



INTERTWINED HISTORIES: Plants in their Social Contexts

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Video Still from "Forest Breath" (2018), Leila Sujir

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Standing among the giant trees, stepping forward to watch gently bobbing ferns on the forest floor or water droplets falling from leaves, gazing ahead into the deep space of the woods: this is the experience of Leila Sujir's *Forest Breath* (2016–2018). As if the screen separating the viewer from the image has magically evaporated, the stereoscopic 3D video reaches into the viewer's space as she moves forward and from side to side of the image. The video space, a luminous volume, fills, expands, and empties. The ancient forest appears to breathe. A reversal of the time-honoured photographic spectacle of a tiny human standing next to a gigantic towering tree, this pixel-engendered journey into an old-growth forest is ground-level and intimate. It offers the experience of a wondrous living place, one that the curious embodied viewer is invited to enter imaginatively as if through an open portal. Sujir's aim is to walk you into a rainforest environment of trees that are hundreds of years old so as to say, "You are here."

Forest Breath draws on aspects of film, video, photography, and painting to create a virtual reality delivered via stereoscopic 3D video projections into a large lightbox. To see the 3D effects requires wearing optical polarized glasses, like the ones used to view commercial 3D films. Inside the box, which measures 283 cm x 164 cm x 62.5 cm (9' x 5' x 2'), four forest views bloom, hold, and fade to a silvery green blur for two to three minutes each on a 10-minute rotational cycle. Emily Carr or nineteenth-century photographers

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like Carleton Watkins and Eadweard Muybridge would recognize some of the compositional strategies, though none worked at such a large scale. But even if *Forest Breath* is a major work in its own right, it represents only about one-third—Sujir describes it as a vertical slice—of what will be a mammoth stereoscopic 3D video installation, *Forest!*, curated by Haema Sivanesan for the Art Gallery of Greater Victoria.

Scheduled to open at the Art Gallery of Greater Victoria (AGGV) in 2024, *Forest!* has grown into an expanded media work with artistic, technological, social, and ecological dimensions. *Forest Breath* was made for the group exhibition *Supernatural: Art, Technology and the Forest*, which Sivanesan curated at the AGGV in 2018, as part sketch, part progress report, part rehearsal for what is to come. The exhibition was accompanied by *Forest Breath: A Portrait in Progress*, a one-day guided forest walk and a community screening in Port Renfrew, in an elementary school gymnasium, of a 16-foot expanse of raw uncut 3D video, recorded in 2016. The completed *Forest!* project will consist of a stereoscopic 3D video installation, two storeys high, that viewers will be able to walk into; a 10-day field school conducted on Vancouver Island in the rainforest near Port Renfrew; and a 360-degree video podcast for those who cannot attend in person. Concurrently, Sujir is making *Forest Aerial*, a 2D short film for *XL Outer Worlds*, a festival of expanded cinema curated by Janine Marchessault celebrating the fiftieth anniversary of IMAX, to be held in Toronto in the fall of 2019.

Sujir, an intermedia and video artist based in Montreal, where she is chair of Studio Arts at Concordia University, has worked with stereoscopic 3D video for more than a dozen years. Based on the mid-nineteenth-century stereoscope, it is an old technology expanded by new technological developments. Photographers of the American West, such as Watkins, produced stereo views of their photographs to be looked at through a stereoscope in the comfort of a Victorian parlour. “The mind feels its way into the very depths of the picture,” wrote Oliver Wendell Holmes in 1859. “The scraggy branches of a tree in the foreground run out at us as if they would scratch our eyes out.”¹ Stereographs like these, the first attempt at virtual reality, are forerunners of the far more sophisticated and enveloping stereoscopic 3D video. Sujir speaks of the quality of its space as “elastic and dream-like . . . ephemeral, yet capable of extending a sensation of volume, physicality, and presence to the viewer.”

In her earlier work, Sujir used this elastic, doubled space to address immigration, migration, disorientation and loss, culture, and memory. Born in Hyderabad, India, in 1951, and a Canadian since childhood, she has often drawn as an artist on the culture and experi-



"Forest!" in progress community screening presentation, with viewers at Port Renfrew elementary school gym, a 3D anaglyph projection, August 2018, presented by Art Gallery of Greater Victoria, photo credit Regan Shrumm



“Aeria” production shoot, with Christian Kroitor, in the data management set-up at the south Walbran location, August 2018

Old growth production shoot “Forest!” with artist director Leila Sujir at left, cinematographer Christian Kroitor at right, Big Lonely Doug location near Port Renfrew, June 2016, photo credit Christian Kroitor



ences of the Sujir family. Her father Raghu, an airline pilot, died in a plane crash in Canada when he was in his mid-thirties. Her mother, Ruth Horricks-Sujir, who was from Calgary, Alberta, died on her daughter's birthday just short of a year before the artist began work on *Forest!* Biographical content is not visible in this work, as it is in others, but it is present nonetheless in the powerful connection between the artist and her subject. When Sujir was twenty-four, she thought she might die of cancer. As she recovered from surgery, her mother took her for walks in the rainforest near Tofino, on the west coast of Vancouver Island. Since then, she has thought of the rainforest as a space of healing, wonder, and contemplation: "The forest was where I found wonder and learned how to be alive again."

Sivanesan's invitation was for Sujir to make a major work for solo exhibition at the AGGV, for the newly renovated and expanded building slated to open in 2024. Sujir could have begun work by doing research at the provincial archives or going into the art gallery collections. Instead, following her intuition, she went directly to the forest without a shooting script. Her first concern was to work on creating space, that of the forest reconstituted within the elastic space of stereoscopic 3D, with which she would construct a walking viewer. To do this she reversed the usual technical steps. The filmmaking technique of pull focus is used during a shoot to change the focus within a shot from one object to another. Pull parallax is a special effects technique used in post-production. Pulling the parallax deepens or expands the space of a film or video image by making the foreground seem to move at a greater speed than the background. Working with cinematographer Chris Kroitor, grandson of IMAX co-founder Roman Kroitor, Sujir used pull parallax to video the forest and "pull" the moving image from relative flatness to extended 3D.

As a result, a viewer who walks toward *Forest Breath* feels the space of the video expand as it seems to move out toward her, producing a deeper and more immersive virtual reality. However, the effect does not work with a seated audience. Conditions set up by artworks can prescribe the way a viewer addresses them: *Forest Breath* constructs a mobile embodied viewer who interacts with its three-dimensionality.

In June 2016, Sujir shot stereoscopic 3D video at four locations in ancient forests on Vancouver Island: the Central Walbran Valley, located outside of Carmanah Walbran Provincial Park; Avatar Grove and Big Lonely Doug, northwest of Port Renfrew, along the Gordon River; and Red Creek Fir to the east. Sujir and Kroitor had to exercise ingenuity from the start, not only to reach remote forest areas, which had not yet been mapped, but also to shoot 3D stereoscopic video without a full crew and rigging. They





Video Still from "Forest Breath" (2018), Leila Sujir

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made the experimental shoots in 2016 with improvised equipment: two Sony F65 digital cameras that shoot 8K (8,000 pixels, which is four times HD), mounted on an IMAX mirror rig. The two cameras recorded slightly different views that converged on the mirror to produce a 3D stereoscopic effect. Technical director Jorge Zavagno joined the shoot in 2018 for *Forest Aerial*, which took place at Emerald Pool, in the Central Walbran. There they shot with a RED camera, a large-format, ultra-high definition, digital motion picture camera that is physically small. Mounted on a drone, the RED camera was flown along the forest floor and up the trunks of trees, emulating the flight of a hummingbird. A soundtrack added in post-production will introduce the bird's hum with sounds played by a musician on a trumpet.

The story does not stop here. *Forest Breath* was an experimental art project that developed into a research project. *Forest!* quickly turned into a project not only with artistic and technological importance but also with social and ecological implications, making it exemplary of process in which research grows into art making. The long lead time provided by the AGGV and Sivanesan, the artist's curatorial collaborator, was part of what made this possible. As well, Sivanesan introduced her to members of the Pacheedaht First Nation, while Sujir's brother Jay introduced her to forest ecologist Andy MacKinnon, who in turn introduced her in Port Renfrew to the Friends of Carmanah Walbran, TJ Watt with the Ancient Forest Alliance, Handsome Dan with the Chamber of Commerce, and Jack Julseth with Wild Renfrew, a resort that promotes ecotourism. Sujir's meetings with community members and others set off a chain of interactions that took the project forward as if it were gathering its own momentum.

Vancouver Island harbours what the Ancient Forest Alliance calls "the grandest old growth forests in Canada,"² which are endangered by the rapid, continued cutting of old-growth trees. Sujir's first contact among BC environmentalists, forest ecologist Andy MacKinnon, advised her to start in the unprotected old-growth forests of the Central Walbran Valley because "they might not be there when you come back." The forestry company Teal-Jones has proposed logging at eight sites in the valley, located on Crown land that is the unceded traditional territory of the Pacheedaht First Nation. One proposal has been approved, although logging had not yet begun at this writing. In February 2017, Sujir met Sarah Turner, a new professor in Geography, Planning, and Environment at Concordia, who was involved as a high-school student in the "War in the Woods," massive protests against clear-cutting by Macmillan-Bloedel in the Walbran Valley in the 1990s. One outcome was the creation of the Carmanah Walbran Provincial Park, but twenty-five years on, BC's ancient forests remain in crisis. According to the Sierra Club BC, the province has since lost 30 per cent of its remaining old-growth forests.

Video Still from "Forest Breath" (2018), Leila Sujir





Old growth production shoot "Forest!", with mirror rig for 2 Sony 65 cameras, artist director Leila Sujir at left, Concordia University undergraduate student research award recipient Andréann Cossette, production assistant intern Jackson Sujir, June 2016, photo credit, Christian Kroitor



Daniela Ortiz and Jorge Zavagno, co-editors, working on "Aerial" in Concordia University's Elastic Spaces research lab, September 2018, photo credit, Leila Sujir

That February, Sujir also attended a meeting at which a logger's union representative read aloud a resolution to stop cutting old-growth trees. This marked a significant change from the conflict between environmentalists and loggers in the "War in the Woods." In May 2017, Sujir met Sarah Turner's mother, ethnobotanist Nancy Turner, who teaches at the University of Victoria, and attended her symposium, *Indigenous Peoples' Land Rights and the Roles of Ethnobotany and Ethnoecology*. At the symposium, the artist gained introduction to Indigenous communities on Vancouver Island's west coast and to the concept of the "tribal park," land use that allows for cultural practices such as "culturally modified trees." Next she met Suzanne Simard, a forestry ecologist who teaches at the University of British Columbia, whom she had been aware of since June 2016. Simard is known for her research on how trees communicate and share resources through underground networks of fungi and roots that are connected to a hub or mother tree, the oldest and tallest in the forest. They met in July 2017, in the Harrop Procter area of BC, at a site where Simard collects research data on carbon exchange among trees as the means of communication. There Sujir realized that, indeed, the place to talk about the forest was in the forest.

Turner, Simard, members of Indigenous communities, loggers, ecologists, environmentalist groups, city and provincial officials, and others with a vested interest in the health and survival of old-growth forests have been invited to participate in the 2023 *Forest!* field school. Sujir's and Turner's Concordia students who attend will receive three course credits. The issues are complex and political. Sujir's intention is to make an artwork that will bring the discussion of all these issues into the public arena where interaction and discussion can lead to larger social change. *Forest!* is a catalyst for conversation, one that Sujir feels confident has already started.

notes

1. Oliver Wendell Holmes, "The Stereoscope and the Stereograph."
2. Ancient Forest Alliance, "Massive Cutting."

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Ancient Forest Alliance. "Massive Cutting of Canada's Grandest Old-Growth Forests Coordinated by BC Government's Logging Agency." Media release, May 18, 2018. <https://www.ancientforestalliance.org/media-release-massive-cutting-of-canadaes-grandest-old-growth-forests-coordinated-by-bc-governmentaes-logging-agency-near-record-sized-douglas-firs-found-in-nahmint-valley-on-van/>.

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