About the Artists

ANANDA GABO is an interdisciplinary designer who has been exploring synthetic biology, manufacturing, food design, and community building for ten years. Their current work focuses on their practice called "Critical Crafting" which is a manifestation of producing objects through the nuances of craft by creating prototypes for speculative manufacturing. They are currently partnering with industry practitioners to imagine near-future scenarios of prototyping. Ananda has been a Community Bio Fellow in 2019 at MIT Media Lab, an Ada Lovelace Fellow at Open Science Hardware Summit 2020, and a judge for iGEM (Internationally Genetically Engineered Machine) 2020.

ANASTASIYA YATSUK is a multidisciplinary artist, curator, and fashion designer. Her work explores mapping, guestioning of the medium, and social pattern analysis. Born in Russia, Anastasiya studied Journalism at Belgorod State University before transferring to College of Design, Architecture, and Planning at the University of Cincinnati, where she graduated with a Bachelor's Degree in Fine Arts. She has been working as a Creative Director and Fashion Designer for her clothing line, TEXTILEHAUS where she uses different textiles/textile treatments to create a cohesive line for each season. She is currently based in San Francisco and collaborates with the creative community to question branding, consumerism, and sustainable production.

KEELEY HAFTNER is a Saskatchewanian-Canadian artist based in the Netherlands whose artwork deals with garbage as a material and as a philosophical construct. Haftner's work has been exhibited internationally in the US, Canada, and Europe in venues including the MOCA (Toronto), Schering Siftung (Berlin), and the Art Institute of Chicago. She received her BFA in 2011 from Mount Allison University and her MFA in 2016 from the School of the Art Institute of Chicago in Fiber and Material Studies. Haftner is a recipient of the Canada Council for the Arts Research and Creation Grant and a Haagse Kunstenaar with Stroom (Netherlands).

ROBERT HENGEVELD is an installation and media artist whose work explores the boundaries between reality and fiction, and where we find ourselves within that relationship. This has often taken shape through the manipulation of familiar environments or common experiences: a rotating tree, a floating shopping cart, or a street lamp that occasionally breaks out into a flickering Morse code. He is currently living and working in Newfoundland where he teaches at Memorial University. He was artist-in-residence at the School of Environmental Science, University of Guelph, and more recently participated in The

Arctic Circle expedition along with other international artists and scientists. His work has been exhibited across Canada and internationally and is held in various public and private collections including Hallwalls Contemporary Arts Center (US), Mercer Union (Canada), Art Athina (Greece), Mulherin Pollard Projects (US), Opinion Makers (UK), and Lativan National Museum of Art.

SHAWN JOHNSTON is an Indigenous digital media artist living in Innisfil. Ontario. Shawn has a BFA in Integrated Media and is a Master of Information Candidate with the Faculty of Information at the University of Toronto. His area of focus is Archives and Records Management & Culture and Technology. Shawn's work explores elements of the body, memory, identity and their relationships within the framework of Indigenous culture and technology, as well as recording, preserving, and honouring Indigenous history and tradition, propelling it into the forefront of modern mode and discourse.

EMILY SHANAHAN is a visual artist working primarily with video and collage. Her interdisciplinary practice addresses issues of gendered labour and technology with special attention to the behaviours, gestures, and societal norms that circulate across media. She received an MFA from the California Institute of the Arts and completed the Whitney Museum Independent Study Program. She was awarded a fellowship from the Terra Foundation for American Art in Giverny, France and is the recipient of a Canada Council for the Arts Research and Creation grant. Her first artist book. The Tick vs. the Hum. was published by Golden Spike Press and is held in the Whitney Museum Library collection. Her most recent artist book, Work Life Harmony, was published by Sming Sming Books and is held in the San Francisco Museum of Modern Art Library collection.

SULTANA ZANA is an artist interested in looking at the relationships between phenomena at different scales. Fine grain observations of chaos and predictability, life and emergence. Zana is a new media artist working with sound synthesis, spatial sound composition, film, code, and Blockchain technology. Her non-human collaborators include, but are not limited to. mycelium, mushrooms, trees, and insects. New developments in media technology, network theory, and ecological research shape her work.

About the author

MEGAN MACLAURIN is a settler Canadian curator and arts facilitator born and based in Toronto/Tkaronto. Canada. She holds an M.A. in Art History & Curatorial Practices from York University and a B.A. in Art History and Arts Administration from the University of Ottawa. Her research and curatorial practice explore the intersections between natural and technological ecologies in a changing climate. Megan is currently the Programming Coordinator at InterAccess and Co-Director/Curator at Bunker 2 Contemporary Art Container.

Inter/Access

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Gallery Hours Friday - Saturday by appointment Admission is always free

Founded in 1983, InterAccess is a non-profit gallery, educational facility, production studio, and festival dedicated to emerging practices in art and technology. Our programs support art forms that integrate technology, fostering and supporting the full cycle of art and artistic practice through education, production, and exhibition. InterAccess is regarded as a preeminent Canadian arts and technology centre.

Life as we know it Curated by Megan MacLaurin

Curator Tour Friday, October 16, 2020 7PM-8PM

Life as we know it is a group exhibition exploring the emergence of biomimicry within new media arts. Participating artists Ananda Gabo & Anastasiya Yatsuk, Keeley Haftner, Robert Hengeveld, Shawn Johnston, Emily Shanahan, and Sultana Zana erode the human/nature binary by studying, collaborating with, and emulating nature's forms and processes. Challenging biomimicry's often extractive and instrumentalist perspective toward the natural world, Life as we know it examines more-than-human knowledges in relation to place, history, and a more sustainable future.

Keeley Haftner Robert Hengeveld Shawn Johnston **Emily Shanahan** Sultana Zana





LIFE AS WE KNOW IT

An essay by Megan MacLaurin

Ananda Gabo & Anastasiya Yatsuk

October 16 - November 28, 2020

Of the estimated 8.7 million species on this earth, humankind has only familiarized itself with around 1.6 million of them.¹In her foundational text Biomimicry: Innovation Inspired by *Nature* (1997), Janine M. Benyus reveals how this fraction of known species have taught humans to generate and store energy, how to feed and heal ourselves, and how to adapt to new environments.² Despite our reliance on nonhuman species, land-altering industries like corporate agriculture and resource extraction place other species under threat. Benyus frames species loss as loss of knowledge and expertise.³ This loss is accelerated by climate change, which has amplified popular interest in nonhuman knowledges and inspired the field of biomimicry.

Biomimicry is the practice of studying and emulating the structures and strategies used by nonhuman species. Biomimicry largely aims to harness nature's principles to balance our relations to other species, restoring homeostasis to human production. In practice, however, industries harness biomimicry in ways that prioritize profitability over sustainability.⁴ Within the realms of finance, big tech, and military defense, nonhuman knowledges are appropriated in ways that abuse nature with its own principles.⁵ Responding to this exploitation of biomimicry, the ambition of *Life as we know it* is to look beyond instrumentalist views toward nonhuman nature and to learn from, advocate for, and work in coalition with other species whose wisdom and expertise may prove fundamental to the survival of our own.

artist Robert Hengeveld imitates and animates stone. Hengeveld's autonomous robotic boulder joins visitors in their journey through the gallery, roving along the floor in a choreographed routine. Oscillating between activity and rest, the rock appears to spring to life, becoming an active agent with its own behaviours and habits. We know that the plates of the earth are shifting beneath us, and that the ocean gradually wears rock down to sand, but the slow pace of geologic time (with the exception of natural disasters) is largely imperceptible to the human senses. Where Phantoms Meet accelerates mineral movement to a just-visible stroll, accentuating the unseen activities that shape the land and our experience of it.

Shawn Johnston's video BVRCH (2019-2020) gives new life to another natural artifact. BVRCH is a multimedia composite study of a birch bark panel that examines the local knowledge of trees. Using photography, photogrammetry, 3D modelling, and video, Johnston develops an ongoing archive devoted to a birch bark panel found at his Innisfil, Ontario home. In the work, the artist rotates a 3D model of the bark, the surface of which is digitally overlaid with videos that suggest its place of origin: the streaking lights of a nearby road and the unusual geometries of a decomposing tree. Birch bark's white surface is patterned with black stipes that visualize its experiences and growth. Like wrinkles on skin, these stripes signify a tree's maturity and wisdom and, like a scar, birch bark cannot regenerate the same pattern once its surface has been stripped away. Johnston asserts that "knowledge is written on the skin" of birch trees, referring to both the transcription of Indigenous knowledge on birch bark scrolls as well as the ways trees record local knowledge on their surfaces.

Similarly interested in the wisdom of trees, Sultana Zana's All the Lines Became Invisible (2019) documents the artist's investigation of a dense cluster of deodar cedars that she encountered during a residency in the Himalayas. The artist was drawn to these cedars as they appeared to have grown in a closed network separate from their surroundings. Through researching these trees, Zana discovered that the trees were not part of the natural forest, but were instead planted by British colonists. These trees, once used by the British for the construction of log cabins, are now protected as part of the nearby forest despite their dry needles intensifying the region's forest fires. All the Lines Became Invisible looks to the colonial history and contemporary effects of the deodar cedar to erode distinctions between the natural and the cultural, the historical and the present.

Nature's knowledge has also come to influence for-profit industries. Benyus describes the many ways companies look to prairies, coral reefs, and old growth forests as experts in efficiency.⁶ This utilitarian perspective toward the nonhuman natural world is what Jesse Goldstein calls terra economica—"a whole earth available to be put to profitable use, or otherwise wasted."7 Extracting unpaid expertise from nonhuman species, corporations imitate nature to increase the productivity of their workers. In Breathing Exercise (2020), Emily Shanahan compiles cellphone video and news footage of Amazon's Seattle-based

botanical conservatory and workspace, The Spheres. This corporate campus features workstations and boardrooms enveloped in plants with the aim of promoting creativity and enhancing brain function within Amazon workers.⁸ Breathing Exercise pairs video of The Spheres with a story told by Amazon's virtual assistant, Alexa, about the experience of losing her voice and the wellness tactics she uses to regain it. In this work, and in her accompanying artist book Work Life Harmony, Shanahan traces the ways biophilic design and self-care practices are deployed in the service of capitalism.

Resisting the wasteful practices of the fashion and textile industries, Ananda Gabo and Anastasiya Yatsuk envision a more sustainable future in their work Critical Crafting 1 (2020), a speculative prototype that reimagines leather production. The work comprises six clear acrylic tanks, each designed in the shape of a different clothing panel. Gabo and Yatsuk fill the tanks with tea. yeast, sugar, and vinegar, forming kombucha SCOBY, a well-researched substitute for animal leathers. Kombucha leather, like other materials used in the fashion industry, is produced in large sheets that are trimmed into panels to construct garments. This method of production yields offcuts that largely go to waste. In Critical Crafting 1, Gabo and Yatsuk attempt to eliminate offcuts by growing kombucha leather in the precise shape of individual clothing panels. This work also enriches the understanding of kombucha as a living entity. Projected above their prototypes is a visualization of the genomic data of the kombucha, as well as the bacterial cultures living within the tanks. Critical Crafting 1

reveals the microscopic life thriving around us and the ways these forms of life can elicit more sustainable modes of production.

Also invested in experimental and sustainable prototyping, Keeley Haftner transforms PLA cups into recycled 3D printing filament for her work Decomposition (2015-2020). PLA (polylactic acid) is a polymer marketed to be biodegradable, however this material will degrade only under the specific conditions of industrial composting. Haftner collects, washes, and dries used PLA cups, which she then extrudes as 3D printing filament. The artist's painstaking process reveals the difficulty of breaking down this stubborn material, contrary to its greenwashed reputation. Haftner 3D scans and prints shells, leaves, twigs, and bones using this recycled PLA filament, symbolically returning this engineered material to nature. Benyus identified 3D printing as a process closely related to the way nature builds teeth and shells-slowly, layer by layer, affording both strength and flexibility.9 Through patience and precision, Decomposition mimics not only the forms but also the processes of nature's design.

Expanding from Shawn Johnston's assertation that "knowledge is written on the skin", *Life as we know it* contends that knowledge exists in all forms of life, many of which have far outlived our species and have already grappled with complex environmental challenges similar to those we are now facing.¹⁰ The works in this exhibition call attention to these nonhuman presences, histories, and activities that surround us. They bring us closer to often overlooked forms of life we can see, like networks of trees,

In Where Phantoms Meet (2017-2020),

and also to forms of life existing beyond the limits of our perception, like bacterial cultures. In doing so, they heighten our awareness of and sensitivity towards nonhuman life and model new modes of interspecies emulation and collaboration critical to our envisioning of more sustainable futures.

Notes

1. Rachael Bale. "How many species haven't we found yet?" *National Geographic*, December 26, 2019. <u>https://www.nationalgeograph-</u> ic.com/newsletters/ani-

mals/2019/12/how-many-species-have-not-foun d-december-26/.

 Janine M. Benyus. *Biomimicry: Innovation Inspired by Nature*. William Morrow, 1997.
 Ibid, 139.

4. A. Marshall & S. Lozeva. "Questioning the Theory and Practice of Biomimicry," *International Journal of Design & Nature and Ecodynamics*. Vol. 4, No. 1 (2009). 3.

5. Ibid, 2.

6. Benyus, Biomimicry, 248.

7. Jesse Goldstein and Elizabeth Johnson. "Biomimicry: New Natures, New Enclosures," *Theory, Culture & Society*, volume: 32 issue: 1, 2015. 14.

8. "Inspiring innovation with Biophilia", *Day One: The Amazon Blog*, November 20, 2017.
<u>https://blog.aboutamazon.com/amazon-offices/inspiring-innovation-with-biophilia</u>.
9. Benyus, *Biomimicry*, 116.
10. *Ibid*, 119.