Academic aeromobility in Australian universities

Andrew Glover Yolande Strengers Tania Lewis

RMIT University

Email: andrew.glover2@rmit.edu.au

Paper prepared for DEMAND Centre Conference, Lancaster, 13-15 April 2016

Only to be quoted and / or cited with permission of the authors. Copyright held by the authors.

This paper discusses how certain forms of hypermobility - primarily air travel - are embedded in the institutional orientations of Australian universities, and hence, into the professional practices of Australian academics. Academic air travel is currently a key component of one's ability to cultivate and maintain 'network capital' (Larsen et al. 2008). Such forms of extended social capital are seen as promoting one's ability to access the most prized elements of the academic career - international collaborations, high-impact journal publications, and research grants. In this sense, a system of 'academic aeromobility' has developed, in spite of the social and environmental implications that regular international & domestic air travel entails. Here, we discuss the results of a review of Australian university sustainability policies, and research & internationalization strategies. We find that the ambitions for universities to reduce carbon emissions by air travel are discordant with broader policies & institutional orientations around international mobility. These findings raise questions of how systems of mobility are developed and maintained in a professional setting, and how existing policies and practices co-evolve and change as part of a globalized research environment.

Introduction

Air travel is an increasingly central part of the successful academic career. Academic mobility is increasingly viewed as a necessity for forging, cultivating, and maintaining remote collaborations and partnerships. Despite the availability of ways to communicate remotely in real time, such as through video-conferencing, flying is still commonly perceived as a necessity for these endeavours. Yet at the same time, Australian universities are attempting to reduce their environmental impacts and carbon emissions. This may involve a number of measures from individual institutional commitments to broader tertiary sector agreements such as the Talloires Declaration (Talloires Declaration Institutional Signatories List 2016). While some Australian universities have acknowledged that air travel is a source of carbon emissions, generally the policies to reduce these emissions are limited in scope (Glover et al. 2015). Explicit reduction strategies are even less common, but where they exist there is an assumption that the activities for which academics undertake air travel can be substituted by video-conferencing, or can be otherwise 'greened'. Such strategies fail to acknowledge the broad spectrum of practices that air travel facilitates in relation to research, teaching, conference attendance, and other academic activities.

University sustainability policies that seek to reduce a university's air travel emissions are also isolated from the broader strategic directions of the university, which are commonly configured toward internationalization - particularly in the Australian context. This impetus to internationalise universities is explicitly bound up in a suite of practices, which necessitate or prioritise air travel, and which academics are expected to participate in to become 'successful'. Contemporary priorities in the academic career place a strong emphasis on the need to connect and build remote and international collaborative relationships with others. The strategic direction of internationalisation has expectations of air travel embedded within it, as we show that both staff and student mobility is emphasised as a desirable and necessary. The systemic nature of this emphasis – not merely the choices of individual academics who choose to fly – can be said to constitute a system of 'academic aeromobility'.

The objective of this paper then, is to highlight the competing priorities – between sustainability and internationalisation – of many Australian universities. These priorities are difficult to reconcile because of the nature of air travel as an intensively carbon emitting activity. We argue that proposed solutions to the reliance on air travel must entail challenging global conventions of academic aeromobility as being central to a successful academic career. This could involve finding ways of creating more meaningful interactions through digitally mediated co-presence, or shifting the priorities and practices of academic careers to emphasise more localized connections that do not require air travel to maintain.

Methods

This paper draws on an analysis of a qualitative review of Australian university websites with respect to two types of policy documentation. Firstly, sustainability

policies and action plans were reviewed from 37 Australian universities with specific reference to policies, goals, and procedures that seek to address air travel as a source of carbon emissions. These documents were reviewed to attempt to understand where the issue was acknowledged, what goals for emissions reduction were cited, and how such goals were intended to be achieved.

The second type of documentation in this analysis was university strategic plans & internationalization strategies. These were reviewed in order to understand how the broader suite of policies that universities were pursuing could have implicit expectations for air travel embedded within them. In doing this, we point to the role that policies seemingly unrelated to sustainability, can nevertheless have on a university's environmental impact. A representative sample of 10 Australian universities was used for this review, representing both city and regional campuses, a representation of states, and universities both within and not in the Group of Eight.

Where available, pdf documents were downloaded for review. Where downloads were not available, relevant university web pages were captured and reviewed offline. These documents were reviewed for material that was explicitly or implicitly related to air travel, internationalization, and mobility more generally. This was accomplished by browsing documents in full, as well as targeted word searches. Specific instances of policies & strategies appearing to require air travel were then clustered into broad policy areas, which form the structure for the rest of this paper.

Sustainable air travel – a siloed approach

In all the sustainability policies reviewed, no university had what we would describe as a detailed and coherent strategy for reducing air travel. In part, this may be due to air travel being classified as Scope 3 emissions, which are those emissions that arise from indirect activities not owned or controlled by the university itself (NGER 2015). Recognition that air travel was a source of emissions for the university was responsible was relatively common in university sustainability reporting and planning, but specific commitments toward reduction – such as a percentage reduction over a defined time - were rare. For instance, a university may have committed to 'Decrease the carbon footprint from domestic air travel' (Queensland University of Technology 2015), but not have established how such a decrease would occur.

For those university sustainability policies that do recognize the climate change impacts of air travel, generally one of two strategies is proposed for its reduction: a) purchasing carbon offsets for staff air travel, or b) increasing the use of video conferencing to substitute for staff air travel. The viability of carbon offsets as a longterm strategy for dealing with climate change has been questioned extensively (see Fuss et al. 2014) and will not be dealt with in this paper. Importantly, this approach does not involve challenging the assumed need for flying; but is focused on making existing flying activity more sustainable. The strategy of increasing use of video conferencing is also limited in its capacity to reduce reliance on air travel. University of Canberra intends to reduce the impact of travelling to long distance meetings through 'Use of virtual technologies to attend long distance meetings.' Further, it claims that its greenhouse gas reductions can be measured by calculating the carbon dioxide avoided by undertaking meetings virtually (University of Canberra 2011, pg 41) – although no specific reduction goals are made. While some university sustainability policies do specify measures for increasing the use of video conferencing – such as increasing the number of bookings for dedicated teleconference facilities (RMIT Sustainability Action Plan, 2011) – such ambitions are not accompanied by supporting strategies for academic staff to facilitate such a change.

These sustainability policies assume that video conferencing can functionally replace air travel to a significant degree. However many researchers (e.g Urry 2004; Storme et al. 2016) argue that video conferencing tends to *supplement* rather than *substitute* for academic air travel – which is to say that this technology enables academics to maintain an extended network of professional connections, which involve air travel to initiate, cultivate or maintain. In this sense the policy of replacing air travel with video conferencing could actually be argued to not only sustain but also *expand* the range of collaborative practices and international connections which demand air travel, at least in part.

Australian university sustainability policies and action plans tend not to question the need for air travel itself. Instead the need for air travel is simply taken for granted, and sustainability policies are formulated to minimise its impact – generally through mild reductions at most. More concerning is that these strategies are also siloed from other policies in the university. There is little to no engagement with the underlying policies that make air travel a perceived necessity for academic staff, as exemplified in the following section.

Internationalising the academic career

For many universities, internationalization is increasingly core to their strategic positioning in a competitive domestic and global environment. The term however is often adopted in broad, undefined ways. For instance Central Queensland University views internationalization as a "Valued and Enabling Concept", that builds an "...inclusive university culture which endorses the importance of intercultural understanding, multi-cultural diversity, international perspectives and interaction between international students and their communities" (CQU Engagement Strategy 2011- 2014, pg 20).

In some cases, internationalization is treated as a theme that cuts across all university activities:

"Comprehensive Internationalization is a commitment, confirmed through action, to infuse international and comparative perspectives throughout teaching, research, and service missions of higher education. It shapes institutional ethos and values and touches the entire higher education enterprise... It is an institutional imperative, not just a desirable possibility". (La Trobe University Internationalization Strategy, Pg 4)

Certain universities are explicitly globally focused, such as RMIT. With the goals of "Global, Urban, Connected", RMIT's strategic plan involves "... extending our physical and virtual presence through international campuses & partnerships" (RMIT Strategic Plan, pg 9). While all universities could be said to extend beyond the boundaries of their physical campus in terms of influence, this strategy does so explicitly. It's difficult to envision how such a globally oriented institution could realize this vision of physical extension to international campuses without staff undertaking air travel.

Some universities have a more regional focus rather than an explicitly international one. James Cook University presents an interesting case, having positioned its research and impact as focusing on issues facing 'the tropics' worldwide, including environments, economies, societies, and health (JCU, 2015). Such a strategy is more implicitly than explicitly international, although the remoteness of its campuses in Townsville and Cairns, together with its international campus in Singapore, are suggestive of an expectation of frequent air travel to fulfill its research ambition.

This is not to say that all universities are equally committed to *comprehensive* internationalization. For instance, Federation University's aim is "to be regional in focus, national in scope and international in reach" (Federation University, Strategic Plan, 2015, pg 7). While internationalization does form part of this mission, Federation University makes a distinction between the geographic differentiation of 'focus', 'scope' and 'reach'. This raises questions about whether a university can achieve international impact, without the accompanying air travel of its staff and students.

The importance of internationalization is also seen in the use of global university ranking tables in university promotional material and higher education discourses. The QS Top Universities ranking states that it's aim is to 'enable motivated people around the world to achieve their potential by fostering international mobility, educational achievement, and career development' (QS 2016). Likewise, the Times Higher Education ranking is based on 'teaching, research, knowledge transfer and international outlook' (Times Higher Education 2016). In 2016, Australia ranked second overall in terms of internationalisation, which measures 'each institution's proportion of international staff, international students, and proportion of research papers published with at least one co-author from another country' (Universities Australia 2016).

Global rankings of journals such as SCOPUS and Web of Science also reinforce the notion that current understandings of academic performance and university competitiveness are linked to the extent to which the institution is internationalized. While these are generally only cited by universities that are competitive in them, they nevertheless reflect that Australian universities are operating in a globally competitive market, both in terms of teaching and research. Internationalization, viewed as an institutional imperative, escalates the importance of international mobility, and particularly aeromobility.

Internationalization of Teaching and Students

A key aspect of the internationalization of universities in Australia can be linked to the growing role over the past decade or so of international students in the sector. In the face of decreasing government funding for the university sector, Australia's universities are heavily reliant on revenue from international student fees, which are amongst the highest in the world (HSBC 2014). This is indicative of a particularly lucrative market for Australian universities to capitalize on (Lawley 1998), as international students numbers increased from 57,661 in 1999 to 328,659 in 2014 (Shanka et al. 2006; Australian Education Network 2015). This amounts to 25% of the total university student cohort in 2014, and education is now the most valuable export in Victoria (Ziguras & McBurnie 2015). Of this, a high proportion of students come from South East Asia on the basis of proximity to home and the quality of education available (Shanka et al. 2006). A significant part of this engagement comes in the form of international student enrolments, which tend to be recognized as highly valuable in Australian university strategic plans.

For instance, University of Adelaide will embark on a rebranding and enhanced marketing campaign to "contribute to our retention of a student profile of high international student enrolment" (University of Adelaide Strategic Plan, pg 15). Staff are promoted in this document as being 'internationally renowned' (pg 3), demonstrating the importance of global recognition in the higher education market. Central Queensland University has an aspirational goal of an increase of 500% of the number of international students studying at Regional campuses (Central Queensland University Strategic Plan, pg 23). While universities may not consider emissions from student flights to be part of their carbon footprint, the pursuit of international students clearly encourages them to engage in air travel, both for immigration and visitation purposes.

Internationalization strategies are also evident in the promotion of International Exchange programs for students, both to and from Australian universities. Victoria University places an emphasis on "strong teaching and international student mobility programs and research collaboration" (Victoria University Strategic Plan 2012-16, pg 13). La Trobe University aims to increase the number of students who undertake an overseas mobility program as part of their degree to 20% of the graduating cohort (La Trobe Internationalization Strategy 2014-17, pg 6). Likewise, La Trobe has the goal of "50% of staff have completed at least one professional development

workshop related to an aspect of internationalization (e.g teaching international students, internationalization of the curriculum)." (ibid, pg 9). This emphasis on international mobility of students further recruits academic staff into teaching practices that necessitate air travel.

A number of Australian universities have also established international campuses in parts of Asia, Europe, and the Middle East, primarily for the purposes of expanding their outreach and facilitating student exchange (Lane, 2011). This often requires academic and university staff to undertake air travel for teaching and promotion to international student markets. Universities and economists view engagement with Asia as a dominant focus for Australian universities in the coming decades, due to the predicted economic growth and wealth in this region.

Our intention is not to be critical of the internationalization of students or universities *per se*. As many research strategies articulate, internationalization provides many benefits for the student experience and inter-cultural learning. However, internationalization also promotes the global mobility of staff and students – the expectation of which is likely to entail increased reliance on air travel.

Internationalization of Research

International collaborations and research grants are increasingly being seen as the most prized goals of the academic research career. This is not merely a reflection of the desires of academics themselves, but a facet of the internationalization of the university more generally, as well as broader pressures in terms of external funding. Domestic university ranking systems such as the Excellence in Research for Australia (ERA) tend to privilege international outputs as markers of quality. The scoring system exemplifies this with 5, the top score, reflecting work that is 'well above world standard' (ERA, 2016) When recruiting academics, for example, universities select from a global pool of candidates with international connections . For instance, University of Adelaide seeks to attract "high citation researchers who count amongst the top 1% in the world in their fields" (Uni of Adelaide Strategic Plan, pg 12). They also explicitly aim to attract international PhD students through scholarships. A "Staff Mobility Scheme" seeks to facilitate international movement of staff between partner institutions (ibid pg, 13). These measures are indicative of an expectation that successful academics will be internationally mobile at all stages of their career, which undoubtedly relies on them undertaking air travel.

Australian universities also place strong emphasis on international collaboration. University of Canberra has a specific objective to "increase the proportion of publications co-authored with international collaborators" (University of Canberra, Strategic Plan 2013-17, pg 6). As we have noted, remote collaborations of this kind tend to be accompanied by air travel, as collaborators perceive intermittent forms of physical co-presence necessary throughout the collaboration. Joint appointments are another measure of internationalization adopted by Australian Universities that entail air travel. For instance, Griffith University seeks to "Explore the potential for joint appointments with targeted senior researchers in key partner institutions and promising candidates for fellowships and postdoctoral opportunities" (Griffith Internationalization Strategy, pg 15). Less formally, university support for staff exchanges and visits offer another opportunity for air travel.

As funding for research becomes increasingly competitive, Australian universities place strong emphasis on academic staff's ability to secure external and international funding. In some cases, research funding is being specifically allocated on the basis of its support for internationalization. Macquarie University will be awarding seed funding to "support new research initiatives that enhance the internationalization priorities at Faculty levels and through central funding" (Macquarie University Internationalization Strategy 2015, pg 2)

The outcome of these policies and strategies is clear: while universities do not specifically mandate air travel and in some cases actively attempt to replace it with video conferencing techniques, the practices of teaching, research, collaboration, joint appointments and international exchange prioritise flying.

Reorienting Internationalization

In this paper we have shown how academic air travel needs to be understood in terms of the broader institutional and cultural orientations of the university sector. In Australia there has been a long-term tendency for academics and universities alike to privilege international conferences and publishers as key sites and outlets for validating and legitimating the quality of Australian research. Such a trend is consistent with the view that Australia is part of a global 'south', with regards to the centers of knowledge production that exist in the global north of North America and Europe (Connell 2007). More recently however this 'cultural cringe' has been greatly compounded by a growing pressure to internationalise across teaching and research, with universities increasingly attempting to position themselves as global players. A university's sustainability policy cannot succeed if it is developed and viewed as practically and conceptually separate from the broader strategic direction of the university.

Importantly, we have not only argued that sustainability policies are relatively ineffectual in the face of increased pressure from universities for academics to internationalise their careers. We have also suggested that these internationalisation strategies represent deliberate attempts to recruit academics into a new and expanded array of collaboration, teaching and research practices that necessitate *flying more often*. By ducking questions about why academics fly, and the practices flying enables, sustainability policies therefore serve to legitimise the promotion of more flying. They give the impression that universities are 'doing their bit' for sustainability, while effectively allowing universities to continue promoting and recruiting academics into practices that require heightened international mobility.

With this in mind, university sustainability policies that seek to reduce air travel must, at the very least, engage with the strategic directions and internationalisation policies of universities. There are a number of ways in which this could be done. For example, this might involve the near complete digitization of academic co-presence across large distances. Though many academics have used video conferencing facilities that allow for a type of remote presence at a conference or meeting setting, these technologies appear to not offer the ability for rich, multi-faceted interactions where networks can be forged and maintained. In other words, although one can 'attend a conference' online, or interact with them on a screen, there is no substitute for actually 'being there'. As such, the perceived necessity for co-present bodies – and therefore air travel – persists (Strengers 2014). It remains to be seen whether more immersive digitally mediated virtual environments could offer the rich degree of interaction that bodily co-presence does. There is also the risk that these digital forms of communication would continue to supplement air travel rather than substitute for it, thereby reinforcing the need to stay internationally connected by flying. Regardless, in the event that digitized engagement can function as a substitution for air travel, the practices of academic collaboration would need systemic reconfiguration to make such practices normalized.

More controversially, sustainability policies might begin to attempt to recruit academics into practices of teaching, research and collaboration that *don't* involve flying or international collaborations. This would require a more fundamental shift in the expectations of academic and university practices that do not entail frequent air travel. A shift towards 'local scholarship', or 'slow scholarship', would necessitate a significant inversion of priorities centered on issues that are more closely related to a university's physical location. Movements of this kind - that prioritize the local over the global - have precedent in other practices related to sustainability, such as local food and energy production, and local currencies and trading schemes. The 'slow scholarship' movement is also gaining circulation in some academic circles as a way to resist the pressures of an increasingly fast paced and competitive profession (Hartman & Darab 2012). Contemplating either of these cases further reveals the air travel to be a systemic issue for the academic and tertiary education community as they seek to address their environmental impact.

In this paper we have highlighted the conflict that many university sustainability policies have with the sectors broader strategic aims of internationalization and mobility of staff & students. The most developed of these policies to reduce air travel emissions may – through their expected reliance on video conferencing and virtual forms of communication – unintentionally be encouraging academic staff to fly more rather than less. Further, we have shown that even the presence of an ambitious and comprehensive sustainability action plan that recognizes the environmental impact of air travel amounts to little if the reduction measures do not engage with broader policies and practices that the university promotes. This involves asking fundamental questions about the long term viability of the system of academic aeromobility that relies on inexpensive, reliable air travel for both revenue and outputs.

References

- Anon, 2016a. Australia's universities among the most globally engaged. Universities Australia. Available at: https://www.universitiesaustralia.edu.au/Media-and-Events/media-releases/Australia-s-universities-among-the-most-globallyengaged#.VtbTT8eUn6p [Accessed January 14, 2016].
- Anon, 2015. National Greenhouse and Energy Reporting. Australian Government Clean Energy Regulator. Available at: http://www.cleanenergyregulator.gov.au/NGER/About-the-National-Greenhouse-and-Energy-Reporting-scheme/Greenhouse-gases-and-energy#n4

[Accessed February 15, 2016].

Anon, 2016b. Talloires Declaration Institutional Signatory List. Available at: http://www.ulsf.org/programs_talloires_signatories.html#Australia.

Anon, 2016c. Top Universities. QS. Available at:

http://www.topuniversities.com/about-qs [Accessed February 23, 2016].

Anon, 2016d. World University Rankings. *Times Higher Education*. Available at: https://www.timeshighereducation.com/world-university-rankings [Accessed February 23, 2016].

Connell, R., 2007. Southern Theory, Allen & Unwin.

- Fuss, S. et al., 2014. Betting on negative emissions. *Nature Climate Change*, 4(10), pp.850–853. Available at: http://dx.doi.org/10.1038/nclimate2392 [Accessed February 10, 2016].
- Glover, A., Strengers, Y. & Lewis, T., 2015. Flying High: Academic Air Travel, Internationalisation, and Sustainability - Presentation at The Australian Sociological Association 2015 Conference,

 Hartman, Y. & Darab, S., 2012. A Call for Slow Scholarship: A Case Study on the Intensification of Academic Life and Its Implications for Pedagogy. *Review of Education, Pedagogy, and Cultural Studies*, 34(1-2), pp.49–60. Available at: http://www.tandfonline.com/doi/abs/10.1080/10714413.2012.643740.

- HSBC, 2014. The Value of Education: Springboard for Success, Available at: http://www.about.hsbc.com.au/news-and-media/australia-the-mostexpensive-country-for-education-hsbc-report.
- Larsen, J., Urry, J. & Axhausen, K., 2008. Coordinating Face-To-Face Meetings in Mobile Network Societies. *Information, Communication & Society*, 11(5), pp.640–658. Available at:

http://www.tandfonline.com/doi/abs/10.1080/13691180802126752.

- Lawley, M., 1998. *Choice of Destination in International Education:A Cross National Model*. University of Southern Queensland.
- Shanka, T., Quintal, V. & MEdMan, R.T., 2006. Factors Influencing International Students' Choice of an Education Destination -A Correspondence Analysis. *Journal of Marketing for Higher Education*, 15(2), pp.31–46.
- Storme, T. et al., 2016. Mobility and Professional Networks in Academia: An Exploration of the Obligations of Presence. *Mobilities*, (JANUARY 2016), pp.1–20. Available at:

http://www.tandfonline.com/doi/full/10.1080/17450101.2015.1116884.

Strengers, Y., 2014. Meeting in the Global Workplace: Air Travel, Telepresence and the Body. *Mobilities*, (May), pp.1–17. Available at:

http://www.tandfonline.com/doi/abs/10.1080/17450101.2014.902655.

- Urry, J., 2004. Connections. *Environment and Planning D: Society and Space*, 22, pp.27–37.
- Ziguras, C. & McBurnie, G., 2015. *Governing Cross-Border Higher Education*, New York: Routledge.