6. FOSTERING ALTERNATIVES

How do we shift from flying to other modes of transport? Much can be done to make train travel, in particular, more attractive, especially through better coordination of international train schedules and booking systems. At the same time, we cannot avoid the question of how to travel less (i.e. less often, shorter distances) in general. The modern hypermobile lifestyle we have developed over the last few decades must come to an end.

Plane tickets are not only cheap, but the lack of good and affordable alternatives also pushes people to fly. What alternatives are already in place, and what is needed to improve them? More generally, we must question the hypermobile lifestyle many of us have developed over the last few decades. Perhaps a form of decelerated societies can be part of the solution, as the *Slow Food* and the emerging *Slow Travel* movements are proposing.

There are many ways of envisioning a world where people still travel, but travel in different ways, i.e. slower, less often, shorter distances, staying longer once they travel, and choosing sustainable means of mobility (see Info Box 4). This chapter will first explore alternatives to travelling by plane (trains, buses, ships and online conferences). The reader will note that many of these alternatives have their disadvantages: Their energy use is not zero, and some alternatives are still way too marginal. Also, not everything can be shifted from the plane to other modes. Therefore, it is necessary to generally reduce the need for transport and to degrow tourism and the trade of goods. Changing our lifestyles and the desire for far distance mobility may be hard to achieve,1 but is necessary. As a study² from the UK shows, the average time spent travelling hasn't changed over the past 50 years: what has changed is the distance travelled—and this is what needs to change again.

SHIFTING FROM PLANES TO (NIGHT) TRAINS AND BUSES

Currently, the existence of trains, night trains, long distance and overnight buses differs widely between countries and continents. In many countries where a railway does not exist, good bus systems provide for longer distance travel (like many Latin American countries). Night trains have long been commonplace across Europe, but most were discontinued in recent years, nearly to the point of extinction.3 They lost large portions of their market share to low-cost airlines and to subsidised highspeed trains, and are disfavoured by unfair policies and by a lack of cooperation between train operators and national authorities.4 Still, there are some positive developments: The Austrian railways have been buying up night-trains from other countries which have shut them down, and have expanded their night train service. The Swedish government announced in 2019 that it will fund the creation of overnight train services from Sweden to the European mainland.

Today, a common opinion among European professionals is that a rail journey time of four hours is a reasonable alternative to flying. A study by FoE Germany (BUND) found that 200,000 flights from German airports—about two thirds of all domestic flights—could be replaced by

trips of less than four hours on existing ICE-trains.⁵ A recent study for the German Environmental Agency⁶ confirmed this order of magnitude. Avoiding such short-haul flights is not enough, but even this shift hasn't happened. Proactive rail companies, intensive public debates and bans of short-haul flights are needed to make this modal shift appealing—especially if we want to replace more than just extremely short flights.

Buses and trains are not only more environmentally friendly than planes, they are also easier to access than airports. Since train or bus stations are well connected to local public transport systems, they don't imply check-in and security checks (with the exception of the Eurostar train), provide for greater flexibility (booking a ticket on the day of travel), and passengers can work while in transit thanks to common Wi-Fi. Additionally, if the journey is overnight, the cost of accommodation is avoided. Measures that can help shift travellers from planes to trains and buses include improved international booking, affordable tickets and improved transfers between trains (e.g. night trains and day train connections). Railway connections to large airport hubs are also imperative in order to avoid short-haul flights.

Currently, there are only a handful of websites for those who might want to travel by alternative means and book trips at affordable prices. These include *The Man in Seat* 61⁷ and *Back on Track*,⁸ a European network to foster European cross-border passenger train traffic and in particular the night trains.

HIGH-SPEED TRAINS: AN ALTERNATIVE THAT CREATES NEW PROBLEMS

Some argue that high-speed trains are the only feasible alternative to flights. However, high-speed trains are not without their own problems: First of all, energy use rises exponentially with speed, so high-speed trains are extremely energy intensive. They also involve high CO₂ emissions from producing the cement and steel used in the large-scale constructions needed for these trains (e.g. long tunnels and bridges). Second, trains still do not run with 100% renewable energy. Third, constructing new train lines for high-speed trains can be very complicated: since sharp curves are problematic, they cut straight through the landscape. This can lead to resistance because of loss of livelihoods and biodiversity (an example is the No TAV movement in Italy). High-speed trains involve large land destructions: A 100 km high-speed train line require the same land destruction as a new airport (5000 ha for 400 km track). They are also very expensive (10M€ for 250km), and high speeds (>300km/h) cause rails to quickly deteriorate.

It might be worth discussing whether there is a socially and ecologically acceptable limit for speed. Furthermore, convenient travelling does not mean setting new records of maximum speed but having a reliable network of lines with a high total average speed available. Having connecting trains available within 5 or 10 minutes (instead of 40 or 55 minutes) saves more time than increasing the maximum speed from 200 to 300 km/h. Even on German fast trains, average speed is far below 200 km/h.

SHIPS WITH RENEWABLE PROPULSION

Overseas travel was more common by ship than by plane until the 1970s. For such trips, ships could still be an alternative to flying. The problem is that currently, there are almost no existing passenger ships left. In addition, the shipping sector's environmental impact is also considerable. Cargo or cruise ships usually use heavy oil as fuel, which is why shipping is a growing source of greenhouse gas emissions and is also a major source of other kinds of air pollution, causing health problems, acid rain and eutrophication. Much like aviation, the sector's international emissions have never been included in international climate agreements and related reporting, including the recent Paris Agreement (see also chapter 8). Apart from the need to reduce international trade in goods and to strengthen regional economies, technological improvements need to be developed and implemented quickly, in order to replace heavy oil with a mix of renewable alternatives like wind, solar, battery-electric, hydrogen or ammonia. Such technologies for shipping can be implemented much easier than for aircraft. Alternative propulsion (not using fossil fuels) for small ferries on short routes is already operational, and extension to larger vessels of longer range is promising.

There currently exist some examples of alternative passenger and cargo transport by ship:

- Fairtransport, based in the Netherlands, is the first modern 'emission free' shipping company. They use only the wind as a means of propulsion. Their ships sail between Europe, the Islands in the Atlantic, the Caribbean and America with a focus on transporting special products which are organic, or crafted traditionally such as olive oil, wine and rum. The ships also carry passengers, offering the opportunity to travel across the Atlantic without emissions. Fairtransport is a member of the Sail Cargo alliance, an alliance of sailing cargo vessels which also carry paying passengers.
- e-Ferry¹⁰ is a zero emission commercial ferry powered by rechargeable batteries connecting the Danish part of the Baltic Sea and the island of Ærø to the mainland.
- The project *Race for water*¹¹ campaigns against plastics in the sea, and uses a ship powered by solar, wind and hydrogen.
- Sail to the COP¹² is a project where a ship and a crew of activists sailed from Europe to the Americas. It raised awareness of aviation before the climate summit which was meant to be held in Chile in December 2019.

On these kinds of trips, the journey is part of the adventure. It might be possible to gain sailing experience which can enable sailing with other vessels in other parts of the world. A longer ship journey offers the opportunity to take time off, relax, escape the ever-increasing pace of life and use the time for oneself.

But of course, this kind of ship travel is no alternative to current forms of plane travel. Trips by ship are very marginal and something for adventurers or people with enough money. Furthermore, to be able to use traditional sailing ships, only specific routes can be taken, and only at certain times of the year when the winds are reliable.

TELEPHONE OR VIDEO CONFERENCES

Telephone and online conferences can drastically reduce work travel. Online methods can be used for interviews, conferences, workshops (webinars), or hybrid learning (to communicate with one or more remote students or faculty in a classroom environment synchronously with video and content). While Skype used to be the most common platform, many more providers have established well-functioning systems in the last years. Some of them are for free, some require a charge, some are less secure, while others are encrypted. There are real-life examples for how conferences can be organised with online attendees and presenters in ways that are inclusive and function well.

- The network *ecolize* is developing an inclusive concept for online participation at conferences, which includes the remote participants into the social aspects of a conference like meals, coffee breaks etc.¹³
- Virtual reality (VR) is growing and improving by the minute. There are companies already offering VR platforms for meetings. Examples are meetinvr.net and portalspaces.com.

This alternative can save both emissions and money, reduce paper and plastic waste, save time, and increase flexibility. Establishing online conference systems is also cheaper than paying for flights.

Online conferencing is considerably more climate friendly than flying, but online communication or virtual reality is not emission free. In fact, studies say the internet in total produces about 2% of the world's CO₂ emissions. ¹⁴ Further, special electronic equipment is needed for large-scale video conferencing, and electronics are increasingly associated with a range of environmental and social problems, such as mining pollution, local resistance or problematic working conditions. Other problems that result from treating information online include security breaches and privacy issues. Also, it will always be necessary for certain personal relationships to interact face-to-face: feelings, friendships and emotions are hard to deal with when talking to a computer. But in many cases, work

meetings and conferences can still be an alternative to flying.

REDUCING LONG-DISTANCE TRADE -AN ECONOMY OF SHORT DISTANCES

Freight transport accounts for a significant share of carbon emissions. Instead of aiming to triple the volume of transport by 2050,¹⁵ we need to reduce the demand for goods from far away and develop localised economies. Food in particular could be grown as locally as possible. This measure would at the same time serve the goal of increased food sovereignty.¹⁶ The aim must however be climate protection, not nationalist-style protectionism. This can and needs to happen alongside maintaining multi-cultural and open-minded societies.

It becomes clear that it is hard to tackle the issue of aviation in an isolated way. Aviation is embedded in a broader picture of a fossil capitalist economy that will be hard to overcome without radically changing policies—not only for transport, but also for other sectors such as trade, agriculture, energy or the financial system.

Practical measures are numerous and cannot be discussed in this report. They could include resistance to free trade agreements, higher tariffs on products brought by plane or fossil-fuelled ships, subsidies for local production of food and goods, and much more. Because they are systemic in character, such proposals will face significant resistance. Joining forces with other social struggles (on food sovereignty, trade justice, etc.) will therefore be important.

DEGROWING AND RESHAPING TOURISM

The increase in aviation, and especially in cheap flights, has been a key driver for the parallel increase in mass tourism and its negative effects both on the environment and the local society (see Info Box 3). There has recently been a surge in local protests around airport expansions, real estate speculation and urban planning policies. If aviation and its impacts are to be reduced, this necessarily involves changing the tourism industry and travelling in different ways. Tourism must change both quantitatively and qualitatively:

- 1. Reshaping tourism in order to reduce its negative impacts, making tourism more sustainable and in line with the visions of long-distance travel in the future.
- 2. A degrowth of tourism induced by a reduction of tourists, especially at hotspots, through the establishment of negative incentives or straight forward caps and limits.

Qualitative change: Reshaping tourism

If we wish to transform tourism in an equitable way for citizens of 'tourism-struck' areas and the environment, it is crucial to empower citizens to express how tourism affects their daily lives. Urban planning plays an important role in order to grant the opportunity to democratically decide what each space is dedicated to. To design cities with the resident and not only the visitor in mind, must necessarily imply limitations to large transport infrastructures such as airports and ports. In Barcelona, a suggestion for democratising the planning related to tourism has been to move from tourism management based on public-private undertakings (such as *Turismo de Barcelona*) to public-community management, where citizens can effectively participate through legal entitlement.

Unfortunately, one must also be realistic and consider some of the key obstacles for the implementation of participatory and citizen-led local decision-making concerning tourism: The first regards the large influence of very powerful lobbyists representing the supply side of the tourism sector. The second is society's general positive image of tourism. Social media and its individualist/identity-shaping premise begs us to share content online. And this is exactly what fuels the tourist sector's belief in and realisation of profits. Furthermore, as in the case of Barcelona, many tourist-occupied infrastructures are owned by the state and therefore decisions are not made at the local level where the impacts of tourism are felt the most. Concrete ways to reduce negative effects of tourism also include fostering environmentally friendly transport (see above); rent-freezes and public housing in touristic areas, so that residents are not driven away; the generation of alternative jobs that could replace both fossil and masstourism oriented ones (e.g. in a localized production of goods); and facilitating public space, local shops and trading which is oriented towards the residents.

Apart from the measures above, the perception of tourism and travel would need to qualitatively change. We could call this travelling, in order to make the difference to tourism clear. Travelling includes an openness towards cultures and new experiences, demands only modest infrastructure and facilities, and usually takes more time, maybe even several weeks or months. However, the scale problem, with respect to the amount of tourists, will remain even if we travel differently. In some places this problem is so big that reshaping tourism alone will not help.

Quantitative change: Degrowing tourism

If a rising amount of people start travelling to unconventional tourist destinations in order to experience 'authentic' cultures, there may no longer be any unspoilt environments to speak of. For example, Instagram has recently driven thousands of people to take photos in national reserves and places where tourists usually would not

travel to—or are prohibited to visit for good reasons. ¹⁸ So while it might be clear that tourism needs to change qualitatively, we also need to think about reducing tourism overall.

Most of the measures to reduce aviation discussed in this report would likely lead to a reduction of a certain type of problematic tourism. But there are also concrete measures to degrow tourism that can be implemented, especially by affected communities. One possibility is to increase the tourist charges for the public sector services that tourists make use of, such as public transport, maintenance, cleaning and security of public space. For example, in September 2019, Venice started to collect a \$3-\$10 fee from visitors. Tourists can purchase their tickets online before coming to Venice and, depending on the exact package, these tickets grant them admission to tourist attractions and cultural events, as well as access to public transportation. Description 20

Local taxes or bans could be linked to the travel mode or other tourism facilities, such as accommodation. Finally, reducing the 'supply' side of the tourism sector, might be the most effective. Reducing the number of visitors and overnight guests can be achieved in many ways: limiting the number of cruise ships/flights per day, placing a moratoria on the expansion of local airports and/or on the construction of new touristic accommodation, or imposing a reduction of tourist accommodations by banning the use of Airbnb or reregulating parts of the city.

FURTHER READING

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INFO BOX 4: A VISION FOR LONG-DISTANCE TRAVEL BEYOND AVIATION

While many understand the critique of aviation and support some of the policies proposed to curb aviation growth, it is difficult to imagine the long-term degrowth of aviation. What would long-distance travel look like? How would people work and travel on holidays? Visioning exercises are useful when trying to imagine a different future. So, let's travel to the future and imagine a new reality! We can imagine that we are in the year 2035 and that things have fundamentally changed. What would the world be like if the aviation industry has radically shrunk?

Policies and institutions have limited aviation to a minimum: people only fly during exceptional circumstances, and long distance travel by other means is available to everyone, not just the privileged few. Long distance trips are reserved for once every few years. Then people really take some time for travelling. Decelerated lifestyles and work time arrangements enable slow travelling. We now have longer holidays, the possibility for switching working spaces, as well as sabbaticals. There has been a process of just transition for those working in aviation and aviation-dependent sectors, such as mass tourism sites or airports. Social justice legislation enables long-distance travel for people with families in distance places, acknowledging the differences in how difficult it is for certain groups not to fly.

Other means of transportation enable long-distance and climate friendly travel: night trains, coaches, sailing and solar ships with renewable gears as well as air ships are used. They are somewhat slower, but quite comfortable. People still travel, visit and explore. Cross-border trains can be easily booked, have good connections and are affordable. They include separate carriages for families, sleeping, chatting and eating. Everyone loves train stations—they are a space where people from all over meet in the clean, comfortable and convenient waiting rooms, while childcare is offered at the playing sites. Train rides and bicycles are often combined, and there is enough space for taking bicycles on the trains.

There are still a few planes that are used for special circumstances, such as when people with migration background need to join his or her family for an emergency situation, or catastrophes are to be averted. International cooperation and exchange has deepened.

While people travel less distance in total, they experience deeper connections to places and people with slower modes of travelling. The journey itself is just as valuable as the destination. We travel less and slower, and have longer stays. We have accepted that 'fast and long distance' travel is not possible anymore (the same way that it is not possible to go to the moon for a visit). This means re-localised networks, where world diversity is recreated in each locality, and good coordination and cooperation within this diversity. While visiting Algerian bars and Algerian friends it seems not so necessary to travel to Algeria. We experience more storytelling by travellers who tell about other parts of the world. There are no more tourists of the old kind, but rather visitors that we welcome in our homes-reconnecting with this part of humanity that used to welcome each other. It also means more solidarity at the local level, including reduced consumption of products from far away. Instead, such products have become very special, and not for everyday consumption. Some formerly imported products are now produced locally instead. We give more value, in each locality, to local archaeology and nature, instead of focusing on touristic mythic monuments. This way, we have reconnected with the diversity around us. Airports are recuperated for other purposes like adventure parks and museums of the old fossil history, and secondary houses have been recuperated for local inhabitants. There are guiet skies and healthy environments for everyone.

Societies have always and will continue to transform, and there are many futures possible. It seems easier to imagine climate breakdown than a world after capitalism — let's try to create more vivid imaginations of the future we want!

- ¹ Department for Transport (2014)
- ² The Conversation (2018)
- ³ New York Times (2019)
- ⁴ Back on Track (2018)
- ⁵ BUND (2015)
- ⁶ UBA Germany (2019)
- ⁷ The Man in Seat 61 (n.d.)
- 8 Back on Track (n.d.)
- ⁹ Fairtransport (n.d.)
- ¹⁰ e-Ferry (n.d.)
- 11 Race for Water (n.d.)

- 12 Sail to the COP (n.d.)
- 13 ecolize (n.d.)
- 14 Climate Care (n.d.)
- 15 ITF (2017)
- 16 Via Campesina (n.d.)
- 17 Konstantinus (2018)
- 18 Coffey (2018)
- 19 Fox (2019)
- 20 Venezia Unica (2014)