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A path to decolonization? Reducing air travel and resource consumption in higher education¹

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Abstract: From “flight shame” or flying consciousness to Stay Grounded and FlyingLess, calls for, and organized efforts to achieve, a marked decrease in flying in response to intensifying climate crisis abound. Of particular concern are frequent flyers, among whom are many in academia, especially in the high-income parts of the world. One manifestation is the proliferation of scholarship that critically analyzes academic flying while advocating for slower forms of travel, new forms of research and collaboration, and a low-greenhouse-gas-emitting academy more broadly. This conceptual article builds on that scholarship by engaging the growing literature calling for the decolonization of higher education institutions and the broader world. In doing so, and by attempting to bring into conversation two currently disconnected streams of literature, it explores how academic air travel both reflects and helps to reproduce patterns of colonial relations. Relatedly, the article considers how flying less contributes to the decolonization of higher education—especially in relation to “nature” and the appropriation of “the commons”. By insisting on the inextricable entanglement of society and nature, it thus illuminates how aeromobility-related consumption both arises from and reproduces persistent inequities born of imperialism and coloniality. On this basis, the article pushes advocates of reduced flying and of decolonization to engage one another in a common project to challenge disparities between peoples and places, as well as interspecies ones, as they relate to aeromobility, consumption, and political ecology.

In November 2019, an author of this article spoke at a one-day conference, which the other two authors organized, titled “Reducing Academic Flying.” The purpose of the conference was to consider socio-cultural, politico-ecological and organizational dynamics associated with the continuing growth in the frequency that academics fly to conferences and meetings. In attendance were academics and speakers based on three continents, many of whom participated via video-conference technology and none of whom boarded an airplane. The aim was to consider how deeply woven into “doing academia” flying has become in recent decades, a time of intensifying climate emergency (e.g. IPCC, 2018; Steffen et al., 2015), and to explore research agendas to develop understanding about why many academics fly frequently. The conference also considered how academics can fly less in order to inform climate action within universities and other industry sectors that involve fossil-fueled travel, particularly that which takes place in the air.

To understand the intensity of anthropogenic influences on climate change, and the effects of aviation, carbon dioxide (CO₂) emissions have become the dominant metric. For example, Lee et al. (2021) calculate that CO₂ emissions from aviation made up around 2.4 percent of total anthropogenic CO₂ emissions in the year 2018. Thus, if commercial aviation were a country, its emissions would be the sixth largest in the world, just behind those of Japan and Germany (EESI, 2019: 1). However, if we take into account the radiative forcing effects of both CO₂ and non-CO₂ greenhouse gas (GHG) emissions, the overall climate impact of aviation increases “by a factor of around 3” (Lee et al., 2021: 15). These calculations are based on flight-related fuel consumption, which has shown marked growth in recent years and, at least prior to the Covid-19 pandemic, was predicted to continue this trend: one study anticipated 4.3 percent annual growth in global air traffic over the next 20 years (Global Market Forecast 2019-2038, n.d.). Consequently, to respond to the climate emergency, radical action is required in relation to air travel (as in many areas of human activity) to arrest and reverse a growth trend and significantly reduce GHG emissions (see Anderson et al., 2020). In response to this imperative, some promote technologies aimed at making aviation “green.” However, careful analyses (e.g., Peeters et al., 2016) have found these “solutions” to be lacking in substance as they are predicated on innovations that have not yet been realized; as such, imaginings about potential innovations become diversions that help the aviation industry and its supporters resist efforts to reduce air travel.

For such reasons, reducing flying represents a significant challenge to higher education institutions, especially those in relatively wealthy parts of the world, which have become heavily reliant on it. Indeed, flying makes up a major portion of their institutional footprints (Wynes & Donner, 2018). For example, according to Arsenault et al. (2019) CO₂ emissions from academic air travel at the Université de Montréal are responsible for 30 percent of the institution’s total CO₂ footprint.² The size of the work-related travel footprints of the professors who responded to the authors’ survey averaged 10.76 metric tons of CO₂ per year.³ That per capita average for flight alone exceeds the *total* per capita annual CO₂ emissions of a typical person in Germany; it is also about five times that of a typical person in Brazil. This carbon intensity of air travel means reducing it is one of the fastest available ways to decrease GHG emissions in higher education.

In response, some universities have begun to scrutinize flights as part of their environmental sustainability efforts. A few have made firm commitments to target reduction in flying by administrators, academic staff, and students and even identified actions to move towards them (see, for example, ETH Zürich, 2019; University of Basel, 2019; University of Sheffield, 2020). However, regardless

of the level of commitment to change expressed by institutions, they typically frame aviation along with the rest of sustainability principally as a realization of responsibility to the environment, or to climate in the abstract, or as pursuance of a commitment to carbon neutrality or some other technical measure. There is rarely any acknowledgment of the real suffering caused to humans and other life forms, now and in the future, that results from an institution's environmental consumption.

Complementing (and helping to increase scrutiny of aviation) is the proliferation of scholarship that critically analyzes academic flying while advocating for slower forms of travel, new forms of research and collaboration, and a low-GHG-emitting academy more broadly (e.g. Glover et al., 2018; Higham & Font, 2020). Within this literature, there are numerous examples of a more expansive set of concerns, ones that go beyond climate change in and of itself by paying attention to the already-unfolding forms of violence that fossil-fueled consumption helps bring about. Often central to these concerns are matters of inequality and differential levels of vulnerability across space and society (e.g., Høyer and Naess, 2001; Dwyer, 2013; Parncutt, 2019).

The raising of the imperative to reduce academic flying is happening at a time when there is a growing body of literature calling for the decolonization of the academy (e.g., Bhambra et al., 2018; García-Peña and Lyon, 2020; de Leeuw and Hunt, 2018; Mbembe, 2016; Muldoon, 2019). Setting aside for now the fact that what decolonization means or should mean is the subject of much discussion, what is striking about these growing calls for decolonization is they typically say nothing about matters of environmental consumption. Similarly, while there is work within transport geography on the subdiscipline and matters of coloniality (e.g., Schwanen, 2018 and 2020; Wood et al., 2020) and even on coloniality and climate (e.g., Schwanen 2019), scholarship related to academic flying has not engaged the literature on decolonization (e.g., Caset et al. 2018; Nevins, 2014). Herein, we seek to remedy this lack of engagement by putting the literatures on academic flying and decolonization of the academy into conversation. We do so in part by considering a broad decolonial literature (e.g., Escobar, 2007; Grosfuguel, 2007; Maldonado-Torres, 2007; Mignolo, 2007; Quijano, 2007; Sharma, 2020; Tuck and Yang, 2012). The goal is to enhance our understandings of coloniality as it relates to the academy and to aviation-related consumption among universities and professional societies. Such understandings are informed by theory. And to the extent that theory is always partial and thus both illuminates and obscures (Castree, 2004), bringing the two bodies of literature in conversation opens the door to an enlarged understanding, advancing a critical theory aimed at socio-ecological transformations.

The literature on decolonization provides valuable tools for illuminating what academic flight “does” and for imagining and creating pathways to reduce it. It is our contention that academic air travel both reflects and helps to reproduce colonial relations. As such, we argue that efforts aimed at achieving a marked decrease in academic flying contributes to both the decolonization of higher education and of the larger world—especially in relation to “nature” and the appropriation of “the commons,” shared resources which enable the long-term viability of a community (see, for example, Perera 2015). We demonstrate how aviation-related consumption relates to persistent inequities born of imperialism that are bound up with deeply problematic relations between the human and other-than-human. We also push advocates of reduced flying and of decolonization to engage one another in a common project to challenge disparities between peoples and places, as well as interspecies ones, as they relate to aeromobility, consumption, and political ecology.

Because of the strong presence of decolonial thought in the academy and growing discussions of decolonizing higher education, it is curious that scholars concerned with the ties between academic flying, climate breakdown, and inequality, have not yet interrogated coloniality to further illuminate the linkages. We lay some foundation for doing so in the two sections that follows—first, by distinguishing between colonialism and coloniality and, second, by exploring discussions of decolonization of academia in particular and how they relate (or do not) to matters of nature. In terms of the latter, a rich component of decolonial literature provides helpful tools for centering ecological concerns, but, with rare exception, does not consider matters of environmental consumption and flying in particular. The three subsequent sections thus, first, provide an overview of the rapidly growing literature on academic flying; second, examine the ties between academic aeromobility and socio-ecological vulnerability and inequity; and, third, make the case that flying-less efforts within the academy are necessarily linked to a broad project of decolonization that goes far beyond academia itself. Finally, in the conclusion, we advocate for a far-reaching dialogue between those who champion radical cuts in fossil fuel consumption, particularly in relation to aviation, in the academy and those who call for the academy's decolonization, as a way of enriching and deepening both efforts.

Decolonization, Colonialism, and Coloniality

An expansive notion of decolonization has profound implications for matters of environmental consumption in relation to transport and aeromobility within the academy and far beyond. Before elaborating on this assertion, we need to appreciate what the term decolonization responds to and make a distinction between two overlapping phenomena: colonialism and coloniality (see, e.g., Mignolo, 2007; Quijano, 2007).

In a narrow sense (a dominant one in the world at large), colonialism refers to an inherently geographical undertaking that involves a group of people (the colonizers) associated with a particular territory—in terms of their identifiable geographic origins—dominating another group of people (the colonized) tied to a different space. Often, the establishment of a settler population tied to the colonizing country is central to the process (see Gilmartin 2009). It is an endeavor that reflects and produces “a system of power relations in which the interests of the dominant party are disguised as universal and mutual, but in which the colonizer actually prospers at the expense of the colonized” (Plumwood, 2002: 8). In other words, colonialism⁴ involves dispossession and ill-gotten gain and generally concerns historical processes of invasion and imposition of socio-political systems of rule over subordinated territories and peoples. Decolonization in this sense thus refers to an end of formal colonialism, through a change in those who rule over a particular territory. Under such a scenario both rulers and ruled are deemed as having a rightful claim to the territory.

Coloniality speaks to a broader set of historically rooted, contemporary, ongoing relations involving what Grosfuguel (2007: 220) calls “colonial situations,” ones that can be present “with or without the existence of colonial administrations.” Such “situations” involve relationships between dominant and negatively racialized/ethnic and thus subordinated populations and, by extension, oppression and exploitation on multiple fronts—from the cultural and epistemic to the political and economic. These relationships are manifest in everything ranging from dominant notions of “common sense” to “the

criteria for academic performance” (Maldonado-Torres, 2007: 243). For this reason, says Maldonado-Torres, modern subjects “breath[e] coloniality all the time and everyday” (see also Gibler, 2018). In other words, coloniality is central to the world in which we live, informing how we see and act within it.

Decolonization in this broader sense typically refers to the many guises of coloniality across time and space, not simply those associated with colonization of a conventional sort. According to Prasad (2003: 5), for instance, decolonization pays heed to the “on-going significance of the colonial encounter for people’s lives both in the West and the non-West.” In other words, decolonization highlights the persistence of colonial-like relations between dominant and subordinate peoples and places in a world in which formal colonial relations (with arguably a small number of exceptions) are passé.

As such, decolonization involves multiple projects (see Clayton, 2020). These range from the “repatriation of land” to indigenous groups dispossessed by settler colonialism (Tuck & Yang, 2012: 7), to the exploration and transformation of taken-for-granted ideas and associated social relations of exploitation and oppression born of empire, which persist beyond empire’s formal expression (see Mbembe, 2016). The different meanings of decolonization manifest that associated processes of action and resistance in the pursuit of change and redress are necessarily variegated.

In terms of the academy, the project of decolonization has a longer trajectory than often recognized. As Mbembe (2016) points out, endeavors to “Africanize” universities as part of African nation-building projects in the 1960s and 1970s were a form of decolonization, even if, as he suggests, they were flawed due to chauvinistic tendencies.⁵ In recent years, a project of decolonization of the academy has re-emerged, particularly in what many define as settler colonies. What takes place within academia and its formal institutions—particularly colleges and universities—has become a key front in the pursuit of this project, with implications for their consumption of “nature”, the topic of the next section.

Decolonizing the Academy and Nature

In a broad sense, the decolonization of academia concerns “addressing how the forces of racism and colonialism have shaped our past and present” (Muldoon, 2019; see also García-Peña and Lyon, 2020). What follows from this recognition of the partiality of Western intellectual orthodoxies are efforts to actively destabilize them through exchange of ideas, theories and knowledges from marginalized communities of scholarship.⁶ This involves changing course curricula as well as who is present in the classroom—as professors and students.

In this spirit, a growing number of academic departments, programs, and universities have announced that they are pursuing various undertakings. In 2015, for instance, all of Canada’s 97 universities adopted a set of principles committing to narrowing the education gap between “First Nation” students and their non-indigenous peers, and to reworking their curricula to reflect indigenous knowledge, culture and values, and to recruit and hire faculty, administrators, and senior managers from aboriginal communities (Goar, 2015). In the United Kingdom, the School of Oriental and African Studies in London announced, in 2018, the establishment of a working group on decolonization; this followed Oxford University’s changing of its history program to require the examination of non-British and non-European history (Woolcock, 2018). And in September 2020, a group of faculty, graduate students and staff at

Cornell University (in the United States) sent a letter to the institution's administration calling for a change in curricula so that it embeds "decolonized readings" in as many university courses as possible (Cornell Faculty Coalition, 2020). There are many more examples.

The actual policies and practices that result from such efforts reflect a contested agenda. As such, they are variable and patchy. Often, they are limited to diversifying reading lists (Liyange, 2020). More broadly, they entail interrogating the history, structures and contemporary consequences of western universities (Bhambra et al., 2018), while scrutinizing "whiteness" and associated privileges within the academy (Doharty et al., 2020), and how indigenous peoples continue to experience settler-colonial violence (de Leeuw and Hunt, 2018).

The multifaceted critique embodied by these efforts indicate that decolonization-demands of the academy are far-reaching because they concern what is taught and the associated social justice implications, and who and what is privileged, included, marginalized or excluded. This extends to processes of self-reflection, critique and change within disciplines and sub-disciplines on the ongoing conduct of research. For example, within transport geography, Schwanen has called for the decolonizing of knowledge through the disruption of dominant ways of knowing transport, and for engaging new concepts, theories and methods from people and places that have thus far been marginalized from processes of academic knowledge production (2018, 2019). For Schwanen (2020), this includes an openness to critical thinking about dominant modes of understanding of what constitutes humanness.

If, as suggested, unequal relations of power and related manifestations of privilege and disadvantage are at the center of the modern (and colonial) academy, environmental consumption by academic institutions and individuals associated with them must also be at the center of decolonization efforts. In this regard, we need to scrutinize the "coloniality of being" and, with it, "ontological excess," which "occurs when particular beings impose on others" (Escobar, 2007: 185).

Hyper-consumption of the earth's raw materials—flying being a stark manifestation given the enormous amount of fossil fuel it requires—is an example of such excess. Both reining in such excess and transforming relations which reproduce it must be, in part, the project of decolonization. In this regard, what Sundberg (2014: 42) states in relation to post-humanist geographies—that it "implies making political choices about the worlds we wish to enact, choices for some ways of living together over others"—easily applies to the project of decolonization. Such "choices"—institutional, collective, and individual—are not only political, but also political-ecological. This is generally not evident, however, in the discussions surrounding the decolonization of higher education—apart, perhaps, from sometimes highlighting and criticizing the fact that particular institutions are located on lands of which indigenous peoples have been dispossessed and/or still claim as rightfully theirs (and, on this basis, asserting various obligations of redress).

The relative absence of political ecology concerns in discussions surrounding decolonization of the academy is not surprising given the inadequacy of decolonial literature in relation to "nature." Plumwood, among others (e.g., Jackson, 2014; Hunt, 2021), helps remedy this by insisting that "the concept of colonization can be applied directly to non-human nature itself" (Plumwood, 2002: 8). She suggests that detached anthropocentric conceptions of nature and non-human species embody colonization by enacting boundaries and distinctions that render the other-than-human as "Others" which are inferior, exploitable, and at the service of humans. This produces a situation whereby "the

One” (the human) is “an elite, morally considerable group” and “the Other” is “an out-group defined as ‘mere resources’ for the first group, which need not or cannot be considered in similar ethical terms” (Plumwood, 2002: 9-10). Thus, the insufficient consideration afforded to nature in calls for decolonization of academia manifests a dominant way of seeing. It is one that perceives nature as separate from the social rather than inextricably tied to it. It also effectively produces the other-than-human as outside “the circle” of ethical consideration (see Mitchell, 2015).

The notion that there is a clear boundary between humans and “nature” (however defined) is itself a Eurocentric and colonialist imaginary (see, e.g., Descola, 1998, Jackson, 2014, Viveiros de Castro, 1992). And the notion that the other-than-human must be at the forefront of discussions about environmental matters is, asserts Hunt (2021), “old news for Indigenous peoples.” But even if we put such observations aside, the very notion is becoming increasingly untenable to those who have posited such a boundary as it becomes more and more obvious that there is no pristine, untouched nature (see Castree 2004), a fact suggested by many characterizing our current geological epoch as the Anthropocene. This counter-analysis underlies Swyngedouw’s refusal of the human-nature divide. “Modern” environments, he writes, are “part natural and part social, and [embody] a multiplicity of historical-geographical relations and processes” (1999: 445). In other words, the “natural” environment is a hybrid. Swyngedouw thus insists on the term “socio-nature,” rather than “nature” as something distinct and unaffected by humans.

As political ecologists insist (e.g., Peluso, 1997, Robbins, 2011, Watts, 2000), environmental matters are inherently political—with questions of access, control, the distribution of associated benefits and detriments, and related struggles central to their concerns. Thus, if what we call nature is actually socio-nature, this means not only that society and nature are intertwined, but also what are characterized as ecological issues are always social and, by extension, political, matters implicated in relations of power. In addition, it means that the social—the university, for example—is ecological. In this regard, drawing on Parenti’s insistence, that the modern capitalist state “does not *have* a relationship, it *is* a relationship with nature” (2015: 830), higher education is also a relationship with nature. It is a nature (like the social) that embodies unjust relations of power.

These unjust relations, and the activities of higher education institutions, flow from and contribute to the making and distribution of harm (as well as advantage). The socio-spatiality of the distribution largely follows patterns of global inequality informed by colonialism’s historical geography. This is one reason why the ecological consequences of academia’s practices, not least GHG emissions from flying, demand critical attention. The intensity of emissions that result from a single trip, in addition to the profound inequality of the social distribution of flying, only heightens the need for such scrutiny. These characteristics suggest that academic flying is a meaningful target for effecting positive change to socio-ecological relations. The growing literature on academic flying, the focus of our next section, provides both evidence and critical understanding of these issues, and of the potential and need for change.

Academic Flight

The literature on academic flying and the associated emissions has been growing rapidly in recent years. It began to emerge shortly after the Intergovernmental Panel on Climate Change published a special report on aviation and its impacts on climate change (Penner 1999). Around the same time, writings by

Monbiot on the detrimental impacts of flying were appearing in *The Guardian* newspaper; the title of a 1999 piece that he wrote for the London-based newspaper, for example, proclaimed that “Global warming means that flying across the Atlantic is now as unacceptable as child abuse” (see also Monbiot 2007). Within the academy, initial writings largely focused on commentary pieces highlighting a problem that, until that point, few people had considered. In an academic publication, Høyer and Naess (2001) and Reay (2004) were among the first to sound the alarm. Similar works in academic journals across disciplines soon followed (e.g., Bonnett, 2006; Greenhalgh, 2007; Fox et al., 2009; Pedelty, 2008; Philippe, 2008; Green, 2008; Roberts and Goodlee, 2007). This was quickly complemented by a larger wave of writings focused on measuring the GHG footprint, to bring to light the sizable impact of professional academic travel (e.g., Hirsch and Hilty, 2002). Much of this literature offers concrete suggestions aimed at reducing those footprints (see, for example, Jäckle, 2019; Klöwer et al., 2020; Kuper, 2020; Ponette-González and Byrnes, 2011). A subset of this category puts less emphasis on measuring GHG emissions and instead focuses its energies on re-rethinking conferencing—and intellectual exchange more broadly—in far-reaching ways (e.g., Hiltner, 2020; Pandian, 2020; Ruddick, 2019).

Resistance or opposition to such analysis has rarely been overt. For the most part, it has manifested itself through “business as usual”—a continuation of academic frequent-flying. That said, there are academics who have called into question the focus on flying. Bendell (2016), for example, characterizes scrutiny of airborne travel as “sometimes misguided and even counter-productive.” He criticizes what he sees as an overly individualist orientation toward addressing the climate crisis while arguing that those involved in bringing about socio-ecological transformation (individuals such as himself) should continue flying. “It’s not how much carbon you use,” he writes, “but what you do with it that counts.” Huber (2017) also criticizes a focus on the emissions of individuals (see, also, Maniates, 2001). Employing a Marxist lens, he takes the critique in a different direction, however, suggesting that scrutiny of individual (and implicitly, by extension, institutional) consumption frames people as atomized consumers, thus undermining a needed, collective and confrontational struggle with capital. Huber similarly takes issue with assigning emissions to countries. In both cases, such assignation ignores how practices are “a product of a web of social relations,” he writes. The true drivers of climate-changing consumption, he suggests, are large corporations, among them, fossil fuel companies.

It is true that we are all products of social relations. We are also producers of such relations. To paraphrase Marx, people make the world, but not under conditions of their own making.⁷ In other words, people have agency, and thus responsibility. Of course, some have more agency—and, hence, more responsibility—than others. That capital has an outsized role in “determining” what the world looks like and what people do is not in dispute. (Herein, we use “determine” in a Marxist sense. It thus does not mean to dictate, but rather, as Mitchell (2020: vii) explains, to limit what is possible and exert pressure to bring about movement in particular directions [Mitchell, 2020: vii].) So, yes, there are pressures on academics—not least those from wealthy countries and institutions—to perform in particular ways. But we cannot reduce those pressures to capital. As scholarly research on why academics fly and often do so frequently makes clear, a host of factors explain their behavior. These include job-related structural pressures and individual motivations; identity-enhancement and the “cultural capital” gained via aviation-related mobility; a refusal to inconvenience oneself by taking slower, more time-consuming modes of transport; moral licensing (e.g. “I compost and recycle and

therefore have earned the right to travel by air”); conscious self-indulgent practices and escapism; a consumer-society-produced sense of being trapped in particular practices and thus feeling that other options are not viable; and the notion that flying is a basic right (Lassen 2010). Fear of damaging one’s career is also a powerful factor in limiting the willingness of many academics, including those worried about climate change, to fly less (Nursey-Bray et al., 2019).⁸

Galeano (2000) once stated, “Reality is not destiny, it is a challenge.” The pressures discussed above embody both “reality” and “a challenge.” The question is, what should we—specifically academics from institutions—do in the face of such challenges? The very posing of the question is indicative of our (the authors’) assumption that, such pressures notwithstanding, there is plenty of room for many within the academy to withstand these pressures—to conduct their professional practices in an alternative fashion (as many of the authors we cite herein have done); and to work together for institutional and sectoral changes to reduce those pressures to fly.

Academic Flight and Socio-ecological (In)justice

The necessity of action speaks to what underlies most, if not all, of the literature on academic flying: ethical considerations in relation to the harm caused by GHG emissions. The focus on ethics and, by extension, moral responsibility to cut professional academic emissions, is sometimes explicit (e.g., Dwyer, 2013; Higham and Font, 2020; Parncutt and Seither-Preisler, 2019; Zoloth, 2014)—as are suggestions of hypocrisy on the part of scholars who focus on environmental issues yet have large ecological footprints (e.g., Balmford et al., 2017); Whitmarsh et al., 2020)—and often implicit. One of the first contributions in this area was an article by Høyer and Naess (2001) about the ethical tensions and contradictions in academia. Through a critical examination of flying, the authors challenge the notion that “knowledge industries” lead to the “dematerialization” of society, to a reduction in environmental resource consumption and pollution. “Knowledge workers,” the authors point out, typically undertake a lot of professional travel, “often made with the most energy consuming and environmentally harmful modes of transport” (Høyer and Naess, 2001: 451), this despite their being “green” in that they “care” about environmental matters. Such conference-going, Høyer and Naess suggest, make the individual part of what they call the global elite. It also contributes, they contend, to socio-economic inequality “between an ever more mobile cultural elite and other, more marginalized groups” (2001: 466). This speaks to a point made by Massey (1993: 62-63) that “[t]he mobility and control of some groups can actively weaken other people—especially those who are already marginalized”. It also highlights the fact that air travel has consequences that go beyond transporting bodies and altering the atmosphere. Indeed, it has life and death implications, flowing from and exacerbating “isms” of injustice (e.g., racism, sexism).

In relation to such injustice, Parncutt (2019) characterizes emissions as ageist, racist, and sexist. To illuminate this, the author develops and models a “1,000 tonne rule”: the burning of roughly one thousand tons of carbon-based fuels (which creates about 3,700 tons of CO₂ emissions) leads to the death of one future human being; with such deaths having disproportionate impacts on the elderly, the negatively racialized, and women. To help make sense of such inequities, Nevins (2014), in exploring professional academic travel, develops the concept of dys-ecologism. This refers to the appropriation of

an unsustainable and socially unjust share of the biosphere's resources in a manner that concentrates benefits in the bodies and places associated with a privileged minority, and detriments in those associated with a disadvantaged majority—producing life-limiting outcomes in a manner similar to, say, imperialism and racism.

These life-abbreviating implications are not limited to human beings. With an intended audience of scientists and conservationists—“often among the most frequent of flyers” (Sonne et al., 2019)—six scholars illustrate the climate-warming impact of flying on Arctic sea ice and polar bear habitat. Using the example of researchers flying from Copenhagen to Oslo for a meeting on polar bears, the authors (Sonne et al., 2019) estimate that each passenger on average is responsible for one square meter of Arctic summer sea-ice melt. This results in a total loss of several hundred square meters for all the attendees and thus contributes to the decline of the world's polar bear population. With one metric ton of CO₂ emissions melting three square meters of Arctic summer sea-ice, the authors estimate that the world's flight passengers together melt 5470 km² sea-ice each year—a landmass equivalent to Trinidad and Tobago or 1.35 million soccer fields.

These examples illustrate that flying, in terms of its fossil fuel consumption and related emissions, is powerful in terms of its ability to shape the biosphere. As Klöwer et al. (2020: 356-357) point out regarding the sum total of travel associated with attendance at one large academic conference, it can result in “as much CO₂ as an entire city in a week.” As an example, the authors estimate that the 28,000 attendees at the 2019 annual meeting of the American Geophysical Union emitted 80,000 tons of CO₂ through their travel to and from the gathering.⁹ This total, they write, is equal to the average weekly emissions of the Scottish city of Edinburgh and, on a per capita basis, represents about 3 tons per scientist in attendance. As a point of comparison, average per capita CO₂ emissions in Brazil in 2016 were 2.2 metric tons.¹⁰

Creswell (2006: 2) asserts that movements of people are always “products and producers of power (and thus their attendant inequities).” As a fossil-fuel-intensive, and thus relatively expensive, activity, flying as form of mobility—in terms of who flies (and who has flown)—reflects such inequities. Indeed, it is “the activity that most clearly embodies the links between inequality and ecological breakdown” (Roelofs, 2019: 268; see also Oswald et al., 2020). It is estimated, for instance, that more than 80 percent of the world's population has never flown (see Gurdus, 2017; Negroni, 2016). And among those who do fly, there are also pronounced disparities. In the case of the United Kingdom, for example, 15 percent of the country's population is responsible for 70 percent of individual flights (Klöwer et al., 2020: 356). In the United States, 12 percent of its denizens are responsible for two-thirds of the country's passenger air travel (International Council on Clean Transportation, 2019). If we compare countries of pronounced differences in wealth per capita, we find that about 80 percent of the population of the United States has flown at some point in their lives (Negroni, 2016) whereas only “a tiny percentage” has done so in India (Richardson, 2010). In 2018, *at most* one percent of the world's population accounted for more than half of the total emissions from passenger air travel; that same year, only eleven percent of people in the world traveled by air, with at most four percent doing so internationally (Gössling and Humpe, 2020). Thus, in the case of the “many academics [who] were frequent flyers”—prior to the Covid-19 pandemic—they are those who enjoyed a “hypermobile lifestyle” (Klöwer et al., 2020: 356), placing them in the upper socio-economic echelons of their countries and, even more so, in global society.

If flying is tied to class differentials and a broader hierarchy of subjectivities and varying levels of (im)mobility (see Cresswell, 2006; Wohl, 2005), it is also tied to the reproduction of capitalist social relations (see Young, 2019; Illich, 1974) as well as to injustice and the making of a world of inequality. An expression of this inequality is one's mobile status, as exemplified by categories such as "tourist" or "frequent flyer" (and the associated hierarchies within) (see Gössling & Nilsson, 2010; Nevins, 2018). As Young (2019:10) asserts, these categories "emerge from, and are necessary to, the flow and expanded reproduction of capital." More broadly, flying is tied to the making of the modern world, central to the making of which has been colonialism as well as coloniality. If, as Escobar (2007) asserts, modernity and coloniality are inseparable, efforts at reducing the environmental consumption of the academy, and that related to flying in particular, must, out of necessity, address coloniality. As Maniates (2001, 50), a prominent critic of individualization of responsibility asserts, a worthy and effective environmental politics "requires linking explorations of consumption to politically charged issues that challenge the political imagination. Walking this path means becoming attentive to the underlying forces that narrow our understanding of the possible." These underlying forces grow out of coloniality, in addition to capitalism. In this regard, a project of flying less—if it is to be truly effective—must necessarily be engaged with such "politically charged issues," central to which are global-local projects of decolonization, the focus of our next section.

Academic Flying and Decolonization of the World

Not all universities engage in flying-related environmental consumption at the high levels discussed earlier. It is universities—and the hypermobile, privileged actors within those institutions—in relatively wealthy parts of the world that do so. As three white male academics at elite institutions in countries with long histories of empire-building, we embody this hypermobility as the beneficiaries of stark global inequalities born of colonialism and imperialism more broadly.

This is illustrative of how air travel has long been entangled with colonial processes. Twentieth century transport innovations, such as aviation, enhanced, if not enabled, the extension of colonial empires and their access to provision raw materials and markets for industrial products (Knowles, 2006). Air travel has also informed the very geography of empire (see Immerwahr, 2019). As for the spatiality of the aviation industry, in terms of the uneven distribution of investment in transport capacity, routes and terminals, it also reflects imperial processes and the highly uneven geography of global wealth and income to which they have contributed. So, too, does the geography of attendance at large international conferences involving air travel. As Martin (2021) notes in regard to the Annual Meeting of the American Association of Geography (which typically takes place in the United States), for instance, "a cursory reflection on the countries most represented at the annual conference outlines a map of global wealth and development." While there are many attendees from Canada, Martin points out, "a very populous country that shares a very long *southern* border with the United States" (Mexico) is "notable by its absence." In other words, who travels, how they travel and at what speeds (see Illich, 1974), and with degrees of difficulty in relation to the state (particularly across international border regions)—and, by extension, how much fossil fuel they consume—is to a significant degree a function of power, one associated with one's access to "nature" and its distribution (see Nevins, 2018). This is true within academia just as it is in the world as a whole. Flattening this hierarchy is, by necessity, a task for decolonization.

Academic flying is involved in enabling ongoing physical flows of people between lands as well as in reproducing patterns of domination between different peoples, places, and epistemologies. As such, academic flying reconfigures various forms of violence, including those associated with coloniality. It also reproduces individualist and modernist ideals and discourses of enlightened “free spirits” moving through space and associated practices (Parker & Weik, 2013). Such discourses and material arrangements naturalize the rapid movement of some academic bodies, allowing them to be widely and physically present (at conferences and meetings).

One might argue that continued high levels of international mobility are necessary to enable destabilization of Western academic orthodoxies through the exchange of ideas, theories and knowledge. However, virtual communication technologies have opened up new avenues for intellectual exchange and increased international access to academic events. With participation no longer dependent on access to travel funding (Lessing et al., 2020) and on state-granted authorization to cross nation-state boundaries, this has increased the ability of scholars from under-represented parts of the world to participate (García 2021). Although there is no doubt that academic travel (particularly of the airborne variety) can and must be markedly reduced, there does clearly remain distinctive value for academic exchange in time spent in person (Storme et al, 2017; Urry, 2003). For a decolonizing agenda, however, such travel should be reshaped to enable destabilization of Western orthodoxies and diversification of ideas, theories and knowledge, with implications of who travels, when, how, and for how long. What this might look like is an open question. But Roelofs (2019: 269) offers some ideas in speaking to fellow Africanists: “Redistribute funds for air travel to those who have historically been shut out of academic networks, with the aim of eventually reducing emissions. Or maybe we should prioritize air travel for those in countries with poor internet connections?” Roelofs goes on to ask and suggest, “What if the money saved by Western-based scholars flying less was devoted to supporting virtual communication? As scholars of Africa, talking to our Africa-based colleagues should be a part of everyday life, not just something we only do when we get a free holiday out of it. CVs and promotion criteria should include a section for virtual collaborations” (see also Anderson et al., 2021).

Such ideas point to what a decolonized world might look like. As Tuck and Yang (2012: 36) suggest, a decolonized world is a fundamentally different one than what now exists. “It is an elsewhere,” they write. This dovetails with their assertion that decolonization is not about oppressor and oppressed simply trading places. Instead, they suggest, it involves the beneficiaries of colonialism giving up their ill-gotten booty. This overlaps with the contention of Sharma and Wright (2008: 133) who understand colonialism as the effective theft of the commons. For them, decolonization entails “liberation of people from social relations that are organized through their hierarchical placement within a ruthless, global competition for profits, whether private or public.” The decolonial project must thus not only “challenge capitalist social relations and those organized through the national state, such as sovereignty”, it must also entail the realization of a commons, one which is *not* delimited by national boundaries and is, instead, global (Sharma and Wright, 2008: 128 & 131). In other words, in terms of resource consumption, a decolonial project necessitates confronting inequities that are embedded in politico-economic arrangements that favor the interests and practices of the wealthy as well as those associated with nation-statism, the very existence of which severely limits access to, and efforts to protect, the commons (see Nevins, 2017).

A commons represents resources shared within a community, with the wellbeing of all commoners—and the long-term viability of the commons itself—being a central concern (see, for example, Perera, 2015). In such a situation, the grossly unequal distribution and consumption of “environmental resources” that manifest themselves today (see Yannick et al., 2020), and the inequities associated with the resulting detriments simply would not happen. As we have explored herein, such inequalities and associated economic systems are expressed through configurations of who is afforded hypermobility through access to, and institutional imperatives for, academic flight.

Conclusion: Making the Path to Decolonization by Flying Less

Decolonization means many things. Rather than seeing the different meanings as competing, we understand them to be complementary, and necessarily so. As such, decolonization needs to contest an imperialist and universalist “Eurocentric canon” within the academy (Mbembe, 2016)—a canon which has evolved to “rationalize, legitimize, excuse and/or make commonsensical” the domination and/or exploitation of the alleged Other (Tejeda et al., 2002: 21). It must also challenge capitalism—particularly the tendency to perceive and treat “nature” as available for exploitation without limit (see Castree, 2004)—as well as nation-states (and their sovereignties) as part of a project of achieving a global commons, and struggle against a world of dys-ecologism (Nevins 2014) and of owners and the dispossessed (Sharma and Wright 2008; Sharma 2020).

In taking this stance, we join others by embracing a decolonizing lens that calls into question the assumption that some populations (e.g., academic jetsetters from wealthy institutions and countries) have a right to consume a grossly disproportionate share of the biosphere; this lens also challenges the assumption that humans are superior to others forms of life (see Collard et al., 2015; Plumwood, 2002). Taken together, this means that a decolonization perspective can challenge the construction of boundaries which render “others” inferior, be they human or other-than-human, and, by extension, less deserving of respect (see Plumwood, 2002; Turkewitz, 2017). In this manner, the commons become a place of human-nonhuman entanglements as strong notions of “us” and “them”—those deserving of full consideration and rights and those less so—are replaced by radical interdependencies (see Ingold 2008; Álvarez & Coolsaet, 2020), and an alternative ethics tied to an expansive global solidarity (Mitchell 2015). As Judith Butler (2020: 6) suggests in considering an ethics of nonviolence, “if a life, from the start, is regarded as grievable, then every precaution will be taken to preserve and to safeguard that life against harm and destruction. Here grievable means that “its loss needs to be conceptualizable as a loss” (Butler, 2020: 58). In other words, an ethics of nonviolence—one we suggest dovetails with an ethics of decoloniality—involves an expansive notion of what is life and worthy of protection and relations of solidarity.

Flying—not in and of itself, but as a practice that embodies profligate consumption by a small slice of the world’s population and the associated harms that result—is antithetical to such solidarity. In this regard, the project of decolonization, as an endeavor to transform a world that allows for high and unsustainable levels of consumption by a global minority (Oswald et al., 2020), provides valuable impetus to flying less efforts within the academy.

Similarly, efforts to challenge high levels of environmental consumption can strengthen the project of decolonization—not least by illuminating more expansively how colonialism has shaped the world and life and death circumstances within. Colonialism-cum coloniality has been central to the making of a world that enables some to fly frequently and effectively denies that “right” to the vast majority of the earth’s denizens, while compelling them to face the resulting socio-ecological harms born of aviation. Hence challenging the practices and the related web of relations that flow from and reproduce this unjust world is an ethical obligation.

Thus far, advocates of flying less in the academy and those who champion the decolonization of institutions of higher education have worked in silos, this despite their projects overlapping in important ways. To the extent that those pushing for flying less policies are concerned with matters of social and environmental justice and that promoters of decolonization can appreciate the centrality of “nature” in the making of a colonized world, this presents an opportunity for cooperation and collaboration—intellectually and practically. It is our hope that this article is a small step down a long road heading toward a common project of socio-ecological justice for all.

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² Given the additional effects of non- CO₂ emissions (Lee et al., 2021), aviation is a higher proportion of the university’s total GHG emissions.

³ Ghent University (ca. 2019) in Belgium calculates that approximately 15 percent of its CO₂ emissions are related to business travel, and mostly in Europe, with a “big chunk” of those trips taking place by airplane. ETH Zürich (2019) estimates that “business trips account for over half” of its greenhouse emissions, “with 93 percent of that due to air travel.” While, along with that of the Université de Montréal, these examples manifest a wide range of sizes in proportion to total emissions, they also

indicate the great significance of flying in terms of overall fossil fuel consumption by universities in high income areas of the world.

⁴ Our use of the term herein refers to “modern colonization,” beginning roughly in 1500 and continuing into the 20th century, whereby certain countries—in particular, Britain, France, Germany, the Netherlands, Portugal, Spain, and the United States—dominated and regulated the flow of people and goods across wide swaths of the world (see Gilmartin, 2009).

⁵ For Mbembe (2016: 36), a more attractive form of Africanization—and, by extension, decolonization—is one that embraces “a *geographical imagination that extends well beyond the confines of the nation-state*” and centers the wellbeing of humanity, not that of particular group of people.

⁶ Schwanen (2018) and Wood et al. (2020) persuasively argue this in relation to transport geography.

⁷ See Karl Marx’s essay from 1852, “The Eighteenth Brumaire of Louis Bonaparte.”
<https://www.marxist.com/classics-the-eighteenth-brumaire-of-louis-bonaparte/all-pages.htm>

⁸ Curiously, while flying is typically justified as necessary for reasons of academic success, a study conducted among academics at the University of British Columbia found no relationship between the amount of professional air travel one engages in and one’s academic productivity (Wynes et al. 2019).

⁹ These estimates fail to include the non-CO₂ greenhouse gas emissions associated with flying. As such—and as discussed in endnote 2—they understate to a considerable degree the climatic impact of the flying included in their measurements.

¹⁰ See The World Bank, “CO₂ emissions (metric tons per capita),”
<https://data.worldbank.org/indicator/EN.ATM.CO2E.PC>