CORA Cork Open Research Archive
Cartlann Taighde Oscailte Chorcaí

Title	Indices Online
Authors	Roddy, Stephen;Nancy, Jean-Luc;De Pinto, Pier Giorgio;Lupi, Ivan
Publication date	2020-07-25
Original Citation	Roddy, S, Nancy, J-L, De Pinto, P G & Lupi, I 2020, 'Indices Online', Paper presented at Nime 2020, Birmingham, United Kingdom, 21/07/20 - 25/07/20 pp. 1-3.
Type of publication	Conference item
Link to publisher's version	https://www.nime.org/web_archive/2020/home/index.html
Rights	© 2020, the Authors/Creators.
Download date	2026-11-03 00:14:50
Item downloaded from	https://hdl.handle.net/10468/19006

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

Title: Indices Online

Title: Indices Online

Abstract
This piece is an online sound installation that uses machine learning techniques to reflect on the interplay of the artist and the artefact in the context of technologically mediated arts collaborations. This project grew in dialogue with another ongoing project titled 58+1 Indices on the body. That project is a collaboration between the artistic collective AMAE and the artist Pier Giorgio De Pinto and philosopher Jean-luc Nancy to which the creator of this installation ahs also contributed. The piece asks what happens to the body when we begin to rely heavily on disembodied technology to mediate our communication and art-making and critically it explores how meaning changes as the artefact transforms across media.

Description:
This project grew in dialogue with another ongoing project titled 58+1 Indices on the body. That project is a collaboration between the artistic collective AMAE and the artist Pier Giorgio De Pinto and philosopher Jean-luc Nancy. This project focuses on Nancy's 58 indices sur le corps (58 indices on the body), written in 2006 by Jean-Luc Nancy presented in his book Corpus. The project combines performances, videos, interactive installations and collaborations with a large and varied group of artists. As part of this project Jean Luc Nancy recorded himself reading his 58 indices on the body, he also wrote an additional index specifically for the project. The project presented here grew out of a collaboration with AMAE, Pier Giorgio De Pinto and Jean Luc Nancy in which the artist originally set some of these indices to music in 2015. The result was a piece that the collaborators were invited to present during the Helicotrema festival at the Francois Pinault Foundation in Venice alongside La Biennale events taking place throughout the city.

Later the artist recorded additional Soundworks and musical pieces incorporating Nancy's indexes, a portion of which will be set to dance as part of the 63 Videos on the Body project.

The current piece collects all of the artists sonic/musical work for the project to date. These works are presented in the form of a web app. The audience is invited to listen to the pieces, and reflect on the indices which have been translated into English from Nancy's native French by Richard A. Rand for the Perspectives in Continental Philosophy Series.

The text is analysed using a machine learning model for sentiment analysis (implemented in ml5.js). This analysis returns a value on a scale of 0 (negative) to 1 (positive).
This sentiment is reflected in the color of the waveform that is drawn across on the screen.

The piece is a reflection on translations across languages, vocalisation, and technologies.
The original indices were written in French. Jean-luc Nancy's reading of them introduces a new layer of meaning through his use of prosody and intonation.

We are presented with English translations of the text that must to some degree reflect the choices and interpretations of the translator. The sentiment analysis introduces an additional layer of meaning/distortion. It does not always represent the translated text very well and rarely represents the information conveyed in Nancy's vocalisations in the original French. The choice of color in reflecting the sentiment values introduce further culturally conditioned ideas about sentiment and emotion. It also the crude nature of the original model which aims to represent sentiment along a linear scale from positive to negative: 0-1. The use of sonic and musical materials to frame the texts introduces yet another layer of meanings and distortions. The soundworlds evoked do not always match the indices, sometimes they are built around the ebb and flow of Nancy's vocalisations as he reads, other times they seem completely random. All of this again is filtered through the artist's specific presentation of these materials. The design and technical implementation of the application along with their interpretation of Nancy's speech and the choices in the design and composition of the soundworlds. All of these introduce layers of meaning and distortion particular to the artist. Rarely are the voice, sound and sentiment analysis in harmony with one another.
This discordant configuration however is in perfect harmony with Nancy's vision of the human body as expressed in his indices. As Nancy comments in index 46:
"Why indices? Because there's no totality to the body, no synthetic unity. There are pieces, zones, fragments. There's one bit after another, a stomach, an eyelash, a thumb-nail, a shoulder, a breast, a nose, an upper intestine, a choledoch, a pancreas: anatomy is endless, until eventually running into an exhaustive enumeration of cells. But this doesn't yield a totality..."

Directions:

1. Follow link for the Desktop version: Desktop
2. Follow link for the Mobile version:: Mobile
3. Wait for the page to load.
4. Press ‘Play Index’ to hear a random index, view the waveform and see the translation.
5. Press ‘Play Index’ again for another one. All but one of the audio files is associated to an index.

Technical/Performance Requirements: The audio is mixed for a standard stereo setup.
The entire performance is available as a web app. The piece can be installed using two stereo speakers and a screen at the conference/festival (screen can be provided by the artist).
The piece can also be made available for the audience to experience at the conference online via the Web App.
This can be launched locally from a laptop or accessed online during the performance.
(The implementation of the visuals will be furthered refined before the performance but the chosen aesthetic will remain intact.)

Feasibility: The installation is feasible. It already exists an you can try it out for yourself by following the links

Directions

6. Follow link for the Desktop version: Desktop
7. Follow link for the Mobile version:: Mobile
8. Wait for the page to load.
9. Press ‘Play Index’ to hear a random index, view the waveform and see the translation.
10. Press ‘Play Index’ again for another one. All but one of the audio files is associated to an index.

Atist Bio:
Stephen Roddy is a Human-computer Interaction (HCI) Researcher and Developer working at the intersection of Computer Science and the Digital Arts. He is a Research Fellow in the Electronics and Electrical Engineering Department at Trinity College Dublin. His research explores novel strategies for representing and interacting with complex multivariate data in both HCI and creative arts contexts. He is currently working on the application of artificial intelligence and machine learning (AI/ML) principles to gestural control/embodied interaction for physical computing systems, data visualisation and auditory display systems. Stephen recently completed an IRC postdoctoral project at the Connect Centre in Trinity College Dublin which explored the development of AI/ML driven, Visualisation and Auditory Display/Sonification solutions for Large-scale Internet of Things (IoT) Networks and Smart City Data.

Stephen adopts an empirical and multidisciplinary approach to research. His interests include HCI & interaction design, IoT, multimodal data analytics, auditory display, sonification, computer music, sound art, sound design, and the application of AI/ML principles in both HCI and creative arts contexts. His work has been widely disseminated through peer-reviewed journal publications, book chapters, and conferences.

Stephen also produces multimedia performances, creative works, and art installations as well as tools and systems for the creative and cultural industries. These include augmented/mixed reality experiences and installations, computer music and sound art pieces, and automated systems for live electronic music and sound art performance contexts. Previous projects have been debuted at the Helicotrema Recorded Audio Festival in Venice, the Contemporary Music Centre’s Salon Series at the National Concert Hall of Ireland and Dublin Dance Festival's Embodied at the GPO and the Sonorities Contemporary Music Festival.