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How Environmentally Sustainable Is the Internationalisation of Higher Education? A View from Australia

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Introduction

In a world of increasing awareness of the many drivers of anthropogenic climate change, all of which fall under the larger rubric of global capitalism with its emphasis on profit-making, economic growth, and a strong dependence on fossil fuels, many universities, particularly in developed societies, have proclaimed a staunch commitment to the notion of environmental sustainability. Conversely, the growing emphasis on internationalisation of higher education, particularly in Australia, entails a considerable amount of air travel on the part of university staff, particularly academics but also support staff, and overseas students and occasionally domestic students. Australia is a generally highly affluent country which is situated in the driest inhabited continent and increasingly finds itself functioning as a ‘canary the coal mine’ with respect to the ravages of anthropogenic climate change. Ironically, climate scientists and other

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observers often refer to various regions, such as the Arctic, low-lying islands, the Andes, and Bangladesh, inhabited by indigenous and peasant peoples as the canaries in the coalmines when it comes to the adverse impacts of anthropogenic climate change. It is often said that those people who have contributed the least to greenhouse gas emissions are the ones suffering the most from climate change, a more than accurate observation.

Australia as a relatively affluent society finds itself at a critical juncture in an era of socio-ecological crisis with three overarching in the pursuit models to pursue in the era of climate change (Burgmann & Baer, 2012). The first one is an entrenched model which has been fostered by multinational corporations and the two major political parties, the Coalition and the Australian Labor Party. While at times purporting to take action on reducing greenhouse gas emissions, for the most part it is committed to ongoing economic growth heavily reliant on fossil fuels for some time to come. The second model adopts a green social democratic or green capitalist approach and calls for some structural reforms which would reduce social inequality and make a transition to renewable energy sources. Adherents of the second model include the mainstream of the Green Party along with large sections of the environmental and climate movements. The third model is eco-socialism which seeks to function as part and parcel of a growing international movement seeking to promote a socially just, deeply democratic, and environmentally sustainable world system. Adherents of this model by and large operate on the margins of the Australian society but include eco-socialists within the Green Party and members of various eco-socialist groups who consider themselves in solidarity with climate justice activists, in contrast to climate activists *per se*, who call for 'system change, not climate change.'

Australia is contributing more than most developed countries, more or less on par with the United States, in terms of contributing to greenhouse gas emissions, not only from domestic consumption of coal but due to massive export of coal. Over the past decade or so, Australia as the driest settled continent has been experiencing rising temperatures, droughts accompanied by water shortages and raging bushfires, storm surges and flooding, and the bleaching of its iconic Great Barrier Reef. As part of a larger process of globalisation, Australian universities have increasingly

been seeking to internationalise themselves in various ways, by encouraging their academics to attend conferences and research meetings in far-off places, particularly Europe and North America.

Furthermore, Australian universities often sponsor visiting academics from faraway places to collaborate on research and even to visit briefly to present a keynote address at a conference or some other event. Furthermore, international higher education had become the third largest export industry in Australia, at least prior to the COVID-19 pandemic, only superseded by the export of iron ore and coal. Cutbacks in government funding since the 1980s have compelled Australian universities to derive an increasing amount of their incomes from full-fee paying overseas students, particularly from China but also other developing countries, such as India, Indonesia, Malaysia, and Singapore. The growing internationalisation of Australian higher education is highly dependent upon air travel, a growing source of greenhouse gas emissions, thus belying frequent claims on the part of Australian universities to being committed to environmental sustainability.

As a critical anthropologist and a scholar-activist, in addition to relying upon published materials, my findings in this chapter rely on an auto-ethnography drawing upon my involvement as a representative of the National Tertiary Education Union branch at the University of Melbourne on sustainability issues and frequent attendance at academic conferences, panel discussions, and seminars, particularly at Victorian universities, on sustainability issues.

Australian Universities and the Sustainability Imperative

Australian universities, to a greater or lesser degree, have enthusiastically embraced sustainability discourses, as have universities in Europe, North America, and in various developing countries. Nineteen of the 28 Australian universities are signatories to the International Tailloires Declaration ([n.d.](#)) initiated in 1990 by 22 presidents, rectors, and vice-chancellors around the world which states that ‘universities bear profound responsibilities to increase the awareness, knowledge, technologies, and tools to create an

environmentally sustainable future.’ Conversely, the deeper question is the extent to which Australian universities as well as universities elsewhere are capable of being environmentally sustainable, given their increasing ties with the corporate world, including its reliance on airplanes for purposes of transporting people for both business and pleasure and cargo (Baer, 2018). While an appreciable number of Australian universities have exhibited some progress towards a policy that Raftery and O’Dwyer (2010) term *greenshift* and that I and Arnaud Gallois (Baer & Gallois, 2018) term *green-sheen*, this policy is uneven and inconsistent. In an effort to internationalise themselves, Australian universities, particularly those belonging to the elite Group of Eight (Go8) group have come to rely upon air travel both for staff and international and, to a lesser degree, domestic students.

Air Travel on the Part of University Staff

Attendance at professional conferences has become an integral component of academic life around the world. Many academics are involved in air travel, a practice that appeared to be spreading, at least until the advent of the COVID-19 pandemic, and which may return to ‘business-as-usual’ if and when the pandemic subsides. Academic air travel often increases with seniority and affiliation with elite universities and funding from granting agencies. As Parker and Weik (2013, p. 168), observe, ‘Setting aside package tourism to sunny beaches, the elite nomads from the traveling classes include academics from the elite institutions of the Global North.’ While Australia is situated in the southern hemisphere, in political-economic terms it is part of the Global North. In order to participate in academic life with their colleagues in Europe and North America, Australian academics are forced to travel even longer distances when participating in international academic events and activities.

Australian academics fly to facilitate a range of collaboration, networking, research, and educational activities with colleagues at other universities, although they may combine air travel with non-academic activities, such as tourism before and after academic events, escaping family obligations, and time away from their home institutions. Universities and academic programmes encourage early career academics and PhD students

to engage in air travel to conferences and other academic events through scholarship funding or by accessing travel grants. Australian academics often fly to Europe and North America, but increasingly to Asian countries, particularly China, India, and Indonesia. Jonathan Symons, an academic based at Macquarie University, states:

Virtually everyone in rich countries such as the United States, the UK or Australia, is a part of the most polluting 10%. I'm a childless, vegetarian who has never owned a car, but I'm part of the most polluting, 1%. Why? Because I travel by air a few times a year. (Symons, 2019, p. 99)

Rather than lamenting his own environmentally dubious behaviour, he boldly states:

Personally, I find the vision of global convergence on a low-energy future quite miserable. For example, I think international travel can be enormously enriching. In my vision of a good life, any ordinary person might hope to spend a semester studying overseas, perform the hajj, visiting family during Golden Week, or attend the World Cup. (Symons, 2019, p. 102)

Furthermore, in their efforts to position themselves in a competitive international arena, which includes research rankings and recruitment of students, including international ones, Australian universities often recruit overseas academic staff, particularly from European and North American universities. Glyn Davis (2010, p. 22), the Vice-Chancellor of the University of Melbourne from 2005 to 2018, boasted that Australia hosts the 'most internationalised higher education system in the world,' a system including both international scholars and international students. While many academics situated in Australian universities hail from European and North American countries, Asian academics now constitute 15.4 per cent of teaching and research staff Australia wide, thus reflecting the growing recognition of Australia's position in the Asia-Pacific region (Song & McCarthy, 2020, p. 137). In my own observations of colleagues at the University of Melbourne, such academics often retain ties with colleagues in their countries of origin and may periodically return to visit relatives and friends for non-academic purposes.

Glover et al. (2017, p. 1) assert that Australian and New Zealand scholars are under pressure as their universities promote global connectivity and have made international collaboration, often in terms of attending meetings and conferences, in North America and Europe an 'increasing central requirement for promotion and career success.' Based upon their qualitative textual analysis of strategic and internationalisation policies at 14 Australian universities, they found that none of them 'had a detailed or coherent strategy for reducing air travel' nor did any of them question the need for air travel (Glover et al., 2017, p. 5).

In a later article, Glover et al. (2019, p. 2) assert that a sense of geographical *remoteness* both within Australia and with the outside world 'has shaped the knowledge economy of Australia in a way that is highly dependent on air travel,' even though it is highly environmentally unsustainable. Based upon an online survey of 301 Australian-based academics, they found they averaged three domestic return flights and 1.72 international flights over the 2014–2015 year for work-related reasons. A hypermobile cohort of Australian-based academics, who generally held a senior rank of professor or associate professor, took eight or more return domestic flights during this time period. In terms of primary reasons for academic air travel, 92 per cent of their respondents cited conferences, symposia, or workshops; 56 per cent meetings with other academics; 37 per cent undertaking fieldwork or data collection; 25 per cent meetings with industry partners; 14 per cent unspecified reasons (such as perhaps teaching); 13 per cent industry events; and 2 per cent for commuting. In terms of the extent to which their home universities encouraged or discouraged air travel, 16 per cent asserted that their employer strongly encourages air travel, 32 per cent that it somewhat encouraged it, 39 per cent that it neither encouraged nor discouraged it, 11 per cent that it somewhat discouraged it, and only 2 per cent that it strongly discouraged it. In terms of the benefit of air travel to their careers, Glover et al. (2019, p. 13) found that 61 per cent of them found it strongly beneficial, 28 per cent somewhat beneficial, 7 per cent neither beneficial nor detrimental, and 1 per cent strongly detrimental.

The research of Glover and his colleagues strongly suggests that Australian academics experience considerable institutional pressure from their universities to fly for academic purposes, aside of whether or not

they enjoy doing so. New Zealand academics situated across the Tasman Sea are even more impacted by the ‘tyranny of distance’ than their Australian counterparts with New Zealand universities subscribing to the rhetoric of international connectivity while at the same time espousing a commitment to environmental sustainability (Hopkins et al., 2016).

Air Travel on the Part of University Students

The presence of international students in Australia began to increase under the auspices of the Colombo Plan beginning in the 1950s and continuing into the 1980s. The plan involved 27-member nations, particularly ones from various Southeast Asian countries, particularly Malaysia, Singapore, Sri Lanka, and Hong Kong (Ong, 2009, p. ix). A second wave of international students arriving in Australia began in the 1990s, many in particular from India and China (Ong, 2009, p. 9). The vast majority of this later cohort of international students rather than coming on scholarships under the auspices of the Colombo Plan pay full fees. Many of these students found Australian universities as second option given the intense competition for university entry in their home country, particularly true of China and India. Croucher and Waghorne report:

A growing Asian middle class, the lack of places in their own country’s universities, the opportunity to live in Australia and, later, the high ranking of Australian universities in global league tables, made Australia appealing. The strategy to attract international students was initially viewed by the government as a vehicle for international engagement, overseas aid and an “export” industry. (Croucher & Waghorne, 2020, p. 183)

Indeed, globally various universities in developed societies have increasingly become dependent on international students as a source of revenue. In 2013, for example, ‘thanks to the intensive cultivation of emerging student markets in Asia and elsewhere, higher education ranked as the UK’s seven-largest ‘export industry’ (Mulhern, 2020, p. 118).

The corporatisation of Australian universities in part has resulted from a drop of government from around 90 per cent of university budgets in

the 1970s to around 42 per cent in 2010 (Connell, 2019, p. 118). In Australia, in contrast to the United States that has a far-flung system of state universities, the federal government, not the six states and the Australian Commonwealth Territory (ACT), established public universities. Federal government funding of higher education in Australia 'as a proportion of GDP is among the lowest in the OECD—around 0.7% on 2011 figures compared to an average of 1.1%' (McCamish, 2016, pp. 32–33). Full fee-paying students, particularly overseas students, many of them Chinese, have become the principal source of revenue for Australian universities (Connell, 2019, p. 120).

Reliance upon overseas students particularly picked up steam during the Coalition government under Prime Minister John Howard between 1996 and 2007 when it relaxed visa requirements for international students. International students constitute Australia's 'largest source of skilled migrants' (Davis, 2017, p. 96), thus in essence constituting a form of 'brain drain' from developing societies from which the vast majority of them hail (Davis, 2017, p. 96).

Australian universities have urged the government to support the recruitment of international students at its Asian diplomatic missions and consulates (Croucher & Waghorne, 2020, p. 184).

Rea observes that the Howard government facilitated this course of action on the part of universities, essentially turning international students into what many have come to term 'cash cows':

The Government assisted in this by also relaxing visa requirements. To be more precise, international students were no longer neighbours, they became the new revenue stream, and now Australia's public universities are hooked on this line. The reality is that today international students are subsidising the education of domestic students as their fees are used to partially make up the funding gap. (Rea, 2016, p. 11)

In a similar vein, Connell (2019, p. 191) asserts that the 'international market in fee-paying students sucks money out of developing countries to pay universities in richer ones,' including Australia. This process constitutes yet another example of the unequal economic exchange between the core, on the one hand, and the semi-periphery and periphery, on the

other hand, or between the Global North and the Global South. Australian academic Richard Hil (2015, p. 204) asks, '[I]n enrolling large numbers of full-fee paying international students, universities might ask themselves whether they are exporting 'Western' values overseas and, into the bargain, reproducing hazardous neo-colonial relations.' Whereas international students are lured to leading Australian universities, such as Melbourne, Sydney, and ANU by their international rankings appearing in the London Times Higher Education listing or the Shanghai Jiao Tong listing, determined primarily by research output rather than quality of teaching, they 'may never encounter the academics behind the research that attracted the funding' but instead 'are often taught by sessional staff [including post-graduate student] and those on short-term contracts' (Simons, 2019, pp. 30–31).

While overall international tertiary education constitutes Australia's third largest export industry, in the case of Victoria, the country's second most populated state, it constitutes the number one export industry. Australia is not alone in its reliance on international students for revenue, however, proportionally is the highest in the world in this regard. Levatino reports:

[Australia] is one of the countries with the greatest reliance on trade in international education services. After the US and the UK, it is the third preferred destination country for students from abroad. Australia is also the OECD country with the highest share of international students and the largest presence overseas relative to the size of its domestic tertiary sector. Its institutions started to offer THE [transnational higher education] early on—since the mid-1980s—and its government had a key role in promoting the liberalisation of higher education. Australian THE is particularly present in Asia, the continent with the biggest supply of THE, and particularly in East Asia, the most important sources of international students worldwide. (Levatino, 2017, p. 641)

While in 2015, Australia's total investment, both public and private, in tertiary education as share of GDP was 'above the OECD average and the fourth highest, behind the US, Chile and Canada,' its public investment in higher education as a 'share of GDP was among the lowest in the

OECD—ranked 24 out of 34 countries’ and was ‘0.77 per cent of GDP in 2015 compared to 0.98 per cent of GDP for average OECD countries’ (Universities Australia, 2019, p. 14).

Australian Bureau of Statistics indicates that, ‘in 2017–18, international education was worth \$32.4 billion to the Australian economy, up from \$28.1 billion in 2016–17’ (Parliamentary Library, 2019, p. 1). Furthermore, the Parliamentary Library reports:

Higher education accounted for 68.5 per cent (\$22.2 billion) of international education export income in 2017–18 and 45.6 per cent of all overseas student enrolments in 2018. Overseas students also enrol in Australian vocational education and training (VET), schools, English Language Intensive Courses for Overseas Students (ELICOS), and non-award courses. However, each of these accounts for few students and has less economic impact than overseas student enrolments in higher education. (Parliamentary Library, 2019, p. 1)

During the 2008–2018 period alone, the number of overseas higher education students almost doubled from 202,581 to 398,553 (Parliamentary Library, 2019, p. 2). Of these students in 2018, 38.3 per cent (152,591) were from China, and 18.0 per cent (71,857) were from India, with the remaining top seven nationalities being Nepal, Vietnam, Malaysia, Pakistan, Sri Lanka, Hong Kong, and Singapore (Parliamentary Library, 2019, p. 3). In 2019, of 1,562,520 higher education students in Australia, 108,255 were domestic students and 479,987 were international students (Universities Australia, 2020). One report indicated that several universities derived over 50 per cent of their students’ fees revenue from international students in 2018, 58.5 per cent in the case of the University of Sydney, 58.5 per cent in the case of the University of Melbourne, 27.5 per cent in the case of the University of New South Wales, 55.1 per cent in the case of Monash University, 51.6 per cent in the case the University of Queensland, and 51.2 per cent in the case of Federation University of Australia (Carey, Hunter, & Heffernan, 2020b). International students’ tuition fees reportedly provided 26 per cent of all university revenue in 2018 in contrast to 10 per cent in 2000 (Carey, Prytz, & Heffernan, 2020c).

While there is a growing concern about the contribution that academic air travel makes to greenhouse gas emissions, there has been relatively little research on the contribution that international and domestic students make in flying to universities or academic-related events away from home (Davies & Dunk, 2019; Arsenault et al., 2019). As Shields observes:

There are no data on the number of trips mobile students make to their home country. The number of trips could range from less than one (e.g., one trip to the home country every other year) to several trips per year. (Shields, 2019, p. 597)

Obviously the number of trips that an overseas student can afford to take to his or her home country depends upon his or her finances or at least those of his or her parents:

The results indicate that GHG emissions associated with international student mobility were between 14.01 and 38.54 megatons of CO₂ equivalent in 2014, having increased from between 7.24 and 18.96 megatons in 1999. To contextualize these figures, the low estimate is comparable to the national annual emissions of Latvia (13.94 megatons) or Jamaica (15.47 megatons), while the upper estimate is comparable to those of Croatia (30.42 megatons) or Tunisia (39.72 megatons). (Shields, 2019, p. 598)

Shields modelled two scenarios for international university student travel, a low one entailing one return trip per year and high one entailing two return trips per year. The vast majority of these students make their way between their home countries and their host countries by airplanes, although it is difficult to say how often they make the trip, whether once or several times during the course of their overseas studies.

In addition to seeking to attract international students, most of whom are full-fee paying students, many Australian universities have created overseas satellite campuses. For instance, the University of Canberra has satellite campuses in Hong Kong, China, and Bhutan; the University of Wollongong has satellite campuses in Dubai and Malaysia; and Monash University has satellite campuses in China, India, Italy, and Malaysia

(Universities Australia, 2020). Davis reports: ‘Some thirty-two Australian universities offer programs internationally, predominantly in Malaysia, Singapore, China, Hong Kong and the Middle East.’ It is difficult to say how much air travel is required in the administration of the overseas satellite campuses complex. Undoubtedly it entails periodic travel on the part of administrators and lecturers from their home institutions, although some of the administrators and lecturers are probably more or less permanently situated in the locations of the overseas satellite campuses (Table 5.1).

Although some international students hail from relatively affluent families, Hil (2015, p. 43) reports that three out of five international students survive on \$20,000 or less per year. Furthermore, many international students work part-time, often in the shadow economy where they are poorly paid, and have to draw on savings to get by. Sparrow (2020) asserts that even prior to the COVID-19 pandemic, which had placed many international students based in Australia in dire straits due to a lack of governmental support, international students had ‘been regularly exploited by unscrupulous bosses, with one report finding that 77% of them received less than the minimum casual wage.’ In Melbourne many international students reside in multiple-student households, sometimes having 3–5 bedrooms with 10–20 students (Hil, 2015, p. 133).

While Australian universities often maintain that the presence of international students adds to the cosmopolitanism of their campuses, in reality many of them have difficulty becoming close with Australian students

Table 5.1 Australian universities with satellite overseas campuses

University	Overseas satellite campuses
Australian Catholic University	Rome
University of Canberra	Hong Kong, China, Bhutan
Curtin University	Malaysia, Singapore, Dubai, Mauritius
James Cook University	Singapore
Monash University	China, India, Italy, Malaysia
Murdoch University	Dubai, Myanmar, Singapore
University of Newcastle	Singapore
RMIT University	Ho Chi Minh City, Hanoi
Swinburne University	Sarawak (Malaysia)
University of Wollongong	Dubai, Malaysia

Source: Universities Australia (2020)

and are ghettoised in terms of where they live, study, and socialise (Hil, 2015, p. 124). Displaced Asian students often confront both cultural and learning differences. Some Australian academics strongly resent the presence of Asian international students in their classes (Song & McCarthy, 2020, p. 103). Conversely, other Australian academics have embraced transcultural teaching modalities to integrate their students more into their university settings. However, Australian academics have been limited in reaching out to both domestic and international students because of increasing workloads and large lecture classroom and tutorials and increased pressure to obtain research grants and publish (Song & McCarthy, 2020, p. 106). Despite efforts on the part of the National Tertiary Education Union to challenge such trends, academics have had to confront a managerial corporate university structure that has over time become more hegemonic. Forty-one per cent of international students in Australia reportedly experience substantial levels of stress from homesickness, cultural shock, loss of educational and personal support, financial problems, and racial discrimination (Song & McCarthy, 2020, p. 115).

While the internationalisation of higher education has been characteristic of developed societies, including Australia as this chapter illustrates, China recently has entered the competition for international students. Davis reports:

The Chinese government has approved the opening of publicly owned Chinese universities in Laos, Malaysia, Thailand and Japan, with further ventures announced for Cardiff and Seattle. One day, Chinese universities may open in Australia to attract outbound Chinese nationals seeking study abroad, and so compete directly with Australian public universities for the international market. (Davis, 2017, p. 108)

China has embarked upon developing world-class research universities and may be transitioning from being a 'sending nation' to being a 'receiving nation' as it seeks to 'regain or retain its best and brightest scholars'. Pacific University situated in Shanghai has attracted a large number of returnee academics from Western countries since 2004.

Australian Universities in the Aftermath of COVID-19

The COVID-19 pandemic created a crisis for Australian universities in that they have become highly dependent for a substantial amount of their revenue from full-fee paying overseas students. Australian universities went into lockdown and shifted to online teaching classes in late March 2020 resulting in loss of revenue from reduced overseas student enrolments and were hoping to reopen their campuses during semester 2 with guidelines around social distancing. Some international students at least for semester 1 opted to remain enrolled in Australian universities and accessed their classes from their home countries via teleconferencing. Most Australian universities resumed on-campus studies during semester 2, but this was not the case for Victorian universities that remained in lockdown due to a flurry of new COVID-19 cases, resulting in a four-month stage hard lockdown implemented in late July 2020 due to a flurry of new COVID-19 cases. Fortunately, due to stringent governmental regulations, the numbers of new cases were drastically curtailed by early November 2020.

Matthew McGowan, the General Secretary of the National Tertiary Education Union, addressed the potential impact of COVID-19 on Australian tertiary institutions in early 2020:

We know that the damage to our sector could be severe, and the impact may spread much further than the university budgets. The political debate is focused on whether universities have become too dependent on overseas students. (McGowan, 2020, p. 3)

Victoria University's Mitchell Institute projected that the Australian university sector will lose between \$10–19 billion between 2020 and 2023, depending on how quickly borders are reopened to international students, with a further \$20–38 billion in wider benefits to national economy being lost (Carey, Hunter, & Heffernan, 2020b). As of May 2020, the number international students in Australian higher education stood at 330,000, down 30 per cent since a year ago (Hunter, 2020). China's Ministry of Education forewarned Chinese citizens about studying in Australia due to reports of racist incidents given that the COVID-19 pandemic first broke in Wuhan (Carey, Hunter, & Bungard, 2020a, p. 4).

Tanya Piblersek, the Australian Labor Party education spokesperson, said that the government's university funding model needs to be revisited in a post-COVID-19 Australia. Duncan Maskell, the Vice-Chancellor of the University of Melbourne stated: 'Next year, with the baby boom coming through and more people looking to improve their employment prospects during these extremely challenging times, we will need more places for home students' (Preiss, 2020). Both the University of Melbourne and the Victorian state government have urged the Coalition federal government to lift its cap on domestic student numbers amid fears that plummeting international enrolments would impose major financial damage to Victorian universities. However, Peter McDonald, a professor of demography in School of Population Health at the University of Melbourne, argued that Australia could have the corner on the international student market by early 2021 in that it has not been as adversely impacted by COVID-19 as had been the US and UK (Megalogenis, 2020). Jon Faine (2020), a former Australian Broadcasting Network radio talk host based in Melbourne, contended that Australia in a post-COVID-19 world would constitute a bargain for the 'bourgeoisie of South East Asia looking for high-quality English education for their kids' because it had not been hit as hard by the COVID-19 as had the US and UK.

A Case Study from the University of Melbourne

In this section, I discuss air travel on the part of both staff and students at the University where I have been situated since 2006, during 2006–2013 as a full-time academic and since 2014 as an honorary research fellow.

Air Travel on the Part of University Staff

The University of Melbourne repeatedly boldly proclaims that it constitutes 'Australia's number one' university, thus defying the old Australian proscription against acting as a 'tall poppy' which needs to be cut down. As part of its effort at global connectivity, numerous programmes, schools, and faculties at the University of Melbourne regularly invite international

speakers, particularly from the United States, the UK, Europe, but also increasingly China, India, and Indonesia. While some of these speakers stay at the university for a few weeks or even a few months as visiting research fellows, others come in for a few days, thus constituting a special category that I call the ‘fly-in, fly-out academic.’ The University of Melbourne Law School regularly invites overseas academics to conduct short courses or intensives on a wide assortment of topics, such as international law. The University of Melbourne is not unique in such practices, although it has more funding available due to its elite status to engage in such practices than most other Australian universities.

The Melbourne Sustainable Society Institute (MSSI, 2017, pp. 20–23), an interdisciplinary think tank based at the University of Melbourne, has its share of affiliated academics who engage in international travel. MSSI focuses on research clusters on climate transformation, future cities/urban futures, and sustainability in the Anthropocene. Many of its personnel regularly travel overseas by air. In late 2015, several MSSI representatives travelled to the UN Congress of Parties (COP) 21 conference in Paris; one person travelled to the UK and three times to China; another person travelled to Vancouver; yet another person travelled to Europe and Quito; and a Climate Reality Project-affiliated representative, a former CEO of the Australian Conservation Foundation and an Enterprise Professor at the University, regularly has numerous overseas trips. More recently, the MSSI annual report states:

A further highlight of MSSI’s work has been the Institute’s collaboration with Al Gore through his Climate Reality Project and his work on Paris Agreement implantation. Specifically, Don Henry regularly joins Al Gore on high level policy meetings with political leaders internationally. In 2018 these activities focused on Mexico, Germany, California, and the COP 24 in Poland. Don Henry also sits on the Board of Al Gore’s international Climate Reality Project. (Melbourne Sustainability Society Institute, 2018, p. 13)

The Energy Transition Hub at the University of Melbourne is an endeavour that collaborates with the Australian National University and the Potsdam Institute for Climate Impact Research, the Mercator Research Initiative for Global Commons and Climate, and the University

of Muenster, all of which seek to foster energy transitions to renewables in both Australia and Germany. While much of the research collaboration between these institutions in locations on opposite ends of the globe are conducted vis-à-vis teleconferencing, I have attended numerous seminars sponsored by the Energy Transition HUB, whose director is a transplanted German, which have been presented by visiting German researchers. Thus far, I have not had the temerity to ask how the HUB accounts for the air emissions miles that it has generated over the years due to its collaboration with its German colleagues.

On May 5, 2016, the University Sustainability Executive launched its Sustainability Plan 2016–2020. Ellen Sandell, a Greens Victorian Parliamentarian, moderated the meeting and I posed the first question:

Flying is the single fastest growing source of greenhouse gas emissions, now in the order of 5–6 percent per annum. There is a campaign to get academics to fly less. Kevin Anderson has not flown in 13 years and took the train to attend a conference in Shanghai. I sometimes tell my colleagues to watch their emissions miles which is an obnoxious thing to do.

Allan Tait, the University Chief Financial Officer and Chairperson of the Sustainability, passed my question onto David Karoly, a world-renowned climate scientist based at the time at the University of Melbourne, said that he had wanted to touch on this issue in his remarks. He added that in the past ‘the University found it too hard to deal with flying in meeting in its emissions target and tabled the issue.’ Karoly noted that he offsets his flights and claimed that the ‘cloud is an even faster growing source of emissions.’

Sustainability Policy on Staff Air Travel at the University of Melbourne

The 2018 University of Melbourne Sustainability Report (2019) reports:

- ‘Air travel was the second largest contributor to the University’s carbon emissions in 2018, after electricity, at approximately 28,000 tCO₂-e’ (University of Melbourne, 2019, p. 60).

- ‘The reported air travel emissions per Full-Time Equivalent (FTE) staff member increased from 2.9 to 3.2 T CO₂-e/yr/FTE, from 2017 to 2018, which is an increase of 10%. It is likely this increase is mainly as a result of improving air travel data collection’ (University of Melbourne, [2019](#), p. 59).

It also reports that University aims to offset air travel emissions to 50 per cent by 2018 and 100 per cent by 2020 and that aims to reduce air travel emissions per staff member by 5–10 per cent for international travel and 10 per cent for domestic travel by 2020. The University reportedly for 2018 purchased ‘air travel 1,500 tonnes of National Carbon Offset Standard (NCOS) accredited offsets is being purchased from the Aboriginal Carbon Foundation and 13,500 tonnes from South Pole’ (University of Melbourne, [2019](#), p. 59). In reality, there is much debate as to whether emissions offsetting schemes such as these constitute well-intended mitigation strategies or yet another genre of greenwashing. Pearse contends:

Offsets have become the airline greenwash tool of choice because they put the onus on the customer to cut emission, and the airlines don’t have to make public any information on the quantity of emissions. British Airways revealed that in 2008 passengers offset 55,000 tonnes of emissions from their flights, but this reportedly was less than 0.5 percent of the airline’s total emissions in that year. On average, it’s estimated that less than one in fifteen passengers chooses to offset their flights—a 3 to 4 percent take-up is considered good. (Pearse, [2015](#), pp. 99–100)

In contrast, the 2019 University of Melbourne Sustainability Report states:

Air travel emissions per Full-Time Equivalent (FTE) staff member decreased from 3.2 to 2.9 t CO₂e/yr./FTE, from 2018 to 2019. As the distance travelled increased from 124 to 132 passenger km, this decrease in reported air travel emissions is most likely due to changes in carbon emissions factors rather than a reduction in actual air travel’ (p. 47). In contrast, the University of Melbourne aims to ‘reduce air travel emissions per staff member by 5 to 10% for international, 10% for domestic by 2020.’ (University of Melbourne, [2020](#), p. 47)

Ironically, due to air travel restrictions resulting from the COVID-19 pandemic, these targets undoubtedly inadvertently will be more than achieved, by how much remains to be seen.

Observations at Two University of Melbourne Events

On August 7, 2019, I attended a panel discussion on ‘Higher education: Has internationalisation gone too far?’ at the University of Melbourne. The panellists were Helen Bartlett, Vice Chancellor of the Federation University of Australia (a regional multi-campus university based in Victoria); Jonas Larsen, President of the University of Melbourne Student Union International; Anthony McClaran, CEO of the Tertiary Education Quality and Standards Agency, and Chris Ziguras, an academic from the Royal Melbourne Institute of Technology. All of the panellists spoke positively about the internationalisation of Australian higher education. I posed the first question of the event to Helen Bartlett:

You said that universities can help students to work in the global economy. Should universities also not encourage both domestic and international students to critique the global economy which is characterised by growing concentration of wealth and persisting poverty and contributing to an ecological crisis, particularly manifested in the form of climate change?

Bartlett contended that a critique of the global economy already occurs in universities and another panellist agreed with her assertion. After the panel discussion, I approached her and asked what is the emissions footprint from all the flying on the part of both academics and students that international education entails. Bartlett admitted that this is an issue, but added that international students at Federation University probably fly less than those at the University of Melbourne because they are generally not as affluent.

On July 9–10, 2019, I attended the ‘Living the French revolution’ symposium at the University of Melbourne that served as an illustration of the high emissions impact of even a small-scale international academic conference. The symposium constituted a celebration of the research of

Table 5.2 Carbon dioxide footprint of a small academic symposium

Presenter	University	Return flight	CO ₂ kilogrammes
A	UCLA	Los Angeles–Melbourne	8469
B	UCLA	Los Angeles–Melbourne	8469
C	Carleton	Ottawa–LA–Melbourne	10,127
D	Western Sydney	–	–
E	National Gallery of Victoria	–	–
F	Regina	Regina–LA–Melbourne	9461
G	Hawaii	Honolulu–Melbourne	4799
H	UCLA	Los Angeles–Melbourne	8469
I	UC–Irvine	Los Angeles–Melbourne	8469
J	Paris Diderot	Paris–Dubai–Melbourne	9368
K	UC–Irvine	Los Angeles–Melbourne	8469
L	Maryland	DC–Los Angeles–Melbourne	9843
M	Deakin	–	–
N	Adelaide	–	–
O	Kingston	London–Dubai–Melbourne	9601
P	Warwick	Skyped presentation	
O	Johns Hopkins	Baltimore–LA–Melbourne	9968
Total			105,512

Source from emissions: www.atmosfair.ed/standards/emissions

Peter McPhee, a well-renowned French Revolution historian and former Provost at the University of Melbourne. Twelve overseas speakers appeared in person and one skyped, although he lamented he could not be physically present at the symposium (Table 5.2).

The symposium included only two presenters from Victorian institutions and two from other Australian institutions, the latter two of whom probably flew to Melbourne for the symposium but may have taken the train, bus, or driven. As airplanes emit nitrous oxide and other exhaust fumes, a ‘factor between two and three is normally applied to CO₂ impact.’ (Tickell, 2008, p. 79). Furthermore, as a point of comparison with other transport modes, Clark (2009, p. 14) reports that a flight between London and Edinburgh results in 140 kg of CO₂e (CO₂ equivalent) per passenger, whereas a one-passenger trip of the same distance in a Ford Mondeno 2.0 results in 120 kg of CO₂ in emissions, a trip in a Toyota Prius with four passengers results in 16 kg of CO₂e per passenger,

a trip in an ordinary train results in 15 kg CO₂e per passenger, and a trip in a coach results in 18 kg CO₂ per passenger.

At no time during the conference was the issue of its environmental sustainability ever raised nor did I raise it, although I attempted to do so. In my conversations over the years with colleagues about their academic flying, I have found three broad responses: (1) a nearly total unawareness of its environmental impact; (2) some awareness but assertions that they are engaging in our sustainable behaviours, such as not driving a car or being vegetarian; and (3) a more or less full awareness but an assertion that they pay emissions for their flights and/or that flying is an essential component of maintaining their academic careers.

Air Travel on Part of University of Melbourne Students

While the University of Melbourne has begun to tabulate the emissions impact of air travel on the part of its staff, it has not embarked upon a similar exercise for student air travel, particularly on the part of international students. In a casual conversation that I had with a member of the University of Melbourne's Sustainability Exchange, she estimated that the most overseas students at the University of Melbourne take one to two trips to their home countries per annum.

The Melbourne Business School promotes study abroad or exchange programmes for its postgraduate students, both domestic and international, with institutions in faraway locations. These include Erasmus University Rotterdam, Durham University, Manchester Business School, Kings College London, HEC Montreal, Harvard University, HEC School of Management in Paris, Copenhagen Business School, the University of Copenhagen, Bocconi University in Milan, Shanghai Jiaotong University, the University of Oslo, the University of Auckland (Melbourne Business School, 2020, p. 9). Needless to say, there are numerous other exchange programmes at the University of Melbourne. Furthermore, my first-hand observations of graduation events at the University of Melbourne suggested prior to COVID-19 that family members of international graduates were making journeys to the campus, resulting in additional undetermined greenhouse gas emissions for the occasion.

In his second annual oration to the University of Melbourne, Vice-Chancellor Duncan Maskell, who had previously had been a high-level administrator at the University of Cambridge, spoke to the University community vis-à-vis Zoom due to lockdown of the University campus since late March 2020. He referred to the impact of the loss of revenue to Australian higher education due to the loss of international students and noted: 'The current situation, if unchecked, would certainly be a threat to our existence' (Maskell, 2020, p. 2). He highlighted the continuing internationalisation of research at the University of Melbourne:

We have had some very exciting announcements recently about partnerships between major international companies and the University, from such as Illumina, Telstra and CSL [Commonwealth Scientific Laboratories]. These will be crucial as this University helps to rebuild our economy in partnership with Government and industry over the next few years. (Maskell, 2020, p. 10)

While Maskell alluded to the important work being done on climate change and sustainability at the University of Melbourne, he did not comment on how environmentally sustainable the University would be in reverting back to its former reliance on air travel on the part of both academics and students in a post-COVID-19 world. He did admit:

In conclusion, there are currently many tensions in the world. Many people in every sector of the economy have lost their jobs. There is fear abroad. This may contribute to worse things to come in international relations, and in other economic and social challenges down the track for Australians. (Maskell, 2020, p. 12)

Ironically, in its 2020 annual report, the University of Melbourne (2021, p. 91) due to the COVID-19 pandemic, its academic air travel 'banned for most of the year, air travel emissions were dramatically reduced.' Whereas in 2019, University academic travel came to 130 million kilometres and resulted in 27,000 tons of CO₂e emissions, in 2020 University academic air travel came to 19.9 million kilometres and resulted in 2464 tons of CO₂e emissions. Furthermore, due to

widespread bans on travel for overseas students who found themselves in their home countries before the travel restrictions took effect but opted to continue with their studies at the University of Melbourne, they had to pursue their studies online.

There is no doubt that the presence of international students on a campus can contribute to cosmopolitanism and cross-cultural vibrancy, something that I have discovered in my interactions with students at the University of Melbourne from countries such as Pakistan, Ecuador, and particularly Ghana, Kenya, and other African nations. However, when international students are treated as cash cows who earn degrees that may serve to provide them with credentials to make them more competitive in the global economy, there is something particularly problematic from both a social justice and environmental sustainability perspective.

Conclusion

As in many areas of a stratified world system, the affluent, particularly business people but also politicians and even well-placed academics and university students, as opposed to casual academics who constitute a component of the precariat, contribute much more overall to greenhouse emissions from flights than working-class people and particularly the poor around the world. Over the past several years, a campaign has emerged urging academics and their associates, as well as researchers, including climate scientists who frequently attend conferences, to reduce their flying through a number of strategies, including video conferencing and travelling to meetings and conferences by train or coach (Carter, 2014). Some academics may assert that refusing to get on a plane to deliver a presentation at a far-off conference or as a guest lecturer at a university will not make any difference in the larger scheme of things because the plane is scheduled to take off anyway. However, if a critical mass of academics and other travellers opted to fly less, or not at all, for conferencing, business, or pleasure, airlines would inevitably have to reduce the number of flights that they offer or even go out of business. In particular, as Parkinson (2009, p. 211) so aptly argues, particularly ‘those

who are building careers and reputations on sounding the alarm about the dangers of greenhouse gas emissions should be a great deal more conscientious than many of them seem to be about how much flying they do.'

The struggle for sustainability within the bowels of the corporate university is a small but essential component of the much larger struggle for creating an alternative world system based upon social justice, public ownership, democratic processes, environmental sustainability, and a safe climate. Envisioning alternatives to aeromobility is an important component in the struggle to transcend capitalism which has entailed ecological crises of various sorts, including anthropogenic climate change and pandemics, such as the recent COVID-19, and replacing it with an eco-socialist world system, a topic which I have discussed in detail elsewhere (Baer, 2018).

Universities and other educational institutions are important loci for teaching and learning that play a crucial role in understanding and shaping society's physical, social, political, and economic practices, sometimes for the better and sometimes for the worse, particularly when they become complicit with the corporate agenda. Several Australian universities have formed partnerships with the mining and fossil fuels industries (Lyons & Richards, 2013). If somehow they can become more democratised, an issue that lies outside the domain of this chapter, they have the potential to contribute to the great socio-ecological turning that is now required to create a truly global society.

In his conception of a more socially just and environmentally sustainable world, Ted Trainer (2010), an Australian eco-anarchist and staunch advocate of a 'Simpler Way,' maintains:

Very few ships, large trucks or aircraft would be produced because there would be little need for transport of goods or people over long distance. There would be little international travel, partly because the fuel for it would be extremely scarce, and secondly because there would be relatively need for it. We might ration international travel primarily for educational and cultural exchange purposes, so you might get one overseas trip in a lifetime. However, we could bring back wind ships, so you might study for your degree on a leisurely trip around the world. (Trainer, 2010, pp. 93–94)

Following from Trainer's observations, I envision two possible career trajectories for progressive academics and university students concerned

about the global climate crisis and its impact upon humanity, including the subjects of their research and the environments which they inhabit. One is to possibly conduct their initial research project, generally their PhD thesis work, in a faraway place, and remain there for an extended period of time, even over a year. However, future research projects should be conducted relatively close to their home. Conversely, a scholar whose initial research project occurred relatively close to home might opt, sometime later in his or her career, to conduct research in a faraway place for an extended period, perhaps as a once-in-a-lifetime experience.

The scurrying of a seemingly countless number of university administrators, academics, and students on airplane flights obviously results in a profound emissions impact on the global ecosystem, an issue that is seldom raised in international education circles as I have witnessed firsthand. As long as universities are situated within the larger framework of the capitalist world system, they will be tempted to market themselves in terms of both their teaching and their research, a scenario that encourages them to rely heavily upon aeromobility for both their staff and their students, particularly international students.

In such an eco-socialist world, the present system of university students studying abroad will have to be rethought. One approach would be a redistribution of educational resources so that university students could study at high-level tertiary institutions within their own countries, thus foregoing the perception that they need to study in developed societies in Europe, North America, and Australasia. In a democratic eco-socialist world system, the socioeconomic gaps between the developed and developing worlds will have been obliterated. Ironically, for the moment, the COVID-19 pandemic has greatly restricted air travel of both academics and students around the world.

Ultimately, creating a sustainable university is part and parcel of creating a sustainable society and sustainable world system. In a public meeting on December 11, 2015, in which the Sustainability Executive released its Sustainability Charter for the University of Melbourne, Arnaud Gallois, a colleague at the time in the Office of Environmental Programs, and I shared with those present and the wider University community an Alternative Sustainability Charter for the University of Melbourne based upon the following principles:

Foresight—working to long time frames, and considering the consequences of our actions for many future generations, so as to minimise any possible future harm;

Ecological solidarity—recognising our interconnectedness and interdependence with all living things, hence a moral responsibility to treat them with care and respect;

Peace—rejecting violence and the threat of violence as a means to resolve conflict between people; avoiding violence towards non-human beings, landscapes, sea-scapes, and the atmosphere;

Justice—for all to enjoy a relatively peaceful, secure, meaningful, and plentiful life: fair, egalitarian, utilitarian, distributive, and procedural;

Democracy—for all to participate equally in the decisions that affect them; an active and participatory process in all spheres of life; work, leisure, local communities, and broader society;

A steady state economy—one that permits economic growth for the most disadvantaged people but that requires economic de-growth for the affluent sectors of humanity; and

Simplicity—living simply so that others (human and non-human) may simply live; that is to meet our basic material needs, without excess, and hence with minimal negative disruption to the wider life-world.

Michael T. Osterholm and Mark Olshaker (2020) predict the possibility of a pandemic much worse than COVID-19, which they term ‘The Big One’; although they admit that it is difficult to say when it might occur. For the moment, COVID-19 has deflected attention away from climate change given that it is a more immediate problem. Ironically, it has resulted in the reduction of greenhouse gas emissions from various sources, including production and consumption and air and motor vehicle travel. It has forced many people to adopt a somewhat ‘Simpler Way,’ although the powers-that-be around the world are doing their utmost to ramp up the capitalist treadmill of production and consumption. However, climate change looms in the background of COVID-19. Needless to say, the COVID-19 pandemic and anthropogenic climate change illustrate the need to ultimately transcend capitalist world system with an eco-socialist world system.

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