

Lê Quan Ninh

BLOCS D' INCIDENCE⁴
for a large ensemble

(2022)

Dedicated to the members of the Nameless Sound Ensemble from Houston, Texas :
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by the Nameless Sound Ensemble.

This piece is for a large ensemble of instrumentalists, both acoustic and electronic.

The dynamic of the piece is rather soft and should sound natural (without exaggeration in terms of volume both in one direction and in another). The general dynamics should be evaluated according to the softest instrument in the orchestra.

An example of 15 parts is given at the end of this document (with a maximum duration of **45:00**). But ideally, the performers should make the score - different for each performance - according to the total duration of the piece, also determined by chance (see below).

Each performer must be equipped with a stopwatch, a metronome and their instrument(s). In order to be rigorous about the pulsations, it is recommended to use headphones connected to the metronome or using its blinking light.

Noise: A rich sound (noise) should be produced using extended techniques with or without preparation. This **noise** sound must be continuous, regular, stable and solid but **without attacks** (neither at the beginning nor at the end). This noise is **without pulsations** either. The performer can play different sounds but cannot change them within the same block (see below). This noise can be a white noise as well as a textured or granular noise.

Note : Percussionists and/or drummers can refer to **BLOCS D'INCIDENCE**¹.

Pure: purest possible pitch, examples:

This sound is as smooth as possible, in complete opposition to the "noise" sound. They are sine wave like.

These sounds are played without dynamic variation softly. They are played continuously or on a pulse (but not staccato).

For each sound (noise or pure), there are no attacks, no accents, no fade in or fade out. Let's imagine that each sound that each musician plays is an object placed and then removed.

Method :

A large number of **chance operations** are required.

It is recommended to use the online software available here:

<http://www.anarchicharmony.org/IChing/ic.cfm>

Duration :

Depending on the concert program and/or the context, the duration of the piece is determined by the performers but cannot be shorter than 10 minutes.

If, for example, the piece cannot exceed 15 minutes (due to the rest of the program for example), draw a duration between 10 minutes and 15 minutes expressed in seconds (e.g. between 600 and 900) using **TIC**.

In this case you have to indicate to the above mentioned online software:

```
Using IC  
numqstns : 1  
bot : 600  
top : 900  
bias : none  
sort : none
```

Example of result : 12:23

Structure :

Each performer draws the duration of each of his actions.

Example: if the duration of the piece is **12:23**, the number of actions must be the result of the division $12/x$ (rounded up) where :

$x = 2$ if the number of performers is 3 or 4,

$x = 3$ if the number of performers is between 5 and 8,

$x = 4$ if the number of performers is between 9 and 12, etc.

In our example, we have 3 performers, so x is 2. $12/2 = 6$ (which is minimum number of blocks).

We must now obtain the maximum number of blocks. This number must be the result of the division of $12/y$ (rounded up) where :

$y = 1$ if the number of performers is between 3 or 9

$y = 2$ if the number of performers is between 10 and 15, etc.

In our example, we have 3 performers, so y is 1. $12/1 = 12$

```
Using IC  
numqstns : 1  
bot : 6  
top : 12  
bias : none  
sort : none
```

If the result is **8**. Draw (**8 x 2 =**) **16** numbers (8 pairs of numbers)

In our example with a duration of **743** seconds (12mn23s) :

```
Using TIC  
numqstns : 16  
bot : 0  
top : 743  
bias : nonrepeat  
sort : asc
```

In our example, we have 8 pairs of numbers. The first of each pair is the beginning of an action, and the second is the end of the action. Each action is called a « **block** ».

Noise or Pure? :

Each performer draws which type of sound (noise or pure) they should play for each of the blocks.

```
Using IC  
numqstns : 8 (in the case of 8 blocks)  
bot : 1  
top : 2  
bias : none  
sort : none
```

If the result is 1, **noise** is chosen

If the result is 2, **pure** is chosen

Pure : pitch

In the case of instruments that can produce a range of pitches, define the range that can be easily played in a soft dynamic. Count all semitones from the lowest to the highest pitch of this range. Number them.

Count the number of times you have to play a certain pitch.

Use IC to set the pitch of each pure tone.

Example :

I can easily play a pure tone from C3 to C5 (**24** semitones). Then, C3 is 1, C#3 is 2, D is 3, D# is 4, etc.

If I have to play a pitch **13** times.

Using **IC**

numqstns : 13

bot : 1

top : 24

bias : none

sort : none

Example of results : 1 17 16 18 1 3 4 1 18 1 21 20 22 (C3, E4, D#4, F4, C3, D3, D#3, C3, F4, C3, G#4, G4, A4)

Pure : Continuous or on pulses

We must now define whether the pure sound is played continuously or based on a pulse.

Using **IC**

numqstns : 13

bot : 1

top : 2

bias : none

sort : none

*If the result is 1, **Continuous** is chosen*

*If the result is 2, **On a pulse** is chosen*

Tempo of the pulse :

Each musician determines a range of *tempi* that they can play on their instrument. In the example below, this range is between 40 bpm and 180 bpm.

Using **IC**

numqstns : 6 (I have 6 pure sound to be played on a pulse)

bot : 40

top : 180

bias : none

sort : none

Example of results : 90 173 54 150 46 169

« Exception » :

By means of a chance operation, each musician determines which of the segments becomes an « exception » (except for the first and the last blocks). This segment becomes an improvisation outside the general aspect of the piece, it cancels its previous parameters. Although not quite a solo, imagine it is like listening to a radio program or other music or sound event coming through an open window...

Variations :

Variations can be added to the above instructions.

1. Through practice, the performer can make a list of possible sounds. They must use similar chance operations to determine which of each sound should be played for each of the blocks.
2. It is possible to use chance operation to establish microtonality on the pitches. (e.g. : microtonal pitch ? Yes 1, No 2. If yes, quarter tone up or quarter tone down).

Player 1 : Ryan

12 blocks	Beginning	End	Noise 1 / Pure 2	5 Pitches	Continuous 1 /Tempo 2	Tempo
	00:31	01:24	2	5	2	88
	02:39	02:48	1			
	03:06	04:10	1			
	04:12	06:55	1			
	07:01	07:25	2	4	1	
	07:28	11:57	2	2	1	
	14:03	14:11	2	1	1	
	14:26	17:11	1			
EXCEPTION	23:54	24:40				
	25:38	27:56	2	3	2	49
	31:32	32:42	1			
	36:06	38:39	1			

Player 2 : Seth

16 blocks	Beginning	End	Noise 1 / Pure 2	9 Pitches	Continuous 1 /Tempo 2	Tempo
	02:18	03:22	2	5	1	
	04:22	04:32	2	1	1	
	06:59	08:48	2	3	1	
	09:08	10:31	1			
	13:52	16:10	1			
	16:52	17:40	1			
EXCEPTION	18:16	20:37				
	22:30	23:02	1			
	23:48	23:54	2	4	2	100
	25:24	27:25	2	2	1	
	29:28	31:46	2	1	1	
	32:21	33:48	1			
	36:13	37:41	1			
	38:14	38:39	2	1	1	
	39:40	41:32	2	4	2	43
	42:54	44:48	1			

Player 3 : Rebecca

18 blocks	Beginning	End	Noise 1 / Pure 2	6 Pitches	Continuous 1 /Tempo 2	Tempo
	00:14	03:30	1			
	06:27	07:04	2	C5	1	
	07:06	07:11	1			
	10:25	11:14	1			
	14:03	16:43	1			
	17:43	18:39	2	E4	2	88
	19:41	19:45	2	D#4	2	174
	20:13	21:05	1			
	22:17	22:59	1			
	23:47	25:42	1			
	26:40	28:51	1			
	29:28	30:12	2	Bb4	1	
	30:42	31:01	2	A3	1	
	34:49	35:09	1			
	35:54	36:39	1			
	37:05	38:25	2	C4	2	109
EXCEPTION	39:52	42:21				
	43:30	43:39	1			

Player 4 : Anthony

15 blocks	Beginning	End	Noise 1 / Pure 2	8 Pitch	Continuous 1 /Tempo 2	Tempo
	00:41	02:54	2	3	1	
	07:57	09:08	2	0	2	83
	09:28	11:47	2	11	1	
	17:17	19:46	1			
	21:38	21:47	1			
	23:12	24:35	1			
	24:36	24:42	1			
EXCEPTION	25:01	25:19	2	7	2	106
	26:10	27:25	2	2	2	126
	28:07	28:23	1			
	30:21	30:36	1			
	35:52	38:21	2	4	2	113
	38:54	39:01	2	10	1	
	40:21	40:36	1			
	42:09	44:14	2	5	2	105

Player 5 : Aaron

18 blocks	Beginning	End	Noise 1 / Pure 2	10 Pitches	Continuous 1 /Tempo 2	Tempo
	01:18	01:58	2			
	03:05	04:12	1			
	05:37	08:45	1			
	11:59	12:14	2			
	12:46	14:44	1			
	15:30	16:34	1			
	17:46	18:01	2			
	19:30	23:07	2			
	23:40	28:53	2			
	30:15	30:40	1			
	32:21	32:34	2			
	32:53	33:33	1			
	35:04	36:09	2			
	36:57	40:05	2			
	40:38	40:40	2			
	41:31	41:34	1			
	43:01	43:05	1			
	43:48	44:57	2			

Player 6 : John

9 blocks	Beginning	End	Noise 1 / Pure 2	3 Pitches	Continuous 1 /Tempo 2	Tempo
	00:06	01:29	2	.	2	140
EXCEPTION	02:04	02:55				
	04:12	04:51	2	.	1	
	05:08	07:57	1			
	12:39	17:32	2	.	1	
	23:46	26:48	1			
	31:59	33:40	1			
	35:09	36:03	1			
	39:13	42:18	1			

Player 7 : Emmanuel

12 blocks	Beginning	End	Noise 1 / Pure 2	6 Pitches	Continuous 1 /Tempo 2	Tempo
	00:06	00:08	1			
	01:00	01:35	2	5	2	104
	02:20	09:57	2	0	1	
EXCEPTION	14:00	14:07				
	14:20	17:40	2	2	1	
	17:46	21:31	2	6	2	31
	23:50	27:15	1			
	28:07	29:32	1			
	31:59	32:44	2	9	2	154
	33:03	33:20	1			
	34:26	34:56	1			
	39:21	44:58	2	7	1	

Player 8 : David

9 blocks	Beginning	End	Noise 1 / Pure 2	5 Pitches	Continuous 1 /Tempo 2	Tempo
	03:38	09:50	2	Bb2	2	70
	10:32	13:23	2	C4	1	
EXCEPTION	13:29	15:22				
	22:18	23:43	1			
	26:01	26:43	1			
	27:36	29:27	1			
	32:24	39:00	2	Bb3	1	
	39:39	42:01	2	F2	2	79
	42:42	43:36	2	F3	2	109

Player 9 : Justin

15 blocks	Beginning	End	Noise 1 / Pure 2	7 Pitches	Continuous 1 /Tempo 2	Tempo
	03:30	06:52	2	17	2	140
	09:26	10:09	1			
EXCEPTION	10:32	13:40				
	14:45	15:28	2	11	1	
	17:34	19:20	2	1	2	62
	19:28	19:36	1			
	22:10	22:38	1			
	23:12	23:51	1			
	24:35	25:18	1			
	25:24	26:43	2	23	1	
	28:10	28:48	1			
	28:56	31:07	2	25	1	
	34:26	35:09	2	10	2	146
	36:03	40:47	1			
	42:09	43:39	2	18	1	

Player 10 : Sonia

17 blocks	Beginning	End	Noise 1 / Pure 2	12 Pitches	Continuous 1 /Tempo 2	Tempo
	01:27	01:35	2	E2	2	154
	02:10	02:45	1			
	04:12	04:43	2	G#1	1	
	06:57	07:22	2	B2	1	
	08:46	08:54	2	C2	1	
	12:14	14:01	2	C#2	2	83
	14:37	15:32	2	D#2	1	
	23:20	25:18	1			
	25:46	27:07	2	F1	2	64
	28:07	28:32	1			
	29:01	30:15	1			
	30:56	31:43	2	A#1	2	78
	32:24	32:50	2	A2	2	110
	34:27	38:18	2	B1	1	
	38:19	40:11	1			
EXCEPTION	40:15	42:50				
	44:07	44:55	2	A#2	1	

Player 11 : Aga

13 blocks	Beginning	End	Noise 1 / Pure 2	5 Pitches	Continuous 1 /Tempo 2	Tempo
	00:24	02:53	2	.	2	83
	03:20	03:30	1			
EXCEPTION	04:57	05:37				
	06:05	09:08	2	.	1	
	10:22	11:59	2	.	2	112
	12:39	13:36	1			
	18:59	19:18	1			
	23:21	23:32	1			
	23:54	27:30	1			
	28:19	30:14	1			
	35:52	36:55	1			
	37:58	38:30	2	.	1	
	41:13	44:12	2	.	1	

Player 12 : Gabriel

17 blocks	Beginning	End	Noise 1 / Pure 2	6 Pitches	Continuous 1 /Tempo 2	Tempo
	00:43	01:43	1			
	03:43	04:26	2	.	1	
	06:35	08:06	1			
	08:26	08:50	1			
	11:02	14:05	1			
	15:47	17:59	1			
	18:16	19:07	2	.	1	
	23:48	26:28	2	.	2	142
EXCEPTION	27:52	28:20				
	28:32	29:04	1			
	29:29	30:44	1			
	30:47	31:15	1			
	31:38	32:21	2	.	1	
	33:34	35:11	1			
	36:59	38:05	2	.	1	
	40:48	41:05	1			
	43:14	44:50	2	.	2	161

Player 13 : Ninh

21 blocks	Beginning	End	Noise 1 / Pure 2	8 Pitches	Continuous 1 /Tempo 2	Tempo
	02:04	02:10	2	.	2	78
	02:24	02:53	1			
	03:33	04:43	1			
	04:53	05:20	2	.	2	158
	06:28	06:49	2	.	1	
EXCEPTION	07:34	07:52				
	08:34	08:59	2	.	1	
	12:36	12:41	1			
	16:10	16:23	1			
	16:28	16:34	1			
	16:52	16:59	1			
	19:30	20:56	1			
	21:42	21:47	1			
	25:39	26:00	1			
	28:24	29:24	2	.	2	127
	30:04	30:31	1			
	31:07	31:44	1			
	32:25	34:27	2	.	2	163
	35:46	36:03	2	.	1	
	37:15	38:13	1			
	38:36	43:27	2	.	1	

Player 14 : Ernesto

14 blocks	Beginning	End	Noise 1 / Pure 2	6 Pitches	Continuous 1 /Tempo 2	Tempo
	00:47	01:02	2	3	2	51
	01:03	04:55	2	3	2	69
	05:26	07:43	1			
	10:12	11:33	2	2	1	
	13:21	15:05	1			
	16:02	17:05	1			
	18:18	20:20	1			
	21:47	29:57	1			
	30:47	31:01	2	2	2	115
EXCEPTION	32:33	34:39				
	36:00	37:58	2	1	1	
	39:03	42:00	1			
	42:17	43:52	2	1	1	
	44:44	44:52	1			

Player 15 : Danny

21 blocks	Beginning	End	Noise 1 / Pure 2	10 Pitches	Continuous 1 /Tempo 2	Tempo
	00:28	01:04	1			
	01:05	01:22	1			
	01:24	01:34	2	Bb4	1	
	02:06	02:48	1			
	04:28	04:59	1			
	06:01	06:48	1			
	07:32	07:42	2	C4	1	
	08:50	09:52	2	F3	1	
	11:28	14:28	1			
	15:03	15:26	1			
	15:28	17:03	1			
	17:54	22:19	1			
	23:02	23:29	2	C3	1	
	27:18	28:48	2	G#3	1	
	30:18	30:57	2	F4	1	
	34:11	35:09	2	B3	1	
	35:45	35:52	2	E3	2	65
	36:28	36:32	1			
EXCEPTION	38:40	39:15				
	39:47	40:11	1			
	41:14	42:11	2	G#4	1	