

### City Research Online

### City, University of London Institutional Repository

**Citation:** Evans, F.M. (1996). Aural image and the language of electroacoustic music. (Unpublished Doctoral thesis, City University London)

This is the accepted version of the paper.

This version of the publication may differ from the final published version.

Permanent repository link: https://openaccess.city.ac.uk/id/eprint/8271/

Link to published version:

**Copyright:** City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

**Reuse:** Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

City Research Online:

http://openaccess.city.ac.uk/

publications@city.ac.uk

Library Information Service Northampton Square

François Evans né 1965

# Conquête de l'espace

1993

basson, harpe, percussion et dispositif éléctronique

la huitième tapisserie de Jean Lurçat dans sa série

Le chant du monde

avec mes remerciements pour sa générosité et ses extravagances. A mon cher oncle Philippe Gautreau

Cette pièce existe grâce a une bourse généreuse du Ralph Vaughan Williams Trust

## sandrage ge grankucz

François Evans (b. 1965)

'Conquete de l'espace' is based on the eighth tapestry by Jean Lurçat in his series 'Le chant du monde' which depicts Man's perception of his own existence. It shows a man with a bow'en garde', leaving the Tarth in a bubble that pierces the ozone. It approaches the heavens that take up the main part of the tapestry with explosions of colour from planets -some with visible trajectories, cosmic gas clouds, blue stars, comets, red & orange suns and white moons.

The foundations have been laid as we approach this new century. What future for Man? Cultures continue to melt together and we have become aware that nothing really 'is' anything after all. Objects, thoughts and what they represent for us are distinct things that can be separated contextually or morphologically. The form of the piece reflects this in that sections often refer to each other through pathways in our internal 'map' of the sound world.

Nost of the harmonic material is based on analyses of cycles of sound made by the acoustic instruments being played. The analyses show timbres as exploitable chords. Each instrument produces distinct 'colour fields' to set up a 'harmony of the spheres'. I also use a reducing technique to producing modes that are played with.

The electronic sounds come either from processed recordings of the acoustic instruments being used, or mimicking synthesizers. These sounds are sometimes harmonized according to the harmonic resources described and made to change colour, 'pulling away' from the acoustic instruments' timbres to become distinct entities.

The floor plan includes a wooden slit drum set apart from the other percussion. I was interested in the principle by which in space, a distant 'speck' can be approached until it becomes a world which can surround and overcome us. The slit drum represents a speck source, literally distant from the other instruments. At one moment in the piece, it is played and its sound is heard to expand gradually to form separate, earthly elements.

Conquete de l'espace is could not have been realised without the generous support of the Ralph Vaughan Williams Trust.

François Tvans December, 1993.

Conque te de l'espace was premiered by the Ensemble Intercontemporain under the composer at the Espace de Projection, IRCAM, Paris on 12/2/1994.

Bassoon:	Paul Riveaux
Percussion:	Daniel Ciampolini
Harp:	Trédérique Cambreling
SONAR-TG77 / Conductor:	François Evans
Electronics:	AlexMikalic
Sound Diffusion:	Franck Rossi

## Conquête de l'espace

François Evans

## Performance Instructions

## All acoustic instruments:

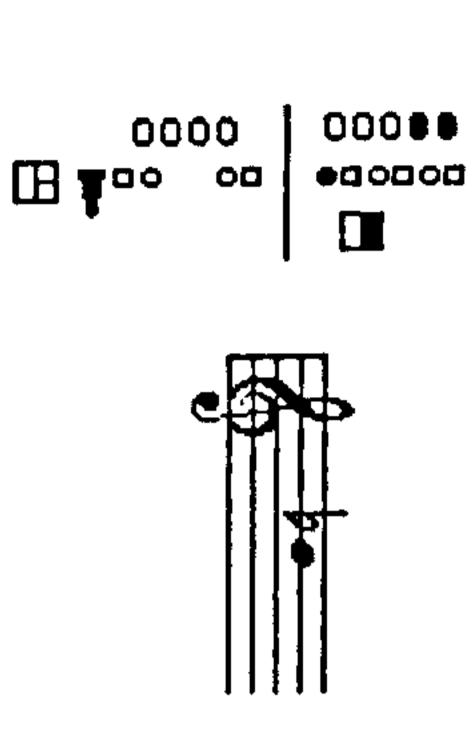
All instruments sound as written except timpani which sound an octave lower than written.

n = niente (nothing)

= highest note possible

### Bassoon

Bars 1 & 233 use:



=1/4-worse flat

‡ = 1/4-wne sharp

MM = vibrato to vary according to the shape of the line:



Slap = slap wngue.

time

### Harp

pdst = près de sa table (play the string/s near the soundboar

N=return to normal playing position

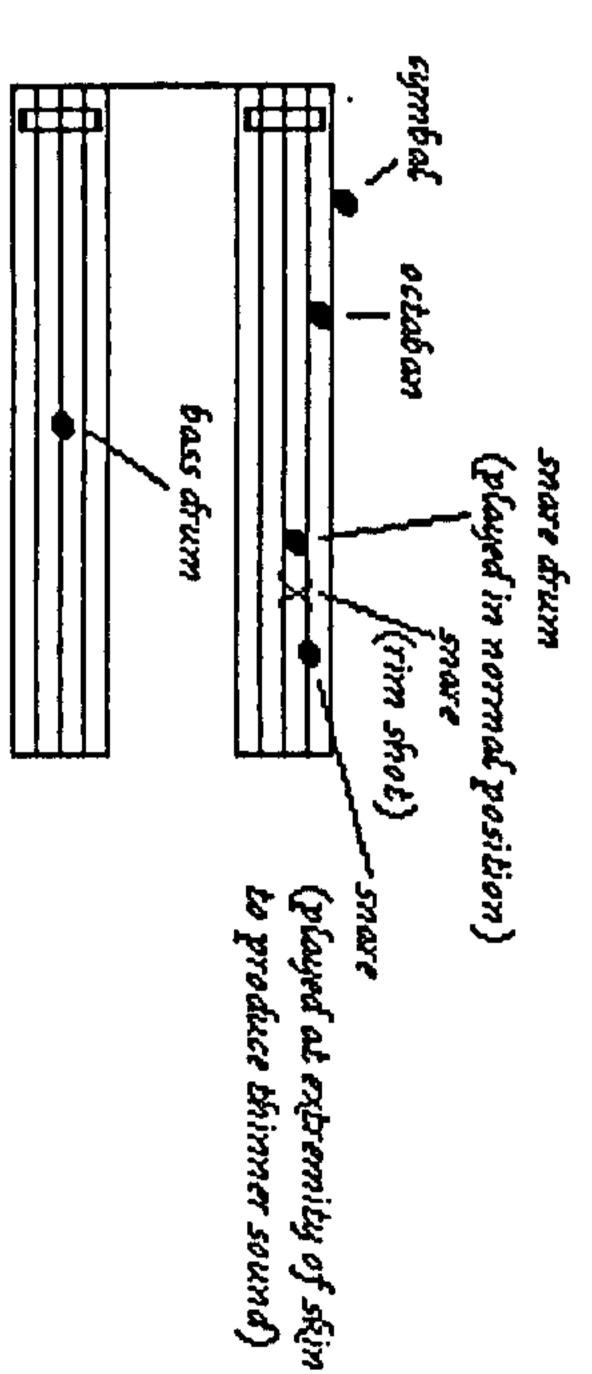
) = plucks tring harshly, with the fingernail

 $\Psi = Touch the vibrating string with the fingernail or a small metal object to make the string buzz.$ 

### Percussion

Percussion can be laid out as suggested in the technical layout plan.

Percussion instrument to play is specified in the score except when 'CC etc' is marked at which time the following set-up is implied:



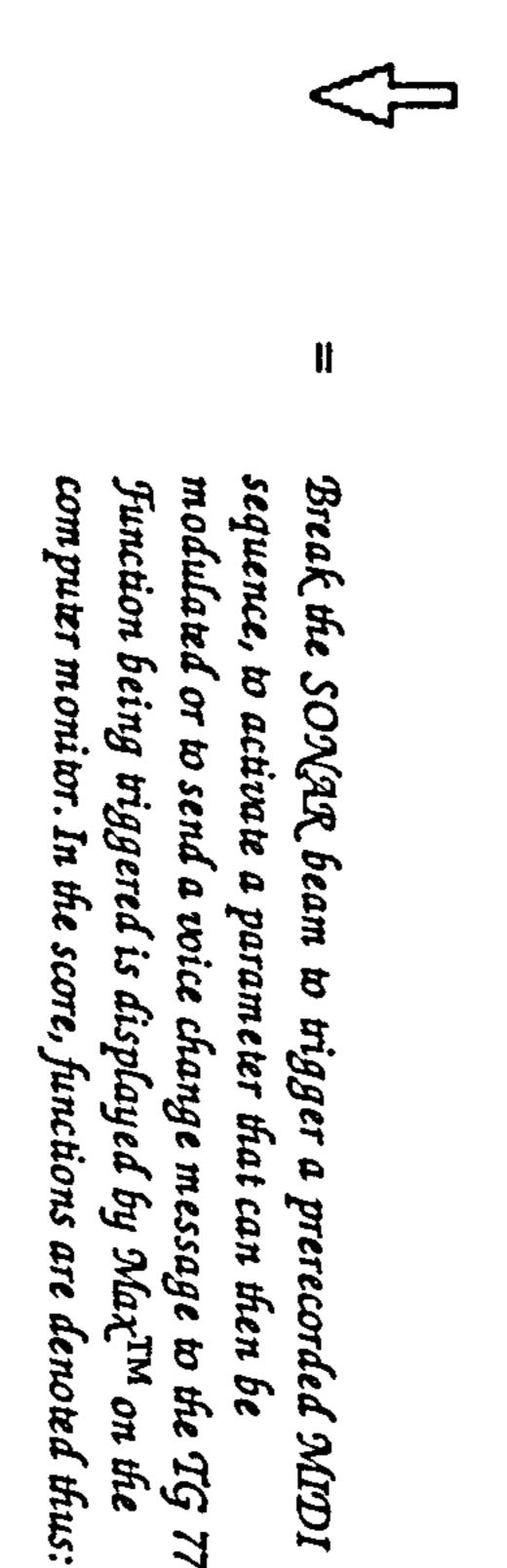
Normal sticks should be used. Medium ('no 17')-type timpani sticks are recommended for timpani passages. The crotales should be played with triangle beaters.

The woodblock is situated centre-front stage well apart from the other instruments. After bar 25, the player should walk quickly to play it. A second copy of the percussion part should be placed on a music stand in front of the woodblock.

## SONAR-controlled TG 77 / Conductor

IRCAM. A mobile SON/AR unit is from City 75004, Paris, France. This is interfaced vi Tun on a macintosh computer. The MaxTM University, Northam pton Square, London. ECIV OHB, or from available from IRCAM 1, Place Igor Stravinsky, a a MIDI pedal board to Max<sup>TM</sup>, patches for this piece are available

by moving the hand wwards and further away from it. Any MIDI interface n be used in lieu of the SONAR, but should leave the player's other hand free to conduct the other players. The SONAR allows the player to vary parameters as programmed into MaxIM away from it. Any MIDI interface may



Changement de voix labelled. Déclenché (trigger). Voice change. Voice number being sent is also Vary (the parameter named).

suggested pattern for modulation of parameter when activated. Wave peaks suggestions. Actual modulations are left to the indicate hand close to the SONAR, troughs hand far away. Wave shapes are merely discretion of the player.

The SONAR-Max $^{TM}$  interface patch (in Max $^{TM}$ ) should be adjusted to suit the arm span and performance preferences of the player.

The current state of system co-ordination from Max $^{ ext{TM}}$  is constantly updated in concert engineer, and TG 77 performer via display window of the computer. This window should be visible to both auxiliary monitor

The technical diagram below shows the complete system set-up.

Pedals on the MIDI pedal board should be assigned w:

- step by step.
- (ii) Moving Nax<sup>IM</sup> functions f Retire functions forwards s backwards step by step.
- (iii)
- (iv) Returning Max $^{\text{TM}}$  to set-up for the start of the piece.

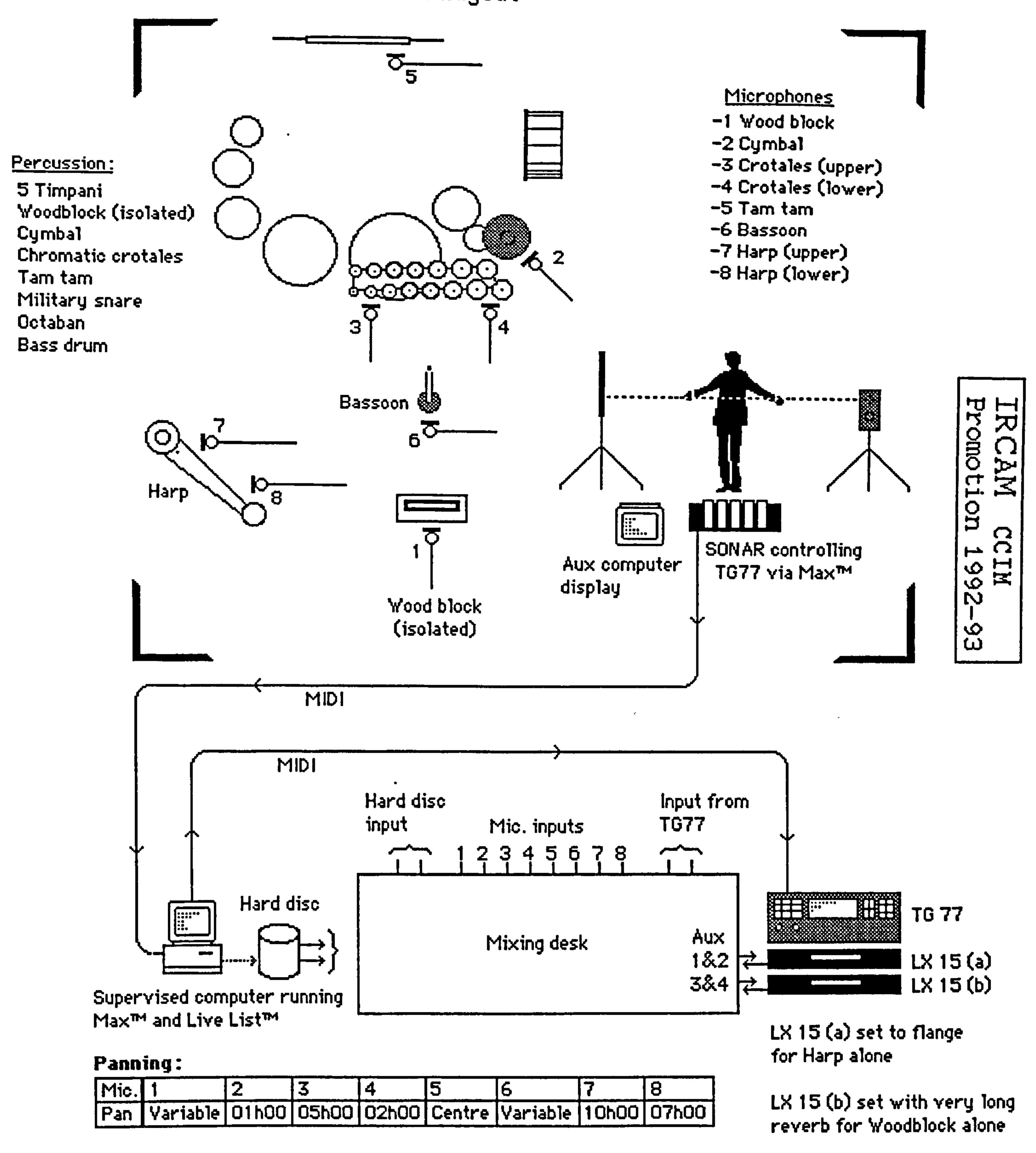
  'Aush-on,-release-off 'gate' to information being delivered by changes in depressed. the SONAR beam. The SONAR will only function when this pedal is
- (2) Swpping Max<sup>TM</sup> in its tracks.

part above these flashes throughout the piece. Hashes reset themselves with each SONAR flashes on the computer monitor (one flash trigger, except those Conductor's downbeat can then fall at the start of bar 1. The conductor follows frequency, oscillator frequency etc. Bar zero is indicated in the score in the TG very first SONAR trigger of the bar <u>!</u> that vary a defined control parameter eg volume, cutoff for each beat of the bar, in tempo). starts an empty, warning bar of

All other special indications are given in the

 $\mathcal{M}a\chi^{TM}$  is A trade mark of

### François EVANS: *Conquête de l'espace*Technical Layout



### MIDI:

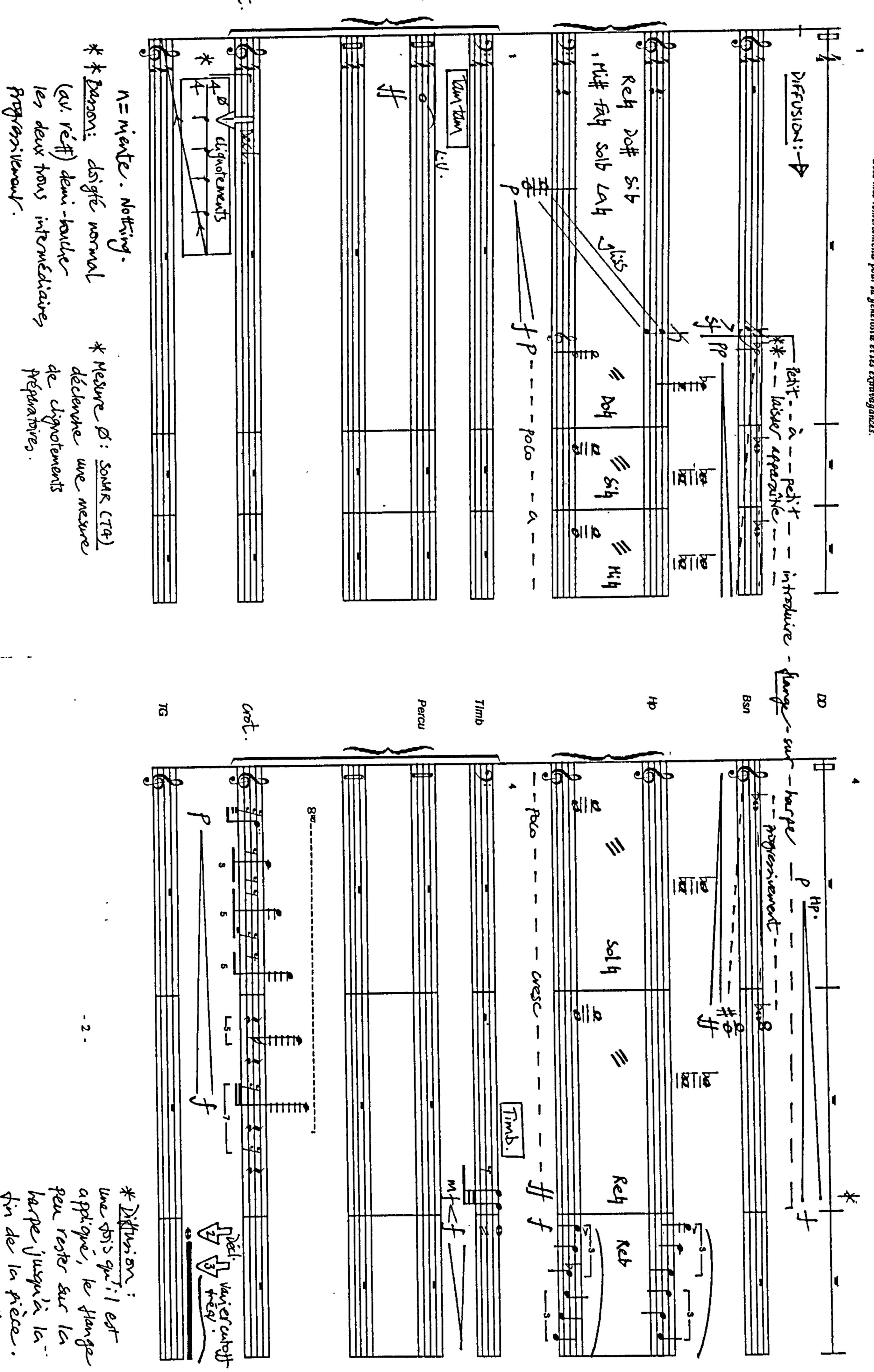
SONAR triggers sequences and sends system-common and system exclusive information in real-time to Max<sup>™</sup>

## onquête de l'espace

Lurçat dans la série

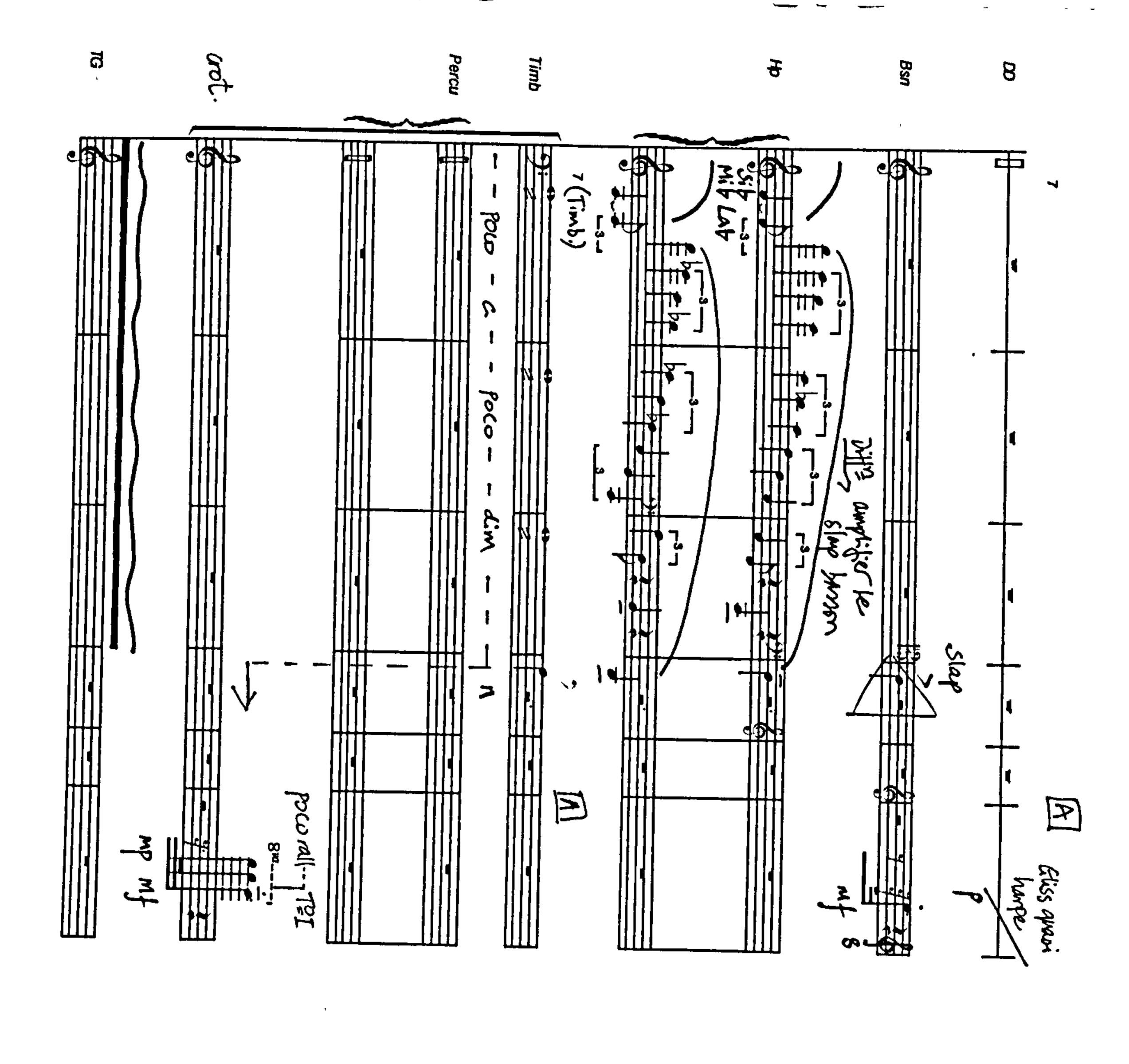
François Evans né 1965

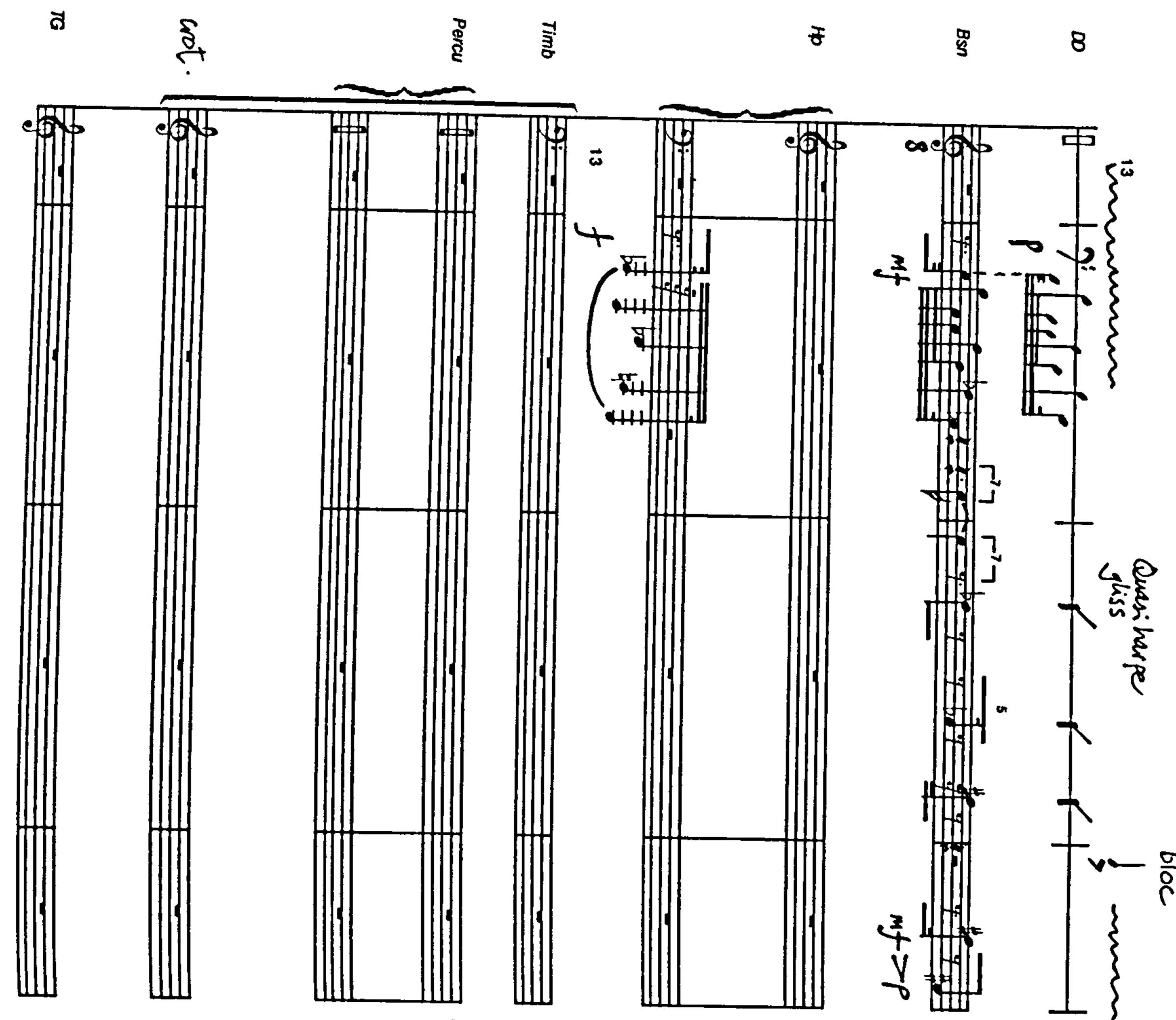
O

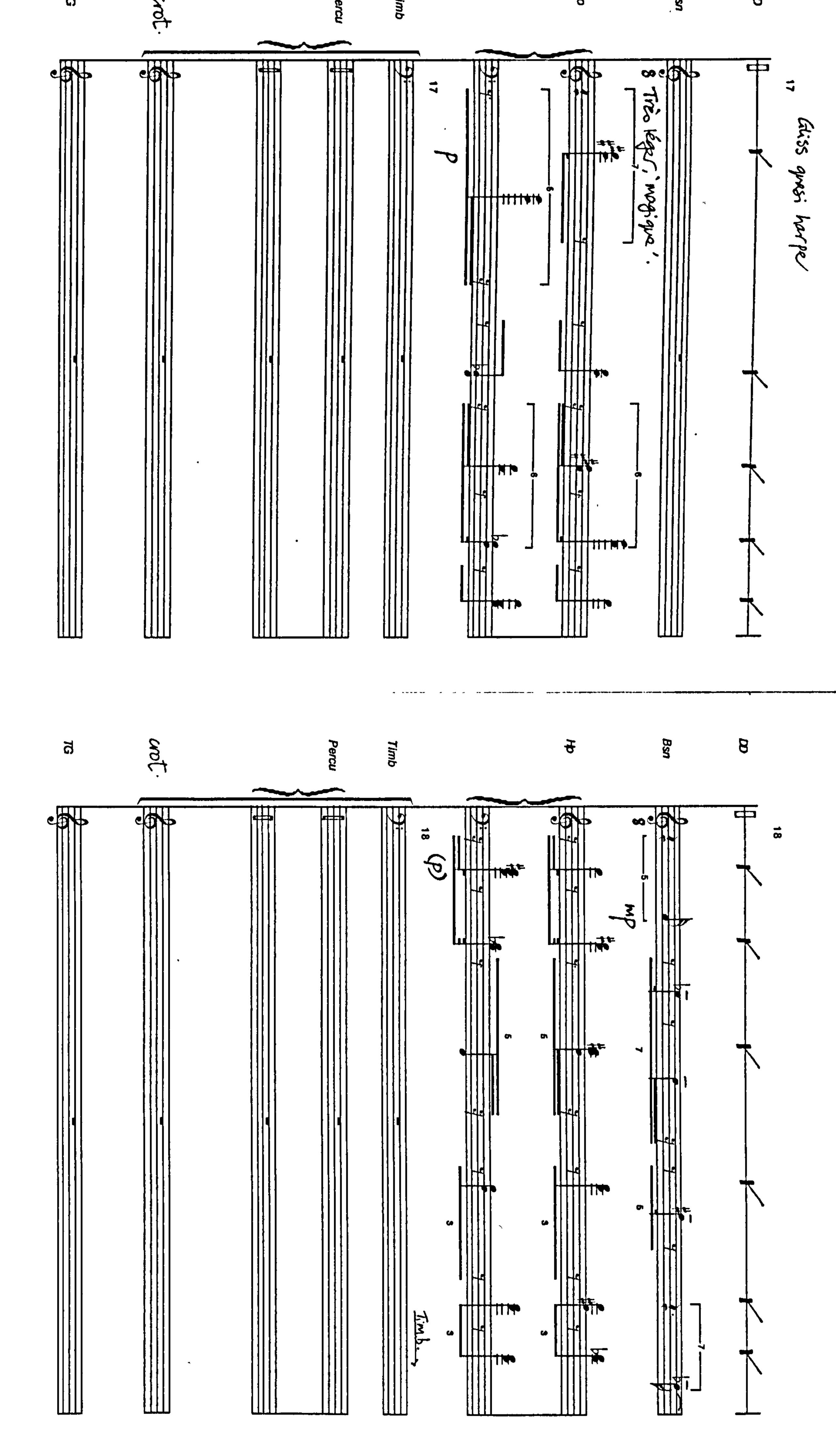


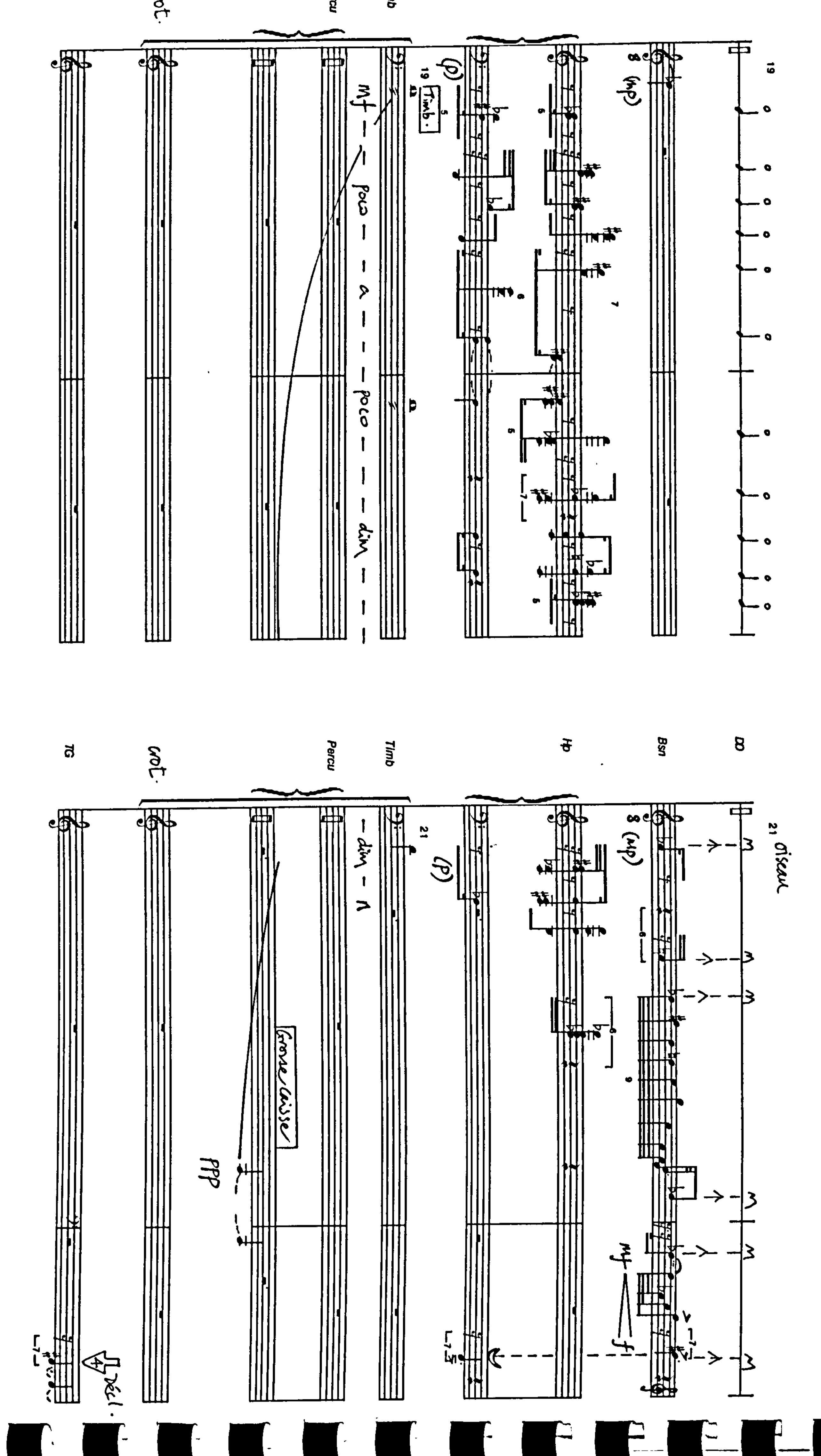
Timb

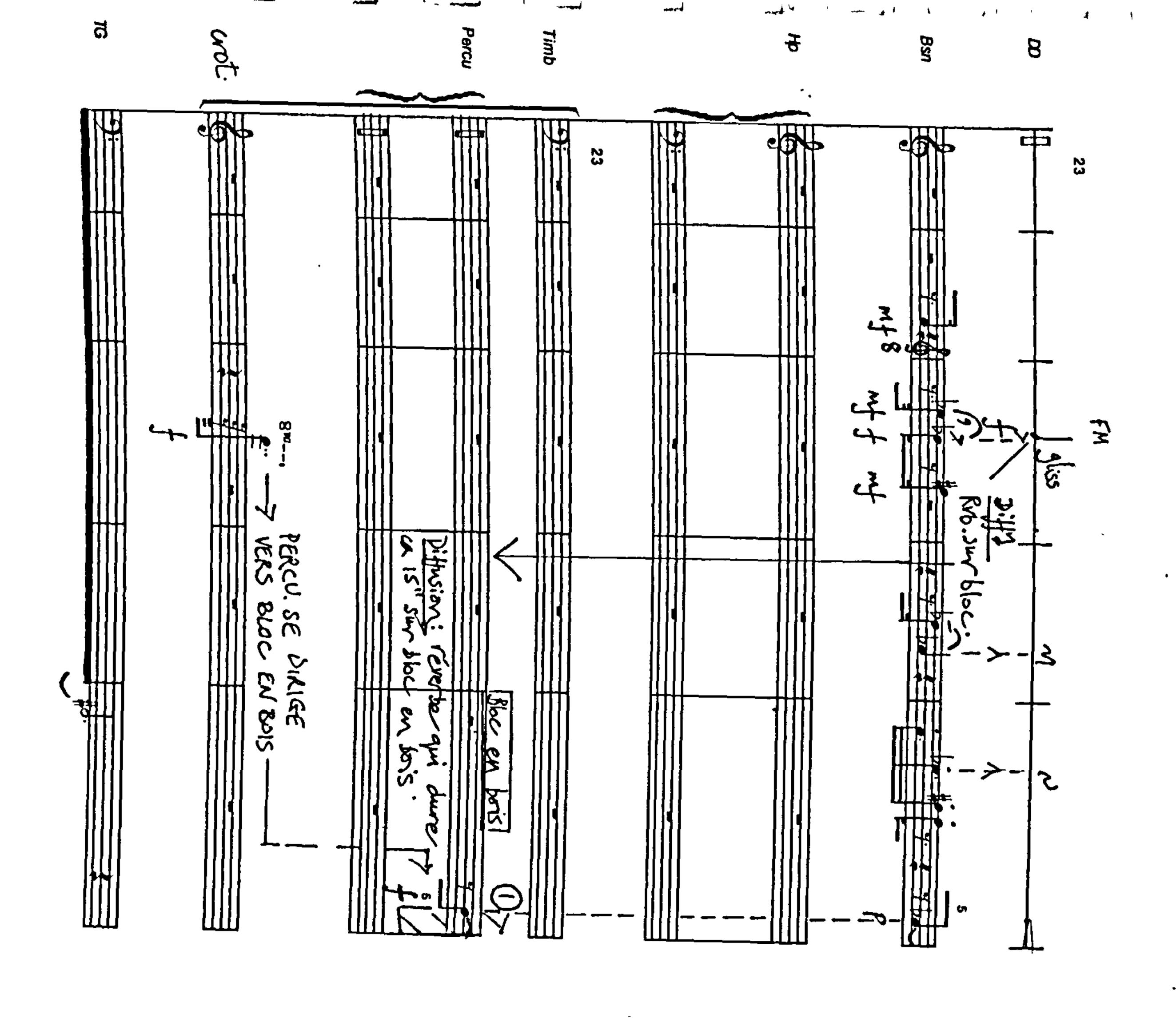
ದ

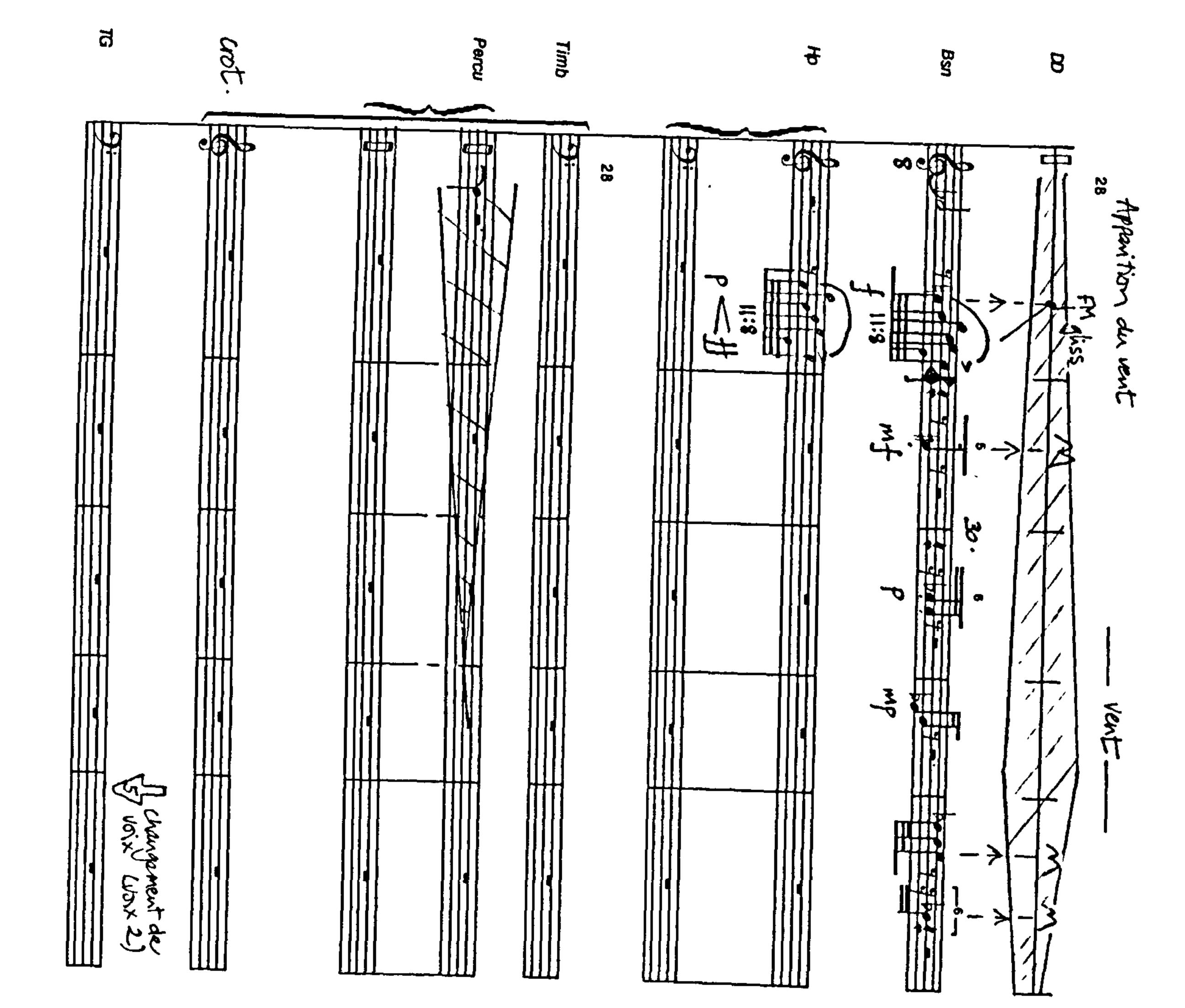


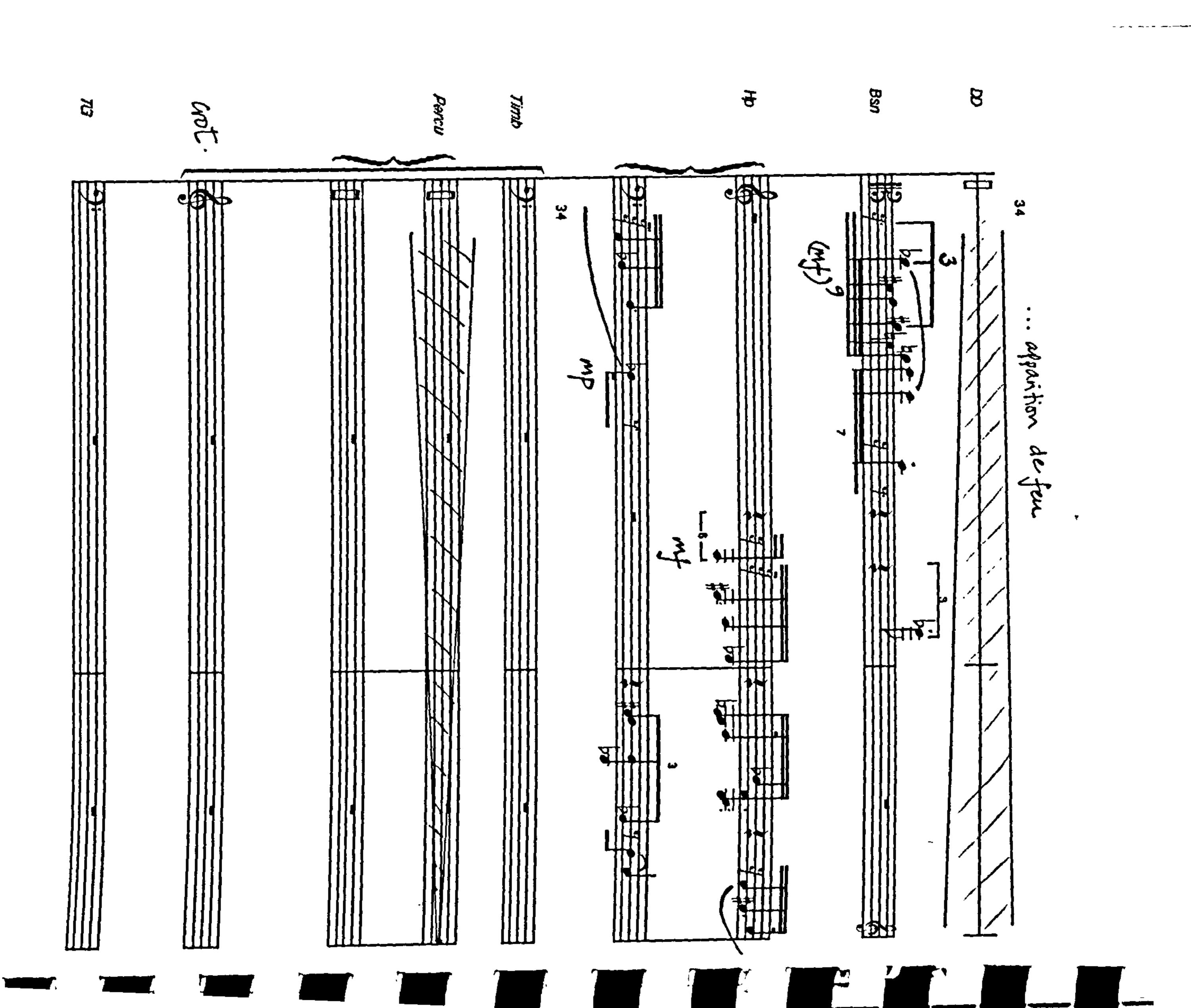




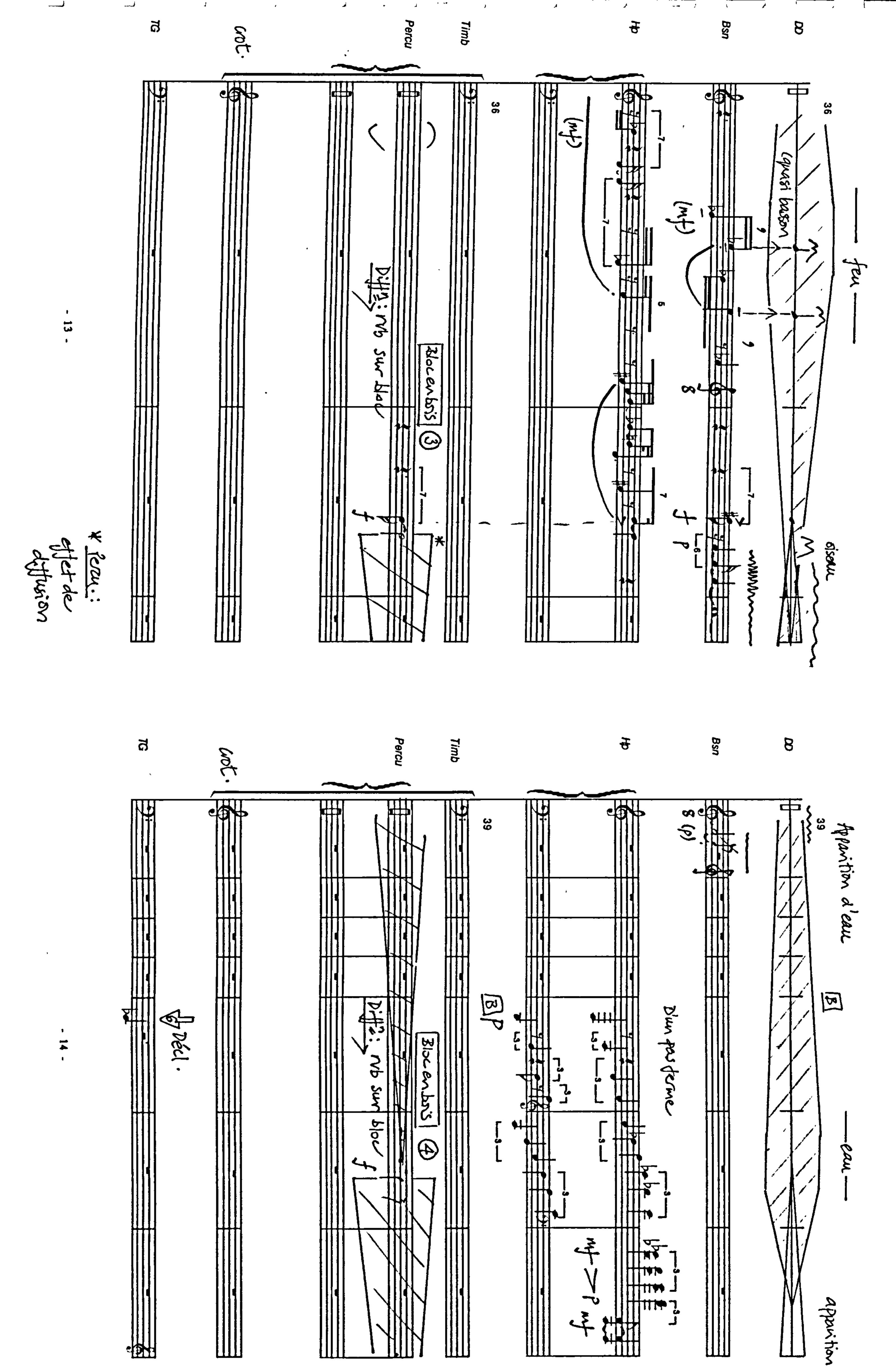


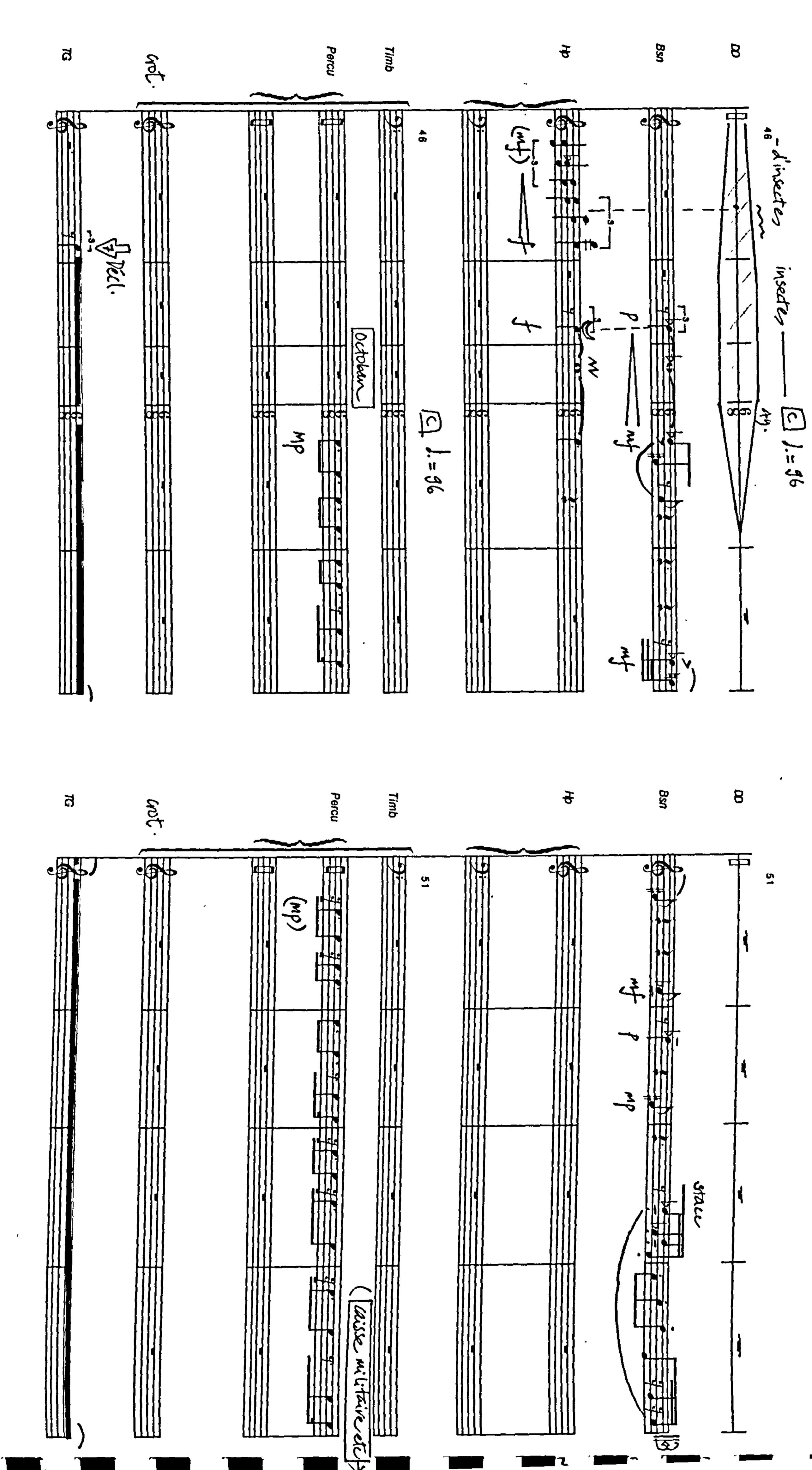


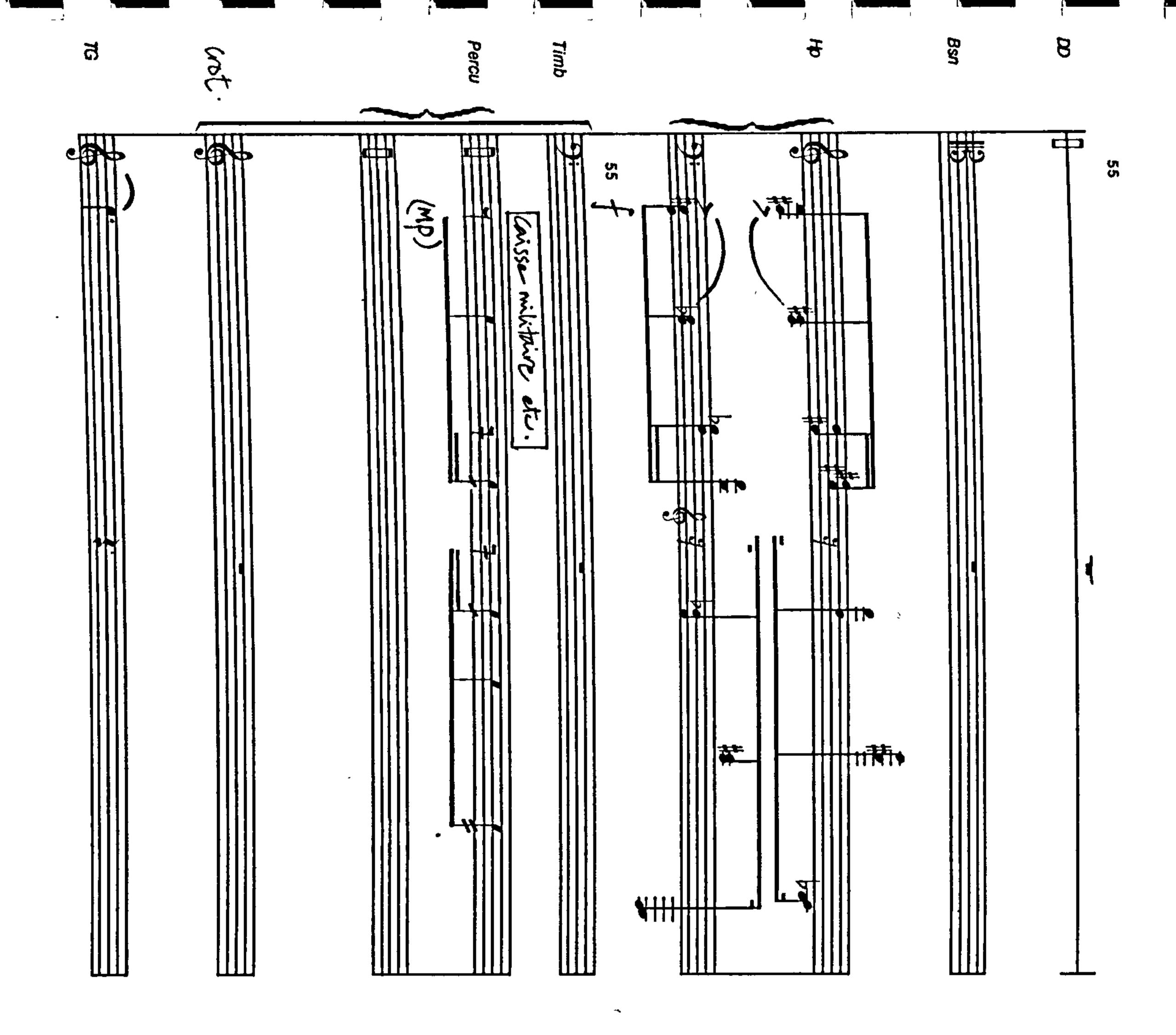


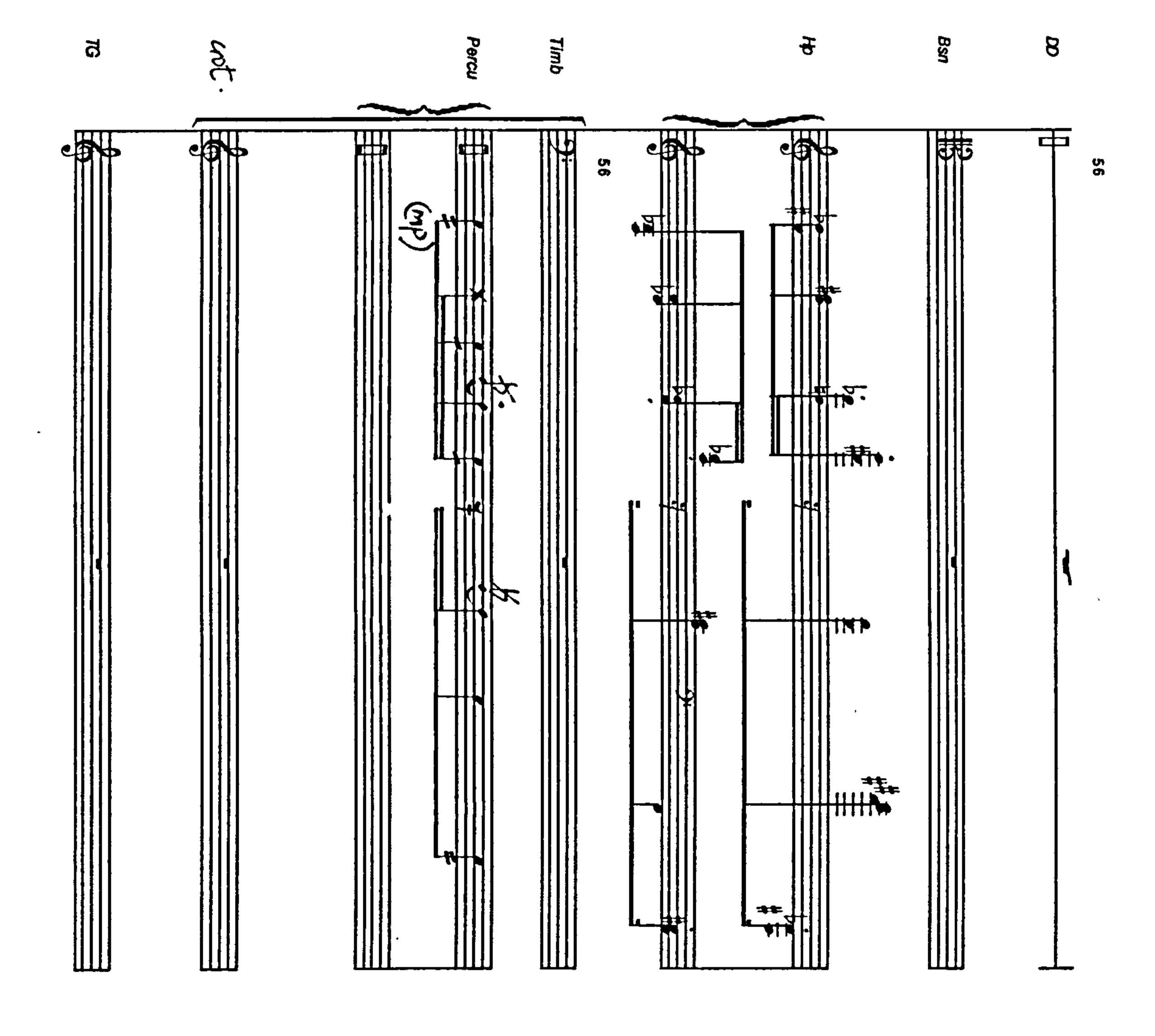


- 11 -

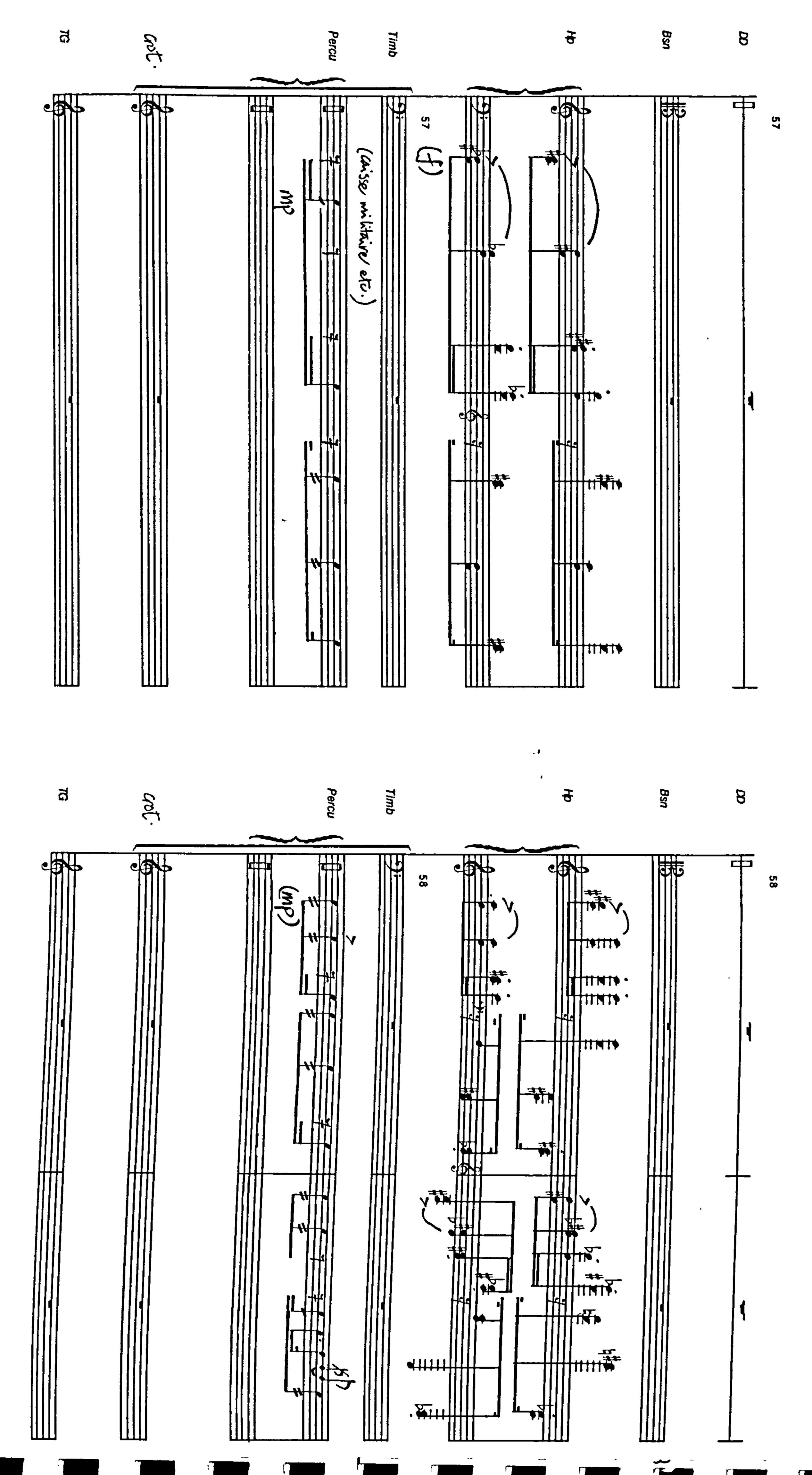




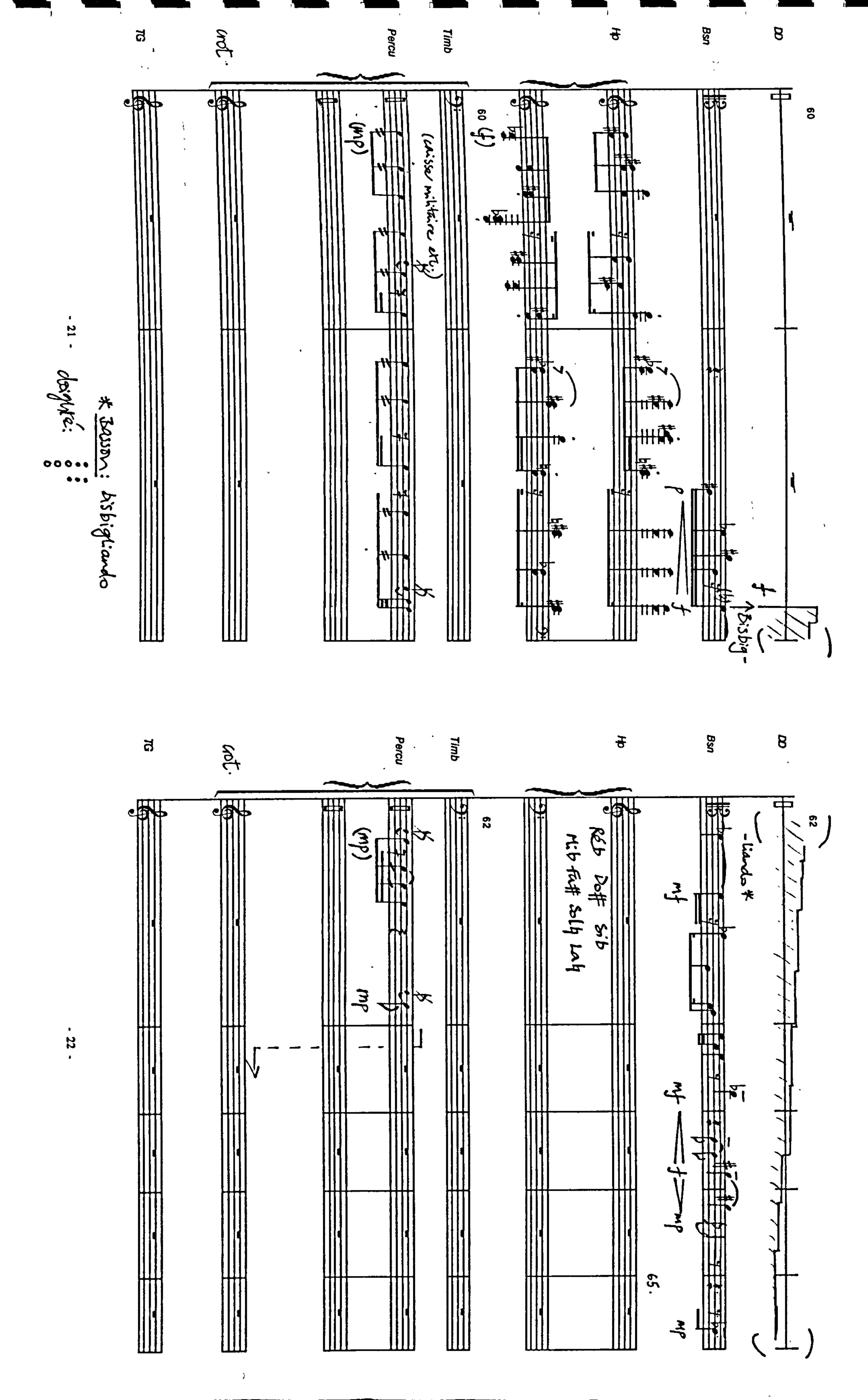


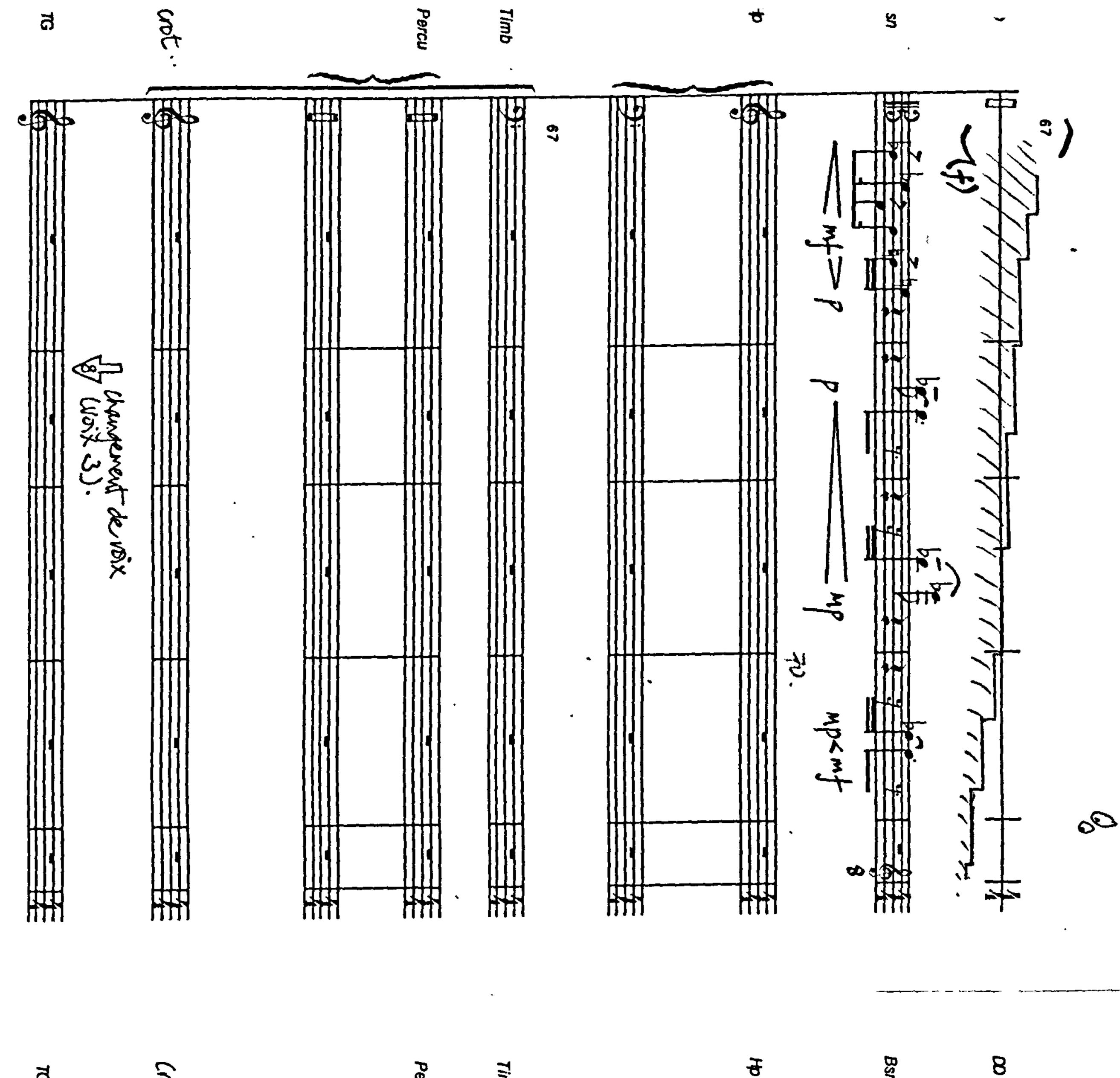


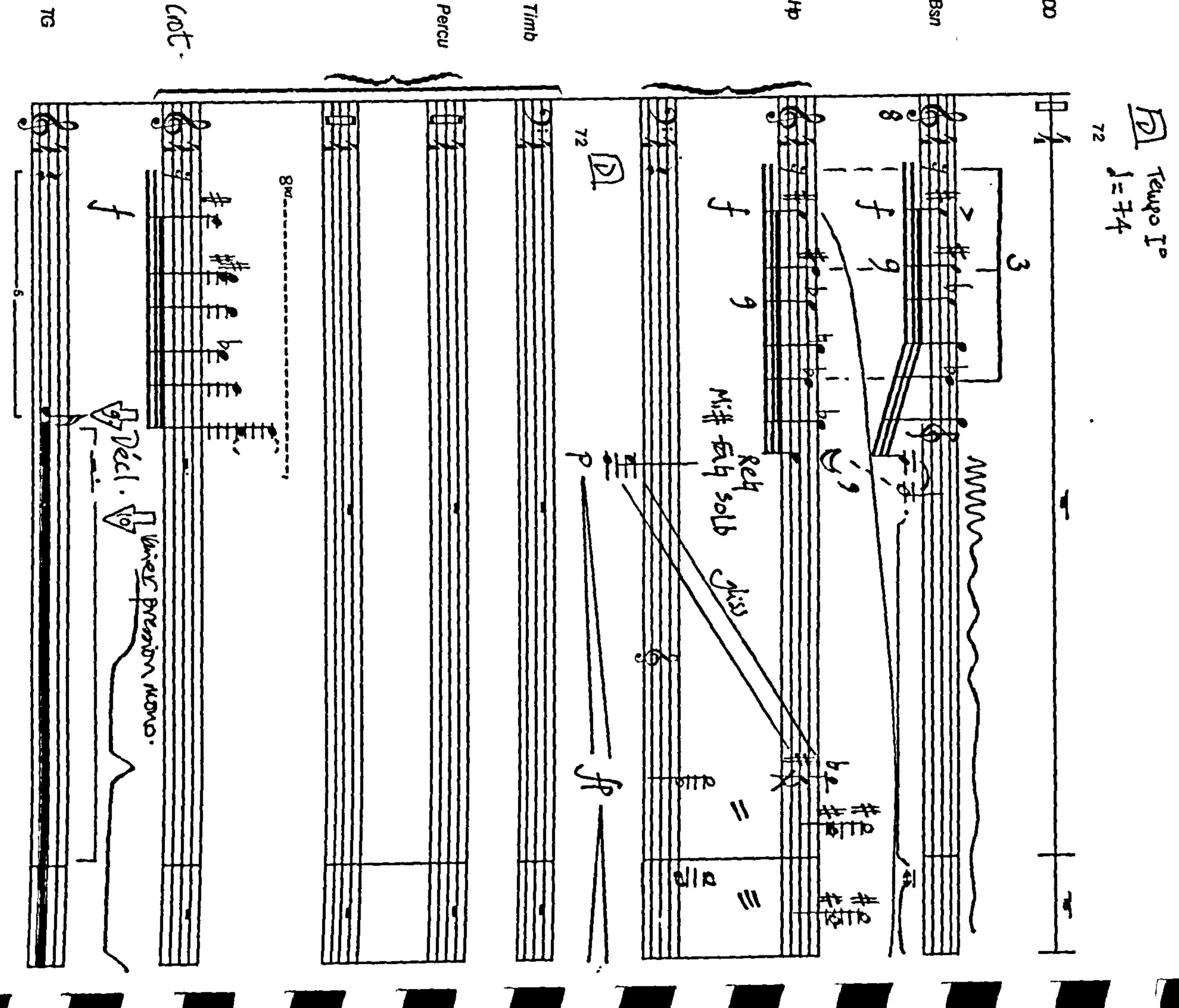
•

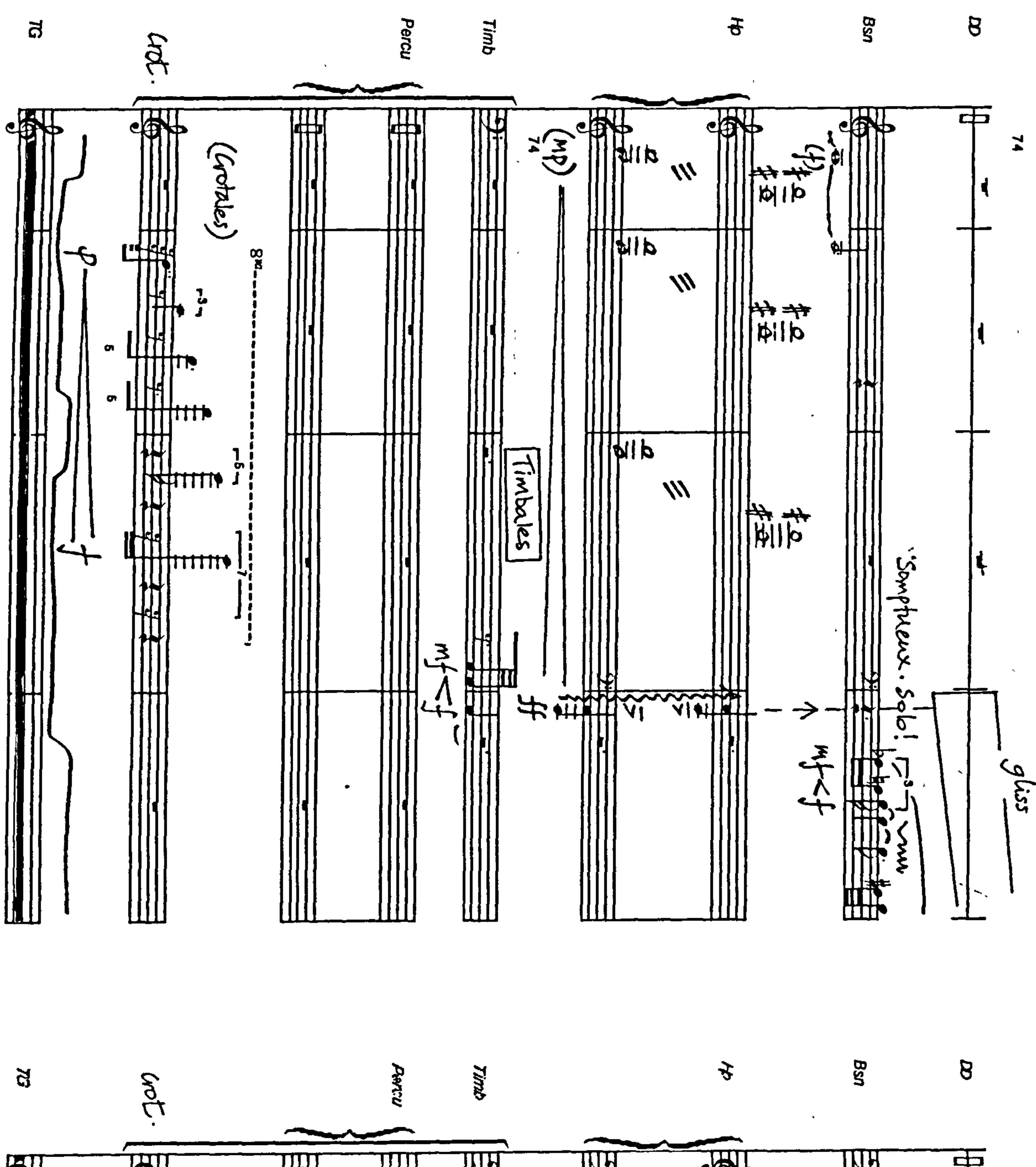


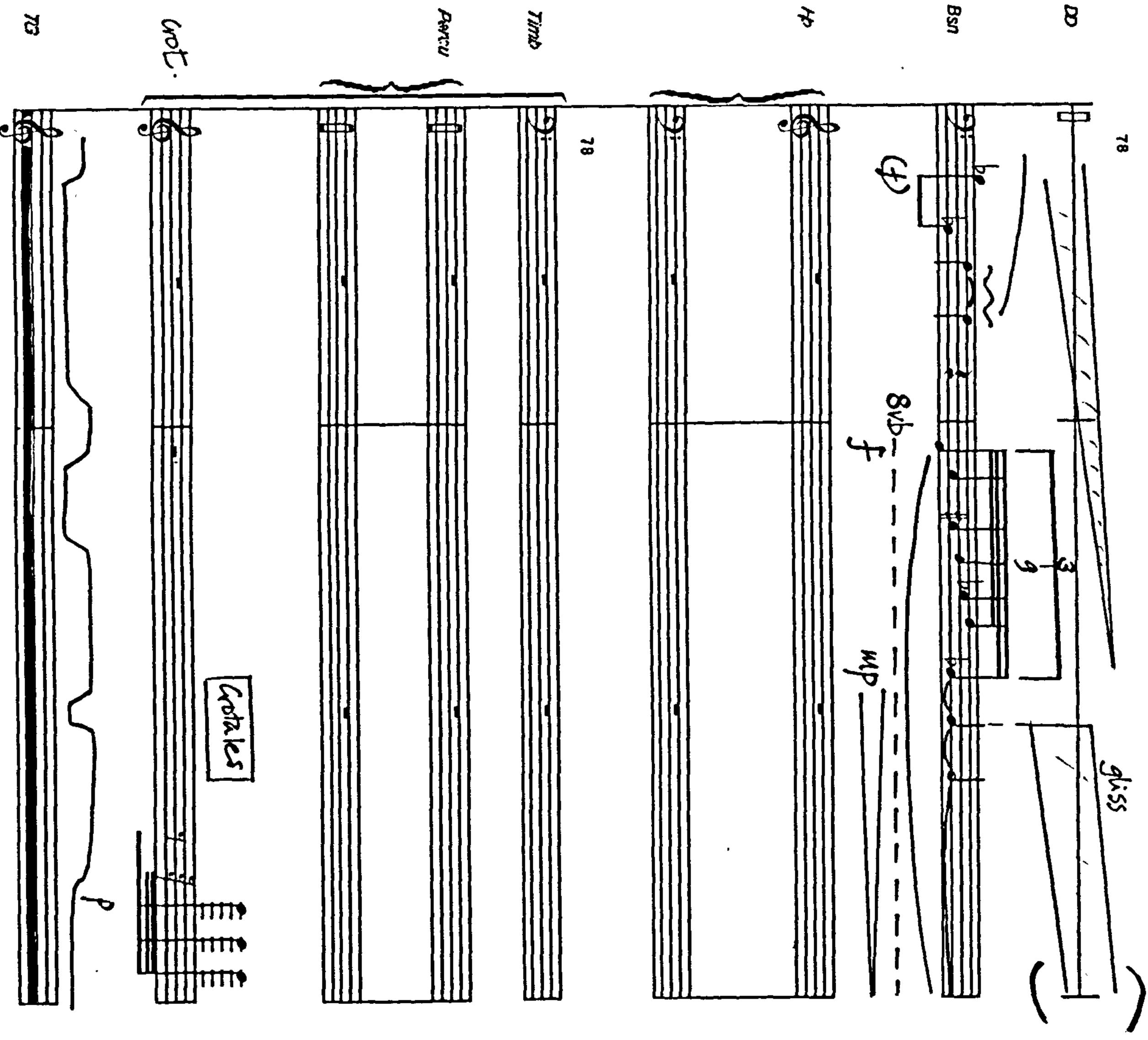
20 .

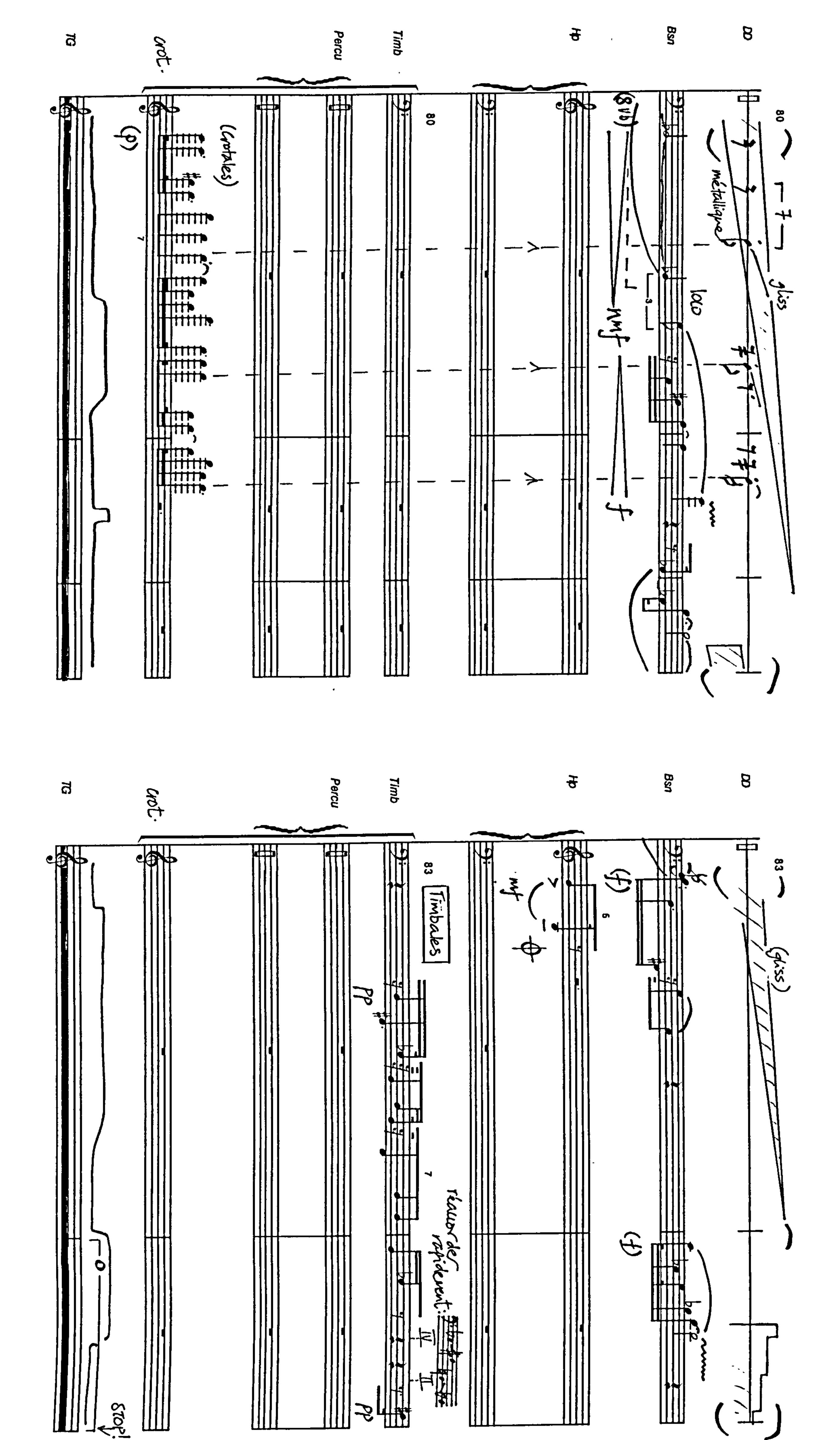




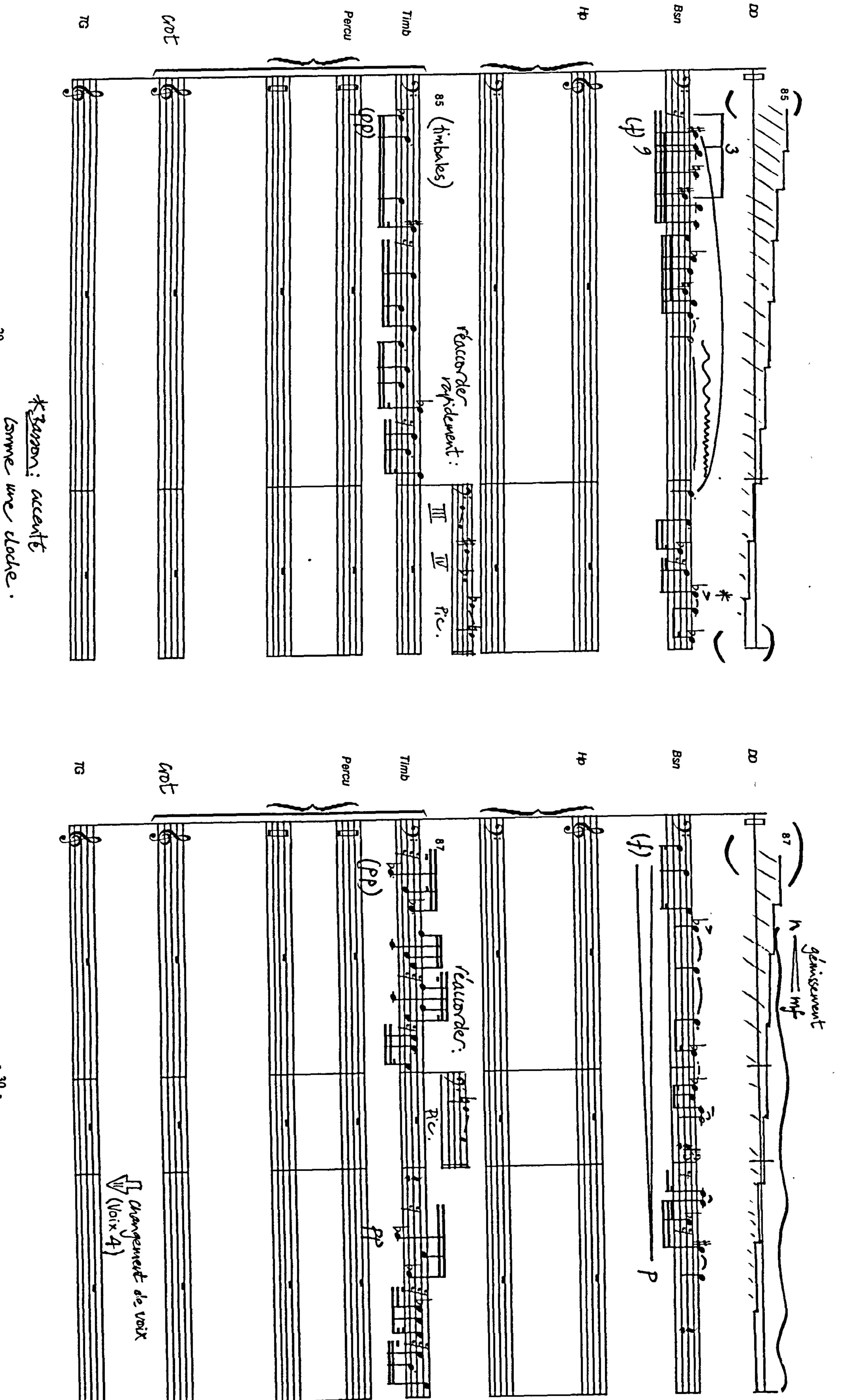




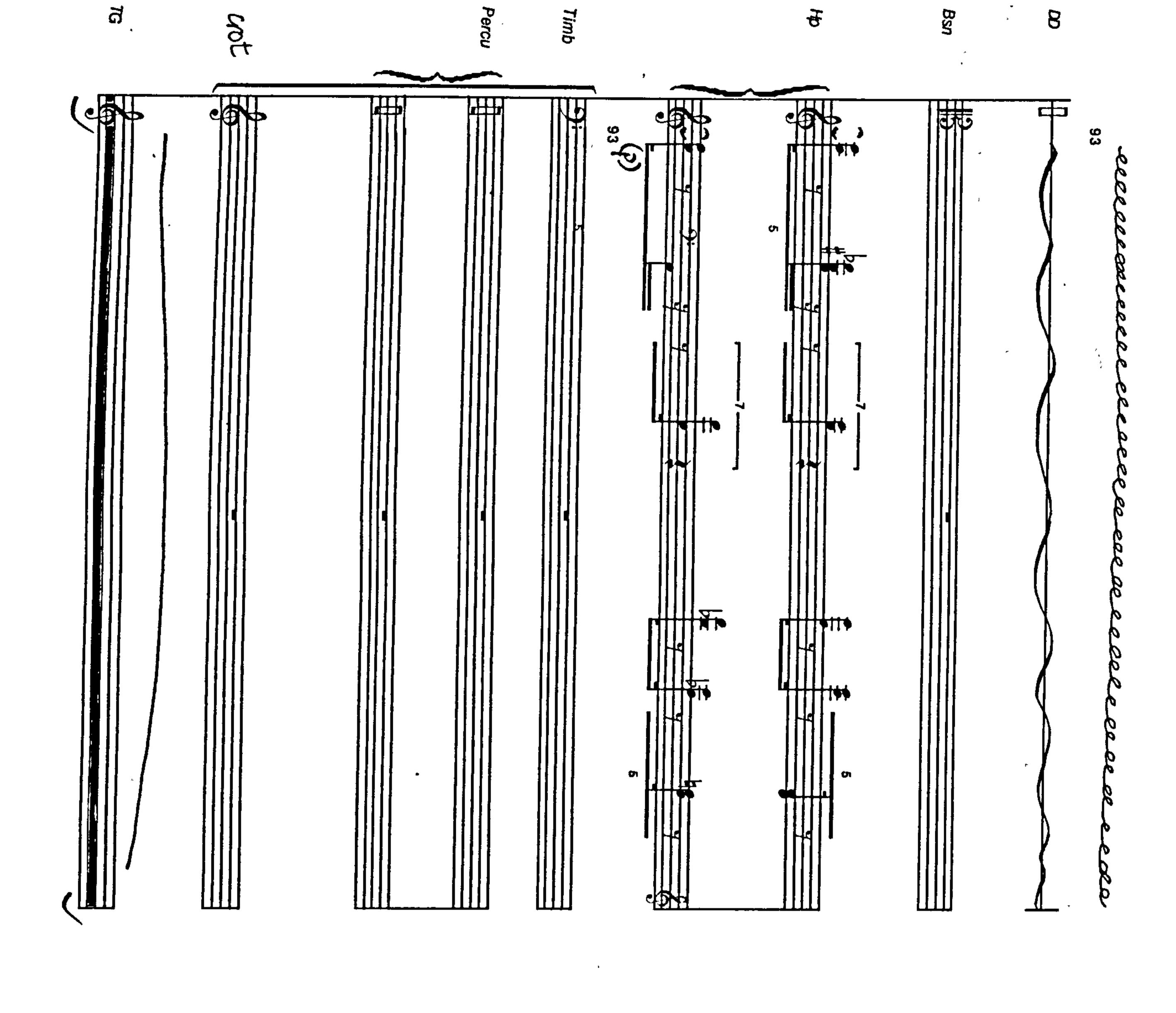


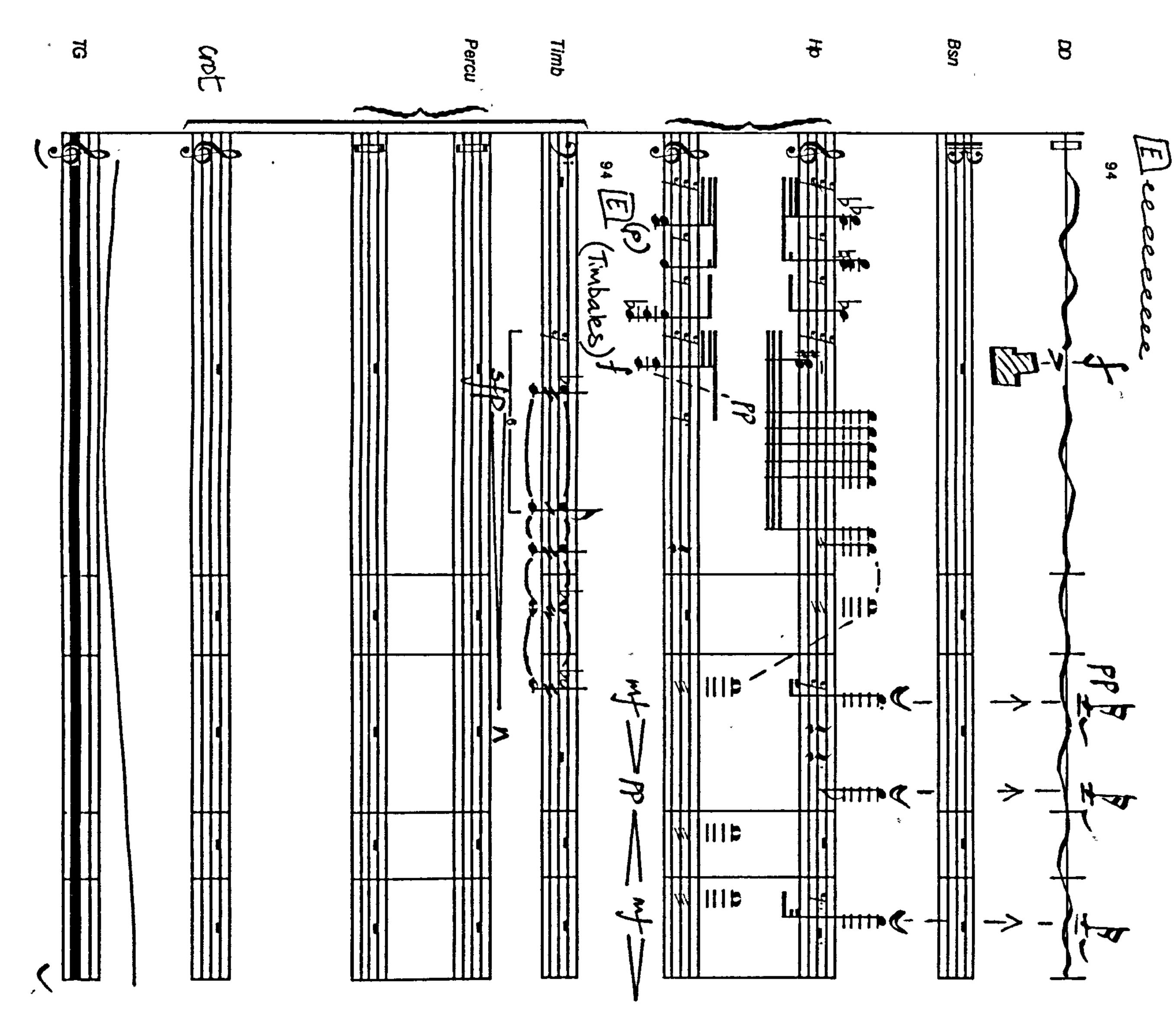


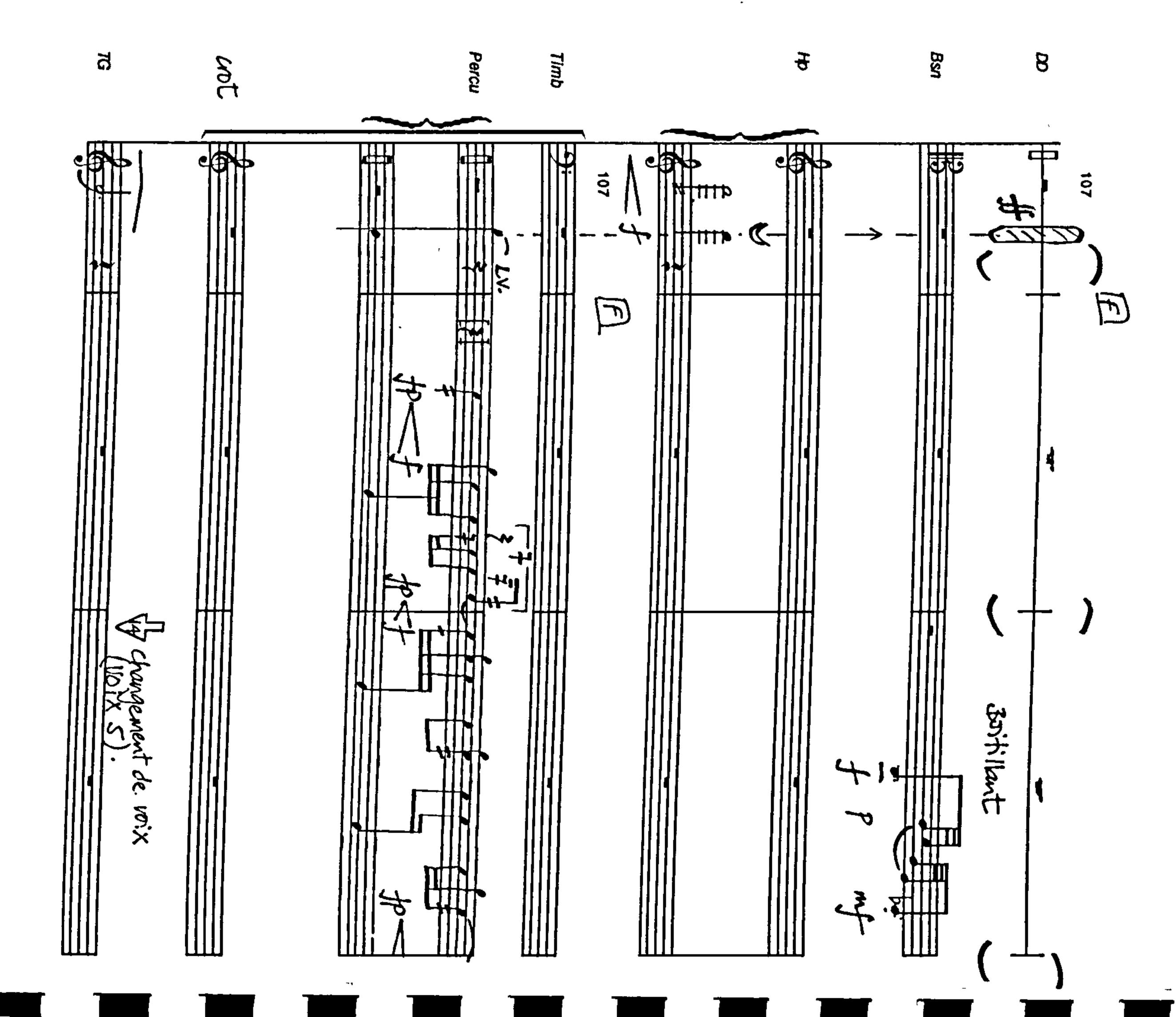
Š



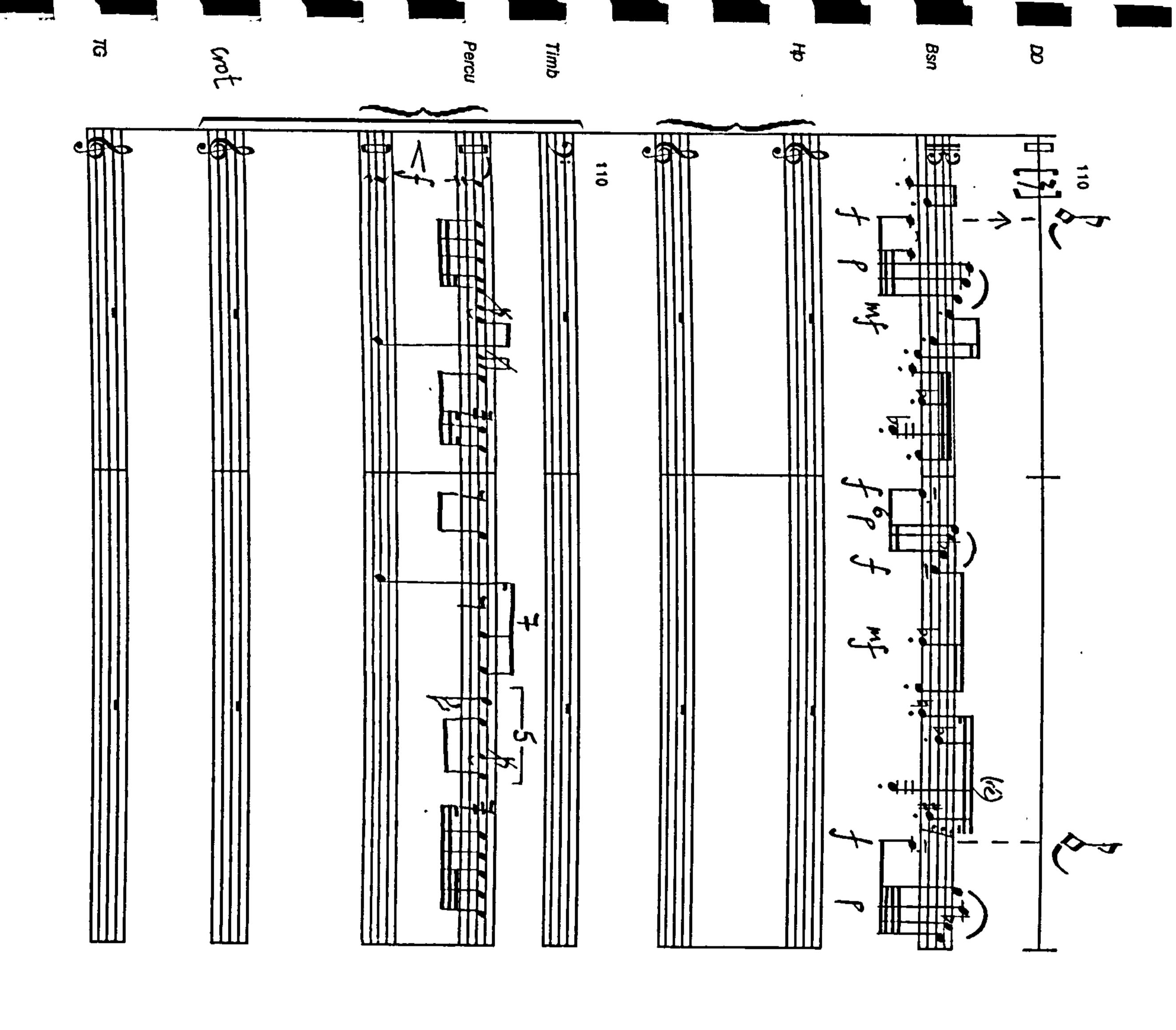
. 31 -

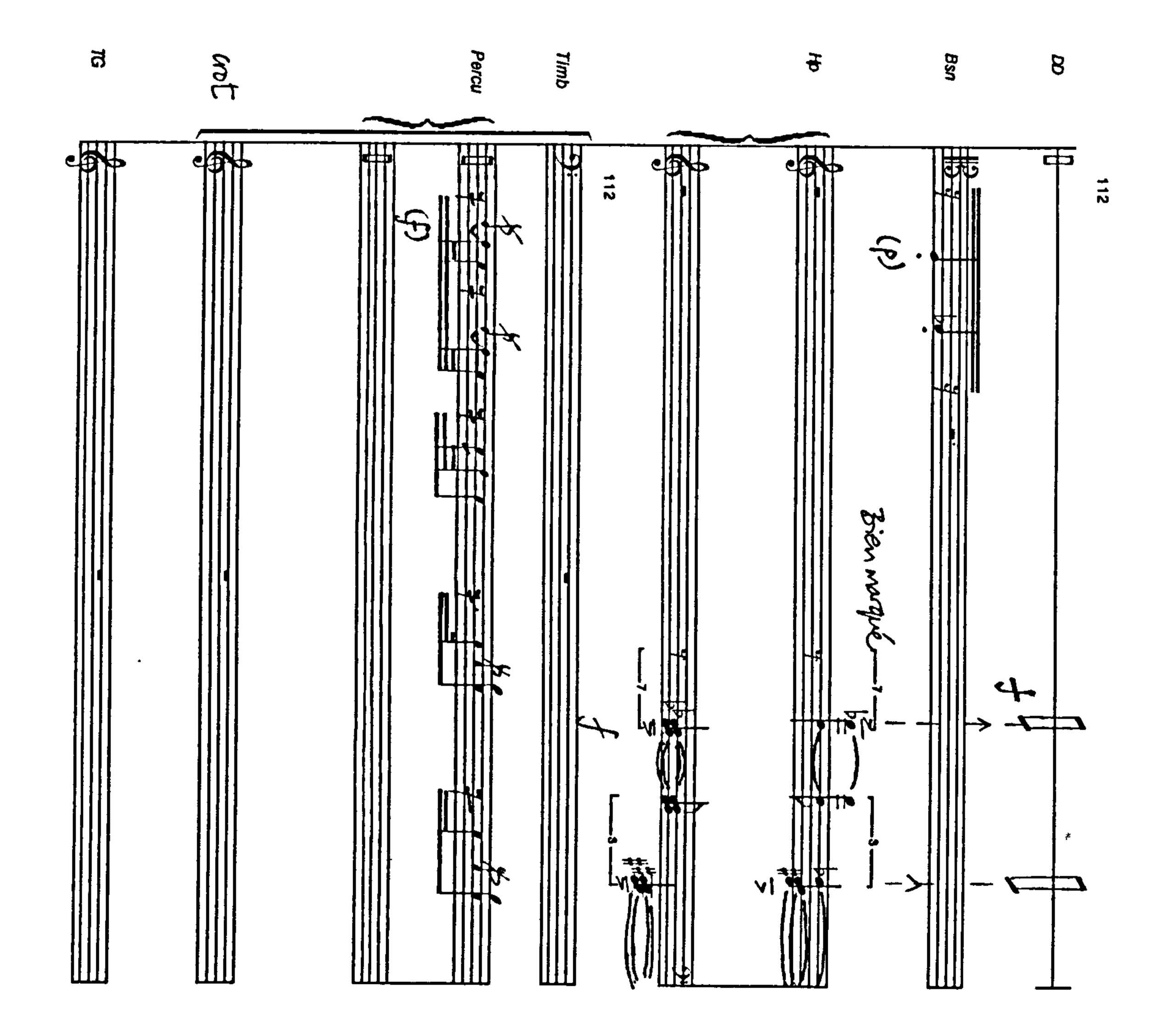




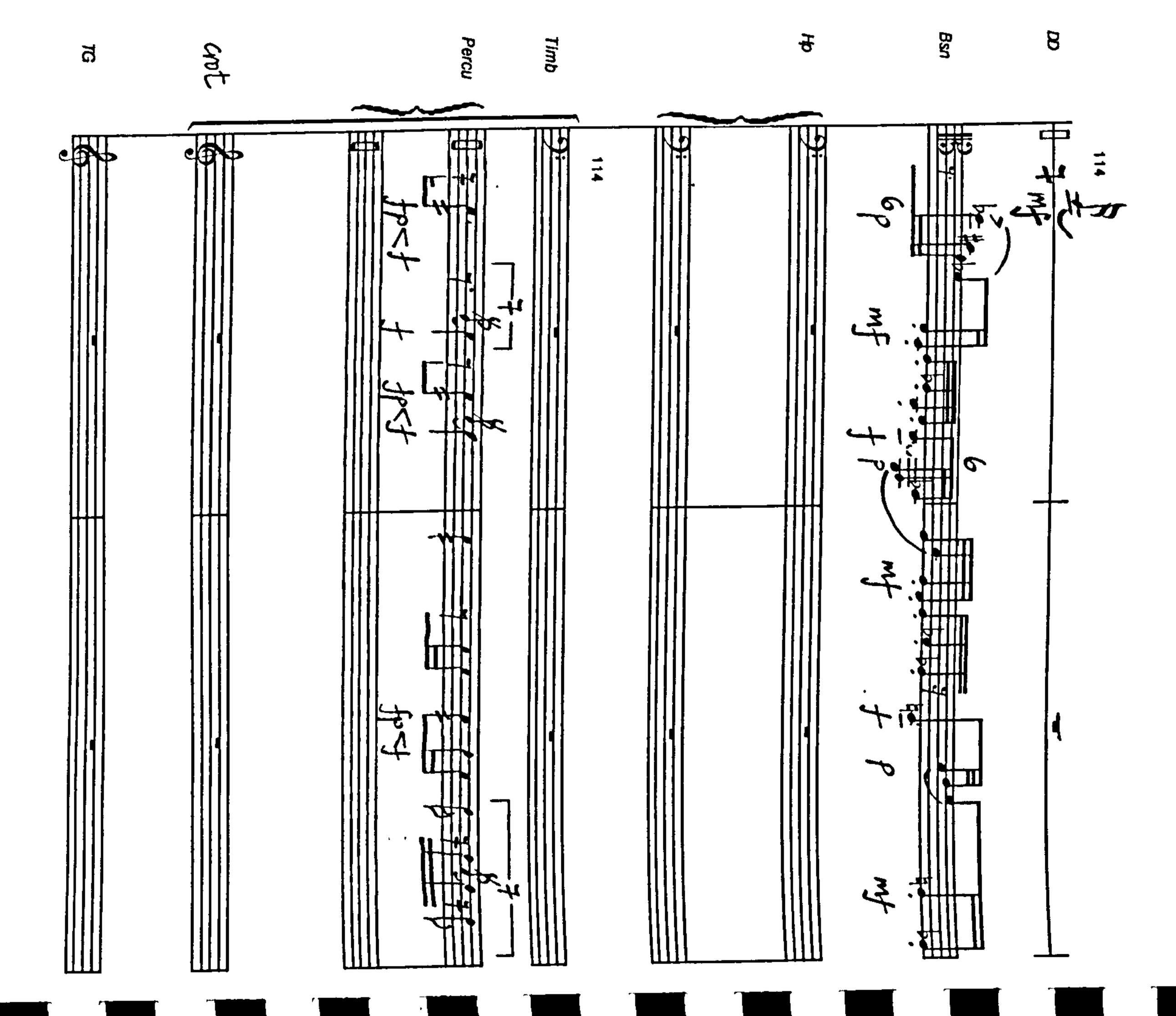


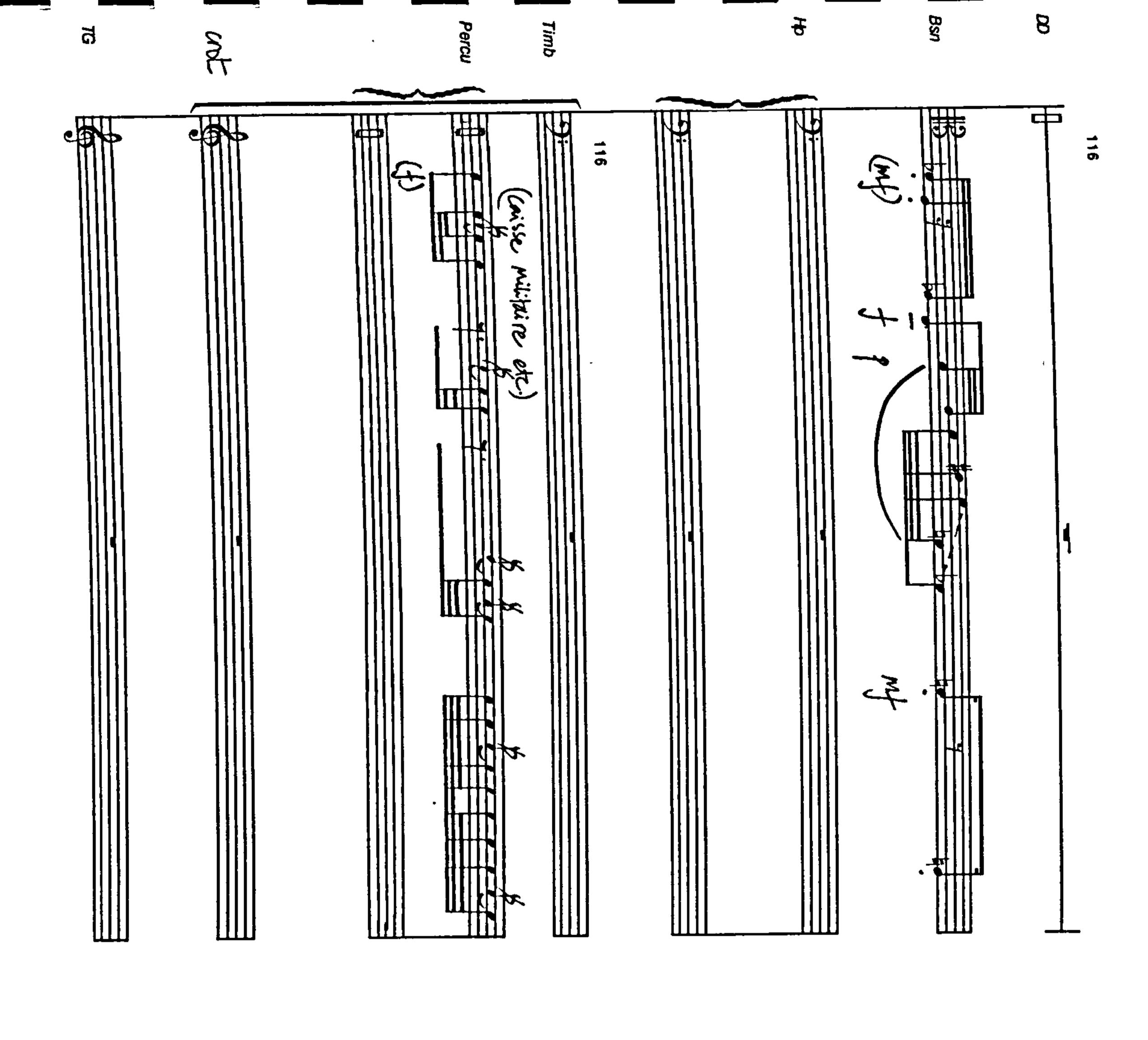
~ - ----

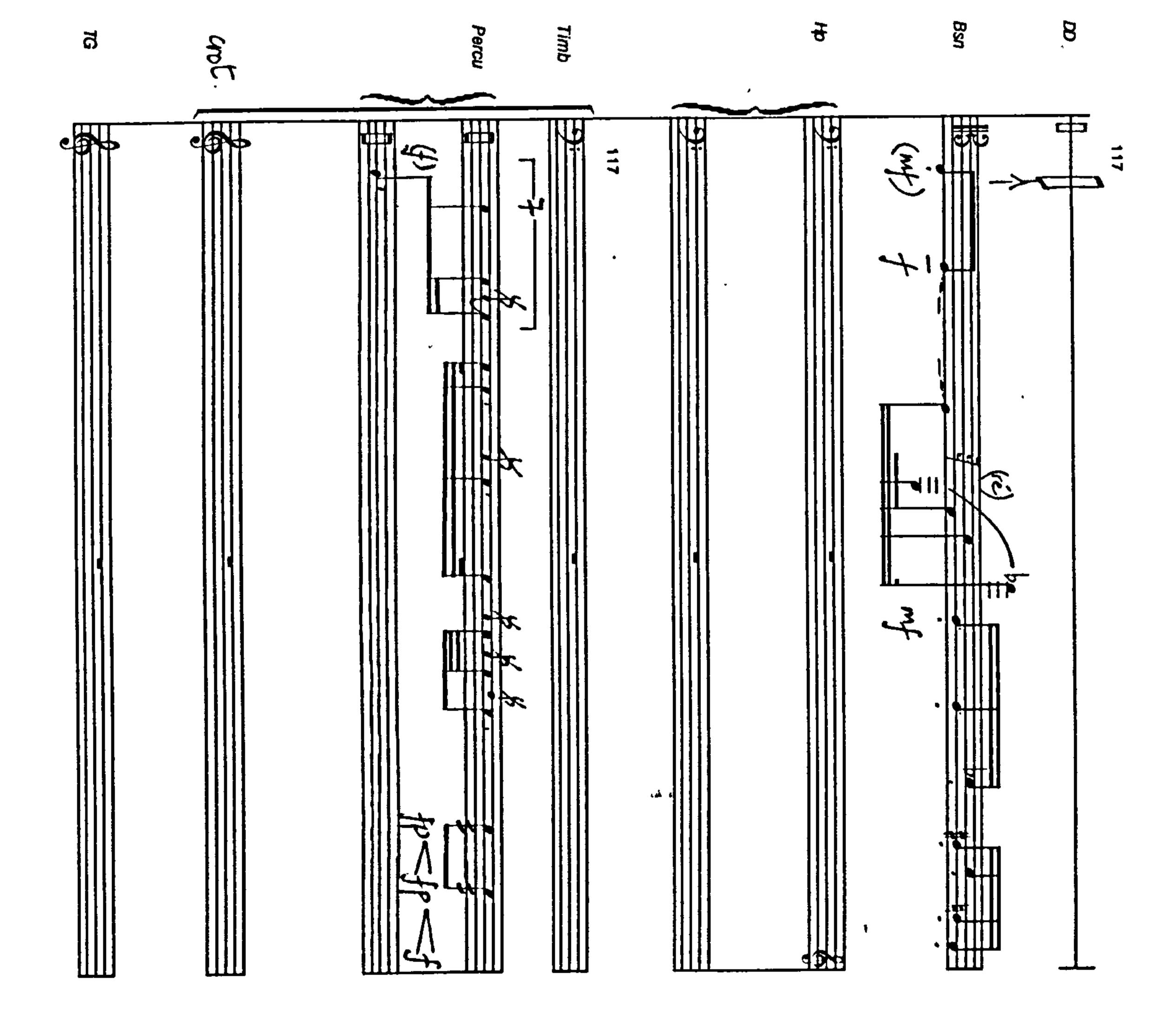


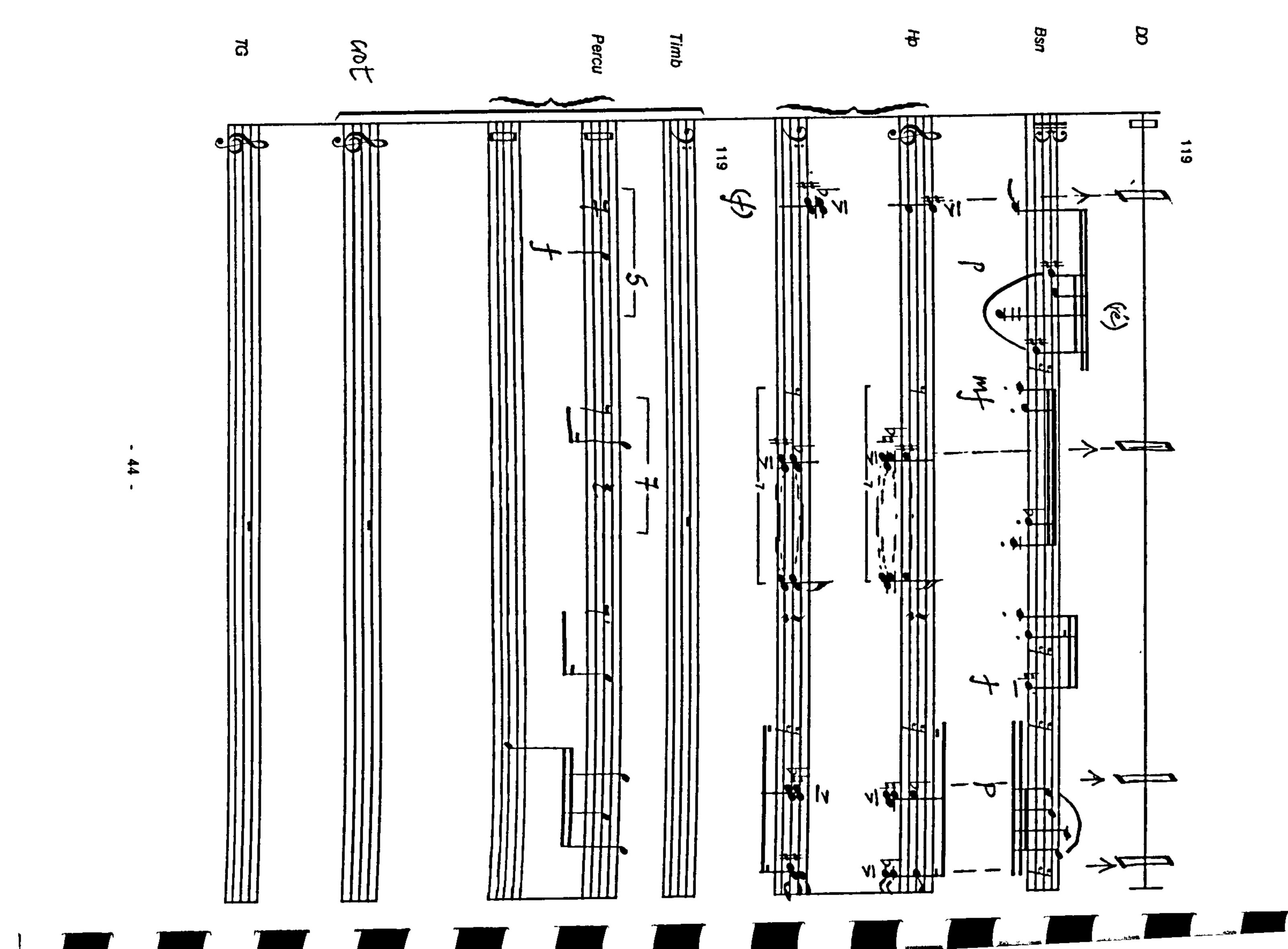


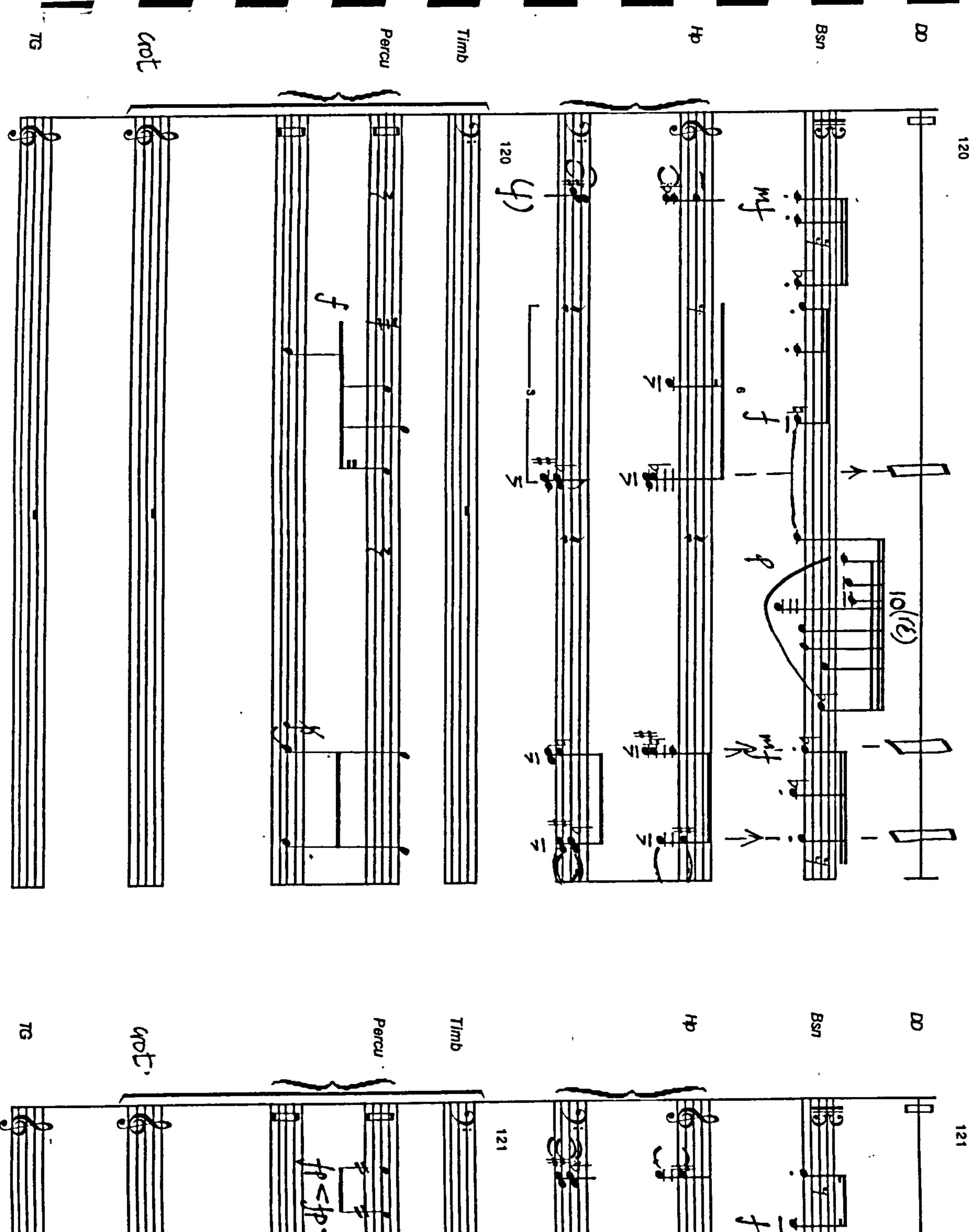
£

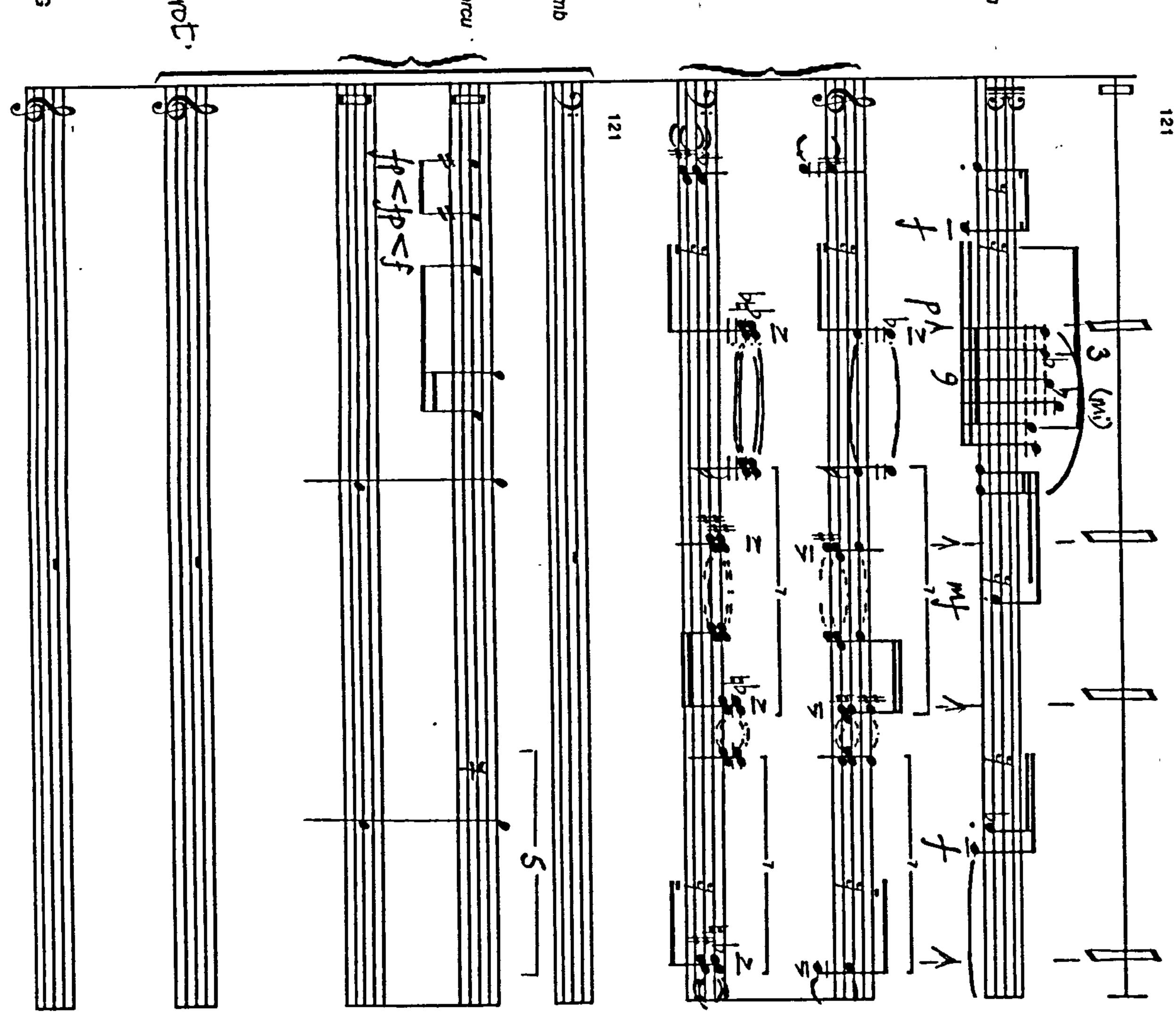


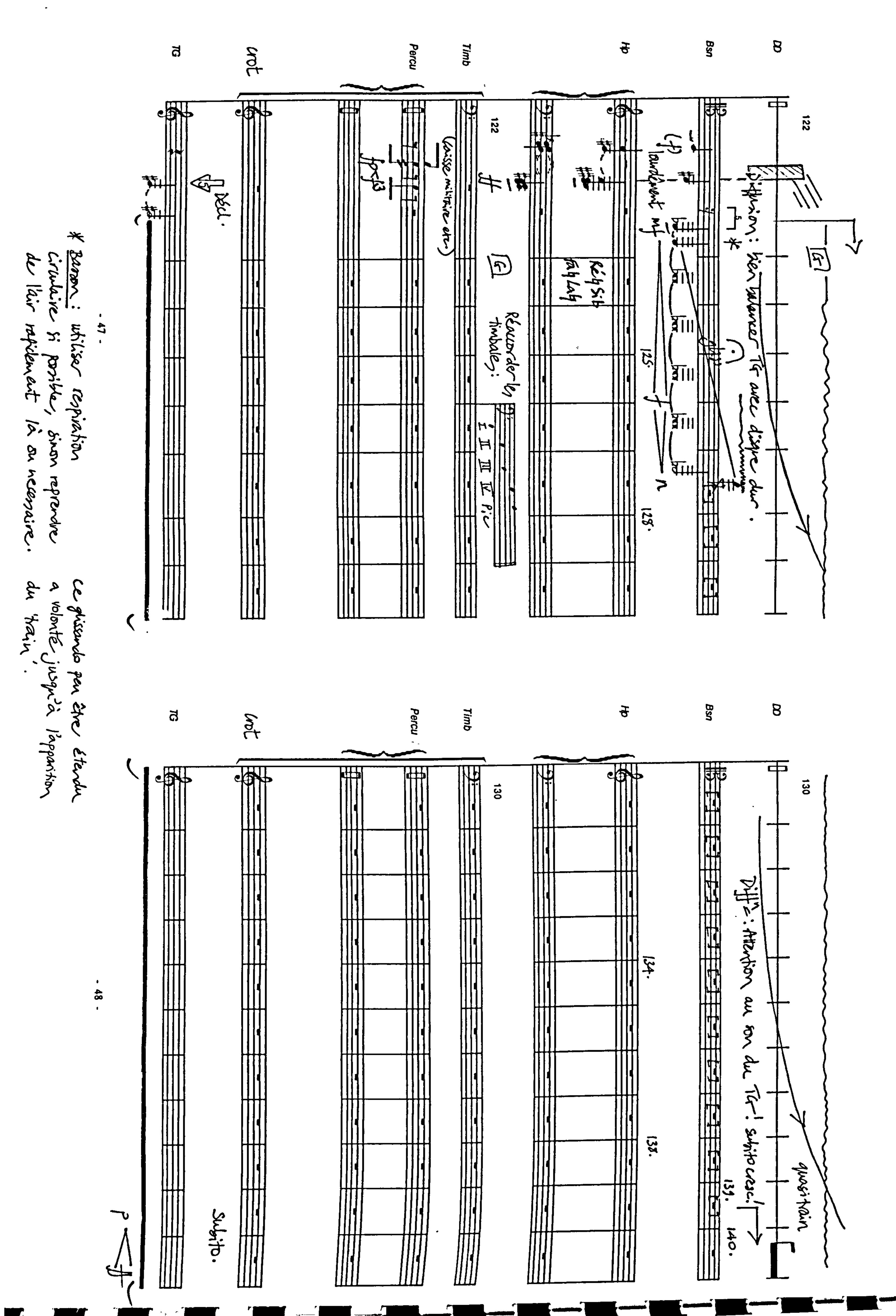


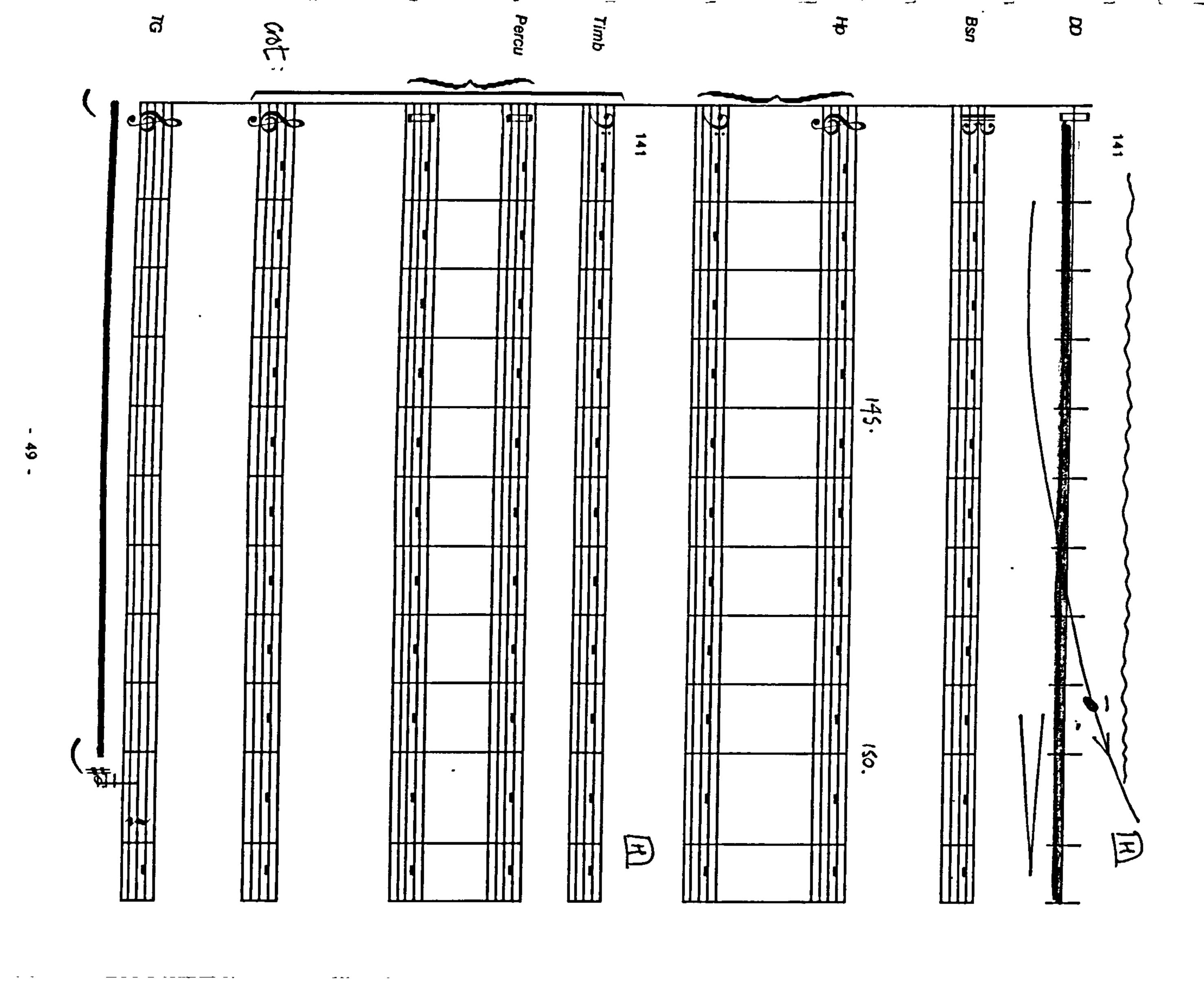


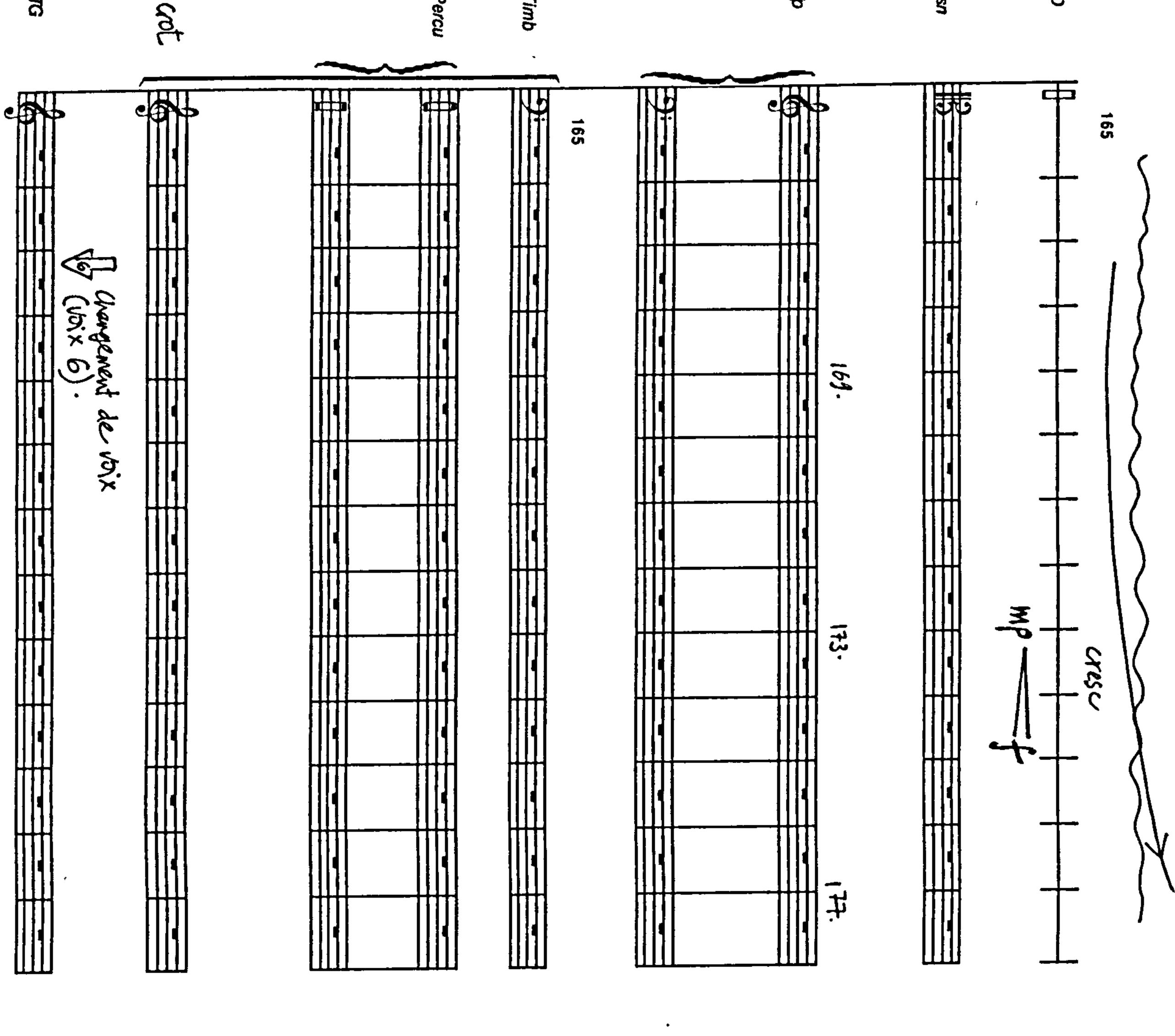


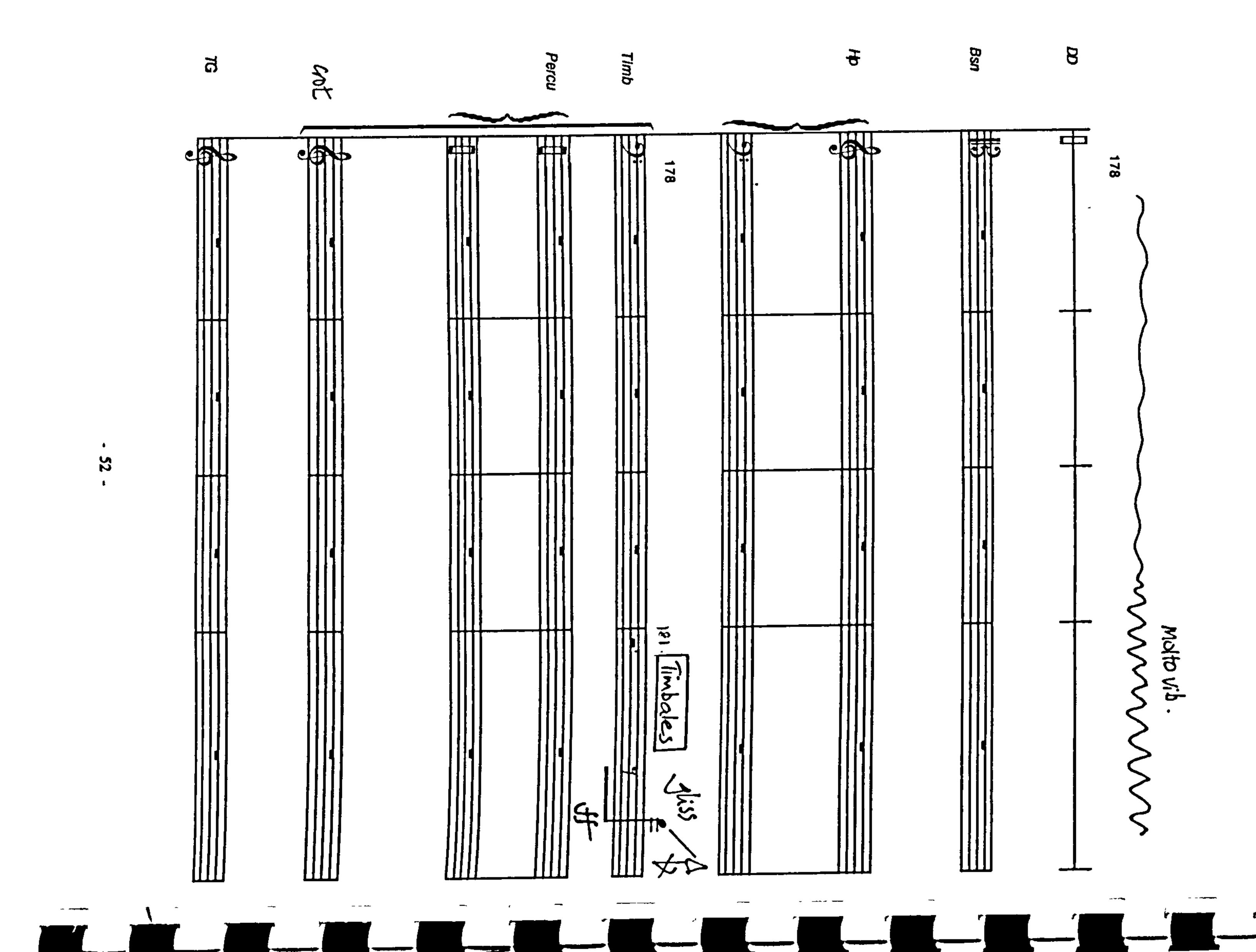


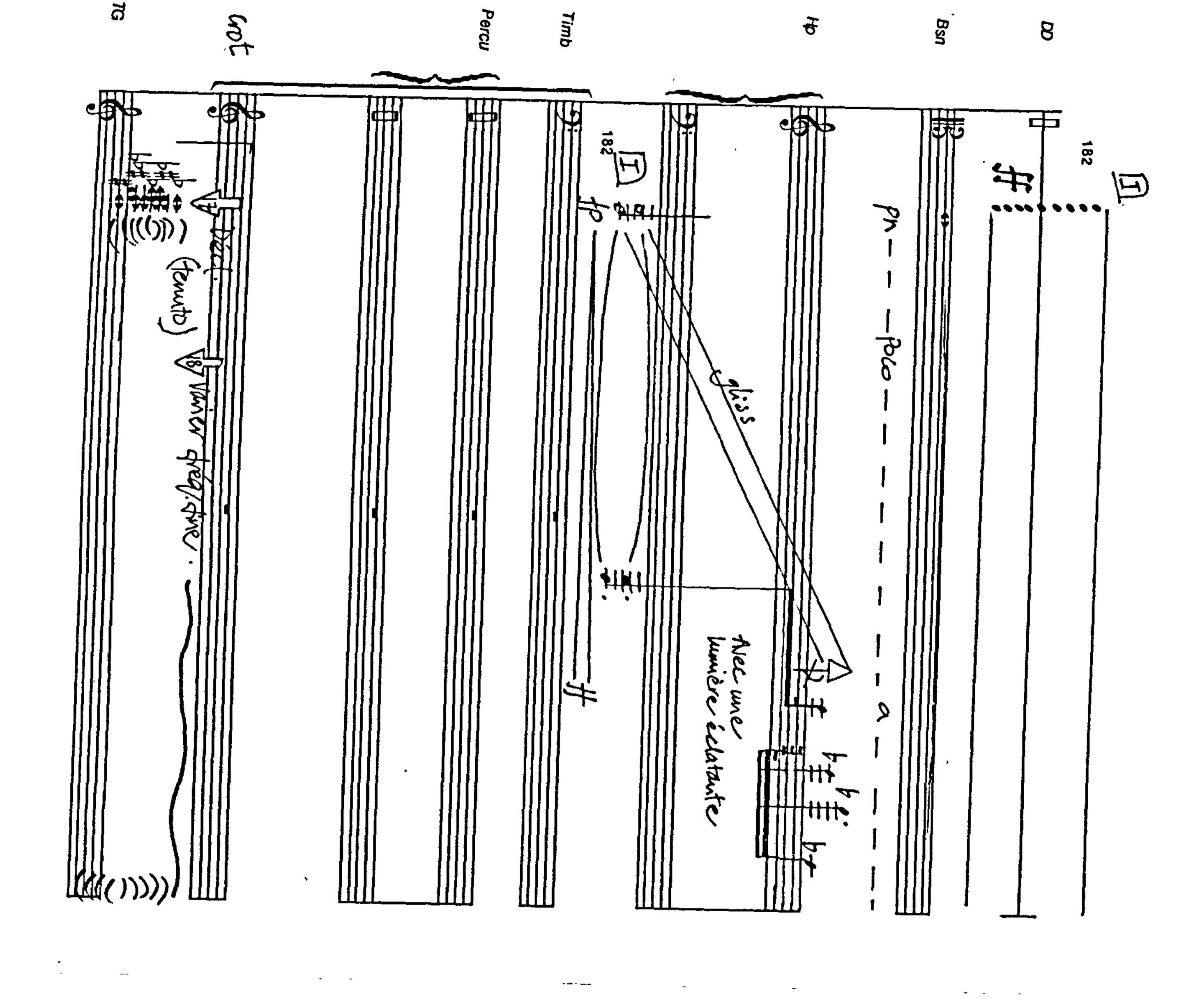


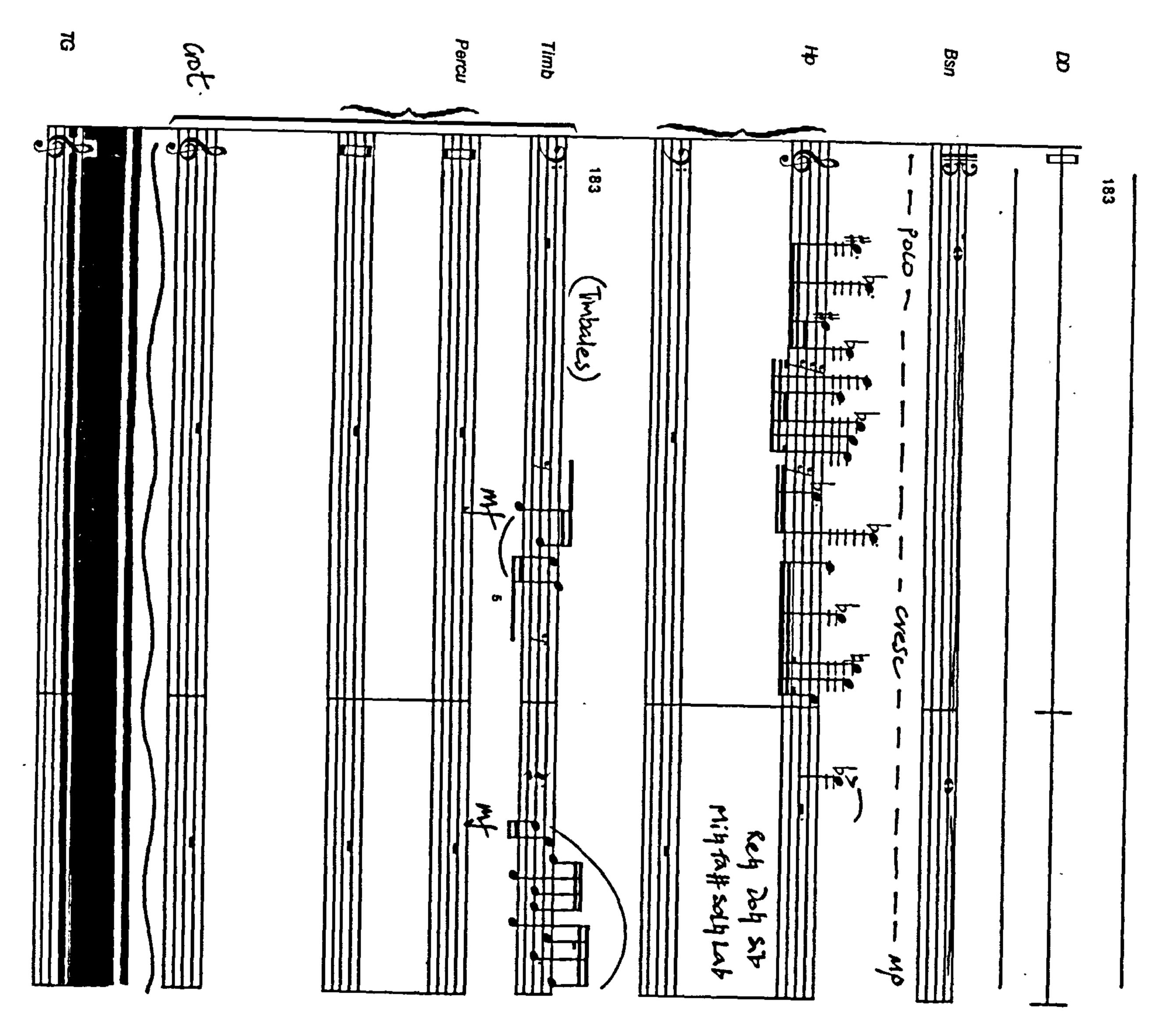




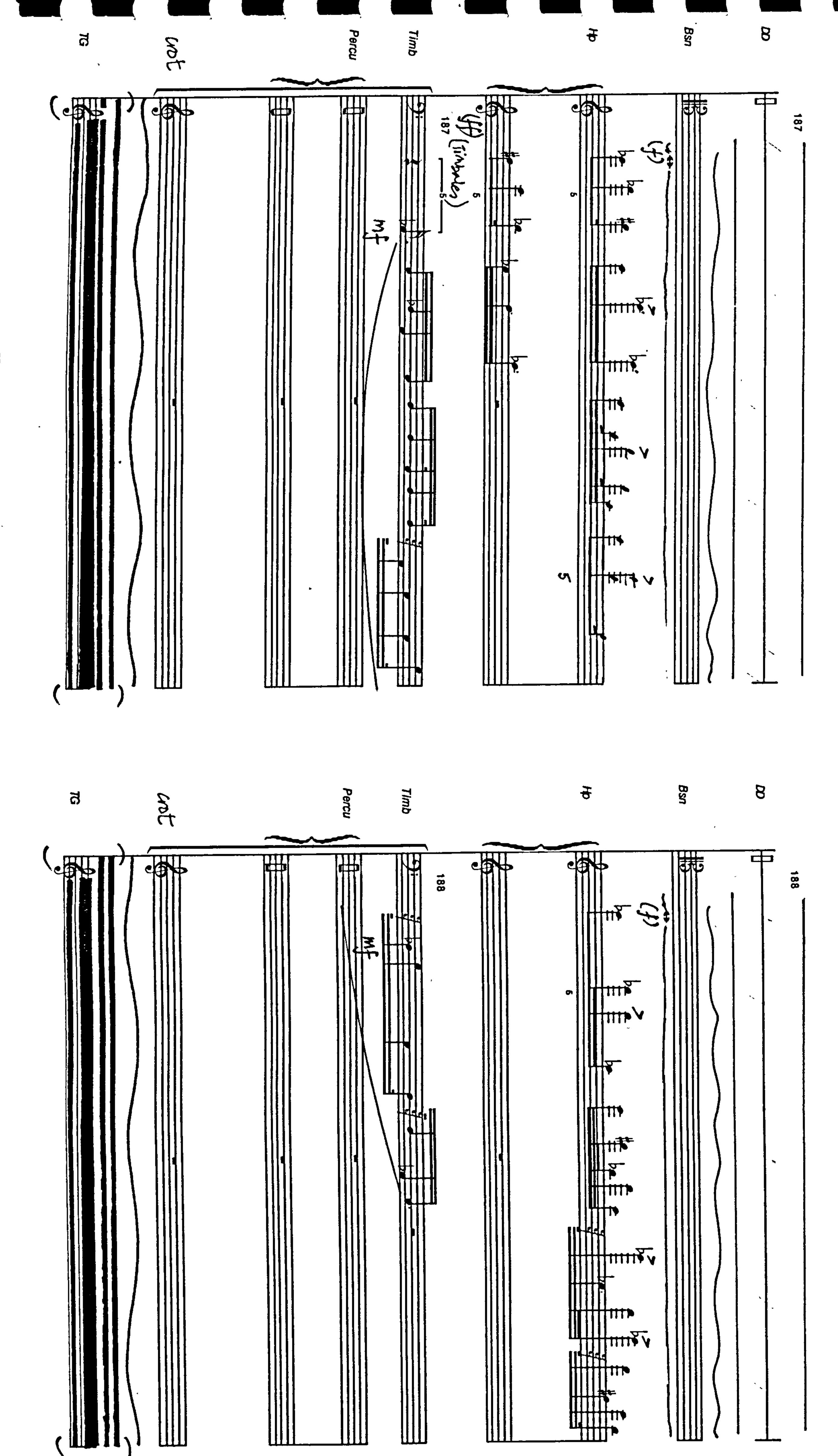


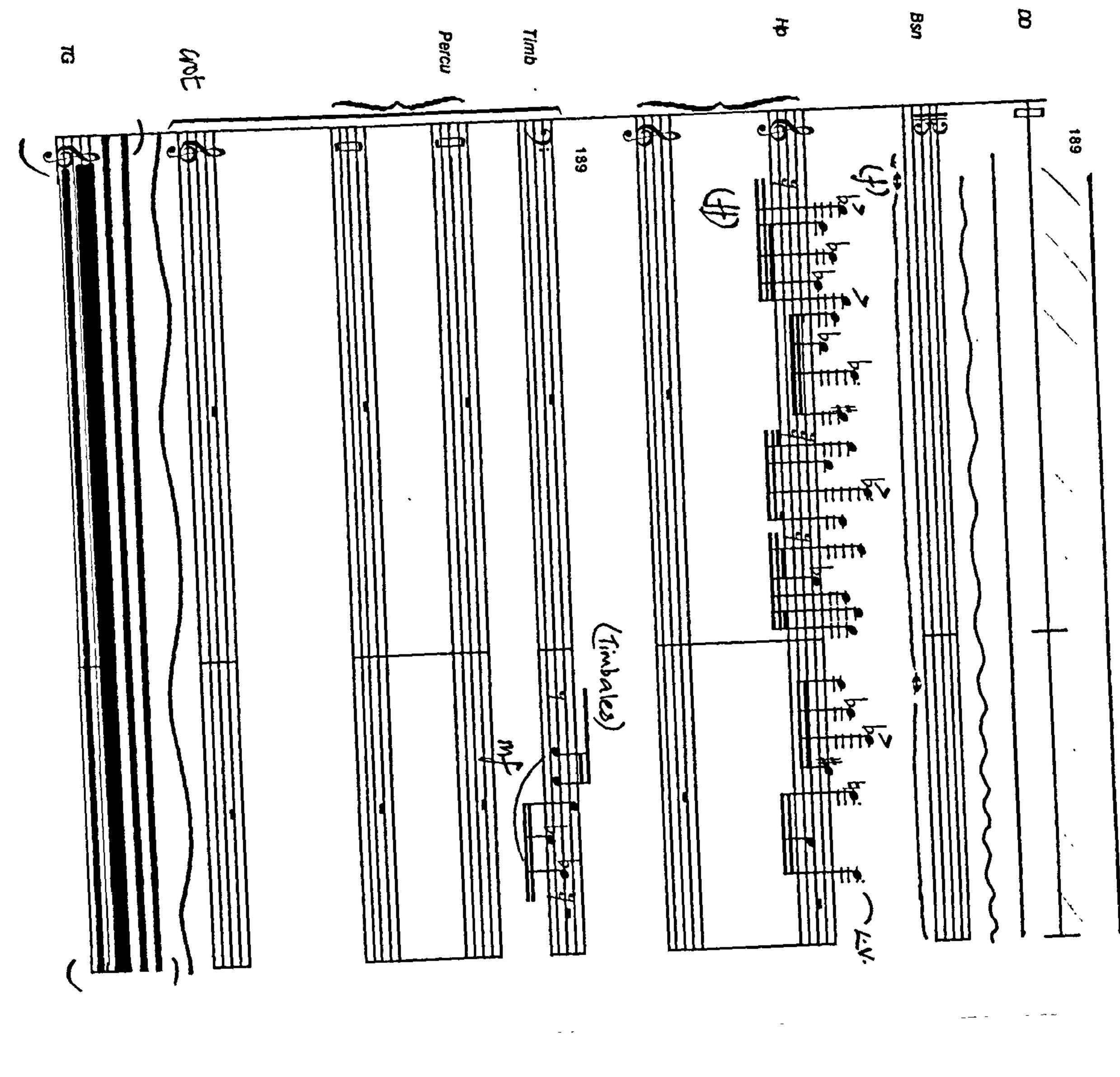


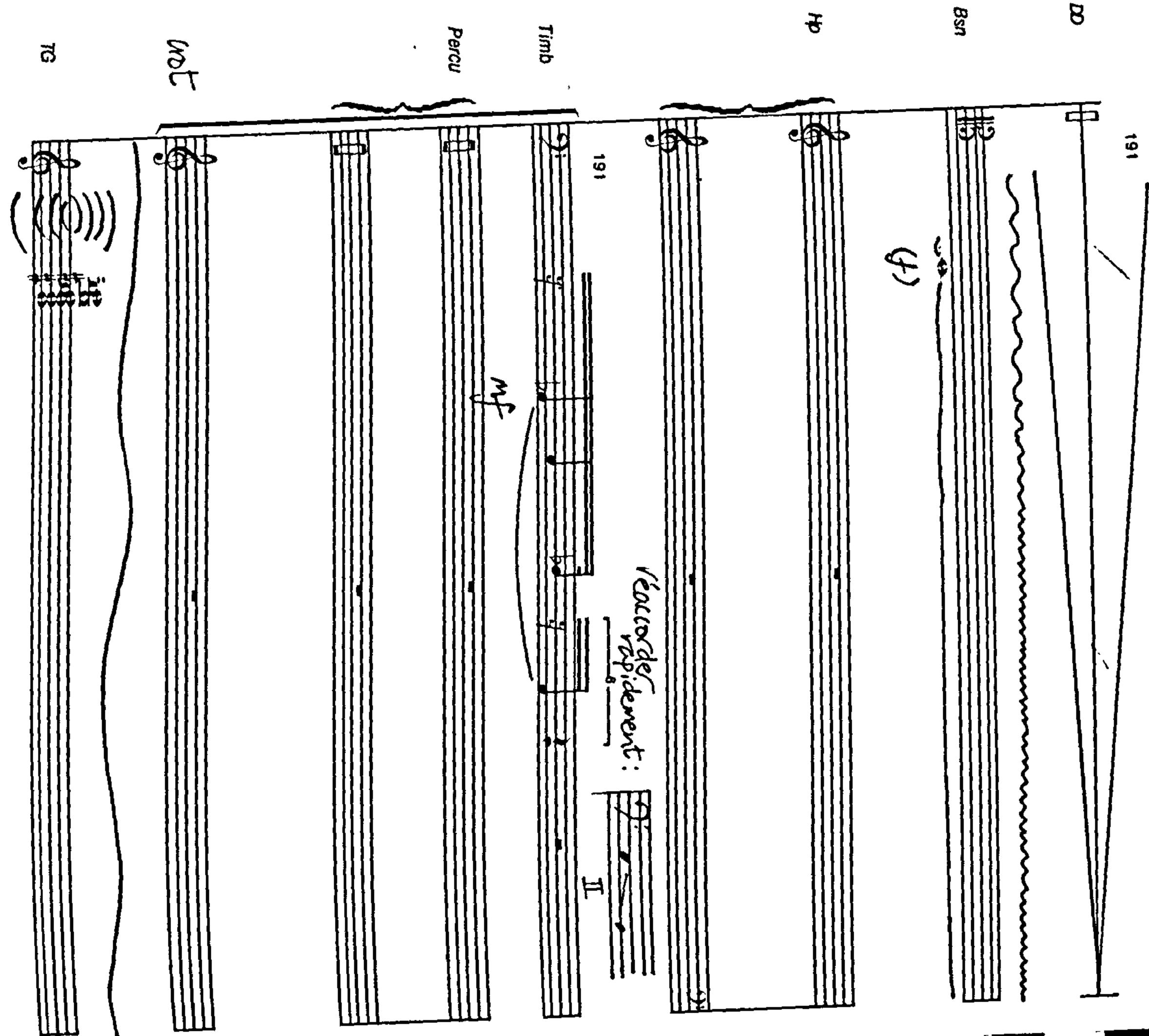




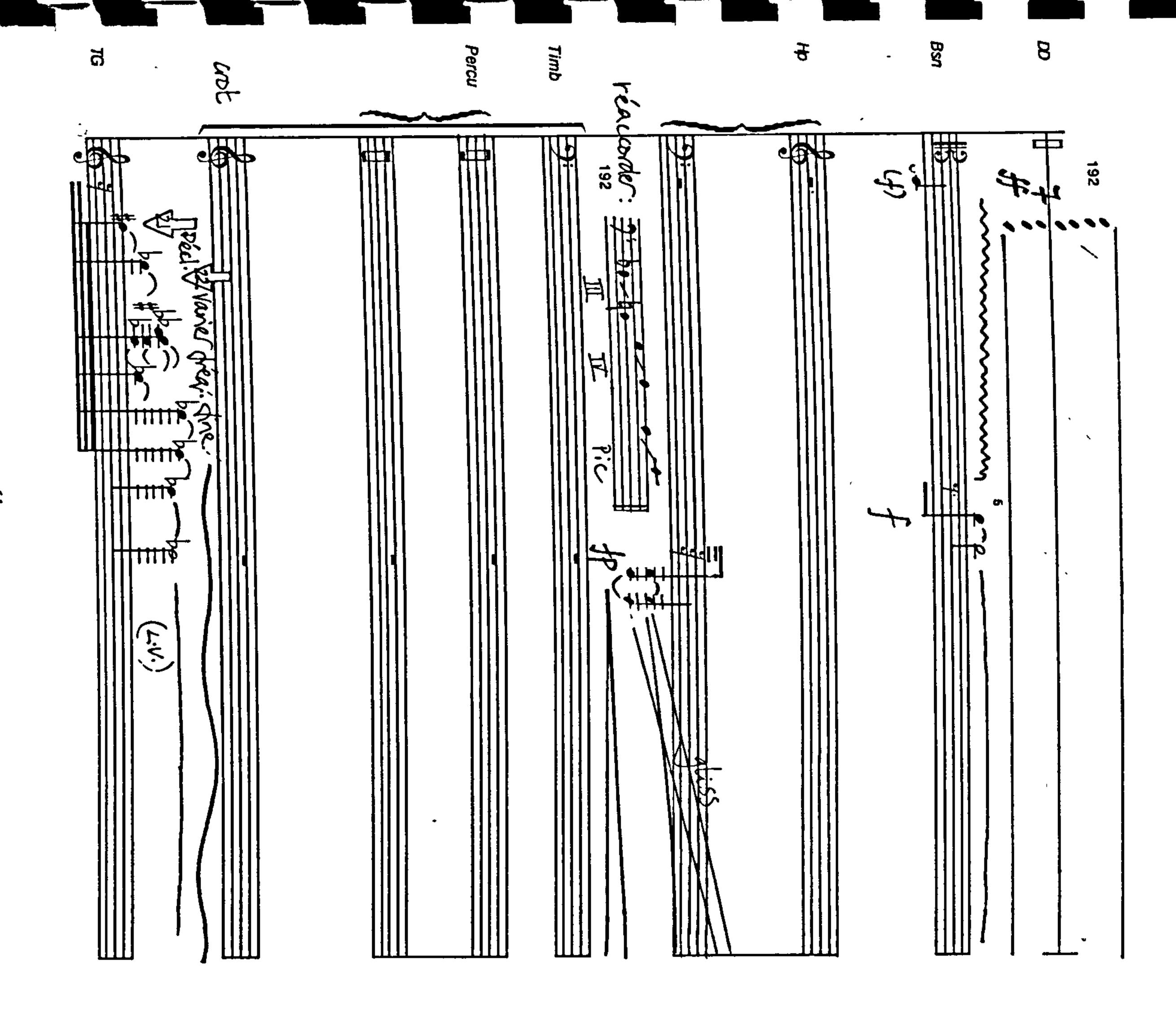
\* Harpen: altorer entre tat et ta#

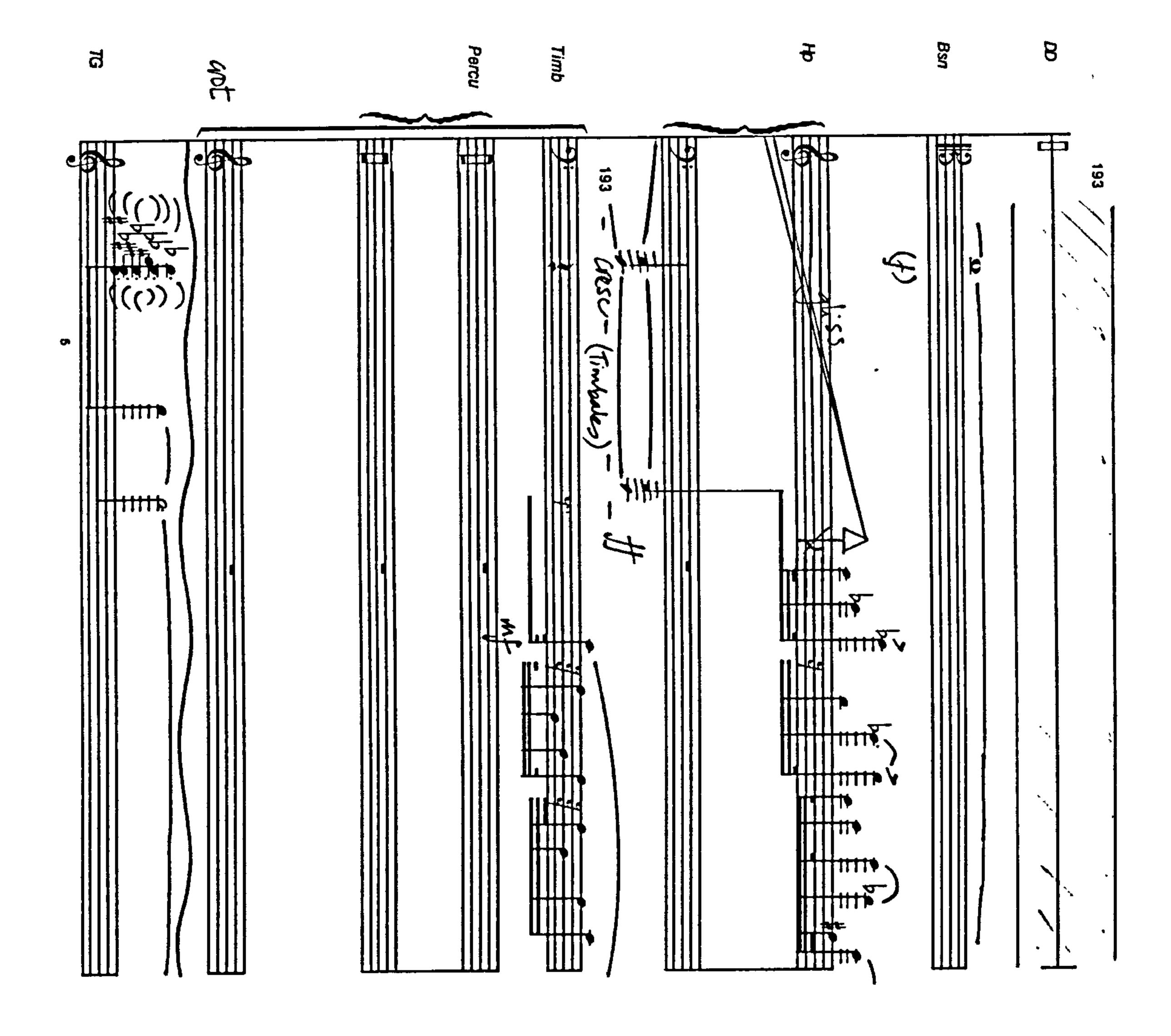


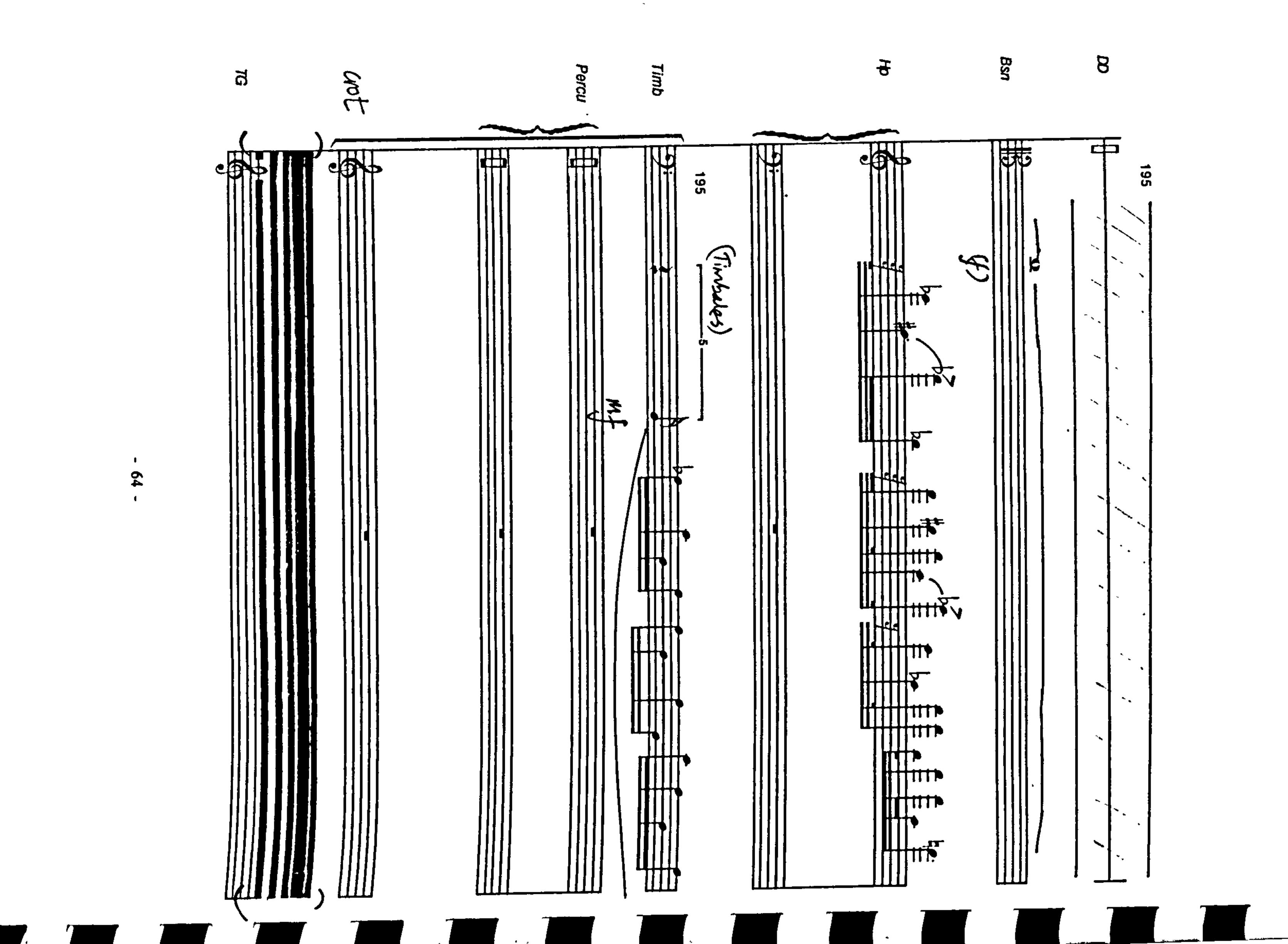


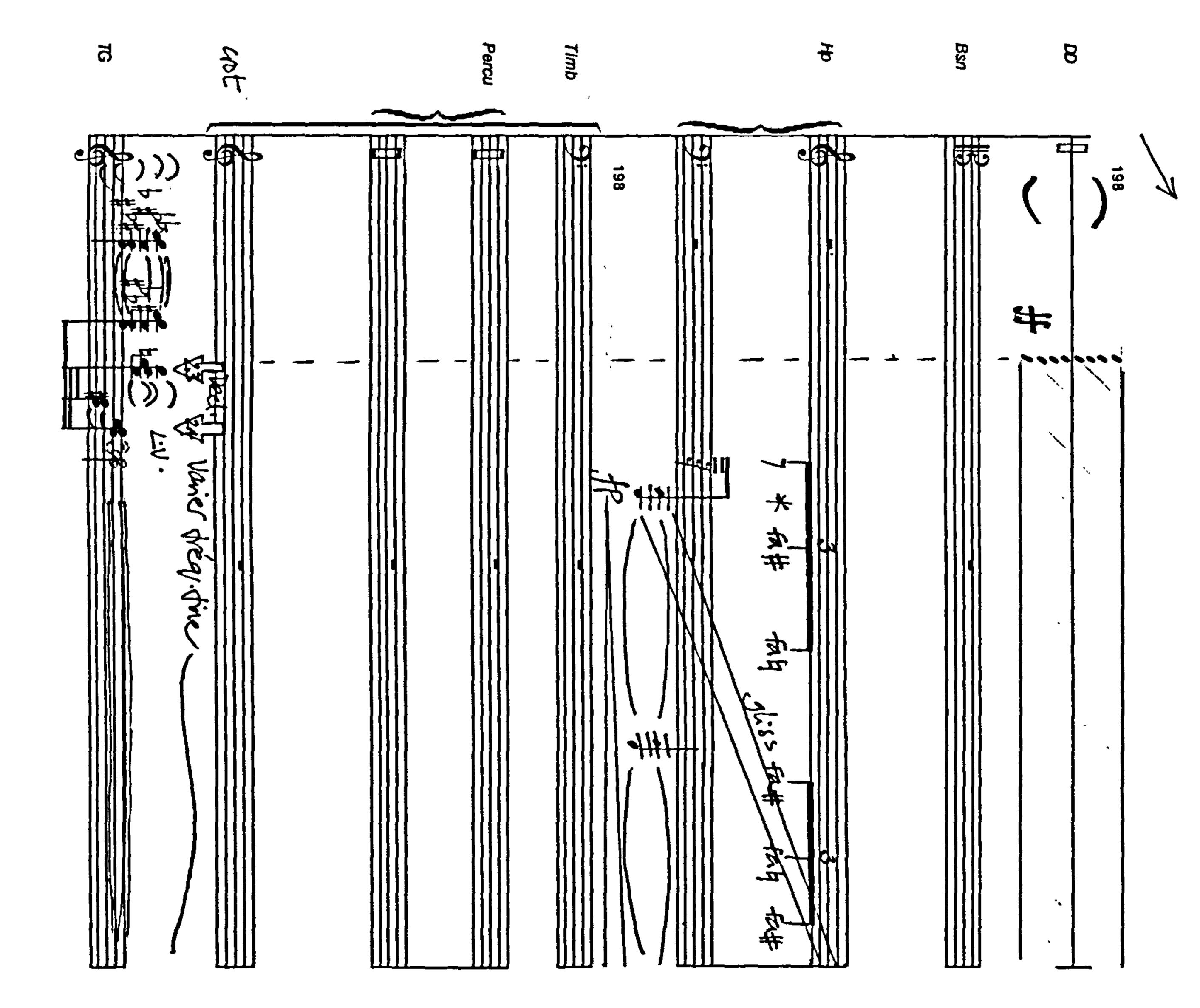


න '





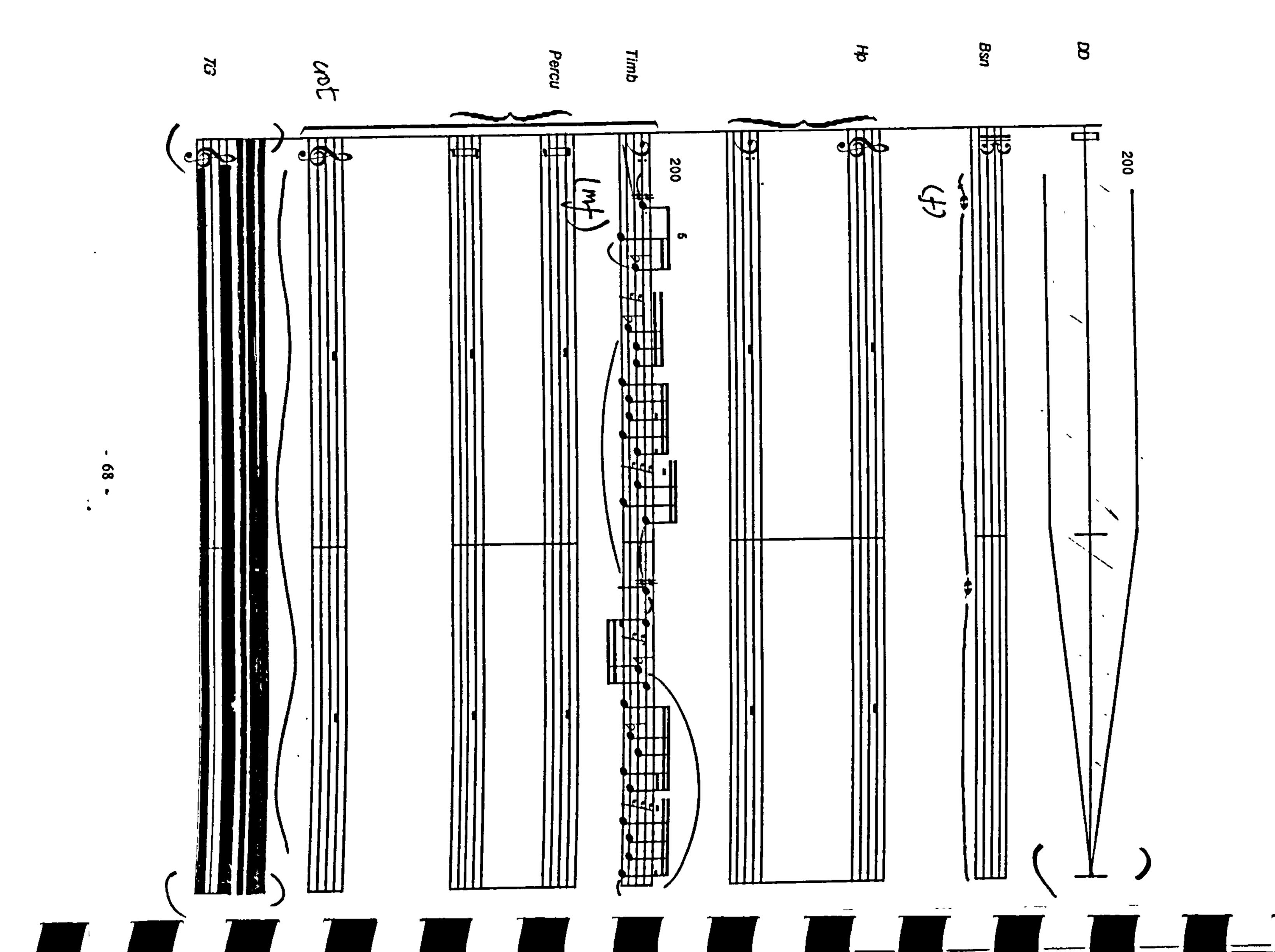




- 65

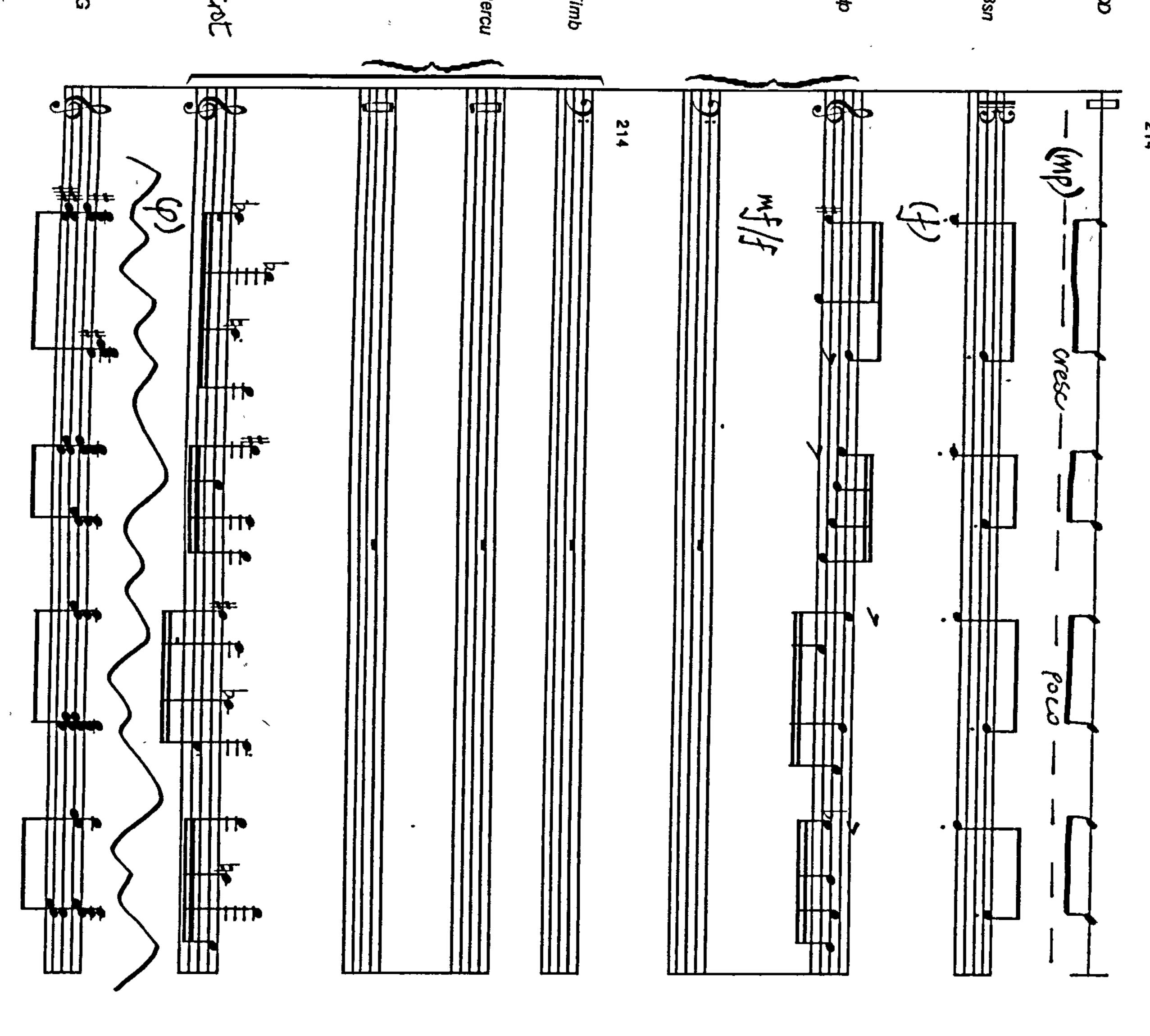
- 66 -

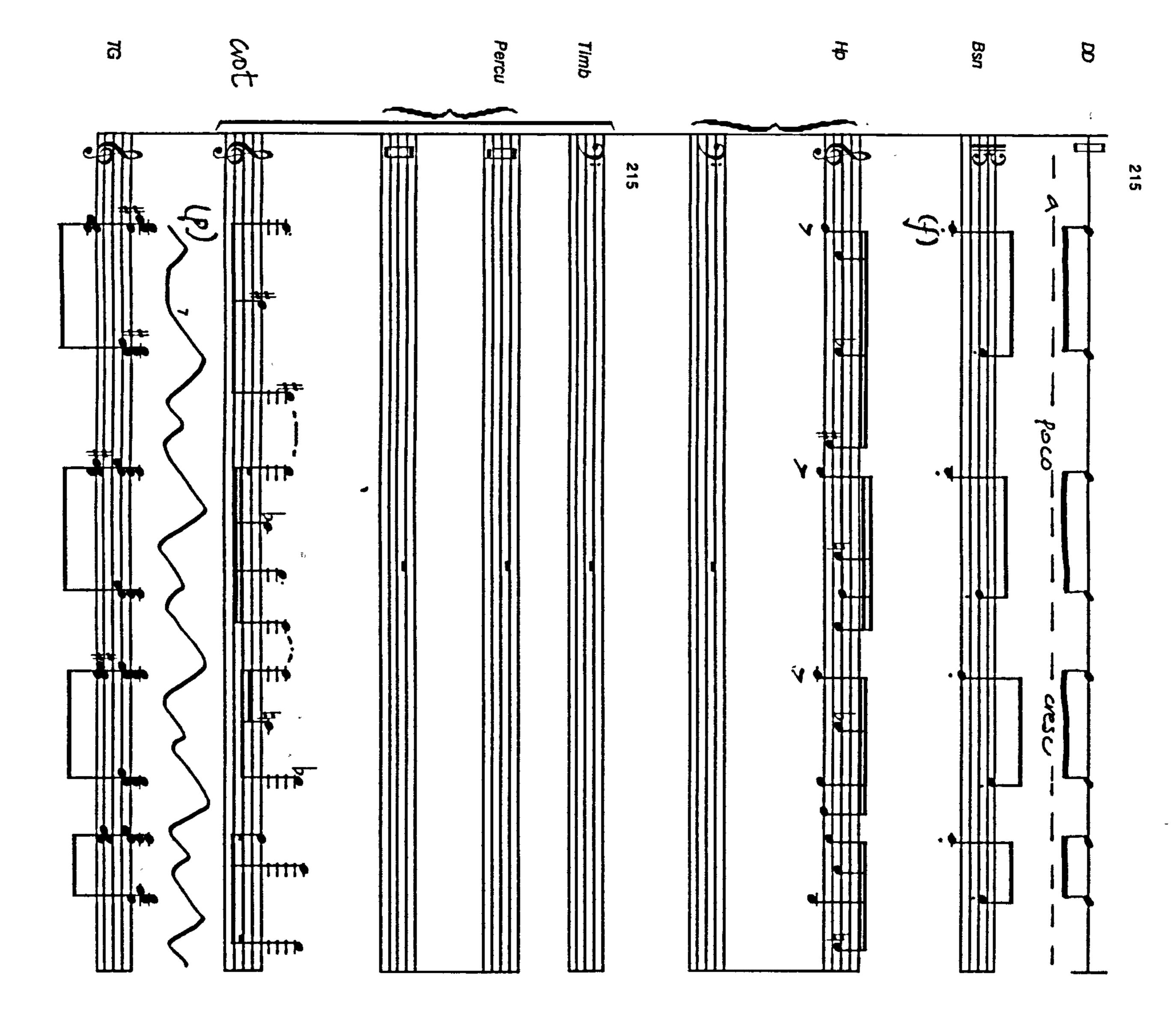
Harper: attendre entre text et text



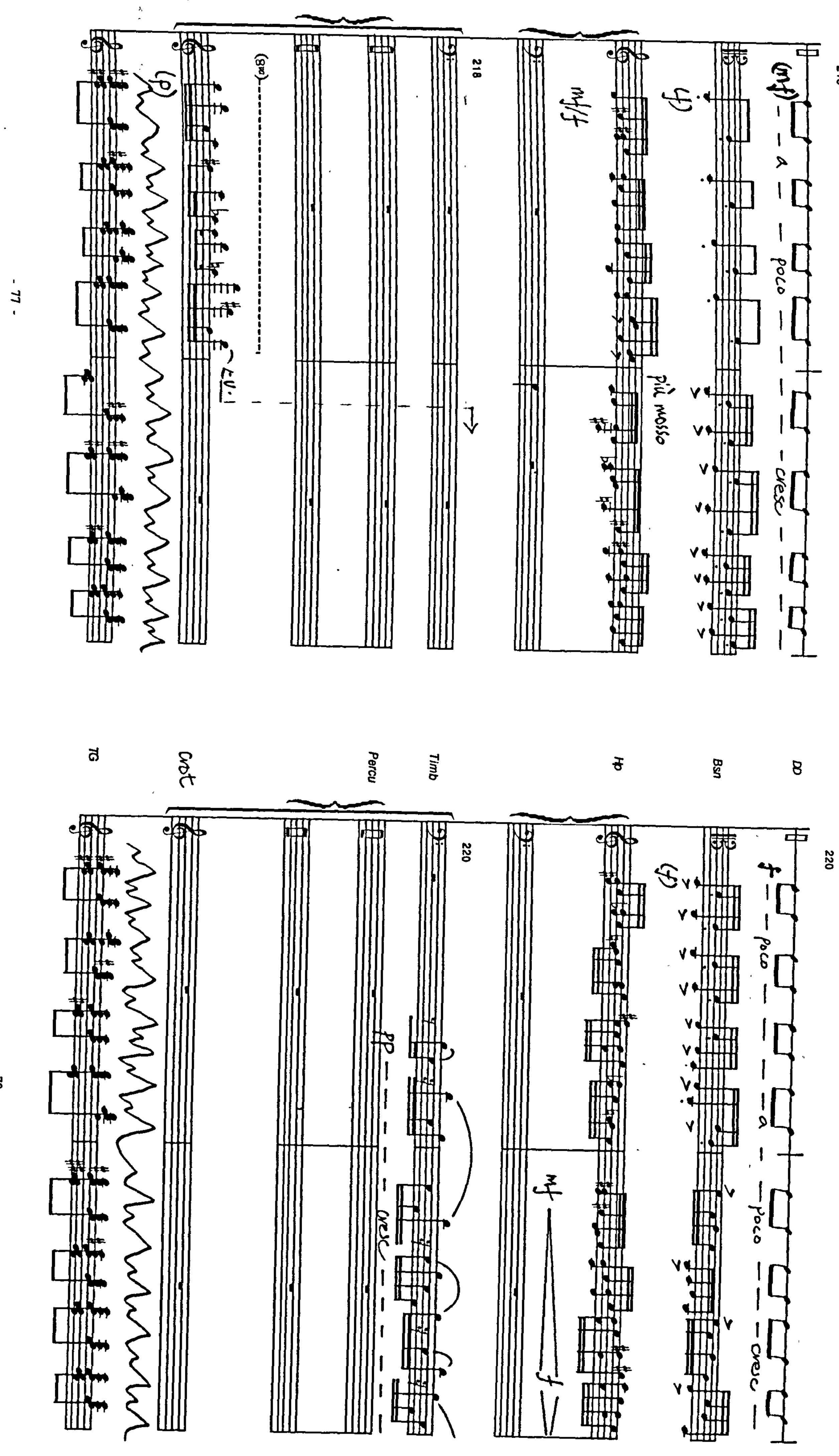
D):qam

70





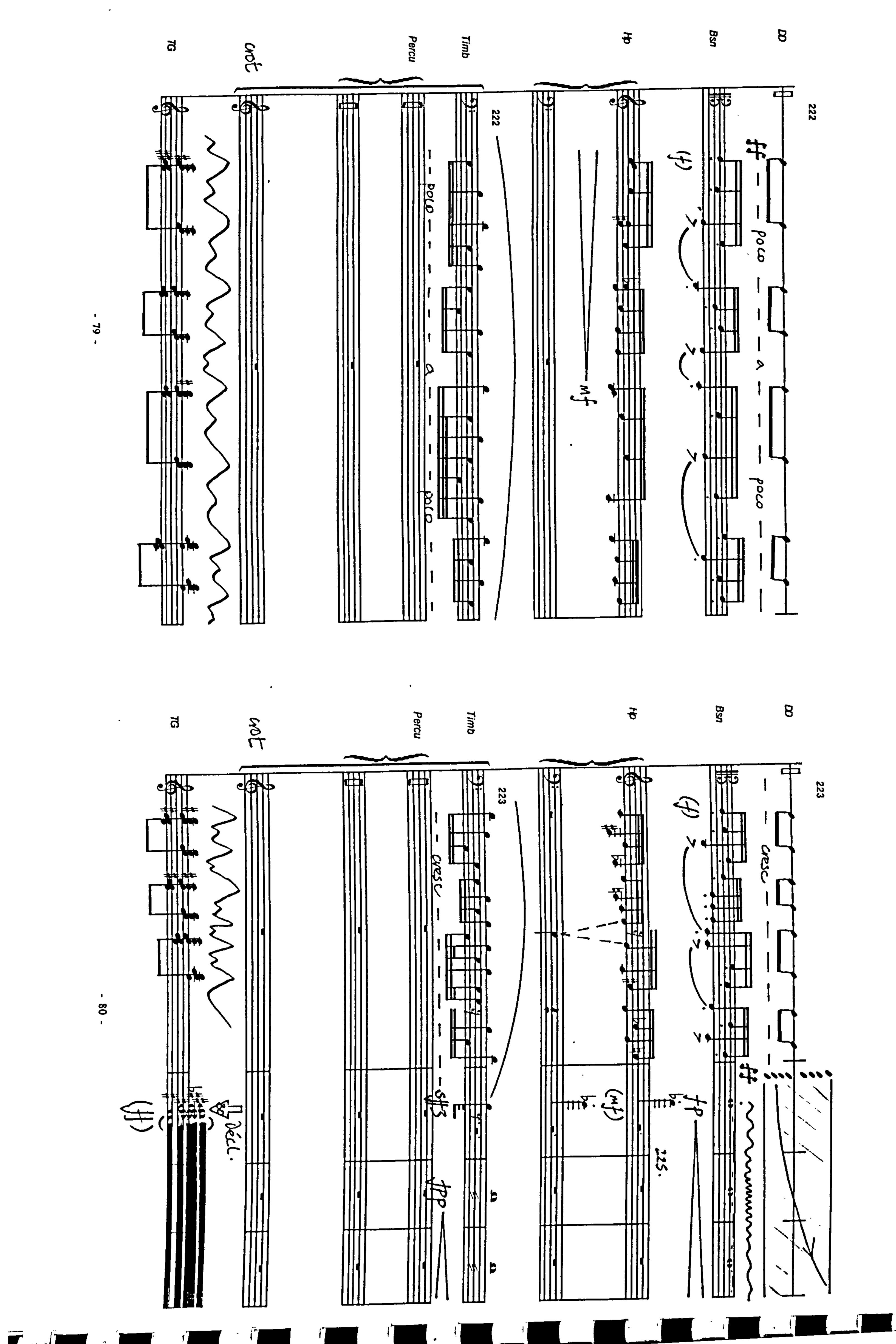
75 -

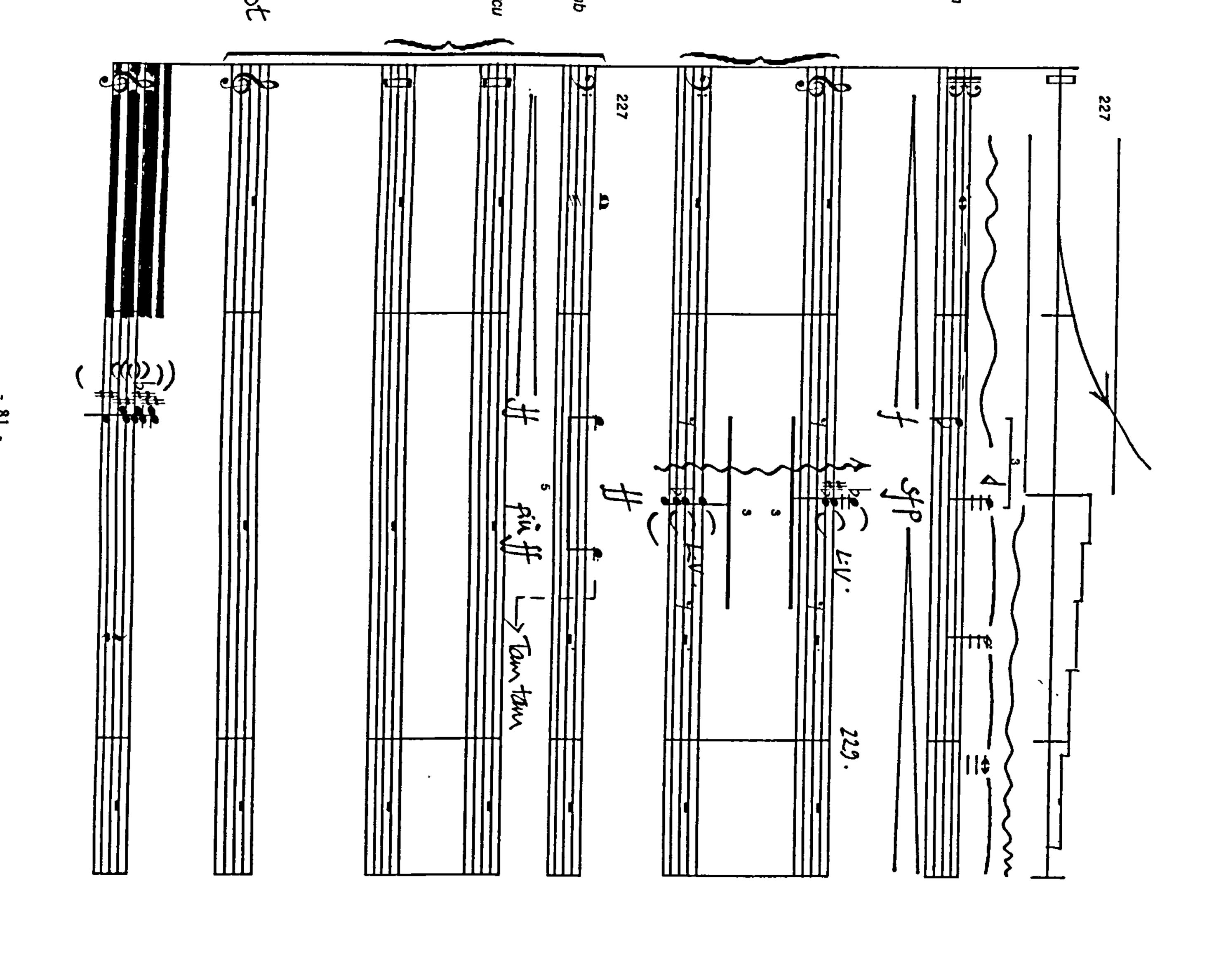


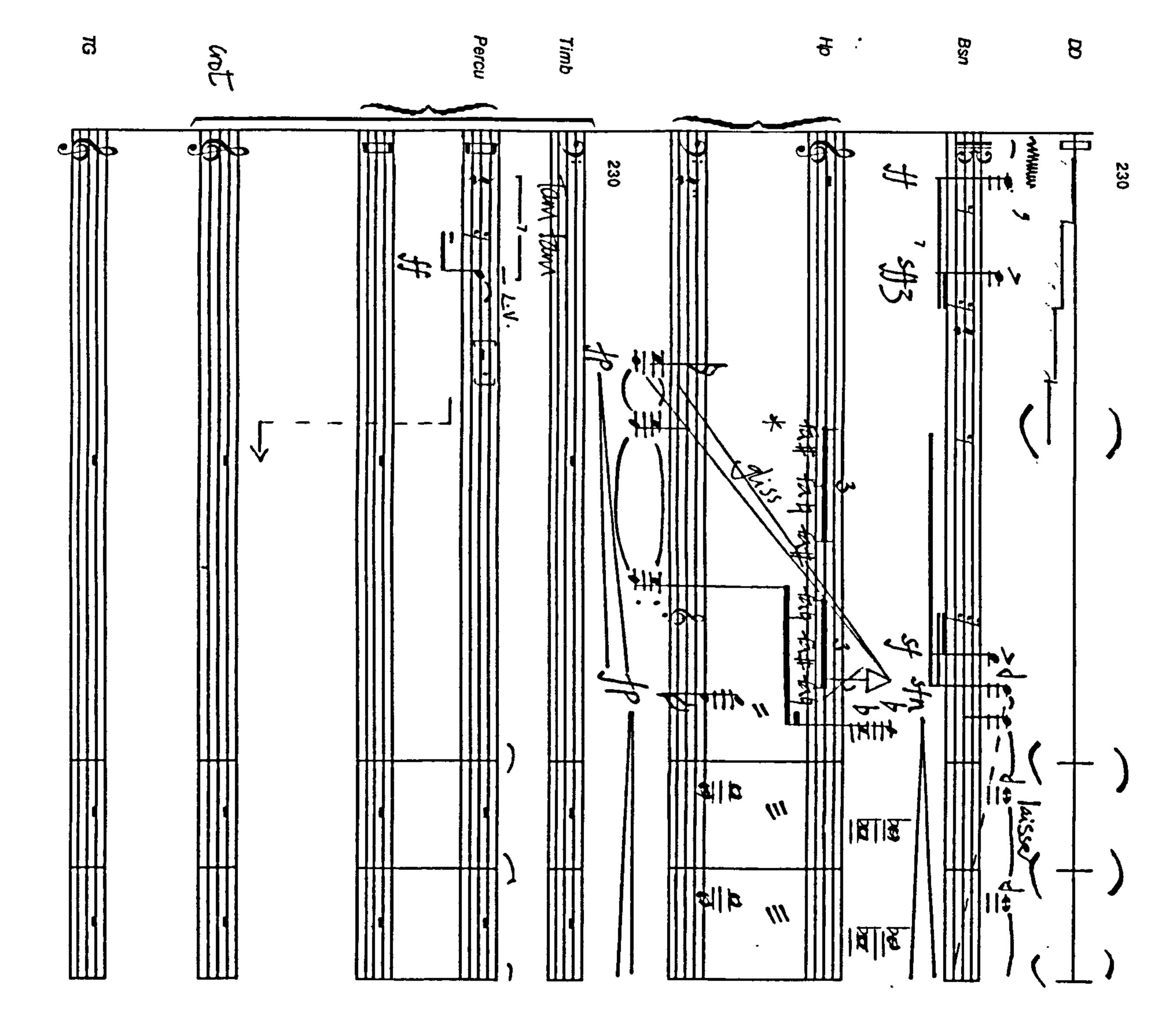
ď

78 -

ದ







\* take: atomo enter

. 73 8 111 7994 Franc (285) 111 14 11 1111 | | हि। हि ==== François Trans Paris/Landres 1993-4.