THE SPECULATIVE MIGRANTS OF THE ANTHROPOCENE
Human Flows in the Neoliberal Planet

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Abstract

The human flows of the neoliberal planet are categorized according to a continuum of mobility forms and managed through framings that construct migration as a threat multiplier, a challenge to human security, and an opportunity to increase the "adaptive capacity" of vulnerable populations. This vision reflects the synthesis of good and bad circulation patterns, good and bad versions of the Anthropocene that characterizes the neoliberal Earth system worldview. The planet as a geochemical entity is a repository of environmental life-cycles that the stewards of the Anthropocene are committed to regulate. In the speculative logic of risk, environmental destruction and species salvation, desperate climate refugees and entrepreneurial climate migrants are two faces of the same coin.

Keywords: Anthropocene, Climate migrants, Speculative methodologies, State of nature, Extinction.

1. *Savage Ecologies*

In their popular science-based climate fiction (Oreskes and Conway 2014), the historians of science Naomi Oreskes and Erik Conway play with the scenarios of climatology and Earth system sciences, the speculative methodologies of the Anthropocene (Baldwin, Methmann, and Rothe 2014; Mitman, Armiero, and Emmett 2018). Writing in 2393 from the Second People's Republic of China, on the 300th anniversary of the Great Collapse, the fictional Chinese historian of Oreskes and Conway's narrative gives voice to the imperial unconscious of Western global environmental science (Anker 2001; Crosby 1986; J. V. Grove 2019; R. H. Grove 2003). China has become the leading world power, a frightful outcome for Oreskes and Conway, and communism is spreading after the collapse in 2093 of the West Antarctica Ice Sheet. While the capitalist West has disregarded the advice of the Intergovernmental Panel on Climate Change (IPCC) and

failed to address the causes of climate change, China has made a full energy transition to renewable sources and prepared for climate meltdown:

> China's ability to weather disastrous climate change vindicated the necessity of centralized government, leading to the establishment of the Second People's Republic of China (SPRC) (also sometimes referred to as Neocommunist China) and inspiring similar structures in other, reformulated nations. By blocking anticipatory action, neoliberals did more than expose the tragic flaws in their own system: they fostered expansion of the forms of governance they most abhorred (Oreskes and Conway 2014, 52).

In 2393, this communist intellectual speaks the same language of the current Anthropocene consensus, embracing a planetary universalism that naturalizes risk, evoking a chronical state of ecological vulnerability that must be confronted by strategies of security, survival and adaptation, conflating environmental perturbations and population disturbances:

> The ultimate blow for Western civilization came in a development that, like so many others, had long been discussed but rarely fully assimilated as a realistic threat: the collapse of the West Antarctica Ice Sheet. (Oreskes and Conway 2014, 29)… As large pieces of ice shelf began to separate from the main ice sheet, removing the bulwark that had kept the sheet on the Antarctic Peninsula, sea level began to rise rapidly. … Over the course of the next two decades (from 2073 to 2093), approximately 90 percent of the ice sheet broke apart, disintegrated, and melted, driving up sea level approximately five meters across most of the globe. Meanwhile, the Greenland Ice Sheet, long thought to be less stable than the Antarctic Ice Sheet, began its own disintegration." (Oreskes and Conway 2014, 30) "Analysts had predicted that an eight-meter sea level rise would dislocate 10 percent of the global population. Alas, their estimates proved low: the reality was closer to 20 percent. Although records for this period are incomplete, it is likely that during the Mass Migration 1.5 billion people were displaced around the globe, either directly from the impacts of sea level rise or indirectly from other impacts of climate change, including the secondary dislocation of inland peoples whose towns and villages were overrun by eustatic refugees" (Oreskes and Conway 2014, 50) "When sea level rise began to threaten coastal areas, China rapidly built new inland cities and villages and relocated more than 250 million people to higher, safer ground. The relocation was not easy; many older citizens, as well as infants and young children, could not manage the transition. Nonetheless, survival rates exceeded 80 percent (Oreskes and Conway 2014, 51).

Oreskes and Conway's doomsday planetarism is not an isolated Western fantasy. From Hollywood disaster films to the Intergovernmental Panel on Climate Change's reports, from grassroots social movements to popular sci-

ence, the vision of unpredictable environmental collapse, mass migration and extinction defines the state of nature of the Anthropocene, a disaster *Weltanschauung* shared by Western philosophers (Colebrook 2014; Latour 2017) and postcolonial intellectuals such as the historian Dipesh Chakrabarty:

> Climate change is not a standard business-cycle crisis. Nor it is a standard 'environmental crisis' amenable to the usual risk-management strategies. The danger of a climate tipping point is unpredictable but real. Left unmitigated, climate change affects all of us, rich and poor. They are not affected in the same way, but they are all affected. A runaway global warming leading to a Great Extinction event will not serve the rich very well. A massive collapse of human population caused by climate dislocation – were it to happen – would no doubt hurt the poor much more than the rich (Chakrabarty 2017, 30).

In *The Great Derangement: Climate Change and the Unthinkable* (2016), the Indian writer Amitav Ghosh echoes this Western imaginary, centred on the convergence of global disaster and population exodus:

> In India a significant rise in sea level could lead to the loss of some 6000 square kilometres, including some of the country's most fertile lands; many of the subcontinent's low-lying islands, like the Lakshadweep chain, may disappear. One study suggests that rising sea levels could result in the migration of up to 50 million people in India and 75 million in Bangladesh. Along with Bangladesh, Vietnam is at the top of the list of countries threatened by sea-level rise: in the event of a 1-metre rise in sea level, more than a tenth of Vietnam's population will be displaced (Ghosh 2016, 53).

The haunting vision of mass environmental migrations of humans and other species serves as a powerful rhetorical device, signaling the spasms of planet Earth before its final collapse, when the "tipping point" of global warming will be reached. These climate migrants are perceived as bodies adrift and – more recently – as entrepreneurial displaced subjects, discursive figures appeared in the late 1980s that took centre stage in the 1990s and 2000s through scientific papers, popular cli-fi literature, and alarming reports by nongovernmental organizations (Baldwin and Bettini 2017).

In a blazing July 2020 article, *The Great Climate Migration*, that inaugurates a bombastic series on "global climate migration", the New York Times Magazine propagates to this contemporary doomsday and US-centred narrative:

> For most of human history, people have lived within a surprisingly narrow range of temperatures, in the places where the climate supported abundant food

> production. But as the planet warms, that band is suddenly shifting north. … By 2070, the kind of extremely hot zones, like in the Sahara, that now cover less than 1 percent of the earth's land surface could cover nearly a fifth of the land, potentially placing one of every three people alive outside the climate niche where humans have thrived for thousands of years. … Should the flight away from hot climates reach the scale that current research suggests is likely, it will amount to a vast remapping of the world's populations (Lustgarten 2020).

It is curious to observe in recent history the emergence and disappearance of environmental migrants from migration studies and the public opinion: environmental conditions and climatic zones dominated the colonial discourse of the second half of the nineteenth century and early twentieth century. Geographers, anthropologists and ecologists such as Moritz Wagner (Wagner 1873), Friedrich Ratzel (Ratzel 1882) and Ernst Georg Ravenstein (Ravenstein 1889) associated climatic zones with favorable migration patterns for European colonists, while also theorizing "migrations laws" and environmental drivers for forced mass migrations (Piguet 2013, 149). These attempts to connect the physical environment with human mobility almost vanished over the course of the twentieth century, before resurging in the 1980s with the reports of the United Nations Environmental Program (UNEP), the Worldwatch Institute and the Intergovernmental Panel on Climate Change (IPCC) (Piguet 2013, 153). While for most twentieth-century social sciences human migration could not be reduced to an ecological dimension, the environmental and climate refugees literature that shaped public policies since the 1980s attributed forced displacement directly to climate change and ecosystems' degradation.

Invisible for decades, millions of "environmental refugees" began to populate the pages of "experts" deeply connected with global policies institutions, as for example in Norman Myers's seminal *Environmental Exodus. An Emergent Crisis in the Global Arena* (a book sponsored by the United Kingdom Overseas Development Administration, the United Nations Populations Funds, the United States Government the Swedish International Development Authority and other global institutions):

> There are at least 25 million environmental refugees today, a total to be compared with 22 million refugees of traditional kind. They are mainly located in Sub-Saharan Africa (notably the Sahel and the Horn), the Indian subcontinent, China, Mexico and Central America. The total may well double by the year 2010 if not before, as increasing numbers of impoverished people press ever harder on over-loaded environments. Their numbers seem likely to grow still more rapidly if predictions of global warming are borne out, whereupon sea-level rise and flooding of many coastal communities, plus

> agricultural dislocations through droughts and disruption of monsoon and other rainfall systems, could eventually cause as many as 200 million people to be put at risk of displacement. These estimates constitute no more, and no less, than a first-cut assessment (Myers and Kent 1995, 1).

These apocalyptic figures of hundreds of millions of climate refugees returned over and over in a plethora of official reports and policy documents (Bettini 2014, 183), creating a security discourse that assumed as factual evidence the nexus between global warming, environmental perturbations (desertification, sea level rises, and conflicts for the appropriation of scarce natural resources), forced migrations and threats to state sovereignty. Climate-induced mobility became a problem to be addressed and solved, the symptom of a pathologic human circulation leading to conflict, disorder and war (Bettini 2014, 181). The building blocks of this discursive regime were laid down by security think tanks and military circles (Schwartz et al. 2004), with the goal of mobilizing climate change through alarmist scenarios, as a legitimation of strategic planning, a tool for the international negotiations of great powers, and a cover up of the political causes of migrations.

As noticed by Richard Black, if we look at large-scale forced migrations – such as the exodus provoked by the Gulf War of 1991 – we can easily recognize that they are not conflicts motivated by scarce natural resources but attempts to control territories rich in natural resources (Black 2001). Although there is no scientific ground for a mono-causal understanding of human mobility, and the scholarly consensus is that "most climate-related movements can be expected to take place within countries, and to be temporary" (Bettini 2017, 34), menacing climate barbarians igniting violent conflicts and destabilizing the prosperity of the West have become an effective rhetorical device for the media and humanitarian organizations, as well as military strategists and policymakers, revitalizing colonial fantasies and civilizational fears of savage wars: "Large-scale population displacement will redraw the ethnic map of many countries, bringing previously separated groups into close proximity with each other and in competition for the same resources" (Brown and International Organization for Migration 2008, 33).

2. *The Fatal Conceit*

After decades of climate refugees' scaremongering, amplified by NGOs and international organizations, a less militaristic vision emerged in the neoliberal approach to migration. The direct link between environmental

change and biblical masses of climate refugees disappeared, replaced by variable and indirect influences on a multiplicity of "drivers":

> It is almost impossible to distinguish a group of 'environmental migrants', either now or in the future. There are a number of existing estimates of the 'numbers of environmental/climate migrants', yet this report argues that these estimates are methodologically unsound, as migration is a multi-causal phenomenon and it is problematic to assign a proportion of the actual or predicted number of migrants as moving as a direct result of environmental change (Foresight Program 2011, 11).

Next to the figure of the pure environmental refugee and its atmospheric version, the climate refugee, another character took hold, the partially environmental migrant, endowed with its specific mode of security, the fluid art of living by adapting known as "human security". This shift is reflected by the Fifth Assessment Report of the IPCC:

> There are many definitions of human security, which vary according to discipline. This chapter defines human security, in the context of climate change, as a condition that exists when the vital core of human lives is protected, and when people have the freedom and capacity to live with dignity […] Research on the specific interaction of human security and climate change focuses on how cultural, demographic, economic, and political forces interact with direct and indirect climate change impacts, affecting individuals and communities (Adger et al. 2014, 12).

The celebration of human security as the "freedom and capacity to live with dignity" embellishes a core principle of the speculative mobility of the Anthropocene: adaptation. If seen as an effect, human migration is a forced movement and a threat to state and human security; but when decoded as a cause, an action, even a decision, migration is an adaptation strategy, a rational behaviour by the agents of the human species, inhabiting a Darwinian nature in which adaptation is key to survival: "Migration can represent a 'transformational adaptation' to environmental change, and in many cases is an effective means to build long-term resilience." (Foresight Program 2011, 21). The neoliberal discourse celebrates the "resilience" of migrants, their willingness to be exposed to the pressure of market and environmental selection, their surprising skills at "survival migration" (Foresight Program 2011, 168) and redesigns international policies as tools to "facilitate" and "manage" this migration of the "vulnerable", which have replaced the "poor" and their socio-political connotations. Resilience, the magic word of the sorcerers of the neoliberal planet, evokes the subjective

side of adaptation, the qualities that the adapting subject must be endowed with to withstand the unknown.

The political ontology of the Anthropocene follows closely the naturalization of market forces theorized by Friedrich Hayek: the economy and the global environment, social capital and natural capital respond to the same logic. Since information is always fragmentary and the future is unknown, only adaptation can allow individuals to survive: "Adaptation to the unknown is the key in all evolution, and the totality of events to which the modern market order constantly adapts itself is indeed unknown to anybody." (Hayek and Bartley 1988, 76). No form of economic planning, no attempt to achieve social justice can replace the brutal reality of environmental selection, the crude competition of the fittest economic players. Nature and the economy are a fascinating "spontaneous macro-order" (Hayek and Bartley 1988, 37) that only an evolutionary approach can apprehend in its global design.

The Anthropocene is a state of nature that reformulates the key principle of Hayek's neoliberal ontology: "Social Darwinism is wrong in many respects, but the intense dislike of it shown today is also partly due to its conflicting with the fatal conceit that man is able to shape the world around him according to his wishes man is able to shape the world around him according to his wishes" (Hayek and Bartley 1988, 27). In this new epoch humans have become a natural phenomenon, so they must dismiss their proud attempt to shape their destiny, their "fatal conceit", and adapt to a high degree of climate change and human mobility, environmental degradation and economic injustice. Resilience leads to self-organizing societies, to a complex, unpredictable but spontaneous natural order (Reid 2013, 225).

The human flows of the neoliberal planet are categorized according to a continuum of mobility forms – from trapped populations and planned relocation to permanently displaced migrants – and managed through a range of "framings" that constructs migration as a threat multiplier, a challenge to human security, or an opportunity to increase the "adaptive capacity" of vulnerable populations, thus minimizing the "adverse impacts of climate change" and optimize economic output (International Organization for Migration 2020, 254–55)[1]. This vision reflects the synthesis of good and bad circulation patterns, good and bad versions of the Anthropocene that characterize the neoliberal Earth system worldview (Luisetti 2019). The planet as a geochemical entity is a repository of environmental life-cycles

1 On "mobility justice" see (Turhan and Armiero 2019).

that the technocrats of the Anthropocene are committed to regulate. Energy and goods, people and information are constantly in motion: the task is to preserve this dynamic system while developing security mechanisms, harmonizing the bad circulation of "pathologically unfit" climate refugees and the good adaptive virtues of well-circulating climate migrants (Bettini 2014, 191). In the speculative logic of risk, environmental destruction and species salvation, desperate climate refugees and entrepreneurial climate migrants are two faces of the same coin.

3. *Speculative Earth*

Since the 1990s, the reports of the IPCC, the intergovernmental body of the United Nations assessing the scientific literature on climate change and distilling policy advice for governments, have served as the manifestos of the state of nature of neoliberalism. The Anthropocene is for the IPCC a "unifying lens" that allows the planet to become a homogenous theatre for adaptation and mitigation actions, measures to contain systemic risk and prevent extinction (IPCC 2018, 32). Thanks to this geohistorical perspective, the fragmented and lacerated Earth – its disjunct body crossed by resource extraction, environmental devastation and human mobility – becomes a homogeneous geohistorical object, the global environment (Hohler 2016; Selcer 2018).

The Anthropocene can be regarded as the state of nature that fulfills the post-Cold War geopolitical vision in which a military, energy and US-dollar denominated American hegemony is predicated upon the far-from-equilibrium planetary scenario of the exhaustion of fossil fuels and climate instability (Cooper 2010; Mitchell 2011). The paradigmatic status achieved by Anthropocenic discourses coincides with the neoliberal construction of global environmental risk, which demands a general reorientation of thought and social practices toward the future. But what future? The Anthropocene describes itself as an origin story, a biospheric crisis initiated by the Industrial Revolution, the Great Acceleration or at other planetary thresholds. In reality, it is an extinction-driven narrative: how can the human species survive throughout the time scale of natural history despite its self-harming tendencies? If the Anthropos does not respect the "boundaries" and "carrying capacities" of planet Earth, under what conditions will it trigger a devastating phase transition that, as already happened with the five mass extinctions of other species, will ultimately end humanity's "safe operating space" and wipe out its comfortable ecological niche?

Extinction threatens a unified subject, the "species being" of the anthropos of the Anthropocene, forcing it to abandon its ecological niche. The living planet is the crime scene of a forthcoming human extinction. The sci-fi, cli-fi and speculative fabulations we associate with the state of nature of neoliberalism derive from this planetary configuration of risk: risk management targets the Earth's criminal behaviour, the bad circulation of species, the murder of *homo sapiens* undergoing in the Anthropocene. The compulsion to adaptation and the policing of deviant socio-economic trends are premised upon this speculative crime scene, the inceding six mass extinction and its premonitory sings. The investigation of volatile trends, unquantifiable traces, suspicious signals, punishable nonconformities stretched across geologic time does not concern only the remnants of an old crime – the putative origin of the Anthropocene – but the future-oriented topology of a genocide that has not yet been entirely perpetrated.

With its deep temporality, global span and modelled Earth consistency, the Anthropocene is the stage on which the alternative futures of global environmental risk analyses perform their exercises of simulation and policing of driving forces at a multi-scale level (Schwartz 1996; Verburg et al. 2016). Using global storylines that include assumptions about future variables and uncertainties, data to be aggregated, and relations to be modelled, "stakeholders" develop scenarios depicting alternative futures with "the ultimate goal of influencing public policy making" (Alcamo 2008). Without the unified speculative crime scene of the Anthropocene, the inquiry and strategy-driven scenarios modelling emissions and populations dynamics, climate change, and energy use, would not be able to assess, anticipate and pre-empt undesirable pathways (Guivarch, Lempert, and Trutnevyte 2017).

The fossil connotations of the Anthropocene reveal the scenario logic that infuses the neoliberal state of nature. Strategic foresight methodologies used by energy corporations, state agencies, and other policy institutions share with science fiction the indifference toward the future as a novel and unpredictable space-time. Fredric Jameson's intuition that science fiction is a "structurally unique 'method' for apprehending the present as history" (Jameson 1982) holds true also for the speculative episteme of the Anthropocene. Scenario approaches construct master-narratives and rudimentary parodies of the future in order to historicize the present and act on complex, volatile and unruly trends. What matters to the neoliberal strategists is the present: societies must be regulated, natural resources securitized, populations tamed in the present, a duration that loses its injustice and fecundity, its rebelliousness and unpredictability and is redesigned instead "in the form of some future world's remote past, as if posthumous and as though collectively remembered." (Jameson 1982, 152)

The Great Climate Migration programmatically announced in July 2020 by the the New York Times Magazine is the by-product of this speculative violence on the present, obtained through scenario methodologies that translate the "subtle disrupting influence" of climate change into a neoliberal political theology (Baldwin 2014):

> In early 2019, The Times Magazine and ProPublica, with support from the Pulitzer Center, hired an author of the World Bank report – Bryan Jones, a geographer at Baruch College – to add layers of environmental data to its model, making it even more sensitive to climatic change and expanding its reach. Our goal was to pick up where the World Bank researchers left off, in order to model, for the first time, how people would move between countries, especially from Central America and Mexico toward the United States. … In all, we fed more than 10 billion data points into our model. … Once the model was built and layered with both approaches – econometric and gravity – we looked at how people moved as global carbon concentrations increased in five different scenarios, which imagine various combinations of growth, trade and border control, among other factors. (These scenarios have become standard among climate scientists and economists in modeling different pathways of global socioeconomic development.) … our model is far from definitive. But every one of the scenarios it produces points to a future in which climate change, currently a subtle disrupting influence, becomes a source of major disruption, increasingly driving the displacement of vast populations (Lustgarten 2020).

We can now understand why Oreskes and Conway chose an historian writing in 2393 as the imaginary narrator of their climate disaster cautionary tale: in tune with the scenario techniques mobilized by the managers of the global environmental, their narrative defamiliarizes and immobilizes the present, reducing current environmental conflicts to a storyline centred on climate engineering and geopolitical war-games. Their plot steals the speculative framework and its representational devices from the futurologists of the carbon regime and renewable energies battlefield (Wainwright and Mann 2018), filling the storyline with the commonplaces of the neoliberal state of nature: the fear of climate breakdown and mass migrations, the technocratic worldview, the fetishization of renewable energies and foreclosure of environmental injustice.

What is missing from this introduction to the US-based climate ideology is the alchemic transformation of socio-political history into natural history, that the Anthropocene accomplishes with its loose framework and hyper-naturalism. When the present dissolves into a geologic epoch, the environment as a priceable externality and nature as a source of "ecosys-

tem services" achieve their speculative transmutation. The Anthropocene's archaeology of the present legitimizes the speculative architecture of the neoliberal globalization of nature.

While these ecologies were building the Anthropocenic worldview, in philosophy and critical theory speculative realisms were providing an ontological framework, hypostatising speculative reason and depoliticizing its genealogy through Westernizing hyper-objects and nihilist ecologies (Morton 2013; Negarestani 2008). An exemplary case is Quentin Meillassoux's *After Finitude* (Meillassoux 2008), in which speculation guarantees the coexistence of knowledge unpredictability and stability across geologic and non-human boundaries. Several Anthropocenic themes – speculative reason, the extinction of the human species and the "world without us", deep time, the non-human scale of planetary and terrestrial life and non-life – feature pre-eminently in this otherwise technical treatise. How can we account for the absolute novelty of natural change and at the same time justify the constancy of concepts, when we address cosmological and geological events unfolding in a pre-human and posthuman temporal dimension? How to make sure that the "temporal discrepancy between thinking and being" (112) does not also affect the conditions of meaning? How do we know that our knowledge is more than a fantasy, which the past or the future can prove wrong?

Speculation, when understood ontologically, reveals the unconditioned power of Western thought to go beyond itself, its consubstantial belonging to nature and any geohistorical context. As for the practitioners of scenario thinking and modellers of alternative futures, also for Meillassuox and the speculative realists (Bryant 2015), speculation is the key operative tool and deep time the key concern. The underlying presupposition of the speculative realists is that ontology is not intrinsically political or historical. The coming into being of unprecedented crime scenes, the transformation of natural sciences into scenario-based enterprises and of human migrations into the mobility of species, can easily be accommodated within Western philosophy's gaze at nature's eternal secrets.

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