

Forces of Reproduction

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Would feminist authority and the power to name give the world a new identity,
a new story?

(Haraway, 1991: 72)

The master's tools will never dismantle the master's house.

(Lorde, 1984)

Introduction

In May 2011, Zé Claudio Ribeiro da Silva and Maria do Espirito Santo, nut collectors and members of the agroforestry project (Projeto Agro-Extractivista, PAE) of Praia Alta Piranha in the Brazilian Amazon, were brutally murdered as a consequence of their engagement in protecting the forest from illegal logging and timber trafficking (Milanez, 2015). Making a living from a non-exploitative and regenerative relationship with the forest, and passionate about the defence of the rights of both Amazonia and its people, Maria and Zé Claudio's deaths are among the number of earth defenders whose lives are being taken, year after year, for opposing the infinite expansion of global economic growth (Global Witness, 2017; Martínez-Alier, 2002). But their lives and labour belong to an even wider class, which Ariel Salleh (2010) has called the global meta-industrial labour class, made up of those less-than-humanized (racialized, feminized, dispossessed) subjects who reproduce humanity by taking care of the biophysical environment that makes life itself possible. I call them the forces of reproduction: they keep the world alive, yet their environmental agency goes largely unrecognized in mainstream narratives of that epoch of catastrophic earth-system changes that scientists have called the Anthropocene.

Narratives do not kill by themselves, of course. But they might hide the killings and the killed from view, and convince us that they are not part of the story of modernity; that this story is benign and a great achievement of humanity, were it not for the limits that nature puts on human wealth and accomplishment. This, I argue, is the hegemonic narrative of the Anthropocene – and its hero is capitalist/industrial modernity. By this expression I mean a specific type of modernity – that which considers the forces of production (Western science and industrial technology) as the key driver of human progress and well-being. Emerging with the rise of capitalism, this narrative has been subsequently assumed as a universal model and maintained by State socialist regimes in different geo-historical contexts. This Element is devoted to displacing the hegemony of this narrative and allowing counter-hegemonic visions of modernity to emerge.

I came to know about Zé Claudio and Maria from Felipe Milanez, a Brazilian reporter who had visited Praia Alta Piranha while working on a documentary

film about deforestation in the Amazon region only a few months before they were killed. He interviewed Zé Claudio and Maria about their life and work, and about the death threats they had been receiving for some time related to their engagement as forest defenders. I met Felipe a year later. He had been greatly affected by Zé Claudio and Maria's death, and was seeking ways to make sense of their story – so he decided to enrol in a PhD programme in Political Ecology at the University of Coimbra in Portugal, and we started to work together on different projects dedicated to making their story heard. This Element is born out of that long-term engagement. It asks the question: Why are the forces of reproduction not accounted for in the hegemonic Anthropocene narrative? Do they *count for nothing*¹ in the historical balance sheet of human/earth relationships?

This is, unequivocally, a feminist question – in fact, I would argue, this is the kind of feminist question that we need to ask if we want to *change the system, not the climate*. But it requires more than feminist answers. Questioning the at once exclusionary and normative character of the Anthropocene narrative, while making visible the alternate humanities that inhabit it, requires us to adopt an expanded version of feminism, one capable of weaving together ecological, decolonial, class and species perspectives. The Anthropocene would thus appear as an idea moulded by the privileged eye of the white/male subject of history – one which inevitably hides all those who are non-privileged, dehumanizing and making invisible those 'others' that actively oppose the systematic killing of nature. Inspired by the 'Black, lesbian, mother, warrior, poet' Audre Lorde (1984), I argue that the Anthropocene is nothing other than a master's house: one that imprisons both human and non-human nature in order to make them work for capital. Dismantling this master's house to liberate humanity and the earth requires formidable new tools, both material and symbolic.

Undoing the Anthropocene narrative is very relevant to, and indeed constitutive of, narrative justice, the project of telling the other-than-master stories of human habitation of the earth. We need narrative justice to make us see the killed. Their existence disturbs and disrupts the progressive narrative: if poor people put their lives before the advancement of progress into the Amazon forest, then something must be wrong with progress itself. My understanding of narrative justice is consistent with the invitation, coming from other scholars in the environmental humanities, to think of the Anthropocene concept with 'the obscene' (Swyngedouw and Ernstson, 2018), that is, those subjects who are

¹ I am deliberately paraphrasing the title of Marilyn Waring's book *Counting for nothing* (1987), a landmark contribution to ecofeminist and degrowth thought.

removed from the official representation, and that carry the possibility of re-politicizing it via both struggle and alternative life practices (Armiero and De Angelis, 2017).

I have been particularly inspired by Donna Houston's (2013) invitation to mobilize environmental justice storytelling as a method that connects 'biographical, political, philosophical and place-based meanings', forging a tool by which 'alternate knowledge' might be sustained and 'different futures might be enacted' (Houston, 2013: 419). I believe this responds to what Serpil Opperman and Serenella Iovino have described as a key task for the environmental humanities, that of calling for 'new modes of knowing and being' which might 'enable environmentally just practices' (Oppermann and Iovino, 2016: 2). In their view, this requires new narrative tools, allowing for 'stronger, more-than-human coalitions' (Opperman and Iovino, 2016: 19). This, I argue, needs to be done by attacking the core of the Anthropocene narrative: its politico-economic logic, what I term *eco-capitalist realism*. Hence this Element's critique of not only political economy but of historical materialism itself, with its classical emphasis on the forces of production. Making the forces of reproduction visible and accounted for, I argue, is a crucial task for environmental humanities scholarship, one that might help us develop a significantly new understanding of our epochal challenges and of the forces that can be mobilized to address them. Responding to such an urge for ecological revolution, this Element aims at telling the right story of climate and earth-system change, one where Zé Claudio and Maria are seen and their lives count.

Great inspiration comes, in this endeavour, from a landmark contribution of ecofeminist scholarship: Val Plumwood's *Feminism and the mastery of nature* (1993). Building upon two decades of ecofeminist critiques of hierarchical dualisms (Salleh, 2017[1997] ; Merchant, 1996), Plumwood argued that the problem at the root of the current ecological crisis was what she called the 'master model' of Western modernity. In Western thought, she explained, concepts of the human have been developed in similarity with those defining male identity; the problem, however, is neither the male sex as such nor the condition of being human, but the way in which Western culture has defined human identity vis-à-vis gender *and* nature. She described dualism as a hierarchical system of signification, which polarizes existing differences positing them as naturally given and irreconcilable separations – man/woman, mind/body, civilized/savage, human/nature – which 'correspond directly to and naturalise gender, class, race and nature oppressions respectively' (Plumwood, 1993: 43). One side is taken as naturally dominant and primary, while the other is defined in relation to it – in terms of lacking those qualities. Domination of one side over the other is thus seen as inherent in the order of

things. In dualism, Plumwood explained, power forms identity by distorting both sides of what is split apart. Consequently, the proper response to dualism is neither reversal nor merger, annihilation of difference, but challenging the polarization of identities and reconstructing difference along non-hierarchical lines.

For example, rejecting the human/nature dualism does not mean reversing the relationship into one of the total submission of humanity to nature: ‘We do not have to accept a choice between treating “nature” as our slave or treating it as our master’ (Plumwood, 1993: 37), Plumwood wrote. Similarly, the reconstruction of women’s difference must come to terms with ‘the combined identity in which colonised and coloniser identities are interwoven’ (Plumwood, 1993: 67): as Western women are not only colonized in relation to gender, but are themselves colonizers in relation to other racial, cultural, class and/or species identities, critical reconstruction of women’s identity must involve a critique of the master model of the human. This is why, Plumwood claimed, the ecofeminist programme is a highly ‘integrative’ one, in the sense that it brings together cultural, socialist, Black and anti-colonial feminisms in challenging the structure of interrelated dualisms that correspond to several forms of repression, alienation and domination.

Although written in the early 1990s, *Feminism and the mastery of nature* still offers indispensable tools with which to analyse the planetary ecological crisis. It allows us to see how Western modernity identifies humanity with the male master of ‘nature’ – identifying women and racialized subjects with the latter. This identification, I argue, is reinstated by the hegemonic concept of Anthropocene, which assumes the master model of modernity as representing the entire human species, and denying the existence or historical relevance of non-master agencies and possibilities. Most importantly, then, Plumwood’s critique of master modernity allows us to search for the alternate stories that are inscribed, largely invisible and untold, in the current epoch of human habitation of the earth. As she wrote:

The power to direct, cast and script this ruling drama has been in the hands of only a tiny minority of the human race and of human cultures. Much inspiration for new, less destructive guiding stories can be drawn from sources other than the master, from subordinated and ignored parts of western culture, such as women’s stories of care. (Plumwood, 1993: 196)

Uncovering these alternate stories, she concluded, is an important way of making visible and contributing to fostering those alternative rationalities which have contrasted with or simply survived the master model, with a view to ‘realign reason’ away from dualism and elite control and towards ‘social

formations built on radical democracy, co-operation and mutuality' (Plumwood, 1993: 196).

Building upon Plumwood's work, and on materialist ecofeminist thought more generally, this Element will show how the official Anthropocene narrative incorporates the master model of humanity with its built-in sex/gender, racial/colonial, class and species relations. Its key character, *the Anthropos*, is an abstraction based on a white, male and heterosexual historical subject in possession of reason (*qua science, technology and the law*) and the means of production, by which tools it is entitled to extract labour and value from what it defines as *Other*. This is, in fact, its civilizational mission – what legitimizes all its actions, including the worst atrocities. Contrary, however, to the official Anthropocene discourse, *this master humanity is not a species, that is, a natural, ahistorical subject, but a power system made up of material and symbolic relations*. Moreover, it has taken different configurations over time and place, in response to the resistance it has encountered from the *Other*. This is why its aim is totalizing: devouring the *Other* – both human and non-human – so that no resistance is opposed to its rule.

The Anthropocene narrative, I argue, is to be rejected: this is because by accepting it, we subscribe to the idea that history has come to an end and no more resistance is to be expected. That the world *is* what the master has made of it. That the *Others* are not historical subjects with a revolutionary potential, that they do not have any force, any power to oppose the master, because they are in fact organs of its universal body which obey its universal mind. If we accept that all humanity is one with the master, from where, then, should we expect change to come? The Anthropocene ideal wants us to believe that the master itself holds the capacity to address the ecological crisis. It claims that non-human nature – or a particular version of it represented by geology and climate – is now exercising historical agency by opposing its force to that of the master; and that the master will either respond to that force by changing its relationship with its environment or perish. That ideal is flawed – we should not put our hopes in it. For decades, the master has known that it is in serious danger, but it has not been capable of any effective response. It is simply proceeding along the only path it knows, defending itself with increasing ferocity against those who resist it. Our only hopes are with the resistance.

My counter-master narrative of the Anthropocene is based on the hypothesis that history consists in a struggle of other-than-master subjects for producing life, in its autonomy from capital and freedom of expression, a struggle that opposes the unlimited expansion of the master's rule. These other-than-master subjects are the *forces of reproduction*. In a rather asystematic way, the concept reflects the influence of, and attempts to merge, two

distinct theoretical traditions: ecofeminist thought and historical materialism. Their critical intersection (Salleh 2017[1997]) allows us to see that the key commonality between all non-master Others is a broadly defined but still cogent notion of *labour*: from different positions, and in different forms, women, slaves, proletarians, animals and non-human nature are all made to work for the master. They must provide it with the necessities of life, so that it can devote itself to higher occupations. The master depends on them for its survival and wealth, but this dependency is constantly denied and the forces of reproduction are represented as lingering in the background of historical agency.

In Western thought, however, the concept of labour is deeply gendered: as Plumwood (1993: 25) recalled, human identity has been associated with concepts of productive labour, sociability and culture – thus, we can argue, it has been separated from supposedly lower forms of work (qua reproduction and care) and property relations (qua commoning). Capitalist political economy defines reproductive work as non-labour, that is, a valueless activity, although socially necessary to sustain the master; the commons is defined as waste – forms of not-yet-realized value, to be appropriated and improved upon by the master. True wealth and human emancipation can only come from the master's house, and from there trickle down to the rest. A new and supposedly higher form of production, premised on colonial/racial, gender, class and species inequalities, sits at the core of capitalist modernity, defining it with respect to non-capitalist modes of production, and has been rapidly universalized as a hegemonic model.

Merging historical materialism with ecofeminism leads us to look at the Anthropocene from the perspective of reproductive labour – the work of sustaining life in its material and immaterial needs. Subsistence farming, fishing and gathering, domestic work, gardening, teaching, nursing, healthcare, waste collecting and recycling are all forms of reproductive labour insofar as they are essential to the development of human nature in its interdependency with the non-human world. *By its own logic, reproductive labour opposes abstract social labour and all that objectifies and instrumentalizes life towards other ends.* Life itself is the product of (human and non-human) reproductive labour. At the same time, capitalism subjects this labour to increasing commodification and objectification: this generates a contradiction insofar as reproductive labour becomes directly or indirectly incorporated within the money–commodity–money circuit of value. Capitalism thus diminishes or annihilates the life-enhancing potentialities of the forces of reproduction, turning them into instruments for accumulation. This process depletes both the worker and the environment, by extracting from them more work and energy than necessary and leaving them exhausted.

As Tithi Batthacharya (2019) has put it: ‘Life-making increasingly conflicts with the imperatives of profit-making’.

Finally, my forces of reproduction are a queer political subject, in the sense that they point to both inter- and intra-species becoming; they describe not only material agency in daily subsistence practices (what is typically understood as ‘women’s work’), but also the potential, inherent in such agency, for rejecting heteropatriarchy and the sexual division of labour which are foundational to the master model of industrial modernity. Only by starting from this rejection, I argue, can reproductive and earthcare labour be seen and valued as tools for halting and reversing the ecological crisis. In this sense, my forces of reproduction describe a political subject in the making; they refer to the convergence (both ongoing and potential) of (trans)feminist, Indigenous, peasant, commoning, environmental justice, and other life-making struggles across the world, based on an emerging awareness that keeping the world alive requires dismantling the master’s house. With their commitment to defending a life project of more-than-human commoning, Zé Claudio and Maria were part of this very struggle; their story survived their killing and became a seed of justice for those who continue to fight. This Element is intended to help spread that seed, in the hope that it will grow into global ecological class consciousness.

A Master’s Narrative

At the opening plenary of the 2012 Rio+20 Earth Summit, delegates from all over the world were seated for the projection of a video called *Welcome to the Anthropocene*. Presented as ‘A 3-minute journey through the last 250 years from the start of the Industrial revolution to today’, the documentary was meant to offer a science-based, consensual understanding by which to make sense of the current earth-systems crisis and to frame the political choices to be made at the summit.² The video is now included in what is defined as ‘the world’s first educational web portal on the Anthropocene’. Promoted by several research centres, think-tanks and funding agencies in climate change and sustainability,³ its declared aim is ‘to inspire, educate and engage people about the interactions between humans and the planet’.

Although the Anthropocene is a highly contested concept in the social sciences and humanities, and different narratives exist regarding the historical roots of the ecological and climate crises, the particular version promoted in the video referred to above can be considered as the official Anthropocene

² See www.youtube.com/watch?v=pTk11idmTUA ³ See www.anthropocene.info

storyline. Not only does it reflect ‘the dominant climate discourse in the mainstream scientific and media arena’ (Bonneuil and Fressoz, 2017), but – more importantly – it has been adopted by the United Nations Environment Programme (UNEP), thus becoming ‘the hegemonic common sense’ (Goodman and Salleh, 2013) concerning the climate and earth-system crisis. Since the first Earth Summit in Rio de Janeiro in 1992, this ‘common sense’ has orientated environmental decisions with life-and-death consequences upon the majority world – which is actually excluded from scientific and governance conversations. Holding the combined advantage of simplification and reflection of neoliberal power structures, this hegemonic Anthropocene common sense can be considered a master’s narrative; thus undoing it requires an unprecedented effort at counter-mastering.

The video features an unspecified *We* subject who, having improved the lives of billions of humans, has become a phenomenal global force of earth-system change, threatening the continuation of life on earth. Enter the Anthropocene, *the most recent chapter of our history*. The story is depicted as starting in one particular place and moment – England 250 years ago – that is, coinciding with the spatio-temporality of what economic historians have termed the industrial revolution. For a certain time, the narrative goes, this was a success story of brilliant inventions sustained by fossil fuels, a success that spread from Europe to the rest of the world via global transportation networks that connected people from one side of the world to the other. Medical discoveries and chemical fertilizers accompanied this global success story, allowing for a sevenfold population increase in just one century. This tale of fossil-fuelled progress is shown to have witnessed a ‘great acceleration’ in the 1950s, when abrupt change came about: *globalization, marketing, tourism and huge investments* led to enormous economic growth, and massive urbanization turned cities into *even more powerful creative engines*. That point in human history is said to have improved *beyond measure* the lives of billions in terms of health, wealth, longevity and security: *never have so many had so much*, the narrating voice proclaims.

In the space of one generation, *We* is said to have reached the peak of its accomplishment, manifesting all its geological power: it now moves more rocks and sediments than all natural processes together and manages three-quarters of the earth’s land surface. Here, the celebration becomes a gloomy account. It turns out that *We* is also emitting the highest levels of greenhouse gases in a million years, and is responsible for a hole in the ozone layer, the loss of biodiversity, the degradation of water systems, sea-level rises, ocean acidification and the near collapse of many earth-systems. All this testifies to the fact that *We* has entered a new geological epoch, one in which

humanity is reshaping the earth. No need to despair, however: humanity is a force capable of great *creativity, energy and industry*. It has shaped the past, it is shaping the present, it can shape the future. *You and I* – the narrating voice concludes – are part of this story: we are the first generation to have realized our responsibility, that of finding a *safe operating space* within planetary boundaries, for the sake of future generations. *Welcome to the Anthropocene!*

Forces of Production and Biophysical Limits

While officially sanctioning a new understanding of global environmental change as largely anthropogenic, the *Welcome to the Anthropocene* video does not represent a fundamentally new narrative. In fact, it could be seen as the latest chapter in an older mainstream narrative, that of modern economic growth. Reflecting the contemporary hegemony of the gross domestic product (GDP) growth paradigm in global political economy (Schmelzer, 2016), the story of modern economic growth has featured in the education of generations of students in the post-world war two era (Barca, 2011). A Promethean tale, modern economic growth celebrates the increase of energy consumption and material production beyond the biophysical limits of renewable resources, overcoming what economic historians call the ‘Malthusian trap’ of the population/resources ratio. Such a tremendous leap forward – so the narrative goes – was brought about by the industrial revolution. Consequently, industrial growth is seen as the most relevant characteristic of modernity – what marks discontinuity with pre-industrial (reputedly pre-modern) economies, where production was largely based on solar and living energy.

Initiated in the early 1960s, the modern economic growth narrative reflected a widespread belief that a new historical age, the age of abundance, had finally opened for humanity due to the virtuous combination of two historical achievements of western Europe: 1) an enormous increase in labour productivity, achieved by tapping into the non-living energy of fossil fuels – that is, technological innovation and 2) an ability to turn this increased productivity into exchange value, thus reinvesting it into a new cycle of production – that is, capitalism. Mechanized industry, made possible by the coal-and-steam complex, facilitated an exponential increase in production and consumption per capita; economic liberalism, premised upon the enclosure and improvement of nature, allowed for the continuous expansion of mechanized industry and its social hegemony. The existence of a global trade system, already shaped by western capitalism since the ‘long 16th century’ (Moore, 2011a), allowed for the global expansion of industrialization.

By celebrating Europe's ability to break the circularity of the 'organic economy' (Wrigley, 1988) and reinvent the economy as an arrow pointing towards infinity (Raworth, 2017), modern economic growth is a tale of human liberation from nature – a liberation accomplished via industrial modernity. Energy use is the single most important carrier of this new meaning of modernity: more energy has been used globally since 1920 than in all of human history, and, in less than one lifetime (from 1950 to today), global energy use has multiplied by a factor of five (McNeill and Engelke, 2014: 9). Not by chance, the modern economic growth narrative started with, and is still largely repeated in, economic history accounts of energy (Kander et al., 2013): needless to say, fossil fuels play a fundamental and unique role in this liberation tale. Written by (mostly) white male academics sitting in ivy-league universities in the global North, these works reflect the (anti)ecological consciousness of industrial capitalism in the age of the Great Acceleration (Barca, 2011). Entirely devoted to celebrating the development of the forces of production, while cancelling the forces of reproduction out of historical agency, this is a master narrative literally speaking: a story told by the master in the colonial and patriarchal sense of the term – the head of the estate, the factory, the trade company; the owner of slaves and the holder of legal authority over women and animals. Modern economic growth is *history*: obliterating the social and ecological costs associated with fossil capital, it backgrounds the agency of the non-master subjects, and considers their sacrifice as inevitable and necessary to global historical progress.

From the 1990s onwards, the modern economic growth narrative has been interconnected with ecological modernization theory, which emerged as a response to the official recognition of a global ecological crisis on the part of the United Nations (UN) (Spaargaren and Mol, 1992). Based on a post-materialist sociological approach and on environmental economics (specifically, the Environmental Kuznets Curve), ecological modernization theory offered a positive and progressive view of the ecological crisis as one that could be solved by decoupling economic and material flows – separating wealth production from resource use and environmental degradation. It thus offered scientific support to discourses of sustainable development and green growth. Sustainability started to appear as an inevitable result of a technological fix, that is, the decrease of energy content per GDP unit, leading to a supposed dematerialization of the economy; and of a market fix – the commodification and financialization of nature, whose paramount translation into politics is the carbon trading market.

Like the modern economic growth narrative, ecological modernization postulated the universal validity of the experience of a few Northwestern European countries in the period of transition from an industrial to a post-industrial