

THE UNIVERSITY OF CHICAGO

BPRO 25800, ASTR 2(3)1700, SOCI 2(3)0531, KNOW 2(3)1700

Are We Doomed? Confronting the End of the World

Thursdays 2:40-5:20pm

Spring 2021

Classroom: Zoom (see [Canvas class page](#) for link)

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Class Syllabus

April 1 - Introduction, Doomsday clock, Nuclear Annihilation

Topics: Nuclear dangers, close calls, treaties, destabilization and new arms race

Guest: [Rachel Bronson](#)

Readings:

1. [2021 Doomsday Clock Statement](#)
2. Rachel Bronson and Sharon Squassoni, "[More hands needed on the nuclear football](#)"
3. Elisabeth Eaves, "[Why is America getting a new \\$100 billion nuclear weapon?](#)"
4. Martin Hellman & Vinton Cerf, "[An existential discussion: What is the probability of nuclear war?](#)"
5. Useful background information can be found at: [Union of Concerned Scientists](#), [Outrider Foundation](#)

Movies: *Fail Safe*, *Dr. Strangelove*, *The Day After*, *On the Beach*, *War Games* (follow Box link [here](#))

Novels: Selection from [here](#)

April 8 - Environmental Devastation

Topics: Climate change, human/social consequences

Guest: [Sivan Kartha](#)

Readings:

1. [Synthesis report from IPCC5](#) (especially the "[Summary for Policymakers](#)")
2. IPCC Special Report: Global Warming of 1.5°C [Summary for Policymakers](#)
3. Bill McKibben, "[Global Warming's Terrifying New Math](#)"
4. Elizabeth Kolbert, "[Three scenarios for the future of climate change](#)"

Movies: *An Inconvenient Sequel: Truth to Power*, *The Day After Tomorrow*, *Soylent Green*, *Nausicaä of the Valley of the Wind*, *Wall-E*, *Akira* (follow Box link [here](#))

Novels: Selection from [here](#)

April 15 - Information Chaos

Topics: Social media, attack on the capitol, stolen election, fake news, post-truth society

Guests: [Herb Lin](#)

Readings: (all available in the [relevant weekly page](#) or [modules section of Canvas](#))

1. Herbert Lin & Amy Zegart, Chapter 1 (Introduction) from *Bytes, Bombs, and Spies*
2. National Research Council, Summary section from *At the Nexus of Cybersecurity and Public Policy: Some Basic Concepts and Issues*
3. Herbert Lin, “The existential threat from cyber-enabled information warfare” (Bulletin of the Atomic Scientists)
4. Herbert Lin and Jaclyn Kerr, “On Cyber-Enabled Information Warfare and Influence Operations” (Oxford Handbook of Cybersecurity)

Films: [The Island President](#), *Zero Days*, *The Circle*, *Brazil*, *The Matrix*, *War Games* (follow Box link [here](#))

Novels: *1984*, *Parable of the Talents*, *It Can't Happen Here*, *The Handmaid's Tale*, *Fahrenheit 451*

April 22 - Revolt of the Machines

Topics: Superintelligence, the alignment problem

Guest: [Stuart Russell](#)

Readings: (all unlinked readings are on the [relevant weekly page](#)).

1. Stuart Russell, “[Human-Compatible Artificial Intelligence](#).” In Stephen Muggleton and Nick Chater (eds.), *Human-Like Machine Intelligence*, Oxford University Press, 2021. (Summary of HC main argument)
2. Stuart Russell, [Many Experts Say We Shouldn't Worry About Superintelligent AI. They're Wrong](#), *IEEE Spectrum*, October, 2019. (Summary of HC Chapter 6)
3. Toby Ord, “[Future Risks: Unaligned Artificial Intelligence](#).” *The Precipice*.
4. Max Tegmark, “[Prologue](#).” *Life 3.0*.

Films: *Her*, *World on a Wire*, *The Matrix*, *The Terminator*, *iRobot*, *2001*, *Blade Runner* (follow Box link [here](#))

Novels: *I Robot*, *R.U.R. (Rossum's Universal Robots)*, *2001 A Space Odyssey*, *We are Legion (We are Bob)*, *the Golden Age*, *Robopocalypse*, *Daemon*, *Ancillary Justice*, *House of Suns*, *The Lifecycle of Software Objects*, *All Systems Red*, *The Diamond Age*, *Neuromancer*, *the Moon is a Harsh Mistress*, *I Have No Mouth and I Must Scream*, *Excession*, *Ware Tetralogy*, *Hyperion*, *Accelerando*

April 29 - Social Inequality and Conflict

Topics: Inequality and Conflict in History and Contemporary / Ethical responses

Guest: [Dipesh Chakrabarty](#)

Readings: (all unlinked readings are on the relevant [weekly page](#)):

1. Anil Agarwal and Sunita Narain, “[Global Warming in an Unequal World: a case of environmental colonialism](#).” Centre for Science and Environment, 1991.
2. Hannes Bergthaller, “[Thoughts on Asia and the Anthropocene](#).” *The Anthropocene Turn*, 2020.
3. Dipesh Chakrabarty, “[Planetary Crises and the Difficulty of Being Modern](#).” *Millennium Journal of International Studies*, 2018.

Films: *Rashomon*, *Metropolis*, *Battle Royale*, *Planet of the Apes*, *Elysium*, *Snowpiercer*, *The Platform*, *The Hunger Games* (follow Box link [here](#))

Novels: *Parable of the Sower*, *The Only Harmless Great Thing*, *The Dispossessed*, *The Necessary Beggar*, *Iron Council*, *Midnight Robber*, *The Unkindness of Ghosts*, *The Binti Trilogy*

May 6 - Policy Responses to Existential Threats

Topics: Policy responses to existential threats, past and present

Guest: [Jerry Brown](#)

Readings: (readings available at [this Canvas page](#))

1. “Nuclear Addiction,” *Thought Magazine*, Vol. 59 No. 232, March 1984 (by Jerry Brown) -- Critique of US nuclear policy
2. “A Stark Nuclear Warning,” *NY Review of Books*, July 14, 2016 (by Jerry Brown) -- Review of Bill Perry's “My Journey at the Nuclear Brink”
3. “The Atomic Titanic,” *The Button: The New Nuclear Arms Race and Presidential Power from Truman to Trump* (by Walter Perry), in Library Reserves linkable from the left menu.
4. “How Close Is Humanity to the Edge?” *The New Yorker*, November 21, 2020 (by Corinne Purtill) -- Profile of Toby Ord
5. “The Risk Landscape” and “Saving Humanity”, chapters 6 and 7 from *The Precipice: Existential Risk and the Future of Humanity*.

Films: Any from prior weeks involving government response. *Manchurian Candidate* (original & remake), *Wag the Dog*, *Vice*, *The unknown known* (follow Box link [here](#))

Novels: *1984*, *The Dispossessed*, *Fahrenheit 451*, *The Handmaid's Tale*

May 13 - Pandemics & COVID19 - Are we Ready?

Topics: Deadly pandemics; quarantine and distancing in complex, interdependent societies

Guest: [Suzet McKinney](#)

Readings/Viewings:

1. Watch the film “Contagion” (2011) ([available on Box](#)).
2. [Visualize](#) the History of Pandemics.
3. CDC [Community Mitigation Guidance](#) (also [available on Canvas](#)).
4. [Biodefense in Crisis](#) by the Bipartisan Commission on Biodefense
5. [The origin of COVID: Did people or nature open Pandora's box at Wuhan?](#) by Nicholas Wade in the Bulletin of the Atomic Scientists

Movies: *12 Monkeys*, *La Jetee*, *28 Days Later*, *Pandemic*, *I am Legend* (follow Box link [here](#))

Novels: Selection from [here](#)

May 20 - The Future of Existential Threats

Topics: Framing, Anticipating and Responding to Existential Threats

Guest: [Martin Rees](#)

Readings: (see direct links [here](#))

1. [On the Future](#) by Martin Rees (the entire book; available through [course library reserves](#))
2. [The Future Prospects for Humanity](#) by Martin Rees in Beshara Magazine
3. [Buckle up: We are in for a bumpy ride](#) by Martin Rees in the Bulletin of the Atomic Scientists
4. [How easy would it be to snuff out humanity?](#) by Martin Rees in The Independent
5. [From coronavirus to the climate: What it means to be a scientist today](#) by Martin Rees in The Independent

Movies/Novels: Any from prior weeks (follow Box link [here](#))

May 27 - The Artistic Imagination of Threat and Speculative Design

Topics: Artistic Rendering of Threats in Art, Film, Novels, Short stories, Music and other formats

Guests: [Patrick Jagoda](#)

Readings/Viewings (linked here or on Canvas page [here](#)):

1. *Speculative Everything* by Anthony Dunne and Fiona Raby, “Chapter 1: Beyond Radical Design?” p. 16-21, and “Chapter 5: A Methodological Playground: Fictional Worlds and Thought Experiments” p. 70-82.
2. [Pumzi](#) (Wanuri Kahiu), science fiction short film (~20 minutes)
3. [“The Mundane Afrofuturist Manifesto”](#) by Martine Syms.
4. [World Without Oil](#) by Ken Eklund and Jane McGonigal, live action game website with documentation (~7 minutes)
5. [Terrarium](#) (Fourcast Lab), alternate reality game short documentary (~17.5 minutes)
6. “Little Brother” by Walter Mosley, short story (~25 pages)

Movies/Novels: Any from previous weeks (follow Box link [here](#))

Note that the “memo” for this, final week is motivated by the following prompt:

Imagine 2051. Use the materials and medium (or media) of your choice to create one modest object that belongs to this future world and animates a rich tension or possibility about the status of the world 30 years into the future. The idea is that you should not create an entire world or detailed narrative. Rather, your object should be evocative of that future world, its ways of life, and forms of action within it. Your object might suggest some of the historical events that have happened between 2021 and 2051. As an added challenge, imagine a world that has overcome some major threat or scenario of doom. You don’t need to imagine a utopia, but to end the course fixed on hope and possibility, try to think beyond purely dystopian and apocalyptic scenarios, which are usually easier to imagine in our troubled times. For your medium, you can work with anything you feel comfortable with, whether it is clay, paint, code, colored pencils, or musical instruments. You can create a short comic, a sculpture, a song or audio soundscape, a paper flyer, a common object, a piece of software, or anything else that exists in your version of 2051. Use your making as a way of thinking about possible (and preferable) futures. Along with one or more photographs or digital representations of your object, turn in a brief one-paragraph artist statement (your “memo” for the week) that discusses your key concepts and themes. Have your object available for display and discussion during class.