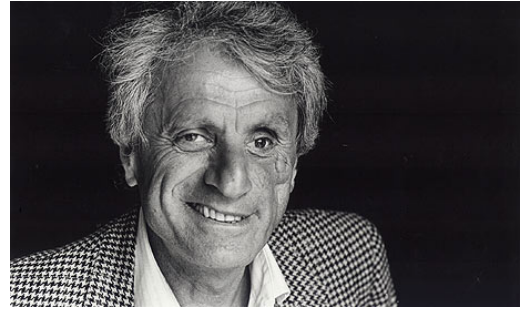


**Iannis Xenakis** (1922 – 2001)

***Rebonds*** (1987 – 1989)

**Publisher:** Éditions Salabert

**Duration:** 12'



**Recordings:** *Xenakis Percussion Works*, Mode Records, CD173, performed by Steven Schick

**Instrumentation:**

*A*: 7 drums (two bass drums, three toms, two bongos)

*B*: 5 drums & 5 woodblocks (bass drum, tom, tumba, two bongos)

**Program Notes:**

Written and dedicated to percussionist Sylio Gualda, *Rebonds* is a two-movement work for solo percussion to be performed in any order: *AB* or *BA*. Utilizing seven drums, ritualistic *A* opens with interplay between the highest and lowest drums, conveying a sense of tension and release. As more drums are slowly added, the web of complex rhythms gets more and more chaotic, ultimately climaxing to a series of complex polyrhythms between hands before breaking down into the opening theme. Calling for five drums and five woodblocks, *B* opens with a relentless ostinato on the high bongo with a melodic theme played simultaneously on the lower drums. Written with the golden mean ratio (1:1.618) in mind, this movement encounters several interruptions along these ratios before reaching a cadenza on the woodblocks and finally fusing both families through rapid rhythmic and sonic statements.

**Iannis Xenakis** is a Greek composer best known for his pioneering use of mathematical models in music during the twentieth century. Trained as an engineer in Athens, Xenakis fused his architectural training and musical interests into a unique compositional voice that has led him to write several prolific works for percussion. His composition teachers include Oliver Messiaen and Darius Milhaud.

**Other works featuring percussion:** *Persephassa* (1969), *Psappha* (1975), *Pléiades* (1978), *Okho* (1989), *O-Mega* (1997)

# Iannis Xenakis *Rebonds*

notes by Francisco Perez – *Spring 2014*

## Biography

- Born May 29, 1922 in Braïla, Romania to Greek parents
- Studied engineering at Athens Polytechnic
- Studied composition with Honegger, Milhaud, and Messiaen
- Compositional style
  - Mathematical-based; “Numbers are the root of all things.”
  - Advocate for challenging literature; self-surpassing drive

## Background

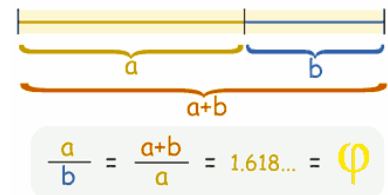
- Written in 1987-1989 for Sylvio Gualda
  - Sylvio Gualda
    - French percussionist/conductor
    - Timpanist for the Paris National Opera Orchestra
    - Taught at Versailles Conservatory
    - Premiered *Psappha* (1976), *Aïs* (1981), *Komboï* (1981), & *Oopha* (1989)
  - Premiered July 1988 at the Villa Medici in Rome (Roma Europa Festival)

## Overview

- Written in two movements: performed as AB (J. Wood) or BA (S. Schick)
- Instrumentation
  - A: 7 drums (two bass drums, three toms, two bongos)
  - B: 5 drums & 5 woodblocks (bass drum, tom, tumba, two bongos)
    - Noted to expand over largest range possible
  - Common practice to substitute a tom for tumba for same set-up
- Study in regularity and irregularity of pulse, pattern, and form
- Written in Xenakis’s athletic style and substantial use of the Golden Mean

## Structure – A (titles by Schick)

- “Declamation & Elaboration” (mm. 1 – 5)
  - Introduces range of entire movement
  - Most basic tension
  - First instance of mirror
- “Polyrhythm” (mm. 6 – 28)
  - Mostly formed around 16<sup>th</sup> notes
  - PR start on ends of range and gravitate inward
  - Includes 3:2, 4:3, and 5:2/3/2
- “Linear” (mm. 29 – 35)
  - Mostly formed around 32<sup>nd</sup> notes
- “Density” (mm. 36 – 50)
  - Motion is less predictable
- “Recollection” (mm. 51 – 61)
  - Climax is subdued by PR featuring opening voices and dramatic space
  - Gestures slowly unwind
  - “Silence, at first dissonant and begging to be filled, has become home.”



Measure Number	Beat & Partial	1988 Manuscript	1991 Edition	Description of error
16	2 e	tom 2	tom 3	Wrong drum notated
18	3	7̣	♩	Inclusion of note on center line instead of rest
49	1 +	"et"	omitted	Missing information
59	4 e	♯	omitted	Missing grace note
63	4	7̣	♩	Inclusion of note on center line instead of rest

Table 3.0 *Rebonds B*: Errata (by B. Tinkel)

## Structure – B

- Section A (mm. 1 – 30)
  - Conversation (rebounds vs. melody)
  - 5-note cycle repeated 38 times (see chart)
  - Two breaks from bongo ostinato
  - ...grace note and accent interpretation?
- Section B (mm. 30 – 65.2)
  - Various intrusions; begins with woodblocks
  - Gradual merger of lines
- Section C (mm. 65.2 – 87)
  - Dynamic and textural change
  - Cohesion of instrument groups
  - Similar ending to voicing in A

Cycle	Dur (16ths)	DSEG	Cycle	Dur	DSEG
1	6,2,3,2,1	<31210>	20	3,2,3,2,3	<10101>
2	6,2,3,2,1	<31210>	21	3,2,3,3,3	<10111>
3	5,3,3,2,1	<32210>	22	3,3,3,3,3	<00000>
4	6,2,3,2,1	<31210>	23	2,3,3,3,2	<01110>
5	4,2,2,3,1	<31120>	24	2,2,4,3,2	<00210>
6	4,2,2,2,1	<21110>	25	2,2,3,2,2	<00100>
7	4,2,2,3,1	<31120>	26	2,3,3,2,2	<01100>
8	4,3,2,2,1	<32110>	27	1,3,3,2,2	<02211>
9	4,2,2,3,1	<31120>	28	1,3,2,3,1	<02120>
10	3,3,2,2,1	<22110>	29	1,3,3,2,1	<02210>
11	4,3,2,2,1	<32110>	30	2,3,3,2,1	<12210>
12	4,3,2,2,1	<32110>	31	2,3,2,3,2	<01010>
13	6,3,2,2,1	<32110>	32	1,3,2,3,1	<02120>
14	6,2,2,3,1	<31120>	33	2,3,2,2,1	<12110>
15	6,3,3,2,2	<21100>	34	3,3,3,2,1	<22210>
16	6,2,3,2,1	<31210>	35	5,2,3,2,1	<31210>
17	4,2,3,2,1	<31210>	36	7,2,3,2,1	<31210>
18	3,2,3,3,1	<21220>	37	6,2,3,2,1	<31210>
19	3,2,3,2,2	<10100>	38	6,2,3,2,1	<31210>

## Challenges

- How?
  - “My works are to be performed according to the score, in the required tempo, in an accurate manner. It is very difficult, but sometimes they succeed.” – Xenakis, 1989
- Implements
- Instrument Layout – A vs. B
  - Visual vs. Execution

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