About this Exhibition Series

7BRIDGES 桥 *is a groundbreaking travel agency specializing in mind-bending, oneiric adventures. As a part of its grand opening celebration, first-time clients are eligible for an all-inclusive dream vacation package. Designed by 7BRIDGES' top travel advisors, Xuan Ye and Wenxin Zhang, this dream vacation special combines A/V, AI, and the latest VR/AR technologies in order to deliver the one of the best virtual tourism experiences on the planet.*

/s

Through the work of **Xuan Ye** (Toronto, ON) and **Wenxin Zhang** (Hangzhou, China), *filling the Klein bottle* navigates the touristic impulse of contemporary cyber-capitalist culture.

In a world of hyperwanderlust and the tendency to dream of other dimensions, there emerges an undying itch to travel and chase novelty experiences all over the world and beyond. New media technologies intensify this longing; they program a thirst for tourism by cultivating viral notions of nomadic pleasure with vast social networks and rampant imagery reiterating over and over again that the world is indeed your oyster.

Matched by an equally powerful desire to document and disseminate images of travel, economies of tourism and visual culture merge to produce a globetrotting market of new and exciting things to experience. As "new," "refreshing," or "exciting" as these ideals may seem, however, they also depend on a habitual, albeit ever-expanding, feedback loop of carefully curated tropes: motifs of itinerant euphoria and routine romanticizations of the vagrant. And as much as we

come across new content by browsing through the Instagrams of travel bloggers and the pages of Lonely Planet, it is the consistent wireframes and algorithms of visual recognition that keep us locked in the infinite scroll. Just as touristic notions of novelty depend on established tropes and well-defined, familiar algorithms dictate our exploration of new images, so too do we dream of and interpret new experiences based on established memes and memories. Recycled frameworks are vital to the unfolding of new encounters, and an ironic but productive friction between the familiar and unfamiliar, the objective and the subjective, the old and the new, keeps the touristic impulse alight.

Driven by an interest in this oscillatory dynamic, *filling the Klein bottle* takes the satirical form of a pseudo-travel agency and "all-inclusive" tourist experience. Branded as 7BRIDGES 桥, the agency goes beyond the typical business model to expand the notion of tourism into something much more psychologically pervasive than transactional vacations. In reference to the malleability of excursionist memory and cognition, the branding of the business makes major allegorical references to the mathematical field of *topology*, which pertains to properties of space preserved under continuous deformations. Treating tourism as a topological form, Ye and Zhang explore how new travel experiences and industry innovations carry timeworn—and sometimes traumatic—memories, motifs, and systems forward.

This exhibition series is co-presented in partnership with Varley Art Gallery, Bunker 2 CAC, and Trinity Square Video.

For more on the exhibition series, please visit www.fillingthekleinbottle.com.

Acknowledgements

Commitment to Indigenous Sovereignty & Land Rights

We thank the local Indigenous communities that live on, steward, and share knowledge of the land upon which this project takes place: the *Rotinonshión:ni* (Haudenosaunee/Iroquois), specifically the *Huron-Wyendot* (Wendat); the *Tsonontowane'á:ka* (Seneca), settled on *Cobechenonk* River, also known as the Humber, the *Tionontati* (Pétun); the Métis; and the *Anishinaabeg* (Chippewa/Ojibwe), specifically the Mississaugas of the Credit River (also known as the *Missinihe* [Trusting Water] River).

In thinking about diasporic narratives of mobility and forced migration, those of us who are settlers must carefully consider Indigeneity and trans/inter-generational knowledge of one's land. The two inform one another—sometimes in conflict and sometimes in solidarity.

Against systemic efforts to erase First Nations history on Turtle Island, we continue to gain insight from

Indigenous ways of knowing. We acknowledge the colonial histories that we have inherited by settling and doing work here, and we endeavour to honour the legacy of T'karonto as a gathering place for exchange, to support Indigenous sovereignty, and to live in right relations with one another and these territories.

At the same time that we curate exhibitions and create artwork related to contemporary ecological, ethno-racial, and systemic issues, we find it worthwhile to keep mindful of the privilege required to theorize and poeticize active socio-political and historical issues. It is therefore important to recognize, learn from, and be in conversations with the people who are focussed on surviving in these systems that we critique and the work of the people on the frontlines of anti-oppressive activism and knowledge development. This exhibition is only a starting point for thinking about the deeper politics of land, sea, and diaspora—we encourage people to take it as a point of departure for transformative behaviour and thinking around geo-, hydro-, and bio-logical existence. These transformations extend far

beyond our academic and creative theorizing and move into our everyday (rather than project-based) decisions, habits, and encounters.

Personal Acknowledgements

The artists and curator would like to thank the Varley Art Gallery, InterAccess, Bunker 2 CAC, and Trinity Square Video for their support of this exhibition. We would also like to thank Jonathan Carroll, co-producer of the VR component in *Belly of the Whale* (2019–2020), Brendan Lehman for the Muse™ Brain Sensing Headband and Muse Lab sponsorship, and the Toronto Arts Council for their financial support of this work. Special thanks to Megan MacLaurin, Bertha Lee, Rosa Wan, Paul Chartrand, Jana Ghalayini, Jahmal Nugent, and Vanessa Rieger.

filling the Klein bottle (y) {
Xuan Ye & Wenxin Zhang
curated by Belinda Kwan
March 4–May 9, 2020
InterAccess

List of Works

XUAN YE

EVERY BODY IS EVERY ATOM IS EVERY NET IS EVERY WAVE, 2019

FROM THE SERIES *THE SPECTACLES BEFORE US WERE INDEED SUBLIME*, 2018–PRESENT

INTERACTIVE INSTALLATION (WEBCAM, CUSTOM SOFTWARE, MIRROR FILM SCROLLS)

DIMENSIONS VARIABLE

Through an active webcam, this interactive installation mirrors an ever-changing metaverse that interweaves undulating cartographic grids with dissolving contours of somatic movement from its audience and surrounding architectural space. The present and the past collapse when the moving images are projected onto free hanging mirror film scrolls. Physical reflections of bodily data fill the space with transient lights and shadows—the biodigital imagery invoking the networked world, colonized by computation on a planetary-scale, and also the liquid impermanence of consciousness and self.

WENXIN ZHANG

TOPOPHILIA, 2020

FROM THE SERIES *THE VESSEL & THE DRIVE*, 2020

SCULPTURE (PIGMENT PRINT ON CLEAR FILM)

DIMENSIONS VARIABLE

Topophilia is an installation in the form of a cut Möbius strip. The image forms a cycle of simulated body, landscape, highway, neurons, and vibratory motion. Like the infinite scroll of a social media interface, it loops over and over again, from the inside-out and the outside-in. These visual symbols intertwine with and penetrate each other in Ouroboric fashion, representing the spiritual experience of ego dissolution but also the act of self-consumption—producing inverse images of eternal return and rebirth.

XUAN YE

BELLY OF THE WHALE, 2019–2020

FROM THE SERIES *THE SPECTACLES BEFORE US WERE INDEED SUBLIME*, 2018–PRESENT

MIXED MEDIA INSTALLATION (VR, REAL-TIME BRAINWAVE DATA SONIFICATION, CUSTOM SOFTWARE, SALT)

DIMENSIONS VARIABLE

Belly of the Whale is an extension of the series *The Spectacles Before Us Were Indeed Sublime*, which centres on the fictional ship "E," and uses cruise imagery as a speculative vantage point for reimagining the colonial past in the shared present. The new work takes previous video documentation of "E" as a point of departure for a virtual reality experience of a cruise trip. On the ship, passengers' geo-locations are tracked and stored as data streams. Traces of their navigational paths are visualized as ghostly specters, dynamically laid over time, visible in the next user's VR experience. The micro-pathways of audience movements reflect the macro migration patterns and systemic structures of surveillance capitalism. An impossible staircase appears, using a generative algorithm to create new steps each time the user goes up or down, trapping them in a navigational loophole. While the user experiences the VR scenes, the brainwave headband worn by themselves or their surrounding peers feeds a custom software with the ebb and flow of their brain wave signals. The brain wave data is then translated into ocean-like waves of pink noise, sweeping viewers and listeners into the proverbial ocean.

The name and anchoring concept of the work, *Belly of the Whale*, refers to the part of the 'hero's journey' marking the rupture between the hero's known world and self. The hero's entrance into this chapter signifies their willingness to undergo metamorphosis for the sake of a greater good or inevitable destiny. Author and scholar Joseph Campbell describes the belly-of-the-whale transformation as a "passage of [a] magical threshold" and a "transit into a sphere of rebirth." In a moment of self-sacrifice,

> [t]he hero, instead of conquering or conciliating the power of the threshold, is swallowed into the unknown and would appear to have died. This popular motif gives emphasis to the lesson that the passage of the threshold is a form of self-annihilation. Instead of passing outward, beyond the confines of the visible world, the hero goes inward, to be born again. The disappearance corresponds to the passing of a worshipper into a temple—where he is to be quickened by the recollection of who and what he is, namely dust and ashes unless immortal. The temple interior, the belly of the whale, and the heavenly land beyond, above, and below the confines of the world, are one and the same.[1]

Using virtual reality, Ye shows how the 'belly of the whale' also operates with a logic of confinement and surveillance that the subject cannot escape unless they 1) surrender or answer to a loaded question or "truth," or 2) meet a certain character profile that assigns them as "hero." The narrative of self-discovery and improvement in tourism reflects this moralizing exercise, revealing how the hero's or tourist's journey may turn more Sisyphean[2] than Jonahesque.[3]

WENXIN ZHANG

ECHOES OF PERFUSION V1, 2020

FROM THE SERIES *THE VESSEL & THE DRIVE*, 2020

THREE-CHANNEL COLOUR ANIMATION WITH AUDIO

6 MIN 27 SECS

From the infrastructural and geographical to the viral and the genetic, *Echoes of Perfusion* is a trans-scalar meditation on the notion of path, described in mathematics as a sequence of links that begins at a node or vertex and then travels from vertex to vertex.

A medical term, perfusion refers to the movement of fluid through the circulatory or lymphatic system to an organ or tissue. Measured as the rate at which blood is delivered to tissue, the concept and term are often used in the healthcare industry to reference curative methods of fluid supply to the body. But perfusion is also a means for viral and microbial transmission—the circulation of certain bacterial, viral, and cancerous cells allows them to covertly migrate and eventually conquer much larger parts of the body.

When these notions of intelligent[4] circulation and supply are scaled to capitalist and geopolitical systems of domination, the economy of the body can be seen as a microcosm of the diffusion of neocolonial power and a model for the feedback loop of structural domination.

In a stream of consciousness, Zhang explores various contradictions between these abstract and material considerations. Motorways, liquid flows, sound waves, and nerve fibres... in every dimension imaginable, sensory data travels through omnifarious pathways, the passage shaping the data and vice versa. The path takes on a biomathematic and aesthetic function here. Straddling the sublime and systemically grievous, it transports the viewer through physiological pathways and concrete overpasses. No matter the host/vessel/infrastructure, each sensory experience gives rise to an uncanny experience of déjà vu: a moving-through strangely un/familiar to the body and the mind.

1. Joseph Campbell & Henry Morton Robinson in *A Skeleton Key to Finnegans Wake*, 1944

2. In Greek mythology, Sisyphus or (Sísyphos) was punished by Zeus for his boastful dishonesty, sentenced to the eternal task of carrying a heavy boulder to the top of a hill that would roll down every time it neared the top.

3. In the biblical Book of Jonah, the eponymous disciple of God attempts to flee God's will by sailing to Tarshish. A great storm occurs and Jonah's fellow sailors determine that he is to blame. He is thrown into the sea, but is saved from drowning by being swallowed by a "great fish." Over three days, Jonah commits to God's will, and he is thrown up by the whale to safety. He goes to Nineveh and preaches to its inhabitants after this ordeal, symbolizing a moral transformation for good and the greatness and forgiveness of God.

4. Although the classification of viruses as "intelligent" may be up for debate, there is no question that viruses function with a particular set of principles (we might even say a *logic*) to migrate outward and conquer cells.

On the Shape of Time & Hauntologies of Trauma/Resistance/Transformation

In a brilliant analysis of racial colonialism and its relationship to gendered capitalism, Black activist-scholar Vivane Saleh-Hanna remodels Derrida's notion of *hauntology*[1] to examine the 'shape-shifting' characteristics of white supremacy and, in turn, 'Black Feminist Hauntology' (BFH) and its exorcizing potential. According to Saleh-Hanna,

> *Black Feminist Hauntology's shape-shifting tools provide a language and vision whereby the original slaveholder's body and his colonizing networks are recognized in their various and (re)occurring manifestations. The struggle for liberation has always been central to Black feminism (James, 2000). Thus, it would appear inevitable that an abolitionist lens for hauntology, a paradigm invested in articulating the historic foundations of contemporary struggles, could only emerge through Black feminist interpretations of ghosting. Moving ahead, abolitionism, if seriously (not peripherally as it has been for centuries) committed to penal abolition, must adopt anti-colonial standpoints and theories that inherently and vividly exorcize anti-Blackness.*[2]

Noting the strong legal and historical legacies of transatlantic slavery and their presence in today's criminal justice system, Saleh-Hanna uses Toni Morrison's novel *Beloved* (1987) as a case study for looking at how alternative conceptions of space-time can be used to critique and circumvent intergenerationally traumatic structures of oppression.

Saleh-Hanna's work on BFH relates to Rasheedah Phillips' work on BQF (Black Quantum Futurism),[3] which proposes the use of quantum and non-European models of space-time "as a means of creating our own order and patterns in the universe, or unfolding and enhancing the patterns already present."[4] For example, quantum mapping (which has strong topological foundations)

> *can be used to recall past and future memories to identify and probe the spiral vortexes of our collective experiences, allowing the subject to reconfigure how one deals with cyclical trauma while understanding that neurological pathways set in one's brain reflect the genetic trauma formed in one's genes.*[5]

Taking these insights on time and intergenerational trauma into account, this exhibition sets its sights on *topology* as a way of further understanding the complications of de/colonial space-time.

In mathematics, topology is concerned with the properties of space that are preserved under continuous deformations, such as stretching, twisting, crumpling and bending, but not tearing or gluing. Topology is related to geometry in the sense that it formalizes notions of closeness and continuity. Unlike classic geometry, however, it is not about rigid objects that have definite shapes, angles, and lengths. Topology is a more generalizable study of dimensional relations, concerned with meshes, surfaces, and open sets of variables that can maintain the same circumstances of connectivity despite taking on different geometric forms. Topological analyses allow us to understand how things that look completely different can actually have the same structure. This idea also appears in data analysis, i.e. a given data set can appear completely different depending on how it is presented. In a sense, then, topology is all about *shape-shifting*: a donut is the same as a coffee mug;[6] one form that looks completely different from another can actually topologically be the same. When related to the notion of hauntology, then, and specifically Saleh-Hanna's BFH framework, topology provides several useful models for thinking through sameness through heterogeneity and vice versa. Describing the difference between classic geometry and topology, Robert R. Bruner writes that "[t]he thing that distinguishes different kinds of geometry from each other … is in the kind of transformations that are allowed before you really consider something changed."[7] This statement becomes particularly relevant when we think about the constant back-and-forth in discourses around racial colonialism and capitalism in which, for instance, one party tends to think that systemic racism has ended with the 13th Amendment while the other sees that slavery has simply shifted into a new carceral-juridical loophole—*have things really changed?* becomes the question here.

There are no Black artists in this exhibition, but I must acknowledge how much Black race theory and resistance work has given me insight and guiding principles for thinking through race and oppression in my own experiences and surroundings as a curator and person. In putting together exhibitions and writing reflections such as these, I am in constant negotiation with my East Asian settler privilege; my reference to Black and Indigenous knowledge is not without its social-political problems and implications of lateral/diagonal violence.

In an exhibition essay for *(x)* { I write

> *To the extent that tourism romanticizes and commodifies the landscape, it constitutes a mirror image of colonialism. If the latter is about hard power and obvious exploitation, the former comprises its Janus face of soft power.*[8]

This idea of the mirror image constitutes another topological reference—in non-orientable forms such as the Klein bottle and the Möbius strip, a return to the origin point results in an inverse positionality (the outside now on the inside or vice-versa). This flipping inside-out or outside-in is a generative metaphor for the same-but-different phenomena in the socio-historical dimensions of tourism and colonialism. The cyclical repetition of neo/colonialism and tourism go on and on, but twists in space-time and perspective manipulate our perception of them so that we cannot see their relationship with one another or the cycle that keeps their dynamic going.

The initial drive to set out to sea, as the genesis of colonial maritime exploration, is itself a touristic one, stirred up not just by shortage of geo-graphical and -logical resources but also a wonderment of what *might be out there*. This kind of self-confidence propels a person into a place to which they do not belong but to which they feel entitled to help themselves. Looking closely at tourism, digital and otherwise, we might begin to notice how the enthusiastic treatment of exotified people and landscapes fuels a kind of desire for experiencing something new. This digitally-informed desire for novelty stems from decades of objectification and exploitation from racialized people and the land and natural resources that sustain them.

As real as the effects of these ideologies might be in war, climate change, economic exploitation, and racially motivated violence they are birthed from fictitious ideas about the Other.[9] In this vein, the Klein bottle, a four-dimensional expansion of the Möbius strip, is also an allegory for spatial phenomena and places that we conceptualize and become fascinated with but do manifest physically in three-dimensional reality. Despite their imaginative existence, we attempt to produce and circulate these conceptual objects, in turn affecting the public imaginary and conversation.

To use a less severe example, there are many novelty objects for sale on the Internet called "Klein bottles." These are in fact *embeddings* of the Klein bottle in 3D space, meaning that they are manifestation of the form that compromises a certain aspect of its geometry to be represented in another dimension. In this case, 3D embeddings of Klein bottles intersect one another, but the actual 4D Klein bottle does not intersect itself. Nonetheless, these novelty glass-blown and 3D-printed Klein bottles have become objects of intrigue, sparking popular interest in mathematical concepts of geometry and topology.

If we were to pour water into a Klein bottle (this is the case for its 3D embeddings as well), it would eventually pour back out, due to its strange inside-outside characteristics. Treating this phenomenon as an emblem of the perpetual thirst for travel and all its complicated dimensions, *filling the Klein bottle* combines concepts from math, science, and the humanities to think more holistically about our relationship to the geographies of space-time.[10]

1. Jacques Derrida in *Spectres of Marx* (1993)
2. Viviane Saleh-Hanna in *Black Feminist Hauntology: Rememory the Ghosts of Abolition?* (2015)
3. Rasheedah Phillips in *Black Quantum Futurism: Theory & Practice, Vol. 1* (2015)
4. Ibid.
5. Ibid.
6. The donut and coffee mug is a popular metaphor for explaining topology because one can transform into the other without stretching, twisting, crumpling and bending. If we press a dimple into a donut (or *torus*, as it is mathematically called), and slowly push the substance or volume of the donut loop into the edge of this dimple, while maintaining the existence of the loop, we would form a mug.
7. Robert R. Bruner in *What is Topology?* (2000)
8. You can find this text online at …
9. For more on the *Other*, see Edward Said's *Orientalism* (1987)
10. As much as the arts and humanities can learn from mathematic and scientific models, we must acknowledge that there is value vice versa. The slipperiness of life-forms, which escapes the closed-circuit objectivity of mathematics and the strict controls of scientific discipline, are perhaps better explored through the arts. As Ramon Amaro notes in his essay *Threshold Value* (2020),

    > Although models provide a mathematical base for future planning, they conflate the variability of gesture with actual human processes of change. Humans are not stable beings that function solely through pattern. Change itself is an act of life [that] sets and resets the conditions of individual human decision in a recurrent cycle of what [Kara] Keeling argues is a becoming and unbecoming of the self. This self, however, does not exist in isolation. Our conditions are in parasitic dialogue with our own temporalities, as well as those of others—inclusive of the forces, structures, objects, and extraneous conditions that inform the now. Mathematics, although sophisticated and powerful, do not fully account for the actual variability of life. Mathematics can only represent life through the symbolic reduction of that which can be converted and quantified as a series of discrete or continuous variables.

    Elsewhere, Eugene L. Arva's text, *Writing the Vanishing Real: Hyperreality and Magical Realism* (2008) serves as an important reminder of how artistic signification (i.e. the production of signifiers), "compared to the irreality and sterility of information, … offers a more effective and authentically human medium by which we access and make sense of the real." After all, "[i]mages devoid of the power of imagination cannot inform our consciousness, let alone speak for it; we are who we are only by producing images of ourselves and our world through imagination."

Events

(y) { Curator's Talk | Belinda Kwan
Inter-object/subject/ivity: a few reflections on math, science, & their political aesthetic

Saturday, April 11, 2020 from 12:00–1:00 PM

Online—follow InterAccess on Facebook for live video link.

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Lunch and Learn | Xuan Ye
Wednesday, April 15, 2020 from 12:30–1:30 PM

Varley Art Gallery
216 Main St Unionville
Unionville, ON L3R 2H1

May be postponed due to COVID-19 concerns.

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Artist Discussion | Xuan Ye & Wenxin Zhang
Art as Critical Tourism: Sensory Time Warps & Acts of Worldbuilding

Saturday, April 25, 2020 from 10:00 AM–12:00 PM

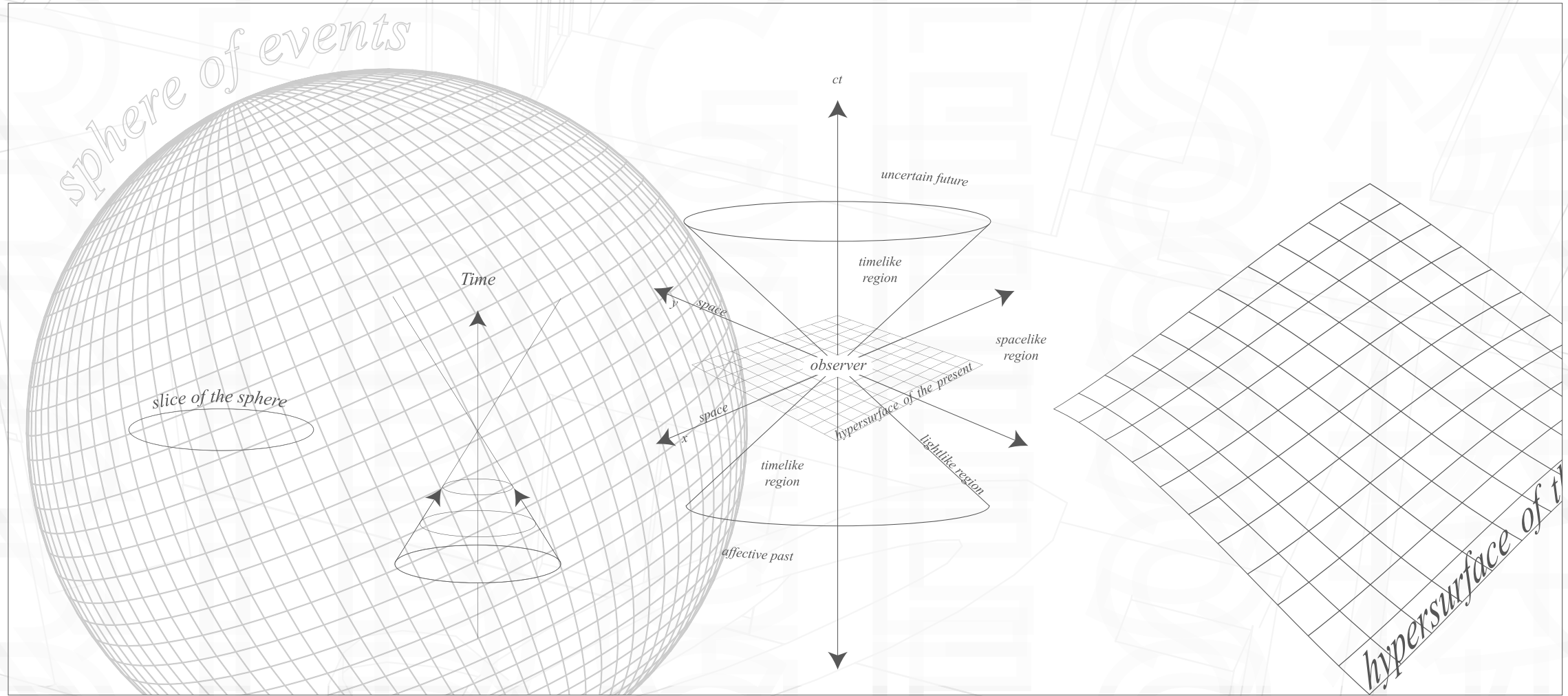Online—follow InterAccess on Facebook for live video link.

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Additional events & programming **TBA**, details on
www.fillingthekleinbottle.com and social media.

Artist & Curator Bios

sphere of events

Time

slice of the sphere

ct

uncertain future

timelike region

y *space*

observer

spacelike region

space

x

hypersurface of the present

lightlike region

timelike region

effective past

hypersurface of t[...]

Exhibition Dates & Locations

(x) {
Varley Art Gallery of Markham
216 Main St Unionville, Unionville, ON L3R 2H1
February 15–April 26, 2020

(y) {
InterAccess
950 Dupont St., Unit 1, Toronto ON M6H 1Z2
March 4–May 9, 2020

(z) {}}}
Bunker 2 CAC
346 Campbell Ave, Toronto, ON M6P 3V9
March 15*–May 30, 2020

CONTACT Scotiabank Photography Festival Feature Exhibition
*opening postponed due to COVID-19 concerns.

Xuan Ye / 叶轩 (CN/CA) makes media poetry synthesizing language, code, sound, body, data, light, and time through diagrammatic processes and multi-medial translations. X's work has been featured, exhibited and performed internationally, including in *Canadian Art*, at the AGO (CA), Vivid Projects (UK), Supermarket Art Fair (SE), InterAccess (CA), Inside-out Art Museum (CN), Goethe-Institut, *ArtAsiaPacific*, *KUNSTFORUM*, Trinity Square Video (CA), among others. X's live performances and music releases have received critical accolades from Bandcamp, *Musicworks* and *Exclaim!*

Wenxin Zhang / 张文心 was born in 1989 in Anhui, China. She received her MFA degree at California College of the Arts in 2013. Solo exhibitions of her work have been presented in the US and China, in galleries including the Guangdong Museum of Art (CN) and Artists' Television Access (US). Using traditional and new media image-making techniques, her artistic processes are concerned with the experience of time and its progression from the mundane to the transcendent.

Belinda Kwan / 关浩恩 is a Chinese-Canadian settler curator interested in exhibitionary forms of critique, pedagogy, and advocacy. Her research-based practice focuses on North American techno/sub/urban infrastructures, and the global legacies of oppression that inform them. She has worked with/for local and international artists on projects presented by artist-run centres, public galleries, and non-profit organizations such as the Society of Literature, Science, and the Arts (int'l); Art Gallery of York University (Toronto); Myseum of Toronto; and Y+ contemporary (Toronto).