressure, or while producing which pitch. Moreover, which note can be played on an open string? When you have a harmonic situation or a chordal situation, you want to use the open string. Because the pitch is exact. But linearly and contrapuntally, you may want to change the intervals slightly. You really want to have the fluctuation and intonation in pitch. But if you do, how do you justify it? With other instruments, who cannot do that? You have to have a reason for that. You cannot just do it hypothetically. It has been a major issue for me for, writing the version for Taipei.[4] Because of Chinese *zheng*, which has less intervallic variation possible within a minor third. The way I deal with this for these pieces with Asian instruments is to think in terms of my pitch material as being evolved out of some of kind of linear and skeletal setups. That makes such flexibility possible for the instruments. A whole new kind of compositional theory comes out of that. It's fascinating. As a composer, I want difficulties to challenge me, and to come up

[4] Chou refers to the latest version, *Eternal Pine* III for Chinese ensemble.

with musical solutions. Solutions are systemized so that you can make sense in musical expression. And yet, it's flexible enough to make these things happen.

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BIOGRAPHY

A native of Taiwan, Janet Jieru Chen has had compositions performed by groups such as Luxembourg Sinfonietta (Luxembourg), Orchestre National de Lorraine (France), Présence Contemporaine (France), American Composers Orchestra (USA), Eighth Blackbird (USA), Alarm Will Sound (USA), VERGE ensemble (USA), Kochi Ensemble (Japan), Banff Chamber Ensemble (Canada), and Cantai Music Group (Taiwan).

Jieru Chen is the first Taiwanese composer to win first prize in the ALEA III International Composition Competition (2009). Other prizes include the Orchestra's Choice, Audiences' Choice and Second Prize of 2009 National Taiwan Symphony Orchestra Young Composers Composition Competition. ISCM-ACL Young Composers Awards and Duke University's William Klenz Prize. She has also received fellowships from the Paul Sacher Stiftung (Switzerland), Acanthes Music Center (France), Millay Colony for the Arts (USA), International Music Courses in Darmstadt (Germany) and Composers Conference at Wellesley (USA).

Dr. Chen is also the co-author of an article "An Introduction to Chou Wen-chung's Concept of 'Water Image' Symmetry," *Mitteilungen der Paul Sacher Stiftung*, 19 (2006), the co-author of "*A prominent Taiwanese composer Lu-yen's Biography"* (2004), the co-editor of *"Series of Lectures, Seminars, and Composition Workshops by Chou Wen-chung"*(2003) and *"Chou Wen-chung Music Festival Special Album*" (2004). She co-founded the Asian Young Musicians' Connection in 2009.

Dr. Chen received her Ph.D at Duke University, where she studied with Prof. Stephen Jaffe.