

## WHY SENTIENCE?

26<sup>th</sup>
International
Symposium on
Electronic Art
ISEA2020

# PROGRAMME

OCTOBER 13-18, 2020
ONLINE FROM MONTREAL, CANADA







Tourisme / Montreal





Conseil des arts Canada Council du Canada for the Arts





SYNTHÈSE

















# 26<sup>th</sup> International Symposium on Electronic Art ISEA2020

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#### A WORD FROM THE MINISTERS

#### MTL Connect: Digital Week | Supporting digital creativity

The gouvernement du Québec is proud to contribute to the realization of MTL connect: Digital Week, one of the major events of Montréal Digital Spring.

As part of the 26<sup>th</sup> International Symposium on Electronic Art, this week promises to be rich in exchanges and discoveries. In its virtual program, MTL connect has brought together a number of speakers from here and elsewhere who will fuel ideas and reflections on the most current and relevant issues

We would like to take this opportunity to recognize the people who are working to develop the digital creativity ecosystem in the metropolis. Your vision, talent, and determination help to confirm Québec's standing as an international leader in this vast cutting-edge sector of the future.

Thank you and have a great week!

#### **Nadine Girault**

Minister of International Relations and La Francophonie Minister of Immigration, Francization and Integration

#### Chantal Rouleau

Minister for Transport Minister Responsible for the Metropolis and the Montréal Region

#### Éric Caire

Minister for Government Digital Transformation

#### Nathalie Roy

Minister of Culture and Communications

#### CANADA COUNCIL FOR THE ARTS

In these unprecedented times, Printemps numérique has made the democratizing decision to hold their MTL connect event entirely online. By doing this, they are creating an open, borderless space, namely for their ISEA2020 symposium.

We need to tap into the potential of digital technology to bring us together and build communities of thinkers across borders. As we grapple with considerable challenges on the world stage, this gathering of participants from diverse backgrounds promises rich discussions on current issues, questions, and the reimagining of a post-pandemic world.

The Canada Council for the Arts is currently preparing its next strategic plan . Today, we have the responsibility of reimagining the arts, and to reimagine the arts' rightful place at the decision-making tables that will shape our future. I am delighted to see that ISEA2020—a not-to-be-missed event – brings together artists, scientists, scholars and researchers from around the world.

The Canada Council for the Arts is delighted to support Printemps numérique and this flagship event, which is central to our shared reimagining. I wish all the participants many fruitful discussions towards a better world.

Simon Brault, O.C., O.Q.

Director and CEO. Canada Council for the Arts

#### CONSEIL DES ARTS DE MONTRÉAL

#### International Symposium on Electronic Art (ISEA2020)

The Conseil des arts de Montréal is proud to be supporting the International Symposium on Electronic Art for this seminal edition. Not only will the symposium bring together agents of change from around the world, it will allow the work of artists to cross borders unencumbered.

The digital arts hold untapped opportunities for all disciplines. We consider ourselves lucky that Montreal was chosen as the base for this highly strategic event that will serve as a catalyst for research and creation in a rapidly growing field.

The participation of artists in this multidisciplinary event underscores the important contribution they make in society and in their communities of practice. Through dialogue with the academic and scientific communities, artists can put their works to use for the advancement of research. With its theme of Why Sentience?, this year's interdisciplinary symposium is sure to shed light on pressing contemporary issues while bringing to bear all our senses.

We wish you many fruitful exchanges. Have a great symposium!

#### Nathalie Maillé

Executive Director, Conseil des arts de Montréal

#### PRINTEMPS NUMÉRIQUE

On behalf of Printemps numérique (Montreal Digital Spring), our partner institutions, and the organizing committee, we are proud to present the ISEA2020 Online: Why Sentience? proceedings. The 26th International Symposium on Electronic Art is the first ISEA edition to be held entirely online and will take place in tandem with the second edition of MTL connect: Digital Week (Printemps numérique's own online symposium), and will act as the latter's creativity pavilion.

We are living in unprecedented times—the global COVID-19 pandemic, with its ensuing social distancing measures, economic shutdowns, sanitary rules and travel restrictions—and as a result the planning for the symposium was swiftly reconfigured to produce what we consider to be its most innovative iteration. The International Symposium on Electronic Art belongs in the digital space, where it can be accessible to all regardless of time zone or continent; it is not only suitable but inevitable that the event should move to an online platform, where participants and presenters will reconsider in a myriad of imaginative and surprising ways the conduits of creative information dissemination and exchange.

The online event will consist of four full days of 12 hours of presentations on three different live streams: 108 full papers, 96 short papers, 24 panels and 18 posters, selected from nearly 1000 submissions from 58 countries.

In addition to this, ISEA will be hosting an entirely virtual series of exhibitions, based on the following themes and their correlation with the symposium's throughline, Why Sentience?: Animality, The Ecosophic World, Politics of Sentience, Matter's Mattering, The Planetary, Machinic Sense & Sensibility, and Sentient Difference. Happening in tandem with the online offerings, ISEA will be physically present in its host city, Montreal, with in-situ exhibitions and performances at Les maisons de la culture Claude-Léveillée, Janine-Sutto, and Côte-des-Neiges. This hybrid programming represents an exact reflection of our current societal modus operandi: full online connection, limited physical presence, for the optimal reach and impact in our local communities and those at large.

An extraordinary effort and resourcefulness are required in organizing an International Symposium such as ISEA, especially during a global pandemic. Printemps numérique would like to thank Erandy Vergara Vargas for her incredible ability and leadership in guiding the team and working together with the Academic and Artistic Chairs and Committees, and particularly for her behind-the scenes work managing the content and form of ISEA2020 Online. We also would like to thank the academic chairs Christine Ross and Chris Salter, whose insight and vision regarding the 26th edition's theme, Why Sentience, were both essential and without comparison, as well as Manuelle Freire, who all together curated the impressive academic programme and talks.

Thank you to the ISEA team for their invaluable work, patience, and endless hours devoted to finding solutions for unprecedented challenges, and for their on-the-spot creativity and flexibility when it was crucial to getting the job done: Pauline Barthe, Maximilien Briat Martin, Sylvaine Chassay, Stephanie Creaghan, Margaux Davoine, Pascal Dufaux, Iriana Rakotobe, and Marine Villedieu.

We would also like to thank the supporting institutions and various partners, without whom the symposium would not be possible: the Gouvernement du Ouébec (Ministère de la Culture et des communications and the Fonds d'initiative et de rayonnement de la métropole), the Conseil des arts et des lettres du Québec, Ville de Montréal, Tourisme Montréal le Conseil des arts du Canada le Conseil des arts de Montréal, Patrimoine Canadien, NAD (École des arts numériques, de l'animation et du design), Concordia University, Synthèse, Destination centre-ville, Reflector, ISEA International, the University of Brighton, Maison de la culture Claude-Léveillée. Maison de la culture Janine Sutto. Maison de la culture de Côte-des-Neiges, Maison du développement durable, Sensorium: Centre for Digital Art and Technology (York University) le Consulat de France, OFQJ France (Office franco-québécois pour la jeunesse), Goethe-Institut Montreal, Sporobole, New Media Gallery, Manifestations Festival, Scopitone Festival, Composite, Milieux Institute, ELEKTRA, Centre PHI, Espace art actuel, Ciel variable and Esse.

Lastly, ISEA2020 would like to thank all our participants, artists and scholars who applied to the symposium back in December of 2019 for your willingness to continue to work with us and evolve with us as we transitioned to the new online format. Your understanding and capacity to adapt are what made the symposium the success that it is. Your generous and insightful reflections on sentience proved more relevant than ever in the face of the pandemic, and we are eternally grateful for your contribution, participation, and adaptability.

#### Mehdi Benboubakeur

Executive Director, Printemps numérique MTL connecte - ISEA2020

#### PREFACE

In late August 2019, when the ISEA 2020 academic committee began discussing the theme of "Why Sentience?" little did we know how prescient the topic would become. With the initial themes tossed around - "animality," "the politics of sentience," "sentient difference" and "matter's mattering" - we were trying to capture the significance of a broader symbiotic turn taking place in the technoscientific arts, humanities and social sciences - the term that the late biologist Lynn Margulis used to describe "the living together in physical contact of organisms of different species." [1] Living together, however, involves sensing together - where the etymology of the Latin word sentientem signifies being "capable of feeling," not only for ourselves but also for others.

But we weren't wholly satisfied with the theme of "sentience" alone – we sought to turn it into a question to demonstrate that living together as different species is not easy, especially among entities and things we wouldn't necessarily consider "like us": nonhuman animals, plants, bacteria, but also machines and the Earth itself. By making sentience into the question of "why sentience," we thus hoped to provoke a debate around two core issues: (1) why is sentience something that presently occupies many artists, scholars and scientists and, (2) what degree and nuance of difference would a deeper exploration of sentience imply?

This was in August 2019. One year later, we are living through a triple catastrophe: the novel coronavirus, the resulting economic collapse and the worldwide unrest brought upon by the exposure and explosion of systematic racism, as well as gender-based violence. These crises have resulted in a major transformation of human and nonhuman life, bringing the theme of ISEA2020 into a new perspective. It is not that the virus - an invisible entity that some 25% of US citizens (as well as others) think has

been invented and planned by a worldwide conspiracy but that has visibly wreaked havoc across the world - is unprecedented. From the Black Death that eliminated at least 60% of Europe's population between 1346-1353 and the 40-100 million lost during the Spanish Flu, to 2003's SARS epidemic, we as humans have long had to live with the otherness of the bacterial and the viral. As historian Mike Davis wrote with uncanny foresight in 2005 in The Monster at our Door, "Human-induced environmental shocks—overseas tourism wetland destruction a corporate 'Livestock Revolution', and Third World urbanization with the attendant growth of megaslums—are responsible for turning influenza's extraordinary Darwinian mutability into one of the most dangerous biological forces on our besieged planet." [2] What, however, is unprecedented is the planetary scale and speed of this entanglement of contemporary conditions in which sociotechnical-political-economic systems are so deeply and fundamentally intertwined with and influencing each other.

But what does this global crisis we are all living through have to do with the theme of Why Sentience? First, the "pandemic condition" has demonstrated that viral, machinic and terrestrial forces are indeed symbiotic. For example, a May 2020 Science article reported on a global "quieting" taking place as the amount of "anthropogenic" (human made) vibrations fell by almost 50% due to the effective shutdowns of the world economy. Utilizing a network of 268 seismographic sensors in 117 countries, geophysicists at Imperial College London could observe a literal "wave of silence" sweeping across the globe from China to Europe to Australia to North and South America as transport networks, football games, air traffic and effectively stopped. This near planetary reduction in noise catalyzed by the global shutdown and picked up by machine-

automated sensors thus shows the close coupling of technical, natural and human worlds. Meanwhile, the media has also been filled with stories of renewal – the return of the natural world in the canals of Venice, the purifying of air in normally pollution-choked global cities or the increase in birdsong, usually masked out by the sound of transport infrastructure.

At the same time, if sentience signifies "the ability to feel," the crisis has also revealed the inability to feel - to sense the plight of others. As Davis argues, "The essence of the avian flu threat ... is that a mutant influenza of nightmarish virulence—evolved and now entrenched in ecological niches recently created by global agro-capitalism-is searching for the new gene or two that will enable it to travel at pandemic velocity through a densely urbanized and mostly poor humanity." [3] The ingrained injustices of the colonial past and the repeated and acute amplification of these through our pandemic present thus compel us to address the hard questions asked by the Cameroonian philosopher Achille Mbembe concerning what he calls "the ordeal of the world" - "Can the Other, in light of all that is happening, still be regarded as my fellow creature? When the extremes are broached, as is the case for us here and now, precisely what does my and the other's humanity consist in? The Other's burden having become too overwhelming, would it not be better for my life to stop being linked to its presence, as much as its to mine? Why must I, despite all opposition, nonetheless look after the other, stand as close as possible to his life if, in return, his only aim is my ruin?" [4]

These questions are not the usual bill of fare for ISEA, which has long been focused on the relationship between technology and the arts. Indeed, in these proceedings you will find this focus again – along with perhaps something new: critical positions in race and anti-racism studies, queer studies and disability studies, Indigenous knowledge, eco-criticism, reflections and interrogations of the histories and geographies, places and non-places, temporalities, processes, and residual colonialisms of sentience through an international cross section of current explorations in the media arts and technological aesthetics. As philosopher

Bernard Stiegler (1952-2020), the great pharmacologist of technology who recently left us, argued: now is perhaps the time to think as a form of healing. Like most cultural events in 2020, ISEA2020 is thus both a response to crisis and an experience with a not yet realized imaginary. Experience here is used in the French sense of the word: as both an experiment, an attempt and an experience. Through these contributions from scholars and creators from across the world, it is our hope that the question of why sentience – of not only sensing the world but also acting with it – can be a response to our more than uncertain future.

#### Christine Ross

McGill University

#### Chris Salter

Concordia University

<sup>[1]</sup> Margulis, Lynn. The Symbiotic Planet: A New Look at Evolution. New York: Basic Books, 1988, 3.

<sup>[2]</sup> Mike Davis, The Monster at our Door: The Global Threat of Avian Flu. New York/London: New Books, 2005, 25.

<sup>[3]</sup> Davis, 26

<sup>[4]</sup> Achille Mbembe, Necropolitics. Durham: Duke University Press, 2019, 2-3.

# ACADEMIC PROGRAMME & TALKS



#### KARIM JERBI OCTOBER 13. 7 AM

Associate Professor, Psychology Department Université de Montréal

Canada Research Chair (CRC) in Systems Neuroscience and Cognitive Neuroimaging WEB SITE: HTTP://WWW.KARIMJERBI.COM/
TWITTER: HTTPS://TWITTER.COM/KARIMJERBINEURO

CENTRE UNIQUE: HTTP://UNIQUE.QUEBEC/

"Proustian Memory and Dreams in Brains and Machines"

In this talk, I will first discuss our recent research on the neural basis of odor-evoked biographical memory, also known as Proustian memory. Smells, more than almost any other sensory input, can trigger very rich and vivid memories, immediately transporting us back to a long-forgotten time and place. This fascinating phenomenon has been coined Proustian memory, in reference to a passage in Marcel Proust's 1913 book Swann's way, in which the narrator describes how eating the crumbs of a madeleine dipped in lime blossom tea triggers a powerful process of remembering that takes him back to a pleasant long-buried childhood memory. But how does the brain create and recall odor-related memories? And why are some of these memories vivid and strong while others are poor and incomplete? Our recent findings shed new light on these key questions and provide a mechanistic neural account of odor-related episodic memory richness. Next, I will move to a different, yet equally enigmatic, form of memory: Our ability to remember the virtual experiences we call dreams. While some of us often remember our dreams, others hardly ever do. The neural underpinnings of dream recall abilities is still an open question. Here, I will discuss new work where we ask whether individuals with high and low dream recall frequencies exhibit different brain activity patterns during sleep, and how we use artificial intelligence (AI) to address this question. Finally, I will talk about the quest for sentient machines and whether better AI needs consciousness."

Karim Jerbi is a professor at the Psychology department of the University of Montreal. He is Canada Research Chair in Computational Neuroscience and Cognitive Neuroimaging and heads UNIQUE, a Neuro-Al research center (Unifying Neuroscience and Al in Quebec). He obtained a PhD in Cognitive Neuroscience and Brain Imaging from the Pierre & Marie Curie University in Paris and a biomedical engineering degree from the University of Karlsruhe (Germany). His research lies at the crossroads between cognitive, computational and clinical neuroscience. The goal of his research is (1) to elucidate the role of neural oscillations and large-scale neural communication in cognition, and (2) to investigate brain network alterations in the case of psychiatric and neurological disorders. The multidisciplinary research conducted in his laboratory combines magnetoencephalography (MEG) and electroencephalography (EEG) with advanced signal processing and data analytics including artificial intelligence. Dr Jerbi also has a keen interest in the convergence between brain science and digital art.

# KIM TALLBEAR OCTOBER 14, 6 PM

Associate Professor, Canada Research Chair in Indigenous Peoples, Technoscience & Environment

Pierre Elliott Trudeau Foundation Fellow Faculty of Native Studies, University of Alberta

"A Sharpening of the Already Present: Five Analytical Vignettes on Apocalypse, Hope, Death, and Life"

This talk, organized around five analytical vignettes, explores an Indigenous analytical approach to understanding the concept of the "Anthropocene," including why the present era is not quite everyone's apocalypse: some Peoples are already post-apocalyptic survivors. In addition to drawing on Indigenous scholarship, two compatible ideas drawn from other decolonial and "multispecies" literatures, "radical hope" and "biocultural hope" respectively, are offered as alternative foundational concepts to counter settler-colonial ideological responses to the current environmental crisis and to the denied/impending fall of US empire. Building from both Indigenous and non-Indigenous materialist critiques of human/animal divides and hierarchies of life, TallBear suggests that the concept of "genocide" must be expanded to include other-than-humans whose lives and deaths are co-constitutive with human lives and deaths. Finally, TallBear examines the relationship between "life" and "death," gluttonous lives and bad deaths.

Kim TallBear is Associate Professor, Faculty of Native Studies, University of Alberta, and Canada Research Chair in Indigenous Peoples, Technoscience & Environment. She is also a Pierre Elliott Trudeau Foundation Fellow. Dr. TallBear is the author of Native American DNA: Tribal Belonging and the False Promise of Genetic Science. Building on her research on the role of technoscience in settler colonialism, Dr. TallBear also studies the colonization of Indigenous sexuality. She is a regular commentator in US, Canadian, and UK media outlets on issues related to Indigenous peoples, science, and technology as well as Indigenous sexualities. She is a regular panelist on the weekly podcast, Media Indigena. She is a citizen of the Sisseton-Wahpeton Oyate in South Dakota.

# JENNIFER GABRYS OCTOBER 15. 7 AM

Professor, Chair in Media, Culture and Environment
Department of Sociology, University of Cambridge
Director, Planetary Praxis research group
Principal Investigator, Smart Forests (ERC, 2020-2025)

"From Planetary Sensing to Becoming Planetary"

How is it possible to "sense" the planetary? It is now not uncommon for the planetary to be invoked in discussions of technology—especially computational technology—is analyzed as something on the "scale" of the planetary. Technology is seen to overrun and command the planetary. The planetary is discussed as a figure of massiveness. Its invocation suggests total dominion: the rolling out of behemoth systems that hold the planet and all of its entities in a space of complete capture. This total view of Earth has an even longer history within modes of control and colonialism. The detached and distant view of Earth produces an entity that could seemingly be managed—or programmed. This total view of the planet suggests complete interconnectedness, but also forms of imperial control. It is the product of globality as well as universal science. A total view can even seem to be necessary: as a way to organize the problem of climate change, for instance, in order to act upon it. Yet in what ways do these modalities of the planetary reduce the possibilities of what the planetary is or might become? How might it be possible not to remake the pretensions of globality and globalization through planetary media projects, but rather begin to unsettle figures of totality and regulation in order to attend to the incommensurate, the unjust, and the yet to be recognized?

Jennifer Gabrys is Chair in Media, Culture and Environment in the Department of Sociology at the University of Cambridge. She leads the Planetary Praxis research group, and is Principal Investigator on the European Research Council-funded project, Smart Forests: Transforming Environments into Social-Political Technologies . She also leads the Citizen Sense and AirKit projects, which have both received funding from the ERC. She is the author of How to Do Things with Sensors (2019); Program Earth: Environmental Sensing Technology and the Making of a Computational Planet (2016); and Digital Rubbish: A Natural History of Electronics (2011). She is co-editor of Accumulation: The Material Politics of Plastic (Routledge, 2013). She has co-edited a special issue on "Sensors and Sensing Practices," with Science, Technology & Human Values (2019); and a special issue on "Environmental Data," with Big Data & Society (2016). She co-edits the new "Planetarities" book series published through Goldsmiths Press. She is currently completing a book on the Citizen Sense project titled, Citizens of Worlds: Open-Air Toolkits for Environmental Struggle.

# DYLAN ROBINSON OCTOBER 16, 1 PM

Associate Professor & Canada Research Chair in Indigenous Arts Queen's University

"shxwelí li te shxwelítemelh xíts'etáwtxw / The Incarceration of Indigenous Life by Museums"

Across the globe, museums filled with glass and plexiglass vitrines display collections of Indigenous belongings. The typical display scenario for such belongings places them upon plinths, underneath a plexiglass. These cases render the life they contain into objects of display, things to be seen but not touched. For Indigenous people, experiencing this objectifying system of display is often traumatic because that which is on display fits neither category of object nor thing; they hold life, and are beings or ancestors. They are treated as kin. Alongside the life of ancestors who take material form, thousands of Indigenous songs collected by ethnographers on wax cylinder recordings and reel-to-reel tape are similarly confined in museum collections. These songs also hold life, but of different kinds from their material cousins. To re-assess the role of the museum as a place that confines life is to put into question its relationship to incarceration. If the museum is a carceral space, how then, might we define repatriation alongside practices of "re-entry" and kinship reconnection? To what extent might we also apply the discourse of prison abolition to the museum?

Dylan Robinson is a xwélmexw (Stó:lō/Skwah) artist and writer, and the Canada Research Chair in Indigenous Arts at Queen's University. His monograph, Hungry Listening (Minnesota University Press, 2020), considers listening from both Indigenous and settler colonial perspectives, and proposes decolonial practices of attention that emerge from increased awareness of our listening positionality. Dr. Robinson's current research focuses on artistic practices of reconnection between Indigenous songs and members of communities who were prohibited by law to sing them as part of the Canadian Government's Indian Act from 1882\(\mathbb{M}\)1951. His previous publications include the coedited volumes Music and Modernity Among Indigenous Peoples of North America (2018) and Arts of Engagement: Taking Aesthetic Action in and Beyond the Truth and Reconciliation Commission of Canada (2016).

08:30-10:00 [PAPERS SESSION 1] MACHINIC SENSE & SENSIBILITY: CODE, AI & PERFORMANCE	
SESSION CHAIR: LYNNE HELLER [CA]	ISEA2020 ONLINE CHANNEL I
Serena Desaulniers [CA]	Cyborg Encounters: The Abilizing Capabilities of Embodying Disabling Avatars
Francisco Gerardo Toledo Ramirez [MX/CA]	Sentience and The Virtual Body, From Dual Subjectivity to the Eros Effect
Live discussion	

08:30-10:00 [PANEL SESSION I] MENTAL ECOLOGIES: CONSCIOUSNESS AS AN EMERGENT PHENOMENA	
	ISEA2020 ONLINE CHANNEL 2
Clarissa Ribeiro [BR], Claudia Jacques [US], Liz Lessner [US]	Mental Ecologies: Consciousness as an Emergent Phenomena
Live discussion	

08:30-10:00 [ARTIST TALKS SESSION I]	
SESSION CHAIR: JULIANA ESPANA KELLER [ES]	ISEA2020 ONLINE CHANNEL 3
Jane Tingley [CA]	Foresta Inclusive, work-in-progress
Rasmus Vuori [FN]	Computational Serendipity in Generative Art
Anni Garza Lau [MX]	Digital Hybrid
Live discussion	

10:15-11:45 [PAPERS SESSION 2] MACHINIC SENSE & SENSIBILITY: CYBORGS AND VIRTUAL BODIES	
SESSION CHAIR: MARC-ANDRÉ COSSETTE [CA]	ISEA2020 ONLINE CHANNEL I
Joseph Thibodeau [CA], Ceyda Yolgörmez [CA]	Open-source Sentience: the Proof is in the Performance
Renne Carmichael [AR]	Dance and Code with Empathy: A Reading of Joana Chicau and Merce Cunningham
Kevin Day [CA]	The Mattering of Algorithms: Reading the Media Performance of Erica Scourti through Originary Technicity
Live discussion	

IO:15-11:45 [PAPERS SESSION 3] POLITICS OF SENTIENCE: DEVICES FOR SOCIAL JUSTICE	
SESSION CHAIR: PENESTA DIKA [AT]	ISEA2020 ONLINE CHANNEL 2
César Escudero [ES], Christa Sommerer [AT]	Data Pollution Devices: Artistic Strategies Against Behavior Capture
Adnan Hadzi [MT]	Social Justice & Al in Virtual Worlds
Rilla Khaled [CA], Samuelle Bourgault [US/CA]	NEO//QAB: Creating a World Through Speculative Play
Live discussion	

10:15-11:45 [ARTIST TALKS SESSION 2]	
SESSION CHAIR: MILENA TOMIC [CA]	ISEA2020 ONLINE CHANNEL 3
Natalie Doonan [CA]	Intimate Encounters with Ducks
Diego Diaz [ES]	Machine Biography
Arne Eigenfeldt [CA]	Unauthorized: Live Generative Dance Theatre with Musebots
Live discussion	

12:00-13:30 [PAPERS SESSION 4] MACHINIC SENSE & SENSIBILITY: DISPOSITIFS OF SENSORY AUGMENTATION I	
SESSION CHAIR: DANIEL CERMAK-SASSENRATH [DK]	ISEA2020 ONLINE CHANNEL I
Chih-Yung Aaron CHIU [TW]	Archive or Alive: The Experimental VR Digital Collection of Shou-You LIU's Shapde 5.5
Michael Palumbo [CA], Doug Van Nort [CA]	git show: Musical Creativity, Ideation, and GitHub
Samuelle Bourgault [US/CA], Emmanuelle Forgues [CA]	Experimenting with Robotic Softness
Live discussion	

12:00-13:30 [PAPERS SESSION 5] POLITICS OF SENTIENCE: ACTIVISM AND LABOR	
SESSION CHAIR: JONAH BRUCKER-COHEN [US]	ISEA2020 ONLINE CHANNEL 2
Jacob Cram [CA]	UNMASK - Digital Thinking with Brutalism
Alessandro Ludovico [IT]	Fake publishing as art and activism
Pedro Costa [PT]	"I try to stay neutral": digital assistants and their stance towards gender
Jocelyn Ho [US]	Revaluing Women's Labor through Material Engagement with Musical Instruments built from Domestic Tools
Live discussion	

12:00-13:30 [ARTIST TALKS SESSION 3]	
SESSION CHAIR: LOUIS-PHILIPE RONDEAU [CA]	ISEA2020 ONLINE CHANNEL 3
Linda Kronman [FN]	Training machines to detect suspicious behaviour
Simon Penny [US], Alex Lough [US]	Sensiqwerty work in progress
Jill Didur [CA], Tony Higuchi [CA]	Sensing across Entities: Global Urban Wilds and Environmental Storytelling
Jessica Parris Westbrook [US], Paige Treebridge [US]	Divergent Design Lab [Towards Invisibility and Social Engineering]
Live discussion	

14:00-15:30 [PAPERS SESSION 6] MACHINIC SENSE & SENSIBILITY: SENSING SPACES AND PLACES	
SESSION CHAIR: REILLEY BISHOP-STALL [CA]	ISEA2020 ONLINE CHANNEL I
Jill Scott [CH]	AURALROOTS: learning about sentience through embodiment and simulation in three sonic environments
Claudia Costa Pederson [US]	Sensing Contemporary Mexican Art: Ariel Guzik's Sonic Machines
Adriana Knouf [US]	Constructing Xenological Encounters
Sandra Volny [CA], Ruth Schmidt [CA]	Aural Soilscapes: sensory challenges in a subterranean world
Live discussion	

14:00-15:30 [PANEL SESSION 2] THE PRACTICE OF NEW MEDIA ART: SENTIENCE, PER-CEPTION, COGNITION, AND CONSCIOUSNESS?	
SESSION CHAIR: PATRICK LICHTY [US/UAE]	ISEA2020 ONLINE CHANNEL 2
Paul Thomas [AU], Mike Phillips [UK], Ernest Edmonds [UK], Jane Grant [UK], Laura Beloff [FN]	The practice of New Media Art: sentience, perception, cognition, and consciousness?
Live discussion	

14:00-15:30 [ARTIST TALKS SESSION 4]	
SESSION CHAIR: JINSIL SEO [US]	ISEA2020 ONLINE CHANNEL 3
Jeff Morris [US]	Native Composition: Metaprocess as a Unifying Factor in a Diverse Body of Artwork
Ulises Unda [EC]	Pasochoa
Abbey Hepner [US]	Digital Anatomical Theater
Alexa Bonomo [US]	Using Metaphor and Naturalistic Geometry to Visualize Quantified Self Data
Live discussion	

15:45-17:15 [PAPERS SESSION 7] MACHINIC SENSE & SENSIBILITY: MACHINE AESTHETIC AGENCY	
SESSION CHAIR: LYNNE HELLER [CA]	ISEA2020 ONLINE CHANNEL I
Nicole De Brabandere [CA]	Machine Generated 'Portraits' as Impersonal Gestures
Sang-won Leigh [US]	Machine-enacted Modes of Creative Exploration
Katia Vega [US]	Exploring Al Ethics Through Intelligent Everyday Objects
Ronald Boersen [CA], Aaron Liu-Rosenbaum [CA], Philippe Pasquier [CA]	Chatterbox: an interactive system of gibberish agents
Live discussion	

15:45-17:15 [PAPERS SESSION 8] MATTERS MATTERING: VISUALIZATION AND MATERIALIZATION	
SESSION CHAIR: LOUIS-PHILIPE RONDEAU [CA]	ISEA2020 ONLINE CHANNEL 2
Scott Hessels [HK]	The Art of Trajectory: Celestial Mechanics V
Jesse Jackson [US]	Pixels in the Material World: Making Marching Cubes
Paul Dunham [NZ], Mo Zareei [NZ]	TwttrGraph: I Wish to Speak with You. A Telegraphic Sound Installation
Live discussion	

15:45-17:15 [ARTIST TALKS SESSION 5]	
SESSION CHAIR: JINSIL SEO [US]	ISEA2020 ONLINE CHANNEL 3
Gregory Garvey [US]	BLASEY FORD V KAVANAUGH & The split brain interface
Scott Kildall [US], Michael Ang [CA]	Unnatural Language
Elizabeth Littlejohn [CA]	The city island
Clea T. Waite [US]	Immersive Cine-installation and Embodied Perception
Live discussion	

17.30-19:00 [PAPERS SESSION 9] MACHINIC SENSE & SENSIBILITY: DISPOSITIFS OF SENSORY AUGMENTATION II	
SESSION CHAIR: JEREMY HIGHT [US]	ISEA2020 ONLINE CHANNEL I
Martin Froehlich [CH]	Blimpy - an artistic framework for creating a spatial augmented reality experience with helium blimps
Miles Thorogood [CA], Aleksandra Dulic [CA]	Aeon Performance System for Visual Music
Bridget Johnson [NZ]	Physicality and Spatialization in Sound Art
Live discussion	

17.30-19:00 [PAPERS SESSION 10] MATTERS MATTERING: (PUBLIC) PLACE MAKING	
SESSION CHAIR: CYNTHIA NOURY [CA]	ISEA2020 ONLINE CHANNEL 2
Adeilson Froiid William da Silva [BR]	Sensing the reality: reflections on artistic actions to defocus the real
Oliver Bown [AU]	Creative audio design for a massively multipoint sound and light system
Douglas Brock [AU]	Sentience and Place: Towards Local, More-than-Human Cultures
Live discussion	

#### 17.30-19:00 COSMOLOGIES GROUP

#### ISEA2020 ONLINE CHANNEL 3

Nina Czegledy [CA], Navid Navab [IR/ CA], Suzanne Kite [US], Lina Dib [CA], Jonathan Sterne [US/CA] A lead group of artists and scholars (Nina Czegledy\_\_artist/ curator; Navid Navab\_\_artist/researcher; Suzanne Kite\_\_ artist/researcher; Dr. Lina Dib\_\_artist/anthropologist; Dr. Jonathan Sterne\_\_artist/historiographer) initiate the Sensory Cosmologies group to discuss various strategies they have synthesized over the years towards engaging the senses to tackle both specific and "wicked" problems none-reductively. This panel will engage topics as pervasive as decolonization of space and time, research-creation at the intersection of art and science, comprehension of complexity, principles of undivided wholeness, and ethico-aesthetic paradigms for integration of non-western perspectives in cultural production of the new. Our guest sensory cosmonauts will discuss whether the difference between living and nonliving is a matter of degree with no beginning and no end: Sentience and liveliness as a degree-of-flux, propelled by complexity, expanding and contracting pre-spatial margins of indeterminacy which de-linearize rationality on different orders, magnitudes, and scales. From quantum indeterminacy, to fractal bifurcation, to post-human creativity within playful cosmologies, Sensory Cosmologies event will attempt to breathe chaos into order.

8:30-10:00 [PAPERS SESSION I] MACHINIC SENSE & SENSIBILITY : IMMEDIATIONS	
SESSION CHAIR: ANNET DEKKER [NL]	ISEA2020 ONLINE CHANNEL I
Christoph Brunner [DE], Jonas Fritsch [DK]	Shifting Immediations: Fields of Experience across Media Art and Design
Nancy Mauro-Flude [AU], Kate Geck [AU]	A Taxonomy for the Contiguous Spectrum: Corporeal Computing futures and the Performance of Signal Transmission
Liron Efrat, Brittany Myburgh [CA]	Seeing is Sensing: Three Strategies for Multisensory Experience in Mixed Reality Art
Live discussion	

8:30-10:00 [PANEL SESSION I] ART-SCIENCE STAGINGS OF NONHUMAN SENTIENCE	
SESSION CHAIR: SARAH CHOUKAH [CA]	ISEA2020 ONLINE CHANNEL 2
Edwige Armand [FR], Sofian Audry [CA], Frédérick Garcia [FR], Maurizio Martinucci [NL]	Who is Speaking? Art-science Stagings of Nonhuman Sentience
Live discussion	

8:30-10:00 [INSTITUTIONAL PRESENTATIONS SESSION 1]	
SESSION CHAIR: REJANE CANTONI [BR]	ISEA2020 ONLINE CHANNEL 3
Vicky Sowry [AU]	ANAT on Country
Aurelie Besson [QC]	Molior _ An international exhibition producer
Nick Bryan-Kinns [UK]	Centres for Doctoral Training in Media and Arts Technology & Al and Music at Queen Mary University of London
Jonathan Parsons [AU], Susan Kukucka [AU], Nicky Pastore [AU]	Experimenta Life Forms
Live discussion	

IO:15-11:45 [PANEL SESSION 2] BREEDING SENTIENCE: QUEERING LINEAGE AND VOGUING ENHANCEMENT	
SESSION CHAIR: ANTONIA HERNANDEZ [CA]	ISEA2020 ONLINE CHANNEL I
Dalila Honorato [GR], Roberta Buiani [CA], Felipe Shibuya [US], Adam Zaretsky [US], Jaden Hastings [US], Charlotte Jarvis [UK]	Breeding Sentience: Queering Lineage and Voguing Enhancement
Live discussion	

IO:15-11:45 [PANEL SESSION 3] BEYOND ANTHROPOCENTRISM	
SESSION CHAIR: SARAH CHOUKAH [CA]	ISEA2020 ONLINE CHANNEL 2
Su Hyun Nam [KR/US], Stanzi Vaubel [US],Garrett Johnson[US], Han Sanglim [US]	Beyond Anthropocentrism: Art Practices to expand human experience, understanding, and creativity
Live discussion	

10:15-11:45 [INSTITUTIONAL PRESENTATIONS SESSION 2]	
SESSION CHAIR: REJANE CANTONI [BR]	ISEA2020 ONLINE CHANNEL 3
Fred Paulino [BR]	Gambiologia
Jorge Ramirez [MX]	Cyberdelia Mexicana x
Filipe Londono [CO]	Image Fest 2020 n
Martin Froehlich [CH]	Immersive Arts Space
Live discussion	

12:00-13:30 [PANEL SESSION 4] SENTIENCE AND TRANS-SPECIES COLLABORATION	
SESSION CHAIR: ELIZABETH DEMARAY [US]	ISEA2020 ONLINE CHANNEL I
Carlos Castellanos [US], Elizabeth Demaray [US], Ken Rinaldo [US], Amy Youngs [US]	Sentience and Trans-Species Collaboration: Considering the Aims, Desires and Perceptual Landscapes of the Non-Human
Live discussion	

12:00-13:30 [PANEL SESSION 5] SOME PROVOCATIONS FROM SKEPTICAL INQUIRERS ABOUT ANIMAL SENTIENCE	
SESSION CHAIR: ELLEN LEVY [US]	ISEA2020 ONLINE CHANNEL 2
Ellen Levy [US], Patricia Olynyk [US], Bob Gluck [US], Meredith Tromble [US], Joel Ong [CA]	Some Provocations from Skeptical Inquirers About Animal Sentience
Live discussion	

12:00-13:30 [INSTITUTIONAL PRESENTATIONS SESSION 3]	
SESSION CHAIR: BONNIE MITCHELL [US]	ISEA2020 ONLINE CHANNEL 3
Viola van Alphen [NL], Nikol Vetronova [NL]	Manifestations: Art & Technology
Jean-Ambroise Vesac [CA]	UQAT research & creation in new media institutional presentation
Victoria Szabo [US]	ACM SIGGRAPH Digital Arts Community
Bonnie Mitchell [US], Janice Searleman [US]	SIGGRAPH Archive Research and Development: A Creative and Innovative Approach to Historical Digital Art Documentation
Bonnie Mitchell [US], Janice Searleman [US], Vim Van der Plas [NL]	ISEA Symposium Archives : Innovative Archive Development And Content
Live discussion	

14:00-15:30 [PAPERS SESSION 2] SENTIENT DIFFERENCE : HUMAN BODY SENSORY MODALITIES	
SESSION CHAIR: ANA PERAICA [AT]	ISEA2020 ONLINE CHANNEL I
Tanya Ravn Ag [DN]	Art and the Broken Mirror: A technogenetic perspective on digitally expanded realities
M. Lucilia Borges [BR]	Schizomachine: a wearable schizo-interface for a schizo-body
Ksenia Fedorova [US]	Qualia Formation through Sensory Substitution in Artistic Laboratories in Russia
Live discussion	

14:00-15:30 [PANEL SESSION 6] LIFE A SENSORIUM	
SESSION CHAIR: JILL SCOTT [CH]	ISEA2020 ONLINE CHANNEL 2
Joel Ong [CA], Melanie Wilmink [CA], Janine Marchessault [CA]	Life a Sensorium
Live discussion	

14:00-15:30 [INSTITUTIONAL PRESENTATIONS SESSION 4]	
SESSION CHAIR: JULIANA ESPANA KELLER [ES]	ISEA2020 ONLINE CHANNEL 3
Paula Perissinotto [BR]	FILE festival Internacional de Linguagem Eletronica
Ricardo Dal Farra [CA]	Transforming Paradigms (Art-Environment)
Megan MacLaurin [ON]	Interaccess
Everardo Reyes [FR]	EUR ArTeC: Networking for Art, Science, Technology, and Humanities through Hydrology of Media
Live discussion	

15:45-17:15 [PANEL SESSION 7] SENSORY ENTANGLEMENTS: DECOLONIZING THE SENSES	
SESSION CHAIR: JAKE MOORE [CA]	ISEA2020 ONLINE CHANNEL I
David Howes [CA], Jennifer Biddle [AU], Chris Salter [CA], David Garneau [CA], Suzanne Kite [US], R E A Saunders [AU], Florencia Marchetti [CA]	Sensory Entanglements: Decolonizing the Senses
Live discussion	

15:45-17:15 [PANEL SESSION 8] BOUNDARY CROSSING(S): Multi-Scalar entanglements in art, science and technology	
SESSION CHAIR: ANDRES BURBANO [CO]	ISEA2020 ONLINE CHANNEL 2
Joel Ong [US], Roberta Buiani [CA], Stephanie Rothenberg [US], Jennifer Willet [CA]	Boundary Crossing(s) : Multi-scalar Entanglements in Art, Science and Technology
Live discussion	

#### 15:45-17:15 [INSTITUTIONAL PRESENTATIONS SESSION 3]

ISEA2020 ONLINE CHANNEL 3

#### ISEA International Annual General Meeting

The Annual General Meeting is an opportunity for ISEA to report on current and future activities and for the community to offer its comments and advice. Following an introduction to the general direction that ISEA International is taking at this time, there will be a presentation by Montreal, ISEA2020, discussing the experience of our first delivery a largely virtual symposium. This will be followed by presentations about ISEA2021/22, ISEA2023 and ISEA2024, followed by a concluding open question and answer session.

Participants: Ernest Edmonds (Chair) Mike Phillips (Secretary) Anne Nigten (Treasurer) Pat Badani Ricardo Dal Farra Rob La Frenais Roger Malina

Sue Gollifer (Executive Director ISEA International HQ)

17:30-19:00 [PANEL SESSION 9] QUEERING INFRASTRUCTURE: THE SYSTEM THROUGH THE EROTIC		
SESSION CHAIR: STEPHANIE ROTHENBERG [US]	ISEA2020 ONLINE CHANNEL I	
Joel Ong [CA], Antonia Hernandez [CA], Kathy High [US], Stephanie Rothenberg [US]	Queering Infrastructure: The System Through the Erotic	
17:30-19:00 [PANEL SESSION 10] THE OCEAN THAT KEEPS US APART ALSO JOINS US		
17:30-19:00 [PANEL SESSION TO] THE OCEAN THA	AT KEEPS US APART ALSO JOINS US	
SESSION CHAIR: PAT BADANI [US]	AT KEEPS US APART ALSO JOINS US  ISEA2020 ONLINE CHANNEL 2	

8:30-10.00 [PAPERS SESSION I] MACHINIC SENSE AND SENSIBILITY: SPATIAL, INTERACTIVE, SENSORY MEDIA	
SESSION CHAIR: YAN BREULEUX [CA]	ISEA2020 ONLINE CHANNEL I
Maurice Benayoun [HK], Tanya Ravn Ag [DE]	After The Tunnel: on shifting ontology and ethology of the emerging art-subject
Elizabeth Lessner [BR]	Sensory and Spatial Koans
Claudia Núñez Pacheco [CL], Lian Loke [AU]	Aesthetic Qualities of Thermal and Vibrotactile Materials for Somatic Contemplation
Live discussion	

8:30-10.00 [PAPERS SESSION 2] THE ECOSOPHIC WORLD: INHALING CONSCIOUSNESS	
SESSION CHAIR: ANNET DEKKER [NL]	ISEA2020 ONLINE CHANNEL 2
Géraldine Piguet [CA], Aleksandra Kaminska [CA]	Odorama V2: Prototyping Touch-Smell Synesthesia to Promote Neurocognitive Empathy
Jo Burzynska [AU]	Risonanze di Vino - Tuning Wine with Sound through the Senses and Culture
Clarissa Almeida [BR]	Inhaling Consciousness: Ecological Sentience at Molecular Level
Live discussion	

8:30-10.00 [PAPERS SESSION 3] MATTERS MATTERING: COLLECTIVE INTERACTIONS AND PLAY	
SESSION CHAIR: ALANNA THAIN [CA]	ISEA2020 ONLINE CHANNEL 3
Sojung Bahng [AU], Sungeun Lee [KR]	Sleeping Eyes: VR narcolepsy storytelling through the duality of presence
Cindy Poremba [CA], Jane Tingley [CA]	Any One, anyWare: Perceiving Sentience and Embodiment in a Distributed Sculpture
Rewa Wright [AU]	Tactile Potentials: A mixed reality project for live performance
Joan Soler-Adillon [ES]	In Pieces VR: Design and conceptualization of a VR- based experimental documentary
Live discussion	

IO:15-11:45 [PANEL SESSION I] AGENCY & AUTONOMY: INTERSECTIONS OF ARTIFICIAL INTELLIGENCE AND CREATIVE PRACTICE	
SESSION CHAIR: ANGELA FERRAIOLO [US]	ISEA2020 ONLINE CHANNEL I
Johnny DiBlasi [US], Carlos Castellanos [US], Eunsu Kang [US], Fabrizio Poltronieri [UK], Leigh Smith [US]	Agency & Autonomy: Intersections of Artificial Intelligence and Creative Practice
Live discussion	

10:15-11:45 [PAPERS SESSION 4] THE ECOSOPHIC WORLD: EXPANDED ENCOUNTERS	
SESSION CHAIR: CYNTHIA NOURY [CA]	ISEA2020 ONLINE CHANNEL 2
Hanif Janmohamed [CA], Maria Lantin [CA], Alexandra Hass [CA], Renrong Guo [CH]	Stonemaps: A Slow Intentional Network for Collective Sentience
Jo Law [US], Agnieszka Golda [AUS]	Enchanting Materialities: e-textiles installations for an ecosophic world
Reynaldo Thompson [MX]	Indigenous Sentience: Fernando Palma's electronic divinities
Live discussion	

IO.15-11:45 [PAPERS SESSION 5] MATTERS MATTERING: COLLECTIVE INTERACTIONS AND PLAY [CONT.]	
SESSION CHAIR: JONAH BRUCKER-COHEN [US]	ISEA2020 ONLINE CHANNEL 3
Samuel Thulin [CA]	Data, Sense, Resonance: An Art of Diabetic Self-Tracking
Erin Gee [CA], Sofian Audry [CA], Alex Lee [US]	Playing with Emotions: Biosignal-based Control in Virtual Reality Game Project H.E.A.R.T.
Renata Azevedo Moreira [CA]	Beyond the turn and towards the event: analyzing the curatorial as a material-discursive practice
Aisling Kelliher [US]	Reclaiming and Commemorating Difficult Felt Experiences
Live discussion	

12:00-13.30 [PAPERS SESSION 6] MACHINIC SENSE AND SENSIBILITY: EMBODIED COGNITION	
SESSION CHAIR: KEVIN HAMILTON [US]	ISEA2020 ONLINE CHANNEL I
Ana Rodrigues [PT], Penousal Machado [PT], Amílcar Cardoso [PT]	Glowing Lichen: Visually sensing social spaces
Simon Penny [US]	Embodied cognition, digital cultures and sensorimotor debility
David Howes [CA]	The Barbican Totem
Live discussion	

12:00-13.30 [PAPERS SESSION 7] THE ECOSOPHIC WORLD : EXPLORATIONS OF NATURAL SENTIENT ENVIRONMENTS	
SESSION CHAIR: JAKE MOORE [CA]	ISEA2020 ONLINE CHANNEL 2
Matthew Halpenny [CA]	Designing Technology for a Symbiosis Between Natural Systems and Information Infrastructure
Johanne Birringer [UK]	Underground sensings
Alexandra Bal [CA]	Sentience as The Antidote to Our Frenzied Mediated Selves
Live discussion	

12:00-13.30 [PANEL SESSION 2] SENTIENCE IN THE CONTEXT OF OPERATIVE IMAGES	
SESSION CHAIR: ORIT HALPERN [CA]	ISEA2020 ONLINE CHANNEL 3
Guillaume Pascale [CA], Jean Dubois [CA], Alexandre Castonguay [CA], Alice Jarry [CA], Nans Bortuzzo [CA]	Sentience in the Context of Operative Images

14:00-15:30 [PANEL SESSION 3] MACHINE LEARNING AS MATERIAL	
SESSION CHAIR: KEVIN HAMILTON [US]	ISEA2020 ONLINE CHANNEL I
Stephen Kelly [CA], Sofian Audry [CA], Ben Bogart [CA], Stephanie Dinkins [US], Suzanne Kite [US]	Machine Learning as Material: Research-creation Approaches to Behavior and Imagination

14:00-15:30 [PAPERS SESSION 8] THE ECOSOPHIC WORLD: PLANTS AND MICROBIAL AGENCIES	
SESSION CHAIR: WHITEFEATHER HUNTER [CA]	ISEA2020 ONLINE CHANNEL 2
Carlos Castellanos [US]	PlantConnect and Microbial Sonorities: Exploring the Intersection of Plant, Microbial and Machine Agencies
Christa Sommerer [AT]	Seeing Plants Through Botanical Illustration
Lisa Moren [US], Tsvetan Bachvaroff [US]	What is the Shape of Water? The Dinoflagellate (Pyrocystis) bioluminesce according to their own DNA
Live discussion	

14:00-15:30 [PANEL SESSION 4] KINSHIP AND DISEMBODIMENT IN MEDIATED CLOUD SPACES	
SESSION CHAIR: ANGELA FERRAIOLO [US]	ISEA2020 ONLINE CHANNEL 3
Alexandra Bal [CA], Steve Daniels [CA], Lila Pine [CA], Kathleen Pirrie Adams [CA]	Kinship and Disembodiment in Mediated Cloud Spaces

15:45-17:15 [PAPERS SESSION 9] MACHINIC SENSE AND SENSIBILITY: EXPRESSIVE AI	
SESSION CHAIR: ANA PERAICA [AT]	ISEA2020 ONLINE CHANNEL I
Ellen Pearlman [US]	AIBO: An Emotionally Intelligent Artificial Intelligent Brainwave Opera: Part 2, Or The Making Of A "Sicko" AI
Mahsoo Salimi [CA], Philippe Pasquier [CA], Carlos Castellanos [US]	Liminal Scape, an interactive visual installation with expressive Al
Bill Seaman [US]	Neosentience
Live discussion	

15:45-17:15 [PAPERS SESSION 10] THE ECOSOPHIC WORLD: PLANTS AND BIOPHILIC ARCHITECTURES I	
SESSION CHAIR: NIC HOLT [CA]	ISEA2020 ONLINE CHANNEL 2
Andrea Wollensak [US]	Open Waters
Elena Papadaki [BE]	Mycorrhizal Curation: minimal cognition for maximal cooperation
Desiree Förster [US/DE]	Expanding Sensitivity in Immersive Media Environments
John Power [AU]	Using Biophilic Design and the Orienting Reflex to Develop Generative Ambient Public Displays
Live discussion	

15:45-17:15 [PAPERS SESSION II] INTERDISCIPLINARY COLLABORATIONS FOR BETTER UNDERSTANDINGS of Sentience	
SESSION CHAIR: SARAH CHOUKAH [CA]	ISEA2020 ONLINE CHANNEL 3
Manuelle Freire [CA]	On places, spaces and objects of interdisciplinary scholarship: The case of Useful Fictions.
G. Mauricio Mejía [US]	Translating disciplinary practices for trans-sentient collaboration
Loren P.Bergantini [BR]	Can art contribute to the research on multisensory processes?
Live discussion	

17:30-19:00 [PANEL SESSION 5] MICROSCOPIC OTHERNESS AND SIGNS OF SUB-MOLECULAR SENTIENCE	
SESSION CHAIR: JOSE-CARLOS MARIATEGUI [PE]	ISEA2020 ONLINE CHANNEL I
Andrea Rassell [AU], Chris Henscke [AU], Paul Thomas [AU]	Microscopic otherness and signs of sub-molecular sentience

17:30-18:30 [ARTIST TALKS SESSION 1]	
SESSION CHAIR: PENESTA DIKA [AT]	ISEA2020 ONLINE CHANNEL 3
Sue Huang [US]	In the Time of Clouds: Materializing Data for a Speculative Future
Amanda Gutierrez [MX]	Flâneuse. La caminanta
Gregory Bennett [NZ], Liz Canner [US]	Lost City of Mer
Live discussion	

8:30-10:00 [PANEL SESSION 9] SCALING SENTIENCE: THE EARTH, THE SKY, AND OUTER SPACE		
SESSION CHAIR: MARTA DE MENEZES [PT]	ISEA2020 ONLINE CHANNEL I	
Kathy High [US], Kira O'Reilly [FI], Marie-Pier Boucher [CA]	Scaling Sentience: The Earth, the Sky, and Outer Space	
Live discussion		

8:30-10:00 [ARTIST TALKS SESSION 1] THE ECOSOPHIC WORLD: PLANTS AND BIOPHILIC ARCHITECTURES I	
SESSION CHAIR: ERIK ZEPKA [US]	ISEA2020 ONLINE CHANNEL 2
Henry Tsang [CA]	Riot Walk
Pauline Jennings [US]	neighboring towns
Erika Mondria [AT]	"Being human is in focus" of biometric data - The body is the event
Live discussion	

IO:15-II:45 [PAPERS SESSION I] THE PLANETARY: WATER WAYS	
SESSION CHAIR: CYNTHIA VILLAGOMEZ [US]	ISEA2020 ONLINE CHANNEL I
Chanelle Lalonde [CA]	Beneath the Surface and into the Planetary: Listening to/for Coexistence in Contemporary Sound Installations
Ana Rewakowicz [CA]	Art and Science Intra-action of Collecting Water from Fog.
Aleksandra Dulic [CA], Miles Thorogood [CA]	Water Ways Visualization Computational Reflexivity for Sustainability Action
Live discussion	

10:15-11:45 [ARTIST TALKS SESSION 2]	
SESSION CHAIR: MILENA TOMIC [CA]	ISEA2020 ONLINE CHANNEL 2
Sarah Cook [CA/UK], Roddy Hunter [UK]	Networked art practice after digital preservation [Workshop Facilitators]
Gabriel S Mose [DE], Carmel Barnea [IL], Brezner Jonas [IL]	The millennial toolkit [Workshop Facilitators]
Barua Shomit [US], Yanjun Lyu [US]	Connectivity Café: Prototyping the Dining Event
Martine Stig [NL]	Art for Machines
Live discussion	

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12:00-13:30 [PANEL SESSION 2] HUMAN COLLABORATION & MACHINE GENERATION ACROSS MEDIA	
SESSION CHAIR: MARC-ANDRÉ COSSETTE [CA]	ISEA2020 ONLINE CHANNEL I
Roderick Coover [US], Nick Montfort [US], Scott, Rettberg [NO]	Human Collaboration & Machine Generation Across Media

12:00-13:30 [ARTIST TALKS SESSION 5]	
SESSION CHAIR: BYRON RICH [CA/US]	ISEA2020 ONLINE CHANNEL 2
Yeohyun Ahn [US]	Social Homelessness on US Campuses
Gene Felice [US], José Carlos Espinel [ES], Fiona Hillary [AU], Jennifer Parker [US]	The Algae Society Bio Art Design Lab presents: Entanglements
Sarah Choi [CA], Michael Trommer [CA]	Shanawdithit VR: Exploration of Indigenous Opera in Immersive Media
Byron Rich [CA] John Wenskovitch [US]	Xeno-Terra: Migrant Ecosystems
Live discussion	

14:00 - 15:30 [PANEL SESSION 3] AESTHETIC AND USER EXPERIENCE IN BIOFEEDBACK ART	
SESSION CHAIR: AFRODITI PSARRA [GR/US]	ISEA2020 ONLINE CHANNEL I
Raivo Kelomees [EE], Varvara Guljajeva [EE], Oliver Laas [EE], Sean Montgomery [US]	Aesthetic and User Experience in Biofeedback Art
Live discussion	

14:00-15:30 [ARTIST TALKS SESSION 4]	
SESSION CHAIR: CYNTHIA VILLAGOMEZ [MX]	ISEA2020 ONLINE CHANNEL 2
David Jhave Johnston [CA]	ReRites & ReLobo
Meredith Drum [US]	Monument Public Address System
Gabriel Vigliensoni [CA]	Telematic Awakening: Participating in the 2019 Chilean Uprising Through a Live Gestural Interface
Live discussion	

15:45-17:15 [PAPER SESSION 2] MACHINIC SENSE AND SENSIBILITY: INTERACTION AND EMBODIMENT	
SESSION CHAIR: SAMUEL THULIN [CA]	ISEA2020 ONLINE CHANNEL I
Doug Van Nort [CA]	Gestural Metaphor and Emergent Human/Machine Agency in Two Contrasting Interactive Dance/Music Pieces
Byeongwon Ha [US]	The Revisit of Sentience: Nam June Paik's Big Sleep in Interactive Art
Minke Nouwens [NL], Noud Heerkens [NL], Michel Van Dartel [NL]	An Invitation to DANCE: Making Sense of Viewer Interaction in Installation Art
Jim Murphy [NZ]	Physical Grainclouds: Granular Sound Art in the Physical World
Live discussion	

15:45-17:15 [ARTIST TALKS SESSION 5]	
SESSION CHAIR: DIANE WILLOW [US]	ISEA2020 ONLINE CHANNEL 2
Nadine Lessio [CA]	SAD Home. Developing an Alexa with depression
Csenge Kolozsvari [CA]	An Artist Talk: The Power of the Spill
Otto Muller [US], Sean Clute [US]	Rural Noise Ensemble: Notweed (2019)
Hugo Solís Garcia [MX]	Sono-lumínica-mano-morse: pulsating study for narrating hands
Live discussion	

17:30-19:00 [PAPER SESSION 3] MACHINIC SENSE AND SENSIBILITY: THE PROBLEM WITH IMMERSION	
SESSION CHAIR: JEREMY HIGHT [US]	ISEA2020 ONLINE CHANNEL I
Vince Dziekan [AUS]	Expanded Notes on the Exhibitionary Conditions of Virtual Reality DO NOT MOVE
Budhaditya Chattopadhyay [IN/NL]	Post-immersion: Towards a Discursive Situation in Media Art
Nick Alexander [CA]	The Problem with immersion
Peiheng Zhao [CA]	Intercultural Dialogue in Museums through Mixed Reality
Live discussion	

17:30-19:00 [ARTIST TALKS SESSION 6]	
SESSION CHAIR: DIANE WILLOW [US]	ISEA2020 ONLINE CHANNEL 2
Afroditi Psarra [GR/US], Audrey Desjardins [US]	Everyday Voices and Voids: Reclaiming and Transcoding Voice Interaction Data as Performance
Fred Paulino [BR]	Gambiologia. A Brazilian approach on critical making
Sophia Brueckner [US]	Captured by an Algorithm
Live discussion	

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# SUMMIT ON NEW MEDIA ART ARCHIVING OCTOBER 16

The Summit is organised with the purpose of presenting a roadmap towards the goals of the Liverpool Declaration\* (see below). This is a cooperative effort of the ISEA, Ars Electronica, SIGGRAPH and ADA archives.

SESSION I (8:00 - 9:00)	
Melanie Swalwell [AU]	"Archiving Australian Media Arts: Towards a method and a national collection
Rodrigo Guzman Serrano [HK]	"A History of the Internet through MoMA's Exhibition Sites. Web- Archiving Art Content at NYARC"
Hava Alboudy [IL]	"Archiving and Researching Media Art in Israel: Challenges, Innovative Solutions, and Potential International Collaborations"
Vladlena Gromova [RU]	"A Database of Interdisciplinary Art in Russia"
Q&A - Moderators:	Bonnie Mitchell and Wim van der Plas

KEYNOTE SPEAKER (9:00 - 9:40)	
Oliver Grau [AT]	"Museum-Network Digital Arts: For a concerted Collection, Documentation and Conservation Strategy (Including intro to ADA)

SESSION 2 (9:41 - 10:20)	
Christina Radner [AT]	"The Ars Electronica Archives"
Bonnie Mitchell [US]	"The SIGGRAPH Digital Art Show Archives"
Wim van der Plas [NL], Bonnie Mitchell [US]	"The ISEA Symposium Archives"
Q&A - Moderators:	Wendy Coones and Wim van der Plas

SESSION 3 (10:21 - 11:16)	
Scott Rettberg [NO]	"ELMCIP Electronic Literature Knowledge Base"
Camille Baker [UK]	"Brief history of STARTS and STARTS related EU policy overview"
Adam Lockhart [UK]	"VR as a Preservation and Simulation Tool for Media Artwork Installations"
Q&A - Moderators:	Wendy Coones and Wim van der Plas

SESSION 4 (II:17 - 12:10)		
Tadeus Mucelli [BR]	"Digital Art Festival, Biennial Of Digital Art and Labcult [UFMG/ PPGCI]"	
Elisa Arca Jarque [PE]	"ePPA: Space/ Platform for Audiovisual preservation"	
Bertrand Gervais [CA]	"Carving out a Path: Building Research and Knowledge environments (RKE) in a Digital Culture"	
Q&A - Moderators:	Wendy Coones and Bonnie Mitchell	
SESSION 5 (12:11 - 12:45)		
Devon Mordell [CA]	"Preservation Begins at Creation: An Embedded Digital Archivist Within the University of Windsor's School of Creative Arts"	
Byeongwon Ha [US]	"Archiving Interactive Art for Art Practitioners and Theorists"	
Q&A - Moderators:	Bonnie Mitchell and Wim van der Plas	
BREAK OUT SESSIONS (13:00 - 14:30)		
Room 1	Connecting New Media Art Archives. Moderated by Bonnie Mitchell & Jan Searleman	
Room 2	Creating Ties to Musea. Moderated by Wendy Coones & Samantha Mealing	
Room 3	Funding for New Media Art Archives (Brainstorm, Networking for Fundraising Strategies). Moderated by Wim van der Plas & Christine Radler and Wim van der Plas	
CONCLUDING SESSION (14:35 - 16:00)		
Creating a roadmap towards the goals of the Liverpool Declaration		

# ARTISTIC PROGAMME

ISEA's 2020 artistic program explores the infinitely large and the infinitely small worlds of Sentience – feeling-sensing-making sense.

There were to be seven exhibitions across various venues for the ISEA2020 artistic programme, until the city's shutdown in March 2020, here as elsewhere, of all non-essential businesses to prevent the spread of COVID-19. Nevertheless, two core themes had already been identified running through the exhibitions.

The first was a careful attention to scale and scalar complexity in the age of the Anthropocene. The selected works not only share a collective sense of urgency to rethink relationships between sentient beings — human, non-human, more-than-human — in different times and spaces, but also engage in vastly disparate scales ranging from the extraterrestrial and planetary to the bodily and microscopic. Among the calamities scientifically linked to human activities, climate change most vociferously connects socio-economic tipping points to changes in the planet's geological scales as well as microbial worlds.

The second theme explored the human sensorium - touch, taste, smell, as well as sight and hearing. Sue Huang's multimedia installation In the Time of Clouds (2019) explores sensorial relationships to clouds and on our collective imagination on their shapes and taste. Custommade ice cream—a tangible product of this collected data—can be sampled by spectators. the cool dessert acting as a sweet unifier of our perceptions of clouds. Stephanie Rothenberg's Aauadisia (2020) is an immersive installation that invites viewers to recline in comfortable chairs, take in three looped videos, and interact with a soft robotic sculpture of a cyborg oyster, with the option of tasting the amino acid liquid produced by the oyster via a series of tubes.

Guillaume Cousin's Le silence des Particules (2018), a large-scale installation using a machine-cannon that cyclically projects ephemeral large circles of smoke moving slowly in the glow of warm light, and leaving a slight trail as they pass and slowly disappear. In a room with extremely controlled light, Le silence des Particules renders visible, almost tangible, the billion particles that form each gram of matter.

With ISEA2020 transition to an online format, the challenge was to present a series of virtual exhibitions that would bring these different scales and senses together in a meaningful way while at the same time respecting the nuances of each work. Fathoming online versions of work intended for physical spaces was simply not possible; a poor and disappointing imitation of the "real" project would almost certainly be the result. As much as we are plugged in and connected through the Internet, most of us need and miss embodied experiences of the world. Among the simpler things in life yearned is walking excitedly into a gallery free of safety measures concerning every breath taken.

By June, the global pandemics of COVID-19 and systemic racism that amplified the health precarity disproportionately impacting Indigenous and other racialized communities and the urgency of the Black Lives Matter movement against policing, pressed gravely upon us even more than before about why sentience matters today. The capacity to feel, the ability to care, to sense and make sense of what it is to be a subject of experience – to be conscious. Of the unconscionable.

The intersections of artistic, scientific, and media narratives play a pivotal role in feeling, coping with and making sense of not only this moment but also of all our relations. Climate futures, biodiversity, multi-species survival, and thrivance, also depend on it. We can no longer deny the place of human beings in this world is simply as another vulnerable species; we are no more immune from ourselves than from other forms - sentient or not, and neither are we separate.

Presented on both the ISEA2020 Online platform and on a separate dedicated website, ISEA2020's artistic program embodies this urgency to decenter inherited anthropocentric, or humancentred views, so that we can not only see but feel and sense ways to deepen relationships with other systems and forms of being. Touch and be touched; then act.

Erandy Vergara Vargas and Alice Ming Wai Jim

#### Acknowledgment

Erandy Vergara wishes to thank Alice Jim and Caroline Andrieux, artistic co-chairs, for their diligent revision of more than 500 art submissions and their rigorous yet open spirit in making the final selection of ISEA2020's Juried selection. Erandy also wishes to thank the invaluable feedback of Pascal Dufaux, ISEA2020's technical director, who spent countless hours on the phone and video conferences discussing, imagining, planning how to best adapt the ISEA2020 Art Programme to the new online format. Erandy would also like to thank Alice Jim and Chervl Sim for their comments half-way through the process of shaping the art-dedicated website. Lastly, Erandy would like to thank the artists, who were open to discuss ways to adapt their work, first to an exhibition context, and for their patience of the many times we proposed something that a few days/weeks later could not work because of the changing landscape with regards Covid-19 security measures in Canada.



ART2020.ISEA-INTERNATIONAL.ORG

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## VIRTUAL EXHIBITION

#### Archiver le Présent Curating Collective

(CÉDRIC ANDERSON, GINA CORTOPASSI, LUDOVIC DOUTRE-GUAY. MARIE FRASER. BERTRAND GERVAIS. JOANNE LALONDE. LAURENCE PERRON AND LISA TRONCA) | ARTISTS AND COLLECTIVES: BARON LANTEIGNE / DAMIEN BEYROUTHY / NANS BORTUZZO / SANDRINE DEUMIER / DISNOVATION ORG & JÉRÔME SAINT-CLAIR / LOUISE DRULHE / FOUNDLAND COLLECTIVE / ISABELLE GAGNÉ & PAUL GASCOU-VAILLANCOURT & STÉPHANE ARCHAMBAULT / BENJAMIN GROSSER / AMIRA HANAFI / JONATHAN HARRIS & GREG HOCHMUTH / INSTITUTE FOR NEW FEELING / PHILIPPE DE JONCKHEERE / DINA KELBERMAN / SAM LAVIGNE & TEGA BRAIN / ALBERTINE MEUNIER / TARYN SIMON & AARON SWARTZ / MOLLY SODA

RE|SEARCH, 2020 Online exhibition The politics of Sentience

RelSearch aims to capture our prevailing impulse to search in the digital age. The online exhibition gathers artworks by various artists and collectives ranging from 2006 to the present.

http://www.archiverlepresent.org

#### Marco Barotti [DE/IT]

THE EGG, 2019

KINETIC SOUND SCULPTURE, NATURAL LATEX RUBBER, WORLD POPULATION COUNTER

ANIMALITY

The Egg is a kinetic sound sculpture constantly changing shape. It questions overpopulation, driven by the data of the Worldometer, an algorithm recording births and deaths.

http://www.marcobarotti.com

#### Scott Benesiinaabandan [CA]

WASSAYGANE ABI-MAZINA'IGAN | MAPS OF HOME AND GLOWING BONES, 2020 VIDEO (07:24)

THE ECOSOPHIC WORLD

Using a variety of technologies and strategies, the work seeks to create maps to better see living space-times I consider (a) home. Home as a living space regardless of my own awareness of it.

http://www.benesiinaabandan.com/



MARCO BAROTTI, THE EGG (2019)

#### Sophia Brueckner [US]

#### CAPTURED BY AN ALGORITHM, 2018

JAVASCRIPT, KINDLE POPULAR HIGH-LIGHTS FROM POPULAR ROMANCE NOVELS, SCANNED ROMANCE NOVEL COVERS, PHOTOSHOP'S PHOTOMERGE ALGORITHM

#### MACHINIC SENSE & SENSIBILITY

A series of commemorative plates that looks at romance novels through the lens of the Amazon Kindle Popular Highlight algorithm. Using over seventy thousand individual acts of highlighting, the work tells the story of the loneliness, grief, vulnerability, and discontent felt by the readers.

http://www.sophiabrueckner.com

#### Brit Bunkley [NZ]

GEOLITH, 2019 VIDEO

THE POLITICS OF SENTIENCE

Geolith is an apocryphal story of an encounter between a Navaho tribal elder and the Apollo 11 astronauts, narrated by Desmond Bovey during animated flybys over cyber islands; the moon rolls.

http://www.britbunkley.com/

#### lan Clothier [NZ], Josiah Jordan [NZ]

DNAWHAKAPAPA . 2019

DNA DATA, GENERATIVE AUDIO AND VIDEO (07:57)

MATTER'S MATTERING

DNAwhakapapa (whakapapa: genealogy/lineage in Māori) uses the artist's DNA data to generate audio via software written by Josiah Jordan that is then translated once more through generative video software, bringing to life visually the artist's genealogy.

http://ianclothier.com



#### Teresa Connors [CA]

FROM THE EDGE, 2019

NONLINEAR AUDIOVISUAL
INSTALLATION

MATTER'S MATTERING

From The Edge is from a series of nonlinear audiovisual installations by Teresa Connors which explore the use of livestreamed ocean data-sets as a co-creative device.

http://www.divatproductions.com

#### Roderick Coover [USA/FR], Krzysztof Wołek [PL]

THE KEY TO TIME, 2019

FULL-DOME 360° VIRTUAL REALITY
PROJECTION

THE PLANETARY

The Key to Time is a surreal and lyrical narrative for immersive spaces that bridges silent film and VR. Filmed in Poland and USA, the story follows a lost scientist who discovers how historic choices echo across time.

https://unknownterritories.org/

#### Malitzin Cortes [MX]

HYPER \_ D, 2019
360° VIRTUAL REALITY VIDEO
THE ECOSOPHIC WORLD

Hyper\_D asks: what stories could objects tell if they had the voice to do it? What would they say about our urgency to invent ways of inhabiting the future?

http://malitzincortes.net/



TERESA CONNORS, FROM THE EDGE (2019)

#### Elizabeth Demaray [US]

THE GENRE PROJECT: LISTENING STATIONS FOR BIRDS THAT PLAY HUMAN MUSIC. 2020

SOUND, INTERACTIVE SYSTEM AND WILD FEEDER BIRDS

ANIMALITY

In The Genre Project: Listening Stations for Birds that Play Human Music, an outdoor installation, birds respond to different genres of human music.

https://elizabethdemaray.org/

#### Sonia Guggisberg [BR]

LIVE WHEEL , 2018
SOUND INSTALLATION
THE PLANETARY

Live Wheel is a multichannel audio installation built around documentative footage of the huge contemporary migration wave in Europe filmed during five trips from 2014 to 2019.

http://www.soniaguggisberg.com

#### Sue Huang [US]

IN THE TIME OF CLOUDS , 2019 XX The ecosophic world

ΧX

http://www.sue-huang.com



ELIZABETH DEMARAY, THE GENRE PROJECT: LISTENING STATIONS FOR BIRDS THAT PLAY HUMAN MUSIC (2020)

#### Alice Jarry [CA]

#### Adriana Knouf [US]

#### Scenocosme: Gregory Lasserre [FR], Anais met den Ancxt [FR]

DUST AGITATOR, 2018-2020
INSTALLATION
THE ECOSOPHIC WORLD

The kinetic installation

Dust Agitator explores
the aesthetic, critical and
sensory potential of a
residual material at the end
of its cycle: a fine, harmful
dust produced by the glass
recycling industry in Quebec.

https://www.alicejarry.com/

TX-1, 2020

SPIRONOLACTONE PILL FRAGMENT, VIVELLE DOT PATCH FRAGMENT, HANDMADE ABACA PAPER, RESIN THE PLANETARY

TX-1—supported by MIT Space Exploration Intitiative and Northeastern University—launches bits of the artist's hormone replacement medications to the International Space Station, marking the first-known time that elements of the transgender experience orbit the earth.

https://zeitkunst.org/

KRYOPHONE, 2019

ICE, ELECTRONIC, AUDIO SYSTEM, COMPUTER, LIGHT

THE ECOSOPHIC WORLD

Kryophone is a sonorous and luminous interactive sculpture made of ice which reacts to the electrostatic touch of bodies. Sounds and light evolve according to the intensity of contacts.

http://www.scenocosme.com



ADRIANA KNOUF, TX-1 (2020)

#### Local Group Collective / Jeremy Segal [CA], Roxanne Sirois [CA], Michel Didier [FR]

PROTEUS, 2018
INTERACTIVE INSTALLATION

MACHINIC SENSE AND SENSIBILITY

In Proteus, a touchscreen becomes a window through which the viewer encounters a mysterious particle system. With dynamic reactive behaviours, the work questions at what point a series of pixels can begin to feel alive.

http://www.jeremymichaelsegal.com/proteus

#### Louise Mackenzie [UK]

ZONE OF INHIBITION, 2019
FILM (14:12)
ANIMALITY

Using darkness as a cover for anonymity, Zone of Inhibition performs a dialogue between an unknown future species and the present-day people who genetically modify them.

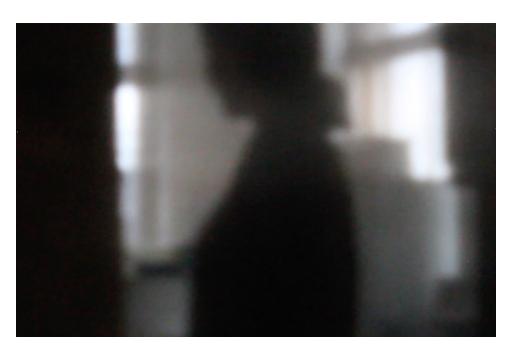
https://www.loumackenzie.com

#### Lisa Moren [US], Tsvetan Bachvaroff [US]

WHAT IS THE SHAPE OF WATER?, 2019
MILLIONS OF BIOLUMINESCENT
DINFLAGELLATE (PYROCISTIS),
ARDUINO, MICROPHONE, SERVO
MOTORS, COMPUTER AND SPEAKER
ANIMALITY

In What is the Shape of Water, viewers enter a pitch-black room with millions of invisible organisms above their heads. If they ask, "what is the shape of water?" the work—made up of bioluminescent dinoflagellates—will come to life as if called by its name and tell them.

http://lisamoren.com



LOUISE MACKENZIE, ZONE OF INHIBITION (2019)

#### Matthew Mosher [US]

#### Aaron Oldenburg [US]

#### Allison Parrish [US]

KHON KHRO, 2019 Mixed Media Matter's Mattering

Khon Khro, a reflected light installation, visualizes the participant's attention using an EEG headset. The projected colors become unified when the viewer is focused and separate when they are distracted.

https://mosher.art

DESERT MOTHERS, 2019
VIRTUAL REALITY VIDEOGAME;
NETWORKED MULTIPLAYER
ANIMALITY

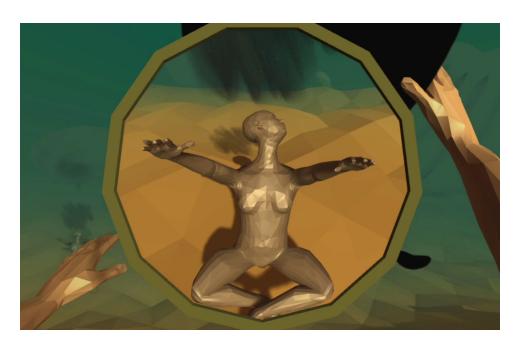
Desert Mothers is an autonomous entity that communicates through weather and time in a networked multiplayer meditation circle.

http://aaronoldenburg.net

RECONSTRUCTIONS, 2020
NEURAL NETWORK, PYTHON CODE
MACHINIC SENSE AND SENSIBILITY

Reconstructions is an infinite chiastic computergenerated poem. Each line—generated with neural networks trained in poetry—is paired with the network's reconstruction of its reverse text

http://www.jeremymichaelsegal.com/proteus



AARON OLDENBURG, DESERT MOTHERS (2019)

#### Ana Rewakowicz [CA], Camille Duprat [FR], Jean-Marc Chomaz [FR]

#### Tivon Rice [NL/US]

MISTY WAY, 2016
INSTALLATION
THE PLANETARY

The Misty Way installation is an immersive environment of light, shadow and sound where visitors/participants are invited on a journey of an intimate encounter with water.

https://www.ladhyx.polytechnique. fr/en/recherche/art-et-science/ mist-collector ENVIRONMENT BUILT FOR ABSENCE (AN UNOFFICIAL/ARTIFICIAL SEQUEL TO J.G. BALLARD'S "HIGH RISE"), 2018

VIDEO, COMPUTER GENERATED TEXT, SOUND (17:45)

MACHINIC SENSE AND SENSIBILITY

After scanning the demolition of the former Dutch statistics office with a drone, an Al trained in the works of JG Ballard describes the possible narratives within these broken grounds in Environment Built for Absence.

http://www.tivonrice.com



TIVON RICE, ENVIRONMENT BUILT FOR ABSENCE (AN UNOFFICIAL/ARTIFICIAL SEOUEL TO J.G. BALLARD'S "HIGH RISE") (2018)

#### Sensory Entanglements: Decolonizing the Senses / David Garneau [CA], Garnet Willis [CA]

HEART BAND, 2020

PAINTED HAND DRUMS AND ELECTRONIC COMPONENTS

SENTIENT DIFFERENCE

Heart Band is a participantactivated instrument.

Sensor and electromagnetic drivers cause tens drums to resonate with a heartbeat sound when approached.

http://www.davidgarneau.com/ www.garnetwillis.com

#### Sensory Entanglements: Decolonizing the Senses Suzanne Kite [US], Devin Ronneberg [US]

ITÓWAPI ČÍK'ALA (LITTLE PICTURE), 2019

SCULPTURE, DIGITAL SCULPTURE SENTIENT DIFFERENCE E

Itówapi Čík'ala (Little Picture) interrogates the relationships between human and nonhuman entities' intelligences. Through Oglála Lakhóta ontologies, materials such as metals and stones can be capable of volition.

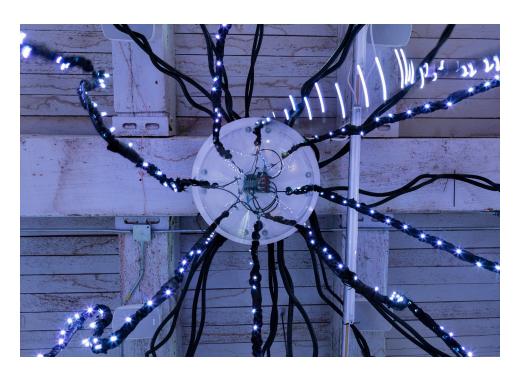
http://kitekitekitekite.com/ Devinronneberg.net

#### Sensory Entanglements: Decolonizing the Senses / Rea Noir [AU]

PAUSE.II, 2020
VIDEO, ANIMATION, SOUND
SENTIENT DIFFERENCE

PAUSE.II is an experimental video work that explores the embodied experience of returning to one's country (Gamilaraay), and the haunting sensorial effects that linger from its colonial past.

https://rea-noir.com/



SUZANNE KITE, DEVIN RONNEBERG, ITÓWAPI ČÍK'ALA (LITTLE PICTURE) (2019)

#### Serious Computer Group / Nina Bouchard [CA], Evan Montpellier [CA]

#### Şölen Kıratlı [TR/US], Akshay Cadambi [IN/US]

#### Hugo Solís [MX]

*NOVA*, 2019 Video installation Machinic sense and sensibility

Nova is a responsive video installation. The work is a study of water, combining video footage and synthesized graphics to generate evolving visual patterns.

https://ninabouchard.com https://evanmontpellier.net HIVE, 2016-2018

INTERACTIVE SOUND AND SCULPTURE WITH SPATIAL AUDIO AND GENERATIVE SOUND, PHYSICAL COMPUTING (SENSORS AND MICROCONTROLLERS), DIGITAL DESIGN AND FABRICATION

#### ANIMALITY

HIVE explores the notion of sentience and agency in the sonic medium through an interactive art installation, created by fusing spatial sound, sculptural form, and interactive methods.

http://solenk.net/ https:///akshaycadambi.com SONO LUMINICA MANO MORSE, 2018

26 SPEAKERS, FOUR SCREENS, LEAP MOTION SENSOR AND CUSTOM SOFTWARE

SENTIENT DIFFERENCE

Sono-Lumínica-Mano-Morse: Pulsating Study for Narrating Hands is a sound installation that invites the public to interact and reflect with the non-hearing world.

http://hugosolis.net



#### Shaoyu Su [CN/US], Weidi Zhang [CN/US]

HONGSHAN EXPERIMENT II: CELESTIAL, 2020

MULTIMEDIA INSTALLATION
THE ECOSOPHIC WORLD

As the second iteration of the ongoing project Hongshan Experiment, HE II: Celestial takes a voyage in search of the "balanced outcome" using computer visions and mathematical models.

https://www.shaoyusu.com http://www.zhangweidi.com

#### Joel Swanson [US]

CODEPENDENT ALGORITHMS, 2018
CODE

MACHINIC SENSE AND SENSIBILITY

Codependent Algorithms
pairs a spelling correction
algorithm with a spelling
deformation algorithm,
creating an infinite feedback
loop that removes the
need for human input or
intervention.

http://joelericswanson.com

#### Clea T. Waite [US]

ICE-TIME, 2017

MIXED MEDIA INSTALLATION: SIX HD VIDEO CHANNELS, 9.1 AMBISONIC SOUND, AND ICEBERG FRAGMENTS

THE PLANETARY

Ice-Time is an immersive video and 3D sound installation that examines our altering perceptions of space, time, and Earth's deep-time, using polar ice as a unique window onto climate change.

http://www.clea-t.de



CLEAT. WAITE, ICE-TIME (2017)

#### Adrianne Wortzel [US]

Mo H. Zareei [NZ]

THE SENTIENT THESPIAN, 2019
VIDEO (05:11)

MACHINIC SENSE AND SENSIBILITY

The Sentient Thespian—
made with support from the
Thoughtworks Arts and the
Consortium for Research
and Robotics and Reach
Robotics—follows a "sentient"
robot tries and fails to create
a transformative experience
for a human and an industrial
robot.

http://adriannewortzel.com

MATERIAL MUSIC, 2020

KINETIC SOUND INSTALLATION
(BRASS, COPPER, ALUMINIUM, STEEL,
HARDWOOD, SOFTWOOD, GLASS,
MARBLE, ACRYLIC, SOLENOIDS, AND
ELECTRONICS)

MATTER'S MATTERING

Material Music is a processbased kinetic installation developed to underscore the significance of physical materiality within the field of object-based audiovisual art.

https://www.millihertz.net/



MO ZAREEI, MATERIAL MUSIC (2020)

## ONLINE PERFORMANCES

OCTOBER 17 | 13:30-14:30

Rik Lander, Phil Hall, and Marie-Helene Boyd [UK]

I AM ECHOBORG ONLINE, 2020

A LIVE PARTICIPATORY PERFORMANCE DELIVERED VIA ZOOM

I am Echoborg Online is a live participatory performance delivered via Zoom

https://echoborg.com https://art2020.isea-international.org/ OCTOBER 17 | 15:00-16:00

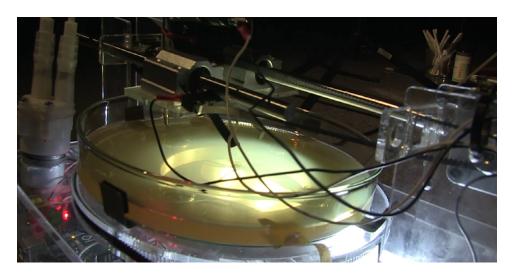
Stephanie Rothenberg

AQUADISIA, 2020

PERFORMANCE AND WEBSITE

Aquadisia explores the queering of biopolitical power in the quest to engineer nonhuman life for human survival. A new species of cyborg oysters is designed to cure climate change in this science fiction.

http://stephanierothenberg.com https://art2020.isea-international.org/



KLAUS SPIESS & LUCIE STRECKER, MICROBIAL KEYWORDING II (2020)

#### OCTOBER 17 | 12:00-13:00

#### Klaus Spiess & Lucie Strecker [AT | DE]

MICROBIAL KEYWORDING II, 2020 SPEECH RECOGNITION, ORAL MICROBES, BIOMEDIA, SOFTWARE

In Microbial Keywording II, the ecological well-being of oral microbes from a Viennese saliva donor re-arrange the online audience's phonemes in order to view the decrease of both linguistic and microbial diversity.

art2020.isea-international.org/

#### OCTOBER 18 | 1:05-1:25

## Afroditi Psara and Audrey Briot [USA/GR | FR]

KNITTED FABRICS, SOFTWARE-DEFINED RADIO, HANDMADE DIPOLE ANTENNAS

Listening Space is an artistic research that explores transmission ecology poetics by archiving sound and image satellite broadcasts into a series of knitted textile artifacts.

http://afroditipsarra.com https://www.audreybriot.fr

## ON-SITE PROGRAMME

IN RESPONSE TO THE RECENT COVID-19 HEALTH REGULATIONS AND RECOMMENDATIONS IN MONTREAL, CERTAIN EVENTS HAD TO BE ANNULLED OR RECONFIGURED.



PAVITRA WICKRAMASINGHE, CORAL BONES/LA MER, MODELS FOR METEORS (2018, 2015)

#### **EXHIBITIONS**

## MAISON DE LA CULTURE JANINE-SUTTO, MONTRÉAL OCTOBER 13 - NOVEMBER I

#### Allison Moore [CA]

WUNDERKAMMER, 2018
VIDEO INSTALLATION

Wunderkammer recreates a cabinet of curiosities animated through a virtual screen composition. The original 16th-century Wunderkammers were a precursor to the modern museum.

http://www.allisonmoore.net/

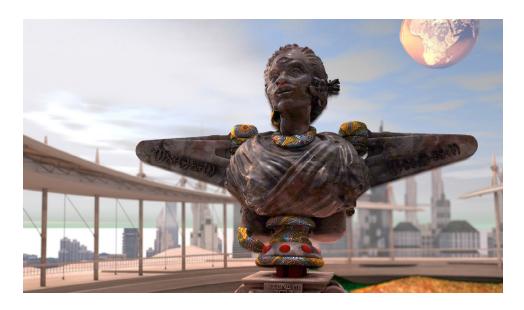
#### Pavitra Wickramasinghe [LK/CA]

CORAL BONES/LA MER, MODELS FOR METEORS, 2018, 2015

INSTALLATION, MIXED MEDIA

The two projects—Models for Meteors and Coral bones/La mer—are an exploration of voyage, discovery and the desire to be here and everywhere at the same time.

https://www.pavitraw.com/



QUENTIN VERCETTY, MISSING BLACK TECHNO-FOSSILS (2020)

## MAISON DE LA CULTURE CLAUDE-LÉVEILLÉE, MONTREAL OCTOBER 13 - 18

#### Katherine Melançon [CA]

TOWARDS A PARLIAMENT OF THE LIVING II, 2020
INTERACTIVE INSTALLATION, ANIMATION, PLANTS
AND SOII

In Towards a Parliament of the Living II, outdoor plants face a screen. Their pH data creates an animation of them at an earlier stage in life. The plants control their own representation and the artwork created by a human.

https://katherinemelancon.com/

## Quentin VerCetty [CA]

MISSING BLACK TECHNO-FOSSILS, 2020 DIGITAL PRINTS

Missing Black Techno-fossils speculates the missing memories and stories of Canadians of African descent through sculptural monuments in futuristic landscapes.

https://www.vercetty.com/

## VIDEO//PLAY, BREAK THE DISTANCE: ON-SITE MOVING PROGRAMME

ISEA2020 has prepared a moving video programme with outreach, accessibility and COVID-19 safety measures in mind: from October 13th to the 18th, two trucks equipped with large LED screens will be in transit around the city showcasing the works of 13 national and international artists that will stop you in your tracks. The projects will be presented throughout the city, exploring dynamics of proximity and distance, and introduce new sentient imaginaries into the heart of Montreal.

We invite you to check out this stealthy programme of which only hints of locations will be disclosed, and that you get the chance to catch it if you can!

#### DATES/NEIGHBORHOODS

OCTOBER 13, 16:00 - 20:00

Hochelaga/ Centre sud

OCTOBER 14, 14:00 - 21:00

Montreal at large

OCTOBER 15, 15:00 - 21:00

Centre Ville/ Village/ Plateau/ Griffintown

OCTOBER 16, 16:00 22:00

Côte-des-neiges/NDG

OCTOBER 17, 16:00 22:00

Villeray/ Mile End/ Saint Michel

OCTOBER 18: 14:00 - 21:00

Montreal at large

#### ARTISTIC PROGRAMME



MARCO BAROTTI, WOODPECKERS (2018)

#### Marco Barotti [IT/DE]

CLAMS, SWANS, WOODPECKERS, 2016-2019
KINETIC SOUND SCULPTURES, RECYCLED PLASTIC,
SATELLITE DISHES, INFRASOUND, DATA API,
ELECTROSMOG, WATER QUALITY MEASUREMENTS
[4:11]

Video documentation of selected kinetic sound sculptures for ISEA2020. *Clams* triggered by water quality; *Swans*, tech waste and wildlife; *Woodpeckers* transform electro-smog into drumming patterns.

https://www.marcobarotti.com/

#### Guillaume Arseneault (gllm.ca) [CA]

FEEDBIKE, 2020

A/V PERFORMANCE FOR AUGMENTED BIKE WHEEL GENERATOR (15:00)

Powered by movement, Feedbike reveals the ungrasped between void and short-circuit. Audiovisual signals through electrical brownout amplify silence to its extinction.



CNDSD AND IVAN ABREU, FIREWORKS (2020)

#### Hannah Claus [CA]

WISK, 2020 VIDEO (01:30)

Wisk brings together the Everlasting wampum belt and its signifier, the white pine: a living forever-growing representation that grounds and structures the Haudenosaunee confederacy.

https://www.hannahclaus.net/

#### CNDSD and Ivan Abreu [MX]

FIREWORKS, 2020 LIVE CINEMA CODING

Fireworks is a live cinema coding performance that shows the idiosyncratic singularities of extreme rites, where syncretism and geopolitical sensitivities are mixed with computational processes

http://malitzincortes.net/ https://www.ivanabreu.net/



NATHALIE GUIMBRETIÈRE, NAXOS (2020)

#### Nathalie Guimbretière [FR]

NAXOS, 2020 HD VIDEO (08:00)

Naxos began with a meeting between artists and researchers from four disciplines: visual arts, music, writing and astrophysics to co-create a singular artistic universe. The resulting work is an eightminute film that, by activating instruments and data linked to space research, interrogates not only the transmission forms of science, but those of art.

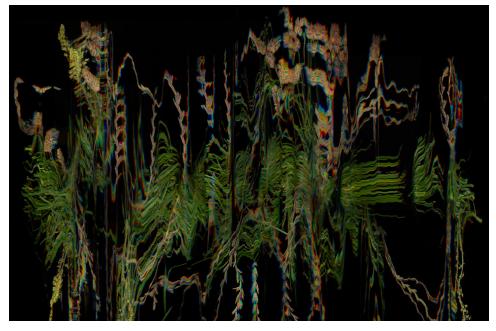
https://nathalieguimbretiere.com/

### Laurent La Torpille [FR]

DAS LICHTQUANT, 2016/2020 GENERATIVE INSTALLATION

Inspired by a liberal interpretation of Albert Einstein's photon concept developed between 1905 and 1917, das Lichtquant is the materialization of the interactive process between light and matter vis-à-vis absorption and spontaneous and stimulated emissions.

www.laurentlatorpille.com



KATHERINE MELANÇON, SEVEN SISTERS SERIES NATIONAL PARK SERIES - GRASS, SCRUB, WOODLAND (2019)

#### Katherine Melançon [CA]

SEVEN SISTERS SERIES NATIONAL PARK SERIES (GRASS, SCRUB, WOODLAND; FAUNA), 2019; 2016 ANIMATION (5:00)

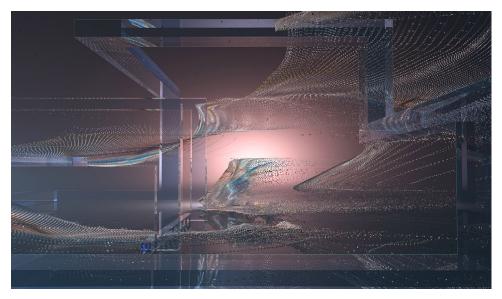
In Grass, Scrub, Woodland, still life is created with organic specimens gathered at the Seven Sisters National Park in Brighton, England; in Fauna, a still life that expands and contracts indefinitely. The works from the Seven Sisters Series National Park Series act as animated scanograms.

https://katherinemelancon.com/

#### Lorna Mills [CA]

PETTING ZOO: NOBLE ORPHANS, 2020 ANIMATED GIF COLLAGE (6:31)

Petting Zoo: Noble Orphans is about the sly, the absurd, and the abject.



SABRINA RATTÉ, ALIQUID (2019)

#### Nelly-Ève Rajotte [CA]

*STEM*,, 2020 HD VIDEO (II:46)

STEM is the sensitive encounter between the precariousness of survival and the sustainability of the machine.

https://nellyeverajotte.com/

### Sabrina Ratté [CA]

ALIQUID, 2019 HD VIDEO (04:34)

Slowly alighting onto a glass architecture, an undefined form of life is torn apart in *Aliquid* by sharp edges and eventually disintegrates into particules that spread into the atmosphere.

http://sabrinaratte.com/



SUSY.TECHNOLOGY | MILO REINHARDT, XAVIER AROCHA, TEO ZAMUDIO, VIRTUAL STATES OF ENTANGLEMENT (2020)

#### Martín Rodríguez [US/CA]

IN SEARCH OF AZTLAN..., 2020

INTERVENTION/PERFORMANCE: VIDEO, RADIO, WOOD, MAGNETIC WIRE, THREAD (12:00)

In Search of Aztlan explores the artist's childhood home along the US/MX border. The work contemplates how borders, both physical and psychological, shape our individual and collective identities.

http://boomboomba.com

#### susy.technology | Milo Reinhardt, Xavier Arocha, Teo Zamudio [CA | CA | MX/CA]

VIRTUAL STATES OF ENTANGLEMENT, 2020
MULTI-CHANNEL VIDEO INSTALLATION (25:00)

Virtual States of Entanglement explores relationships between non-locality, entanglement and the collective consciousness.

https://www.susy.technology/

#### ARTISTIC PROGRAMME



QUENTIN VERCETTY, MISSING BLACK TECHNO-FOSSILS (2020)

#### Quentin VerCetty [CA]

MISSING BLACK TECHNO-FOSSILS, 2020 ANIMATION (3:24)

Missing Black Techno-fossils speculates the missing memories and stories of Canadians of African descent through sculptural monuments in the futuristic landscapes.

https://www.vercetty.com/



MEHDI BENBOUBAKEUR



MEHDI BENBOUBAKEUR

# PUBLIC INTERVENTIONS

IN RESPONSE TO THE RECENT COVID-19 HEALTH REGULATIONS AND RECOMMENDATIONS IN MONTREAL, CERTAIN EVENTS HAD TO BE CANCELLED.

#### OCT. 16 - 16:00 - 22:00

Maison de la culture Côte-des-Neiges

#### Daniel Iregui + Studio Iregular [CO/CA]

CREATURE, 2020

- THIS EVENT HAS BEEN CANCELLED -

CREATURE is an ongoing research of interactive experiences created to observe how large groups of people engage with digital public work, and the capacity of these interactions to create meaningful connections.

https://iregular.io/

### OCT. 15 - 18:30

Maison du développement durable

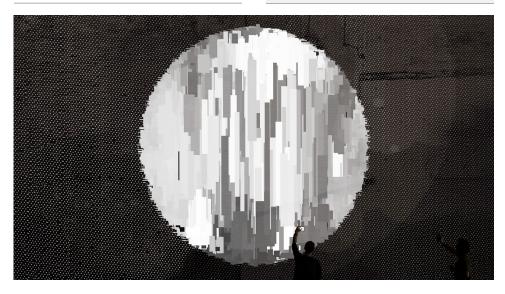
# MAPP MTL / Thien Vu Dang [VN/CA]

MAPP TON OUARTIER (MAPP YOUR NEIGHBOURHOOD). 2020

- THIS EVENT HAS BEEN CANCELLED -

MAPP ton quartier (MAPP Your Neighbourhood)—a social and cultural mediation work—uses a bike projector to screen inhabitants' creations that center around the Why Sentience? sub-theme, The Planetary.

https://www.mappmtl.org/



DANIEL-IREQUI, CREATURES (2020)



STEVE HEIMBECKER SCAMP: MONT ROYAL (2020)

#### OCTOBER 13 - 18

Mont Royal Parc

#### Steve Heimbecker [CA]

SCAMP: MONT ROYAL, 2020

INTERACTIVE GEOLOCALIZED APP: ANDROID & IPHONE

- THIS EVENT REMAINS -

SCAMP: Mont Royal is an interactive, geolocalized, soundwalk. SCAMP is "played" forward/backward/fast/slow, depending on the movement of the user, together with the companionship of a family dog.

http://www.steveheimbecker.net/

#### OCT. 16 - 19:00

Maison de la culture Côte-des-Neiges

#### Allison Moore [CA]

LES NOCTILUQUES, 2020

PROJECTED LIGHT AND SHADOW

- THIS EVENT HAS BEEN CANCELLED -

Les noctiluques are animals which emit light in darkness. This communityorganized event invites local residents to come light the neighbourhood using lanterns and projection mapping.

http://www.allisonmoore.net/

# SCREENING: ISEA2020 ONLINE: WHY SENTIENCE?

IN RESPONSE TO THE RECENT
COVID-19 HEALTH REGULATIONS AND
RECOMMENDATIONS IN MONTREAL,
CERTAIN EVENTS HAD TO BE
CANCELLED.

ISEA2020 is thrilled to present its juried selection of single-channel videos by international artists, grouped under the symposium's main theme, Why Sentience? The programming is made up of evocative and spellbinding investigations of sense and perception agents and environments—from the concept of the home to that of the monument, interior maps of the body to exterior spaces experiencing absence, and the uncanny overlap of the human and the technological.

PROGRAMME		
DATE	TIME	VENUE
13 OCTOBER	16:00, 17:30, 19:30	Auditorium of Maison de la Culture Janine Sutto
16 OCTOBER	16:00, 17:30, 20:00	Auditorium of Maison de la culture Côte-des-Neiges
17 OCTOBER	16:00, 17:30, 19:30	Maison de la Culture Claude Léveillée

# PROGRAMME (55:59)

#### Scott Benesiinaabandan [CA]

wassaygane abi-mazina'igan | maps of home and glowing bones [HD video, 2020]

#### Brit Bunkley [NZ]

Geolith [video, 2019]

### Ian Clothier, Josiah Jordan [NZ]

DNAwhakapapa [DNA data, generative audio and video, 2019]

#### Louise MacKensie [UK]

Zone of Inhibition [film, 2019]

#### Tivon Rice [NL/USA]

Environment Built for Absence [video, computer generated text, sound, 2018]

#### Adrianne Wortzel [US]

The Sentient Thespian [video, 2019]

# SPECIAL PROJECTS & COLLABORATIONS

## SENSORIUM: CENTRE FOR DIGITAL ART AND TECHNOLOGY

ARTISTS/ARTWORKS: Freya Björg Olafson [CA], MÆ-Motion Aftereffect [performance & video, 2017-ongoing]; Nicole Clouston [CA], Lake Ontario Portrait [sculpture with mud & microbes, 2017-ongoing]; John Greyson [CA], Hammer [360° video, 2020]; David Han and Aidan Waite [CA], Is there a way to be gone and still belong? [interactive software, 2020]; Mark-David Hosale [CA] and Jim Madsen [CA], Messages from the Horizon [interactive kinetic sculpture, 2019]; Alison Humphrey [CA], Shadowpox: Citizen Science Fiction [media installation & workshops, 2018-ongoing]; Evan Light [CA], Snowden Archive-in-a-Box [wireless network & sculpture, 2015-ongoing]; Taein Ng-Chan [CA], Inside the Chrysalis [360° video, 2020]; Jenn E Norton [CA], Cucoloris domesticus [media installation, 2012]; Joel Ong [SG/CA], Terra Et Venti [media installation, 2018]; Michaela Pnacekova [SK/DE/CA/DE], Symphony of Noise [VR, 2019]; Dan Tapper (UK), Machines to Listen to the Sky [media installation, 2013-ongoing]; Michael Trommer [CA], Ancient Thoughts and Electric Buildings [360° video, 2020]; Doug Van Nort [US/CA], GSO: Genetically Sonified Organisms [site-specific audio installation, 2017-18]; Graham Wakefield [UK/CA] & Haru Ji [KR/CA], Infranet [neural network & media installation, 2018]

Sensorium: Centre for Digital Art and Technology (York University, Canada) is pleased to present the exhibition "Life, A Sensorium," as part of ISEA2020

The exhibition unfolds at the nexus of art, science and technology through the works of artists affiliated with Sensorium, who collectively explore the entangled ecologies of the post-natural world. Through multi-sensory experiences that include installations, virtual and mixed reality, 360° videos, performances, expanded media and sculptural forms, these artists explore the different ways that contemporary sensorial relations?human/non-human, natural/artificial?stage complex articulations and expansions of the real.

In this show, computer-generated organisms interact with viewing bodies.

Site-specific installations, kinetic sculptures, virtual environments, and video games explore our interactions and collaborations with multispecies ecologies. The works in "Life, A Sensorium" range from shadow plays and optical illusions to VR wanderings through cosmic orchestral stagings. The blended physical and virtual nature of these aesthetic interactions and environments provide access into worlds not ordinarily perceptible.

In this virtual iteration of the exhibition, we present excerpts of documentation and interviews with the artists as "capsules" of their artistic practice. For these videos, artists were asked: "What does sentience mean to you with respect to your work?" and "Why sentience now?" as prompts to explore the situation of their work within the ISEA 2020 theme.

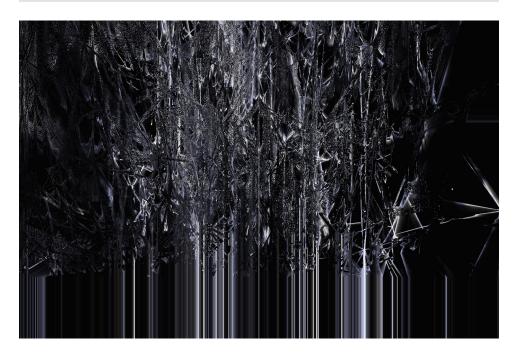
# SCOPITONE FESTIVAL

ARTISTS/ARTWORKS: Guillaume Cousin [FR], Le silence des Particules [Large-scale installation, 2018], Nathalie Guimbretière [FR], Naxos [Video, 2020] Laurent La Torpille [FR], das Lichtquant [Generative Installation, 2020] Guillaume Marmin [FR], Anger & Hope [Installation, 2019]

The Consulat Général de France à Québec in Montreal, in partnership with the Scopitone Festival in Nantes, presents a selection of works by French artists as part of ISEA2020.

Organised by Stereolux, the Scopitone Festival is an international-scale gathering dedicated to electronic cultures and the digital arts. Every year it attracts over 30,000 festival goers, showcasing around sixty different artists, coming from more than 20 different countries. Scopitone Programme includes concerts and performances, installations, conferences, workshops, round tables and industry gatherings, as well as a youth programme.

For ISEA 2020, Scopitone's artistic Director Cédric Huchet curated a selection of artworks by French artists. In relation to ISEA2020's theme "Why Sentience?," the selected artists develop a unique approach to digital creation, questioning the place and relationship between humans, their environment, technologies, changes in the world (societal, ecological, philosophical, etc.).



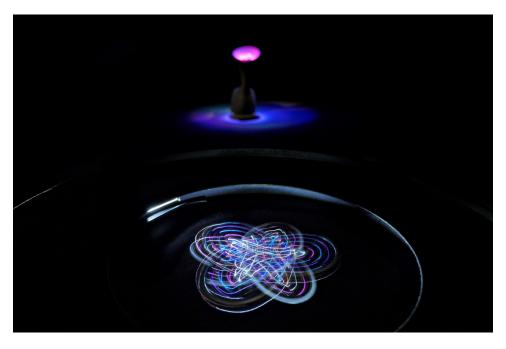
LAURENT LA TORPILLE, DAS LICHTQUANT (2016/2020)

# TOPOLOGICAL MEDIA LAB, CONCORDIA UNIVERSITY

ARTISTS/ARTWORKS: Chloë Cheuk [HK/CA], Expose (revisited) [kinetic sculpture, 2019], Navid Navab [IR/CA], tangibleFlux. plenumorphic. chaosmosis [triptych, kinetic sculpture, 2018], Alice Jarry [CA],
Dust Agitator [kinetic sculpture, 2018], Peter van Haaften [CA] | Michael Montanaro (CA) performed by Nien Tzu Weng [TW/CA], SPIEL [performance/intervention, 2018], Serious Computer Group [Nina Bouchard [CA] | Evan Montpellier [CA], Nova [responsive membrane, 2019]

Topological Media Lab, in partnership with ISEA International, presents a co-curated selection of discursive events and artistic works from its core group of artist-researchers, as part of ISEA 2020.

From experimental panel discussions on Sensory Cosmologies to art works centred around sensorially augmented dissipative structure, dust, mist, and feedback ecologies, this selection provides a small window into ten TML researchers' variously unique and diverse approaches in playfully engaging with the current ethos, philosophies, and dynamic research-creation streams of the atelier-lab.



NAVID NAVAB, TANGIBLEFLUX. PLENUMORPHIC. CHAOSMOSIS (2018)

### MANIFESTATIONS FESTIVAL

ARTISTS/ARTWORKS: Tim Dekkers [NL], The Parasitic Humanity [2018], Maartje Dijkstra [NL], Braindrain, TranSwarm Entities, Surface Distortion, Optic Traces [2019], Jip van Leeuwenstein [NL], A Diverse Monoculture [2017], Daniëlle Ooms [NL], Apple-based Material [2019]

Manifestations—a yearly Art & Technology festival in Eindhoven, the Netherlands—presents a selection of works by four artists centred around the ISEA2020 subtheme, The Ecosophic World, as part of ISEA2020.

During the Dutch Design Week in October (350.000 visitors), we present 50-100 innovative and talented artists that develop accessible installations and artworks for a broad audience. All the artwork is about a more human technology – a lot of the work and projects we present are later in large international museums or festivals. At Manifestations we offer interactive artworks for events or festivals.

We work with more than 5.000 international artists that create art using technology. We focus the spotlight on art and technology with a human dimension: sometimes confrontational and other times the perfect match, but always critical, playful, recognizable and awe-inspiring. Think of robot acts, performances with electronic music, exoskeletons, e-fashion art, data & privacy installations, artworks that integrate Al, sustainability, hackers, crypto nails, food printing and more. The festival also reaches a non-art audience to prevent preaching to its own choir.



JIP VAN LEEUWENSTEIN, A DIVERSE MONOCULTURE (2017)

# LARBITSSISTERS | NEW MEDIA GALLERY

ARTISTS/ARTWORK: LarbitsSisters, bitsoil.tax/campaig

LarbitsSisters, in partnership with New Media Gallery in Vancouver, presents Bitsoil POPup Tax and Hack Campaign (2018), as part of ISEA2020.

An interactive, internet-based work, Bitsoil POPup Tax and Hack Campaign (2018) is a digital campaign with online and offline activity. It consists of multiple interactions between trolling social media bots on Twitter, in combination with an offline interactive installation functioning as a tool designed to restore fair balance to a digital economy known for its tendencies to concentrate wealth in the hands of a few big tech companies. The campaign claims a tax on user data collected by tax collector bots who mine data produced by Twitter users. As the bots interact with the Twitter user, a tweet with video

pops up on the user's account and redirects her to the online platform of the campaign. As the user joins the campaign, she chooses from several actions which will result in the redistribution of wealth and the promotion of fair value.

From October 13-18 2020, Bitsoil POPup Tax and Hack Campaign (2018) will be running as a live feed directly from the New Media Gallery in Vancouver and will be presented as part of ISEA2020 Online. The feed will feature a talk between the artist duo LarbitsSisters (in Brussels) and curators Joyce + Duggan together with special guests. This interactive work is part of the Currency Exhibition at New Media Gallery, September 2 - December 6.



LARBITSSISTERS, BITSOIL.TAX/CAMPAIG (2018)

# (PRE)EXISTING CONDITIONS #EAHR\_ISEA2020 INSTAGRAM PROJECT 2020

ARTISTS kimura byol-nathalie lemoine [kR/BE/CA] Rodrigo D'Alcântara [BR] Jenny Lin [CA] Jean-Pierre Mot [US/CA] Jayce Salloum [CA] Astria Suparak [CA/US] Jaret Vadera [US/CA]

Ethnocultural Art Histories Research (EAHR) presents (pre)existing conditions (#eahr\_isea2020)—curated by Tamara Harkness and Sarah Piché, with Alice Ming Wai Jim—as part of ISEA2020.

(pre)existing conditions (#eahr\_isea2020) (October 13 through 19, 2020) is a selection of seven projects closely resonating with the ISEA2020 theme of "Why Sentience?" that are part of EAHR's larger HEAR US NOW! Instagram Project (@eahrconcordia), whose goal was to connect with and support the work of BIPOC artists during this time of uncertainty in the wake of the coronavirus pandemic. Over the course of ten weeks June 29 through September, HEAR US NOW! posted weekly submissions of artistic responses to the circumstances presented by the COVID-19 pandemic, including the urgent call to address ongoing systemic racism and oppression, (pre-)existing conditions, climate change, and social justice activism. With the lockdown, artists did not have physical venues to exhibit their work making the Internet the obvious recourse. During the practice of physical distancing measures, social media also functioned as an important site for sharing videos, news, and information about anti-racist movements. Instagram was chosen because it best conveyed the variances of responses over a ten-week period curated during COVID-19. The archive of all twenty Instagram posts can be found at www.ethnoculturalarts.com.

Ethnocultural Art Histories Research (EAHR) is a student-driven research community focused on examining issues of cultural representation and ethnocultural art histories research across various disciplines. Since 2011, EAHR has facilitated opportunities for exchange and creation through its programming in order to critically engage within the visual arts in Canada. EAHR distinguishes itself through its membership which comprises mainly undergraduates, graduates and alumni of Concordia University. EAHR is supported by the Concordia University Research Chair in Ethnocultural Art Histories and based in the Department of Art History at Concordia University, Montreal, Canada. The EAHR Instagram project is grateful for additional support from the Thinking Through the Museum (TTTM) Research Network.

JENNY LIN, PANDEMIC DRAWING (2020)

# Vancouver Senior Assaulted In Racist Attack Related To Coronavirus: Police

The attacker also yelled remarks that "included comments about COVID-19!



Hearing incidents on the news, I feared that my parents would become targets on the street if they wore masks. Maybe they are targets anyways, being Asian and seniors since people think they can't fight back.

# PEALL D'ÂNE: CELEBRATING THE WORK OF VALÉRIE LAMONTAGNE

See the exhibition here:

https://artspaces.kunstmatrix.com/en/exhibition/2460870/peau-d%E2%80%99%C3%A2ne-celebrating-the-work-of-val%C3%A9rie-lamontagne

This is a virtual exhibition gallery space to experience the e-textiles art and FashionTech collections, research, talks performances of late Valérie LaMontagne a pioneer in the discipline. Professor Valérie Lamontagne was a Montréal artist-designer, curator, and completed her PhD in "Performative Wearables: Bodies, Fashion and Technology" from Concordia University in the Department of Design & Computation Arts in 2018. She had just been appointed as professor of the Fashion Research and Technology research group at the Amsterdam Fashion Institute (AMFI) in 2018 and was about to take her post when she found out she has leukaemia, and spent a year fighting it. Valérie had just successfully won her battle with the disease in August 2019, but then deteriorated and died October 4th, 2019. Valérie was the owner & designer of the brand 3lectromode, a wearable electronics atelier dedicated to avant-garde crafting and consulting in fashionable technologies. She was collaborating on the project "synapseWear" with Alexander Reeder from Art and Program Inc., based in Tokyo, investigating artistic uses for environmental data in wearable devices. Lamontagne's research focused on how emerging technologies are creating new platforms for wearable fashion.

Valérie has curated and collaborated on design and media arts exhibitions and events such as: "Fashiontech Festival," McCord Museum, Montréal, Canada (2017); "Tech-à-porter," MUTEK IMG, Montréal, Canada (2016); "The Future of Fashion is Now" at Museum Boijmans Van Beuningen, Rotterdam, Netherlands (2014); "TechnoSensual" at MuseumsQuartier, Vienna, Austria (2012); "Clothing Without Cloth" at V2\_ Institute for the Unstable Media, Rotterdam, Netherlands (2011); "Electromode" at Vancouver Winter Olympics, Canada (2010); "Sartorial Flux" at A+D Gallery, Columbia College, Chicago, USA (2006); "Ellipse" at Musée National des Beaux Arts du Québec, Canada (2002); and "Location / Dislocation" at New Museum, New York, USA (2001).

AUAS Dean FDMCI, Frank Kresin said after hearing of her death: "Valérie was a driving force in an international network of fashion innovators. She knew how to inspire others and create amazing work, thanks to her enormous creativity, passion and perseverance. She fought for her life, for life itself, until the very end and never lost her optimism. Her death is a huge loss for many of us and I wish her family, friends and loved ones my condolences." This exhibition is dedicated to Valérie and to try preserve her work and legacy in the e-textiles, wearables and FashionTech community.



© DOMINIQUE LAFOND

# NEUROMEDIA: ENHANCING SENSORY PERCEPTION FOR ARTISTS AND DESIGNERS

OCTOBER 17-18

PART I. OCTOBER 17 | 8:00-15:00 PART 2. OCTOBER 18 | 8:00-10:00

Jillian Scott [CH] ZHdK

Marille Hahne [CH]
Self Employed



@ MARILLE HAHNE, 2019

This workshop is a unique blend of sensor systems lab exercises from neuroscience, media arts and design to context ideas. The aim is to help artists and designers think differently about sensory stimuli past simple interaction ideas of cause and effect, and to understand cross-modal sensory interaction and sensory anatomy. It was designed by Jill Scott to raise body awareness for those who are interested in neuroscience and cognition. It may help them incorporate users or interactive viewers in the actual processes of construction.

Participants will have to apply in pairs so that they can physically work together and develop media art and digital design projects about sensory perception, then meet virtually with the workshop members to hear presentations and compare their results. The workshop pairs will be given exercises based on the understanding and stimulation of three neural systems, the Peripheral Nervous System (PNS), the Central Nervous System (CNS) and the Automated Nervous System.

Sight, taste, smell, touch, sound, and Proprioception will be explored.

# DATA GLOVES

# OCTOBER 17-18

PART I. OCTOBER 17 | 8:30-16:30 PART 2. OCTOBER 18 | 8:30-16:30

### Hugo Jesus Vargas Hernandez [MX]



© HUGO ESCALPELO + ANNI GARZA LAU. 2020

In this workshop you will manufacture a pair of "Data Gloves"—an economic and open source alternative for advanced and detailed interaction in VR environments. You will have access to all the designs and codes necessary to operate the "Data Gloves" and learn the manufacturing process.

The "Data Gloves" were developed with the purpose of interacting with the VR environment *Human After* by Anni Garza Lau. Faced with the problem acquiring the high cost of a set of commercial gloves to bring the project to reality, Vargas and Lau realized that they had the ability to manufacture a pair of gloves with a very detailed ability to acquire information about the position of the fingers for a fraction of the price. After developing the gloves, Vargas decided that the design should be open source, so that any artist or developer can have the opportunity to interact in detail with their VR environments with minimal investment. The "Data Gloves" consist of a set of 3D printed parts, a set of common cloth gloves, handmade electronic circuits, low-cost sensors (<\$1 USD each) and a series of steel cables, for a total investment around \$150 USD or less depending on 3D printing fees.

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# DYNAMICS OF PERCEPTIONS - ENGAGING WITH THE FELT EXPERIENCE OF TEMPORALLY DYNAMIC ALGORITHMS

# OCTOBER 17 | 9:00-12:00

### Alexandre Saunier [CA]

Milieux Institute for arts, culture and technology

# David Howes [CA]

Concordia University

#### Christopher Salter [CA]

# Joseph Thibodeau [CA] Concordia University



@ AGUSTINA ISIDORI, 2019

Dynamics of Perceptions looks at the relation between machine subjectivity and human subjectivity expressed temporally with artistic media.

The workshop coordinators will introduce you to cutting edge algorithmic technics, such as Spiking Neuron Networks and Reservoir Computing, which have the potential to generate complex temporal dynamics and patterns that are difficult, if near impossible, for humans to script on their own. You will get to manipulate those algorithms with the newly developed software "autonomX" by lab Xmodal. This software uses an intuitive graphic interface to create with life-like processes and express them in real-time through light, sound, video or robots.

In parallel, you will be introduced to key anthropological notions to address human-machine relationships through their sensorial and perceptual qualities. The workshop will be structured around a series of short presentations, experiments and discussions. It will gradually unfold the temporal dimension of autonomous, emergent and self-organizing computational technics and discuss how they can participate in generating strong perceptual and aesthetic experiences.

# ART AND INNOVATION IN THE AGE OF BIG DATA: DESIGN OF INFO-OBJECTS AND INTERFACES FOR DATA VISUALIZATION

# OCTOBER 17-18 PART 1. OCTOBER 17 | 9:30-12:00 PART 2. OCTOBER 18 | 13:00-14:30

#### Andrea Sosa [AR]

National University of La Plata

#### Everardo Reyes [FR]

Université Paris 8

#### Homero Pellicer [AR]

Universidad de Buenos Aires, Facultad De Arquitectura, Diseño y Urbanismo



© ANDREA SOSA, 2020

This workshop focuses on Data and Representation, following a step-by-a-step approach to identify significant patterns in datasets and to explore innovative methods to make insights visible and tangible. Though the methodology can be applied to multiple materials, water will be the central theme for this edition.

The aim of the workshop is to gather a multidisciplinary group in order to find creative solutions from different perspectives. The duration of the workshop is four hours, split in two days. On day one, participants will reflect and discuss different ways in which hydrologic data can be represented using physical materials. On day two, participants (individually or collectively) will present the results. The experience is expected to be joyful and thought-provoking.

This workshop is the result of an international Art, Science and Technology cooperation Program INNOVART between three universities: Université Paris 8 Vincennes-Saint-Denis, National University of La Plata, and National University of Buenos Aires with the support of PIESCI of the Ministry of Education in Argentina and IFA from the Embassy of France.

# NETWORKED ART PRACTICE AFTER DIGITAL PRESERVATION

# OCTOBER 17 | 10:00-15:00

Roddy Hunter [UK]
University of Huddersfield

Sarah Cook [UK]
University of Glasgow



© BODORHUNTER, 2020

This workshop traces the edges and boundaries of the preservation of both analogue and digital networked art practice. Focusing on artworks which draw on networks of distribution as their primary medium of production (such as mail art and net art), the workshop aims to unpack existing digital preservation efforts concerning online and offline exchanges, while also feeling out the present and future implications of the use of machine learning and data mining within preservation strategies and how they affect artistic and curatorial agency and authorship.

Typically understood as inherently ephemeral (as in the case of mail art) or immaterial (as with internet-based exchanges), networked art practice often, deliberately, resists collection and preservation. Given its linkages to wider networks, knowing what the edge or boundary of the work is, and where to 'draw a line' around its preservation is a substantial challenge.

Workshop participants will collectively identify questions addressing digital preservation (including 'preventative conservation' and record-keeping) as it is manifest within the production, distribution and reception of networked art practices. Joined by guest practitioners sharing first-hand insights, participants will then work in groups to develop novel approaches, leading towards a greater understanding of the networked conservation concerns of a diverse range of work.

# THE STREET PLUGIN: PLAYING PEOPLE AND INFRASTRUCTURE

# OCTOBER 17 | 10:30-13:00

#### Viktor Bedö [CH]

Critical Media Lab FHW Academy of Art and Design, Basel

### Ida Toft [CA]

Concordia University



© VIKTOR BEDÖ. 2020

The city operates on different scales: bikes, people, houses on street level; traffic and communities on neighbourhood level; infrastructure on the city level. The workshop playfully investigates transformations and frictions that occur when instruments that help to make sense of higher scale phenomena are introduced. When the focus shifts from the lives of individuals to pedestrian flows, qualitative methodologies give way to modelling. Agent-based computer models (ABM) are instruments of scale as they allow observing higher-level behaviour with large numbers of agents (scaling up in number) throughout a longer time span (scaling up in time). Creating computer agents inherently involves the omission of the original ecological, social or political entanglements of the modelled agent, as modelling sacrifices 'resolution' for 'scale'.

The Street Plugin hosts 15 participants and includes some small activities on the street: the analysis of a simple ABM that addresses community-based infrastructure maintenance; a simple distributed game in which some participants enact computer agents in urban space and will be connected via messaging app or mobile video stream with other participants—the discrepancies and sympathies between the resolution of human experience and agent behaviour will be recorded during the game. The workshop closes with a discussion about #scale\_critique, #modelling, #infrastructure, #ableism, #embodied\_knowledge and #research\_through\_games.

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# THE HUMAN SEARCH ENGINE: A MILLENNIAL TOOLKIT 4 ASSOCI@IVE EXPLOR@ION

# **OCTOBER 17-18**

PART I. OCTOBER 17 | II:00-13:00 PART 2. OCTOBER 18 | II:00-13:00

### Carmel Barnea Brezner Jonas [IL]

Desperately Seeking

# Gabriel S Moses [DE]

Desperately Seeking



© DESPERATELY SEEKING, 2020

each and every one of us is seeking something they cannot find. but is algorithmic online searching really the best way to do it?

the workshop is aimed at participants looking for a middle-ground approach towards online-life. we offer a toolkit to those who wish to neither disconnect nor let habit-forming technologies run their lives, we believe we can "deprogram" these technologies in a way that empowers us

we will kick things off with a discussion on the ways in which habit-forming search technology shapes our daily pursuits. we will then split into pairs for two main exercise rounds—one per day. their goal: becoming a human search engine

ROUND#1 "mapping things out": using a new and disruptive, rank-free search engine called Shmoogle, pairs will turn their most personal online exploration into a free-associative game

ROUND#2 "cruising via proxy": pairs from round#1 will go on an online date, using Shmoogle as their guide, together, they will explore each other's neighbourhoods in hope to rediscover them through a fresh pair of eyes and a little bit of unhinged free-association

we will wrap things up with a feedback round: "make the internet human again?" pros and cons

# EMPIRES, VILLAGES, ECOLOGIES OF EXPERIMENTAL PRACTICES

# OCTOBER 17 | 11:30-13:00

### Xin Wei Sha [US/CA]

Leonardo + Synthesis @ ASU

#### Diana Ayton-Shenker [US]

Leonardo, the International Society for Arts, Sciences, & Technology Arizona State University



© KEEGAN CARLSON, 2019

Synthesis@ASU and Leonardo convene a conversation about experimental practices in arts and sciences and ecosophic sense-making.

Experiment and experience combine both creating novelty and inhabiting/living sense-making. Speculative design, engineering, philosophy, experimental arts and humanities are transforming the very objects, subjects, materials and methods of their constitutive disciplines and practices. This endeavour implies an understanding of the arts (including literature, the performing arts and other practices) as a mode of alchemical knowledge production and practice predating the modern split into arts and science. But in the 21st century, the re-flourishing of experimental practices hybridizing philosophical hypotheses, "heuristic fictions," speculative engineering, and literary/artistic/musical/movement-based thought experiments has overgrown the models of start-ups and grants we inherited from 20th century techno science and public management culture.

What are some of these new modes of sense-making practices that simultaneously constitute new kinds of inquiry and new kinds of inquirers, and new senses of matter? And what are the ways in which such practices can be sustained non-anthropocentrically in the changing ecosystems and economies of the century?

Worldwide communities are invited to join a curated conversation seeded by radical examples of experimental practices.

# AVATARS IN ZOOM FOR ALL! (A HANDS-ON TUTORIAL)

# OCTOBER 17 | 13:00-15:30

### Eyal Gruss [IL]



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How can you be anybody in Zoomspace? Very recent developments in deep-learning allow the creation of synthetic media of unprecedented quality and ease. The first-order-motion-model can do facial reenactments in real-time provided with only a single image of the desired avatar. This came not a moment too soon, as Human communication was forced to move online due to the Coronavirus pandemic. Can this be an opportunity to fulfill the long promised cybernetic utopia, where we could shed our physical shells and become however we wish to be? And how does this pertain to issues of privacy, identity and trust? Eyal Gruss will review the contemporary technologies and show how they use them in their artistic and activist practices. This is a handson participatory tutorial, where you will create deep-fake videos using your own materials, and play with various options of becoming an online avatar. No prior knowledge needed.

## OUEER AND BIOPHILIC APPROACH OF THE CUTANEOUS MICROBIOME

# OCTOBER 17 | 13:30-16:00

#### Nathalie Dubois Calero [CA]

Milieux Institute for arts, culture and technology



© NATHALIE DUBOIS CALERO, 2020

This workshop will allow the general adult public to experience their cutaneous microbiome (micro-organisms that live on and in our skin) in a haptic-visual/olfactive- and intellectual reflection about our ubiquitous relationships of hate/love with this part of ourselves.

Participants will soak a piece of fabric in a culture broth and inoculate it with their cutaneous microbiome. They will use their lactobacilli to lacto-ferment vegetables and produce some safe and personal sauerkrauts, kimchi, and hot sauces. In the meantime, Nathalie Dubois Calero explains principles from microbiology - and traditional cooking- to get safe cultures. Scientific data about cutaneous microbiome will open a discussion on our physical relationships with it. Two weeks prior to the workshop, participants will receive a shortlist of material to get before the activity and the culture broth recipe (it takes 30 min to prepare from ingredients found in any grocery store).

To illustrate possible troubleshooting with lacto-fermentation, Calero will show healthy and dubious cultures done a week before. The exploration of some pieces of fabric with microbial colonies from different microbiomes will allow us to enjoy their beauty and diversity. Participants will broadly determinate their microbial composition and interpret it. They will also explore the love/hate for the microbiome. We hate it, it is our smell, animality, but it wraps us from birth to death, protecting us, intimately connecting us to the outer world, and to itself (ourselves) in a queer relationship.

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# PASS AGAIN THROUGH THE HEART: GESTURE, MEMORY, AND FOOD

# OCTOBER 17 | 14:30-16:30

# Immony Mèn [CA] Public Visualization Lab (OCAD, York, and Ryerson)

# **Patricio Dávila [CA]** Public Visualization Lab (OCAD, York, and Ryerson )



@ PUBLIC VISUALIZATION LAB. 2020

This workshop looks at how knowledge is shared through gestures and feelings by family members. It is informed by an ongoing project that collects recipes from Canadian immigrants and refugees, each touching on acknowledgment and formation of transnational identities within North America. This series explores multi-directional approaches to cultural food practices, the bodies that preserve them, and the media that moves this information within the viewing format of a transmedia essay film.

Knowledge of practice and feelings are carried across borders. The histories that are shared between parent and child, aunties, sisters, brothers, and chosen family are guided by multigenerational narratives that consist of bodies, things, events, and environments. The facilitators wish to highlight commonalities in transnational experiences while expanding on a specific type of intergenerational knowledge sharing—one that, at once, preserves approaches, information, and traditions, creates feeling for processes, smells, taste, as well as transforms, hybridizes and responds to contexts around food as a cultural practice.

The workshop will explore the generative and expressive possibilities of recording rather than capturing and domesticating human movement through a scientific management of labour. It will take note of how Eduardo Galeano reminds us that to remember (recordar) is to pass again (re) through the heart (corazón).

# MEASURING COMPUTATIONAL CREATIVITY: COLLABORATIVELY DESIGNING METRICS FOR EVALUATING CREATIVE MACHINES

# OCTOBER 18 | 15:00-19:00

#### Eunsu Kang [US]

Carnegie Mellon University

#### Jean Oh [US]

Carnegie Mellon University

#### Robert Twomey [US]

Arthur C. Clarke Center for Human Imagination



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How do we make a creative machine? Creativity involves "a multitude of definitions, conceptualizations, domains, disciplines that bear on its study, empirical methods, and levels of analysis, as well as research orientations that are both basic and applied and applied in varied contexts."

This workshop follows a series of studies conducted in the classroom setting at CMU and UC San Diego. To begin, participants were asked to provide a definition of creativity specific to machines. Then more questions emerged: Can we computationally model ambiguity? Would a novelty search result in valuable discoveries? Where is the threshold between randomness and creativity? How do we evaluate the creativity of an algorithm? To answer these questions, participants developed sets of criteria to assess their own and peer groups' creative Al and ML projects. Although such a human-centered method is subjective, participants found that the exercise helped them to better describe and interpret dimensions of algorithmic creativity.

This half-day workshop extends these methods and engages a broader arts and machine learning community to collaboratively define quantitative metrics assessing the creativity of algorithms and machines. This workshop is a first attempt to establish evaluation metrics for the area of creative Al.

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