



feral feminisms

**Hacking the Anthropocene:  
Do-It-Together (DIT)**

issue 10 · fall 2021

## Mitochondrial Crossings

*prOphecy sun, Freya Zinovieff, Gabriela Aceves-Sepulveda, and Steve DiPaola*

Image: Steve DiPaola

Sound Composition and Remix: prOphecy sun

Listen: <https://soundcloud.com/prophecy-sun/mitochondrial-crossings>

*Sounds continually fill the urban and rural, terrestrial, and subterranean, airborne, or underwater environment with an overabundance of noise from a myriad of sources, products, infrastructures, and electronic devices (Langeveld et al. 2013). This acoustic information obscures and diminishes the human and non-human ability to hear subtle or nuanced tones, frequencies, and variations, and our built environments hide almost all of the high or low frequency ranges unless they are forefronted by musical or other ultrasonic techniques (Sarvaiya 2017). Based on ongoing research into mothering as an act of human and non-human care (Sun et al. 2019) (see Fig. 1), Mitochondrial Crossings (2020) explores the potential of collective sound-making to make audible our shared acoustic environment. The six-minute composition consists of processed voice, breath, granulated tones, and remixed samples from incubated, growing bacteria. This work questions how might sameness and difference be managed and nurtured? What sounds rise to the fore, and which ones are excluded, marginalized, or ignored? How do sounds advance thresholds and cross borders? And how can listening act as a form of activism or care (Woloshyn 2018; Voegelin 2014; Zinovieff and Aceves 2020)?*

### Lineage

*Mitochondrial Crossings* (2020) is part two of a series of sound works that are passed from artist to artist in an ongoing process of remix and iteration. The project explores the idea of decolonial listening, in relation to two maternal bodies situated in the settler colonial landscapes of Canada. Mitochondria are the parts of a cell that regulate balance, and mitochondrial DNA is passed through the maternal lineage and is regulated by epigenetic processes (Cavalcante et al. 2020, 1838 – 9). This means that environment, stress levels, sound, experiences, and even the food that we eat can affect the ways that cellular lineage is passed on to future generations. Like the process of ancestral lineage through which the Mitochondria evolves, each soundscore we create is built upon the one before it.<sup>1</sup>

In concurrence with Zoe Todd and Heather Davis (2017, 762), we define the Anthropocene in relation to the violent systems of capitalism and white supremacy and draw attention to listening as a practice that has the potential to awaken us to the colonial power dynamics and settler relations in British Columbia, Canada. Following Zoë Dankert and Rolando Vázquez's (2019, 149) ideas about decolonial listening, and their argument that the "task of listening is the task of bridging the colonial difference," we argue that to listen deeply is to connect at a visceral level, with stories, histories, and ways of being in the urban landscape.



We suggest that this practice is an enactment of care and of activism that fosters an intent to enquire into the relations between Self and Other (Woloshyn 2018, 29; Voegelin 2014, 9; Zinovieff and Aceves Sepúlveda 2020).

We propose that sound's ability to permeate matter offers up a provocation to cultivate a listening practice that actively participates in the dissolution of boundaries, borders, and unequal dynamics of power that serve only a few, to co-create imagined futures, and work together towards being "good ancestors" (Saad 2020, 171).

### Nomadic Temporalities

Inspired by Rosi Braidotti's (2011, 12) writings on nomadic temporality and spatial sites of co-production, and Donna Haraway's (2006, 151) notions on post-humanistic relationality, *Mitochondrial Crossings* (2020), consists of a six-minute multimodal sonic composition that explores nomadic, liminal and temporal bodies moving through the urban landscape (Braidotti 2011, 55; de Certeau 2011, 91-92). The piece is multidirectional, made up of looped granulated sequences that feature voice, breath, anthropophagic, geophonic, and biophonic sounds alongside remixed, repurposed, processed digital samples of incubated, growing bacteria. The samples are remixed from what we call the Mothered source—the initial sound composition from the first collective project *Mothering Bacteria* (2019, see note 1).

The new sound piece that is *Mitochondrial Crossings* reverberates on a variegated frequency that transitions between technological systems, networks, and place (Mitchell and Hansen 2010, 172; Braidotti 2011, 25; Haraway 2006, 150). Indeed, this lifeforce has been collectively shaped—birthed from metals, earth elements, minerals and molecules that can time travel through the air and through a plethora of network cables hidden beneath our feet or sprawled along the ocean floors (Parikka 2013, 19; Starosielski 2015, 1; Sun et al. 2017; 47).

Much like a *flâneuse*—a female form breathing new life in space—*Mitochondrial Crossings* is nomadic and beats, folds and reshapes location, time, and space at its own pace. In the same way, we intend for the digital imagery of a human body to be recalibrated using AI computational tools (see Fig. 1).<sup>c</sup> Importantly, this form is not topically bound in the same way as the Mother—restrained by perceptual notions of place (gallery), form (digital soundtrack), and location (installation) (Lefebvre 1991, 170; Sun et al. 2019, 456). Instead, it lives in an advantageous continual state of remediation, actualization, potentiality, and crossing. In this way, we argue that this new mitochondrial entity is always in a state of becoming (Braidotti 2011, 151).

### A Manifesto for Mitochondrial Crossings

This text is the prelude to a forthcoming manifesto for *Mitochondrial Crossings* (2020) that will appear alongside a series of time-based sound compositions that will be published in journals and other creative forums. Building on the work of Maria Puig de la Bellasca, Astrida Neimanis and Jennifer Hamilton, and Kate Mondloch and Rosi Braidotti, we take a Feminist Materialist approach to the expansive network of relations that weave through human and non-human bodies that co-construct technologically-mediated sound creation and practices of listening (de la Bellasca 2018, 280; Mondloch 2018, 15; Braidotti 2014, 172).<sup>3</sup> Using our creative praxis to inform the theoretical underpinnings of this work, and vice versa, we embrace



feral feminisms

## Hacking the Anthropocene: Do-It-Together (DIT)

issue 10 · fall 2021

Mitochondrial Crossings  
prOphecy sun, Freya Zinovieff,  
Gabriela Aceves-Sepulveda, and Steve DiPaola

expansive systems and temporalities, complicate linear narratives, and draw attention to colonial histories.

Drawing on Brandon LaBelle's (2015, 4) argument that sound documents connection, we want to provoke the act of listening. We ask how the concept and practice of connection can be extended to one another in varying degrees and situations, and how we can negotiate the challenges of an increasingly disrupted planet. Using the sonic stream as a way to reimagine the perceptions that might divide, or connect Self and Other (Feral Feminisms, CFP), we invite readers and listeners to engage with their own urban surroundings. We invite everyday acts of listening that add, ignite, reimagine, queer, complicate collective imagining, and cosmic vibrations on what the Anthropocene narrative is becoming (Braidotti 2014, 169). It is crucial, in fact, that we sonically open up, reform, and reinvent processes that disrupt the *Homo destroyer* paradigm.



Figure 1. Process shot courtesy of Gabriela Aceves-Sepulveda, prOphecy sun, Freya Zinovieff, and Steve DiPaola, 2019-ongoing. The image presented along with the sound composition, *Mitochondrial Crossings*, is a remedi-ated rendition of a nomadic form in flux. The image is of one of the artists and was rebuilt using AI techniques including genetic programming, Neural Nets, and Deep Learning. This is a colla-borative process between a computer, biology, and the mothered body.

NOTES



1. *Mitochondrial Crossings* (2020) is the creative offspring of *Mothering Bacteria* (2019). *Mothering Bacteria* is a three-channel, 60-minute immersive audio and video installation that explores notions of caretaking bacteria that reside on and off human skin. This ongoing collaboration explores the relationships between particular bodies that are mothers and bacteria. Through the symbiotic process of caring for one another, we suggest that the porous boundaries between Self and Other break down (Sun et al. 2019, 456). See the work in another format:  
<https://protect-au.mimecast.com/s/N8UXCxnMJ5s1KLjzWC8wCnT?domain=dl.acm.org>
2. Michel de Certeau writes about the practice of the everyday and how *flâneurs* are liberators of form and structure because they roam, bypass, re-shape, alter, and breathe new life into the city (de Certeau 1984, 91).
3. Kate Mondloch (2018, 9) suggests that Feminist Materialism embraces fluid systems between bodies, objects, and technologies.

#### Works Cited

- Braidotti, Rosi. 2011. *Nomadic Theory: The Portable Rosi Braidotti*. New York: Columbia University Press.
- Braidotti, Rosi. 2014. "Writing as a nomadic subject." *Comparative Critical Studies* 11(2-3): 163-184.  
<https://www.eupublishing.com/doi/abs/10.3366/ccs.2014.0122?journalCode=ccs>
- Cavalcante, Giovanna C., Leandro Magalhães, Ândrea Ribeiro-dos-Santos, and Amanda F. Vidal. 2020. "Mitochondrial Epigenetics: Non-Coding RNAs as a Novel Layer of Complexity." *International Journal of Molecular Sciences* 21, 5:  
<https://www.proquest.com/openview/3f447a971300b580cb770cca16bf2f13/1?pq-origsite=gscholar&cbl=2032341>
- Dankert, Zoë, and Rolando Vázquez. 2019. "Decolonial Listening." *Soapbox Journal*, 1(10): 147-156.  
<https://www.soapboxjournal.net/print-editions/1-1-practices-of-listening>
- Davis, Heather, and Zoe Todd. 2017. "On the Importance of a Date, or, Decolonizing the Anthropocene." *ACME: An International Journal for Critical Geographies* 16 (4): 761-80.  
<https://acme-journal.org/index.php/acme/article/view/1539>
- de Certeau Michel. 2011. *Practice of Everyday Life*. Berkeley: University of California Press.
- Feral Feminisms. 2020. "Feral feminisms CFPs." Accessed September 26, 2020.  
<https://feralfeminisms.com/cfps/>.
- Haraway, Donna. 2006. "A cyborg manifesto: Science, technology, and socialist-feminism in the late 20th century." In *The International Handbook of Virtual Learning Environments*, 117-158. Springer, Dordrecht, Netherlands: Springer Nature BV.
- LaBelle, Brandon. 2015. *Background Noise: Perspectives on Sound Art*. London: Bloomsbury.
- Lefebvre, Henri. 1991. *The production of space*. Translated by Donald Nicholson-Smith Oxford: Blackwell.
- Mitchell, William John Thomas, and Mark BN Hansen. 2010. *Critical Terms for Media Studies*. Chicago: University of Chicago Press.
- Mondloch, Kate. 2018. *A Capsule Aesthetic: Feminist Materialisms in New Media Art*. Minneapolis: University of Minnesota Press.
- Oliveros, Pauline. 2003. *Deep Listening: A Composer's Sound Practice*. New York: Deep Listening



Institute.

- Parikka, Jussi. 2013. *What is Media Archaeology?* Hoboken, New Jersey: John Wiley & Sons.
- Saad, Layla. 2020. *Me and White Supremacy*. Chicago: Sourcebooks.
- Starosielski, Nicole. 2015. *The Undersea Network*. Durham, North Carolina: Duke University Press.
- Sun, Prophecy, Freya Zinovieff, and Gabriela Aceves-Sepulveda. 2019. "Mothering Bacteria: A Speculative Forecast of the Body as an Interface." In *Proceedings of the 2019 on Creativity and Cognition*, 455-460.
- Voegelin, Salomé. 2014. *Sonic Possible Worlds: Hearing the Continuum of Sound*. New York: Bloomsbury Publishing USA.
- Woloshyn, Alexa. 2018. "Brandon LaBelle, Sonic Agency: Sound and Emergent Forms of Resistance." London: Goldsmiths Press, 2018. *Organised Sound* 23, (3),308-309.
- Zinovieff, Freya, and Gabriela Aceves Sepúlveda. 2020. "Listening Geopolitics and the Anthropocene Contact Zones of the Bali and Georgia Strait." *Leonardo Music Journal* 30: 114-118.  
[https://doi.org/10.1162/lmj\\_a\\_01103](https://doi.org/10.1162/lmj_a_01103).

prOphecy sun (PhD) is an interdisciplinary performance artist, movement, video, sound maker, and mother. Her practice celebrates both conscious and unconscious moments and the vulnerable spaces of the in-between in which art, performance, and life overlap. She performs and exhibits regularly in local, national, and international settings, music festivals, galleries, and has authored several articles, book chapters, and journal publications. Visit her on **Instagram** at <https://www.instagram.com/prophecysun/> and on **Twitter** at <https://twitter.com/prOphecysun>.

FREYA ZINOVIEFF is an artist and Ph.D. student at the School of Interactive Arts and Technology at Simon Fraser University, Canada. Her research looks at the entanglements between technologies, species, and the Earth System, specifically in Borderlands, through the creation of Speculative Sonic Fictions, and ethnographies that illuminate the boundaries between the political and the ecological.

GABRIELA ACEVES SEPÚLVEDA (PhD) is a media artist and Assistant Professor at the School of Interactive Arts and Technology at SFU, where she directs cMAS <https://criticalmediartstudio.com/>. She is the author of the award-winning book *Women Made Visibly: Feminist Art and Media in post-1968 Mexico* (2019). Her research-creation projects investigate the intersections of art and technology from a feminist perspective. Visit her on **Instagram** at <https://www.instagram.com/gasaceves>.

STEVE DiPAOLA (PhD), active as both an artist and scientist is past director of the Cognitive Science Program at SFU and leads the iVizLab (<https://ivizlab.sfu.ca/>), a research lab that creates "human experience"-based computational systems that incorporate biology, cognition, and behavior in AI models. His digital artwork is shown internationally including at the MOMA, MIT Museum, and the Whitney Museum of Art. Visit him on **Instagram** at <https://www.instagram.com/steve.dipaola> and on **Twitter** at <https://twitter.com/DipaolaSteve>.