

Máquina Cóndor

Máquina Cóndor is the title of a series of ephemeral, process-based works carried out between 2006 and 2016. These works should be understood more as performances than objects destined to be preserved over time. They are performances—performances carried out by a machine and those people who, in some way, unwittingly, are in the machine and participate in it. The machine functions through a program that generates poetic texts. It may reside in different installations. At the software level, it is comprised of a web search engine and something I call a “writing engine.” More specifically, the web search engine is part of the writing engine. For this reason, and given what I have mentioned previously, to summarize this work it is important to distinguish between hardware and software. I will only describe the hardware details of the first version of the work, since I believe that this version is the most accomplished in sculptural terms. The other versions may be seen in the photographs in this portfolio.

Máquina Cóndor

Máquina Cóndor (2006-to-date) consists of a processual art piece in development whose core is an algorithm composed (so far) by three interlocking operations. The machine generates strophe of four verses based on the first strophe of *De la Ambición Humana –On Human Ambition–* (1623) by Luis de Góngora. In simple terms, the poems that the machine writes are subject to A) - news (depending on what happens - or the editing of the facts by the newspapers), B) - prices of natural resource (such as lithium, gold, copper, and water) and the values of buying and selling coins from ex-African colonies, the Middle East - and the countries where Operation Condor took place (for example, the dollar in relation to the Chilean peso) - and C) - the insertion of certain words in the verses of Góngora, which depends on the data analyzed in A and B. The three correlations are made with online data that are obtained in real time. The operations are:

A) - Real-time search in 12 newspapers of 333 keywords related to war and economy.

B) - Online search and analysis of the values of the sale of natural resources which are important for the Chilean economy (such as lithium, gold, copper and water) and the values of buying and selling currencies of ex-African colonies, the Middle East and the countries where Operation Condor took place (for example of the dollar in relation to the Chilean peso).

C) -interleaving 9 words -provided by the lexicon of surgery, anatomy and forensic medicine- in the first strophe of a memento mori by Luis de Góngora (*On Human Ambition*, 1623). The disposition of these 9 words depends on the searches and economic analysis exposed in A and B, so that the true poem is not only the generated verse but the relational structure that is the product of a world that is expressed through the filter of the newspapers and the values of foreign exchange and natural resources.

NOTE: That is the true poem, the relational structure arranged by me and through which the world expresses itself through a work that feeds on the facts filtered by the newspapers, never neutral or objective, and the hard data of the economy. The poem is not just the stanza, but all the data synchronized in unison, which, moreover, are the only thing that makes it possible, as seen in one of the monitors of the 2016 version presented at the National Center of Art Cerrillos, in Santiago de Chile.

These mortuary poems, if I may call them so, respond to relations of cause and effect, where once again war is combined with the economy, the bios with the polis, and the psyche with the logos.

Hardware:

In its first version, in 2006, *Máquina Cóndor* was an installation consisting of two scaffolds measuring 110 x 250 x 360 centimeters. Supporting 96 television sets on one scaffold were three alphanumeric panels, one hardware machine (also named *Máquina Cóndor*), a PC monitor and a printer. The second scaffold contained twelve 14” television sets from the 1980s and 90s, found at Santiago’s main flea market.

These devices were controlled by this hardware, which was designed specifically to distribute

the signals throughout the television sets, the panels, the printer, a webpage (www.maquinacondor.com) and an advertising screen at the intersection of Ahumada and Nueva York streets in downtown Santiago, Chile. However, after five days, the machine was censored because the owner of the advertising company that administered the screen considered the prose obscene, and as a result it was no longer possible to appreciate the machine’s prose on the street.

The signals were distributed through 40 different processors that fed them via three multiplex ports and three other cards through the various visual and audiovisual devices mentioned earlier. This hardware allowed the deployment of web-based applications on television screens to operate on the basis of analogous signals which, as artifacts, belong to an earlier period of the history of mass communications media, prior the widespread adoption of the PC and the Internet. There was one of the aforementioned scaffold structures in each gallery room. The first contained 96 dismantled 5.5” television sets. The second contained twelve 14” television sets from the 1980s and 90s, found at Santiago’s main flea market. Knowing that Vostell believed the great sculptures of the latter half of the twentieth century to be the car, the jet and the television, perhaps the great sculptures of our day would be the smartphone, the drone and transgenic foods. In this first version of *Máquina Cóndor*, objects from both periods were brought together, combining processes from the Internet era with those from the days of analog television. In this light, *Máquina Cóndor* becomes an exercise in media archaeology.

As I mentioned previously, every 3.26 minutes a stanza was sent to www.maquinacondor.com. Not much later, *Máquina Cóndor* could “dematerialize:” in October 2006, in Madrid, at the Antimuseo de Arte Contemporáneo, El Ojo Atómico, a datashow was connected to a home-based PC which showed what one might see on www.maquinacondor.com. Tons of iron became lumen. As an irony with respect to the contemporary myths surrounding the cloud, we might say, not without a touch of sarcasm, that the piece can be measured in bits or atoms, which of course overlooks the fact that tons and tons of material infrastructure actually make the World Wide Web possible: satellites, submarine cables and hundreds of thousands of servers all over the world (which, moreover, are constantly being spied on by private

companies as well as the world’s most important intelligence agencies). For this reason, this piece can be displayed in one location or simultaneously, in as many locations as desired. Regarding the variety of forms in which the work may be implemented, it is worth mentioning another version, from 2012, in which a seismometer was attached to the machine, so that the prose generated depended upon the force of people’s footsteps in situ. I will return to this further on.

Software:

Máquina Cóndor is also the name of a software whose main function is to generate texts from Internet searches. To do this the software wrote “reactive verses,” which reacted to keyword searches. The text generator (or “writing engine”) operated within the server in the gallery.

The process of text generation was divided into two stages. The first stage was a constant crawling applied to the websites of five news publications: *The New York Times*, *The Guardian*, *The Miami Herald*, *The Economist* and *The Washington Post*. These searches used a search engine with a limited database of 333 words related to two specific news areas: war and economics. Once the system had completed its scrutiny of one of these sites it ranked the keywords in terms of frequency. Since these publications were updated relatively often, the “reactive prose” the system generated was also quite dynamic. To each one of the terms in the search engine database another was assigned in the “writing engine” database.

The latter also had its own database that grouped together, in a very rigid categorization, words from the fields of medicine, surgery and human anatomy. This may be understood more easily through the following example, a four-verse stanza from sonnet 157, *De la Ambición Humana* (Of Human Ambition) written in 1623 by the Baroque poet Luis de Góngora (1561-1627), of Spain’s Golden Age:

[Mariposa] no solo no [cobarde]
mas [temeraria.], [fatalmente] [ciega]
lo que la [llama] al [Fénix] aún le niega
Quiere [obstinada] que a sus [alas] guarde

Which may be translated:

[Butterfly] not only not [cowardly]
but [recklessly,] [fatally] [blind]
to claim [stubbornly] for its [wings]
what the [flame] denies the [Phoenix]

Within this stanza, the Spanish words *mariposa* (butterfly), *cobarde* (cowardly), *temeraria* (recklessly), *fatalmente* (fatally), *ciega* (blind), *llama* (flame), *Fénix* (Phoenix), *obstinada* (stubbornly) and *alas* (wings) were replaced by these other words, which were stored in the writing engine database (see fig. A in page 6). The effect of these “other words” was determined by the ever-changing content of the daily editions of each news publication. If the ranking, in, for example, *The New York Times*, was configured in a given way, our system could construct the following verse:

[Cavity] not only not [cranial]
but [inert,] [fatally] [unstitched]
to claim [aphasic] for its [necrologies]
what the [flame] denies the [Phoenix]

The distribution of the nine words is neither random nor totally deterministic. It would not be entirely accurate to say that to each one of the terms in the search engine database another was assigned in the “writing engine” database. More precisely, each term in the search engine is assigned a group of four words, of a total of sixteen for the positions 1, 2, 3, 4, 5, 6, 7, 8, and 9. These sixteen are divided into four groups of four. A random function decides which of the four words is inserted (for example, between 1 and 4). Conjugated in the stanza, the four groups refer to images associable to:

Group i)– a simple dissection.

Group ii)– an autopsy on a body of a person who died from poisoning.

Group iii)– a necropsy of a body of a person who died from sterilization.

Group iv)– variations on the original motif of the stanza used, including its original words. That originating motif is a *memento mori* and a *vanitas*. I must add here that the original words were also considered variables, so that in principle at least, given the right statistical conditions, the system could reproduce Góngora’s stanza.

The order of the 333 ranked words decides which word will be placed in which verse. The machine iterates based on the ranking over and over again. The words it passes over, in descending order (from 1 down), determine which word will be simultaneously inserted in each of the nine boxes of each stanza generated.

In the terms from the database used to populate the verses, occasionally we find a confluence between architecture and anatomy (*boveda*, or dome, and *nervadura*, or rib), or anatomy and geography (*cuenca*, or basin, and *fosa*, or pit). There are more than two situations of this type; I cannot enumerate them all. References to other authors abound; they may be literal or they may be distortions: *tala* in the first case (Gabriela Mistral) or *llagar* and *nínfulo* (Mistral and Nabokov respectively). To this day the database continues to be updated constantly.

This entire mechanism explains what the viewer sees on the PC monitor (see page 10) that sits at the feet of the scaffolding structure that contains the *Máquina Cóndor* hardware. The nine numbers that appear on the upper right-hand corner of the screen tell us which word is being inserted into which part of the stanza, and the poem may be read immediately underneath. To the left we find the name of the news source that is being examined with the respective ranking.

In this way, we had a piece whose ever-changing form was essentially impossible to predict. The verses generated by *Máquina Cóndor* in real time were shown permanently on the Internet at www.maquinacondor.com for the duration of the exhibition, and continued on for a few more months afterward. Once the exposition had closed, the machine’s potentially *ad infinitum* production could still be appreciated online until May 2007, as the author hosted the software on his home PC server. These verses were germinated from a relational structure —from an objective mechanism— on a screen, only to be erased soon thereafter by the emergence of a new verse. Only one was printed by a continuous form printer (with an Egyptian aspect). The others, as the spoken word, were more fleeting in nature, surviving approximately 3.26 minutes before disappearing, perhaps forever. Later, in 2012, *Máquina Cóndor* was presented again twice: once as an installation in Santiago and then as a video projection in Berlin.

The installation in Santiago was presented at the Biblioteca Nacional de Chile, Chile’s National Library. On this occasion the function of the random numbers was replaced by the data supplied by a seismometer that measured the force of the footsteps of the people who approached the work. If nobody came by, the machine did not write anything. Additionally, the database of medical and anatomical words was replaced by fragments from the text *Mundus Subterraneus* (1665) by Athanasius Kircher (1601-1680), an extremely influential work in Latin America in the seventeenth and eighteenth centuries that compared the entrails of the Earth with those of the human body. Finally, the volume of news publications analyzed grew considerably, ultimately including media such as *USA Today*, *The Los Angeles Times*, *The Independent*, and others.

Finally, there is an online version currently in development, in which the random numbers have been substituted by the prices associated with the sale and purchase of a selection of currencies and natural resources connected to countries that are either enduring or have endured wars and political conflicts sparked by economic motives. For example, the US dollar’s relation to the Iraqi dinar, the Saudi riyal in relation to the Syrian pound, the Euro in relation to the Boliviano, or the Pound Sterling in relation to the Argentine peso or the price of lithium, oil or copper.

As we have seen, there is nothing simple or random about *Máquina Cóndor*. Since the last modification there is, in fact, nothing random at all — just determinism. This is not “random poetry.” Because of this, we can imagine it as a kind of extremely precise thermometer (including a calculated effect of variation), like a living memorial or a relational structure based on nodes that are constantly being modified by the everyday unfolding of life. There, everything is in real time, interconnected, instantaneous, and responds to cause-effect relations in which, once again, we find war and economics, torture and *scientia*, *tékne* and *medicus* and, of course, *bíos* and *logos*.

Demian Schopf, 2006.

Figure A.

| | lista 1 | lista 2 | lista 3 | lista 4 | lista 5 | lista 6 | lista 7 | lista 8 | lista 9 |
|--------|--------------|--------------|------------------|-------------------|------------------------|-------------------|----------------|------------------|-----------------------|
| FIKE → | 1 bóveda | 1 craneal | 1 inerte | 1 objetivamente | 1 descosida | 1 vivisección | 1 inciso | 1 afásica | 1 necrologías |
| CA1 ← | cavidad | encefálica | exánime | asepticamente | hilvanada | disección | cisurado | distásica | tanatologías |
| | cámara | medular | exangüe | clínicamente | suturada | bisección | trepanado | disfémica | logópedas |
| | corteza | ocular | cosa | técnicamente | zurcida | sección | punzado | disfónica | tanatólogos |
| C2 ← | 2 mucosa | 2 lingual | 2 infectada x | 2 supuración x | 2 tumefacta x | 2 proliferación x | 2 barbitúrico | 2 crepuscular | 2 cremadores |
| | membrana | vaginal x | 2 séptica x | 2 expectoración x | 2 mortecina x | 2 diseminación x | 2 psicotrópico | 2 eclipsada | 2 incineradores |
| | tejido | rectal x | 2 infestada x | 2 secreción x | 2 necrotizante x | 2 ramificación x | 2 sedante | 2 eclíptica | 2 fosales |
| | epitelio | intestinal x | 2 inoculada x | 2 salivación x | 2 necrosante x | 2 nidación | 2 calmante | 2 parafásica x | 2 sacramentales |
| C3 ← | 3 concavidad | 3 vaginal x | 3 estéril x | 3 por | 3 electrocirugía x | 3 necrosis x | 3 quirurgo | 3 moribunda x | 3 naturalezas muertas |
| | inervación | uterina x | 3 yerma x | 3 por | 3 oclusión | 3 gangrena x | 3 cirujano x | 3 desfalleciente | 3 sobrenaturalezas |
| | cuenca | himenal x | 3 infértil x | 3 por | 3 electrocoagulación x | 3 hemorragia x | 3 quirófano x | 3 agonizante x | 3 extirpaciones |
| | hendidura | trompal x | 3 esterilizada x | 3 por | 3 transección | 3 infección x | 3 operador x | 3 mortecina x | 3 ablaciones |
| C4 ← | 4 mariposa | 4 cobarde | 4 temeraria | 4 fatalmente | 4 ciega | 4 llama | 4 Fénix | 4 obstinada | 4 alas |
| | terminal | evitable | 4 eutanasia x | 4 asepticamente | 4 asistida | 4 palpitación | 4 inerte | 4 obsecada | 4 ánforas |
| | agónica | esquivable | 4 ortotanasia x | 4 clínicamente | 4 socorrida | 4 dilatación | 4 yerto | 4 elíptica | 4 urnas |
| | agonizante | soslayable | 4 distanasia | 4 objetivamente | 4 auxiliada | 4 contracción | 4 exánime | 4 elusiva | 4 nichos |

MARIPOSA NO SOLO NO COBARDE
 MAS TEMERARIA FATALMENTE CIEGA
 LO QUE LA LLAMA AL FENIX AUN LENTAMENTE
 QUIERE OBSTINADA QUE A SUS ALAS CUANDO

Figure B.