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The flying less movement

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Compared to the loud cacophony of disparate voices praising the virtues of driving less, cycling and walking, calls for rethinking our flying habits seem to be few and far between. Yet the number of advocates of 'flying less' has been steadily growing for more than a decade. As their voices begin to echo further afield, their aim is to turn what has been until now a rather niche debate into a movement reshaping the way we think of air travel. Who are these people and what is their message?

The flying less movement has been energised by citizens making a consistent effort to achieve a low-carbon footprint not just at home through, for example, recycling, using more energy-efficient appliances, or driving less, but also in activities away from home that have often involved flying such as holidaymaking and work-related conferences and meetings. Although the size of the movement is not known, it involves people from different professional backgrounds in every continent. Some of its most visible advocates are best-selling writer Naomi Klein, environmentalist Rob Hopkins, founder of the Transition Towns movement, and some climate scientists such as Alice Larkin and Kevin Anderson in the UK and Peter Kalmus in California. This text focuses largely on these pioneers working in academia who one day decided to fly less or stop flying altogether.

Key strands of their message can be succinctly outlined in the following points:

Climate change is an urgent issue: We tend to think of climate change as a problem that can be addressed with incremental changes in technology and behaviour aiming at lower energy consumption in a more or less distant future. Yet, what matters are not levels of technological efficiency in say 2080 but cumulative greenhouse emissions which could trigger a tipping point in climate dynamics ¹. This means that we have a limited 'carbon budget' that must be adhered to if average global temperatures are to stay below what has been agreed as being a safe threshold. The size of this budget depends on the probability of exceeding the 1.5 or 2 degrees threshold between acceptable and dangerous climate change ². The problem is that adapting everyday technologies to new energy systems can take decades, and therefore there is no alternative but to reduce energy demand ³. This means changes in lifestyles, and for those who have normalised high-carbon lifestyles this means flying less or not flying altogether.

Climate change is about equity: The notion of carbon budgets reframes climate change as a zero-sum game. The more carbon is emitted by some, the less can be emitted by others. Discussions about the responsibility for reducing emissions have tended to focus on emissions by countries. Turning their focus to individuals, recent reports by Oxfam and the French economists Lucas Chancel and Thomas Piketty have shown that the richest 10% of the population is responsible for 50% of carbon emissions. Climate scientist Kevin Anderson has estimated that if this privileged group were to reduce its emissions to those of the average European citizen, global carbon emissions would be reduced by 33%, with immediate effect (see video). Poor people who will be most affected by climate change are those who emit less carbon and whose well-being could be significantly improved with even modest increases in energy consumption. There is a pie for all and at the moment there are some who are eating most of it while others pick at the crumbs from the table.

Flying is not normal: In western societies affluent segments of the population have come to think of flying as a normal aspect of everyday life or at least a normal aspect of holidaymaking and certain jobs such as academic research. Yet, only 2-3% of the world's population flies in consecutive years and 95% have never been on a plane. Seen from a global perspective, flying is an elite form of transport. Even in some western societies, flying is the privilege of a few. In the UK 15% of the population are responsible for 75% of all flights.

Flying is artificially cheap: Worldwide more than 420 new airports, 121 new runways, 205 runway extensions, 262 new terminals and 175 terminal extensions are currently being planned or under construction. The aviation industry expects the number of aircraft and the number of passenger-kilometres to double in the next twenty years. This growth is being aided by tax-free fuels and a lack of regulation regarding carbon emissions – aviation has repeatedly been left outside international climate negotiations such as COP21. The current system of mass air travel relies on a number of policies and those policies can be changed. The expansion of aviation is not inevitable.

Beware of techno-optimism... Despite claims by the aviation industry such rapid growth is not 'green'. There is no such thing as sustainable aviation. Innovation in fuel efficiency and less polluting fuels are not enough to make aviation a clean mode of transport, especially considering the current and expected rapid growth in demand. Norway's airport operator has noted that electric planes will be available by 2050 to operate short-haul flights. There are at least four problems with this statement. Firstly, it still has to be proved that electric planes will be available by then and that they will deliver what is being promised today. It is important to remember that in the early stages of development

new technologies often go through a hype phase in which the technical problems are consciously downplayed while the potentials are overstated so as to attract investment. Secondly, even if electric planes could work for shorter distances, long-haul flights would still operate with conventional fuel. Thirdly, regardless of whether electric planes are available then, the key concern is to reduce emissions as fast and as widely as possible within the next two decades so as to have a fair chance of avoiding dangerous climate change. Right now, the only way to reduce emissions significantly in aviation is by reducing demand. Finally, aviation will consume a very large part of the carbon budget by 2050. In a 2015 report, the research organisation Öko-Institut warned the European Parliament that international aviation's CO₂ emissions may reach a share of 22% of global emissions by 2050. This share is greater in countries where aviation is more prominent. Projections for the United Kingdom show that if the government is committed to limiting global warming to 1.5 degrees 71% of the national emissions budget will be consumed by aviation by 2050. It is possible that other forms of commercially viable air travel such as air ships will emerge that will make low-carbon aviation possible. Investment is now being put into this possibility, but for now avoiding dangerous climate change means reducing aviation demand and changing one's lifestyle accordingly.

... and don't sweeten the message: The need to address climate change has been discussed for three decades. During this time messages of hope have nurtured complacency and achieved very little: green-house emissions keep growing. Reporting clearly and bluntly about the serious risks ahead is more effective than spinning a cheerful yarn about climate change as recent research suggests.

Integrity matters: When communicating science, it is important to 'walk the talk'. If science says that current trends in aviation are incompatible with avoiding dangerous climate change, then it makes sense to act accordingly, otherwise one's talk may be interpreted by others as cheap virtue signalling. Lecturing people about the risks of climate change and its effects on the planet and poor people while sitting on a plane will ultimately weaken public trust in scientists.

Individual action matters: People who fly frequently usually occupy influential positions compared to the rest of the population. Their voices are often louder than others. Most probably only a small part of the population will willingly fly less or stop flying. But small minorities can be powerful minorities and their gestures matter. The actions of a small but visible segment of the population could be a symbolic but essential catalyst for wider systemic change through the introduction of a sensible regulation of high-carbon behaviours and practices. Weren't the suffragettes, abolitionists, and American civil rights activists initially made up of a small number of individuals committed to positive change? Besides this, research has shown that emulation is an effective social mechanism for change in this case. People fly less when others around them, especially influential figures, fly less or stop flying. According to unpublished research by Steve Westlake, of those who know such an individual, half fly less as a result, and three quarters say knowing that person has changed their attitudes. The message from the flying less movement is that if you decide to fly less, make sure others know about it.

Flying less is about positive change : Flying less is not about 'sacrifice' or limiting one's choice. Instead it should be seen as a positive change in one's life, a rediscovery of the pleasures of slow travel and slow living. Above all it is a commitment to 'live with the future', as if the climate mattered and as if we cared for future generations and the poor.

Flying less is about exploring all available options: People who stop flying or begin flying less often talk about the pleasures of discovering that one's lifestyle can be re-set

when non-flying options are properly considered and that aviation is not as necessary as it may seem. Frequent flyers such as many academics should take an opportunity to re-set their values and rethink why they fly and whether it is strictly necessary. Do I really need to attend that conference? Why not an on-line presentation? Would I attend it if it took place in a less attractive place? Am I really attending it because of the benefits to my work or because of the tourism opportunities it provides? How much is flying related to status seeking in academia and other jobs? Isn't it possible to keep updated about your research field by using the many on-line resources available? Is flying really unavoidable or is it that I am reluctant to change my habits? Work places can help in promoting a new culture of doing business and research. For example, the Tyndall Centre for Climate Change Research has issued guidelines for helping their own staff to consider every non-flying option possible. This is now being used by other institutions.

Flying less does not mean giving up holidays abroad: Although long-distance travel by train and ship does not currently receive the same support as airport expansion, in Europe it is still possible to travel comfortably by these means of transport (although services are being closed - for example, night trains and passenger ships between the UK and Scandinavia). Kevin Anderson, a keen rock climber, holidays in Sicily every year. The journey involves a full day enjoying Rome in between night trains. The flying less movement hopes that enough people will demand and use lower carbon land and sea travel options so that eventually it becomes easier visiting distant places without jumping on a plane. This was the aim of Kate Andrews, co-founder of Loco2, a London-based start up whose mission is to make booking a train in Europe as easy as booking a flight. See also *The Man in Seat 61*.

A growing movement: Flying is so engrained in the lifestyles of more affluent segments that the possibility that sometime in the near future people may fly less, much less, may seem implausible. Yet recent events may suggest that change may be closer than some people realize. In Sweden, the debate about flying has been taking place in mainstream media since January. Two party leaders have pledged to stop flying due to climate change and the opera singer Malena Ernman is a prominent figure in the campaign. On the other side of the Atlantic, for the first time the Biennial Conference of Cultural Anthropology is taking place online in order to reduce travel-related carbon emissions and to facilitate a broader participation from academics facing visa restrictions. Calls are being made for other big conferences to follow this path. Anthropologist Jason Hickel has recently called for an end of the annual meeting of the American Anthropological Association (AAA) arguing that in an age of dangerous climate change, unnecessary flights cannot be morally justified and go against the professional ethics code of the AAA which states that 'Anthropological researchers must do everything in their power to ensure that their research does not harm the safety of the people with whom they work.' He calls on anthropologists to step forward and join others who are already working to create a low-carbon research culture: 'We as anthropologists – we as the AAA – have the opportunity to lead on this front, just as we led on anti-racism and anti-colonialism in the past. We can set an example that other disciplines and professional associations will follow. Climate scientists are already taking this step. We should be right behind them. The ethical imperative is clear: it's time to end the annual meetings in their present form and come up with a safe, just, and sustainable alternative. (...) I have no doubt that this shift would attract landslide support among anthropologists eager to help usher in a better world. Let's make it happen, starting in 2018. We have little time to lose.'

Negotiating inertias in work and travel cultures and infrastructures: Obviously attempts to significantly reduce one's carbon footprint face many constraints, as the

guidelines to reduce work-related flying issued by the Tyndall Centre acknowledge. These constraints range from expectations at work places to spend a limited amount of money and time travelling, to practicalities such as when travelling long distances with small children (for example, to visit relatives abroad). The inertias of the system are there constraining individuals' desires and aspirations for low-carbon travel. The flying less movement places the emphasis on rethinking what is necessary and possible at an individual level within existing constraints, while at the same time supporting collective efforts for wider changes in working cultures and travel systems.

Learn more about the flying less movement Video with Kevin Anderson on aviation and climate change. Video about Peter Kalmus: find out how and why a climate scientist felt compelled to shrink his carbon footprint by 90%. Atypical Lifestyle Choices: an exploratory workshop. Book: Beyond Flying: Rethinking Air Travel in a Globally Connected World.

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of Dramatically Warmer World This Century', World Bank, press release, November 18, 2012.

Notes

1 Anderson and Bows (2011)

2 Staying within this limit is a formidable challenge but the alternative of doing nothing is simply not an option. Organisations such as the conservative International Energy Agency (2011), the World Bank (2012) and PriceWaterhouse Cooper (2012) warned that current CO₂ emission trends were on track for a global mean surface temperature rise of 4°C or more by the end of the century with 'devastating' consequences for the planet. This would mean 'extreme heat waves, declining global food stocks, loss of ecosystems and biodiversity, and life-threatening sea level rise' (Schellnhuber et al. 2012, World Bank 2012). Kevin Anderson, one of Britain's top climate scientists, observed that 4° C warming is 'incompatible with any reasonable characterization of an organized, equitable and civilized global community' (Anderson 2012). Put simply, following this 'business as usual' scenario would lead to an erosion of economic and political conditions for civilized ways of life. More recent analyses by Brown and Caldeira (2017) published in Nature suggest that in a business-as-usual scenario 'we can expect global temperatures to increase anywhere in the range of 5.8 and 10.6 degrees Fahrenheit (3.2 to 5.9 degrees Celsius) over preindustrial levels by the end of the century—a difference of about a factor of two between the most- and least-severe projections.' See: <http://bit.ly/2DoQbmZ>. Another key issue in dealing with different budgets is the behaviour of other greenhouse gases. Climate scientist Glen Peters clarifies that 'whether the remaining budget is 700, 800, or 900 billion tonnes of CO₂ is largely beside the point. Due to the uncertainty in future no-CO₂ pathways (i.e. expected emissions and behaviour of other greenhouse gases), we simply do not know. Either way, emissions need to go to zero at an unprecedented rate'. See: <http://bit.ly/2HwO3fB>. Should technologies of negative emissions exist in the second half of the century, reduction rates would still have to be 3-6% per annum during 2030-2050 (IPPC 2014). But the technical and financial credibility of these technologies still needs to be demonstrated (Fuss S, Canadell JG, Peeters GP, et al 2014).

3 Regarding questions of fairness in the distribution of the effort to reduce emissions between wealthier industrialised countries and developing countries, research on carbon budgets by the Tyndall Centre shows that if a fairness principle is observed so that developing countries have more leeway to reduce unacceptable levels of poverty, emission reductions by wealthier industrialised countries of at least 10% per annum would be needed (Anderson and Bows 2011). Yet, even if not accounting for principles of fairness, if we accept lower chances of staying below 2 degrees and assume net zero emissions in this century, mitigation rates still need to be around 5% per annum globally (Raupach, Davis, Peeters et al 2014). These levels of emission reduction are unprecedented.

Movement

Movement is the crossing of space by people, objects, capital, ideas and other information. It is either oriented, and therefore occurs between an origin and one or more destinations, or it is more akin to the idea of simply wandering, with no real origin or destination.

More

Lifestyle

A lifestyle is a composition of daily activities and experiences that give sense and meaning to the life of a person or a group in time and space.

More

¹ <https://www.facebook.com/AlumniUoM/videos/1509359762446284/>

² <https://www.sciencedirect.com/science/article/pii/S0959378016300450>

³ <http://tyndall.ac.uk/publications/tyndall-working-paper/2015/towards-culture-low-carbon-research-21st-century>

⁴ <https://loco2.com/>

⁵ <https://www.seat61.com/>

⁶ <https://displacements.jhu.edu/>

⁷ <https://anthrodendum.org/2018/01/13/climate-change-ethics-code-end-aaa-annual-meeting/>

⁸ <http://en.forumviesmobiles.org/video/2018/03/20/does-aviation-has-place-low-carbon-world-12393>

⁹ <https://www.kcet.org/shows/socal-connected/energy-saving-family>

¹⁰ <http://en.forumviesmobiles.org/project/2017/02/02/atypical-lifestyle-choices-exploratory-workshop-3469>

¹¹ <http://www.greenbooks.co.uk/Book/468/Beyond-Flying.html>

¹² <http://www.nature.com/news/the-inconvenient-truth-of-carbon-offsets-1.10373>

¹³ <https://newint.org/sections/argument/2014/01/01/flying-still-beyond-the-pale/>

¹⁴ <https://www.carbonbrief.org/analysis-aviation-to-consume-half-uk-1point5c-carbon-budget-2050>

¹⁵ <https://www.oeko.de/en/publications/p-details/emission-reduction-targets-for-international-aviation-and-shipping/>

¹⁶ <http://en.forumviesmobiles.org/marks/movement-460>

¹⁷ <http://en.forumviesmobiles.org/marks/lifestyle-1756>