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HITCHBOT: THE RISKS AND REWARDS OF A HITCHHIKING ROBOT

In the summer of 2014 we left hitchBOT at the side of the Trans-Canada Highway on the east coast of the country to see if it could hitchhike the 6,000-kilometre journey to Victoria, British Columbia. Equipped with a simple conversation program, Internet connected to GPS location services, and its own social media accounts[1], hitchBOT was able to activate a large number of followers and fans and capture international media coverage. We like to call what we attempted to do in this project 'cultural robotics', where we recognise the creative conceptual and participatory performance aspects of social robotics. In this case, we initiated a form of collective play where our little homemade robot would raise a thumb, smile, and ask passersby for a lift towards its destination. The history and motivations of the project bring together a number of topical concerns, some of which resonate with the urban hitchhiking project of Finnish artists Tuuli Malla, Anna Kholina, and Lauri Jäntti.

hitchBOT began with our speculation on the possibility of using robots for adventure: sending a robot out into the world on a social journey with events and outcomes that could not be predicted in advance. A much more analog version of this type of adventure by proxy would be the act of writing a message to a stranger, sealing it in a bottle, and casting it into the sea: an implicitly optimistic act that invests hope in the reciprocity of some unknown individual's recognising and answering your invitation for social connection. And hitchBOT was about activating trust (or not, for those who already know hitchBOT's ultimate fate).

A popular dystopian anticipation of our future with robots is typically grim, with robots ultimately dominating and sometimes eliminating humankind. This is often framed by the question, 'Can we trust robots?' We wondered if this is not overstated; after all, we are the creators of these technologies and bear the ultimate responsibility for their design. From an ethical perspective, we think that our machines will embody and perhaps exacerbate familiar human problems. For example, much like a lone hitchhiker, an autonomous social robot might be prepared to consider whether it can actually trust humans.

In the 1970s David Harris Smith logged at least 10,000 km hitchhiking throughout Canada, and enjoyed it immensely: firstly, because it was an inexpensive way to travel as a youth, and secondly, for the adventure of meeting people from different parts of the country. A long stretch of highway often resulted in small talk (weather), but sometimes also personal histories (schools, divorce, immigration), and discussions about careers and occupations (truck driving, logging, farming, fishing, military, law). Occasionally, David encountered dangerous drivers when he would invent a sudden need to get out at the next crossroads. For him, and likely for the majority of hitchhikers, these negative interactions were the exception. Hitchhiking was so popular in Canada in the late 1960s and early 1970s that it was not unusual for hitchhikers to have to queue up at the edge of a town, activating the hitchhiking etiquette of allowing the first hiker on scene to have first access to oncoming

traffic. Of course, drivers were free to assess the desirability of riding companions and there was no guarantee that a driver would not pull over to pick up someone farther down the line. Women hikers, especially, often waited less time for rides. In Canada today, one rarely sees a hitchhiker. What happened?

We live in a world of increasing danger, or so we believe. This commonly held perception is wrong, in fact. In the U.S., for example, the majority holds the opinion that rates of violent crime are rising yearly, despite significant yearly declines since the early 1990s (Mitchell 2015). Similar declines are noted in Canada, Finland, and the UK. Pinker (2011) presents the likewise counterintuitive, yet convincingly argued case for declining human-on-human violence on a millennial scale. The reasons why our perceptions of social safety are so misaligned with actuality are not entirely clear, but political propagandising on the need for increased state powers in the areas of policing, incarceration, surveillance, and security, ubiquitous media coverage of bad news, and a disproportionate concentration on human violence in television and cinematic storytelling have each been suggested as possible influences. It seems that these apprehensions also resonate with the increased levels of vigilance and restriction of children's activities—parental proofing against so-called *stranger danger*—such as the admonishments never to talk to strangers. These were some of the issues we considered in our planning of hitchBOT's journey, hoping that our project would instigate public discourse.

Of course, new encounters do entail some risk in addition to the potential benefits, but, like other rational and often statistically informed assessments of the world and its dangers, it is a competition between the dispassionate calculation of harm and more visceral apprehensions. For example, a recent study of the Swedish population from 1973–2004 found that the majority of violent crimes were committed by 1 per cent of the population (Falk et al. 2014). Thus the probability of an encounter with a potentially violent individual is 1 per 100 encounters and a further probability calculation ensues as to whether this is exactly the wrong day to encounter this potentially violent individual. Associated variables with persistent violent offenders include male gender, mental health disorders, and substance abuse, which may offer further contextual considerations when we attempt to gauge and manage our relative safety in unscripted encounters with strangers. Other compounding statistics intervene on stranger violence. However, the Canadian Centre for Justice Statistics report for 1996 (Janhevich 1998), for example, reveals that the majority of violent crimes (60 per cent) were committed by someone known to the victim, and the most likely victims of violence by strangers were young men aged 15–24 (27 per cent of all victims) at rates more than double than those for young women aged 15–24 (11 per cent of all victims).

hitchBOT travelled the 6,000 km to Victoria and had many adventures along the way: attending a First Nations pow-wow, camping in provincial and national parks, hanging out in pubs, and being invited to a wedding. After hitchBOT's subsequent trips to Germany and the Netherlands in the following year, we decided to launch hitchBOT on a trip across the United States. As many readers will already know, hitchBOT's journey ended in Philadelphia a few weeks later, as it was vandalised and left in pieces in a city park. The demise of hitchBOT was met with much sadness and disappointment, expressed by its followers on social media, and with some

thoughtful comments and at least one essay on the depreciation of the public commons (Ignaffo and Dougherty 2015).

Were we too optimistic? Although we were always aware of the risks of letting our robot hitchhike (the probability of an exceptional encounter), our eyes were set upon the adventure and pleasures of its chance meetings with strangers: the rewards outweighed the risks. hitchBOT surprised us in a somewhat prescient but spooky utterance as we set it down at the side of the road in the New England seaside town of Marblehead MA to begin its U.S. journey. We were taking some farewell photos and checking its battery life and conversation engine, when hitchBOT suddenly said, 'I think I've changed my mind.'

NOTES

1 Twitter: @hitchBOT; Facebook: hitchBOT; Instagram: @hitchbot

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