

## Week 1: Introduction

### Assignment

Before the next class (Monday, 10 September), you should read:

- The first two parts (Chapters 1-8) of Yuval Noah Harari, *Sapiens: A Brief History of Humankind*.
- Yuval Noah Harari. *Why Technology Favors Tyranny*. The Atlantic, October 2018.

Along with the readings, you should:

1. **Keep track of how long you spend:** I want to make the reading assignments reasonable time expectation. This is a fairly long one, since we want to make progress in the book, and our first class is nearly a week into the semester. In general, I would advocate for reading less more deeply and thoughtfully, than reading too much too quickly. So, if the volume of reading expected in this class is too much for you to read thoughtfully, please let me know.
2. **Check facts:** As part of your reading, you should select at least one claim in the readings to fact check. Once you've selected the claim you want to fact check, post it as a comment to the post in the class sub-reddit. A good fact check will include references to other sources that either support or contradict the claims in the book.
3. **Responses:** for each of the readings, either (1) write a short response to at least two of the questions below, or (2) write a detailed response to one of the questions below, or (3) pose your own question and provide a response. You may select any one of the options above, but should be prepared to contribute to discussions in the next class on many of these topics.

Response questions For *Sapiens: A Brief History of Humankind* (see above - you do not need to write responses to all of these!):

1. *Sapiens* divides history into three main revolutions: cognitive revolution (70,000 years ago), agricultural revolution (12,000 years ago), and scientific revolution (500 years ago). Describe a different way of dividing human history, and make a case for why it is better.
2. Chapter 2 writes about millions of individuals working together to make a nuclear warhead. Pick a simple artifact you use every day and estimate how many humans cooperated to produce it?
3. Chapter 4: How should understanding of the historical impact of humans on other species guide our current attitudes and policies (for example, regarding endangered species and habitat protection)?
4. Chapter 5: Why has no noteworthy plant or animal been domesticated in the past 2,000 years?
5. Chapter 5: Harari writes, "We did not domesticate wheat. It domesticated us." Is this true? How does it change your world view? Will future historians look at what smart phones did to your generation, and conclude they were a trap like wheat was to our predecessors?

6. Chapter 5: “This discrepancy between evolutionary success and individual suffering is perhaps the most important lesson we can draw from the Agricultural Revolution.” How should we measure the success of a species?
7. Chapter 6: Harari transforms Jefferson’s introduction to the Declaration of Independence into “We hold these truths to be self-evident, that all men evolved differently, that they are born with certain mutable characteristics, and that among these are life and the pursuit of pleasure.” Can you do better?
8. Chapter 6: Describe the imagined order(s) that most influenced your life in high school or here at UVA.
9. Chapter 6: Discuss: “There is no way out of the imagined order. When we break down our prison walls and run towards freedom, we are in fact running into the more spacious exercise yard of a bigger prison.”
10. Chapter 7: The three main limits of human memory presented are limited capacity, dies with the human, and only adapted to store particular types of information. Are these the most important limitations of human memory? (See Joshua Foer’s *Moonwalking with Einstein* on human memory training and competition.)
11. Chapter 7: “Our computers have trouble understanding how Homo sapiens talks, feels and dreams. So we are teaching Homo sapiens to talk, feel and dream in the language of numbers, which can be understood by computers.” Really?
12. Chapter 8: Harari writes about vicious circles that perpetuate imagined hierarchies of discrimination and subjugation. How can such vicious circles be ended? In human history, what are successful examples of ending them?
13. Chapter 8 presents three theories for nearly universal male dominance in human societies, but admits that none of them are convincing. Any better theories?

Response questions for *Why Technology Favors Tyranny* (see above - you do not need to write responses to all of these!):

1. “Fears of machines pushing people out of the job market are, of course, nothing new, and in the past such fears proved to be unfounded. But artificial intelligence is different from the old machines. In the past, machines competed with humans mainly in manual skills. Now they are beginning to compete with us in cognitive skills. And we don’t know of any third kind of skill—beyond the manual and the cognitive—in which humans will always have an edge.” Are there any candidates for a “third kind of skill” where humans would have a permanent advantage?
2. “AI is a tool and a weapon unlike any other that human beings have developed; it will almost certainly allow the already powerful to consolidate their power further.” Some tools have empowered individuals; others have empowered centralized authorities. Why is AI a tool for consolidating power (or is it)?
3. It is surprising to me that Harari’s essay does not mention China. Does what has happened in the last few decades in China contradict or support Harari’s claim that, “The decentralized approach to decision making that is characteristic of liberalism—in both politics and economics—has allowed liberal democracies to outcompete other states, and to deliver rising affluence to their people.”

4. What kinds of human decision-making should be left to machines?
5. Do you agree with Harari's call to action: "If you find these prospects alarming—if you dislike the idea of living in a digital dictatorship or some similarly degraded form of society—then the most important contribution you can make is to find ways to prevent too much data from being concentrated in too few hands, and also find ways to keep distributed data processing more efficient than centralized data processing. These will not be easy tasks. But achieving them may be the best safeguard of democracy."

### **Contributing to the Class Forum**

- Post links to interesting and relevant (this is very broadly defined) articles you find, along with a short comment about why you found it interesting or whether you agree with it.
- Post follow-up questions (and answers)