

Carbon and Conferences (Again): The Austin MLA in The Flood of 2016

On January 21, 2016, I received the “2016 Postconvention Survey for Attendees.” I have been thinking about it ever since--though I didn’t actually respond to the questionnaire because I didn’t, in the end, attend the Annual Convention. The short of it is that the train I was scheduled to take from Illinois to Texas was cancelled due to the December 2015 and January 2016 flooding in eastern Missouri. (To be fully factual, once flooding had made some tracks impassable, and two days before my planned departure date, Amtrak offered me a trip by train through Illinois transferring to bus in Missouri in the middle of the night and back to train still in the middle of the night before entering Texas. Though I’ve done such things in the past, I declined this particular offer.) As the conference in Philadelphia approaches, this experience of nonattendance has caused me to imagine a survey somewhat different from the one that we were sent.

The survey conference registrants were sent contains the following:

- 1) Why did you attend the MLA annual convention in Austin? Check all that apply.
- 2) Please rate the factors that affected your attendance. Important, Not important. No opinion.
- 3) Please indicate how satisfied you were with the following: very, somewhat, somewhat not, very not, no opinion.
- 4) Please indicate the format(s) in which you used the Program for the MLA annual convention. Select all that apply.

- 5) Please indicate where the following types of online convention resources have been or would be useful. Useful. Not. No opinion.

To the first question, I need to add the inverse question: why did you not attend the MLA Convention in Austin although you planned to? Among the possible answers could be poor health, cold feet, unexpected financial obstacles, and also, severe weather. I need not revise the second item, but I do need to expand the list of factors affecting attendance. The only one pertaining to travel reads, “ease of air travel.” The word “ease” and the assumption of air travel invite explication if not dismay. More on that in a moment. For now, I imagine the addition of the options “viability and value of travel mode”—also inviting explication--and “carbon footprint of mode of travel.”

Having been absent, I cannot do justice to the list of possible reasons for satisfaction offered for consideration in the third question. I can, however, include a missing option: ability to participate in your panel or keynote panels or all panels remotely. Question five about the usefulness of online convention resources suggests such an option might have been near at hand if not quite in hand. For example, question five includes queries about “the ability to share sessions you are attending on MLA Commons” and “the ability to annotate sessions in which you are presenting.” I appreciate that *Profession* makes available the presidential address, presidential fora, and some miscellaneous interviews after the conference.

In proposing amendments to the survey, I mean no disrespect to those who planned and attended the formal and informal occasions of the conference. I hope none is taken. I wish I had been there. I know it was valuable. Instead I want to use

the conference and survey as an introduction to my quandary about my professional travel in particular and faculty travel in general in a climate-changed world. Behind my amendments to the survey are questions that I ask myself that I find hard to answer.

These questions that trouble me about face-to-face intellectual engagement and its cost in carbon are not new. Take just one example, Matthew Schneider-Mayerson's December 8, 2014, post on the website of the Center for Energy and Environmental Research in the Human Sciences@ Rice. Entitled "The Ethics of Conferences in the Age of Climate Change," Schneider-Mayerson's post confronts head-on the relative value of an academic conference and considerable carbon emissions. He notes the "sense of guilt and heavy heart" of those scholars who take the question seriously. It is a state of being Ulrich Beck describes in *Risk Society*: the combination of increased numbers of world-wide wicked problems and increased assertion of individualism in social structures put individuals in the untenable position of seeming to be alone with their personal decisions about multi-faceted planetary problems.

Footprints

If I attach a number to my personal greenhouse gas emissions in flights to and from Austin (.22 metric tons of carbon including a multiplication effect for radiative forcing, ie, emissions in the upper atmosphere) and in accompanying ground travel (.01 metric tons of carbon), and I attach another number to my car

and bus travel to central Illinois-- the closest train travel to my home in Iowa City— (.09 metric tons of carbon) and my subsequent train travel to and from Austin (.04 metric tons of carbon), I can declare myself in possession of .10 metric tons of virtue for choosing train travel, although it never got me to the conference. Of course, one of my principal reasons for choosing train travel—climate change—is also a likely cause of my failure to realize that train travel. According to Chris Anderson, an Iowa State University weather and climate scientist who focuses his research on the center of North America, under a changed climate, the region has an annual 1 in 4 chance of a heavy rainfall and subsequent flooding whereas not so many years ago those chances were 1 in 20. My .10 metric tons of virtual carbon virtue are not all that satisfying.

And the details are complicated all up and down the geographic scale. In June 2015, prior to the climate talks in Paris, the Obama administration announced the desire to take steps to limit the greenhouse gas emissions from airplanes, following an Environmental Protection Agency declaration that these emissions contribute to global warming and endanger human health. Because airliners release CO₂ into the upper atmosphere, that CO₂ is often estimated to do twice the damage of that released on the ground. 1.891 times is the multiplier used by the UK's Department for Environment, Food and Rural Affairs and the one I used. Even so, the EPA deferred any ruling until seeing the report of the UN's International Civil Aviation Organization (ICAO), a body environmentalists have declared too influenced by consultation with the airlines and thus substantively inactive throughout its existence. Without rehearsing all claims about the EPA's intentions, the credibility

of the ICAO analysis, and the airlines' efforts to curb emissions by trying to develop less polluting biofuels as well as reducing the weight of new planes and of cargo, you could nevertheless attend to the EPA's assertion that US emissions from aircraft are the highest in the world and about 7 times higher than aircraft greenhouse gas emissions from China, the second highest emitter. Future predictions cite a substantial growth in planetary air travel through this decade and into the foreseeable future. In 2015 aviation was about 2 percent of global emissions. We might be tempted to dismiss 2%, but any emissions widely predicted to rise substantially represent a serious problem. "By 2020, international aviation emissions could be 70 percent higher than in 2005, even if fuel efficiency improves by 2 percent a year, according to estimates cited by the European Commission," says *The New York Times*.

If I had been travelling between London and Paris or Brussels or various cities in the south of France via the Chunnel train, Eurostar, I would have more specific points of comparison to argue about. I could claim that I was responsible for 90% less CO₂ than if I had been a passenger on a comparable flight. A 2006 Eurostar-commissioned study produced this finding after considering passenger loadings, power consumption, the way electricity is generated, actual aircraft loadings, and fuel consumption, among other factors. The study, which did not include the upper atmosphere effect, also concluded that comparisons of train and plane travel between London and Edinburgh, Nice, Amsterdam, Dublin, and Tangier showed similar emission advantages for train travel ranging from 73% to 91%.

Writing in the Greenwash column of *The Guardian* in 2009, science and environmental writer Fred Pearce called these claims to task. The London to Paris route seems to have particularly low emissions because of France's use of nuclear power, and the dirty diesel trains of the UK generally are way behind in the emission reductions possible with electrification. What about emissions from diesel locomotives in the US ?

"Emission Factors for Locomotives," a 2009 EPA study, estimates that national and regional freight line hauls consume 88% of locomotive fuel and national freight switching consumes 7%. Local freight lines consume less than 2% of diesel fuel and passenger rail (all in) accounts for the remaining 3%. The pollutants produced by diesel, and the object of this study, are those regulated as toxic rather than those that contribute to global warming: that is, oxides of nitrogen, hydrocarbons, carbon monoxide, particulate matter, and smoke (all important, for sure). CO₂ emission, the study observes briefly, is more dependent on the mix of the fuel than the parameters of the engine although the age and state of the engine are always relevant factors. The study mentions another greenhouse gas, methane, as a trace pollutant from locomotives that is dependent on engine parameters, but they do not have detailed estimates of this and other trace pollutants. The report does show all emissions of pollutants declining in the recent past and into the future. In the case of passenger rail, this is due to increased electrification and, according to another EPA report, an EPA regulation finalized in 2008 that "will drastically reduce emissions from diesel locomotives of all types. ...The standards are based on the application of high-efficiency catalytic aftertreatment technology for freshly

manufactured engines built in 2015 and later” and for what are called remanufactured engines.

Are these standards now providing significantly reduced emissions of greenhouse gases as well as toxic pollutants? Does more significant emissions reduction rest in these standards than in, say, the airline industry’s preliminary use of biofuels made from beef tallow and pig fat acquired from slaughterhouses? I don’t know, but I hope so since the widespread use of tallow and fat airplane fuel entangles me in another significant moral quandary I have tried to avoid for decades by not basing my own bodily fuel on the products of slaughterhouses. If it is not already clear, I should announce that the tables and charts and formulae about emissions of locomotives and the chemistry of airplane biofuel are outside this individual’s ability to conduct independent analysis.

A diesel-electric power source fuels the locomotive that pulls the Texas Eagle, the Amtrak train I would have taken from Bloomington, Illinois, to Austin through Missouri. Its fuel source and aerodynamic design make this locomotive an improvement over my worst fears about diesel dependence. How much of an improvement I lack the knowledge to say for sure. I do know that my ticket was in a sleeper, the lowest occupancy cars and therefore the least fuel-efficient. People travelling in coach would have subsidized my carbon footprint. That said, train technologies generally promise the possibility of considerable emissions reductions although this opportunity does require that there actually be trains running in your area. Meanwhile, if we were counting on the high cost of jet fuel to drive airline efficiencies, we might have to rethink that assumption. Nevertheless, airplane

emission regulation generated from recommendations of the ICAO and the EPA and emission reduction self-imposed by the good graces and innovations of the airline industry could, to be fair, produce results.

Grounded

Because only one passenger train runs through Iowa and that goes east and west, additional bus or car transportation to the nearest train station compromises the carbon savings of train travel in this part of the world. Bloomington, Illinois, for example, is 188 miles away from my home. I may fantasize travelling to the MLA convention by freight, as Ralph Ellison's narrator rides a boxcar to college in "I Did Not Learn Their Names," and jumping out of a slow-moving freight train at my destination, as does Hal in William Inge's play *Picnic*. But the reality is less romantic. Still, the carbon cost of my train travel, even with the additional carbon cost of getting to a passenger train, was less than flying—at least two planes are required to get anywhere from here except to the nearest hub.

Plus, travelling along the ground has other benefits that I value. It always reframes the presentation I had planned. Like J.M. Coetzee's Elizabeth Costello, I often find myself scrambling to rethink my ethical positions and the words of my presentation after confronted in person by the subject of my analysis. A trip through the American Bottoms, for example, is an eye-opener.

Though flooding prohibited my ground travel last January, I did drive from Iowa City to southwestern Louisiana in March. Double-digit rainfalls were still

passing through the area in waves. Mile after mile, the Great River Road was the highest ground in the delta (a matter of inches) and water licked at its sides. Homes, lower than the road on either side, were inundated; their residents standing outside, minimally protected by porches. Everything you know about American Bottoms and Mississippi Delta cultures over thousands and hundreds of years, everything you know about the class and race-inflected responses to flooding in the last one hundred and fifty years, everything you know about the likely incidence of severe flooding in the region in a climate-changed twenty-first century is all made material for you when you travel on the ground.

Convening

The question remains, what criteria of a meeting are worthy of the carbon emissions it generates? Meeting face-to-face can be more efficient, effective, and satisfying and produce more synergistic creative thinking than teleconferencing. But it is only as good as its human planners and participants and the same could easily be said for telecommunication. Thoughtful people will disagree on the value of each. Better to ask what face to face meeting is truly necessary and how often, to reconsider the value assigned to physical travel on a faculty member or graduate student's cv, and to have (if you are an institution) or encourage (if you are a professional organization such as the MLA) a mechanism for tracking amount of travel for all purposes and then responding responsibly. Many individuals and institutions have already devised or even implemented these kinds of measures and

have good ideas about other carbon-conscious travel practices. Some of these practices are described in links below. They all begin with addressing the status quo of academic travel as a shared problem. If “ease of air travel” is the only travel-related item on our MLA post-conference questionnaire, we probably aren’t, as a collective body, acknowledging the status quo of academic travel as a problem in a climate-changed world at risk, however much our individual presentations address climate-change vulnerabilities.*

January 2016 wasn’t the first time I received a last-minute phone call from Amtrak cancelling my train trip to a major conference because of flooding. Though the Souris River through Minot, North Dakota, did not crest until mid-June 2011, already in April the BNSF tracks, also used by Amtrak, were impassable there. I did not attend the American Association of Geographers meeting in Seattle, April 12-16. As that summer unfolded, a third of the homes in Minot and much else of the human infrastructure along the Missouri River was damaged or destroyed.

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*Just today I see that MLA and Amtrak have collaborated on train transportation deals to the MLA conference in Philadelphia.

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