# 'Flights of fantasy': A theoretical reformulation of the 'flyers' dilemma'

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## **Abstract**

We position pleasure travel within Beck's risk society as a contradictory form of consumption that simultaneously produces individual pleasure and global environmental risk. We examine the paradoxical emergence of the 'anxious traveler' from this contradiction, arguing that this social category is necessary to individualize and apportion the global, environmental risk associated with frequent flying, and hence legitimate the reproduction of unsustainable travel practices. We identify several future scenarios that may synthesize this frequent-flying dialectic. On reflection, these scenarios themselves appear as cultural productions, suggesting that our attempts to imagine the future are crippled by the hegemonic ahistoricism associated with contemporary capitalism.

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My wing is ready for flight, I would like to turn back. If I stayed timeless time, I would have little luck.

Gerhard Schloem, "Grus vom Angelus"

From Benjamin (1968, p. 257)

## Introduction

Contemporary air travel is heavily implicated everyday consumption practices. Globally, over 3.0 billion air passenger trips were made in 2013, up from 1.1 billion in 1993, and 0.4 billion in 1973 (World Bank, 2014). This increasing aeromobility has well-documented environmental costs (Lee et al., 2009). These costs need to be somehow justified, or rationalised, in order for the airline industry to reproduce itself. One discursive resolution to the problem posed by the growing environmental impacts of aero-mobility is to interpret these as the consequences of individual consumer choices, rather than of the structural conditions of production. This individualization of environmental harm opens the door to the interpretation of flying as a form of excessive pleasure consumption, one that locates the environmental problems associated with air-travel in the excessive appetites of individual consumers or, in this case, 'binge flyers' (Cohen, Higham, & Cavaliere, 2011; Randles & Mander, 2009a). Casting aero-mobility as 'binge flying', a psychologically disordered version otherwise rational air travel, invites the sort of behavioral-pathological analysis routinely applied to other forms of pleasure consumption (e.g. alcohol and tobacco).

This approach is problematic in the context of pleasure travel. Indeed, the 'addicted flyer' construct has been criticized in terms of it classification validity, allocation of consequences, negative transfer responsibility, and tendency towards social control and domination (Young, Higham, & Reis, 2014). The construct of the addicted flyer not only represents an analytical culde-sac, but also serves to perpetuate the very intends to critique. system it Bvindividualizing responsibility environmental damage, the 'flyers-dilemma' becomes a discursive device through which an unsustainable industry can increase production without shouldering material responsibility. In this sense, the flying-addict scapegoat becomes a necessary precondition for the reproduction of aero-mobility specifically, and the tourism industries more generally.

The fundamental question we now face is how to analyze the phenomenon of flying consumption without resorting to the categorizations of addiction psychology (Young, et al., 2014). This necessitates an analysis of the structural conditions of flying production, conditions which produce the flying-addict as an ideological device of legitimation. Attempting a structural analysis may go some way towards both resisting the discursive reproduction of the 'flying addict', and to re-imagining possible futures for aero-mobility. As the basis for our analysis we develop a dialectical chain, loosely based on the triad of thesis, antithesis, and synthesis. We examine the key logic driving a particular configuration air travel (thesis), examine the contained within this contradiction formulation (antithesis), then go on to tease out the ways these contradictions have been temporarily resolved (synthesis). We write 'temporarily resolved' as we are attempting to reveal an inherently historical, and hence

contingent process (Benjamin, 1968). In what follows we identify three general moments in a dialectic transition in the way environmental risk associated with flying is constructed and apportioned through the ideological edifice of consumer capitalism. We constitute the dialectic through the juxtaposition of two terms: 'undifferentiated -differentiated' and 'global - local'. The latter is a simple expression of geographic scale. The former refers the individualized, variated social patterning of phenomena, one commonly associated with consumption practices, rather than the 'dedifferentiation' employed by some tourism scholars to describe the blurring of categories between travel/tourism everyday life (e.g. Uriely, 2005). To be clear, we present a structural, dialectical analysis that is entirely modernist in mode (e.g. Harvey, 1989; Jameson, 1991), not a poststructuralist attempt to deconstruct modernist categories commonly associated with late capitalism.

## The Risk Society

Beck's risk society thesis

We commence our dialectical analysis by locating frequent-flying within the broader sociological framework of the risk society (Beck, 1992, 1995). Beck argues that one of the characteristics of modernity (i.e. industrialized society) is the desire to control, and respond to, the increasingly global and inter-generational risks produced by the very process of modernization itself (e.g. global warming, nuclear threats). The risks associated with Beck's reflexive modernity are *global* in their scale and *undifferentiated* in that everyone is affected

to some degree regardless of wealth or social status. For example, climate change has global ramifications that are unavoidable and will affect all class positions. The hazards associated with the risk society are explicitly global insofar as they are unbounded, external, intergenerational, systemic (in that no-one is immediately accountable), and generalized (they affect the entire planet) (Beck, 1992). They are undifferentiated in that their outcomes, while mediated by class, are not class specific (e.g. the seasonal fires in and around Los Angeles, see Davis, 1995). The individual consumer is relatively powerless over these risks. This is the first moment of the risk dialectic.

In response, consumers attempt to minimize their risk exposure, producing a society where the organization of risk-management transcends the traditional oppositions associated with politics, a class-based Beck describes as process reflexive This modernization. involves social individuals' organization based upon attempts to minimize their own risks in response to generalized, global anxieties. To this end, risk biographies, the historicallylocated and contingent collection of fears and anxieties that a person is most concerned about and most likely to respond to, become integral to an individual's subjective response to modernity itself. According to Hacking (2003, p. 33), risk biographies are a changing basket of risks that comprise, at any given time, an individual's specific risk 'portfolio', which is '... just that set of hopes and fears that moves you, that concerns you, that you feel strongly about ... it is the set of risks that engage you, that you combat.' In

this view, no grand meta-theory of risk can explain or predict the contingent and historical nature of risks. It is under certain pre-conditions that collective risks are prioritized, such as the emergence of the nuclear energy and terrorism in risk portfolios over the past two decades (Hacking, 2003).

The risks posed by climate change are indeed potentially catastrophic, far-reaching and global. The calamitous consequences of global warming include sea level rise, increasingly extreme weather events (in addition to more frequent inland flooding and heat waves), decreased food security, loss of access to water resources and loss of biodiversity (Intergovernmental Panel on Climate Change, 2014). Such is the threat posed by climate change that the current Secretary General of the United Nations recently dubbed it the 'defining challenge of our times' (Ban Ki-Moon, 2010). Yet it can be argued that climate change is not the only new global risk, and may be enumerated among a myriad of other threats such as global terrorism, land-degradation, universal alienation (Harvey, 2014, pp. 264-281), accelerating global inequality (Piketty, 2014), various pandemics (Wolfe, 2011), and the proliferation of nuclear weapons, to name but a few. In the context of this smorgasbord of risks, '...climate change has assumed a very large presence in discussion and debate... across the world... it is not entirely clear why' (Giddens, 2008, p. 5).

The reason for the relative prominence of climate change risk is something we will return to later in the essay. For now, we simply locate travel and tourism as heavily implicated in the risk-politics of climate change (Gössling, Hall, Peeters, & Scott, 2010). The contribution of transportation (Peeters & Dubois, 2010; Wheeller, 2012), and particularly aviation (Lee, et al., 2009; Scott, Hall, & Gössling, 2012) to climate change is significant. Flying, in particular, has started to appear in the risk-biographies of individual tourists (Cohen, et al., 2011; Higham & Cohen, 2011). Indeed, it is from consumer awareness of the growing relationship between pleasure-travel and environmental damage that the phenomenon of the 'flyers' dilemma' emerges.

## Risk taking for pleasure

If, in the risk-society, individuals do indeed attempt to minimize their risk-exposure, then, at a theoretical level, we need to reconcile risky-consumption, such frequent flying, with the supposed riskreduction tendencies of Beck's risk society. Here Giddens (1991) offers a more positive view of risk, agreeing with Beck that people want to discipline risk (see also Hacking, 1990), arguing that some risk engagement is desirable given the centrality of risk-taking to innovation within capitalist society. In other words, the risk society appears to have produced a corollary: risk taking for pleasure, a demand for individual risk consumption (Young, 2010). Routine examples may include smoking, sun tanning, excessive alcohol or food consumption, or gambling. Some forms of serious leisure (Stebbins, 2007), adventure tourism (Hudson, 2003), extreme sports (Higham & Hinch, 2009) and drug tourism (Uriely &

Belhassen, 2005) may also fit this classification. It appears that in opposition to the global, undifferentiated risk of the risk society, capitalism has commoditized risk, creating products and spaces for consumption, both physical and ideological, that allow for the production and sale of differentiated, individually consumed risk on an industrial scale. This is the second moment of the risk dialectic.

These oppositional tendencies may be synthesized insofar that risk, as a conceptual category, contains within it a dialectic relation between global undifferentiated risk (associated with anxiety) and individual differentiated risk (associated with pleasure) (Young, 2010). In the context of risk-taking for pleasure, risk is individual in that it affects the individual consumer directly. It is differentiated in that each individual expresses specific consumption preferences. Pleasure becomes a consumer choice, the ability to engage in risk in a way that is bounded and controllable. Therefore, these risks are less associated with generalized societal anxieties.

## The Risk Society Thesis and **Pleasure Travel**

It is within this dialectic relation between the risk society and risky consumption that we may locate pleasure travel, which now becomes an antidote to the risk-society. In the very idea of tourism one sense. encapsulates (at least ideologically) the opposite of anxiety – a temporary relief from positioning oneself in relation to

avalanche of risk statistics (Hacking, 1982). While pleasure travel is not without risk as such, the likely risks are in general covered by the burgeoning travel insurance industry that mitigates risks such as illness, loss of emergency evacuation, property, personal injury. Indeed, tourism has historically been framed as a discretionary leisure activity, one that celebrates freedom, choice, pleasure, and lack of constraint (e.g. Crompton, 1979; Dann, 1977, 1981). In this sense, international tourism has developed using the ideology of pleasure discursively separated from the increasing environmental risks associated with mass global mobility. Generalized anxieties are inverted into, or at least suspended to make room for, individual pleasures (e.g. freedom, escape, temporary release, and abandon). In this sense, the material shift spatio-temporal, everyday life represented by tourism was accompanied by a simultaneous ideological shift that interpreted the meaning of tourism as one of pleasure (Barr, Shaw, Coles, & Prillwitz, 2010).

While the trammeling of the pristine (environmental and social) 'other' has been a longstanding and core theme in tourism research (Mathieson & Wall, 1982; Wall & Mathieson, 2006), public awareness of the aviation industry as one that is highly profligate and environmentally irresponsible been increasing (Barr, et al., 2010; Becken, 2007; Hares, Dickinson, & Wilkes, 2010; Kroesen, 2012). The problem is that what used to be small scale and local has now emerged as large scale and global - the risks associated with tourism have become more obviously linked to

potentially catastrophic, problem (Gössling, et al., 2010; Hall, 2013). In May 2013, the concentration of CO<sup>2</sup> in the atmosphere as measured at the world's oldest continuous  $CO^2$ monitoring station, Mauna Observatory, Hawaii, passed the milestone level of 400 parts per million (ppm); the highest level in recent geological history (Carrington, 2013). The impacts of pleasure travel are no longer restricted to localized and repairable environmental damage, but to global, irreversible climate change. Risk has migrated from the individual to the global scale.

At the same time, travel patterns themselves have been significantly changing. The contemporary mobilities paradigm (Burns & Novelli, 2008; Hall, 2005) has identified a merging of mobilities across the spatial and temporal scales, and a mobility motivations themselves, such that the part of mobility previous labelled 'tourism' has moved increasingly into the 'everyday' 2007). The spatio-temporal (Edensor, separation of pleasure travel from everyday life is starting to dissolve, especially for frequent flyers. The implication is that the concept of tourism, and its environmental costs, have moved 'closer to home' (Higham & Cohen, 2011). This means travelers are less able to bracket their travel behavior and its environmental impacts from their daily lives. The environmental costs of travel are filtering through the range of travel modes into everyday life, particularly hypermobile middle class subgroups (Casey, 2010; Urry, 2012). Both the idea of travel risk and the notion of travel itself are undergoing profound, simultaneous transformation and expansion.

Thus, the contradictions between the globalized anxieties of the risk society and pleasure travel are inevitably becoming more apparent. We would argue that they are no longer containable by the pleasure ideology discourse – at least not for particular groups of travelers - the environmentally-conscious bourgeoisie (Barr, et al., 2010). The emergence of sustainable tourism, alternative tourism and eco-tourism (Butler, 1990; Wheeller, 1991, 1992) suggest separation is being challenged at the global level. On one hand, more sustainable destinations and practices have emerged (DeLacy, Jiang, Lipman, & Vorster, 2014). time, At the same a discourse sustainability has been used to market and sell particular experiences (Wheeller, 1992). Indeed, a burgeoning research literature has emerged on social sustainability and travel ethics (Fennell, 2006; Lovelock & Lovelock, 2013), demonstrating that the environmental risks associated with the risk increasingly entering are transforming travel consumption. However, the seemingly unmodifiable axiom that the global tourism industry, in the current historical moment, depends upon highvolume air travel, and thereby the inevitable production of greenhouse gases, means that "sustainable tourism" always remains an unfinished (or rather an unfinishable) programme.

## The Emergence of the Anxious Traveller

The production of travel anxiety

As a consequence, we argue that a new form of travel has been emerging over the past 20 years – one that is increasingly characterized by anxiety rather than pleasure. People still want to travel for the spatio-temporal fix (interpreted as the temporary escape from the capitalist working day). However, now the environmental anxieties of the risk society also appear within pleasure travel in a particular way. This is the third moment of the risk dialectic. Travel anxiety is individual that the psychology of particular consumers is affected (or incorporated into risk biographies to a greater or lesser degree depending on class, wealth, and knowledge). undifferentiated It is in that the environmental risk effects are expressed globally (e.g. elevated carbon, warming and atmospheric disturbance). The inherent contradiction between the individual internalization of climate risk and its global production and impact, has been discursively resolved via the production of the 'flying addict' category (Young, et al., 2014). The environmental costs of production are presented as the behavioral responsibilities of individual consumers. This formulation allows for continued capital accumulation while simultaneously transferring responsibility onto the consumer (both and psychological). What is material important here is the way in which global (environmental) risks are now discursively reproduced as the internal anxieties of the individual consumer who bears the economic

and psychological cost of an unsustainable industry.

This resolution appears to be a powerful, albeit damaging one. Even environmentally aware consumers, frequent a recalcitrant flying is site environmental attitudes do not directly translate into behavioral change (Barr, et al., 2010; Walmsley & Lewis, 1993). Guilt is not easily relieved by changed practices; hence, we have its production, acceptance, and internalization. This provides industry with a ready-made group to bear the responsibility for the environmental impacts of flying. In this way, the travel-anxiety synthesis resolves the contradiction between the global impacts of risk and the individualization of responsibility. The environmental responsibility for frequent flying, when located at the feet of individual consumers, becomes a necessary condition for the reproduction of frequent flying (Young, et al., 2014). This is the nub of the issue with an industry that is clearly unsustainable (Butler, 1990; Wheeller, 1991). Inevitably, this means global risks will remain systemically unaddressed while individual consumers continue to increase their guilt and anxiety levels (Cohen, et al., 2011; Higham, Cohen, & Cavaliere, 2014).

The ideological transference of environmental costs into consumption

The discursive transference of moral responsibility for environmental damage from the collective to the individual is mirrored in the resolution of the flyers' dilemma. According to airlines, the problem

of excessive flying is not to be solved by collective action, but by consumers purchasing another commodity, that is, voluntary carbon offsets that promise to empty air travel of its damaging consequences (Becken, 2007). While the effectiveness of these schemes has been challenged (Gössling et al., 2007), it is not their efficacy that is important. Voluntary carbon-offsets play a crucial ideological role. By offering offsets as a consumable option, airlines perform an ingenious two-step abrogation of responsibility: they first remind consumers that global warming is their own fault and then invite the anxious flyer to manage their guilt through a further purchase, effectively individualizing what are, in reality, societally-produced risks.

This is part of a broader trend that Žižek (2010) terms 'charity capitalism'. Starbucks coffee, for example, perversely resolve the problems of production (i.e. social and environmental damage) within the purchase of that commodity, in this case through the donation of a proportion of the purchase price to charity. In charity capitalism, the commodity presents itself ideologically as providing the solution to the very problems it creates (Žižek, 2010). In our example from an inflight magazine (Figure 1), buying a luxury pen helps "...children pave their way to a successful, self-determined, and happy life." In this way, egotistical consumption includes the token price of its opposite, namely capitalism with a socially-generous (even ethical) face.



Figure 1 Advertisement for Mont Blanc pens from QANTAS inflight magazine. Source: The Australian Way, OANTAS inflight-magazine, August 2013, p.36 (image provided by QANTAS 12th December 2013).

of 'consumption without This fantasy consequence' is, of course, entirely fetishistic (Fletcher & Neves, 2012). Not only are the social relations behind commodity production hidden (Marx, 1976), so are the processes that bring together offsets. be those ethical social environmental (Carrier, 2010). If we defetishize the production of market-based offset schemes for example, violent accumulation by dispossession is revealed (Cavanagh & Benjaminsen, 2014). In the case of carbon offsets, the environmental instantiation of 'ethical capitalism' amounts no more than the "...tethering of environmentalism to a political economy with growth for growth's sake, or, in Marx's accumulation for accumulation's sake" (Prudham, 2009: 1594).

Fatally, there is, as yet, no way to modify flying to make it substantially less damaging (Monbiot, 2006; Peeters & Dubois, 2010). Carbon offsets aside, flying is associated with a circumscribed materiality. Other commodities can be fetishized to allow heavy, guilt-free, even binge consumption, such as decaffeinated coffee, low-alcohol beer, fat-free milk, and sugar-free cola. To borrow again from Žižek, there is no 'decaffeinated' form of flying that allows for guilt-free consumption. The air-travel system is likely to produce ongoing flying, more guilt, more capital accumulation, and more environmental damage. How then can we, if at all, resynthesize the flyers' dilemma, and what political action would be required to initiate this sort of transformation?

## Flights of Fantasy: Beyond the 'Flyers' Dilemma'?

The third moment of the flying risk dialectic leads us towards a flying addict construct that encourages differentiated (i.e. individual behavior while and variated) global environmental risks accumulate. If we are to imagine an alternative future for air travel, we need to attempt a re-synthesis of the contradiction between differentiated pleasure travel and responsibility for global climate risks contained within the flyer's dilemma. As a parallel starting point, Dennis and Urry's (2009) book After the Car seeks to chart the future of auto-mobility. These authors describe three possible 'post-car' scenarios, which they entitle 'regional warlordism', 'digital networks of control' and 'local sustainability'. In what follows, we draw on the logic of these scenarios in the context of aero mobility to examine the ways in which it may be possible to resynthesize the tension between global climate risks and the demand for individual air travel.

#### Regional warlordism

The enormous amount of tourism capital invested in the global landscape produces an inevitable spatio-temporal momentum that is not easily diverted (Britton, 1991; Fletcher, 2011; Harvey, 2011a). Indeed, the number of flights is forecast to increase, with the number of domestic journeys in the UK alone predicted to grow from 200 million journeys in 2003 to 400 million in 2020, reaching 500 million journeys by 2030 (Ryley, Davison, Bristow, & Pridmore, 2010). The opposition by emitting industries to any meaningful climate change reform (Duval, 2012) demonstrates that capitalism itself is hardly capable of refashioning itself in response to climate change (Storm, 2009). If the future means, therefore, not a reform of capitalism by social democracy but a libertarian atrophication of the state's redistributive capacities and, indeed, the dissolution of the state itself, the most likely outcome is accelerated physical, social, economic, and environmental separation between the rich and the poor.

This structural tendency towards increasing inequality of capitalism, first highlighted by Marx (1976), has been empirically verified via Piketty's (2014) influential book Capital in the Twenty-First Century. Piketty's detailed empirical analysis of income and wealth data, dating back to the sixteenth century, demonstrated that the historical tide of rising inequality has been punctured only by war and depression. Moreover, the potential remedies of state intervention to affect structural change appear politically unviable. Piketty himself only recommends a fairly banal progressive wealth and income taxes on the global rich. One cynical conclusion is that the book "... allows us all to acknowledge the problem of inequality without the danger that we might be endorsing or licensing any effective solution" (Engelen & Williams, 2014, p. 1776). In other words, business as usual will reign in spite of overwhelming evidence of the inexorable, structural threats to the liberal-democratic order itself.

The geography of this nigh capitalist social order will be characterized by segregation, where the super-rich wall themselves off from an otherwise stricken planet in highlysecured, affluent and comfortable 'evil paradises' (Davis & Monk, 2007) This is the scenario described by Dennis and Urry as 'regional warlordism':

"In this 'barbaric' climate change future, oil, gas and water shortages and intermittent wars lead to the substantial breakdown of of many the mobility, energy communication connections that straddle the world and which were the ambivalent legacy of the twentieth century. There would be a plummeting standard of living, a localization of mobility patterns, increasing emphasis upon local 'warlords' controlling recycled forms of mobility and weaponry, and relatively weak national or global forms of governance. There would be no monopoly of physical coercion in the hands of national states. Infrastructure systems would collapse..." (Dennis & Urry, 2009, p. 152).

This vision, frightening though it is, is hardly new. Two decades ago Kaplan (1994) wrote his hugely influential *The Coming Anarchy*. Extrapolating from trends in contemporary Africa, which Kaplan views as archetypal, he forecast a world where wealthy states would wall themselves off in luxury while "outside the stretch limo [of the West] would be a rundown, crowded planet of skinhead Cossacks and juju warriors, influenced by the worst refuse of Western pop culture and ancient tribal hatreds, and battling over scraps of overused earth in guerrilla conflicts that ripple across continents and intersect in no discernible pattern" (Kaplan, 1994, p. 10). Already capital does not flow, but rather hops, across contemporary Africa, flying over a neglected continent to connect enclaves of affluence and security (Ferguson, 2005). We may well draw a parallel with the act of air travel itself: the consumer supplied with air-conditioning, inflight entertainment, and food and beverage services, while below disappearing islands, flood/drought stricken landscapes, famine and disease. Indeed, Kaplan's Anarchy may have been better served by changing transport mode from limousine to private jet. Air travel for the rich between highly secured zones of affluence is the future for aero-mobility in these visions. In the regional warlord scenario, systems of secure long-range

terrestrial mobility would simply disappear; only the rich would travel long distance, and then only by armed helicopters or light aircraft (Dennis & Urry, 2009).

Such flights of fantasy articulate well with apocalypticism. climate change James Lovelock, the scientist who first detected chlorofluorocarbons in the atmosphere and proposed the Gaia hypothesis, claims that in the West we should give up on the hopeless ideological project of saving the planet. Instead, Lovelock advocates a retreat to 'climate-controlled cities' while the world outside burns (Knapton, 2014). In this vision of a world ending in fire, the logic of the flyer's dilemma is not so much resynthesized as entrenched. The choice to fly remains, although now more heavily restricted along class and geographical lines. Global risks are accelerated and manifest, although become increasingly differentiated (that is, felt by the global poor, while those who fly shelter in their highly-secured 'evil paradises'). This is the flyers' dilemma writ large.

#### Digital networks of control

A second set of visions for the future involve the radical, transformative possibilities offered by technology. Certainly the idea that we can make flying less environmentally damaging has been proposed as a resolution to the flyers' dilemma, one that would reduce the environmental consequences of physical travel. Yet with increasing travel demand, decreasing efficiency-gains, and ineffective carbon offsetting, the prospects for clean air travel are bleak (Gössling, Scott, Hall, Ceron, & Dubois, 2012; Peeters & Dubois,

2010). The gap between the ideological and the material is still too wide for the anxious frequent flyer to bridge. Perhaps the solution to insufficient technological change is not business as usual (a world that ends in fire) but much more *radical technological change*. Could we have tourism, for example, without the need for physical travel?

Here the trajectory of postmodernity may hold some hopeful opportunities. As the core of tourism is consumption of alterity, the trick will be to provide this consumption of the 'other' (i.e. places, people, experiences) technologically without the need to fly. If we accept the startling ontological provocation by Baudrillard (2001) that the real itself is now only that which can be reproduced in the virtual, then the future of mobility itself may be entirely immaterial. In this scenario, we would expect tourism to exist as a simulation of real places, doing away entirely with need to fly. In a future dominated by digital networks "...virtual access will need to have been much developed so that they effectively simulate many of the features of physical co-presence with other people. The development of teleimmersion environments may be the start of a set of technologies that do indeed begin to simulate the pleasures and especially the complexities of face-to-face interactions" (Dennis & Urry, 2009, pp. 156-159).

The full virtualization of tourism has been so far stymied by the mismatch between technology and experiential demands. We have been able to create fantastic, hyperreal attractions such as Las Vegas (Ritzer & Stillman, 2001) and Disneyland (Baudrillard, 2001; Eco, 1986), but as built environments, not purely virtual phenomena. But technology is catching up with the virtual terms imaginary. In of simulation, technology giant Google has spent the last decade developing a virtual model of the streets in one quarter of the globe and clearly have ambitions to go global (Fisher, 2013). The Borgesian fantasy of a map covering the earth's surface, so compelling to Baudrillard (2001), is fast becoming a virtual reality. Already such technologies deployed in schools, facilitating virtual field trips that would otherwise have required significant physical travel (Connelly, 2012). Our technology for simulation has perhaps been outdone by the proliferation of simulacra, simulations of environments that never existed. Such fantastic have landscapes, already consumed routinely via computer games, are fast coming to resemble travel destinations. Witness, for example, the rise of "videogame tourism" whereby the most spectacular views in a simulacrum landscape are captured and consumed like tourist photographs (Walker, 2014).

However, the phenomenology of readily reproducible simulations and simulacra does not yet rival the physical tourist experience. Consequently, much of the virtual activity relating designed tourism complement material production, for example, by providing visualisation destinations and for digital heritage preservation (Arnold, 2005; Guttentag, 2010). Yet despite the limitations of current phenomenological experience, virtual tourism is already preferable to corporeal travel for some. Virtual reality offers the identities promise of new and an unsurveilled escape from the limitations of social norms, where, for example, taboos like those against premarital sex may be evaded Mura, 2015). And (Tavakoli & technological underpinning of these simulacra is rapidly improving. As Facebook founder Mark Zuckerberg (2014) described the (still-in-development) virtual reality headset "Oculus Rift":

When you put it on, you enter a completely immersive computer-generated environment, like a game or a movie scene or a place far away. The incredible thing about the technology is that you feel like you're actually present in another place with other people... By feeling truly present, you can share unbounded spaces and experiences with the people in your life.

It is clear that new technologies do have the potential to make air-travel obsolete - the flyers' dilemma resolved through the abolition of flight. The risk term of the dialectic would be eliminated, leaving consumers free to purchase any number of virtual travel products.

Of course such technologies are by no means politically neutral; a digital future may be entirely dystopian. As Dennis and Urry (2009, p. 159) point out, technologies, "CCTV cameras, data mining software, biometric security, integrated digital databases [and on it goes]" will inevitably be used to surveil, monitor, record, classify and govern. We might add that global surveillance infrastructure has been in formal

operation since 1971 (Nabbali & Perry, 2004). Indeed, in a world where 'face-to-face' meetings are electronically mediated, no conversation will be off the surveillance grid (Schneier, 2014). Such ubiquitous surveillance, required to maintain an artificial scarcity of infinitely replicable goods in a digital economy, has great totalitarian potential (Foucault, 1979).

In addition, any enthusiasm about the possibilities of virtual travel ought to be tempered by a caution as to its political economy. This anticipated further round of space-through-time compression (Harvey, 1989), based on the virtualization of production and consumption, will transform global capitalist relations, and will inevitably be grounded in exploitative material conditions. side the production, we may expect the supply of tourist places to be outsourced to locations where their computer generation can be performed most efficiently, produced by underpaid workers who create virtual landscapes for access by the world's elite. On the side of consumption, past experience in virtualized gambling products and computer games (Livingstone, 2005; Schüll, 2012) give us reason to be wary of the potentially addictive nature of on-tap, virtually consumable experiences. The addicted flyer construct may well give way to addictive virtualization technologies.

#### Local sustainability

A final, but unlikely, scenario is a serious, concerted effort to globally position environmental risk as an absolute priority: a

worldwide reconfiguration of economy and society around 'local sustainability'. This would imagine a dialectical synthesis that localized the global environmental costs of air travel production while simultaneously restricting consumer travel behavior. In the words of Dennis & Urry (2009, p. 149):

This envisions a network of self-reliant (and probably also semi-isolated) communities in which people live, work, and most recreate...

This would involve dramatic global shifts towards lifestyle that are much more intensely local and smaller in scale. Friends would have to be chosen from neighboring streets, families would not move away at times of new household composition, work would be found nearby, education would be sought only in local schools and colleges, the seasons would determine which and when foodstuffs were consumed, and most goods and services would be simpler and produced nearby.

In this scenario, leisure travel is restricted to local destinations, accessible via land-based forms of mobility. International travel is increasingly rationed, making long-haul for well-off citizens of the global North "a once-in-a-lifetime experience, not an annual event" (Moriarty & Honnery, 2008, p. 871).

While there is, of course, a large extant literature on sustainable travel and tourism (Hall, Gössling, & Scott, 2015), perhaps the logic of a shift to slower, less carbon intensive travel modes is best revealed by the

so-called 'slow travel' movement. Slow travel has been somewhat eponymously defined as an "... alternative to air and car travel where people travel to destinations more slowly overland and travel less distance" (Dickinson, Robbins, & Lumsdon, 2010, p. 482). Following the slow food and slow city movement of the 1980s and 1990s (Clancy, 2014), which aimed at reverting the 'McDonaldization' of food and society more generally (Petrini, 2001), slow tourism seeks to refocus on the most fundamental aspects of travel, making the journey itself an extraordinary experience (Howard, 2012). The decreased velocity of slow travel results in space-time decompression: an increased duration and increased friction of distance. As such, we would suggest that the temporality of slow travel is more about a return to the past than slowness per se. As Dickinson et al. (2011, p. 282) note, "...pilgrimage routes, the Grand Tour, and similar romantic, cultural or religious journeys were antecedents of what we refer to now as slow travel." Indeed, the notion of the pilgrim links slow travel to previous modes of travel experience, based around the mismatch between the present reality and a Platonic ideal other place. In the words of Bauman (1996, p. 20): "For pilgrims through time, the truth is elsewhere; the true place is always some distance, sometime away. Wherever the pilgrim may be now, is not where he ought to be, and not where he dreams of being. The distance between the true world and this world here and now is made of the mismatch between what is achieved and what has been. The glory and gravity of the future destination debases the present and makes light of it."

As it involves reduced consumption, this retrograde slowness is unlikely to be driven by capitalist enterprises eager to maximize profit. Slow travel is therefore a necessarily marginal phenomenon, suitable for features in newspapers' 'lifestyle' supplements about eccentric travelers rather than a threat to the global air travel industries. fundamentally, a transition to slow travel en masse would require a restructured political economy, something which leftist and radical approaches have been attempting for centuries. In short, there does not appear to be the momentum for a shift towards localized risk and more socialized responsibility of their production. It is a future which is increasingly difficult to imagine, particularly since the catastrophic experiments with communism in the 20<sup>th</sup> Century.

## On The Origins and Destinations of Banal Fantasy

The scenarios sketched out above present logical extensions of some current trends, made in the spirit of what may be loosely described as apocalyptic studies (Mitchell, 2004). The scenarios proposed by Dennis and Urry, and our contextualizations of flying within them, have a certain familiar logic; they fit with the syntax of our times (Žižek, 2011). They are, perhaps, all too easily imagined. As social theorists, we should be deeply suspicious of such easy familiarity (Ricoeur, 1970). These scenarios are arguably not products of objective analysis but of cultural habit, the object of what was once known as 'ideology'. On a prosaic level, these exercises in futurism are

instantly recognizable, drawing as they do from the genre of science-fiction. Indeed, well before global warming came prominence in the popular imaginary, automobile-induced apocalypse had formed a crucial component of our cultural vocabulary. For example, in several of the works of apocalyptic English science-fiction writer JG Ballard, the car is the harbinger of the 'autogeddon', the symbol of pathological psyches and relations to nature. In the present, the 'regional warlordism' scenario could be a description of the recent Hollywood films Elysium (2013) or Oblivion (2013). Similarly, in place of our recount of 'digital networks of control', we could offer aspects of the plots from Equilibrium (2002), Sleep Dealers (2008), Cargo (2009), or Transcendence (2014). The point is that these scenarios are not analyses; they are science fiction scripts.

It is the entire cultural bent in imagining the future that we are questioning here. In other the scenarios we propose themselves a product of bourgeois ideology, expressed in science fiction. Indeed, the field of 'future studies' is built on a foundation of science fiction with a disciplinary genealogy traceable to HG Wells. It seems we have trouble imagining the future without recourse to sci-fi (Mitchell, 2004; Tucker & Shelton, 2014). To envision the future in any mode other than science fiction - with its attendant capitalism - requires an imagination that we simply lack. Susan Sontag's seminal (1965) diagnosis of science fiction as the inadequate imagination of destruction must be inverted: science fiction has come to destroy the adequacy of our imagination.

That our critical faculties might be overcome by our cultural products is not a novel proposition. As early as 1947, Adorno and Horkheimer famously argued that industries', most 'culture notably the production of film and radio but also the then-emerging industry of television, establish the fundamental Kantian categories through which we understand the world. According to this radical view, the very structure of our consciousness has become shaped by film production teams. When cultural products of this type saturate our senses, the result is "the stunting of the massmedia consumer's powers of imagination and spontaneity" (Horkheimer & Adorno, 1997, p. 126).

Perhaps our present situation diagnosed with a filmic reference to Total Recall (1990). Like the protagonist of the film who believes himself a revolutionary hero but is in fact experiencing an implanted memory, our scenarios above feel like analysis but are in fact ideology. Under circumstances in which, as Baudrillard argued, we have become so saturated by media that it has come to take precedence over reality, it is hardly surprising that we have lost sight of the idea of utopia. In the words of Jameson (2003, p. 704), "... few periods have proved as incapable of framing immediate alternatives for themselves, let alone imagining those great utopias that have occasionally broken on the status quo like a sunburst".

Evidence of this is the absence of the 'locally sustainability' scenario in popular imagination. We suggest that where we, like

Dennis and Urry, do envisage a green socialized future, it is not via extrapolation of existing trends into the future, but as a nostalgically imagined past.

It is the representation of this past in the present moment that is symptomatic. Under conditions of late capitalism, space is annihilated by a tendency towards instant communication (Bauman, 2009). Everything reduced to the temporal present, producing 'end of paradoxically an temporality' where time ceases to produced as a sequence of events (Jameson, 2003). Under these profoundly ahistorical conditions of production, visions of the future and the past are themselves cultural products, systemic expressions of absence of space, time and imagination. Walter Benjamin's 1940 ninth thesis on the philosophy of history resonates here:

His eyes are staring, his mouth is open, his wings are spread. This is how one pictures the angel of history. His face is turned towards the past. Where we perceive a chain of events, he sees one single catastrophe which keeps piling wreckage upon wreckage and hurls it in front of his feet. The angel would like to stay, awaken the dead, and make whole what has been smashed. But a storm is blowing from Paradise; it has got caught in his wings with such violence that the angel can no longer close them. This storm irresistibly propels him into the future to which his back is turned, while the pile of

debris before him grows skyward (Benjamin, 1968, pp. 257-258).

## **Conclusions**

It is unlikely we will achieve fully decaffeinated, risk-free, flying any time soon. The immediate future is likely to be characterized by the reproduction of the flyers' dilemma and ongoing ideological to individualize global attempts environmental risk through increasingly sophisticated forms of commodity fetishism. If we are to agitate for a global green future, we clearly need to re-situate travel risk within broader debates about how to manage global commons (Harvey, the Ostrom, 1990). However, our attempts to imagine alternative scenarios for air travel in the age of climate emergency, mirroring as they do tropes of popular culture and contemporary futurism, are less revelatory of the future than they are diagnostic of the present. What appear as future scenarios are cultural simply the symptoms of ideologically hegemonic of system production. This, we argue, is why climate change politics is so visible; it appears in the risk society discourse precisely to the extent that it is compatible with the sort of apocalyptic visions of capitalist ideology, expressed through cultural forms.

As if in confirmation of this hypothesis, United Nations Secretary-General, Ban Ki-Moon, nominated A-list Hollywood actor, Leonardo DiCaprio, as UN Messenger of Peace with a special focus on climate change. DiCaprio was invited to address the UN Climate Change Summit in September 2014, where he presented an extraordinary address:

As an actor I pretend for a living. I play fictitious characters often solving fictitious problems. I believe humankind has looked at climate change in that same way: as if it were a fiction, happening to someone else's planet, as if pretending that climate change wasn't real would somehow make it go away (The Guardian, 2014).

DiCaprio's statement suggests that, in the West at least, we imagine environmental problems as cultural products. What is perhaps more telling, is the fact that a world leader in ideological production is trying to convince the world to act materially, a ploy that appears itself as ideology. This is symptomatic of the ideological impasse we now confront. If frequent flying is the structural conditions of outcome of contemporary capitalism rather than disordered psyches, we need to understand the interplay, contradictions and historical momentum of these conditions in order to imagine alternative futures. Yet our attempts to imagine the future, including the quasiof 'sustainable' tourism utopian ideal (Høyer, 2000; Wheeller, 2012), are foiled by the ideological apparatus responsible for the construction of the flying addict we commenced by critiquing. This acts as a double bind – we need imagination to resist the system, yet our ability to move beyond the current restrictive configuration of consumer capitalism is crippled by our inability to imagine an alternative concrete utopia that might break us out of hegemonic ahistoricism.

This is a dilemma recognized by Beck in his more recent writing on climate change: risk societies "... find themselves confronted the institutionalized contradiction with according to which threats and catastrophes, at the very historical moment when they are becoming more dangerous, more present in the mass media and hence more mundane, increasingly escape established concepts, causal norms, assignments of burdens of proof and ascriptions of accountability" (Beck, 2010, p. 260). It is a sobering conclusion: reflexive modernization, despite its imperative to respond to risks, is not going to be enough. We are left with the task of imagining alternative futures free from the ideological contexts that produce these futures as their cultural expressions. If late capitalism truly is ahistoric, then we are unable even for a moment to step outside its temporal framework to act in any way 'historically' (Jameson, 2003). This is a logical impossibility, the nostalgia of the moment. Before we can imagine a politics of the future we are obliged to philosophically resolve this dilemma of the present.

#### References

- Arnold, D. (2005). Virtual tourism. In M. Novelli (Ed.), Niche Tourism: Contemporary Issues, Trends and Cases (pp. 223-232). Oxford: Elsevier.
- Ban Ki-Moon. (2010). New Directions for the UN. from http://www.un.org/sg/articles/articleFull.asp?TID=120&Type=Op-Ed
- Barr, S., Shaw, G., Coles, T., & Prillwitz, J. (2010). 'A holiday is a holiday': Practicing sustainability, home and away. Journal of Transport Geography, 18(3), 474–481.
- Baudrillard, J. (2001). Simulacra and simulations. In M. Poster (Ed.), Jean Baudrillard Selected Writings (pp. 169-187). Stanford: Stanford University Press.
- Bauman, Z. (1996). From Pilgrim to Tourist or a Short History of Identity. In S. Hall & P. Du Gay (Eds.), Questions of cultural identity (pp. 18-36). Thousand Oaks, CA: Sage.
- Bauman, Z. (2009). Time and space united. Time and Society, 9(2/3), 171-185.
- Beck, U. (1992). Risk Society: Towards a New Modernity. London: Sage.
- Beck, U. (1995). Ecological Politics in the Age of Risk. London: Sage.
- Beck, U. (2010). Climate for change, or how to create a green modernity? Theory, Culture & Society, 27(2-3), 154-266.
- Becken, S. (2007). Tourists' Perception of International Air Travel's Impact on the Global Climate and Potential Climate Change Policies. Journal of Sustainable Tourism, *15*(4), 351-368.
- Benjamin, W. (1968). Illuminations (H. Zohn, Trans.). New York: Schoken Books.
- Britton, S. (1991). Tourism, capital, and place: Towards a critical geography of tourism. Environment and Planning D, 9, 451-478.
- Burns, P. M., & Novelli, M. (Eds.). (2008). Tourism and mobilities: local-global connections. Wallingford; Cambridge, MA: CABI.
- Butler, R. W. (1990). Alternative Tourism: Pious Hope Or Trojan Horse? Journal of Travel Research, 28(3), 40-45.
- Carrier, J. G. (2010). Protecting the environment the natural Way: Ethical consumption and commodity fetishism. Antipode, 42(3), 672-689.
- Carrington, D. (2013, 11 May). Global carbon dioxide in atmosphere passes milestone level. The Guardian. Retrieved from http://www.theguardian.com/environment/2013/may/10/carbon-dioxide-highest-levelgreenhouse-gas
- Casey, M. E. (2010). Low cost air travel: Welcome aboard? *Tourist Studies*, 10(2), 175-191.
- Cavanagh, C., & Benjaminsen, T. A. (2014). Virtual nature, violent accumulation: The 'spectacular failure' of carbon offsetting at a Ugandan National Park. Geoforum, 56(0), 55-65.
- Clancy, M. (2014). Slow tourism: ethics, aesthetics and consumptive values. In C. Weeden & K. Boluk (Eds.), Managing Ethical Consumption in Tourism (pp. 56-69). London: Routledge.
- Cohen, S., Higham, J., & Cavaliere, C. (2011). Binge flying: Behavioural addiction and climate change. Annals of Tourism Research, 38(3), 1070-1089.
- Connelly, C. (2012, November 11). Field trips ditched for online experiences. The Sunday Telegraph. Retrieved from http://www.theaustralian.com.au/news/field-trips-ditchedfor-online-experiences/story-e6frg6n6-1226514378498?nk=ce7075470ecf4c0a43092708810d12bf
- Crompton, J. L. (1979). Motivations for pleasure vacation. Annals of Tourism Research, 6(4), 408-424.

- Dann, G. M. S. (1977). Anomie, ego-enhancement and tourism. Annals of Tourism Research, 4(4), 184-194.
- Dann, G. M. S. (1981). Tourist motivation an appraisal. Annals of Tourism Research, 8(2), 187-219.
- Davis, M. (1995). The Case for Letting Malibu Burn. Environmental History Review, 19(2),
- Davis, M., & Monk, D. (2007). Evil Paradises: Dreamworlds of Neoliberalism. New York: New Press.
- DeLacy, T., Jiang, M., Lipman, G., & Vorster, S. (Eds.). (2014). Travel, Tourism and Green Growth: Concept, Policy and Practice for Sustainable Tourism Abingdon: Routledge.
- Dennis, K., & Urry, J. (2009). After the Car. Cambridge: John Wiley & Sons.
- Dickinson, J. E., Lumsdon, L. M., & Robbins, D. (2011). Slow travel: Issues for tourism and climate change. Journal of Sustainable Tourism, 19(3), 281-300.
- Dickinson, J. E., Robbins, D., & Lumsdon, L. (2010). Holiday travel discourses and climate change. Journal of Transport Geography, 18(3), 482-489.
- Duval, D. T. (2012). Critical Issues in Air Transport and Tourism. *Tourism Geographies*, *15*(3), 494-510.
- Eco, U. (1986). Travels in Hyperreality: Essays (W. Weaver, Trans.). San Diego: Harcourt, Brace & Company.
- Edensor, T. (2007). Mundane mobilities, performances and spaces of tourism. Social & *Cultural Geography*, 8(2), 199-215.
- Engelen, E., & Williams, K. (2014). Just the facts: On the success of Piketty's Capital. *Environment and Planning A, 46*(8), 1771-1777.
- Fennell, D. A. (2006). *Tourism ethics*. Bristol: Channel View Publications.
- Ferguson, J. (2005). Seeing Like an Oil Company: Space, Security, and Global Capital in Neoliberal Africa. American Anthropologist, 107(3), 377-382.
- Fisher, A. (2013, December 11). Google's Road Map to Global Domination. The New York Times Magazine. Retrieved from http://www.nytimes.com/2013/12/15/magazine/googles-plan-for-global-dominationdont-ask-why-ask-where.html?pagewanted=8&\_r=2&ref=internationalhome&pagewanted=all&
- Fletcher, R. (2011). Sustaining tourism, sustaining capitalism? The tourism industry's role in global capitalist expansion. Tourism Geographies, 13(3), 443-461.
- Fletcher, R., & Neves, K. (2012). Contradictions in tourism: The promise and pitfalls of ecotourism as a manifold capitalist fix. Environment and Society: Advances in Research, 3, 60-77.
- Foucault, M. (1979). Discipline and Punish: The Birth of the Prison (A. Sheridan, Trans.). Harmondsworth: Penguin.
- Giddens, A. (1991). Modernity and Self-Identity: Self and Society in the Late Modern Age. Cambridge: Polity.
- Giddens, A. (2008). The politics of climate change: National responses to the challenge of global warming. London, UK: Policy Network.
- Gössling, S., Broderick, J., Upham, P., Ceron, J.-P., Dubois, G., Peeters, P., et al. (2007). Voluntary Carbon Offsetting Schemes for Aviation: Efficiency, Credibility and Sustainable Tourism. Journal of Sustainable Tourism, 15(3), 223-248.
- Gössling, S., Hall, C. M., Peeters, P., & Scott, D. (2010). The future of tourism: can tourism growth and climate policy be reconciled? A mitigation perspective. Tourism *Recreation Research*, 35(2), 119-130.

- Gössling, S., Scott, D., Hall, C. M., Ceron, J.-P., & Dubois, G. (2012). Consumer behaviour and demand response of tourists to climate change. Annals of Tourism Research, *39*(1), 36-58.
- Guttentag, D. (2010). Virtual reality: Applications and implications for tourism. *Tourism* Management, 31(5), 637-651.
- Hacking, I. (1982). Biopower and the avalanche of printed numbers. *Humanities in Society*, 5(3 & 4), 279-295.
- Hacking, I. (1990). The Taming of Chance. Cambridge: Cambridge University Press.
- Hacking, I. (2003). Risk and Dirt. In R. Ericson & A. Doyle (Eds.), Risk and Morality (pp. 22-47). Toronto: University of Toronto Press.
- Hall, C. M. (2005). Tourism: Rethinking the social science of mobility. Harlow, UK: Pearson Education.
- Hall, C. M. (2013). Framing behavioural approaches to understanding and governing sustainable tourism consumption: beyond neoliberalism, "nudging" and "green growth"? Journal of Sustainable Tourism, 21(7), 1091-1109.
- Hall, C. M., Gössling, S., & Scott, D. (Eds.). (2015). The Routledge Handbook of Tourism and Sustainability. Abingdon: Routledge.
- Hares, A., Dickinson, J., & Wilkes, K. (2010). Climate change and the air travel decisions of UK tourists. Journal of Transport Geography, 18(3), 466-473.
- Harvey, D. (1989). The Condition of Postmodernity. Oxford: Basil Blackwell.
- Harvey, D. (2011a). The Enigma of Capital and the Crises of Capitalism. London: Profile Books.
- Harvey, D. (2011b). The Future of the Commons. Radical History Review (109), 101-107.
- Harvey, D. (2014). Seventeen Contradictions and the End of Capitalism. Oxford, UK: Oxford University Press.
- Higham, J., Cohen, S., & Cavaliere, C. (2014). Climate Change, Discretionary Air Travel, and the "Flyers' Dilemma". Journal of Travel Research, 53(4), 462-475.
- Higham, J., & Cohen, S. A. (2011). Canary in the coalmine: Norwegian attitudes towards climate change and extreme long-haul air travel to Aotearoa/New Zealand. Tourism Management, 32(1), 98-105.
- Higham, J., & Hinch, T. (2009). Sport and tourism: Globalization, mobility and identity. Oxford: Elsevier.
- Horkheimer, M., & Adorno, T. W. (1997). Dialectic of Enlightenment. London: Verso
- Howard, C. (2012). Speeding up and slowing down: Pilgrimage and slow travel through time. In S. Fullagar, E. Wilson & K. Markwell (Eds.), Slow Tourism: Experiences and Mobilities (pp. 11-24). Bristol: Channel View Publications.
- Høyer, K. G. (2000). Sustainable Tourism or Sustainable Mobility? The Norwegian Case. Journal of Sustainable Tourism, 8(2), 147-160.
- Hudson, S. (Ed.). (2003). Sport and adventure tourism. Binghampton: Routledge.
- Intergovernmental Panel on Climate Change. (2014). Climate Change 2014: Impacts, Adaptation and Vulnerability. Cambridge, UK; New York, USA: Cambridge University Press.
- Jameson, F. (1991). Postmodernism, or, The Cultural Logic of Late Capitalism. Durham, NC: Duke University Press Books.
- Jameson, F. (2003). The end of temporality. Critical Enquiry, 29(4), 695-718.
- Kaplan, R. D. (1994). The Coming Anarchy: How scarcity, crime, overpopulation, tribalism, and disease are rapidly destroying the social fabric of our planet. The Atlantic Monthly, February.
- Knapton, S. (2014, 8th April). We should give up trying to save the world from climate change, says James Lovelock. The Telegraph. Retrieved from

- http://www.telegraph.co.uk/science/science-news/10752606/We-should-give-uptrying-to-save-the-world-from-climate-change-says-James-Lovelock.html
- Kroesen, M. (2012). Exploring people's viewpoints on air travel and climate change: understanding inconsistencies. Journal of Sustainable Tourism, 21(2), 271-290.
- Lee, D., Fahey, D., Forster, P., Newton, P., Wit, R., Lim, L., et al. (2009). Aviation and global climate change in the 21st century. Atmospheric Environment, 43(22–23), 3520-3537.
- Livingstone, C. (2005). Desire and the consumption of danger: Electronic gaming machines and the commodification of interiority. Addiction Research and Theory, 13(6), 523-534.
- Lovelock, B., & Lovelock, K. (2013). The ethics of tourism: critical and applied perspectives. Abingdon: Routledge.
- Marx, K. (1976). Capital: A Critique of Political Economy, Volume 1 (B. Fowkes, Trans. Vol. 1). London: Penguin.
- Mathieson, A., & Wall, G. (1982). Tourism: Economic, Physical and Social Impacts. Harlow: Longman.
- Mitchell, K. (2004). The tradition of the end: Global capitalism and the contemporary spaces of apocalypse. In N. AlSayyad (Ed.), *The End of Tradition?*: Routledge.
- Monbiot, G. (2006). Heat: How to stop the planet burning. London: Allen Lane.
- Moriarty, P., & Honnery, D. (2008). Low-mobility: The future of transport. Futures, 40(10), 865-872.
- Nabbali, T., & Perry, M. (2004). Going for the throat: Carnivore in an ECHELON world -Part II. Computer Law & Security Review, 20(2), 84-97.
- Ostrom, E. (1990). Governing the Commons: The Evolution of Institutions for Collective Action. Cambridge: Cambridge University Press.
- Peeters, P., & Dubois, G. (2010). Tourism travel under climate change mitigation constraints. Journal of Transport Geography, 18(3), 447-457.
- Petrini, C. (2001). Slow Food: The Case for Taste. New York: Columbia University Press.
- Piketty, T. (2014). Capital in the Twenty-First Century (A. Goldhammer, Trans.). Cambridge: The Belknap Press of Harvard University Press.
- Prudham, S. (2009). Pimping climate change: Richard Branson, global warming, and the performance of green capitalism. Environment and Planning A, 41, 1594-1613.
- Randles, S., & Mander, S. (2009a). Practice(s) and ratchet(s): A sociological examination of frequent flying. In S. Gössling & P. Upham (Eds.), Climate change and aviation: Issues, challenges and solutions (pp. 245-271). London: Earthscan.
- Ricoeur, P. (1970). Freud and Philosophy: An Essay on Interpretation (D. Savage, Trans.). New Haven: Yale University Press.
- Ritzer, G., & Stillman, T. (2001). The modern Las Vegas Casino-Hotel: The paradigmatic new means of consumption. Management, 4(3), 83-99.
- Ryley, T., Davison, L., Bristow, A., & Pridmore, A. (2010). Public Engagement on Aviation Taxes in the United Kingdom. International Journal of Sustainable Transportation, *4*(2), 112-128.
- Schneier, B. (2014). Carry On: Sound Advice from Schneier on Security. Indianapolis, Indiana: Wiley.
- Schüll, N. D. (2012). Addiction by Design: Machine Gambling in Las Vegas Princeton: Princeton University Press.
- Scott, D., Hall, C. M., & Gössling, S. (2012). Tourism and climate change: Impacts, adaptation and mitigation. Abingdon; New York: Routledge.
- Sontag, S. (1965). The imagination of disaster. *Commentary*(October), 42-48.

- Stebbins, R. A. (2007). Serious leisure: A perspective for our time. New Brunswick: Transaction Publishers.
- Storm, S. (2009). Capitalism and climate change: Can the invisible hand adjust the natural thermostat? Development and Change, 40(6), 1011-1038.
- Tavakoli, R., & Mura, P. (2015). 'Journeys in Second Life' Iranian Muslim women's behaviour in virtual tourist destinations. Tourism Management, 46, 398-407.
- The Guardian. (2014, Tuesday 23 September 2014 23.49 AEST). Leonardo DiCaprio at the UN: 'Climate change is not hysteria – it's a fact'. *The Guardian*. Retrieved from http://www.theguardian.com/environment/2014/sep/23/leonarodo-dicaprio-unclimate-change-speech-new-york
- Tucker, H., & Shelton, E. (2014). Travelling through the end times: The tourist as apocalyptic subject. Tourism Analysis, 15(5), 645-654.
- Uriely, N. (2005). The tourist experience: Conceptual developments. *Annals of Tourism* Research, 32(1), 199-216.
- Uriely, N., & Belhassen, Y. (2005). Drugs and risk-taking in tourism. Annals of Tourism Research, 33(2), 339-359.
- Urry, J. (2012). Social networks, mobile lives and social inequalities. *Journal of Transport* Geography, 21, 24-30.
- Walker, A. (2014, 6 February 2014). Video game photography: interview with pioneer, Duncan Harris. Retrieved 3rd September, 2014, from http://www.abc.net.au/technology/articles/2014/02/06/3939389.htm
- Wall, G., & Mathieson, A. (2006). Tourism: Changes, Impacts and Opportunities. Harlow: Pearson Education Limited
- Walmsley, D., & Lewis, G. (1993). People and Environment: Behavioural Approaches in Human Geography. London: Longman.
- Wheeller, B. (1991). Tourism's troubled times: Responsible tourism is not the answer. *Tourism Management*, 12(2), 91-96.
- Wheeller, B. (1992). Alternative tourism a deceptive ploy. In C. P. Cooper & A. Lockwood (Eds.), *Progress in tourism*, recreation and hospitality management: Volume 4 (pp. 140-145). London: Belhaven Press.
- Wheeller, B. (2012). Sustainable mass tourism: More smudge than nudge the canard continues. In T. V. Singh (Ed.), Critical Debates in Tourism (pp. 39-43). Bristol: Channel View Publications.
- Wolfe, N. (2011). The Viral Storm: The Dawn of a New Pandemic Age. New York: St Martin's Press.
- World Bank. (2014). Air transport, passengers carried. Retrieved 3rd September, 2014, from http://data.worldbank.org/indicator/IS.AIR.PSGR
- Young, M. (2010). Gambling, capitalism and the state: Towards a new dialectic of the risk society? Journal of Consumer Culture, 10(2), 254-273.
- Young, M., Higham, J., & Reis, A. (2014). 'Up in the Air': A conceptual critique of flying addiction. Annals of Tourism Research, 49, 51-64.
- Žižek, S. (2010). First as tragedy, then as farce. 4th August. from http://www.thersa.org/events/rsaanimate/animate/rsa-animate-first-as-tragedy,-thenas-farce
- Žižek, S. (2011). Living in the End Times. London: Verso.
- Zuckerberg, M. (2014, 25th March 2014). Facebook post. from https://www.facebook.com/zuck/posts/10101319050523971