

**The Dys-appearing Fat Body: Bodily Intensities and Fatphobic  
Sociomaterialities when Flying Whilst Fat**

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## **Abstract**

This paper offers an exploration of the embodied experiences of flying whilst fat, based on research with a significantly larger group of people than any previous research on this topic (795 surveys and twenty-eight interviews with fat people largely, though not exclusively, from the USA). Theoretically, this paper advances geographical understandings of fat embodiment and the embodied experience of transport spaces which attend to micropolitical encounters and comfort (Bissell, 2016; 2008). In doing so, we develop an approach to understanding the hyperpresence of the fat body within plane space, drawing together Leder's (1990) work on embodied "dys-appearance" with Ahmed's work on bodily intensities (2004) and queer phenomenology (2006). The paper explores how material and social aspects of plane space combine to make fat bodies hyperpresent in ways that, for some, limit self-advocacy. We set this in broader political and economic contexts which frame fatness as mutable and which govern access to air travel in ways that are exclusionary for many fat people.

**Keywords:** *airtravel, embodiment, fat, flying, mobilities*

## Introduction

“Ever get the situation where you're in the middle and there are two sort of large people on either side of you? It is not the most pleasant flying experience” (Senator Schumer speech in U.S. Senate, 2018).

“So, I love to fly, I really love flying but it is stressful because of the size of my body. ... my only stress in relation to flying comes from interactions with other people. It's like hyper-awareness of my body at all times. And other people don't have to think about it, they don't have to think about their space and how much or how little they are taking up. It's just easy for them! And I am always trying not to burden someone else with my body, with the amount of space that I take up” (interview with Marie W).

“I mean every other aspect of my life I don't let the size of my body stop me at all. .... I wear a bikini whenever I go swimming. I wear totally tight clothes. I get harassed on the street for wearing the clothes I do or having pink hair. I'm fine, I can comeback with something immediately or I can be like 'what an asshole' and move on. .... why is the airplane my nemesis? It's like my kryptonite. It's like, why is that space not the same as any other space being harassed in or dealing with that kind of bigotry? I mean it's obviously because of the experiences I've had just being comically horrible and being trapped I think is a big part of it. There is nowhere to go it's hard for me to imagine feeling safe and empowered when I am surrounded by this kind of nastiness” (interview with Sandra L).

In April 2016, Steve Cohen, a U.S. Democratic congressman, along with Senator Chuck Schumer, unsuccessfully attempted to introduce an amendment to the Federal Aviation

Administration funding bill to mandate a minimum seat pitch (leg room) on commercial airplanes. Arguments to support this amendment noted that whilst body size of the average American has increased, there has been a concomitant decrease in the size of airplane seating. This fact was not news to the many fat people<sup>i</sup> who travel in significant discomfort. Rather than this attempted legislative change facilitating travel for fat passengers, as the quote above illustrates, the legislation was framed as an intervention to ensure comfort for non-fat passengers who have to share space with “large people”. Contrast this with the second quote, from an interview from the research this paper is based on. Marie’s experience is echoed in other interviewees’ stories, revealing the inaccessibility of the plane to be about social as well as physical space, and the embodied hyperawareness and careful navigation required by those whose bodies don’t easily fit.

Schumer’s comments echo a trend in media reporting on the experiences of people sharing space with fat passengers, including high profile cases in which airlines have been sued by thin passengers (Guardian, 2018), and debate about whether to charge fat people, akin to excess baggage (BBC, 2016). In such reporting, fat people’s voices and experiences are absent. Where fat people have spoken out about the inaccessibility of, and fatphobic abuse during, air travel this is often met with abuse and vitriol online. In academic research, whilst there has been a lot of work on obesity which positions fat people as diseased, there remains a paucity of research on the lived experience of fat embodiment. In health and medical geography research often works with problematic measures such as the BMI (Evans and Colls, 2009) and similarly problematic classifications of environments as obesogenic (Colls and Evans, 2014). As Anna Kirkland explains, “Despite all the attention, the voices of fat people themselves are rarely heard. Fat men and women are presumed to be in pursuit of weight loss and literally hoping to disappear as fat people” (2008, 399).

In this paper, we adopt a different approach, responding to Kirkland's (2008, 399) question: "What if scholars reimagined [fat people] as citizens with claims to justice based on their status as fat? How would they make arguments for rights?" Following from disability studies and activism based on the principle "nothing about us without us", this research centers fat people's experiences drawn from surveys and interviews conducted with people who identify as fat, and is co-produced with a fat activist (Stacy Bias). In contrast to dominant debate then, this paper provides much needed exploration of the experience of commercial air travel from the perspective of fat passengers. In particular, we focus on what Marie in the quote above describes as *hyperawareness* of her body, offering a new perspective on recent debates in geography on pain (Bissell 2009a, 2010) and comfort (Bissell, 2008) along with radical geographical work on fat (see Colls and Evans 2014), and recent work in mobility studies which attends to the microgeographies, sociomaterialities and micropolitical encounters within transport spaces (Bissell, 2007, 2009b, 2016; Burrell, 2011). In particular, we suggest, following Bissell (2016), that recognition of the entanglement of macropolitical and micropolitical encounters within transport spaces is vital for understanding the lived experiences of flying while fat. Indeed, this research contributes to and intervenes in wider critical geographical scholarship concerned with understanding the intersection of embodied differences with issues pertaining to social justice, rights and activism. The value and importance of fatness has yet to be realized within this body of work, in particularly its intersection with the politicisation of related issues such as disability, gender, ethnicity and sexuality.

Previous research has used a range of more-than-representational approaches to think about the intensities of embodied and emotional experiences in mobile spaces (Bissell, 2007, 2009b, 2016, Wilson, 2011). We extend this by demonstrating that Leder's (1990) work on dys-appearance, in conjunction with Ahmed's work on queer phenomenology (2006) and on

bodily intensities (2004), offers unique opportunities to consider, as Sandra L illustrates in the quote above, the specificities of the spaces of commercial air travel and the ways in which self-advocacy and fat activism may be difficult in these spaces. Here, we build on work by Samantha Murray (2005a, 2005b, 2008) on the limitations of fat activism that focuses on internal feelings of fat pride. As Murray (2005, 271) argues, these movements are premised on a model of subjectivity that is “founded on a humanist principle, whereby one’s identity is located in one’s mind, and that through the act of changing one’s mind, it is then possible to change the way one’s body is received”. As such, fat pride cannot always be operationalized when the fat body constantly encounters fatphobic material and social environments.

This paper is divided into three sections. First, we provide an overview of literatures in geography and cognate disciplines on fat geographies, aeromobilities (including extant research on fat bodies and flying) and consider the usefulness of the concepts of dys-appearance (Leder, 1990) and bodily intensities (Ahmed, 2004). Following an overview of the research process and the methods used, we then discuss the socio-material and political-economic contexts of flying while fat and explore how these experiences limit fat activism on planes.

## **Fat Geographies and embodied (aero)mobilities**

### ***Fat Geographies***

In her landmark 2005 paper, Robyn Longhurst (2005, 254) calls for research that attends to the social and cultural construction of fatness as abject in order to create “political space for the subjectivity of [fat] people”. Longhurst suggests attention to the microgeographies of everyday spaces (including transport spaces), and the ways in which the design of these spaces cause discomfort and pain to fat people, would allow geographers to “develop a proxemics of fat bodies and spaces” (254). Since publication of Longhurst’s article, there has

been growth in geographical work that considers critically the politics of fatness (Colls, 2007; Evans and Colls, 2009; Evans, 2010; Guthman, 2012; Colls and Evans, 2014) and which aims to center the voices and experiences of fat people (Colls, 2004, 2006, 2012; Longhurst 2010, 2012; Hopkins, 2012). However, there remains little consideration within geographical research of the experiences of fat passengers in air travel, or other forms of transport.

Two of the few geographical explorations of fat people's experiences of transport spaces include Longhurst's (2010) work involving interviews with 12 women, and Hopkins' (2012) research involving interviews with 18 young people. In neither of these studies is air travel the core focus, but in both, interviewees mention feeling excluded and hyperawareness of their bodies within plane spaces.

More broadly, critical geographical scholarship on fat embodiment has begun to document the lived experience of fatness in a range of social and institutional spaces (Colls, 2004, 2006, 2012; Longhurst, 2010, 2012; Hopkins, 2012; McPhail et al., 2016), demonstrating how fat people's wellbeing is impacted by everyday injustices that result from living in fatphobic societies (Colls and Evans, 2014). For example, McPhail et al.'s (2016) research on fat women's experiences of reproductive care in Canada shows that some doctors act in soft eugenic ways, refusing to remove intrauterine devices from fat women to prevent fat reproduction (see also Colls, 2004, 2006 on clothes shopping; and Colls 2012 on club nights for big beautiful women). There remains significant need for geographical research on the lived experiences of fatness; and this article is a response to this imperative.

### ***Embodied Geographies of (Aero)mobilities***

In 2007, Adey, Budd and Hubbard (2007; see also Adey, 2008) called for more social and cultural geographies of *aeromobility*, defined as an exploration of the "dominance of flying as a normal international mode of travelling" (774). They called for research that considers

airspace not as “some asocial realm or ‘non-place’, but a space whose embodied, emotional and practiced geographies remain to be adequately charted” (774). Whilst there is little extant work on fat experiences within geographical research on aeromobilities, there has been some limited research in interdisciplinary literature. What exists within Transport Management and Transport Studies adopts problematic approaches to fat rights (for example, Bhatta, 2012, argues for policies that require passengers to pay according to weight), or works within a model that prioritizes profit (Patel and D’Cruz, 2018). In *Tourist, and Fat Studies*, there is work that explores the discourse surrounding fat airline passengers. Joyce Huff’s (2009) analysis of a move by Southwest Airlines to charge fat passengers higher fares, situates conflicts over airplane seat size at the intersection of political economies in which space is commoditized, social and cultural beliefs that fatness is mutable, and neo-liberal ideologies of good citizenship. Small and Harris’s (2012) analysis of online discussion forums and policies related to seat size and “obese” passengers highlights points of difficulty for fat passengers (seats size, asking for seatbelt extenders, cost of having to buy two seats), and makes evident the animosity towards fat people on planes in online discussions by “non-obese” travelers. This research opens up understandings of the discursive production of fat bodies in relation to flying. However, it is limited by the absence of engagement with fat people.

Research which does have some engagement with fat people includes Poria and Beal’s (2017) exploration of “obese people’s” experience of air travel through interviews with twenty-four people (sixteen “obese” and eight “morbidly obese” using BMI classifications),<sup>ii</sup> and Dark’s (2018) work on audience reactions to her performance piece “Things I Learned from Fat People on the Plane”. Although narrow in terms of sample size, these papers are useful because they highlight similar aspects of plane travel that are exclusionary for fat people: the physical design of the plane and negative interactions with other passengers. Whilst Dark’s work is rooted in fat activism and offers an important perspective, it is, however, removed



from direct engagement with the space of the plane itself. Poria and Beal's (2017) research has a relatively small sample size (twenty-four), with the majority of those participants (16) at the lower end of body size considered to be "obese". Moreover, the use of BMI to identify people as "obese" or "morbidly obese" also makes this research problematic. BMI is fundamentally flawed if you are trying to ascertain body fatness (Evans and Colls, 2009). The impact of this is clear in Poria and Beal's research. Included in their small sample are participants who are classified as obese but who don't face the material constraints of the plane (they are short, so have high BMI without being too big for the seats), and others who do not face fatphobia (their high BMI is a result of muscle mass and are seen to be tall and strong). There is therefore considerable need for further research that considers a wider range of experiences of flying whilst fat.

Given this paucity of research on flying whilst fat, broader geographical work on aeromobilities provides important context for this paper: First, this work has demonstrated that "the air transport industry provides one of the most highly visible articulations of power" (Adey, Budd and Hubbard 2007, 780). For example, Darcy (2012) shows that for disabled passengers, discrimination often occurs at all stages of the travel experience (pre-travel planning, boarding and disembarking, seat allocation, on-board personal care, equipment handling and customer service) (see also Imrie, 2000). Secondly, research has made important advances in understanding "the 'little', or the 'small', unanticipated and unintended emotions, affects, senses, urges and nuances of life in-the-air" (Adey and Lin, 2014, 61; see also Budd, 2011; Lin, 2015). This includes work that demonstrates that commercial air travel has become "an increasingly grueling experience" (Budd and Hubbard, 2010, 14), involving frequent "humiliation and indignity" (Adey, Budd and Hubbard 2007, 780), even for those bodies who fit the imagined ideal passenger: "rich, young, White, nondisabled, heterosexual, slim and 'attractive'" (Darcy, 2012, 93). Moreover, Budd's (2011) historical work illustrates

that as early as the 1930s, airlines' promises about comfort "did not necessarily reflect the reality" (1013).

Broader work in geography and mobility studies is also useful. For example, Walters (2015) calls for migration studies to pay more attention to "viapolitics" – the ways in which vehicles, such as migrant ships, are sites of power and contestation. At a smaller scale, Wilson (2011, 635) suggests that the "extraordinary intimacy with others and intense materiality" during bus travel, results in increased awareness of one's body and its relation to others and the materialities of the space (see also Jensen, 2006). For the purpose of this article, Bissell's (2008) work on comfort and pain is particularly helpful for understanding people's embodied experiences of transport spaces, specifically that comfort is produced through the interaction of bodies and spaces. Whilst fatness isn't mentioned specifically in this work Bissell's (2016) research on micropolitical encounters during train commuting does demonstrate that inequalities surrounding class, gender, race, age, disability, and other markers of bodily difference are important in understanding who is enabled and who is constrained in different modes of transport. Specifically, he argues that the micropolitical "barely perceived transitions in power that occur in and through situated encounters" (397) point to a more complex, changing form of embodied politics that has the capacity to transform "relations of enablement and constraint" (397). These micropolitical encounters and transformations are intertwined with the micropolitics of mobility. Thus, attention to the micropolitics of air travel is vital in not only documenting the lived and embodied experiences of flying while fat, but also in understanding how to advocate for the rights of a range of bodies whose "capacities to do and sense things" (397) are transformed through encounters within the plane at a range of scales.

One of the key factors that affects comfort during air travel is seat size and spacing (Gustafson, 2014). Budd et al. (2011) explain that it was the introduction of 163-seat Boeing

707s in 1960 that saw a reduction in the amount of space afforded each passenger (in economy, a reduction to 34 inches of leg room). They also note that health concerns were raised about this at the time. This is significantly more space than the 28 inches seat pitch some airlines have today (Guardian, 2017). There is an important political economy to the question of seat size whereby comfort is offset against the profitability of the space. Most airlines offer seats with more legroom at additional costs, along with multiple “classes” of seating marked by a difference in seat size and space. As such, Bissell (2008) suggests that in transport spaces the historic designation of status on the basis of comfort is still evident (see also Budd and Hubbard, 2010). One result of this is animosity between air passengers concerning ownership and occupation of the limited space available. Kathy Burrell’s (2011) research on Polish migrants’ experiences of flights to/from the UK shows that whilst there is some anger directed at airlines for poor conditions, “much of the negativity associated with these low cost flights has been linked to fellow passengers” (1028). This echoes Huff’s (2009, 183) discussion of the stigmatization of fat passengers as a means to deflect complaint away from the airline. The un/comfortable embodied experiences of air travel are then embedded in, and productive of, broader economic and social power relations which mean that some bodies fit more easily into air travel spaces.

### ***The dys-appearing body: bodily intensities***

Having provided an overview of extant work on flying while fat and relevant broader work on (aero)mobile and fat geographies, we turn now to the theoretical framework that we suggest is useful for understanding the hyper-awareness of the body that is evident in the quote from Marie that opens this paper. In “The Absent Body”, Drew Leder (1990) uses the term dys-appearance to describe the way in which “the body appears as thematic focus, but precisely as in a dys state – dys from the Greek prefix signifying 'bad', 'hard', or 'ill’” (84). Central to Leder’s argument is the assertion that the body seems to disappear when

functioning unproblematically but seizes our attention at times of dysfunction. Thus, he suggests that the times when we are most aware of our bodies are the times when the body is in a “dys” state.

Importantly for our discussion, Leder asserts that dys-appearance is not only physical/material, but also social, and that these are inextricable. Social dys-appearance, Leder explains, stems from experiencing the body as an object, often through the eyes of others. Leder also suggests that bodies may dys-appear based on appearance, in conditions which are “defined as diseases primarily because they are disfiguring or embarrassing, offending our sense of the proper body” (Leder, 1990, 82). As fat studies scholars have argued, the classification of bodies as ill or diseased on the basis of their size, fits this description.

In disability studies, Paterson and Hughes (1999) suggest that Leder’s recognition of the importance of the social and political to our embodied experiences is particularly useful. Dys-appearance is not an intracorporeal experience, but is intercorporeal, occurring through interactions between body, environment, institutions, and social relations (Edwards and Imrie, 2003). This is also deeply political, since “The impaired body ‘dys-appears’ as a consequence of the profound oppressions of everyday life. It is stunned into its own recognition by its presence-as-alien-being-in-the-world” (Patterson and Hughes, 1999, 603). As such, they argue that Leder allows us to see the ways in which “pain re-arranges our lived space and time, our relations with others and ourselves” (603), providing a means to address criticisms that the social model of disability fails to politicize pain. Instead, Paterson and Hughes (1999) suggest that Leder allows pain to be seen as “more than a carnal sensation,” because “the disabling and disabling sociospatial environment produces a vivid, but unwanted consciousness of one’s impaired body” (603).

There has been little engagement with Leder's (1990) work in geography. Geographers who have done so have shown dys-appearance provides "a useful template for a phenomenologically informed investigation of the somatic senses" (Paterson, 2009, 770). Three particular elements of embodiment have been approached in geography using Leder. First, Leder has allowed exploration of the ways in which the body is central to experiences of particular spaces and environments (see Middleton, 2010 on walking; and Perez, 2015 on cave exploration). Secondly, geographers have used Leder to understand pain (see Philo, 2005; 2017, on "wounds" and empathetic relations to pain; Bartos, 2017 on bodily dys-appearance due to excruciating stomach pains after eating meat; and Robinson, 2018 on experiences of pain associated with breastfeeding). Thirdly, Leder has been used in geographical work on disability (see Imrie, 2006 on bodily dys-appearance in the context of inaccessible housing design; and Gaete-Reyes, 2015, on women wheelchair users' bodily experiences navigating the city). A particularly thorough exploration of this is Lucherini's (2015) exploration of the experiences of people with diabetes, drawing attention to the ways in which the chronically ill body demands constant awareness.

Leder's work has not been without its critiques. Chris Shilling (2012) suggests that "Leder's analysis assumes there exists a harmonious fit between people's bodily habitus and the social fields they inhabit" (219), and that Leder's work doesn't take account of how "structures sometimes shape our physical dispositions" (245). Shilling's critique, however, seems to overlook Leder's discussion of social dys-appearance and, in response to Shilling, Gimlin (2006) suggests that in conversation with work on the body as a project, Leder's work remains useful for understanding "the body's emergence at times of suffering" (203).

Ahmed (2004) offers an amendment to Leder's work, critiquing use of the terms "absent" and "present" which imply "bodies *can* simply appear or disappear". Instead, she points to "the economic nature of intensification" (26) suggesting that "one is more or less aware of bodily

surfaces depending on the range and intensities of bodily experiences” (26). Bissell (2008), in work on comfort, similarly considers “bodily intensity”, and this refiguring of dys-appearance by Ahmed better allows for recognition that comfort and discomfort are produced through relations with objects, spaces and other bodies. As Ahmed suggests, whilst “to be comfortable is to be so at ease with one’s environment that it is hard to distinguish where one’s body ends and the world begins” (148), this experience is heterogeneous and what fits one body may cause discomfort for another.

Ahmed expands on this in *Queer Phenomenology* (2006), developing an understanding of “orientation” which allows us to consider the ways in which bodies, objects and spaces act together to allow some bodies to be extended, to fit, to be comfortable, whilst for others, inhabiting those spaces requires “painstaking labor” (61). Importantly, Ahmed explains that “objects, as well as spaces, are made for some kinds of bodies more than others. ... In this way, bodies and their objects tend toward each other; they are orientated toward each other, and are shaped by this orientation” (51). Ahmed’s work, therefore provides an important extension of Leder’s work, recognizing that the orientation of spaces and objects to fit some bodies and not others, is political as well as social. This is vital for considering fat people’s experiences in the face of pervasive discursive, structural and material manifestations of fatphobia (see Murray, 2005a, 2005b).

## **Methodology**

This paper uses data from 795 online survey responses and 28 in-depth interviews with people recruited via the online flying whilst fat community on facebook (over 13,000 members) and other online fat activist sites. The surveys consisted of twenty-seven questions, twenty-four of which were open questions.<sup>iii</sup> Surveys offered the opportunity to get a broad range of perspectives, and open, free text questions allowed for responses that, given the lack

of previous research, we could not anticipate. Response rate to the survey was overwhelming. The 795 responses were reached in the space of a week. Interviews were carried out by Stacy Bias via phone, Skype, or email. Informed consent was gained from all participants and pseudonyms are used in this paper to keep responses confidential.

This research is a form of collaborative feminist and scholar-activist research. Alongside academic papers, one output from this project has been an animated video of participants' accounts of flying while fat (available here:

<https://www.youtube.com/watch?v=Eoiml0Co50Y>). Our approach recognizes that Fat

Activism has a much longer history than academic Fat Studies and even within fat studies, critical weight studies or critical obesity studies, researchers who are fat themselves are often marginalized (Stoll and Thune, 2019). Whilst all three of the authors of this paper have faced institutional fatphobia, and have been involved in fat activism, Bethan Evans and Rachel Colls are relatively privileged in that, like some participants in Poria and Beal's (2017) research, they do not face exclusion due to the physical or social environment of the plane. As a long-standing Fat Activist and organizing member of the primary online community of study, Stacy Bias was uniquely positioned to access research communities, design research that is informed by radical fat politics that allows for participants to be respected and listened to, and to undertake research from a position of shared experience (whilst acknowledging the heterogeneity of embodied experiences). Whilst there always remain power differentials in research that privilege those of us in positions of relative security within the academy, this collaborative approach attempts to ensure that this research is research *with* rather than *on* fat people.

Not only is our sample size much bigger, but participants in this research had a much broader range of body size than any previous research on flying while fat. As outlined above, BMI is a problematic way of classifying bodies in relation to flying and whether people fit within the

seat and/or face fatphobia is a better indication. Of the survey participants who answered the question (n=527), 67 percent (n=353) consider being unable to fit in the seat as a concern or a major concern, and 75 percent (n=397) considered negative interactions with other passengers as a concern or major concern. Our sample then includes far more bigger people than in previous research and has much greater potential to explore the experiences of those who are in a wider range of body sizes and compositions. As with all research there are also, however, limitations to our sample. The demographic characteristics of the survey respondents reflect, in part, the demographics of the flying whilst fat online community. The survey was only available in English, and the majority of respondents were American. Fat Activism, has its roots in 1970s lesbian feminism, and so the movement itself is highly gendered and highly queer: only 6.2 percent of survey participants identify as male and 53 percent as heterosexual. Twenty percent of the survey respondents identified as disabled (compared to 8.6 percent of the U.S. population, U.S. Census Bureau, 2019) and 82 percent as white (compared to 76.5 percent of the U.S. population, *ibid*, 2019). Intersections of race, gender, sexuality and fatness matter in relation to flying while fat and so the over-representation of white people in the sample means that some of these intersecting forms of oppression which we discuss later, will likely be more prevalent than what is indicated in our data.

### **Bodily Intensities and Flying While Fat**

[INSERT FIGURE 1 HERE]

As Figure 1 shows, the factors which most people consider a major concern include aspects of the material (being assigned a middle seat, being unable to fit in a seat or use tray table), social (negative interactions with other passengers or airline staff) and economic (cost to sit



comfortably and being asked to buy a second ticket) aspects of plane space. In the remainder of this paper we explore these overlapping aspects of bodily intensities/dys-appearance, first the ways in which social and material elements of the space of the plane combine to enable the comfort of some bodies and heighten the discomfort of others; second how micro-geographies within the plane reveal broader political and economic contexts and what this means for the potential for fat activism on the plane.

### ***Sociomaterialities: pain and discomfort***

Bissell (2016) argues for a consideration of the politics of mobilities that attends to the micropolitical encounters *in situ* in transport spaces which may enhance or diminish a body's capacity to act. To do this, our data suggests, requires attention to the ways in which the material design of the plane and the social relations on the plane combine in ways that make some more comfortable than others:

“I am very sensitive to the feelings of people around me and it can be really toxic to sit next to somebody who literally hates you for no reason except for the shape of your body. It's just a horrible feeling to be on a long flight where I am already uncomfortable because I am trying to squeeze into the tiny space and make myself small and then to have this person right in my space who, you know. I mean that's what happened on this flight. I was right next to this guy who was constantly sighing and pushing me. I did finally say something to him like 'look we're both uncomfortable, this is where we are at and I'm sorry' and he kind of calmed down after that. But I just don't want to have to deal with that. I just hate living in a world where I don't fit into it sometimes. There is no space for me” (Sandra L).

As Sandra L explains, it is *both* the limitations of the “tiny space” afforded each person on the plane, *and* hostility from neighboring passengers that results in physical and emotional

discomfort. As Figure 1 shows, Sandra L is not alone here: 75.3 percent of respondents who answered that question (n=527) said that negative interactions with fellow passengers in relation to their body was a concern or major concern. Such discomfort, Ahmed (2004) explains, “is crucial to the forming of the body as both a material and lived entity” (24). Both Bissell (2008) and Ahmed (2004) use the example of a chair: Bissell (2008) suggests that the chair is the “nexus of an assemblage comprising body and proximate environment” (1699). The seat on a plane needs to be considered in this way, not just as a physical object but comprised of the proximate social environment too. Sandra L’s discomfort results from making herself small to fit the restrictive material space *and* dealing with a hostile social space, which is in part a result of the limited physical space afforded each passenger and which at the same time exacerbates the physical limitations. As outlined earlier, Leder (1990, 82) acknowledges that dys-appearance may not always (or only) involve physical pain, but may be a result of the way our outer appearance is encountered (see also Gimlin, 2006): “in such cases our body takes on an alien presence insofar as it is an object of pity or disgust. Its appearance no longer expresses one’s own wishes and personality but the hegemony of an occupying force”.

This hostility doesn’t just happen once in the seat, the wider social environment on the plane is hostile to fat passengers. As Tiffany and Christine explain:

“There is a moment that every fat person experiences when they get on a plane and start down the aisle. That is the moment when the other passengers look at you and get The Expression. The Expression is the one where you can tell that they are hoping and praying that you are NOT sitting in their row” (Tiffany).

“The entire time I am walking down the aisle, I am thinking about the people looking at me and praying that I am not sitting with them” (Christine).

In discussing mobilities in the contemporary city, drawing on Goffman and Simmel, Jensen (2006) uses the concept of “facework” to discuss the ways in which passengers signal to others where they are welcome or unwelcome to sit (see also Wilson, 2011 on bus travel). Jensen (2006) proposes that this wouldn’t happen when one has a reserved seat, but this facework is clear in the encounters described by Tiffany and Christine on a plane where seats are allocated. Perhaps the reason for this is that on a plane, unlike a bus or train, bodies are not able to negotiate, jostle and make space for other bodies (Wilson, 2011). As Burrell (2011) suggests, the close embodied proximity during air travel pushes people to seek alternative ways to emotionally and socially distance themselves. For many (though not all) fat passengers, shame is one result of this process:

“I think in that moment it becomes shame. I really do and I don’t want to feel that way. I feel like I feel bad for taking up extra room or for needing extra space and I don’t think that’s right, I don’t think I should have to feel that way . . . you know like when I am looking at myself I don’t feel that way . . . maybe the incidents are making me internalize whatever they are saying or however they are acting towards me” (Marie).

Ahmed (2004, 105) explains that “the individuation of shame – the way it turns the self against and towards the self – can be linked precisely to the inter-corporeality and sociality of shame experiences. The “apartness” of the subject is intensified in the return of the gaze; apartness is felt in the moment of exposure to others, an exposure that is wounding”. As Marie and Tiffany (above) explain, it is the expression, the gaze, along with the sighing and pushing that Sandra L (quoted earlier) mentions, by other passengers that intensifies the feelings of otherness and “apartness” and makes evident the hostility towards fat people. This is further exacerbated when remembering previous hostile encounters when flying:

“I’m the most stressed about like re-living that bad experience that happened on my last flight. Somehow being publicly shamed and not having the wherewithal to stand up for myself or change the situation to be able to educate that person that is harassing me [pause]. That somehow I would be paralyzed or return back to that, you know like how anxiety kind of works. You can get triggered. I mean there is definitely a little PTSD at play when I imagine being back on plane that is the first thing - is being publicly shamed and harassed. Having to sit by somebody who is being passive aggressive about the space I am taking up” (Sandra L).

Ahmed (2004, 25) argues that the “surfacing of bodies” is “tied to a past history of readings, in the sense that the process of *recognition* (of this feeling, or that feeling) is bound up with what we *already know*. For example, the sensation of pain is deeply affected by memories: one can feel pain when reminded of past trauma by an encounter with another”. As Sandra L explains, past experiences have the potential to make the body dys-appear in similar spaces, even if hostility isn’t immediately present, through triggering memories of past pain and hostility from other passengers.

However, it is important to acknowledge that not everyone internalizes shame or feels discomfort equally. As Tiffany and Sandra K explain, whilst they are aware of shame inherent in other people’s reactions to their bodies, they resist the internalization of this shame:

“I know that some fat people are also embarrassed to have to ask for a seat belt extender, but I am well past that embarrassment and just boldly do so without caring what anyone around me thinks about it. ... I would rather be comfortable than care about two seconds’ worth of people being in my business” (Tiffany).

“When I am travelling I’m very aware of my size ... so here's where the attitude part comes in. Because I am aware of my size I’m not ashamed of it but I am aware of its impact on others and I want to do what I can to minimize the impact on others for both our sake” (Sandra K).

As Sandra K explains, it is possible to reject this shame, whilst still feeling a heightened awareness of her body. Whilst Tiffany is not ashamed to ask for what she needs to make herself comfortable, elsewhere in her interview she similarly acknowledges that the plane is a space that makes this difficult:

“I used to experience a lot more body shame than I do now. I have finally reached the point in my life where I understand that I am who I am, and that I have nothing to be ashamed of. Of course, air travel does test that new comfort level, it tests my comfort level more than just about anything else I do” (Tiffany).

The variation in these accounts demonstrate that an approach to understanding inequity in air travel based purely on a macropolitical reading is, although important, limited. Indeed, it is vital, to pay attention to those micropolitical encounters that might enhance or diminish a person’s capacity to act (Bissell, 2016).

Many respondents discussed actively trying to ensure their fellow passengers are as comfortable as possible, often in detriment to their own comfort:

“Black and blue marks almost for certain and, let’s see, the last time I flew my knees hurt extra for a couple of days. My back will hurt usually afterwards and it’s always worse if I have been doing contortions to try to keep away from a person sitting next to me” (Ruth W.)

In Lin's (2015, 296) discussion of the affective atmospheres generated in Singapore Airline cabins, he highlights the ways in which employees and customers are enlisted in the production of an "atmosphere of comfortable journeying". As the quotes above illustrate, this work is not only affective, but also physical. As Ahmed (2004, 149) suggests, "the availability of comfort for some bodies may depend on the labor of others and, the burden of concealment. Comfort may operate as a form of "feeling fetishism": some bodies can "have" comfort, only as an effect of the work of others, where the work itself is concealed from view". Here, Ahmed is discussing heteronormativity and display. Whilst this is a different context, it is evident that fat passengers' embodied labor is required to ensure comfort for others. As Bissell (2008) explains, comfort takes work. We suggest that this work is not only (or necessarily) to achieve comfort for the self, but also for others – in fact the comfort of others may require discomfort to the self (as Ruth W says, her pain is worse if she is trying to keep away from her neighbor). Even when it is possible to get an aisle or window seat to minimize the number of passengers in direct proximity to themselves, many respondents feel hyperawareness of their body:

"I generally buy or select aisle seats so that I can stick at least one leg out from my hips because that helps with the pain. Even then I'm always hyperaware. I always feel like my leg sticks out but then I'm hyperaware of my shoulder being in the way of people going down the aisle" (Kendra).

Bissell (2008) suggests that attempts to achieve some comfort when seated on a plane or train requires "a choreography of gestures where a changing bodily position redistributes pressure" (1707). For fat airline passengers, bodily movement is restricted even more than other passengers:

“Legs and knees being crammed up for not moving so long, partly because I’m being squished into the space and partly because I don’t take the time to stand up and walk around because that makes me more of a visual target. To have to make people move just gives them another reason to be upset that I exist” (Cindy).

As a result, fat passengers’ ability to make themselves comfortable, or at least to alleviate some discomfort and pain, is significantly reduced by the material environment and social hostility. As Sandra L explains (in the quote at the start of this paper), discomfort and embodied dys-appearance on the plane is heightened by being “trapped” and having “nowhere to go”.

This restriction on personal space does, of course, vary widely between passengers reflective of the heterogeneity of bodies and the social readings of embodied markers of difference. Plane travel is, for most people, inherently uncomfortable. The conceptual usefulness of dys-appearance may, therefore, also allow us to consider the dys-appearance of all (not only fat) bodies through discomfort and pain:

“Even if you are average size the seats are small and it's a tight space so if you're traveling and you are average sized you are already feeling like you're going to be a sardine. All it takes is to be a little larger and you're thinking okay you know, if you're in any way encroaching on another person's space and you have any sense of respect for other people I think that increases your sensitivity to feeling um....I hate the terms like good and bad but bad is the term that comes to mind. Feeling bad about encroaching on someone else's space but there's nothing you can do about it. So, kind of just frustrated that's part of the design of travel” (Ellen).

As Ahmed (2004, 27) explains, the perceived intrusion into the body (or in this context ‘allocated’ seat space) “creates the desire to re-establish the border, to push out the pain, or

the (imagined, material) object we feel is the ‘cause’ of the pain”. Fatphobic hostility towards other passengers, does this work. When fat passengers are seen to be taking up more than their ‘fair’ share of the space, they become the target of abuse:

“We are all in a strange public interaction that is prompted by the constriction of space ... That’s actually what’s happening. Our public decorum has been broken. The lines between people standing or sitting so close together has been broken and all we know how to do is to ... break our own civility based on standard lines of hatred. So yes this guy is going to hate the fat lady next to him (Kathleen)”.

“I think that when you realize that the resources are scarce you start thinking what’s fair..... Oh god don’t let her sit next to me because she’s going to take up part of my share. Let her take from somebody else not me” (Aidan).

Evident here is the necessity of Ahmed’s (2004) extension of Leder’s dualistic model of dys-appearance to one that recognizes varying intensification of bodily awareness. Intensification allows recognition that hostility enacted by non-fat passengers may result from hyper-awareness of *their* bodies, caused by restrictions on *their* personal space, whilst also recognizing that this is worse for fat passengers and that this hostility intensifies pain and discomfort for those whose bodies don’t fit. It also allows us to acknowledge that many fat passengers are engaged in actions to try and limit the discomfort of other passengers sometimes at the expense of their own comfort:

“From the minute I get on the plane I mostly just ignore everybody. I don’t know that it’s the best tactic but I get into my seat and I always select a window seat if possible and I sort of just lean into it. If the person sitting beside me recognizes that there is discomfort there and that I’m doing what I can to be as unobtrusive as I can and they want to relay the small talk then it makes me feel better, can breathe a sigh



relief but for the most part my tactic is to be as invisible as possible and just sort of disappear as much as I can” (Lynn).

Like Lynn, a desire to be invisible is something that came up in several interviews. As Bissell (2009a, 915) explains, comfort involves a “desirable lessening of corporeal intensity” which “does not deplete bodily experience but rather enhances it”. In a context in which the fat body is made to dys-appear, become hyper-present and hyper-visible, seeking the reverse of that is understandable.

***Plane space as fat activism’s “Kryptonite”: political and economic contexts:***

Imrie (2000, 1641) argues that “the inequities of mobility and movement are connected to sociocultural values and practices which prioritize mobile bodies or those characterized by societally defined norms of health, fitness, and independence of bodily movements” (Imrie, 2000, 1641). In addition to physical and social dys-appearance, Leder (1990) suggests that dys-appearance arises in contexts of unequal power relations. Air travel is highly differentiated, bodies are funneled into different spaces according to class, nationality, race, perceived threat, etc. and bodies are expected to be docile, to obey rules about how to behave, to be open to scrutiny and surveillance (Adey, 2008; Brown, 2015; Shilon and Shamir, 2016). Power relations are absolute here. At multiple stages of the journey, a passenger’s right to travel may be revoked, with little recourse:

“The dominant culture at the airport is do what you are told because you have no power at all as a person. You have no personal power. You are not in charge. Like the most personal power is to stick up for yourself a little bit, to advocate within the bounds of your rights and then write an angry letter later” (Dorothy).

Fat passengers are aware that it is legal for airlines to refuse them carriage if they are considered a “safety” risk, or they may be asked to buy two tickets and they have little recourse to challenge these decisions. Moreover, policies are inconsistent, not only between different airlines, but often down to the personnel who are supervising on the day. As Figure 1 shows, 59.2 percent of survey respondents who answered that question (n=527) said that the possibility of negative interactions with airline staff in relation to their body was either a concern or a major concern.

“The last time I was on a plane was over five years ago, and a [name of airline] steward tried to get me kicked off the plane because the seat belt didn't fit and it was a full flight and they did not have any extenders. Fortunately, a different steward ran back to the gate and found an extender, but it held the flight up and everyone on that plane knew why. It was humiliating. I haven't been back on a plane since” (survey respondent).

“I've been belittled, yelled at, lied to, and reduced to tears in multiple airports by employees at multiple levels” (survey respondent).

Airline and airport staff are the gatekeepers for air travel, making decisions about who can and cannot fly. This resonates with other studies of mobility. For example, discussing bus travel for women wheelchair users, Gaete-Reyes (2015, 355) explains that “bus drivers are the ‘gatekeepers’ of mobility having the power to choose who gets on the bus, and they often prioritize the mobility of those seen to be ‘productive bodies’”. Moreover, Brown (2015) discusses a report by the American Civil Liberties Union on ‘Flying While Black’ which identifies the lack of consistent guidance for customs staff as enabling racial profiling. Indeed, the embedded relations of power that govern which bodies can and cannot travel, illustrates the need to critically interrogate the political and economic contexts of mobility.

Fat passengers may be required to book two seats but these policies are inconsistently applied. For many passengers, buying a second seat is not financially viable:

“It doesn’t feel like the ‘buy two seats’ option is a real option for a lot of us. ... Like, if you have that kind of money, you’re probably already flying in first class, you’re already doing a whole bunch of other things to make your flying more comfortable”  
(Ruth W).

As Figure 1 shows, the concern Ruth W. expresses here is echoed by many survey respondents. Of those who answered the questions (n=527 and n=528 respectively), 53.7 percent said being asked to buy a second seat was a concern or major concern, and 52.1 percent said the cost to sit comfortably was a concern or major concern. The implications of this are felt unevenly, fat intersecting with class as the need to buy a second seat is less of a problem for those who can afford it. For those who are concerned about discriminatory approaches from airline staff, race, and gender presentation are also important as assessments of whether passengers are considered a ‘safety risk’ operate through intersecting axes of power and prejudice (Morrow, 2017). Discussing the intersection of racial and gendered discrimination in airport security, Brown (2015) uses the concept of “‘racial baggage,’ where certain acts and certain looks at the airport weigh down some travelers, while others travel lightly” (132). Our survey data showed that 38.9 percent of participants who identified as Black, Hispanic, Asian, Mixed-Race, Gypsy, or Maori (and who answered the question, n=56) felt the possibility of racist assumptions impacting their travel experience was either a concern or a major concern (another 12.5 percent a minor concern):

“Have had more anxiety prior to int'l flights (due to worry about long-term discomfort or racist flight attendants/passenger). Have found more comfortable seats on int'l

flights, but fears of racist flight attendants have been realized at least once or twice”  
(survey respondent).

“[Airline name] gate staff were incredibly racist in France (not in U.S. ) and treated me like a criminal” (survey respondent).

This is important because, as Mollow (2017) explains, the intersection of fatphobia, ableism and racism operates in such a way that legitimizes anti-black violence. Moreover, this matters for research on air travel because, particularly since 9/11 (but with a longer history too), racial profiling at airports has been widely documented (Chandrasekhar, 2003; Brown, 2015). In relation to gender presentation, 52.9 percent of survey respondents who identify as trans, non-binary, genderqueer, intersex or other (n=34) said that the possibility of negative reaction to non-normative gender presentation from either staff or fellow passengers was either a concern or major concern, another 11.8 percent saying it was a minor concern:

“I don’t like to fly and then being fat and being gender neutral or gender ambiguous really adds too. I am also mixed race Latina amongst other things but I have fairly light skin so I don’t usually get harassed for my race even if they see my name. That’s not the primary thing but there is definitely a lot of attitude about me being fat and me being visible queer” (Becca).

This is not surprising given that, as Currah and Mulqueen (2011) have discussed, security profiling in airports both reinforces gender binaries and means that those who’s gender presentation does not fit clearly with what is on their documentation face further scrutiny.

The micropolitical encounters discussed above are thus intertwined with macropolitical issues (Bissell. 2016). There are two broader political and economic contexts that are important here. First, as Solovay (2000 189) explains, dominant ideas are “that weight is mutable, that

weight loss is a benign procedure and that fat is unhealthy”. As Ellen explains, this legitimizes judgment from others:

“I really observed a difference, I think, in the increased level of entitlement of people judging people of size with the obesity epidemic, with the use of that term, the sort of officializing -- I know that's not a word -- as a thing, I think that has translated in a lot of ways to people then interpreting it as if they then are more righteous where maybe in the past they might have been just thinking judgmental thoughts. Now they're actually voicing and feeling like it's appropriate for them to voice them” (Ellen).

As Small and Harris (2014, 32) discuss regarding crying babies on planes, the concept of choice is used to justify excluding people from air travel: “parents have chosen to have children and this comes with a price: freedoms have to be relinquished and this might mean not travelling by air”. Fat is similarly seen as a choice and as something that is inherently bad.

Second, in economic terms, we cannot consider the dys-appearance of fat bodies in airplanes without considering the commoditization of the space of the plane, as the material and social relations during plane travel are shaped by the drive to maximize profit:

“Where the space is commoditized and it’s a small place and everyone is deciding what piece they should have ... the energy directed at me with resistance and anger and disdain for my size is amplified pretty dramatically and some of them don’t even know that they are doing it. ... I really don’t know how to fix that because airplanes are commoditized spaces” (Aidan).

As Goodley (2014, xv) argues, “Our bodies are shaped by the alienating choreographies of capitalism. All of us are left lacking in the market; debilitated by the dance of capital”.

Policies such as extra baggage payment, variations in price and seat size between different classes, give the idea that there is a cost per unit of space. However, seat pricing is not that simple. Clark and Vincent (2012) show that on one route, the average cost of a ticket varied from around \$125 to over \$300 dependent on the date of booking. Yet the idea that fat passengers take up more space/weight than they've paid for makes advocating for fat rights difficult:

“I don't feel comfortable arguing for fat rights on a plane. I'm a great a fat activist but like I said I get the commodification, I get it and in an ideal world I will be willing to pay twice as much for more space. If we are saying that space has cost this much money how many spaces do you need? In an ideal world I can do that but considering I live in a country and in a space where being fat also means that my chances of having employment are lower and my access to all these other things are lower I happen to be fucking broke. So then I'm not really down with that plan because then I can't afford to fly at all and I can barely afford to fly as it is. It's hard for me to think about being a fat activist on the plane. Mostly I just try to hide. I spend most of my time just trying to be invisible as possible because I need to get through it. It's really painful, even for someone like me I mean I teach disability right , I teach this , I do it all the time and it's just really, really painful” (Aidan)

Both Aidan (quoted above) and Sandra L (quoted at the beginning of this paper), are embedded in fat activist communities and able to challenge fatphobia in other spaces, but advocating for fat rights on a plane feels impossible for them. Paterson and Hughes (1999), drawing on Leder (1990), suggest that “When one is confronted by social and physical inaccessibility one is simultaneously confronted by oneself; the external and the internal collide in a moment of simultaneous recognition. When one encounters prejudice in behavior

or attitude, one's impaired body 'dys-appears'" (603). As Aidan explains, this dys-appearance makes it difficult to experience fat embodiment in a positive way.

The material, social, political and economic elements of plane space, thus bring the fat body into sharp focus in ways that foreground stigma and complicate resistance. As such, advocating for oneself requires practice:

"I love to travel, but it's a pain in the ass. I have gotten to the point where I know what I need to do to advocate for myself, but getting to the point where you're comfortable doing it is something that takes time, and some people never get there" (Lisa).

This echoes Ahmed's (2006, 62) explanation that, "for bodies to arrive in spaces where they are not already at home, where they are not "in place," involves hard work; indeed, it involves painstaking labor for bodies to inhabit spaces that do not extend their shape". Thus, as Murray (2005a, 2005b, 2008) suggests, knowledge of, and engagement in fat activism and fat studies often is not enough to protect oneself from fatphobia:

"As it turns out body shame isn't magically erased when you read a bunch of awesome fat books. Unfortunately it doesn't automatically after you read the fat studies reader six times, it doesn't just disappear" (Kendra).

## **Conclusion**

The key points we want to make in this paper are fourfold. First, Leder's work on dys-appearance, developed in disability studies and by Ahmed, provides an important theoretical framework to understand how fat bodies become hyperpresent in the confined spaces of air travel. This also offers potential to think through the mobile body and its interactions with social, material, political and economic aspects of transport spaces more broadly. Whilst all bodies may experience discomfort during air travel, the fat body is dys-appeared in these

spaces in more intense ways (fat also intersects with race, gender, disability, sexuality, age). The feeling of hyper-presence that many of our interviewees reported is a result of the intensification of embodied presence in which the body is felt as being out of place. Chairs have been central to work that theorizes comfort. On a plane chairs/seats are designed to fit particular bodies and demarcate the space available for each person. Drawing Leder's, Bissell's and Ahmed's work together allows recognition that bodily dys-appearance isn't just about the physical feeling of discomfort but also how "the surfaces of social as well as bodily space 'record' the repetition of acts, and the passing by of some bodies and not others" (Ahmed, 2004, 148). Comfort then is about a relationship between bodies, material, economic, political spaces, memories and histories (see also Bissell 2007, 2008, 2009).

Secondly, whilst regulation regarding the physical design of the plane interior is important, the wider social, political and economic contexts in which air travel and fatness are governed must also be considered. Micropolitical encounters on the plane contribute to the hyperpresence of fat bodies, and are intertwined with macropolitical inequities (Bissell, 2016). This, along with the commoditization of space, intensifies and is intensified by broader discourses that vilify fatness and see fat as mutable. To return to the quote that opened this paper from Senator Schuman, and Kirkland's (2008) work on fat rights, until ideas about fat as mutable, and comfort as commodity are challenged then arguing for equality in access to plane space on the basis of required space will be difficult.

Thirdly, this paper has demonstrated the importance of considering how access to and comfort in mobile spaces are important for "embodied citizenship" (Gaete-Reyes, 2015, 353). The absence of legal protections for fat passengers, variance in policies between airlines, reliance on the judgment of airline staff, and the social and material dys-appearance and intensification of fat embodiment means that for many, self-advocacy and fat activism within the spaces of air travel is difficult even when people regularly advocate for fat rights in other



spaces. Given plane spaces are not only exclusionary for fat passengers but also spaces of exclusion along axes of race, nationality, religion, gender, sexuality, disability, age/parenthood, etc., yet remain the main mode of international travel, there is still significant work that needs to be done in social and cultural geographies to explore the micro and macro politics of aeromobilities.

Fourth, this paper has taken important steps towards redressing the absence of fat people's voices in research on aeromobilities. We hope that this paper, and the animation that came from this research, encourages non-fat people to think about fat passengers as fellow human beings with rights (Kirkland, 2008). Leder asks how we might move from a Cartesian notion of the body centered on controlling or transcending the body to "a new ethic of embodiment" (160) premised on "an ontology or ethics of interconnection" (160). He proposes that Compassion – "derived from the Latin *cum* and *patior*, which together can be literally translated as "to suffer with"" (161), or more broadly, to experience with, may offer possibilities here. We wonder what an ethics of interconnection or compassion on a plane might look like. What would it mean if non-fat passengers saw fat passengers as people similarly, or even *more so*, discomforted by broader infrastructures, rather than as the cause of their pain. How might this lead to transformative encounters (Bissell, 2016)? What would happen if passengers "experienced with" rather than "competed against" each other? As a survey respondent explained:

"Both of my seatmates were incredibly lovely, supportive and told me to never worry about what others think. This single event has stuck in my mind as THE most positive experience I have ever had, and I have thanked the universe for putting those seatmates next to me ever since" (survey respondent).

Moreover, what might this approach allow in developing a critical geographical approach to air travel that considers not only bodies that travel but also those left behind, lost infrastructures for slower forms of travel, human and non-human bodies that are impacted by broader economic and environmental impacts of aeromobilities?

Leder uses the example of visiting a sick friend to suggest that recognizing another's pain is vital to compassion. Central to challenging fatphobia then is documenting the lived experiences of fat embodiment, in a way that does not lead to the fetishization of pain, or the sharing of sensational stories which "turn pain into a form of media spectacle, in which the pain of others produces laughter and enjoyment rather than sadness or anger" (Ahmed 2004 32). We hope the animation goes some way towards doing this, but recognize that, as Aidan explains, this is a long-term goal:

"So I don't necessarily know if there's some way to fix this unless people learn that it's OK to be different sizes. And that's a long far off goal, you know? That's a deep psychological cultural change goal. That takes time. That takes generations. Like, how do you fix people being OK with people being different sizes and maybe not getting an equal share, but having that still mean that they get their fair share" (Aidan).

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## Notes

<sup>i</sup> Whilst fat is often considered an insult, fat activists have worked to reclaim this term as a marker of pride (Cooper, 2010). Overweight and obese, often used in academic work, are problematic as they pathologise fat. We use the term ‘fat’ in line with fat activism. All interviewees identify as fat, having responded to a call for people with experience of flying while fat.

<sup>ii</sup> Poiria and Beal’s (2017) and Small and Harris’s (2012) research brings an awareness of fat embodied experience to tourist studies. However, they use terminology (obese, morbidly obese, overweight) that pathologises fatness.

<sup>iii</sup> Closed questions asked demographic questions, frequency of flying, and how concerned people were about a range of aspects of flying (see Figure 1). Open questions asked about positive and negative experiences of flying, solutions or workarounds to make the experience less stressful, changes they would make to air travel, advice they would give other fat airline passengers, and asked participants for anything they thought we should have asked but didn’t. Both the surveys and the interviews focussed on people’s experiences rather than explicitly on elements of the space of the plane, but space was important in responses.

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Figure titles:

**Figure 1: Survey responses to questions asking participants to rate their level of concern about a range of factors when flying**

