BACK TO EARTH

CONTESTED HISTORIES OF OUTER SPACE TRAVEL

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Back to Earth *is an multimedia exhibition and discursive program that seeks to critically engage mainstream narratives of space exploration. The program features films by Nuotama Bodomo (Ghana), Subash Thebe Limbu (Tibet), Zahy Tentehar (Tentehar-Guajajara, Brazil), and Alice dos Reis (Portugal).*

Addressing the ways in which imaginaries of outer space travel, space tourism, and cosmic mining continue to naturalize colonization and dispossession of people on Earth, this program takes an intersectional approach to new planetary imaginaries. As such, we have invited artists and filmmakers who from their Indigenous, Asian, Black, and feminist perspectives are reflecting on the implications of space exploration for racialized communities–especially as these exploratory endeavors continue to assert technocratic ideas of progress that erase, negate, and disavow the capacity of diverse forms of life to exist and thrive on our planet.

The program will contribute to today's most pressing planetary thinking. Following philosopher Kelly Oliver's provocative question: "how do we share the Earth with those with whom we don't share the world?" we centered on views that depart from a broader imagining of worlds-within-the-world, for these reject conceptions of the world that begin from a totalizing view of the globe. These intersecting perspectives highlight how visual experiments can help us rethink our role in building worlds that are grounded on earth, that are rooted in interdependence, and that foreground mutual accountability.

Alongside this group of artists, *Back to Earth* will include discursive engagements, providing critical new perspectives on the urgency of repositioning mainstream narratives of outer space exploration.

For filmmaker **Nuotama Bodomo**, the question of whether Matha would make it to the moon is almost irrelevant. While "based on true events," Bodomo's short film *Afronauts* (2014) renders the story of the Zambian Space Program as a dreamlike work of speculative fiction, contemplating the larger ramifications of launching the Black body into space against the backdrop of the independence movements taking place across the African continent in the 1960s.

See You Later Space Island (2022) by **Alice dos Reis** is a loose tale of friendship and endurance. In the middle of the Atlantic, Helena rekindles an old friendship with Ceu, an astrophysicist who recently relocated to Santa Maria, an Azorean island off the coast of Portugal, to study exoplanets. Caught between the island's geological inheritance and the vastness of the cosmos, the two friends are confronted by and must reconcile with the various space exploration infrastructures stationed on the island.

Zahy Tentehar's newly commissioned film *Máquina Ancestral: Ureipy* (2023) is a performance and science-fiction short where a differently-abled character called "robotic entity" travels to a mysterious space in search of his identity, which was lost in time. Evermore aware of the failures and perhaps even ruination of the human condition, the robotic entity refuses to succumb to the loss. Instead, the robot seeks to redeem the human species by rescuing its inherited ancestral knowledge. The film is inspired by silent cinema, featuring inaudible dialogues with subtitles that offer a better reading of the work.

Zahy Tentehar's, *Karaiw a'e wà* (*The Civilized*, 2022) considers Indigenous Futurism as a methodology for countering the historical erasure of Indigenous knowledge, technologies, and creative forms. In a technocratic apocalyptic scenario the artist challenges what it means to be civilized as an image rooted in coloniality. In the work, the invention of civility is put to the test along with the ideals of progress, intellectuality, and modernization. The short is motivated by the desire to combat stereotypes by uplifting Indigenous epistemologies and cosmologies.

Subash Thebe Limbu's film *Ningwasum* (2021) is a Yakthung science fiction film. *Ningwasum* follows two Indigenous time travelers, Miksam and Mingsoma, who in their journey together weave folk stories, culture, climate change, and science fiction narratives. The film explores notions of time, space, and memory, delineating how alternative realities have different bearings on people's experience of the present.

All films will run on a loop, for a full schedule of screenings and other programming see canalprojects.org.

Curated by Sara Garzón.

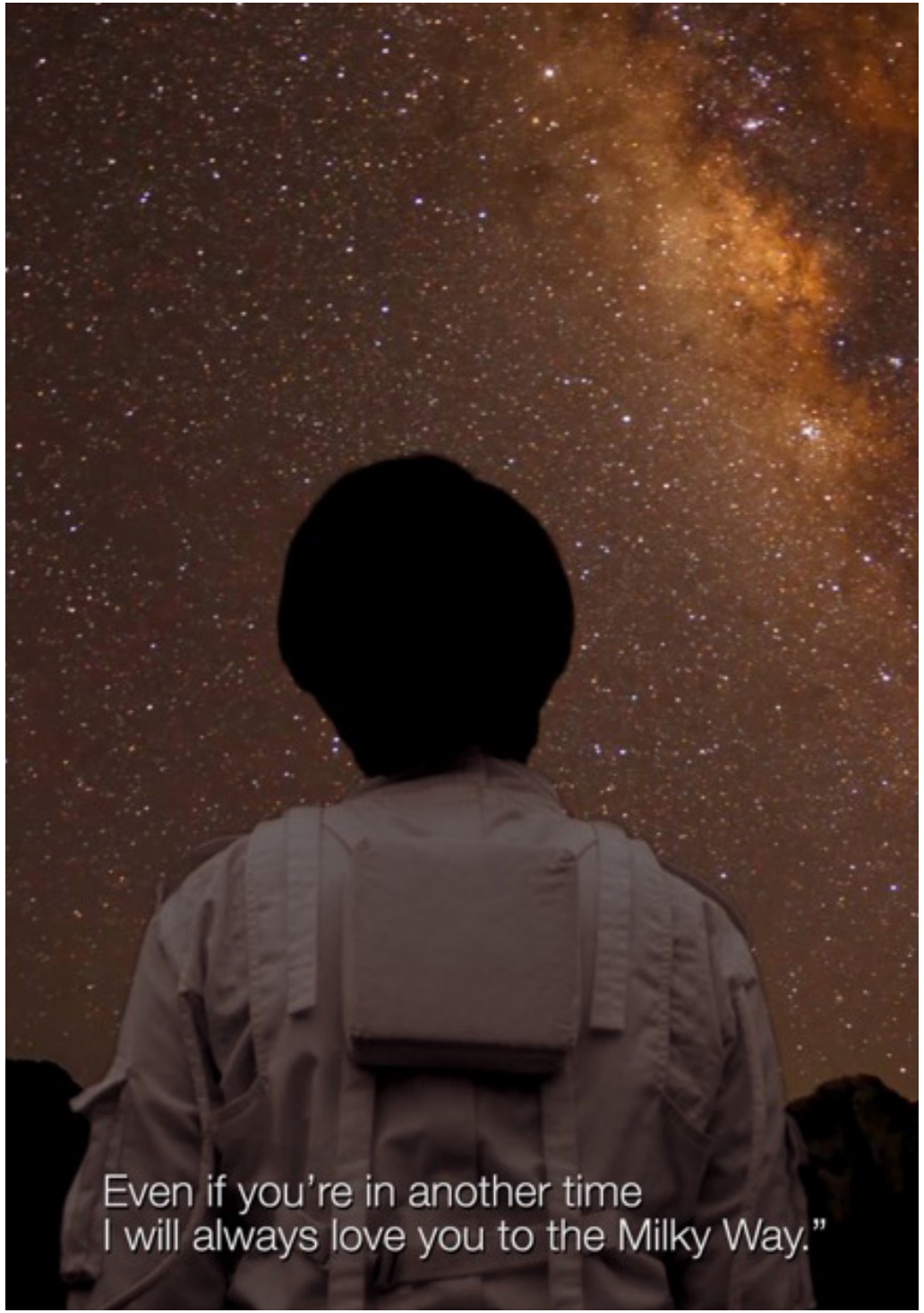

fig. 1

A RETURN TO EARTH
SARA GARZÓN

Back to Earth: Contested Histories of Outer Space Travel interrogates the ideologies of space exploration for communities of color across the globe. This project is, however, less interested in the possibilities granted by interplanetary travel and more so on the contradictory implications of its visual imaginaries, which simultaneously assert our complete separation from Earth while making strong claims about our belonging and interdependence. In the wake of new planetary thinking across contemporary art, the exhibition focuses on four counter-narratives of space exploration that foreground the emergence of intersectional solidarity movements, inter-species and ancestral alliances, as well expressions of care and intimacy. Friendship, love, and care appear in the films not to fuel our desire to leave our home planet, but to help us embody our return to Earth.

Featuring films by Nuotama Bodomo (Ghana), Subash Thebe Limbu (Nepal), Zahy Tentehar (Tentehar-Guajajara, Brazil), and Alice dos Reis (Portugal), the exhibition addresses the ways in which imaginaries of outer space travel, space tourism, and cosmic mining continue to naturalize the colonization and dispossession of people on Earth. This is why we invited a group of filmmakers who from their Indigenous, Asian, Black, queer, and feminist perspectives are reflecting on the consequences of space exploration for racialized communities, questioning the ways in which these exploratory endeavors continue to assert technocratic ideas of progress that erase, negate, and disavow the capacity of diverse forms of life to exist and thrive on our planet.

Since the 1950s, space exploration has generated contradictory reactions. Despite divergent ideologies about the efficacies of space travel, photographed views of planet Earth such as *Earthrise* (1968) and *The Blue Marble* (1972) catalyzed something equally important in our contemporary subjectivities (fig. 2). This was the realization that the moon landing did not constitute a new step in the evolution of human civilization, but rather marked our absolute separation from Earth. That is, the loss of a grounding precedence that was fostered by this alleged totalizing view of Earth; a condition which decolonial scholar Rolando Vázquez has called "earthlessness."[1] When speaking about the impact that the Blue Marble has had in our relationship of the planet Vázquez writes that:

> *On December 7, 1972, the Apollo 17 crew took the first photograph of Earth: "Blue Marble." This photograph accomplishes the Renaissance geographers' dream of reducing planet Earth to an object of representation; it is a moment in which the anthropocentric gaze achieves, as it were, its historical completion, the absurdity of its totality. The conception of the Earth as a prison, the will to emancipate the "Human" from Earth, and the reduction of Earth to representation are all expressions of modernity's world as artifice, its anthropocentrism, and its loss of earth as relation. "Blue Marble" comes to signify the transmogrification of Earth into an object of appropriation, representation, consumption, and waste. It signifies the forgetfulness of earth as grounding precedence.*[2]

fig. 2

Following Vázquez's assertions about the loss of place and situatedness, *Back to Earth* attempts to reimagine human and more-than-human relationships to our planet by providing visual imaginaires that delineate ideas of decolonization, solidarity, and friendship and that refuse to turn the planet into the mere backdrop of human action. While the *Blue Marble* was influential to the global environmental movements of the 1970s that are the bedrock of today's planetary thinking, this exhibition focuses specifically on the hegemonization of the world picture. These are views that maintained the sixteenth century belief that the "world is only one and not many" –a globalized perspective that comes at the expense of negating the many. Against the grain of earthlessness, *Back to Earth* centers on intersectional views that open the possibility for images and practices that can ground our thinking, connecting and situating ourselves in the realities and urgencies of people on Earth, as these depart from a broader imagining of worlds-within-the-world.

Protest and contestation against space exploration has been consistent since the very beginning of space exploration. In 1969, Civil Rights leader Reverend Ralph Abernathy (1926-1990) showed up near the Apollo 11 launch site among hundreds of protesters denouncing the billions of dollars spent to land the first man on the moon while Black Americans suffered a state of inequality and poverty (fig. 3).[4] Navajo communities also challenged space travel by sending warning messages to moon people about astronauts colonizing their territory.[5] Witnessing the launch of a rocket, Native American scholars famously claimed: "pity the Indians and the buffalo of outer space."[6] With this statement, they expressed their fear for moon people whose territory was being "regarded as unoccupied land to which powerful governments can lay claim."[7] For Indigenous, Black, and global South communities, space programs have elicited a call to action for thinking collectively about the forces of colonization that continue to affect racialized and marginalized peoples. Wars in Central America and Southeast Asia, the deforestation of the Amazon, the desecration of sacred graveyards in North America, not to mention satellite surveillance and the weaponization of space, have all called for intersectional alliances against the instrumentality of space technologies.

Following this call, the films in the exhibition are all grounded in real events both historical and contemporary. For instance, Nuotama Bodomoo's *Afronauts* (2014) draws from the 1960s Zambian Space Program. Here, Bodomo contemplates the larger ramifications of launching the Black body into space at a time when African nations were also achieving their independence from colonial rule. Alice dos Reis, *See You Later Space Island* (2022) takes place on Santa Maria, the Azorean island where Portugal unsuccessfully attempted to establish a satellite launcher, raising questions about renewed forms of colonialism. Zahy Tentehar's films, *Máquina Ancestral: Ureipy* (2023) and *Karaiw a'e wà* (The Civilized, 2022), are inspired by the efforts carried out by members of the Guardians of the Forest —a group of Guajajaras in the state of Maranhã in Brazil, to resist and fighting against targeted killings and occupation of their territory. In

'Poor People' On Hand For Historic Moon Shot

The Rev. Ralph D. Abernathy, flanked by associate Hosea Williams, stands on steps of a mockup of the lunar module displaying a protest sign during tour of Cape Kennedy space center. On left is a model of Jupiter C and next to it is a model of the Titan II.

The Rev. Mr. Abernathy, president of the Southern Christian Leadership Conference, SCLC, holds a sign which ridicules the spending of $12 a day to feed an astronaut, "We could feed a starving child for $8."

Rev. Abernathy led a group of about 40 members of SCLC's Poor People's Campaign to the space center for the launching of the Apollo 11 Moon Shot which placed men on the moon for the first time in history. The group was given "VIP" seats for the launching. Rev. Abernathy explained that his group was there to protest "a distorted sense of national priorities" and not to oppose the launching nor to disrupt space center operations. He hailed the successful moonshot as magnificent and historic.

fig. 3

her two videos, Tentehar provokes a reflection on the values of progress, challenging the so-called superiority of Western "civilization." Based on these experiences, throughout the exhibition we see claims for solidarity that coalesce around land sovereignty, environmental justice, and anti-colonial resistance. These forms of resilience are simultaneously enacted through cosmotechniques, as possibilities of the global majority to propose their own technological becomings outside of the oppressive techno-scientific paradigms of the west.[8]

The concept of the "Afronauts" was coined by Mukuka Nkoloso himself to speak about African women and men occupying humanity's shared spaces, with their own technologies and claims to belonging. The events and testimonies of the Zambian Space Program have been, since then, discussed by scholars and journalists who continue to grapple with the conditions of this failed undertaking. In 2012, the story was also taken up by Spanish photographer Christina de Middel (b. 1975). De Middel produced the first artistic speculative take on Zambia's Space Program, creating a series of arresting photographs like this portrait of a man looking straight into the camera with his space helmet and vibrant space suit made of traditional patterns and textiles (fig. 4). The images illustrate the dreams once started by Mukuka Nkoloso. Through her photographs, de Middel's *Afronauts*, adds to the various possibilities of reclaiming stories, defending territories, and asserting the very possibility of people of African descent to justly occupy spaces on Earth and abroad. "Deserted," or remote landscapes

replicated by moon photography ascertained in the space age, echo ideas of *Terra Nullius*. In the first landing on the moon, astronauts were consistently compared to Christopher Colombus.[10] The reach and complexity of setting foot on a new horizon was equated to the ways in which Columbus landing in the Americas changed human history. Veiled under the guise of celebrating the west's technological prowess, the comparison reiterated instead the tropes and ideologies of new frontier colonization. Colonization is an empire and state-sanction project that was initiated with Columbus, but was subsequently replicated throughout centuries against Indigenous, Afro-Indigenous peoples, and Asian-natives all across the globe. Sites that sparked the imagination of space exploration, however, are not only outside of our planet, but also deeply earthbound. Natural sites in Iceland, the Amazon range, or even Navajo territories are only some examples of sites used by NASA and other nations' space programs to test and replicate the "extreme" and "inhospitable" conditions of outer space travel.

Ecuadorian artist Oscar Santillan's *Bubble Gum Codex* (2020) exposes and reconceives such colonial relationships. The artist follows Neil Armstrong's 1976 expedition into the Cueva de los Tayos (Coangos) in Ecuador. Through archival research, Santillan identifies a soldier by the name of Francisco Guamán (to the right of Armstrong, fig. 5), who among other members of the Shuar community, led the astronaut through the cave and into the center of the Earth.[11] In his research, the artist finds that the family of Francisco Guamán had preserved the discarded piece of bubblegum, once chewable by Armstrong. Taking a sample of the petrified gum, Santillan extracted a sample of the astronaut's DNA. The genetic material was consequently inserted into the genome of plants, which were then planted and nurtured on the surface of the bubbled work of art. On the elongated plastic white bubble, which emulates a gum's bubble, the artist places the chewable element in a transparent, laboratory-grade specimen container, while small plants spurt from glass beakers from the work's elastic membrane. As Santillan explains," *Chewing Gum Codex* suggests the possibility of an interspecies astronaut as a plausible way for long-term traveling through outer space. In other words, in the future Mr. Armstrong could return to outer space, this time traveling inside plants."[12] Contesting the condition of space travel and re-imagining vocabularies that move away from the reassertion of new horizon

fig. 4

fig. 5

colonization and extractivism, Santillan's poetic imaginary creates the possibility of a multispecies space-time travel, healing the narrative of dispossession and instrumentality that is used by space exploration against peoples and spaces outside the west.

Space travel is not only founded on the dispossession and colonization of Indigenous land and resources of the global South, but its technologies are also weaponized against people of color. Alice dos Reis' *See You Later Space Island* contemplates the effects of space exploration technology on people and ecosystems on the island of Santa Maria. The work's main character Helena, ends the film by asking her friend, the astrophysicist Ceu, if the research he is doing on an exoplanets reminds him of what happened 500-years ago, when sugar cane, wheat, and cows among others things, were first brought into the island.

A different untold story of weaponized space technologies has been addressed by El Salvadorian artist, Simón Vega (b. 1972) since the late 1990s. While not included in the exhibition, Vega's work is an important reference which addresses the impacts of the Space Race between the United States and the Soviet Union in Central America. Unlike the utopian space travel narrated in most science fiction tales, Vega's investigation reveals and denounces the fact that the entire enterprise was also a justification for the development of war technologies that were subsequently tested in El Salvador during the Cold War years.[13] Vega has dedicated many sculptural and installation projects to

this theme, replicating spaceships and space stations with repurposed materials and recycled objects. Highlighting the precarity and violence which arose from ideas of technological progress, works like *Tropical Mercury Capsule Crash Landing* (fig. 6, 2015) and *Tropical Space Hostel* (fig. 7, 2019) extend beyond an apocalyptic view, offering instead a form of groundedness in the tropical landscapes from where these technologies emerge. More than a simple tropicalization of space travel, the images confront us with the realities of space travel in which a struggle for global power became decisive in the death and destruction of people in El Salvador. To delineate the ongoing effects of this violence into the present, the 2019 *Tropical Space Hostel* is a sculptural object based on a specially designed capsule for a space hotel developed by the Russian Space Agency.[14] The artist's ongoing series "Tropical Space Projects" focuses not on the past, but on the future –particularly on tourist colonialism, as this endeavor displaces and uproots local communities for the sake of the tourism industry. The ruination of the spaceships evident in Vega's photographs elucidates the devastation of the landscape and the detritus of failed ideologies of progress, raising the greater question: progress for whom?

In a similar vein, Zahy Tentehar's films question the technocratic ideas of progress and evolution by focusing on indigenous ancestrality as a technology for survival, community, and memory. Her science-fiction short film *Máquina Ancestral: Ureipy* (2023) which was specially commissioned for the exhibition, proposes reflections on the loss of our senses motivated by our need to change our reality. In the video, a differently-abled character called "robotic

fig. 6

fig. 7

entity" travels to an unidentified space in search of his identity, which was lost in time. They desire to become human. Evermore aware of the failures and perhaps even ruination of the human condition, the robotic entity refuses to succumb to the loss. Concerned with future paths and recognizing the importance of the past, the robot seeks to redeem the human species by rescuing its inherited ancestral knowledge. Challenging the epitome of the white, all-abled Vitruvian Man, the film centers on other notions of corporeality that do not uphold human exceptionalism or power, instead relying on the sacred and the ancestral as forces for connecting and enabling space-time travel.

Underscoring the power of indigenous ancestrality, cosmology, and storytelling, Subash Thebe Limbu's *Ningwasum* (2021) also highlights global asymmetries and power relations that displace Indigenous people for the sake of the evolution and progress of the west. In the film, Indigenous time travelers Miksam and Mingsoma, see the defamation of sacred land and ancestral graves. A woven blanket connects these two travelers in space-time. The film echoes what the Navajo people in the United States had already expressed in the 1960s –that intergalactic travel with moon people had been happening for centuries, occurring through the connections between ancestors and spiritual beings, relations which enable travel across space-time dimensions.

While the stories of moon landing and space travel are steeped in the history of the space race and Apollo Missions, the continued endeavors to explore the intergalactic frontier by governments and private entities poses a significant threat to communities of color and our biosphere at large. One only has to remember that France is seeking approval from the European Union to burn the Amazon forest in order to power their Spaceport.[15] The plan would not only endanger irreplaceable mangroves and tropical forests, but also would put 268,000 people at risk.[16] This is only the latest development in an ongoing struggle in Guiana, where for years Indigenous people have protested France's Space Center and its occupation of their land.[17] In the United States, Elon Musk of SpaceX has invaded sacred land of the Carrizo Comcrudo Tribe in Texas, destroying and defaming indigenous burial sites. Standing on a mountain of toxic waste, the project obliterates the practices of Indigenous people worshiping their ancestors.[18] Juan Mancias, chair of the Carrizo Comecrudo Tribe of Texas even claimed, "I don't think they understand what a sacred site is, because they have no connection to anything that's sacred to their lives."[19] These are just two example of many stories of dispossession, violence, and destruction that are the undercurrent of mainstream narratives of space exploration which continually legitimize and naturalize the colonization of the newest frontier.

In proposing other approaches to planetarity, the artists in *Back to Earth* urge the necessity of deconstructing linearity and hegemony, offering instead spaces of re-territorialization, new temporalities, and recognition of all human and non-human actants as a way to dismantle the totalizing view of the world picture exemplified by the *Blue Marble*. The conception of "planetarity" invoked here, counters the notion of globalization and speaks to the increasing awareness of a contemporary world-view constituted by planetary entanglements. This planetary consciousness positions humans as only a microcosm of the universe, and as interconnected, interdependent, and entangled in complex social relations with humans and more-than-human entities that are all grounded and dependent on Earth. This consciousness encourages us, then, to think critically about the mediums, perspectives, and visual forms that make possible new orientations towards the world. That is why, following Philosopher Kelly Oliver's provocative question, "How do we share the Earth with those with whom we do not share the world?" *Back to Earth* puts forward intersectional and contestatory narratives of space travel.[20] These are narratives that ask about our shared responsibility, ethics, structures of care, and about repairing our broken relationships to the world and to each other. The imaginaries provided by the program also center on ideas of a present-future that asserts forms of existence based on groundedness to earth, rootedness in interdependence, as well as mutual accountability.

Notes

[1] Rolando Vázquez, "Precedence, Earth and the Anthropocene: Decolonizing Design," *Design Philosophy Papers* 4, no. 44 (2017): 4.
[2] Vázquez, "Precedence, Earth and the Anthropocene: Decolonizing Design," 4.
[3] W.J.T. Mitchell, *What Do Pictures Want? Essays on the Lives and Loves of Images* (Chicago: University of Chicago Press, 2005; Kelly Oliver, *Earth and World: Philosophy After the Apollo Missions* (New York: Columbia University Press, 2015), 3; Benjamin Lazier, "Earthrise; or, The Globalization of the World Picture." *The American Historical Review* 116, no. 3 (2011): 602–30.
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[6] Young, "'Pity the Indians of Outer Space': Native American Views of the Space Program." 273
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[11] Jean West, "Neil Armstrong's giant leap in Ecuador with a Scots engineer. Seven years after becoming the first person to walk on the moon, the astronaut took a journey towards the center of the earth, in search of lost treasure," *The Sunday Times*, Sunday June 30 2019. [Accessed May 2, 2023] www.thetimes.co.uk/article/neil-armstrongs-giant-leap-in-ecuador-with-a-scots-

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[12] Oscar Santillan, *Bubble Gum Codex* (2020), artist portfolio. Unpublished document.

[13] Kency Cornejo, "Decolonial Futures: Ancestral Border Crossers, Time Machines, and Space Travel in Salvadorian Art," in *Mundos Alternos: Art and Science Fiction in the Americas*, ed. Robb Hernandez (Riverside: University of California, Riverside, 2017), 23.

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[18] Hopper, "Defending Native Sacred Sites From Elon Musk and SpaceX,"; For more on indigenous protests and skepticism towards space exploration see, Tony Milligan, "From the Sky to the Ground: Indigenous Peoples in an Age of Space Expansion," Space Policy 63 (2023): 2.

[19] Hopper, "Defending Native Sacred Sites From Elon Musk and SpaceX,"

[20] Oliver, *Earth and World: Philosophy After the Apollo Missions*, 14.

Figures

[1] Subash Thebe Limbu, *NINGWASUM* (still), 2021. 44 min, HD. © Subash Thebe Limbu.

[2] *Earthrise*, 1968. Image Credit: NASA

[3] "Poor People' on Hand for Historic Moon Shot," *Norfolk Journal and Guide*, July 26, 1969 Reprinted from Black Quotidian: Everyday History in African-American Newspapers, Matthew F. Delmont, published by Stanford University Press (c) 2019 by the Board of Trustees of the Leland Stanford Jr. University. All rights reserved.

[4] *2011. Mbulumbublu. From the series: Afronauts.* © Cristina de Middel/Magnum Photos.

[5] Neil Armstrong in Ecuador, 1976. Courtesy of Tayos Foundation.

[6] Simón Vega, *Tropical Mercury Capsule Crash Landing*, 2015. Gelatin on paper, 60 x 100cm. Image courtesy of the artist.

[7] Simón Vega, *Tropical Space Hostel*, 2019. Wood, metal, recycled objects, lights, and plants, 350 x 120 x 250 cms. Image courtesy of Maia Contemporary, México DF y Summit, Tulum.

HOW DO WE SHARE THE EARTH WITH THOSE WITH WHOM WE DON'T SHARE THE WORLD?

DR. KELLY OLIVER

Taking our earth-bound limits as a starting point changes the way in which we view relations between beings and between their/our worlds. Re-viewing the partial vantage point of earthlings on our earthly home gives us new ways to view what it means to share a world or the world. Furthermore, can avowing what it means that every living being and every world it inhabits is of the earth change our perspective on our relationship to others? Can we expand the horizons of our attunement to the earth, and to the multitude of different worlds that coexist on it, by acknowledging that each species and each singular living being belong together on this earth, our shared home? Can we share the Earth even if we do not share a world?

The spectacular images from the 1968 and 1972 Apollo missions to the moon, "Earthrise" and "Blue Marble," are the most disseminated photographs in history.[1] Indeed, "Blue Marble," is the most requested photograph from NASA (cf. Lazier 2011 620 & Cosgrove 1994 272). Whereas "Earthrise" shows the earth rising over the moon, with elliptical fragments of each (the moon is in the foreground, a stark contrast from the blue and white earth in the background), the later image "Blue Marble" is the first photograph of the "whole" earth, round with intense blues and swirling white clouds so textured and rich that it conjures the three-dimensional sphere. Even more than previous photographs of Earth, the high definition of "Blue Marble" and the quality of the photograph makes it spellbinding. Set against the pitch-black darkness of space that surrounds it, the earth takes up almost the entire frame. Unlike in Earthrise, in Blue Marble the earth does not look tiny or partial, but whole and grand. Both photos from Apollo missions (8 and 17) were immediately met by surprise, along with excited exclamations about the unity of mankind on this "blue marble," this "pale blue dot," this "island earth" (cf. Carl Sagan, NASA).

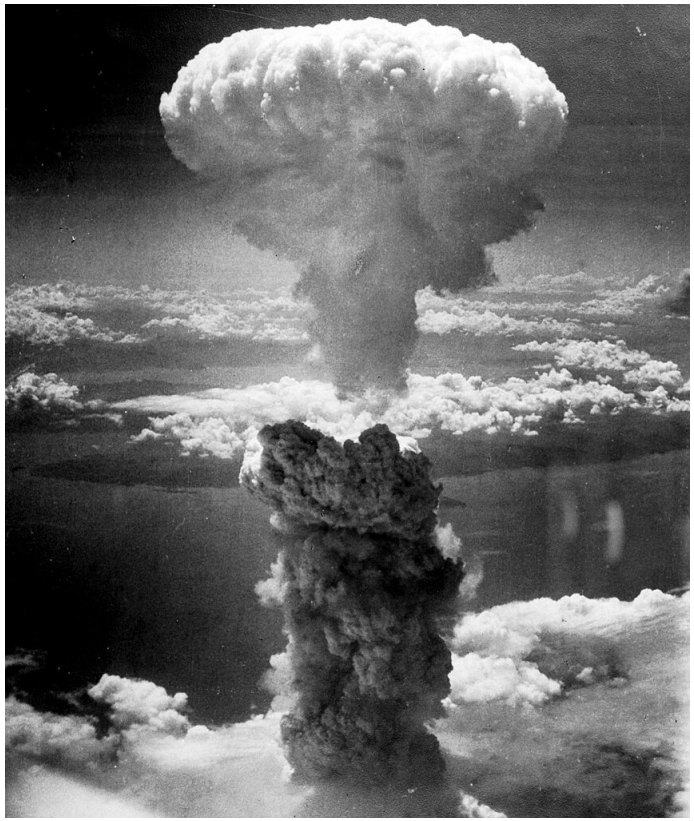
In the frozen depths of the Cold War, and over a decade after the Soviets launched the first satellite to orbit Earth, Sputnik, these images were framed by rhetoric about the unity of mankind floating together on a lonely planet. At the same time as vowing to win the space race with the Soviet Union, the United States wrapped the Apollo missions in transnational discourse of representing all of mankind.

While aimed at the moon, these missions brought the Earth into focus as never before. The photographs sparked movements aimed at "conquering" our home planet just as we had now "conquered" space. Indeed, the criticisms of these early ventures of the space program asked why we were concentrating so many resources on the moon when we had plenty of problems here on Earth, not the least of which was the

The Blue Marble, 1972. Image Credit: NASA

While aimed at the moon, these missions brought the Earth into focus as never before. The photographs sparked movements aimed at "conquering" our home planet just as we had now "conquered" space. Indeed, the criticisms of these early ventures of the space program asked why we were concentrating so many resources on the moon when we had plenty of problems here on Earth, not the least of which was the threat of nuclear war (Time 1969). The Apollo missions were a direct outgrowth of this threat, not only in terms of the significance of the race to space, but also their technologies, which originated with military developments in World War II. The atom bombs dropped in Japan in 1945 heralded the nuclear age with the threat of total annihilation. And the development of rockets by both the United States and Germany as part of military strategies in WWII, gave rise to rockets launched into space by the U.S.S.R. and U.S.A in decades that followed. Indeed, the U.S. recruited German scientists to work with N.A.S.A..

Within a decade, we had gone from *World* War and the threat of genocide of an entire race of people, to the possibility of nuclear war and the threat of annihilation of the entire human race. And, within another decade or two, with Sputnik and then the Lunar Orbiter and Apollo missions and photographs of Earth from space, the *World* gave way to the *Planetary* and the *Global*. Following the twentieth Century German philosopher Martin Heidegger, we might call this "the globalization of the world picture" (see Lazier 2011 606). Within a few short decades, the rocket science used by the military in WWII had given rise to the globalism that we have inherited today. From global telecommunications such as cell phones and Internet, to global environmental movements, the Apollo missions moved us from thinking about a world at war to thinking about both the annihilation and the unification of the entire globe.



Mushroom cloud resulting from the explosion of the atomic bomb over Nagasaki, Japan, on August 8, 1945. Image: Wikimedia commons.

The real nuclear destruction in WWII and the threat of nuclear war during the Cold War sparked fantasies of nuclear devastation in popular culture, evidenced by several films of the 1950's and '60s, which revolved around the threat of nuclear destruction, many of them imagining what would happen if the U.S.A. or U.S.S.R. "pushed the button."

The mushroom cloud and the iconic Blue Marble became intertwined in popular investment in the fantasy of whole earth. It was as if we could think the earth whole only by imaging its destruction, and that all attempts to "save" the planet first require imagining destroying it. To take the world as a whole, we imagine it gone. To see the *whole* earth, we fantasize its obliteration. In this regard, fantasies of Whole Earth and One World are nostalgic in that they begin with imaginary scenarios of annihilation followed by the longing for wholeness. In the words of the tagline of the 2013 film *Oblivion*, in which aliens have rendered the earth a barren desert, "Earth is a memory worth fighting for."

> *Is it a stretch to say that before the World Wars, we had no sense of the World as a whole? And is it just coincidence that the images of the "whole" Earth appear only through the threat of nuclear annihilation of the entire planet? Are the mushroom cloud and Blue Marble two sides of the same coin, namely the technological mediation of our relationship to both Earth and World?* (Cf. Lazier 2011 619).

In this case, the Whole Earth and One World in the photos from space are phantasms created by the fallout of the fantasies of World being gone and Earth being obliterated. This was the fear that inspired men to reach for the stars, the fear that life as we know it on Earth might disappear one day. And on "the day the world ended" and "the day the earth caught fire," these men wanted to be ready to abandon ship and make a new start someplace else in the universe. Yet, what they discovered with their first ventures off world rocketing to the moon is that looking back and seeing the Earth was the most profound moment of their mission. Certainly, the most enduring legacy of the Apollo missions are the images of earth from space.

Immediately after the Earthrise photograph was transmitted back to Earth from Apollo 8 on Christmas day 1968, poet Archibald MacLeish's wrote an article in *The New York Times* entitled "Riders on Earth Together, Brothers in Eternal Cold," in which he proclaimed the significance of the moon mission as changing our very conception of earth:

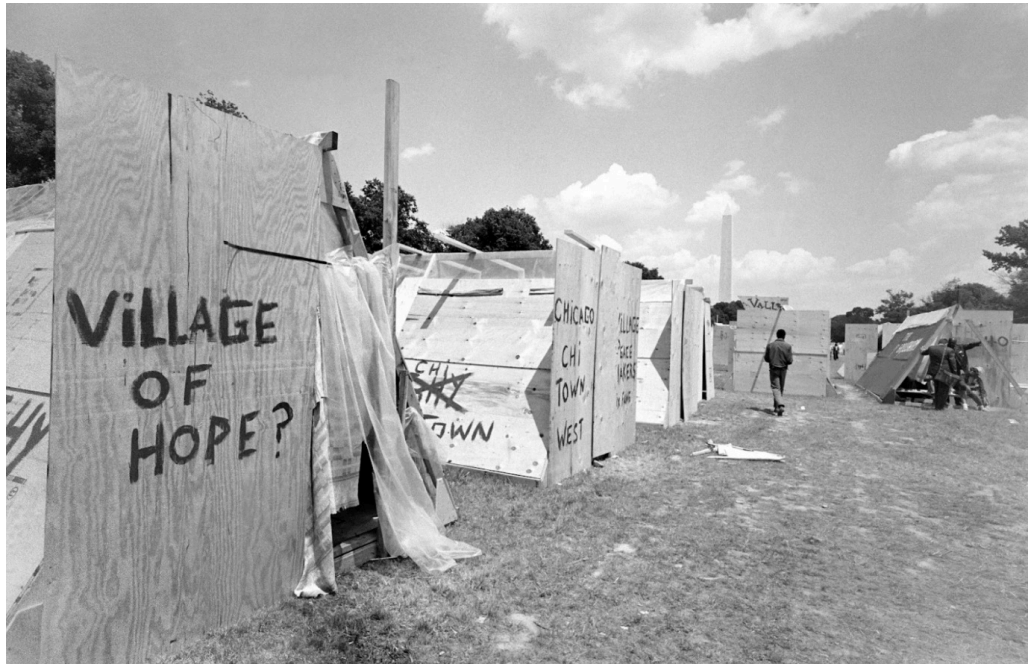
MacLeish speculates that seeing the earth "as it truly is" will "remake our image of mankind" such that "man may at last become himself" (NYT 1968). Seeing the earth "whole" for the first time unites all of mankind, together on "that little, lonely, floating planet." Realizing that we are all in this together on the precarious lovely earth alone in the "enormous empty night" of space is seen as a catalyst for our finally coming into our own as a species united as "brothers." When MacLeish calls the astronauts "heroic voyagers who were also men," however, we cannot hear the universal mankind but rather the masculine heroic space cowboys, riders in the sky, who have the power and vision to unite all men as "brothers" against the eternal cold of space.[2] MacLeish's assessment is consistent with NASA's press releases after both Apollo missions, which included panhuman themes of uniting mankind and representing all of mankind in space outside of any national borders.[3] For example, then NASA chief Thomas Paine told *Look* magazine that photographs of Earth from space:

> *"emphasize the unity of the Earth and the artificialities of political boundaries"* (quoted in Poole 2008 134). *NASA presented the Apollo 8 mission as one of peace and goodwill to all mankind* (cf. Cosgrove 1994 282).

In 1969 *Time Magazine* named the Apollo 8 astronauts, Broman, Lovell and Anders, "Men of the Year." The accompanying article described a New World born from their mission, one in which the human race could come together with one unified peaceful purpose as a result of the "escape from the planet that was no longer the world" (Time 1969). The world had expanded to include the universe, while the earth had shrunk into a tiny fragile ball. *Time* describes the Earth as a troubled place full of war and strife and space as the great hope to "escape the troubled planet." Again, the astronauts are seen as heroic figures conquering space: "It seemed a cruel paradox of the times that man could conquer alien space but could not master his native planet" (1969). The goal is clearly to conquer; and the Apollo missions signal a great victory in escaping a troubled planet and moving beyond what appeared from space as the petty disagreements between peoples.

In the words of astronaut Frank Borman, "when you're finally up at the moon looking back at the Earth, all those differences and nationalistic traits are pretty well going to blend and you're going to get a concept that this is really one world and why the hell can't we learn to live together like decent people" (quoted in Poole 2008 133-4). The irony is that Borman claims that he only accepted the mission because as a military officer he wanted to "win" the Cold War (see Poole 2008 17). Like Borman, the American media seemed to think of the Apollo mission as a triumph for freedom and hope, paradoxically both for all of mankind and as a specifically American victory in the Cold War (cf. Poole 2008 134).

Both ideals of "One World" and "Whole Earth" that emerged out of the Apollo missions manifest this tension. And the Earthrise and Blue Marble photographs became emblems of both conflicting



About 3,000 people from across the nation occupied the National Mall in Washington, starting on May 12, 1968. While coverage at the time highlighted the camp's failures, these images show a broader picture.Credit...George Tames/The New York Times https://www.nytimes.com/2017/02/18/us/martin-luther-king-resurrection-city.html

ideals. "One World" is the idea that techno-science can unite all of the nations of the world, while "Whole Earth" believes concern for our shared environment can unite all peoples on the fragile planet Earth. Perhaps more surprising than reveling in the technocratic triumph of the moon missions was the solemnity of realizing that Earth is the only thing that looks even remotely living from that vantage point.

While it is not so surprising that astronauts may have felt alone floating in their space capsule thousands of miles from any other living soul, it is remarkable that their sense of isolation was contagious. Each one of them expressed the loneliness of space in which Earth appears as an oasis. For example, on a later mission, Apollo 11 astronaut Michael Collins voiced the loneliness and vulnerability of Earth when circling the dark side of the moon alone in the Command Module. Collin's remarks express the contradictory reactions to seeing Earth from that distance. On the one hand, he imagines blotting out the Earth with his thumb and on the other he imagines himself as very small and insignificant. The power and mastery of technological prowess is counterbalanced by the vastness of the universe that makes our entire planet look like a "tiny pea."

More recently, think of William Shatner's reaction to seeing the earth from space. Shatner describes his sadness at the realization that the earth is fragile and the only tiny speck of life in the otherwise dead universe.

"All the News That's Fit to Print"

The New York Times

LATE CITY EDITION

VOL. CXVIII ... No. 40,311 NEW YORK, MONDAY, JULY 21, 1969 10 CENTS

MEN WALK ON MOON

ASTRONAUTS LAND ON PLAIN; COLLECT ROCKS, PLANT FLAG

Voice From Moon: 'Eagle Has Landed'

A Powdery Surface Is Closely Explored

VOYAGE TO THE MOON

Cover of *The New York Times*, July 21, 1969.

The first astronauts to circle the moon all expressed similar sentiments, emphasizing the loneliness, uniqueness, and fragility of Earth. Apollo 8 Mission commander Frank Borman called Earth "a grand oasis in the big vastness of space" (quoted in Cosgrove 1994 282). Astronaut James Lovell described the loneliness of space, "The vast loneliness up here is awe-inspiring. The earth from here is a grand ovation to the big vastness of space" (Lovell quoted in *Time* 1969 12). Astronaut William Anders stressed the fragility of the tiny planet: "Let me assure you that, rather than a massive giant, it should be thought of as the fragile Christmas-tree ball which we should handle with care" (quoted in Cosgrove 1994 284). To these astronauts, and subsequently the media, along with One World and Whole Earth proponents, the Earth is alone in the universe, "a planet so eccentric, so exceptional" that the mission to the moon brought the Earth into focus (Lazier 2011 623). Through the lens of the Apollo cameras, the lovely planet Earth appears as lonely as it is unique set against the absolute blackness of space.

Seeing the Earth from space, so tiny and yet the only visible color, prompted ambivalent feelings of vast loneliness and eerie insignificance along with immense awe and singular significance. Seeing Earth from space made some appreciate Earth anew, while others imagined moving further away from Earth and traveling other planets. For some, seeing the loveliness of Earth "is to wish also to return" to it (Lazier 2011 620); while for others, seeing the insignificance of Earth compared to the vastness of space is to wish to leave it.

Indeed, mission chief Frank Borman recounts feeling nostalgia and homesick when he saw the "picture" of Earth from the moon: "It was the most beautiful, heart-catching sight of my life, one that sent a torrent of nostalgia, of sheer homesickness, surging through me" (quoted in Poole 2008 2). Decades later, William Shatner echoed these sentiments. Certainly, the photographs of Earth from the moon still provoke feelings of uncanniness when we realize that we are there somewhere, miniscule specks on that tiny "pale blue dot" floating in space (Sagan).

Yet, whereas fellow astronaut James Lovell, saw the Earth as fragile and in need of care, astronaut Buzz Aldrin continues to urge us to colonize Mars and become a "two-planet species": "Our earth isn't the only world for us anymore. It's time to seek out new frontiers" (NYT 2013).

While some, like Lovell, saw the Earth from space and want to protect it, others, like Aldrin, imagine escaping from Earth to find our way in the galaxy, perhaps even the universe. With environmental disaster looming large on the horizon, in recent years there is a sense among some that the Earth has betrayed us or is taking it revenge on us; and rather than a safe haven, it has become a death trap and a threat to human survival (see Lazier 2011 619).

For example, Elon Musk's SpaceX is aimed at Mars. His goal is to make humanity an inter-planetary species to prepare for a future when the earth is uninhabitable. Contra Shatner who saw earth from space as fragile and in need of protection, Musk imagines a future

where we can leave earth behind. The contradictory reactions to the "Earthrise" and "Blue Marble" photographs are still with us as we recommit to saving our planet and at the same time develop means to escape it.

I want to suggest that this paradoxical logic is intrinsic to the photographs themselves. For, to shoot those images, astronauts were propelled into inhospitable space in an unsustainable and precarious artificial environment where their very survival was uncertain. In other words, those images could only be taken from a vantage point where the survival of man is impossible. This extraterrestrial vista is from an impossible viewpoint, where no one could live. In this way, both photographs signal the danger inherent in the viewpoints of the people taking them. On the one hand, these two photographs, taken by human beings rather than unmanned satellites have more rhetorical force because they are tokens of a human eyewitness standpoint. On the other, they also signal the perilous position of these space travelers who risk their lives while taking them.

Furthermore, the only way to get what even NASA officials called this "God's eye view" was from this impossible point so far away from Earth (cf. "Use and Misuse of the Whole Earth image" by Garb). The view of the "whole" Earth could not be seen from Earth, but only at a distance born out of rocket science and compared to the viewpoint of God. As creatures of and on the Earth, we cannot see the Earth; it is never a whole or total object presented to our perception. Apart from photographs, until Jeff Bezos's Blue Origin, the view of the Earth "as a whole" had been reserved for the rare astronaut who left the Earth's atmosphere. Even now, it is available only to the rare few who can afford the million-dollar flight.

Even so, what the astronauts, the media, and the One World and Whole Earth proponents assumed they saw in the photographs, particularly "Blue Marble"—namely the whole Earth—was an illusion. For, both images show only part of Earth, indeed, a fraction of the Earth. "Earthrise" shows an elongated piece of the top of a sphere, while "Blue Marble" shows one side of the Earth; and both are rendered in the two-dimensional space of the photographic medium. In other words, we did not see what we thought that we saw. The impact of seeing the Earth whole, seeing it as it *really* is, was based on *the fantasy* of the whole Earth, which not only was never visible in these photographs, but also, at least with current technology, never will be. The Whole Earth cannot be captured from any human vantage point, even one floating in a space capsule orbiting the moon, or any other point in space. For, as phenomenologists teach us, the human perspective is always only partial; there is always something that is occluded and missing from our viewpoint. No matter how far out we venture, we have not and never will see the earth as a whole.

And we have not seen the Earth "as it truly is." Indeed, without its atmosphere, the Earth would not look like the beautiful blue marble of the photographs. Furthermore, the Earth looks beautiful and unique relative to the black space around it and the gray surface of the moon and the reflection of light from the sun. This is to say, that the photographs are not just images of the Earth alone, but the Earth in relation to the elements that surround it.

To take the Earth as an object apart from its relationships is the ultimate illusion of mastery, the fantasy that we are so powerful that we can take the whole Earth as our object. To see Earth as an object floating alone in nothingness is to interpret the photographs within the technological framework that renders everything, even Earth itself, as an object for us, an object that can be grasp, managed and controlled, an object ripped from its contextual home. So why this fantasy of wholeness? What purpose does it serve?

Given the turbulence of the late 1960's and early 1970's in the U.S., the Apollo photographs along with the fantasies of the unity of "mankind," and One-World and Whole-Earth that they fueled, acted to quell anxieties about the possibility of nuclear war and civil unrest. In addition, the environmental movement, hatched in the wake of these photographs, signaled an investment in saving the earth from the devastation caused by humans. The fantasy of the whole earth also results from illusions of mastery and globalism, but now in the service of saving rather than destroying the planet. Yet, as the most rudimentary foray into phenomenology reveals, we never see any object whole. Ours is a perspectival and partial vision. We arrive at our sense of the wholeness of any object through processes of induction and deduction that are in themselves born out of our embodied experience as earthlings. The contradictory responses to seeing the Earth from space signal the need to rethink our bond to the Earth, our status as earthlings, and our relationships with, and responsibility to, Earth's co-inhabitants.

Usually, when philosophers define the moral community, it is made up of either rational, sentient, or intentional beings, beings with freedom of choice and usually only *human* beings. What if instead, we start our ethical thinking with earthlings? All living beings, human and nonhuman, are earthlings –at least all living beings we know of so far. We are *of* the Earth, we *belong* to the Earth. Yet, as different species and as different peoples, we inhabit different worlds. When our worlds collide, whatever our differences, we can't deny our shared bond to the Earth. Co-habitation on our shared planet is not only our lot, but also our responsibility. We have a responsibility to share the Earth even if we don't share a world.

Notes:

[1] See Benjamin Lazier (2011 606). I am fortunate to have found Lazier's article "Earthrise" while working on this project (2011). His analysis is insightful and provocative. This chapter is indebted to his work there. I am also grateful for conversations with Jennifer Fay, which helped me immensely in formulating this project.

[2] Denis Cosgrove analyzes the masculinist and imperialist rhetoric surrounding the early Apollo missions (1994). Cosgrove argues that the within this discourse "the airman unveils the true face of the earth" (1994 279). He also argues that the very use of the word "mission" conjures both Christian missionaries and military missions, both of which inform the rhetoric of the early space program (1994 280-182). For a discussion of the rhetoric of the missions in terms of gender, see also Garb 1985.

[3] Denis Cosgrove describes the way in which this pan human rhetoric aligns Christian universalism and the American vision of global harmony imagined because imperialism can be taken into space where there is enough to go around: "The dominant rhetoric of Apollo spoke of an incorporative vision of global human mission rather than of dominion or territorial control; and as such, that rhetoric was unremarkably consonant with much of post-war American foreign policy. Imperial expansion, henceforth, was to be directed peacefully beyond the Earth for the benefit of 'all mankind' rather than into the territories of other human cultures" (1994 281). See also Poole 2008.

Kelly Oliver recently retired from Vanderbilt University, where she was Distinguished Professor of Philosophy. She is the author of sixteen scholarly books, including *Earth and World, Philosophy After the Apollo Missions* (Columbia UP), the editor of another thirteen books, including her most recent on *Gaslighting* (Oxford UP), and the author of over one hundred scholarly articles on a variety of topics including refugee detention, capital punishment, animal ethics, sexual violence, images of women and war, psychoanalysis, and film.

Her work has been translated into eight languages. She has been interviewed on ABC news, appeared on CSPAN Books, published in *The New York Times* and *Los Angeles Times*, among other appearances and publications in popular media.

Kelly is also the bestselling author of three award-winning mystery series: *The Jessica James Mysteries* (7 novels, contemporary suspense), *The Fiona Figg Mysteries* (5 novels, historical cozy), and *The Pet Detective Mysteries* (3 novels, middle grade).

Nuotama Bodomo

Afronauts

In 1964, amid the Cold War and on the eve of Zambia's independence from Britain, school teacher and activist Edward Mukuka Nkoloso told an Associated Press reporter, "Some people think I'm crazy, but I'll be laughing the day I plant Zambia's flag on the moon." Five years before the United States would launch Apollo 11, Nkoloso was busy running Zambia's National Academy of Science, Space Research and Philosophy. For filmmaker Nuotama Bodomo, the question of whether Matha would make it to the moon is almost irrelevant. While "based on true events," her 2014 short *Afronauts* renders the story of the Zambian Space Program as a dreamlike work of speculative fiction, contemplating the larger ramifications of launching the Black body into space against the backdrop of the independence movements taking place across the African continent in the 1960s.

Afronauts, 2014. 14 min, HD.

Nuotama Bodomo in Conversation with Daniella Brito

fig. 1

Daniella Brito: *Afronauts* is inspired by true events and it recounts the story of the 1960s Zambian Space Academy through speculative narration. Can you tell us about the real events that inspired the story?

Nuotama Bodomo: I learnt about the Zambian Space Academy from a newsreel back in 2011-2012. When I first came across the story, I wanted to research it, find facts, documents, clips, and more. I had that energy for the story, but quickly realized that not much existed, which is, as we know well, a common issue in African history. So what do you do when you're confronted with something that is true, based on real events, but the documents that are supposed to vet it as a history, do not exist? And the things that *do* exist are from a perspective that you don't want to rely on? For example, the news clips that I found were all from the point of view of a white British news anchor. In the footage the reporter appears annoyed because the Afronauts seem to be joking around. At that point, the news anchor claims that the Afronauts "are just a bunch of crackpots." That line, that very statement, made me feel like I had to make a movie about this.

Undoubtedly, there is something really zany about this story. It is funny and it is weird and yet those two things are not legitimate reasons to erase or undermine the Afronauts's desire to beat the US to the moon. Especially when their methods and resources clearly didn't match those of the US or the USSR. To disavow it altogether as a minor episode was violent and condescending. There are, however, a lot of gaps in the story and its documentation. The question then was: what should I do with the gaps? At first, I was trying to mimic the newsreel in a black and white sort of aesthetic, but do it in a way that made it clear to the audience that I was not trying to replicate the reportage –this was clearly a colonial shooting style. I wanted to reference it but do something completely different.

DB: It does feel like the reportage was pulling from a speculative world. And I definitely see forms of world building taking place in the dreamlike imagery of your film. Especially in those moments when you are splicing together the archival documentation and the cinematic bits. This makes it difficult for the viewer to decipher what is real and what's imagined. For me, this raises questions around the counter archive and the kinds of narratives that emerged from the freedom movement that

was happening in Zambia at the time. What do you think the Space Academy represented for folks on the ground in Zambia who were fighting for liberation from British colonial rule?

NB: I was able to go to Zambia for six months to do research. There I collected oral histories, I talked to people of very different class levels. We talked to one politician who was in the first cabinet, and to people who were part of the space program as children. Edward Makuka Nkoloso, the founder of the Space Academy is no more, but we got to talk to his son.

Through collecting those accounts we understood that this space program was just such a small part of a much bigger independence movement. Edward Makuka Nkoloso was a jack of all trades. He had studied in the seminary, was a union organizer, a teacher, and became a freedom fighter. He was an important figure in the freedom movement. He was the bodyguard of the man who would become the first president of Zambia. He ran with the big guys and was taken quite seriously. His specific role in that independence movement was to bring in the lay people. So he had a way with words, and a way of corralling people, and inspiring people enough to join big things and do the impossible.

This was the early 1960s, when Apollo 11, Apollo 13, hadn't happened yet. At this point, there's a lot of dreaming, a lot of "what ifs," and clearly a lot of mistakes, many rockets crashed. People on the ground were like, "will there be aliens?" The space race was all around really zany. In Zambia too, a lot of impossible things were being realized and imagined, freedom was being won through very specific direct actions.

DB: I'm very curious about the projection of nationalism onto female bodies, and what that means in your film. I'm thinking about the role of the woman in the nation building project –how their bodies are often projected as landscapes that birth nations and different worlds. I'm thinking a lot about imagery from the nineteenth century in Cuba, when they were liberating themselves from Spain. Cuba was seen as a feminized character –as a cartoon of a damsel in distress. What does it look like to project nationalism onto female bodies like Matha? What kind of savior role –if any– was she expected to play on the moon?

NB: Before I answer, I love this thing that you're teasing out of national imagery being pushed onto the female body. It reminds me of the film *Mother India,* which I love.

The real Nkoloso had a very flowery, flamboyant, big, prophetic way of speaking. For him, it was like "the first human on earth was an African woman. The first human on the moon should be an African woman." He was very adamant that it should be a space girl that would go to the moon. For me, however, embodying it in Matha was about asking: when we dream, when we vision, when we gather, who is doing the conceptualizing? Who is doing the thinking, the oration of it, and whose body is on the line? Who actually is a foot soldier of the movement? Who is putting their life on the line for this? That is what I was trying to explore by casting

fig. 2

Matha.

I also took the liberty of casting an actress with albinism. On the one hand, that look was about continuing this sort of metaphoric vision: "she's the daughter of the moon, she looks like the moon." On the other hand, I was also trying to speak to a specific history or cultural aspect of Southeastern African people where folks with albinism can be ritually sacrificed. So it becomes this thing where you think of the hero as somebody who is the most prized in a story, or the most prized in a community, but in this sacrificial version. Are we sacrificing her because she is the most valued hero? Or are we sacrificing her because she's the least valuable? That kind of push and pull I thought was very important for this story.

DB: Absolutely. In the film, you don't necessarily get a sense of interiority from her, except in this one scene where she's speaking with her mother and her mother says, "they just want to blast you off with the sky" — to which Matha responds, "am I, will I?" It's interesting this tension between the potential that's built up through her character and also the real fear of this new fate that she's envisioning for herself. Do you have a sense of her own relationship to this desire? Does she want to make it to the moon?

NB: For Matha, I see her as somebody who definitely trained herself. She pushed and brutalized her body into being what she needs to be to take on this mission. In Nkoloso's vision, she is king, because she is a hero, and she believes in that vision. The system often makes more sense when it is good for you. But is it good for you? Does it care about you? I think that's how I wanted to explore Matha. She's very cold to us

because she has crafted herself for a job that needs to be done. She has molded herself into what is needed for this mission, and she believes in it because she is good in it, she's the hero in it. And maybe there is a lack of worry for her body in that sense.

DB: That was running through my mind the entire time. I was like, "does she wanna go to the moon or is she just so focused and involved with this mission?

NB: Like you said, you'll do this thing, you've trained for this thing, even if you're feeling queasy on the day, are you gonna say no?

DB: Exactly. She's already committed.

I'm so curious to hear and see how this question of collectivity comes into play and how it manifests in the research that you're doing.

What the space race showed the West, and also the world at large is that humans have an almost limitless desire to colonize a new planet. But, within that, I'm very curious if there are things that we can learn from the exploration of space and the longing for a new universe. Did this come up for you at all? Can we use space travel as a framework for ideating towards more liberated futures?

NB: One of the big things I want to do with *Afronauts*, especially as the project evolves, is to show that there's other uses and experiences of space, other uses of space other than to colonize it. You kind of start the movie knowing they don't make it. So why follow these people if they're gonna fail? Failure is the most beautiful thing about this story. How do you experience space when you're not going there, when you're not going there to plant a flag? How do you experience space?

We know that the moon is there because we see it. So there's gonna be experiences of it, lores of it, myths of it, talk about it, studies of it, you know. And there's so many more ways to look at it that don't necessarily involve building a rocket to go and land on it. *Afronauts* is about the reasons you follow people into imaginaries and visions about the moon, which is also the future, which is also a revolutionary and liberatory present, which is also a possibility of being otherwise. Everything you see in the film before the final moment, it's an experience of space that is very valid, even though it has nothing to do with actually going to space.

DB: Absolutely. There's something about the potential of a new place that holds valuable information — or valuable speculative memory that is.

I feel like there's this circular thing that happens, especially when you're trying to "translate" world histories. You're embodying a practice of annotation: from person to person, the story changes. Once it's transcribed into text, or video, or moving image –no matter what the final end of the story is, the story is kept alive, it's not going to be linear. It's always going to be kind of circuitous, and ever-changing and adaptive. So it's really exciting to think about your film in this context of chronicling a history that is active and alive –still in the process of becoming.

Figures

[1] Daniela Brito (left) and Nuotama Bodomo in conversation. May 18, 2023 at Canal Projects

[2] Nuotama Bodomo, *Afronauts*, (still) 2014. 14 min, HD. Image courtesy of the artist

Nuotama Bodomo is a Ghanaian filmmaker. Her award-winning short films have played at festivals including sundance, the Berlinale, Telluride, Rotterdam, sxsw, and New Directors/New Films. *Afronauts* was exhibited at the Whitney museum as part of the group show *dreamlands: immersive cinema and art, 1905-2016 and* at the 2018 Venice Biennale architecture (US pavilion) as part of *dimensions of citizenship*.

Daniella Brito is a Dominican-American writer and curator. Their writing has appeared in *Hyperallergic, Contemporary And, Document Journal, Them*, and elsewhere. Brito has held curatorial and programmatic support roles at Art Labour Archives (Berlin), Decad (Berlin), The Knockdown Center (New York), El Museo Del Barrio (New York), and more. They have curated programs and presented work at spaces including e-flux Screening Room, The Kitchen, Fridman Gallery, Queer|Art, and NEW INC. They are currently a research fellow at The Kitchen, where their research interests span across visual culture, fugitivity studies, and queer performance practices.

TECHNOLOGIES OF RE-EXISTENCE
ZAHY TENTEHAR'S ANCESTRAL MACHINES

SARA GARZÓN

The Guajajara-Tentehar artist, filmmaker, and activist Zahy Tentehar (b. 1989) was born in the Indigenous Reservation of Cana Brava, in Maranhão, Brazil. In 2010 she moved to Rio de Janeiro where she became an artist-activist through her work in television, theater, and cinema. Since 2013, Tentehar has been part of the rise of the Guajajara social movement known as the Guardians of the Forest. While the Guardians of the Forest have only until recently gained political attention, the movement has protected the rainforest from state targeted killings, invasion by loggers, land grabbers, and drug traffickers for decades. Increasing threats against their community and tribal leaders have mobilized young people towards the defense of their land in the north-eastern edge of the Amazon rainforest, which spans over four-hundred thousand hectares and is home to over twelve thousand people.[1]

In the face of violent dispossession, forced displacement, and ecological exploitation, Tentehar has dedicated many of her artistic projects to denouncing ongoing efforts by the state and private interests to eradicate native life from the Amazon range. Some of her latest work addressing this topic includes the short films *Máquina Ancestral: Ureipy* (2023), *Karaiw a'e wà* (*The Civilized,* 2022), *Arte Ritual* (*Pytuhem: Uma carta em defesa dos guardiões da floresta*, 2021), and *Arte Ritual - Aiku'è* (*R-existo,* 2020). In these films, the artist not only advocates

fig. 1

for the defense and recuperation of Indigenous epistemes but also builds on what Chippewa writer Gerard Vizenor termed "survivance."[2] Survivance is a neologism that combines concepts of survival and resilience, yielding practices where "native presence overcomes absence, nihility, and victimry."[3] In a recent interview, Tentehar articulated her intention as a filmmaker, expressing how when she is writing:

> *I am alive and resisting, but in me lives the memory of an invasion planned to exterminate my history, my ancestors, and my family. In my role as artist and activist, I construct and return an Indigenous gaze, as this constitutes a space through which members of my community can see themselves and reflect on what they are in the continuum between past, present and future.*[4]

The Indigenous gaze offered by Tentehar destabilizes the hegemonic white gaze that places native subjects as objects in front of the camera. The objectification of native subjects is a visual tradition that stems from when Indigenous peoples were first brought to Europe in the 16th century to perform for royal courts and the Pope as spectacles, being collected in cabinets of curiosities to pose as lifeless and frozen in time. The materiality of the moving image thus provides Tentehar with a dynamic visual language by which to reclaim Indigenous spaces in order to uplift and memorialize native knowledge and perspectivism, and simultaneously enact an ontological pluralism.[5] The reclamations that are made throughout Tentehar's "Indigenous gaze" as she calls it, are both contestatory and propositional. They denounce while also enabling a sensibility unique to native forms of relatedness. In the films, the camera changes perspective, the sound emulates natural or ritual textures, drawing the viewers into immersive experiences that tap into vibrational sounds that call for attunement. In the end, the perspectival stance transforms the character of the image, creating an arrest of the senses unique to other ways of beingness.

The film *Arte Ritual* (*Pytuhem: Uma carta em defesa dos guardiões da florestal*), for example, is a manifesto of disobedience that narrates the struggle of Indigenous peoples for ''re-existence." In the video, Tentehar faces the camera speaking in Ze'eng Eté—a dialect of the Tupi-Guarani trunk. She addresses different forms of erasure including land dispossession and removal from both rural and urban spaces. Demanding "land back," her mode of enunciation is one that claims sovereignty in the rainforest but also within urban spaces, like the Center on the Recuperation of Indigenous Life in Rio de Janeiro. The video weaves in the removal of Indigenous peoples from Maracanã Village, also known as the Old Indian Museum, which was demolished and turned into a mall in preparation for the 2014 World Cup.[6] Maracanã Village had been occupied since 2006 by Indigenous inhabitants, who had converted it into a hub for native gathering and culture in the city.[7] Confrontations with the police on this site confirmed once again that Indigenous political subjectivities constitute a threat to the hegemonizing structures of the state and its colonizing ideologies.

Through its essayistic form, *Arte Ritual: Pytuhem* crafts an aesthetics of survivance by centering on native storytelling and positioning ancestrality, temporality, and Amazonian cosmologies as the epistemes that give sense to Indigenous world-making practices in the present. In fact, throughout this and other films by Tentehar we see the repeated characterization of the artist as a river, a body that travels between two worlds. By this metaphor, Tentehar means that through the camera her identity becomes tangible. She presents herself as both a member of the Guajajara tribe and an artist. Her speech floats in streams like water and her films' aesthetic remains fluid, allowing her the possibility of mobility and power in a manner comparable to the unforgiving force of nature.

In *Arte Ritual - Aiku'è* (*R-existo*, 2020), the narrative emerges from the earth, representing the birth of a being in genuine symbiosis with nature. In the first scene, we see Tentehar emerge from the ground, buried in leaves and covered in mud. Upon looking directly at us, the camera recedes upwards to show her curled in fetal position while being showered by dried leaves. The sound of a news reporter describing a confrontation between the police and Indigenous peoples in Rio de Janeiro stands in stark juxtaposition to the artist's bare body immersed in the ground. The scene changes and she

fig. 2

is suddenly washing her hair while speaking about being sentenced to extinction.She cleans her face with a leaf and then proceeds to mark her face with *Achiote* pigments symbolizing her native identity. This marking process is interrupted by the denial of this native origin when she whispers, "I adapted myself to the system, I survived." Consequently, the artist washes her face with mud and black ink, speaking to the reduction suffered by Indigenous peoples in their need to assimilate and insert themselves into a society that negates them. However, in a cyclical movement, the artist returns to a reclamation of her land, proceeding to symbolically repair her connection with nature. This is her act of resistance. The prompt of *re-existing* then emerges in a realization that she does not have to give up her origin, her language, or her culture to survive. Instead of simply showing a typical combative ethos where Indigenous peoples are always shown resisting oppression, the artist proposes re-existence through presence. This presence lies outside the frameworks and languages of representation imposed by the capitalism of alterity. Refusing *othering*, it opens a "space of fissure that allows for different possibilities of life counter to the continuous homogenization of the cultural order," precisely re-asserting the existence of Guajajara-Tentehar peoples.[8]

Reiterating re-assertions of an aesthetics of survivance based on Indigenous storytelling and re-existence, the newly commissioned film *Máquina Ancestral: Ureipy* (2023) is a performance and science-fiction short two-channel film that tells the story of a differently-abled character called "robotic entity." Evermore aware of the failures and perhaps even ruination of the human condition, the robotic entity refuses to succumb to the loss. Throughout the film, the entity seeks to redeem the human species by rescuing its inherited millenarian knowledge as it searches for its own ancestrality as a technology of resilience. *Máquina Ancestral: Ureipy* (2023), moreover, proposes new ways of seeing, feeling, and hearing the world. In Ze'eng Eté, *Ureipy* refers to ancestors or those who came before. In an invocation of memory, spirituality, and respect for the elders, the robotic entity acts as a portal that simultaneously connects ancestry with the present and future of indigenous people's in Brazil.

Following decolonial thinker Adolfo Alban Achinte's notion of re-existence, the film and its visual provocations move "beyond representation to presentation, and from resistance to re-existence."[9] In this new body of work, re-existence is furthered materialized by the reclamation of ancestrality as a technology of resistance. As an expression of memory, relationality, and kinship with the elders, the spirits, and the land, ancestrality indicates a temporal regime that obfuscates the time of capital that is embedded in Western cinema. Tentehar's scenes do not move linearly. The narrative is not fixed, but rather oscillates between past and present, between dream and reality, and between human and animal. We see this through the seemingly un-robotic actant's movement through different apocalyptic landscapes and ruinated scenarios, wanting to rescue their lost original power, which was lost in time-space. Silent through the film, the entity appears inside an abandoned warehouse while the loud sound of a beating heart and an electronic pulse marks the space inside the frame. Wearing a white suit, the creature slowly makes its way to a sound of a consul where TV monitors lie, showing distorted images and pixelated static. The figure grabs a video camera and turns it towards itself. This act seizes and reverses the power of the gaze, placing it in the hands and vision of the robotic entity.

On the channel to the left, a black and white infra-red view shows a shadow figure of an unknown entity moving through the floor. The creature, almost animal-like, stands up while moving slowly. However, in this search for its identity, the creature also appears like a spirit or animal figure; we see it crawl on the floor, and blend into the background as a time traveler that potentialized all of its senses to navigate the ravages of coloniality, deforestation, and extinction.

Máquina Ancestral: Ureipy is a continuation of Tentehar's short film *Karaiw a'e wà* (*The Civilized*, 2022). In a technocratic apocalyptic scenario, in this film the artist challenges what it means to be civilized as an image rooted in coloniality. The invention of civility is put to the test along with the ideals of progress, intellectuality, and modernization. The short is motivated by the desire to combat stereotypes, ultimately recentering on Tentehar-Guajajara cosmologies as a form of relationality that is attuned and interconnected with humans and non-human forms of intelligence.

The Civilized talks about the bankruptcy of human beings, touching on their illness, their denaturalization, the hardening of their abilities, and the diminishing of their physical and philosophical senses. *The Civilized* questions the consequences of our supposed civility. Challenging Judeo-Christian ideas of the *Homo Faber*, the artist's addresses the figure of the robot alluding to its imagined surrogate, The Vitruvian Man or "maker man." This white, all-abled body man is positioned at the center of the universe and from that vantage point seems to create the world, and with it, its machines. However, through this process the "human" underscored in technophilic ideologies is reduced to a responsive yet lifeless machine. Here, according to Tentehar's own treatment of the subject, the human loses their senses and all the power of natural experience. Empiricism gains value above affect, intimacy, desire, and togetherness. In the absence of nature, there is an excess of reproducibility, garbage, and virtual dimensions that are not confined by decay or death, and are instead exponentially unsustainable in their unmitigated growth. Survivance is then suggested by Tentehar as the possibility of thinking of technology and the machine from the perspective of her Amazonian cosmology, plural ontologies, and Amerindian perspectivism, where ancestrality and animism become the techniques by which to liberate her people from a world defined by instrumentality and control. In dialogue with *Máquina Ancestral: Ureipy*, *The Civilized* is a poignant critique of the demise of western technocratic ideologies. The film decolonizes technology, proposing instead Indigenous futurity as a method by which to contend with the many end-of-the-world scenarios played out

in classical science fiction realities. That is, the realities of people that are living at the shores of extinction, catastrophe, and dispossession experience regularly, but that only appears as fictional acts of the imagination to those privileged by the colonial matrix of power.

To take on the camera and position herself, her body, and her liquid identity at the center of the narrative to tell the story and present condition of the Guajajara Tribe makes Tentehar's artistic undertaking an expression of resilience. As stated by both Vizenor and Achinte, resilience is not simply the act of resistance, survival, or even representation, but a reassurance of re-existence. Tentehar's overall practice is one of storytelling that centers on the presence and thriving reality of Indigenous peoples in Brazil. The assertion of presence is evinced through Tentehar's Indigenous ancestrality, her living memory, and connection with the spirits, as these not only give us a sense of Guajajara worldmaking practices but also inform and nourish the Guardians of the Forest's own fight to continue to claim their sovereignty inhabitants of the Amazon rainforest.

Notes

[1] Carol Marçal, "The Life and Death of the Guajajara," Green Peace, 8 November 2019. [Last visited 07/15/2023] www.greenpeace.org/international/story/26403/the-life-and-death-of-the-guajajara.

[2] Gerald Vizenor, *Survivance: Narratives of Native Presence* (Lincoln: Nebraska University Press, 2008).

[3] Ibid.

[4] Interview with Zahy Tentehar, May 6, 2023.

[5] Brazilian anthropologist Eduardo Viveiros de Castro underscored that according to Amazonian cosmologies, humans, animals, and spirits see each other in ways that determine a unique type of knowledge production. Native perspectivism thus enacts other forms of seeing, listening, and relatedness that entirely redefines western understandings of ''nature', 'culture' and 'supernature'. Here amerindian perspectivism is the construction of "another relation to knowledge and another regime of truth." For more on this see Eduardo Viveiros de Castro, *Cannibal Metaphysics*, Trans. Peter Skafish (Minneapolis, Univocal, 2014), 193; For more on ontological pluralism as divergent ways of being outside western dualism see Jason Turner, "Ontological Pluralism," *The Journal of Philosophy* 107, no. 1 (2010): 5–34.

[6] Pedro Fonseca e Rodrigo Viga Gaier, "Polícia enfrenta manifestantes e invade antigo Museu do Índio no Rio," Terra, 22 March, 2013. www.terra.com.br/esportes/policia-enfrenta-manifestantes-e-invade-antigo-museu-do-indio-no-rio,16a7e01a4fc8d310VgnCLD2000000ec6eb0aRCRD.html

[7] Ibid.

[8] Adolfo Alban Achinte, "Estética de la re-existencia ¿Lo político del Arte?" en *Estéticas y opción decolonial*, eds.
Pedro Pablo Gómez y Walter Mignolo. (Bogot, Universidad Distrital Francisco José de Caldas, 2012), 292.

[9] Ibid.

Figures

[1] Zahy Tentehar, *Máquina Ancestral: Ureipy,* (still), 2023. 11 min, HD.

[2] Zahy Tentehar, *Arte Ritual - Aiku'è (R-existo),* (still), 2020. 14 min, HD.

Zahy Tentehar

Karaiw a'e wà (*The Civilized*)
2022. 15 min, HD.

Karaiw a'e wà (*The Civilized*, 2022) considers Indigenous Futurism as a methodology for countering the historical erasure of Indigenous knowledge, technologies, and creative forms. In a technocratic apocalyptic scenario, the artist challenges what it means to be civilized as an image rooted in coloniality. In the work, the invention of civility is put to the test along with the ideals of progress, intellectuality, and modernization. The short is motivated by the desire to combat stereotypes and value Indigenous epistemologies and cosmologies.

Máquina Ancestral: Ureipy
2023. 11 min, HD.

Commissioned by Canal Projects for this exhibition, the film *Máquina Ancestral: Ureipy* is a performance and science-fiction short film that proposes reflections on the loss of our senses motivated by our need to change our reality. In the video, a differently-abled character called "robotic entity" travels to an unidentified space in search of his identity, which was lost in time. He desires to become human. In *Máquina Ancestral*, the robotic entity evermore aware of the failures and perhaps even ruination of the human condition refuses to succumb to the loss. Concerned with future paths and recognizing the importance of the past, the robot seeks to redeem the human species by rescuing its inherited ancestral knowledge. The film is inspired by silent cinema, with inaudible dialogues, but is subtitled for a better reading of the work.

Healing from Meteorites

Himali Singh Soin with Alexis Rider

Catastrophe is etymologically derived from the Greek word for an overturning of fortune, much like the process of discovering a meteorite. A futile and arduous search undertaken with the ever-dimming hope that one of the many rocks overturned might have its origins on another planet or the Moon, often even just the detritus of a planet that didn't form: a piece of primordial matter that didn't congeal into a world. The word *catastrophe* originated simultaneously with the word *disaster*, rooted in the word *astro*, implying a sense of misfortune under the influence of the stars.

In order to make meaning from a meteorite, we must not think simply of its mysterious origins or its temperamental points of rest, but of what the geographer Nigel Clark might call its strato-biography, "a story of traversals of the deep, sedimented time of the earth itself. And for this the opposite question might be not only *where* but *when* do I belong?"

Like other rare and seemingly unexplainable natural phenomena, such as earthquakes and monstrous births, reports of meteorite falls were for a long time understood as signs of divine portents or dismissed as fanciful fabrications. As late as 1790, a meteorite shower that fell on Barbotan, France—witnessed and attested to by 300 citizens—was dismissed in the *Journal des sciences utiles* as "an apparently false fact, a physically impossible phenomenon." Little scientific interest was directed at these seemingly fabricated stones: how can these げてもの, monstrously odd rocks, as described by the Japanese Antarctic Research Expedition of 1969, fall from the air, anyway?

A meteorite is an articulation of a catastrophe

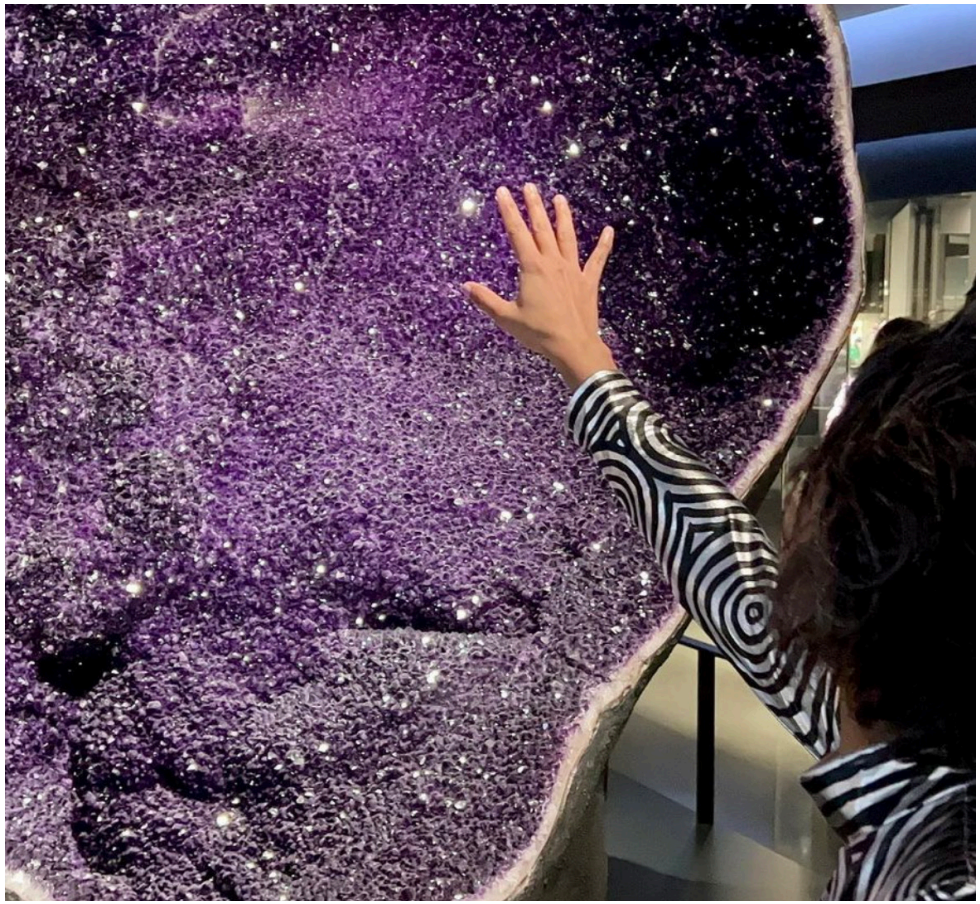
Until the mid-17th century, abrupt change was more legible than an endless, unwavering temporal plane. Naturalists suggested spontaneous generation or sudden, sharp showers of stones during full moons to explain "tongue stones": dark, triangular, serrated rocks that we now call fossilized shark teeth. In Antarctica, meteorites appear like tongue stones, arriving as strangely shaped black instances in sheets of blue ice. Multiply the scale, zoom outward into the cosmos, and their arrival is as spontaneous, as temporally surprising, as a rock suddenly forming teeth. The meteorite hunters know this, as they scour the sheet in an attempt to travel through time.

It was a chauvinistic assumption that rational science could will away catastrophe. In divine justice, Lunacy herself intervened to prove these scientists wrong. Through the 20th century, the Moon was recognized as a mirror of Earth's past: covered in a million craters, speckled with cosmic interjection. How could two celestial bodies, joined as they are at the hip, have such different stories? How could the Moon be so dented and Earth unscathed? Of course, hidden beneath its lively skin, Earth bears the truth: craters so vast they

make you weak at the knees, the residue of impacts so forceful they shifted the geology of the entire planet. Dinosaurs departed and something unearthly arrived.

Meteorites may change everything, imprinting on Earth a shock of heat and light: a tremulous beginning of nearly everything. The full stops of such large encounters are now known well: the Cretaceous collision threw mud into the air and coated the world in iridium—a clear mark in the strata of beginning-end. But can catastrophe be understood as something less absolute, less sudden—the constant insistence of the presence of otherness? These monsters arrive endlessly on Earth to remind us, as planetary geologist Ursula Marvin suggests, that "Earth hurtles around the Sun along a path that is gritty with interplanetary dust and rubble," colliding violently and sensuously with morsels of cosmic ephemera.

Could the catastrophic event of a meteorite falling on Earth be a geological glitch, an interstellar error? Legacy Russell calls the glitch a "catalyst" in her manifesto, *Glitch Feminism*, which "prompts us to choose-our-own-adventure… and turns the gloomy implication of glitch on its ear by acknowledging that an error in a social system that has already been disturbed by economic, racial, social, sexual, and cultural stratification and the imperialist wrecking-ball of globalization—processes that continue to enact violence on all bodies—may not, in fact, be an error at all, but rather a much-needed erratum." As objects that simulate emergence, insist on the relationality of strata, remind us that nature iterates multiplicity, can the meteorite provide us with a different way of knowing, a disturbance that strengthens our resistance? Russell insists that "this glitch is a correction to the 'machine' and, in turn, a positive departure." With the accumulated knowledge of its ancestral journey, could meteorites be an invitation to begin again?



In much of Himalayan Buddhist, Bon, and animistic thinking, a catastrophe, such as a violent storm or an earthquake, spells a good omen. The Earth shook when the Buddha attained enlightenment. Earthquakes can also herald the reincarnation of an important teacher or yogin. Comets and shooting stars, like rainbows, can also be interpreted as a message from the heavens communicating the (re)birth of such persons, or their location, when search parties are looking for them. Can a simple anodyne rock fallen from a distant past overturn our fortunes —for the better? Help us heal from the bruises of the present?

Our ancestors' traumas reside in the deep jungles and vast deserts of our bodies. Cosmic grief is not dissimilar: the catastrophe of meteorites can perhaps inform our understanding of how to cradle those histories into radical new futures. A meteorite is the only natural source of metallic iron in Earth's crust. The Tibetan Thogcha, meaning "thunder iron," is an amulet made from meteorites, believed to contain medicinal powers, having been blessed by the celestial realm before arriving on Earth. Thogchas are considered to be self-formed, self-arising objects, manufactured by naturalistic designs. The iron is placed in milk to energize it with the spirit of the object, after which Mukisa drinks the liquid to incorporate its magical properties before conducting rituals.

A meteor has been traveling through space since before human thought. It has been orbiting the Sun for 4.5 billion years waiting for a diversion from its path. Eons have passed as life struggled on Earth, staggering finally from swamp and sea. A tempting target, this planet, thrumming with breath and legs and squabbles: a chance, perhaps. The meteorite plops onto the Antarctic ice, a perfect pocket of negative entropy, a spot of unconformity, an unexplainable catastrophe, a repeating and rejuvenating little death. A means of worlding that meteorites insistently offer.

Can something as simple as a rock falling from space onto Earth form a crater of possibility? If its presence suggests a not-knowing knowing that releases us from a measurable, hegemonic, patriarchal system, then its preservation allows for other bodies, Black bodies, Brown bodies, bodies in transition to live with their own mouldable rights and rhymes and reasons. The meteorite desires refusal. It wants to deny your claims to its body: deny Ann Hodges, who lays claim to it through the blue of her bruise; deny the institution's vitrines; deny even those for whom it is sacred and who revere it.

It wants to say no to being named, becoming a taxonomy, something secondary to science.

When a mass spectrometer is trained on a meteorite, colours refract and allude to the cosmic abundances of elements in the universe. Meteorites articulate difference, insisting on a capricious potential for change materialized in matter. The meteorite says, we will always all have different lithologies. It bounces off the radio, insisting on illegibility such that it cannot be decoded. It knows that real freedom lies in the ability to interpret. We are many and not monolithic. We are marked and metered. It says, we are made of kryptonite and sugar both. We are not normative and our trajectory is guided by the weather alone. The meteorite asks us to look up so we can sift through strata gingerly, in a generative and judicious way. Look up, where we will see it streaking across the skies, not downward with the territorial impulses of early explorers, and dream. Look at us with geopoetic wonder, it begs, not with the cunning utilitarianism of geohistory. We are our own medicine. We are reverse, inverse, obverse, queer. We are otherwise. We are clocks without the constraints of time.

Meteorites, often found embedded in ancient blue ice, acted as useful natural chronometers that could be analyzed geochemically to gain insight into the very deep past of the universe, aiding in developing a picture of deep time that extended beyond Earth. These "poor man's space probes" were gathered with the care devoted to lunar samples, plucked from the ice with sterilized tongs, re-entombed in Teflon bags. The meteorite says, I escape entropy by being. I am always transforming, it says, like Earth and its plates pushing, pulling, and sliding against each other across vast swaths of time, the many Earths, the multiverses, the many-mes. Not perfectly preserved, instead always bearing, accumulating, shedding, mutating, turning, crashing. I am queer and proud. Your dull conformity is naive and bores me. I am a chasm, a dissonance, plural potentials, a myriad of meanings and endless erasures. It is you who turns away from impact, from affect. It is you, who, detached, cynical and perverse, will not notice me, or, if you happen to overturn a pebble at your foot, will, disappointed, kick it away.

Healing from Meteorites was originally written by Himali Singh Soin together with Alexis Rider for Momenta Biennale (2021). Images courtesy of the artist.

Himali Singh Soin's (b. New Delhi, lives between London and New Delhi) multi-disciplinary work uses metaphors from the natural environment to construct speculative cosmologies that reveal non-linear entanglements between human and non-human life. Her poetic methodology explores the myriad technologies of knowing, from scientific to intuitional, indigenous and alchemical processes.

Himali has had solos at The Art Institute of Chicago (2022-2023) and Museo Thyssen in Madrid (2022). Her art has been shown at Khoj (Delhi), Mimosa House, Serpentine Gallery (London), Gropius Bau, (Berlin), Desert X (California), the Dhaka Art Summit and the Shanghai Biennale among others. She has been the writer in residence at the Whitechapel Gallery and was a spring 2023 Studio & Research Resident at Amant.

Subash Thebe Limbu

Ningwasum

Ningwasum is a Yakthung science fiction film narrated by Miksam, a time traveler from a future Indigenous Nation. *Ningwasum* follows two time travelers Miksam and Mingsoma, played by Subin Limbu and Shanta Nepali respectively, in the Himalayas, weaving indigenous folk stories, culture, climate change, and science fiction. The film explores the notion of time, space, and memory, considering how realities and the sense of now could be realized by different communities. *Ningwasum* imagines a future from an Indigenous perspective which maintains agency, technology, sovereignty while keeping intact Indigenous knowledge, culture, ethics, and storytelling. *Ningwasum* was filmed mostly in Sharwa (Sherpa) Nation, Yakthung (Limbu) Nation, and Newa (Kathmandu) Nation.

Ningwasum, 2021. 44 min, HD.

NOTES ON NINGWASUM

ĐỖ TƯỜNG LINH

There were no gods
No skies like stretched bridges
No earth made from soil
A big empty hole below and above
There were no vast lands
But only void and darkness
But now, here we are, children of cosmic dust, storm, and light.[1]

Ningwasum is a powerful poetic manifesto of resilience, memory, and shared struggles. "Ningwasum'' loosely means "memory" in the Yakthung language. The film follows a conversation between two characters from a future Indigenous nation: Mingsoma and Miksam. Miksam is a symbol of the future, but carries with her objects and symbols of the past as she wanders into an unknown present. Right from the opening scene, Yakthung artist Subash Thebe Limbu brings us into the inner world of Miksam, unveiling her memories in a nonlinear space-time.The film's narrative voice-over is in Yakthungpan (Limbu language), a Tibeto-Burman language spoken by Yakthung communities in Nepal, India, and parts of Bhutan. The film is shot mainly in the traditional homeland of the Sharwa (Sherpa) Nation, Newa-Tamsaling Nation (Kathmandu valley) and Wasanglung region, the shamanic home of the Yakthung people in eastern Nepal. The film leaves us to wonder: what languages do we preserve from the past and what languages carry us into the future?

Thebe Limbu has coined his approach to the film as "Adivasi Futurism": a space where Nepalese Indigenous peoples have agency and land sovereignty. As Western perspectives have mostly dominated space exploration endeavors, this proposition of Adivasi Futurism reinforces forms of Indigenous representation and self-determination that escape Western stereotypes. Furthermore, for Thebe Limbu, Adivasi Futurism is a technique for reimagining Indigenous communities "not only as the storytellers of the past but also as creators of interplanetary and interstellar civilizations of the future."[2] While the film references ancient oral traditions that have been quickly erased by modernization, it also creates a poetic and powerful reclamation meant to confuse modern time by introducing speculative possibilities that insist on the future of Indigenous peoples and cultures. As writer-activist Leanne Betasamosake Simpson stated:

> *We cannot just think, write or imagine our way to a decolonized future. Answers on how to rebuild and how to resurge are therefore derived from a web of consensual relationships that is infused with movement (kinetic) through lived experience and embodiment. Intellectual knowledge is not enough on its own. Neither is spiritual knowledge or emotional knowledge. All kinds of knowledge are important and necessary in a communal and emergent balance.*[3]

In the case of *Nignwasum*, anglophone listeners are forced to face not just another language but altogether another sensorium for thinking about the historical persecution of Indigenous peoples. Their reflection, however, is not meant to be passive, but instead active as the film hopes to turn viewers into participants involved in the process of recuperation and vindication within contemporary Indigenous culture.

The use of documentary footage of protesters in current-day Nepal turns the film into a decolonial manifesto that reflects on the violence and forms of dispossession enacted by space exploration technologies. Against the grain of launching sites that, while being built in the name of supposed technological progress and human evolution in "remote" areas often sited on Indigenous territories –on top of sacred graves and burial sites– in *Ningwasum* we are presented with landscape inhabited and full of cosmological life. Challenging the rhetorics of emptiness that often inspire new horizon colonization, Miksam contends in the film that: "The greenery of the underdeveloped world benefits developed countries across the ocean. But the underdeveloped world is also displaced from their own lands in the name of 'protected area.' Modern people continuously violate ancestors' graves, tearing down houses and sacred places, and erasing entire cultures in the name of development and progress, healthcare and education in an open market."[4] In this regard, the film presents a counter narrative of space exploration, one that without leaving planet Earth is also readily able to materialize time-space travel and quantum communication. In the face of continuous space exploration and new horizon colonization, the film asks: what holds the future before us?

In the chapter titled "Thakthakma", Thebe Limbu uses the concept "Thakthakma," a handloom weaving tradition and technique as a metaphor for time-space traveling. Through the woven fabric, the intersection of textile-making, time-traveling, and memory materializes the capacity of Indigenous epistemologies and worldmaking to create their own quantum or space-time experience of reality. With every move, the characters are able to revisit and reflect on past memories and create new meanings. The unique patterns, shapes, and symbols of a traditionally woven garment not only carries cultural and historical values, but also invokes multi-sensory experiences in daily life. Memories are created when the mind interprets, reacts, and retrieves information. Throughout the film, we learn about Miksam's memories as she gives us fragments of stories in chapters: "Tanchhoppa People and Memory Places," "It has to be you," "Glimpse," and the aforementioned "Thakthakma," all of which are based on oral stories that the artist has collected over years of working with the community. It is in this complex web of interdependent relationships between the film's protagonists and their fragmented memories that we become open to new possibilities of interpretation.

In "Tanchhoppa People and Memory Place," Thebe Limbu weaves the story within another story to tell the beautiful but tragic tale of a boy named Changchanglung. Changchanglung lost his parents. Before they were gone, his mother left him a baby chicken, which he considered his sibling. As time went by, the chick turned into a rooster and flew to the sky transforming into *Tanchoppa* – the morning star (Venus). The last words said to Changchanglung by the chick were "Yungngese o Yungngese" (Stay, oh Stay). An allegory of birth and death, the tale is associated with transformation and the process of becoming. It is a celebration of life, spirituality, and nature through kinship. The cry "Yungngese o Yungngese" (Stay, oh Stay) becomes a longing –the search for love and affection in a world of uncertainties.

When Mingsoma finds and confronts


MIKSAM

Miksam in the later portion of the film, the story returns to a personal anecdote of a child looking for her father. Miksam starts to recall her earliest memory, which entailed her parents showing her the stars and calling her by her name for the first time. She begins to remember her mother's words:

> *In time of despair and sorrow. Let it pass through you and live for better tomorrow. For I will always be with you. Even if you're light years away. Even if you're in another time. I will always love you to the Milky Way.*[5]

In its beginning, the film's cosmic landscape is full of light and in the end, it becomes a landscape of hope, reminding us of the warmth and affectionate light inside the mother's womb. The work's love and hope for humanity always remains true regardless of time or space. *Ningwasum* emphasizes the task of the decolonial artists, scholars and activists in the creation of work that does "not simply offer amendments or edits to the current world, but displays the mutual sacrifice and relationality needed to sabotage colonial systems of thought and power for the purpose of liberatory alternatives."[6] The meditative and philosophical space of *Ningwasum* enables and gives us possibilities for reimagining and expanding our senses by materializing embodied daily life experiences.

Ningwasum questions major world issues while giving us hope and belief in the infinitive power of art and humanity. Coming from a visual art aesthetic and training, Thebe Limbu's moving image method has inherited the language of essay films, especially in its use of juxtaposition which toes a fine line between documentary and fiction. Those polarities are contradicted and aligned with the space-time travel theme of the work. The playful treatment of sound elements from poetic language to folk music, modern hip hop to rap, create a nostalgic hybrid and enable transgenerational sentiments and sensibility. The work has also been screened and discussed in the Yakthung community in Nepal and has become an important historical, cultural and artistic milestone for the community. By infusing different stories, visuals, and auditory elements, the artist Thebe Limbu embraces Indigenous epistemologies so that "*Ningwasum* isn't just limited to critiquing the current societal status quo. It is also about moving further from realism and having the liberty to imagine a future that we can together aspire to."[7]

Notes

[1] Subash Thebe Limbu, *Ningwasum*, 2021.

[2] Mark Turin, "At the Edge of Tomorrow," *Nepali Times*, 23 November 2022. www.nepalitimes.com/banner/at-the-edge-of-tomorrow.

[3] Leanne Betasamosake Simpson, "Land as pedagogy: Nishnaabeg Intelligence and Rebellious Transformation," *Decolonization: Indigeneity, Education & Society 3*. no. 3 (2014): 1-25.

[4] Subash Thebe Limbu, *Ningwasum*, 2021.

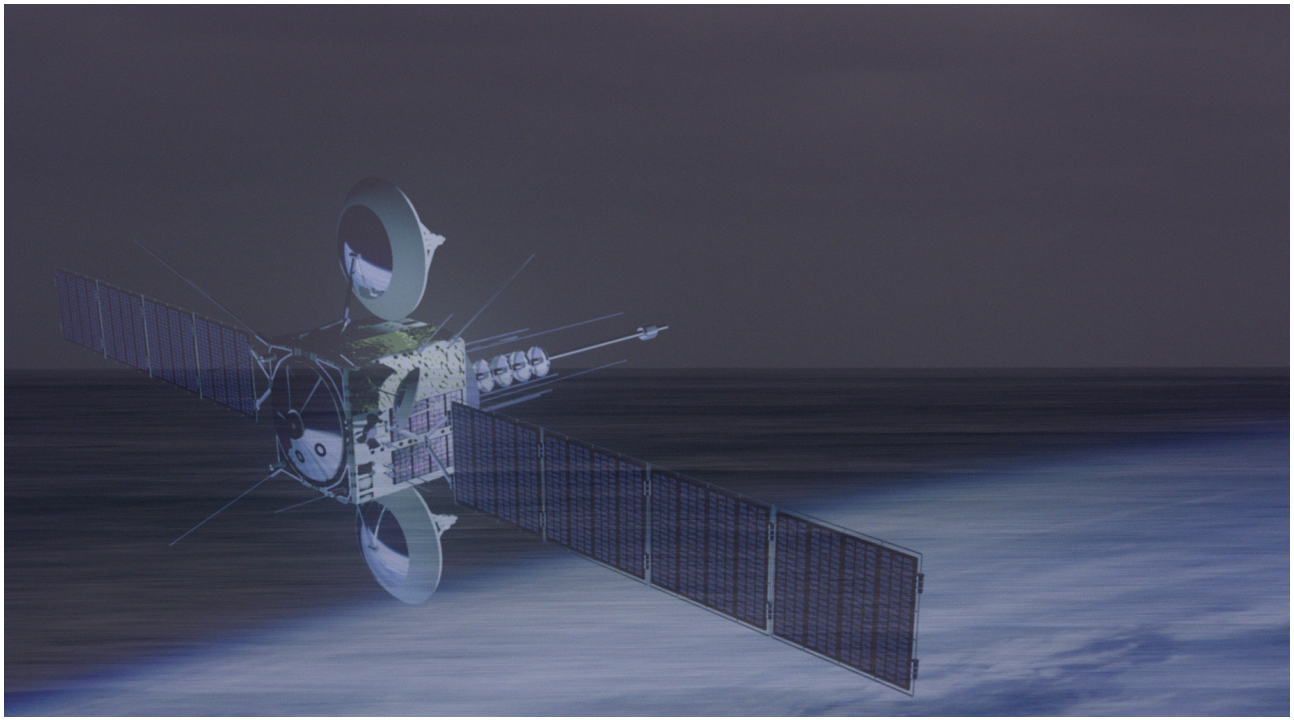
[5] Ibid.

[6] Jarrett Martineau and Eric Ritskes, "Fugitive Indigeneity: Reclaiming the Terrain of Decolonial Struggle Through Indigenous Art," *Decolonization: Indigeneity, Education & Society*. vol. 3 no. 1. pp. I-XII.

[7] Pinki Sris Rana, "Focusing on What If Rather Than What Was," *The Kathmandu Post*, Wednesday, July 12, 2023. https://kathmandupost.com/movie-review/2022/03/11/focusing-on-what-if-rather-than-what-was.

Đỗ Tường Linh is a curator, art researcher, writer based between Hanoi (Vietnam) and New York (USA). Linh holds a BA in Art History and theoretical criticism from Vietnam University of Fine Arts and a MA in Contemporary Art and Art Theory of Asia and Africa at SOAS (University of London). UK. Her research and curatorial practice range from art and politics, to conceptualism and post-colonial studies. She was part of the curatorial team of 12th Berlin Biennial.


There's new data about one of the exoplanets I've been observing.



Alice dos Reis

See You Later Space Island

In the middle of the Atlantic, Helena rekindles an old friendship with Ceu, an astrophysicist who recently relocated to the Azorean island of Santa Maria off the coast of Portugal, to study exoplanets. Caught between the island's geological inheritance and the vastness of the cosmos, the two friends reconcile with the various space exploration infrastructures that are stationed on the island. A work of science-fiction inspired by the various space technologies currently existing in Santa Maria, *See You Later Space Island* is a loose tale of friendship and endurance. Santa Maria is also the place in which Portugal attempted to establish satellite launcher, a project that was never realized.

See you later Space Island, 2022. 18 min, HD.

Alice dos Reis
Untitled, 2022
Cotton thread and embroidery canvas
17.7 x 12.2 in (45 x 31 cm)

This set of tapestries is inspired by the speculative landscapes of Serra da Gardunha in the Portuguese interior, which is known as a place of both paranormal sightings and religious apparitions. These myths have developed into claims that the mountain is hollow, concealing a UFO hangar inside.

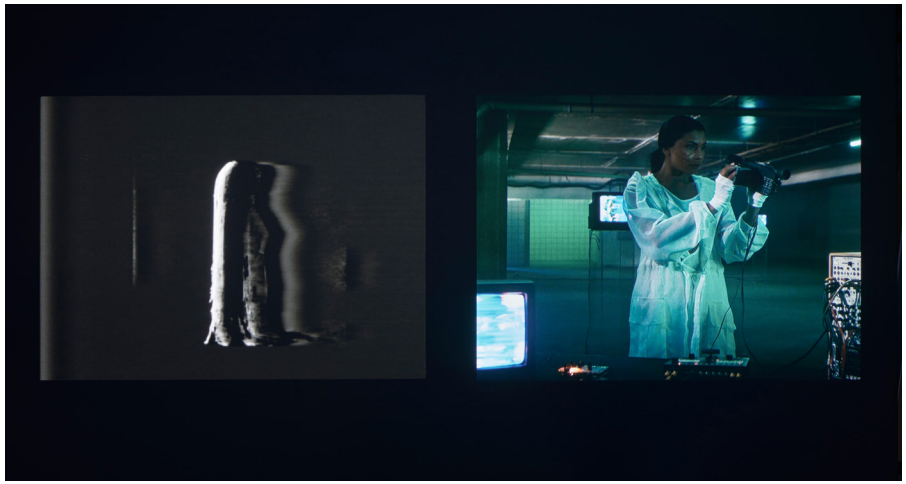
Bios

Nuotama Bodomo is a Ghanaian filmmaker. Her award-winning short films have played at festivals including sundance, the Berlinale, Telluride, Rotterdam, sxsw, and New Directors/New Films. *Afronauts* was exhibited at the Whitney museum as part of the group show *dreamlands: immersive cinema and art*, 1905-2016 and at the 2018 Venice Biennale architecture (US pavilion) as part of *dimensions of citizenship*.

Alice dos Reis (Lisbon) is a visual artist. They have exhibited, solo and in group, at the Serralves Museum for Contemporary Art (Porto), Kunsthalle Lissabon (Lisbon), Gallerie D'Italia (Torino), 5th Istanbul Design Biennale (Istanbul), RADIUS CCA (Delft), Porto Municipal Gallery (Porto), PuntWG (Amsterdam), Galerie InSitu (Paris), Display (Prague), Gallery and Lehmann + Silva, among others. Their films have been shown at the Palais de Tokyo (Paris), EYE Film Museum (Amsterdam), Platform Vdrome, and Museum of the Moving Image (NYC), as well as in various international film festivals. They co-run Pântano Books, an independent poetry press.

Zahy Tehentar (Brazil) lives and works in Rio de Janeiro. Tentehar is a multidisciplinary artist, filmmaker, actor, and activist from the Tentehar-Guajajara people. Tentehar's video works examine contemporary indigenous identities and experiences amidst ongoing struggles for land rights and against ecological exploitation in the aftermath of colonial invasion. Her works have previously been shown in exhibitions including Dja Guata Porã: Indigenous Rio de Janeiro at Museu de Arte (MAR), Rio de Janeiro, Brazil (2017); Nakoada: Strategies for Modern Art at the Museu de Arte Moderna do Rio de Janeiro (MAM-Rio), Rio de Janeiro (2022), and a recent solo presentation at the Museu de Arte de São Paulo (MASP), São Paulo (2021).

Subash Thebe Limbu (Nepal) is an artist and comes from the people of Dharan, Nepal. He works with sound, film, music, performance, and painting. Subash has a MA in Fine Art from Central Saint Martins (2016), BA in Fine Art from Middlesex University (2011), and Intermediate in Fine Art from Lalit Kala Campus, Kathmandu. His works are inspired by socio-political issues, resistance, and science/speculative fiction. Indigeneity, climate change, and Adivasi Futurism are recurring themes in his works. He is based in Newa Nation (Kathmandu) and London.



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