A Brush with Modernism: Painting the Stars

Flute Concerto: *Cancri 55*

Commissioned by New Music Concerts, Toronto, for Robert Aitken and the New Music Concerts Ensemble, 2010

Project in collaboration with University of Toronto

First performed 6th March 2011

Today's agenda

How it came to be the way it is

How I wrote it

What the problems were

Where the doubts came from

My resolution of the doubts

The validity of a modernist approach

Programme note

In 2007 astronomers at the University of California announced that they had found for the first time a star around which exists a quintuple planetary system: Cancri 55 is a star roughly the same size a our sun, and the fourth planet out - and the last to be discovered - appears to be in the "Goldilocks zone" at such a distance from its star so as to be neither too hot nor too cold for life.

The tremendous excitement we might feel for what might be "up there" is tempered by the knowledge that no one is likely to know anything much for centuries – if ever. However we *can* go there in our imaginations! In my piece I invite you to join me in a musical journey visiting these five planets.....

Cancri 55's planets (and year lengths)

1	Neptune-size	3 days
2	Jupiter-size	14.7 days
3	Saturn-size	44 days
4	4th planet – Goldilocks!	260 days
5	4x Jupiter-size	14 years
	Red dwarf	30,000 years

Programme note

Right at the beginning we hear a single *crotale* note, a pinpoint of light which we soon discover to be concealing five distinct "soundworlds". Each planet, as we approach, we find to have its own *timbre*, its own pulse and harmonies, its own musical idiosyncrasies.....

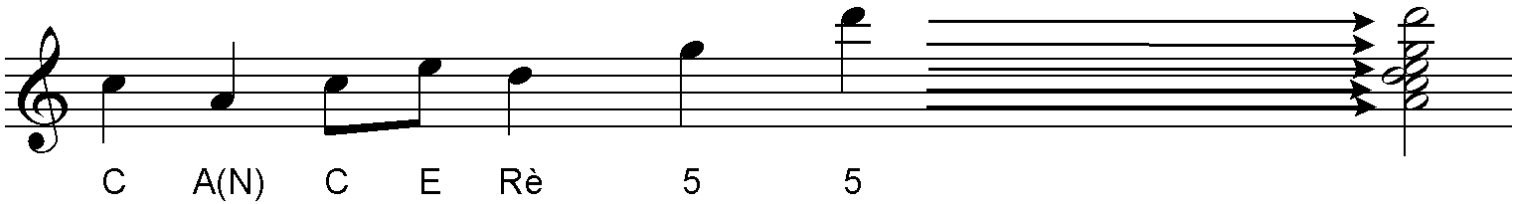
Listening

00.00 – 02.30
More and more detail
All five sound worlds manifest by the time of the flute entry
Flute reference to the chorale melody which becomes more and more important through the work.

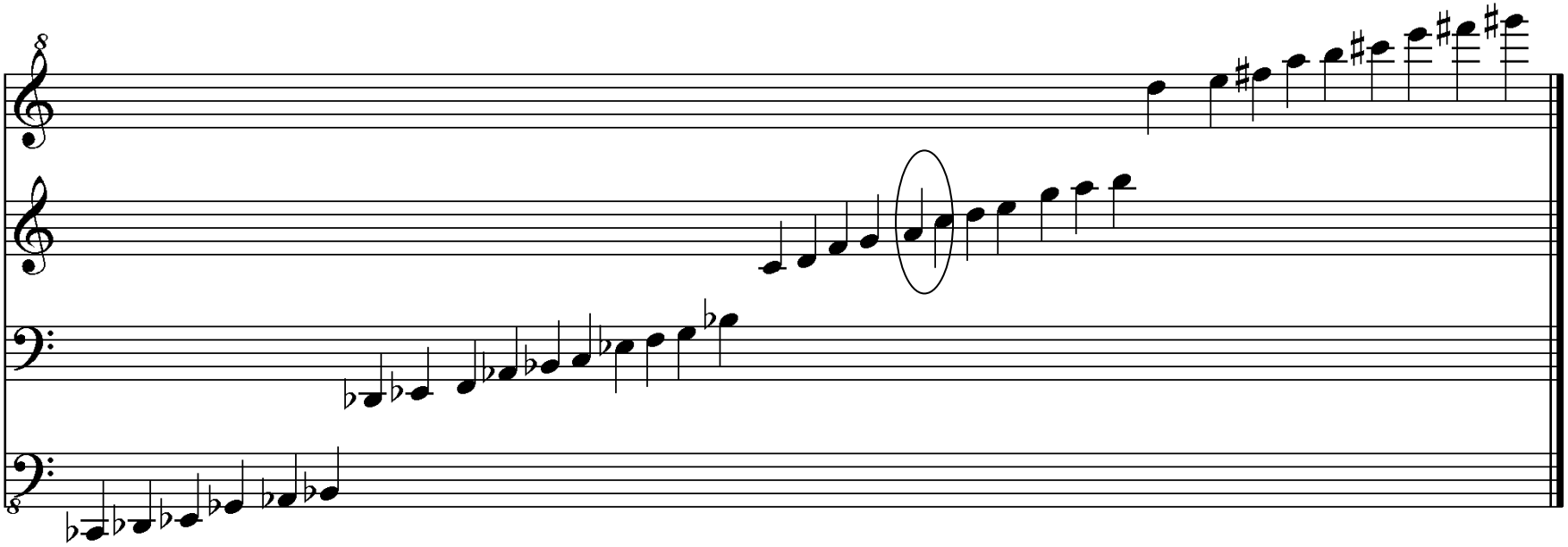
Creating five soundworlds

- Pitch - melody/harmony
- Rhythm, tempo and metre
- *Timbre*
- Musical idiosyncrasies and *motifs*

Cancri 55 cryptogram



Planet 1

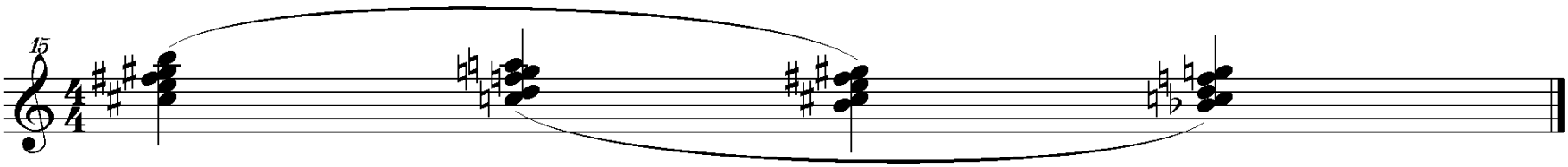


•Harmonic field - wholetone “triads” each separated by minor 3rds. “Core” is circled A/C.

•Scintillating textures from harp, vl.1 (opens strings and harmonics) metal percussion (glock. and vib.) Lowest note is lowest note of the harp.

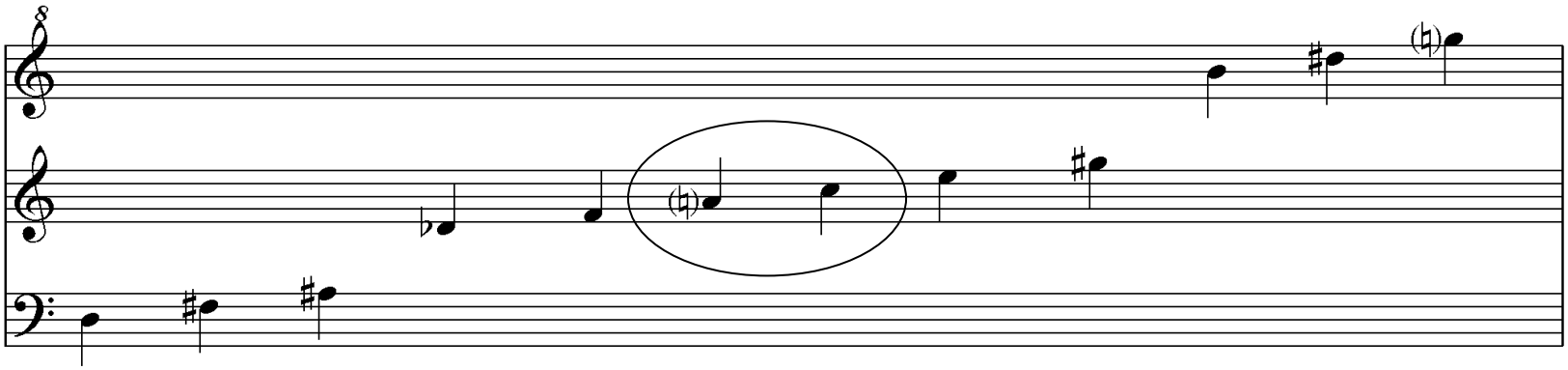
•Light/dark rotation

Planet 1



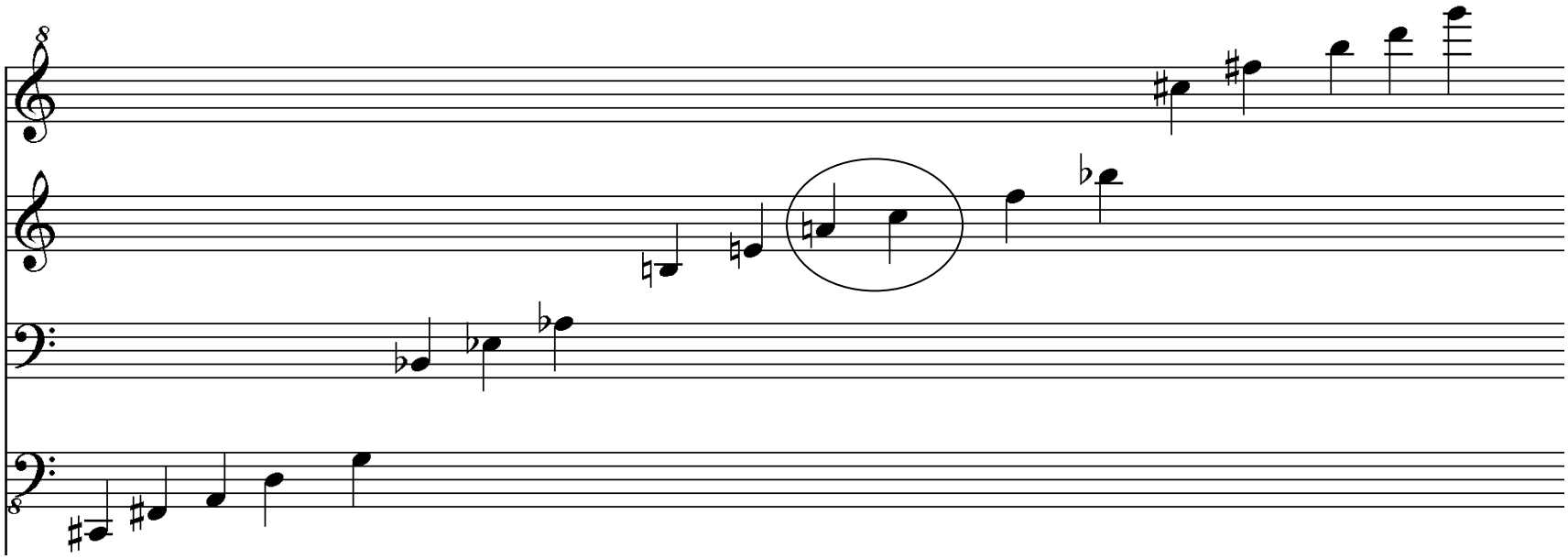
•Parallel harmonic field (with contrasting *timbre*) – suggestion of rotation??.

Planet 2



•Harmonic field - augmented triads each separated by minor 3rds. “Core” is circled A/C.

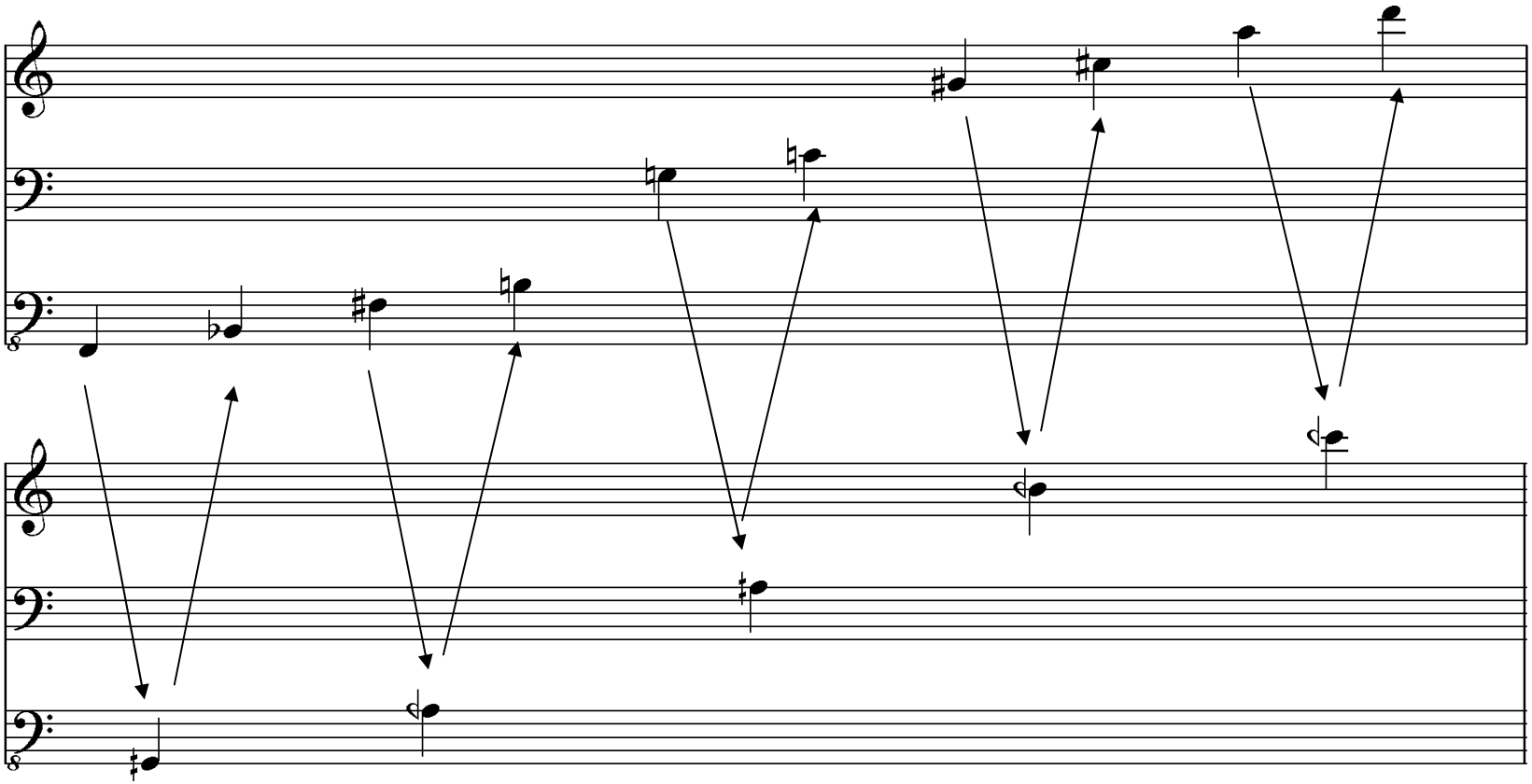
Planet 3



•Harmonic field – triads of perfect 4ths, each separated by minor 3rds. “Core” is circled A/C.

Microtones sneak in to enrich the harmonies in this h.f. and in the parallel h.f. too……

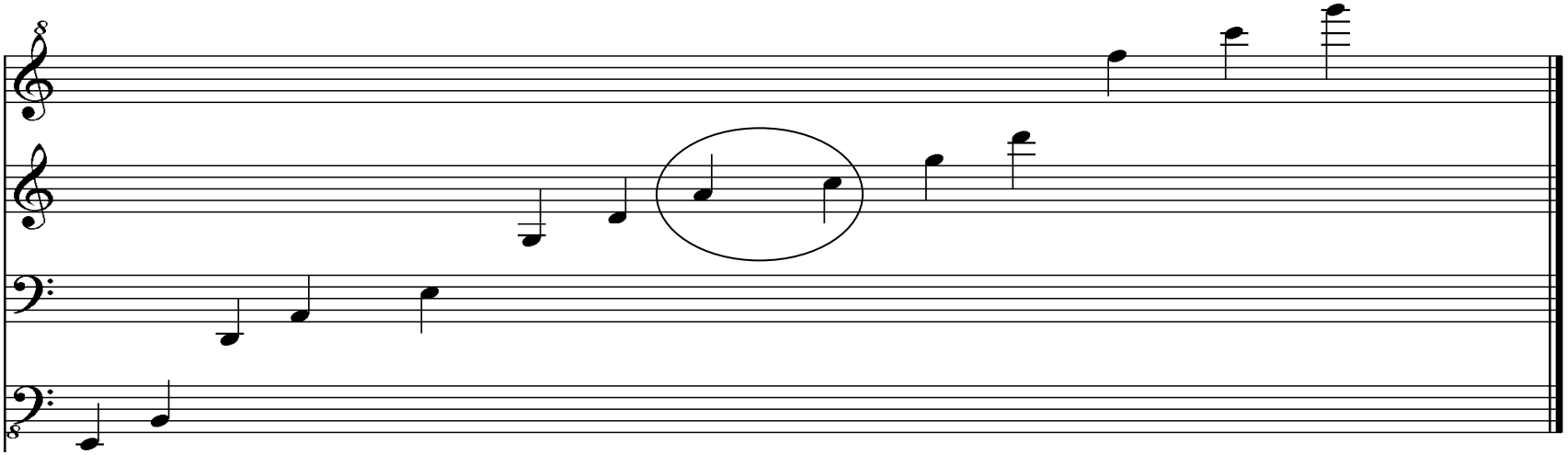
Planet 3



•Parallel harmonic field – incorporates quartertones midway between each of the perfect fourths (5 semitones ÷ 2 = 5 quartertones)

03:10 Planet 3 music starts
03:21 Planet 1 superimposed (glockenspiel chords
plus string harmonics)
03:40 Planet 2 bursts in

Planet 4



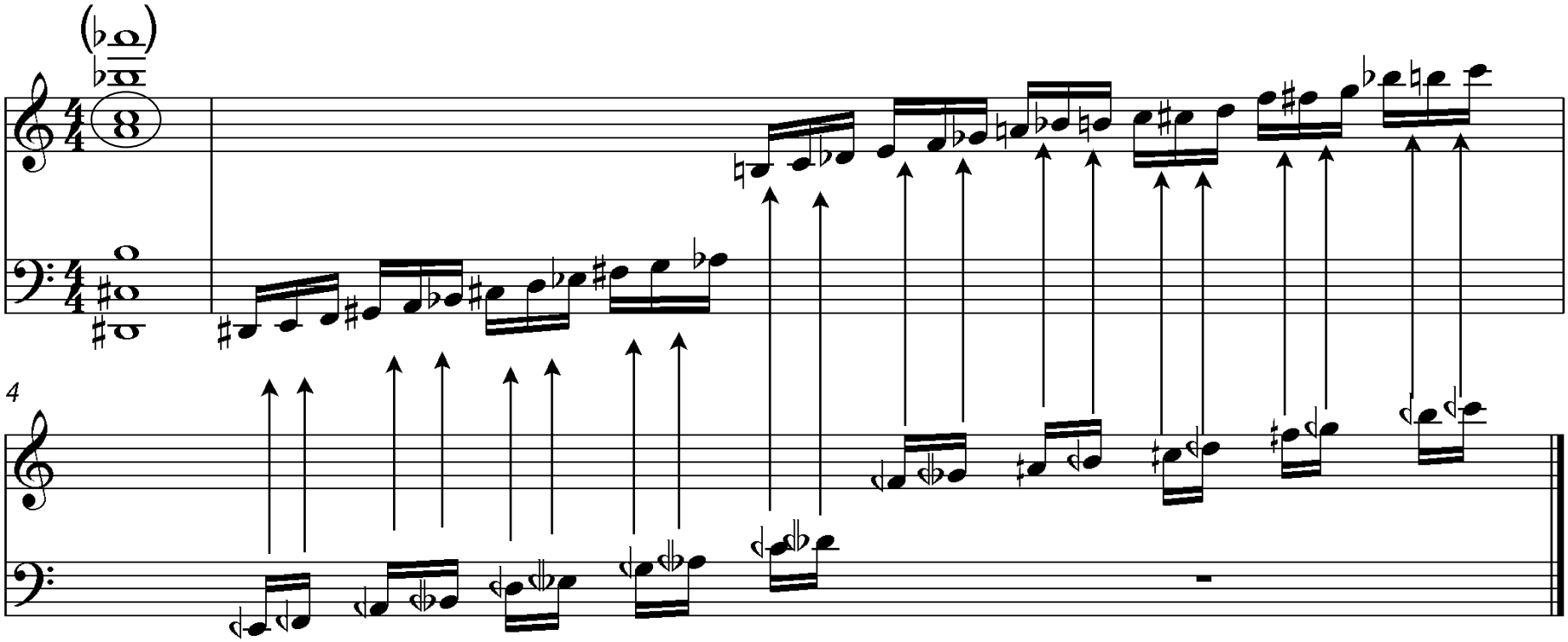
•Harmonic field – groups of 3 perfect fifths each separated by minor 3rds. “Core” is circled A/C.

•Parallel harmonic field at the other quartertonal level – oscillation between the two

HOWEVER the notes took on a life* of their own - much more harmonic subtlety and development here than in other soundworlds

*note that word!

Planet 5



- Harmonic field – major 7ths separated by minor third “core” (A/C again)
- Colour enhanced by tight quartertone groups – cold, remote, acerbic

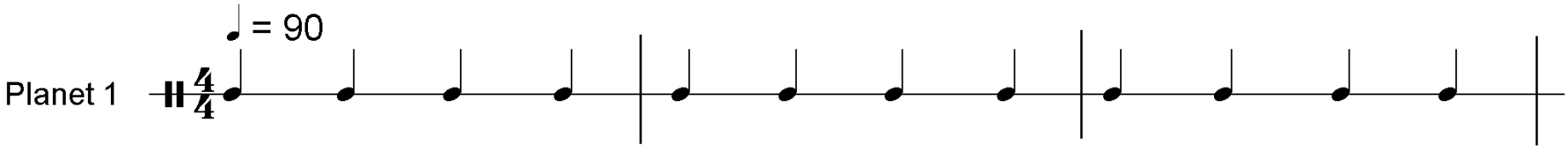
03:57 Planet 4 music
04:14 Planet 5 appears for the first time
oboe melody, double bass, bassoon
05:25 Planet 2 glimpsed briefly, then Planet 3

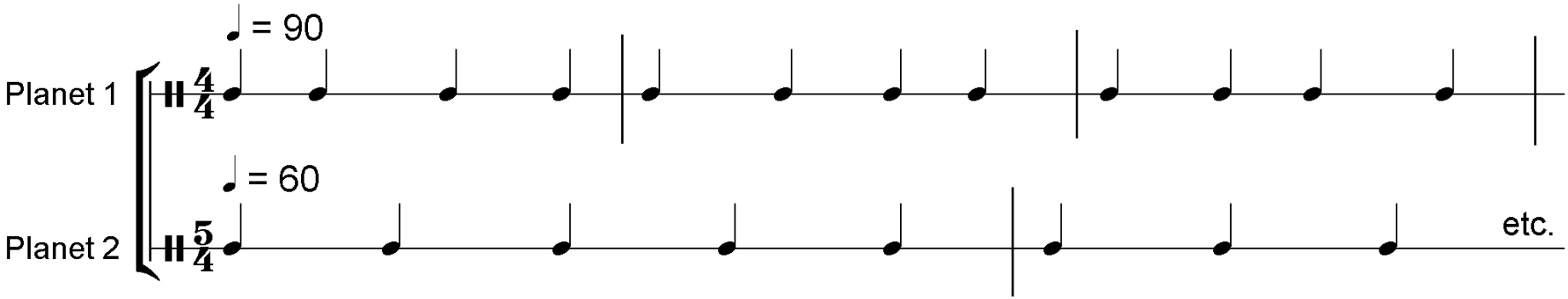
Programme note

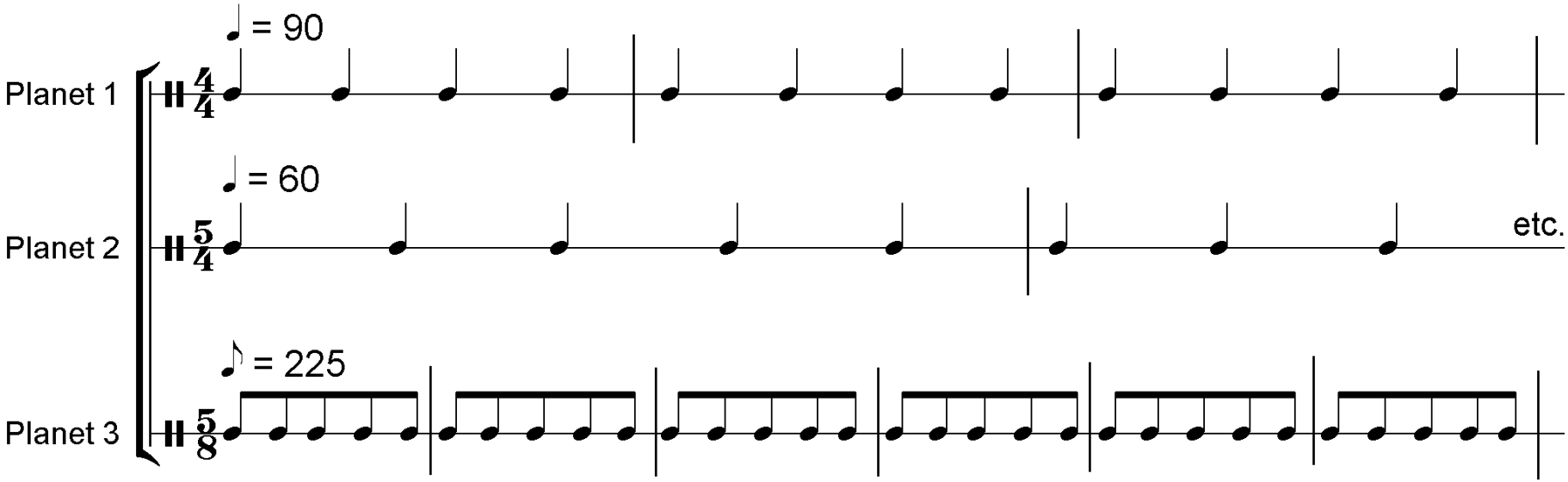
We do not simply fly from one soundworld to the other. Often planets will eclipse each other, and sometimes we are overwhelmed with a richness of aural vision as we go through the awesome complexity of a planetary conjunction. We find that some of the planets are busy little places – like the earth - whilst on others we find maybe beautiful and unusual landscapes but little else....

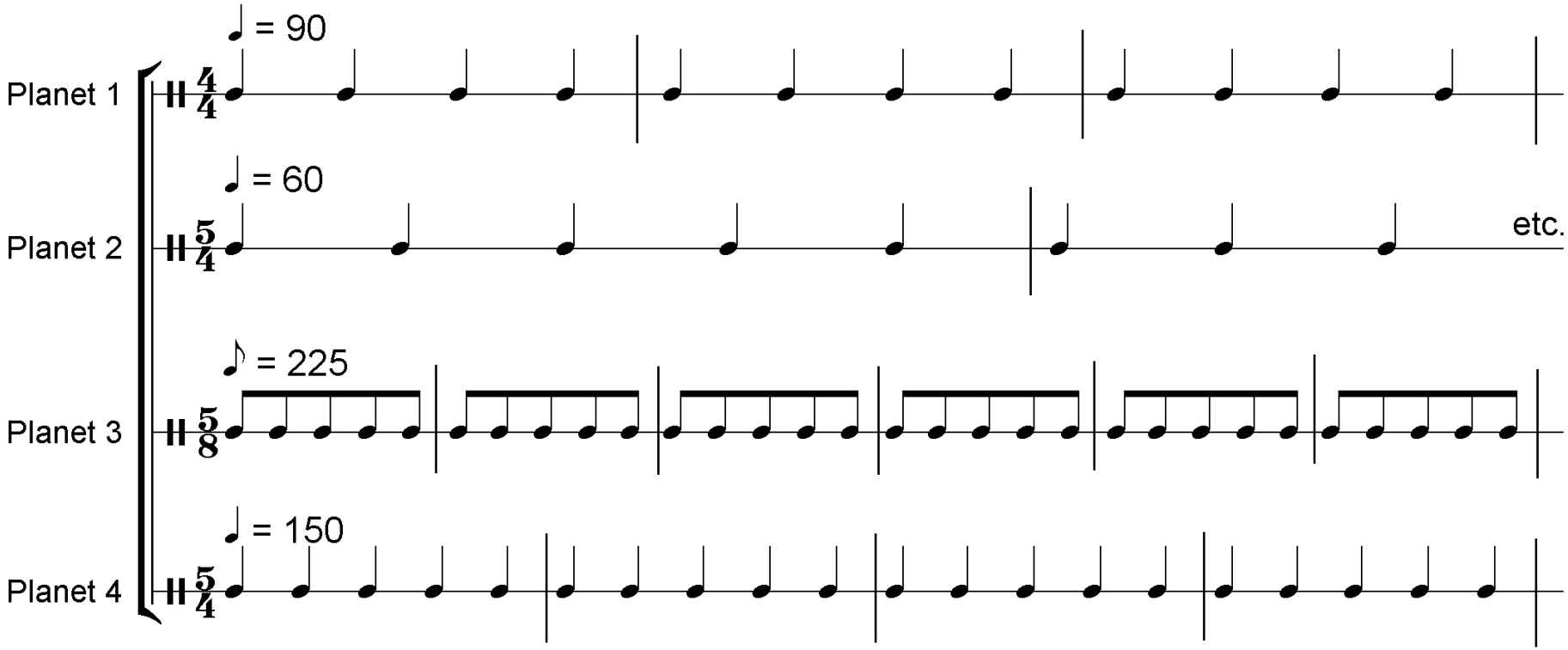
Pulses

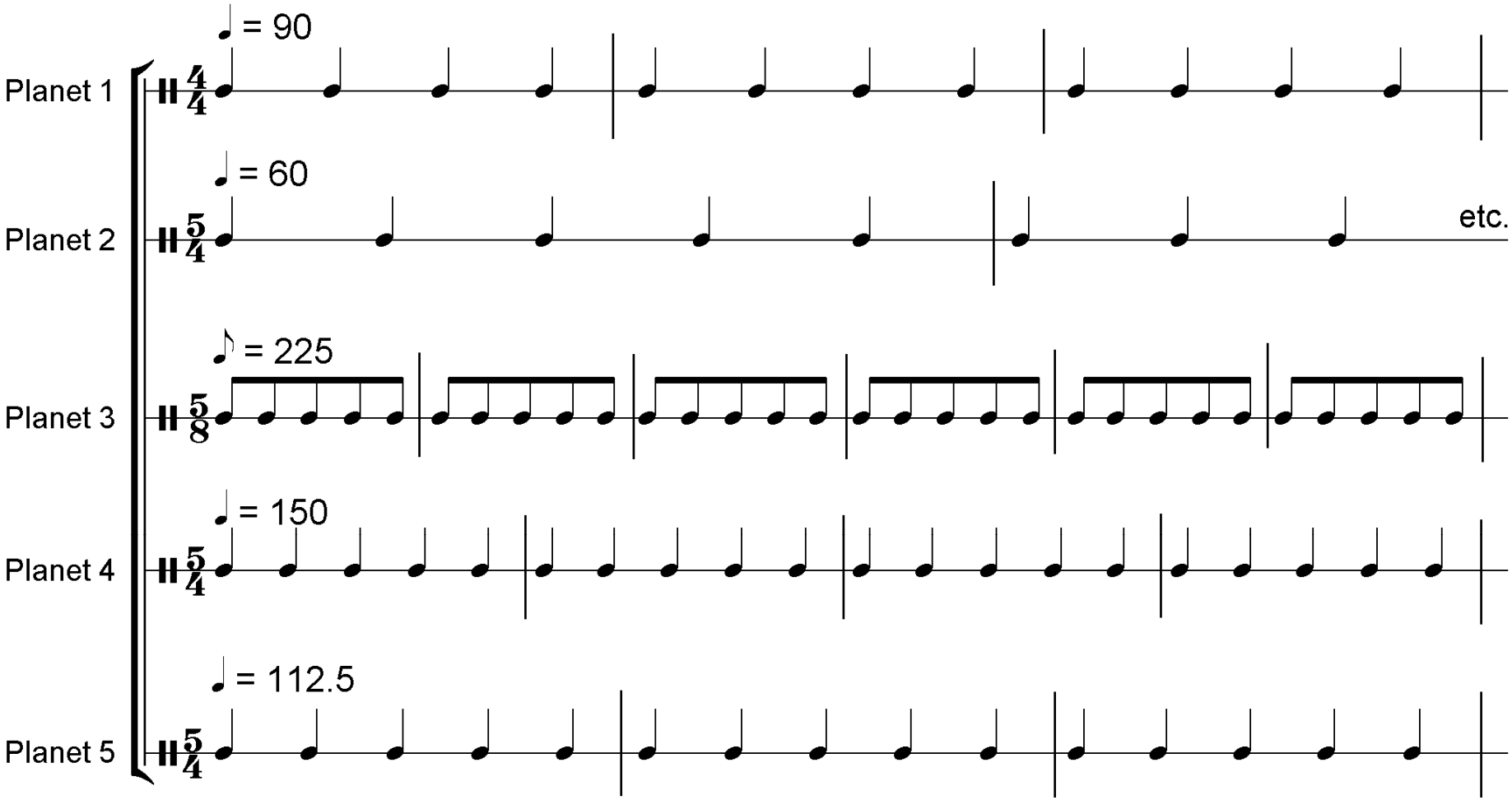
Planet 1 - crotchet = 90
Planet 2 - crotchet = 60
Planet 3 - quaver = 225
Planet 4 - crotchet = 150
Planet 5 - crotchet = 112(.5)

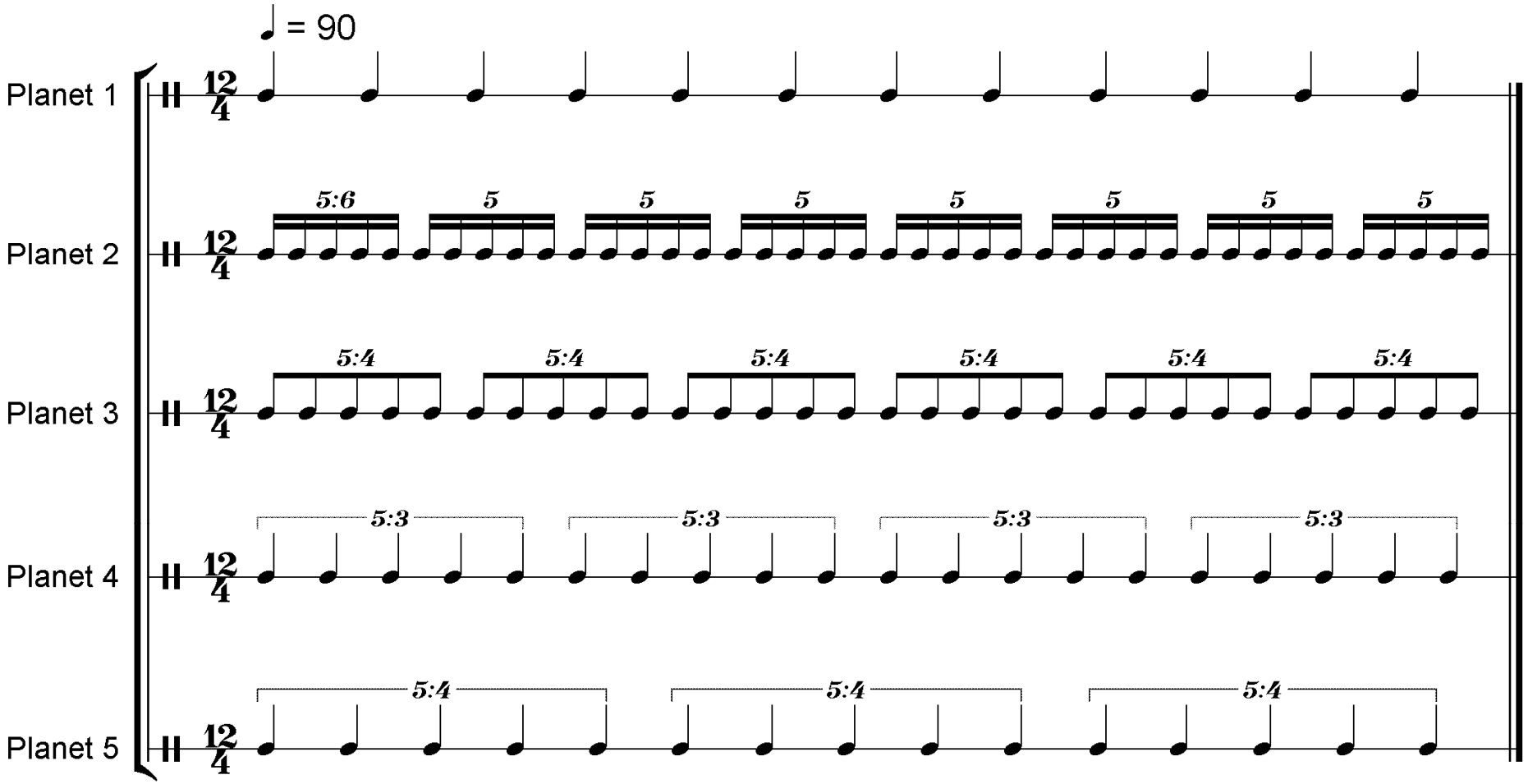

= 90
Planet 1

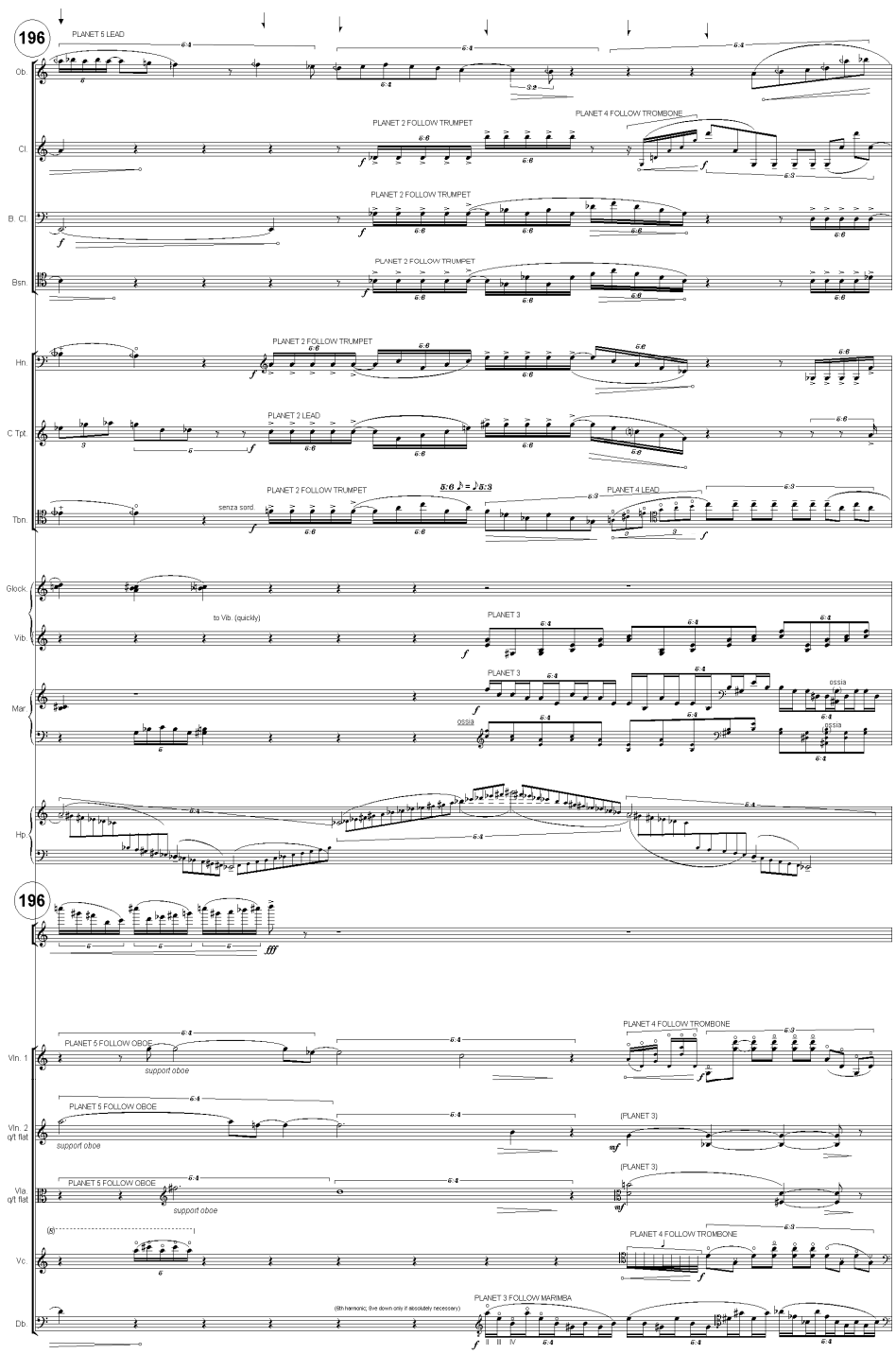

♩ = 90
Planet 1
4/4
♩ = 60
Planet 2
5/4
etc.

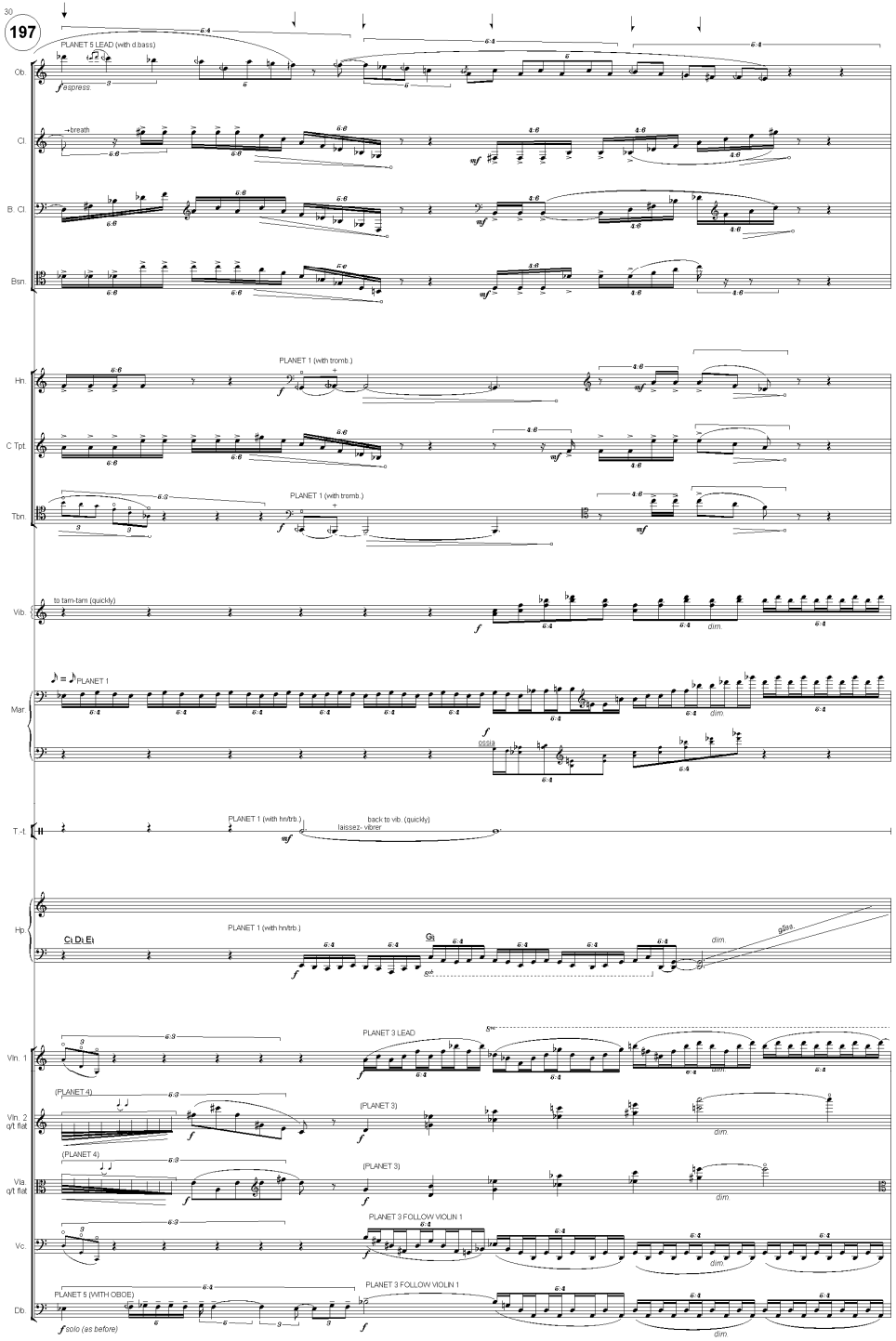

♩ = 90
Planet 1
4/4
♩ = 60
Planet 2
5/4
etc.
♪ = 225
Planet 3
5/8


Planet 1
♩ = 90
Planet 2
♩ = 60
etc.
Planet 3
♪ = 225
Planet 4
♩ = 150


Planet 1
♩ = 90
4/4
Planet 2
♩ = 60
5/4
etc.
Planet 3
♪ = 225
5/8
Planet 4
♩ = 150
5/4
Planet 5
♩ = 112.5
5/4


♩ = 90
Planet 1
Planet 2
Planet 3
Planet 4
Planet 5
12/4
5:6
5
5:4
5:3


196
PLANET 5 LEAD
Ob.
PLANET 2 FOLLOW TRUMPET
PLANET 4 FOLLOW TROMBONE
Cl.
PLANET 2 FOLLOW TRUMPET
B. Cl.
PLANET 2 FOLLOW TRUMPET
Bsn.
PLANET 2 FOLLOW TRUMPET
Hn.
PLANET 2 LEAD
C Tpt.
PLANET 2 FOLLOW TRUMPET
senza sord.
PLANET 4 LEAD
Tbn.
Glock.
to Vib. (quickly)
PLANET 3
Vib.
PLANET 3
ossia
Mar.
Hp.
196
PLANET 5 FOLLOW OBOE
support oboe
PLANET 4 FOLLOW TROMBONE
Vln. 1
PLANET 5 FOLLOW OBOE
support oboe
(PLANET 3)
Vln. 2 q/t flat
PLANET 5 FOLLOW OBOE
support oboe
(PLANET 3)
Vla. q/t flat
PLANET 4 FOLLOW TROMBONE
Vc.
PLANET 3 FOLLOW MARIMBA
(6th harmonic, 8ve down only if absolutely necessary)
Db.


197
PLANET 5 LEAD (with d.bass)
espress.
Ob.
→breath
Cl.
B. Cl.
Bsn.
PLANET 1 (with tromb.)
Hn.
C Tpt.
PLANET 1 (with tromb.)
Tbn.
to tam-tam (quickly)
Vib.
dim.
PLANET 1
Mar.
ossia
PLANET 1 (with hn/trb.)
back to vib. (quickly)
laissez- vibrer
T.-t.
PLANET 1 (with hn/trb.)
Hp.
dim.
PLANET 3 LEAD
Vln. 1
(PLANET 4)
(PLANET 3)
Vln. 2 q/t flat
(PLANET 4)
(PLANET 3)
Vla. q/t flat
PLANET 3 FOLLOW VIOLIN 1
Vc.
PLANET 5 (WITH OBOE)
solo (as before)
PLANET 3 FOLLOW VIOLIN 1
Db.

Timbre

Planet 1 – sparkling - metal percussion, harp, string harmonics, brass

Planet 2 – strong, colourful - woodwind, brass

Planet 3 – staccato/pizzicato strings, BD, harp, tuned percussion

Planet 4 – “warm” sounds - clarinets, arco strings, horn, trombone

Planet 5 – all instruments used “coldly”, untuned metal percussion

05:41 end of this appearance of Planet 3 (flute contributing)
06:34 Planet 4 – warmth
07:29 Planet 1 superimposed

Stop at 07:40

Writing the monster

Rhythmic complexity

Textural complexity

Complexity of rhythm and texture combined with extended structure - how to keep the thing cohesive and coherent!?

- Graphic planning – in itself helping me to imagine sound
- A bar a day ….

08:40 Flute playing “Bach” against a backdrop of Planet 4 music
09:16 Planet 1 added
09:34 Planet 2 added
09:35 Planet 5 added

Conjunction

10:14 Planet 2 added

Drifting apart – flute and double bass duet

Cadenza

Writing the monster

Rhythmic complexity

Textural complexity

Complexity of rhythm and texture combined with extended structure - how to keep the thing cohesive and coherent!?

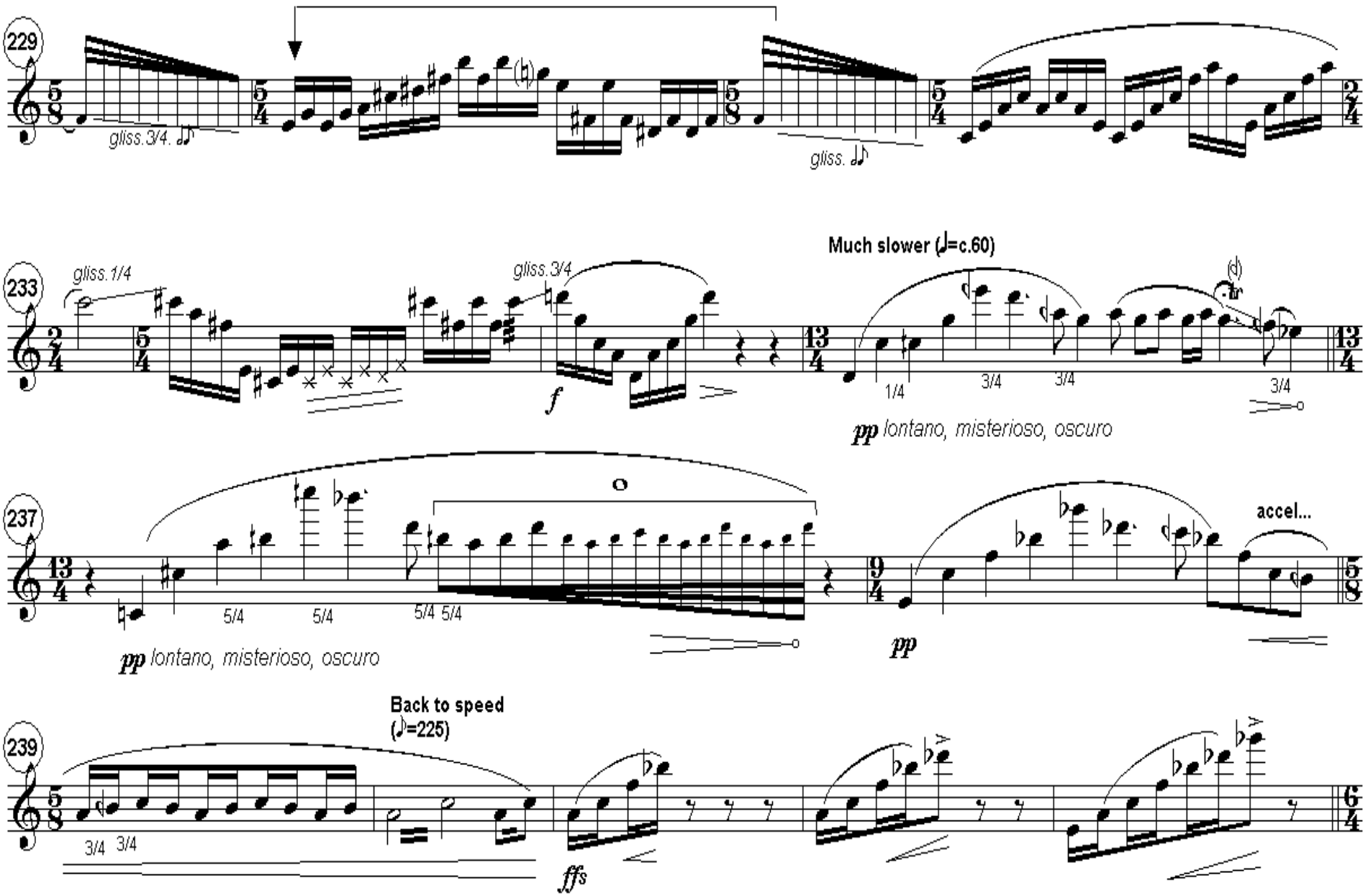
- Graphic planning – in itself helping me to imagine sound
- A bar a day ….

Instrumental complexities

Integrating the flute

Programme note

The flautist – in my imagination the traveller – looks on, takes part in the planetary music, and even sets up a dialogue with musical fragments (life forms?) it finds – listen to the duet with the double bass ten minutes into the work. Throughout its musings, never far away is the melody of Samuel Rudigast's joyful chorale *Was Gott thut, das ist wohlgetan* (What God has done is well done). This pervades the harmonies of the planets; and the flute "tries out" the melody in the alien modes of the five soundworlds, before it bursts out in a quotation of one of Bach's own settings (from Cantata 100).


229
gliss.3/4.
gliss.
233
gliss.1/4
gliss.3/4
f
Much slower (♩=c.60)
1/4
3/4
3/4
3/4
pp lontano, misterioso, oscuro
237
5/4
5/4
5/4
5/4
pp lontano, misterioso, oscuro
pp
accel...
239
Back to speed
(♪=225)
3/4
3/4
ffs

14.02 End of cadenza

Adding Planet 3, Planet 1, Planet 2

Adding Planet 4 (15:27)

Bach quotation

Melting away …..

19:05

Programme note

As a small boy, I remember wondering whether, if there are intelligent beings on other planets, there might also be music elsewhere. Is there another Bach in the universe? And if so does his music have the same wholeness and strength? Does it rejoice in the same God?

Perhaps these are idle musings for a grown man. Yet consider the words of Gaston Bachelard: "In a flash the stars break our solitude..... Distance is abolished. An infinity of communion erases an infinity of size. The world of stars touches our soul".

Problems and doubts

- Initial reaction of soloist and orchestra
- Extremes of pitch/technical capabilities asked for
- Rhythmic complexities – inevitably long bars
- Reaction of media
- Self-doubts – “did it work?”
- Expecting too much from a piece of music?
- Is there another way I might have written the piece?
    - Polytonality?
    - Antiphonal or 8-channel – projecting the sound?
- Is the concept beyond the reach of instrumental music?

Resolving doubts

- Enthusiasm for the work from Jonathan Harvey
- Audience reaction
- Finding the courage of my convictions…

What is music?

- Music as commodity
- Music as an enhancement of our consciousness
- Music as devotion
- Music as something that sounds nice
- Music as a questing for a new beauty
- Music as a reflection of who we are