

MONT 104N – Modeling the Environment
Reading/Study Questions on *The Uninhabitable Earth*
August, 2019

- I. Some personal reactions to begin:
- A) Have you or your family already been subject to effects of climate change? In what ways?
 - B) Is your thinking about the how humans relate to the natural world different from your parents' or grandparents' thinking? In what ways? For instance, do you, or your parents, or your grandparents enjoy doing things outdoors more?
 - C) Have you or your friends been involved in activities related to environmental issues? Do you want to find out how to get involved?
- II. I believe that one possible (maybe even an understandable and natural) response to the dire predictions Wallace-Wells lays out is one of *grief* for what will be lost if the worst comes to pass and humans engineer a planet on which humans cannot survive. Most of us think, I expect, that some of the things humans have done (perhaps our art, philosophy, literature, mathematics, science, etc.) go at least some way toward giving our existence value and meaning.
- A) What human accomplishment would you be sorriest to see lost?
 - B) What would it take to preserve some of those accomplishments?
 - C) Is there any point to that preservation if no humans are around to appreciate what is saved? (There's a very touching episode called "The Inner Light" from Season 5 of *Star Trek, the Next Generation* that addresses some of these questions.)
- III. Part II (Elements of Chaos) of *The Uninhabitable Earth* is a catalog of different effects of climate change at increases in global average temperature of 2, 4, 6, 8 degrees Celsius over the pre-Industrial Revolution period. Some critics (see II below in particular) have pointed out that while Wallace-Wells has relied for the most part on accepted science in describing the causes and potential effects of climate change, he has consistently presented only worst-case scenarios rather than ranges of possible outcomes with estimates of their likelihood.
- A) Does this seem like a fair characterization?
 - B) Why do you suppose he has chosen to structure this section in this way?
 - C) Does it add to or diminish the power of the points he is trying to make?
- IV. The well-known climate scientist Michael Mann (originator of the famous "hockey stick" graph used in Al Gore's "An Inconvenient Truth") wrote about Wallace-Wells' book on his Facebook page: "I am not a fan of this sort of doomist framing. It is important to be up front about the risks of unmitigated climate change, ... [but there is] danger in overstating the science in a way that presents the problem as unsolvable, and feeds a sense of doom, inevitability, and hopelessness." You should compare this with Wallace-Wells' own analysis of "scientific reticence" in the face of charges of "alarmism" on pages 155-157.

- A) Did you feel some of that sense of doom, inevitability, and hopelessness in reading this?
 - B) What do you think Wallace-Wells' reply to Mann would be? Would he claim that "alarmism" is justified now? If so, why?
 - C) Is the global picture of climate change still too big and too hard to grasp for most humans?
- V. On p. 31, in the midst of Part I (Cascades), Wallace-Wells writes: "The thing is, I am optimistic. Given the fact that humans could engineer a climate that is 6 or even 8 degrees warmer over the course of the next several centuries—large swaths of the planet unlivable by any definition we use today—that degraded muddle counts, for me, as an encouraging future. Warming of 3 or 3.5 degrees would unleash suffering beyond anything that humans have ever experienced through many millennia of strain and strife and all-out war. But it is not a fatalistic scenario; in fact it's a whole lot better than where we are headed."
- A) What is the *degraded muddle* that Wallace-Wells is referring to here?
 - B) What do you think about this "it could be worse" brand of optimism? Is it optimism at all?
 - C) According to Wallace-Wells, even the "degraded muddle" outcome would require measures such as world-wide carbon taxes, development and deployment of atmospheric CO₂ extraction technology, drastic changes in our food-production methods and diets, geoengineering by injection of other gases (such as SO₂) into the atmosphere that would reflect more sunlight, and so forth. What are the obstacles to implementing those ideas? Look for what Wallace-Wells says about those technological solutions elsewhere in the book(!)
 - D) What would it take to get enough people around the world on board with them to make a real difference? Is that at all likely?
 - E) What did you think of the various "fringe" responses described in the "Ethics at the End of the World" section starting on page 204?
 - F) Is there any actual reason for optimism? Or is it just the only outlook that does not lead to a complete collapse?
- VI. On page 220, Wallace-Wells says "If we allow global warming to proceed, and to punish us with all the ferocity we have fed it, it will be because we have chosen that punishment—collectively walking down a path of suicide. If we avert it, it will be because we have chosen to walk a different path, and endure." And farther down that same page, "If humans are responsible for the problem, they must be capable of undoing it."
- A) What is the relation between humans and the rest of the natural world at present?
 - B) Are we really in such complete control of our collective fate? More concretely, are humans even capable of decision-making and action on the global scale he is talking about?
 - C) Page 221: What is the meaning of Enrico Fermi's question: "Where is everybody?"

D) From the review “Down to Earth,” Meehan Crist, *The New Republic*, April 9, 2019: “...the way we define problems shapes our definition of solutions. If stories locate the problem in a realm where humans have some control, in politics and policy, they might point down a road toward salvaging something of human civilization. The future is undoubtedly bleak—to suggest we will “solve” climate change is to ignore the truth unfolding all around us—but it is not wholly settled. At the end of a political story, there is at least the possibility, however belated, of action. At the end of a tragedy, there is just tragedy, though some readers might feel catharsis on the road to ruin.” Is this ultimately a political story? Are there clear villains to blame? Or has everything in human history since the development of agriculture been a colossal mistake? (see pages 198-199)?