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## History has become a trump card: historical research and the climate crisis in Southeast Asia

### Sejarah telah menjadi kartu truf: penelitian sejarah dan krisis iklim di Asia Tenggara

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#### ABSTRACT

The climate crisis is above all a human crisis, not simply a technical one. Are the sciences of the humanities ready to offer intellectual leadership? This paper makes three suggestions for Indonesian historians to take a guiding role in bringing about a better, more sustainable, happier future for all Indonesians. The first is to write new kinds of histories. Material environmental histories could focus on deforestation and the petroleum industry. Cultural environmental histories could highlight traditional ecological knowledges that once flourished in villages that are today considered “backward.” The second suggestion is to engage in some of the biggest debates the country has ever had about how to achieve a more sustainable future. All these debates are really historical in nature, but only historians have the knowledge to offer a long-term perspective on them. The third suggestion is to dare to be imaginative – to dream of utopias, and not simply to report “facts” as if we ourselves were not part of them.

#### KEYWORDS

environmental history; climate crisis; historical research

#### ABSTRAK

Krisis iklim terutama sekali adalah krisis kemanusiaan, bukanlah krisis teknis. Apakah ilmu-ilmu humaniora siap memberikan kepemimpinan intelektual? Makalah ini mengajukan tiga saran bagi sejarawan/wati Indonesia yang ingin berperan aktif menawarkan masa depan yang lebih bahagia kepada keluarga besar Indonesia. Yang pertama adalah, tulislah sejarah dalam bentuk baru. Sejarah lingkungan hidup material dapat menyoroiti pembabatan hutan atau industri minyak. Sejarah LH budaya bisa fokus kepada kearifan ekologis tradisional di pedesaan dulu, tempat yang kini dianggap “terbelakang.” Saran kedua adalah: terjunlah ke dalam perdebatan paling dahsyat yang akan terdengar di Indonesia, yaitu bagaimana kita dapat mencapai masa depan yang berkelanjutan. Perdebatan ini pada intinya berpijak pada sejarah, dan hanya sejarawan yang memiliki pengetahuan yang berwibawa untuk bicara tentang jangka panjang. Saran ketiga: beranikanlah diri untuk berimajinasi – untuk bermimpi tentang utopi, tidak hanya melaporkan “fakta” seolah kita berdiri di luar fakta itu.

#### KATA-KATA KUNCI

sejarah lingkungan hidup; krisis iklim; penelitian sejarah

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## INTRODUCTION

It is no longer necessary to start a paper on the climate crisis with much data on how serious the situation is in which the globe finds itself. This northern summer nearly every news bulletin featured out-of-control wildfires. A crisis that only a decade or two earlier was considered “future” is now here, and about to ramp up. Nor are continually tumbling heat records the only form of harm Mother Earth faces. Seven of the eight Earth System Boundaries established by a large consortium of scientists have already been overstepped in most of the world, some only in the last decade. Besides rising temperatures due to ever-increasing greenhouse gas emissions, these boundaries include an unprecedented rate of species extinction, reactive nitrogen and phosphorus compounds from fertilizers damaging land and water, and abused surface and underground waters. The scientists who drew up the latest assessment urged action and noted how much this would require of us ([Rockström et al., 2023](#)):

All evidence suggests this will not be a linear journey; it requires a leap in our understanding of how justice, economics, technology and global cooperation can be furthered in the service of a safe and just future.

Notice the social science words “justice” and “global cooperation” here alongside the more usual economics and technology. A similar realization of the scale of human transformation the crisis required led the filmmaker and author Naomi Klein to entitle her book *This changes everything* ([Klein, 2015](#)):

Because the thing about a crisis this big, this all-encompassing, is that it changes everything. It changes what we can do, what we can hope for, what we can demand from ourselves and our leaders. It means there is a whole lot of stuff that we have been told is inevitable that simply cannot stand. And it means that a whole lot of stuff we have been told is impossible has to start happening right away.

One of the questions we face concerns how much continuity there should be between our conventional history and the environmental history we want to do now. The words of the scientists – “a leap in our understanding” - and of the activists – “this changes everything” - lead me to urge a radical attitude.

So what can we contribute? After all, we are not Artificial Intelligence experts, not engineers or economists, not even political scientists who advise the powerful. We are not practical people, we are just historians. I do feel history departments suffer from a slight inferiority complex. An old joke at historians expense says: “Those who can, do; those who can’t, teach (history)”. Let me remind you where this comes from. It is a misquote of something Aristotle once said. In reality he meant the complete opposite. Instead of starting an infamous anti-intellectual witticism, he actually privileged true scholarship when he distinguished merely knowing stuff from understanding it: “Those that know, do. Those that understand, teach.” The scientists quoted above are calling not for more knowledge but for “understanding”.

We may feel very much like beginners. I am, myself, hardly a published environmental historian. So the following remarks are self-educational. They are addressed to myself as well as to you. This is what I would like to do at the beginning of my third career, as a historian of the “mutual relations between humans and the rest of nature” (Hughes, 2009), presently focusing on extreme weather phenomena in Asia. My first career was as a geologist and a geophysicist who worked on possibly oil- or mineral-bearing formations in outback Australia as well as in the jungles and seas of Malaysia. It was exciting for a young man, but also reflected the extractive, exploitative attitude to nature that we now recognize as such a problem. Afterwards I taught physics to prospective school teachers and engineers in Indonesia, then still a developing country. In my second career, I became a research historian of intra-human interactions such as nationalism, modernization, human rights, the rising middle class, and citizenship. It was inspired by Indonesia’s youthful democracy movement, and no doubt exemplifies a noble aspiration for social justice. But it also now astonishes me that the Earth I had loved in my first was left so completely out of this second career. Now perhaps I can bring the two together again in some way.

In this paper I will propose three principles to motivate new historical research about the climate crisis in Southeast Asia. They are: Innovate; Debate; Imagine. Innovate by adopting new ways of writing history; engage in some of the biggest public debates; and dare to imagine a better world.

### **Innovate - Adopt new ways of writing history.**

Hubbell and Ryan are the authors of a popular *Introduction to the Environmental Humanities* (2021) “Environmental history (EVH), therefore,” they write, “starts by asserting that we need to change the way history is written.” Conventional history writes about how human affairs change; EVH recognizes that nature too has an active agency. Seas rise and fall, rivers move, rats invade, pandemics spread, whether we humans like it or not. Humans are just one species among many others; we are not that exceptional. The short time-scales upon which we usually write history have to be expanded, because many natural cycles move more slowly than human ones. Our ideas of change must change too – if something is good for one species like humans it may not be good for other species who also belong to our story. Quoting the environmental historians Carolyn Merchant and Donald Worster, Hubbell and Ryan conclude:

History helps you acknowledge how difficult it is to live within the limits set by our environment. Societies that survived learned by trial and error to restrain greed and self-interest: “they made rules, lots and lots of them.”

Environmental history tends to divide into a material and a cultural/ intellectual wing. Material environmental history concerns itself with how the economic and technological sides of human affairs have changed biological and physical environments. The cultural/ intellectual wing by contrast thinks about how nature is represented in the human imagination, and what changes in those images reveal about people’s altered relations with the rest of nature (McNeill, 2003). Both clearly have political implications as well.

A few notes first on the *material* history. The first critical turning point in the world's environment was the colonial destruction of tropical forests including Indonesia. The Max Planck Institute of Geoanthropology in Jena, Germany, is dedicating its interdisciplinary research team exclusively to building the data and concepts to understand this long-term question of colonial-led deforestation.<sup>2</sup>

How could you write a material environmental history of Indonesia's forests? One famous example is the environmental history of the coastal jungles of Brazil by Warren Dean (1997). Its foreword promises that this book is:

a history critical of exploitation driven at times by necessity, but often by unrelenting greed with little or no concern for the *mata*, the forest, symbol in Brazil of the backward, the undeveloped, the untamed. Many in this story bear responsibility — peasants, loggers, ranchers, coffee planters, industrialists, and the nation state itself.

The key concept behind Dean's story is the German idea of *Raubwirtschaft*, or "plunder economy". This term was first formulated by the German chemist Liebig in the mid-19th century to describe what he called the "metabolic rift". The rift in turn refers to the unsustainable break in the natural cycle when humans move to an industrialized city like London, eat food from far-away agricultural areas, then dump the excrement from that food into the Thames River instead of cycling it back into the soil whence the food came. This resulted in impoverishment of the soil. A damaging race ensued to import guano from an island off Peru and even human bones from the battlefields of post-Napoleonic Europe to put onto the soil in Britain as substitute fertilizer. This ecologically dysfunctional economic cycle, according to Liebig, was a form of robbery of Nature – *Raubwirtschaft*. From here the idea arose that in fact *all* Western development had been unsustainable, because it continually sought territorial expansion, extracting more and more non-renewable resources at the margins and dumping the pollution and waste into the biosphere (Bonneuil & Fressoz, 2016).

Karl Marx read Liebig with great interest, and the "metabolic rift" became key to his late re-assessment of the environmental impact of capitalism. Scholars of Marx have in the past neglected this idea. They were too fascinated with the great benefits that industrial production could bring, only on condition that those benefits were equally shared with the workers. The young Karl Marx himself shared this fascination. More recent scholars have discovered how central the metabolic rift was to the thinking of the *late* Karl Marx. They include John Bellamy Foster in a series of books (Foster & Clark, 2020), and the young Japanese historian Kohei Saito (Saito, 2023). They have restored the metabolic rift to the heart of a vital and ecological Marxist critique of capitalism known as eco-Marxism.

James Moore (2003) has gone one step further. He coupled the eco-Marxist critique to a related idea about the spread of capitalism from "core economies" to "peripheral" ones in the course of the especially the 19th century. Immanuel Wallerstein's world systems theory (Wallerstein, 2020) explains why the countries in Northwest Europe and North America that invented industrial capitalism have remained so powerful, while those on the

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<sup>2</sup> <https://www.shh.mpg.de/1489404/pantropocene-group>

margins have remained on the whole “underdeveloped”. It is because the core has a high level of technological development and manufactures complex products, while the periphery supplies raw materials, agricultural products, and cheap labour to the core.

This unequal human economic exchange between periphery and core Wallerstein (2020) also produced environmental degradation such as forest loss in the periphery (eco-Marxism). Moore describes the ecological consequences of the colonial expansion of capitalism as follows:

Degradation and relative exhaustion in one region after another were followed by recurrent waves of global expansion aimed at securing fresh supplies of land and labor, and thence to renewed and extended cycles of unsustainable development on a world-scale.

A disturbing global map in the assessment of Rockström et al (2023) shows where most Earth System Boundaries have been exceeded, and where only a few have as yet been overstepped. The peripheral areas of Southeast Asia including Indochina and Indonesia have been very badly degraded. This is graphic evidence that the devastating waves of global expansion have also washed over Southeast Asia.

It would certainly be innovative to take such an approach to a history of Indonesia’s forests. It would connect with the current major historical interest in colonialism, but would extend, re-orient and re-centre it to include nature. It wants environmental history to “break through colonial and state-centered framings of the environment and environmental history in this region (as well as globally)”. A state-centered emphasis on colonialism and nation-building in Southeast Asia has blinded us to the environmental consequences of the whole story. My suggestion is that the current historical interest in the nationalist movement against colonial racism and oppression should not be abandoned but rather re-centered and re-oriented into the larger field of environmental history.

Colonialism brought into being many processes that alienated humans from each other. Imperial armies fought local princes who would not submit; tobacco plantations enslaved indentured labour brought from far away; sugar plantations disowned peasant land-owners. But colonial agrarian capitalism also led to huge areas of jungle being felled for export crops such as rubber, sugar and later palm oil. So we can re-orient colonial studies by linking the two in this new research question; Did the historical colonial processes that alienated humans from each other (our current preoccupation with racism and oppression) also alienate humans from non-humans (the new environmental history)?

I am pretty sure some of this is already being done. And I am sure Farabi Fakhri’s pioneering history of petroleum geology in Indonesia is going to flesh out exactly such a picture of colonial *Raubwirtschaft* expanding into an environmentally fragile periphery.

Now some notes on innovative environmental histories focusing on *cultural and intellectual* aspects of human attitudes towards the rest of nature. One obvious route into this field for Indonesian historians would be to re-centre and reorient the current work on local history. Regional autonomy since *Reformasi* in 1998 has created a genuine popular interest in such work. It is within local communities that people develop cultural identities that assert themselves against an overwhelmingly centralized state. This has become a strong theme in

Indonesian historiography. The new question is then to ask about the Traditional Ecological Knowledge (TEK) of local communities.

Perhaps the way Indonesians lived in their villages by the river a long time before foreign capitalists arrived was not “backward“ but held the seeds of something we may wish to strive for today. Today we can only observe that knowledge still lives in a few locations far from the capital city. But at one time this was the common mode of environmental knowledge throughout the archipelago. And it was the key to how they governed their relations with the rest of nature. How did these local societies nurture TEK in the past to sustain “alternative systems of governance“ (Armitage & Guldi, 2014)? The alternatives they actually practiced did *not* assume unrestrained market forces, but *did* involve redistribution of risk to reduce societal vulnerability.

The Finnish editors of a book on TEK (Krieg & Toivanen, 2021), Finland being the home of the indigenous Sami) recognize strong ecological motifs in the traditional way of life:

The Indigenous notion of TEK goes beyond the physical landscape; it refers to social relationships with living beings (human and other-than-human), and it is closer to the understanding of ‘ecosystem.’ Thus, Indigenous peoples view the environment, people, and knowledge inseparably, as a whole, and interconnected with each other.

The classic paper on TEK is an ethnography of a North American Indian tribe known as the Ojibwa, written in 1960 (Hallowell, 1960). It highlights the personal and kinship relations that exist between Ojibwa humans and the non-human “grandfathers“ who live in some birds, trees, and other natural elements:

Thus the world of personal relations in which the Ojibwa live is a world in which vital social relations transcend those which are maintained with human beings. ...Speaking as an Ojibwa, one might say: all other 'persons' - human or other than human - are structured the same as I am.

The central goal of life for the Ojibwa is expressed by the term *pimadaziwin*, life in the fullest sense, life in the sense of longevity, health, and freedom from misfortune. This goal cannot be achieved without the effective help and cooperation of both human and other-than-human 'persons,' as well as by one's own personal efforts.

Historical anthropologists since then have discovered similarly compelling “ecological“ kinship with the non-human among Aborigines (Rose, 2000) as well as in many places throughout Indonesia (Dove, 1993; Padoch & Peluso, 1996; Sager, 2008) and much much more.

### **Debate - Engage in the biggest debates.**

The second appeal I would make is to be ready to enter the public arena with environmental history research results. Political life in all the world’s democracies is dominated by short-term thinking. Politicians look only to the next election. Corporate executives look only to the profit line in the next quarterly report to their shareholders. Nobody asks long-term questions. Nobody except historians, and more and more ordinary citizens who think about

where their world is going. To ask long-term questions such as these is core to the *History Manifesto* of American historians Jo Guldi and David Armitage ([Armitage & Guldi, 2014](#)). The program they call for builds a long-term history that looks to the future:

Written at the nexus of past and future, history can draw a map that includes not only pictures of the fantasy world of capitalistic success and the world burning in climate change apocalypse, but also realistic alternative pathways to a world that we actually want to inhabit.

The driving force behind Guldi and Armitage's *History Manifesto* is the dawning awareness that there is a "hunger in the private sector for experts who understand time – on either the short *durée* or the long."

The climate crisis means that the long-term perspective is more important than ever before. How did we end up here? Who is responsible for it? Which powerful ideas were privileged at crucial times, which were suppressed, and why? What past practices give us hope of a better world in the future, and what makes us think they can be appropriated for that future? Suddenly everyone is quoting history to support their side of the argument, even if they are not historians:

[W]hen scientists have sought to establish human culpability in climate change and call for future action, they have found themselves in the realm of historical reasoning. In the midst of policy wars between economists and climate scientists, **history has become a trump card** played by both sides... Questions about which options to choose and how have driven a new generation of scientists trained as biologists, chemists, and geologists to become, effectively, historians of institutions. ([Armitage & Guldi, 2014](#))

All today's great questions are historical. But only historians have the skills to answer them expertly. To rise to the occasion requires us to stop retreating into micro-niches unclaimed by others. We must confront with historical arguments the opinion-makers of our times – from GDP growth fantasist Milton Friedman to techno-optimists like Elon Musk and Sundar Pichai and even a green capitalist like Al Gore. All the great questions involve a historical "longue duree," whose turning points led to the burning earth today. We should reclaim the *longue duree* as ours to understand.

Indonesia is one of the world's biggest sources of fossil carbon emissions. Where are the histories connecting those activities with the historical choices made by powerful people? The histories demonstrating who are Southeast Asia's climate-crisis victims? The histories explaining why, when, at whose hands? The histories pointing out who are its climate-crisis (co-)perpetrators? Amazingly, there is still no history of the petroleum industry in Indonesia. Shell is reportedly keeping its archives tightly sealed against precisely such an inquiry, fearful of the consequences.

The most powerful players in the world today have an interest in NOT asking those historical questions. They are so powerful that even the strongest of the world's elected governments apparently cannot stop them. The immense might of fossil fuel companies such as Shell, PT Adaro, and PT Bumi Resources became painfully obvious at the 2009 United

Nations Climate Change Conference meeting in Copenhagen. At that meeting, US President Barack Obama sabotaged an embryonic global greenhouse gas emissions agreement by closing a back-room deal with Chinese Premier Wen Jiabao, Brazilian President Lula da Silva, South African President Jacob Zuma and some others. The deal made targets „non-binding“ and thus ineffective. This failure was the trigger for the emergence of a global Climate Justice movement seeking to achieve results by popular mobilization instead (Jafry et al., 2018). Two further realizations also underpinned the movement. First, that technological innovation alone is not adequate to address the scale of the crisis. And second, that the climate crisis has exacerbated inequality in the world.

These issues call for new approaches and methods to address the inequitable nature of climate change and its impacts. Climate justice work is intensely historical. For example, the poorest countries of the world experience the worst climate change impacts. Yet when the sum total is calculated of the greenhouse gasses they have emitted per capita since the start of the industrial era, it is very low. The cumulative total is important because even CO<sub>2</sub> emitted 100 years ago is still causing rising temperatures today. This historical fact has led climate justice activists to point out that the rich North has a “climate debt” to the global South.

A great deal of historical climate justice works still awaits the attention of Indonesian historians. Their research faces multiple dilemmas. On the one hand, Indonesia is a climate crisis perpetrator. Indonesia today competes with Australia to be the world’s greatest coal exporter.<sup>3</sup> Moreover Indonesia has a very high cumulative historical CO<sub>2</sub> emissions profile. It did not burn much oil and coal until it grew prosperous in the 1990s and its coal exports have only soared recently, but it did undertake a lot of deforestation and other land use changes since 1850. This contributes to the total cumulative emissions. When this is taken into account, Indonesia ranks fifth in the world just after Brazil and Russia (but still almost five times less than the USA).<sup>4</sup> Of course, the colonial emissions due to land use change were probably owned largely by foreigners from the global core – a fact that is not insignificant.

On the other hand, Indonesia’s population depends to a large extent on agriculture, fisheries, and forestry, sectors that are more vulnerable than average to the climate crisis than those of highly developed countries (Climate Vulnerable Forum and DARA, 2012; Yusuf & Francisco, 2009). Which direction should climate justice activism take? The question is a historical one, as well as deeply political.

A practical dilemma is the extent to which any climate justice agenda can be achieved within the bounds of existing governance and economic structures. Powerful taboos on political engagement within Indonesian universities go back to the New Order and are reinforced by “private-public partnership” funding mechanisms involving corporate perpetrators of climate injustices. (Australian universities are of course no different.)

To engage in these long-term historical and political questions requires not only that historians develop a latent political nerve, but also that they learn something of a broad range of disciplines. Hubbell and Ryan (2021) capture the range of disciplines that are relevant to

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<sup>3</sup> <https://www.carbonbrief.org/the-carbon-brief-profile-indonesia>.

<sup>4</sup> <https://www.carbonbrief.org/analysis-which-countries-are-historically-responsible-for-climate-change/>.

environmental history: “from anthropology, sociology, and geography to earth sciences to art, communications, ethnic and indigenous studies, history, literature, philosophy, religion, and theatre”. This has implications for syllabus design at the university. The Great Divide between the natural sciences and the humanities has been disastrous for the Earth. Nothing good can come from maintaining it, except institutional inertia (Armiero, 2017).

My personal cross-disciplinary hero is the German scientist Ernst Haeckel (1834 – 1919) (Lebrun & Lebrun, 2004; Richards, 2019). This pioneering scientist conceived the term “ecology” (*Ökologie*) in 1866. He was also an artist, a philosopher, and a social reformer. His beautiful drawings of radiolaria, little marine creatures that he single-handedly put on the zoological map, continue to astonish viewers (Haeckel, 1974). With his book *The History of Creation* he became the best-known advocate of Darwin’s theory of evolution, for years battling religious conservatives in public. His books inspired movements for voting law reform, feminist reforms concerning abortion and birth control, pacifism and internationalism. During the 1920s, the Monist movement he inspired acquired a strongly anti-Nazi reputation by denouncing National Socialism as the “new religion” and the “core of reaction” (Holt, 1975).

In our own day, a heroine of cross-disciplinary environmental history is the anthropologist Anna Lowenhaupt Tsing. She originally wrote extensively about indigenous life in Indonesia, became an environmental historian (Greenough & Tsing, 2003), then turned herself into an expert on the global history of mushrooms (Tsing, 2015).

### **Imagine - Dare to imagine.**

My third appeal is that we abandon the positivistic tone of writing that was for a long time (and is perhaps still) regarded within the university as truly scientific, and that we embrace both emancipative social change and, at a deeper level, “humanness”. Historians are familiar both with the social sciences engaged in positive social change, and with the humanities that ask searching questions about who we are as human beings. Investigating the history of emancipative social change, and the deeper history of our common humanness – this is our true mission, and the unique thing we can do for the world that nobody else can do as well.

Let me start with the humanities. The task of the natural sciences is the transformation of nature; of the social sciences it is the transformation of society; but the problem we face today is the transformation of human culture, and that is the domain of the humanities. The humanities are in decline in universities everywhere. This is mainly the result of a long-held belief that only technology was decisive for our future. But that belief is now cracking. If today we still do not read in the newspapers about the latest discovery by someone from the humanities, then it is the fault of the humanities themselves, which have lost sight of the truly human. We have capitulated to the descriptive, to the quantitative, to the neutral and the “objective”, when the world today desperately needs to rediscover our humanness.

Like Guldi and Armitage, the radical Russian intellectual Mikhail Epstein has also written a Manifesto, one calling for transformative humanities (Epstein, 2012). Indonesian universities - and Australian ones! - should teach the genre of the Manifesto. A manifesto is hot. It is impatient with the present, like a utopia. It is urgent, like a shout. It is not “objective”

like the scientific forecast. Epstein begins his manifesto by pointing to the transformative role of the humanities in the past:

The era of Enlightenment was inaugurated by philosophy and literature: by the works of Voltaire, Rousseau, and Diderot. The era of Romanticism came into being thanks to the creative efforts of literary critics, linguists, poets, and writers, such as Novalis, the brothers Schlegel, Byron, Hugo, and Madame de Staël. It has traditionally been the role of the humanities to lead humankind.

He then urges humanities departments in the universities to adopt that leadership role:

The crisis in the humanities is first and foremost a crisis of imagination. There is no future for those disciplines and methods that turn away from the future.... The humanities used to determine, and give meaning to, historic eras... Thus, the future-oriented humanities must not limit themselves to scholarship, but rather should seek to create their own ways of changing what they study and transforming the human world. ... According to Alfred North Whitehead, one of the greatest philosophers of the twentieth century, "the task of a University is the creation of the future, so far as rational thought, and civilized modes of appreciation, can affect the issue." (Epstein, 2012).

Taking Epstein's manifesto seriously means taking a distance from the positivist "objectivism" of conventional university work, and becoming imaginative culture-makers, culture-changers. One of the first scholars in the humanities to realize the depth of transformation needed to confront the environmental crisis was the philosopher-anthropologist Gregory Bateson. Bateson did ethnographic field work in Bali before the Pacific War, while married to Margaret Mead. He later studied the communicative world of animals, from dolphins to the otter, hoping to prove that "the organization of the biosphere itself can be considered as a communicative recursive order". In 1970 he wrote that the consequence of the ecological crisis, which was already apparent even then, should produce critical social learning:

Civilization and its leaders are faced with a 'massive change in deep lying premises - a dose of what you call "culture learning" such as no previous culture has ever swallowed' (Harries-Jones, 1995)

Australian eco-philosopher Arran Gare similarly sketched the enormous scope of the intellectual transformations that might be adequate to the crisis (Gare, 2014). It practically comes down to remodeling the entire university (where I suspect "history" is subsumed under "human ecology" and "anthropology"):

To correct our defective models it will be necessary to transform the human sciences, seeing humans simultaneously as part of nature and as self-creative. This will require the development of human ecology as a transdiscipline to reinterpret anthropology, integrate physical and human geography and

subordinate or replace sociology and to situate economics, and the development of an institutionalist form of ecological economics to replace mainstream economics. The latter is required to free economics from the assumption of humans as *homo economicus* – efficient functioning psychopaths (in the tradition of thought that goes back to Hobbes) and to focus on what kinds of institutions are required to augment our ecosystems, as well as to situate humanity within nature.

Today's most important environmental history textbooks focus on alternative civilizational values to those of individualism, greed, and competition that currently shape our world (DeLoughrey et al., 2015; Frankopan, 2023; Hubbell & Ryan, 2021; Hughes, 2009; LaFreniere, 2012; Oppermann & Iovino, 2016; Worster, 1994). In the last few paragraphs let me sketch some work along these lines that I already see happening in Indonesia, and what work could fruitfully be undertaken as a matter of priority.

Eco-philosophy is an exciting field – it is what first drew me to environmental history. I could fill days introducing new students to its joys. My eyes were first opened to it by the phenomenally influential Norwegian ecological advocate Arne Naess (1912-2009). He developed his “deep ecology” ideas from the Radical Enlightenment philosophy of the 17th century thinker Spinoza (Naess, 1977). A few sentences give you the flavour of his program:

The driving force of the movement [started by Rachel Carson's book *Silent Spring*] was and still is philosophical and religious.... The nature conceived by field ecologists is not the passive, dead, value-neutral nature of mechanistic science but akin to *Deus sive Natura* (God, or Nature) of Spinoza. All-inclusive, creative (as *natura naturans*), infinitely diverse, and alive in the broad sense of panpsychism, but also manifesting a structure, the so-called laws of nature.... No great philosopher has so much to offer in the way of clarification and articulation of basic ecological attitudes as Baruch Spinoza.

Radical inner reorientation such as this has political implications. This becomes obvious when we scan the table of contents of one of the better source books on eco-philosophy (Zimmerman et al., 2005). Take for example one of its branches, eco-ethics. Starting out from the animal liberation movement, a combined intellectual and activist movement for eco-ethics began to assign moral stature to various elements and relations within nature in the 1970s. The community of mutual moral obligation is here no longer confined to the human, but embraces the entire ecological community, including the mountains in the landscape. Eco-ethics have political implications. Feminizing Nature as Mother Earth, activists meeting at Cochabamba, Bolivia, on 22 April 2011, signed the Universal Declaration for the Rights of Mother Earth.<sup>5</sup> This has since then been incorporated into the laws of several countries. Feelings of empathy, of connectedness, of erotic love even,

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<sup>5</sup> <https://www.garn.org/universal-declaration-for-the-rights-of-mother-earth/>

as well as of the sacred arise here that are further explored in inter-related movements of eco-feminism, of eco-theology, eco-aesthetics, and literary ecocriticism.<sup>6</sup>

I would love to see a study of the natural iconography on the Borobudur and Prambanan monuments. These show a highly diverse array of plants including the sacred Bodhi Tree, animals, and mountains (*Gunungan*), with their associated nymphs (*Apsara*) and goddesses (*Tara*). Do these show, as some would have it, “the unity of the cosmos and the interrelatedness of everything in it” (*lengheng* - Zoetmulder), or rather “a celebration of the conquest of nature” (Tony Day)?

Have any of these alternative civilizational values ever informed utopian movements for a more ecological future in modern times? Marieke Bloembergen’s essay on ecological empathy and counter-cultural activism in Indonesia suggests the answer is Yes.<sup>7</sup> There is scope for much more historical work on ecological elements in anti-systemic movements of the past including the 1945 Revolution and its children, perhaps especially the revolutionary agrarian movement *Barisan Tani Indonesia* (BTI).

As suggested by the BTI history, the *material* environmental history also has clear political implications for emancipative change. Even if they themselves are not fully aware of the history, protesters against palm oil plantations in Indonesia connect directly with the Raubwirtschaft analysis of Liebig, Marx, and Wallerstein. They are also mainly driven by indigenous voices, inspired by Traditional Ecological Knowledge (Berenschot et al., 2023; van der Muur, 2019). Indigenous voices are now at the forefront of climate justice movements against new fossil fuel projects in North America and Australia. TEK today has political potential as an “alternative system of governance”.

Intellectual leadership in the area of emancipative social change driven by the key concerns of material environmental history in Indonesia would do well to study Erik Olin Wright’s emancipatory social science project *Envisioning Real Utopias* (Wright, 2010). The Real Utopias Project he began represents a comprehensive assault on the quietism of contemporary social theory. It lays the foundations for a set of concrete, emancipatory alternatives to the capitalist system. It recognizes that not all utopias are actually desirable; that even if they are desirable they may not be viable; and that even if they look viable they may not be achievable. Discussions within networks for change would apply these hopeful yet scientific principles to the challenge of envisioning an ecological civilization for Indonesia that is at once desirable, viable, and achievable.

### **Concluding suggestion**

I would hope to see here the core of a new network of historians who are willing to take environmental history to a broad public in ways people will find surprising, shocking, and inspiring; that it will play its part in developing “a leap in our understanding” as the scientists demand; that it will “change everything” as climate justice activists and eco-philosophers say is necessary.

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<sup>6</sup> Some of the papers at the UGM History Department Summer School on Environmental History present the connections with this eco-philosophical “worldview remediation”. Among them are Faizah Zakaria on the eco-theology of elephants, and Abdul Wahid on critical animal studies.

<sup>7</sup> The essay is also presented at the UGM History Department Summer School on Environmental History.

Can I close with a suggestion? Capitalism is ruining our planet as climate disasters loom. Many young people no longer believe in its promises of ever-increasing wealth for all. Yet today we are further than ever from imagining a viable future that is better, more beautiful, more fair, than what we now have. Where is the Indonesian climate justice movement to take the lead in this? Where are the university academics ready to engage with activists outside the university in the biggest challenge humanity has ever faced?

People with similar concerns could continue to work together and form a nascent National Climate Justice Network (*Jaringan Keadilan Iklim Nasional, Jaklimnas?*). It would set itself the task of developing a utopian vision of a better world. Fear never inspired anyone to change their life, but a hopeful alternative can. It would commit to a national dialogue – perhaps initially on the social media – on the shape of an ecological utopia for Indonesia. The sheer act of discussing this topic would be an act of resistance to the cynicism of persisting with a failed capitalist narrative. It would also be an act of rejecting the pessimism that lets us sleep-walk into ecological apocalypse.

The network could adopt the principles of Erik Olin Wright’s Real Utopias Project. It would ask, among many other urgent questions, what relevance the 1945 Revolution has for ecological civilization in Indonesia. If an anti-capitalist revolution is once more desirable and urgent, is it viable or achievable? Or does the future lie in what Wright calls “interstitial transformation”? He defines this as:

a process of metamorphosis in which relatively small transformations cumulatively generate a qualitative shift in the dynamics and logic of a social system. This does not imply that transformation is a smooth, non-conflictual process that somehow transcends antagonistic interests.

These and similar questions are developed at some length in yet another Manifesto (Klinken, 2021, 2022). The network would ask, for example, why the *Partai Hijau Indonesia* is too small even to enter the elections? How radical does a movement for ecological civilization have to be? How political? Who are the heroes of ecological civilization we may emulate? What are the bases for collaboration within existing social movements such as women’s movements? What to do about the gap between those who want to pursue lifestyle politics (such as electric cars) and others who engage in extra-parliamentary protest politics (Extinction Rebellion)? What about community-oriented vs state-oriented activism? Does the developing world offer special opportunities for more radical global action?

I once saw a poster at a climate rally that said: “It is easier to imagine the end of the world than the end of capitalism.” It is our special burden as university environmental historians to help our societies to imagine precisely the latter in order to prevent the former.

## REFERENCES

- Armiero, M. (2017). Environmental history between institutionalization and revolution : A short commentary with two sites and one experiment. In S. Oppermann & S. Lovino (Eds.), *Environmental humanities: Voices from the Anthropocene* (pp. 45–60). Rowman & Littlefield International.

- Armitage, D., & Guldi, J. (2014). The history manifesto. *Lectures, Les Livres*.
- Berenschot, W., Dhiaulhaq, A. A., & Hospes, O. (2023). *Kehampaan Hak: Masyarakat vs Perusahaan Sawit di Indonesia*. Yayasan Obor Indonesia.
- Bonneuil, C., & Fressoz, J.-B. (2016). *The shock of the Anthropocene: The earth, history and us*. Verso Books.
- Climate Vulnerable Forum and DARA. (2012). *Climate vulnerability monitor: A guide to the cold calculus of a hot planet*. Author Madrid, Spain.
- Dean, W. (1997). *With broadax and firebrand: the destruction of the Brazilian Atlantic Forest*. Univ of California Press.
- DeLoughrey, E., Didur, J., & Carrigan, A. (2015). *Global ecologies and the environmental humanities: Postcolonial approaches*. Routledge.
- Dove, M. R. (1993). Smallholder rubber and swidden agriculture in Borneo: a sustainable adaptation to the ecology and economy of the tropical forest. *Economic Botany*, 136–147.
- Epstein, M. (2012). *The transformative humanities: A manifesto*. Bloomsbury Publishing USA.
- Foster, J. B., & Clark, B. (2020). *The robbery of nature: capitalism and the ecological rift*. Monthly Review Press.
- Frankopan, P. (2023). *The Earth transformed: an untold History*. Bloomsbury Publishing.
- Gare, A. (2014). Deep ecology, the radical enlightenment, and ecological civilization. *The Trumpeter*, 30(2), 184–205.
- Greenough, P., & Tsing, A. L. (Eds.). (2003). *Nature in the Global South*. Duke University Press. <https://doi.org/10.2307/j.ctv1198tsr>
- Haeckel, E. (1974). *Art Forms in Nature*. Dover Publications.
- Hallowell, A. I. (1960). Ojibwa ontology, behavior, and world view. In S. Diamond (Ed.), *Culture in history: essays in honor of Paul Radin* (pp. 19–52). Columbia University Press.
- Harries-Jones, P. (1995). *A recursive vision: Ecological understanding and Gregory Bateson*. University of Toronto Press.
- Holt, N. R. (1975). Monists & Nazis: a question of scientific responsibility. *Hastings Center Report*, 37–43.
- Hubbell, J. A., & Ryan, J. C. (2021). *Introduction to the environmental humanities*. Routledge.
- Hughes, J. D. (2009). *An environmental history of the world: humankind's changing role in the community of life*. Routledge.
- Jafry, T., Mikulewicz, M., & Helwig, K. (Eds.). (2018). *Routledge Handbook of Climate Justice*. Routledge. <https://doi.org/10.4324/9781315537689>
- Klein, N. (2015). *This changes everything: Capitalism vs. the climate*. Simon and Schuster.
- Klinken, G. van. (2021). Manifesto: menuju peradaban ekologis untuk Indonesia. In W. Wijayanto, A. P. Budianti, & H. P. Wiratraman (Eds.), *Demokrasi tanpa Demos:*

*refleksi 100 ilmuwan sosial politik tentang kemunduran demokrasi di Indonesia* (pp. 557–568). LP3ES.

- Klinken, G. van. (2022, April 16). *Towards an ecological civilisation for Indonesia*. Inside Indonesia.
- Krieg, C. P., & Toivanen, R. (2021). *Situating sustainability: A handbook of contexts and concepts*. Helsinki University Press.
- LaFreniere, G. F. (2012). *The decline of nature: environmental history and the western worldview*. Oak Savanna Publishing.
- Lebrun, D., & Lebrun, D. (2004). *Proteus: A Nineteenth Century Vision*. First Run/Icarus Films.
- McNeill, J. R. (2003). Observations on the nature and culture of environmental history. *History and Theory, 42*(4), 5–43.
- Moore, J. W. (2003). The Modern World-System as environmental history? Ecology and the rise of capitalism. *Theory and Society, 32*, 307–377.
- Naess, A. (1977). Spinoza and ecology. In *Speculum Spinozanum, 1677-1977* (pp. 418–425). Routledge.
- Oppermann, S., & Iovino, S. (2016). *Environmental humanities: Voices from the anthropocene*. Rowman & Littlefield.
- Padoch, C., & Peluso, N. L. (1996). *Borneo in transition: people, forests, conservation and development*. Oxford University Press.
- Richards, R. J. (2019). *The tragic sense of life: Ernst Haeckel and the struggle over evolutionary thought*. University of Chicago Press.
- Rockström, J., Gupta, J., Qin, D., Lade, S. J., Abrams, J. F., Andersen, L. S., Armstrong McKay, D. I., Bai, X., Bala, G., Bunn, S. E., Ciobanu, D., DeClerck, F., Ebi, K., Gifford, L., Gordon, C., Hasan, S., Kanie, N., Lenton, T. M., Loriani, S., ... Zhang, X. (2023). Safe and just Earth system boundaries. *Nature, 619*(7968), 102–111. <https://doi.org/10.1038/s41586-023-06083-8>
- Rose, D. B. (2000). *Dingo makes us human: life and land in an Australian Aboriginal culture*. CUP Archive.
- Sager, S. (2008). *The Sky is our Roof, the Earth our Floor: Orang Rimba Customs and Religion in the Bukit Duabelas Region of Jambi, Sumatra* [PhD dissertation]. Australian National University.
- Saito, K. (2023). *Marx in the Anthropocene: Towards the Idea of Degrowth Communism*. Cambridge University Press.
- Tsing, A. L. (2015). *The mushroom at the end of the world: On the possibility of life in capitalist ruins*. Princeton University Press.
- van der Muur, W. E. (2019). Land Rights and the Forces of Adat in Democratizing Indonesia. *PhD Diss., Van Vollenhoven Institute, Leiden University*.
- Wallerstein, I. (2020). *World-systems analysis: An introduction*. duke university Press.
- Worster, D. (1994). *Nature's economy: a history of ecological ideas*. Cambridge University Press.

Wright, E. O. (2010). *Envisioning real utopias*. Verso Books.

Yusuf, A. A., & Francisco, H. (2009). *Climate change vulnerability mapping for Southeast Asia*.

Zimmerman, M. E., Callicott, J. B., & Sessions, G. (2005). Environmental philosophy. *From Animal Rights to Radical Ecology*, 3.