

Digital Colonialism – In Visual Culture

By Katrin Köppert
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Today's digital colonialism creates value on the basis of historical exploitation. Besides deriving profit from data, the creation of digital infrastructures also involves mining raw materials and asserting mastery over nature, the effect of which is to accentuate injustice. Images play a key role in this, albeit an ambiguous one.



Illustration by Zoran Sivilar

What do images have to do with digital colonialism? And how are we to understand the idea of digital colonialism when we are not even sure what colonialism means today? Since the late 15th century, historical colonialism has referred to imperial conquest – involving the violent subjugation of the people living in a conquered territory and the exploitation of its natural resources – emanating from Europe (in particular, Spain, Portugal, Great Britain, Germany and France). It quickly became entangled with the process of establishing hierarchies and categorising people on the basis of race, an idea that was created specifically for this purpose. Dividing people up into different 'races' and giving these races an order of precedence was intended to provide moral justification for the ongoing process of exploitation. Visual regimes of surveillance, infiltration, exposure and screening are directly linked to the production of this hierarchy, whether in art, science or popular culture.

And what of colonialism today? It manifests in exploitative systems akin to slavery, of the kind practised in agriculture, for example, or takes the form of human trafficking precisely predicated on racialised discrimination. We see the way Europe taps the resources of distant regions to provide it with energy, be it Siberian gas or Moroccan solar power. In global terms, the imperial occupation of territories is no longer in the foreground of colonialism today but the predatory exploitation of people and nature – unequally distributed across different regions – most definitely is. This ties in with my concept of digital colonialism inasmuch as safeguarding our digital present, with its manifold varieties of meaningfulness and absurdity, relies on the 'mining' of people, landscapes and raw materials – primarily from outside Europe. In other words, whatever the digital infrastructure market needs is extracted and taken, including rare earths, labour and geographically favourable locations that can be used, for example, to house data servers.

And what about images? What do pictures have to do with all this today? The Instagram selfie, the holiday shot in your WhatsApp status, the Google images search result?

First of all, any image that is put online entails data colonialism, the economics of which involves squeezing money out of the trade in image data, with the owner of this data denied any possibility of controlling the process.[1] Under historical colonialism it was people's territories and bodies that were plundered – now, in the context of digital culture, data too has been declared a raw material and is being mined.

Meanwhile, there is lively discussion, centring on the buzzwords 'automated inequality', 'co-coded bias' and 'algorithmic discrimination', about the extent to which computer operations reproduce racist and hetero-sexist stereotypes in their handling of images: this may manifest in the form of the consistently sexualised and sexist images that appeared as recently as 2009 at the top of a Google search for 'black girls',[2] or in the automatically generated 'gorilla' tag applied to the picture of two Black friends in 2015.[3] Even in cases where images suggest diversity and a positive view of difference seems to be affirmed – witness the genteel smiles to be seen in the pictures produced by a Google search for 'black woman' today – we can safely assume that these representations are also influenced by the prejudices of the people who write the code involved, for example, in finding and tagging these images.[4] It is just that the prejudices here are a form of positive racism, harking back to the stigmatic label of the 'noble savage'. In other words, forms of colonial knowledge are perpetuated through the back door of algorithmic designation. And this is not 'just' because the algorithms discriminate along racist lines when they prioritise certain images or automatically tag them but also because they are linked with colonial logics of navigation, discovery, surveillance and classification. [5] This algorithmic colonialism – as I would like to call it here – is not simply the product of a lack of diversity in technology companies. Rather, it is testimony to the fact that colonialism as a system of classification and hierarchisation has embedded itself in our ways of thinking, perceiving and feeling.[6]

Colonialism has cut deep into consciousness, so that at times – and especially for people who are not exposed to its negative effects – it is barely seen for what it is any more. Colonialism can be viewed, as it were, as an ecological phenomenon, because it has become the often unexamined natural environment of human existence and thus of digital technologies too. Because of this ecology, colonialism is not always apparent, as I will show. It is taken so much for granted that even the profound interventions in nature that have been required to create and secure the digital infrastructure and system of networking are lost from view. To borrow from Mark Fisher, it is 'easier to imagine the end of the world than the end' of colonialism.[7]

For me, digital colonialism implies a form of intervention that goes beyond questions of data colonialism and algorithmic colonialism. It interferes in geology and is actively involved in the environment in which digitality (for example, in the context of infrastructure and data archiving) is fused with colonial power structures. This is where digital colonialism has, in a sense, the clearest links with historical colonialism, in that it is very much responsible for the re-emergence of patterns of occupation affecting land and landscape. And perhaps because it can be placed so firmly in this historical tradition, it seems to necessitate a visual policy of concealment, whereby images are represented aesthetically or even anaesthetised.[8] I will look at three examples to illustrate how visual politics downplays colonial power relations in the context of digitality. I will also present decolonial approaches to the visualisation of digital colonialism. The ultimate aim is to generate an alternative perspective, an outside view, and to dissent from the ecology of colonialism.

(An)aesthetic images of extraction

No digital image can exist without its environment, which includes hardware: i.e. tablet, smartphone, keyboard; no Insta selfie, without the ores, minerals and rare earths that our devices require; no Facebook post, without the labour it takes to mine the raw materials or the energy used to extract them. An understanding of the raw materials and outlays of energy and labour that are essential to the global communications industry cannot be disconnected from the conditions of colonialism. When James Bridle writes that the internet – the cloud – begins with coal,[9] there is no getting around the fact that its extraction is outsourced to regions whose long history of colonial subjugation means that are still trying to build econo-

mically viable states. When people say that Germany needs more mines to cover the increasing demand for chemical elements in digital technologies, they should also mention where these mines are located and who is going to work in them.[10] The technological present is increasingly haunted by the colonial histories of ore mining. There is no reason, then, to give uncritical approval to technology amid the frenzied clamour for digitisation and broadband expansion.

Let us take as an example the Vergenoeg fluorite mine in South Africa. Known for its numerous gold mines – most of which have been closed and are only used now by ‘informal miners’ trying to make a living[11] – South Africa is currently being rediscovered as a source of rare earths, the ‘gold of the 21st century’.[12] The Vergenoeg fluorite mine in north-eastern Pretoria contains fayalite minerals that have been studied using atomic resolution imaging techniques in a successful search for rare earths, an essential element in the production of smartphones. The imaging of rare earths is set against visual policies that render invisible or aestheticise the mine’s high-resolution floodlights and the impacts these have on people and the environment. A look at the home page of one of the companies with shares in the mine reveals deceptively stage-managed presentations of Black miners as engineers designing their future and a good life for themselves.[13] There is no (visual) indication here that the company’s leadership team is entirely made up of Chinese managers.



Metorex website, 2021; source: <http://www.metorexgroup.com/>

A Spanish company’s website, in turn, includes a view of the mine that is reminiscent of a landscape painting, showing what looks like mountain scenery with possible vistas leading off into the distance.[14]



Minersa website, 2021; source: http://www.minersa.com/eng/vergenoeg_mining.php

The only thing in the scene to suggest extraction and the exploitation of raw materials – which is what this picture represents – is hidden away in the background of the picture and does no more than hint at the mining technology employed here, which is shown in another image included in the website presentation. The size relationship between the man in the second picture and the mining equipment is a clear indicator of our fixation on technology as the guarantor of the digital infrastructure – entirely in keeping with Western thinking, which regards technological progress as a determinant of social development.[15] The disjunction between the images – with the picture on the left showing a landscape untouched by technology, while on the right we see technology cast as an oversized fetish without any environmental dimension – enacts a new form of colonial penetration into visual knowledge production.

To understand this better, let us take a look at art history. Art historian Nicholas Mirzoeff describes how, in the late 19th century when industrialisation was enjoying its heyday, smog

– and the coal mining technologies that caused it – became an element in landscapes painted in cities like London and Paris, without this having any detrimental effect on the beauty and majesty of the painting.[16] Stylistic devices like the slightly elevated viewpoint from which scenes of environmental pollution were depicted made it possible to aestheticise the content: according to Mierzoeff, such selective representations of ‘imperial smog’ pictured it as a positive sign expressing the vitality of the modern metropolis. In contrast, images of smog from places like India in the Global South allegedly expressed a backward notion of climate protection. The way the mines are pictured thus involves a shift, representing a new approach to the colonial production of visual knowledge in relation to digital infrastructures. The aestheticisation of history using the stylistic means of exaltation, whereby urban pollution is rendered harmless, is inserted directly into the pictorial world of the Global South, in this case South Africa, the purpose being to anaesthetise the imagery and legitimise mining. What we see is a landscape that it seems natural and at times beautiful to dig up – one that at the very least can be controlled. This is the line taken by T. J. Demos when he discusses aerial and satellite photographs of mines, which, while documenting damage, invariably serve to give the viewer the feeling that they have control over what they are being shown. [17] Accordingly, the portfolio of the Vergenoeg fluorite mine includes an aerial view in which technology is marginalised so that it once again appears harmless. In keeping with the mine’s name,[18] the photographs make it possible to push asymmetrical power structures ‘far enough’ out of view.



Aerial view of the Vergenoeg fluorite mine in South Africa, Vergenoeg Mining Company; source: Mphonyana Modiselle, *Review of the Fluorspar Industry in the Republic of South Africa*, Report R95, 2011, <https://www.dmr.gov.za/LinkClick.aspx?fileticket=olbLxC7lb1Q=&portalid=0>

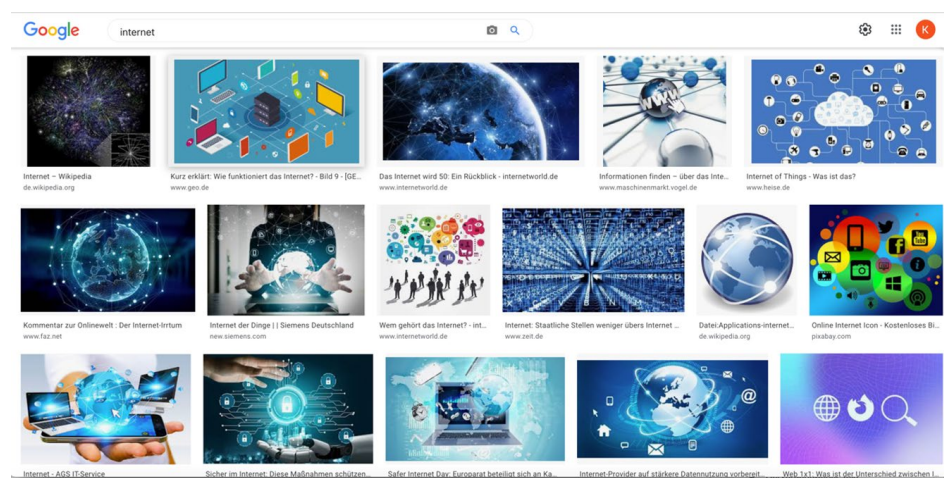
The visual material shown above and the approaches taken in the digital age to images of exploitation prevent us from forming any kind of realistic picture of the global situation. What images enable us to spot this distortion and shift our gaze? What images create an outside vantage point that reveals the scars caused by mining? If you wish to delve into a rhetoric of the image that is decolonial and thus does not downplay the issue, my first suggestion would be to look at the photographs of artist Zanele Muholi. Their work centres on a visual politics rooted in a physical sense of the body.

By enacting themselves as a miner, Muholi evokes not only the history of mining during apartheid but also the South African miners’ strike of 2012, which was bloodily crushed by the police with 34 fatalities. The photograph, which was taken in 2015 as part of the series *Somnyama Ngonyama: Hail, the Dark Lioness* (2018), can also be seen as a reminder that, in the wake of digitisation, mining should not be prematurely consigned to history. It is not only the artist’s gaze that conveys this warning, but more especially their physical presence and the porosity evident in the skin, which mark the human and the mine as vulnerable. Muholi translates into the image the ideas that Gloria Anzaldúa had put forward. Made sick by her exposure to herbicides and pesticides as a child worker in the fields of South Texas and by

having drunk water from a river contaminated with arsenic from the local silver mines, Anzaldúa argued for a politics anchored in physicality that can be described using the language of ‘pores’ and ‘cracks’ in skin and tissue.[19] I see the pores in Muholi’s skin, the wrinkles under their chest and their face, which almost looks as though it has been smeared with grease, as an expression of this language, a necessary counterweight to the process of numbing down and belittling, of anaesthetising, in other words.

The internet is not up in the clouds

The rhetoric of wireless communication and decentralised networks has encouraged us to view digital communication as disconnected from any material conditions or impact in the physical world. This Silicon Valley rhetoric, which would have us believe that the internet is weightless – based on its wirelessness – is accompanied by the visual placement of satellites or images of signals in orbit.[20] Not only is the *Blue Marble* photograph one of the most reproduced images of all time,[21] but pictorial language representing the universe still dominates our notion of digital interconnectedness. The results of an image search query for the keyword ‘internet’ bear this out with a single click.



Screenshot: Google images search «Internet», 2021, source: <https://www.google.com/>

However, ‘wireless’ communication is predicated on the network of fibre optic cables traversing the ocean floors. The routing of these cables follows the pathways of telegraph cables, which in turn follow the routes plied by the slave ships that were used to transport slaves from the 15th century on. Modern digital communication is mapped to early colonial geographies. Although the internet is advertised as a space of social mobility, its conduits trace historical and political lines that introduce inequalities into its DNA. Media scholar Nicole Starosielski describes this as the ‘geographic stasis’ of the digital environment, which also reflects the ‘conservative nature of the cable industry’.[22] Because undersea cables are routinely laid using installation techniques that have a long pedigree, the digital infrastructure is based in some sense on the knowledge of colonialism mediated by history. Historical illustrations showing telegraph cables in natural symbiosis with underwater plants are euphemistic images of this colonial media history. Contemporary high-gloss stagings of underwater worlds beneath the oceans serve a similarly aestheticising function – the effect of this is to normalise the conquest of marine space and anaesthetise its political dimensions.[23]

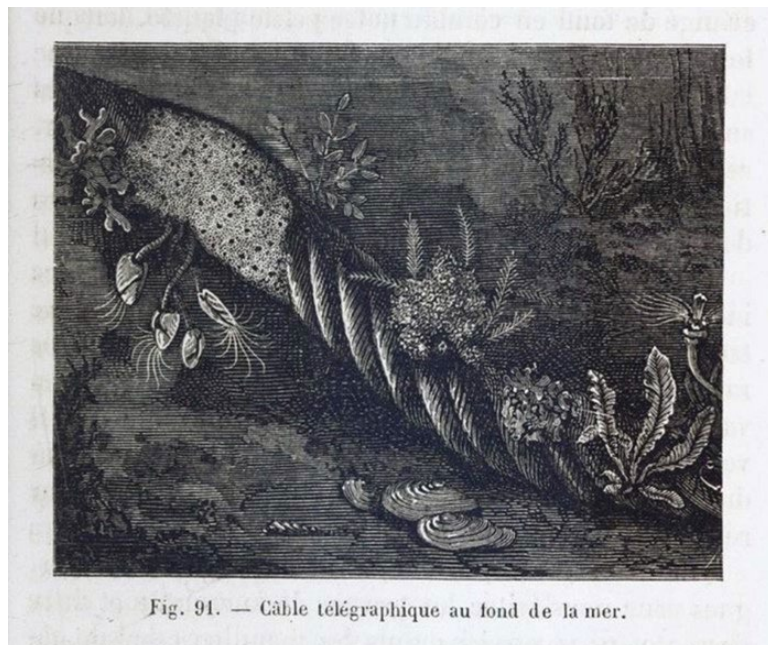
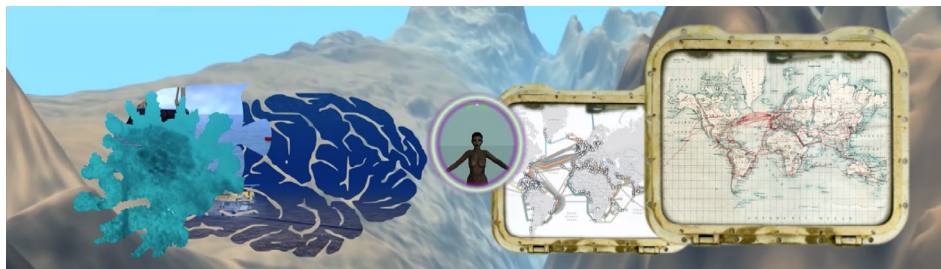


Fig. 91. — Câble télégraphique au fond de la mer.

Yan' Dargent, Férat and A. Mesnel, *Câble télégraphique au fond de la mer*, illustration/print, from Léon Sonrel, *Le Fond de la mer* (Paris: L. Hachette, 1868), 331; source: <https://www.deichtorhallen.de/halle4/tiere-um-uns>

This again raises the question of what images constitute a critical response to the internet's downplaying of itself and thus intervene with a decolonial intent. Tabita Rezaire's 2017 video essay *Deep Down Tidal* is helpful in suggesting a possible answer. The artist focuses on the intertwining colonial histories of cables by layering images one on top of the other.



Tabita Rezaire, *Deep Down Tidal*, 2017, video still, HD video, 18:44 min., © Tabita Rezaire, Courtesy Goodman Gallery, South Africa

These layers can be seen as a visual representation of the geology of digital colonialism. In other words, Rezaire's visualised layering allows us to understand digitality in terms of layers and deposits of rock. However, instead of just rendering a visual experience, she also creates a mental space that goes far beyond a spontaneous revolt against colonial continuities.



Tabita Rezaire, *Deep Down Tidal*, 2017, video still, HD video, 18:44 min., © Tabita Rezaire, Courtesy Goodman Gallery, South Africa

Using the shamanism of a snake dance, for example, she targets a liminal moment in consciousness that allows us to unlearn the 'coloniality of power' that is warehoused in our perception.[24] In the atmospheric realm of spiritual practices, rehearsed perceptions can be forgotten. Rezaire's art centres on her opening up to sensibilities that go beyond rationalist narrative traditions of digital progress fixated on technology, without her leaving the space of the internet to achieve this.

Archives of digital colonialism

Besides such manifestations of digital colonialism as the mining of raw materials and the creation of infrastructures, archiving is now presenting us with another form of intervention in geologies connected with specific geographies. For example, the company GitHub is focusing on protecting open-source software – nicely chilled – for future generations, with the information preserved on hardened film. This data, which is to be encoded on frames with 8.8 million pixels each, will be stored in a disused coal mine set in the permafrost deep beneath an Arctic mountain in Svalbard in Norway.[25] The Arctic – home to the Sámi people, one of Europe's very few indigenous communities – is one of the territories that has recently been declared a no man's land owing to climate change and the freeing up of maritime routes through the region. The Sámi are being colonised on the pretext of securing the future – as is borne out by the promotional film for the GitHub Arctic Code Vault. For one thing, it makes no mention of the people who have settled the region: it makes reference to the 1,000 polar bears living there, but not to the Sámi. For another, it presents an image of a mostly virgin landscape unaffected by climate change – something that is made evident when one looks at Susan Schuppli's work *Arctic Archipelago*.



GitHub, *Arctic Code Vault*, 2019, video still, YouTube, 13.11.2019; source:
<https://www.youtube.com/watch?v=fzl9FNjXQOo>

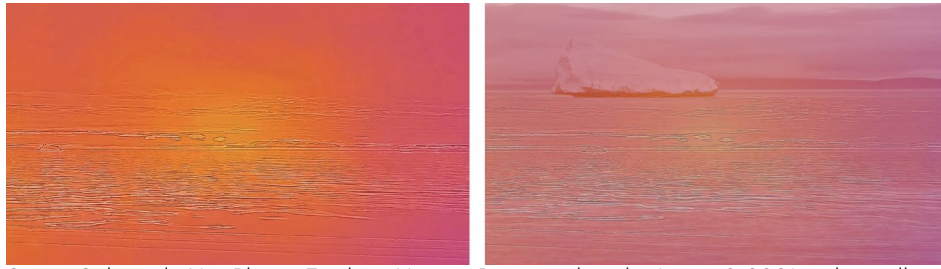


Susan Schuppli, *Svalbard Arctic Archipelago*, from the series *LEARNING FROM ICE*,
2021, © Susan Schuppli

Unlike in Schuppli's work, we see frozen, snow-covered mountains. To secure the future of digitality, images are created that effectively bring colonialism, coupled with processes of extraction, into the present – even if this is not directly visible.

Schuppli's new work, *Not Planet Earth or How to Denaturalise the Image?*, is a counter to the visual naturalisation of colonial gestures of exploitation. By presenting images in unfamiliar

form – using a thermal camera, for example – she turns the processes of naturalisation and trivialisation inside out. The red discolouration of the ice brings viewers into a culturally programmed affective space of fear and menace. Her manipulation of the images is a potential means of introducing us to the politics surrounding images of digital colonialism: this can induce feelings of increasing anxiety as we look at the glowing ember of ice.



Susan Schuppli, *Not Planet Earth or How to Denaturalise the Image?*, 2021, video still, HD video, 14:24 min., © Susan Schuppli

Images like Schuppli's enable a state of disquiet, allowing us, as Donna Haraway puts it, to remain troubled in the face of colonialism's digital reiteration.[26] Zanele Muholi's photographs also use the language of 'cracks' to accentuate the element of opposition, turned against the numbing action of digitality, or rather its anaesthetic visual culture. Tabita Rezaire, meanwhile, creates sedimentary images with jarring transitions that are anything but seamless and articulate rifts in our perception that are repeated with digital colonialism.[27] The challenge will be to understand these proposals as artistic practices that are consistent with the decolonial activism of indigenous groups. At the same time, we need to find a way of giving visibility to these points where political activism intersects with the visual activism of art – as located too within digital practices related to infrastructuring and archiving – enlarging them under the microscope so that they can be seen in the present.

References

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[3] Ruha Benjamin, *Race After Technology: Abolitionist Tools for the New Jim Code* (Cambridge: Polity, 2019), 110.

[4] Benjamin, *Race After Technology*, 10–11.

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[6] Aníbal Quijano, *Kolonialität der Macht, Eurozentrismus und Lateinamerika* (Vienna and Berlin: Turia + Kant, 2016); Walter D. Mignolo, *Epistemischer Ungehorsam: Rhetorik der Moderne, Logik der Kolonialität und Grammatik der Dekolonialität* (Vienna and Berlin: Turia + Kant, 2012), 49–51.

[7] Mark Fisher, *Capitalist Realism: Is There No Alternative?* (Ropley: O Books, 2009), 1.

[8] 'While aesthetics strengthens feeling, anaesthetics is focused on a lack of feeling – the loss of sensibility, its suppression or impossibility, operating on all levels: from a blunted physical state to intellectual blindness.' Wolfgang Iser, *Ästhetisches Denken* (Stuttgart: Reclam, 2017), 12 [translated].

[9] James Bridle, *New Dark Age: Technology and the End of the Future* (London: Verso, 2018), 23.

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[12] Robert Klatt, 'Fayalit-Mineralie: Großes Vorkommen Seltener Erden außerhalb Chinas entdeckt', *Forschung und Wissen*, 10 March 2021, <https://www.forschung-und-wissen.de/nachrichten/geologie/grosses-vorkommen-seltener-erden-ausserhalb-chinas-entdeckt-13374808>

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[19] Joni Adamson, 'Cosmovisions: Environmental Justice, Transnational American Studies, and Indigenous Literature', in *The Oxford Handbook of Ecocriticism*, ed. Gregg Garrard (Oxford: Oxford University Press, 2014), 177.

[20] Data transport was still being advertised using an image of orbit long after undersea cables had been put into service. See Nicole Starosielski, *The Undersea Network* (Durham; NC: Duke University Press, 2015), 5.

[21] Demos, *Anthropocene* (see n. 18), 19.

[22] Starosielski, *The Undersea Network* (see n. 21), 12.

[23] Stacy Alaimo, 'Feminist Science Studies and Ecocriticism: Aesthetics and Entanglement in the Deep Sea', in Garrard, *The Oxford Handbook of Ecocriticism* (see n. 20), 188–204.

[24] Quijano, *Kolonialität der Macht* (see n. 6).

[25] The artist duo MELT, who themselves work with processes of melting in the context of queer speculations on the world of algorithms, drew my attention to the GitHub Arctic Code Vault. MELT (Loren Britton & Isabel Paehr), 'Ice, Water, Vapor Computing', in *digital:gender – de:mapping politics*, ed. Katrin Köppert, Julia Bee and Irina Gradinari (Leipzig: Spector Books, forthcoming).

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[27] Katrin Köppert, 'Rifted Algorithms: Digitale Medienkunst postafrikanischer Zukünfte – Tabita Rezaire: Deep Down Tidal (2017)', *Navigationen: Zeitschrift für Kultur- und Medienwissenschaft* 21, no. 2 (2021), 145–58.

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