

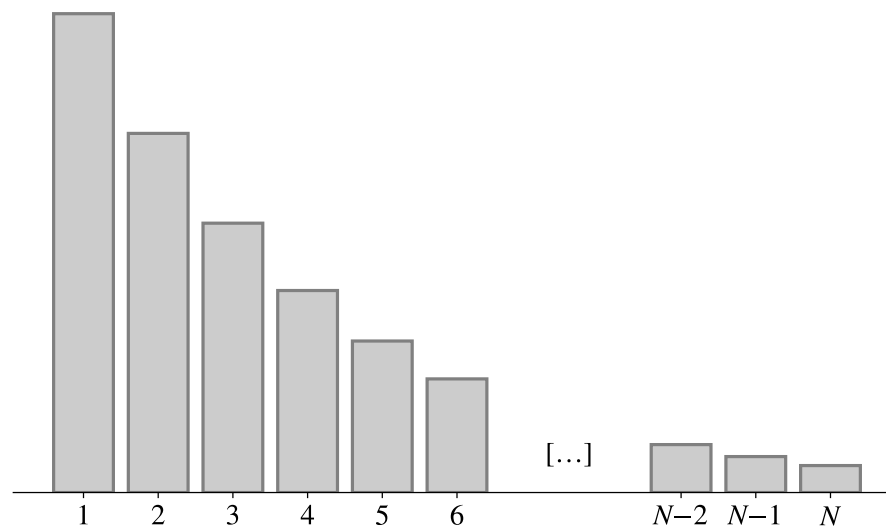
Gilberto Agostinho

Cartography #3

for solo guitar

2017

All pieces in this series were composed using the following distribution:



$$P(n) = (3/4)^k \times P(n - k)$$

Cartography #3, for solo guitar

Mapping and rules

number of notes per chord

set size	$N = 5$
transformation period	no transformation.
set	[1, 2, 3, 4, 0], where 0 represents a rest.

pitches

set size	$N = 4$
transformation period	every new note/chord event.
transformation mechanism	first, four random strings are selected. Barring is then uniformly randomly selected from the values {0-6}. After, the number of strings with fingered frets is uniformly randomly selected from the values {0-3}, and the fingered frets of a string can be one or two positions from the barred fret. There is a 20% of chance that the bottom note will be an unbarred E2. A set must also follow the constraints that no major or minor thirds are allowed between any two elements and that pitch classes must be unique in the set.

arpeggios for 3-note chords

set size	$N = 2$
transformation period	no transformation.
set	[false, true]

durations

set size	$N = 6$
transformation period	$6 \times \text{♪}$
transformation mechanism	randomizing the set [1, 2, 3, 4, 5, 6].
initial set	random.

dynamics

set size	$N = 6$
transformation period	no transformation.
set	[<i>pp</i> , <i>p</i> , <i>mp</i> , <i>mf</i> , <i>f</i> , <i>ff</i>]

constraints

- number of duration transformations: 40.
- no major thirds, minor thirds or perfect octaves are allowed between any two elements in a chord.
- barre position range from 0 to 6 frets.
- number of fingered strings range from 0 to 3.
- fingered strings range from 1 to 2 frets distance from bar.
- 2-note chords cannot have arpeggios.
- 4-note chords always have arpeggios.

General notes

This score was automatically generated by a computer program. The only manual alterations made to it are:

- added string numbers and barre indications.
- moved the first dynamic indication of bar 14 because it was too close to the accidental of the next note.

Cartography #3

 = *ca.* 96

10

8

f *mp* *pp* *ff* *pp* *mp* *p* *pp* *ff* *pp*

I

4

31

8 *p mp pp mp pp p pp mf f p pp mf*

I^5 III_{-}

42

8 *pp f pp mp mf f p f ff pp*

V

52

8 *ff f ff f mp p mp mf p*

IV_{-}

63

8 *p pp mp pp mf f mf pp mf f ff*

V_{-} V