

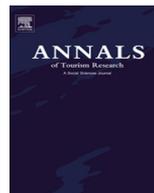


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Contents lists available at ScienceDirect

Annals of Tourism Research

journal homepage: www.elsevier.com/locate/atoures



‘Up in the air’: A conceptual critique of flying addiction



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ARTICLE INFO

Article history:

Received 21 February 2014

Revised 24 July 2014

Accepted 7 August 2014

Coordinating Editor: Susanne Becken

Keywords:

Frequent flying
Sustainable tourism
Consumer culture
Addiction
Pathology
Social control

ABSTRACT

The ‘flyers’ dilemma’, where an individual’s self-identity as an environmentally-responsible consumer conflicts with the environmental impacts of frequent air travel, has been shown to produce a range of negative psychological effects. Some have argued that frequent flying may represent a site of behavioural addiction, characterized by guilt, suppression and denial. While this sort of pathologisation finds parallels in other forms of excessive consumption, its application in a tourist context is problematic in terms of classification validity, attribution of negative consequences, transfer of responsibility, and tendency towards social control and domination. We argue for an alternative conceptual approach to frequent flying which elaborates the structural reproduction of the ‘flyers’ dilemma’, rather than its individual, psychological effects.

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Introduction

At present, there are more people flying, and flying more frequently, than at any time before in human history (Gössling & Upham, 2009). Air travel has become an affordable, everyday consumer product; one that offers personal aeromobility to a widening range of social classes (Randles & Mander, 2009a). These new freedoms are enjoyed at a cost. In particular, the environmental impacts

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of frequent flying are now widely recognised (cf. Gössling, 2009; Higham, Cohen, Peeters & Gössling, 2013; IPCC, 2013). Ironically, it is the middle-classes, who tend to be the most environmentally-aware (Leviston, Leitch, Greenhill, Leonard, & Walker, 2011; Princen, Maniates, & Conca, 2002), who are also the most frequent flyers (Randles & Mander, 2009b). This contradiction produces an inevitable clash between the self-identity of the 'environmentally-responsible consumer' and the material-environmental impacts of air travel, a problematic termed the 'flyers' dilemma' in the popular media (Rosenthal, 2010). In a provocative paper, Cohen, Higham, and Cavaliere (2011) argue that this dilemma, and the cognitive dissonance it represents (Festinger, 1962; Thøgersen, 2004), is often manifested in the form of guilt and anxiety on the part of affected flyers. They further argue that these negative emotions, along with associated suppression and denial, are the same as those experienced by behavioural addicts. In this way, Cohen et al. (2011) reframe air travel as a pathological form of consumption, one that may be likened to the consumption of other dangerous commodities such as alcohol and tobacco. Indeed, these authors argue that their empirical research explicitly supports what they describe as an emergent 'counter-narrative' to frequent tourist air travel, one that positions air travel as a site of mass behavioural addiction rather than a socially-desirable form of leisure consumption.

In this essay, we take issue with the application of a behavioural addiction framework in the context of consumption generally, and frequent flying specifically. We argue that while the conceptual lens of behavioural addiction may be seductive to some (cf. Hill, 2007), it is, in contrast to the position of Cohen et al. (2011), ultimately counterproductive to the development of a meaningful critical response to the question of frequent flying and environmental damage. In a technical sense, the notion of behavioural addiction is problematic when applied in the context of flying for reasons we elaborate below. More generally, we are concerned that the deployment of the behavioural addict trope, while useful in an attention-getting, provocative sense, presents a complex, historical and systemic effect of global capital as a narrow, individual, psychological issue. This conceptual approach at best downplays, and at worst completely ignores, the fundamental socio-structural causes of frequent flying. A theoretical approach that emphasizes psychological deviance and disorder at the expense of the social, institutional and economic forces that produce excessive consumption in the first place only serves to reproduce the dilemma it seeks to analyse. In terms of political-economy, the dressing-up of a complex social issue created by the emergence of a consumer society as the failings of the undisciplined, irrational and excessive subject (i.e. the lens of addiction) allows capital to reproduce itself by discursively presenting solutions to the problems it has produced, and to apportion blame with the 'flawed consumer' (Bauman, 2007). In short, the flying addict construct, if popularised, actually plays into the hands of an environmentally destructive industry by allowing it to legitimate its practices while simultaneously absolving itself from responsibility for the environmental destruction from which it profits. From this perspective, Cohen et al. (2011) are asking the wrong question. Rather than asking "is frequent flying a behavioural addiction?" we need to ask "why is the 'flyers' dilemma' necessary for the reproduction of the global tourism industry in its contemporary form?" This reorientation demands an alternative conceptual approach to the analysis of frequent flying, one that elaborates the structural causes and historical contexts of the 'flyers' dilemma', rather than its individual psychological effects.

The phenomenon of frequent flying

Low-cost, high-volume air travel has grown dramatically over the past several decades. The global fleet of aircraft with a minimum of 100 seats, estimated at 13,300 in 2007, is projected by Airbus Industries to increase to 28,550 by 2026 (Holloway, Humphreys, & Davidson, 2009). In the UK alone, air travel has increased five-fold in 30 years. It is forecast to grow from 200 million journeys in 2003 to 400 million in 2020, reaching 500 million journeys by 2030 (Ryley, Davison, Bristow, & Pridmore, 2010). This pattern of growth, now well established across Europe, is being mirrored in the BRIC countries (Brazil, Russia, India and China), and other emergent capitalist economies (e.g. Mexico, South Africa, Indonesia, South Korea, Turkey and Nigeria). Indeed, the largest single purchase of aircraft in the 95-year history of Boeing Aircraft Corporation was confirmed by Lion Air, Indonesia,

on 16 November 2011: 408 Boeing aircraft (\$US 37.7 billion) over fifteen years with delivery starting in 2017 (Voigt, 2011). This massive expansion has been facilitated by airline deregulation, intense competition within the airline industry, and the unrestrained growth of low-cost carriers who have successfully used technology (e.g. internet booking systems, automated flight text alerts, online check-in) to substantially reduce labour costs (Holloway et al., 2009). As a result, low-cost flying has become widely accessible consumer product, representing “one of the biggest revolutions in tourism and travel since the package holiday’s arrival half a century earlier” (Casey, 2010, p. 176).

The term ‘frequent flying’ (or the ‘frequent-flyer’ consumer) originates from schemes launched in the early 1980s to reward the most ‘loyal’ customers of airline companies. American Airlines was the first to introduce such a scheme shortly after the deregulation of the airline industry in the United States (Mason & Barker, 1996). By the end of the same year, four other American airline companies had introduced similar programs, all of which rewarded customers in proportion to total miles flown within a certain timeframe. Only a decade later, there were more than 16 million ‘frequent flyers’ in the U.S. and today frequent flyer program members total more than 100 million customers worldwide (Frequent Flier.com, 2013).

The success of these programs attests to not only the popularity of flying as a mode of transport in contemporary society, but also to the increasingly ordinary nature of air travel (cf. Randles & Mander, 2009b; Urry, 2010). Air travel has, in effect, become part of everyday consumption, a practice deeply embedded in ‘normal’ social behaviour (Randles & Mander, 2009b). Herein lies a contradiction. While air travel has become more available across the social spectrum, airlines still seek to market their products as exclusive. In short, a level of prestige still needs to be afforded to the practice of consumption. The frequent flyer schemes resolve this dilemma by offering a reward system that bestows elite status on regular customers (Thurlow & Jaworski, 2006). Frequent flying has become an institutionalized form of desirable consumption, encouraged by airline loyalty schemes that award status points (Gössling & Nilsson, 2010). These schemes differentiate a larger total pool of consumers into loyalty classes with a hierarchical reward structure (e.g. QANTAS have silver, gold, platinum and platinum-one status ‘privileges’). It is through the customer differentiation created by these schemes, rather than flying *per se*, that social status is conferred.

While points may be used to redeem further flights and other consumer products, the notion of ‘elitiness’ is itself its own reward. This idea was beautifully captured in the 2009 movie *Up In the Air*. The protagonist, Ryan Bingham (played by George Clooney), is a senior hatchet man brought in to sack workers when struggling companies ‘downsize’. In a post- global financial crisis world, business is booming. Ryan Bingham is perpetually flying across the US. In a scene set in a hotel restaurant, he is having dinner with his new protégé, Natalie Keener (played by Anna Kendrick), and explaining why he collects frequent flyer miles:

NK: Okay, you got to fill me in on the miles thing. What is that about? You’re talking about, like, frequent flyer miles?

RB: I don’t spend a nickel, if I can help it, unless it somehow profits my mileage account.

NK: So, what are you saving up for? Hawaii? South of France?

RB: It’s not like that. The miles are the goal.

NK: That’s it? You’re saving just to save?

RB: Let’s just say that I have a number in mind and I haven’t hit it yet.

NK: That’s a little abstract. What’s the target?

RB: I’d rather not...

NK: Is it a secret target?

RB: It’s ten million miles.

NK: Okay. Isn’t ten million just a number?

RB: Pi’s just a number.

NK: Well, we all need a hobby. No, I- I- I don’t mean to belittle your collection. I get it. It sounds cool.

RB: I’d be the seventh person to do it. More people have walked on the moon.

NK: Do they throw you a parade?

RB: You get lifetime executive status. You get to meet the chief pilot, Maynard Finch.

NK: Wow.

RB: And they put your name on the side of a plane.

NK: Men get such hardons from putting their names on things. . .

Source: <http://www.imdb.com/title/tt1193138/quotes>

For Ryan Bingham, the logic of consumption has become internalised, it is no longer about buying more flights or commodities, but about the status and prestige that comes with being the most prodigious consumer. Consumption has become its own goal—ascribing to itself symbolic meaning that is its own rationale and reward, converting the banal into the desirable. In a society where esteem and meaning is increasingly achieved through practices of consumption (Ritzer, 2000), rather than those of production (Marx, 1976), frequent flyer schemes are instrumental in affording social status.

It is this semiotic realisation of 'elite' membership that reveals frequent flyer programs as important mechanisms for the expression and global power relations in travel and tourism (Thurlow & Jaworski, 2006, p. 100). Indeed, we would question the assertion that low-cost carriers, and the changes in travel and tourism that they have produced, have enabled lower income groups to enjoy high levels of personal aeromobility. While more lower-class people do now fly, frequent flyers (who presumably are most likely to be trapped within the flyers dilemma) tend to be wealthier. For instance, a UK travel and tourism market review published in 2005 showed that most 'frequent flyers' (those who travel by plane three or more times per year) had an annual income of over £50,000 (Gower, 2005). To provide a vaguely grotesque illustration, even the pets of frequent flyers can now earn more points than the majority of the planet's inhabitants (see Fig. 1).

However, the association of frequent flying with prestige has not limited the embrace, even if only discursively, of such a practice by consumers from the most varied economic strata. By institutionalizing the association between air travel and everyday consumption patterns through frequent flyer point schemes in supermarkets, the airline industry has been able to expand its reach and influence over the market and consequently fabricate and regulate the 'elite' traveller (Thurlow & Jaworski, 2006). For instance, the QANTAS online frequent flyer store (QANTAS, 2013) offers an enormous range of commodities from the traditional travel products, through electronics, sporting goods, household goods, representing an entire department store. This then enables consumers to achieve 'elite' status through other consumption practices that frequently do not involve air travel or tourism at all.



Fig. 1. Pet frequent flyer program. Source: <http://dogloversadelaide.com/pet-dogs-frequent-flyer-point/> (Retrieved 12th December 2013). Source: *Voyeur Inflight Magazine* issue 145 p110.

Frequent flying schemes are thus increasingly linked to the streamlined consumption practices of everyday life (Ritzer, 2000).

Frequent flying, the ‘flyers’ dilemma’, and flying addiction

The environmental consequences of these demand-stimulating schemes have not gone unnoticed. It is clear that cheap air travel is proving to be a problematic and contradictory form of consumption (Burns & Bibbings, 2009; Urry, 2010). At a time where the sustainability of tourist transport more generally is being questioned (Wheeler, 2012), the climate consequences of high volume, high velocity, and long distance transportation is receiving particularly close scrutiny (Leiper, Braithwaite, & Witsel, 2008; Peeters & Dubois, 2010). The environmental impacts of frequent flying have become the focus of growing concern on the part of activists (The Guardian., 2006), academics (Gössling, Hall, Peeters, & Scott, 2010; Hall, 2013, Higham et al., 2013), and government advisors (Garnaut, 2011; Stern, 2007). The aviation sector contributes substantially to tourism industry carbon production. This is projected to increase from 15 to 40 per cent of total global CO₂ emissions by 2050 (Dubois & Ceron, 2006; Gössling & Peeters, 2007). Given the growth trajectory of the aviation sector, there is also growing public awareness that the contribution of air travel to climate change will increase substantially over coming decades (Ryley et al., 2010). Indeed, the sort of radical societal and individual transformations that would be required to combat climate change has drawn the very consumer culture celebrated by neoliberal Western societies into deep question (e.g. Monbiot, 2007; Stern, 2007). As part of this broader critique, frequent tourist air travel by those who enjoy high personal aeromobility is now being cast in a critical light (Cohen et al., 2011; Urry, 2010). Moreover, while international travel tends to be excluded from the environmental consciousness of most travellers (Lassen, 2010), the environmental costs of air travel are nonetheless starting to become apparent to a segment of society. In this context, the ‘flyers’ dilemma’ crystallises the inherent contradiction between the personal benefits of high aeromobility and its environmental consequences (Higham, Cohen, & Cavaliere, 2014).

In an effort to reconcile environmental costs with the consumption of air travel, parallels have been drawn between frequent flying and forms of excessive pleasure consumption. In particular, the notions of ‘binge flying’ (Cohen et al., 2011; Randles & Mander, 2009a) and ‘binge mobility’ (Urry, 2010) represent an attempt to locate the environmental problems associated with air travel in the excessive appetites of individual consumers (Orford, 2001). When cast as ‘binge flying’, the psychologically disordered version of frequent flying, we open an avenue towards the sort of behavioural-pathological analysis routinely applied to other forms of pleasure consumption. For example, alcohol (Bowman & Jellinek, 1941), gambling (Raylu & Oei, 2002), shopping (Lejoyeux & Weinstein, 2010), internet use (Young, 1998), television (McIlwraith, 1998), and sex (Griffiths, 2012) have all been identified as general sites of psychiatric disorder and specific sites of behavioural addiction. In this vein, Burns and Bibbings (2009, p. 34) represent frequent flying as a form of compulsive consumption, arguing that “... the middle classes of the developed world are somehow addicted to carbon-intensive leisure mobility”, while Hill (2007) likens travel to the addictive consumption of tobacco. Implicit in such critiques is the notion that it is the irresponsible individual, through their unrestrained and excessive consumption, who is the ultimate source of undesirable global climate externalities.

Not surprisingly, some commentators have recently argued that many of the defining qualities of behavioural addiction apply in the specific case of frequent flying (Cohen et al., 2011; Hill, 2007; Rosenthal, 2010). Drawing on the notions of guilt, suppression and denial associated with frequent flying, Cohen et al. (2011) go so far as to argue that ‘binge flying’ represents a new form of behavioural addiction alongside such others as gambling, smoking and shopping. Their argument is based on the idea that the psychological consequences of frequent flyers parallel those experienced by behavioural addicts. The essential feature of behavioural addiction is the failure to resist an impulse, drive or temptation to perform an act that is harmful to the person or to others (Grant, Potenza, Weinstein, & Gorelick, 2010, p. 234). To elaborate, behavioural addictions involve the impulsive satisfaction of immediate or short-term desires with disregard to longer-term negative effects (Clark & Calleja, 2008). They are generally defined by three common criteria: a deep-seated impulse and inclination to engage in the specific behaviour; denial or disownership of the potential negative consequences

of the behaviour; and an inability to modify or discontinue the behaviour (Faber, O'Guinn, & Krych, 1987). Behavioural consequences that are too disturbing may be knowingly denied or repressed to allow continued engagement to achieve short-term changes in mood, feelings of escape, and experiences of pleasure, excitement, relaxation, or disinhibition (Faber et al., 1987; Griffiths, 1996).

This sort of psychological classification represents a routine academic trope in the analysis of excessive consumption (e.g. shopping, alcohol, smoking, gambling, the internet, smart phones), one that links undisciplined consumption to negative individual and social consequences, both psychological and material. Indeed, an entire statistical machinery has been developed by what Nikolas Rose (1996) terms the 'psy sciences' (i.e. psychology, psychiatry and psychoanalysis) to describe and enumerate aberrant consumers. As a case in point, the American Psychiatric Association (APA) released the fifth edition of its keystone Diagnostic and Statistical Manual of Mental Disorders (DSM-5) in May 2013¹. Substance-use disorders are included on the basis of drug type and measured individually on a continuum from mild to severe (American Psychiatric Association, 2013a). The DSM-5 recognizes substance-related disorders resulting from the use of ten separate classes of drugs: alcohol, caffeine, cannabis, hallucinogens, inhalants, opioids, sedatives, stimulants, tobacco, and other or unknown substances (American Psychiatric Association, 2013b). The actual substance use disorders span a wide variety of problems arising from substance use, and cover 11 different criteria (American Psychiatric Association, 2013c, 2013d):

1. Taking the substance in larger amounts or for longer than the you meant to;
2. Wanting to cut down or stop using the substance but not managing to;
3. Spending a lot of time getting, using, or recovering from use of the substance;
4. Cravings and urges to use the substance;
5. Not managing to do what you should at work, home or school, because of substance use;
6. Continuing to use, even when it causes problems in relationships;
7. Giving up important social, occupational or recreational activities because of substance use;
8. Using substances again and again, even when it puts the you in danger;
9. Continuing to use, even when the you know you have a physical or psychological problem that could have been caused or made worse by the substance;
10. Needing more of the substance to get the effect you want (tolerance);
11. Development of withdrawal symptoms, which can be relieved by taking more of the substance.

We include them here because the DSM-5 also includes behavioural addiction in a general 'addictions and related disorders' category. Behavioural addictions are included on the basis of *shared characteristics* with substance-use disorders. Indeed, the introduction of 'behavioural addictions' was based on the argument that some behaviours, such as gambling, closely resemble substance addictions in terms of neurological reward, phenomenology, tolerance, comorbidity, overlapping genetic contribution, neurobiological mechanisms and response to treatment (American Psychiatric Association, 2013c, 2013d; Grant et al., 2010, p. 237). So far gambling is the only listed behavioural addiction. However the door is open for further inclusions in this category. For example, internet addiction is listed in the DSM-5 Appendix as a category pending further analysis and potential inclusion as a second behavioural addiction in future revisions of the DSM.

The important point here is that a whole range of consumption practices may, in the future, be classed as behavioural addictions, and diagnosed and treated in similar ways to substance addiction. Diagnostic criteria for behavioural addiction have already been proposed in the broader psychiatric literature for other behaviours including compulsive buying, internet addiction, video/computer game addiction, sexual addiction, and excessive tanning, although none had enough evidence to justify inclusion in the DSM-5 (for an overview see Grant et al., 2010). We now may add 'flying addiction' to this list of possibilities. There is, of course, a deep irony in even trying to view frequent flying through the lens of addiction. Tourism, traditionally the realm of freedom, unconstraint and abandon (Crompton, 1979; Sharpley, 2003) is now recast as a pathology, associated with the pernicious

¹ The DSM is the psychiatrist's 'bible', providing the diagnostic criteria for all forms of mental disorders.

tendencies of the human psyche. If the provocation by Cohen et al. (2011) gains momentum, then we may envision a historical moment where frequent flying is included as a formal addiction along with attendant remedies, be those behavioural (e.g. cognitive-behaviour therapy is the primary psychological treatment for addiction) and/or pharmacological (e.g. Naltrexone is already used to treat behavioural addictions such as problem gambling). We would like to interrupt, or at least resist, this analytical trajectory for several reasons:

Problems with criteria for addiction

Cohen et al. (2011) argued that the notion of ‘binge flying’, as a relatively recent behavioural addiction, has some conceptual and empirical support. We find this claim unconvincing. In terms of conceptual support, the identification of guilt, suppression and denial does not mean an activity is an addiction or related disorder as diagnosed by the DSM-5. As outlined above, behavioural (and other) addictions are clearly defined in terms of etiologic and diagnostic criteria. To offer a rhetorical example, if we take the criteria for the only behavioural addiction defined in the DSM-5 (e.g., gambling) and rewrite it to apply to flying rather than gambling we would define flying addiction as *persistent and recurrent problematic flying behaviour leading to clinically significant impairment or distress*, as indicated by the individual exhibiting four (or more) of the following in a 12-month period (where scores 0–3 = no problem; 4–5 = mild problem; 6–7 = moderate problem; 8–9 = severe problem):

1. Needs to fly with increasing frequency and/or take longer trips in order to achieve the desired excitement.
2. Is restless or irritable when attempting to cut down or stop flying.
3. Has made repeated unsuccessful efforts to control, cut back, or stop flying.
4. Is often preoccupied with flying (e.g., having persistent thoughts of reliving past flying experiences, handicapping or planning the next venture, thinking of ways to get money with which to fly).
5. Often flies when feeling distressed (e.g., helpless, guilty, anxious, depressed).
6. After spending money on flying, often returns another day to get even (“chasing” ones losses).
7. Lies to conceal the extent of flying.
8. Has jeopardized or lost a significant relationship, job, or educational or career opportunity because of flying.
9. Relies on others to provide money to relieve desperate financial situations caused by flying.²

A diagnosed flying addict (and some may exist) would appear to differ from the frequent flyer who is feeling guilty about the environmental consequences of flying. Indeed, the latter would appear to be entirely rational. Flying may be associated with feelings of guilt and suppression, but so are many other activities, like driving to work, using plastic bags, and using electricity from coal-powered generators. This does not make flying an addiction as defined by the DSM-5. In addition, a flying addict would be addicted to the act of flying when, in reality, people fly as part of a broader tourism or business journey or experience. Flying may be incidental to the motivations for travel, merely an unavoidable part of attaining a particular experience. In other words, the focus of flying addiction is likely to be complicated and shifting, unlike, for instance, gambling addiction, that is more clear-cut.

Allocation of negative consequences

There is another, more banal, reason why the behavioural addiction formulation does not make sense, one which Cohen et al. (2011) do acknowledge. That is, apart from guilt and anxiety, the material consequences caused by frequent flying are not felt at the individual level but instead impact on the global atmospheric/climate commons. While the negative consequences of most forms of addiction are borne by the consumer (e.g., personal financial stress, physical illnesses, and failed personal

² Adapted from the (American Psychiatric Association, 2013a) *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition* (section 312.31).

relationships and careers), frequent flying represents an exception to this general rule. The immediate individual cost of frequent flying is a psychological one of guilt (Higham & Cohen, 2011) associated with the cognitive dissonance between self-identity and behaviour (Barr, Shaw, Coles, & Prillwitz, 2010; Hibbert, Dickinson, Gössling, & Curtin, 2013; White & White, 2004). While the benefits of air travel accrue to the individual, the destructive environmental consequences of climate change are distributed globally and unevenly. The environmental risks associated with frequent flying as a form of pleasure-consumption tend to be generalized and intangible (i.e. increased total carbon emissions, possible climate change) compared to the individual and specific risks of other forms of dangerous consumption (e.g. obesity, drug dependence, heart disease).

Transfer of blame to pathologised individual

Indeed, if we try to explain any broader social phenomenon primarily through a discourse of pathology we are likely to completely misunderstand and misrepresent it. These psychologising manoeuvres lay the blame for the social harm associated with pleasure-consumption at the feet of affected individuals, rather than with the social, institutional and economic forces that produce a 'saturated' consumer society (Sulkunen, 2009). The commentary on the recent 'obesity epidemic' is instructive here. Obesity was formally classified as a disease by the recent annual meeting (June 18, 2013) of the American Medical Association (AMA). Over one-third of US adults are apparently suffering from this 'complex disorder' (Australian Broadcasting Corporation, 2013). By locating the problem in the diseased individual, responsibility is moved away from the fast food industry, government regulators, urban designers, car manufacturers, schools and the advertising industry (to name but a few) towards the pathologised subject—the 'sick' individual. Resorting to the aberrant human psyche is a completely inadequate response to a complex social, technological, historical, economic and geographic question. In other words, a complex social issue created by the transition towards the consumer society (Harvey, 2011) is represented as a psychological problem of the undisciplined, irrational, excessive subject (see for example Orford, 2001). The failings of Western consumerism are insidiously dressed up as the failings of the individual in a way that expunges, or at least downplays, the socio-structural causes of 'dangerous' pleasure consumption (Keane, 2002). Analytically speaking, the 'addicted flyer' construct still leaves us with an unresolved tension between an inflexible and environmentally damaging industry on the one hand, and an anxious (now pathologised) group of middle-class flyers on the other (Randles & Mander, 2009b). It does little more than provide a way of categorising individuals, making them visible to the machinery of 'psy sciences' (Rose, 1996).

Social control—technological domination

More insidiously, the generalized application of a discourse of deviance and dysfunction to society as a whole may be viewed more as a mechanism of social control and domination than one of benevolent intervention by an expert elite in the name of social health and wellbeing (Young, 2013a, 2013b). Foucault (1975, 1989), in particular, demonstrated how discourses constructed about deviance (e.g. crime, sexuality, madness) are used to define, label, and manage the aberrant 'other' as the objects of surveillance, control, and intervention. The key point here is that the production of knowledge is inseparable from the exercise of power relations. This spirit of enquiry has been used to explain how Western societies have evolved to become both ontologically probabilistic (Hacking, 1990) and epistemologically psychologised (Rose, 1996). In other words, society has moved away from fatalism and determinism, as guiding principles of human life, towards probability, odds, and risk assessment. This has been accompanied by a massive bureaucratic and statistical machinery that attempts to quantify any number of risks. In the words of Hacking (1990, pp. 4–5):

Probability and statistics crowd in upon us. The statistics of our pleasures and our vices are relentlessly tabulated. Sports, sex, drink, drugs, travel, sleep, friends – nothing escapes. . . . Our public fears are endlessly debated in terms of probabilities: chances of meltdowns, cancers, muggings, earthquakes, nuclear winters, AIDS, global greenhouses, what next? There is nothing to fear (it may seem) but the probabilities themselves.

More specifically, social discourses and their enumeration have produced the social categories of the alcoholic (Valverde, 1998), the pathological gambler (Collins, 2006; Reith, 2007), and the drug addict (Bright, Marsh, Smith, & Bishop, 2008; Seddon, 2011). This creation of the pathologised ‘other’ has allowed the positioning of deviant subgroups as architects of their own misfortune or, in sociological terms, ‘flawed consumers’ (Bauman, 2007).

Viewed more broadly, this trajectory is symptomatic of the way in which Western societies tend to deal with the health risks associated with consumption. Wherever problematic consumption has been identified, a reactionary discourse of disorder, aberrance, addiction and pathology has followed (Keane, 2002). Central to this discourse is a process that Hacking (2006) describes as ‘making up people’—the active creation of social categories that define, enumerate and attribute characteristics to a specific social group. The notion of a social *category* makes explicit reference to the ways in which groups of people are not only identified and labelled, but are enumerated, characterised, measured and diagnosed for the purposes of management or other forms of governance (Hacking, 1982, 1990; Rose, 1996, 2010). Increasingly, these are applied to groups of consumers that fail the implicit test of rational self-governance, such as pathological gamblers, kleptomaniacs, anorexics, bulimics, and shopaholics (Reith, 2004).

Such behaviours, and the extent to which they may be constructed as enactments of excessive or compulsive consumption (Hirschman, 1992), are subject to social norms that are shaped by personal, social, cultural and economic influences that change over time (Clark & Calleja, 2008). Drug use, drinking, sexual promiscuity, smoking and air travel, which have been accepted or even glamorised in different societies at different times, have been subject to changing social perceptions and varying degrees of stigmatisation (Cohen et al., 2011). In other words, what is socially viewed as a problematic form of consumption tends to vary according to social norms and expectations.

However, we wish to take this argument further and point out that the psycho-statistical machinery that creates social categories is itself historically contingent, a product of what the sociologist Max Weber (1930) described as a tendency towards the rationalisation of Western society. The very act of labelling and measuring brings into view a whole new social world and set of relationships that are historically and socially conditioned. They do not, despite a veneer of objectivity, present an impartial, God’s eye-view of underlying social phenomena (Young, 2013a, 2013b). In other words, social categories are themselves products of certain historical and sociological contexts (Reith, 2004). This means they may be subverted to marginalise groups in society that are disobedient to the existing ideological and praxis norms promulgated by the existing social order (Bauman, 2007). From this perspective, social categories are inevitably subjective expressions of what Foucault (1975, 1979, 1989) describes as the micro-physics of power. The real question is *why* the discursive formulation of the ‘flyers’ dilemma’ is necessary and for whom? Or to use the pragmatist John Dewey’s (1927) terminology: how do particular *public problems* come into being, and who stands to win and lose from their deployment? In the case of the frequent flying, if we see the ‘flyers’ dilemma’ as a psychological construct, we look for material responses on the part of the pathological subject, such as therapy or pharmacology. If we see frequent flying as part of the consumption demand by capital, then we look to ways to resist capital accumulation on this environmentally damaging basis. The locus of responsibility is crucial here.

In the case of frequent flying, we are concerned with the ways in which the contradictions associated with the ‘flyers’ dilemma’ translate into bourgeois guilt—the transference of the environmental costs of aviation into the psychological cost of the individual. In the case of frequent flying, how does air travel (re)gain legitimacy in the face of its demonstrated environmental cost? Presented more formally: *How does a system that produces pleasure consumption en masse deal with the social and environmental effects of this consumption in a way that not only legitimizes, but allows for the expanded reproduction of those industries?*

The structural production of the ‘flyers’ dilemma’

If we take this question and associated critique seriously we need a fresh theoretical approach. While flying addiction may describe some consumers, there are dangers that it results in

pathologisation of individuals and facilitates the unconstrained reproduction of capital. However, if we see the 'flyers' dilemma' as the product of structural conditions (i.e. societal, economic, technological) rather than individual excessive appetites (i.e. psychological), we can start to look at the conditions under which flying anxieties are produced. Viewed through this structural lens, it appears that the flyer's dilemma, its environmental cost and the individual anxieties associated with it, are an inevitable part of flying production for several reasons.

First, flying has become an integral part of contemporary mobility. Its low cost has meant that it out-competes more fractional, low-impact forms of travel. In a global economy characterized by repeated rounds of 'space through time compression' (Harvey, 1989), cheap air travel has become the mechanism by which the demand for the leisure consumption of distant places can be integrated with the demands of the capitalist working day, week or year. It has allowed the turnover time of the tourism industry to accelerate and provide increased rates of capital accumulation (Harvey, 1989; Marx, 1978).

Second, the environmental cost of air travel appears unavoidable. While jet aviation is extremely efficient in terms of time/distance/cost thresholds (Holloway et al., 2009), its energy efficiency gains have become more fractional and insignificant over time (Peeters and Dubois, 2010), and the cost per person per trip is still steep (Gössling et al., 2010; Hall, 2013; Higham et al., 2013). The jet engine has reached a stage of 'evolutionary sophistication' that does not allow for further efficiencies (Holloway et al., 2009). In the search for economic gains, some airlines are now purchasing larger aircrafts (e.g. Airbus Industries A380), which reduce the overall fuel burn per passenger and, therefore, the per passenger carbon emissions (Holloway et al., 2009). These efficiencies, however, do not conceal the increase in total air travel emissions as the industry continues its unrestrained growth (Peeters and Dubois, 2010). Without significant scope for further technical gains in aircraft efficiency (Scott, Peeters, & Gössling, 2010) and in the absence of 'game-changing' innovations in transport technology, it is clear that the United Nations World Tourism Organisation (UNWTO) *Tourism Barometer 2012* forecast of 1.8 billion international travellers by 2030 is incompatible with carbon mitigation.

Third, while practices such as drinking, eating, smoking or gambling are open to significant daily modification by an individual, flying appears more resistant to consumer-led change. The pro-environmental attitudes of the middle-classes appear not to translate into voluntary and sustained behavioural change by travellers. Because the environmental risks associated with air travel are global and systemic, as opposed to specific and individual, they tend not to be prioritized within a flyers' environmental consciousness (Beck, 1995; Lassen, 2010). More generally, consumer behaviour associated with long-term, rather than more immediate, consequences tends to be more immutable (Elliott, 1994). In part this is because flying is viewed as a socio-technical system that is outside the agency and control of individual flyers, unlike, for example, the journey to work (Lassen, 2010, p. 739). Here we need to raise an important point. The majority of frequent flyers are business passengers. For example, data from a passenger survey of one major US airport shows that 22% of business travellers had taken more than 10 flights from that airport over the past year, compared to less than 5% of non-business passengers (Dresner, 2006, p. 30). If, indeed, business travellers are less likely to prioritise environmental risks because it is not their direct, personal choice to travel, then the concept of flying addiction at the individual level becomes even less meaningful.

Furthermore, as is characteristic of tourist behaviour, people tend to suspend or rationalize their home-held climate change attitudes when inhabiting tourism spaces (Cohen, Higham, & Reis, 2013). Consequently, the middle-classes, who fly the most and are most likely to be educated about environmental concerns (Casey, 2010; Sheller & Urry, 2004; Urry, 2012), tend to be reluctant to change their flying behaviour. At best, they will try to offset their carbon costs through various schemes offered by airlines (Barr et al., 2010). Implicit in these offset schemes is the notion that wealth may be deployed to pay another entity to mitigate the externalities of consumption. This mechanism is central to how contemporary capitalism deals with the contradictions inherent in consumption; it tends to relocate them both spatially (Harvey, 2006, 2011) and ideologically (Žižek, 2011). Even these voluntary offset schemes are problematic, triggering a rumbling of discontent (and even 'aviation rage') against the perceived implicit critique of flying behaviour (Randles & Mander, 2009a).

Towards a structural reformulation of the 'flyers' dilemma'?

So how do we begin to theorise a systemically produced contradiction such as the 'flyers' dilemma'? Certainly as a *provocation*, Cohen et al.'s (2011) notion of the quasi-addicted 'binge-flyer' is effective. It brings to attention the increasing environmental consciousness of middle-class tourists and their internal struggles with an environmentally destructive industry and form of consumption. It sheds light on how consumers internalize and process their behaviour while finding it structurally impossible to resolve the overt contradictions between their self-identity (ethics) and their actions (practices). It helps to popularise a counter-narrative that contests the traditional meaning of flying as a prestigious, desirable and liberating form of consumption.

However, as we have argued in the essay, this stance is problematic not only on conceptual grounds but, more importantly, in the context of political economy, it plays into the hands of an inherently damaging industry by allocating blame and responsibility at the feet of 'deviant' consumers. If we are to resolve the 'flyers' dilemma', we require an alternative conceptual approach to the analysis of frequent flying, one that elaborates the structural causes and historical contexts of the 'flyers' dilemma' rather than its individual psychological effects.

In a general sense, this demands an investigation of the ways in which capitalism itself produces *dangerous commodities while simultaneously attempting to ideologically expunge or mitigate their consequences* (Higgins-Desbiolles, 2010). In his critique of the post-World War II relevance of classical economics, Galbraith (1958) argued that in affluent Western societies where basic needs are largely satisfied, capital turns towards the production of luxury goods. As these are discretionary, demand has to be artificially created in line with increased production. According to Galbraith, the production of these commodities does not make people better-off; it tends to have the reverse affect, in that society spends less on public resources, producing private affluence and public degradation. In particular, the relation between commodity production, produced-consumption, and ideological legitimization of the consumer society has become a central feature of capitalist production (Marcuse, 1964; Ritzer, 2000).

In this sense people do not demand flying to fulfil a basic human need (cf. Maslow, 1954). They are made into flyers through the ideological manufacture of desire (Marcuse, 1964). The key point is that capital does not accept or deal with the consequences of its production—these are, through the mechanism of the 'flyers' dilemma', placed at the feet of the individual consumer. Without the 'flyers' dilemma', and the individual acceptance of the onus of guilt, the flying industries may fail to valorise their capital. In this way, the 'flyers' dilemma' is, in fact, integral to the reproduction of capital. From this point we are able to present an alternative provocation: *the 'flyers' dilemma', rather than being a problematic consequence of contemporary tourism that requires individual management, is a necessary precondition for the reproduction of the tourism industry in its contemporary form.*

This provocation, in turn, implies reflexivity on the part of consumers. Indeed, the 'flyers' dilemma' would not exist were it not for consumer awareness of how capitalism manipulates desire and its implications for the environmental commons. The dilemma can only exist because counter-cultural and ecological critiques have become part of popular discourse. In a scenario of ignorance, everyone would just unconcernedly enjoy the spectacles that capitalism has to offer (Debord, 1977). The 'flyers' dilemma' reveals a contradiction between our contemporary consciousness of capitalism, its environmental consequences, and our need to continue flying, whether this is an outcome of consumer manipulation by the travel industry or otherwise. Our current, hegemonic resolution of this contradiction is in the individualisation of responsibility at which liberal society excels, whether that is in the form of the addicted flyer or some other variant of the pathologised individual or otherwise flawed consumer (Bauman, 2007). Our task now is resist the discursive reproduction of the flying addict and to imagine alternatives to the contradictions contained within this form of consumption.

Acknowledgements

Francis Markham, Australian National University, for his insightful critiques of earlier drafts.

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