Aeromobilities in the Time of the COVID-19 Pandemic

Weiqiang Lin

Abstract

This Perspective piece marks the ten-year anniversary of Transfers’ life as a journal and its contributions to aeromobilities research. Reflecting on my own past decade learning and writing about aeromobilities, the article takes stock of some significant threads in the field, before charting out three key future directions for aeromobilities research prompted by the COVID-19 pandemic and health crisis. Without prejudice to existing scholarly threads, the article discusses the burgeoning salience of new (aero)mobility injustices, automation, and aerial (in)civilities, amid an aviation industry struggling to reboot itself. The next ten years present enduring possibilities for aeromobilities inquiries, and the article hopes to inspire future thinking on the subject as societies connect again through aviation.

Keywords: aeromobilities, automation, aviation, civility, COVID-19, health, mobility justice, pandemic

As recently as January 2020, it was virtually impossible to imagine that over half of global air traffic would grind to a halt. Hailed as “a potent mechanism for economic and social change,” air transport seems to be on a “relentless” march to become one of the greatest inventions of the twentieth century. However, the COVID-19 pandemic has today presented a major threat to air travel like no other event ever did. The 1973 and 1979 Oil Crises, the September 11 terror attacks, Severe Acute Respiratory Syndrome (SARS), the 2008–2009 Great Recession, and ash clouds—none of these had hit home as hard as did the coronavirus pandemic.

A perfunctory look at the situation in October 2020 reveals the severity of aviation’s—especially international aviation’s—ailing state. With many border restrictions and quarantine rules still firmly in place, gleaming airports such as Beijing Daxing and Istanbul Havalimani, once the epitome of global connectivity, are still functioning drastically below capacity, even as tens of thousands of aircraft are stored in deserts indefinitely. As I further noted in February, COVID-19 has also levied a human cost, attacking an “underbelly” of low-skilled, often migrant, workers in aviation, many of whom have lost their livelihoods. Comprising not just frontline staff like flight and cabin crew, but also the armies of caterers, launders, drivers, ramp
service personnel, and logistics workers who toil behind the scenes, these hires now prove redundant in a time of capital’s withdrawal from global aeromobilities.

These new realities certainly give me pause as to the many aeromobilities studies that are out there, mine included. From airports to airspace to airlines, how do we take stock of the literature against the current context? As Gijs Mom has recounted in this issue, Transfers has not shied away from examining the contours of aeromobilities either, having contributed numerous insights in the journal’s ten-year history. Besides having ruminated on the image of airports as urban utopias, there has also been work highlighting the kinesthetic experience and (dis)comforts of airplane flying. Provocatively, Ole N. Jensen and Phillip Vannini’s piece examines two generations of cabin design and exactly delineates how aircraft engineering can greatly influence the affective qualities of flight. Consider also Bret Edwards’ reflection on the governance of global aeromobility. As another primary vein of enquiry in the aeromobilities literature, this article echoes an assortment of explorations elsewhere on the politics and exclusions latent within aeromobile networks that are ultimately not free for all.

What then do we say to these writings, which seem at the present moment more and more detached from the localized, non-aeromobilized form of existence that much of the world has descended into? Should aeromobilities research be cold-stored together with the aircraft, infrastructures and workers that it used to interrogate; or should scholars discount the future significance of aeromobilities? Here, I want to echo Mimi Sheller’s insistence that mobilities—including that of the air—are in fact now “more pertinent than ever,” rather than have diminished in importance. Indeed, (aero)mobilities are the very reason the world finds itself where it is today and are likely also the answer to how societies will connect again.

Tellingly, despite the extreme challenges, aeromobilities have not disappeared at all. At least from my corner of the (grounded) world, aviation still continues to function—if not as an instrument to repatriate stranded citizens abroad, then as a carrier of last resort for urgent commodities such as personal protective equipment (PPE) and foodstuff. In more unseen ways, the industry is also quietly consolidating to prepare for a reboot, as I learned from my industry contacts. While the International Civil Aviation Organization is updating guidance materials to standardize health-related protocols across the globe, airlines and airports are initiating experiments with novel insurance schemes and safety certifications to lure customers back. These developments ought to rekindle academic curiosities about the impending reconfigurations, and possible continuities in, aeromobilities when COVID-19 is eventually subdued. Rather than recoiling from an inimitable manner of conveyance that will likely continue to shape the future of global intercourse, I would like to take this opportunity to chart three research directions by which
scholars might rethink aeromobilities on-the-cusp-of-change, after ten years of fruitful research in *Transfers*.

**Inequalities**

One prominent theme repeatedly generated by mobilities research in the last decade revolves around the issue of inequality. In *Transfers*, inequalities in air travel have likewise been foregrounded. If not pertaining to the uneven treatment of different kinds of air passengers (e.g., nationals versus non-nationals versus refugees and asylum-seekers) in contemporary aviation orders, then it is to the colonial role that air travel has historically played in forging different—and racialized—senses of self and Other through unequal flying privileges.

Aeromobilities in a post-pandemic world have provided similar glimpses of such inequalities in the midst of change. In the initial phases of the outbreak, it was telling that, even though epidemiological programs restricting air passages from “Third World” countries for other diseases were routine, there was a notable reluctance and feet-shuffling among Western nations to restrict travel, especially among themselves. Part of this was a result of incomplete information, but, even so, it was already known by February that the Tom Hankses, Boris Johnsons, and Sophie Trudeaus of society had repeatedly tested positive for the virus because of their—or their contacts’—itinerancy. Similarly, when the Trump administration banned travel from the European Union (EU) on 13 March, the measure had attracted an inordinate amount of criticism, as compared to the Chinese ban, suggesting that some places were more easily excluded from air travel than others.

This unspoken inclination to preserve the aeromobility rights of typically affluent, white and/or male subjects could be seen in reverse as economies gradually reopened by summer. In Europe, France was one of the first to re-admit foreigners beyond the EU’s “safe” list (comprising twelve nations, as first recommended in August), but the country did so on condition that these individuals would demonstrate the “essential” nature of their travel—defined as those engaging in long-stay business, education, and diplomatic work. Other jurisdictions had similarly opted for this more cautious, but discriminatory, approach. China and Singapore, for example, instituted one of the first “green lanes” in the world for short-term business travel. Under the bilateral agreement, these “essential” visitors must file an application with the embassy, pay for pre-departure and post-arrival COVID-19 tests, and be allowed to skip fortnight-long quarantines. More recently, there have been debates on whether vaccine passports should be introduced, to fast-track those with access to immunity boosting inoculations (i.e. those in developed countries) back to the air. It would seem that some classes of travelers, and some bodies,
are deemed less dispensable than others, and therefore liable to exemptions from the strictest rules.

Arguably, preferential travel policies like these hint of a return to aeromobility’s signature style of prioritizing certain economically and politically important flows, as the industry reboots. Silent, in particular, are the rules on the accommodation of perhaps equally “urgent” travel among refugees and asylum-seekers, whose vulnerability to COVID-19 is only made more acute by their inability to move or access healthcare. On the other hand, initial observations during this pandemic have also signaled some re-qualifications of “risk” as the world changes. Notably, as of October 2020, many countries continued to curtail travel from the United States, but not China, raising questions about the standing of the former as a superpower and the de facto center of international aviation’s “empire.”18 How the remaining travel restrictions around the world would be dismantled in the months and years to come is still unclear; but suffice to say, air travel already seems poised to repeat its old ways of unequal access, albeit with new hierarchies and apparatuses to execute its injustices.19

**Technologies**

A second line of inquiry that will likely headline aeromobilities research in a post-pandemic world concerns the heightened use of technologies. Of course, aviation has always been a pioneer in technological breakthroughs, beginning with the invention of flight itself, through to today’s innovations in aircraft avionics;20 but the next phase of technological renovation looks set to affect a wider swath of people inhabiting airport ecosystems.

Here, I refer to the potential for the mass automation in many aspects of terminal operations. With human touchpoints increasingly deemed to be risky on the health front, there is a global urgency to convert many of what used to be manual facilitation procedures into machine-mediated ones. As Zhanjing Zeng and colleagues concur, aviation will likely see a sudden expansion of robotic and automated solutions to minimize “high-risk contact.”21 On top of biometric borders meant to screen passengers for security threat,22 enhanced investments would likely be made, too, in technologies supportive of self-assisted processing, including check-in kiosks, computed tomography security screenings and boarding gates with facial recognition capabilities.23

This mass rollout of a “touchless” operating environment in passenger spaces has two implications. First, the retrenchment of airport workers seen at the peak of the COVID-19 outbreak could become permanent or even accelerate. Migrant and elderly workers, once the mainstay of the airport workforce, might find it harder to render frontline service under pandemic conditions, even as new technologies gradually supplant them. Indeed, a
worldwide survey done in the spring of 2020 has found that over 60 percent of airport managers expect an increased dependence on “automation and artificial intelligence” in the next two years.24 If realized, such a plan could change the dynamics of how airport infrastructures function in relation to people, raising questions about the future of 10.5 million workers employed by airports and airlines.25

The second implication pertains to the future of passenger experience and privacy. While purportedly more efficient, automation comes with its own pitfalls. The reduction in human interaction and adaptive capacity would mean that machine codes would become more rigid in the future of airport facilitation,26 making improvisations and rule-bending less viable. The increased collection of data to automate multiple steps in the facilitation process—check-in, bag-drop, border crossing, security, boarding and deplaning—could also make the biometric surveillance of individuals, and, worse, the anticipatory determination of people’s eligibility to fly, more draconian and pervasive.

These post-COVID prospects spur a need for new research on the future trajectories, as well as dangers, of aviation and automation. With increased deployment of robotics, artificial intelligence and big data, terminal experience and work could radically change, shifting from a service-oriented utopic model to one of machine-interfaced interactions and profuse data management.

(In)civilities

Finally, expanded health rules and regulations for flying due to the pandemic are also making air travel a more stressful—and increasingly “uncivil”—experience. Across the world, airlines have implemented a litany of stringent adjustments, ranging from mandatory face coverings, cabin bag limitations, and reduced meal and other service contact. This does not yet include the string of onerous procedures that are newly enforced at airports, including health and border compliance checks, transit restrictions, swab tests, and quarantines.

The requirement for face covering throughout one’s journey has proven especially contentious, particularly in North America. Differing assessments of the efficacy of face masks, mixed with strong emotions about the (perceived) erosion of personal freedoms and detriment to children, has sparked numerous episodes of in-flight confrontations and disputes. Often ending in the deplanement of so-called anti-maskers, airlines’ “no mask, no fly” policies, and the refusal of some passengers to comply while onboard, have introduced new frictions to aeromobilities, often precipitating acts of incivility.27 Disagreements have even boiled over, in some instances, into blatant displays of air rage, with offending passengers resorting to destroying property, or assaulting airline employees.28 Ironically, the institution of mandatory
mask-wearing is procedurally in conflict with existing security protocols requiring clear views of one’s face, as well as the increasing use of facial recognition systems for airport facilitation. Not only raising the ire of passengers, these health rules are likely to complicate operations on the ground for airport staff and security personnel as well.

For this reason, airports have joined the aircraft cabin as another epicenter of unruliness, as the stresses of dealing with regulations increase and travel plans are rudely scuttled. While international border policies have largely stabilized, last-minute flight cancellations—sometimes without recourse to a cash refund—and the sudden implementation of quarantine rules upon arrival, such as those announced in the UK against Spanish travelers in August 2020, are still commonplace. In Malaysia, the blanket closure of the country’s borders without warning in March had similarly caused much anguish among foreign travelers, who had flown to the country, only to be denied entry at the border.29 Such episodes bear semblances to the anxieties of past incidents, when volcanic ash or simply weather and technical issues, grounded flights, and tested frayed nerves among those affected. However, the coronavirus has also ushered in a more disconcerting kind of travel uncertainty, happening over an unusually long period of time, and coupled with new travel burdens that keep being revised.30 If made permanent, whether by dint of tightened health regulations or insufficient participation in vaccination programs, this travel climate could persist and heighten the existing incivilities and unpleasantness of modern air travel.

At the crux is whether regulators, airline employees, and passengers can come to a workable solution to amicably manage the present (and potentially future) health risks of civil aviation. There are glimpses of such adaptations—such as the first all-purpose “travel bubble” instituted between Singapore and Hong Kong (currently slated for implementation in early 2021), which requires dedicated point-to-point air transport services excluding transit passengers—but these remain “baby steps.”31 Also of concern is the potentially yawning difference in travel experiences between those who can afford to fly in spaced-out premium cabins, and those who are relegated to the tight quarters of the back of the plane. Here, one comes full circle on the question of inequality again, as differentiation in modern aviation plays a not-so-subtle role in determining who gets to travel safely, comfortably and, indeed, civilly relative to others.

A Brave New World?

Aeromobilities are unlikely to come to an end simply because of the COVID-19 pandemic. If anything, hefty investments made in air infrastructures and aircraft in the past will keep the industry moving against all odds. In fact, the world is already seeing signs of a rejuvenation in air travel by the second half
of 2020, albeit with some new, as well as old, characteristics. As norms are being remade across all sectors of life from how we live to how we work and consume, the world should also expect similar adjustments in the coming months and years for aviation.

Through this Perspectives piece, I hope to have encouraged the readers of *Transfers* and those interested in aeromobilities to continue charting new horizons for the field. This commitment is befitting of the mobilities paradigm, which believes that the world is, simply because there is, first, movement. If the last ten years of research have provided rich insights into the cultures of flying, then the next ten—so momentously (if also tragically) framed by a once-in-a-century event—should be no exception. As the discussion above has outlined, issues surrounding inequalities, technologies, and incivilities should provide some (non-exhaustive) starting points where future research can begin yielding equally, if not more, productive expositions on the hopes and worries of air travel again.

Notwithstanding, this optimism should not be mistaken as a call for a complete overhaul of aeromobilities research. While there are many exciting discoveries (and critiques) to be made, one should not lose sight of the many continuities—especially those that breed unjust outcomes and, in time, a recrudescence of climate concerns—that will likely still animate aerial life. Here, the past and the future meet in a meaningful way. The pioneers of *Transfers* have started a good work, and it is now time to continue in it with a considered retrospection.

**Weiqiang Lin** is assistant professor at the Department of Geography, National University of Singapore. His work lies at the intersection of mobilities (particularly aeromobilities) and the infrastructures of moving. In particular, his writings seek to open up the cultural politics of mobilities production (e.g., norms, laws, STS, technologies, affects), charting through the creation of a variety of artifacts and regimes. His recent research includes the production of airspaces in Southeast Asia; discursive and technological framings of air logistics in Singapore and China, as well as labor and automation in four of Asia’s biggest international airports. He is the Ideas in Motion editor for *Transfers* since 2019.

Email: weiqiang@nus.edu.sg

**Notes**


10. Mimi Sheller, “Ten Years of *Transfers*: Mobility Studies and Social Change during a Pandemic,” this issue


17. Ministry of Foreign Affairs, “Joint Press Statement by Ministry of Foreign Affairs and Ministry of Trade and Industry on the Singapore-China Fast Lane for Es-