

On-Trade-Off

Countering Extractivism by Transnational Artist's Collaborations

Lotte Arndt and Oulimata Gueye
in close exchange with the members of *On-Trade-Off*



Le Vide, (The Void), Georges Sanga, Contour Biennale 9, 2019 (1).

Keywords: extractivism, lithium, artistic research, transnational practice

The term extractivism designates far more than the literal extraction of raw materials from soils: it points in a wider sense to the structural foundations of global capitalism, its colonial history, and its ongoing afterlives, comprising contemporary ecocides. It refers to an “understanding that the world, and all its

beings, are inherently commodifiable, violently turned into ‘things’, operating as a standing reserve for the accumulation of profit and power in the hands of a few.”²¹

Global capitalism is fueled by fossil energies, which are most often extracted for the benefit of transnational companies

Correspondence:

Lotte Arndt, lotte.arndt@gmx.de

Cite this article:

Arndt, L. and O. Gueye. 2020. “On-Trade-Off: Countering Extractivism by Transnational Artist's Collaborations.” *Commodity Frontiers* 1: 32-42. doi: 10.18174/CF.2020a17969.

Commodity Frontiers is an open-access journal edited by the CFI Editorial Board, Mindi Schneider, senior editor. Read it online at CommodityFrontiers.com, or our website, commodityfrontiers.com.

This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).



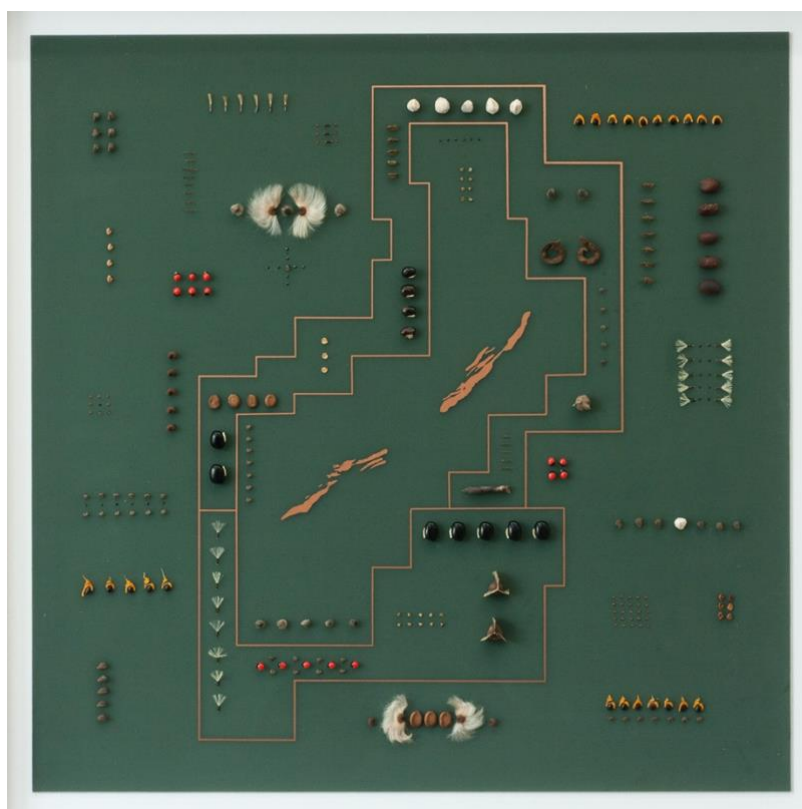
collaborating with national governments, but to the detriment of local populations. In the past decades, extractivism has been theorized mainly in South American scholarship highlighting the “dramatic material change to social and ecological life that underpins [racial capitalism]”.ⁱⁱ

In an extended view angle, the critical discussion of power structures in the global art world refers to extractivism to describe the frequent incorporation of artists from the Global South into galleries, biennales, fairs and exhibitions located mostly in the urban centers of the North, often without long-term engagement for the sustainable working structures in their countries of origin. While the symbolic surplus of the artist’s practice is appropriated unilaterally, the power of the metropolitan centers remains largely untouched.

How to address as an artist collective the profit-maximizing structures of extractivism? A collaboration between a dozen artists and writers on three continents, *On-Trade-Off* enters the “extractive zone”ⁱⁱⁱ, critically examines its functioning, and searches for alternatives. Several artists and thinkers gravitating around the collectives *Enough Room for Space* (co-founded by Marjolijn Dijkman and Maarten Vanden Eynde, Brussels, 2005) and *Picha* (co-founded by Sammy Baloji and Patrick Mudekereza, Lubumbashi, 2009) pushed their long-term conversations further and started to inquire collaboratively about lithium mining in the Congo, the pitfalls of the promises of the green energy revolution, and more broadly, the unequal distribution of risks, destruction, wealth and opportunities along global

value chains. The configurations of the group are evolving, and depend on the specific focus chosen for an exhibition or an event.^{iv} It is nevertheless of crucial structural importance that the project relies on a collaboration between a collective in Lubumbashi, in central Africa, and another Brussels, the middle of Europe, with members joining from changing geographical locations, including Australia, requiring constantly to take into account the realities experienced on all sides.

The geographical starting point for the project is a site of extractivism par excellence: the Manono mine, situated in the Tanganyika province of the Democratic Republic of Congo, 500 kilometers from Lubumbashi. While the mine has been exploited for its tin reserves since 1919, it entered recently in the focus of international speculation on a strategic raw material for the green revolution: as explorative drillings conducted by the Australian company AVZ in 2018 have shown, the soil contains high concentrations of lithium, an alkali metal with high capacities to store electricity. The



Future Flora Manono II, Maarten Vanden Eynde, 2019, photo credit (c) Philippe De Gobert.

prospection on the mine's ores that also contain cassiterite and coltan, both metals of strategic importance for wireless communication, concentrates as a conundrum the contradictions that *On-Trade-Off* examines: While promising to provide a more sustainable technology, the future extraction of the ore will most probably replicate the exclusion of local populations from the wealth of their soils.

Working on a collaborative project between two artist's collectives in the Democratic Republic of Congo and Belgium renders today's asymmetrical structures of the world-economy and their colonial history a palpable reality on many levels. While being connected through the value chains of global industries, artists participating in the *On-Trade-Off* project do not experience the same realities, according to their geographical situation. They work with different tools, went to heterogeneous journeys, and recur to diverse esthetic approaches. The frequently abstract terminology that conceptualizes extractivism materializes in the artworks as concrete takes on the world, engaging with the local effects of globally traded ores, and their transformation into consumer products.^v It is precisely this interconnected reality that the transnational artistic research project *On-Trade-Off* interrogates critically.

In this text we will stress that *On-Trade-Off* strives, by its very structure, its multi-sited geography, its collaborative intention, and the internal redistribution of resources, to resist the rampant extractivist logics of the global art field, including the neo-exotic tokenism of artists from the Global South. By developing *On-Trade-Off* as a permanent dialogue between artists living and working closely connected to the sites of extractive mining, and group members confronted in their direct environment rather to the seducing surfaces of the electronic end products, the project systematically connects the extremities of the world spanning value chains that oftentimes are dissociated. While it cannot pretend to mitigate the destructive

power of capital, it “stays with the trouble”^{vi} and engages enthusiastically in collaboration as a source of learning in multiple perspectives, and mutual transformation.

Ambiguous crossroads

How to work with the vocabulary of the neoliberal economy? *On-Trade-Off* advances in a field dominated by powerful corporate interests and the language of financial speculation. The collective's work is permanently obliged to deal with forces that exceed by far its own possible impact. Reformulating Audre Lorde's fundamental question, it has to ask incessantly if the available conceptual and esthetic tools can contribute to dismantle the extractivist house.

As a consequence, the group engages in continuous criticism and self-reflexivity, not only in the visual production, but also at a linguistic level. Beginning with the project's title, the participating artists interrogate whether a transformative use of the very (visual and linguistic) vocabularies of global trade is possible: in neoclassical economic theory, a trade-off designates situations where increasing one part of an equation requires diminishing another. For example, the destruction of living environments in regions with strategic raw materials is the price to pay for augmenting international interconnectedness and increasing energy efficiency. Rather than to accept the fatalistic stance of this argument, the artists working together on the *On-Trade-Off* project question its assumptions, reconsider the material realities through research, and explore speculative scenarios inventing alternative modes to think about energy, global circulation, and transnational collaboration.

Thus, the group shares a common virtual and material space for textual and visual research, including images and footage by the artists themselves that can be re-

appropriated and used by other group members. Collaboration materializes as commonized material. It was first named *Banque collective* - and evolved after intense discussions on the role of banks in global investment into *Common (Re-)source*. The new name is referencing both, the material flow that originates outside of the group, as a source, requiring responsible uses in more-than-human assemblages, and the critical interrogation of digital information media. It points to the space of the commons, ie. to use values that can be of general benefit precisely because accessing them is not privatized.

Transnational collaborations and technology

On-Trade-Off develops through evolving iterations and context-specific exchanges, taking part in a growing network of activists, researchers, and fellow artists. Invitations to exhibitions and talks provide the framework for progressively inventing a working methodology to inquire about strategic raw materials for global communication industries, financial speculation, and the history of electricity.^{vii} Knowledge is acquired in constant conversations. The group works with complementary perspectives, without unifying the esthetic and analytical approaches. It considers that



Le Vide, (The Void), Georges Sanga, Contour Biennale 9, 2019 (2).

the plurality of experiences allows for a more precise understanding of the global realities of extractivism. The photographic work of Georges Senga (DRC/NL, 1983) is for example closely tied to the mining history of Lubumbashi, testifying of the decisive impact of the mining giant *Gécamines* for generations of the cities' inhabitants. In the past years, his residencies in several European countries have allowed him to access archives out of reach from Lubumbashi. Still, he returns regularly to the city, and feeds parts of his images into the *Common (Re-)source*.



When the Dust Unsettles, Work in Progress Femke Herregraven.

The collaborations between artists are multiple, and take a variety of forms: The artists Musasa (DRC, 1950) and Maarten Vanden Eynde (BE, 1977) work for instance together on a series of tableaux representing the chemical elements, playfully quoting chalkboards and school charts and



Ils ont partagé le monde, Maarten Vanden Eynde & Musasa, produced for the Belgian Art Prize 2017, Bozar.

their educational usages (*Material Matters*, 2018-ongoing). Their approach breaks with the division of applied art and high art, brings together two artists of different generations and living situations, and explores how a collaborative learning and transmission process can look like. In their work, they make use of a classical pedagogical tool - the chalkboard - and use

it to create connections between chemical elements and their industrial uses. *Material Matters* is one example for collaborative practice in the project.

But approaches can also remain distinct and still create strong resonances allowing for all parts to gain new dimensions. Such is the case for Jean Katambayi Mukendi's (DRC, 1974) hand-made speculative drawings and machine-sculptures, and the slickly designed multi-media installations of Femke Herregraven (NL, 1982), that often draw on financial data sets and the visualization of speculation.

Katambayi's work challenges the detrimental effects of mining on local populations by imagining how to appropriate the technological potential of the industrial tools, and to feed it into future design and urbanism. While he frequently draws from calculations of electric flows and technical drawings, Katambayi deliberately employs low-tech proceedings in easily available

materials such as cardboard, paper, or copper wire. He thus claims that complex electric and industrial processes can be handled beyond the hierarchical control of enterprises, and thus appropriates the potential to invent the tools for the future. His personal trajectory led him from degrees in electricity and mathematics to art, and his artistic practice remains strongly informed by his solid technological knowledge.

The research of Herregraven examines the abstract financial renderings of the world, which she interrogates critically as a means of domination, but also explores as a source of imagination. Herregraven's multimedia installations enquire how financial speculation streamlines the complexities of the material world into compact data, represents dramatic socio-ecological transformations - such as species extinction or the melting of the pole capes - as lucrative options for financial speculation, and digitally simulates future extraction sites. Flat screens, clean design, graphically efficient visual solutions, and cutting-edge technology are omnipresent in her artistic work that is comprehensively informed by the visuals and software of global companies.

Herregraven engages deeply with the ambiguity of visual abstraction in the field of finance: She develops narratives from distinct geographic and financial places that she visits materially or electronically, and translates them into images, objects, voices, and 3d-models. While her approach of financial speculation is critical, her work does not shy away from the fascination with the powerful realities generated by algorithms and vertiginous high-speed trade. Katambayi's inventions of tools for shaping future environments and Herregraven's investigative inquiries on the languages of digital trade are esthetically and biographically rooted in distant takes on the world. The collective allows them not only to become complementary, but also to inform each other mutually and contribute to an evolution. The connections between

their work render the interdependence of the local contexts apparent that is frequently obscured by the celebratory discourses of the extractive companies.

Digital working tools and their global entanglements

None of the complex structural questions interrogated by *On-Trade-Off* are external to the group itself. Indeed, working in a transnational collective on three continents depends strongly on the very technologies scrutinized by the groups research: The Covid-19 crisis with its worldwide impact presented a particularly double-sided situation for the work of the highly mobile artists group. During the lockdown, members have been based in Lubumbashi, Sydney, Brussels, Paris, Amsterdam, and Zagreb. The transnational collaboration remained generally possible via computer and smart-phone screens, revealing the striking differences in quality, cost and accessibility of the internet connection, and more broadly electricity in each location. Even if the massive extension of internet-based communication led to decreasing international air-travel with its destructive ecological footprint, it remains nevertheless based on raw material consuming technologies, and their ongoing supply: We know about the energy consumption, water usage, toxicity, and waste caused by the production and use of digital media, that belie corporate myths of their immateriality.^{viii} As several studies demonstrate, by 2030 communication technologies could consume 51 percent of global electricity, and produce 23 percent of greenhouse gas emissions.^{ix} Another report predicts that by 2024, video will comprise 74 percent of data traffic; according to another, 89 percent in 2030.^x While the groups' work visibilizes the production conditions of electronic communication devices, it is itself far from small footprint media practice. The research depends heavily on electronic media, and thus takes part in an economy that extracts labor from bodies; minerals, gaz, and oil from the ground, and that has

no inherent limits to the permanent accumulation process, as Karl Marx wrote in *Capital*, as early as 1884.

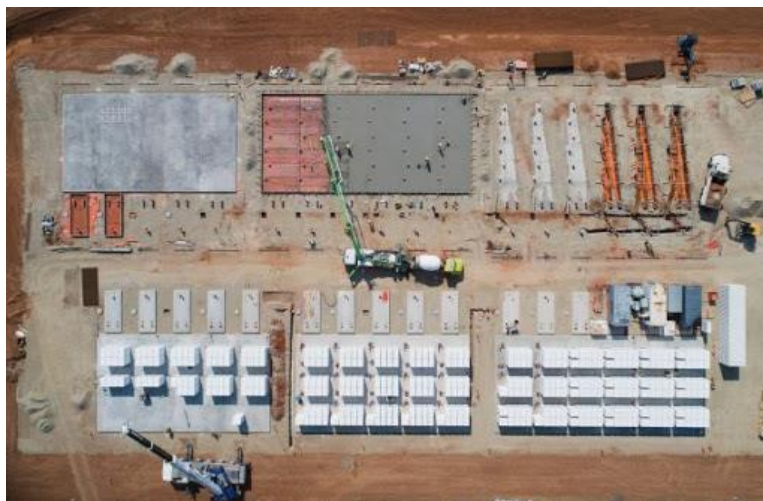
Still, the ongoing research demonstrates that transnational collaboration can contribute to counterbalancing the structural exploitation. While the artists of the group living in the Democratic Republic of Congo are facing unstable electricity supply, rising consumer good prices, and repressive political uses of the sanitary crisis, those based in the European Union observe daily increasing nationalism, militarised border policies, and incitement to consumerism. Efficient technologies, presented as the solutions of the ecological crisis in the North; the concentration of extraction and outsourcing of hazardous waste in the South, and anti-migration laws, and increasing social exclusion go hand in hand.

From Australia, where he is based, Alexis Destoop (BE/AU, 1971) works on a film on the history and becoming of lithium, reaching from cosmological tales of origin to its role as a supercharger in energetic cycles, and (re)tracing the journey of the transformation of this volatile element. From the vantage point of the Asia-Pacific, he sees the geopolitical struggle over the control of strategic resources intensifying.



Phase Shift, work in progress Alexis Destoop made in Manono, DRC, 2019.

His research spans several technological sites, among which a wind-powered energy storage system located at the edges of the Arid Zone of the Eyre Basin and pastoral lands, a site whose efficiency negates the arguments against renewable energy sources put forward by the powerful fossil fuel lobbies. Destoop's research engages with the blind spot of his life in between Australia and Belgium, and their particular colonial



Research image for *Phase Shift* by Alexis Destoop. The world's largest battery by Tesla in Hornsdale, Australia.

histories, and strives for narrative and visual elements allowing to navigate a horizon obstructed by dystopia.

Equally following wide-spanning connections, Pélague Gbaguidi's (BJ/BE, 1965) work addresses the existential

urgencies generated by technocapitalist exploitation, and connects its local realities to global entanglements. During a residency in 2019, she traveled from Brussels to Lubumbashi, where she worked with women laboring in an informal mine close to the nearby town Kipushi, where cobalt, another central ingredient for the production of lithium batteries, is extracted in health-threatening conditions. Bringing these insights together permits understanding the

interdependency for finding sustainable solutions. But the

collective also allows very materially to apply for funding together, to facilitate visa-proceedings, to meet at a workshop, or to share the recordings made by one member at a site hardly accessible for the others.

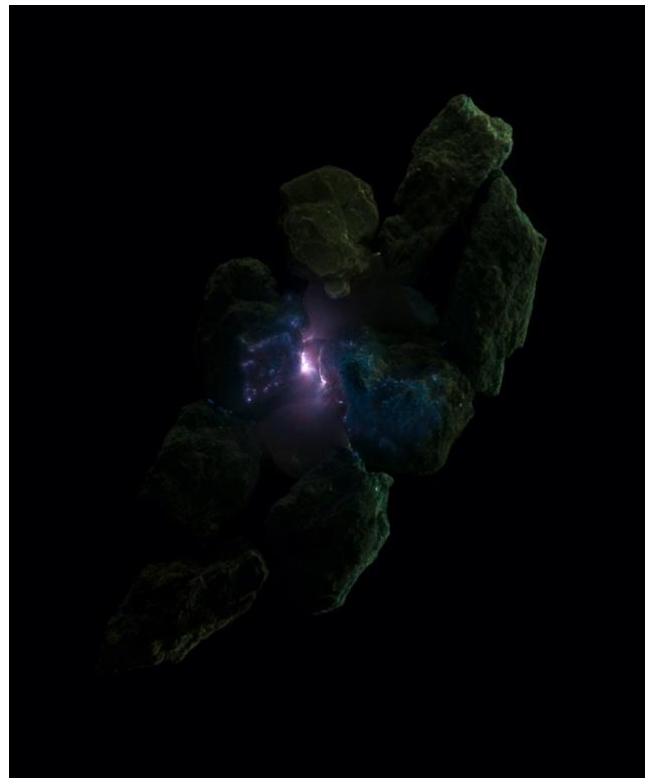
Unraveling Speculation

The group evolves between analytical criticism of extractivism in the artworks, and its own implication in the asymmetries of the global economy, without ever claiming to remain unaffected by the powerful structures that it interrogates. Speculation itself is approached in a double perspective: As the financial translation of future values, a bet on the capitalization of not-yet-exploited wealth, speculation is a subject of critical investigation. But it is also understood as a generative artistic proceeding to resist positivism and to draw alternative scenarios for the future.

In this sense, Marjolijn Dijkman (NL/BE, 1978) dives into the history of electricity, its pre-scientific staging as a spectacle, and the constitution of scientific electrical knowledge in the 18th century. In a highly experimental process, she recurs to high-voltage photography, and creates, with *Earthing Discharge* (2020), a glooming custom collage of images depicting ores from Manono, e-waste such as circuit boards, and the remnants of a clockwork from the “age of enlightenment”. The photographs capture the objects’ electrical fields, called corona discharge, caused by the ionization and electrical disturbance of adjacent air. In the image, the extremities of the extractive chain connect, as the conductive glass is sourced from the touchscreens of smartphones - the seductive surface of communication devices visible for the consumers - while the depicted matter - raw minerals and e-waste - constitute the invisible parts of the production and dumping process.

Dijkman’s research highlights the parallels drawn by Benjamin Franklin, author of core elements of today’s electricity storage, such as the plus and minus symbol of battery poles and the term of an electric discharge,

between economy and electricity. For Franklin, the control over power promised to master nature, and to counterbalance poverty by wealth. Dijkman questions his faith in progress, and connects it to the promises of today’s green revolution. While she appropriates high-tech-material in developing her own experimental devices, the glowing, wall covering images create themselves a mythic appearance, reminding the power of spectacular electric displays and stagings.



Earthing Discharge (photograph of lithium from Manono and electricity), Marjolijn Dijkman, 2019.

Making and crashing together

Today, the rhetoric of sustainability and global responsibility is common language in the communication of global companies. The US-American company Tesla Inc. for

instance announces to accelerate the “world’s transition to sustainable energy” by selling high-end electric cars, designed to move with regenerative energy, stored in lithium batteries. The company under the directorship of CEO Elon Musk is named after Nikola Tesla, a scientist born in Smiljan (today Croatia) in 1856, and inventor of the Wardencllyffe Tower: a technology promising to provide free wireless electricity for whole societies. While Nikola Tesla’s utopian idea has never become real, and many of his patented inventions have been attributed to his part-time employer, and concurrent Thomas Edison, his name is now featured by a strongly profit-oriented global enterprise selling electric cars and batteries as green technologies for the future. For its batteries, Tesla Inc. requires huge amounts of lithium - and may thus be one of the clients of the prospective mining of the ore in the city of Manono.

In the present distribution of power, it is likely that “the promise of the green car of the future is valid only for the part of the world that will enjoy its use, [while] the environmental impact is displaced in the areas of extraction and refining of materials that compose it.”^{xi} Challenging this situation, the artists Jean Katambayi

Mukendi, Sammy Baloji (DRC/BE, 1978) and Daddy Tshikaya (DRC) conceived and constructed in their hometown Lubumbashi a real-size Tesla car in copper wire: *Tesla Crash: A Speculation*. The remarkable object is an outcome of collective intelligence and collaboration, using copper, a raw material that is present in high quantities in the soils of the Katanga region, and has been mined extensively since pre-colonial times. The copper-wire Tesla car has been skillfully constructed over several months at Picha in Lubumbashi (2018-2019), gathering numerous concerned and interested audiences around the daily construction process, or in workshops dealing with energy and technologies for the future. The car playfully and ironically speaks back to the industrial Tesla car, and upholds the utopian potential of the name-giving engineer against its capitalist usurpation, but it also references and magnifies the ubiquitous self-made children’s toys in cities where recuperation and raw materials are more accessible to large populations than consumer goods. While the life-size original of *Tesla Crash: A Speculation* stayed in Lubumbashi, the miniature version sketched after it traveled to exhibitions in Europe, inverting thus well-established hierarchies.



Hercule de Lubumbashi, Dorine Mokha and Elia Rediger, 2019, still

Far more than an object, the car is still generating collaborations. During the Lubumbashi Biennale in 2019, artist Dorine Mokha (DRC, 1989) knitted the narration of his performance around it, entering into call-and-response with the audience, and initiating future collaborations with the *On-Trade-Off* project.

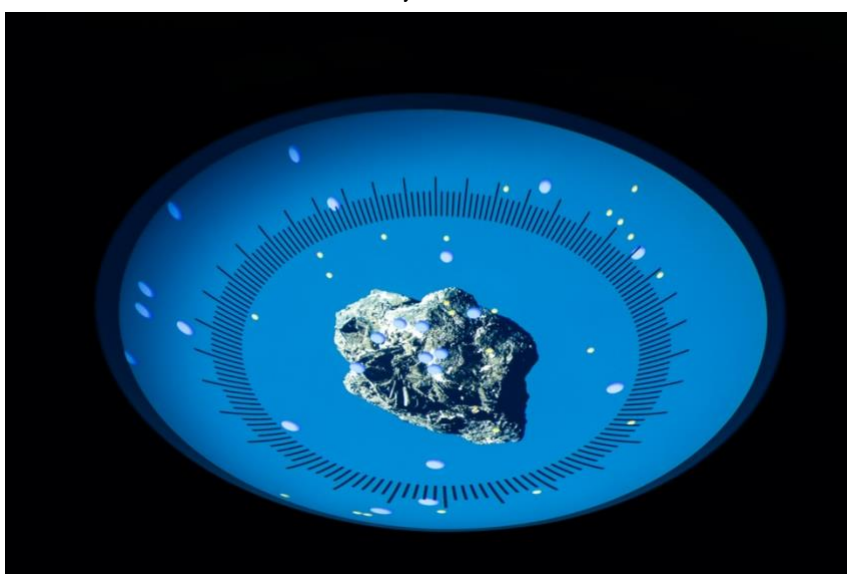
In close conversation with the three conceivers of the wire car, Marjolijn Dijkman prepared the performance *Charging Tesla Crash: A Speculation*. Jean Katambayi led through the ceremony, while Dijkman discharged from a home crafted electric Tesla coil 3 million volts over a distance of 2 meters on the highly conductive copper car. With great noise, accompanied by the acclamations and comments of the audience, the car was symbolically called into “life” through electricity - just as at the beginning of science fiction writing in Europe Mary Shelley had awakened Frankenstein from the dead by the power of electricity. But the spectacularity of the discharge did not animate the car. It rather pointed to the dead-ends of the asymmetrical benefits from the raw material exploitation.

While it is clear that the “future of the electric car, just as so many other technologies, lies largely in the DRC, one can doubt if the future of Congo lies in the Tesla.”^{xii} With the current crisis deepening the social divides on a global scale, and promoting green technologies for wealthy consumers, largely forgetful about the conditions of their production, and the deep structural asymmetries of global capitalism, *On-Trade-*

Off continues to insist on the interconnectedness of living situations across the globe and the urgency for environmental justice.

As authors like Vandana Shiva, Ghassan Hage, and Malcom Ferdinand have highlighted for long, decolonial ecological practices require to acknowledge the unequal structures of racial capitalism, and its colonial foundations.^{xiii}

At the modest scale of an artist collective, *On-Trade-Off* strives to counter extractivist structures and to collaboratively speculate on possible scenarios for alternative manners to live together on an interdependent planet, to open ideas beyond the protective localism of wealthy ecological policies, and the structural racism of global technocapitalism. Examining future modes of travel and transnational collaboration, and the continuous self-reflecting on the group’s structure and its inherent biases, are among the challenges for the coming months and years.^{xiv}



Navigating Polarities, Marjolijn Dijkman, 2018, Flemish Government Acquisitions 2019, in collection of Mu. ZEE, BE.

This is pre-publication version of the piece that will appear in the upcoming *Vertical Atlas* book produced by [Digital Earth](#) in collaboration with Het Nieuwe Instituut.



Lotte Arndt is a writer and curator based in Paris. She works on long-term artistic research projects in shifting transnational geographies and in close collaboration with artist. Her current research critically inquires toxic conservation in Western museum collections.



Oulimata Gueye is a Senegalese and French art critic and curator who has been studying the impact of digital technology on urban popular culture in Africa. She has been conducting research projects which explore digital culture, science and the potential of fiction to develop critical analysis and alternative positions.

ⁱ Heather Davis “Blue Bling. On Extractivism”, *Afterall*, no. 48, Autumn 2019, <https://www.afterall.org/journal/issue.48/blue-bling-on-extractivism>.

ⁱⁱ Macarena Gómez-Barris: *The Extractive Zone. Social Ecologies and Decolonial Perspectives*, Duke, 2017, p. xvii.

ⁱⁱⁱ *Ibid.*

^{iv} At different moments, the group involved so far the artists Sammy Baloji, Alexis Destoop, Marjolijn Dijkman, Pélagie Gbaguidi, Femke Herregren, Jean Katambayi Mukendi, Dorine Mokha, Musasa, Alain Senga, Georges Senga, Daddy Tshikaya, Pamela Tulizo, Maarten Vanden Eynde, and the writers and curators Lotte Arndt, Oulimata Gueye and Rosa Spaliviero.

^v Chéneau-Loquay Annie, “Mobile Telephony in African Cities. A successful adaptation to local context”, *L'Espace géographique*, 2012/1 (Vol. 41), p. 82-92. <https://www.cairn.info/journal-espace-geographique-2012-1-page-82.htm>

^{vi} Donna Haraway, *Staying with the Trouble : Making Kin in the Chthulucene*, Durham, N.C., Duke University Press, 2016.

^{vii} *The Weight of Wonders*, Cargo in Context, Amsterdam 2019; Contour Biennale, Mechelen 2019; *Green Gold*, Imane Fares, Paris 2019; Picha Biennale, Lubumbashi, 2019; *La Contrepartie*, Espace Jean Cocteau, Les Lilas 2019.

^{viii} Laura U. Marks: “Let's Deal with the Carbon Footprint of Streaming Media”, *Afterimage*, 2020, 47 (2), p. 47. <https://doi.org/10.1525/aft.2020.472009>. For a critic of the rhetorics of dematerialized communication see: Lisa Parks and Nicole Starosielski (eds.): *Signal Traffic: Critical Studies of Media Infrastructures*, Champlain, Illinois, University of Illinois Press, 2015.

^{ix} Anders S. G. Andrae and Tomas Edler, “On Global Electricity Usage of Communication Technology: Trends to 2030,” *Challenges* 6, no. 1, 2015, pp. 117-157.

^x *Ibid.*

^{xi} Oulimata Gueye: “No Congo, No Technologies”, *Digital Earth* 2019, <https://medium.com/digital-earth/no-congo-no-technologies-163ea2caec0a>

^{xii} *Ibid.*

^{xiii} Lionel Astruc: *Vandana Shiva. Creative Civil Disobedience*, Arles, Actes Sud, 2017; Ghassan Hage: *Is Racism an Environmental Threat?* Polity Press, 2017; Malcom Ferdinand: *Une écologie décoloniale. Penser l'écologie depuis le monde caribéen*, Paris, Seuil, 2019.