

Digging into the Earth

a programmatic reading list on resources, extraction, and biogeochemistries

Mining has been a defining human activity, shaping the ways we relate to the planet – and how we think about that relation – since prehistory. This reading cluster is interested in reconsidering this activity, its practices, knowledges, consequences, and articulations. In fact, mining is often understood as a relation of extraction, carved around the notion of resource: to mine is to extract mineral resources from the earth. This image of mining is at the center of extractive industries today, and resource management is often the name of the game that plays around mining and its conflicts and effects. And yet, mining is much more than just the extraction of resources.

Considering historical, ethnographic, political, ecological, technoscientific, economic, and legal cases and differences, this reading cluster will begin to unhinge mining from the hegemonic, universalist, and neoliberal story of resource extraction. Through this gap, other versions, stories and logics can seep in, that are not merely against mining as resource extraction, but that often respond to entirely different questions and problems. It is to figure some of these alternatives out, that the books in this reading list have been collected together.

Over the course of the spring and fall 2016, those interested in this reading cluster will meet and discuss the readings. Given the breath of the field, and the diversity of approaches, the discussions will be orbiting around the **case studies** of those interested. This will allow the cluster not only to keep a much firmer focus on specificities and details that would otherwise easily be swallowed and surmised by sweeping theorization and generalization of common sense, but also to use the readings to more concretely further our own investigations and interests. For this reason, the first meeting will be an introductory one, in which all those interested can briefly present their cases (and, for those who will join later, the beginning of each discussion can be used for this brief presentation). In this way, all the participants will have some concrete case to think about the questions that the readings unearth, and to animate the conversations with.

Because of the transdisciplinary character of the interest of this cluster, the approaches will be diverse: to avoid arranging our comments and reflections along the lines of disciplinary fault lines, a few directionalities are suggested that can cut across disciplines, to push us to consider the materials and concepts discussed in a different light (and more will probably emerge as we read further).

Knowing and doing – to know something is not disconnected, as the common understanding of western epistemology seems to suggest, from doing something to it, transforming and relating to it. This is all the more clear when dealing with the underground. The God trick of the objective gaze fails most evidently when it reaches the rocky bottom. Thinking about knowledge practices – and the knowledges, natures, and facts that they shape – as never-closed, ongoing relations with naturecultures will allow us to avoid merely taking for granted some arrangements of nature over others.

Living and patterning – In the intricate entanglements of the underground, the biotic and the abiotic are confused: the living becomes rock, but also the rock becomes living. In these processes, different patterns are shaped. While the specificities of life and nonlife might get

confused, other patterns come into view that cut across this foundational distinction in western thought. Attending to these patternings will allow us to begin to extricate some of the relations made and unmade between below and above ground with a fresh eye for those processes that might seem most mundane.

Counting and accounting – Mining involves a number of practices, techniques and tools – both technoscientific and socio-cultural – for extracting, transforming, quantifying, valuing, understanding, and distributing its outcomes. While these practices are usually split up according to different objects they allegedly deal with (money, minerals, rights, toxins...), they often work according to similar logics. Holding them together will allow the expected differences, but also the surprising similarities to surface, facilitating critique, but also the reshaping of these practices.

Planetary and microscopic – These two scales are rarely brought together; yet, they depend one on the other, and their histories are entwined. In fact, they often respond to a similar logic, that allows us to move – seamlessly – with our imagination from the infinitely small to the infinitely big. Paying attention to the often non-scalar and even non-spatial relation between the planet and subatomic particles will provide us different tools to recalibrate our analysis to the interconnections we find in mining that often exceed the scales we are more used to.

To start the cluster, some of the possible readings for the first meetings are listed below (and the texts will be made accessible).

The limits of matter: chemistry, mining and enlightenment, Hjalmar Fors, Chicago 2015 (chapter 1, 3, 7) – an interesting contribution to the history of ideas, the book explores “how conceptions of matter changed during the Enlightenment and pins this important change in European culture to the formation of the modern discipline of chemistry”. Simultaneously, it does so from the periphery of European Enlightenment – Sweden – the periphery of chemistry – the Bureau of Mines – and the periphery of modernity – the magical and supernatural discourse of alchemy and chymistry.

Seeing underground: maps, models, and mining engineering in America, Eric Nystrom, Nevada 2013 (intro, 1, 5, conclusions) – the author follows the history of the nineteenth century transformation and professionalization of mining, in particular through the figure of the mining engineer and its emergence in the US mineral boom. This professional figure emerged together with specific technologies for mapping and visualizing the underground, and specific epistemic regimes that made these maps trustworthy.

Mining in world history, Martin Lynch, Reaktion books 2002 (chapters 4-6) – a simple and basic – capital H history – book, interesting in weaving some of the most glamorous and yet oftentimes not well known episodes in the history of mining, its technologies, its politics and its economies.

Mining capitalism: the relationship between corporations and their critics, Stuart Kirsch, Univ of California 2014 (intro, 4, conclusions) – Focusing on the conflict around a mine in PNG, the author unfolds the story of how “corporations promote their interests by manipulating science and invoking the discourses of sustainability and social responsibility”.

Frozen assets: British mining, exploration, and geopolitics on Spitsbergen, 1904-53, Frigga Kruse, Circumpolar studies 2013 (chapters 1, 3, 9) – merging industrial archeology and mining history, the book explores the case of coal mining in Svalbard, complicating ideas of the rational of mining with geopolitical questions.

Unearthing conflict: corporate mining, activism, and expertise in Peru, Fabiana Li, Duke 2015 (intro, 2, 4, 5, conclusions) – Studying the conflicts around mining in Peru, the author shows how “debates about what kinds of knowledge count as legitimate lie at the core of activist and corporate mining campaigns”.

Alchemy in the rain forest: politics, ecology, and resilience in a New Guinea mining area, Jerry Jacka, Duke 2015 (intro, part 3, conclusions) – the author attends to the extraction in PNG and its socio-ecological effects. “In place of the idealized relations of neoliberal economics, Jacka posits an ‘alchemy’, in one of the most revealing and disturbing accounts ever written of industrial resource extraction in the Global South”.

Earth's deep history: how it was discovered and why it matters, Martin Rudwick, Chicago 2014 (chapters 9-12) – Following the history of earth sciences, the book explores the vicissitudes of deep history and its complex relation with Judaeo-Christian ideas.

Life on a young planet: the first three billion years of evolution on Earth, Andrew Knoll, Princeton 2015 (new edition, still need to check the chapters) – a wonderful exploration of the early life on earth, its complex connections with geology, and the intricate techniques and methodologies that allow to characterize it, explore it, and redefine it constantly.

Deleuze and geophilosophy: a guide and glossary, Mark Bonta and John Protevi, Edinburgh 2004 – the book takes on Deleuze's geophilosophy using complexity theory: “it asks not what the earth means, but how it works. It provides a common conceptual framework within which physical and human geographers can work together alongside other social scientists, cultural studies practitioners, and philosophers in interdisciplinary teams to explore the entangled flows, lines, grids, and spaces of our world”.

(more books will come up as we go...)

If you are interested in joining the cluster, please email me, Filippo, at f.bertoni@cas.au.dk . Once the cluster begins to assemble, we will formalize some of the decisions and the first appointments.