The many disasters of the COVID-19 pandemic

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Principles of Complex Systems, Vols. 1 & 2 | @pocsvox
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Outline

First: The Truth

COVID-19 is a conspiracy

- It's not a real contagion.
- Contagion: *con* = 'with' + *tangere* 'to touch.'
- Conspiracy: *con* = 'with' + *tangere* 'to breathe.'
- WHO declares COVID-19 transmission may be via airborne particles in … May, 2021 ⧉ after long resisting doing so ⧉

- 2020-01-14: WHO tweeted: ⧉
  "Preliminary investigations conducted by the Chinese authorities have found no clear evidence of human-to-human transmission of the novel #coronavirus."
- 2020-03-30: WHO Official Defends Guidance: 'We're Not Seeing' Airborne Transmission ⧉

The whole concept of 'disaster' is a disaster:

- Dis + Aster = Bad Star = Astrological Ill Fate.
- If the heavens are a clockwork, then all was foretold.
- The stars and planets are the shadowy cabal.
- But we know there are different timelines available.
- Fate is a sometimes food, and there is only the story of fate. (more later in PoCS, Vol. 1).

Journal entry, 2020/02/11:

- Coronavirus
- The idiocy about R_0 continues.
- Unbelievably believably bad science.

Journal entry, 2020/02/21:

Twitter DMs to Sam Scarpino:

- Okay: The scientists studying pandemics need to be able to present some kind set of numbers that show how bad things are. The whole R_0 disaster has been waiting to happen because people have been … lazily having fun with math models? Unconcerned about how to communicate vital scientific information? Stupid? I don't know. Maybe a radar plot visualization. I don't know.
- "When these three boundaries are crossed, we are in trouble"
- Measles has an R_0 of 20. We should all have it. Of course, there's no f**king time scale for R_0 so we don't know when that happens.

Journal entry, 2020/02/21, cont.:

Twitter DMs to Sam Scarpino:

- One of the core pieces we had in our old paper: "What is N?"
- And rare events matter so, so much. I keep seeing new countries report their first case.
- South Korea with the church. WaPo says cases are "soaring" there. I haven't seen the numbers.

What is haPpeNing?

On March 11, within about 15 minutes after 9 pm US EST:

1. Tom Hanks and Rita Wilson announced that they had tested positive for COVID-19.
2. The National Basketball Association put its season on hold indefinitely due to the COVID-19 pandemic.
3. Trump gave an Oval Office Address during which the Dow Jones Industrial Average futures dropped.
4. Also: former US vice presidential candidate Sarah Palin was appearing on the popular Fox TV show "The Masked Singer" performing Sir Mix-A-Lot's "Baby Got Back" in a bear costume.

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2020/03/15, journal entry:

They look like us now ▦

- 🦠 What must be done, and must have been done from the start:
- 🦠 Test everyone.
- 🦠 We need sunlight, we need knowledge.
- 🦠 And we needed to be prepared.

"Narrative Epidemiology" through TV Tropes: ⬈

- 🦠 The virus as this season's Big Bad ▦ and a Complete Monster ▦
- 🦠 Ignore the Scientists ▦
- 🦠 Asymptomatic spreaders: The Virus ▦ looks like us now ▦
- 🦠 Failure to act as one against a remorseless unified foe: Let's Split Up, Gang ▦
- 🦠 Vaccine as a silver bullet ▦
- 🦠 Bill Gates created the virus and wants to put chips in your head: Poison-and-Cure Gambit ▦
- 🦠 Tyrant Takes the Helm ▦
- 🦠 Fundamental problem: We much prefer stories of individuals, not systems.

Story versus the Virus

Journal entry, 2020/03/21:

The complete incompetence of Trump, our doom

Washington Post article, March 20 ⬈

Azar couldn't get through to Trump to speak with him about the virus until Jan. 18, according to two senior administration officials. When he reached Trump by phone, the president interjected to ask about vaping and when flavored vaping products would be back on the market, the senior administration officials said.

Story versus the Virus

Journal entry, 2020/03/21, cont.:

On Feb. 25, Nancy Messonnier, a senior CDC official, sounded perhaps the most significant public alarm to that point, when she told reporters that the coronavirus was likely to spread within communities in the United States and that disruptions to daily life could be "severe." Trump called Azar on his way back from a trip to India and complained that Messonnier was scaring the stock markets, according to two senior administration officials.

🦠 Like life, death finds a way.

System failure—things fall apart

Mismeasurement of Death

- 🦠 We couldn't and still can't count cases and deaths properly.
- 🦠 All up-to-date pandemic dashboards are wrong.
- 🦠 No error bars.
- 🦠 Like flying a plane with instruments showing readings from 3 hours ago.
- 🦠 We need a Grim Scorekeeper.
- 🦠 Excess deaths in the US have run at about 35% more than reported COVID deaths.
- 🦠 Estimate: Over 500,000 excess deaths in the US from March 15 to December 31, 2020.
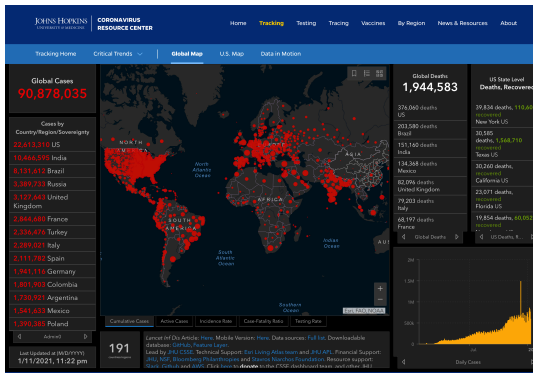
Eight significant digits, no errors:

January 11, 2020, Johns Hopkins:

https://www.ft.com ⬈

January 7, 2020, Financial Times, beautiful, misleading:

https://www.ft.com ⬈
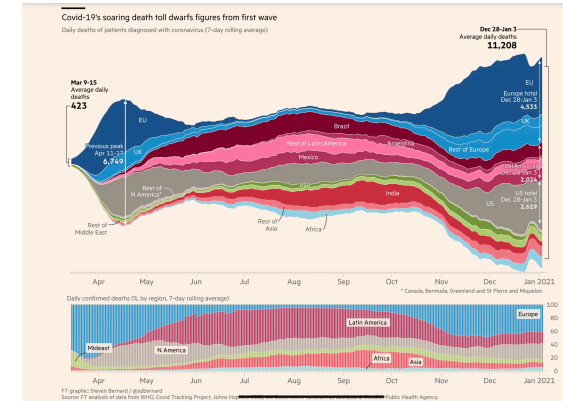
Eventually: time series with excess deaths:

September 20, New York Times:
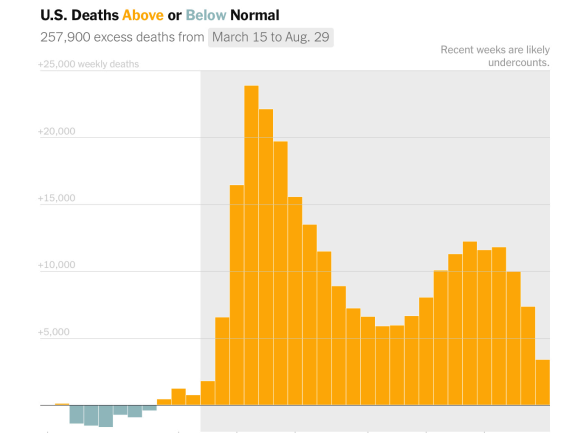
Financial Times:

January 7, 2020, Financial Times:

https://www.ft.com ⬈

The humans:

Timely delivery of Stimulus Packages for the Virus and SIR models:
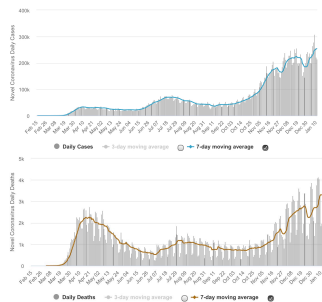
Vacations + fatigue + stories.

The Mismeasurement of Death:

We need a Grim Scorekeeper

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Prominent COVID-19 dashboards:

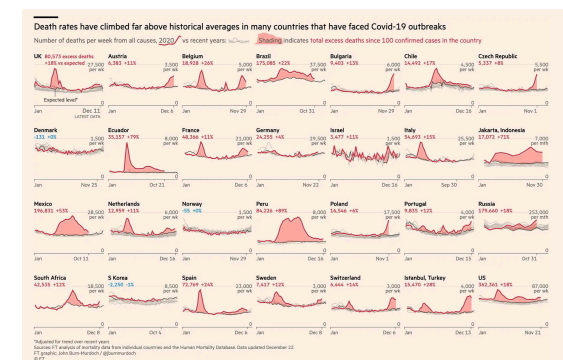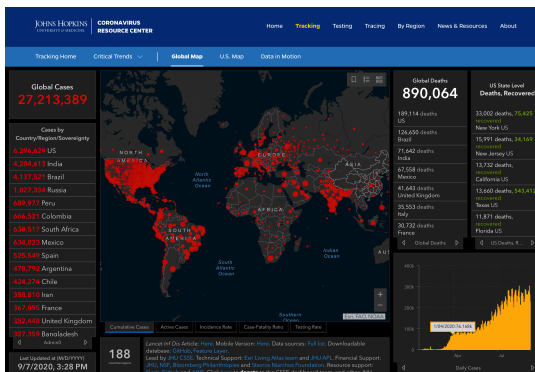🕸 Johns Hopkins Coronavirus Resource Center ⬀

🕸 Worldometer ⬀

🕸 Financial Times (moved to tracking excess deaths):
https://www.ft.com/content/
a2901ce8-5eb7-4633-b89c-cbdf5b386938

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Johns Hopkins Coronavirus Resource Center ⬀:

"An interactive web-based dashboard to track COVID-19 in real time" ⬀
Dong, Du, and Gardner,
The Lancet Infectious Diseases, , , 2020. [1]

Issues:

🕸 Leads with cases, sometimes noted as being confirmed.

🕸 Illusion of accuracy: 27,213,389 global cases and 890,064 deaths on 2020/09/07, 3:28 pm EST

🕸 Amazing: 8 and 6 significant digits.

🕸 No errors or uncertainty indicated.

🕸 General dashboard issue: Reporting varies wildly across the world and within countries.

🕸 General dashboard issue: Case numbers have been an undercount the whole time.

The Mismeasurement of Death:

Tracking excess deaths:

🕸 CDC:
https://www.cdc.gov/nchs/nvss/vsrr/covid19/
excess_deaths.htm

🕸 The New York Times:
https://www.nytimes.com/interactive/2020/05/05/
us/coronavirus-death-toll-us.html

🕸 The Economist:
https://www.economist.com/graphic-detail/2020/07/15/
tracking-covid-19-excess-deaths-across-countries
Data:
https://github.com/TheEconomist/
covid-19-excess-deaths-tracker

🕸 Financial Times:
https://www.ft.com/content/
a2901ce8-5eb7-4633-b89c-cbdf5b386938

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[1] E. Dong, H. Du, and L. Gardner.
An interactive web-based dashboard to track
COVID-19 in real time.
The Lancet Infectious Diseases, 2020. pdf ⬀