

- LAKE
- CEMENT
- ▨ TREES
- ▨ INDUSTRIAL AREA
- BUILDING
- ROAD
- ▨ RAILROAD
- GROUND
- ◆ ▲ WORKS ON MULTIPLE SITES

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<p>+ the work of WIND AIR LAND SEA Sept. 14–23, 2018 Southdown Industrial Area</p> <p>information</p> <p>4 Welcome Messages 6 Partners, Funders, Sponsors 7 Who We Are 8 Getting Around 9 Hospitality and Accessibility 10 Territory Acknowledgment 11 Welcome from the Mississaugas of the New Credit First Nation</p> <p>exhibition</p> <p>14 Curatorial Statement 18 Beaufort Scale 20 Area Map 22 Eduardo Navarro 24 Xiaojing Yan 26 Museo Aero Solar 28 Lisa Myers 30 Paul Walde 32 Pejvak 34 Dylan Miner 36 Ed Pien 38 Tania Willard 40 Gediminas & Nomeda Urbonas 42 Julian Oliver 44 Jana Winderen 46 Christina Battle</p>	<p>Sept. 14: 6–9pm Sept. 15–23: 9am–9pm</p> <p>events</p> <p>50 Event Calendar 52 We Who Spin Around You 54 Economies of Scale 55 Lunchtime Talks 56 Listening As Wayfinding: Cobble Beach 58 miinawaa // also; and; again – A Conversation on Transgenerational Environmental Violence 60 Lukumi: A Dub Opera 61 Amphibian House 62 Society for the Diffusion of Useful Knowledge Hub 64 Book Launch: The Work of Wind: Land 66 Shore Lunch Conversations and Tours 68 Plein Air Painting Workshops 69 Aerocene Explorer Workshop 70 Ecologies of Waste: A Conversation 72 Water-Witching Workshop: “a slick, a smear...awash in green” 74 The Future of Breathing: A Participatory Workshop</p> <p>76 Carbon Footprint 77 Back at the Blackwood</p> <p>78 Society for the Diffusion of Useful Knowledge</p>
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Welcome Messages

Director's Welcome

Climate change is real, it is happening, and has been happening for a long time, but we are often faced with a sense of overwhelm or powerlessness in confronting it. We believe that in order to recognize the significance of global climate crises and to act together to mitigate their most disastrous effects, we need a renewed culture of learning. Contemporary art practices offer ways to see, narrate, respond, and come to terms with the realities of climate change.

The Work of Wind: Air, Land, Sea brings together a remarkable group of artists and represents an opportunity for unprecedented collaboration across the city's arts and cultural sector, activating connections between environmental organizations, municipal government, industry, and the University of Toronto Mississauga. This festival is a chance for artists, scientists, academics, youth, business leaders, social innovators, environmental stewards, and citizens to engage with each other in meaningful discussion about environmental responsibility.

We encourage you to explore the exhibition in depth, take part in participatory workshops and performances, and join in critical discussions throughout the ten-day festival. *The Work of Wind: Air, Land, Sea* and its matters of concern call for attention and care. We suggest you take some time in between each installation or event to think and talk about what you've seen, unpack what you assume, question what you know, and try to see things from a new perspective.



Christine Shaw
Director/Curator, Blackwood Gallery
University of Toronto Mississauga

A Message from the University of Toronto Mississauga

An important activity of a leading university is to stimulate the imagination by exploring points of view about topics that are of profound impact. Perhaps there is no issue today more profound than the impact that human activity is having on the environment. The clash between our expectations of ever-increasing quality of life and the reality that this aspiration is not sustainable will have consequences that will be inherited by future generations. *The Work of Wind: Air, Land, Sea* explores this tension in a thought-provoking series of commissioned artist projects. Professor Christine Shaw, with lead support from the Canada Council for the Arts and from numerous other participants, has built on her experience as curator for the 2015 edition of Toronto's Nuit Blanche to present an inspiring exposé at a grand scale. An immersive exhibition-festival of this size is new for Mississauga and we hope that you will enjoy the experience and be inspired to be thoughtful about the roles we all play when considering our personal impact on the world. The University of Toronto Mississauga (UTM) is an integral resource for the community at many levels, offering internationally-leading academic programming, research that develops new technologies and medicines, stimulation of entrepreneurship, and service as an economic development engine for the region. We are very pleased to offer this special event as part of our commitment to our community.



Ulrich Krull
Vice-President and Principal
University of Toronto Mississauga

A Message from the Mayor

On behalf of the City of Mississauga and Members of Council, I am pleased to extend a warm welcome to all those attending *The Work of Wind: Air, Land, and Sea*. I would like to recognize the tremendous effort put forth by the Blackwood Gallery, the City of Mississauga's Culture and Environment Divisions, and the University of Toronto Mississauga in making this event a reality.

The Work of Wind gives us an opportunity as a city to use the power of contemporary art to create conversations about climate change. Projects like this are important because they make art accessible to many different audiences and engage various communities across the city.

Mississauga is excited to be the host for this important ten-day contemporary art festival, focused on climate change, environmental crisis, and resilience. Taking place in Clarkson's Southdown area from September 14–23, 2018, this project is designed to expand perspectives on climate change through artistic practice, cultural inquiry, and community activation.

A contemporary art project of this scale is the first of its kind in Mississauga. *The Work of Wind: Air, Land, and Sea* invites our community to create memorable encounters with art, in the continued fight for a healthy, vibrant future.

Once again, best wishes to all who worked tirelessly to ensure the success of this event.

Warmest Regards,



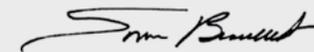
Bonnie Crombie, MBA, ICD.D
Mayor
City of Mississauga

A Message from the Canada Council

With their creative visions, their expressions of hope, and their questioning of the status quo, artists play a vital role in helping us to better understand and address the complex challenges of our times.

That's why, as Canada prepared to mark the 150th anniversary of Confederation, the Canada Council for the Arts created New Chapter. Through this program, the Council is funding over 200 exceptional projects in communities across Canada and abroad, creating a lasting legacy for all Canadians.

The Canada Council for the Arts is proud to support the Blackwood Gallery, through the New Chapter program, in its presentation of *The Work of Wind: Air, Land, Sea*. Because for us, art is essential in pointing us, together, toward a brighter future.



Simon Brault, O.C., O.Q.
Director and CEO
Canada Council for the Arts

Partners, Funders, Sponsors

The Work of Wind: Air, Land, Sea is presented by the Blackwood Gallery, University of Toronto Mississauga, in partnership with the City of Mississauga



Government Funder

This is one of the 200 exceptional projects funded in part through the Canada Council for the Arts' New Chapter program. With this \$35M investment, the Council supports the creation and sharing of the arts in communities across Canada.



Event Sponsors



Artist Commission Sponsor



Donors



This project would not have been possible without the extraordinary support of the University of Toronto Mississauga.

A special thanks to:

Amrita Danieri, Ulrich Krull, Kent Moore, Felicia Sciberras, Macarena Sierra, Andrew Stelmacovich, Bryan Stewart, Jane Stirling, Alison Syme, and Nicolle Wahl.

Media Partner



Publishing Partner

The *Work of Wind* book series is published in partnership with K. Verlag.



Transportation Partners



Site Partners

The exhibition is made possible with support from our site partners: Bell Media Inc., Clean Harbors, CN Rail, Contrans, Petro Canada, PPG Industries, and Region of Peel

We are grateful for additional project support from the Region of Peel



Who We Are

Director/Curator

Christine Shaw

Assistant Curator

Alison Cooley

Project Coordinator

Caitlin Sutherland

Exhibition Coordinator

Matthew Tegel

Curatorial Assistant/Collections Archivist

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Curatorial Research Assistant*

Joy Xiang

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Exhibition Production Assistant*

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* Funding for additional staff support was made possible, in part, through the Young Canada Works in Heritage Organizations program, Department of Canadian Heritage. The Canadian Museums Association administers the program on behalf of the Department of Canadian Heritage.



The Blackwood Gallery is grateful for the collaborative efforts of the staff at the City of Mississauga who helped make this project happen:

Lisa Abbott, Heliya Babazadeh-Oleghi, Sonja Banic, Leya Barry, Kelly Bianchi, Rena Boparai, Mary Bracken, Noa Bronstein, Edyta Brzeziak, Michael Campbell, Norman Cassar, Chloe Catan, Michael Cleland, Jeff Cunningham, Paul Damaso, Frank Fong, Carmen Ford, Mary George, Diane Gibson, Jeff Grech, Laurie Kassabian, Kaari Kingissepp, Kelly Kubik, Julius Lindsay, Callan Long, Ashley Lyons, Tad Makula, Ryerson Maybee, Marco Medeiros, Stephanie Myhal, Lindsay Noronha, Kyle Passmore, Matt Petrie, Meaghan Popadynetz, Christopher Pyke, Craig Pzytula, Kyle Sadowsky, Diana Suzuki-Bracewell, Catherine Timoon, Ashley Travassos, Shelley Tsolakis, Michael Tunney, Lisa Urbani, Ed Vasich, Yusuf Williams, Na Yao

We are excited to be collaborating with The Climate Change Project (City of Mississauga, Environment Division) as they usher in new climate change policy for Mississauga.



Installation Technicians

Marco Cheuk, Zsolt Cseh, Sam de Lange, Peter Filippou, Andrew Giuliano, Daniel Griffin Hunt, Jeff Hunwick, Stephen Kelly, Leah Klein, Gareth Lichty, Shannon Linde, Zhiyang (Jimmy) Mao, Dima Matar, Ian McLaren, Aamna Muzaffar, Anne O'Callaghan, Laura Pitkanen, Sean Procyk, Vanessa Rieger, Danny Russell, Joe Sellors, Lyndsea Shipway, Michael Steenvoorden, Matthew Smith, Geoffrey Tanner, Matthew Walker, David VanVeldhuisen

Getting Around

The Work of Wind: Air, Land, Sea is open from 6pm–9pm on Friday September 14 and 9am–9pm from September 15–23

By Car

From Brampton

Take Highway 410 southbound to Queen Elizabeth Way. Follow QEW towards Hamilton and take the Erin Mills Parkway exit. Erin Mills Parkway becomes Southdown Road.

From Hamilton/Burlington/Oakville

Follow Queen Elizabeth Way/Highway 403 eastbound towards Mississauga and take the Royal Windsor Drive exit. The exhibition area begins at the intersection of Royal Windsor Drive and Southdown Road.

From Toronto

Follow the Gardiner Expressway/Queen Elizabeth Way westbound towards Mississauga and take the Erin Mills Parkway exit. Erin Mills Parkway becomes Southdown Road.

Leave your car at the Clarkson

GO Station

The Work of Wind: Air, Land, Sea transforms an industrial area and is best experienced as an immersive outdoor event. We encourage all visitors to the exhibition to be mindful of the environment and explore the exhibition car-free.

Dedicated festival parking  is available throughout the week on the 6th floor of the Clarkson GO Station Garage, and on the weekends in all areas of the Clarkson GO Station parking lot.

By Public Transit

Clarkson GO Station is the closest major transit terminal to the exhibition area. Clarkson GO is accessible via the following major transit routes:

GO Transit

Lakeshore West

MiWay

13N Glen Erin
14E and 14A W Lorne Park
23 Lakeshore
29 Park Royal-Homelands
45 and 45A Winston Churchill
110 University Express

Catch the FREE *Work of Wind* MiWay Bus at the GO terminal bus loop

Accessible buses through the exhibition site (with 8 stops throughout the area) run every 10 minutes from 9am–9pm during the festival.

By Bicycle and on Foot

The exhibition area connects to the Great Lakes Waterfront Trail on Southdown Road, with bicycle routes through Lakeside Park.

We invite audiences to explore the exhibition on foot and witness the area's incredible transformation.

The northbound lane of Avonhead Rd. will be closed during the festival in order to enable bicycle and pedestrian traffic.

We advise cyclists and pedestrians to be mindful of vehicle traffic in the area and to obey all traffic laws and designated crossings. Cyclists are responsible for their own safety equipment, including helmets and lights.

Hospitality and Accessibility

Accessibility

The Work of Wind: Air, Land, Sea takes place in an outdoor industrial area and not all installations are fully accessible. All installations are accessible to be seen from barrier-free areas, but not all installations enable barrier-free interaction and immersion—some installations are not located at ground level, or require movement over unpaved terrain to reach. Some installations invite viewing up-close, while others are only viewable from a distance. If you require an accommodation or would like more information about accessing one of the projects, please speak to the event volunteers.

Wheelchair-accessible bus service is available throughout the exhibition area.

Information Centre

The Work of Wind: Air, Land, Sea's central information hub is located in Lakeside Park. The Information Centre provides the following services:

- maps, program guides, and directions
- lost and found
- lost children
- opportunities to speak with volunteer project ambassadors

Food

Throughout the exhibition weekends, food trucks are parked adjacent to the Lakeside Park picnic area. We encourage you to make use of picnic benches and park space to sit, eat, rest, and relax throughout the festival.

Water

Refill your water bottle at information stations throughout the site, or at the permanent public washrooms in Lakeside Park.

Bathrooms

There are three bathroom locations throughout the exhibition area:
Portolets in Petro Canada Park and Cricket field (gender neutral)
Portolets on Avonhead Rd. (gender neutral)
Permanent public washrooms in Lakeside Park (gendered)

Web and Social Media

Digital maps and program information are available at workofwind.ca. We invite you to use the website to plan your trip to *The Work of Wind: Air, Land, Sea*.

Share your experience!

Tag your posts and photos with [#workofwind](https://twitter.com/workofwind)

By participating in sharing posts with [#workofwind](https://twitter.com/workofwind), you grant permission for your content to be reposted on the event website and Blackwood Gallery, University of Toronto Mississauga, and City of Mississauga social media feeds.

Territory Acknowledgement

The Work of Wind: Air, Land, Sea takes place on the traditional lands of the Huron-Wendat, the Seneca, and most recently, the Mississaugas of the Credit River. As we gather in Mississauga, a name that comes from the Anishinaabe word *Misi-zaagiing*, meaning “[Those at the] Great River-mouth,” we acknowledge the politics of violence in North America as it relates to Indigenous lands, bodies, and waters including on the many Indigenous territories this project touches, whether they are ancestral, traditional, unceded, unsurrendered, urban, rural and/or reserve.

Welcome from the Mississaugas of the New Credit First Nation

Aanii and welcome to *The Work of Wind: Air, Land, Sea!*

We would like to welcome all the participants and guests of *The Work of Wind: Air, Land, Sea* to the Treaty Lands and Territory of the Mississaugas of the Credit.

The theme of this project resonates with the people of the Mississaugas of the Credit due to our sacred connection with the land, our Mother, the Earth.

We appreciate the thought and creativity that goes into bringing attention to the protection of Mother Earth through art and for this, we commend the organizers and artists participating in this year’s festival.

We would like to take this opportunity to share with you a poem from MNCFN Chief R. Stacey Laforme, called *A Sacred Trust*, which sums up our special connection to the land you are gathered on today:

**We are the keepers of this land
 She shelters and sustains us
 Long after the flesh fails the spirit
 We will care for these lands
 Our drums will be heard upon the winds
 Our voices in the rustle of the leaves
 My people have a sacred trust with the land
 A trust no man may break, a trust that death cannot sever
 We were here when you first stepped foot upon this land
 And here we will remain long after the last step has disturbed her soil.
 -*A Sacred Trust*, by Chief R. Stacey Laforme**

Please enjoy the festival.

- Chief R. Stacey Laforme,
 On behalf of the Mississaugas
 of the Credit First Nation

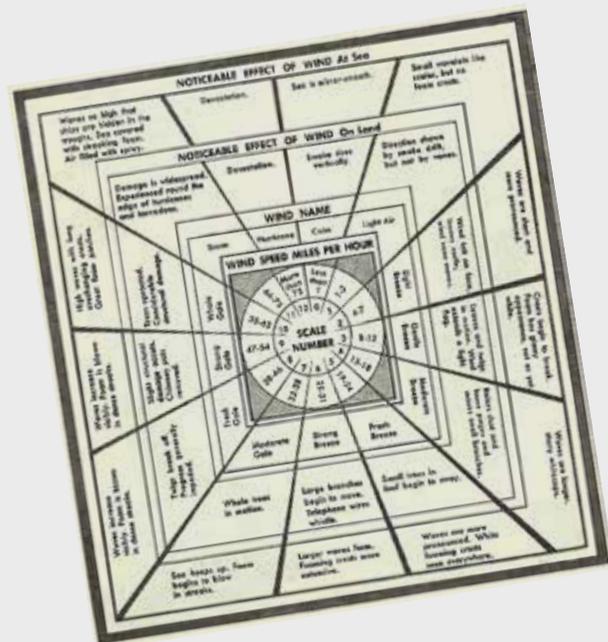
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- Christina Battle
- Dylan Miner
- Museo Aero Solar
- Lisa Myers
- Eduardo Navarro
- Julian Oliver
- Pejvak
- Ed Pien
- Gediminas &
Nomeda Urbonas
- Paul Walde
- Tania Willard
- Jana Winderen
- Xiaoqing Yan

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Curatorial Statement



extreme weather events, energy battlefields, extraction zones, carbon reserves, volatile oceanic experiences, radioactive clouds, plastic pollution, brownfields, water toxicity, landfill leachate, floods, tsunamis, uprooted trees, ocean acidification, marginal ice zones, atmospheres of contemporary algorithms, deviant predictions, supply chain labour, real estate booms, uneven development, deforestation, species extinction, detritus of a derelict economy, destroyed houses, sinking and melting, climate refuge, submerged perspectives, plant stories, water cannons and tear gas, wind gusts and storms, sounds of sand, mosquito clouds, fugitive dust, post-natural ecologies...

A picture emerges.

We live in a time of accelerated global warming, environmental degradation, and radical transformations in the Earth's ecosystems to the extent that life for future generations is becoming increasingly difficult. Despite our insight into the destructive effects of human impact on the Earth, we seem unable to act in accord-

the work of WIND: AIR, LAND, SEA

ance with this knowledge. One reason has to do with the abstract quality of scientific data, which tends to make it impalpable. Another has to do with the temporal character of the data; it seems that since the damage has already occurred it is too late to act. In addition to this, the perspectives of climate change are overwhelming in their demand for a radical transformation of the way we think, live, act, and breathe. Confronted with ecosystem collapse we seem to be at an impasse between the impossible and the inevitable. Rather than demand political action and change our everyday praxis, we often experience a sense of powerlessness in relation to it. The totality of disaster overwhelms us to such a degree that pacification results, which suggests that instead we need to change our perspective, detect the openings in this seeming impasse, and generate possibilities for collective action and strategic engagement.

The first step is to acknowledge that climate change, as Kyle Powys Whyte of the Potawatomi Nation argues, is an “unprecedentedly old crisis,”¹ a crisis that Heather Davis and Zoe Todd observe is “the cyclical recurrence of logics of extraction (of bodies, lands, minerals, fossil fuels) that have amplified to become a global phenomenon.”² The second step is to recognize that the Earth is not an infinitely replenishable resource. In order to recognize these facts and act to mitigate their most disastrous effects, a renewed culture of learning is urgently necessary. Stimulated by the narrative potency of contemporary art practices and bolstered by its unique position as a university art gallery, the Blackwood Gallery presents *The Work of Wind: Air, Land, Sea* and asks: How are we affected by this cancellation of the future? Can artists facilitate observation of human impact on the Earth and make observation a truly public enterprise? How can observation lead to action?

The Work of Wind: Air, Land, Sea is a site-specific exhibition, public program series, and publication platform designed to expand perspectives on climate change through artistic practices, cultural inquiry, and political mobilization. To do so, the project appropriates the Beaufort Scale of Wind Force as an organizing device.

Beaufort Scale of Wind Force

In 1806, the British hydrographer and sea admiral Sir Francis Beaufort invented the Beaufort Scale of Wind Force, an index of thirteen levels measuring wind force first used for the practical navigation of 19th century ocean space. It takes the wind at sea, anywhere all over the planet—wherever a ship might encounter it—and reduces it to a format that is not only clear but quantifiable and communicable. The Beaufort Scale takes observation and turns it into information. Beaufort offered sailors something by which they could gauge the force of wind, they could measure it by the ship itself. All they had to do was look around them. By taking a list of words (for example, CALM, MODERATE BREEZE, VIOLENT STORM) and, by attaching them to something real, something actual and observable —“waves are formed,” “leaves are blown from trees,” “houses are destroyed”—Beaufort had suddenly made them meaningful, useful, a self-evident scale that every sailor on a frigate or man-of-war could be expected to easily apply. The Beaufort Scale of Wind Force became a method for seeing and understanding one's surroundings, but it also became a tool to expedite colonial processes of extraction, accumulation, privatization, and land dispossession.

Notes
 1. Kyle Powys Whyte, “Climate Change: An Unprecedentedly Old Catastrophe,” *In Society for the Diffusion of Useful Knowledge*, Issue 01: GRAPHTING (Mississauga: Blackwood Gallery, University of Toronto Mississauga, June 2018), 8.
 2. Heather Davis and Zoe Todd, “Decolonizing the Anthropocene,” *In Society for the Diffusion of Useful Knowledge*, Issue 01: GRAPHTING (Mississauga: Blackwood Gallery, University of Toronto Mississauga, June 2018), 12.

Artists in the 21st century can gauge the current conditions of the Earth by looking around them and turning their observations into modulators of attention, inciting us to apply strategies and tactics to get us from the here of our current ecological-economic dead-end to a there that is ecologically sustainable with humans in it. In 2018/19, *The Work of Wind: Air, Land, Sea* turns the Beaufort Scale of Wind Force into a diagram of prediction and premonition in the context of accelerating planetary extinction. While the title might suggest a weather project, it is not about wind but of wind, of the forces of composition and decomposition predicated on the complex entanglements of ecologies of excess, environmental legacies of colonialism, the financialization of weather, contemporary catastrophism, politics of sustainability, climate justice, and resilience.

Southdown Industrial Area

This project transforms the Southdown Industrial Area in Mississauga into a site-specific contemporary art exhibition with commissioned works by Canadian and international artists. Bordered by Clarkson to the north and Lake Ontario to the south, this complex 1.5km² area features an oil and lubricants refinery, a carbon dioxide production facility, a nursery, heritage sites, brownfields, commercial transport hubs, a wastewater treatment plant, a cement plant, a gypsum pier, a rail line, a hazardous waste management facility, fields of phragmites, a fruit distribution centre, an abandoned paint and resin plant, a working hay farm, a radio transmission field, among others. These are in addition to the popular recreational sites of the Petro Canada Park and Cricket Ground and Lakeside Park, with its Cobble Beach comprised of the remnants of buried clay pipes from the National Sewer Pipe Company, increasingly exposed as the shoreline and bank erodes.

The Work of Wind: Air, Land, Sea

Drawing on the language of the Beaufort Scale of Wind Force—breaking, scattering, drifting, tumbling, rolling, driving, whistling, rustling, extending, raising, swaying, inconveniencing, impeding, damaging, uprooting—the exhibition unfurls the thirteen Beaufort forces, from 0 (CALM) to 12 (HURRICANE) across the area with thirteen site-specific artist projects moving between modes of allegory and creative adaptation strategies.

From Secwépemc artist Tania Willard's *The Liberation of the Chinook Wind* that turns wind speed data passing through four windsocks into poetry, to Jana Winderen's four-channel sound installation based on recordings of creatures from the planet's most vulnerable environments, to Julian Oliver's installation of wind turbines that mine cryptocurrency to fund climate change research, to Ed Pien's complex and intricately balanced water networks, many of the projects in the exhibition seek to materialize the human and non-human forces acting upon our environments. Installations such as Métis artist Dylan Miner's platforms rematriating old-growth lumber harvested from the depths of Lake Ontario, Xiaojing Yan's poetic meditation on the precarity of home, Pejvak (Rouzbeh Akhbari & Felix Kalmenson)'s exploration of ancient wind-catcher technology and tellurian toxification, and Gediminas & Nomedas Urbonas's immersive *Futurity Island* which turns environmental data into sonic cries, address the structures—historical, metaphoric, and narrative—that

govern our climate futures. Exploring the poetry and energy of the elemental, works by Paul Walde and Eduardo Navarro harness performance as a means of connecting to the atmospheric and the celestial, while *Museo Aero Solar* takes plastic bags out of Mississauga's waste cycle to become a completely fossil-fuel free airborne sculpture, lifted only by the heat of the sun each day of the festival. Works by Lisa Myers and Christina Battle directly respond to the political urgency of climate action, working through histories of labour, sustenance, and environmental violence.

The Society for the Diffusion of Useful Knowledge

The Work of Wind: Air, Land, Sea is extended by a series of workshops, performances, publications, and discussions highlighting a year-long public program titled *The Society for the Diffusion of Useful Knowledge* (SDUK). The name of this innovative platform is borrowed from a non-profit society founded in London in 1826, focused on publishing inexpensive texts such as the widely read *Penny Magazine* and *The Library of Useful Knowledge* (of which Sir Francis Beaufort led the map and atlas section), and aimed at spreading important world knowledge to anyone seeking to self-educate. Continuing, and troubling, the origins of the society, the SDUK platform asks: What constitutes “useful knowledge”? For whom? And who decides? An ecology of knowledge based on the relationship and antagonism of “useful” ideas is composed by *The Society for the Diffusion of Useful Knowledge* and circulated across the city of Mississauga, in programming that continues through spring 2019.

We begin with more than 20 SDUK events organized in conjunction with *The Work of Wind: Air, Land, Sea*, and taking place in various locations within and between the artist commissions in the Southdown Industrial Area. The program of events includes performances on post-apocalyptic futures, remediation, and listening to the landscape; participatory workshops on atmospheric pollution, environmental monitoring, and aspiration; conversations on chemical contamination, Indigenous environmental justice, waste and plastic pollution, the Great Lakes, migrant rights, and food justice; a *Useful Knowledge Hub* bringing together University of Toronto Mississauga researchers, local environmental organizations, and City of Mississauga Divisions; plein air painting workshops and lunchtime artist talks; and the launch of *The Work of Wind: Land*, the first book in a three-volume series co-published by K. Verlag and Blackwood Gallery.

The Work of Wind: Air, Land, Sea explores the complexity inherent in seeing and understanding climate change—for this reason, it takes form as a play between exhibition installations, public events, research, and the realities of the site where it takes place. It sees many kinds of knowledge about our world as fundamentally entangled. In doing so, it sets out to develop durable visual-cultural literacies, invites publics to create new encounters in the common struggle for a future, and points to a simple fact...

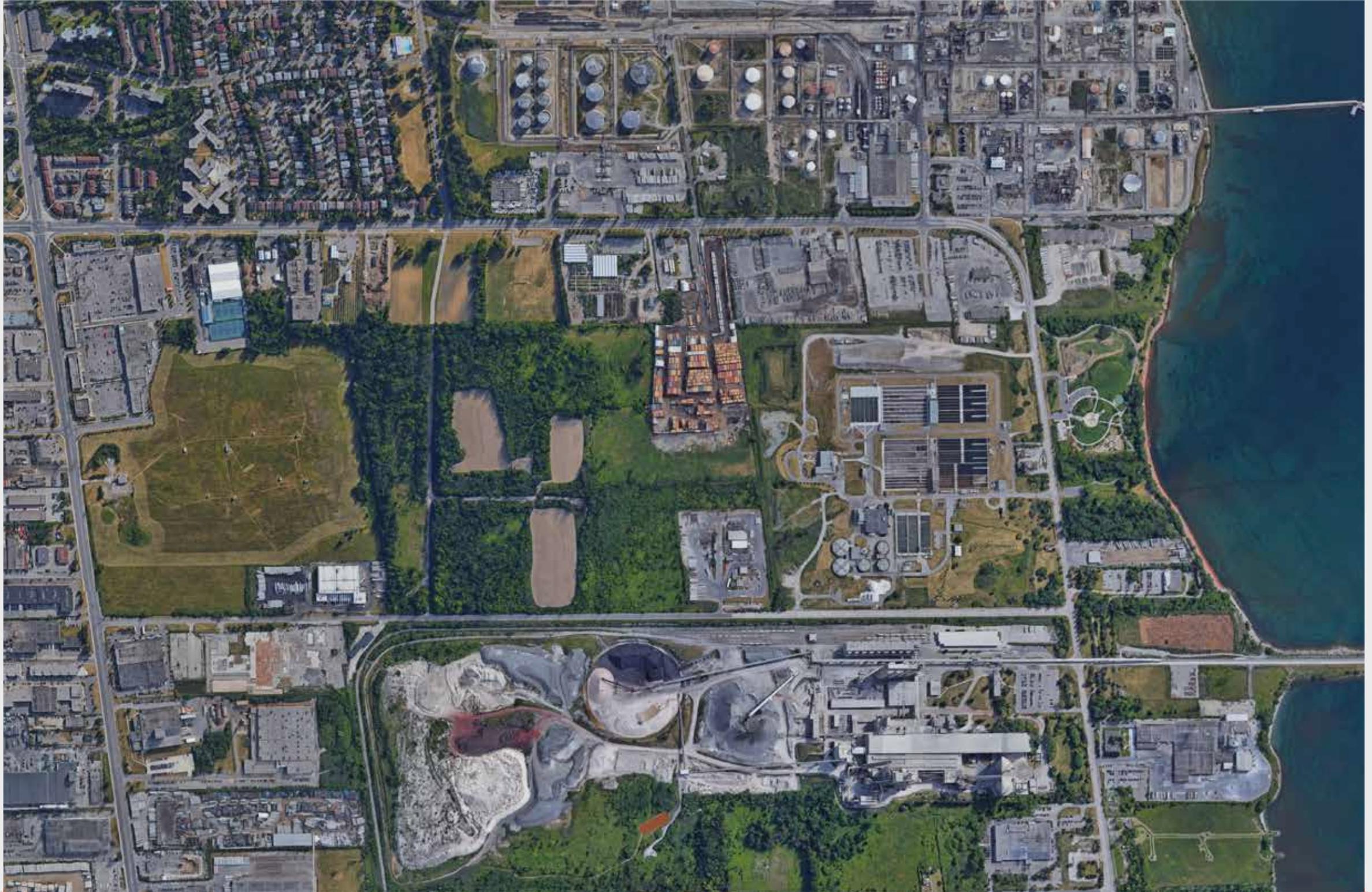
A new picture must emerge.

—Christine Shaw

Beaufort Number	Knots	Km per hour	Description	Specifications for use at sea	Specifications for use at land
0	<1	<1	CALM	Sea like a mirror	Calm, smoke rises vertically
1	1-3	1-6	LIGHT AIR	Ripples with the appearance of scales formed but without foam crests	Direction of wind shown by smoke drift, but not by wind vanes
2	4-6	7-12	LIGHT BREEZE	Small wavelets still short but more pronounced; crests have a glassy appearance but do not break	Wind felt on face; leaves rustle; wind vane moved by wind
3	7-10	13-19	GENTLE BREEZE	Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses	Leaves and small twigs in constant motion; wind extends light flag
4	11-16	20-30	MODERATE BREEZE	Small waves becoming longer, fairly frequent white horses	Raises dust and loose paper; small branches moved
5	17-21	31-39	FRESH BREEZE	Moderate waves taking a more pronounced long form; many white horses are formed; chance of some spray	Small trees in leaf begin to sway; crested wavelets form on inland waters
6	22-27	40-50	STRONG BREEZE	Large waves begin to form; the white foam crests are more extensive everywhere; probably some spray	Large branches in motion; whistling heard in telegraph wires; umbrellas used with difficulty
7	28-33	51-62	NEAR GALE	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind	Whole trees in motion; inconvenience felt when walking against the wind

Beaufort Scale of Wind Force

8	34-40	63-74	GALE	Moderately high waves of greater length; edges of crests break into spindrift; foam is blown in well-marked streaks along the direction of the wind	Breaks twigs of trees; generally impedes progress
9	41-47	75-87	STRONG GALE	High waves; dense streaks of foam along the direction of the wind; crests of waves begin to topple, tumble and roll over; spray affects visibility	Slight structural damage (chimneys pots and slates removed)
10	48-55	88-102	STORM	Very high waves with long overhanging crests; the resulting foam, in great patches, is blown in dense white streaks along the direction of the wind; on the whole, the surface of the sea takes a white appearance; the tumbling of the sea becomes heavy and shock-like; visibility affected	Seldom experienced inland; trees uprooted; considerable structural damage occurs
11	56-63	103-117	VIOLENT STORM	Exceptionally high waves (small and medium-sized ships might be for a time lost to view behind waves); the sea is completely covered with long white patches of foam lying along the direction of the wind; everywhere the edges of the wave crests are blown into froth; visibility affected	Very rarely experienced; accompanied by widespread damage.
12	>64	>118	HURRICANE	The air is filled with foam and spray; sea is completely white with driving spray; visibility very seriously affected	—



We Who Spin Around You

Eduardo Navarro



Eduardo Navarro, *We Who Spin Around You* (action documentation), 2016. Photo: Liz Ligon. Work commissioned and produced by The Highline Art, NY.

We Who Spin Around You brings audiences face-to-face with our relationship to the celestial. In the early evening as the sun begins to lower in the sky, Navarro invites participants to don custom-made bronze masks designed to help them safely view the sun, transforming it into a tiny green sphere. Then, as night falls across the Southdown industrial area in Mississauga, astrophysicists, astronomers, poets, and researchers give brief lectures on solar history and humanity's changing relationship to the sun and skies. The work—situated in parkland on the shore of Lake Ontario with sightlines to smoke stacks—invites viewers to think about their place in the surrounding terrestrial and celestial worlds.

Performance opens at 7pm.

Lectures, poems, and readings will be delivered every night at sunset by:

Sonja Greckol, poet
Renée Hložek, Assistant Professor, Dunlap Institute of Astrophysics, University of Toronto
Julie Joosten, poet
Kent Moore, Professor, Atmospheric Physics, University of Toronto
 Mississauga

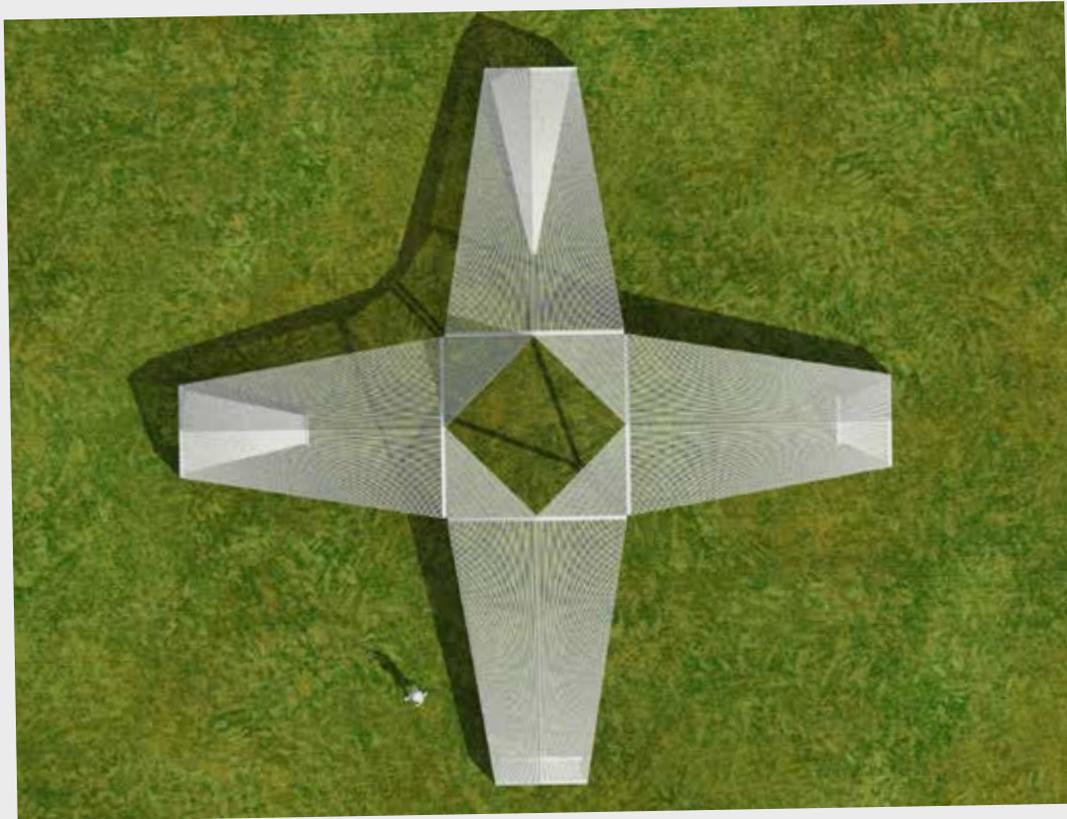
Stephen Morris, J. Tuzo Wilson Professor of Physics, University of Toronto
Karyn Recollet, writer and Associate of Professor, Women & Gender Studies Institute, University of Toronto

Eduardo Navarro investigates different ways of transforming our senses in order to have a new understanding of our world. His works range from large-scale sculptures to actions and participatory installations that investigate empathy and contemplation. His work has recently been shown at the Universidad Torcuato Di Tella, Buenos Aires; Museo Rufino Tamayo, Mexico City; High Line Art, New York; Der Tank, Basel;

and the Drawing Center, New York. His work has been featured in major international group exhibitions including *Tidialectics*, TBA21, Vienna, the Mercosul Biennial; the Bienal de São Paulo; *Surround Audience: The New Museum Triennial*, New York; the Sharjah Biennial; *La era metabolica* at the Fundación Malba, Buenos Aires; and *Metamorfosi* at the Castello de Rivoli, Turin.

The House Sets the North

Xiaojing Yan



Xiaojing Yan, *The House Sets the North* (artist's rendering), 2018.

In *The House Sets the North*, 30,000 metres of thread constructs a translucent courtyard, which appears airy, fleeting, and insubstantial—like a mirage floating above Mississauga's Southdown Industrial Area. Viewers are invited to walk into the work to engage with the space, stimulating ideas and memories through the embodied experience of thread walls.

Where is home? The question is among the central concerns of many immigrants. As an artist living and travelling across continents and cultures, Xiaojing Yan represents home as a concept always in flux.

Designed based on the traditional Chinese courtyard, which aligns with the cardinal directions, Yan's installation explores how the symbolism of the four directions and the four seasons resonates across spiritual, cultural, geographical, and cosmological scales. Creating spatial confusion and contesting viewers' perceptions of time and space, the structure explores how landscape and environment serve as important reference points for human experience. *The House Sets the North* questions how we must reckon with this experience in an age of rapid environmental shifts that impact not only the notion of "home" (with significant seasonal changes, resource-based conflict, and environmental disasters increasingly driving global migration), but humanity's attitude towards our planetary future. Recognizing our dependence on planets and stars for navigation, guidance, and assurance, *The House Sets the North* brings together personal narratives of displacement, public and private space, recognition and alienation, with the celestial and interplanetary concerns of a changing world. Anchored in Lakeside Park, the structure nonetheless appears precarious, reflecting the ongoing intensity of human impact on the earth, and the delicacy of our continued presence here.

Xiaojing Yan is a Chinese-Canadian artist working and living in Markham, Ontario. She received a BFA from Nanjing University of the Arts in 2000 and an MFA from Indiana University of Pennsylvania in 2007. Her work has been shown internationally, including at the Royal Ontario Museum, and the Suzhou Museum, China. Her work has been collected by many museums, institutions, and

private collectors. She is also a recipient of numerous grants and awards, including the 2014 Outstanding Young Alumni Award from Indiana University of Pennsylvania, Project Grants from the Canada Council for the Arts, and the Chalmers Arts Fellowship, and Mid-Career Visual Artist Grant from the Ontario Arts Council.

Museo Aero Solar



Museo Aero Solar, Prato, Italy, 2009. Photo: Janis Elko.

Museo Aero Solar is a flying museum and a solar sculpture made by the “Museo Aero Solar” group—an open-source international community, initiated more than eight years ago by Tomás Saraceno in conversation with Alberto Pesavento, inviting everybody to take part and to turn used plastic bags into lighter-than-air sculptures.

What began from the premise of a collection has unfolded to be an urgently necessary investigation on coexistence, aeronautics, and architecture, aimed to rethink the way we navigate new territories and venture beyond the rules of gravity. *Museo Aero Solar* stands for a different conception of space and energy, both anomalous and forceful at the same time. The core of *Museo* resides in the inventiveness of local inhabitants, not in its image: among collective action and art, do-it-together technology and experiment, it is a voyage back/forward in time. The *Museo Aero Solar* is a growing community of self-assembling groups of initiators and participants that are working independently and together in different parts of the world on creating novel instantiations of the *Museo*. By taking the bags out of waste cycles, they are jointly raising awareness of the impact of our daily plastic consumption and our careless use of resources. In the past eleven years, the *Museo Aero Solar* has culled more than 20,000 plastic bags and landed in more than 21 sites across Africa, Asia, Europe, South America and the Caribbean, and the United States. This is *Museo Aero Solar*'s first launch in Canada.

Every day throughout *The Work of Wind: Air, Land, Sea*, *Museo Aero Solar* will float completely fossil-fuel free, powered only by the heat of the sun.



Shore Lunch

Lisa Myers



Lisa Myers, *Shore Lunch* (Harbourfront Centre, Toronto), 2014. Photo: Keesic Douglas.

Shore Lunch is an ongoing, multi-site, mobile art venue that takes the form of a make-shift camp kitchen. Complete with propane burners, tables, shelter, and bucket seating, this performance space invites people to share food and conversation. *Shore Lunch* has engaged the public on the shores of the Rideau Canal in Ottawa, next to Lake Ontario in Toronto, on the island of Montreal, and is now hammering down tent pegs in Mississauga.

Inspired by stories of my mother's fishing skills and her love for pulling up on an island and frying up fish over a fire, I created this project to think more about the layers of history, and the interaction between waterfront leisure areas and industrial hubs around the Great Lakes. *Shore Lunch* in Clarkson/Mississauga will delve into the history of fruit farms in the area and acknowledge the Anishinaabe and Haudenosaunee workers who traveled from reserves in Central Ontario to pick fruit in this Lake Ontario region. Drawing from written history and stories from community and family, I have created three structures for three sites. Each site offers interaction and hospitality. At one site, the *Shore Lunch* mobile camp kitchen cart serves as a space for sharing food and stories. At the second, a wall tent encampment is set up for transient visitors passing by, who can borrow small picnic bags for their movement between sites. The final structure is a small shack, furnished to convey the history of migrant labour, including Indigenous workers. Considering this migrant worker history also means thinking about migrant labour within current food systems. *Shore Lunch* creates a space to camp out for a while to acknowledge the different kinds of sustenance we get from a place.



Canadian Indians Picking Raspberries at the Walker House Farm. Oakville & Toronto, ONT., n.d. Courtesy: Oakville Historical Society Archive.

Lisa Myers is an independent curator and artist with a keen interest in interdisciplinary collaboration. Myers has an MFA in Criticism and Curatorial Practice from OCAD University. Since 2010, she has worked with anthocyanin pigment from blueberries in printmaking, and in her stop-motion animation. Her participatory performances involve sharing berries and other food items in social gatherings, reflecting on the value found in place and

displacement; straining and absorbing. She has exhibited her work in solo and group exhibitions across Canada and her writing has been published in a number of exhibition publications in addition to *Senses and Society*, *C Magazine* and *FUSE*. She is an Assistant Lecturer in the Faculty of Environmental Studies at York University. Myers is a member of Beausoleil First Nation and she is based in Port Severn and Toronto.

Of Weather (for Geoff Hendricks)

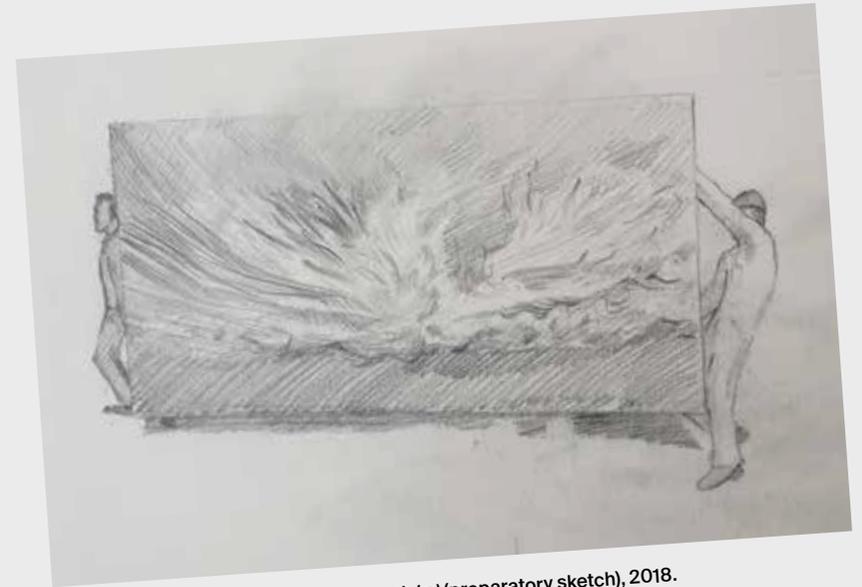
Paul Walde



Paul Walde, *Of Weather (for Geoff Hendricks)* (production still), 2018.



Of Weather (for Geoff Hendricks) is the first of a proposed series of performances called *Moving Image Works*, where images of clouds are brought down to ground-level as large-scale stretched photographic prints. The clouds are animated by teams of handlers who move through the Southdown Industrial Area, responding to changes in the weather over the course of ten days. At prescribed intervals during each day, the teams come together to perform a choreography of image movements. This *ballet* of images is built upon standard film-making camera movements and editing techniques including pans, zooms, tilts, wipes, and cuts. When not roaming the exhibition area, the images form a photographic installation in a radio transmission field.



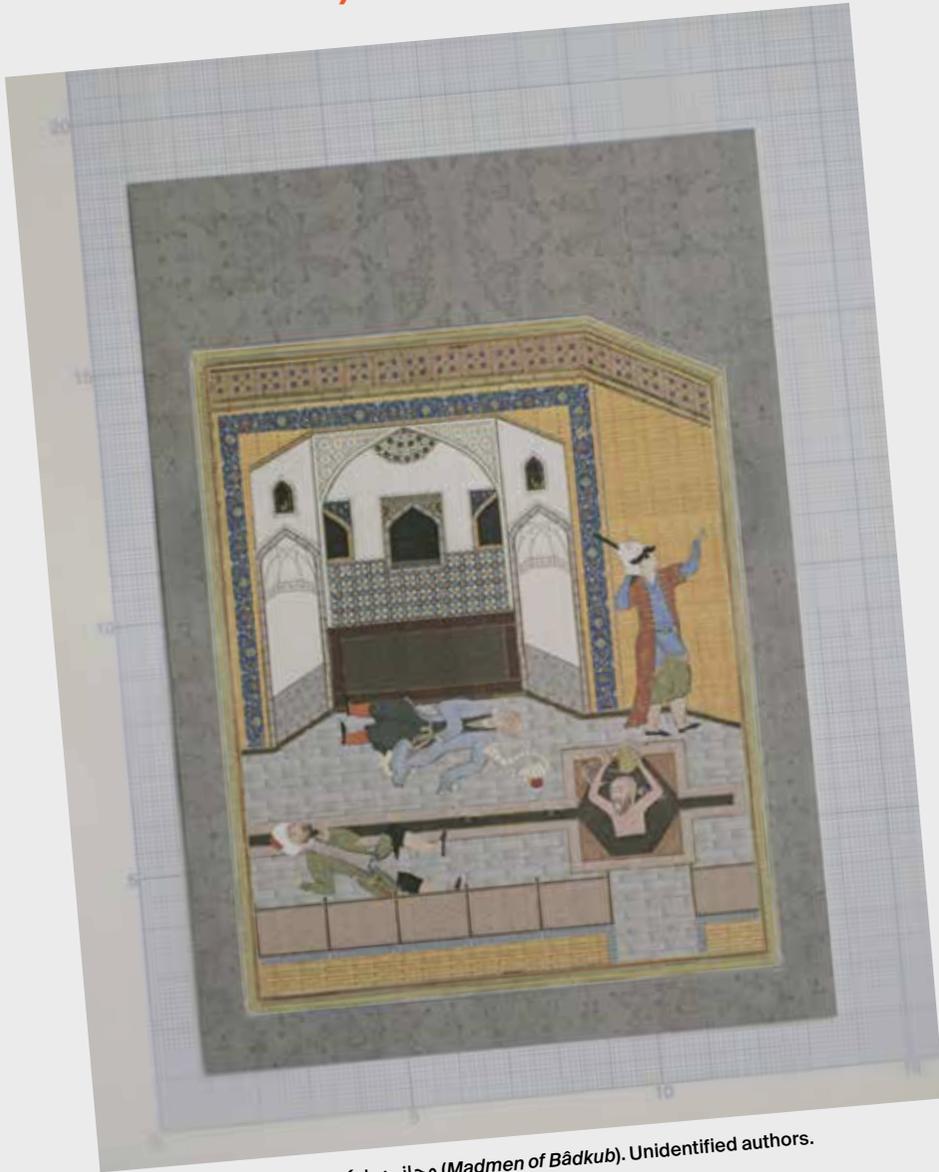
Paul Walde, *Of Weather (for Geoff Hendricks)* (preparatory sketch), 2018.

Paul Walde is an artist, composer, and curator. Walde's body of work suggests unexpected interconnections between landscape, identity, and technology. Recent exhibitions of his work include: *Au Loin Une Île* at Mains d'Oeuvres in Paris (2018), *Records and Wireframes* at Dundee Contemporary Arts as part of the NEoN Festival of Digital

Media in Dundee, Scotland (2017) and *The View from Up Here* at the Anchorage Museum and the Nordnorsk Kunstmuseum in Tromsø, Norway (2016 and 2017). Walde is an Associate Professor and Chair of the Department of Visual Arts at the University of Victoria, BC.

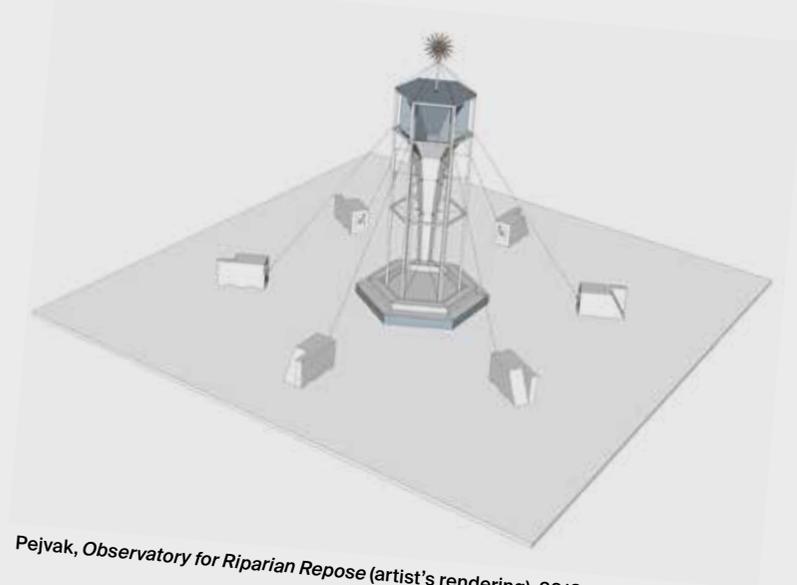
Observatory for Riparian Repose [In Reaching, the Sun collapsed into the Sea]

Pejvak (Rouzbeh Akhbari &
Felix Kalmenson)



From the manuscripts of مجانین بادکوبه (*Madmen of Bâdkub*). Unidentified authors.

The *Observatory for Riparian Repose* is a story told in wind and water. Inspired by ancient *bâdgir* (windcatcher) designs of Iran, this immersive sculpture funnels ambient breeze into a strong directional wind that encounters a pool of liquid beneath the structure. Originally, *bâdgirs* served as passive cooling systems in hot desert climates, directing atmospheric winds into subterranean cisterns en route to domestic interiors. *Observatory for Riparian Repose* adapts the form of the *bâdgir*, detached from its intended function, with the aim of creating an environment for contemplating the enmeshing of elements. Through sculptural and textual additions, a story implicates this *bâdgir* within a broader narrative that ties together histories of extraction, collective madness, tellurian toxification, and the invention of solar time.



Pejvak, *Observatory for Riparian Repose* (artist's rendering), 2018.

Pejvak is the long-term collaboration between Felix Kalmenson and Rouzbeh Akhbari. Through their multivalent, intuitive approach to research and living, they find themselves in a convergence and entanglement with likeminded collaborators, histories, and various geographies.

Rouzbeh Akhbari is an artist working in video installation and film. His practice is research-driven and usually exists at the intersections of political economy, critical architecture, and planning. Through a delicate examination of the violences and intimacies that occur at the boundaries of

lived experience and constructed histories, Akhbari uncovers the minutiae of power that organize and regiment the world around us.

Felix Kalmenson is an artist whose practice navigates installation, video, and performance. Kalmenson's work variably narrates the liminal space of a researcher's and artist's encounter with landscape and archive. By bearing witness to everyday life, and hardening the more fragile vestiges of private and collective histories through their work, Kalmenson gives themselves away to the cadence of a poem, always in flux.

Agamiing – Niwaabaandaan miinawaa Nimiwkendaan // At the Lake – I see and I remember

Dylan Miner



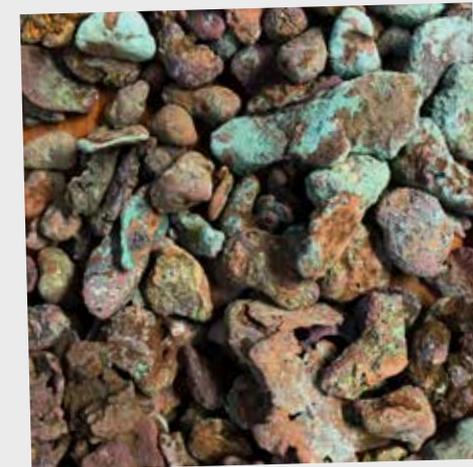
Dylan Miner, *Agamiing – Niwaabaandaan miinawaa Nimiwkendaan // At the Lake – I see and I remember* (artist's rendering), 2018.

Agamiing – Niwaabaandaan miinawaa Nimiwkendaan // At the Lake – I see and I remember begins with the Anishinaabemowin word *agamiing*, which signifies “to be at the lake, at the shore, or at the water.” Miner explores the lake as an important historic and contemporary location where different peoples/ecologies/worlds meet.

the work of WIND: AIR, LAND, SEA

A series of seven platforms constructed from old growth lumber and copper are installed in seven sites across the exhibition area, buried slightly into the ground so that the surface of the platform is at ground/water level. Materially, the platforms' copper detailing is symbolically rich: it harkens back to both early capitalist mineral extraction in the Great Lakes region, and to the sacred use of copper within many Indigenous communities.

Rematriating old-growth wood (and copper) back to the land, Miner's work also explores the non-linear temporal concept of *aaniikoobijinag* (ancestors/descendants)—this work serves to bring the past into the present/future, or the present into the past/future, or the future into past/present. In addition to mediating between earth, water, and skyworlds, Miner's platforms also serve to create a space to look at and remember the ecological destruction wrought by industry. Animated throughout the exhibition, Miner's platforms serve as micro-ecologies within the larger industrial environment. However, these micro-ecologies are always interconnected with all other ecologies and, in turn, never fully autonomous. The platforms will play host to events throughout the festival.



Dylan Miner, *bskaabwidoon // bring it back*, 2018. Glacial float copper which will be rematriated with the Land.

Dylan A.T. Miner is a Wiisaakodewinini (Métis) artist, activist, and scholar. He is Director of American Indian and Indigenous Studies and Associate Professor in the Residential College in the Arts and Humanities at Michigan State University. Miner sits on the Michigan Indian Education Council, is a founding member of the Justseeds Artists' Cooperative, has been featured in over 20 solo exhibitions, and been an artist in residence or visiting artist at institutions across

North America and Europe. He holds a PhD from The University of New Mexico and has published more than sixty journal articles, book chapters, critical essays, and encyclopedia entries, and numerous limited-edition artist books/booklets. He recently commenced the *Bootaagaani-minis* ∞ Drummond Island Land Reclamation Project and is uncertain if he will return to academic writing.

Hydra

Ed Pien



Ed Pien, *Hydra* (prototype), 2018.

Hydra is an installation that activates multiple sites in the exhibition area including along the edge of the Petro Canada brownfields and adjacent to the CRH Cement Plant, which are on Treaty 13A land, ancestral to the Mississauga Nation. *Hydra* grapples with the crisis of near-irreversible environmental damage. Exploring trauma, complicity, and the possibility of bearing witness, *Hydra* also foregrounds the potential for community resilience and encourages collective responsibility, positioning hope and vitality as starting points for negotiating forces of environmental destruction that are both within and beyond human control.

Hydra consists of a network of water pipe systems connected to above-ground swimming pools equipped with electrical pumps that push water through the pipe system. *Hydra's* water configuration and circulation allude to the complex and intricately balanced water networks that sustain the Earth. The installation also makes reference to the circulatory systems of living beings, and to our collective vital dependence on water, while the swimming pools attest to privilege, excess, and waste. *Hydra's* overall configuration and working system points to extraction, and the intentional leakage of the system recalls the endless episodes of leaked pipelines and sunken oil tankers marking the surface of the Earth.

Ed Pien lives and works in Toronto. He has received a BFA from Western University and a MFA from York University. Pien has shown extensively in venues including the Drawing Centre, New York; the Victoria & Albert Museum; The Canadian Culture Centre, Paris; The Goethe-Institut, Berlin; The Art Gallery of Ontario; Musée d'art contemporain Montréal; Art Gallery of

Greater Victoria; The Mendel Art Gallery, Saskatoon; Musée des beaux-arts Montréal; Songzhuang Art Centre, Beijing; the National Art Gallery of Canada; and at MASS MoCA, Massachusetts. He has participated in the Montreal Biennale; the Sydney Biennale; the Moscow Biennale; the Beijing Biennale, as well as the Curitiba Biennial, Brazil.

Liberation of the Chinook Wind

Tania Willard



Tania Willard, *Liberation of the Chinook Wind* (artist's rendering), 2018.

This work is an elaboration of concepts that artist Tania Willard has been working with in *BUSH Gallery*: a collaborative project that centres Indigenous lands and leadership. Willard connects her Secwépemc positionality and territory within Mississauga territory through the story of Chinook Salmon—introduced into Lake Ontario in the 1960s for sport fishing and to prey on other invasive species of fish also introduced by settler water management strategies. Chinook were preferred for sport fishing because they “fight” and “thrash” on the line.

the work of WIND: AIR, LAND, SEA

Dramatic species decline and extinction in the Great Lakes from settler management is felt strongly by Indigenous peoples whose ways of life and sacred responsibilities in harvesting resources have been changed irrevocably. Current water claims by the Mississaugas of the New Credit assert rights to waterways and aquatic resources that were not surrendered in treaty. This project conceptualizes points of overlap in an exercise of building relations that also acknowledges the artist's position as an uninvited guest implicated in the settler project (albeit through the gallery) in an interlacing of coloniality.

Asserting Indigenous presence and claims to the water, *Liberation of the Chinook Wind* also conceptualizes points of overlap between Indigenous nations, settlers and uninvited guests, and the non-human by exploring the entangled histories of Chinook language, Chinook Wind, and Chinook Salmon.

Chinook jargon was an early trade language—a hybrid of Indigenous in the Pacific Northwest. Members of Willard's family spoke and wrote Chinook in the past, a fact that counters myths of isolation in pre-contact Indigenous interactions. The Chinook Wind is also an animate being in Secwépemc creation story—In a time of discussions of the Anthropocene, Indigenous concepts of interrelatedness are essential to counteracting our human-centric worlds. In this project, the agency of the wind is suggested through a data visualization in which ambient weather data (collected by four windsocks overlooking the water) is used to generate poetry.

Tania Willard, of Secwépemc and settler heritage, works within the shifting ideas around contemporary and traditional, often working with bodies of knowledge and skills that are conceptually linked to her interest in intersections between Aboriginal and other cultures. Her curatorial work includes *Beat Nation: Art Hip Hop and Aboriginal Culture (2012-2014)*, co-curated with Kathleen Ritter. In 2016 Willard received the Award for Curatorial Excellence in Contemporary Art from the Hanatyshyn Foundation and a City of Vancouver Book Award for the

catalogue *Unceded Territories: Lawrence Paul Yuxweluptun*. Willard's ongoing collaborative project *BUSH Gallery* is a conceptual land-based gallery grounded in Indigenous knowledges and relational art practices. Willard is an MFA candidate at UBCO Kelowna, and her current research constructs a land rights aesthetic through intuitive archival acts.

The wind poetry was realized in association with Steve Sziget (ICCIT, UTM) and programmed by Stephen Keller.

Futurity Island

Gediminas & Nomeda Urbonas
in collaboration with Indrė Umbrasaitė
and Nicole L'Huillier



Gediminas & Nomeda Urbonas, *Futurity Island* (rendering), 2018. Drawing by Indrė Umbrasaitė.

Futurity Island is conceptualized as a space for acoustic experimentation. It serves as an infrastructure that hosts sound compositions and performances that open space for learning.

Pipe is the primary structural and symbolic unit of the *Island*, referencing both the material that has facilitated worldwide land reclamation of swamps throughout the era of modernity and Bertolt Brecht's statement in *The Radio as an Apparatus of Communication* (1932): "The radio would be the finest possible communication apparatus in public life, a vast network of pipes. That is to say, it would be if it knew how to receive as well as to transmit, how to let the listener speak as well as hear, how to bring him into a relationship instead of isolating him."

In *Futurity Island*, a network of pipes becomes an artificial skeleton that employs sound to channel what we used to call "nature." Once used to drain swamps, the pipe becomes a metaphor for a human-centered ecology, an infrastructure of environmental domination and one of the prime symbols of the Anthropocene. *Futurity Island* appropriates the pipe as an anthropocenic technology and builds a sound infrastructure that brings humans and non-humans into a more symmetrical, collaborative relationship, aiming to transmit and to hear the silenced voices of this planet.

By installing sonic transducers within the structure, Gediminas & Nomeda Urbonas create an organic, reverberating object that opens free space for swampy mediations. The installation also becomes a site for acoustic experiments, using sound as a quaking force that destabilizes both architectural space and the human misconception that we are "builders of the environment."

Nomeda and Gediminas Urbonas are artists, MIT-based researchers and educators, and co-founders of Urbonas Studio, an interdisciplinary research practice that facilitates exchange amongst diverse nodes of knowledge production and artistic practice in pursuit of projects that transform civic spaces and collective imaginaries. They have exhibited internationally including at the São Paulo, Berlin, Moscow, Lyon, Venice, and Gwangju Biennales, Folkestone Triennial, and Manifesta and Documenta exhibitions (among others). They are the recipients of numerous grants and awards, including the Lithuanian National Prize (2007); a Prize for the Best International Artist at the Gwangju Biennale (2006) and the Prize for the national pavil-

ion at the Venice Biennale (2007). They were also nominated for the Nam June Paik Award in 2012. Currently Urbonas are curating the "Swamp School"—a future learning environment at the 16th Venice Architecture Biennale 2018.

Futurity Island's architecture is created in collaboration with Indrė Umbrasaitė, a Lithuanian-Austrian architect and Assistant Professor at the Institute of Architecture, University of Applied Arts in Vienna. Sound composition by Nicole L'Huillier, a sound artist, musician, and architect from Santiago, Chile, currently based in Boston as a PhD researcher at the MIT Media Lab, Opera of the Future Group.

HARVEST

Julian Oliver



Julian Oliver, *HARVEST* (artist's rendering), 2018.

HARVEST is a work of critical engineering and computational climate art. It uses wind-energy to mine cryptocurrency, the earnings of which are used as a source of funding for climate-change research. Exploring the capacity of art and technology to harness renewable resources, the project responds directly to climate and weather conditions at the exhibition site.

the work of WIND: AIR, LAND, SEA

Taking the form of two 2kW wind turbines with environmental sensors, weatherproof computers and 4G uplink installed in an empty field behind the Musket Transport terminal, *HARVEST* “feeds” from two primary symptoms of our changing climate: wind gusts and storms.

It does this by transforming wind energy into the electricity required to meet the demanding task of mining cryptocurrency (here Zcash), a decentralized process where computers are financially rewarded for their work maintaining and verifying a public transaction ledger known as the blockchain. Rather than filling the digital wallet of the artist, all rewards earned by the *HARVEST* mining machine are paid out as donations to non-profit climate change research organizations such that they can better study this planetary-scale challenge.

The second component of *HARVEST* comprises a live feed directly from the miners to a 40ft shipping container located at the front of the terminal, conveying real-time footage of the wind turbines and data relevant to the mining process. This data is visualised by Christopher Pietsch.



Julian Oliver, *HARVEST* (prototype), 2017. Wind turbine, batteries, cryptocurrency mining rig, data visualization, dimensions variable.

Julian Oliver is a New Zealander, critical engineer and artist based in Berlin. His work has been presented at many museums, galleries, international electronic-art events and conferences, including the Tate Modern, Transmediale, the Chaos Computer Congress, Ars Electronica, FILE, and the Japan Media Arts Festival. Oliver has received several awards, including the distinguished Golden Nica at Prix Ars Electronica 2011 for the project *Newstweek*

(with Daniil Vasiliev). He is the co-author of the *Critical Engineering Manifesto* and co-founder of Crypto Party in Berlin. He is also the co-founder of *BLACKLIST*, a screening and panel series focused on the primary existential threats of our time. He is an advocate of Free and Open Source Software and actively supports and contributes to initiatives that reinforce rights of privacy and anonymity in technologically mediated domains.

Spring Bloom in the Marginal Ice Zone: From the Barents Sea to Lake Ontario

Jana Winderen



Sea angel from the Marginal Ice Zone. Photo: Jana Winderen.

The marginal ice zone is the dynamic border between the open sea and the sea ice, which is extremely ecologically vulnerable. The phytoplankton present in the sea produces half of the oxygen on the planet. During spring, this zone is the most important CO₂ sink in our biosphere.

the work of WIND: AIR, LAND, SEA

In *Spring Bloom in the Marginal Ice Zone*, the sounds of living creatures become a voice in the current political debate concerning the official location of the ice edge (or floe edge—the space where the open sea and frozen sea meet). The listener experiences the bloom of plankton, the shifting and crackling sea ice in the Barents Sea around Spitsbergen (towards the North Pole), and the underwater sounds made by bearded seals, migrating species such as humpbacks and orcas, crustaceans and spawning cod—all actions that depend on the spring bloom.

This particular installation brings the sounds of drifting sea ice from East to West to imagine these sounds fished out of the ocean and presented on the shore. The ever-thinning sea ice will have unknown consequences not only for the life in and under it, but also for neighbouring ecosystems and the entire planet's climate. As more light shines through the ice, the bloom occurs earlier and is more active, which results in a changing ecosystem in the benthic zone (the bottom of the ocean and the sea floor). Melting sea ice will also make it possible for shipping traffic to increase and for oil exploration to move further north. These increases are already happening, to the extent that sea mammals can no longer hear each other over distances—their lines of communication crossed and destroyed by human-created noise.



Jana Winderen conducting field recordings in Iceland. Photo: Finnbogi Petursson.

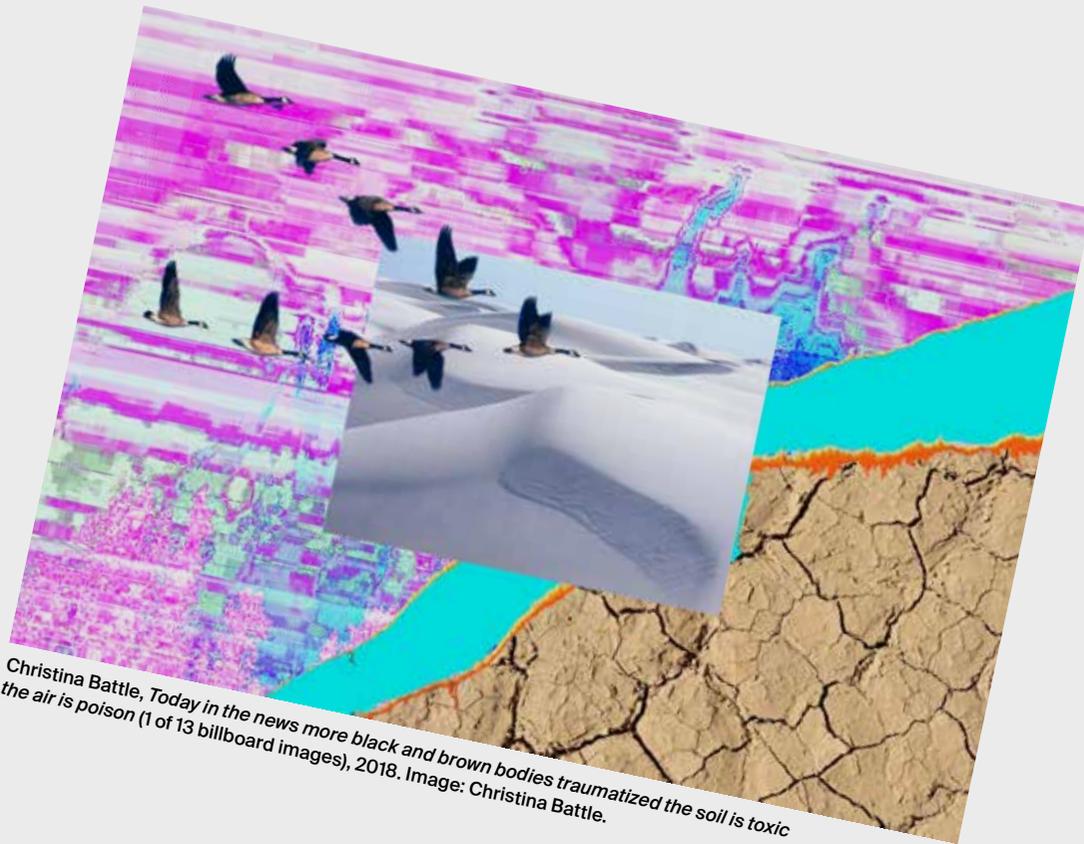
Jana Winderen is an artist educated in Fine Art at Goldsmiths, University of London with a background in mathematics, chemistry, and fish ecology from the University of Oslo. Winderen focuses on audio environments and ecosystems which are hard for humans to access, both physically and aurally. Amongst her activities are immersive multi-channel sound installations

and concerts which have been performed internationally in major institutions and public spaces in America, Europe and Asia. Winderen lives and works in Oslo.

The artist thanks Sonic Acts and Dark Ecology who first commissioned the work for the Sonic Acts festival (Muziekgebouw, Amsterdam, 2017); ARCEX research cruise on R/V Helmer Hanssen, UiT The Arctic University of Norway; Mamont Foundation; and TBA21 Academy.

Today in the news more black and brown bodies traumatized the soil is toxic the air is poison

Christina Battle



Christina Battle, *Today in the news more black and brown bodies traumatized the soil is toxic the air is poison* (1 of 13 billboard images), 2018. Image: Christina Battle.

Today in the news more black and brown bodies traumatized the soil is toxic the air is poison is both title and starting point for this billboard collage project made specifically in response to *The Work of Wind: Air, Land, Sea's* appropriation of the Beaufort Scale of Wind Force. The work uses the scale as the underlying structure of its overall narrative, proposing that we are currently at the peak of the scale—stuck at 12: HURRICANE—and asserting that we must find strategies to move ourselves back toward 0: CALM as a necessity for any possible future. Rooted within the understanding that we are at a critical impasse where multiple imbalances within our society—climate change, global capitalism, infrastructural governance, environmental racism—are inherently entwined, *Today in the news more black and brown bodies traumatized the soil is toxic the air is poison* proposes that the potential ways forward are limited: we either continue on as we are, forever caught within the hurricane, or follow a new, alternate path that will help us escape a never-ending loop. The thirteen billboard collages punctuate the perimeter of the entire exhibition area and begin to mark out the path.



Originally from Edmonton, [Christina Battle](#) is currently based in London (ON). Her research and work consider to the parameters of disaster—looking to it as action, as more than mere event, and instead as a framework operating within larger systems of power. She has exhibited internationally in festivals and galleries, most recently at: Nuit Blanche (Toronto), Deluge Contemporary (Victoria), Franklin

Street Works (Stamford, CT), Le Centre des arts actuels Skol as part of Le Mois de la Photo à Montréal, Thames Art Gallery (Chatham, ON), Casa Maaud (Mexico City); and SOMArts (San Francisco). Christina is a contributing editor to *INCITE Journal of Experimental Media*, and current collaborative projects include re:assemblage with Scott Miller Berry and SHATTERED MOON ALLIANCE with Serena Lee.

Event Calendar

14-23 *We Who Spin Around You*
 See map ⁶
 7pm daily
 Sept.

15 *Economies of Scale*
 Julian Oliver
 See map ¹
 12-1:30pm
 Sept.

15 + *Listening As Wayfinding: Cobble Beach*
 Lindsay Dobbin

18 See map ²
 Performances:
 September 15, 2-4pm and
 September 18, 5-7pm
 Sept.

15 *miinawaa // also; and; again - A Conversation on Transgenerational Environmental Violence*
 See map ³
 4:30-6:30pm
 Sept.

15 *Lukumi: A Dub Opera*
 d'bi.young anitafrika
 See map ⁴
 8-9pm
 Sept.

15 + *Amphibian House*
 See map ⁵
 10am-8pm

16, 22, 23 Drop-in building activity for kids ages 5 and up
 Sept.

15 + *Society for the Diffusion of Useful Knowledge Hub*
 See map ⁶
 11am-5pm

22
 Sept.

16 Book Launch:
The Work of Wind: Land
 See map ⁷
 3-5pm
 Sept.

16 + Shore Lunch
 Conversations and Tours
 Worked/Working—A Documented Conversation:
 See map ⁸
 Sept. 16, 12-2pm

21, 22, 23 *Camp Kit Sharing Sessions:*
 See map ²⁰
 Sept. 21, 22, 23, 10am-6pm

Watershed Memory and Drainpipe Story—A Tour: See map ²¹
 Sept. 22 and 23, 11am-12pm and 2-3pm
 Sept.

17-21 Lunchtime Talks
 12-1pm daily
 Sept. 17: Christina Battle ⁹
 Sept. 18: Lindsay Dobbin ¹⁰
 Sept. 19: Pejvak ¹¹
 Sept. 20: Xiaojing Yan ¹²
 Sept. 21: Ed Pien ¹³
 Sept.

17 21 + Plein Air Painting Workshops
 Sept. 17, 9am-12pm ¹⁴
 Sept. 21, 1pm-4pm ¹⁵
 Sept.

22 *Aerocene Explorer Workshop*
 See map ¹⁶
 10am-1pm
 Sept.

22 *Ecologies of Waste: A Conversation*
 See map ¹⁷
 4-6pm
 Sept.

23 *Water-witching Workshop: "a slick, a smear...awash in green"*
 Alana Bartol
 See map ¹⁸
 12-2pm
 Sept.

23 *The Future of Breathing: A Participatory Workshop*
 SHATTERED MOON ALLIANCE
 See map ¹⁹
 3:30-6:30pm
 Sept.

14-
23

We Who Spin Around You

Sept.
7 pm daily

In the evening as the sun begins to lower in the sky, Eduardo Navarro invites participants to don custom-made bronze masks designed to help them safely view the sun, transforming it into a tiny dark green sphere. Then, a scientist, scholar, or poet gives a brief lecture or reading on solar history and humanity's changing relationship to the sun and skies.

Friday, September 14
7:31pm Karyn Recollet

Saturday, September 15
7:29pm Karyn Recollet

Sunday, September 16
7:27pm Julie Joosten

Monday, September 17
7:25pm Kent Moore

Tuesday, September 18
7:23pm Stephen Morris

Wednesday, September 19
7:21pm Sonja Greckol

Thursday, September 20
7:19pm Renée Hložek

Friday, September 21
7:17pm Stephen Morris

Saturday, September 22
7:15pm Renée Hložek

Sunday, September 23
7:13pm Sonja Greckol

Sonja Greckol is grateful for subways and bike lanes wherever. She published three poetry books: *No Line In Time* (2018) *Skein of Days* (2014) and *Gravity Matters* (2008). Her long poem "No Line In Time" won the 2017 *Briarpatch* Writing In the Margins Poetry Contest. She edits poetry for *Women and Environments International*. The re-election of Mike Harris propelled her into poetry; the election of Doug Ford propels her deeper into local activism with an eye to both the stars and the earth.

Renée Hložek is Assistant Professor at the Dunlap Institute of Astrophysics, University of Toronto. Hložek studied at the University of Pretoria and the University of Cape Town. She received her PhD from the University of Oxford in 2011, where she was a Rhodes Scholar. Before coming to the Dunlap, she was a Lyman Spitzer Jr. Postdoctoral Research Fellow in the Department of Astrophysics at Princeton University and the Spitzer-Cotsen Fellow in the Princeton Society of Fellows. She is also a Senior TED Fellow.

Julie Joosten is a poet, essayist, and editor who lives and works in Tkaronto. Her first book of poetry, *Light Light* (Book Thug, 2013), was short-listed for the Governor General's Award. Her next book, *For Nor*, is forthcoming from Book Thug in the spring of 2019. It explores perceptual styles, affect, form, and politics.

Kent Moore is Professor of Atmospheric Physics at the University of Toronto Mississauga. He investigates climate change and its effects on ocean circulation systems through studying high latitude climate dynamics in locations such as Greenland, the Himalayas, and the Arctic. He is currently UTM's Vice-Principal of Research.

Stephen Morris is the J. Tuzo Wilson Professor of Geophysics, Department of Physics, at the University of Toronto, where he leads the Experimental Nonlinear Physics Research Group. His research involves experiments on emergent patterns in fluids, granular media, ice formations, and fracture. He is also interested in natural patterns, and in the history of physics.

Karyn Recollet is an Assistant Professor in the Women and Gender Studies Institute at the University of Toronto. Recollet is an urban Cree whose research explores the multiple layered relationships that urban Indigenous folx have with lands' overflow. Her focal points are choreographic fugitivity, Indigenous futurities, decolonial love/processes of creating radical relationalities with kin.



Eduardo Navarro, *We Who Spin Around You* (action documentation), 2016. Photo: Liz Ligon. Work commissioned and produced by The Highline Art, NY.

15 Economies of Scale Julian Oliver

Sept.
12-1:30pm



HARVEST data visualization by Christopher Pietsch, 2017.

Starting at the shipping container housing the live video feed and data visualization of HARVEST's mining rig, Julian Oliver, facilitated by Musket Transport, will lead the group through the shipping yard to the adjacent field where the rig is located. At the foot of the 2kW wind turbines, Oliver will discuss how he directs the turbines' clean power into mining cryptocurrency to support climate change research and awareness. Acting as a fully functional prototype beyond a media-art context, Oliver envisages hundreds of such

HARVEST nodes could be deployed in the windiest parts of the world, together generating large sums of supplementary funding for climate-change NGOs in a time where climate science itself is under siege from the fossil-fuelled interests of governments and corporations. Oliver will address how the financials generated by HARVEST introduce the prospect of economies of scale and reveal the volatility of markets.

17 + Lunchtime Talks

18,
19,
20,
21

Sept.
12-1pm daily

September 17
Christina Battle
Petro Canada Park

September 20
Xiaoqing Yan
Lakeside Park

September 18
Lindsay Dobbin
Cobble Beach

September 21
Ed Pien
Avonhead Road

September 19
Pejvak
North Field



Lindsay Dobbin, *Water Drumming*, 2016. Participatory Performance in the Bay of Fundy, Nova Scotia. Photo: Lucas Ferguson-Sharp.

The *Work of Wind: Air, Land, Sea* Lunchtime Talks series presents artists from the project in discussion with Blackwood Gallery Director/Curator Christine Shaw. These conversational talks open up insights from the development of the site-specific commissions and projects, explore the local context of contemporary art and climate change, and

invite artists to share observations from their research and studio practices.

Location: Petro Canada Park, Cobble Beach, North Field, Lakeside Park, Avonhead Road

15 + Listening As Wayfinding Performances

Sept. 2-4pm

Lindsay Dobbin

18 Sept. 5-7pm



Lindsay Dobbin, *Listening As Wayfinding: Magdalen Islands*, 2016. Participatory Performance. Photo: Nigel Quinn.

Cobble Beach’s eroded clay cobblestones are sewer pipe remnants from the National Sewer Pipe Limited, which operated its Clarkson plant at the site of the current Lakeside Park from 1955-1980. When the plant ceased operation after cheaper plastic pipes were introduced, the remaining clay pipes were buried underground, and now fall out of the eroding bluff at the park’s east end, where the plant was located.

Materiality of sound. Sounding material. Honour fragments of erosion, and return to the water cycle.

In a world that is suffering due to intense fragmentation and trauma, listening to the land is a path of embodiment, relationship, responsive creativity and re-remembering what has been scattered. On the Cobble Beach shoreline, a buried history emerges from the banks of the earth, eroding into smaller and smaller pieces due to the action of water. Rather than reassemble, can we be present

in our listening with the process of erosion as the fragments become part of the water cycle, flowing through all awareness? What is the knowledge hidden in this shoreline clay? What sounds emerge from fragmentation? What is wholeness? Where does trust emerge? Dust? How can our awareness be like living water? Join artist Lindsay Dobbin for collaborative, listening-based actions on the Cobble Beach shoreline. Engaging in sensorial intimacy with the borderland, let’s find the place where true communication and relationship exists, with the land and each other, and improvise there.



Lindsay Dobbin, *Air/String Sun/Water*, 2015. Solar-powered intertidal radio performance at the Bay of Fundy, NS. Photo: Lauren Fournier

Lindsay Dobbin is a Kanien'kehá:ka (Mohawk)-Acadian-Irish artist, musician, curator, and educator who lives and works on the Bay of Fundy in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People. Born in and belonging to the Kennebecas River Valley in New Brunswick, Dobbin has lived throughout the Maritimes as well as the Yukon Territory. Their place-responsive practice includes music, media art,

performance, sculpture, installation, social practice and writing, and is invested in and influenced by Indigenous epistemologies and cultural practices, such as drumming. Dobbin is a passionate educator and active artistic collaborator—they are currently working with the Quiver Artist Collectives on a cross-Canada initiative that brings together Indigenous and settler artists.

15

Sept.
4:30-
6:30pm

miinawaa // also; and; again – A Conversation on Transgenerational Environmental Violence

A poet, an artist, an activist, and an historian of science discuss transgenerational environmental violence, thinking and working from non-linear histories and futurities. Exploring the infrastructures and decolonial futures of life already affected by chemical contamination in the Great Lakes and Chemical Valley, the conversation will turn to decolonizing environmental justice from the perspective of grassroots organizing, land defense, and education.



Dylan Miner, Untitled poetry broadsides, 2018. Two-colour risographs on French paper.

Vanessa Gray is a 25-year-old Anishinaabe kwe from Aamjiwnaang First Nation, located in Canada’s Chemical Valley. As an organizer with Aamjiwnaang and Sarnia Against Pipelines (ASAP), she works with community members to bring awareness to the health issues resulting from her reserve’s toxic surroundings. On December 21, 2015, Vanessa was arrested for shutting down Enbridge’s Line 9 pipeline.

Dylan Miner is a Wiisaakodewinini (Métis) artist, activist, and scholar. He is currently Director of American Indian and Indigenous Studies and Associate Professor in the Residential College in the Arts and Humanities at Michigan State University.

Erica Violet Lee is a two-spirit nēhiyaw writer and community organizer from westside Saskatoon, Saskatchewan. She has a BA in political theory from the University of Saskatchewan, and is now a graduate student at the Ontario Institute for Studies in Education, University of Toronto, pursuing her master’s degree in the department of Social Justice Education with a focus on Indigenous feminist freedom and embodied sovereignties.

Michelle Murphy works on decolonial feminist technoscience studies. She is the author of three books including *The Economization of Life* (Duke University Press, 2017). She is director of the Technoscience Research Unit, which hosts a social justice technoscience lab with a specific focus on environmental and data justice. Murphy is a Professor of History and Women and Gender Studies at the University of Toronto. She is Métis from Winnipeg.

15 Lukumi: A Dub Opera

d'bi.young anitafrika

Sept.
8-9pm



Found image: nuclear devastation. Courtesy: d'bi.young anitafrika.

Lukumi by d'bi.young anitafrika is an Afro-futurist Dub Opera set in post-nuclear-apocalypse Tkaronto, about a Black womxn who goes on an epic journey to the centre of the earth to uncover the meaning of her recurring dream of being buried alive. The Dub Opera is the third play in the Orisha Trilogy, featuring the plays *Esu Crossing the Middle Passage* and *Mami Wata & The PussyWitch Hunt*. The triptych takes us on a journey across the past, present, and future while reinterpreting the triangular journey of Black folks, voyaging from Africa to the Caribbean to North America under the influence and protection of The Orishas. d'bi.young anitafrika's performance comprises excerpts of *Lukumi* followed by a Q & A.

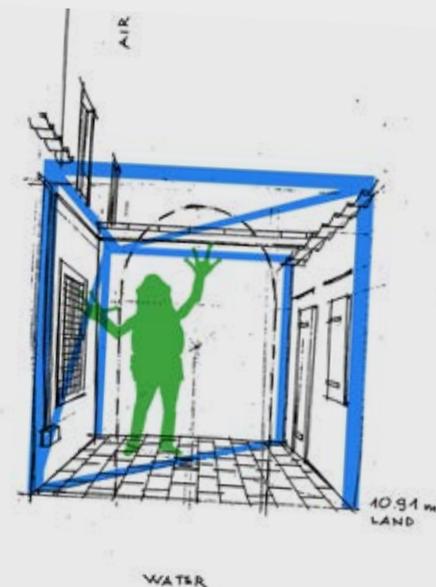
d'bi.young anitafrika is an award-winning published playwright-performer, director-dramaturge, and scholar. She is the originator of the Anitafrika Method (a creative leadership praxis and intersectional liberation framework), an internationally celebrated arts educator, and founding Artistic Director of the Watah Theatre as well as the instigator of Spolrusie Publishing. She is the published author of seven books, nine plays, and seven dub albums, and has toured her work internationally. She is currently pursuing postgraduate studies in London, UK, researching her Anitafrika Method and Theatre of Ritual-Self-Recovery as outgrowths of Dub Poetry and African-Caribbean Theatre.

15 + Amphibian House

Designed by ŠA Atelier (Gabrielė and Antanas Šarkauskai)

16
22
23

Sept.
10am-8pm



ŠA Atelier, *Amphibian House* (artists' rendering), 2018.

In 1959, Polish architect, theorist, and urban planner Oskar Hansen introduced the theory of "Open Form," which describes art as a process of collaboration, group expression, and flexibility, and imagines architectures and shared spaces as modulated and reconfigured by their users, rather than designed hierarchically by a single expert.

Amphibian House aims to involve children in creative play and learning through educational performance. In this activity, play shifts children's creativity towards the development of a symbiotic environment. Based on Oskar Hansen's Open Form theory, *Amphibian House* explores advanced hybrid thinking and asks children to imagine, construct, and experience architectural structures that can accommodate half-human/half-amphibian

beings. Through the workshop, children will investigate different aspects of interspecies relationships, new forms of dwelling, and the possible coexistence of different forms of life.

ŠA Atelier is an art and architecture studio established in Vilnius by Gabrielė and Antanas Šarkauskai. Each completed a Bachelor in Architecture at the Vilnius Academy of Arts and Master degrees at the Vilnius Gediminas Technical University: Gabrielė, a Master in Theory and History of Architecture, and Antanas, a Master in Architecture. They design and lead architecture-related workshops for children and adults, aiming to combine practical functional achievement and exploration of theoretical issues

15 + Society for the Diffusion 22 of Useful Knowledge Hub

Sept.
11am-5pm



The *Society for the Diffusion of Useful Knowledge* Hub brings together booths from municipal and regional environmental divisions, local environmental organizations, and University of Toronto research to showcase approaches to climate change research and action taking place in the area. The Hub makes research available to Mississauga publics and creates connections between diverse local initiatives that share the common goal of addressing the realities of climate change.

Participating Organizations:

City of Mississauga:
 Environment Division and Climate Change Action Plan
 Storm Water and Rainwater Harvesting
 Urban Tree Canopy

Region of Peel Office of Climate Change and Energy Management

University of Toronto
 Mississauga:

Centre for Urban Environments
 Making Social Knowledge
 Master of Science in Sustainability Management
 Remote Sensing and Spatial Ecosystem Monitoring Laboratory

Local Environmental Organizations:

EcoSource and Peel Environmental Youth Alliance
 Toronto and Region Conservation Authority
 Walk and Roll Peel

16

Sept.
3-5pm

Book Launch

The Work of Wind: Land

Beaufort Scale of Wind Force

Force	Knots	Km/h	Description	Specifications for use at Land
0	<1	<1	CALM	Calm; smoke rises vertically
1	1-3	1-6	LIGHT AIR	Direction of wind shown by smoke drift; but not by wind vanes
2	4-6	7-12	LIGHT BREEZE	Wind felt on face; leaves rustle; ordinary vane moved by wind
3	7-10	13-19	GENTLE BREEZE	Leaves and small twigs in constant motion; wind extends light flag
4	11-16	20-30	MODERATE BREEZE	Raises dust and loose paper; small branches moved
5	17-21	31-39	FRESH BREEZE	Small trees in leaf begin to sway; crested wavelets form on inland waters
6	22-27	40-50	STRONG BREEZE	Large branches in motion; whistling heard in telegraph wires; umbrellas used with difficulty
7	28-33	51-62	NEAR GALE	Whole trees in motion; inconvenience felt when walking against wind
8	34-40	63-74	GALE	Breaks twigs off trees; generally impedes progress
9	41-47	75-87	STRONG GALE	Slight structural damage occurs (chimney pots and slates removed)
10	48-55	75-87	STORM	Seldom experienced inland; trees uprooted; considerable structural damage occurs
11	56-63	103-117	VIOLENT STORM	Very rarely experienced; accompanied by widespread damage
12	>64	>118	HURRICANE	

Cover of *The Work of Wind: Land* (K. Verlag, 2018)

The first volume in *The Work of Wind: Air, Land, Sea* book series launches with a conversation on “this land of forces,” hosted by editors Christine Shaw and Etienne Turpin, and publisher Anna-Sophie Springer. Seven contributors will speak about their work in the book: performance scholar Allen Weiss on the history of art as an itinerant, speculative exhibition; artist duo Pejvak on the border work of Armenian political economic realities; artist Tania Willard on Indigenous land practices born out of a *lived* connection to the land; and activist Tom Keefer and lawyer Adrienne Telford with D.T. Cochrane on Indigenous solidarity work and the struggle for justice.

Through his work with the Institute for New Economic Thinking, D.T. Cochrane is providing political economic analysis to support opposition to the Trans Mountain pipeline expansion by Secwépemc land defenders.

Tom Keefer is a media creator and consultant in the field of First Nations economic development and governance.

Pejvak (PJVK) is the long-term collaboration between artists Rouzbeh Akhbari and Felix Kalmenson. Through their multivalent, intuitive approach to research and living they find themselves in a convergence and entanglement with like-minded collaborators, histories, and various geographies.

Christine Shaw is the Director/Curator of the Blackwood Gallery and Assistant Professor, Teaching Stream in the Department of Visual Studies at the University of Toronto Mississauga.

Anna-Sophie Springer is a curator, writer, editor, and director of the publishing imprint K. Verlag in Berlin. She is the co-editor, with Etienne Turpin, of the *intercalations: paginated exhibition* series.

Adrienne Telford is a white settler lawyer based in Toronto, Canada. She practices with the law firm Cavalluzzo LLP in the areas of Aboriginal, constitutional, labour, and human rights law, and is legal counsel to Asubpeeschoseewagong Netum Anishinabek (Grassy Narrows First Nation).

Etienne Turpin is a philosopher, founding director of anexact office, and research coordinator of User Group Inc. LLP, a London-based, worker-owned cooperative building software for disaster response and environmental monitoring. With Anna-Sophie Springer, he is co-principal investigator of *Reassembling the Natural*.

Allen S. Weiss is the author and editor of over forty books in the fields of aesthetics, landscape, gastronomy, sound art, and experimental theater. He teaches in the Departments of Performance Studies and Cinema Studies in the Tisch School of the Arts at New York University.

Tania Willard (Secwépemc Nation) is an artist and curator whose projects include BUSH gallery, a residency space in Secwépemculecw, the territory of the Secwépemc Nation. BUSH Gallery acts as a conceptual space for land-based learning and making.

The Work of Wind: Land includes contributions by Rouzbeh Akhbari & Felix Kalmenson, d’bi.young anitafrika, Amy Balkin, Jesse Birch, D.T. Cochrane, Revital Cohen & Tuur Van Balen, Anna Feigenbaum, Macarena Gómez-Barris, Ilana Halperin, Tom Keefer, Barbara Marcel, Mimi Onuoha, Tomás Saraceno, Christine Shaw, Juliana Spahr, Adrienne Telford, Etienne Turpin, Allen S. Weiss, Tania Willard, and Eva Wilson. Design by Katharina Tauer.

16 + Shore Lunch Conversations and Tours

21,
22,
23

Sept.
10am-6pm

Organized by Lisa Myers

Worked/Working – A Documented Conversation
September 16, 12-2pm
Location: Canadian Fruit & Produce Company

Camp Kit Sharing Sessions
September 21, 22, 23, 10am-6pm
Location: CN Rail

Watershed Memory and Drainpipe Story – A Tour
September 22 and 23, 11am-12pm and 2-3pm
Location: PPG



Lisa Myers, Shore Lunch (shore of Rideau River, Ottawa), 2015. Photo: K. McGruer.

Worked/Working – A Documented Conversation
September 16, 12-2pm

Many Indigenous people have travelled from reserves in south and central Ontario to work for fruit farms in Clarkson. Considering this history and the present conditions for migrant workers, *Shore Lunch* brings narratives of migrant labour into conversation. Artists and scholars Dolleen Manning and Lisa Myers (both from Anishinaabe families who worked as fruit pickers/migrant workers), migrant worker Gabriel Allahdua, and Justice for Migrant Workers founder Evelyn Encalada Grez, will begin a discussion to deepen a collective understanding of this land's use/appropriation and to build a fuller story of who worked/works the land. This session will be documented to ensure that these stories travel, grow, and add to the ongoing movement work for migrant rights, food justice, and Indigenous sovereignty.

Camp Kit Sharing Sessions
September 21, 22, 23, 10am-6pm

Camp Kit Sharing sessions provides participants with a kit to help attain the sustenance from this place. The kit offers food-shares and directions for contemplating our surroundings.

Watershed Memory and Drainpipe Story – A Tour
September 22 and 23,
11am-12pm and 2-3pm

Considering memories and situated knowledge connected to this site, Sheila Batacharya will lead a tour of the PPG Coatings and Resins Plant ruins. Her storytelling will map the literal and metaphoric drains and drainage in the operations of this industry, and the history of this place.

Gabriel Allahdua is from St Lucia and is a member of Justice for Migrant Workers. He works on farms in Ontario and speaks up for better working conditions.

Sheila Batacharya teaches and writes. She grew up on Royal Windsor Drive, two kilometers from the Pittsburgh Plate Glass of Canada factory in Clarkson where her father worked as a chemical engineer from the late 1960s until he retired in the 1990s. Batacharya's work about embodiment is shaped by paying attention to race and, colonization, and by examining perception as inextricably socially constructed, but more than just discursive.

Evelyn Encalada Grez is a transnational community organizer and co-founder of the award-winning collective, Justice for Migrant Workers. She has been organizing with migrant farmworkers for nearly two decades throughout rural Canada and in their home communities in Mexico and Guatemala. She has a PhD in Social Justice Education from Ontario Institute for Studies in Education at the University of Toronto and her doctoral work focuses on the transnational lives of Mexican migrant women working and forging a living in rural Canada.

Dolleen Tisawii'ashii Manning is a member of Kettle and Stoney Point First Nation, and a recipient of the SSHRC Postdoctoral Fellowship held at Michigan State University, September 2018-2020. Manning is an Anishinaabe artist and scholar with graduate degrees in critical theory and contemporary art. She works at the intersection of Indigenous philosophy, epistemology and ontology, critical theory, phenomenology, and art.

17 + Plein Air Painting Workshop

Instructor: Zan Barrage

Petro Canada Park

Sept.
9am-12pm

21 Plein Air Painting Workshop

Instructor: Sam Paonessa

Lakeside Park

Sept.
1pm-4pm



Smoke stacks. Limestone piles. Solar panels. Shipping containers. Sumac and phragmites. These are just some of the subjects to be captured in open session Plein Air Painting Workshops hosted in collaboration with Visual Arts Mississauga at Riverwood. Participants

are responsible for bringing their own materials (easels, sketchbooks, chairs, paints, and brushes) and receive instruction from professional plein air painters and Visual Arts Mississauga instructors. All skill levels are welcome.

22 Aerocene Explorer Workshop

Sept.
10am-1pm



Aerocene Free Flight from Schönefelde, Berlin to Poland. Photo: Studio Tomás Saraceno. Courtesy: Aerocene Foundation.

Join us to a launch floating, solar-powered sculpture for atmospheric exploration! Participants in this workshop will learn about the Aerocene Foundation's Aerocene Explorer Device, a backpack consisting of a free-floating sculpture, camera, flight notebook, and remote sensing tools. As part of the Aerocene Foundation's mission to foster sustainable aerial mobility, citizen science, environmental monitoring, and knowledge sharing, the Aerocene Explorers embody the possibilities of flight powered only by the sun. Operating on the same principles as Museo Aero Solar, the Aerocene Explorer Devices

are designed for reuse, mobility, and durability—and their successful flight depends on co-operation and collaboration.

This workshop will be presented in partnership with the Association for Canadian Educational Resources (ACER), a Port Credit-based organization that facilitates environmental education through citizen science.

The Aerocene Foundation—initiated by artist Tomás Saraceno—is a non-profit organization devoted to community building, scientific research, artistic experience, and education.

22 Ecologies of Waste: A Conversation

Sept. 4-6pm



Synthetic Collective at Materials Recovery Facility in London, ON.

From the great garbage patch in the Pacific Ocean, to microplastics in the Great Lakes Region, to 34 million tons of municipal waste in Canada according to the latest statistics, waste and plastic pollution are both global and local issues. This event, hosted within *Museo Aero Solar*, brings together artists, scientists, and researchers to share their work on the waste crisis and creative pathways to remediation and sustainability.

SDUK

Amanda Boetzkes's research and publications focus on the intersection of visual and creative practices with the biological sciences (particularly ecology and neurology). She is currently completing a book entitled *Contemporary Art and the Drive to Waste*, which examines the interplay between the aesthetics of contemporary art, global systems of energy use, and the life cycle of garbage. She is an Associate Professor of contemporary art history and theory at the University of Guelph.

Sara Hughes is an Assistant Professor in the Department of Political Science at the University of Toronto Mississauga. Her work is aimed at better understanding the politics and governance of urban waste, and her research interests include urban politics and governance, water policy, and climate change policy. She focuses on understanding how political interests, institutions, and environmental problems interact at the urban scale, and the social and environmental outcomes they generate.

Synthetic Collective is an interdisciplinary collaboration between visual artists, cultural workers and scientists working together to sample, map, understand, and visualize the complexities of plastics and micro-plastics pollution in the Great Lakes Region. Their inquiry is at the intersections of plastics pollution, geologic processes, and artistic production. The collective is working to expand its network of resources and researchers with the goal of developing a more tangible understanding of plastics pollution as a wicked problem: one that is both a local and global systemic issue, yet also a potential site for innovation and remediation. Kelly Jazvac, Kirsty Robertson, and Kelly Wood represent the collective for this event.

Myra J. Hird directs Canada's Waste Flow (CWF), an interdisciplinary research program connecting people interested in the topic of waste to consider Canada's waste future. Researchers at CWF study the movement, processing, treatment, and after-effects of diverse waste streams, including by-products of mining, nuclear energy, biomedicine, and domestic waste linked to larger issues such as over-consumption, settler colonialism, intra- and extra-governmental relations, and public dialogue. Hird is a Professor in the School of Environmental Studies.

23

Sept.
12-2pm

Water-witching Workshop: “a slick, a smear...awash in green”

Alana Bartol



Alana Bartol, *Dowser* from Orphan Well Adoption Agency, 2016. Photo: Karin McGinn

Artist Alana Bartol will lead an exploration of the use and tools of dowsing (a.k.a. water-witching). Drawing on her family’s water-witching history and traditions of divining, she explores dowsing as a creative method in her art practice. Dowsing or water-witching is a form of divination used to locate ground water, ores, oil, and information. While there is no scientific evidence that dowsing is accurate, a fascination with this practice still persists. All are welcome, even the skeptics!

The workshop will take place outside and will involve moving throughout the area on paved and unpaved terrain. During this workshop, participants will be provided with and introduced to the tools and techniques of dowsing. During the second part of the workshop, the pendulum dowsing performance “*a slick, a smear.... awash in green*” will take place:

A pendulum responds to contamination in the Southdown region. Audiences are asked to reflect on the past, present, and possible futures of this site. *How do we arrive at an understanding of remediation in this region? How can we consider empathy and care in this process?*

Open to children seven years of age and older. Children under twelve must be accompanied by an adult.

Born in Halifax, Alana Bartol comes from a long line of water witches. Her site-responsive works explore walking and divination as ways of understanding across places, species, and bodies. Bartol’s work has been presented across Canada at Walter Phillips Gallery (Banff), InterAccess (Toronto), PlugIn Institute for Contemporary Art (Winnipeg), Access Gallery (Vancouver), and Art Gallery of Windsor, as well as in Romania, Germany, Mexico, and the United States. Recent and upcoming residencies include Santa Fe Art Institute (USA), Eastern Edge Gallery (St. John’s), and Canadian Armed Forces Artist Program. Bartol currently lives in Calgary where she teaches at the Alberta College of Art and Design.



Alana Bartol, *Dowsing Rod*, 2017

23 The Future of Breathing: A Participatory Workshop

Sept.
3:30-6:30pm

SHATTERED MOON ALLIANCE



Following a format of listening, doing, and reflecting, collectively we will consider breathing—and its variants—as necessary tools for time travel. Through discussion and hands-on exploration, we will imagine breathing in the future by considering how it is that we breathe (and don't breathe) now. A series of questions we would like to explore together include: What have we lost over time in terms of our ability to breathe deeply? What are the politics of the substrates that we breathe? How does breathing relate to rest and how might we practice being able to breathe better? Who gets to breathe and how might we become more attuned to those who aren't able to? How might the act of breathing or not breathing be tied together with memory, consciousness and what is perceptible?

SDUK

A number of guests will help to focus our discussion, including Beverly Bain, who will lead us in thinking through aspiration as both method and practice. Bain's work builds on the concept of aspiration developed by Christina Sharpe in her book *In The Wake: On Blackness And Being*. Aspiration focuses on metaphorically putting breath back into the Black female queer and trans bodies of those who have died, been killed, experienced police- and other forms of violence, and have survived that violence. We will discuss Bain's research alongside activities that bring attention to site-specific environmental data on the air we will be inhaling, and ways of breathing and walking as a generative and reflective practice. Jamie Magnusson will guide us through internal martial arts exercises in breathing to consider the "social body." We will engage with Magnusson's practice of community building and political work through "breath - work," and its potential to dismantle oppressive hierarchies and build toward new social relations.

Beverly Bain is a Black queer feminist scholar who teaches in Women and Gender Studies at the University of Toronto Mississauga. She teaches and researches in the area of Black and Caribbean diasporic sexualities, violence against women and the Black queer radical feminist tradition in Canada.

Jamie Magnusson has been doing breath work as community building for a number of years. She has worked with queer/trans communities, sex workers, and BIPOC women who have experienced intimate partner violent and police violence. She is interested in breath-body consciousness in terms of "the social body," and breath work as deeply connected to issues of sovereignty and cultures that we consciously and collectively build.

SHATTERED MOON ALLIANCE is a living research project taking the form of a series of participatory workshops exploring science fiction narrative worldbuilding. SHATTERED MOON ALLIANCE is Christina Battle and Serena Lee. Originally from Edmonton, Christina Battle is currently based in London (ON). Her research and work consider to the parameters of disaster; looking to it as action, as more than mere event, and instead as a framework operating within larger systems of power. Serena Lee's practice stems from a fascination with polyphony and its radical potential. Based in Toronto, Lee practices and collaborates close to home and internationally. Recent projects have been presented at Whitechapel Gallery (London), the Research Pavilion at the 57th Venice Biennale, the Images Festival, Forest City Gallery (London, ON), Toronto Reel Asian Film Festival, The Theatre Centre/FADO Performance Art Centre (Toronto), and Mountain Standard Time (Calgary).

Carbon Footprint

20,000 lbs of concrete, 13 tons of armour stone, 3,000 used plastic bags, 4,752 metres of packing tape, 58 metres of steel tubing, 272 yards of ripstop nylon, 81 metres of aluminum tubing, 30,720 metres of yarn, 2 2kW wind turbines, 6 graphic cards, 6 12V batteries, 2 above-ground swimming pools, 18,000 gallons of water, 3.5 kilometres of plumping pipe, 18 litres of tracing dye, 200 zip-ties, 100 t-bars and couplings, 455 metres of PVC sewer pipe, 80 bolts, 6 transducers, 1,150 square feet of plywood, 423 metres of old growth lumber, 95 metres of sheet copper, 2,500 copper nails, 182 metres of sheet bronze, 100 welder glass lenses, 6 aluminum telescopic poles, 1 weather station, 1 anemometer, 380 metres of paper, 5 gallons of wheat paste, 200 cans of fish, 13 water cisterns, 1 prospector tent, 8 felled trees, 4 video projectors, 6 media players, 8 speakers, 1,150 square feet of plywood, 1,000 metres of spruce 2x4s, 17 shipping containers, 1,500 metres of construction fence, 500 metres of snow fence, 6 boom lifts, 2 telescopic forklifts, 1 backhoe, 1 excavator, 1 dump truck, 18 cubic yards of soil, 26 yards of limestone crush, 13 diesel tower lights, 12 generators, 1 air blower, 200 litres of diesel fuel, 200 safety vests, 46 hard hats and safety glasses, 46 pairs of steel-toed work boots, 10 fall protection harnesses, 12 flatbed transport trucks, 260 traffic barrels, 200 crowd control barriers, 6 portolets, 8 rakes, 10 shovels, 20 brooms, 30 garbage cans, 37,225 emails, 350 hours of Skype chats, 28,680 kilometres of staff travel, 46 national and transnational flights, 166 nights of hotel reservations, 6,000 broadsheets, 3,094 sq feet of exhibition banner vinyl, 514 earth magnets, 3,848 GB of server space, 4 MiWay buses, 18 vinyl bus wraps, 80,000 sheets of 100% recycled paper, 10,000 maps, 186 volunteers, 50,000 anticipated attendees, 1.5 km² of asphalt, and more...

This partial list of materials and resources points to a paradox: an exhibition on climate change, environmental crisis, and ecologies of excess *is* an ecology of excess. Our attempt to communicate the enormity of the climate crisis and offer pathways for local collective engagement comes at a high planetary cost. Calculating the environmental impact of this exhibition is beyond our means, especially when taking into consideration the resource extraction, industrial manufacturing, global transportation, and labour required to produce its materials.

We have put plans in place for recycling, redistributing, and re-using the materials and we are securing permanent sites for select artist projects, including on the campus of the University of Toronto Mississauga. Yet, we cannot deny the enormity of *The Work of Wind: Air, Land, Sea's* carbon footprint: the exhibition illustrates the incommensurability of the material weight of our earthly actions.

When Either But Not Both Are True Miruna Dragan

Those at the Great River Mouth Carolina Caycedo



Carolina Caycedo, *Misi-zaaging*, 2018. Digital image printed on acrylic billboard, 72in x 108in.

September 6–December 1, 2018
Blackwood Gallery, University of Toronto Mississauga

Examining nature symbolism, territorial resistance, and solidarity economies connected to land and water, two solo exhibitions by women artists trace the contours of embodiment and the agency of more-than-human worlds. Calgary-based Miruna Dragan's *When Either But Not Both Are True* explores the limits of human comprehension alongside material manifestations of the unknown, the underground, and the under-worldly. Exploring dreaming, divination, energy economies, and logic systems, the exhibition engages human relationships with the natural world in order to question

our interactions with the physical spaces we inhabit. *Those at the Great River-Mouth* is based on Colombian artist Carolina Caycedo's investigation of hydroelectric sites across Latin America, whose processes of land expropriation and environmental licensing have been marked by unprecedented environmental disasters and profound Indigenous resistance. Picturing water's living and life-giving capacities, Caycedo's work affirms nature's vibrancy beyond the narrow resource-driven logics of extractivism.

blackwoodgallery.ca

Society for the Diffusion of Useful Knowledge



The Society for the Diffusion of Useful Knowledge (SDUK) is a yearlong public program and serial broadsheet publication produced by the Blackwood Gallery in collaboration with The Climate Change Project (Environment Division, City of Mississauga). The name of this innovative platform is borrowed from a non-profit society founded in London in 1826, focused on publishing inexpensive texts such as the widely read *Penny Magazine* and *The Library of Useful Knowledge*, and aimed at spreading important world knowledge to anyone seeking to self-educate. Both continuing and troubling the origins of the society, the Blackwood Gallery's SDUK platform composes and circulates an ecology of knowledge based on the relationship and antagonism of "useful" ideas through broadsheet publishing and public programming.

The SDUK broadsheet series brings together contributors from diverse fields in the sciences and humanities, students and faculty from across the University of Toronto Mississauga, community organizations and activists, policy makers and policy agitators, artists and speculative thinkers, all to advance new forms of literacy around climate change discourse.

Issues in the SDUK Broadsheet series:

Issue 01:
GRAFTING, **June 2018**

Issue 04:
SHORING, **December, 2018**

Issue 02:
COMMUTING, **August 2018**

Issue 05:
ACCOUNTING, **February 2019**

Issue 03:
BEARING, **October, 2018**

Issue 06:
FORGING, **April 2019**

Following The Work of Wind: Air, Land Sea (September 2018), a series of public programs will be presented in sites across all eleven wards of Mississauga through spring 2019.

Follow workofwind.ca for future event listings.

