



the
universe
is a
flower
of rhetoric

Tim Richardson

Well into

Seminar XX: Encore

Jacques Lacan
enigmatically claims,
“The universe is a flower
of rhetoric.” He doesn’t
elaborate and, for this
project, I’m not really
interested in what he
means.

Instead, I want to make

A Flower of Rhetoric

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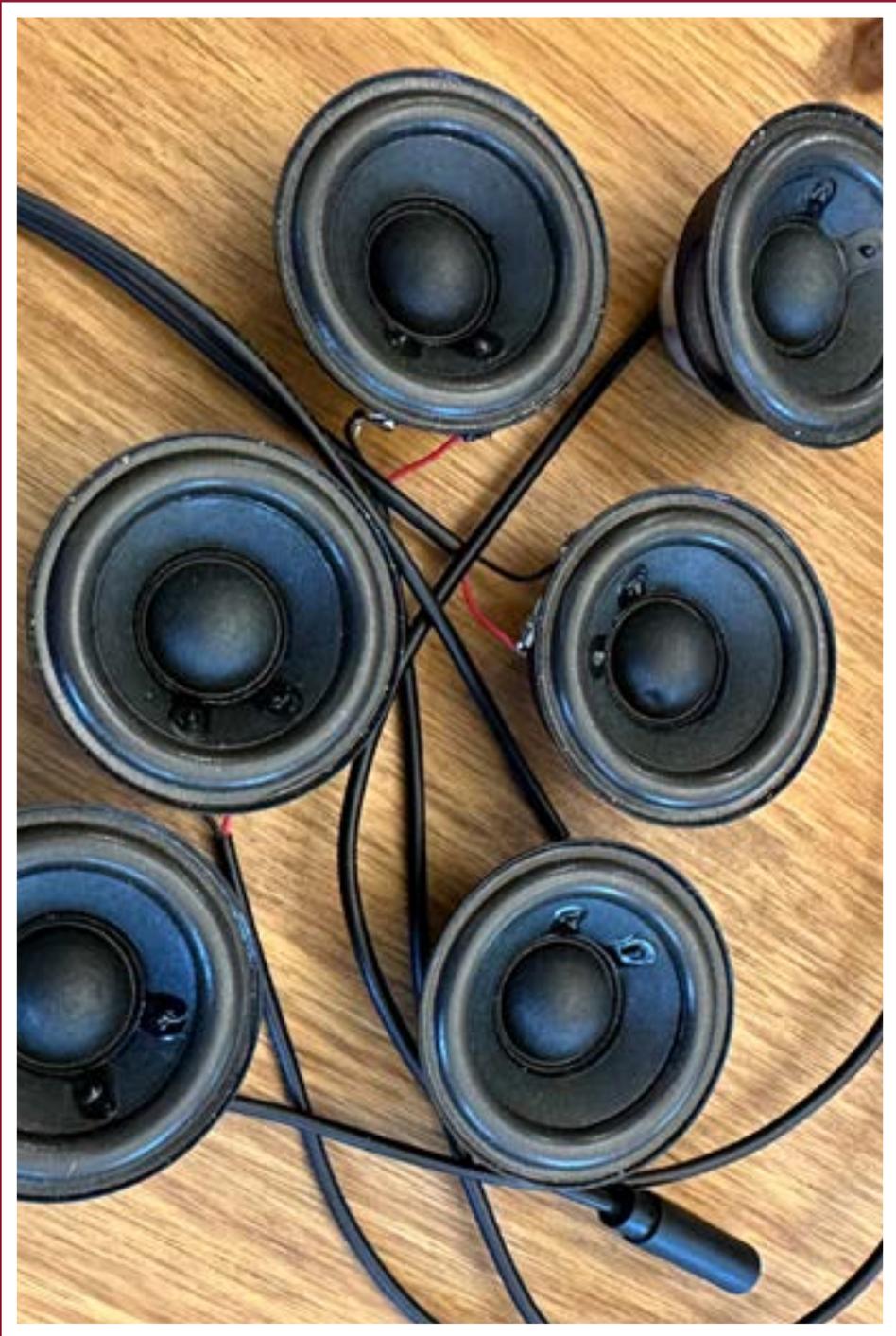
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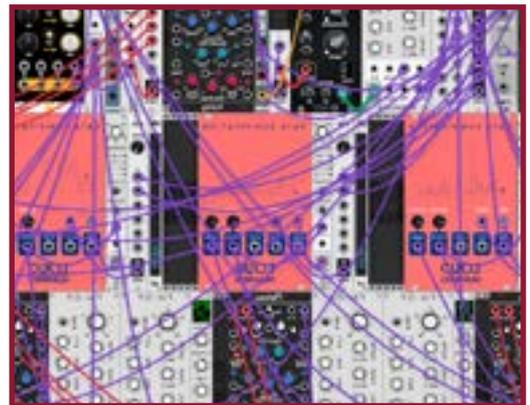


Introduction

what it is, and why

In *How to Make Art at the End of the World*, Natalie Loveless insists on research-creation as a valuable and productive means of academic exploration in an inter- or transdisciplinary manner. My project aims to make Lacan's statement literal by producing a physical object that resembles something vegetal, but that also renders data sonically. It was begun alongside students' projects for our Spring 2023 graduate course, ENGL 6350: Ambience & Rhetoric and was funded by a CoLA Faculty Research Endowment Award.

The goals for this work are several. Producing keywords from across a large selection of works (in this case, the texts for our Spring 2023 "Rhetoric & Ambience" graduate course) and generating translatable data from them are standard practices in the digital humanities. The apparatus, the Flower of Rhetoric, gives a body and voice to this data. Sounds from small speakers are quiet so that, while it is common to come close to smell flowers, these require bringing your ear to them. The effect is to bring the texts we explored over the course of a semester out of their syllabus sequence and to be with them in a different, non-narrative way.



Disciplinary approaches are, more often than not, organized by morals and not ethics precisely to the degree that they think they know the parameters of the question and the appropriate form for the answer.

Natalie Loveless (HOW TO MAKE ART AT THE END OF THE WORLD, 2019)

The Process

how it's made

World, New, Work, Research, and Human. According to the free text analysis software [Voyant Tools](#), these are the most frequent keywords across the readings for our Spring 2023 graduate course, ENGL 6350: Rhetoric & Ambience (front matter and Works Cited pages were removed to focus on the bodies of the works).

world (1291 times)

new (775 times)

work (733 times)

research (732 times)

human (702 times)

Using Voyant, these words were organized by the phrases in which they are used. A phrase is a group of two or more words that is used two or more times. For instance, the word used most often across the texts was “world,” at 1291 times. The phrase “world as we know it” is used four times (that’s more than two) across all the texts for the course and consists of five words (also more than two).

For each of the five keywords surfaced by Voyant – world, new, work, research, and human - two sets of data were collected: the number of words for each distinct phrase (two and up) and the number of times each distinct phrase was used (two times and up). In order to represent both sets of data in one string of comma separated values (.csv) for each of the five words, the number of times a phrase was used was sorted by the number of words in the phrase (the length of the phrase from shortest to longest). For “world,” this meant 165 distinct phrases.

This collated phrase data from Voyant (in .csv format) for each of the five words was then imported into the free virtual Eurorack software [VCV Rack](#) using five instances of the free module [Loud Numbers](#) by the data sonification company of the same name. As the project plays, each module is clocked by the same (virtual) low frequency oscillator set at 0.1 hz, but otherwise runs independently of the other tracks. These modules convert the collated phrase data for each word to virtual “control voltage” that other modules can work with. The control voltage output by each of these five instances of Loud Numbers is sent to its own sound source, a voltage-controlled oscillator – vco - in VCV Rack.

Each of the five voltage-controlled oscillators (one for each keyword) has been assigned a musical note. Musical notes often conform to a musical scale. In 2003, astronomers at the Institute of Astronomy in Cambridge offered sonified data of the longest radiation wave issued from an observable massive black hole. The resulting note was a b-flat that “is 57 octaves below middle C or one million, billion times lower than the lowest

**An ambience is defined
as an atmosphere, or a
surrounding influence:
a tint....**

Brian Eno (from the liner notes for MUSIC FOR AIRPORTS, 1978)

The Process (continued)

sound audible to the human ear” (NASA). So, to bring the universe of the Lacan line to this flower of rhetoric, I chose five notes from the b-flat major scale, one for each of the five words. Pitched 59 octaves up, “world” is B-flat, “new” is C, “work” is E-flat, “research” is F, and “human” is A-flat.

The data translated to control voltage by Loud Numbers determines the speed at which the notes are played – the tempo - for each of the five audio tracks.

world (165 phrases)

new (106 phrases)

work (69 phrases)

research (111 phrases)

human (87 phrases)

The more often the phrase appears, the more quickly the track plays its note. So that each track doesn’t simply begin slowly (at two instances of a phrase) and then speed up (three instances, four instances, etc.), the sequence of the tempo data has been determined by the length of the phrases using the given word (from shortest to the longest, as described above). Thus, variations in tempo for each audio track are the result of the tempo data being organized by the length of phrase.

Each of the five words is its own audio track and is output on its own channel to a pair of speakers (there are 10 speakers total, two per word-note). After the track presenting the word with the most phrases – “world” – finishes its run, a chord of all five notes is played across all five channels and the process resets and plays again.

The physical apparatus was constructed from inexpensive 2-inch speakers soldered to 3.5mm input jacks and attached to 4-foot wooden dowels via metal clamps custom-made by artist [Darryl Lauster](#). Patch cables were inserted into the 3.5mm input jacks and wrapped around the dowels. The base is a premade 10x10x10-inch wooden box with a hinged lid. A larger hole was cut into the top of the box for inserting the dowels and a smaller hole was made on the side for the power cable. Inside the box, a piece of wood with holes drilled for the dowels was attached to the bottom. A small computer running Windows 11 and the VCV Rack software, a touch screen

**[T]he intent of designing
interplay is not to fix
positions but to initiate
interactivity - to disrupt
loops and binaries....**

Keller Easterling (MEDIUM DESIGN, 2021)

The Process (continued)

for interacting with the computer, a 5.1 channel usb audio interface, and a usb light strip were affixed to the sides.

Interaction with the object both generates echoes that extend the ambience of the place in which it is situated and modulates the sound of the notes, making them sound “brighter.” The result is a kind of distant reading - or hearing - that creates a context for the keywords from relationships that are non-narrative (so, different from the ways a syllabus makes an argument) and at any moment are only ever partially apprehended. And the translation of words to musical notes forces a shift of disciplinary approach. Interdisciplinarity is a hallmark for research-creation.



**Listening shapes culture,
locally and universally.**

**Listening is directing
attention to what
is heard, gathering
meaning, interpreting
and deciding on action.**

Pauline Oliveros (QUANTUM LISTENING, 2010)

Software & Texts

the stuff I used

Software:

- [Voyant Tools](#)
- [VCV Rack](#) & various modules

Hardware:

- desktop mini-pc running Windows 11 Pro, 5.1 channel usb sound card, & 7" touch screen
- wooden dowels, wooden box, patch cables & splitters, 2" speakers, clamps fabricated by Darryl Lauster (thank you!)

Texts (in the order they appeared on the syllabus):

Rickert, Thomas. *Ambient Rhetoric: The Attunements of Rhetorical Being*. U of Pittsburgh P, 2013.

Vanheule, Stijn. "Capitalist Discourse, Subjectivity and Lacanian Psychoanalysis." *Frontiers in Psychology*, vol. 7, 2016.

Holland, John. "The Capitalist Uncanny." *S: Journal of the Circle for Lacanian Ideology Critique* 8 (2015): 96-124.

Loveless, Natalie. *How to Make Art at the End of the World: A Manifesto for Research-Creation*. Duke UP Books, 2019.

Easterling, Keller. *Medium Design: Knowing How to Work on the World*. Verso Books, 2021.

(from) Barnett, Scot, and Casey Boyle. *Rhetoric, Through Everyday Things*. U of Alabama P, 2016.

- "Listening to Strange Strangers, Modifying Dreams" (Marilyn M. Cooper)
- "Alinea Phenomenology: Cookery as Flat Ontography" (Katie Zabrowski)
- "Writing Devices" (Donnie Johnson Sackey & William Hart-Davidson)
- "The Material Culture of Writing: Objects, Habitats, and Identities in Practice" (Cydney Alexis)
- "Circulatory Intensities: Take a Book, Return a Book" (Brian McNely)
- "So Close, Yet So Far Away: Temporal Pastiche and Dear Photograph" (Kim Lacey)

If we ride harder on the precepts of ambience, it must be the case that transformations in the world will transform us, including how the world will come to disclose itself to us and through us....

Thomas Rickert (AMBIENT RHETORIC, 2013)

Software & Texts (continued)

- “Assemblage Rhetorics: Creating New Frameworks for Rhetorical Action” (Jodie Nicotra)
- “Encomium of QWERTY” (James J. Brown Jr. & Nathaniel A. Rivers)

Dunne, Anthony, and Fiona Raby. *Speculative Everything: Design, Fiction, and Social Dreaming*. MIT P, 2013.

(from) Lacey, Jordan. “Unlikely Issue 06: Translating Ambiance.” *Unlikely*, unlikely.net.au/issues/issue-06.

- “A Brief Archaeology of the Notion of Ambiance” (Jean-Paul Thibaud)
- “Sounding through Touch” (Cindy Yuen-Zhe Chen)
- “For we are made of lines” (Traci Kelly & Rhiannon Jones)
- “Sensory Modalities of the Sonic Frame” (David Chesworth)
- “Go Live in the Middle of Nowhere Obviously” (Mark Peter Wright)
- “Drips in the Underground: Creatively Activating Urban Ambiances” (Kristen Sharp)
- “Abstract Everywhere: Dressing in Electromagnetic Atmospheres” (Erin Lewis)
- “Intermittent Space: Sound, Violence, Ambiance and Affective Politics of Fear in Contemporary Mexico” (Luz María Sánchez Cardona)
- “COLD: translating the ambiance of rivulets into air-conditioners” (Jordan Lacey)