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Imagining post-fossil tourism mobilities with Norwegian tourists

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ABSTRACT

Sustainable mobility has become a catch-all term to describe forms, modes, policies and practices of mobility that are thought to have a lower environmental footprint and/or fewer social exclusions than the contemporary mobility system which is reliant on fossil fuels and private ownership. As a result, its main application has been in urban mobility contexts, often focused on everyday commuting journeys. In this paper we re-visit sustainable mobilities through the lens of tourism sustainabilities, a concept that opens space for multiple, contingent operations of sustainability for tourism mobilities. We draw empirically from qualitative interviews with 26 residents from Oslo (Norway) undertaken in 2020 to answer two questions: (1) How are tourism sustainabilities imagined and enacted by residents of the Oslo region, Norway, and (2) What (re)imaginings of tourism sustainabilities are made possible? Attentive to the sociomaterial nature of tourism sustainabilities and drawing from critical sustainabilities scholarship, we present three enactments of tourism mobilities: Forming sustainabilities; Fragmenting sustainabilities; Fracturing sustainabilities, and three (re)imaginings: Stripped Back; Having a Go; Stuck in the Mud. The social geographies of tourism mobilities are made visible, and these open space for an expansive reading of sustainable mobilities which may enable deeper understandings of the possibilities for alternative forms of mobility in a climate constrained world.

Imaginando movilidades turísticas posfósiles con turistas noruegos

RESUMEN

La movilidad sostenible se ha convertido en un término general paradescibir formas, modos, políticas y prácticas de movilidad que se cree que tienen una menor huella ambiental y/o menos

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MOTS CLEFS

Écomobilité; durabilités critiques; loisirs; tourisme; durabilités du tourisme

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exclusion sociales que el sistema de movilidad contemporáneo que depende de los combustibles fósiles y la propiedad privada. Como resultado, su principal aplicación ha sido en contextos de movilidad urbana, a menudo centrados en los desplazamientos cotidianos. En este artículo revisamos las movilidades sostenibles a través del lente de las sostenibilidades turísticas, un concepto que abre espacio para procesos múltiples y contingentes de sostenibilidad para las movilidades turísticas. Nos basamos empíricamente en entrevistas cualitativas con 26 residentes de Oslo (Noruega) realizadas en 2020 para responder dos preguntas: (1) ¿Cómo imaginan y representan la sostenibilidad del turismo los residentes de la región de Oslo, Noruega?, (2) ¿y qué (re)imaginaciones de la sostenibilidad del turismo son posibles? Atentos a la naturaleza socio-material de las sostenibilidades del turismo y basándonos en estudios críticos sobre sostenibilidad, presentamos tres implementaciones de las movilidades turísticas: formación de sostenibilidades, fragmentación de la sostenibilidad, fractura de sostenibilidad; y tres (re)imaginaciones: *despojada*, *tener una oportunidad*, y *atrapado en el lodo*. Las geografías sociales de las movilidades turísticas se hacen visibles y abren espacio para una lectura expansiva de las movilidades sostenibles que puede permitir una comprensión más profunda de las posibilidades de formas alternativas de movilidad en un mundo con restricciones climáticas.

Inventer les mobilités du tourisme post-énergie fossile avec les touristes norvégiens

RÉSUMÉ

L'écomobilité est devenue un terme fourre-tout pour décrire des formes, des modes, des stratégies et des pratiques de mobilité qui semblent avoir une empreinte écologique moindre et/ou moins d'exclusions sociales que le système de mobilité contemporain, qui est tributaire des combustibles fossiles et de la propriété privée. De ce fait, son application principale a été dans les contextes de mobilité urbaine et concentrée en général sur les trajets quotidiens. Dans cet article, nous revenons sur l'écomobilité à travers les durabilités du tourisme, un concept qui ouvre la voie à des activités de durabilité multiples et contingentes pour les mobilités du tourisme. Nous nous appuyons de manière empirique sur des entretiens qualitatifs qui ont pris place en 2020 avec 26 habitants d'Oslo, en Norvège, pour répondre à deux questions : (1) Comment les habitants de la région d'Oslo et de la Norvège imaginent-ils et mettent-ils en œuvre la durabilité pour le tourisme ? (2) Quelles (ré-)inventions de durabilités sont rendues possibles ? Nous prenons en compte la nature sociomatérielle de la durabilité du tourisme, nous nous servons de recherches critiques sur la durabilité, et nous présentons trois applications de mobilités du tourisme : la formation de durabilités ; la fragmentation de durabilités, la fracturation de durabilités, et trois (ré)inventions : réduites ; essayer ; embourbées. Les géographies sociales des durabilités du tourisme sont mises en exergue, et cela mène à une interprétation plus large des mobilités durables qui pourrait permettre de mieux comprendre les possibilités de formes alternatives de mobilité dans un monde sujet aux contraintes climatiques.

Introduction

The last two decades has seen a proliferation of scholarship examining different dimensions of mobile lives (Doughty & Murray, 2016; Elliott & Urry, 2010; Schuermans, 2016). Questions of un/sustainability have been particularly prevalent (Urry, 2012). That many forms of mobilities – and mobile lives – produce harmful emissions, are experienced unequally, and perpetuate inequalities is relatively well established (see, for example Ohnmacht et al., 2009; Paterson, 2014). But the very idea of sustainability is rarely interrogated: what dominant interpretations and meanings of sustainability pervade pluralized contemporary forms of mobilities? In this paper, we argue that at the critical juncture of the COVID-19 pandemic, global fuel price increases, the cost-of-living crisis, and escalating challenge of climate breakdown – experienced to varying degrees across countries, regions and populations – there is a critical need to (re)imagine sustainable (tourism) mobility futures, to avoid re-entrenching pre-pandemic practices of ‘extractive and ecologically damaging forms of tourism’ (Sheller, 2021, p. 4) and to foreground alternative mobility futures.

Approaches to analyse sustainable mobility are plentiful. The sustainable mobility paradigm (Banister, 2008), for example, prioritizes travel substitution measures (i.e. reducing the need to travel), modal shift (i.e. policy to enable a reduction in private car use), and technological innovation to increase the efficiency of the vehicle fleet. This bears similarities to Avoid, Shift, Improve (ASI) frameworks (see, for example, Remme et al., 2022) that have received a lot of attention particularly in policy and practice, as easily comprehensible approaches to problematizing the unsustainability of contemporary systems of mobility and finding actionable responses, offering support for policy responses that incentivize walking and cycling infrastructure development, mixed use zoning, and electric vehicle (EV) innovation, and disincentivise internal combustion engine (ICE), private car-dependent planning and practice. These frameworks have largely been applied to commuting trips and/or urban mobilities (e.g. Ozaki et al., 2022). The tendency to focus on every day, urban (commuting)mobilities excludes or precludes the many other forms of mobilities, and their associated emissions, which dominate mobile lives in late capitalist society.

This paper re-visits sustainable mobilities from the starting point of tourism/leisure mobilities. It does this by interrogating the meaning/s of sustainability in sustainable mobility, and in doing so, decentres the ‘commute’ as the main trip purpose for sustainable mobility scholarship. This is important with changing practices (e.g. working from home) and social configurations (e.g. ageing population) re-ordering the relative significance of different forms of travel in many countries (e.g. Department for Transport, 2022). It then draws empirically from data collected through interviews with individuals in the Oslo region of Norway in 2020 to consider their imaginings of sustainable (tourism) mobilities. We ask – and seek to answer – two questions: (1) How are tourism sustainabilities imagined and enacted by residents of the Oslo region of Norway, and (2) What (re)imaginings of tourism sustainabilities are made possible? Through this we offer alternative conceptualizations of sustainable mobility which open up a range of possible mobility futures.

Conceptual framing

Sustainability, mobilities and tourism

Just as William E. Rees asked in 1997 whether the idea of a ‘sustainable city’ was an oxymoron, we too question whether contemporary mobility – with present day, and diverse, built environments, norms and values, economic structures – can ever be ‘sustainable’. To begin this process of reflection requires an interrogation, and shared understanding, of sustainability. Across sub/disciplines and research domains, and beyond the academy, a variety of definitions of sustainability emerge, with the assumption of a shared understanding but undergirded by sometimes wildly varying definitions. Perhaps the dominant definition – repeated by practitioners, students and scholars alike – is the 1987 United Nation (UN) Brundtland Commission’s idea of sustainability as ‘meeting the needs of the present without compromising the ability of future generations to meet their own needs’. More recently, the 2016 UN Sustainable Development Goals (SDGs) extend this idea, recognizing a duty of care for both present and future people on Earth using the phrasing of a ‘more sustainable future for all’. From this, road-traffic emissions caused by ICE vehicles (including carbon dioxide, methane and nitrous oxide) are *unsustainable* – they challenge the health and wellbeing of both present and future generations and lead to social, economic and environmental harms. But perhaps the concept of sustainability can do more work than this.

For Longo et al. (Longo et al., 2016, p. 1), early use – and arguably original forms – of the term ‘sustainability’ relied heavily on ‘a “pre-analytic vision” that naturalizes capitalist social relations, closes off important questions regarding economic growth, and thus limits the potential for an integrative socio-ecological analysis’. This ‘pre-analytic vision’ (Daly & Farley, 2004) offers just ‘initial conceptual categories and base assumptions for analyzing a particular phenomenon’ (Longo et al., 2016, p. 2), but goes no further. Longo et al. (2016) show how the coupling of the economy and the environment dates back to the 1980s, and forms the very basis of much of contemporary thought on sustainability – particularly where definitions rely on UN processes, or foundational conceptualizations are taken-for-granted and not critically interrogated. They suggest that we need to *unlearn* not just the connection between economy and environment, but the pre-eminence of economy over environment.

Dominant frameworks often speak of the three pillars/factors/goals of sustainability: social, environmental and economic (see Purvis et al., 2019 for a history of these framings). This has been a useful triad of categories, offering a structure through which to analyse imbalances in prioritization, finance and action. Yet a focus on ‘balancing’ or win-win framing led scholars to suggest that this might limit the potential and/or possibilities for more radical versions of sustainable change, as ‘most traditional notions of sustainability seek to change, alter or tweak existing systems’ (Rose & Cachelin, 2018, p. 518) rather than undermining the structure of these systems. To do so involves recognizing and attending to the interconnections between ecological limits and social justice, this relies upon acknowledging and supporting the necessities that sustain all – human and non-human – life (Cauvain, 2018; Wadham, 2020), refuting the commodification of ‘nature’, and pluralizing sustainabilities to recognize context-dependencies (Rose & Cachelin, 2018). If, instead of seeing sustainability as a unifying concept, we follow Wadham

(2020, p. 531, also see Longo et al., 2016) to recognize it as ‘a contested normative framework’, new future pathways might emerge. Such an approach opens space for questions such as how sustainability claims and imaginings are created and/or resisted, and what should be sustained and for whom.

We engage with *tourism mobilities* as a particular dimension of mobilities scholarship. For Sheller and Urry (2004, p. 1) tourism is about ‘the urge to travel elsewhere, the pleasure of immersing oneself in another environment, and the fascination with little differences in the materiality of the world’. This recognizes the way that (tourism) places themselves are mobilized through, for instance, physical changes (e.g. new or upgraded buildings and infrastructures) and the performativities of destinations. Thus tourism mobilities can be conceptualized in its broadest sense as including economic geographies of tourism investment and finance (Debbage, 2018), the digital geographies of booking systems (Jansson, 2022), and the mobilities (movements, meanings, social practices) of tourists and tourism workers (Plyushteva, 2021; Salazar, 2022). For Sheller and Urry (2004, p. 1)

many different mobilities inform tourism, shape the places where tourism is performed, and drive the making and unmaking of tourism destinations. Mobilities of people and objects, airplanes and suitcases, plants and animals, images and brands, data systems and satellites, all go into ‘doing’ tourism . . . tourism mobilities involve complex combinations of movement and stillness, realities and fantasies, play and work.

Connecting (critical) sustainability with tourism mobilities opens space to consider neo-liberal capitalism, extractive tourism practices and the potential for ‘resilient regional ecologies and regenerative economies’ (Sheller, 2021, p. 2). The dependence of local economies on tourism is often used to justify the ongoing practice of (mass) international tourism flows often dependent on highly polluting and unequally accessed aviation (see, for instance, Gössling & Humpe, 2020). Yet as Matilde Córdoba Azcárate (2020) has shown, there is a ‘stickiness’ to these tourism geographies, where national, regional and local governments and communities become “stuck” with tourism as a developmental trap’ (Sheller, 2021, p. 6). Mirroring other extractive sectors – the most obvious being mining – local resources are captured for global capitalist profits. This spatializes the potential sustainabilities of/for tourism and signals the need for emplaced and dispersed understandings of sustainability. Following this, resistance to contemporary – extractive – forms of tourism might come not through limiting or ending a community’s relationship with tourism, but rather by taking the form of a more equitable tourism system that works for the public good, that ‘does not ruin it, lay waste to it, degrade it, or take it away from the use of others’ (Sheller, 2021, p. 8).

Sustainable tourism might be best thought of as tourism sustainabilities; offering a language for interrogating place-specific possibilities and potentialities for alternative futures. We suggest that pluralizing sustainabilities recognizes the implicit (and sometimes explicit) dominion of a pre-analytic version of sustainability. It also centres sustainability in its own right, rather than as a condition or mode of tourism. By including in/justice and in/equity into sustainability (Cauvain, 2018; Rose & Cachelin, 2018), we move beyond ‘present and future’ temporalities of traditional sustainability discourse, to instead recognize historical injustices too. More than this, tourism sustainabilities pluralizes not only the problems but also the solutions, situating them in-places to recognize what

works in one place may not work in another, a point frequently made in policy mobilities scholarship (e.g. McCann, 2011; Temenos & McCann, 2013) but still often overlooked in sustainable tourism policy. We use tourism sustainabilities in this paper rather than 'climate-safe tourism' or 'sustainable tourism' to depict the contestations within conceptions of sustainability and its constituent social, political and economic constellations.

We also use tourism sustainabilities to unsettle notions of tourism as distinct from other related forms of mobilities. Mobility categories such as tourism, recreation and leisure have long histories, used in a practical sense to catalogue 'trip purpose' and market segmentation (by scholars as well as government departments and consultancies) as well as having theoretical purchase. Yet they create distinctions which we argue may not be valuable when considering the ways sustainabilities are (re)imagined and (re)enacted. Tourism mobilities have a variety of temporal and spatial distinctions, with timeframes which may be fleeting or enduring, and proximities to 'home' including the near and far, all of which have been disrupted by pandemic-related travel restrictions and home holidaying. Conceptualisations of 'home' here engage with Blunt and Varlet (2004, p. 3) as shaped by 'everyday practices, material cultures and social relations'. Home is an important mooring (Hannam et al., 2006) in imaginings of tourism sustainabilities and might produce alternative spaces for (re)imagining what tourism sustainabilities can be.

(Re)imagining tourism sustainabilities

In the context of the post-fossil city, Wachsmuth (2019, p. 138) argued that 'imagining the post-fossil city will actually require imagining a whole bunch of things that do not look much like the city at all'. Following this, it is likely that imagining post-fossil tourism may also require imagining things – practices, infrastructures, technologies, regulations – that do not look much like tourism. It might be that dismantling the lived, conceptual and analytical boundaries between tourism, leisure and recreation is a first step (see, Lehto et al., 2023). While sustainability is hard-to-define beyond initial and overly simplistic conceptualizations, so too are tourism mobilities (Sheller & Urry, 2004); when analysing the sustainability of tourism mobilities it becomes easier to construct function categories, for instance, accommodation, travel, activities and entertainment, particularly through technoscientific discourses demanding measurement, quantification, comparison and attribution of environmental harms such as emissions. The (re)imagining of tourism sustainabilities may represent a way through this impasse, where tourism is no longer seen to be an exception to daily life, but an interconnected (everyday) sociomaterial practice that needs to be recognized within this context (see, for instance, Edensor, 2007). This thinking aligns with *critical* tourism studies scholarship (e.g. Tribe, 2007; Morgan et al., 2018), and particularly that which connects *critical and* sustainable tourism (Pernecky, 2023).

The research presented in this paper is interested in the power that ideas have to (re)shape the world (Patomäki & Steger, 2010; Purdy, 2015). As they become inscribed in norms, practices and institutions, ideas of today might become tomorrow's possibilities. Imagination can operate as a central component of how humans perceive and inhabit the social and material world (e.g. Hayes et al., 2015). As such, imaginings do not only mirror the world; they work to actively produce it. Informed by experience, they are framed by existing – often dominant – worldviews and grant narratives.

Imagination, then, can be a space where radically new possibilities in the context of future uncertainty become visible (Hayes et al., 2015; Kölbel, 2020). Hajer and Versteeg (2019) question why it is difficult to imagine possible new worlds, and argue that climate breakdown demands a rethinking of the existing socio-geographic arrangements (also see, Pincetl, 2021; Wachsmuth, 2019 for commentaries). For Segato and McGlazer (2018), processes of imagining are not about a 'perfect' future, but instead engaging in an active imaginative process, which seeks to 'explain and reveal rather than define and identify' (Turner & Taboada, 2021, p. 419).

Scholarship examining (sustainable) tourism imaginaries recognizes how they are constructed and disseminated by the industry to 'incite longing for long-distance travel' (Linke, 2012, p. 294), but are also co/constructed by tourists (Graburn, 2017). Entrenched, shared imaginaries of mainstream tourism mobilities may operate to lock-in unsustainable practice, while also limiting the possibilities for alternative futures. In what follows, we seek not to offer Utopian/Dystopian visions of alternative (tourism) mobility futures (although these do emerge), but instead to empirically examine the realms of possible alternative visions of tourism sustainabilities. From here, we introduce our qualitative research approach, before presenting our empirical findings by way of enactments and (re)imaginings.

Methodology and methods

This paper presents empirical material from a series of interviews conducted with residents from the Oslo area of Norway. There are distinct socio-economic, political, cultural and geographical features of both Oslo and Norway. Norway is a wealthy country, with a median after-tax household income of NOK566,300 (approx. US\$52,000; Statistisk sentralbyrå, 2022b). Tourism is important for the Norwegian economy contributing NOK 127.4 billion in 2019; 3.6% of total GDP and supporting 7.4% of total employment (OECD, 2022). Domestic tourism has always been a significant feature of this market, with Norwegian tourists accounting for 70% of all commercial nights in 2019, 86% in 2020, and 85% in 2021. But international tourism remains important for Norwegian residents too; in 2019 Norwegians made a total of 10.5 million international trips, with over half of the population travelling abroad at least once per year (Statistisk sentralbyrå, 2019). The Oslo region of Norway is distinct in a number of ways. It is one of the fastest growing capital cities in Europe (Anderson & Skrede, 2017), with a municipal population of around 700,000 (13% of the national population). It has a Gross Domestic Product (GDP) per capita similar to that of Los Angeles (United States) and London (United Kingdom), and the second highest in the Nordic region (OECD, 2020). Yet while Oslo is a wealthy city, median figures disguise variation with Venter et al. (2023, p. 5) reporting that 'the poorest sub-district in Oslo (Fossum) has income levels that are less than a third of the richest sub-district (Slemdal)'. Forecast population growth, largely from international migration, led to municipal master planning with explicit engagement with ideas of sustainable development (see, Anderson & Skrede, 2017). Venter et al. (2023) recognize a paradox of Oslo; located in a wealthy and egalitarian country, with close proximity to nature (forests and water; Jørgensen & Thorén, 2016), yet experiencing rapid urbanization, reported spatial segregation of wealth (Haandrikman et al., 2021; Næss et al., 2020), and unequal access to

nature (Suárez et al., 2020). From these characteristics, the framing of sustainability by Oslo area residents becomes paramount.

The empirical contributions of this paper come from semi-structured interviews with 26 Norwegian adults conducted between May and June 2020, prior to the summer holiday period. All interviewees were then invited for a second interview between September and November 2020, following the summer holiday period, and 22 participants agreed. This resulted in a total of 48 interviews. Participants were initially recruited through a large-scale survey (Jacobsen et al., 2023); 75 respondents provided contact details for further research, all were contacted and 26 of these were selected on the basis of sampling criteria which prioritized diversity (see Table 1). The interviews took place online due to pandemic travel restrictions, and lasted between 1 and 2 hours. The question guide (see, Supplementary Material) included perceptions of climate conscious holidays and holidaymakers, ideal holiday practices, and behavioural responses to carbon reductions.

The interviews were conducted in Norwegian and partially transcribed into English, raising questions of translation, interpretation and linguistic privileging (e.g. Müller, 2021). The interviewer's choice of terminology had a bearing on how the participants spatialized their responses. The word 'ferie' translates as vacation or holiday, and in the interviews, the interviewer purposely used this word instead of 'fritidsreise' (leisure travel) to encourage participants to think about vacations/holidays not limited by spatially-situated imaginings of 'leisure' travel, and potentially offering the possibility of talking about 'travel-free' vacation (e.g. home-based). That being said, as often happens with English terms such as holiday and vacation, it became clear through the interviews that 'ferie' was also often linked by participants to the notion of 'travelling away' (from 'home'). Few participants thought of (and talked about) home or cabin stays, when the interviewer asked them to talk about their 'ferie' (holiday/vacation). Having become aware of this, the interviewer guided participants to consider the breadth of possible tourism mobilities, following a semi-structured interview protocol. We acknowledge, however, that focusing on 'ferie' risks excluding some types of leisure travel practices. Furthermore, individual interpretations of 'ferie' are likely to be influenced by a variety of social and cultural characteristics.

The analytical work seeks to draw out where participants discuss their own practices (enactments) and futures (imaginaries). The translation and analysis presented in this paper took place through discussions and iterative engagement with the empirical material and theoretical concepts, which allowed us to think with the concepts of sustainabilities, mobilities, crises and socio-materialities. This took the form of reflexive thematic analysis (Braun & Clarke, 2021). A *reflexive* thematic analytical approach which 'involves immersion in the data, reading, reflecting, questioning, imagining, wondering, writing, retreating, returning' (Braun & Clarke, 2021, p. 332) was relevant and appropriate given the research questions at hand. This encouraged long periods of discussion and reflection individually and collectively by the research team, these activities involved slowly working through the empirical material discussing translations, interpretations and connections. Imagining and writing are also recognized as important parts of the analysis, where the themes are slowly constructed through and with the research team. Throughout this process, we returned to our two research questions to guide our analysis:

Table 1. Participant details.

Participant number	Pseudonym	Gender	Age	Work situation	Pre-pandemic travel details (2019)
1	Anna	female	40–60	working	International flight-based vacations (3RT) and domestic motorhome vacation, no cabin stay, no home stay
2	Aurora	female	40–60	working	International flight-based vacations (4RT) and home stays, no cabin stay
3	Adam	male	20–40	unemployed	International fly & drive vacation (1RT) and international car-based vacation (1RT), cabin stay and home stay
4	Emma	female	over 60	pensioner	International flight-based vacations (2RT), cabin stays and home stays
5	Eva	female	40–60	working	International rail-based vacation (1RT), domestic multimodal (flight/rail/boat) vacation, cabin stay and home stays
6	Hanna	female	40–60	pensioner	International flight-based vacations (5RT), domestic car-based vacation (1RT), cabin stays and home stays
7	Benjamin	male	40–60	working	International flight-based vacation (1RT), cabin stays (partly flight-based), no home stay
8	Ida	female	over 60	pensioner	International flight-based vacations (2RT), domestic car-based vacation (1RT), cabin stays, no home stay
9	Casper	male	40–60	working	International flight-based vacations (2RT), cabin stays, no home stay
10	Julie	female	20–40	working	International flight-based vacations (10RT), domestic car-based vacation (1RT), no cabin stay and no home stay
11 ¹	Lea	female	20–40	working	International flight-based vacations (2RT), domestic car-based vacation (1RT), no cabin stay and no home stay
12	Maya	female	over 60	pensioner	International flight-based vacations (3RT), international car-based (2RT) and PT-based (1RT) vacations, cabin stay and home stays
13	Matilde	female	20–40	working	International flight-based (1RT) and domestic (3RT) vacations, domestic PT-based vacation (1RT), home stays, no cabin stay
14	Nora	female	20–40	working	International flight-based vacations (2RT) and home stays, no cabin stay
15	Christian	male	over 60	pensioner	International flight-based vacations (4RT), international boat trips (2RT), international car-based (1RT), domestic PT-based vacation (1RT), cabin stays and home stays
16	Felix	male	40–60	working	Domestic flight-based vacations (2RT), fly & drive (motorbike) vacation (1RT), domestic motorbike vacation (1RT), home stays, no cabin stays
17	Herman	male	20–40	working	International flight and rail-based vacations (2RT), international (1RT) and domestic (1RT) car-based vacations, home stays, no cabin stays
18	Olivia	female	20–40	disability leave	International flight-based vacations (2RT), domestic PT-based vacations (3RT), cabin stay and home stays
19	Leo	male	over 60	pensioner	International flight-based vacations (4RT), cabin stays and home stays
20	Sara	female	20–40	working	Domestic (1RT) and international (1RT) flight-based vacations, domestic car-based (1RT) and PT-based (1RT) vacations, home stays, no cabin stays
21	Marcus	male	over 60	pensioner	Domestic flight-based (1RT) and car-based (1RT) vacations, cabin stays, no home stays

(Continued)

Table 1. (Continued).

Participant number	Pseudonym	Gender	Age	Work situation	Pre-pandemic travel details (2019)
22	Sofia	female	40–60	working	Domestic (2RT) and international (10RT) flight-based vacations, domestic car-based vacation (1RT), cabin stays, no home stay
23	Philip	male	20–40	working	International flight-based vacations (2RT), domestic (1RT) and international (1RT) car-based vacations, home stays, no cabin stays
24	Victoria	female	40–60	working	International flight-based vacations (3RT), domestic (1RT) and international (1RT) car-based vacations, home stays, no cabin stays
25	Sebastian	male	20–40	working	International flight-based vacations (4RT), domestic (1RT) and international (1RT) car-based vacations, home stays, no cabin stays
26	Victor	male	unknown	working	International flight-based vacations (2RT), cabin stays and home stays

(1) How are tourism sustainabilities imagined and enacted by residents of the Oslo region, Norway, and (2) What (re)imaginings of tourism sustainabilities are made possible?

Enacting tourism sustainabilities

In presenting our analysis and interpretations, we first draw from the empirical material to develop an understanding of the ways that tourism sustainabilities are performed and brought into being by our participants (RQ1). We develop three constructs for our argument: 1. *Forming sustainabilities*, 2. *Fragmenting sustainabilities*, and 3. *Fracturing sustainabilities*.

Forming sustainabilities

The idea of *forming* implies something taking shape and also beginning, when an idea, practice or material is forming it might (be) reshape(d). Forming also implies an unfinished nature, with potential to become something else – to take another shape – in the future. This theme focuses on the way/s tourism sustainabilities are established, developed and brought into (tentative) being. The forms and forming of sustainabilities are diverse. Forms of sustainabilities are often contingent on certain patterns of access/ownership, for instance having access to an (electric) vehicle, or a cabin for domestic holidays. In this way, the socio-materialities of tourism sustainabilities become visible, as do the connections between everyday materialities and tourism which might make some forms of ‘sustainable’ activities more or less possible. We characterize these around accidentally forming and intentionally forming sustainabilities, described further below. The accidental/intentional dichotomy can be thought of as relational; where conditions – access to particular modes or accommodation – might make some modes of behaviour possible for some people but not others – and this is not static, but changes across spatial and temporal contexts. They do, however, make some forms of sustainabilities more available to some people, thus illuminating injustices in dominant thinking on sustainability.

One way of understanding ‘accidentally forming sustainabilities’ might be understood through the Norwegian practices of ‘cabins’ or ‘cottages’ as second homes (e.g. Rye & Gunnerud Berg, 2011) which expose a variety of different potential (tourism) sustainabilities enabled by those with the financial and/or social capital to engage in this practice. We recognize these forms of tourism/holiday practices as accidentally forming sustainabilities due to participants’ framing of domestic, cabin-based holidays as being broadly perceived to be environmentally friendly. With many of Oslo area residents’ cabins accessible via Electric Vehicle (EV), and with Oslo having some of the highest EV market penetration in the world (The Driven, 2020), this is a unique spatial feature of the region. More than the transport mode, activities described by participants (walking, cycling, reading, skiing) were argued to have a relatively low environmental footprint (e.g. through resource consumption). The ‘sustainable practices’ appear to lack intentionality. This uncovers the cultural contexts of some versions of sustainability – but also hints towards the limits to participation. The quote below offers a glimpse into the complexities of this lifestyle, whereby the idea of whether or not this constituted a ‘holiday’ and the boundaries of tourism become evident (see, for example, Hall, 2014).

It is more climate friendly to be at the cottage of course there is very little travel, very little use of, as I said, I use a car and stuff like that, there we can take also bike or we can take the bus for example electric or gas bus, but I thought you meant travel outside the home and the cabin, that’s what I thought. [] Yes, but when you know that I’m half a year in Oslo and half a year at the cabin, then ... then the cabin is not vacation. It’s my second home. That’s why I have to say that when I travel, I travel either from here or from the cabin. (That’s what) I consider a journey ... because the cabin is, as I said, my second home (Christian)

More intentional formations of tourism sustainabilities were described by participants and these largely focused on practices including reducing the frequency of tourism travel and shifting modes – for instance from short haul flights to train. These were described by some participants through their purposeful actions, seeking ways to reduce the ‘footprint’ of their travel. Through these in/actions, participants are seeking to become more ‘environmentally friendly’ or sustainable:

I feel that over the years I have become more environmentally friendly, like in general ... for example that I have taken the train down to Berlin and fly back does not make that holiday environmentally friendly, but it makes it much more environmentally friendly than if I only had taken the plane for example ... one has become, that is, being environmentally friendly and (things like that) has become more ... one talks more about it in the media, for example, one talks more about it with friends and things like that ... so it has become more of a part of everyday life in all parts of life, and over time, right, over time one begins to ... what to say, change his own habits then (Herman)

These intentionally forming sustainabilities change over time, based on current knowledge/learnings about sustainable action – and ostensibly link to avoid-shift-improve modes of sustainable mobilities. Thus, the dominant framing of sustainability is important here, it offers credibility to some actions but not others. But the distinction between intentionally and incidentally forming sustainabilities is not absolute; intentional actions can lead to other incidental actions and vice versa, moreover, it is a matter of individual and collective perception, all underscored by a shared (and often taken for granted) idea

of what sustainability is and whether/how it might be achieved. From our interviews, it appeared that environmental dimensions – from emission reductions, to proximity to nature – are all part of the ways our participants developed their enactments. Tourism sustainabilities are, then, formed through and with the places, modes and practices that are (made) available and un/intentionally engaged with.

Fragmenting sustainabilities

Fragmenting suggests a splintering of something; where different parts emerge from which were previously (thought to be) a whole. Yet, in the context of sustainabilities enactments are never whole, but instead evolving collections of practices, ideas and representations. This theme deconstructs the idea of sustainability as a whole, and works to fragment into partial sustainabilities which materialize and activate in different parts of life. In other words, the fragmentation of sustainabilities shows the contingency of some ‘unsustainable’ practices on other ‘sustainable’ practices. This builds upon forming sustainabilities, by showing that these categories are indeed fragmented and partial.

By framing – and examining – tourism as exceptional and infrequent, it can become removed from calls to move towards sustainable lifestyles. Yet as literatures on hypermobility show, there are increasing patterns, by some, towards frequent aeromobilities and high-carbon lifestyles. Tourism, though, is not homogenous. The patterns, routes, modalities and rhythms can vary substantially. ‘Fragmenting sustainabilities’ speaks to the everyday practices used by participants to justify aviation, hypermobility and/or tourism practices. It shows how sustainabilities operate across domains and actions in highly relational – and fragmented – ways. Through this, participants enact fragmented sustainabilities through activities including; recycling plastics at home, keeping to a vegetarian diet, driving an EV, and flying.

Sometimes I have reflected a little on whether I should feel guilty because I fly, and may well have ... some (guilt), but ... I don't drive a car on a daily basis and save up a bit there, and then I use it as an argument ... I wear out little the environment. I think having that freedom to come down in Europe and also elsewhere it's a fantastic privilege, so that I can afford it and have the opportunity to do it, so I'm enjoying it full-on. This is in a way kind of selfish on a world scale, but ... (Leo)

Carbon footprint calculators and carbon budgets can contribute to such fragmenting of sustainabilities, allowing individual assessments of where carbon ‘savings’ occur (e.g. through commuting by bicycle) and then ‘spending’ those emissions on an international flight (also referred to as behavioural rebounds). Again, this version of sustainability is centred on environmental harms, as such calculations can struggle to measure social dimensions (e.g. Cauvain, 2018) such as access and equity, and thus depend on a limited set of epistemic claims. Nevertheless, participants like Leo recognizes the ‘fantastic privilege’ of aeromobile affordances, and the potential ‘selfishness’ of this practice, which might speak to a degree of *flygskam* (‘flightshame’), although Doran et al. (2022) found low levels of flight shame in their nationally representative sample of Norwegian residents.

Similarly, the emissions generated from business travel, industry or other countries are used to rationalize the relatively infrequent tourism travel of some participants. This might represent what Tulloch and Neilson (2014) refer to as the side-lining of radical components of possible sustainabilities through doing *something*. This might be a comparative exercise, inasmuch as seemingly doing better than others – than one’s friends, colleagues, peers, neighbours – may be enough to justify particular practices. Thus, everyday sustainabilities reflects relations between 1. daily and tourism enactments (intrapersonal), and 2. enactments between people (interpersonal).

Fracturing sustainabilities

Fracturing goes further than fragmenting, it reflects the pressure(s) which may occur externally, internally or both, which lead to breakdown of and/or resistance to enactments of ‘sustainable tourism mobilities’. In this context, fracturing sustainabilities reflects upon the rationales for not undertaking what the participants believe to be ‘sustainable’ practices. Here this happens either with 1. halted sustainability practices due to shifting social, cultural, economic or material practice, or 2. the expectations that others will – or should – take actions to reduce emissions (e.g. the discursive formation of ‘little Norway’; see Norgaard, 2011). Fracturing sustainabilities is not the rejection of sustainability causes, nor is it individualizing (or shaming) behaviour, but rather recognizing a failure of sustainability discourses to lead to individual or shared changes to behaviour.

In discussing sustainable actions, participants commented that they ‘want to but can’t/won’t/don’t’ or that they ‘used to but no longer do’. Unlike fragmented sustainabilities, where participants reflected on being comparatively better than others, in fractured sustainabilities they were noting the responsibilities of others to be doing more – the comparative unimportance of their own actions. This rarely identified the Norwegian government or other domestic actors, but rather signalled to other countries – those with coal powered energy systems, those burning forests, those with big industry.

I believe the miles we drive to Lofoten and drive around up there I believe ... it is clear we leave an imprint, a CO₂ imprint, there is no doubt about it ... we see that there are many other activities that are much, much worse or put a lot much heavier imprint. When we think also globally ... if you think as opposed to coal-fired power plant, burning of forests - all that stuff - then at least we don’t feel guilty really ... China has coal-fired power stations that spew out, right? and the same in England, they still fire with coal, right? And obviously you can have this [Norwegian] oil, but I feel like we should not feel guilty in any case (Marcus)

The final words are very interesting, a relational reading of ‘guilt’ that positions Norway in opposition to other countries and their perceived in/actions, and used to fracture or resist sustainable tourism mobilities. Nevertheless, these reflections of international power generation need to be contextualized through Norway’s ongoing dependence on oil and gas extraction, representing 14% of GDP and state revenue and 41% of total exports in 2021 (Government of Norway, 2021; Lemphers et al., 2022).

These three themes – forming, fragmenting and fracturing – are not discrete, they show the multi-scalar ways that our participants discussed their own mobility practices in relations to those of other individuals or countries. The forming, fragmenting and fracturing distinctions are valuable inasmuch as they show that sustainabilities are not

analytically static/stable but are moving and mobilized by individuals as they seek to make sense of and (sometimes) enact tourism sustainabilities.

(Re)imagining sustainable tourism mobility futures

Having developed our conceptualizations of how our participants enact different forms of tourism sustainabilities and socio-spatially rationalize those actions, we now turn to the types of imaginings we found within our participant's narratives. With the aim of avoiding re-entrenching pre-pandemic practices of 'extractive and ecologically damaging forms of tourism' (Sheller, 2021, p. 4), we question what tourism mobilities are, and who they are for. We do so by drawing from the imaginings of participants' future travel. We also integrate learnings from forming, fragmenting and fracturing sustainabilities into these imagined tourism mobility futures. These three (re)imaginings are not scenarios, nor are they complete; they offer glimpses into tentative, hesitant and partial imaginings, which are spatially, socially and politically situated, and co-constructed through our empirical material. We now present three (re)imaginings, 1. Stripped Back, 2. Having a Go, 3. Stuck in the Mud.

Stripped Back

The first (re)imagining posits that dominant modes of tourism are inconsistent with sustainability and a post-carbon future. Thus, it focuses heavily on localism (e.g. incidental forming sustainabilities) and whole-of-life low consumption. In doing so, it challenges dominant economic logics. Key actors including Greta Thunberg were recognized by participants. The Stripped Back tourism imaginary confronts what tourism is, and who it is for, as well as its connections to leisure, recreation and vacationing/holidaying. It can be framed in terms of (a) materialities, (b) spatialities and (c) practices. Items such as hammocks, tents, bikes feature in this (re)imagined world, with participants suggesting 'Yes . . . bike ride [laughs] yes, with tent. Kind of like that . . . isn't a hammock what you should have now, yes, bike ride with the hammock' (Sofia). This version of tourism sustainabilities is about proximity (i.e. a cyclable distance) and resource-light accommodation provisions. The proximity to home offers a challenge to the traditional tourism imaginaries, as premised on being close to one's main place of residence. For some, this imaginary is akin to the lifestyles made possible through the pandemic-related travel restrictions, with one participant recognizing that Stripped Back would be '*almost like when there was corona closure in March, April*' (Aurora).

Spatial descriptions include 'back to nature' narratives, such a Stripped Back imaginary of tourism sustainabilities lacks diversity and centres on one way of 'doing' tourism and 'being' sustainable. It was described by one participant as reverting to 1950's lifestyles. Food production and consumption appear in these stories of a Stripped Back tourism system, with participants discussing where food would be sourced from, and activities such as fishing – and eating the catch – as part of a sustainabilities which further blur the analytical boundaries between what might be traditionally thought of as 'tourism' and other forms of leisure and recreation.

I actually have a little hard to imagine because it depends a little on what you . . . if we're talking about carbon emissions and pollution and plastic and stuff, then one could easily

think your way back to like a householder's existence where each of us had a cow, a pig and two sheep. But ... there's nothing to suggest that either ... that it ... will be very beneficial, so I simply can't see for myself, lack enough imagination, I think ... because if, for example, one is going to drive less or fly less and so on ... it becomes a society that becomes quite similar, let me say, the society we had in ... 1950, right? (Emma)

Implicit in the Stripped Back imaginary is a rejection of consumption-led lifestyles developed through the stories being told by participants. In an example, provided below, Matilde questions production and consumption, digital connections and trade. From this we can see how globalization might be viewed as part of the challenge to be overcome by stripping back tourism to a more basic form of leisure.

I guess it must be a little more... you maybe grow more things yourself. Much less plastic and metal in the goods, and services you buy ... almost goes back to the agricultural society we had before, what would it be, 50, 100 years ago? Create more local goods and services... maybe a little bit like that exchange culture too, that you exchange some services instead of buying them from the outside. And less travel. And then I also think about how much more is now on digital solutions in relation to communication, and then I think will be sustainable in the future and ... then there is something about export and import of goods as well ... see that we make some change where ... like how many goods we need to buy from abroad and how many should we sell (Matilde)

This form of imaginary is consistent with that which we often see in Utopian/Dystopian visions, and is broadly that which is being pushed against by some quarters, particularly those desiring a business-as-usual (hyper)mobilized future. This could be informed by forming, fragmenting or fracturing sustainability but the localism we see in this imaginary has a materially different configuration which is more systemic in its transformation of not only local tourism/leisure practices, but also considering connected systems of production and consumption. In this way it might connect more closely to degrowth movements. It also connects to pandemic 'back to nature' practices adopted by many through local exploration. Yet this imaginary remains closely tied to questions of environmental harm from tourism; carbon emissions, biodiversity, resource consumption, and linkages to the dominant economic paradigm. There may also be an assumed increase in accessibility of this form of tourism, but Oslo's spatial inequalities made visible by Venter et al. (2023) could challenge this, and reignite questions of social sustainability in imaginaries of tourism sustainabilities.

Having a Go

'Having a Go' is the second imaginary; it centres on selecting the best of the available options in a particular situation or context. In this way, tourism sustainabilities are about a collective of individualized choices made by consumers. It appears to focus on individualized action as the locus of power. This might, for instance, mean selecting the lowest emitting flight available for a particular trip, the least carbon dependent mode to a particular destination, or the most environmental accommodation. These are context dependent decisions, and recognized as contingent and partial sustainabilities, but reflective of doing the best one can. The introduction of carbon calculations on flight websites, for example, allows those purchasing a flight to make decisions not only on the

relative cost but also relative emissions is a constitutive part of this framing. For instance, when asked what an environmentally friendly holiday might look like, Sara said:

It depends on how you look at it. If you have three options, then you choose the most environmentally friendly alternatives or, I don't know, but I think one has to try to take what [has] the least emissions. I think if you go to a resort, then try to use the most environmentally friendly way to get there, and then maybe you don't have to stay in an awesome five star hotel, and if one also tries not to buy so much on vacation . . . one at least tries, one takes a few extra steps to try to make your vacation a little more environmentally friendly.

Incremental steps are part of the imaginary presented through 'Having a Go', centring on individualized behaviour rather than structural reconfigurations. For Philip this relates back to fractured sustainabilities, rationalizing some actions and decisions through trade-offs:

I think that I normally do very little other things that pollute. I don't drive a car normally in the city or anything like that, I walk and cycle and take public transport and I almost always try to choose options other than airplanes and preferably other alternatives to car too, if possible but it is clear there are always trade-offs with what is convenient and what what things cost, but I try to opt out the most polluting alternatives.

This imaginary is then developed around information provision and sufficient knowledge to make decisions around transport modes, accommodation provisions and activities – the breakdown of the various choices that tourists (are thought to) make. Trade-offs may occur within a particular category (e.g. modal shift), or across categories (e.g. flying but then staying in eco-accommodation). As described by Sara, this imaginary is focused on *'tak[ing] a few extra steps then to try to make your vacation a little more environmentally friendly'*. The environmental sustainabilities mentioned here are rarely cost neutral, with a 'green premium' often placed on low-emission modes, lower emission flights often being the more expensive routes, and 'eco-resorts'. This could result in the exclusion of low-income households from such choices – limiting who can 'Have a Go'.

Stuck in the Mud

The 'Stuck in the Mud' imagining reflects a paralysis of uncertainty about 'best' behaviour, and what sustainable (tourism) practices look like. Stuck in the Mud maintains the status quo as there is no change to practices or uptake of alternatives due to confusion around options, trade-offs and intersections of possible future-scapes. This differs from the previous imaginary, Having a Go, inasmuch as it represents data gaps; the participants spoke of more hesitance and uncertainty which was not evident in Having a Go (where trade-offs were thought to be possible).

Anna and Julie both reflect upon uncertainties that lead to inaction; this speaks to different emission scenarios. Rather than framing one transport mode as more or less emitting than another, these two participants reflect on the contingencies of these conditions.

I don't know what pollutes the most. Like, on the plane, maybe 130 people can sit. If there are emissions, I think that 130 cars drive to a holiday so I don't know how much you save the environment when you measure how many people can sit on a plane, whereas when the plane is quite empty, then pollution becomes much bigger and unnecessary (Anna)

I don't know what to say because yes still think that flights are in a way a public transport ... but I'm a little unsure about flights damaging the environment more than, let's say, a car for the same distance? if there are 150 people sitting on planes flying from Oslo to Croatia or there are 70 cars driving this stretch. I don't know if it might have the same effect on the environment? (Julie)

Christian shows the connections between these different imaginaries when he reflects that *'I don't think it's that very simple, like just like you can quit, don't travel that much, and it'll be so much better. I don't think it's very simple because it's a complex matter'*. The assumption embedded within this quote might be that of a Stripped Back tourism system, one which requires (much) less travel and (much) different forms of tourism. For this participant, such an imaginary is overlooking the complexity of the system, of the rationales for participating in tourism. This might reflect the different ways that household members think about tourism, where some family members may want one type of holiday and others want the complete opposite. It might also reflect societal pressures for participating in particular forms of tourism. Thus, complexity is not only within the decisions being made and about an availability of suitable data on which to make the decisions, but also within the broader social and material context of contemporary life for our participants.

It was within the Stuck in the Mud imaginary that possible 'sustainable' innovation and technological solutions emerged and allow practices to remain unaltered, albeit coined with some uncertainty about the possibility of technologies to alleviate the environmental harms of the contemporary system. This was discussed in relation to material sciences and energy efficiency, *'Then you have this thing with the planes getting lighter and the planes will require less energy to fly ... this is incredibly complicated, so you don't know'* (Christian). This imaginary of tourism sustainabilities then centres on uncertainties, and hopefulness for sustainable innovations.

Conclusions: towards tourism sustainabilities

Tourism is often imagined as extra-ordinary inasmuch as it goes beyond daily life, and daily emissions, pollutants and consumption. Such a position works to distance tourism both figuratively and spatially from sustainability actions, policies and regulations. Repositioning tourism as closer-to-home (not only materially), tourism sustainabilities are possible through tourist practices as close to daily life as possible: through proximity to home, home-like practices (i.e. cooking, cleaning). Rather than excluding non-commute journeys as discretionary and optional, we reposition tourism, leisure and recreation in relation to transport-related carbon emissions. We suggest that particular forms of leisure travel might reinforce car-dependence and ownership (e.g. for domestic and Nordic tourism, rationalized through EV ownership). This has substantial implications as, for instance, Remme et al. (2022) has shown how, in Norway (and arguably elsewhere), the promotion of electric automobility ('Improve') is delaying actions to 'Avoid' travel or 'Shift' to public or active transport modes, and could be extending automobility through behavioural rebounds (Klößner et al., 2013) or reducing engagement with other pro-environment actions (Nayum & Thøgersen, 2022).

We present three (re)imaginings not as 'scenarios' but as contingent and relational possible futures of tourism sustainabilities. They should be viewed in relation

to one another, where for instance the first – ‘Stripped Back’, in its rejection of dominant political economic structures, could contribute to ‘Having a Go’ as practices within the current system, and ‘Stuck in the Mud’ as reproducing the status quo. Nevertheless, the relations are not linear or one-directional but iterative and/or circular. The same emerged for the participant’s enactments of tourism sustainabilities, where forming, fragmenting and fracturing sustainabilities exist in relation to one another. We are therefore seeking to show the ways that tourism sustainabilities (temporarily) manifest in specific quotidian sociomaterial and spatio-temporal contexts (Edensor, 2007). Given the specific geographical contexts of our empirical material, the research presented is Euro-centric in its orientation, and our findings are conditioned by the particular historical, social, cultural, economic and political norms, practices and mobile lives.

Framings of sustainability presented here firmly lock into environmental concerns and carbon footprints, but there are social sustainabilities implicit in these too. Methodologically, we found the participants offered little reflection on social (e.g. overtourism) and economic (e.g. covid recovery) sustainability dimensions. Yet from our analysis we can see these coming through, for example in the gentrification of cabin tourism mobilities. While not as exclusive as some forms of second home ownership and/or use, changes to cabin construction and ownership are increasingly restricted to selected sections of the Norwegian population. Exclusivity is also enacted through access, with new migrants not always having the economic or cultural capital to access a cabin, and therefore the ability to enact this form of accidental sustainability is not shared across the Norwegian population. With an immigrant population of nearly 820,000 in 2022 (Statistisk sentralbyrå, 2022a) in a population of nearly 5.5million (Statistisk sentralbyrå, 2022c), sustainability claims about cabin use may be called to question as it has the potential to become an increasingly inaccessible form of tourism. Similarly, Venter et al. (2023) show the spatial inequalities that already exist in Oslo around access to green and blue spaces; assumptions around proximity and access to these spaces need further interrogation. Thus, while explicit consideration of sustainabilities might centre on environmental dimensions, tourism sustainabilities offers the analytical space to engage with the social, cultural, economic, political dimensions too. This will only become more important in a climate constrained world, to avoid re-entrenching inequalities and injustices into sustainable (tourism) mobilities.

Our argument in this paper is therefore that while the idea of sustainable mobility is attractive, it has become synonymous with a limited set of ideas and actions (Davidson, 2021). Mobilising a more fluid conceptualization through, for example, tourism sustainabilities, may help to represent the diversity of possible sustainable mobility futures, which dismantle the ordering and bordering of components of mobile lives. This paper shows that tourism sustainabilities can be formed through various (in)voluntary acts. This, in turn, opens the possibility of thinking of a wider range of policy actions to make tourism sustainabilities happen. Also, with people making sense of their tourism sustainabilities through fragmentation it could be helpful to portray tourism sustainabilities in relative rather than absolute terms. This fluid conceptualization has, in turn, the potential to encourage ‘having a go’ scenarios to move away from the status quo, possibly serving as introduction to more substantive changes to mobile lives in the climate crisis, and post-fossil tourism mobilities.

Note

1. This participant lived partly abroad in the year preceding the pandemic.

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