

Formal Analysis and Computer Process

ARCH-P8123

Teachers: Denis Derycke (coordinator), Michel Lefèvre

Invited lecturers: Uri Wegman, Julien Rippinger

2025-2026 theme

Based on the analysis of a piece of procedural music, exploration of autonomous compositional systems contained in the space of a 10 centimeter cube. This semester will examine French electro artists from the early 2000s and later, along with several distinguished predecessors.

Examples of previous works & pictures of working sessions at ALiCe lab

<https://alichelab.be/formal-analysis-and-computer-process-algorithmic-music-i-iii>

<https://alichelab.be/formal-analysis-and-computer-process-algorithmic-music-ii-iii>

<https://alichelab.be/formal-analysis-and-computer-process-algorithmic-music-iii-iii>



Photos : © PP Hofmann

INTERPRÉTATION DES PARAMÈTRES
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 F100 (appel) = 100 (appel)



Solid structure	Isolated structure	Shade on edges Lines	Edge with opacity Lines	Rotation direction	Position Place

Cube 5: [View](#) [Info](#)

Cube 2	Index	Value
1	1	1
1	2	1
1	3	1
1	4	1
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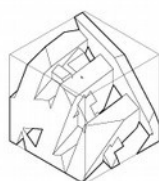
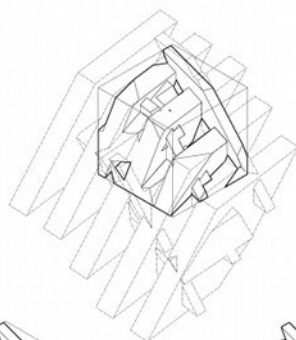
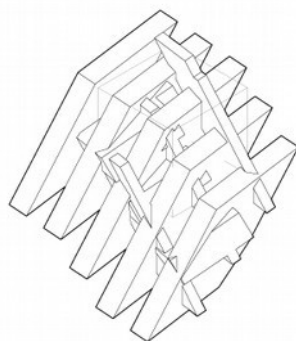
Case 2	Year	Age
1	1998	10
2	1999	11
3	2000	12
4	2001	13
5	2002	14
6	2003	15
7	2004	16
8	2005	17
9	2006	18
10	2007	19
11	2008	20
12	2009	21
13	2010	22
14	2011	23
15	2012	24
16	2013	25
17	2014	26
18	2015	27
19	2016	28
20	2017	29
21	2018	30
22	2019	31
23	2020	32
24	2021	33
25	2022	34
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37	2034	46
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108	2105	117
109	2106	118
110	2107	119
111	2108	120
112	2109	121
113	2110	122
114	2111	123
115	2112	124
116	2113	125
117	2114	126
118	2115	127
119	2116	128
120	2117	129
121	2118	130
122		

Table 1. *Continued*

Table 2. (continued)

Cube Root

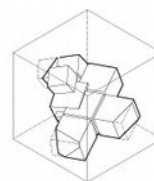
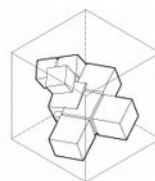
	100	1000	10000	100000	1000000	10000000
1000	10.0	10.0	21.5	28.2	46.4	346.4
10000	21.5	28.2	34.6	70.7	100.0	464.2
100000	46.4	70.7	100.0	215.4	346.4	1000.0
1000000	100.0	346.4	1000.0	10000.0	34641.0	100000.0
10000000	346.4	10000.0	34641.0	1000000.0	10000000.0	34641016.2



FORME FINALE

RECOMPOSITION

RECONSTRUCTION



FORME SPECULÉE

John Long, who
David Longman, who
David Longman, who
David Longman, who

CONFIGURATIONS POSSIBLES

Table 1

	2005 2006	2007	2008	2009	2010	2011
2005	0.0	0	0	0.0	0	0.0
2006	0.0	0	0	0.0	0	0.0
2007	0.0	0	0	0.0	0	0.0
2008	0.0	0	0	0.0	0	0.0
2009	0.0	0	0	0.0	0	0.0
2010	0.0	0	0	0.0	0	0.0



BLOCS DENSE

	000	001	010	011	100	101	110	111
000	0.0	0	0	0.0	0	0	0	0.0
001	0.0	0	0	0.0	0	0	0	0.0
010	0.0	0	0	0.0	0	0	0	0.0
011	0.0	0	0	0.0	0	0	0	0.0
100	0.0	0	0	0.0	0	0	0	0.0
101	0.0	0	0	0.0	0	0	0	0.0
110	0.0	0	0	0.0	0	0	0	0.0
111	0.0	0	0	0.0	0	0	0	0.0

[illegible]

BLOCS COMPLEXES

	2000 2001	1999 2000	1998 1999	1997 1998	1996 1997
2000	1.27	0	0	0.27	0.27
1999	0.0	0	0.0	0	0.0
1998	1.27	0	0	0.27	0
1997	1.27	0	0	0.27	0
1996	1.27	0	0	0.27	0



	Age 5-12	Age 13-17	Age 18-24	Age 25-34	Age 35-44	Age 45-54
Q101	0.19	0.15	0.09	0.04	0.01	0.00
Q102	0.12	0.10	0.05	0.02	0.01	0.00
Q103	0.17	0.13	0.07	0.03	0.01	0.00
Q104	0.15	0.11	0.06	0.03	0.01	0.00
Q105	0.13	0.10	0.05	0.02	0.01	0.00



BLOCS COMPACTS

[illegible]

John Edgar Hoover
David Bonaparte/Photo: M
Cris
Spencer Platt/Getty Images

