"If we wanted to be environmentally sustainable, we'd take the bus": Skiing, mobility and the irony of climate change

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Abstract

Global climate change is among the most visible environmental issues on the public agenda. This paper examines skiing in British Columbia, Canada, as a site where the cultural dynamics of climate change play out. Szerszynski (2007) uses the concept of "irony" to describe the gap between professed environmental values and environmental behavior. The relationship between skiing and global climate change is an exemplar of ecological "irony." The ski industry is often viewed as a "canary in the coalmine" for climate change. Skiers' interview talk also describes climate change as a major environmental concern. At the same time, discussions of climate change and skiing often neglect the intimate connections between skiing, mobility networks and global flows of tourism. These networks produce significant amounts of greenhouse gas emissions, further contributing to the environmental risks of climate change. This places skiers in an ecologically ironic situation, where pro-environmental discourse conflicts with environmentally-harmful behavior.

Key words: *climate change; sport, recreation and tourism; environmentalism; British Columbia, Canada*

Introduction

"Keep winter cool: Fight Global Warming." "Protect our Winters." "Save our Snow: Start Global Cooling." "Snow: An Endangered Species." These slogans and rallying cries illustrate one of the ways in which skiing is intertwined with environmental politics. Media accounts of shrinking glaciers and shorter winters define skiing in Europe and North America as particularly at risk from climate change. As the ski industry is central to several regional and national tourism economies, this is not a negligible risk. As a result, it is not surprising that ski resorts and skiers are showing signs of increased awareness of global climate change. This paper draws on qualitative research on skiing in British Columbia, Canada, to examine several related research questions. First, how might we interpret ski industry vulnerability to and responses to global climate change? Second, as a subpopulation with a vested interest in the future of alpine environments, how do skiers interpret the relationship between their sport and global climate change? Third, how do the ski industry and skiers interpret and act upon (or fail to act upon) the connections between skiing and automobile use, which produces carbon emissions and contributes to climate change?

The relationship between skiing and climate change is marked by what Szerszynski (2007) refers to as ecological "irony": the gulf between expressed environmental beliefs, on one hand, and active participation in ecologically destructive practices, on the other. The ski industry and many skiers adopt a generally pro-environmental standpoint (Fry, 2006; Rockland, 1994; Sachs, 2001-2002; Weiss et al., 1998). However, skiing is intimately bound up with mobility networks (Larsen et al., 2006; Lassen, 2006; Sheller & Urry, 2006; Urry, 2004) oriented around airplane and car travel. Insofar as ski resorts are nodal points in networks of automobility and aeromobility, skiing contributes to global climate change at the same that the sport is viewed as particularly vulnerable to its consequences. In this paper, I draw on Szerszysnki's work to explore the environmental ironies inherent in the relationship between skiing, mobility and the politics of climate change.

Though awareness of global climate change among environmental scientists and environmentalists dates back to the 1980s, there has been a recent explosion in media and political attention to the issue (Flannery, 2005; Monbiot, 2006; Paehlke, 2008; Weart, 2003). Record warm temperatures around the globe in the late 1990s, extreme weather events like Hurricane Katrina and the success of films like Al Gore's documentary "An Inconvenient Truth" have made global climate change one of the most visible public issues of contemporary environmental politics. While the exact consequences of climate change are difficult to predict, there is a high degree of consensus among the scientific community that the impacts will likely be severe if the world's population does

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not reduce its production of greenhouse gas emissions. Potential consequences include rising sea levels and flooding of coastal areas, the spread of diseases into new regions of the globe, and devastating transformations of animal and plant habitat.

As Lever-Tracy (2008) observes, mainstream sociology has been slow to add climate change to its research agenda. Environmental sociologists, however, have increasingly turned their attention to this issue. Much of the theoretical and empirical literature on climate change focuses on four main areas: policy responses to climate change (Borek & Bohon, 2008; Bryner, 2008; Bulkeley & Betsill, 2005; Compston, 2009; Fisher, 2004, 2006; Fletcher, 2009; Grundmann, 2007; Pralle, 2009; Zahran et al., 2007), public attitudes and behaviors (Dietz et al., 2007; Dunlap, 1998; Henry, 2000; Wolf et al., 2009; Zahran et al., 2006), media framing of the issue (Boykoff & Goodman, 2009; Brossard et al., 2004; Carvalho, 2005; Dispensa & Brulle, 2003; Gavin, 2009; Shanahan & McComas, 1999; Ungar, 1998), and the social justice implications of climate change, or "climate justice" (Dorsey, 2007; Harris, 2008; Parks & Roberts, 2006; Roberts & Parks, 2007). The present analysis contributes to the sociology of global climate change by examining how this issue is interpreted and acted upon by skiers and the ski industry in British Columbia. While a growing body of research focuses on climate change-related attitudes and behaviors among the general public (conducted primarily in the United States), this paper hones in on the interpretive frameworks and individual responses among a sub-group of the Canadian population that has a personal stake in the issue. An examination of climate change in the context of skiing illustrates the shortcomings of individualized responses to climate change — such as improving home energy efficiency, using public transit, or driving a more fuel-efficient car — which are the type of responses most often promoted by governments in Canada and elsewhere.

Theoretical framework: Irony and automobility

In their research on environmental values and behavior in Canada, Kennedy et al. (2009) describe a widespread "environmental values-behavior gap." Canadian social values appear to be shifting towards the "New Ecological Paradigm" (NEP). The NEP emphasizes the inherent worth of non-human nature and locates humans within broader ecosystems (Dunlap, 2002, 2008). However, a majority of Kennedy et al.'s survey participants (72.3%) describe a gap between their pro-environmental "intentions and their actions" (Kennedy et al., 2009, 157).

Szerszynski (2007) uses the notion of "irony," with its multiple dramatic and literary meanings, to describe the environmental values-behavior gap, wherein pro-environmental beliefs are often not embodied in our daily behavior. In speech, irony describes a separation between the words used and the intended meaning. In a theatrical or literary sense, it refers to a tragic or comic situation that is evident to the audience, but not to the character in the situation. At one level, ecological irony refers to the gap between professed environmental values and beliefs and anti-ecological behavior, which may be expressed by individuals or by organizations. We may profess to be concerned about climate change, for example, but continue to drive to work each day. We may offer regular financial support to environmental organizations, like the Sierra Club or Friends of the Earth, but continue to fly on a regular basis. Oil corporations like British Petroleum rely on advertising images of unspoiled nature in advertising and engage in alternative energy research in order to cultivate a pro-environmental public persona. At the same time, they put marine ecosystems at risk through offshore oil drilling in the Gulf of Mexico and elsewhere. These inconsistencies between attitudes and behavior are not unusual. Rather, they are among the many tensions and paradoxes inherent to social life in 21st century consumer-oriented societies. These ecological ironies may pass unnoticed, or they may be consciously used and manipulated (for example, by corporations who wish to construct a pro-environmental façade for the public).

Ecological irony refers to the detachment between abstract values and embodied behavior, whether by individuals or by groups and organizations. At another level, irony is used as a political tactic by environmental groups to illuminate the separation between the use of pro-environmental discourse by states and corporations and the anti-ecological behavior of these actors. The theatrical protests of Greenpeace often use irony in this manner. For example, Greenpeace climbers were arrested in 2009 for hanging a banner on Mount Rushmore with a picture of President Obama and the wording, "America Honors Leaders, Not Politicians: Stop Global Warming" ("Greenpeace Makes Urgent Call," 2009). A similar tactic was used to draw attention to the gap between political discourse and lack of meaningful policy action on climate change at the 2009 G20 meetings in Pittsburgh. Greenpeace protesters hung a banner mimicking a large road construction sign reading, "Danger: Climate Destruction Ahead" ("14 Arrested," 2009). As Szerszynski notes, this mode of ecological irony typically works by separating the pro-environmental ironist from the objects of their claims, constructing boundaries between "separate groups of perpetrators and victims" (Szerszynski, 2007, 348). This move is problematic insofar as it does not push the ironist to recog-

nize their own participation in the anti-ecological social practices inherent to contemporary capitalist societies.

Szerszynski does not expect that we — either individuals or organizations — will be able to resolve the tension between belief and behavior, or between "appearance and reality," which permeates consumer capitalist societies (Szerszynski, 2007, 342). Rather, he calls for an ironic ecological politics that is cognizant of the "inevitability of failure and error, and at the same time the need to act, with due care, in the very face of that recognition" (Szerszynski, 2007, 351). Unlike the ecological irony deployed as a political tactic by groups like Greenpeace, this mode of irony does not attempt to claim a standpoint outside the "tensions, inconsistencies and absurdities" of our relationships with non-human nature (Szerszynski, 2007, 343). Instead, as Szerszynski writes, "A thoroughgoingly ironic environmentalism would involve a reflexive awareness of the limited and provisional nature of human understanding, while at the same time not lapsing into cynicism or quietism" (Szerszynski, 2007, 350). This mode of environmental politics would adopt a reflexive and critical stance towards the environmental claims of corporations, states and environmental organizations, and would accept the need to act within complex systems as its starting point. By acknowledging the presence of ecological irony within the behavior of most individuals and organizations, we may craft individual and organizational responses that continuously work to minimize the environmental values-behavior gap, while remaining aware that this will always be a work-in-progress. In terms of the present research, Szerszysnki's notion of ecological irony suggests several questions: What are the main ecological tensions and ambiguities within skiing? Are the ecological ironies inherent to skiing recognized by skiers or the ski industry? If so, how do skiers and the ski industry attempt to mitigate these ecological ironies?

Szerszysnki's notion of irony is useful for understanding climate change and skiing. The analysis is also informed by Urry and his co-authors work on mobility networks (Larsen et al., 2006; Lassen, 2006; Sheller & Urry, 2006; Urry, 2004). As Sheller and Urry note, the recent turn towards mobility emphasizes that "all places are tied into at least thin networks of connections that stretch beyond each such place and mean that nowhere can be an 'island'" (Sheller & Urry, 2006, 209). The car is a particularly iconic symbol of mobility and tourism. Urry uses the term "automobility" to describe "the networks of human activities, machines, roads, buildings, signs and cultures of mobility" that are brought together through the combination of cars and drivers (Urry, 2004, 26). Automobility focuses our attention on the ensemble of cars, roads, parking lots and discourses associated with car use. The concept stresses that the mixture of cars and drivers is simultaneously social and technological. Cars and drivers may be considered "hybrid" entities because they take on qualities and abilities through their association that neither possesses on its own. The notion of automobility further highlights how car-driver hybrids are individualized, yet are simultaneously connected to a multitude of others through shared use of space (highways, parkades) and shared cultural norms. As Urry notes, "At the beginning of the twenty first century, there is a landscape of mobility systems with automobility as the dominant evolutionary peak" (Urry, 2008a, 265).

While automobility networks facilitate travel between urban and rural landscapes, between places of work and places of recreation, they also embody the types of contradictions and unintended consequences described by Szerszysnki's notion of ecological irony. While automobility has become integral to maintaining our family, friendship, and professional networks, it is also responsible for a large proportion of the greenhouse gas emissions that are driving global climate change, putting glaciated, high elevation landscapes at risk. For Urry, the ecological costs of automobility are an example of capitalism's broader tendency to "call up consequences it can't control" (Urry, 2008b). He predicts that global climate change will transform the nature of mobility, with less movement for tourism and leisure, but increased movement to escape the flooding, draught, and extreme weather events associated with global climate change.

Skiing landscapes, such as British Columbia's Whistler-Blackcomb, the Alberta Rockies, or the Laurentian Mountains in Quebec, are nodal points in global tourism mobility networks that are dominated by car and airplane travel. The barrage of ads in ski magazines and resort websites highlights how ski resorts are designed with tourism in mind, replete with hotels and restaurants. Even when skiers are "locals" rather than "tourists," they often rely on networks of automobility to travel between skiing landscapes and urban areas, such as Vancouver, Calgary, or Montreal. As I will show, skiing's reliance on mobility networks is central to the ecologically ironic relationship between the sport and global climate change.

Methodology

I used a multi-method qualitative approach for this research, combining textual analysis, interviewing and field observation. A qualitative approach to textual analysis was used to examine recurrent themes in ski magazines and resort websites (Macdonald, 2003; Silverman, 2001). Fourteen ski resort websites were sampled, including those of large destination resorts and smaller ski hills throughout British Columbia. I also examined 21 ski magazine issues, published between 2004 and 2007, from seven different magazine titles. This sample includes wide-distribution American publica-

tions, as well as smaller publications directed at the Canadian market.

While textual analysis is useful for identifying recurrent themes in magazines and websites, interviewing is valuable for exploring how skiers interpret their embodied sport experience. Semi-structured interviews were conducted with 45 skiers in the Vancouver-to-Whistler and Nelson regions of British Columbia (Kvale, 1996; Rubin & Rubin, 1995). A broad definition of "skiing" was used, so that downhill skiers, snowboarders, and telemark skiers were all eligible interview participants (this follows several writers on skiing, including Clifford, 2002; Fry, 2006; Hudson, 2000).[1] To recruit participants in Vancouver, Whistler, and Nelson, I posted notices at skiing and outdoor recreation stores and ran ads in several weekly newspapers.

There is a near-even split of male (22) and female (23) participants in the interview sample. While this reflects the gender composition of Nelson and Vancouver, women are overrepresented in terms of the gender composition of Whistler, a ski town where 55 percent of the population is male. The interview sample is also highly concentrated in the 25-44 age group. While 83 percent of the Nelson sample falls in this age group, this group only makes up 28 percent of the Nelson population in general. Similarly, 73 percent of the Vancouver-Whistler sample falls in this group, compared with 33 percent of the Vancouver population and 48 percent of the Whistler population. Interview participants are also more highly educated than the general population, with 67 percent holding a Bachelor's degree or higher (compared to 24 percent for Nelson, 29 percent for Vancouver and 31 percent for Whistler). In terms of income, interview participants are concentrated in the $21,000 to $40,000 income category, placing them above the median income for Nelson ($20,667), Vancouver ($23,237) and Whistler ($27,116).

The skiers who participated in this research are predominantly white, young, economically secure — though not wealthy — and more highly educated than the general population in these regions. This is consistent with the assertion that sport is often a site where economic capital is required for entrée into the realms where cultural capital is built up and exercised (Bourdieu, 1990, 1991). Skiing requires economic capital for ski gear, transportation to ski resorts and for lift tickets, all of which can be relatively expensive for a leisure activity. However, as Bourdieu notes, there are also "hidden entry requirements, such as family tradition and early training, and also the obligatory clothing, bearing and techniques of sociability which keep these sports closed to the working classes . . ." (Bourdieu, 1991, 370). Elsewhere, Veenstra (2007) includes skiing as a key component of the "West Coast lifestyle," which works as a form of cultural capital within British Columbia. This lifestyle includes hiking, skiing, yoga, cycling and kayaking as forms of recreation and bodily fitness. The West Coast lifestyle is most strongly linked with the province's professional class.

The largest group of participants is alpine skiers (40 percent), followed by telemark skiers (24 percent) and snowboarders (18 percent). The remaining 18 percent participate in more than one mode of snow-riding. Almost half of the participants have between 16 and 25 years of experience. While most participants appreciate living close to the skiing landscape of Whitewater or Whistler Blackcomb, the majority balance skiing with work and family commitments. I interviewed few true "ski bums," whose daily activity and occupation centre on skiing as a lifestyle. The interview sample, however, generally consists of serious, long-term skiers, rather than occasional participants who ski only a few times a year. Interpretations of skiing and climate change might be quite different for more casual skiers, or for those who ski primarily as a family activity.

As a third data collection strategy, 18 days of unobtrusive field observation was conducted between November 2006 and April 2007, split evenly between Whistler Blackcomb and Whitewater ski resorts (Bailey, 1996; Lofland et al., 2006). I covered a variety of terrain at both resorts and visited a range of on-hill lodges. While skiing, riding chairlifts, or waiting in lift lines, I was attentive to skiers' behavior and conversation. Riding "single" on chairlifts further allowed me to talk to a variety of skiers and snowboarders.

The textual materials, interview transcripts and typed field notes were imported into NVIVO7 qualitative analysis software (QSR International, 2006). The data were coded manually, rather than using automated keyword searching. The coding scheme was divided into main categories (i.e. Skiing and Environment), with several second-level and third-level categories (i.e. skiing landscapes, animals, skiing and a pro-environmental standpoint, skiing as an environmental problem, weather). I used a semi-structured approach to coding, moving back and forth between data collection, coding and analysis, while periodically revising the coding scheme (Silverman, 2001).

Climate change and the ski industry

One of the questions guiding this research is: How might we interpret ski industry vulnerability and response to climate change? Mass media coverage of skiing and climate change often focuses on climate change as a threat to the viability of skiing, as warming temperatures may result in shrinking glaciers and shorter winters. Skiing is depicted as a sort of canary in the coalmine for the impacts of climate change, much like the world's low-lying cities (such as Venice and New Orleans), or the ice caps in the Polar Re-

gions. Several articles discuss attempts by the ski industry to adapt to the uncertainties of climate change, through technological measures like increased snow-making and glacier preservation projects. For example:

> *Whistler itself is aware of the looming problem of global warming. The municipality has recently adopted standards to make it more environmentally sustainable. And Intrawest Resorts, the operators of Whistler Blackcomb, is expecting to invest millions of dollars in new snow-making equipment over the coming years* ("Global Warming Threatens," 2003, A1).

Ski resorts' attempts to address climate change are not limited to increasing snow-making and glacier preservation. In another article on climate change and skiing, the reader is told that Whistler is also improving their environmental practices through technological innovation:

> *Whistler Blackcomb is trying to grow back the glaciers by adding artificial snow and by building snow fences to protect them from wind erosion, DeJong says. The resort is also trying to set a good example by using fuel-efficient snow-grooming machines and the hill is even researching the viability of putting wind turbines on their mountains to produce clean energy* (Efron, 2005, T1).

Barthes (1973) describes "mythology" as a particular relationship between signifier, signified and sign, wherein the sign is naturalized by removing it from its historical and political context. Myth distorts meaning, but does not erase meaning. In the ski industry's discursive construction of itself, there is a mythology that links skiing, nature, and environmentalism. Through animal habitat management, recycling, educational signs about climate change, or use of "alternative" energy, skiing assumes an environmentalist posture. The ski industry appears to engage in a project of "ecological modernization," adapting to the ecological harms associated with capitalism through technological innovation and more efficient use of resources (Mol & Spaargaren, 2000).

Another question guiding this research is: How do skiers and the ski industry interpret and act (or fail to act) upon the connections between skiing and automobility networks, which contribute substantially to the greenhouse gas emissions driving climate change. In the case of the ski industry, the connections between skiing and automobility are typically marginalized from media accounts, as well as from the ski industry's discursive representation of itself. Of course, places like Whistler and Whitewater depend on flows of tourism. This is the essence of an "experience economy"

Figure 1. Skiing and automobility, Whitewater ski resort (author photo).

(Thrift, 2001). However, this experience economy is bound up with networks of automobility and aeromobility, which involve environmental "withdrawals" — fossil fuels — and "additions" — greenhouse gasses (Gould et al., 2008). Given the connections between automobility and climate change, the failure of the ski industry to address this is ironic (in Szerszysnki's sense of the term). In the winter of 2006-2007, media stories proliferated about the potential demise of skiing in the European Alps. Media accounts similarly discuss receding glaciers at Whistler Blackcomb. However, the constant stream of traffic between Vancouver and Whistler is testimony to the ski industry's own contributions to global climate change. The overflowing parking lots of Whistler Blackcomb and Whitewater further highlight the connections between skiing and automobility (see Figure 1). This illustrates Beck's (1992) notion of how a "boomerang effect" operates within the risk society, where those who create environmental risk (such as climate change) often also end up being victims of those same risks.

Skiers and climate change

The ski industry is often defined as particularly at risk from climate change. While the industry is depicted as responding through technological adaptation and moving towards pro-environmental practices, connections between skiing and mobility networks are often left out of view. Skiers' interview talk allows us to explore how the connections between skiing and climate change are interpreted by participants in the sport, who have a personal interest in the health of mountain environments. In general, the skiers I interviewed in the Vancouver, Whistler, and Nelson regions were environmentally concerned and were engaged in everyday pro-environmental behaviors like buying organic, using "green" cleaning products, and recycling. This finding is consistent with prior research, which suggests an affinity be-

tween skiers and environmental values (Fry, 1995; Rockland, 1994; Weiss et al., 1998). Furthermore, seventeen participants (out of 45) had donated money to environmental organizations in the past, or maintained environmental organization memberships. Fourteen interviewees had been directly involved in environmental organizations at some point (including four participants who were active environmental group participants at the time of interviewing).[2]

When asked about their environmental concerns, participants raised a variety of issues. Figure 2 uses network analysis techniques to map out connections among the environmental concerns raised by skiers. This figure is constructed by "quantizing" themes from skiers' interview talk and treating them as nodal points in "discourse networks," which can be examined using Ucinet social network analysis software (Borgatti et al., 2002; for similar applications of network analysis see Mische, 2003, 2008; Mohr, 1998; Prior, 2008; Reiter et al., 2007). Node size reflects the frequency with which an issue was raised. The thickness of lines (ties) between nodes reflects the frequency that pairs of themes were cited by the same participants.

As this figure illustrates, a broad range of environmental concerns were invoked by skiers. These include overpopulation, protected areas, pesticides, urban development, biodiversity and food security. Climate change, however, emerged as the central environmental concern among the skiers I interviewed. It is cited most frequently by participants, and is also well-connected to other environmental concerns raised by multiple participants, including fisheries and forestry issues, or general comments about the environmentally unsustainable character of our dominant culture. The centrality of climate change as a concern may reflect the high profile this issue currently has in the media. Luciana, a female skier from Nelson, illustrates how climate change is often invoked during interviews. She refers specifically to the impact of climate change on skiing, and draws on her own experience of interacting with mountain landscapes to interpret the issue:

> *The global warming's always a big thing. 'Cause the snow, some years are getting worse and worse and worse. I was talking with friends about how much snow there used to be when I was a kid here. And so far, we seem okay this year, but the last few years haven't been that great* (Luciana, Nelson).

Luciana thinks of climate change through the prism of her experience as a skier. Through her recreational interactions with the mountains, she connects this global environmental issue with her personal memories of "how much snow there used to be" in the Nelson area. One barrier to action on climate change is that many people feel the issue is far re-

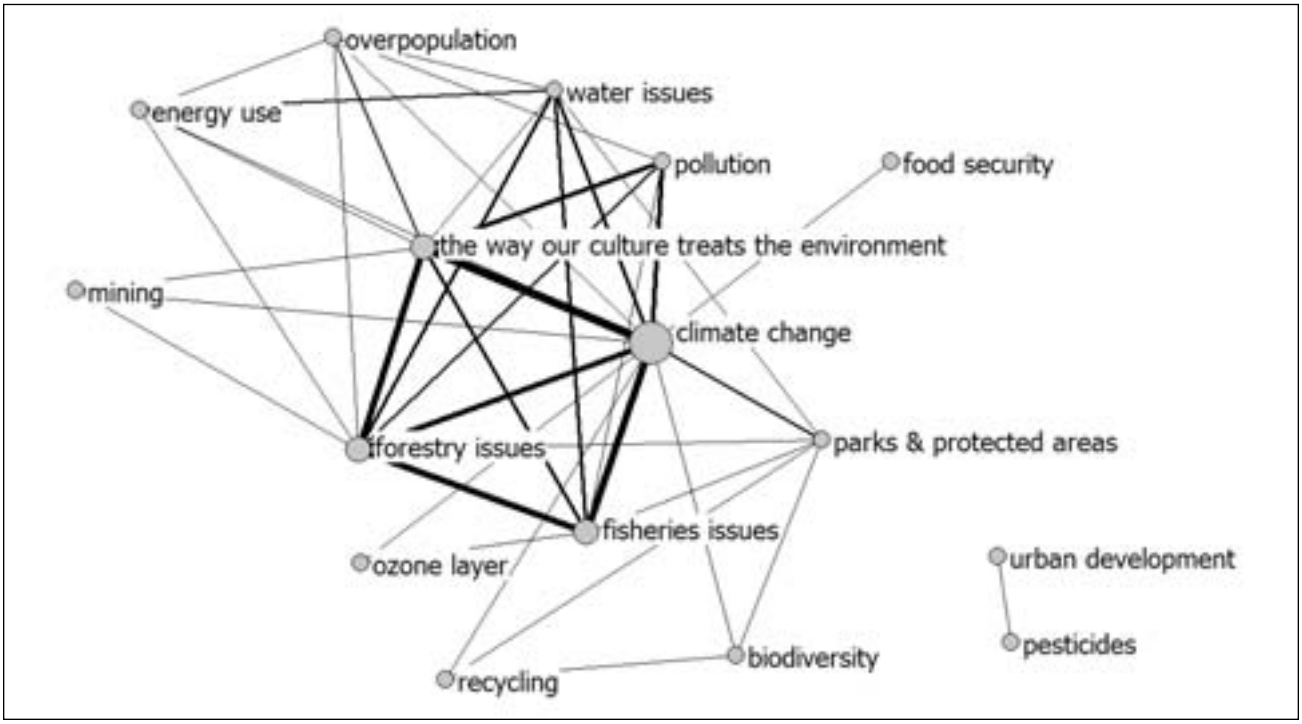

Figure 2. Skiers' environmental concerns, relationship among themes.

moved from everyday life. As Slocum notes, "One obstacle to getting people to care about climate change is the fact that it is technically complex and, for most of the 1990s, was portrayed as scientifically uncertain" (Slocum, 2004, 420). To communicate the problem of climate change in a tangible form, polar bears were used by environmentalists as symbols of threatened nature that could mobilize local action and support for climate change policy (Slocum, 2004). Luciana similarly draws on her standpoint as a skier to personalize and localize the abstract concept of climate change. Like the polar bears invoked by Greenpeace, the mountain landscapes of Whitewater or Whistler Blackcomb may become symbols for skiers to translate global climate change into a personal environmental concern.

Similar talk about climate change appears in the following excerpt. Sofia has been involved in several environmental groups and identifies herself as an environmentalist. She begins by demonstrating her knowledge of climate change to me by referencing a 1987 government document on the issue. When asked about her environmental concerns, she briefly mentions that "deforestation is dreadful of course" then continues:

> *I mean global warming. We were told in '87, in a government standing committee on the environment, chapter two said global warming is real and serious. And ski areas are going to get affected by it. But that's pretty, sort of like, my back yard. There's much more about it than that* (Sofia, Nelson).

Concerns about climate change are linked to skiing because it may alter the future of the sport. However, the skiers I interviewed repeatedly brought up the ironic connections between skiing — as a practice they value *because* it brings them into mountainous nature — and automobility. These connections are generally missing from ski industry and mass media accounts of skiing and climate change. By contrast, several skiers describe their participation in automobility systems as a point of tension between skiing and their personal environmental values. Automobility networks connect skiers with resorts and backcountry access points. The car is — for most — an essential technology of skiing. Donna describes this connection with reference to the Sea to Sky highway, which connects Vancouver and Whistler, "In a way, it's almost the people coming up [to Whistler] here in the vehicles [that's the biggest environmental impact]. I mean, on weekends it's like a snake of traffic of people accessing the area" (Donna, Vancouver-Whistler).

Many participants see this connection as an environmentally-problematic aspect of skiing, especially given the connections between automobility and global climate change. Allison, a Whistler-area skier, further illustrates this:

> *Well, we drive (laughs) to get there. And we drive far distances. And that's not environmentally sustainable at all. Like there's no way we're within our footprint if we're doing that. Like, if we wanted to be environmentally sustainable, we'd take the bus and go skiing at Grouse [instead of driving to Whistler] (Allison, Vancouver-Whistler).*

Allison, a self-identified environmentalist, highlights how skiers' choices to ski a bigger mountain, with more terrain, is linked to an active decision to participate in automobility networks. Her self-conscious laughter highlights the irony inherent in her response — in Szerszysnki's (2007) sense — as she demonstrates an awareness of the contradictions between simultaneously holding pro-environmental beliefs and engaging in environmentally-harmful behavior. As Allison notes, the North Shore Mountains, which include Grouse Mountain, Mount Seymour and Cypress Mountain, are closer to Vancouver and can be reached through public transit. These mountains, however, do not offer the same terrain and landscape as Whistler Blackcomb. Cypress Mountain, the largest of the North Shore ski hills, has 52 runs, a 610 meter vertical rise (the distance from the base of the chairlift to the peak) and 600 acres of skiable terrain. Whistler Blackcomb, by contrast, has over 200 runs (on two separate mountains), a 1,530 meter vertical rise on Whistler Mountain and a 1,609 meter vertical rise on Blackcomb Mountain, and 3,414 acres of skiable terrain. For many skiers, the pull of a larger mountain with more skiable terrain accentuates the ecological ironies already inherent in the sport.

Many skiers interpret the connections between skiing and automobile use as a point of tension between environmental values and participation in their sport. From this point, we may ask how individual skiers attempt to address these problematic connections. Several interview participants try to address their ironic connections to automobility by car pooling, car sharing, or buying a more fuel efficient vehicle. For example, Frank describes his strategy for mitigating the harmful effects of his reliance on automobility:

> *I car-share. I don't own a vehicle. Like, I car share with another friend and (clears throat) we hardly use it. It's just to get out of town. But the ironic thing is, the one time I am driving, it is to go skiing (laughs), right? In the winter. And it's an SUV. It's a big vehicle, so we can fit lots of gear, and lots of people. Um, you know, and it's been sitting for two weeks, I haven't used it. But if I want to go skiing this weekend, we're going to use it* (Frank, Vancouver-Whistler).

Even where the environmental harms of automobility can be mitigated, there remains an environmental ambiguity that Frank gives voice to. He articulates the irony of his own car-dependence as a medium for entering into and interacting with mountainous nature. A further example of attempting to manage the relationship between skiing and automobility comes from Jeffrey, who describes buying a Smart Car. He says, "I bought a Smart Car because of the environment. And it's about the minimum amount of fuel I can burn. So I'm willing to put my money into that ... I'm quite aware of the environment and willing to put some effort into maintaining it" (Jeffrey, Vancouver-Whistler).

Technologies of mobility are well-entrenched in the practice of skiing, providing skiers with access to mountain environments. At the same time, they are not entirely desirable. Automobility networks demand large-scale natural resource use for cars, roads and other infrastructure, while they produce air pollution and greenhouse gases that contribute to global climate change (Urry, 2004, 2008a). The intimate relationship between skiing and automobility produces an environmental ambiguity within the sport that is noticed by skiers, though it is typically ignored in the ski industry's representation of itself as a pro-environmental steward of mountain landscapes. While some skiers try to mitigate the negative environmental impacts of their car use through car-sharing or car-pooling, these remain individualized responses that are constrained by the "path dependency" of established automobility networks (Urry, 2003).

Conclusion

Szerszysnki's (2007) use of irony as a theoretical concept draws our attention to the gulf between expressed pro-environmental beliefs and values, on one hand, and participation in ecologically destructive social systems, on the other. Irony is a useful concept for thinking about the relationship between skiing, mobility and climate change. Ski resorts often position themselves as pro-environmental stewards of mountain landscapes. However, they downplay their connections to the "automobility" and "aeromobility" networks that connect these local, typically rural landscapes to nearby urban areas and broader networks of global tourism (Lassen, 2006; Sheller & Urry, 2006; Urry, 2004). For the most part, the ecological irony embodied by the ski industry is ignored.

However, the ecological ironies inherent to skiing do not pass unnoticed by the skiers I interviewed. When asked about the "sustainability" of skiing, most participants were quick to highlight the tensions between their own pro-environmental values and the anti-ecological impacts of skiing as a mode of interaction with mountain environments. Interviewees repeatedly raised the ironic relationship between skiing — as a means of entering into embodied relationships with non-human nature — and the automobility networks that provide access to mountain environments. Several participants also expressed skepticism about commitments to "sustainability" at the 2010 Olympics, which was hosted by Vancouver and Whistler. For many, the decision to upgrade the Sea to Sky Highway, rather than revitalize rail service along the Vancouver-to-Whistler corridor, is a lost opportunity that supports a skeptical view of the ski industry's pro-environmental construction of itself. Skiers' environmental reflexivity and attention to ecological irony is consistent with prior survey research that suggests that skiers score as high as or higher than the general public on environmental values measures (Fry, 2006; Rockland, 1994; Sachs, 2001-2002; Weiss et al., 1998). One factor that might explain this high degree of environmental reflexivity is participants' higher levels of formal educational attainment than the general population, which is similar to the above-average educational attainment of Canadian skiers in general.[3]

Awareness of ecological irony leads some skiers to mitigate the negative impacts of their own automobility through carpooling, or driving hybrids or Smart Cars. Personal awareness of environmental irony may lead some people to alter their behavior. Individual acts of "ecological citizenship" or "political consumerism" are valuable and should be encouraged (Spaargaren & Mol, 2008; Wolf et al., 2009). Personal responses to ecological irony are limited, however, insofar as they individualize responsibility for political action on climate change (Boykoff & Goodman, 2009; Evans & Abrahamse, 2009; Scerri, 2009). As Evans and Abrahamse argue, "lifestyle change is a necessary but not sufficient condition for the social changes required to avert present environmental crises" (Evans & Abrahamse, 2009, 498). Many individualized solutions, such as buying a hybrid car or Smart Car, are also limited to those with higher levels of economic capital.

A larger scale ironic ecology is needed to address the gulf between the ski industry's use of environmental discourse and its intimate connections with the mobility systems that help drive global climate change. The first component of such an ironic ecology is for the ski industry to openly acknowledge the tensions between its use of environmental discourse and its environmental impacts. The ski industry is unlikely to do this, however, unless provoked by skiers and environmentalists. While individual skiers have limited power to push the ski industry towards greater environmental reflexivity, environmental organizations have proven adept at using irony (through protest and the media) to draw attention to gaps between corporate pro-environmental self-representation and anti-ecological behavior. In British Columbia, environmental organizations have occasionally challenged the ecological legitimacy of skiing where specific ski resorts

have intruded upon valued wilderness areas. It would be useful for environmentalists to call attention to the more systematic ecological tensions embodied by the ski industry. Given that many skiers espouse environmental values and demonstrate environmental reflexivity, such a move would likely be welcomed by many participants in the sport.

While the ski industry incorporates pro-environmental discourses into its self-representation, it has been timid when it comes to entering the "policy networks" of environmental politics that extend beyond the state (Compston, 2009; Montpetit, 2003). With the provocation of skiers and environmentalists, the ski industry might consider taking a more activist stance on climate change. For example, ski industry organizations, such as the Canadian Ski Council, might partner with environmental organizations like the David Suzuki Foundation to push for more aggressive Canadian climate change policy. The ski industry might also engage more directly with transportation policy debates and encourage the development of better public transportation between local ski resorts and nearby urban areas. For example, several skiers decry the decision to upgrade the Sea to Sky highway, instead of rebuilding rail service in the region, as a failed opportunity to demonstrate a commitment to environmental sustainability for the 2010 Winter Olympics. Skiers, environmental groups (such as Whistler's AWARE) and Whistler Blackcomb might become more vocal in demanding the revitalization of rail service along the Whistler-to-Vancouver corridor as an alternative mode of transportation. Such large-scale responses to the ecological ironies inherent in skiing would surpass many of the limitations of individualized responses to climate change and its impacts on alpine environments. As skiing contributes to the environmental risks of climate change, so it will continue to suffer its consequences through shorter, warmer winters and melting glaciers. Slogans like "global cooling," "save our snow," or "protect our winters" are empty without addressing the ironic relationship between skiing, mobility and climate change.

Endnotes

1 Telemark skiing uses free-heel bindings (i.e. the skiers' toe is firmly attached to the ski binding, but not the heel), in contrast to the more familiar fixed-heel findings of alpine skiing. The skier alternately drops each knee to create a curve that guides their turns. While alpine equipment and technique has dominated the sport since the 1930s, telemark skiing enjoyed a resurgence in the 1970s and continues to account for a small minority (2%) of Canadian skiers (Canadian Ski Council, 2008).

2 Four participants have been both "donors" and "active participants." Thus, 27 out of 45 interviewees (60%) have had some connection to the environmental movement.

3 According to Canadian Ski Council (2008) estimates, 55% of alpine skiers have a university certificate or degree, compared with 24% of the general population of Nelson, 29% of the general population of Vancouver, and 31% of the general population of Whistler. While snowboarders have a similar level of educational attainment to the general population (24% have a university certificate or degree), it is worth bearing in mind that 65% of Canadian snowboarders are under 24 years of age.

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Endnote

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