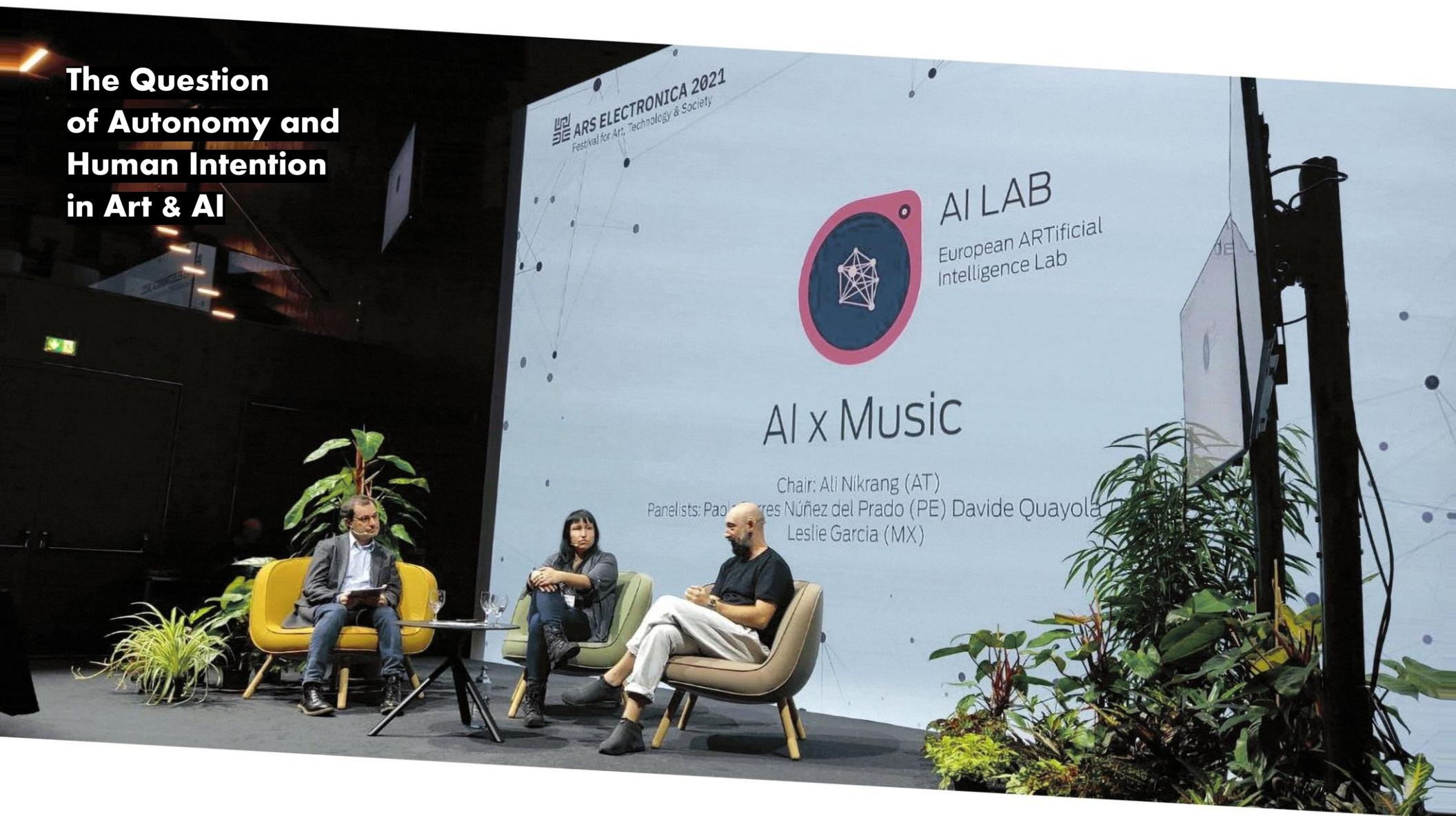


Paola Torres Núñez del Prado (PE/SE) explores the boundaries and connections in between tactility, the visual and audio related to the human voice, to nature, and to synthetic ones those whose listening is often considered less harmonious, such as machine or digital noises. Her work is complex: she explores the limits of the senses, examining the concepts of interpretation, translation and misrepresentation, so to reflect on mediated sensorial experiences while questioning the cultural hegemony within the history of Technology and the Arts.



Honorary Mention @Prix Ars Electronica, 2021 - Google Artists + Machine Intelligence Residence Grant recipient, 2019 - Vivo Arte.mov Mobile Media Award, Brasil, 2013. Her performances and her artworks, which are also part of the collections of Malmo Art Museum and the Public Art Agency of Sweden, have been presented in diverse countries of the Americas, Europe, and Scandinavia, where she is currently based.

The Question of Autonomy and Human Intention in Art & AI



Speakers: Davide Quayola (IT), Paola Torres Núñez del Prado (PE), Leslie Garcia (MX)

Moderation: Ali Nikrang (AT)

In recent years, new AI technologies have increasingly been incorporated into fascinating artistic projects. The ability of AI to explore new, previously unknown perspectives of data certainly seems to enable new areas of artistic creation. But it also raises questions about possible forms of collaboration between AI and human artists. To create something, we always need the intention to create. But how can artistic intention be communicated with an AI system? How does the degree of autonomy of an AI system affect human-AI collaboration? Are less autonomous AI systems better suited for artistic tasks because they give humans more freedom?

"Paola Torres Núñez del Prado explores notions of interpretation, translation, misrepresentation and perceptual experiences of cross-modality through interactive painting, sculpture and video art. Her purpose is to describe significant (often ambiguous) multicultural structures, through objects, video, or code."

*Teresa Buscemi
Curator of Digital Latinamerica
New Mexico, USA
2014*

"Paola Torres Núñez del Prado uses in an innovative way, different artistic methods in her work while combining, for example, social anthropology, programming and interactive co-creation, building viable models to investigate textile patterns, now taken as banks of collective memory and cognitive structures. Through her artistic research Torres Núñez del Prado contributes to the creation of knowledge about the textile designer immersed in a complex cultural role."

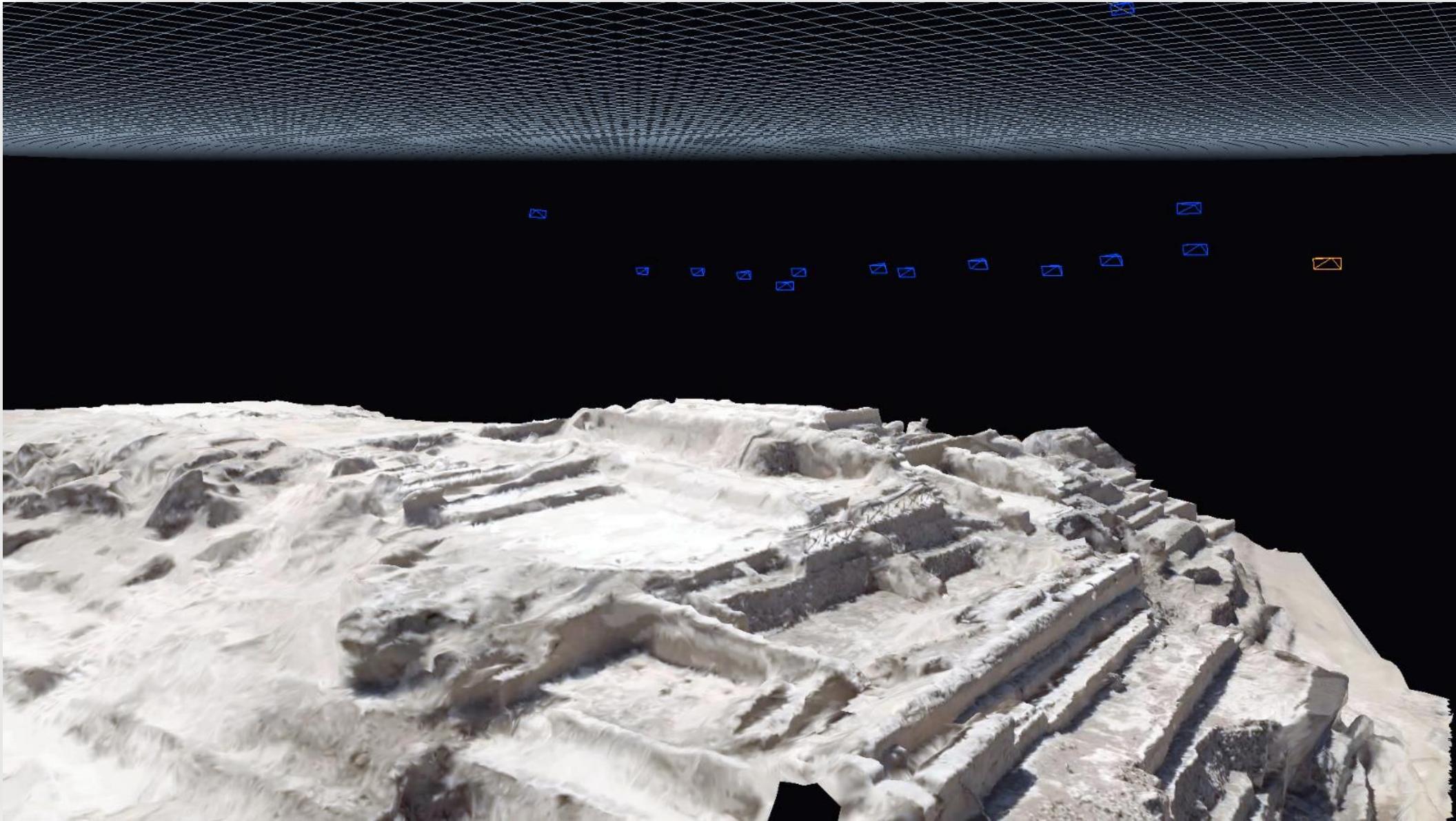
*Bella Rune
Textile Artist & Curator
2016*

Las Huacas is an ongoing project initiated in 2019, which now moves to the field of Virtual Reality. It consists of a series of reconstructions through Photogrammetry of various earthen temples in the city of Lima, characterized by being mostly ignored, forgotten, or invaded.

<https://autodios.github.io/huacas.html> (2021)



To Wear Quipus or Cables? (2021) Video for Sound Piece of the same name <https://vimeo.com/528958248>



<https://autodios.github.io/media/28.mp4> ("Reconquista I", video, 2019)

The project began by referring to the Glitch, or the errors in the reconstruction of these structures, now shifting towards their restauration/enhancement for the virtual space.

"Paola Torres Núñez del Prado explores traditional Peruvian knowledge systems like quipus (a knot-based record keeping system used by the ancient Incan civilization) or Shipibo textiles (a fabric-based form of multimodal transcription) and brings these systems to digital life using technologies like machine learning and sound synthesis, speculating on how they might be seen and understood by their makers and by contemporaries. For AIELSON, the artist trained a neural net on Latin American poetry, including works by conceptual poet Jorge Eduardo Eielson, known for his work interpreting quipus. This project represents a multigenerational approach to a mysterious historical medium: To make the neural-net generated poetry audible, the artist trained a Spanish language voice model on Argentine voices, since no South American speech generation models were available. The recorded output was pressed into a vinyl record and released as an album online, complete with the glitches and grain that Torres Núñez Del Prado also celebrates elsewhere in her work."

Ars Electronica curatorial text, 2021



| **KHIPUMANCY @Ars Electronica**

<https://www.youtube.com/watch?v=yA4hR9DS82k>



This device is a knot-based computerized sonic instrument

that consists of a recognition system that uses

Machine Learning + Computer vision to recognize

knots that associated to their position allows

"Live Coding" with a Khipu (notation device

of pre-Hispanic origin).

<https://www.youtube.com/watch?v=vA4hR9DS82k>

The ML:Knot() Khipu

*developed
for the
KHIPUMANCY
performance*

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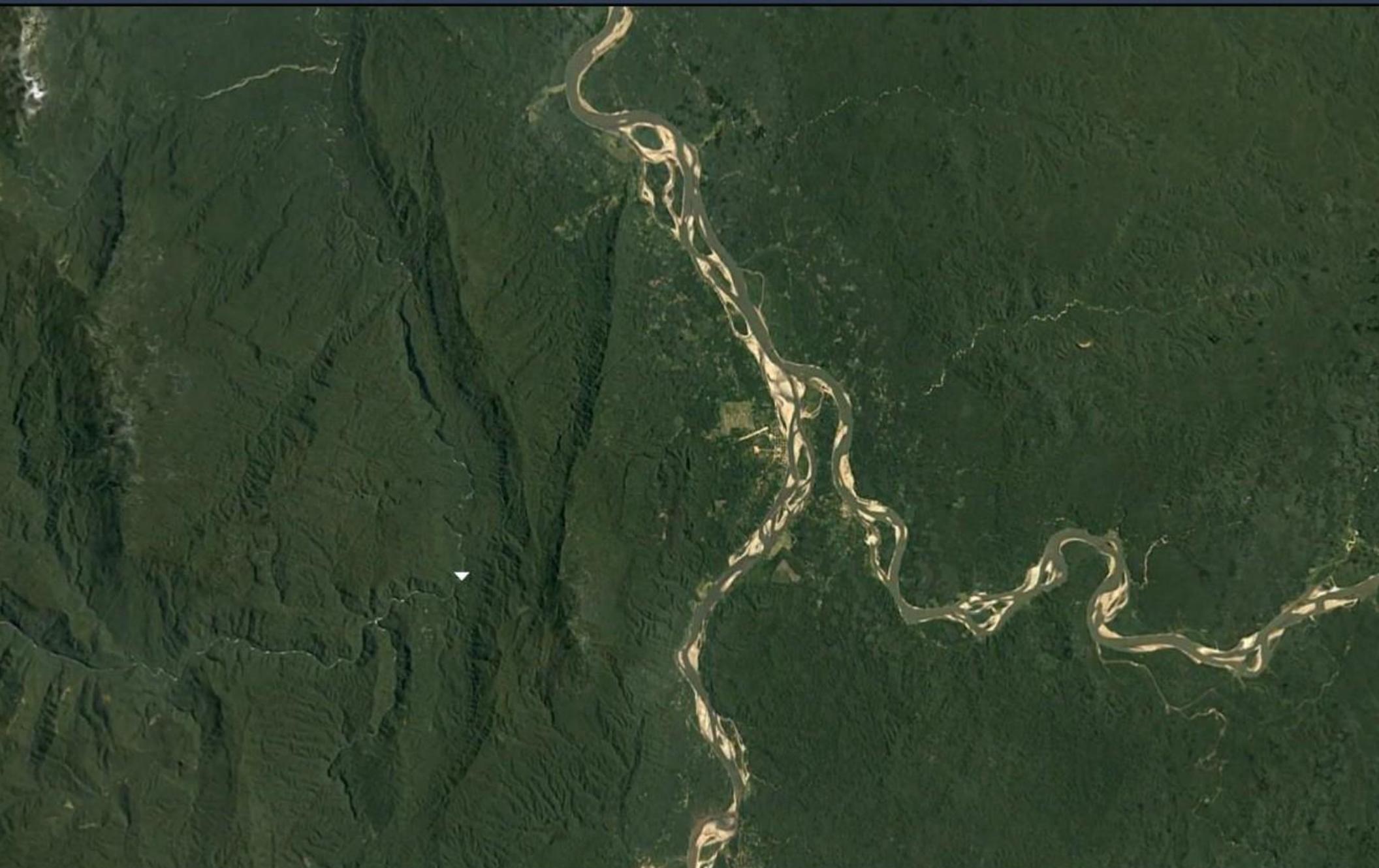
Did you detect all 3 left knots? >>> no
0: 480x640 3 knots, Done. (0.016s)
[[126 144 158 180 3 0]
 [128 91 161 127 5 0]]
Did you detect all 3 left knots? >>> no
0: 480x640 3 knots, Done. (0.017s)
[[125 144 158 180 3 0]
 [129 91 161 126 5 0]]
Did you detect all 3 left knots? >>> no
0: 480x640 3 knots, Done. (0.015s)
[[125 144 158 180 3 0]
 [128 90 162 127 5 0]
 [124 189 164 222 14 0]]
Did you detect all 3 left knots? >>> yes
X: 142 Y: 162
X: 144 Y: 205
X: 145 Y: 108
threeLeftKnotsCall.json
{'mid_hori': 162, 'bott_hori': 205}
0: 480x640 2 knots, Done. (0.018s)
[[124 146 158 183 3 0]
 [128 90 162 128 5 0]
 [124 189 163 223 14 0]]
Did you detect 2 knots mid left y bottom left? >>> 
X: 142 Y: 162
X: 144 Y: 205
X: 145 Y: 108
paola@paola-Legion-5:~$ python3 /usr/local/bin/FoxDot
paola@paola-Legion-5:~$
```



STYLEGAN3 GENERATED AMAZONIAN PORTRAITS

Singing Rivers, Various Deep Learning Systems, 2021: Portraits generated by a StyleGAN 3 trained for this Web- based Decolonial project that consist of also three other pre- Trained Neural Network models managing data related to the Amazonia. The next image shows a still of reconstructed video using DAIN/RIFE Machine Learning models to analyse deforestation in the area.

<https://singingrivers.github.io/>



Now rivers connected to the Amazonas river and its surrounding areas have changed since the 70s. At this stage, Machine Learning becomes a tool that allows us to "fill in the gaps," recreating missing rivers, alongside the river bed itself, for the last 50 years.

ANDEAN AESTHETIC INFORMATICS THE NEOKHIPUKAMAYOQS

ABOUT MANIFESTO MANIFIESTO (ES)



THE TECHNOKHIPUMANCERS' NEOKHIPUKAMAYOQ MANIFESTO

We are the Technokhipumancers, also called Khipunks or Neokhipumancers, part of the extended movement of the now called Neokhipukamayoqs; we define ourselves as the third generation of a long but not yet recognized artistic trend in Latin American arts and beyond, whose name we now chose to define ourselves with, refers to the Andean experts of the Inca period, the Khipucamayoqs, the specialists who once could decipher and code the content of data with knots, within the rope-based devices known as Khipus, memory-storing instruments that today enjoy a renewed interest both by researchers and artists immersed in technological topics.

Knowing that the Khipukamayoqs survived beyond Colonial times, and being aware of the possibility that there could be Andean experts capable of interpreting the data encoded in these instruments living in the Andes, we openly recognize the Khipu as part of the culture of various peoples inhabiting the region. In this context, we choose to position ourselves as the heirs of a millennial tradition where the prefix 'Neo' is what marks a division that is, in practice, more linked to the cultural milieu than to a temporal framework: as we resignify these artifacts of pre-Columbian origin within the Modern and Contemporary arts, we highlight its long history that goes beyond archaeological remnants.

It is in the recognizing of the Khipu as living culture where we begin to consider a re-reading of Andean knowledge from our mostly globalized point of view yet with the respect and responsibility that comes with it: many of us are South Americans, and, as such, these instruments and their associated knowledge are part of our own cultural heritage. Yet, confronting current problematics that now make obvious the marginalization and mistreatment of our brothers and sisters, the Indigenous peoples of the Americas, we now make explicit our commitment on placing these interests and needs above, in case we come from urban or more Westernized areas.

It is now our mission that this movement, and all of its multiple manifestations, that is, whenever a Khipu is used within the Arts, it should be recognized as part of a movement originating in South America a hundred years ago at the writing of this Manifesto. We are aware that, by now, the trend has long crossed the borders of the Andean area, thus, the fact that it was born at the foot of the Andes in the beginning of the 20th Century becomes extremely relevant as we now present the Neokhipucamayoq art movement as another branch of the *avant-garde* of Global Modern Art.

AIELSON – El Tiempo del Hombre, 2020



This is the first Artificial Intelligence album of its kind: a set Spoken Word Poetry entirely generated by an AI, both the voice and the poems themselves, printed in a set of vinyl albums.

<https://vimeo.com/444243666>



I dig a hole with a traditional Pan-American agricultural tool so to bury the EL TIEMPO DEL HOMBRE (English: *The Time of Man*) album, referencing archaeological remnants from our time (which will mostly be plastic and synthetic) while also being a feminist action (me, a female, burying “The Time of Man,” her creation). The sounds are from AIELSON system learning (being trained) on how to speak.

Multidisciplinary Arts + Machine Intelligence project that involves various sub-projects and includes subjects such as current and possible applications of ML algorithms for artistic and audiovisual creation, as a tool for archaeological research, and an experimental path for literary compositions...

<https://khipucamayoc.github.io/>

KNOT OF CODE

Multidisciplinary Arts + Machine Intelligence
project involving the history of Khipus

START

*"Questions about the historically low value of textiles, their aesthetics, politics, representation, tactility, vision and material come together in the exhibition [Textila Undertexter].
(...)*

Paola Torres Nuñez del Prado shows her electronic embroidery on canvas where the post-colonial criticism is closely woven through pattern and its process."

*Milou Allerholm
Art Historian (Sweden)
Extract of Dagens Nyheter publication(main Swedish newspaper)
2016*

FROM NOISE TO MUSIC – Textile Painting, 2021



ANDEAN GLITCH – Textile Painting, 2020



For the Aikphrasis Project, curated by

An Artificial Intelligence:

<https://hollygrimm.com/aikphrasisproject>

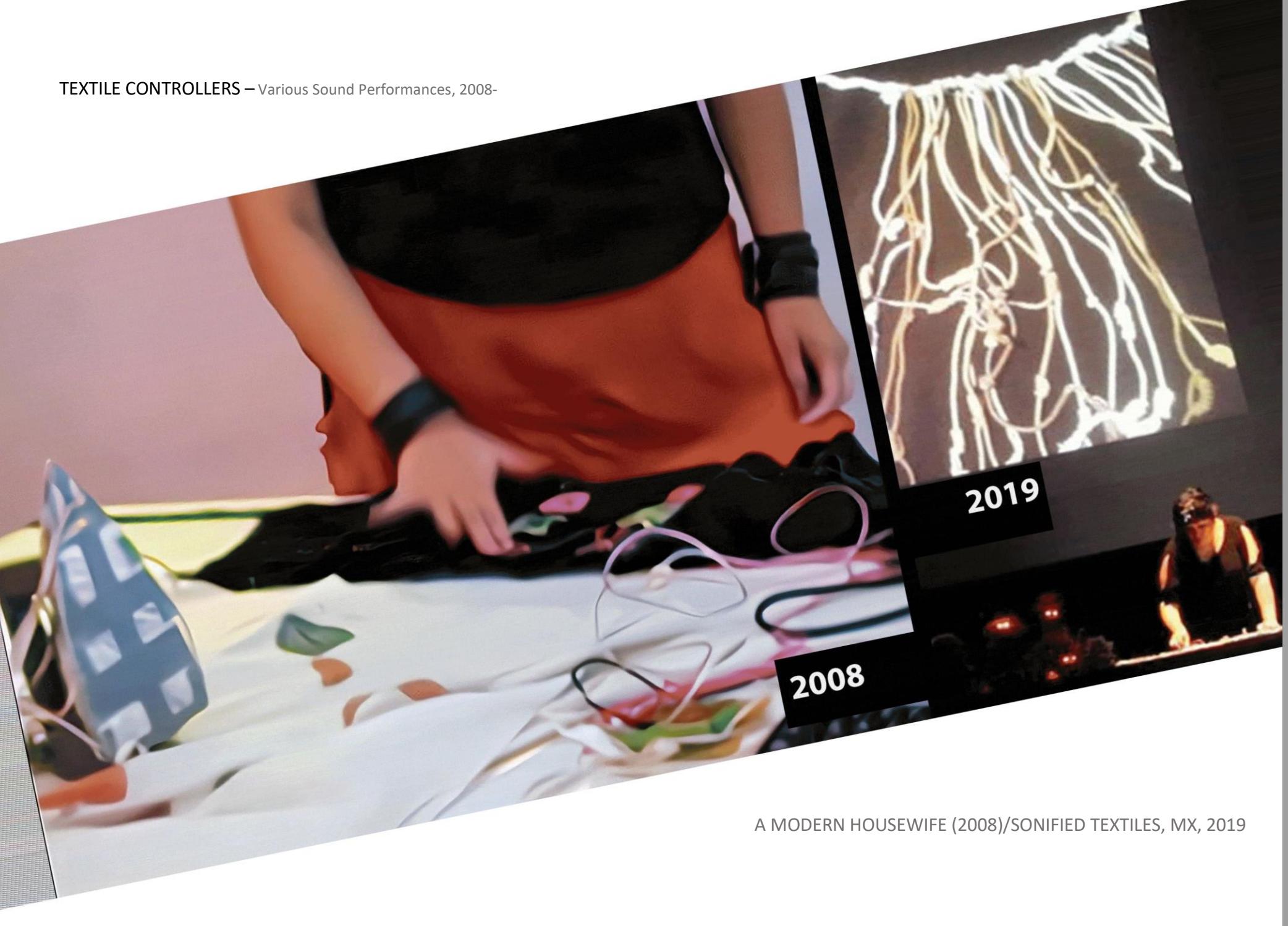
WAYPE (de la Flor) – Interactive Soft Sculpture, 2019





SS_WIPES – Series of Interactive Soft Sculptures, 2018

TEXTILE CONTROLLERS – Various Sound Performances, 2008-



"Paola Torres Nuñez del Prado is an artist who has been exploring the limits of visuality and sound, from the human voice, the sounds of nature (the river, the wind) and those whose listening is often considered less harmonious, such as machine noise, saturation or computer sounds. (...)

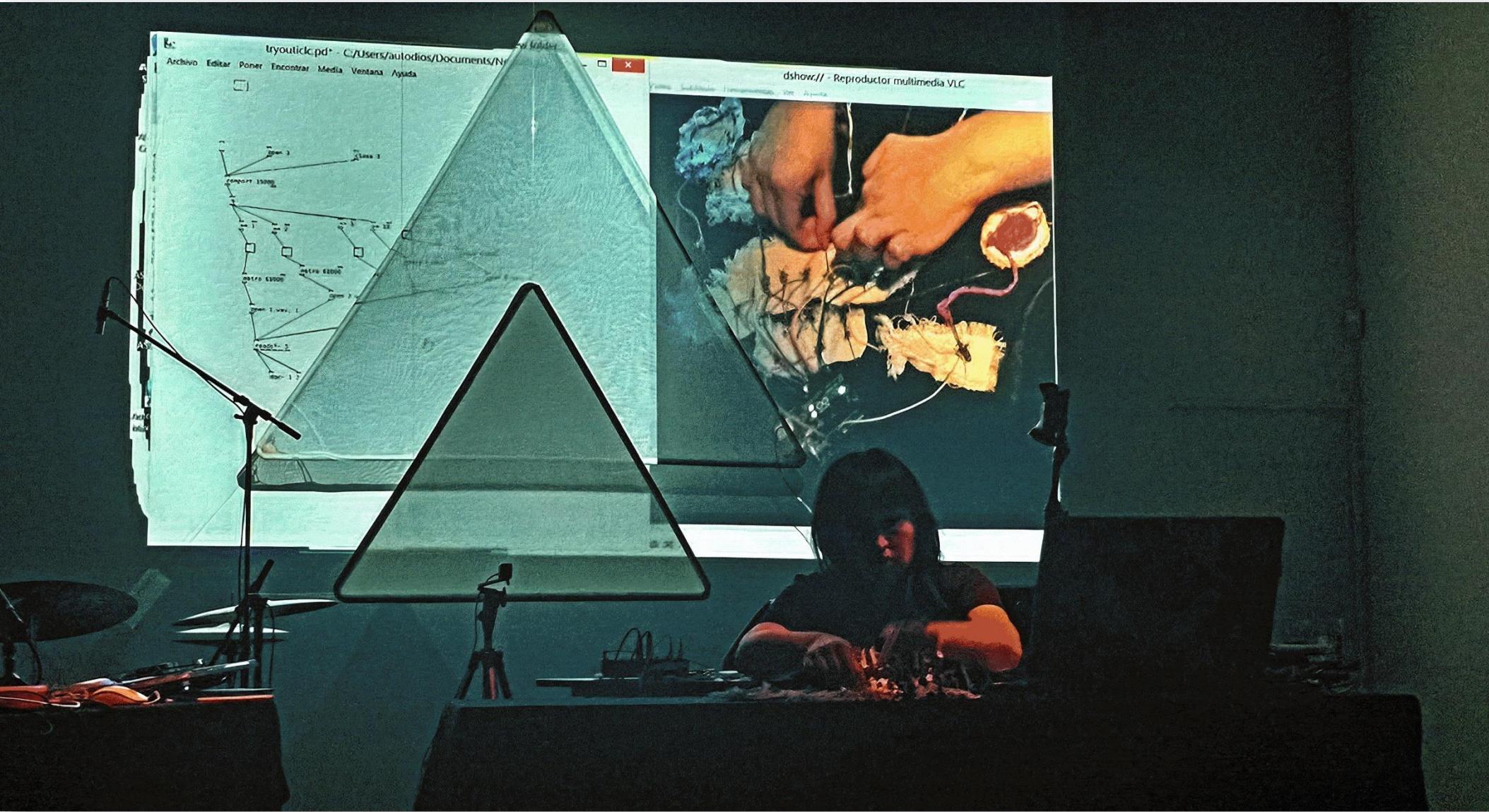
The artist offers the interactive use of sound as a language capable of giving meaning to the formal appreciation of art (...) Sonic Maps: Overlapping cities (Induced Performance, 2014) and previously in A Modern Housewife (2008) where the noise is produced through a modified iron and several garments that also includes a hand sewn corset."

*Olga Rodríguez-Ulloa
PhD in Hispanic Studies
Columbia University
NYC
2014*

"If there is something that characterizes the work of Paola Torres, it is the cross between programming codes, art and music, which is revealed in her latest performances in which the ancient quipus and the Andean and Amazonian textiles play a leading role."

*Jorge Paredes Laos
El Comercio Newspaper
2019*





TEXTILE PATCHING PERFORMANCE (2017 -) Live Coding Conference, MX

150,000 REASONS (NOT) TO BE A FEMALE ARTIST - Performance in Art Basel, next to Cattelan's controversial work, 2019



"Embroidery refers to traditional Peruvian textiles of the past and present where the pattern has been distorted by a contrasting sound, which has been added by displacing the original digital design that the embroidery creates.

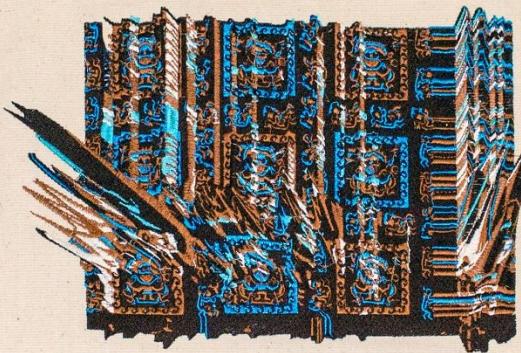
These Corrupt Structures show traditional knowledge destroyed in the process of searching for minerals or ancestral structures that have been deformed by colonialism."

*Helena Selder
Curator (Sweden)
Undertexter Textile Catalog
2016*



THE CORRUPTED STRUCTURES – Electronic embroideries whose designs are distorted by visualizations of various sounds







Tender Room

Performance with drone related to immigration, surveillance, and motherhood.





Keep your head down and walk! (2014)

Wearable for induced performance

"In (...) Kanobo: The Song's Path (2013), Paola establishes her creative endeavour around the songs of Shipibo, an ethnic group in the Peruvian Amazon. This interactive Installation combine Kene (Shipibo designs) and the extinct Brazilian Marajó culture of the Amazon, exploring the existing natural territoriality before the sovereign border. Here the artist acts as a shaman who, through a constant movement and much visual and sonorous stimulation, induces an almost psychotropic experience.

When a person enters the cubicle a pattern is generated that is reflected on each side of the space. This interaction produces distortion over the very pattern that symbolically functions as an analogue over the failure of human subjectivity and its intervention in the natural world. Her work with the Shipibos is part of a broader investigation that includes a reflection on conservation of the environment and the impact of oil extraction (The Empty Net, 2012). "

*Olga Rodríguez-Ulloa
PhD in Hispanic Studies
Columbia University
NYC
2014*

Kanobo/Infinite Frameworks (2013)

Interactive Audiovisual Experience



"Paola Torres builds what I call a knot of code, and plays with the frontier of understanding through the different senses; For example, you can be non-deaf, but you can hear the sound, however you do not understand it, you can be blind and you can understand the braille, but you do not understand the sound either ... Actually it is a game of many codes included in one single machine. Braille immediately refers to how the senses can limit the perception of certain things of reality. "

*Kiko Mayorga
Electronic Engineer and Co-curator of Automatic / Versatile
(Fundación Telefónica, 2008)*

"In the work Autorretrato (2007), Paola designs an Interactive Braille Installation that is presented as a "Painting for the Blind", seeking to deepen the relation between this disability and the traditional ways of approaching a painting, questioning the conventional ways of perceiving them. When visual experience is not possible the artist offers the interactive use of sound as a language capable of giving meaning to the formal appreciation of art."

*Olga Rodríguez-Ulloa
PhD in Hispanic Studies
Columbia University
NYC
2014*



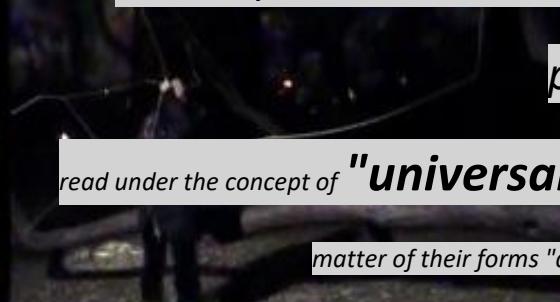
Autorretrato/Audioportrait (2007/2014)

Tactile translations of visuals to sound

"Principio Vegetal" on Khipu Performance in Central Park, 2004, Elisa Arca - Revista Ansible, 2018: "The **intrinsic unity** of all things is



work to the idea of a **pattern** that spontaneously (and similarly) replicates in the various **structures** present in the



plant life. Both the action in Central Park and some of her later works can



read under the concept of "**universal intellect**", which Giordano Bruno describes as "what permeates the



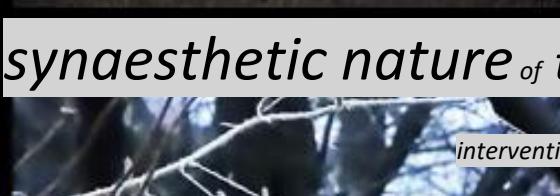
matter of their forms "and which is comparable to the organized production of rational human beings.



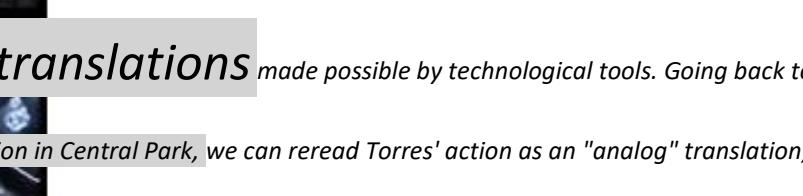
(Bruno 2010: 75). **This rationality** of forms can, and indeed are, the case with Torres' work,



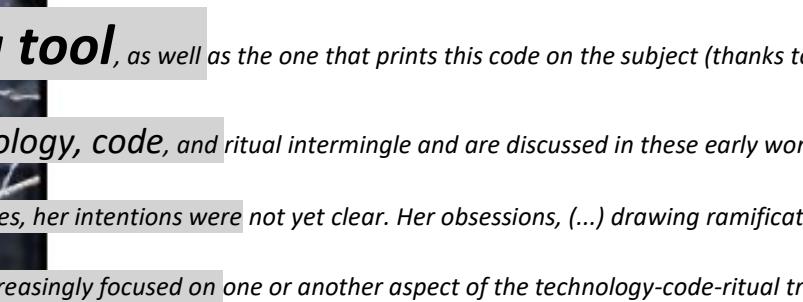
expressed through **codes** that are no more than **possible translations of the same phenomenon**. The



technology in this process becomes an ally when it comes to exploring the possibilities that



coding offers. Also, in the project she carried out in 2004, called Musical Coordinates, Paola



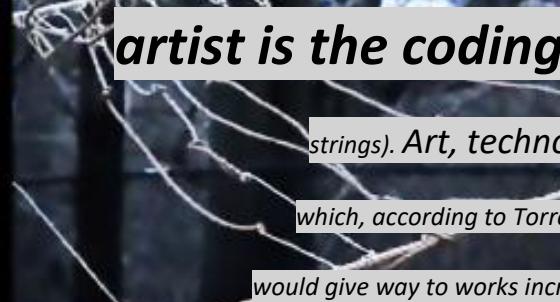
Torres projected **light** onto taut strings across a space, in musical notes, emphasizing the



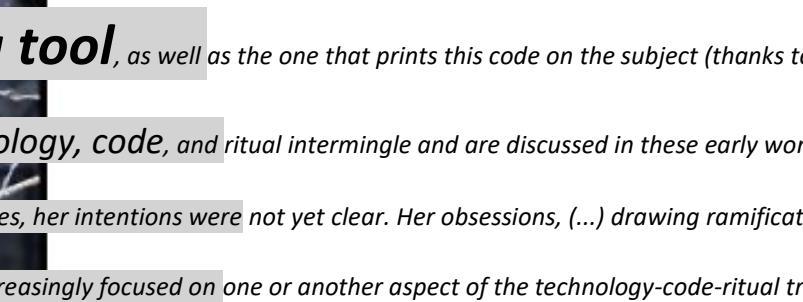
synaesthetic nature of translations made possible by technological tools. Going back to the



intervention in Central Park, we can reread Torres' action as an "analog" translation; The



artist is the coding tool, as well as the one that prints this code on the subject (thanks to the



strings). Art, technology, code, and ritual intermingle and are discussed in these early works in



which, according to Torres, her intentions were not yet clear. Her obsessions, (...) drawing ramifications,



would give way to works increasingly focused on one or another aspect of the technology-code-ritual triad."

LINKS AND MORE INFO:

<https://autodios.github.io/>

<https://www.singingtextiles.com>

https://artsandculture.google.com/story/DwWhq_x7q_L2ZQ

<https://www.youtube.com/watch?v=XSBUQ-IUKYko>

<https://vimeo.com/59113254>

<https://vimeo.com/108711513>

<https://vimeo.com/13926140>

<https://vimeo.com/59278401>

<https://vimeo.com/117045001>

<https://vimeo.com/15241315>

<https://vimeo.com/182642738>

https://www.youtube.com/watch?v=sELrbGz_krQ

<https://autodios.github.io/info/ModernHousewife.html>

<https://vimeo.com/427634862>

<https://vimeo.com/444243666>

<https://vimeo.com/375159011>

<https://vimeo.com/390439999>