

Perspective

To Fly or Not to Fly? Why We Should Walk Our Own Climate Crisis Talk

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After the pandemic, we quickly returned to business as usual. Many events moved back from online to offline, and the flying-around-the-globe circus was re-launched. If we take the climate crisis seriously, we should walk our own climate crisis talk to reduce our global carbon footprint, and to safeguard science's credibility and legitimacy. The AIB could lead by example by opting for a hub-and-spoke model, combining an international and large but online annual conference with an orchestrated series of regional and small offline events. AIB can reap the opportunity to showcase how the road to greater sustainability could be paved convincingly.

INTRODUCTION

If we fail to act, the world will have witnessed an average temperature change of five degrees Celsius in the three centuries since the year 1900 by the end of the 21st century (cf. the 2023 IPCC report, p. 17). The earlier average temperature change of the same magnitude took 20,000 years, cumulating in the latest ice age. The impact will be dramatic, if only because much land mass will have disappeared under sea surface. Whilst this earlier temperature change took so long that many species had plenty of time to adapt gradually, this time around mass extinction will inevitably be the key evolutionary mechanism. Those who have been able to absorb the many subtle details in the latest IPCC report of 2023 (<https://www.ipcc.ch/report/ar6/syr/>), or who have played the Climate Fresk (<https://climatefresk.org>), will appreciate the fatal complexities that will wreak havoc across the globe's species, above and under water.

Science is the key messenger of this bad news. The news has turned from not so good via rather bad to very alarming over the decades in which the IPCC regularly updates the knowledge cumulated up until then. One would expect that science does walk its own climate crisis talk. Many ambitious initiatives notwithstanding, the hard reality is very different, both at the level of the individual scholar and of the collective institution. I argue that our own Academy of International Business (AIB) can lead the way to increased ecological sustainability of academic conferencing practices. My main message is that we can showcase, as AIB, how we can drastically reduce our carbon footprint in academia by replacing our deeply ingrained flying-around-the-globe habits by modern digital and hybrid practices that seriously reduce the need to fly.

After the COVID-19 pandemic, the AIB quickly returned to business as usual. And the AIB is not alone in this. By and large, all scholarly academies, associations, and so-

cieties roughly took the same (re)turn to pre-pandemic times. During the pandemic, many if not all academies, associations, and societies were forced to introduce a series of digital innovations. After the pandemic, many of these innovations were either scaled back substantially or fully abandoned, essentially returning to the practice of flying across the globe to meet physically at conferences and workshops. This return to pre-pandemic offline practices implies that we are back to an increased carbon footprint. AIB can decide to adopt conferencing practices that substantially reduce the need to fly. In so doing, AIB can reap the opportunity to showcase to the many other academies, associations, and societies how the road to greater sustainability could look like.

TO FLY OR NOT TO FLY

A few stylized facts are very hard to deny. One of these is that flying is highly problematic, with a very large carbon footprint, as long as the switch to alternative technologies such as electricity or hydrogen is not within reach. A simple rule of thumb, ignoring large variation around the average, is that if I as a rich Westerner would decide **not** to fly back and forth to New York from Amsterdam, this will reduce my personal carbon footprint in that year with about one fifth. However, many scholars are, again, flying from one side of the planet to the other to meet up with people they could equally well connect with digitally. And they are doing so on an alarmingly regular basis, and in alarmingly large numbers. To illustrate what this implies, Dey and Russell (2022) emphasize that the largest international meetings create a carbon footprint equivalent to the weekly emissions of a city of the size of Edinburgh.

An illustrative calculation exercise is that of Bousema et al. (2020). They calculate the carbon footprint due to flying alone (but see Dey & Russell, 2022) of the 2019 an-

nual conference of the American Society of Tropical Medicine and Hygiene (ASTMH), with 4,834 attendees in that pre-corona year. Their estimate is a footprint of 8,646 metric tons of CO₂ flying emissions, which amounts to the total weekly carbon footprint of approximately 9,366 average American households. Translating these figures to AIB, conservatively assuming similar flying behavior, does suggest that our annual AIB conference generates a carbon footprint of close to 3,000 metric tons due to flying alone, which is equal to the total weekly CO₂ emissions of approximately 3,000 average American households. This is a lower bound estimate, as Bousema et al. (2020) impose a series of conservative assumptions regarding the attendees' flying behavior. For instance, their estimate is based on economy travel only, whilst premium economy, business, and first-class seats come with about 50, 200, and 300 per cent higher CO₂ emissions, respectively.

Thierry et al. (2023) offer evidence-backed arguments as to why we engage so stubbornly in what is a clear case of damaging individual and institutional inertia. At the individual level, a plethora of psychological mechanisms are at play, jointly reducing our cognitive dissonance by rationalizing why we cannot but fly around the globe, not only for the sake of keeping our own academic career afloat, but also as this is argued to be essential for knowledge production. At the collective level, the sociology of inertia suggests a similarly large set of mechanisms that generate resistance to institutional change, implying that the return to our pre-pandemic practices of organizing one physical international conference or workshop after the other is seen as the natural way forward to promote knowledge exchange and social networking.

The standard defense is that without flying around to network and to look colleagues in their eyes in-situ, research productivity and quality will be harmed. This claim is not backed by any evidence, but is based on intuition. The key argument seems to be that personal contact is needed to establish and maintain a relationship that inspires and feeds collaboration that will produce high-quality research output. Given that the modern research community is global, this inevitably requires flying. Modern science has professionalized with the invention of an efficient meeting place by organizing mass gatherings known as conferences, largely doing so on a per-discipline basis. The annual AIB Conference is one of these, attracting about 1,200 attendees, with the yearly Academy of Management (AoM) Conference being by far the largest one in the broader Business and Management discipline, welcoming more than 10,000 participants.

Before the breakthrough of modern transportation technologies, science was organized very differently. This does not imply that early science was not productive, or was of low quality. For instance, who are 'better' economists: the non-flying Adam Smith, Vilfredo Pareto or Léon Walras or the flying Paul Krugman, Jean Tirole or Oliver Williamson? With Strevens (2020), one might even argue that many of the key breakthroughs were achieved in the pre-flying era. Although the circle of colleagues with whom an individual scholar was in direct contact was tiny, and largely lo-

cal, compared to what we are so used to for many decades by now, scientific progress was incredibly impressive, by all standards. But that was back then. This comparison might not be very fair. Is there any reason to believe that flying around the globe to meet up physically is a *sine qua non* for high-quality research in modern times?

Bjørkdahl and Franco Duharte (2022) is a collection of arguments and analyses that make the case for drastic flight reduction. In the introductory chapter, Bjørkdahl and Franco Duharte (2022, p. 2; emphases in the original) immediately make clear what is at stake here: "it is clear that academics fly for reasons that are quite distinct to them. Indeed, it would be no exaggeration to say that academics have worked aeromobility into the **ethos** of science, in what might appear like a peculiar mix of necessity and romance: Globetrotting is part of the allure of being an academic, but at the same time, academics **must** fly if they are to 'stay in the game' – or so the story goes." They continue to argue that maintaining this jet lifestyle-like "academic tourism" is absurd and irresponsible in times of climate change emergency and the arrival of effective digital technologies. This is not to say that we should stop organizing offline events altogether, but rather that we should find a way to do so whilst minimizing flight traveling.

Glover et al. (2018) argue that academic flying is unethical and hypocritical. From their review of the sustainability policies of Australian universities in the mid-2010s, they conclude that "no university – or inter-university agreement – has articulated a strategy for how air travel could become denormalized" (p. 766). For this to happen, academic practices require a major overhaul, which is an uphill battle as long as the deeply ingrained assumption that co-present bodies are crucial for individual careers and scientific progress is so dominant. Kreil (2021) presents findings from a more recent case study of ETH Zürich in Switzerland, identifying the arguments for and against reducing air traveling that circulate on a campus of a well-reputed university with explicit flight reduction policies. She concludes that the majority of scholars across disciplines still act on the basis of the deep-felt and persistent assumption that physical interaction is a *sine qua non* for success in academia, with quite a few even arguing that flight reduction threatens the freedom of science. On the basis of a case study of the Canadian University of British Columbia, Wynes (2019; see also Wynes, Donner, Tannason, & Nabors, 2019) concludes that there is no evidence that good academics fly more: "We found that beyond a small threshold, there was no relationship between scholarly output and how much an individual academic flies."

PERSONAL EXPERIENCE

Although my personal career history may be far from representative, the peculiarities of my case may well help to identify a few of the circumstances that might matter. Personally, I do not enjoy conferences at all. Hence, I not even attended an AoM annual meeting a single time, and physically visited the AIB annual conference only twice. Three factors emerge that may well be important. The first is that

I not so much developed an international network by purposely networking at large conferences or smaller workshops, but rather by jumping from one local network to the other by changing university 11 times, twice in the form of a lengthy sabbatical, three times by accepting a part-time affiliation elsewhere, and six times by switching from main employer, across four different countries. Each time, I added a substantial number of then-local colleagues to my later-international collaboration network. Many of my then-colleagues changed affiliation, too, expanding my network of collaborators when they involved their new local colleagues in our joint work. So, not by flying frequently but by moving occasionally, a deep collaboration network can be developed (Kim & Harzing, 2024).

The second involves the role of location. I am privileged by being born in the Netherlands, and by having worked in four Western countries. I always have had easy access to a large local network reachable by train. The Netherlands has a high-density railway system connecting 14 universities. Maximum traveling time by train is that of 4.5 hours from Groningen (up north) to Maastricht (down south). With the high-speed train, traveling from Amsterdam to Brussels, London or Paris takes less or not much more than three hours, whilst Berlin is within six hours train reach. Related, I oftentimes could stay at home because (potential) collaborators travelled to where I was, either by visiting me personally or my then-employer university, or by attending one of the many events that were organized locally within train reach year after year. With a globally very well-connected Schiphol Airport Amsterdam, all Dutch universities are easy to reach from across the world. When deciding about the location of local events, the need to fly can be minimized by opting for such high-density localities.

The third issue relates to my early promotion. Seniority attracts collaboration, and offers ample opportunities to supervise PhD students. So, when I was promoted to the rank of Full Professor at the age of 31, my gravity immediately increased substantially. And this effect received yet another boost when I accepted the role of Dean at the age of 36. Not only is an early-promotion case like mine an outlier, but times have changed dramatically since the early 1990s, implying that such early promotion is close to impossible in the modern days of the tenure track system with high and strict publication criteria. Changing the current promotion system may not be a good idea, but involving early career scholars in PhD supervision, hence cracking the monopoly power of senior faculty, may well be the way forward.

MEETING BY NOT FLYING

Regarding flying, less is more. The optimal adaptation would imply to implement a zero-flying policy, with all international conferences and workshops moving online until the days of electricity or hydrogen. This will be too much to ask for, given the forceful psychological and sociological mechanisms promoting individual and institutional inertia, in combination with the benefits of physical interaction. However, a substantive policy of reduced flying would already massively contribute to decreasing our research com-

munity's carbon footprint. In [Table 1](#), I provide four suggestions. Note that, to save space, I only focus on both tails of the career stage trajectory.

We could develop a hub-and-spoke model. The hub is the online annual AIB Conference, where we meet, present, listen, discuss, and talk digitally. The new video platforms offer plenty of opportunities to do so interactively and innovatively. The spokes are regional and smaller offline workshops, targeting local participants sharing a specific interest or seeking to invest in collaboration, who can close-to-all travel to the meeting venue by train. Such smaller-scale and interest-targeting workshop formats contribute much more to deep knowledge exchange, social networking, and research collaboration than large and generic conferences (Kim & Harzing, 2024). An interconnected web of such local events could share their outcomes digitally. We would cleverly combine digital globalization with physical de-globalization (cf. Brakman, Garretsen, & van Wittenloostuijn, 2021), where effectiveness can meet efficiency whilst drastically reducing our global carbon footprint.

Organizing local and smaller-scale events compensates for two major disadvantages of meeting digitally only. Firstly, although we know that mass gatherings fail to contribute substantially to deep knowledge development, the opposite holds true for tailor-made face-to-face interaction in smaller groups (e.g., Brucks & Levav, 2022; Collins et al., 2022; Duede, Teplitskiy, Lakhani, & Evans, 2024). Evidence abounds that face-to-face interaction is conducive to creativity. We should focus the local and smaller-scale spokes to creative interaction in a physical context. Subsequently, digital interaction is an efficient way to further develop the physically established collaboration, as evidence suggests that this virtual mode of interaction is well suited to rationally decide on practical matters. If these local offline events would benefit from the contribution of senior scholars from far away, one or two of such experts can be flown in.

Secondly, such tailor-made smaller-scale encounters can be instrumental for early career scholars who must still develop their international collaborative network, particularly if flanked by fitting university HR policies. Two examples must suffice here. First, the flying "quota" for junior and mid-career scholars should be much larger than that for their senior counterparts. For instance, the rule could be to grant one flight per year for early career scholars, and one in three years for senior faculty, and one in two years for mid-career scholars. Second, a very effective way to develop deep collaboration abroad is through extensive stays. So, a university could introduce a sabbatical scheme tailored at early and mid-career career scholars.

If the AIB succeeds in setting an example that many other scholarly research communities are willing to mimic, academia's carbon footprint reduction can be impressive. To give an idea, the largest annual international conferences in Medicine attract about 35,000 attendees. Taking, again, Bousema et al.'s (2020) conservative calculations as our benchmark, only transforming one such a conference into a bi-annual event would already reduce the carbon footprint with about 60,000 metric tons in the digital year, which is equal to the total weekly emission of approxi-

Table 1. Recommended flight reduction policies

Recommended actions	Early career	Late career	Main objectives	Examples
1. Online hub (annual conference)	The annual conference is organized globally online for all	The annual conference is organized globally online for all	Networking and shallow knowledge exchange	AIB Annual Conference during corona times
2. Offline spokes (workshops)	An interconnected web of workshops is organized locally, with limited flying, mainly for early career scholars (see 3)	An interconnected web of workshops is organized locally, with only a few late career experts flying in	Collaborating and deep knowledge exchange	20 interconnected local events on 'capacity building in digital globalization research', organized by the AIB Digitalization Strategic Interest Group
3. Differentiated flying rules	Universities flying rules are more extensive (say, once per year) for early career scholars	Universities flying rules are more restrictive (say, once per three years) for late career scholars	Flight reduction, but safeguarding early career networking	
4. Differentiated sabbatical schemes	Universities pay for two long stay sabbatical leaves of early career scholars	Universities facilitate sabbatical leaves of late career scholars, but without budget	Deep knowledge development through in-situ collaboration	

mately 65,000 average American households. In our own broader field, the Academy of Management (AoM) could reduce its carbon footprint with circa 26,000 metric tons if the annual conference would be organized online, which equals the total weekly emissions of roughly 28,000 average American households. And all these estimates are very conservative, as attending a conference produces extra CO₂ emissions due to much more than flying alone, and because many (Western) academics avoid economy class flying.

THE PRICE WE MUST BE WILLING TO PAY

Whether actually true or not, many young and mid-career scholars may well feel seriously disadvantaged if they would no longer have the opportunity to fly around to connect, network, and collaborate. But this is only one side of the argument. The other is that many young and mid-career academics might not like the forced-upon habit of having to engage in frequent air traveling to attend mass gatherings. This may be the case because this disturbs their work-life balance, because they are deeply worried by the climate change emergency, or for any other reason. The AIB could administer an opinion poll among its membership, adding potential explanatory variables such as age, career stage, and gender. The climate crisis is so urgent, and will come with such massive damage if we fail to act, that the younger generation may well be willing to pay the price of flying less. And perhaps, the established generation is more change-resistance than the younger one. We should not ignore the elephant in the room: We might well have a problem with the *homo academicus*' ego. On average, this ego is likely to be more frequently and more impressively inflated among those seniors who have enjoyed the status of being important and prominent at all those mass gatherings that

should be a relic of the past soon, would we – as the AIB – be willing to lead by example.

A by-catch of a reform of our conferencing practices along the lines suggested here is that this will address the large inequalities across the world through, at least, two channels. First, the current climate change challenge is largely the result of the century-long ecological unsustainability of rich societies. A thought-provoking example, revealing global inequality in this respect, is that “flying from London to New York and back generates about 986kg of CO₂ per passenger. There are 56 countries where the average person emits less carbon dioxide in a whole year – from Burundi in Africa to Paraguay in South America” (from *The Guardian*'s carbon calculator). Indeed, by far the majority of our conferences' attendees are from these rich countries. Second, the current flying-around-the-globe model is very expensive. This is a key reason for the underrepresentation of attendees from poor countries at our conferences; they simply lack the budget to pay for this expensive intercontinental flight tickets. With digital modes of conferencing, the cost of attending will be drastically reduced, which will help to correct this underrepresentation.

Before concluding, one final issue deserves a reflection: the individual and institutional resistance against any change, as discussed above, and how this relates to the pros and cons of the flying versus no-flying option. To structure this reflection, [Table 2](#) provides an overview of the main issues in this respect – 12 in total, 6 associated with flying and 6 with no-flying (again, for the sake of space, focusing on the tails of the career stage trajectory). Note that, in all instances, I locate a pro under either the flying or no-flying heading, deciding for either location on the basis of where this argument is seen as particularly prominent. However, in all instances, what is the pro of flying is the con of no-

Table 2. Pros and cons of flying and no-flying, and resistance to change

Pro of flying (con of no-flying)		Pro of no-flying (con of flying)	
1. Network development			
2. Knowledge exchange			
3. Career development			
4. Increased research productivity			
5. Increased research quality			
6. Heroes' ego pampering			
		7. Substantial carbon footprint reduction	
		8. Increase in equality and inclusivity	
		9. Leading-by-example toward sustainability	
		10. Better work-life balance	
		11. Less feeling of moral guilt	
		12. Expanding the freedom of science	
Individual resistance	Institutional resistance	Individual resistance	Institutional resistance
Junior scholars are reluctant to change, as this may harm their career; senior scholars oppose change, as this is painful for their ego; both add to this that by not flying to mass gatherings, science's productivity and quality will be harmed.	Institutions add to this set of arguments that changing extant career policies is counter-productive; moreover, vested institutional interests will be harmed, including the business model of many of the current institutions; on top of this, any change comes with a (high) cost.	An individual will argue that her/his contribution to carbon reduction will be extremely marginal (or may deny human-driven climate change), that any change that they feel will limit their freedom should be opposed, that their work-life balance is fine, and that the offline mode will not be more inclusive.	An institution might argue that taking any political stance should be avoided, in the spirit of neutral science; moreover, they may argue that issues of work-life balance, morality and inclusivity should not be intermingled with that of ecological sustainability, but have to be handled elsewhere.

flying, and *vice versa*. For instance, a substantial reduction of the carbon footprint is a major (if not the major) advantage of the no-flying option, but equally so a major (if not the major) disadvantage of the flying alternative. Given this, the numbering of all pros (and mirror image cons) is an uninterrupted series, numbered from 1 to 12.

Given space limitations, I cannot discuss all issues and all arguments in great detail. I hope that much of what is summarized in [Table 2](#) is self-explanatory. Regarding resistance, my argument is that the usual opposition can be expected, driven by the usual mechanisms such as cognitive dissonance, organizational inertia, and vested interests, albeit given a look that fits with the flying – no-flying issue at hand. Of course, [Table 2](#) cannot be overly nuanced. In practice, individual, institutional, and regional differences do abound, implying that a one-size-fits-all package of measures is illusionary. But [Table 2](#) does, hopefully, be helpful to start the discussion.

Luckily, the AIB is experimenting with new formats, seeking for hybrid modes that combine the pros of both options. A promising example is the initiative of the AIB Digitalization Strategic Interest Group (initiated in July 2023). Recently, they launched an experiment with 20 locations to be connected digitally, across Africa, the Americas, Asia, Europe, and Oceania. The idea is to organize these 20 events locally, with experts, faculty and doctoral students attending. Additionally, all will be participating in a global simulcast, with a thematic focus on ‘capacity building in digital globalization research’. My expectation and hope are that this hybrid and networked mode of organizing will be associated with a substantial reduction in air traveling without affecting knowledge exchange and development negatively.

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