Digital Earth Talks
November 7-8, 2019
Jameel Arts Centre, Dubai
Digital Earth Talks brings together artists, scholars and designers from Africa, Europe and Asia to explore how technology influences not only interpersonal relationships but also contemporary geopolitics and our understanding of the world.

‘Digital Earth’ refers to the materiality and immateriality of the digital reality we live in – from data centers to software interfaces and rare minerals to financial derivatives. Earth is dug, excavated, and ripped apart to extract the fundamental materials that keep the computational machine running – oil, coltan, sand, rubber, and lithium form the material basis on which digital reality is built. At the same time, digital technologies enable new modes of circulation and extraction of information and data.

Algorithmic regimes regulate the movement of goods and people around the world in relatively smooth fluxes enabled by increasingly sophisticated surveillance systems. These algorithmic regimes generate, track and accumulate such a mass of data that it is already referred to as the ‘digital twin’ of Earth. The existence of a physical planet and its ‘datafied’ counterpart generate a discrepancy between the reality on the ground and what is recorded and broadcasted. What forms of socio-political, economic, ecological and cultural frictions does this discrepancy generate? How do digital technologies shape the way we map and understand space in different regions around the world? How have diverse worldviews, shaped by social and spiritual concerns, affected the way technologies have been developed and implemented across the globe?

Digital Earth Talks is a collaboration between Digital Earth; a global research network of artists and scholars interrogating how 21st-century technology shapes geopolitics and Jameel Arts Centre; an independent arts institution dedicated to exhibiting contemporary art to the public and engaging communities through learning, research and commissions.
Thursday November 7, 2019

COSMOLOGIES: WHAT WORLDS WILL WE PRODUCE?

10am-1pm  KNOWLEDGE STUDIO
Facilitated by Nishant Shah (pre-registration)

1-2pm  FILM PROGRAMME: GALLERY 9
Louis Henderson: All that is solid (2014) 15’40”
Sarah Meyohas: Cloud of Petals (2017) 30’12”

2-4pm  PANEL: OLD WORLDS AND NEW BEGINNINGS
Introduction
2:10  Federico Campagna: After the end of the timeline: compressed technologies
2:45  Arianne Conty: Animism in the Anthropocene
3:25  Discussion and Q&A moderated by Nada Raza
4  Coffee Break

4:20-6pm  PANEL: INNOVATE IN CRITICAL TIMES?
Introduction
4:20
4:30  Clapperton Chakanetsa Mavhunga: Multi-skills Partnership in Service of Problem-solving: Evolving Climate Change Mitigation Story of Ward 17, Zimbabwe
5:05  Brendan McGetrick: What is innovation anyway?
5:40  Discussion and Q&A moderated by Nishant Shah

6:30-8pm  FILM PROGRAMME: GALLERY 9
Geocinema: Framing Territories (2019) 15’30”
Francois Knoetze: Core Dump (2019) 49’91”
Tabita Rezaire: Mamelles Ancestrales (2019) 61’
Friday November 8, 2019

CARTOGRAPHIES: LOOK BACK AT THE WORLD!

10am-1pm  KNOWLEDGE STUDIO
Facilitated by Nishant Shah (pre-registration)

1-2pm  FILM PROGRAMME: GALLERY 9
Erin Espelie: The Lanthanide Series (2014) 70’

2-4pm  PANEL: NOT SO IMMATERIAL
2  Introduction
2:10  Vladan Joler: Anatomy of an AI System
2:45  Jean Katambayi Mukendi and Maarten Vanden Eynde: On-Trade-Off: Tesla Crash, a Speculation
3:25  Discussion and Q&A moderated by Nadia Christidi
4  Coffee Break

4:20-6:10pm  PANEL: DATA AND I
4:20  Introduction
4:30  Nanjala Nyabola: Cartographies of Belonging
5:05  Wael Eskandar: The Inevitability of Technology
5:40  Discussion and Q&A moderated by with Lawrence Abu Hamdan

6:30-7:30  JAMES BRIDLE: OTHER INTELLIGENCES
Discussion and Q&A moderated by Lawrence Abu Hamdan

8-9:30pm  FILM PROGRAMME: GALLERY 9
Tekla Aslanishvili: Algorithmic Island (2019) 60’14’’
(rough cut screening)
COSMOLOGIES: WHAT WORLDS WILL WE PRODUCE?
Whether we call them foundational myths or worldviews, cosmologies are the universal narratives that different cultures create to explain the world around us. Among them, the origin of technics and technology, and our relationship to them, are narrated differently in Chinese, Arabic and Greek among others, with radically different consequences. For instance, Chinese cosmology created traditional medicines based on yin and yang, African divination systems pioneered the binary code, and Promethean myths made the industrial revolution as we know it possible. How are new and old myths shaping the future of digital technologies? The geographical diversity of the participants allows us to re-think (rather re-imagine) these deep narratives, investigating them but also creating new ones that form new and renewed relations, between Africa and China for instance, or the Gulf and India.
After the end of the timeline: compressed technologies
a lecture by Federico Campagna

Ever since technology first untangled itself from archaic ritualism, its global dominance has been expansive: more power, greater reach, higher efficiency, larger distribution, and so on. Its reliance on a massively distributed, hyper-complex network of resources and infrastructures, means that any significant disruption can easily cause the entire system to collapse. It seems likely that the only trace of our Technic/Capitalist civilisation to reach the future will be pollution, landfills and degrading concrete: a civilisation without culture, a black hole in history from which future generations will struggle to recover.

But it doesn’t have to be so. There are other, more compressed forms of technology that might still make it through the narrow passage of societal collapse, bringing with them a speck of culture. These compressed forms of technology rely directly on living bodies which they connect along invisible, resilient networks.

This talk will discuss the nature of such ‘compressed technologies’, the expanded range of experience that comes with them, and their relevance to the contemporary and post-contemporary historical age.

Federico Campagna is a philosopher and writer. Before moving to London in 2007 he spent more than twenty years in Milan, where he was active in the anarchist/autonomist networks and co-founded the street-poetry collective Eveline. In his latest work Technic and Magic Federico suggests a radically alternative worldview and reintroduces non-Western mysticism and magic as an alternative way of shaping the world and life.

Animism in the Anthropocene
a lecture by Arianne Conty

Following upon philosopher Bruno Latour’s famous injunction that “we have never been modern,” religious studies scholar Graham Harvey has recently added that perhaps “we have always been
With the massive eco-system destruction that is underway in the Anthropocene Age, this realization could provide the necessary paradigm shift to address anthropogenic climate change. Currently, our techno-scientific innovations tend to reinforce the nature/culture divide responsible for the anthropocentrism that justifies mastery over the earth rather than understanding our dependency upon it. Expropriation and destruction are intrinsic to the modern division between a world of cultural values attributed exclusively to humans, and a world of brute inanimate matter devoid of value. But this division has become untenable. Showing the illusory nature of this divide should in and of itself open the possibility for redefining an animistic relational ontology. Developing the four traits typical of animistic cultures, personhood, relationality, location and ontological boundary crossing, a postmodern “machinic animism” will be developed as a new ecological paradigm for the Anthropocene Age.

Arianne Conty is a continental philosopher working as an associate professor of philosophy at the American University of Sharjah. Her research is in the fields of the philosophy of nature, and the philosophy of technology. She is currently writing a book developing an interdisciplinary philosophical response to the Anthropocene. Her articles have been published in many reputable journals, including Environmental Values, Theory, Culture & Society, Politics, Religion & Ideology, Technē: Research in Philosophy and Technology, Philosophy Today, South African Journal of Philosophy, Dialesthai, Odradek, La Deleuziana, Literature & Theology, Medieval Mystical Theology and Religion and the Arts.

Session ends with a discussion moderated by Nada Raza.

Nada Raza is Artistic Director of the Ishara Art Foundation. Raza was previously Research Curator at Tate Research Centre: Asia, with a particular focus on South Asia, and led on Tate activity in the region. Alongside collection building, supervising research and producing public events, she organised displays of work by international artists including Meshac Gaba, Monir Shahroudy Farmanfarmaian, Zarina Hashmi, Sheela Gowda, Amar Kanwar and Mrinalini Mukherjee.
Multi-skills Partnership in Service of Problem-solving: The Evolving Climate Change Mitigation Story of Ward 17, Zimbabwe

a lecture by Clapperton Chakanetsa Mavhunga

The Western template of rigid disciplines that we have inherited is not suited for the 21st century. It tunnels us into mono-skilled bookworms stuck in our ivory tower while the world proceeds without the benefit of the meticulous knowledge that we uncover through rigorous research; producing knowledge that is too academic for solving society’s pressing challenges. At best, when we talk about “interdisciplinarity,” we mean bringing humanists and/or social scientists and their materials into dialogue, and on the rare occasion humanities and social sciences engaging with bench sciences and engineering, but intra-university, each guarding its categories, methods, and position with heavy armor and artillery. Interdisciplinarity’s problem is precisely that it is limited to and by the university’s disciplines and values. This talk presents a different story of partnership in service of problem-solving that defies discipline, or centrality of “the university” as knowledge-maker.

Clapperton Chakanetsa Mavhunga is Associate Professor of Science, Technology, and Society at MIT. He is the author of Transient Workspaces: Technologies of Everyday Innovation in Zimbabwe and the editor of What Do Science, Technology, and Innovation Mean from Africa?, both published by the MIT Press.
What is innovation anyway?  
A lecture by Brendan McGetrick

As we stumble through these critical times, it is increasingly clear that the standard means of describing our world are no longer adequate. The words and values engrained in our books and magazines, in film and online, are unable to accurately describe the forces shaping our lives. If we are to make the most of the present and think more intelligently about the future, we first need to refresh our language. To begin this process, this talk will offer a hard look at one of the defining terms of our time, innovation.

Innovation is a magical term that somehow manages to be both ubiquitous and obscure. In politics and the press, it is defined mostly by the priorities of the marketplace. The market judges innovations by their technical effectiveness, by whether they succeed or fail to do the job they are designed to do. But always, even for the most brilliantly successful technology, an ethical question lurks in the background: the question of whether the job the technology is designed to do is actually worth doing.

This talk will address the dangers of innovating in an ethical vacuum and make a case for a liberating the term from the limitations of the market in order create space for the millions of acts of imagination that occur beyond the bounds of ‘innovation’.

Brendan McGetrick is a writer, curator, and designer. His work has appeared in publications in more than thirty countries, including The New York Times, Wired, The Financial Times, Art Review, Der Spiegel, Domus, and Vogue Nippon. His projects include the books Content (Taschen), MAD Dinner (Actar), and Urban China: Work In Progress (Timezone 8). In 2011, he curated Unnamed Design, a component of the 2011 Gwangju Design Biennale, in collaboration with Ai Weiwei. The exhibition received over 200,000 visitors and was named the year’s best contemporary design show by the New York Times. In 2014, he co-curated Fair Enough in the Russian pavilion at the Venice Architecture Biennale, together with Anton Kalgaev and Dasha Paramonova.
In 2017, together with Justin McGuirk, he curated California: Designing Freedom at the Design Museum in London. Since 2015, he has served as the director of Global Grad Show, the world’s largest exhibition of graduate design and technology. He is currently the Creative Director of the Museum of the Future, a visionary cultural institution currently under construction in Dubai.

Session ends with a discussion moderated by Nishant Shah.

Nishant Shah is a feminist, humanist, technologist and is currently the vice-president of Research at the ArtEZ University of the Arts, The Netherlands. He works as a knowledge partner with the Digital Earth fellowship with Hivos, and with the Feminist Internet Research Network with the Association of Progressive Communication. His ongoing work is invested in understanding the state of misinformation, fakeness, and violence through the frame of techno-aesthetics ‘aesthetechs’ in order to find new processes of civic action. *2018-19 Digital Earth mentor

DIGITAL EARTH: VERTICAL ATLAS

a lecture by Arthur Steiner and Leonardo Dellanoce

Vertical Atlas is a new atlas to navigate the global shifts in digital technologies and geopolitics around the world. The publication is the visible outcome of two years of research and think tanks organized around the globe by Digital Earth.

The computer in the palm of our hands is a ‘portal gun’ — an entry point to a planetary structure linking lithium mines in Chile to offshore data servers in Russia, to fiber-optic submarine cables in the Atlantic to freeports in Singapore, to corporate-owned satellites in orbit, to a swelling quantity of IP addresses and teraflops of data. Old cultural, economic and political structures and connections are being reshaped by digital technologies into new, uncanny geographies — and all the while we already inhabit them.
#HYPERBODY

a VR installation by Hyperbation

How can post-humanism and techno-Orientalism contribute to a better definition of maximalism in art and architecture? How can VR (virtual reality) and AR (augmented reality) technology better inform an understanding of body without organs i.e. HyperBody?

The research is undertaken by art and architectural practice and seeks to provide a definition of ‘HyperBody’: a hybrid of architecture, anatomy, anthropology and game. It investigated three specific geographic locations in China that each presents a specific type of excess: The Hyper-religious Body in the Dunhuang Caves, Gansu Province, the Hyper-sexual Body in Beijing, and the Hyper-gastronomical Body in Chongqing. Each offers an expansion of the maximalism research approach, based on visual excess. By conducting field work at these sites, Hyperbation tried to remix, recreate and rediscover the spaces around and beyond the human body in order to ultimately lead to the ‘HyperBody’ – a multi-reality architectural experiment that mediates between the physical and virtual spheres.

Hyperbation consists of Mingxuan Xie and Pete Jiadong Qiang. This interdisciplinary artist duo remix, recreate and rediscover the relationship between the human body and digital technology. They create alternative mixed reality architectural experiments aimed at erasing the boundaries between virtual and physical spaces, while expanding the notions of gamification, hyperization and hyperlocalization. Hyperbation exhibited at Paradise Air, Matsudo (2018), Zero to One, London (2018) and the Architectural Association School of Architecture during the London Festival of Architecture (2018).

*2018-19 Digital Earth fellows*
CARTOGRAPHIES: LOOK BACK AT THE WORLD!
The world doesn’t look like the maps we are used to. Digital technologies impacted not only the very way we create maps (through satellite imagery, GPS systems and user-adaptive cartography), but have become themselves a new variable in map making, just like oceans and mountains.

Through modern cartography, the world was remapped according to colonial logics, erasing and purposefully forgetting the realities on the ground – cloud platforms are just a different flavour of the same. As specific interests are hidden behind smooth interfaces, the social, political and ecological conditions of this new map-making are not acknowledged. Together with speakers from all over the world, we will rethink possibilities of map-making, from discursive storytelling to graphic representations, in order to understand how digital technologies shape and represent space in different regions around the world today.
NOT SO IMMATERIAL!

with Vladan Joler, Jean Katambayi Mukendi and Maarten Vanden Eynde

Anatomy of an AI System
a lecture by Vladan Joler

At this moment in the 21st century, we see a new form of extractivism that is well underway: one that reaches into the furthest corners of the biosphere and the deepest layers of human cognitive and affective being. Many of the assumptions about human life made by machine learning systems are narrow, normative, and laden with error. Yet they are inscribing and building those assumptions into a new world, and will increasingly play a role in how opportunities, wealth, and knowledge are distributed.

Anatomy of an AI System is a large-scale map and long-form essay investigating the human labor, data, and planetary resources required to build and operate an Amazon Echo. The exploded view diagram combines and visualizes three central, extractive processes that are required to run a large-scale artificial intelligence system: material resources, human labor, and data. The map and essay consider these three elements across time—represented as a visual description of the birth, life, and death of a single Amazon Echo unit.

Vladan Joler is SHARE Foundation founder and professor at the New Media department of the University of Novi Sad. He is leading SHARE Lab, a research and data investigation lab for exploring different technical and social aspects of algorithmic transparency, digital labor exploitation, invisible infrastructures, black boxes, and many other contemporary phenomena on the intersection between technology and society.

On-Trade-Off: Tesla Crash, a Speculation
a conversation between Jean Katambayi Mukendi and Maarten Vanden Eynde

In this presentation, Jean and Maarten will talk about their work, the collaborative project On-Trade-Off, their expedition to the Manono concession and Lithium mine which is currently under construction, and elaborate on the project Tesla Crash, a Speculation.
On-Trade-Off is an ongoing collaborative artistic-research project that raises awareness about environmental and economic implications of the extraction and processing of lithium, the main raw material needed for the global production of Green Energy. Lithium, a naturally occurring element (number three on the periodic table), is currently considered to be ‘the new black gold’ because of its crucial role in the global transition towards a ‘fossil fuel free economy’. Focusing on this one chemical element (Li3) allows the project to zooms in on particular social, ecological, economic and political phenomena that characterize production processes that are currently in full development.

Tesla Crash, a Speculation is a handmade 1:1 model of the notorious Tesla Model X in recycled copper wires using a special weaving technique that was produced by Jean Katambayi Mukendi (in collaboration with Sammy Baloji and Daddy Tshikaya) in the framework of Digital Earth. This wire construction is inspired by miniature replicas of prototypes of wire cars that the children of workers living in mining camps used to make in Lubumbashi. the metal wire 1:1 scale Tesla Model X provokes speculation about the enrichment of the global mineral industry against the background of a local economy that is still static and poor, lacking the most basic technological tools like electricity we take for granted now.

Jean Katambayi Mukendi is an artist based in the Democratic Republic of Congo. His practice lies at the intersection of technology, mechanics, geometrics and electricity. He fuses his training as an electrician with the influences from his daily life within his works. Driven by complex electrical mechanisms, his installations seek to find solutions for issues within Congolese society through technological investigations. He recently exhibited in the 6th Lubumbashi Biennial, D.R. Congo (2019); 9th Contour Biennial in Mechelen and Wiels in Brussels, Belgium (2019); Kunsthaus Graz, Austria (2018); Muhka in Antwerp, Belgium (2018); Stroom in The Hague, The Netherlands (2017); Museum für Völkerkunde in Hamburg, Germany (2017); 12th Havana Biennial, Cuba (2015); Royal Museums of Fine Arts in Brussels, Belgium (2015); 11th Dak’Art Biennial in Dakar (2014).

*2018-19 Digital Earth fellow
Maarten Vanden Eynde is an artist based in Belgium and France. His work is situated exactly on the borderline between the past and the future; sometimes looking forward to the future of yesterday, sometimes looking back to the history of tomorrow. Tracing the origin and usage of different materials like rubber, copper, uranium, cotton and silicon, he merges old and contemporary stories of trade and colonisation with physical remnants of technological evolution. He recently exhibited in the 6th Lubumbashi Biennial, D.R. Congo; 9th Contour Biennial in Mechelen, Belgium (2019); RIBOCA/Riga International Biennial of Contemporary Art in Riga, Latvia (2018); Belgian Art Prize in Bozar, Brussels, Belgium (2017); 2050. A Brief History of the Future at National Museum of Fine Arts in Taichung, Taiwan (2018), Palazzo Reale in Milan, Italy (2016) and The Royal Museums of Fine Art in Brussels, Belgium (2015). In 2005 he founded Enough Room for Space (ERforS), an interdependent art initiative that initiates and coordinates events, residencies, research projects and exhibitions worldwide, together with Marjolijn Dijkman.

*2018-19 Digital Earth mentor

Session ends with a discussion moderated by Nadia Christidi.

Nadia Christidi is a Syrian, Palestinian, and Greek researcher, writer, and arts practitioner based between Cambridge, MA and Beirut, Lebanon. Her work explores the political and economic dimensions of environmental imaginaries, earth sciences, and their representation in literature, art, and design. She has exhibited at Beirut Art Center; SALT Galata, Istanbul; and SALT Ulus, Ankara. Nadia was previously Assistant Director at Beirut Art Center and Interpretation and Learning Lead at Darat al Funun, Amman, and has worked on exhibition projects with Ashkal Alwan and the Young Arab Theatre Fund. Her writing has been published by Arteeast, ArtAsiaPacific, and TandemWorks. Nadia holds a BA in History of Art (2006) from Bryn Mawr College, Pennsylvania and an MA in Historical Studies (2015) from the New School for Social Research, New York. She is currently a PhD candidate in History, Anthropology, and Science, Technology, and Society at MIT.
DATA AND I

with Nanjala Nyabola and Wael Eskandar

Cartographies of Belonging
a lecture by Nanjala Nyabola

All over the world there are examples of ethnic identities that have been remade simply by drawing lines in the sand, particularly by power, and the long lasting political consequences that arise from that. Yet, with the advent of digital technology, states all over the world have become even more enthusiastic about drawing these lines in the sand: redefining the parameters of identity, inclusion and exclusion by the stroke of a keyboard. A stroke of the keyboard made millions of people stateless in India: a digital society fuelled genocide in Myanmar; new digital identity systems are being built to exclude the Other from Europe.

What do these new digital cartographies do to our sense of belonging and inclusion? This talk will highlight some of the ways in which the digital is redefining our sense of identity and belonging. It will discuss surveillance economies, centralised identity systems, as well as border and visa regimes to highlight the ways that the digital is hardening borders, including intangible boundaries within the nation states. In this way, it will elaborate the contours of contemporary digital cartographies, their pitfalls and the challenges they present.

Nanjala Nyabola is a writer and political analyst based in Nairobi, Kenya and the author of Digital Democracy, Analogue Politics and a co-editor of Where Women Are: Gender and the 2017 Kenyan Election. Her writing has appeared in the Foreign Policy, New Internationalist, Al Jazeera, Project Syndicate, among others.

The Inevitability of Technology
a lecture by Wael Eskandar

Technology has long drifted from being a luxury we may choose to use to simplify tasks that would otherwise demand labor. We can no longer abandon technology at will and focus on manual or analog means. Technology has become so deeply integrated within most elements of our daily lives that it has become impossible to avoid the impact it has on us. What we can see from technology is the tip of
the iceberg with the greater bulk almost invisible beneath the surface of our interactions. Whether it is the infrastructure that supports our daily interactions, policies that control our data or information made available on the internet, we are exposed only to a fraction of what technology is all about and yet live fully with the consequences of using it.

Without digging deeper we are rarely presented with the inner workings of technology that affects our lives and helps shape a great part of it. Knowledge is power here. If people have knowledge and tools, as well as access to critical skills, they can make informed choices and have more of a say on how they want technology to impact their lives and the community they live in.

Wael Eskandar is part of a team that runs the Tactical Tech program Exposing the Invisible, which focuses on inspiring and empowering individuals to conduct their own investigations as a form of engagement. The project highlights the importance of investigation as a means to navigate a world that has been saturated with information. He has worked for numerous NGOs and is a writer, journalist and political analyst. His work ranges from covering arts and culture in Egypt to the political developments and the changing civic space around technology across the world.

Session ends with a discussion moderated by Lawrence Abu Hamdan.

Lawrence Abu Hamdan is an artist based in Lebanon. In 2019 he was nominated for the Turner Prize for his exhibition *Earwitness Theatre* and his performance *After Sfx*. His solo presentations have taken place at Witte De With, Rotterdam (2019), Tate Modern Tanks & Chisenhale Gallery, London, Hammer Museum L.A (2018), Portikus Frankfurt (2016), Kunsthalle St Gallen (2015), Beirut in Cairo (2013), The Showroom, London (2012), Casco, Utrecht (2012). His audio investigations has been used as evidence at the UK Asylum and Immigration Tribunal and as advocacy for organisations such as Amnesty International and Defence for Children International together with fellow researchers from Forensic Architecture.
OTHER INTELLIGENCES

a lecture by James Bridle

New technologies are forged in the image of the societies that create them; thereafter they shape them in turn. What does our current obsession with Artificial Intelligence say about us? Why are we so obsessed with a technology that might usurp or destroy us? What sort of intelligences do we want to create? And what about the other intelligences that have been here all along? We’re only just beginning to learn about the multitude of other forms that intelligence takes in non-humans: animals, plants, and ecological systems. What might we learn from them, and how might that understanding reshape us too?

James Bridle is an interdisciplinary artist, and journalist. An explorer of a strange corner of the internet, he challenges, questions and critiques our relationship with technology. His viral Medium post “Something is wrong on the internet” pressured Youtube to terminate over 50 channels targeting children and his new book the “New Dark Age”, is a deep dive into technology, knowledge, and the end of the future. James Bridle’s artworks have been exhibited worldwide and his writings have appeared in Wired, Harpers, the Atlantic, the New Statesman, the Guardian, and the Observer.

Q&A and discussion moderated by Lawrence Abu Hamdan
NOVEMBER 6-9

All Films

NOVEMBER 10-17

Louis Henderson: All that is solid (2014)
Francois Knoetze: Core Dump (2019)

NOVEMBER 18-25

Geocinema: Framing Territories (2019)
Tabita Rezaire: Mamelles Ancestrales (2019)

NOVEMBER 26 - DECEMBER 2

Sarah Meyohas: Cloud of Petals (2017)
Erin Espelie: The Lanthanide Series (2014)
Geocinema

Framing Territories (2019)

HD 15’30”
Framing Territories starts inside the Chinese Science Academy, before traversing outwards across landscapes of earth sensing. Satellites, surveillance cameras, seismic and geosensors constellate as new international collaborations take shape. They are driven by a shared urgent need to predict the future of the Earth’s increasingly volatile climates. Plans are simultaneously being drawn by China’s Belt and Road Initiative, which seeks to synchronize the continuous sampling, surveillance and quantification performed by a polyphony of instruments situated in territories spanning between Asia and Europe. Together, they measure the limits of the planet to gauge how it is changing and how it can be changed.

This film acts as an investigative documentary into large-scale systems and infrastructures amidst growing ecological and political anxieties. As passively documenting prospective mining sites, surveying land for new fibre optic cables and monitoring clouds of pollution, something awakens inside this ‘Geocinema’; its gaze capturing movement, relationships, and perhaps even poetry. Scenes between a conversation with a UN environmental representative during a conference in Tengchong, predictions narrated by climate scientists in Bangkok, a guard watching the Beijing satellite-ground station are woven together—each being instantiations that interrogate the various instruments that are being used to read the very earth upon which we stand.

Geocinema consists of art historian Asia Bazdyrieva and filmmaker Solveig Suess. Bazdyrieva studied analytical chemistry at the Kyiv National University (2009) and art history at The City University of New York as a Fulbright grantee (2017). Suess completed her undergraduate in Visual Cultures at the Glasgow School of Art, with her postgraduate at the Centre for Research Architecture, Goldsmiths University, London (2017). Bazdyrieva and Suess started their collaboration at the New Normal think-tank, Strelka Institute, Moscow (2018).

*2018-19 Digital Earth fellows*
Tekla Aslanishvili

*Algorithmic Island* (2019)
(rough cut screening)
HD 60’14”
Algorithmic Island is a documentary film, focused on the trials and errors of developing a futuristic city and logistics hub in Anaklia, a village lying on the north-western edge of the Georgian Republic. An essayistic documentary investigates the material and social conditions that are produced as a result of ambitious infrastructural investments, aimed at transforming the country of Georgia into a trade corridor for the speculative New Silk Road project.

By exploring the awkward infrastructural landscapes and relating architectural frictions that have emerged over the last decade in Anaklia, the film observes how the planning strategies and operational logics of large scale infrastructural investments and even mistakes, which the fantasies of technologically managed smooth urban life inevitably contain, are being manifested in a design of peripheral large-scale geo-engineering projects.

Through artistic-scientific collaborations with international researchers, film partially positions itself at a distance from the actual events and speculates about the possible scenarios of development from a future perspective.

Tekla Aslanishvili is an artist, essayist and curator based in Tbilisi and Berlin. Tekla’s work investigates proliferated practices of automated production and the algorithmic management of global urban spaces; her artistic focus lies with the possibilities of unfolding the potential of computation for progressive social and political change. She creates cross-disciplinary essayistic documentary films, interventionist performances, video installations, as well as texts and lectures. She has also taken part in residency programmes, including Casino Luxembourg (2015), the Foundation Center for Contemporary Art in Kiev, Ukraine (2014), and Tirana Institute of Contemporary Art, Albania (2013). *2018-19 Digital Earth fellow
Francois Knoetze
Core Dump (2019)
HD 49’91”
Set in Kinshasa, Shenzhen, Karlsruhe, Chengdu, New York and Dakar, Core Dump is an ongoing video series which explores the relationship between digital technology and colonialism. Core Dump considers the extractive nature of the tech industry and its origins, looking specifically at mining in the DRC, the dumping of e-waste on Africa’s west coast, and how notions of ‘progress’ and ‘mechanisation’ are falsely represented as products of the West, disregarding the contribution – both historically and in the current supply chain – of Africa. It tries to uncover ways in which the ‘materiality and immateriality of digital reality’ has played out to devastating effect across the African continent, but also to highlight conceptual connections between the West’s notion(s) of a ‘tech utopias’ and the ‘broken paradises’ it mines to create these. The films are rhizomatic assemblages of found footage, performance documentation and recorded interviews that form narrative portraits of the uncertainty in the nervous system of a global digital machine at the brink of collapse.

François Knoetze is a performance artist, filmmaker, and sculptor, currently based in Cape Town. Knoetze’s practice explores the life cycles of discarded objects and the intersections of material and social histories. Using material waste as a medium, he creates elaborate sculptural suits that merge the human with the synthetic. Through the personification of objects that occur with the performance of the sculptural suits, Knoetze tries to bring into view the objectification of people. His works have been presented at a wide range of national and international group exhibitions and festivals, including the Afropixel Festival & Dak’Art Biennale in Dakar (2018), LagosPhoto Festival, Nigeria (2015), and Syngenta Photo Awards Exhibition at Somerset House, London (2017).

*2018-19 Digital Earth fellow*
Tabita Rezaire

*Mamelles Ancestrales* (2019)
HD 61’
Drawing inspiration from the megalithic landscapes of Senegal and The Gambia, archaeology, astronomy, numerology, theology and African understandings of the cosmos, *Mamelles Ancestrales* strives to establish pathways between heaven and earth, between the living and the dead, in a world where celestial bodies, mineral life and spirits sing together.

Cultures throughout the world have always turned to the skies to get their bearings, find answers, and understand the mysteries of the universe. Observing the heavens has impacted on architecture, navigation, agriculture, politics, mathematics – and art. In *Mamelles Ancestrales* Rezaire investigates the quest of our ancestors and the methods they used to understand and connect to the celestial realms in the face of our contemporary drive for spatial conquest.

The film is the result of the artist’s research and expeditions to four megalithic sites: the stone circles of Sine Ngayene and Wanar in Senegal, and Wassu and Kerbatch in The Gambia. Gathering stories from the guardians of the sites, local populations and other understandings from astronomers, archeologists, and theologians to unfold the mysteries of the thousands of stones circles scattered across Senegambia, Mamelles Ancestrales goes in pursuit of an ancient African Megalithic civilization so as to better understand our own. From petrified brides to burial sites, ancient observatories, ceremonial ground, haunted places, or energy device, for Rezaire the stone circles become the center of a scientific, mystic, and cosmologic research. This dance of circular and orbital geometries is imagined as a meditation on outer space and a revelation of the communicative pathways between the cosmos and humankind.

Tabita Rezaire is a cross-dimensional new media artist and tech-politics researcher. In her work she explores the possibilities of decolonial healing through technology. Both offline and online she considers the prevalent matrix of colonality and how it affects matters of identity, sexuality, technology, health and spirituality. Her works have been shown at the 9th Berlin Biennale, Tate Modern, London, and Museum of Modern Art, Paris. She is a co-founder of the creative agency NTU, forms half of the artist duo Malaxa Andis the mother of the energy house Seneb.

*2018-19 Digital Earth fellow*
Louis Henderson

*All that is solid* (2014)

HD 15’40”
This is a film that takes place.
In between a hard place,
a hard drive,
and
an imaginary,
a soft space – the cloud that holds my data.
And in the soft grey matter,
Contained within the head.

_All that is solid_ is a technographic study of e-recycling and neo-colonial mining filmed in the Agbogbloshie electronic waste ground in Accra and illegal gold mines of Ghana. The video constructs a mise-en-abyme as critique in order to dispel the capitalist myth of the immateriality of new technology - revealing the mineral weight with which the Cloud is grounded to its earthly origins.

_Louis Henderson_ is a filmmaker who is trying to find new ways of working with people to address and question our current global condition defined by racial capitalism and ever-present histories of the European colonial project. Interested in exploring the sonic space of images, his work aims to develop an archaeological method in cinema, listening to the echoes and spirals of the stratigraphic. Since 2017, Henderson has been working within the artist group The Living and the Dead Ensemble. Based between Haiti and France, they focus on theatre, song, slam, poetry and cinema. Henderson has shown his work at various film festivals, exhibitions and biennials worldwide. His work is in the public collection of the Centre National des Arts Plastiques, France, and is distributed by LUX and Video Data Bank.
Sarah Meyohas

*Cloud of Petals* (2017)
16mm transferred to HD, 30’ 12”
Filmed in Bell Works, the film documents the digitization of 10,000 rose petals by 16 men, in order to train an AI algorithm to generate an infinite series of new unique petals. The film is a meditation on how human concepts such as beauty or morality can be taught to and embedded in AI systems, while also touching the future of automated labor, and the physical infrastructures left behind as workplaces become digitized.

Sarah Meyohas is a visual artist working across media. For her latest project, Cloud of Petals, she staged a performance at the site of the former Bell Labs. Sixteen workers photographed 100,000 individual rose petals, compiling a massive dataset. This information was used to map out an artificial intelligence algorithm that learned to generate new, unique petals forever. The performance resulted in a film, six gaze-based virtual reality experiences, and a series of sculptures, presented during a large-scale solo exhibition at Red Bull Arts New York. The film has been screened at various festivals, including the Minneapolis St Paul International Film Festival, Slamdance, NY Times Talks, CogX, and the Locarno Film Festival.
The Lanthanide Series

The Lanthanide Series (2014)
16mm transferred to HD, 70’
From the portals of personal computing devices to ancient obsidian mirrors, optical instruments control how people see, foresee, frame, record, and remember their lives. Filmed entirely through the reflection of black mirrors, The Lanthanide Series meditates on how we understand the world through such material means, with a reliance on history, the Periodic Table, and the people we love.

Erin Espelie is a filmmaker, writer, researcher, and editor, whose science-based experimental and poetic documentaries have shown at the New York Film Festival, the International Film Festival Rotterdam, the British Film Institute’s Experimenta, CPH:DOX, the Copernicus Science Center in Warsaw, the San Francisco Museum of Modern Art, and more. She currently serves as Editor in Chief of Natural History magazine, and works at the University of Colorado Boulder as an assistant professor in Cinema Studies & Critical Media Practices and co-director of NEST (Nature, Environment, Science & Technology) Studio for the Arts.