Kunst im Anthropozän

Daniel Falb

St. Afra

02/2024

Kunst im Anthropozän

1. Was ist das Anthropozän?
2. Defossilisierung
3. Refossilisierung
4. Tiefenzeit Gespenster

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GLOBAL CHANGE
NEWSLETTER
No. 41 May 2000
The International Geosphere–Biosphere Programme (IGBP): A Study of Global Change
of the International Council for Science (ICSU)

The "Anthropocene"

by Paul J. Crutzen and Eugene F. Stoermer

The name Holocene ("Recent Whole")for the post-glacial geological epoch of the past ten to twelve thousand years seems to have been proposed for the first time by Sir Charles Lyell in 1833, and adopted by the International Geological Congress in Bologna in 1885 **(1)**. During the Holocene mankind's activities gradually grew into a significant geological, morphological force, as recognised early on by a number of scientists. Thus, G.P. Marsh already in 1864 published a book with the title "Man and Nature", more recently reprinted as "The Earth as Modified by Human Action" (2). Stoppani in 1873 rated mankind's activities as a "new telluric force which in power and universality may be compared to the greater forces of earth" [quoted from Clark (3)]. Stoppani already spoke of the anthropozoic era. Mankind has now inhabited or visited almost all places on Earth; he has even set foot on the moon.

Considering these and many other major and still growing impacts of human activities on earth and atmosphere, and at all, including global, scales, it seems to us more than appropriate to emphasize the central role of mankind in geology and ecology by proposing to use the term "anthropocene" for the current geological epoch. The impacts of current human activities will continue over long periods. According to a study by Berger and Loutre (14), because of the anthropogenic emissions of CO_2, climate may depart significantly from natural behaviour over the next 50,000 years.

Geology of mankind

Paul J. Crutzen

For the past three centuries, the effects of humans on the global environment have escalated. Because of these anthropogenic emissions of carbon dioxide, global climate may depart significantly from natural behaviour for many millennia to come. It seems appropriate to assign the term 'Anthropocene' to the present, in many ways human-dominated, geological epoch, supplementing the Holocene — the warm period of the past 10–12 millennia. The Anthropocene could be said to have started in the latter part of the eighteenth century, when analyses of air trapped in polar ice showed the beginning of growing global concentrations of carbon dioxide and methane. This date also happens to coincide with James Watt's design of the steam engine in 1784.

Mankind's growing influence on the environment was recognized as long ago as 1873, when the Italian geologist Antonio Stoppani spoke about a "new telluric force which in power and universality may be compared to the greater forces of earth," referring to the "anthropozoic era". And in 1926, V. I. Vernadsky acknowledged the increasing impact of mankind: "The direction in which the processes of evolution must proceed, namely towards increasing consciousness and thought, and forms having greater and greater influence on their surroundings." Teilhard de Chardin and Vernadsky used the term 'noösphere' — the 'world of thought' — to mark the growing role of human brain-power in shaping its own future and environment.

The rapid expansion of mankind in numbers and per capita exploitation of Earth's resources has continued apace. During the past three centuries, the human population has increased tenfold to more than 6 billion and is expected to reach 10 billion in this century. The methane-producing cattle population has risen to 1.4 billion. About 30–50% of the planet's land surface is exploited by humans. Tropical rainforests disappear at a fast pace, releasing carbon dioxide and strongly increasing species extinction. Dam building and river diversion have become commonplace. More than half of all accessible fresh water is used by mankind. Fisheries remove more than 25% of the primary production in upwelling ocean regions and 35% in the temperate continental shelf. Energy use has grown 16-fold during the twentieth century, causing 160 million tonnes of atmospheric sulphur dioxide emissions per year, more than twice the sum of its natural emissions. More nitrogen fertilizer is applied in agriculture than is fixed naturally in all terrestrial ecosystems; nitric oxide production by the burning of fossil fuel and biomass also overrides natural emissions. Fossil-fuel burning and agriculture have caused substantial increases in the concentrations of 'greenhouse' gases — carbon dioxide by 30% and methane by more than 100% — reaching their highest levels over the past 400 millennia, with more to follow.

So far, these effects have largely been caused by only 25% of the world population. The consequences are, among others, acid precipitation, photochemical 'smog' and climate warming. Hence, according to the latest estimates by the Intergovernmental Panel on Climate Change (IPCC), the Earth will warm by 1.4–5.8 °C during this century.

Many toxic substances are released into the environment, even some that are not toxic at all but nevertheless have severely damaging effects, for example the chlorofluorocarbons that caused the Antarctic 'ozone hole' (and which are now regulated). Things could have become much worse: the ozone-destroying properties of the halogens have been studied since the mid-1970s. If it had turned out that chlorine behaved chemically like bromine, the ozone hole would by then have been a global, year-round phenomenon, not just an event of the Antarctic spring. More by luck than by wisdom, this catastrophic situation did not develop.

Unless there is a global catastrophe — a meteorite impact, a world war or a pandemic — mankind will remain a major environmental force for many millennia. A daunting task lies ahead for scientists and engineers to guide society towards environmentally sustainable management during the era of the Anthropocene. This will require appropriate human behaviour at all scales, and may well involve internationally accepted, large-scale geo-engineering projects, for instance to 'optimize' climate. At this stage, however, we are still largely treading on *terra incognita*. ■

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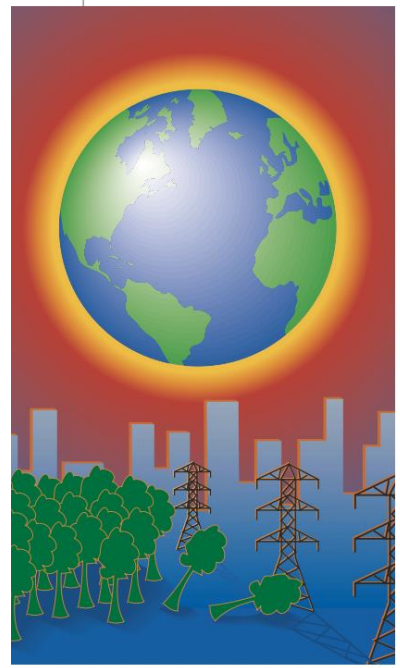
The Anthropocene

The Anthropocene could be said to have started in the late eighteenth century, when analyses of air trapped in polar ice showed the beginning of growing global concentrations of carbon dioxide and methane.



FURTHER READING

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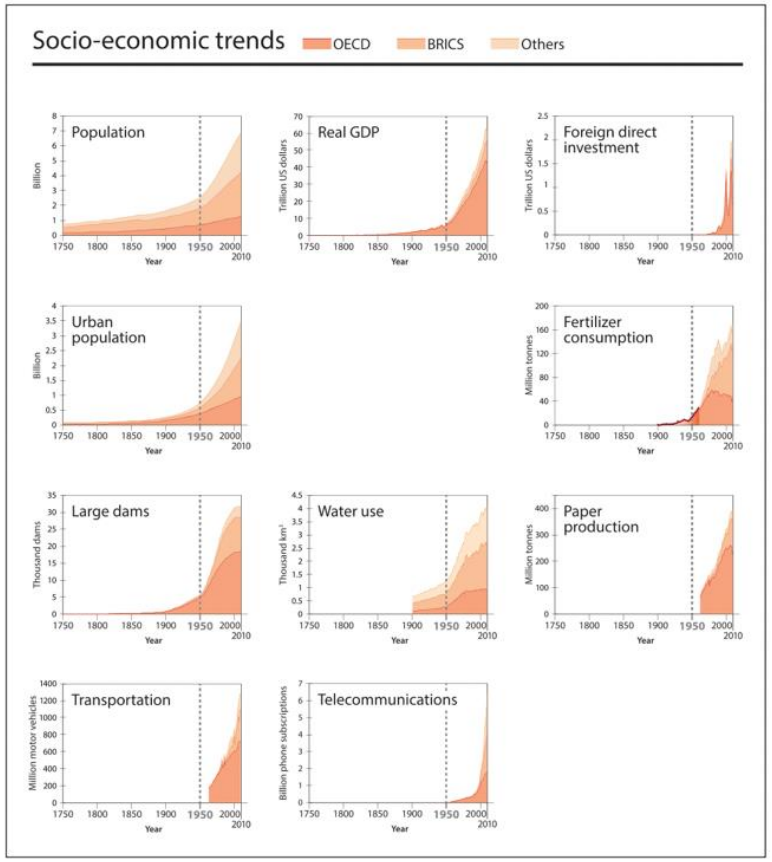
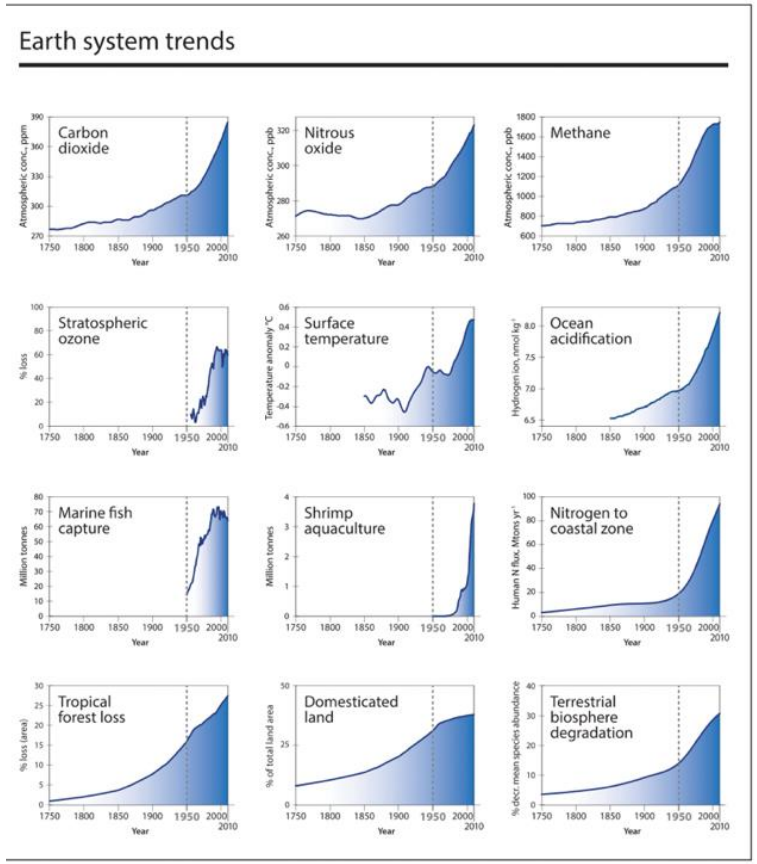
Die Große Akzeleration

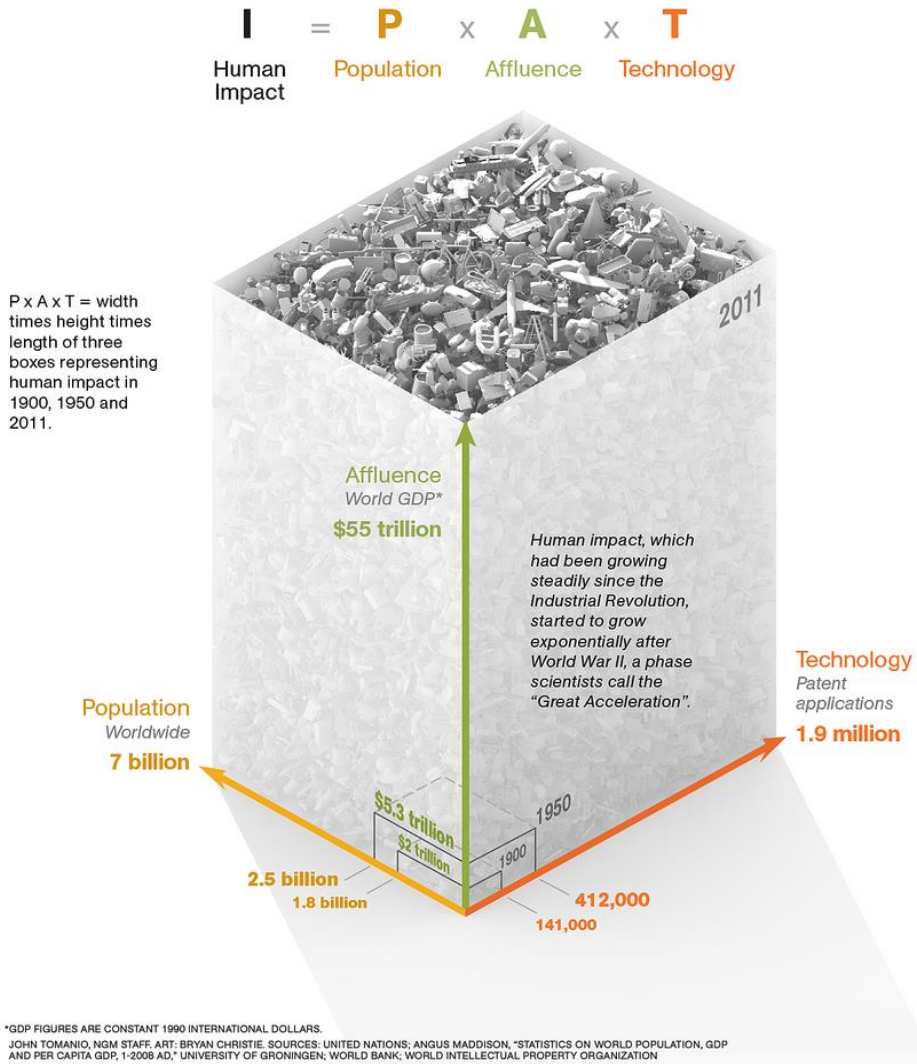




Steffen et al., »The trajectory of the Anthropocene«

WHY IS OUR IMPACT GROWING?

Is population growth the root cause? Or is it affluence, which leads to greater consumption of energy and other resources? Or technology, which offers new tools for exploiting and consuming? The IPAT formula is a way of thinking about the issue: It says the three factors compound. Since 1900 world GDP (a measure of A) and the number of patent applications (a measure of T) have grown even faster than population.



*GDP FIGURES ARE CONSTANT 1990 INTERNATIONAL DOLLARS.

JOHN TOMANIO, NGM STAFF. ART: BRYAN CHRISTIE. SOURCES: UNITED NATIONS; ANGUS MADDISON, "STATISTICS ON WORLD POPULATION, GDP AND PER CAPITA GDP, 1-2008 AD," UNIVERSITY OF GRONINGEN; WORLD BANK; WORLD INTELLECTUAL PROPERTY ORGANIZATION

Anthropozän (= neues *Menschen*-Zeitalter) als Bezeichnung irreführend, da nicht alle „Menschen“ gleichermaßen an seiner Produktion beteiligt?
Besser: Kapitalozän?

OXFAM MEDIA BRIEFING 21 SEPTEMBER 2020

CONFRONTING CARBON INEQUALITY

Putting climate justice at the heart of the COVID-19 recovery

Figure 1: Share of cumulative emissions from 1990 to 2015 and use of the global carbon budget for 1.5C linked to consumption by different global income groups

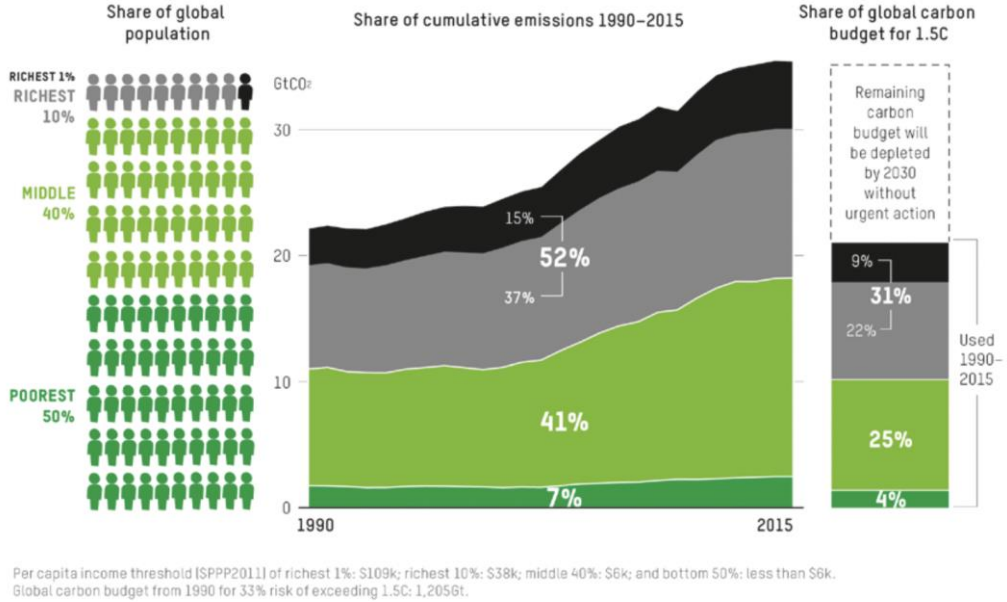
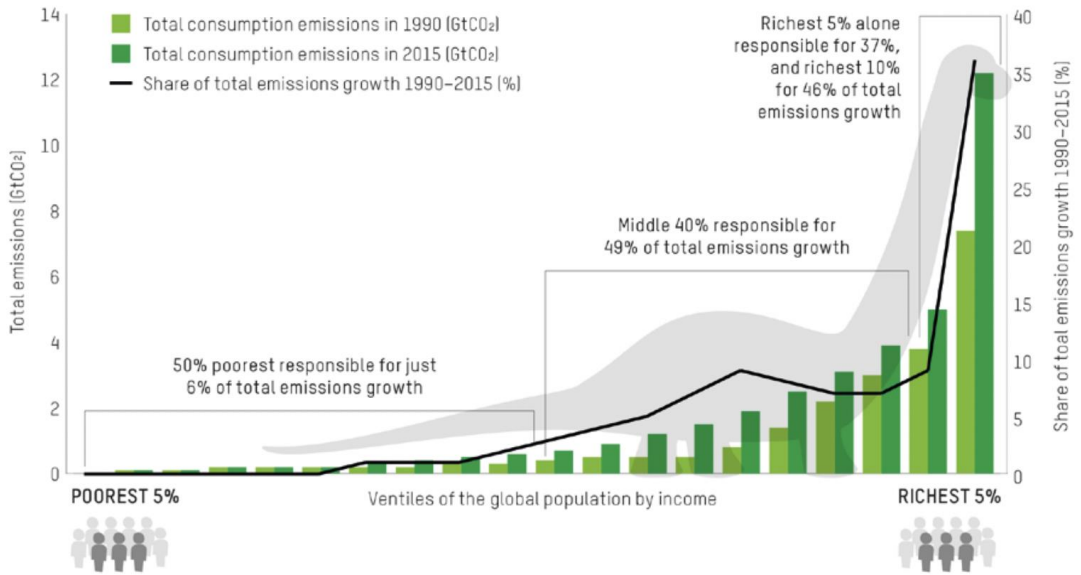
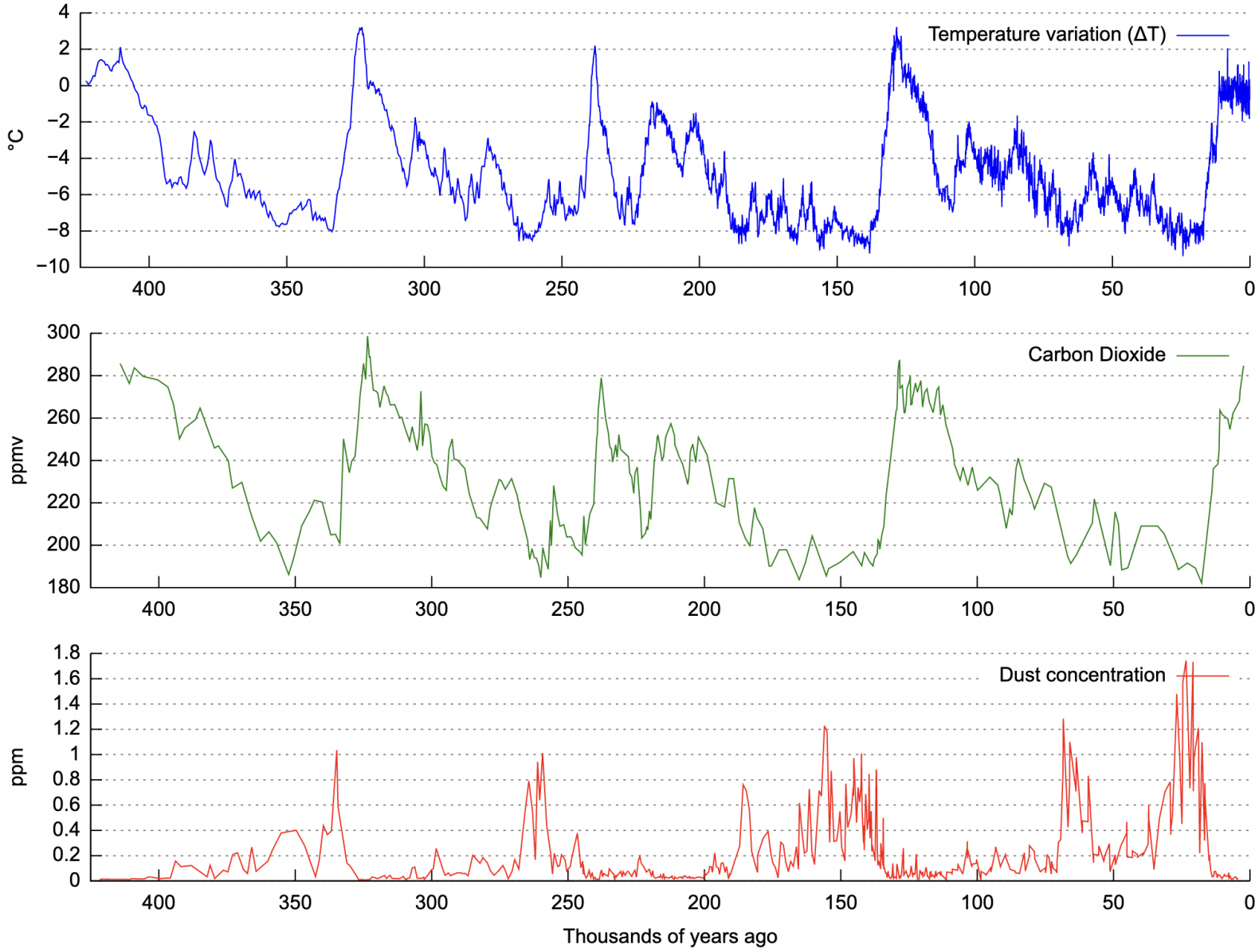


Figure 2: The 'dinosaur graph' of unequal carbon emissions growth 1990-2015



Das Anthropozän ist ein neues *geologisches* Zeitalter.
Es kontextualisiert die Gegenwart in der geologischen Tiefenzeit der Erde.
Es löst das *Holozän* ab.

Cf Milanković-Zyklen



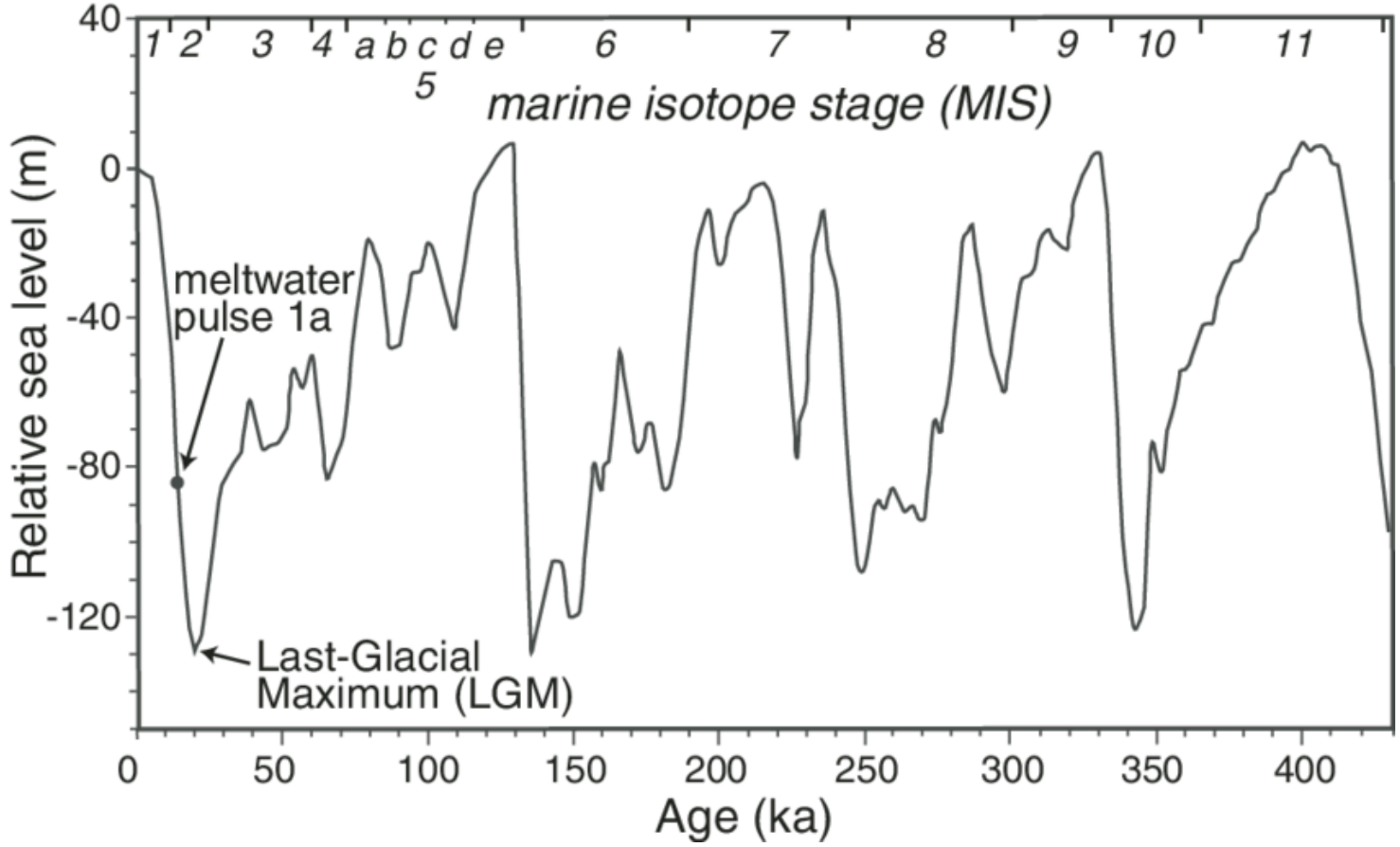
Holozän-
Interglacial

Quelle: Wiki
„Quartenary Glaciation“

Quartäres Eiszeitalter (ca. 2.5 Mill Jahre vor heute – bis heute)

Menschen haben eine lange Geschichte mit Klimawandel (2.5 Mill/300.000 Jahre).

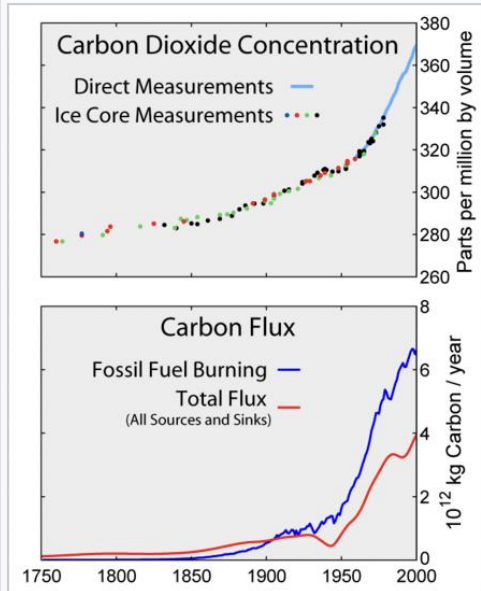
Wenn auch nicht
mit dem menschengemachten.



Next glacial period [edit]

Further information: Milankovitch cycles, Past sea level, Climate change, and Human impact on the environment

The warming trend following the Last Glacial Maximum, since about 20,000 years ago, has resulted in a sea level rise by about 130 metres (427 ft). This warming trend subsided about 6,000 years ago, and sea level has been comparatively stable since the Neolithic. The present interglacial period (the Holocene climatic optimum) has been stable and warm compared to the preceding ones, which were interrupted by numerous cold spells lasting hundreds of years. This stability might have allowed the Neolithic Revolution and by extension human civilization.[39]



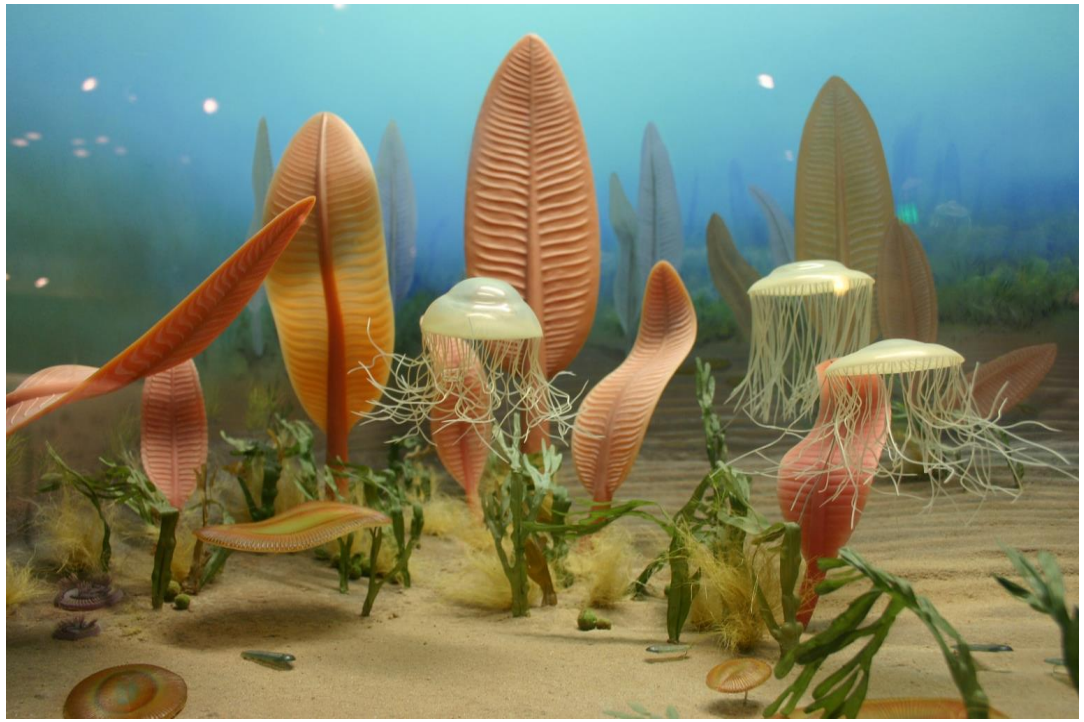
Increase in atmospheric CO_2 since the Industrial Revolution

Based on orbital models, the cooling trend initiated about 6,000 years ago will continue for another 23,000 years.[40] Slight changes in the Earth's orbital parameters may, however, indicate that, even without any human contribution, there will not be another glacial period for the next 50,000 years.[41] It is possible that the current cooling trend might be interrupted by an interstadial phase (a warmer period) in about 60,000 years, with the next glacial maximum reached only in about 100,000 years.[42]

Based on past estimates for interglacial durations of about 10,000 years, in the 1970s there was some concern that the next glacial period would be imminent. However, slight changes in the eccentricity of Earth's orbit around the Sun suggest a lengthy interglacial period lasting about another 50,000 years.[43] Additionally, human impact is now seen as possibly extending what would already be an unusually long warm period. Projection of the timeline for the next glacial maximum depend crucially on the amount of CO_2 in the atmosphere. Models assuming increased CO_2 levels at 750 parts per million (ppm; current levels are at 417 ppm[44]) have estimated the persistence of the current interglacial period for another 50,000 years.[45] However, more recent studies concluded that the amount of heat trapping gases emitted into Earth's oceans and atmosphere will prevent the next glacial (ice age), which otherwise would begin in around 50,000 years, and likely more glacial cycles.[46][47]

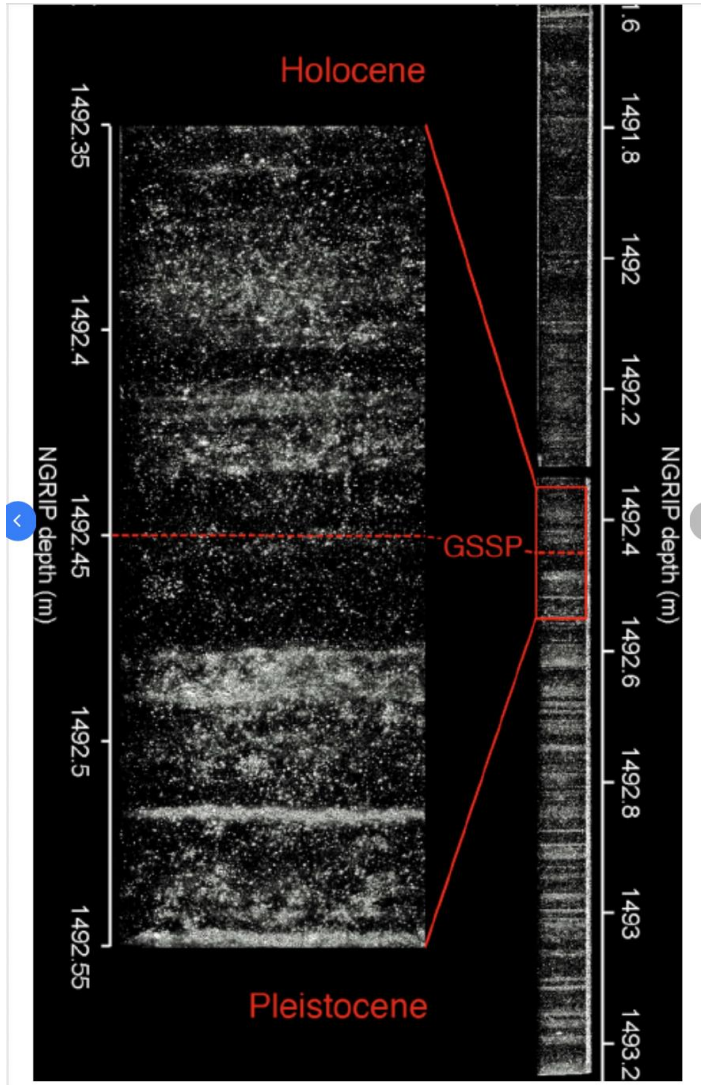
Passiert bis auf weiteres nicht

Methode der historischen Geologie: Strata analysieren



635 Mill years ago.

Gesucht: Ein Stratum des Anthropozäns



The Holocene GSSP in the NGRIP ice core from Greenland: a) is an enlargement of b) at the critical GSSP. The image is reversed so that impurities in the ice, including dust particles from eastern Asia, appear white. Annual banding is visible in the ice. Note a sharp increase in annual ice-layer thickness above the GSSP. The primary guide is a sharp decline in deuterium excess values (not visible), and the GSSP is dated at 11,700 calendar yr b2k with a maximum counting error of 99 yr (2 s). A break in the ice

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Original publication

McCarthy, F. M., Patterson, R. T., Head, M. J., Riddick, N. L., Cumming, B. F., Hamilton, P. B., Pisaric, M. F., Gushulak, A. C., Leavitt, P. R., Lafond, K. M., Llew-Williams, B., Marshall, M., Heyde, A., Pilkington, P. M., Moraal, J., Boyce, J. I., Nasser, N. A., Walsh, C., Garvie, M., … McAndrews, J. H. (2023)

The varved succession of Crawford Lake, Milton, Ontario, Canada as a candidate Global boundary Stratotype Section and Point for the Anthropocene series.

The Anthropocene Review, 10(1), 146–

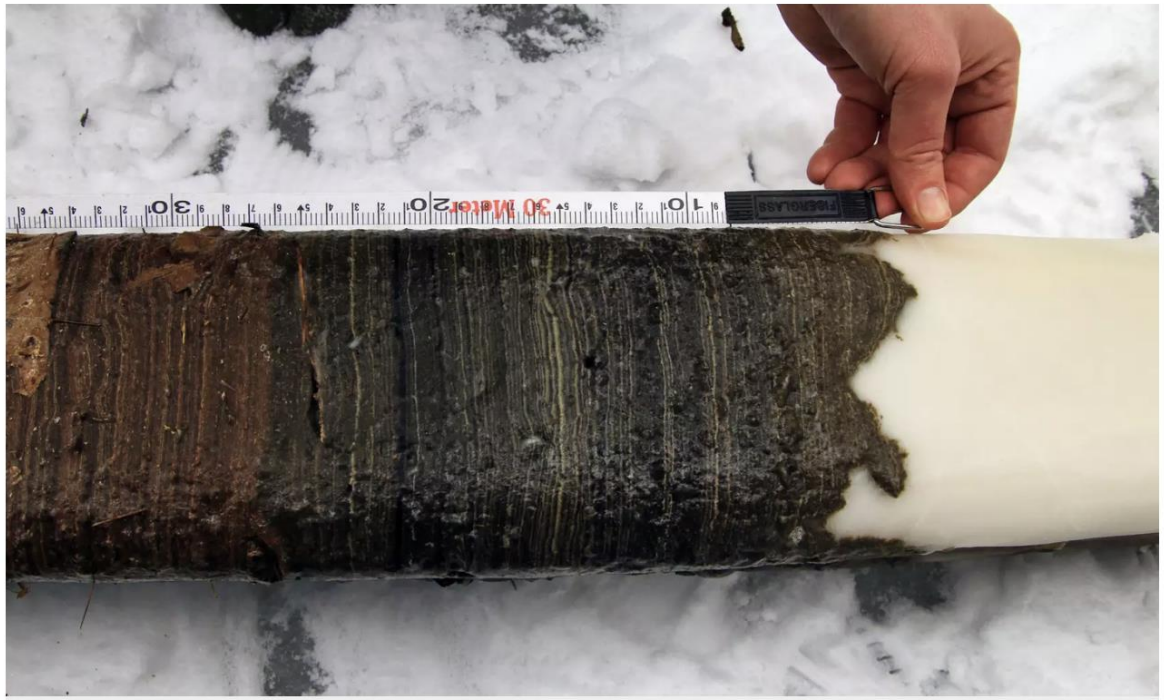
Locating the Anthropocene

Researchers announce major step towards defining a new geological epoch

JULY 11, 2023

Climate | Social Sciences

Officially, we are currently living in the geological epoch known as the Holocene. But the profound impact of human activities on the Earth's systems has triggered discussions regarding a new era: the Anthropocene. Yet, until now, there has been a lack of clear scientific evidence, specifically a unique reference point, to signify the onset of this new epoch. An international geological working group has now successfully addressed this gap. In the future, a small lake in Canada will serve as the designated geological repository of evidence, marking the transition into the human era. The Max Planck Society has played a significant role in propelling research on the Anthropocene and has contributed valuable insights to the efforts of the working group.



Drill core from Crawford Lake: In this Canadian lake, calcium and carbonate ions from the surrounding rocks combine and crystallize into small calcite crystals when the water is warm. These crystals gradually sink and form a distinct white layer at the lake bottom each summer. This natural phenomenon provides researchers with a precise chronological marker, allowing them to determine the specific year being examined. Around the year 1950, there is a notable increase in the concentration of plutonium particles. This significant change serves as a clear indication of human impact and, consequently, provides evidence of the Anthropocene era.

[less]

Im Herzen des Anthropozäns: „the history of human intelligence“

A new era has then begun with man. Let us admit, though eccentric it might be, the supposition that a strange intelligence should come to study the Earth in a day when human progeny, such as populated ancient worlds, has disappeared completely. Could he study our epoch's geology on the basis of which the splendid edifice of gone worlds' science was built? Could he, from the pattern of floods, from the distribution of animals and plants, from the traces left by the free forces of nature, deduct the true, natural conditions of the world? Maybe he could; but always and only by putting in all his calculations this new element, human spirit. At this condition, as we, for instance, explain the mounds of terrestrial animals' bones in the deep of the sea, he, too, could explain the mounds of sea shells that savage prehistoric men built on the coasts that they inhabited. But if current geology, to understand finished epochs, has to study nature irrespective of man, future geology, to understand our own epoch, should study man irrespective of nature. So that future geologist, wishing to study our epoch's geology, would end up narrating the history of human intelligence. That is why I believe the epoch of man should be given dignity of a separate new era.

Antonio Stoppani, Corso di Geologia (1873)

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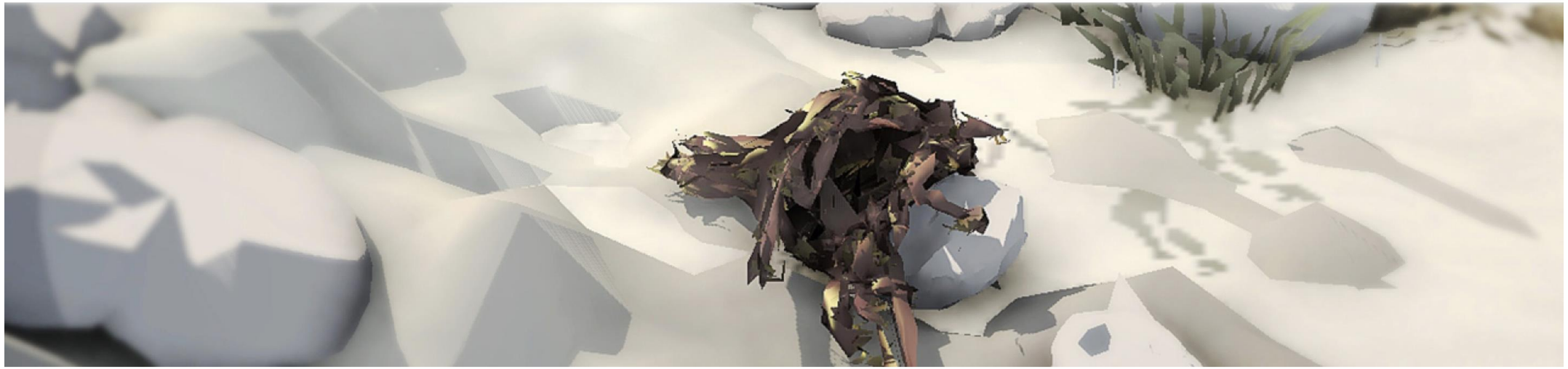
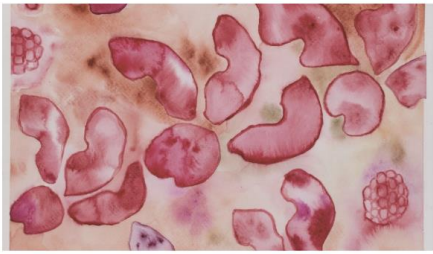


Defossilization and Refossilization

2019-04-03 Daniel Falb POLSKI

Context



Obieg po sztuce współczesnej #12

MATYLDA WIŚNIEWSKA

Defossilisierung und Refossilisierung
= **Anthropozän als plastischer Prozess**

Defossilisierung:

– Ausgrabung, „Verflüssigung“ und Bewegung von Sedimenten/Fossilien/Rohstoffen

– Verwendung dieser Materialien zum Bau von Infrastrukturen und Technologien

Refossilisierung:

– Absonderung und Ablagerung von nicht mehr verwendetem Material (Müll, Schutt)

– Bildung des Anthropozän-Stratums

Defossilisierung: Erdbewegungen

The sum effect of anthropogenic soil, rock and sediment movement in the terrestrial realm has been estimated to exceed, currently, those from natural processes, perhaps by an order of magnitude [22,23].

Zalasiewicz et al.

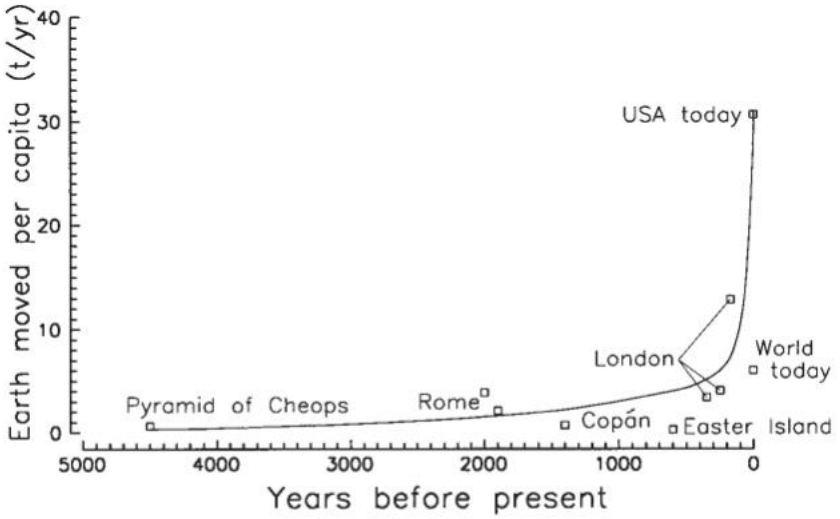


Figure 1. Estimates of amount of earth, including both soil and rock, moved per capita intentionally annually, by certain relatively advanced societies in the past; t is tons.

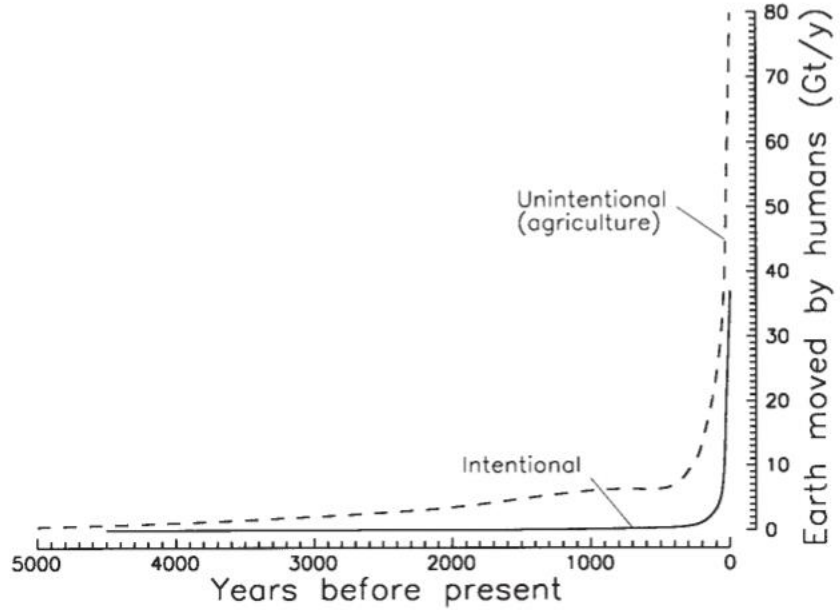


Figure 4. Estimate of total amount of earth moved annually by humans at various times in the past. Curves were obtained by multiplying earth moved per capita (Fig. 2) by population (Fig. 3).

Hooke 2000

Anthropozän als plastischer/skulpturaler Prozess:
Planetarische Fluss-Gestalt der Defossilisierung

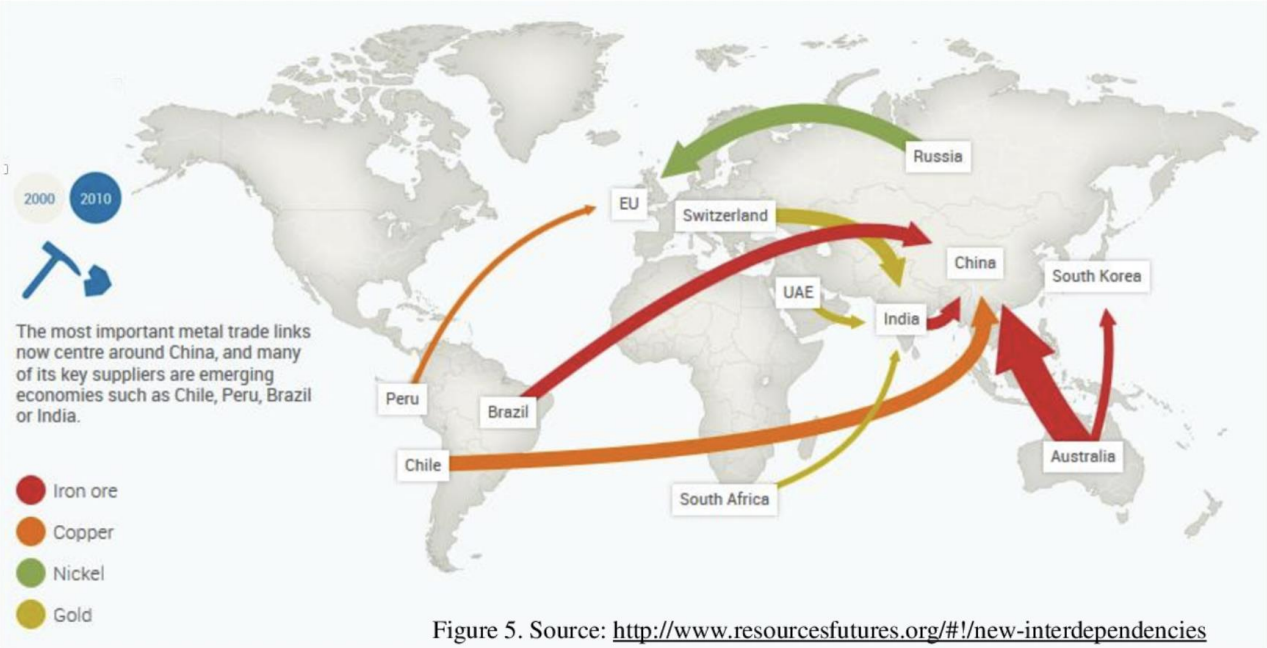
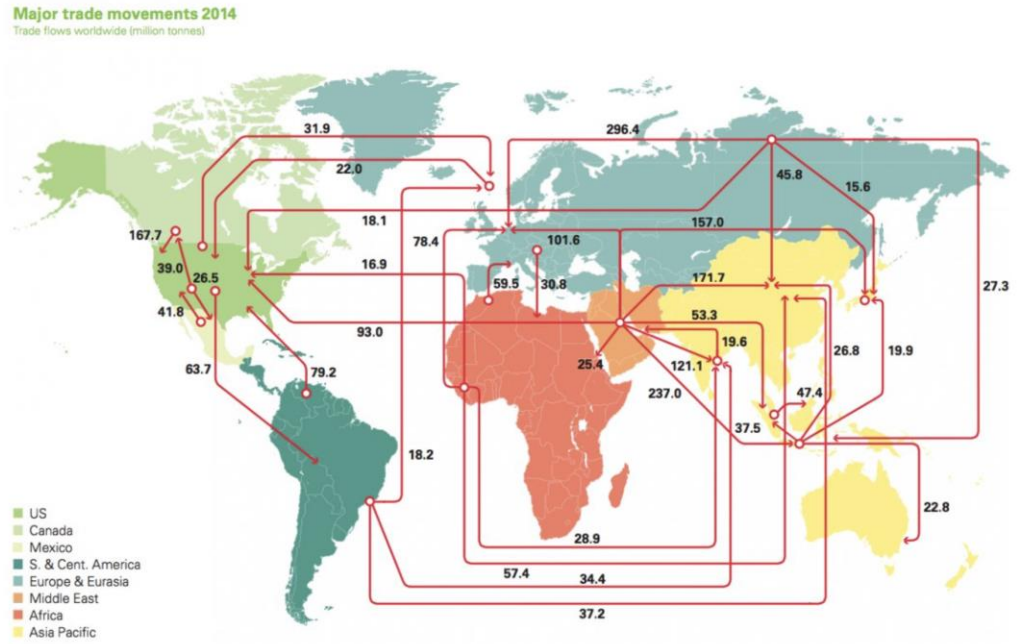


Figure 5. Source: http://www.resourcesfutures.org/#!/new-interdependencies



Visualizing the Flow of Oil Around the World

Every day, 93 million barrels of oil are consumed by the world economy.

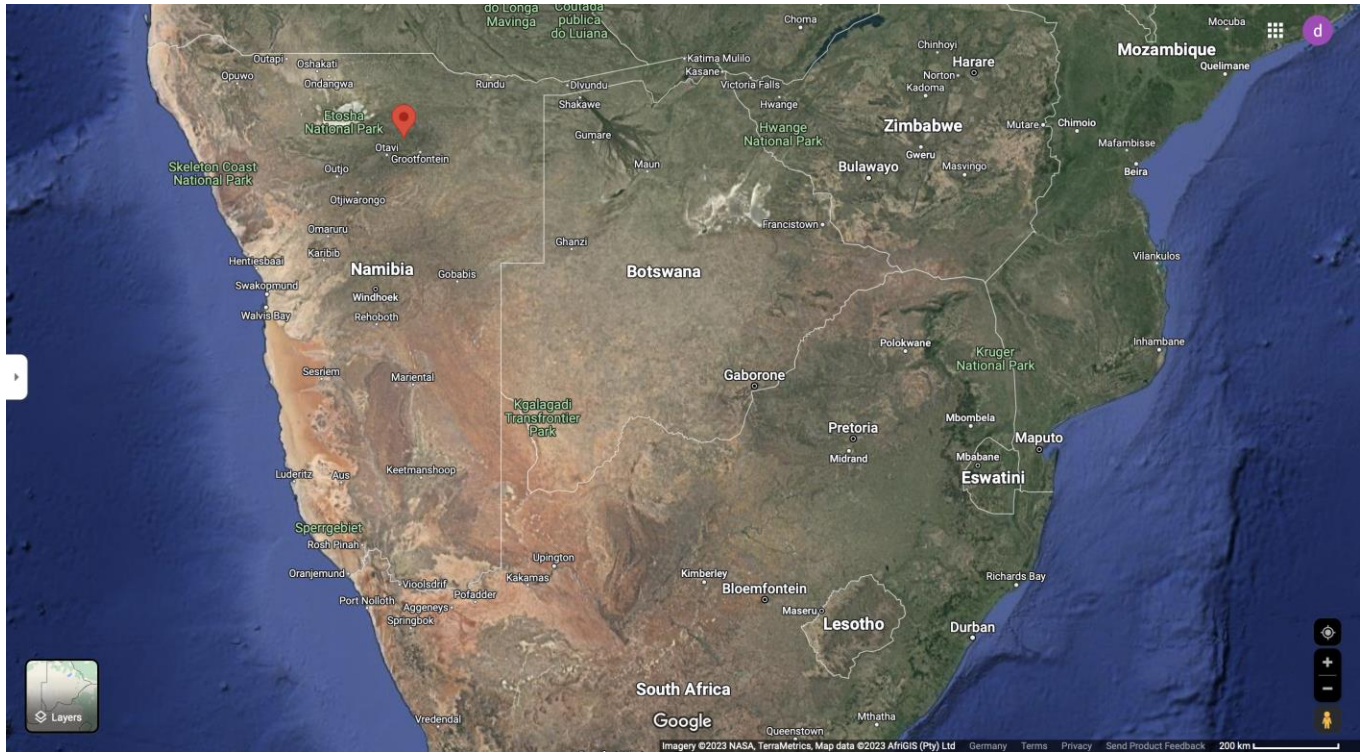
Quelle: https://www.visualcapitalist.com/visualizing-the-flow-of-oil-around-the-world/

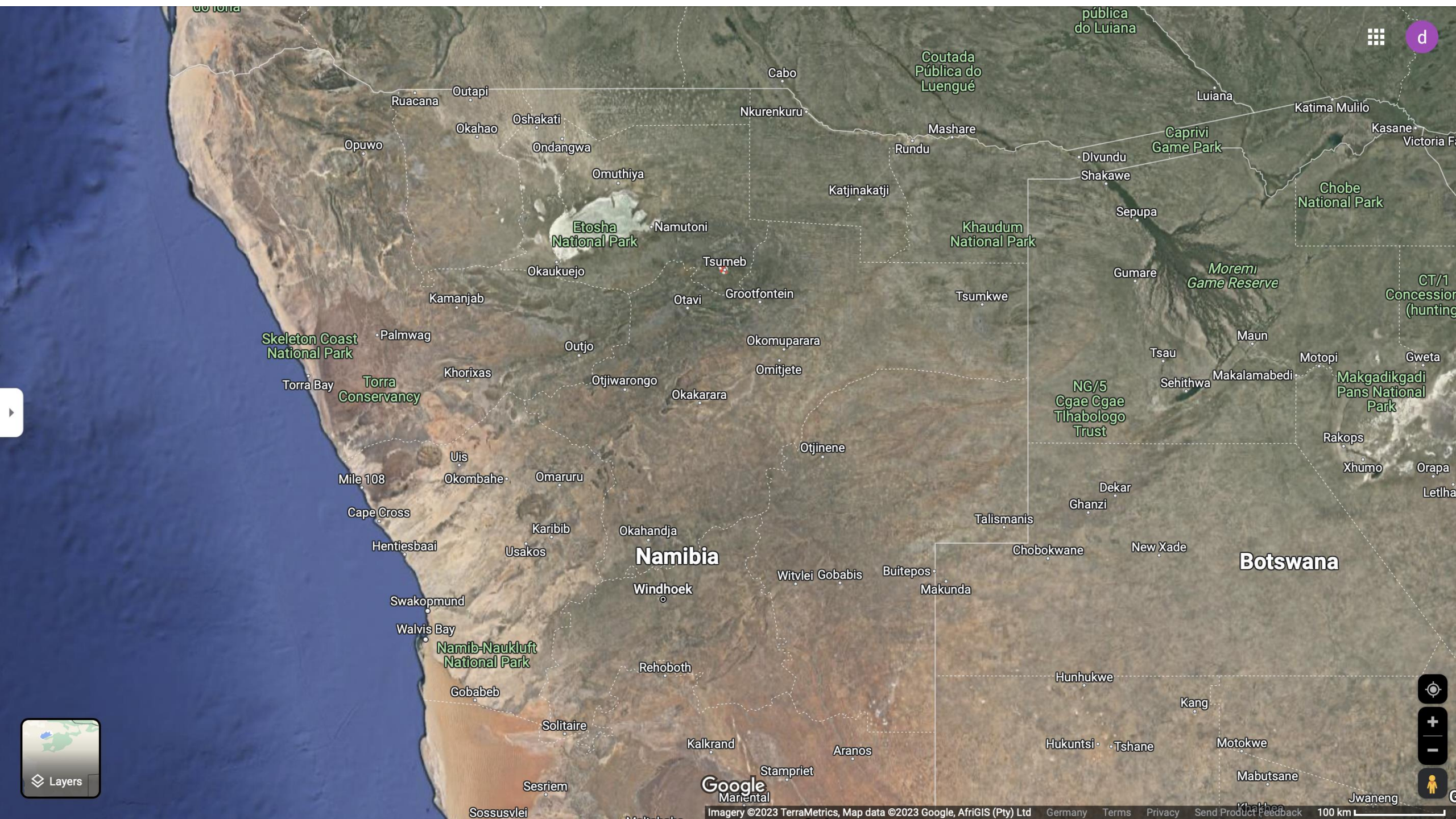
Künstler*innen Arbeiten an der Konkretisierung und Komplikation dieses Bildes
und insitieren auf der Reversion der hierin vollzogenen Abstraktionen („Rohstoff“).
Kunst der Defossilisierung = Kunst des Extraktivismus

Otobong Nkanga

Remains of the Green Hill (2015)

Reflections of the Raw Green Crown (2015)

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Luiana
Katima Mulilo
Oshakati
Okahao
Mashare
Kasane
Caprivi
Game Park
Opuwo
Ondangwa
Rundu
Dlvundu
Omuthiya
Shakawe
Katjinakatji
Chobe
National Park
Sepupa
Etosha
National Park
Namutoni
Khaudum
National Park
Tsumeb
Okaukuejo
Gumare
Moremi
Game Reserve
Kamanjab
Otavi
Grootfontein
Tsumkwe
CT/1
Concession
(hunting
Skeleton Coast
National Park
Palmwag
Outjo
Okomuparara
Maun
Tsau
Motopi
Gweta
Khorixas
Omitjete
Torra Bay
Torra
Conservancy
Otjiwarongo
Okakarara
Sehithwa
Makalamabedi
NG/5
Cgae Cgae
Tlhabologo
Trust
Makgadikgadi
Pans National
Park
Rakops
Otjinene
Uis
Xhumo
Orapa
Mile 108
Okombahe
Omaruru
Dekar
Letlha
Ghanzi
Cape Cross
Talismanis
Karibib
Okahandja
Hentiesbaai
Usakos
Namibia
Chobokwane
New Xade
Botswana
Witvlei
Gobabis
Buitepos
Windhoek
Makunda
Swakopmund
Walvis Bay
Namib-Naukluft
National Park
Rehoboth
Hunhukwe
Gobabeb
Kang
Solitaire
Hukuntsi
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Tsumeb Morial Church
Presidents Ave
Nomtsoub Cemetery
Copper Guesthouse
Makalani
Minen
Tsumeb Private Hospital
Tsumeb Museum
Tsumeb
Farm Balavia tsumeb
Tsumeb Gimnasium
Secondary School
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Deutsche Kolonialität (1884-1915)

Der industrielle Bergbau erfordert nicht nur einen ununterbrochenen Strom billiger Arbeitskräfte zum Ziehen, Tragen und Graben der Erdmassen – worauf ich später eingehen werde. Die Otavi-Region, in der Tsumeb liegt, ist darüber hinaus durch eine Geschichte gewaltsamer und illegaler Annexionen geprägt. Das Deutsche Reich erwirbt das Land damals ohne die rechtmäßige Zustimmung der Besitzer_innen.[16] Hendrik Witbooi, einflussreicher Politiker und Kaptein der Nama, schreibt: «Ich selbst habe keinem Weißen erlaubt, Kupfer zu suchen».[17] Es gibt zahlreiche antikoloniale Widerstände gegen den Landraub in der Otavi-Region, wenn von ihnen in der Geschichtsschreibung oftmals auch nur in Nebensätzen oder Fußnoten berichtet wird.

Der Deutsch-Namibische Krieg, der zu dem Genozid an Herero und Nama sowie der Ermordung vieler weiterer afrikanischer Bewohner_innen der damaligen Kolonie führt, steht in Zusammenhang mit Tsumeb. Der antikoloniale Aufstand der Herero, mit dem der Krieg beginnt, unterbricht 1904 den kurz zuvor begonnenen Bau der Eisenbahn, der ihr Land entzweien sollte, um das Kupfer von Tsumeb zur Hafenstadt Swakopmund zu transportieren.[18] General Lothar von Trotha spricht den Vernichtungsbefehl aus, der den südwestafrikanischen Widerstand in extremer Brutalität niederschlägt und in dessen Folge das Land der Herero zur infrastrukturellen Bebauung freigegeben wird. Die genozidale Landnahme ist letztendlich die Voraussetzung für die Versorgung der europäischen Infrastrukturen mit Kupfer aus Tsumeb.[19]

Naomie Gramlich, Mediengeologisches Sorgen

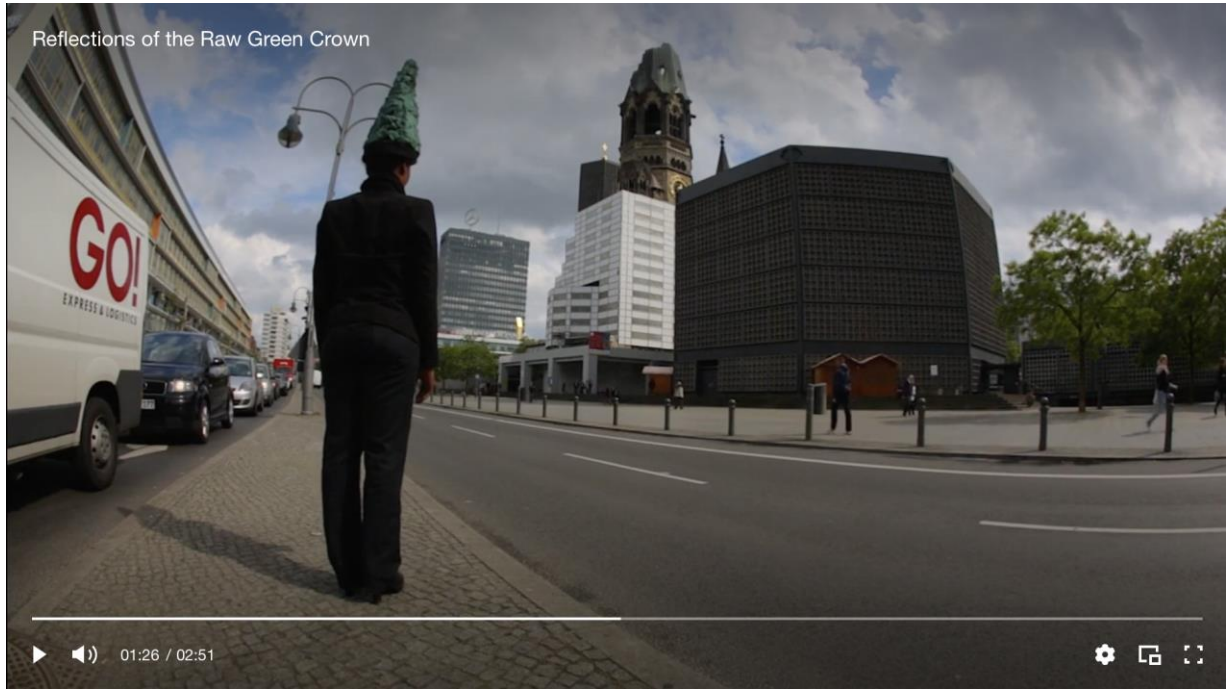
Remains of the Green Hill (2015)

FS: Deine Werke in den letzten Jahren haben sich häufig mit Mineralien und Bergbau und einigen Orten Namibias beschäftigt. Darin hast du auch die Bedeutung von Monumenten und Ruinen erforscht und von positivem und negativem Raum gesprochen sowie von der Stofflichkeit von Mineralien und der Ästhetik industrieller Prozesse. Nun wird dem menschlichen Körper in deinem Werk viel Bedeutsamkeit zugemessen, einerseits bei der Herstellung von Verbindungen, andererseits aber auch als ein Werkzeug. Würdest du erklären, wie der menschliche Körper als ein Ausstellungsfeld und auch als Werkzeug mit den sie interessierenden Themen in Verbindung gerät?

ON: Ich betrachte den Körper als etwas, dass in Bewegung ist, tätig ist, nicht als einen Punkt des Stillstands, den man einfach beobachten kann. Er reagiert auf etwas, bewegt sich von einem Ort zum nächsten. Und ebenso verschiebt und verändert er die Landschaft der Dinge, hat die Fähigkeit dazu. Was mich hier interessiert, sind Überlegungen zum Körper und zur Stofflichkeit und Wandelbarkeit der Dinge: eine Art Verschiebung des Körpers, wie der Körper den Berg zu einem Loch hat werden lassen und wie der Körper zu einer Art

Werkzeug wird, um politische und gesellschaftliche Perspektiven zu ändern und wie der Körper zu einer Art Waffe wird oder politisch und für bestimmte Verhaltensweisen eingesetzt wird. Der Körper in meinem Werk ist kein neutraler Körper, er ist immer schon etwas, das manipuliert, zerstört, verwandelt oder verschoben werden kann.

Reflections of the Raw Green Crown (2015)



Getsemanekirche

Kaiser-Wilhelm-Gedächtniskirche

diese Orte auf der Welt für uns als vernetzt dar? Diese Fragen haben sich mir eröffnet, ebenso, als ich sah, wie die Gesteine zermalmt wurden und dass damit eine ganze Landschaft auf eine gewisse Weise ausgelöscht wurde: da fragt man sich, ob diese Leere anderswo etwas hat in die Höhe ragen lassen, zumal dann, wenn man sich mit dem Konzept des Monuments beschäftigt und an die in Monumenten und Gebäuden verarbeiteten Materialien denkt. Es wäre möglicherweise richtiger, das Konzept des Monuments und auch das Konzept von Monumentalität umzudenken durch ein Konzept der Trümmer und Ruinen (*remains*).

FS: In diesem Zusammenhang sprichst du ja auch von dem „negativen Monument", was dem Diskurs zum Monument eine bestimmte Stoßrichtung verleiht. Würdest du einmal erläutern, was du unter dem Begriff Monument verstehst und insbesondere unter einem „negativen Monument"?

ON: Für mich stellt sich das derart dar, dass alles, was wir bauen und konstruieren, an einem anderen Ort ein Loch erzeugt, eine Art Leere. Wenn wir also ein Bauwerk betrachten, sagen wir mal das eines bedeutenden Architekt und dann „Ach, was für ein bedeutsames Monument" hervorstoßen, erkennen wir nur diese Seite des Monuments an diesem Ort. Was an einem Ort errichtet wird, leert anderswo den Raum, diese Aspekte sollte man zusammen denken, damit dieser andere Raum, der die Errichtung des Gebäudes ermöglicht hat, ebenfalls als Monument erkannt wird. Wir sollten das auf diese Weise betrachten und uns das immer wieder ins Bewusstsein rufen: Wenn wir Orte entleeren und Dinge errichten, ist der andere Ort genauso bedeutsam wie das Errichtete. Allerdings werden die meisten dieser Orte, die entleert und auf eine gewisse Art und Weise zerstört werden, in unserem Geschichtsverständnis, in unserem Gedenken und unserem Trauern nicht berücksichtigt. Dabei sind diese Orte auf eine sehr komplexe Art miteinander verbunden.

Nkanga:

negative monuments (of extractivism)

‚positive‘ monuments (of the stuff built through it)

Atome miteinander verbunden sind. Nachdem ich die chemische Struktur von Glimmer erforscht hatte und die darin enthaltenen Grundelemente, kam mir die Vorstellung, dass all diese Ideen in einer Struktur zusammengebracht werden könnten, die durch magnetische Stangen verbunden wird. Diese Stangen könnte man dazu verwenden, das Ausstellungsstück oder sagen wir mal die molekulare Struktur der Ausstellung zu verändern.

Dadurch würde es zu einem modularen Display: Es passt sich dann den zum Werk entstehenden Gedanken an, es lassen sich Sachen hinzufügen oder entfernen, Teile sind komplett austauschbar oder änderbar, aber der Kerngedanke bleibt davon unberührt. Allein schon bei der Beschäftigung mit der

Nicholas Mangan

A World Undone (2012)

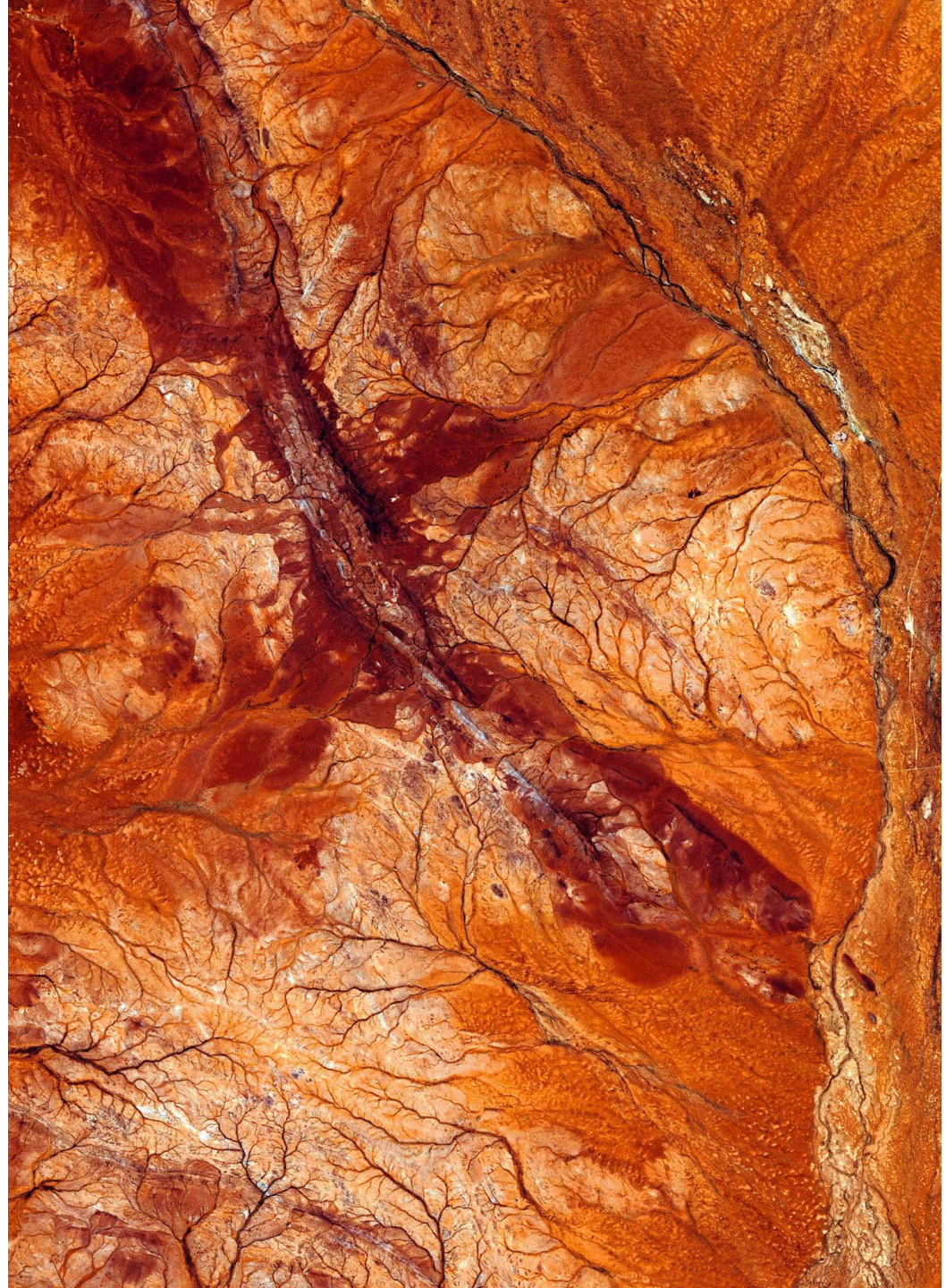
Jack Hills

Article Talk

From Wikipedia, the free encyclopedia

For the astronomer, see Jack G. Hills.

The **Jack Hills** are a range of hills in Mid West Western Australia. They are best known as the source of the oldest material of terrestrial origin found to date: Hadean zircons that formed around 4.404 billion years ago. These zircons have enabled deeper research into the conditions on Earth in the Hadean eon. In 2015, "remains of biotic life" were found in 4.1 billion-year-old rocks there.[1][2] According to one of the researchers, "If life arose relatively quickly on Earth ...then it could be common in the universe."[1]



Nicholas Mangan, *Matter over Mined*, 2012, C-type print, 69 × 103 cm.

Nicholas Mangan, *Mined over Matter (for A World Undone)*, 2012, C-type print, 69 × 103 cm.

Earlier in 2012, Mangan sourced a sample of this rock containing zircon crystal from Jack Hills which he then proceeded to crush into crumbs, and then granular dust. This process was carried out along the methodological lines of a disaggregation, or what Robert Smithson — an important precursor to Mangan's thinking — famously spoke of in terms of entropy: the reversal or decline of discrete matter into a state of disorder. In the video work A World Undone, Mangan filmed these granular particles in airborne flux set against a black backdrop with a slow motion HD camera. In so doing, he both captured the dust particles' movement with microscopic detail and dislocated this movement from earthly time by slowing down the footage — shooting 2,400 frames per second as opposed to the standard rate of 24. At this speed, the specks of dust become epic: moving slowly, silently, and with a hint of gravitational force through the blank, black space. With no clear context or scalar referents discernible within the frame, the footage of these drifting particles is reminiscent of 'documentary images of meteorite showers, cosmic dust or an asteroid belt'; the polar relationship between the micro and the macro is cast into radical ambiguity.

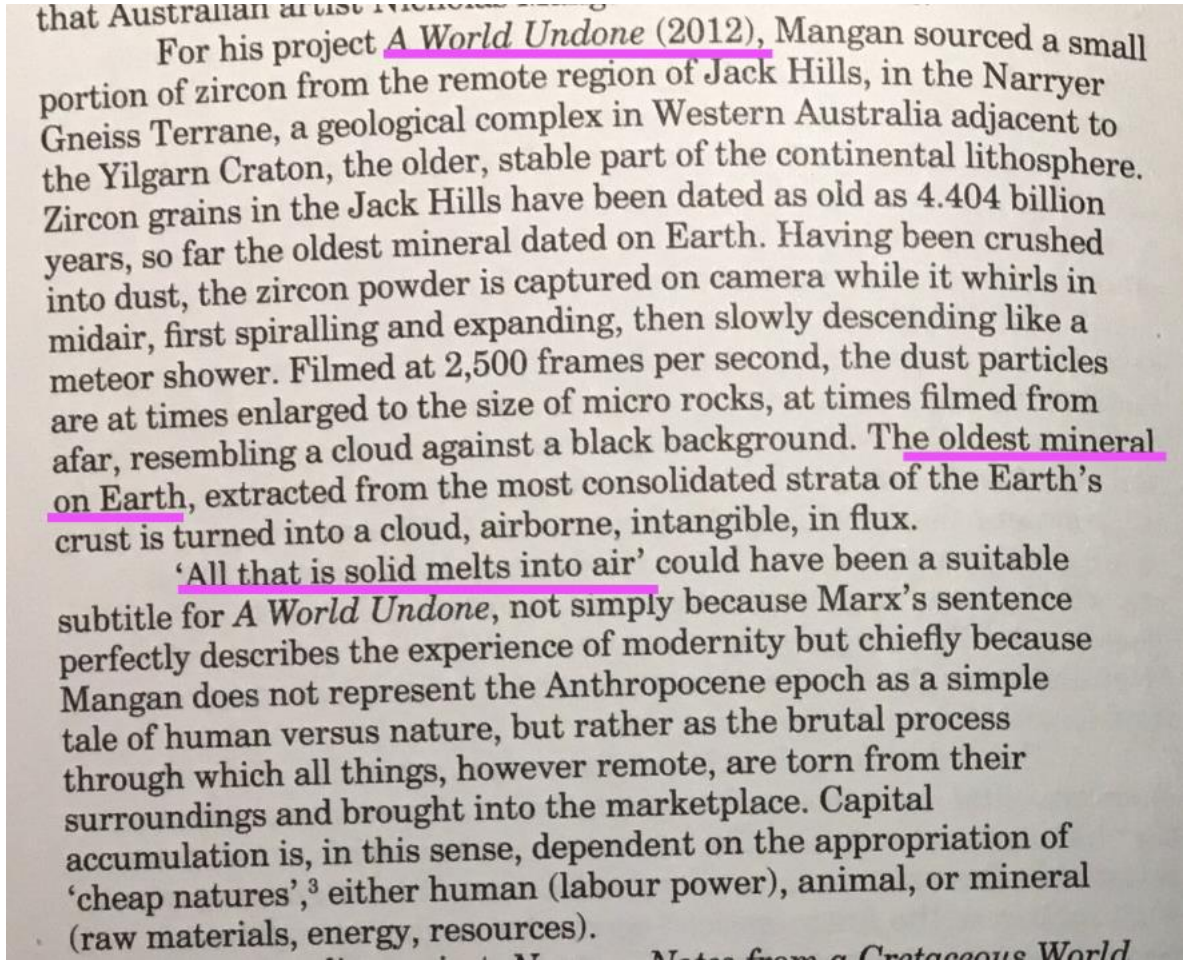
„Freisetzung" von Tiefenzeit

Nicholas Mangan, *Matter over Mined*, 2012, C-type print, 69 × 103 cm.

Nicholas Mangan, *Mined over Matter (for A World Undone)*, 2012, C-type print, 69 × 103 cm.

Matter over Minded

Mined over Matter



that Australian artist [illegible]

For his project *A World Undone* (2012), Mangan sourced a small portion of zircon from the remote region of Jack Hills, in the Narryer Gneiss Terrane, a geological complex in Western Australia adjacent to the Yilgarn Craton, the older, stable part of the continental lithosphere. Zircon grains in the Jack Hills have been dated as old as 4.404 billion years, so far the oldest mineral dated on Earth. Having been crushed into dust, the zircon powder is captured on camera while it whirls in midair, first spiralling and expanding, then slowly descending like a meteor shower. Filmed at 2,500 frames per second, the dust particles are at times enlarged to the size of micro rocks, at times filmed from afar, resembling a cloud against a black background. The oldest mineral on Earth, extracted from the most consolidated strata of the Earth's crust is turned into a cloud, airborne, intangible, in flux.

'All that is solid melts into air' could have been a suitable subtitle for *A World Undone*, not simply because Marx's sentence perfectly describes the experience of modernity but chiefly because Mangan does not represent the Anthropocene epoch as a simple tale of human versus nature, but rather as the brutal process through which all things, however remote, are torn from their surroundings and brought into the marketplace. Capital accumulation is, in this sense, dependent on the appropriation of 'cheap natures',[3] either human (labour power), animal, or mineral (raw materials, energy, resources).

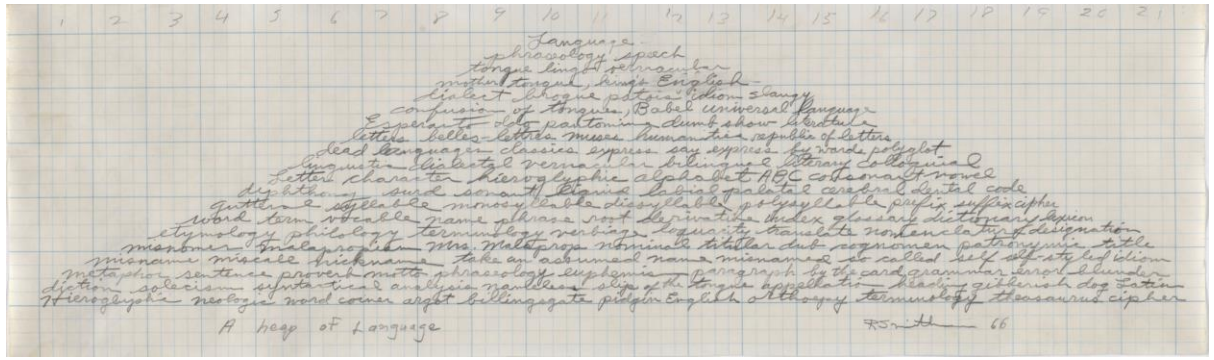
Notes from a Cretaceous World

Ana Teixeira Pinto, Alien Economies

Die Bourgeoisie kann nicht existiren, ohne die Produktionsinstrumente, also die Produktionsverhältnisse, also sämmtliche gesellschaftlichen Verhältnisse fortwährend zu revolutioniren. Unveränderte Beibehaltung der alten Produktionsweise war dagegen die erste Existenzbedingung aller früheren industriellen Klassen. Die fortwährende Umwälzung der Produktion, die ununterbrochene Erschütterung aller gesellschaftlichen Zustände, die ewige Unsicherheit und Bewegung zeichnet die Bourgeois-Epoche vor allen früheren aus. Alle festen, eingerosteten Verhältnisse mit ihrem Gefolge von altehrwürdigen Vorstellungen und Anschauungen werden aufgelöst, alle neugebildeten veralten, ehe sie verknöchern können. Alles Ständische und Stehende verdampft, alles Heilige wird entweiht, und die Menschen sind endlich gezwungen, ihre Lebensstellung, ihre gegenseitigen Beziehungen mit nüchternen Augen anzusehen.

Das Bedürfniß nach einem stets ausgedehnteren Absatz für ihre Produkte jagt die Bourgeoisie über die ganze Erdkugel. Ueberall muß sie sich einnisten, überall anbauen, überall Verbindungen herstellen.

Marx, Karl; Engels, Friedrich: Manifest der Kommunistischen Partei. London, 1848.



Mind *as* geologic force

World before the emergence of mind
(Mind *emerges* from geology [via history of life and evolution])

Kunst im Anthropozän

1. Was ist das Anthropozän?
2. Defossilisierung
3. Refossilisierung
4. Tiefenzeit Gespenster

Defossilisierung und Refossilisierung
= **Anthropozän als plastischer Prozess**

Defossilisierung:

– Ausgrabung, „Verflüssigung“ und Bewegung von Sedimenten/Fossilien/Rohstoffen

– Verwendung dieser Materialien zum Bau von Infrastrukturen und Technologien

Refossilisierung:

– Absonderung und Ablagerung von nicht mehr verwendetem Material (Müll, Schutt)

– Bildung des Anthropozän-Stratums

THE CONVERSATION

Academic rigour, journalistic flair

The materials used by humans now weigh more than all life on Earth – here's four graphs that reveal our staggering impact on the planet

Published: June 12, 2023 5.50pm CEST

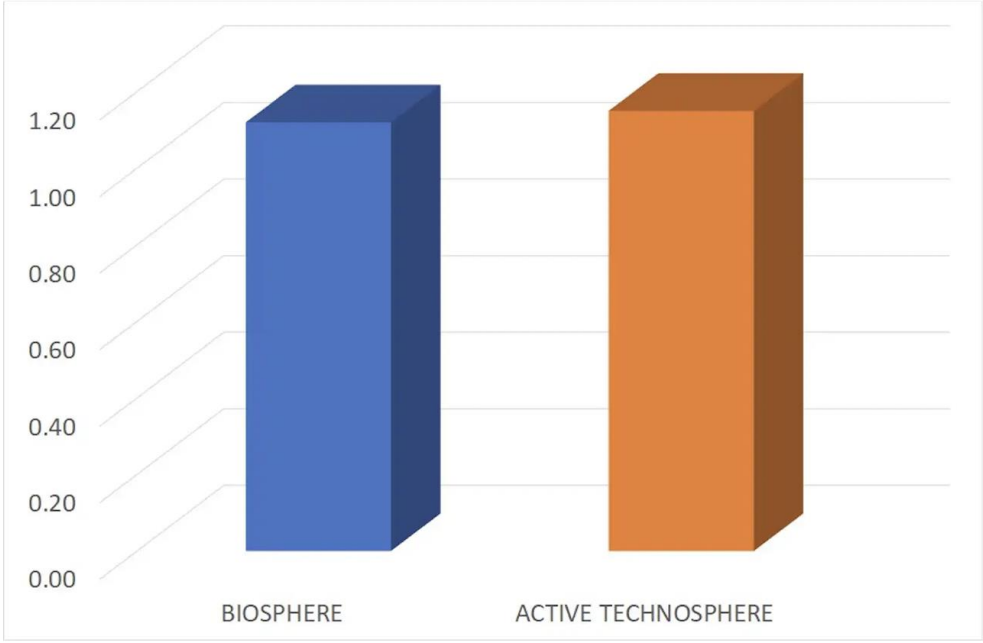
Yantian Port, Shenzhen City, China. Weiming Xie/Shutterstock

1. Weighing the technosphere

In 2020, a group of Israeli academics presented a shocking fact: the combined mass of all materials currently utilised by humanity had surpassed the total mass of all living organisms on Earth.

According to their findings, the collective weight of all life on Earth (the biosphere) – ranging from microbes in the soil, to trees and animals on land – stands at 1.12 trillion tonnes. While the mass of materials actively used by humans, including concrete, plastic and asphalt, weighed in at 1.15 trillion tonnes.

The technosphere weighs more than all life on Earth (trillion tonnes):



The relative weights of the active technosphere and biosphere. The active technosphere includes materials that are currently in use by human activities. The biosphere includes all living things. Elhacham et al. (2020), CC BY-NC-ND

This graph offers a glimpse into the immense size of humanity's footprint. But it likely only scratches the surface.

When accounting for the associated byproducts of the materials used by humans, including waste, ploughed soil and greenhouse gases, the geologist and palaeontologist, Jan Zalasiewicz, calculated that the technosphere expands to a staggering 30 trillion tonnes. This would include a mass of industrially emitted carbon dioxide equivalent to 150,000 Egyptian Pyramids.

„positive monument" (Nkanga)
<—
All dies: potentielle Technofossilien

Leben im Anthropozän = Leben in der „Eingrabungsstätte“

(Eingrabungsstätte realer oder möglicher zukünftgiger Ausgrabungen)

Ästhetik der *Re*-Fossilisierung = Teil der Ästhetik der Kunst des Anthropozäns

FIELD WORK COMMODITIES DEEP TIME ENGINEERING SCALE STRATIGRAPHY TECHNOSPHERE

APR 22, 2022

Matt Edgeworth Peter K. Haff Juliana A. Ivar do Sul Daniel Richter Jan Zalasiewicz

THE TECHNOFOSSIL RECORD: WHERE ARCHAEOLOGY AND PALEONTOLOGY MEET

ANTHROPOGENIC MARKERS

As high tides and storm surges erode the landfill deposits at East Tilbury, sheet plastics dumped in the 1980s emerge from the low receding cliffs, to be swept out onto the river and eventually out to sea. Such modern forms of plastic are found only in the upper layers. Lower layers contain earlier forms of plastic such as bakelite. In fact this landfill, started in the late nineteenth century, may comprise a stratigraphic record of almost the entire history of plastics. *Photo by Strat188, wikimedia*

To understand the phenomenon of technofossils, we need to go further back in time to set the framework (or multiple frameworks). The very word "technofossil" is a reframing of the venerable term "artifact" to emphasize that many of these objects will enter the fossil record, and may be used—in the near or far future—like the traditional zone fossils, such astrilobites andammonites, thatpaleontologists use to age-date strata. Moreover, as these objects enter the fossil record, one can bring the dark arts of taphonomy to bear, forward-modeling how, and in what form, these objects will survive within strata over geological timescales. This, though, is not a simple exercise in telling catchy stories of the far future. The very act of fossilization means passing through, and interacting with, the living, sensitive "critical zone" that surrounds our planet. A plastic bag, for instance, might ultimatelyform a complex flattened impression in a bed of shale, reminiscent of (say) some exquisitely preservedjellyfish from Cambrian times. But, in passing from the surface to its ultimate burial, the bag may have choked a seagull, trapped some marine worms on the sea floor and, as a novel barrier to water and oxygen, formed different microbial micro-communities on its lower and upper surfaces that would react differently to the conditions of ever-deeper burial—before that subterranean life eventually winks out,millions of years later, several hundred meters below the sea floor. Technofossilization is therefore an active process, making its own living winners and losers in the critical zone. The process is complicated further in that humans not only manufacture complex objects, butassist in the fossilization process itself, for instance by emplacing such objects within tunnels and boreholes.

Mariana Castillo Deball: „Alchemy" (Formprozess)

challenge. And archaeology, while traditionally tasked with exploring the human world of the past—from ancient times prior to literacy up to historical times—now looks increasingly at the contemporary past, when the scale, speed, and nature of anthropogenic change accelerated. Thisfocus has led to pioneering archaeologically-based or -influencedstudies of contemporary “material culture”—for example, the analysis of the kinds of waste accumulating in landfill sites suggests thatthe modern, still-functioning world may be put under the same kind of microscope as in the studies of, say,Troy,Pompeii, orAngkor Wat.

Leben in der Eingrabungsstätte

Most technofossils provide very fine dating resolution, not only for identifying theAnthropocene, but also to signal a discrete level within it. Among the modern polymers which are produced and consequently discarded in large amounts around the globe, one might consider, for instance, those under the polyethylene (PE) umbrella: there are dozens of polymer types (LDPE, HDPE and many others) that have been invented within decadal timespans and might representfine-scale chemostratigraphical markers within Anthropocene strata.[3] PET (polyethylene terephthalate) bottles, now ubiquitous, were first produced in 1973, and so date what one might now term the mid- to late Anthropocene. Of course the patterns into which plastics have been shaped infinitely multiply the dating possibilities.The plastic credit card andthe Bic Cristal ballpoint pen, for instance, both first produced in 1950, may be regarded as zone technofossils for the Anthropocene, whilecompact discs (surprisingly widely dispersed as trash) only date from 1982. The technostratigraphic possibilities are almost endless, as technodiversity (if measured as the number of specific kinds of technofossil) is now far greater than biodiversity, measured as the number of species.[4] The larger technofossils are not quite as ubiquitously

Technodiversität übersteigt Biodiversität

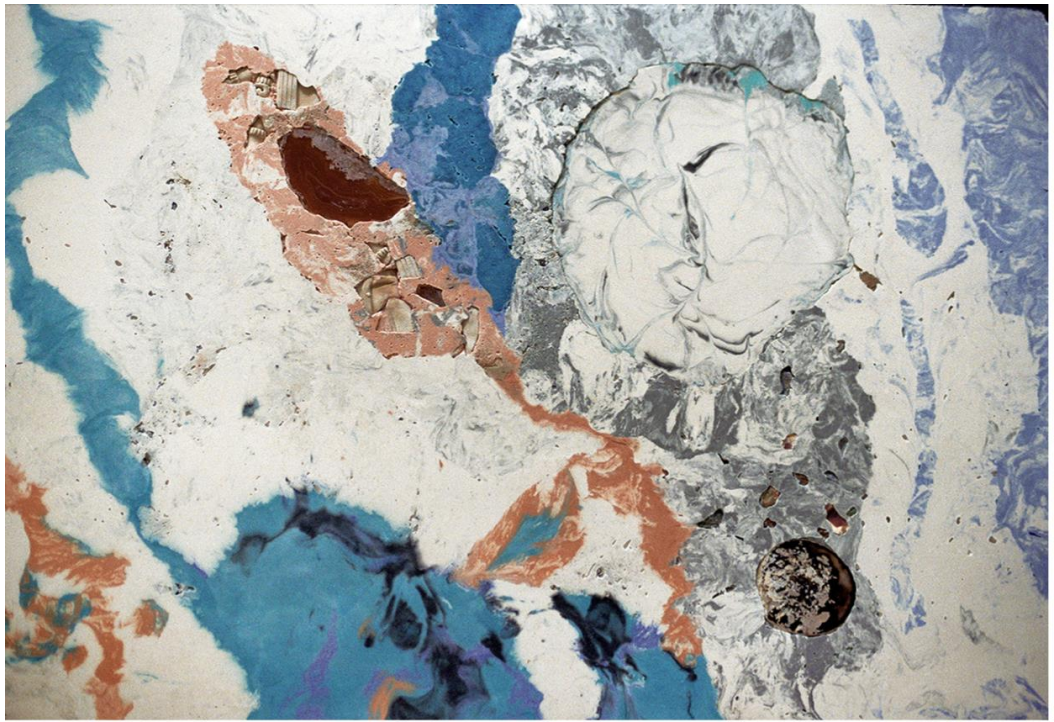
Human-led mineral evolution, concrete, metals and the plastics connection

The novel materials used in these constructed objects are as astonishingly hyper-diverse as the objects themselves. That the number of types of inorganic crystalline compounds—minerals in all but formal classification—multiplied forty-fold over a figure that hadheld more or less steady for two and a half billion years is impressive enough. The mineralogist Bob Hazen and his colleagues have both beautifully set out the geologically slow pace of mineral evolution on Earth,[9] and then detailed its late but strikingly impressive human addition.[10] To have nearly all of that novel,human-driven diversification taking place in the last 70 years seems surreal, like something out of science-fiction.[11] Most of these new compounds are present in tiny amounts, of course—but then, most natural mineral species are extremely rare too; only a few dozen make up the bulk of rocks on Earth.

However, the mere presence of a novelty may not really count for much in the Earth System, if its effect on that system is slight or benign. The most abundant novel material on Earth, by a wide margin, isconcrete, at something exceeding half a trillion tons—about half this weight was produced inthe last 20 years. Yet concrete is a rock, a little like a sandy limestone, generally inert if not altogether non-toxic (through its highly alkaline nature). Large amounts of pure (or alloyed) metals have been brought to Earth's surface, like iron, copper, and aluminum—the metals themselves are not generally regarded as pollutants (although the separation of these metals from their native ores may be highly polluting). Plastics, though, are something different.[12] Even though they are among the most chemically inert of all of the novel materials, their relative inertness, combined with their strength and lightness, is exactly what makes them so troublesome.

It is hard to think of a geological equivalent, physically or chemically, for plastics. As larger fragments, amber and related solid hydrocarbons come close, but they are too rare to have wider environmental impacts. The tough natural polymer coats of pollen and spores could make good analogues for microplastics, but millions of years of evolution has enabled biological digestion processes to evolve which can break down these materials—not least by honeybees, which can use pollen as a primary food source (one, these days, sometimes hijacked by health-conscious humans). One might have to go to other planetary bodies to find analogues for abundant, undigested polymerized hydrocarbons at the surface—such as Saturn's moon, Titan, where such solid particles are thought to make up the spectacular wind-blown dunefields there. In many ways, plastics are an alien material for Earth, and developing an effective conceptual framework for plastics is one of the challenges they present us in the Anthropocene.

Plastik



Mariana Castillo Deball, Uncomfortable Objects (2012)

SEEN IN THE STUDIO | DEC. 2, 2014

SEEN in the Studio: Ajay Kurian

By Sarah Trigg

Ajay Kurian in his Brooklyn studio, at work on his sculptures Hive (Want) (foreground) and Without Polish (Care), both 2014. Photo: ? Sarah Trigg

Kurian's collected rocks and broken Jawbreakers. Photo: ? Sarah Trigg

Layers within layers are common themes in Kurian's work, like with a candy Jawbreaker. He gathered a few of the broken candies mixed with a selection of his collected rocks. "There is as much of a sedimentation to candy as there is to words, as to the world itself, as to emotions, and all sorts of things. It's thinking about false versus real geologies as well as this arbitrary division between nature and culture. That's not to say that these things are all equally meaningful, just equally real."

Ajay Kurien, *Spiegel Leben 2*, 2013, © Foto: Nils Klinger

Ajay Kurian, *Probabilities (Bad at Math)*, 2014, © Foto: Nils Klinger 22/54

Wer sieht sich im Spiegel? (Zeit-Unbestimmtheit)

Michele Gabriele, Please at least tell Me Once before I Leave (2017)

A
Michele Gabriele, *They are standing there, under the weather, totally waterproof or completely wet* (2015) Exhibition view. Courtesy Konstanet, Tallinn.

Refossilisierung als glitch

Michele Gabriele, "CLUMSY and MILKY: encoding the last quarter of a pose", 2018 (Installation view);

Black dance 2016

Exhibition view, project space gallery ChezValentin, Paris. Site specific installation.

Black dance is an installation composed of sculptural artifact made of concrete, oil, glass and casted aluminium, all connected to each other by a metallic grid recalling a computer circuit board. At the center of the space lies a life size cast of a body, made of soil and resin, and whom head feels to be half plant half human.

Based upon online gamers conversations about possible futures, war and peace, the installation explore the idea of loss and faith in the context of global digital entertainment.

Peacekeeper765 minutes ago

+Frank Fish the HAE wouldn't have become as powerful without outside help, before and up until the time the HAE turned on the Hegemony (it doing so out of religious reasons) the Chinese and cfr poured billions into the Hae infrastructure/war making capabilities. It did so to help its "ally" become stronger for the war against the allies. Food was always an issue after the nuclear exchange in 2060 and billions will starve from it but the armies of the world used two methods to help Alleviate it's hunger issue. Synthetic food and human harvesting. Since the population was so large and the deaths so frequent enemy soldiers were often harvested for their meat, organs, blood and water.

Antoine Renard

Premier Machinic Funerary - Prologue

In Timur Si-Qin's recent work, commercial and stock photography, as well as displays like those often found in malls and stores, are presented as biological relics. The first part—aptly titled "Part One"—of the Berlin-based artist's series "Premier Machinic Funerary," 2014–, is featured in the latest edition of the Taipei Biennial, curated by Nicolas Bourriaud and on view at the Taipei Fine Arts Museum from September 13, 2014 through January 4, 2015.

"PREMIER MACHINIC FUNERARY" is made up of installations that resemble a form of hypercommercial ancestor worship. Essentially, they are funeral altars with 3-D printed scans of hominid fossils. More aptly, they're antifunerals, marking the reemergence of a life form through various phase transitions: from organism to fossil, from 3-D data to 3-D print. KNM ER 406, the fossil I'm focusing on for "Part One" in Taipei, was a male Paranthropus boisei who lived around 1.7 million years ago in what is now Kenya. Through technology and the ritual of contemporary art, this person is, in some way, being resurrected and, at least temporarily, prevented from having their particular arrangement of matter dissolve into entropy forever.

Wieder: wer erblickt dies? (Zeit-Unbestimmtheit)

Timur Si-Qin, TM1517 (Paranthropus Robustus): Dressed in Space (2013)

** *Which of your works were included in the Bonn exhibition? I understand you made 3D prints from fossils.*

TS: Yeah, there are these three constellations, each consisting of a strain of commercial pop-up display and a vitrine with the 3D printed remains of a hominid teenager that lived in South Africa 1.5 – 2 million years ago. Each vitrine has different versions of the same individual, the same person that once lived. I was able to retrieve the digitalisation of his remains and make copies. I think what interests me about it is this causal history of shape and pattern, that the shapes of this person are echoing through time in varying guises; first before he was alive, through his ancestors, then after his death, the shapes were stored in fossilised rock, and now they've been scanned, digitized and 3d printed, but it's still the same echo, the same shapes. In some ways I think the same thing goes for stock photos.

** *Was this a consideration in your works using Axe products? The Axe brand plays so much on these outdated ideas of scent and pheromones being able to trigger a response in the opposite sex. At the same time, the products also exploit very real evolution-based desires.*

TS: I think what interested me was not so much the truth of the claims of the product, which is obviously over the top teenage boy catnip, but that a campaign and product like that can be as effective today as it is, which is again evidence of the power of the vestigial.

** *It must be! Axe is such an object of ridicule but remains so popular.*

TS: Right, it's a fossil. The bottles themselves look like fossils too. I think those pieces were successful in being a joke and being serious and enchanted by its subject at the same time, which is something I strive for. Like the stock cosmetics style portraits of females, which to me represents the opposite side of the spectrum of over-expressed male/female duality.

Kunst im Anthropozän

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4. Tiefenzeit Gespenster

Going prehistoric: are we entering the ‘dinocore’ era?

LIFE & CULTURE - LONGREAD

From indie sleaze to regencycore, nostalgia-driven trends are being chewed up and regurgitated at breakneck speed. Enter dinocore: the final trend to end all trends

Text Günseli Yalcinkaya
Illustration Bior Elliot

25th March 2022

GALLERY

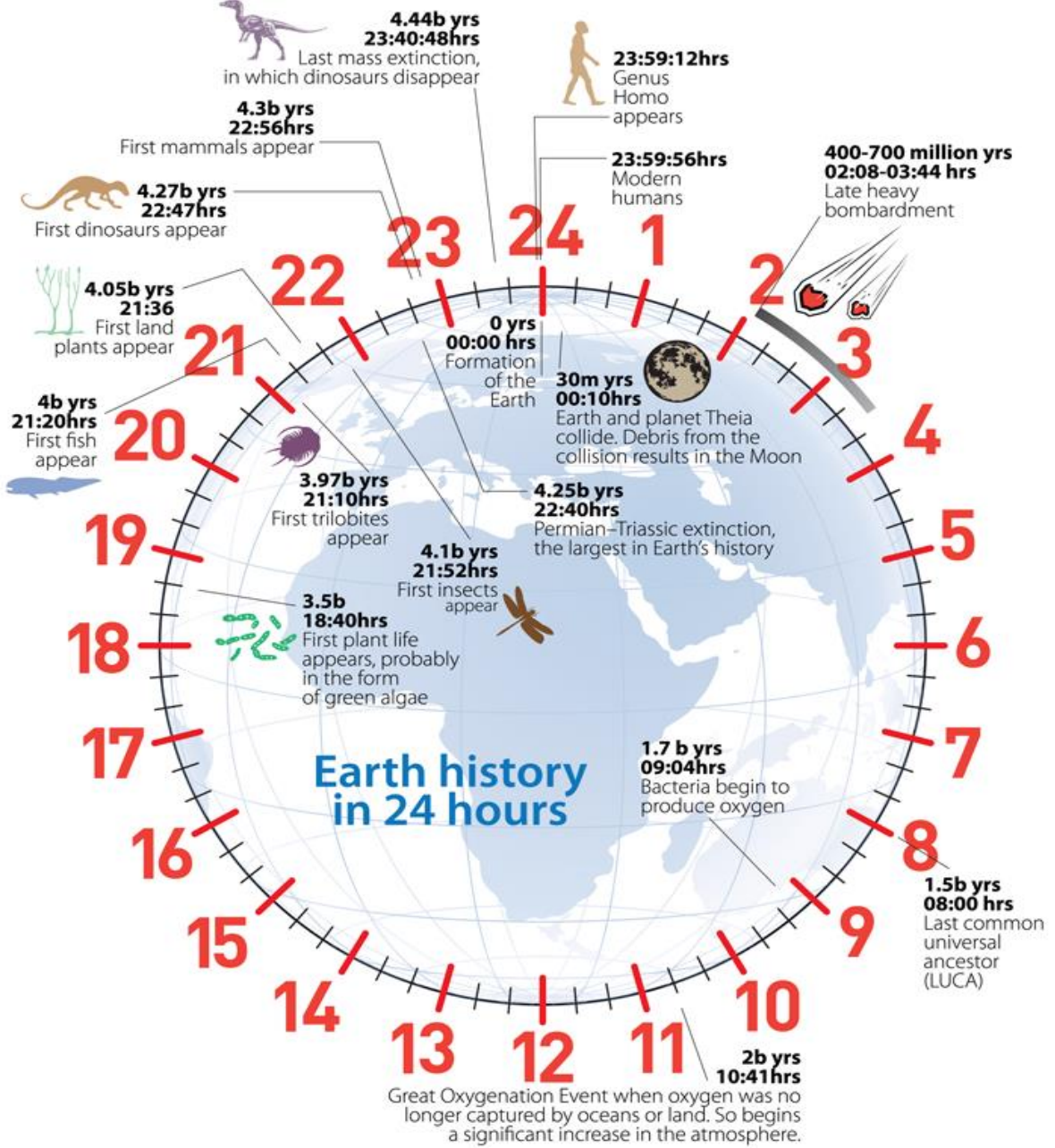
DINOCORE

13 IMAGES

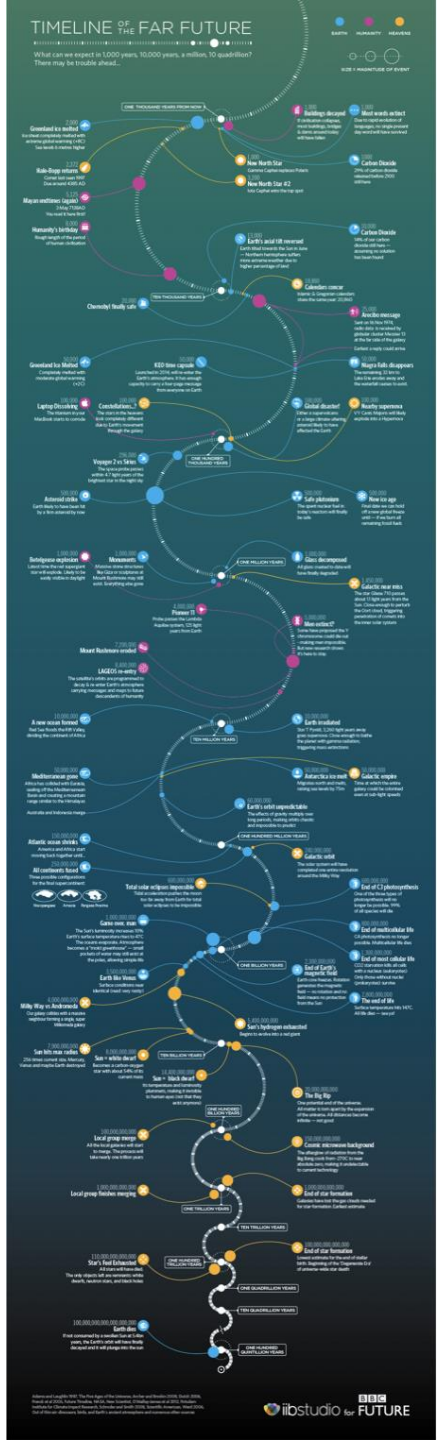
Warum Dinocore etc.? These:

Wir leben im Anthropozän – einem neuen, ‚menschengemachten' geologischen Zeitalter –, und das Anthropozän eine *Hochzeit* der Deep time, eine Zeit, die geologische Tiefenzeit *aktiviert* und *in akute Unruhe* versetzt.

Anders gesagt, das Anthropozän markiert eine Gegenwart, die in nie dagewesener Weise einen *Kurzschluss* mit Deep time produziert – und zwar einen kogniviten wie materiellen Kurzschluss –, und dadurch von Deep time ‚geflutet' wird, sich auflädt mit einer Aura von Deep time.



Deep time Vergangenheit



Deep time Zukunft

	500–600 million	The Sun's increasing luminosity begins to disrupt the carbonate–silicate cycle; higher luminosity increases weathering of surface rocks, which traps carbon dioxide in the ground as carbonate. As water evaporates from the Earth's surface, rocks harden, causing plate tectonics to slow and eventually stop once the oceans evaporate completely. With less volcanism to recycle carbon into the Earth's atmosphere, carbon dioxide levels begin to fall.[78] By this time, carbon dioxide levels will fall to the point at which C_3 photosynthesis is no longer possible. All plants that use C_3 photosynthesis (≈99 percent of present-day species) will die.[79] The extinction of C_3 plant life is likely to be a long-term decline rather than a sharp drop. It is likely that plant groups will die one by one well before the critical carbon dioxide level is reached. The first plants to disappear will be C_3 herbaceous plants, followed by deciduous forests, evergreen broad-leaf forests and finally evergreen conifers.[72]
	800–900 million	Carbon dioxide levels will fall to the point at which C_4 photosynthesis is no longer possible.[79] Without plant life to recycle oxygen in the atmosphere, free oxygen and the ozone layer will disappear from the atmosphere allowing for intense levels of deadly UV light to reach the surface. Animals in food chains that were dependent on live plants will disappear shortly afterward.[72] At most, animal life could survive about 3 to 100 million years after plant life dies out. Just like plants, the extinction of animals will likely coincide with the loss of plants. It will start with large animals, then smaller animals and flying creatures, then amphibians, followed by reptiles, and finally, invertebrates.[78] In the book *The Life and Death of Planet Earth*, authors Peter D. Ward and Donald Brownlee state that some animal life may be able to survive in the oceans. Eventually, however, all multicellular life will die out.[81] The first sea animals to go extinct will be large fish, followed by small fish, and then finally, invertebrates.[78] The last animals to go extinct will be animals that do not depend on living plants, such as termites, or those near hydrothermal vents, such as worms of the genus *Riftia*.[72] The only life left on the Earth after this will be single-celled organisms.
	1.1 billion	The Sun's luminosity will have increased by 10%, causing Earth's surface temperatures to reach an average of around 320 K (47 °C; 116 °F). The atmosphere will become a "moist greenhouse", resulting in a runaway evaporation of the oceans.[78][83] This would cause plate tectonics to stop completely, if not already stopped before this time.[84] Pockets of water may still be present at the poles, allowing abodes for simple life.[85][86]
★	7.59 billion	The Earth and Moon are very likely destroyed by falling into the Sun, just before the Sun reaches the top of its red giant phase.[110][note 3] Before the final collision, the Moon possibly spirals below Earth's Roche limit, breaking into a ring of debris, most of which falls to the Earth's surface.[112] During this era, Saturn's moon Titan may reach surface temperatures necessary to support life.[113]

Materieller Kurzschluss mit Deep time:

– Produktion eines anthropogenen Stratums

Materieller Kurzschluss mit Deep time:

– Produktion eines anthropogenen Stratums
– Massives Inbewegungsetzen fossilisierten Materials

greatest geomorphic agent on the planet.[12] While mining coal and other raw materials has a 6000-year history, it does not escalate before the 1800s; oil extraction only takes off in the 20th century. Some 70 billion tons of materials (fossil fuels, metal ores, non-metallic minerals, biomass) are currently being pulled from the ground every year (up from 24 billion 40 years ago).[13] Five of the top ten companies on the Fortune Global 500 list – employing 2.3 million people – are fossil excavation enterprises.[14]

Materieller Kurzschluss mit Deep time:

– Produktion eines anthropogenen Stratums
– Massives Inbewegungsetzen fossilisierten Materials
– Fossilienverbrennung (fossil capitalism)

Materieller Kurzschluss mit Deep time:

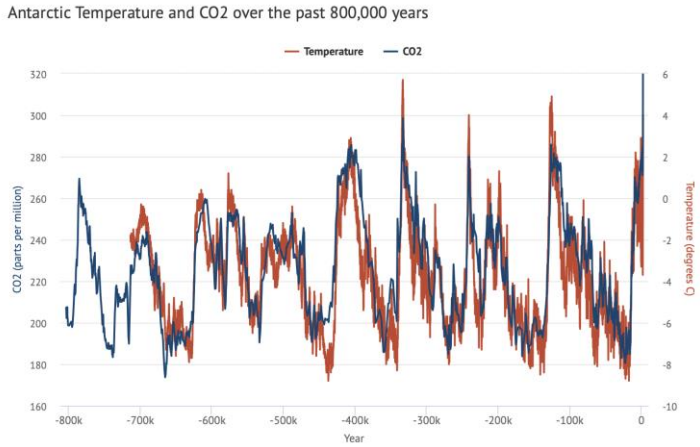
– Produktion eines anthropogenen Stratums
– Massives Inbewegungsetzen fossilisierten Materials
– Fossilienverbrennung (fossil capitalism)
– Wiederherstellung eines prähistorischen Klimas

Temperature is predicted to rise by 1,1 °C to 6,4 °C by the end of this century,
leading to global temperatures not encountered since Tertiary“ – vor mehr als 2,58 Millionen Jahren.

(Zalasiewicz, Jan, et al.: „Are We Now Living in the Anthropocene“, 2008.)

Materieller Kurzschluss mit Deep time:

– Produktion eines anthropogenen Stratums
– Massives Inbewegungsetzen fossilisierten Materials
– Fossilienverbrennung (fossil capitalism)
– Wiederherstellung eines prähistorischen Klimas
– Kalibrierung unserer Klimamodelle am Paläoklima

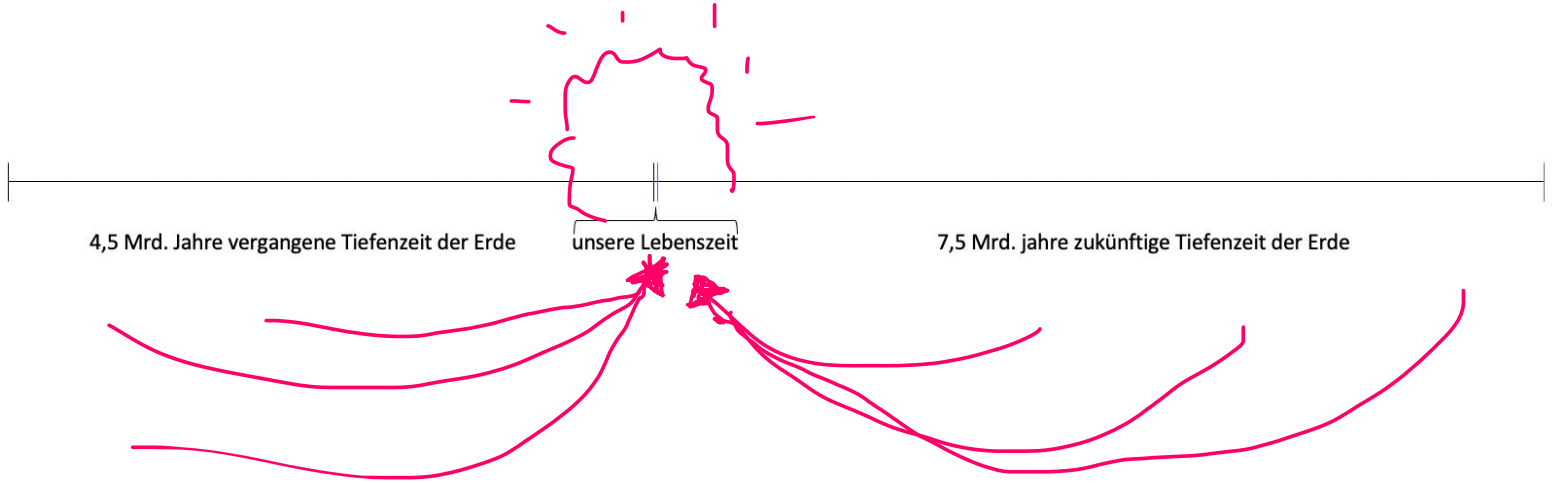


Materieller Kurzschluss mit Deep time

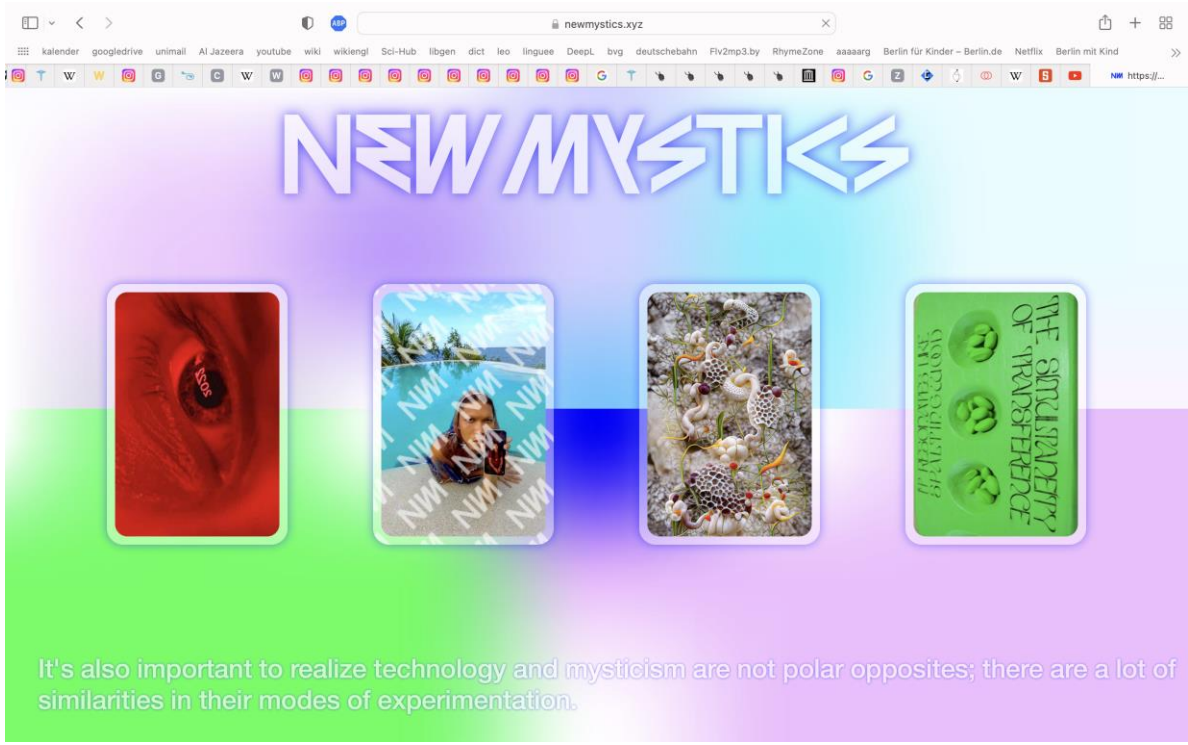
----->

Ästhetischer Kurzschluss mit Deep time

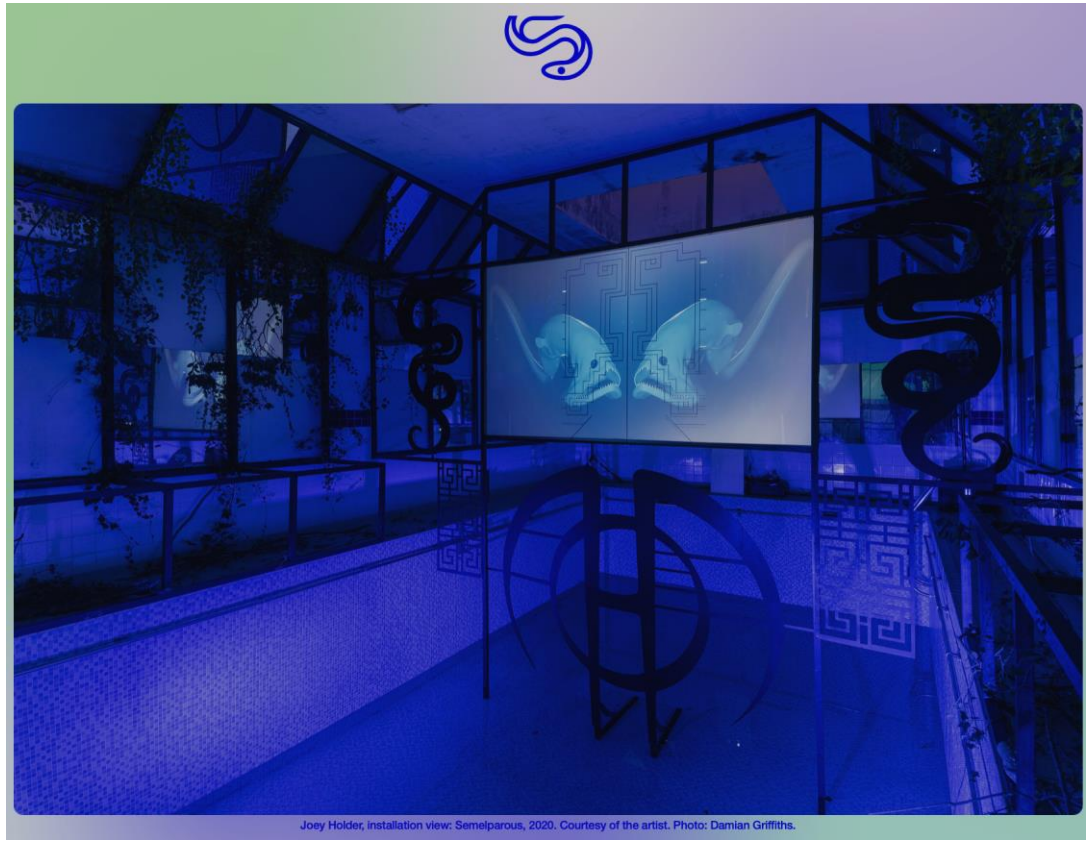
„Tiefenzeit Gespenster“:
Heimgesuchtwerden von Deep time
Tiefenzeit „spukt“ in der Ästhetik der Gegenwart herum…



Die Welt vor uns


newmystics.xyz
NEW MYSTICS
It's also important to realize technology and mysticism are not polar opposites; there are a lot of similarities in their modes of experimentation.


newmystics.xyz
JOEY HOLDER
ABYSSAL SEEKER



Joey Holder, installation view: Semelparous, 2020. Courtesy of the artist. Photo: Damian Griffiths.

I've been feeling really cosmological lately. I've been thinking about the universe and how big it is, how remote from anyone else we are, how weird it can be. Space is a weird, psychedelic environment. I'm interested in the idea of cosmological consciousness and how consciousness emerges from matter. How do we define consciousness? I don't think we actually have an idea of consciousness beyond our own subjective experience of having consciousness. We can't define what it is, but we know it when we see it and feel it.

Think about the layers of the ocean. Can you feel the fluorescent warmth of the Sunlight Zone as it slips off the continental shelf? Think about the changing quality of the light as it cuts through 1,000 meters of salt water and beams become hazy and muted as they dissipate into the Twilight and Midnight Zones, 4,000 meters down, as deep as Mount Rainier is tall. Think about the technical terms for these places defined by their lack of light – Mesopelagic and Bathypelagic. Let those words slosh around in your salt-puckered mouth as you consider the anatomy of the angler fish, snipe eel, and

Joey Holder: Abyssal Seeker [Benthic Zone]

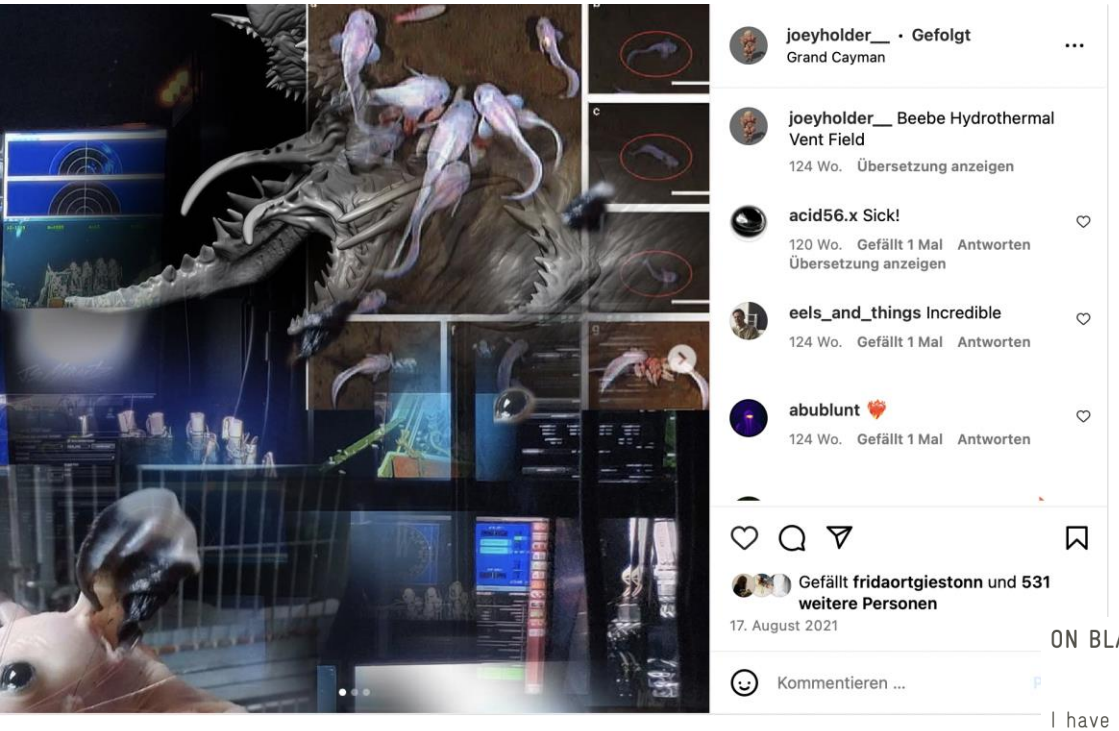
Curator: Boris Ondreička

5. 5. 2020 - 20. 6. 2021

Held at at Centre for Contemporary Art FUTURA, Holečkova 49, Praha 5

And finally—here is the abyss of Joey Holder—an intersectional mythopoetic way of understanding the unknown in the deepest valley of uncanny between a (so-called) living (bio-logisms) and non-living (techno-logisms…). Her oceanic katabasis (a metaphorical transfer in the form of overwhelming digitally rendered images, pictographisms, and objects) reaches those idyllic sea-beds where black-smoker hydrothermal vents have created metabolisms of future life from the stone (*Iron-Sulfur World Theory* = the hypothesis of abiogenetic origin of life of Günter Wächtershäuser). If life was born from a mineral and mineral is the unbreakable part of our corporeality, the division of living and non-living and dead is a pure act of linguistic, semantic economy. Joey Holder's abyss revitalizes the expanded vocabulary, the data-genesis of mineral-vegetable-animal-machine complexity ('holos'). The unknown here is not to be embraced. She and we (observers, seekers…) are (literally, spatially…) embraced by the unknown.

Entstehung des Lebens



joeyholder__ · Gefolgt
Grand Cayman

joeyholder__ Beebe Hydrothermal Vent Field
124 Wo. Übersetzung anzeigen

acid56.x Sick!
120 Wo. Gefällt 1 Mal Antworten
Übersetzung anzeigen

eels_and_things Incredible
124 Wo. Gefällt 1 Mal Antworten

abublunt
124 Wo. Gefällt 1 Mal Antworten

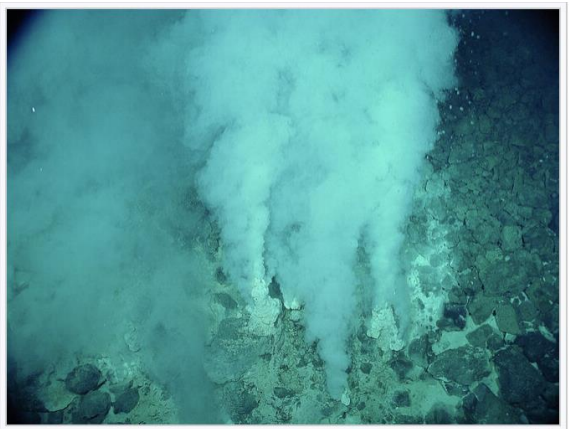
Gefällt **fridaortgiestonn** und **531 weitere Personen**
17. August 2021

Kommentieren ...

ON BLACK SMOKERS

I have a continued interest in the deep sea. It's a really extreme alien environment that fascinates me. I did a project about 'black smokers' which are these active volcanoes found at the bottom of the ocean. A completely different chemical composition exists around those hydro-thermic vents. There's no light down there at all. We used to think that it wasn't possible for life to exist in these extreme conditions but the creatures in those environments completely turned that idea on it's head. In fact, scientists now think that life may have started in this exact environment. These weird creatures might even be the origin of life.

The **earliest known life forms** on Earth may be as old as 4.1 billion years old (or Ga) according to biologically fractionated graphite inside a single zircon grain in the Jack Hills range of Australia.[2] The earliest evidence of life found in a stratigraphic unit, not just a single mineral grain, is the 3.7 Ga metasedimentary rocks containing graphite from the Isua Supracrustal Belt in Greenland.[3] The earliest *direct* known life on land may be stromatolites which have been found in 3.480-billion-year-old geyserite uncovered in the Dresser Formation of the Pilbara Craton of Western Australia.[4] Various microfossils of microorganisms have been found in 3.4 Ga rocks, including 3.465-billion-year-old Apex chert rocks from the same Australian craton region,[5] and in 3.42 Ga hydrothermal vent precipitates from Barberton, South Africa.[1] Much later in the geologic record, likely starting in 1.73 Ga, preserved molecular compounds of biologic origin are indicative of aerobic life.[6] Therefore, the earliest time for the origin of life on Earth is at least 3.5 billion years ago, possibly as early as 4.1 billion years ago — not long after the oceans formed 4.5 billion years ago and after the formation of the Earth 4.54 billion years ago.[7]



Evidence of possibly the oldest forms of life on Earth has been found in hydrothermal vent precipitates.[1]

“Abyssal Seeker [Demersal Zone]” (detail), exhibition view, Seventeen, London, United Kingdom, 2021. Photographer: Damian Griffiths.

“Abyssal Seeker [Demersal Zone]” (detail), exhibition view, Seventeen, London, United Kingdom, 2021. Photographer: Damian Griffiths.

Joey Holder, Abyssal Seeker, 2021

Kambrische Explosion

‘Proetida’, 2022

geologypage · Folgen

geologypage Trilobite Fossils of North America | #Geology #GeologyPage #Fossils #Trilobite

Photo Copyright © Tony Petropoulos
instagram. com/geology.life

Geology Page
www.geologypage.com
53 Wo. Übersetzung anzeigen

Für dich

abd_ulbz ❤️😍
52 Wo. Gefällt 1 Mal Antworten

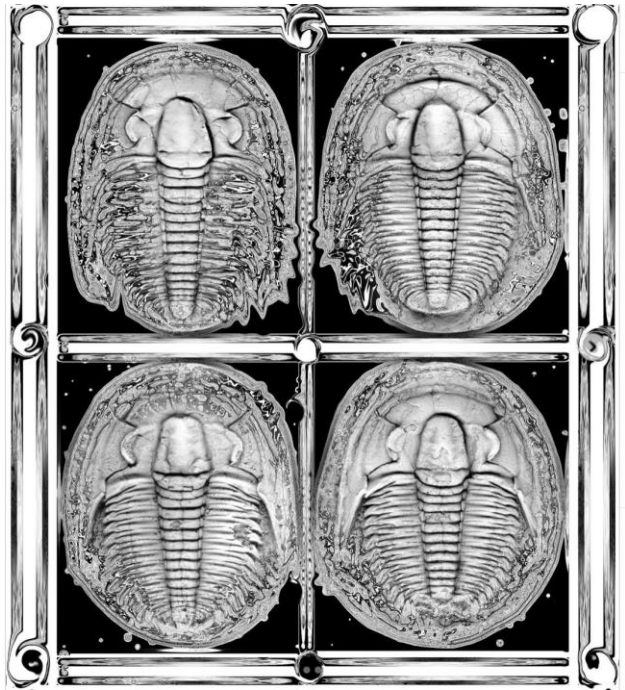
ufukdogangul I'm begging someone to hear my voice and help me if I can't find 5000 dollars I will commit suicide by morning I am so desperate please I beg everyone
52 Wo. Gefällt 1 Mal Antworten Übersetzung anzeigen

wolfyyyholly Just wow
53 Wo. Gefällt 2 Mal Antworten Übersetzung anzeigen

josepiolet Que. Belleza. Tener en la mano un molusco que. Tiene dos millones de años un trilobite .o..un...amonite. .
53 Wo. Gefällt 2 Mal Antworten Übersetzung anzeigen

Gefällt 3.405 Mal
26. Dezember 2022

Kommentieren ... Posten



joeyholder__ · Gefolgt

joeyholder__ Bearbeitet · 102 Wo.
Palaeozoic: the Cambrian, Ordovician, Silurian and Devonian...
.
.
#Trilobite #arthropod #Paleozoic
.
.
.
.

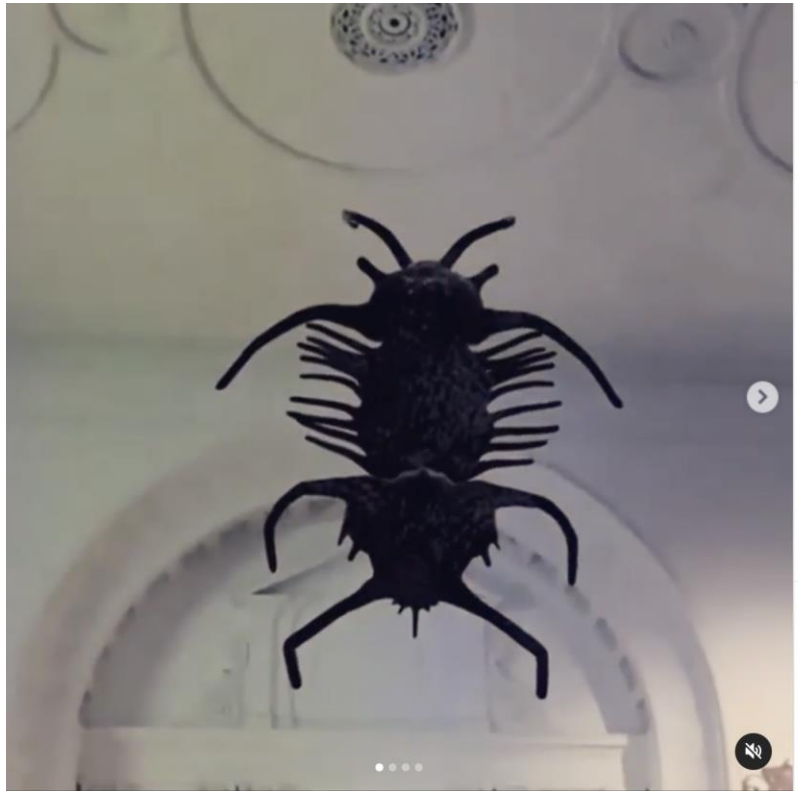
@julia_vaughan_g
@paulluckraft
Übersetzung anzeigen

Für dich

pssa_sculpture 90 Wo.
💣💣💣💣💯
Antworten

Gefällt 457 Mal
17. Januar 2022

Kommentieren ...



joeyholder__ · Gefolgt

joeyholder__ Bearbeitet · 86 Wo.
New AR piece ‘Proetida’
++research images
part of #AmongtheMachines
@zabludowicz_collection @daata.art
massive thanks to @julia_vaughan_g
@budgetfinley

Seen here in action, the #augmentedreality experience sees a creature, based on a fossil of a trilobite, a group of extinct marine arthropods, rise up from the altar and squirm into the air.

Among the Machines is an exhibition examining how humans interact with machines and non-human entities.

Remember to download the @daata.art

Gefällt 544 Mal
10. Mai 2022

Kommentieren ...

Was für eine Welt ist das, in der wir (noch) nicht sind?

– Welt, in der „wie aus dem Nichts“ etwas (evolutionär) entsteht: vom Nichtsein ins Sein übergeht
„Mystizismus“ der Entstehung des Lebens aus der unbelebten Erde

– Welt, die eine Fülle möglicher Zukünfte enthält

Cryptid, 2023

joeyholder__

joeyholder__
22 Wo.

andrea.samory Awesome 🔥are they all AI generated?
8 Wo. Antworten Übersetzung anzeigen

furi.clubuser.216 I remember these from my primary school textbooks
22 Wo. Gefällt 1 Mal Antworten Übersetzung anzeigen

grahamycakes_ Have you tried these as image to mesh? <3
22 Wo. Gefällt 1 Mal Antworten Übersetzung anzeigen

Gefällt **fridaortgiestonn** und **508 weitere Personen**
4. August 2023

Kommentieren ... Posten

joeyholder__

Für dich

matthew.r.gale Loving your new work @joeyholder__ 🔥🔥
21 Wo. Gefällt 1 Mal Antworten Übersetzung anzeigen

solbaileybarker 🔥🖤🔥
21 Wo. Gefällt 1 Mal Antworten

katiesandovalmeade Love all these ....
21 Wo. Gefällt 1 Mal Antworten Übersetzung anzeigen

iota__official 🔥🔥🔥
21 Wo. Gefällt 1 Mal Antworten

katiesandovalmeade ❤️
21 Wo. Gefällt 1 Mal Antworten

trngs_____ 🔥
21 Wo. Gefällt 1 Mal Antworten

fromtkya Fourth one looks a bit like a panopticon!
21 Wo. Gefällt 1 Mal Antworten Übersetzung anzeigen

Gefällt **fridaortgiestonn** und **454 weitere Personen**
11. August 2023

Kommentieren ... Posten

Tiefenzeit Kulte

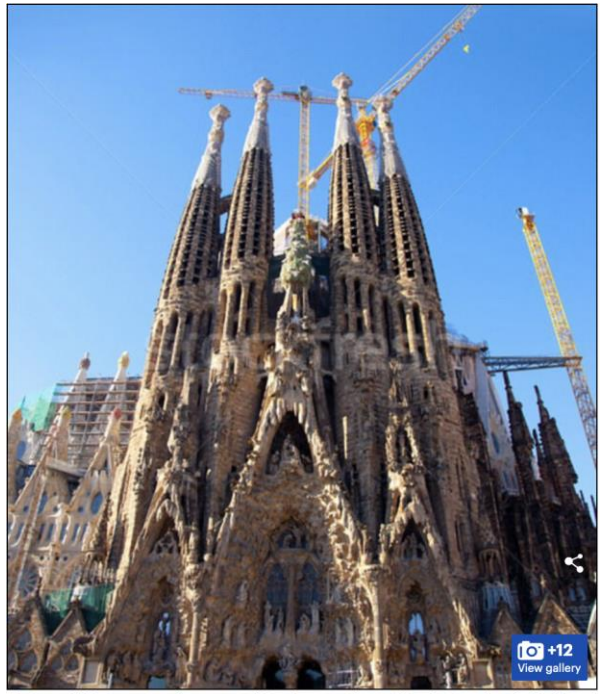
EMPEDOCLES

Lara Joy Evans

Presented by Final Hot Desert

At Whipple Cave, Lund, Nevada

March 29, 2022



The incredible structure almost resembles the Sagrada Familia - the Gaudi cathedral in Barcelona (pictured)

Antoni Gaudi
Sagrada Família
It is the largest unfinished
Catholic church in the world.
1882ff.

Lara Joy Evans

Termite Ascension

Golden Queen Mining Company, Reefer City, California

May 2020

We may be termites after all, building pillars using our own dirt, dung, and spit to ascend to the heavens in the sky. Alongside the empirical psyche, lives an impersonal and universal nature in the bugman as well as the individual. The termites move in unison to build chrysalis growths that extend into thin columns, slime ossifies into rigid crusts.

The incredible 'cathedral' built by TERMITES: Intricate structure is a dead ringer for Gaudi's Barcelona masterpiece

- Richard Dawkins shared the image of the termite colony on Twitter
- He asked his followers to provide information about the creatures responsible
- Matt Shardlow, CEO of Peterborough based Bugs Life, cleared up the question
- He told Radio 4's Today programme that Australian magnetic termites made it
- He believes that attempts to repair damage resulted in the impressive spires

By TIM COLLINS FOR MAILONLINE
PUBLISHED: 11:41 GMT, 23 November 2017 | **UPDATED:** 14:36 GMT, 23 November 2017

A mystery posed by one of the world's leading evolutionary biologists has been solved, thanks to social media. Professor Richard Dawkins shared an eye-catching image of a cathedral like structure, built by termites, to Twitter yesterday

'What it looks like has happened with this particular colony has been damaged at some point, and those tall spires are the termite's efforts to rebuild and get the height back within their colony as quickly as they can.'

The Cathedral-like mounds are built by two species of termite, 'magnetic termites' amitermes meridionalis and 'cathedral termites', nasutitermes triodiae.

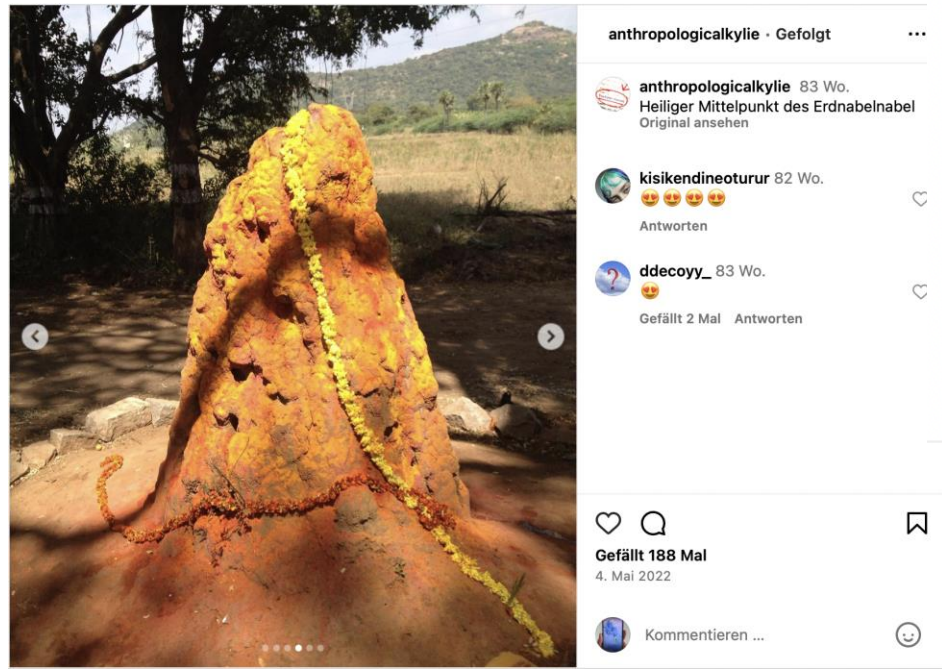
The structures are made from a mixture of faeces, mud, and wood, which forms a robust, waterproof clay-like substance.

John C. Irwin

THE SACRED ANTHILL AND THE CULT OF THE PRIMORDIAL MOUND

Ethnographical reports of the last hundred years suggest that anthill worship is an ancient cult that survives in many parts of India up to the present day. The cult once occupied a central place in Vedic and Hindu religion, and from at least as early as the first millennium B.C., and probably earlier, it has figured prominently—if somewhat incomprehensibly—in rituals associated with all the critical events of human life, including birth, marriage, sickness, and death. Anthills have also played an important part in the consecration of temples, the warding-off of evil, ritual destruction of an enemy, calling divine witness, and securing material prosperity. The anthill in figure 1 is one among thousands still under regular worship, and although such shrines are nowadays mainly concentrated in the south, there is abundant evidence that they were once common throughout India.[1]

Strictly speaking, we should not call them "anthills," because they are made not by ants but by termites (misleadingly called "white ants"). The termite, in fact, is unrelated to the ant. It is entomologically closer to the cockroach, but mainly confined to tropical and subtropical regions. However, since the term "ant" is used by all the ethnographers, philologists, and folklorists that I will be quoting, I



tufenkianfinearts 71 Wo.
Lara Joy Evans' comments on her drawings and sculptures:
"I have the drawings depicting the same structure of a termite mound which is what termites have created organically in their nature which kind of looks like a Gaudi castle. I used a more fleshy material compared to gaudi. I was kind of going off of the termites, that they build these structures with these small pillars and they are connected not only up above ground, but underground and they were considered ancient primordial mounds, kind of holy in several different cultures that didn't have connections to each other and they thought that the termites were some kind of like holy creature because they were working together in a hive trying to ascend not only upward, but downward. Like they were trying to ascend to the heavens.

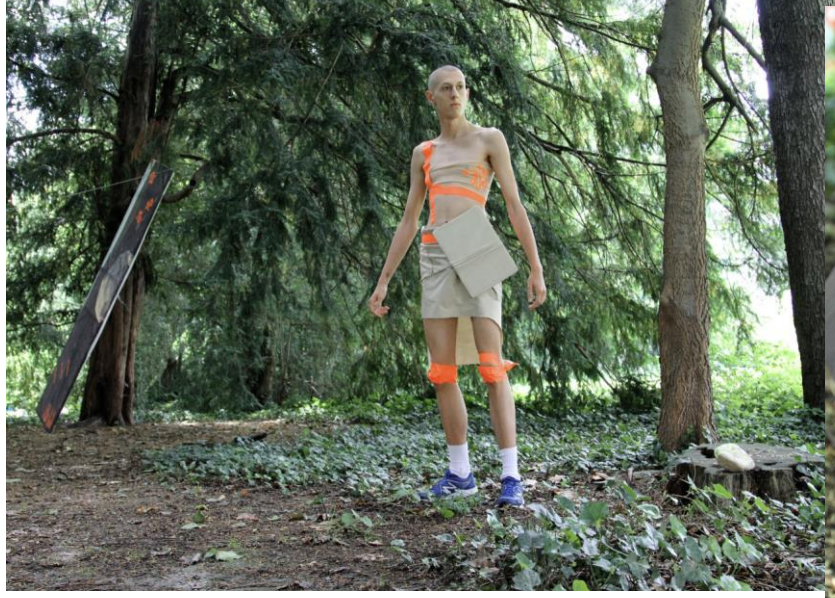
They make all of these really weird structures that kind of resemble human-like structures. I wanted to reflect on the termite and how the human can also relate to the termite"
@larajoyevans

Lara Joy Evans

– menschlicher Kathedralenbau wird naturalisiert:„ist wie Termitenbau“. Religiöse Praxis wird in naturalistisches Szenario eingeschrieben

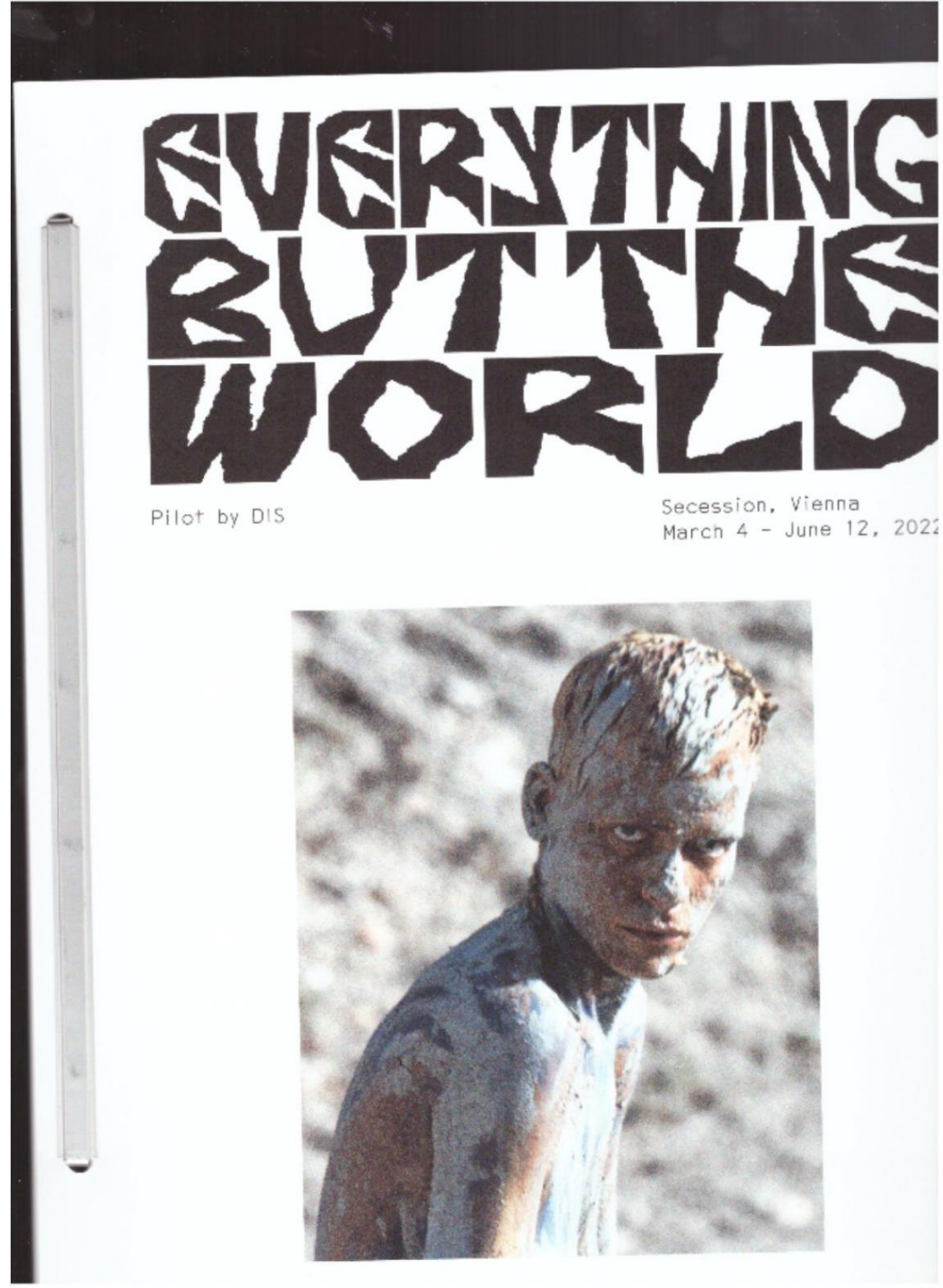
– Bezug aufs Oben/Außer-Irdische/Jenseits wird revidiert: Sich-Verschreiben der Transzendenz ans *Innere der Erde* und ihre Zeitlichkeit (die sich in der geologischen Formation ablesen lässt)

Wir sind Vor- und Frühmenschen



Young Girl Reading Group/ Agatha Valkyrie Ice (Dorota Gawęda & Eglė Kulbokaitė): perma-permadeath (2016) https://web.archive.org/web/20180202012946/http://www.oflux.net/perma-permadeath-by-agatha-valkyrie-ice/

DIS, EVERYTHING BUT THE WORLD (2021)



Out of the sprawling, brutal, and seemingly lifeless landscape, a tiny twitching animal begins to take shape down below.

Homo - Wikipedia
en.wikipedia.org

Homo - Wikipedia
en.wikipedia.org

Homo - Wikipedia
en.wikipedia.org

NARRATOR (O.S.) They always imagined that they were history's favorite customer, Daddy's favorite. But Lord have mercy on you because, he was never there. Daddy never showed up!

Our view of the desert zigzags, drunk and dancing. Blue sky, browns and grays streak across the frame.

DADDY

BRANCH

And Banter, did you know that most humans are actually not even born yet and that only a fraction of a percent will qualify for fossilhood?

Our place
In deep time

Our potential future is *vast*

Our World in Data

Every triangle in this chart (▼) corresponds to 7.95 billion people, the number of people alive today.

Humanity's past All the people who have died, 109 billion. These are 14 triangles – the dead outnumber the living by a ratio of 14 to 1.

Humanity's present All people who are alive today, 7.95 billion. Those of us who are alive now are about 6.8% of all people who ever lived.

Humanity's future?

The 12,572 triangles below represent all people who might be born in the future – from 2022 onwards.

This is a scenario in which humanity survives for another 800,000 years, in which the population stabilizes at 11 billion people and in which global life expectancy rises to 88 years.

The next 7.95 billion children – represented by the first triangle – will be born in the next 6 decades.

Each row represents the lives of half a trillion people

Children born here are about 1,000 generations away from our generation today.

50,000 years from now: The Niagara Falls will have eroded its river bed and will cease to exist.

This is when the ten trillionth child after today will be born.

100,000 years from today

200,000 years from today: As many years into the future as humanity has existed so far.

250,000 years from now: Lō'ihi, the youngest volcano in the Hawaiian seamount chain, will rise above the surface of the ocean and become a new volcanic island.

300,000 years from today

The fifty trillionth person born after now

400,000 years from today

500,000 years from today: The rugged terrain of Badlands National Park in South Dakota will have eroded completely.

600,000 years from today

700,000 years from today

In this scenario of the future, 100 trillion children will be born in the next 800,000 years.

The sun will exist for another 5 billion years. If we stay alive for all this time – and based on the scenario above – this would be a future in which 625 quadrillion children will be born.

How big would a chart be that shows this future? If you have a shelf with 30 books, each of which has 200 pages, then this same chart that you see here – showing the birth of 100 trillion future children – would be printed on each page of each book in your bookshelf.

And humanity could survive for even longer.

Kunst des Anthropozäns (2010s):

(1) Künstler*innen regieren auf Defossilisierung bzw. Extraktivismus

– (Koloniale) Historien recherchieren

– Materialströme nachverfolgen

– Kurze Frist/historische Zeiträume: politisierbar

– Motiv: Zerstäubung (Mangan: Freisetzen von Zeit)

– Motiv: Buch/Geist

(1) Künstler*innen regieren auf Defossilisierung bzw. Extraktivismus

(2) Künstler*innen reagieren auf Refossilisierung bzw. Sedimente des Anthropozäns

– Motiv: Künstliche Sedimente und Fossilien

– Digitale/Simulierte Fossilisierung

– Zeitliche Reversibilitäten: Wessen Skelett, wessen Eingrabung und wann beobachtet?

– Motiv: Glitch fossilization (instantane Fossilisierung)

(1) Künstler*innen regieren auf Defossilisierung bzw. Extraktivismus

(2) Künstler*innen reagieren auf Refossilisierung bzw. Sedimente des Anthropozäns

(3) Künstler*innen reagieren auf die anthropozäne Aktivierung von Deep Time

– Motiv: Vor- und Frühmenschen (schauspielerisch)

– Anschluss an und umcodierung von vertrauten Ästhetiken des Transzendenten/Sakralen (Kathedrale & Ritual)

– Digitale Simlation der Tiefenzeit Szenarien/Lebewesen

Kunst des Anthropozäns (2010-2024):

(1) Künstler*innen regieren auf Defossilisierung bzw. Extraktivismus

(2) Künstler*innen reagieren auf Refossilisierung bzw. Sedimente des Anthropozäns

(3) Künstler*innen reagieren auf die anthropozäne Aktivierung von Deep Time

Abschlussfragen:

Ästhetik der De-/Fossilisierung – Frage der sinnlichen Darstellbarkeit

Deep time – Strategien der Darstellung des Undarstellbaren?
(Stratum – Staub – temporale Reversibilität)

Ästhetik der De/Fossilisierung als politische Ästhetik?

Kunst im Anthropozän

1. Was ist das Anthropozän?
2. Defossilisierung
3. Refossilisierung
4. Tiefenzeit Gespenster

Vielen Dank