### **FABIO GRASSO**

# HARMONIC, FORMAL AND RHYTHMICAL STRUCTURES in Ligeti's Etudes for Piano

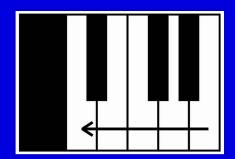
- Second Book (1988-1993)
  - Third Book (1995-2001)

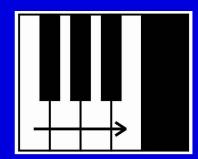
### GENERAL FEATURES



n. 5 Arc-en-ciel n. 11 En suspens

n. 6 Automne à Varsovie n. 14 Columna infinita





Harmonic and formal differences in the 3° Book Rhythmical features common to the 3 Books

# SECOND BOOK: MAXIMUM VARIATION IN MAXIMUM UNIFORMITY

HARMONY: GENERAL OUTLINES

COMPLEMENTARY HARMONIC FIELDS

(POLYMODAL WRITING ← BARTÓK)

ONE FIELD PER HAND

No significant modifications during the piece

Fixed harmonic fields → horizontal uniformity

Free interactions between fields

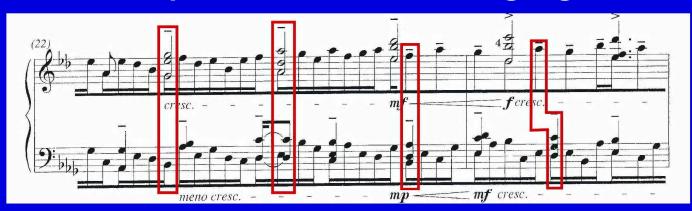
→ vertical variety

#### SECOND BOOK: HARMONY - GENERAL OUTLINES

#### VARIOUS COMBINATIONS OF CONSONANCES AND DISSONANCES: AN "HARMONIC CHEMISTRY"

EFFECT OF GREAT HARMONIC RICHNESS

Line from n.7: pseudo-tonal chords highlighted in red

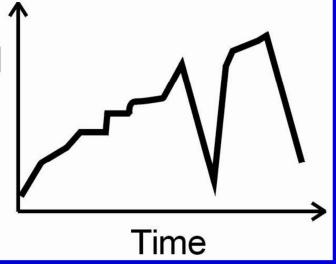


### SECOND BOOK: FORMS

 FORM 1: Type A-B-A', or like "Rondò", with the scheme A1-X-A2-Y-A3... nn. 8, 11, 13. Each A is varied, and more and more complex

• FORM 2: n. 7, 9, 12.

OPEN FORM Polyphonic and rhythmic complexity

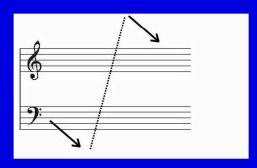


- n. 10 = mixed form
- n. 14 = open form with constant complexity

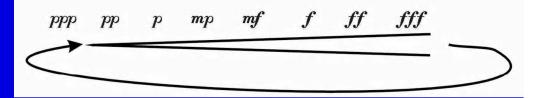
## INSTRUMENTAL WRITING: VARIATION AND UNIFORMITY

- Gradualness of the movements:
  - No jumping
  - Rare use of thumb's passage

 Circularity of the keyboard's space



 Circularity of the dynamic space

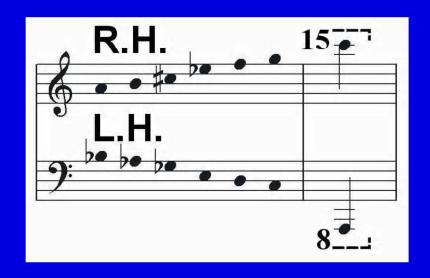


### **RHYTHM: GENERAL OUTLINES**

- Initial regularity of the beating
- Progressive asymmetricalization of the beating through added accents, but still with the hands in phase
  - Further asymmetricalization through new added accents, now with the hands out of phase

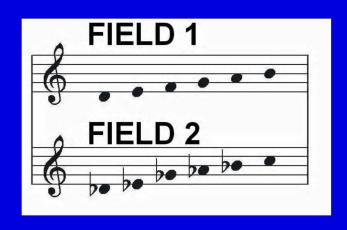
# SECOND BOOK: EXAMPLES n. 7: Galamb-borong

Indonesian title: six-tones scales



### SECOND BOOK: EXAMPLES n. 12: Entrelacs

Harmonic fields exchanged between the hands



RHYTHMICAL PROCESS SIMILAR TO NUMBER 7

# SECOND BOOK: EXAMPLES n. 11: En suspens

Approximate Hemiolia (Galamb-borong)



Exact Hemiolia (En Suspens)

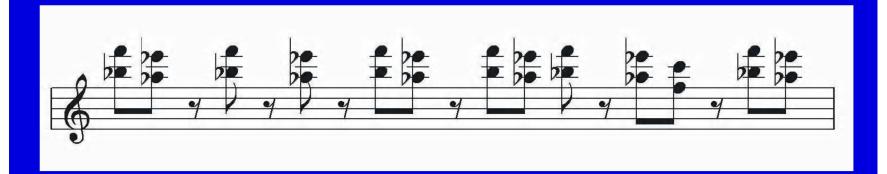




En Suspens
The little shepherd

## SECOND BOOK: EXAMPLES n. 8: Fém

#### Main rhythmical cell

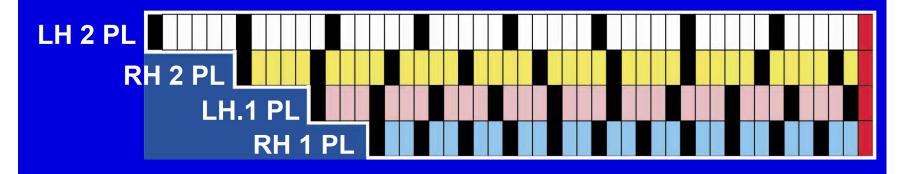


Debussy's Golliwogg's Cakewalk



### Polyphonic Etude 4 hands

- Each cell is a bar. Each group beginning by a black cell is a repeated melodic line.
- Black cells = first bars of each repetition.
- Red cells = conclusive bars
  - Line of 2nd player's left hand, 6 bars, C major
    Line of 2nd player's r.h, 5 bars, F sharp major
    Line of 1st player's l.h, 4 bars, E major
    Line of 1st player's r.h, 3 bars, B flat major



# SECOND BOOK: EXAMPLES n. 10: Der Zauberlehrling (The sorcerer's apprentice)

ILLUSIONISTIC JOKE OF THE FIGURATIONS

OPPOSITION WHITE-BLACK KEYS, WITH ALLUSIONS TO CHOPIN'S op. 10 n. 5

MIXED FORM (OPEN FORM AND RONDÒ)

### SECOND BOOK: EXAMPLES n. 14: Columna infinita

"Human" version of «Coloana infinita» for mechanical piano

→ PARADOXICAL INTENT

Attempt to fix one of the realizations of an aleatory thought

### SECOND BOOK: EXAMPLES n. 13: L'escalier du diable

VIRTUOSITY-RELATED
MEPHISTOPHELEAN SARCASM
like in Liszt's Mephisto-Waltz
or in Paganini

Conventional images and symbols: Dante's circles of Hell, tritone intervals

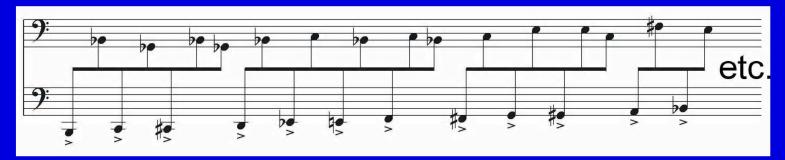
The signal of the "infernal bells"

### SECOND BOOK: EXAMPLES n. 13: L'escalier du diable (2)

### STRICT RELATION BETWEEN RHYTHM AND HARMONY

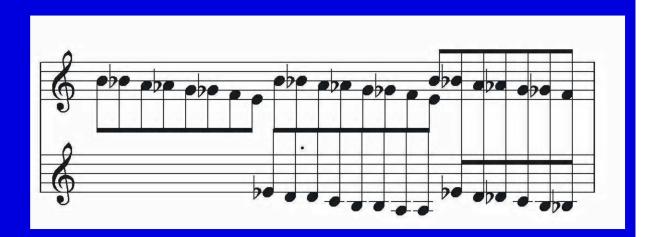
#### **FIRST LINE:**

Main ictuses with chromatic field Secondary ictuses with 6-tones field



## SECOND BOOK: EXAMPLES n. 9: Vertige

Main element: Chromatically descending fragments



Probable instrumental hint from Chopin's op. 25 n. 10



### SECOND BOOK: EXAMPLES n. 9: Vertige (2)

Example of irregular successions of fragments. The numbers refer to the quantity of notes per fragment, therefore to the rhythmic beating of their flow (2° page). 2-3-4 / 2-3-4 / 3-4-5-2-3-3-5-4-2-3 / 2-2-2-2-2-2-2

Contrast between the vertiginous descending chromatic movements and the ascending lines, with consonant pseudo-tonal harmonies

### THIRD BOOK

- ONE HARMONIC FIELD (with subsequently added extraneous notes)
  - n.15 (3rd Book n.1), White on white, scale of white keys
  - n.16 (3rd Book n.2), Pour Irina, defective scale of B flat minor
  - n.17 (3rd Book n.3), A bout de souffle, scale of C minor

## THIRD BOOK: Other elements of distinction

COUNTERPOINT WRITING: CANONS at the octave



- TASTE FOR REMEMBRANCE
  - Slow Introductions in n. 15 (1) and 16 (2)
  - Memories of Chopin's Sonata op. 35, 4th movement, in n. 17 (3)

# THIRD BOOK: Other elements of distinction (2)

LESS AGGRESSIVE AND MORE INWARD STYLE

STRONG ENIGMATIC INTENT: FINAL CHORDS IN SUDDEN PIANISSIMO

**SURPRISING A MINOR CHORD AS END OF 18**