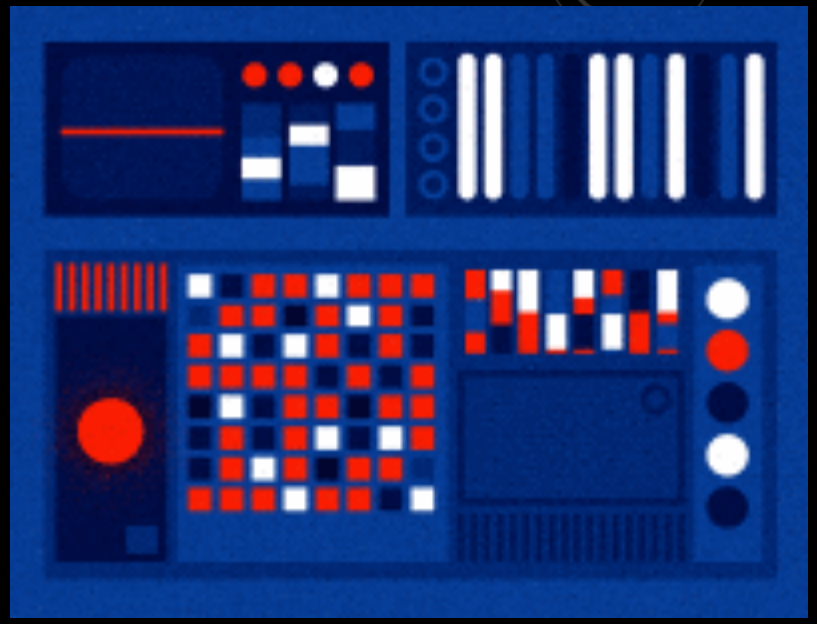
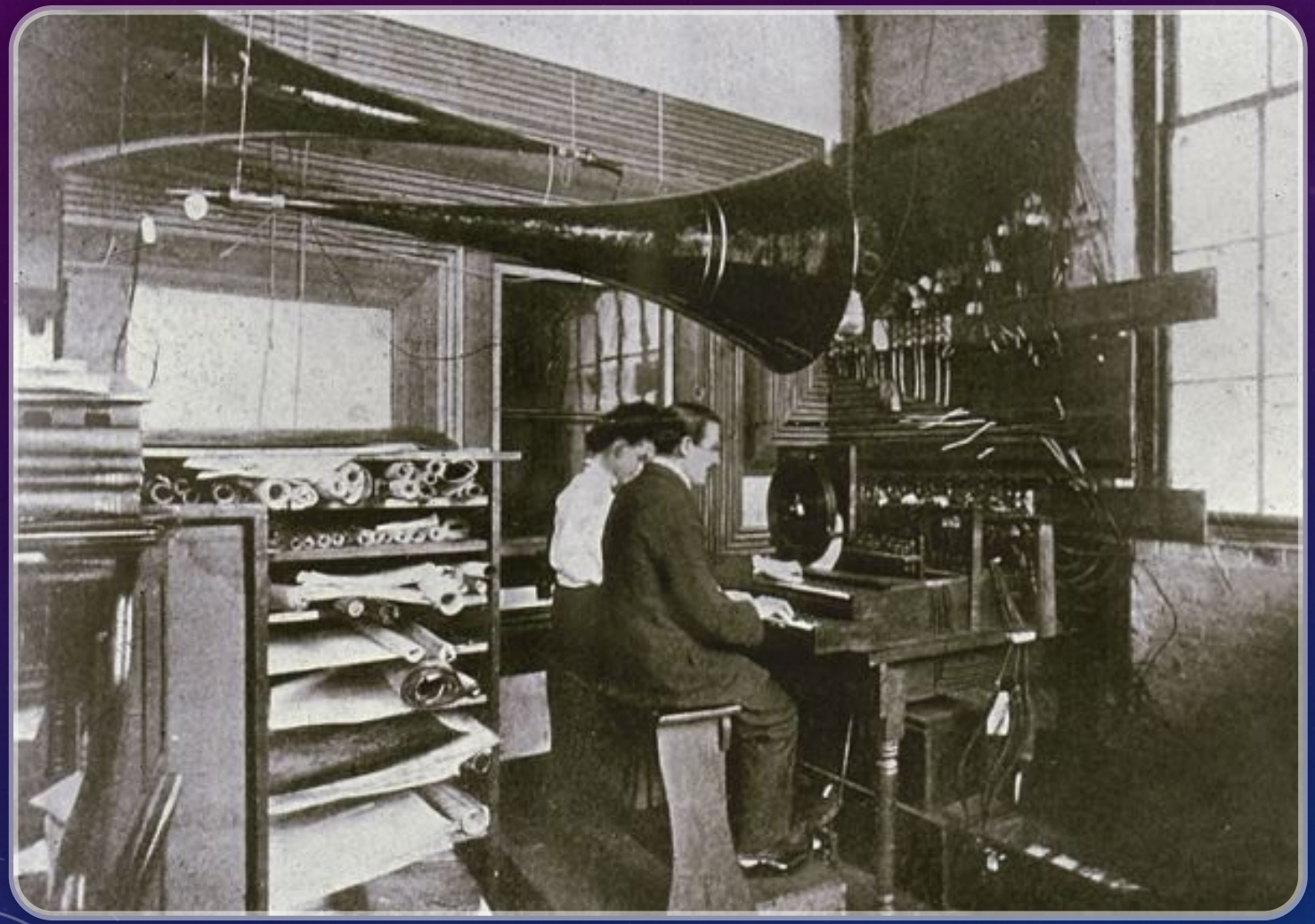
EXPERIMENTAL MUSIC IN FIXED MEDIA COMPOSITIONS LECTURE-RECITAL

Dr. Veronica Salinas Lopez, viola
Dr. Elizabeth Janzen, flute
Texas A&M University-Kingsville
Kingsville, TX



TURNER



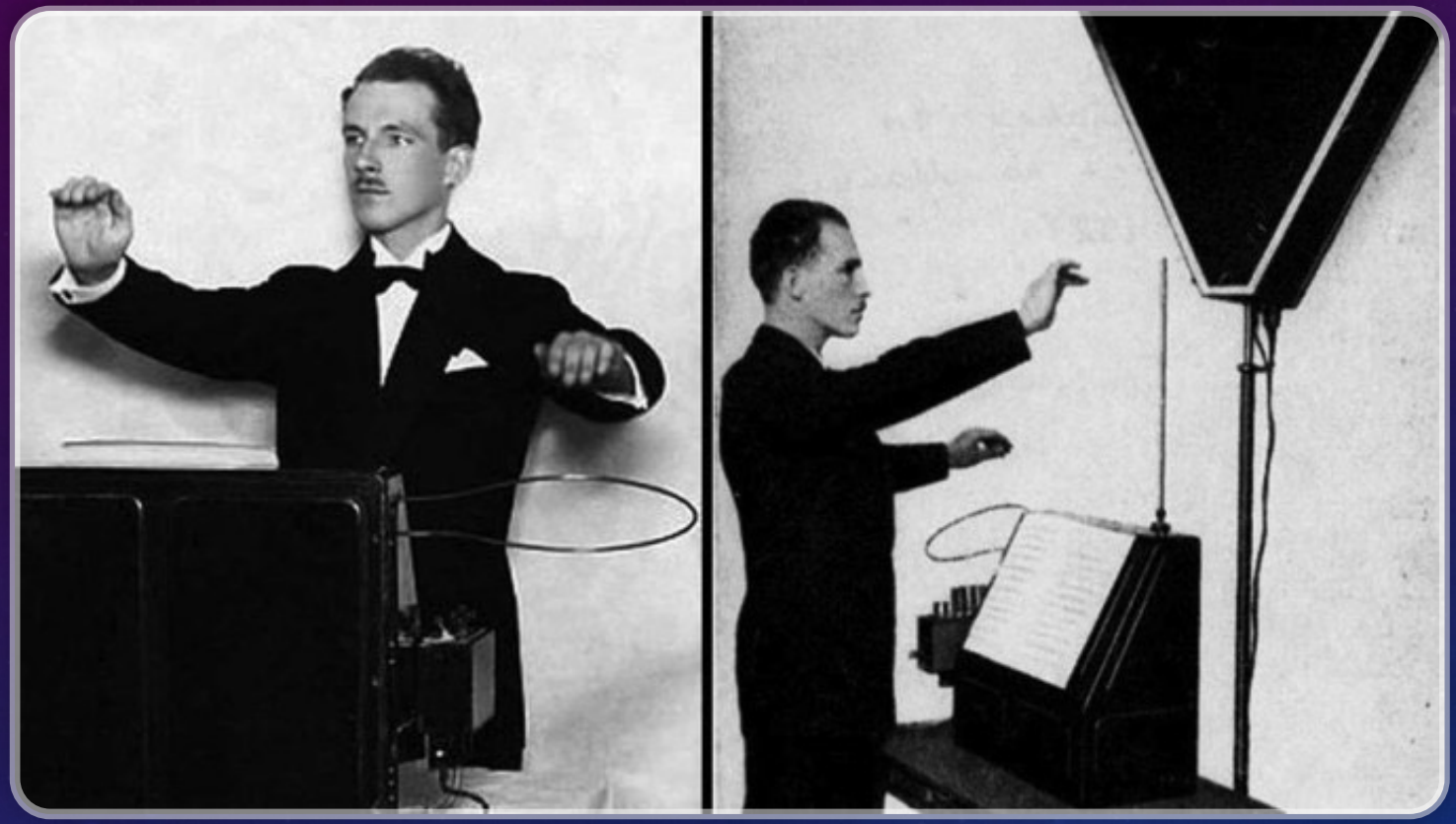
HISTORY

- **1906 - *Teleharmonium*, Thaddeus Cahill**
  Electronic impulses → Sound

- 1919 –Theramin, Leon Theramin
  Two antennas → Control Pitch and Volume

- 1934 –Hammond Organ, Laurens Hammond
  Rotary, motor-driven generators → Sound

- 1941 – *The Log Electric Guitar, Les Paul*
  4/4 piece of wood with bridge, neck, pick-up



HISTORY

- 1906 - Thaddeus Cahill's Teleharmonium
  Electronic impulses → Sound
- **1919 -*Theramin*, Leon Theramin**
  Two antennas → Control Pitch and Volume
- 1934 -Hammond Organ, Laurens Hammond
  Rotary, motor-driven generators → Sound
- 1941 - *The Log Electric Guitar, Les Paul*
  4/4 piece of wood with bridge, neck, pick-up

HISTORY

- 1906 - Teleharmonium , Thaddeus Cahill
  Electronic impulses → Sound
- 1919 –Theramin, Leon Theramin
  Two antennas → Control Pitch and Volume
- **1934 –*Hammond Organ*, Laurens Hammond**
  Rotary, motor-driven generators → Sound
- 1941 – *The Log Electric Guitar, Les Paul*
  4/4 piece of wood with bridge, neck, pick-up

HISTORY

- 1906 - Teleharmonium , Thaddeus Cahill
  Electronic impulses → Sound
- 1919 –Theramin, Leon Theramin
  Two antennas → Control Pitch and Volume
- 1934 –Hammond Organ, Laurens Hammond
  Rotary, motor-driven generators → Sound
- 1941 - ***The Log Electric Guitar, Les Paul***
  4/4 piece of wood with bridge, neck, pick-up

MAGNETAPHON TAPE RECORDER

1940s Germany

MUSIQUE CONCRÉTE
1940S
PARIS, FRANCE

Pierre Schaeffer

Pierre Henry

”FOR THE FIRST TIME IN HISTORY WE HAVE THE POSSIBILITY TO MAKE THE SOUND BECOME FIXED FOR A WHILE AND *WORK ON IT*. TRADITIONALLY, SOUND WAS CONSTANTLY MOVING. ONCE IT WAS PRODUCED, IT WAS GONE.”

~KARLHEINZ STOCKHAUSEN

MUSIQUE CONCRÉTE
PROCESS → ”TAPE MUSIC”

Speed manipulation → Increase or decrease speed of sound

Directional manipulation → backwards or forward direction of sound

Cutting/Splicing → Changing the attack, decay

Looping → Replay of fragmented sounds

Juxtaposition → Combine two or more sounds to create length and complexity

DAPHNÉ ORAM

Pioneer of Musique Concrète

ORAMICS

Drawn Sound Technique

Shapes and designs drawn onto 35mm film strips that are read by photo-electric cells and transformed into sounds.

STILL POINT
FOR TURNTABLES, DOUBLE ORCHESTRA, AND 5 MICROPHONES

BBC PROMS ”Pioneers of Sound”
July 23, 2018

THEA MUSGRAVE

Composer

FROM ONE TO ANOTHER I (1970) FOR VIOLA AND TAPE

10 minute work written in collaboration with Daphne Oram

Written for violist Peter Mark and the Monday Evening Concerts, LA

Tape source is live viola but treated electronically

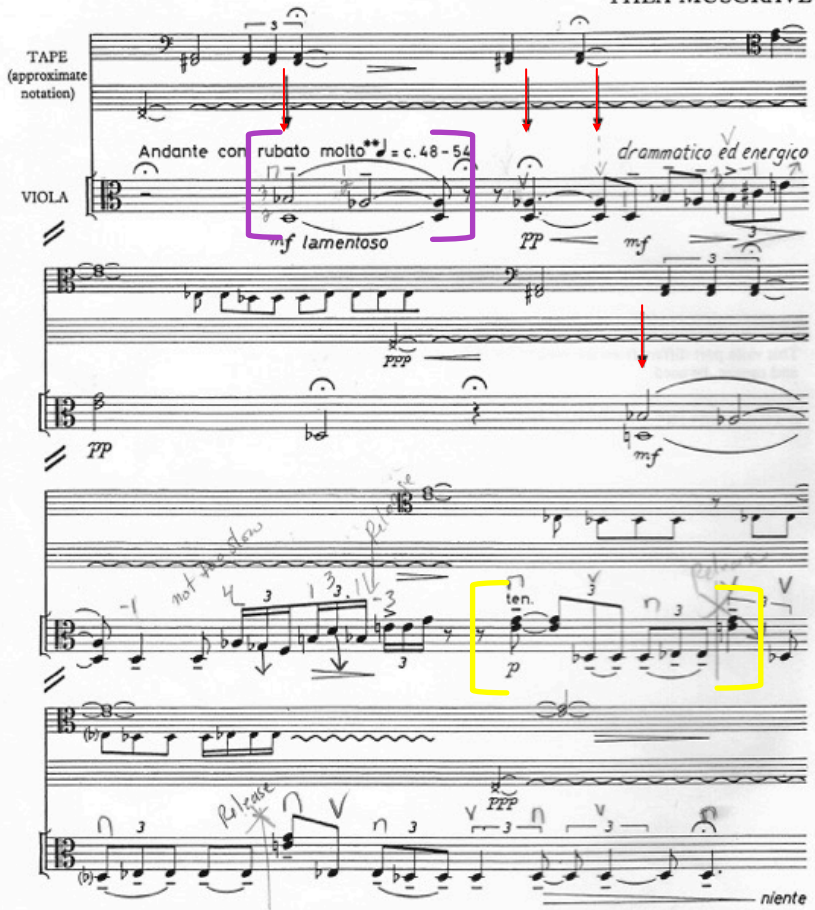
Premiered 11/30/70 in Los Angeles, CA

From One to Another II (1980) for Viola and Orchestra

To Peter Mark

FROM ONE TO ANOTHER
for viola and tape

THEA MUSGRAVE



*Play with considerable rubato at tempo indicated. Exact synchronisation with tape only necessary where there are arrows.

Electronic Tape made in collaboration with Daphne Oram.

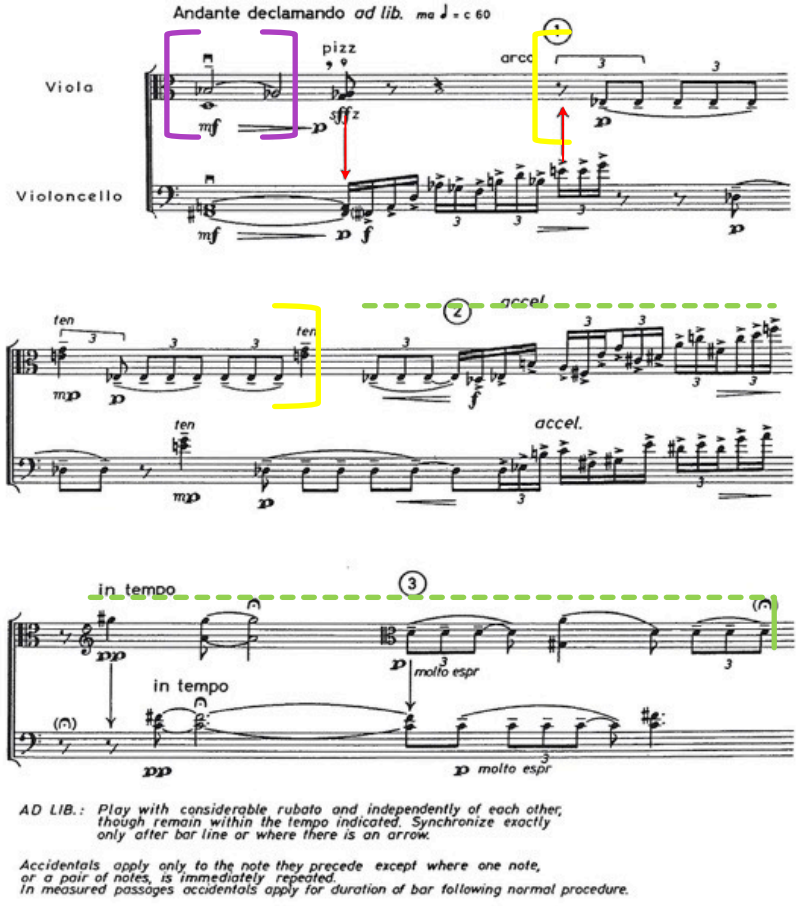
Duration 10 minutes

© Copyright 1970 Chester Music Ltd. All Rights Reserved

For Peter Mark and Geoffrey Rutkowski

ELEGY

Thea Musgrave



AD LIB.: Play with considerable rubato and independently of each other, though remain within the tempo indicated. Synchronize exactly only after bar line or where there is an arrow.

Accidentals apply only to the note they precede except where one note, or a pair of notes, is immediately repeated. In measured passages accidentals apply for duration of bar following normal procedure.

Copyright for all Countries, 1971 © J & W Chester, Ltd, London

J.W.C 464

All rights reserved Printed in England

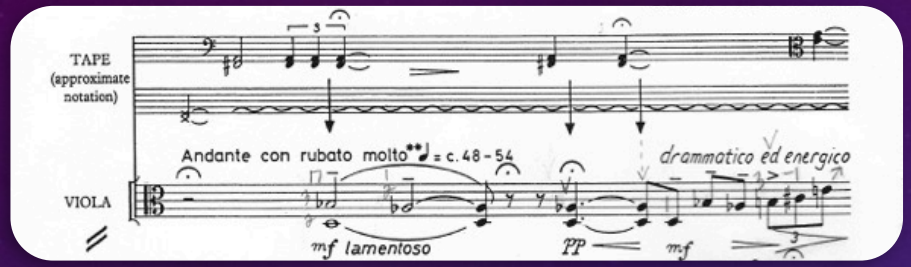
FROM ONE TO ANOTHER I (1970)

"The tape is not simply an adaptation of what could be played live by a second viola… it retains just sufficient qualities of the original sound to match and blend with the live instrumentalist. For the whole idea is that the live viola closely interacts with what is on the tape. Hence the title."

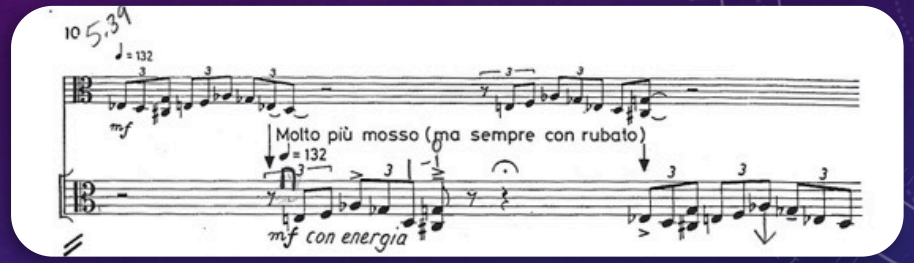
~Thea Musgrave

FORM

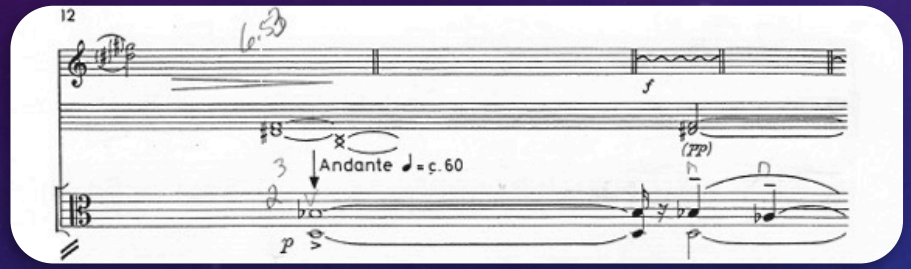
1.


TAPE
(approximate notation)
Andante con rubato molto ♩= c. 48 - 54
drammatico ed energico
VIOLA
mf lamentoso
pp
mf

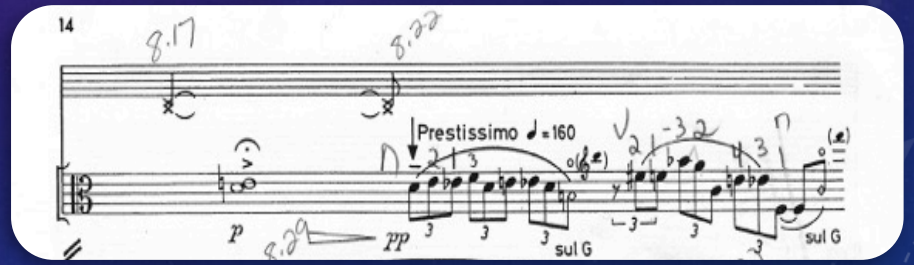
2.


10
5.39
♩= 132
mf
Molto più mosso (ma sempre con rubato)
♩= 132
mf con energia

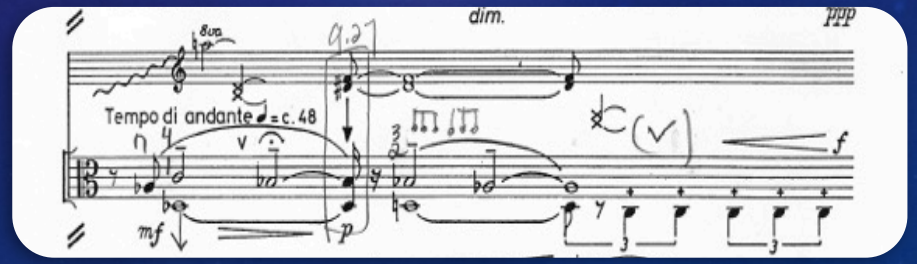
3.

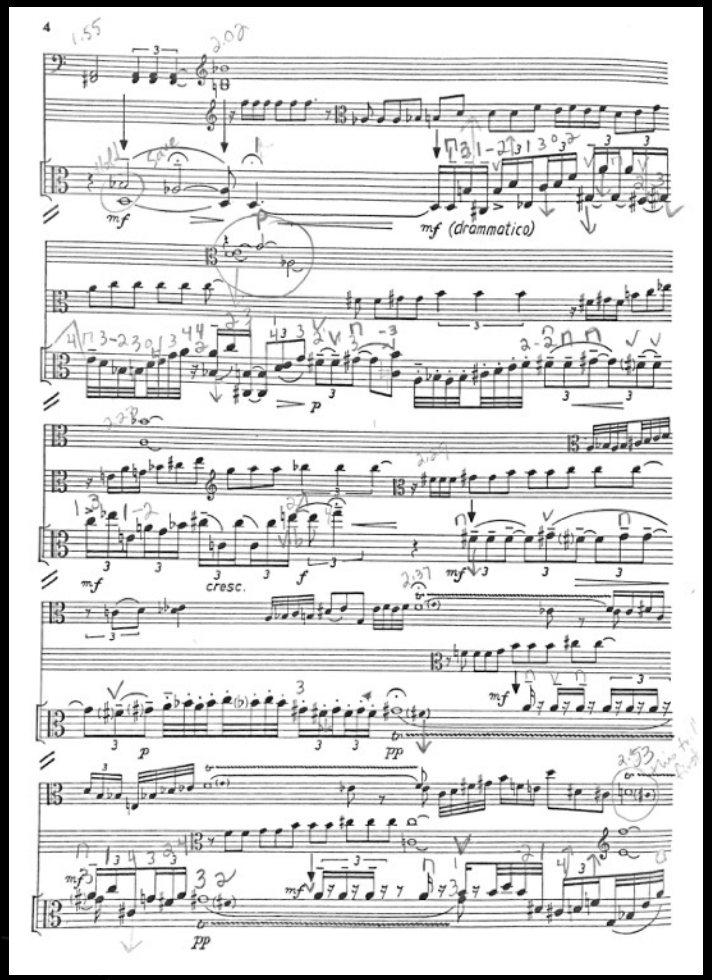

12
6.53
f
(pp)
Andante ♩= c. 60
p

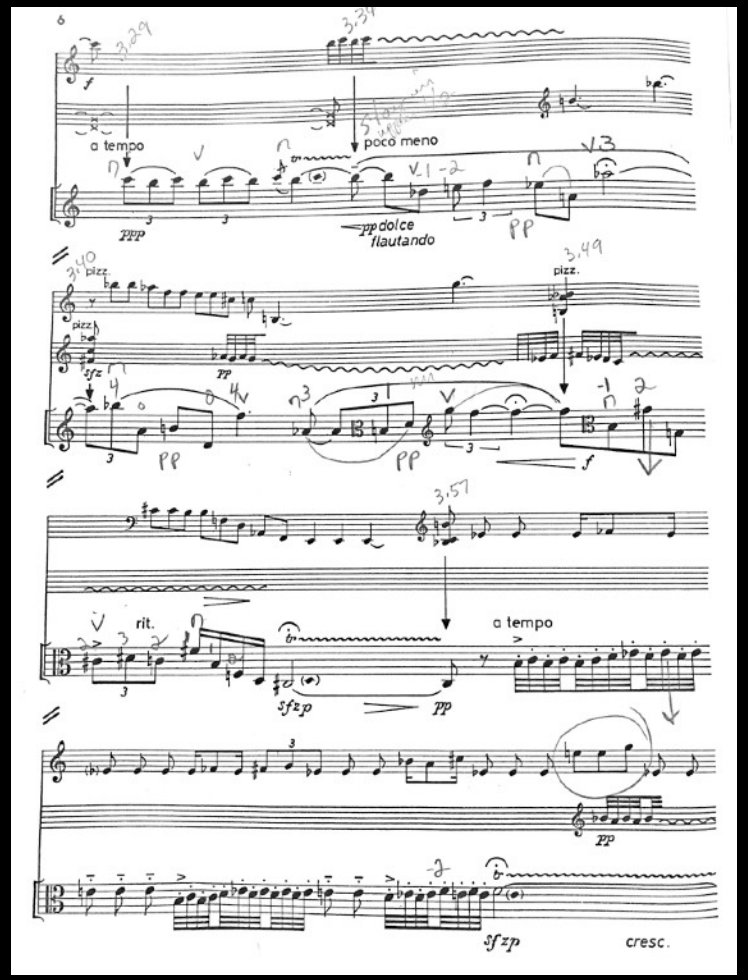
4.

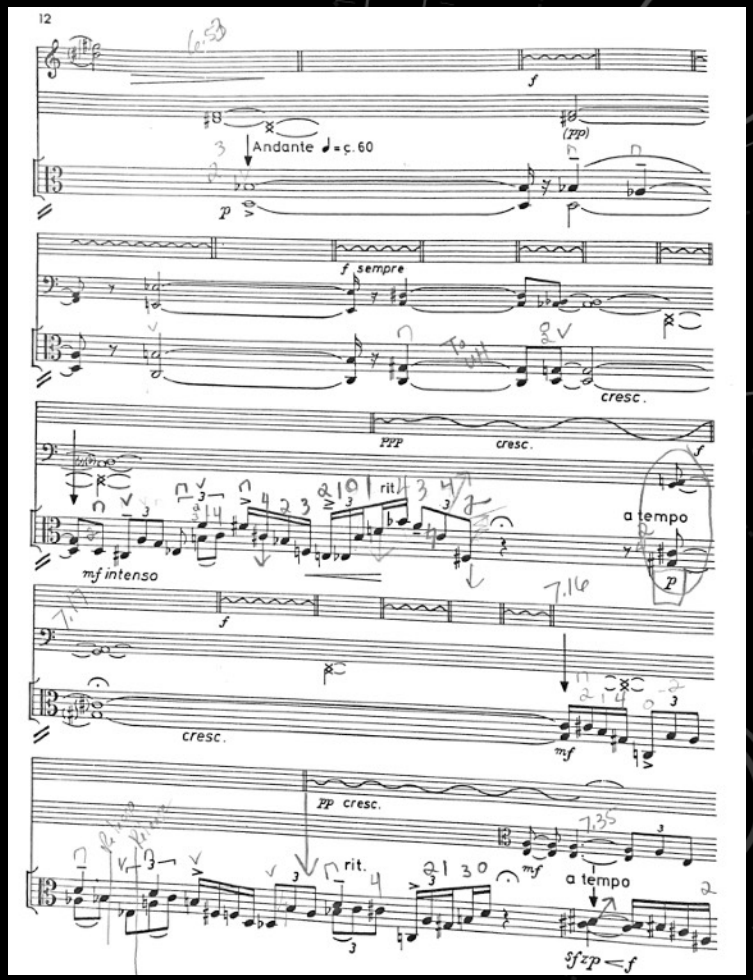

14
8.17
8.22
Prestissimo ♩= 160
p
8.29
pp
sul G
sul G

5.


8va
9.27
dim.
ppp
Tempo di andante ♩= c. 48
mf
p
f


4
mf
mf (drammatico)
p
mf
cresc.
f
mf
p
pp
mf
mf
pp


6
f
a tempo
poco meno
ppp
pp dolce
flautando
pizz.
pizz.
pp
pp
pp
f
rit.
a tempo
sfzp
pp
pp
sfzp
cresc.


12
f
(pp)
Andante ♩= c. 60
p
f sempre
cresc.
ppp
cresc.
f
mf intenso
rit.
a tempo
p
f
cresc.
mf
pp cresc.
mf
rit.
a tempo
sfzp < f

FROM ONE TO ANOTHER I (1970)

"It was very strange to play with a fixed tape and still have spontaneity. I allowed myself to go up to the edge of expression by exaggerating the phrases, since the tape's sound was so much bigger and more varied than my own live tone."

~Peter Mark

FROM ONE TO ANOTHER I (1970)

Thea Musgrave in Collaboration with Daphné Oram
Acoustic Source Recording, Peter Mark

CHRISTOS HATZIS

Composer

NADIR FOR FLUTE OR RECORDER, VIOLA AND DIGITAL AUDIO 1988

7-minute Electroacoustic Work

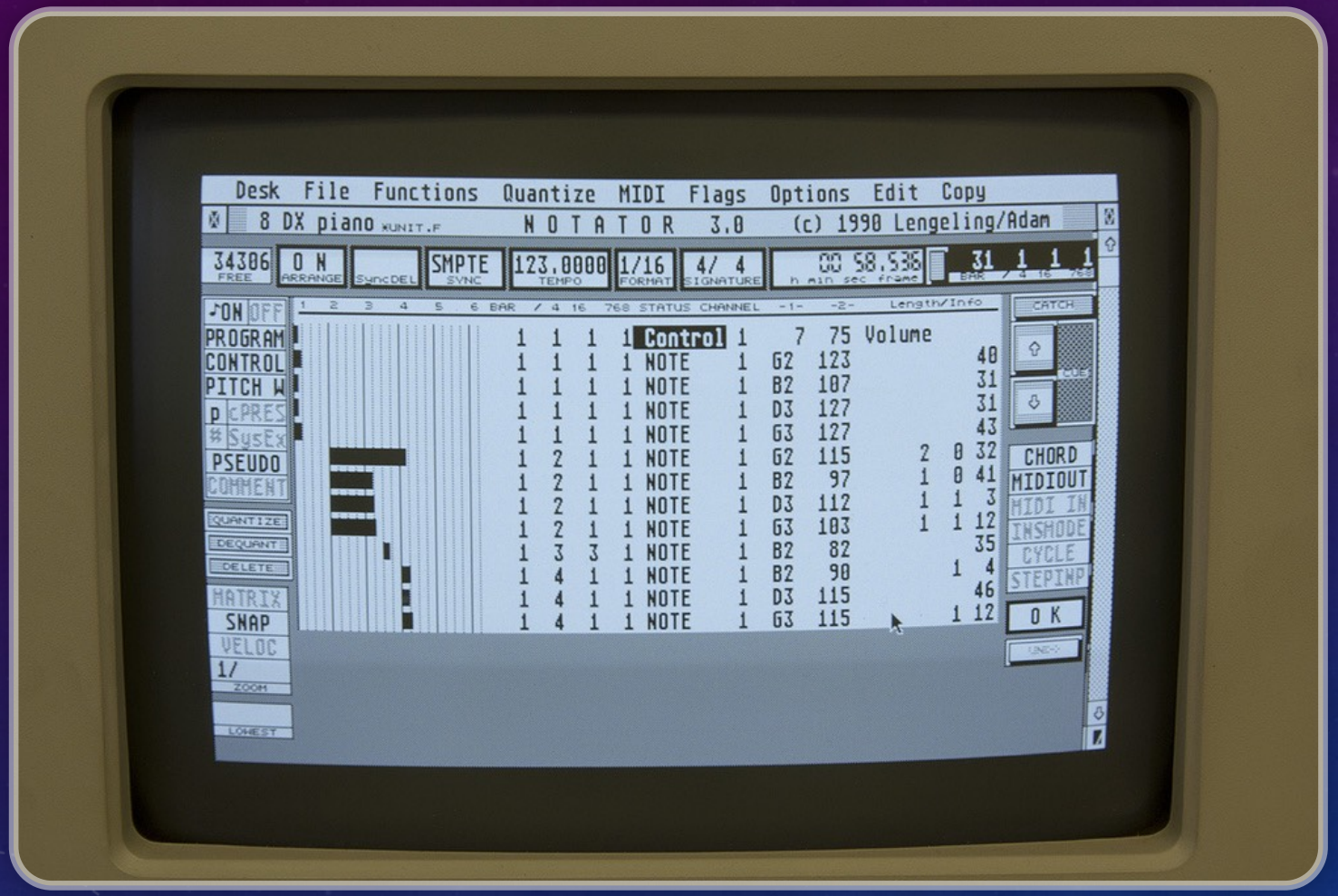
Nadir → Opposite to zenith; the lowest point; time of greatest depression

Inspired by the death of two close friends

Written in 1987-88 at the end of the Iran-Iraq War

Commissioned by The Canadian Electronic Ensemble

Premiered in April of 1988 in Toronto, Canada by Peter Hannon (rec), Douglas Perry (va)



ELECTROACOUSTIC MUSIC

Made with electronic technology

Advances in 1980:

→the personal computer

→Digital music and the compact disc

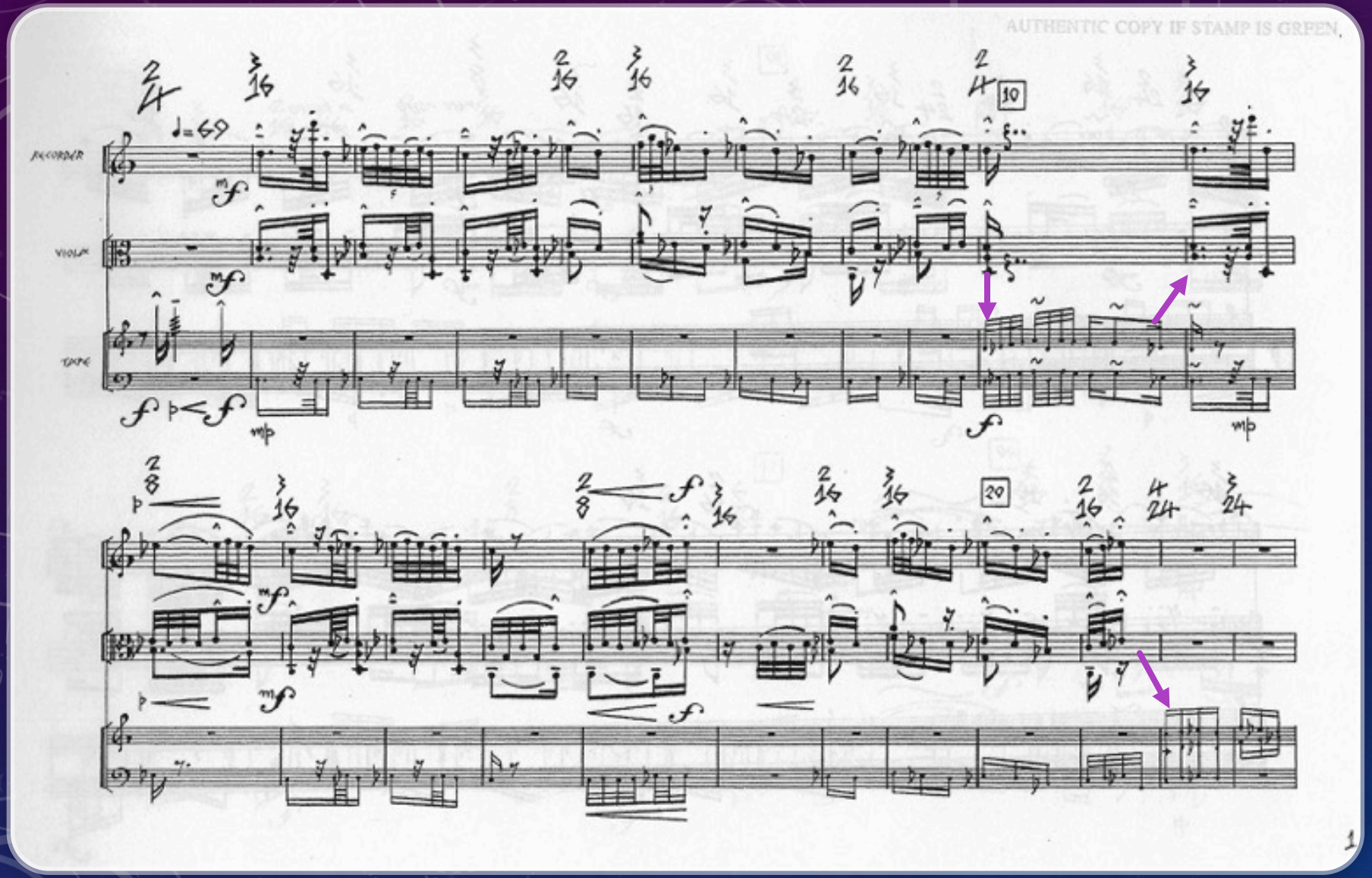
→MIDI Protocol

Focus was to create a “rhythmically tight” coordinated piece for both live performer and tape

Emphasis on unconventional time signatures for rhythmic instability

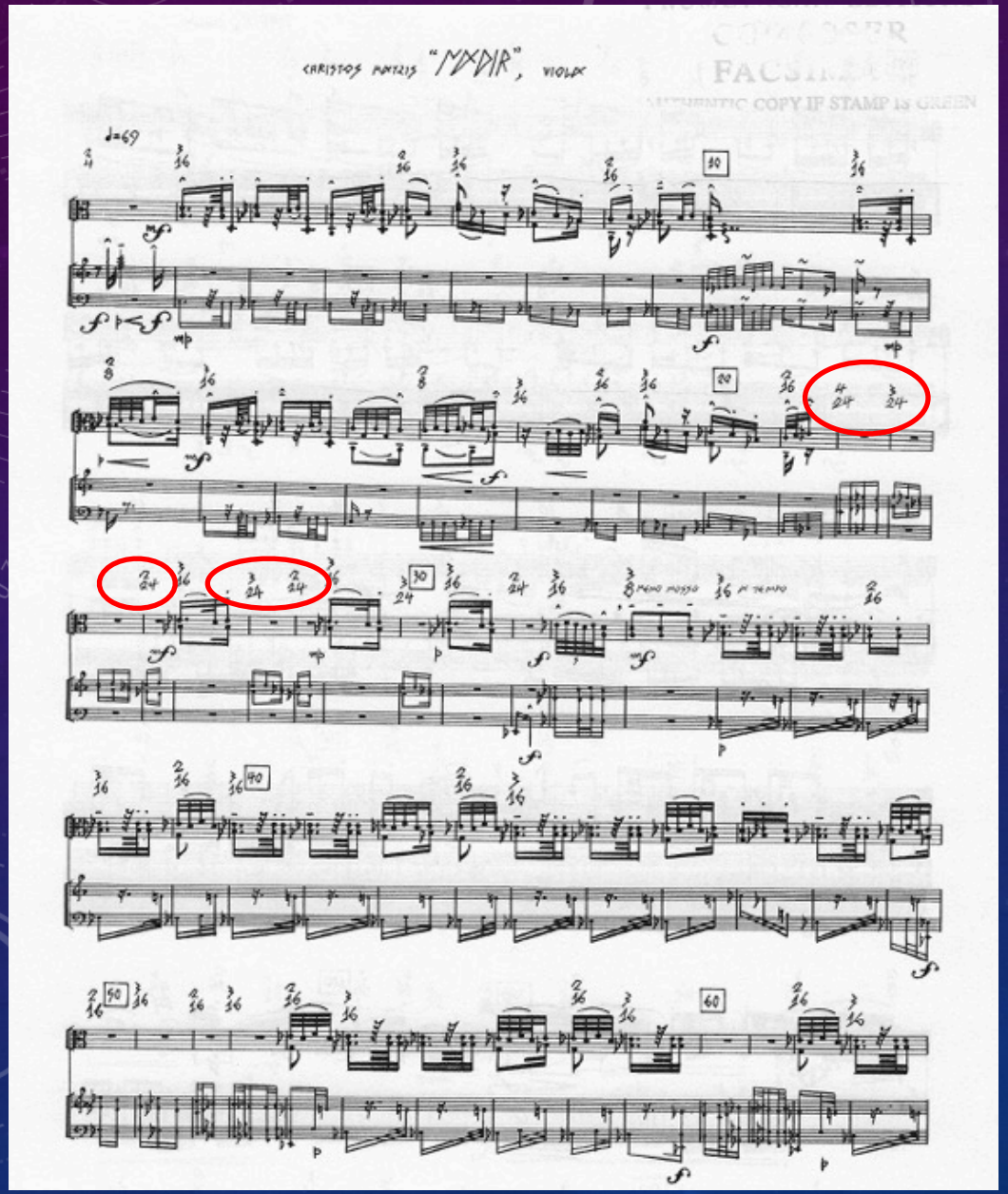
Predominantly Phrygian mode and rhythmic variety creates a Middle Eastern timbre

Rewritten in 1999 as the third movement of String Quartet No. 2: The Gathering



NADIR

Score



NADIR

Viola Part

NON-DYADIC TIME SIGNATURES

Uses Various Unconventional Time Signatures in variations of all triplet with the following denominators:

5 → Quarter quintuplets

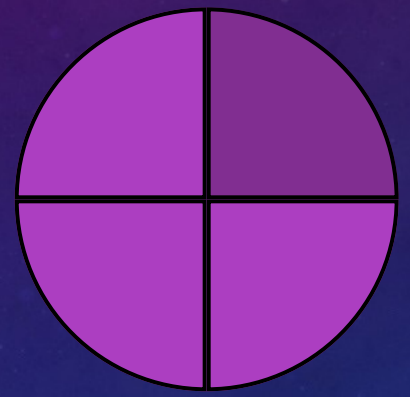
6 → Quarter triplets

10 → Eighth quintuplets

12 → Eighth triplets

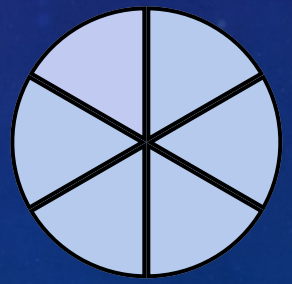
20 → Sixteenth quintuplets

24 → Sixteenth triplets

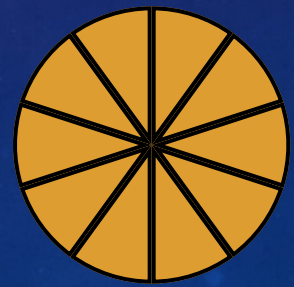


Denominator 5

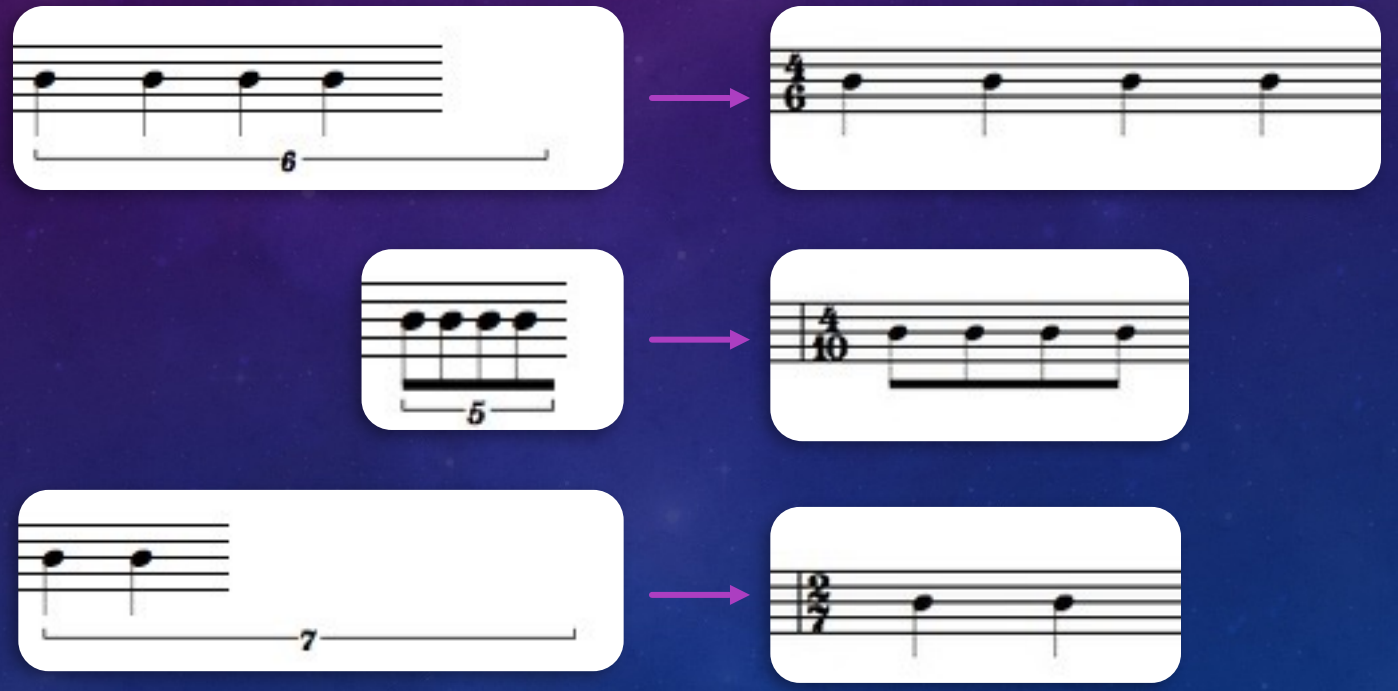
Denominator 6



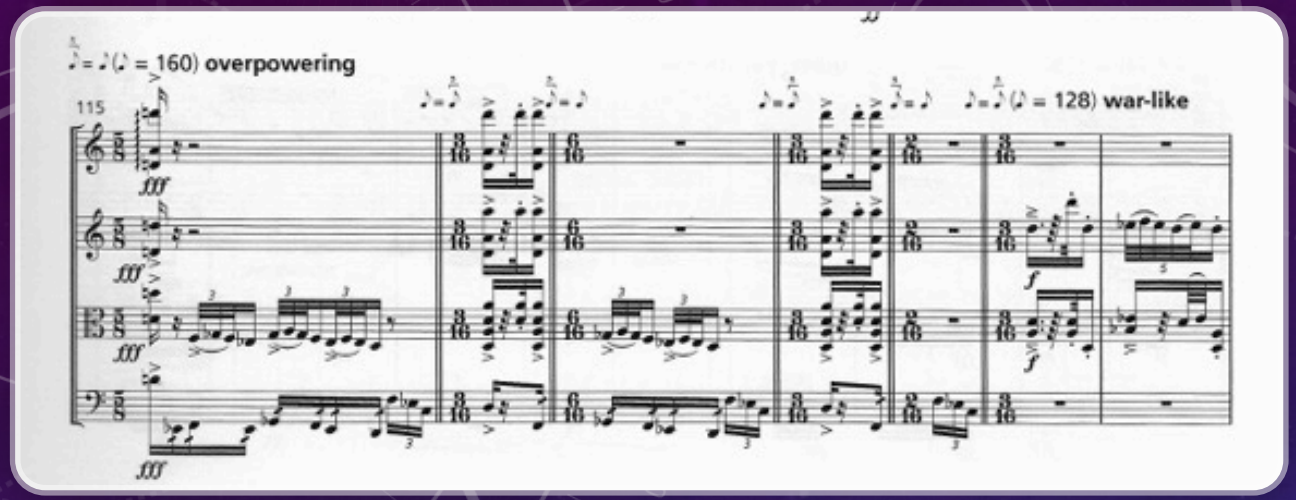
Denominator 10



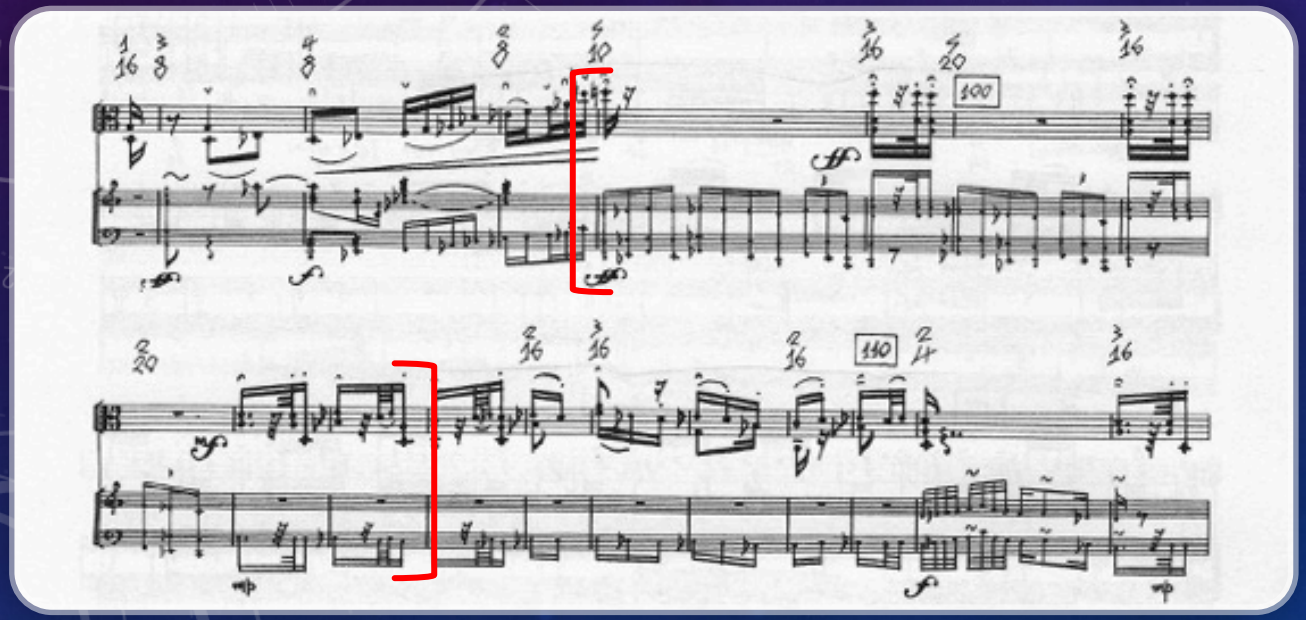
NON-DYADIC TIME SIGNATURES



String Quartet No. 2



Nadir



METRIC MODULATION

NON-DYADIC TIME SIGNATURES

NADIR
FOR FLUTE, VIOLA AND DIGITAL AUDIO (1988)

Christos Hatzis