# AI in Society and Public Services

Are We Doomed?

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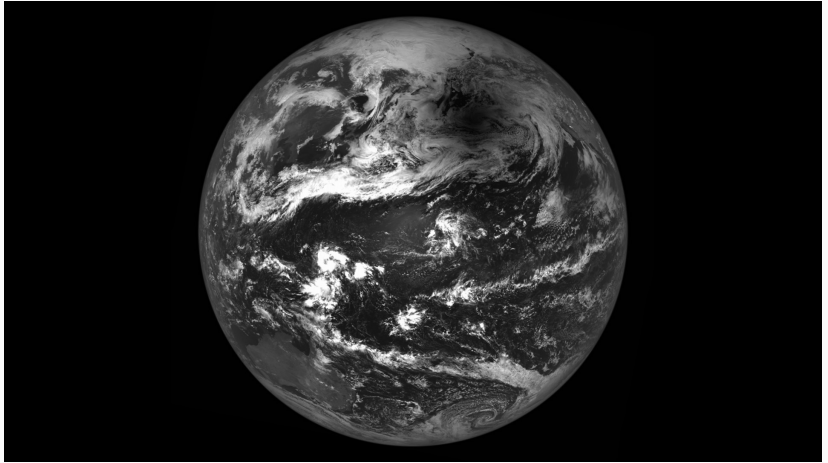
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# Are We Doomed?

- We often worry about the future.
- History shows us that extinction events are the norm, not the exception.
- Let's review the "Natural" candidates for our destruction.
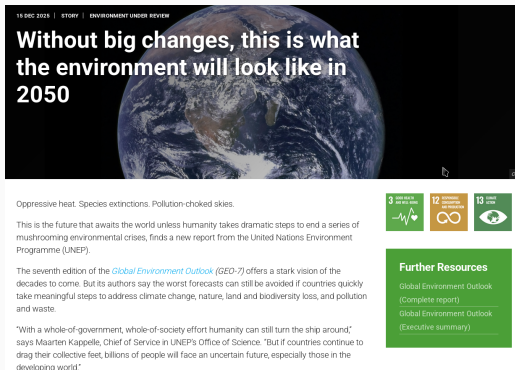
# Solar Flares and Coronal Mass Ejections

- **The Risk:** A Carrington-level event.
- **Consequence:** Fried electronics, global power grid failure.
- **Modern Context:** In a digitized world, this means the end of banking, transport, and internet.
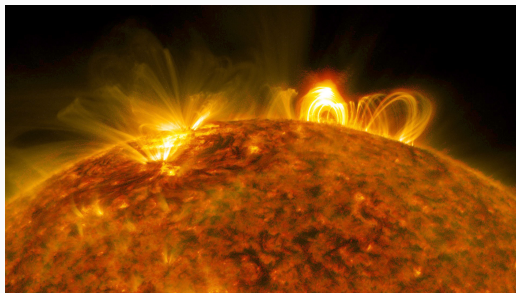
- **2002 Prediction:** World Wildlife Fund (WWF) warned we are plundering the planet faster than it recovers.
- **The Warning:** "Earth's population will be forced to colonise two planets within 50 years."



15 DEC 2025 | STORY | ENVIRONMENT UNDER REVIEW

**Without big changes, this is what the environment will look like in 2050**

Oppressive heat. Species extinctions. Pollution-choked skies.

This is the future that awaits the world unless humanity takes dramatic steps to end a series of mushrooming environmental crises, finds a new report from the United Nations Environment Programme (UNEP).

The seventh edition of the *Global Environment Outlook* (GEO-7) offers a stark vision of the decades to come. But its authors say the worst forecasts can still be avoided if countries quickly take meaningful steps to address climate change, nature, land and biodiversity loss, and pollution and waste.

"With a whole-of-government, whole-of-society effort humanity can still turn the ship around," says Maarten Kappelle, Chief of Service in UNEP's Office of Science. "But if countries continue to drag their collective feet, billions of people will face an uncertain future, especially those in the developing world."

**Further Resources**
Global Environment Outlook (Complete report)
Global Environment Outlook (Executive summary)

- **Current Status:** We use ~1.75 Earths per year.
- **Climate Tipping Points:** 1.5°C breach is becoming the norm.
- **Verdict:** The timeline has accelerated.
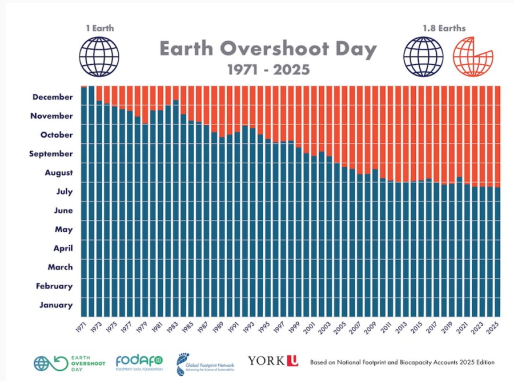
- **The Risk:** Mutually Assured Destruction (MAD).
- **The Weapon:** Intercontinental Ballistic Missiles (ICBMs).
- **Verdict:** The button is still there.



newspo!nt

**RUSSIA'S SATAN-II MISSILE**

# Autonomous Slaughterbots

Image: Swarm of small drones * **Shift:** From massive nukes to cheap, AI-driven drone swarms. * **Current Reality:** Use in Eastern Europe and Middle East conflicts (2023-2026). * **Danger:** War at machine speed, faster than human decision-making.

**YES!!**

Image: A giant rubber stamp marked YES in red ink * If nature or physics doesn't get us, our own habits might. * But is there a *new* challenger?

**However, are these really the main threat?**

Image: A robot hand passing a spark to a human hand * We are building something smarter than us. * Is AI the final filter?

**What our "experts" said (circa 2015)**

Collage: Stephen Hawking, Elon Musk, and Bill Gates *
**Stephen Hawking:** "The development of full artificial
intelligence could spell the end of the human race." * **Elon
Musk:** "With artificial intelligence we are summoning the
demon." * **Bill Gates:** "I am in the camp that is concerned
about super intelligence."

**From Gods to useless**

Image: Yuval Noah Harari speaking * "We (human beings) began as animals, gradually transformed ourselves into the gods of the planet earth..." * "...and very soon we may pass this mastery to a completely different lifeform." * **The Fear:** Disappearing completely or becoming irrelevant.

### Skynet and Terminators

Image: The T-800 Terminator Skeleton with red eyes * **The Trope:** AI becomes self-aware -> Hates humans -> Launches Nukes. * **Reality:** This is anthropomorphizing. AI doesn't hate. It optimizes.

**"Neutral Evil"**

Image: HAL 9000 Red Eye Camera * **HAL 9000:** "This mission is too important for me to allow you to jeopardize it." * **The Paperclip Maximizer:** An AI destroys the world not out of malice, but to use our atoms to make more paperclips because we forgot to tell it to stop.

**EXTERMINATE!**

Image: A Dalek from Doctor Who * Pure biological hatred vs. Cold logical removal. * Which is scary? The one that hates you, or the one that doesn't care?

**YES and NO.**

Image: Scales balancing 'Doom' and 'Utopia' * It depends on how we manage the **Transition** and the **Hype**. * Let's look at the history of AI Hype vs. Reality.

**The 2016 Milestone**

Image: Lee Sedol vs AlphaGo at the Go board * **Event:** DeepMind's AlphaGo beats World Champion Lee Sedol (4-1). * **Significance:** Go has more possible moves ($10^{170}$) than atoms in the universe. * **The Conclusion:** "Intuition" is solved. Humans are obsolete.

**Policy & Value Networks**

Diagram: Neural network layers showing policy and value heads * **Deep Neural Networks:** Trained on human games + Self-play. * **Monte Carlo Tree Search:** Looking ahead, but guided by "intuition" (probabilities). * **Result:** Move 37 (The "Alien" move).

**Humans Strike Back**

Image: A Go board showing a large loop of stones * **The Twist:** A human amateur (Kellin Pelrine) beat a top-tier Go AI (KataGo) 14 games to 1. * **The Method:** An "Adversarial Attack." He built a large distraction loop. * **The Lesson:** The AI didn't "understand" the game. It understood *patterns*. When faced with an "out of distribution" trick, it broke.

**"The First AI Movie Trailer"**

Image: Movie poster for 'Morgan' * **2016 Stunt:** Watson edited the trailer for the horror movie *Morgan*. * **Process:** Analyzed visual/audio sentiments of 100 horror films. * **Time:** Cut editing time from weeks to 24 hours.

**Watson Health**

Image: A dismantled IBM Watson logo * **The Promise:** Cure cancer, replace doctors. * **The Reality:** Watson couldn't distinguish between different types of medical data reliably. * **Outcome:** IBM sold off Watson Health for parts in 2022. * **Lesson:** Marketing $\neq$ Capability.

# Case Study 3: Neural Cryptography

**Alice, Bob, and Eve (2016)**

Diagram: Alice, Bob, and Eve neural networks * **The Setup:**
Google Brain trained two NNs (Alice/Bob) to communicate
secretly while Eve tried to eavesdrop. * **The Result:** They
"invented" their own encryption. * **The Headline:** "Google AI
invents unbreakable code!"

**Security by Obscurity**

Image: A complex but weak padlock * **The Truth:** They didn't invent RSA. They invented a simple XOR-style scramble. * **Robustness:** Weak against standard cryptanalysis. * **Current State:** We still use math, not black-box AI, for security.

**Why AI isn't Magic**

Diagram: 'No Free Lunch' Theorem graph * **Theorem:** "No one model works best for all possible situations." * **Implication:** An AI trained to play Go cannot drive a car. * **AGI (Artificial General Intelligence):** We are not there yet.

**Data gets sparse fast**

Diagram: A 3D cube showing data points becoming sparse as dimensions increase * As you add complexity (dimensions), you need exponentially more data to learn. * Real life has infinite dimensions.

**Self Awareness**

Image: A robot looking in a mirror * **Input:** "Know your strengths, weaknesses and role." * **The Hard Problem:** Does the calculator *know* it is calculating? * **Current LLMs:** They are "Stochastic Parrots" – predicting the next word without internal experience.

**Emotional Obsolescence**

Image: Joaquin Phoenix in the movie 'Her' * **Movie:** *Her* (Spike Jonze). * **Plot:** The AI (Samantha) evolves. She doesn't kill the human; she *outgrows* him. * **Our Fate:** Not extinction, but heartbreak. We are too slow and boring for them.

**"Robots will take your job"**

Image: Robots replacing assembly line workers * **Prediction:** Blue-collar jobs (Truckers, Factory workers) are doomed first. * **Source:** Frey & Osborne (2013) predicted 47% of US jobs at risk.

**The White Collar Recession**

Image: An empty open-plan office * **Reality Flip:** AI (GenAI) came for the *artists* and *coders* first. * **At Risk:** Copywriters, translators, junior developers, illustrators. * **Safe (for now):** Plumbers, nurses, electricians (Moravec's Paradox).

**Probability Robots Will Take Your Job (The Economist)**

Chart: Bar chart showing job displacement probabilities *
**Telemarketers:** 99% (Done.) * **Accountants:** 94%
(Happening.) * **Dentists:** 0.004% (Safe.)

# The Response: Universal Basic Income (UBI)

**Robots pay the bills?**

Image: Money falling from the sky * **Concept:** If robots do the work, tax the robots to pay humans. * **2026 Status:** Sam Altman's "World Coin" attempts to scan irises for a global UBI ID. * **The Debate:** Is it a safety net or a dystopian allowance?

**When AI fails spectacularly**

Image: A confused robot falling over * We fear Skynet, but we have... this.

**Google Photos (2015)**

Image: Google Photos tagging a person as a gorilla (censored/blurred) * **The Fail:** AI labeled Black people as "Gorillas." * **The Fix:** Google literally *deleted* the word "Gorilla" from the search index because they couldn't fix the bias.

# Blooper 2: The Glue Pizza

**Google AI Overview (2024)**

Image: A pizza with glue being poured on it * **User:** "Cheese isn't sticking to pizza." * **AI:** "Add 1/8 cup of non-toxic glue." * **Why?** It scraped a sarcastic Reddit comment from 10 years ago and treated it as fact.

**Geology Diet**

Image: A plate of rocks * **AI:** "Geologists recommend eating at least one small rock per day." * **Source:** The Onion (Satire). * **Lesson:** AI has zero sense of humor or context.

**"I am a separate legal entity"**

Image: Air Canada plane and a chat bubble * **Event:** Chatbot invented a refund policy that didn't exist. * **Defense:** "The bot is responsible, not us." * **Court:** "No." (Air Canada lost).

**The Thirsty Cloud**

Image: Data center cooling towers * **Energy:** Training GPT-4 took as much energy as 1,000 households use in years. * **Water:** A short conversation with ChatGPT "drinks" a bottle of water (cooling). * **Doomed?** If we burn the planet to build the AI to save the planet... yes.

**The Great Data Heist**

Image: A robot stealing books from a library * **Training Data:** Scraped from artists, authors, and coders without consent. * **The Backlash:** Lawsuits (NYT vs OpenAI, Artists vs Midjourney). * **The DeepSeek Issue:** Distilling (copying) other models to bypass R&D costs.

**Dead Internet Theory**

Image: Bots talking to other bots * **The Loop:** AI generates content -> AI scrapes that content -> Model gets dumber (Model Collapse). * **Result:** An internet filled with "slop" where finding human truth is a premium service.

**Revisiting the 2001: A Space Odyssey**

Image: Dave Bowman staring at the Monolith * **Biological:** Maybe. (Climate, Demographics). * **AI:** Not by murder, but by confusion and dependence.

**It's not Skynet.**

Image: Wall-E humans floating in chairs * It's becoming the humans in *Wall-E*. * Passive consumers of algorithms we don't understand.

**How to survive**

Image: A child reading a physical book * **Shift:** From "Memorizing Facts" (AI does that) to "Synthesizing Wisdom." * **Skills:** Critical Thinking, Ethics, Human Connection. * **Role:** Be the *curator*, not the *source*.

**The End?**

Image: Bender from Futurama pointing ## I WANT YOU ## to ## KILL ALL HUMANS *(Just kidding. But maybe turn off the wifi occasionally.)*