

## Week 2: Technology and Tyranny

### Links

XKCD Land Mammals

OurWorldInData: Child Mortality, Democracy

### Assignment

Before the next class (Monday, 17 September), you should read:

- Part Three of Yuval Noah Harari, *Sapiens: A Brief History of Humankind*. Everyone should read Chapters 9, 10, and 13; Chapters 11 and 12 are “optional” - I think they provide a lot of eye-opening insights, but it is not necessary to read them for the seminar. As a warning, Chapter 12 is about religion and is quite dismissive of major religions.
- Alan Turing, Computing Machinery and Intelligence (1950).

These two are optional (you are not expected to read them, but I think they are worthwhile and you’ll find them interesting):

- Claude Shannon, Programming a Computer for Playing Chess
- Silver et al., Mastering Chess and Shogi by Self-Play with a General Reinforcement Learning Algorithm, 2017.

Everyone should post at least one “fact check” (about any claim of your choice in either the *Sapiens* or the Turing reading; if it is the same as another student’s, you should provide more evidence or counter-evidence responding to their post), and for both of the readings write a response to at least one of the questions below or post a free response to your own question.

As discussed today, I won’t set a specific deadline for posting responses, but everyone is strongly encouraged to not wait until the day before class to start posting, and I’m hoping to see some constructive on-line discussion. It isn’t necessary to finish the readings before posting, and I would encourage reading the relevant response prompts below as you read each reading.

Please post your responses as comments for the appropriate post (and you are encouraged to comment on others’ responses).

- Week 2: *Sapiens*, Ch 9-13: Fact Checks
- Week 2: Turing: Fact Checks
- Week 2: *Sapiens*, Ch 9-13: Responses
- Week 2: Turing: Responses

## Response questions For *Sapiens: A Brief History of Humankind*, Part

III

Choose any one (or more) of these questions to respond to, or make up your own question.

### Chapter 9:

1. Harari writes about the unification of human cultures to the point where nearly all humans are closely interconnected. What is the most different culture you've experienced? How fundamentally different is it from your own?

### Chapter 10:

2. Harari writes, "We accept the dollar in payment, because we trust in God and the US secretary of the treasury.". What are we actually trusting the US secretary of the treasury to do? (Hint: since 2003, we're also putting a lot of trust in a different cabinet secretary.)

### Chapter 11:

3. "As the twenty-first century unfolds, nationalism is fast losing ground. More and more people believe that all of humankind is the legitimate source of political authority, rather than the members of a particular nationality, and that safeguarding human rights and protecting the interests of the entire human species should be the guiding light of politics." As we discussed a bit in class Monday, in the last few years since this was written, a lot has happened to contradict this view, and there has been a rise of nationalism in many countries (including, of course, the US and Britain). Is there still reason to believe in the longstanding trends away from nationalism?

### Chapter 12:

4. Harari describes *Humanism* as "a belief that Homo sapiens has a unique and sacred nature, which is fundamentally different from the nature of all other animals and of all other phenomena. Humanists believe that the unique nature of Homo sapiens is the most important thing in the world, and it determines the meaning of everything that happens in the universe. The supreme good is the good of Homo sapiens. The rest of the world and all other beings exist solely for the benefit of this species." According to Wikipedia, "Humanism is a philosophical and ethical stance that emphasizes the value and agency of human beings, individually and collectively, and generally prefers critical thinking and evidence (rationalism and empiricism) over acceptance of dogma or superstition." Can these definitions be reconciled? How well does Harari's argument hold up with Wikipedia's definition?

### Chapter 13:

5. "In memetics," Successful cultures are those that excel in reproducing their memes, irrespective of the costs and benefits to their human hosts." Is there a better way to measure success of a culture?

### **Turing, *Computing Machinery and Intelligence***

Choose any one (or more) of these questions to respond to, or make up your own question.

1. Turing sets up the game where the computer plays the role of one of the respondents. How would things be different if the computer played the role of the questioner (so the test was being able to classify A/B as well as a human questioner can)?
2. Turing wrote this 68 years ago: “I believe that in a-bout fifty years’ time it will be possible to programme computers, with a storage capacity of about  $10^9$ , to make them play the imitation game so well that an average interrogator will not have more than 70 per cent. chance of making the right identification after five minutes of questioning. The original question, ‘Can machines think?’ I believe to be too meaningless to deserve discussion. Nevertheless I believe that at the end of the century the use of words and general educated opinion will have altered so much that one will be able to speak of machines thinking without expecting to be contradicted. I believe further that no useful purpose is served by concealing these beliefs.” How good was his prediction?
3. Turing discusses nine potential objections to his Imitation Game test. Which one do you find most convincing (that is, where Turing’s counter-argument is not convincing)? Or, what other objection do you have?