

Nevermore: Pretext Machine

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Abstract: Our proposal is to make a graphic representation of the sound syntax and the syllabic structure enclosed in *The Raven*, published in 1845 by Edgar Allan Poe, using a script that works simultaneously as reading-text-machine, a drawing-machine and a synthesis-text-machine.

The script translates the poem structure into an abstract grid, generating a drawing. The geometric definition of the poem is then constrained by the characters and their correspondent location to the sound code: the word nevermore and the textual reverberation it produces. A synthesis of the poem is achieved by a recursive selection of syllables, resulting in a graphical and textual configuration towards a rewritten final stanza.

The process is repeated with the Portuguese translation of the poem, made by Fernando Pessoa in 1924. Although it follows the same initial structure and algorithms the change of idiom introduces different geometries and sound reverberations.



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1. Introduction

Originally published in February 1845 by Edgar Allan Poe *The Raven*, widely translated and illustrated since then, was analysed in *Philosophy of Composition* (1846) to demonstrate Poe's writing method—a recurrent rhythmic combinatory procedure to emphasize the mathematic and mechanical structure of the text.

Our proposal is to make a graphic representation of the sound syntax and the syllabic structure enclosed in *The Raven*, using a script that works simultaneously as reading-text-machine, a drawing-machine and a synthesis-text-machine.

The poem is conceived as a pretext to use the sounds contained in the single word of the refrain. The script defines a set of combinatory rules that move and elapse the text according to its basic sound code: the word *nevermore* and the textual reverberation it produces. Like Poe refers, “*considerations inevitably led me to the long o as the most sonorous vowel in connection with r as the most producible consonant*” (Poe, 1846).

2. Script

Made “*with the precision and rigid consequence of a mathematical problem*” (Poe, 1846), it is possible to describe and deduce an algorithm and represent it in a graphic grid. This grid gives visibility to the transformations that occur along the script iterations:

- a) *Reading text machine*: The computational model we present, starts by defining a grid of points that interpret the structure of the poem: stanzas (18), verses (108) and syllables (1512). Each point of the grid as a correspondence to a character, which as a value assigned by the script: a geometrical representation of variable length;
- b) *Drawing machine*: in each iteration a repulsive reaction is applied to the geometries from the points of resonance (*nevermore*, *o-r*);
- c) *Synthesis text machine*: A process of natural selection is undertaken each iteration. The strongest syllable in an equivalent position between two stanzas remains, the other is obliterated. The elected syllables generate a final stanza. The result is a graphical and textual synthesis where the poem is rewritten.

The script, developed with the purpose of reading the English version of the poem, can also read other translations, and in this case running the Portuguese translation made by Fernando Pessoa in 1924. There were only two parameters that had to be changed: the number of syllables per verse — from 18 to 22; and the points of resonance (textual elements *-ais* and *-ro*).

The script is made in Grasshopper 0.9 (a graphical algorithm editor integrated in Rhino modelling software) complemented by some functions written in Pynthon Script.

The script allows the user to read/draw/synthesize other poems by changing the parameters variables on the grasshopper interface, such as: the number of stanzas, verses and syllables and by defining the strongest rhymes along the poem.

Future advances in this demo will contemplate an interface developed in Processing in order to the user control of the parameters values.

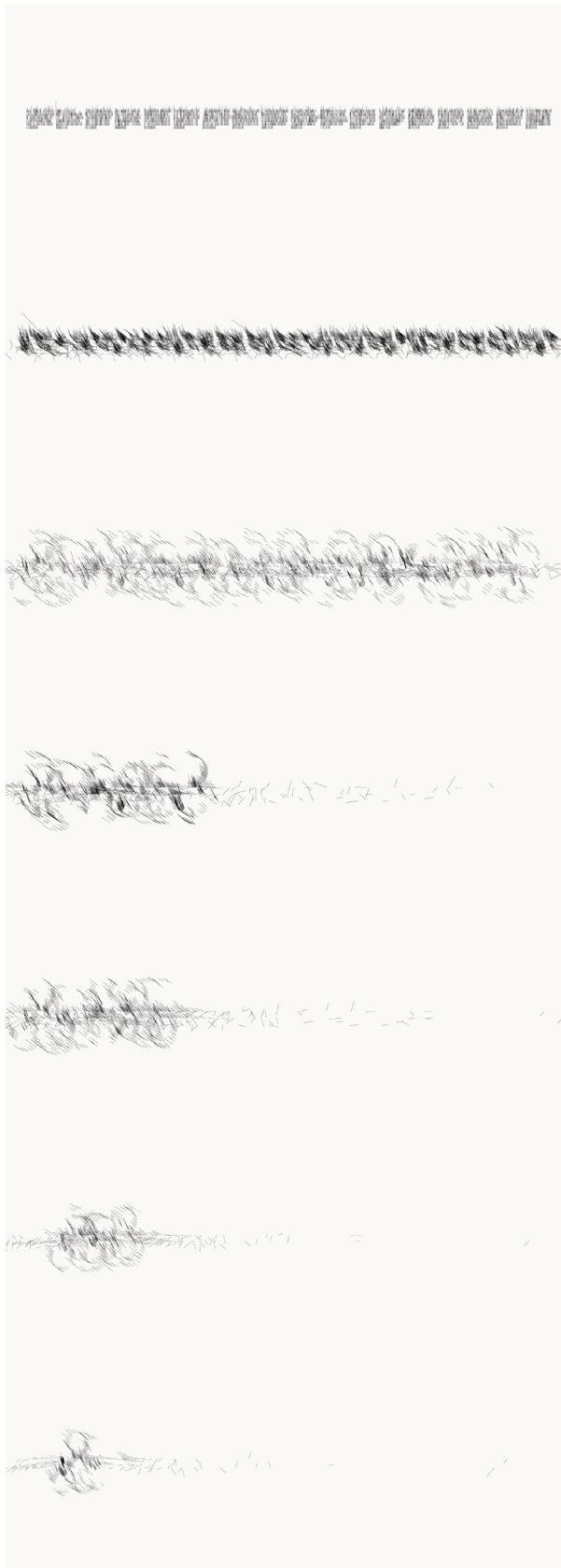


Fig. 1-7. Pretext drawings generated by reading *The Raven* original version, #1-7 iterations.

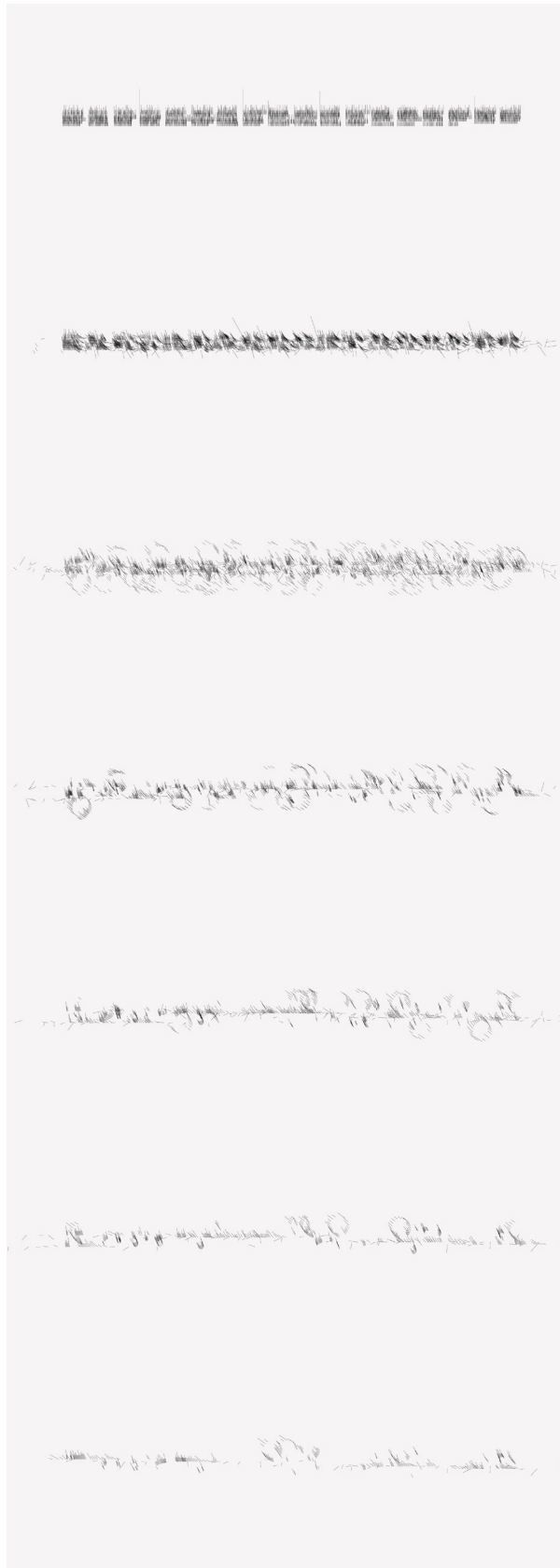


Fig. 8-14. Pretext drawings generated by reading *The Raven* Portuguese translation, #1-7 iterations.

proph thought that thing night denser tling there course press straight ting still fiend shriek start ing
there tempt whose dreams quaint wheth falls burned wrought saint stock both floor fore wretch this night's shore black
plume shorn sance daunt thee with these feath stood sought aidenn thee ter ed shall scarce demon's leave light stream
throws saint cient ping trance friends gloat flown shore bore clasp there dirges there shad floor that heart
still tured gaunt trance night's flown name plore shall press said noth from floor shall more
more more that

Fig. 15. New stanza generated on the pretext drawing # 7 iteration, *The Raven* original version.

que mais cor gri dis noi mais gres frou quan quei chei ain dum zen dis tris par mar gu
ra tor trou dia tais fron qual quem nhan nhos quem mos trou guem vras trais guais brais brais nais
tens pren lhar mais mim que man nha tris gre quem por mui nio que ses nha vros tra vi gre
do que nha luz lan quem lhe res tris gou nha som bra meus bras brais brais guais ais trais quem
ais trais num ber tar qual que nun meu mais quo fran tes som meus ses brais seus brais guais trais
dis cli nar cor nun nun mais mais

Fig. 16. New stanza generated on the pretext drawing # 7 iteration, *The Raven* Portuguese translation.

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