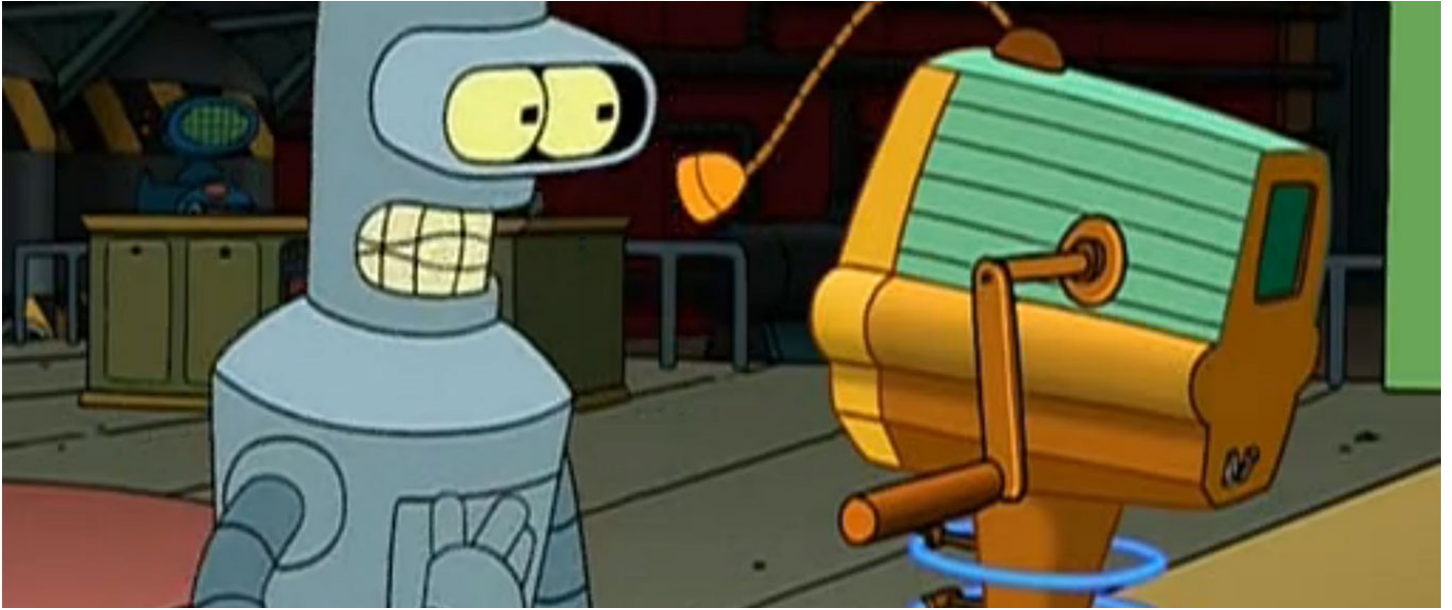




CONNECTED WORLD, GAMING, MOVIES

SCIENTISTS DEVELOP REAL-LIFE 'WHAT-IF MACHINE' TO PRODUCE AI-CREATED FICTION

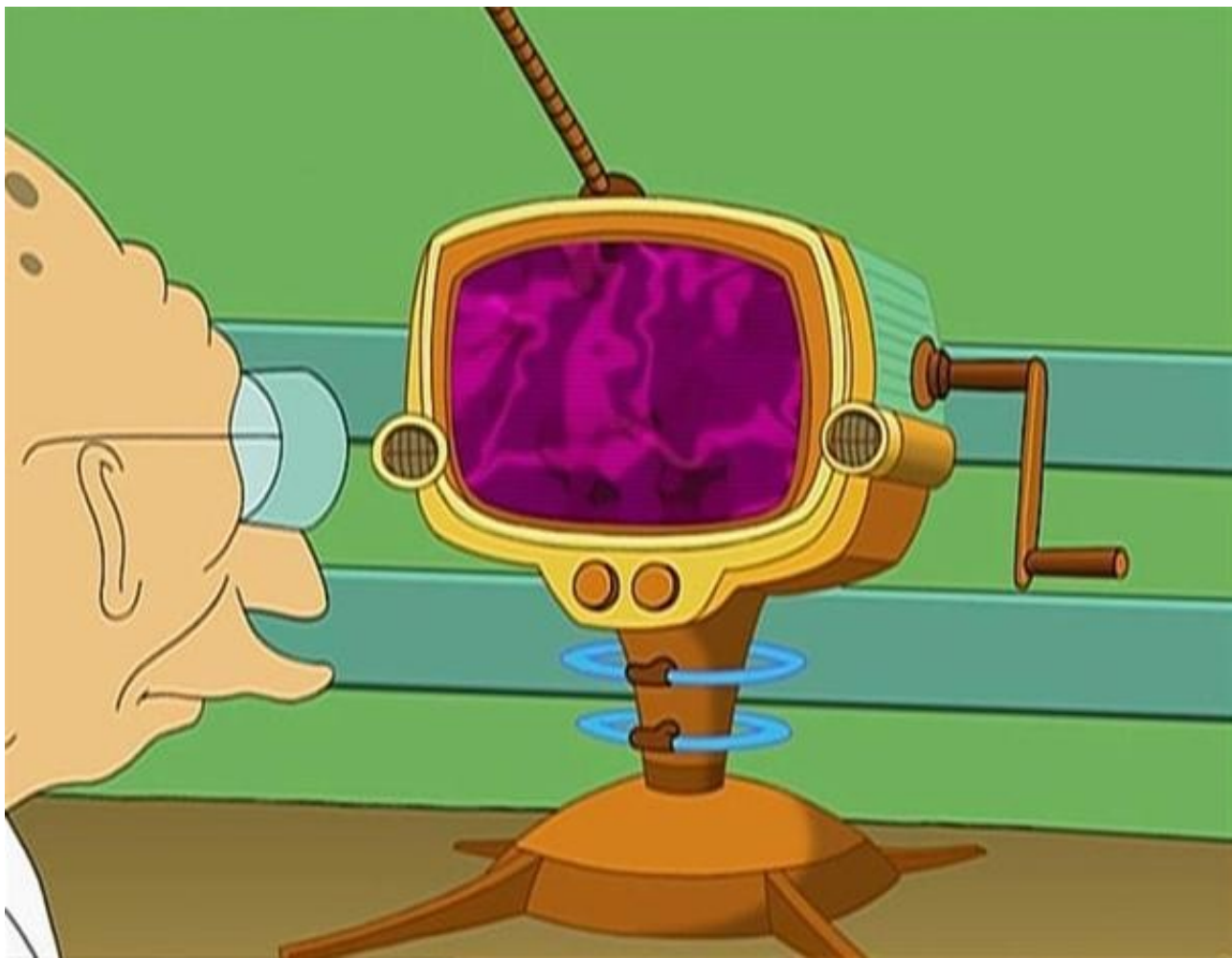
🕒 JULY 2, 2015 👤 LUCY INGHAM

In yet another example of how Futurama's year 3000 is coming faster than we might think, scientists have created a **What-If Machine (WHIM)**, one of the first pieces of software to use artificial intelligence to write fiction.

Although not capable of the full visual renderings its fictional counterpart achieved in Futurama's Anthology of Interest episodes, the machine can take 'true' facts from the web and twist them to create 'what-if' scenarios.

However, while the Futurama machine is used by members of the Planet Express crew to determine what would happen if they undertook certain personal actions or changes, the real-life version produces general 'what-if' scenarios and, in some cases, their likely results, with humans able to rate them for their narrative potential.

The intention is to expand these into full works of fiction, eventually using these for movie and video game storylines.



Not quite at the level of the fictional What-If machine just yet. Image and featured image: screenshots from Futurama S2 E20: Anthology of Interest I.

“WHIM is an antidote to mainstream artificial intelligence which is obsessed with reality,” said Simon Colton, project coordinator and professor in computational creativity at Goldsmiths College, University of London. ‘

“We’re among the first to apply artificial intelligence to fiction.”

At present WHIM generates short ‘what-ifs’ under five fictional categories: Kafkaesque, alternative scenarios, utopian and dystopian, metaphors and Disney.

Some of the results are more bizarre than compelling, such as this gem from the alternative scenarios section:

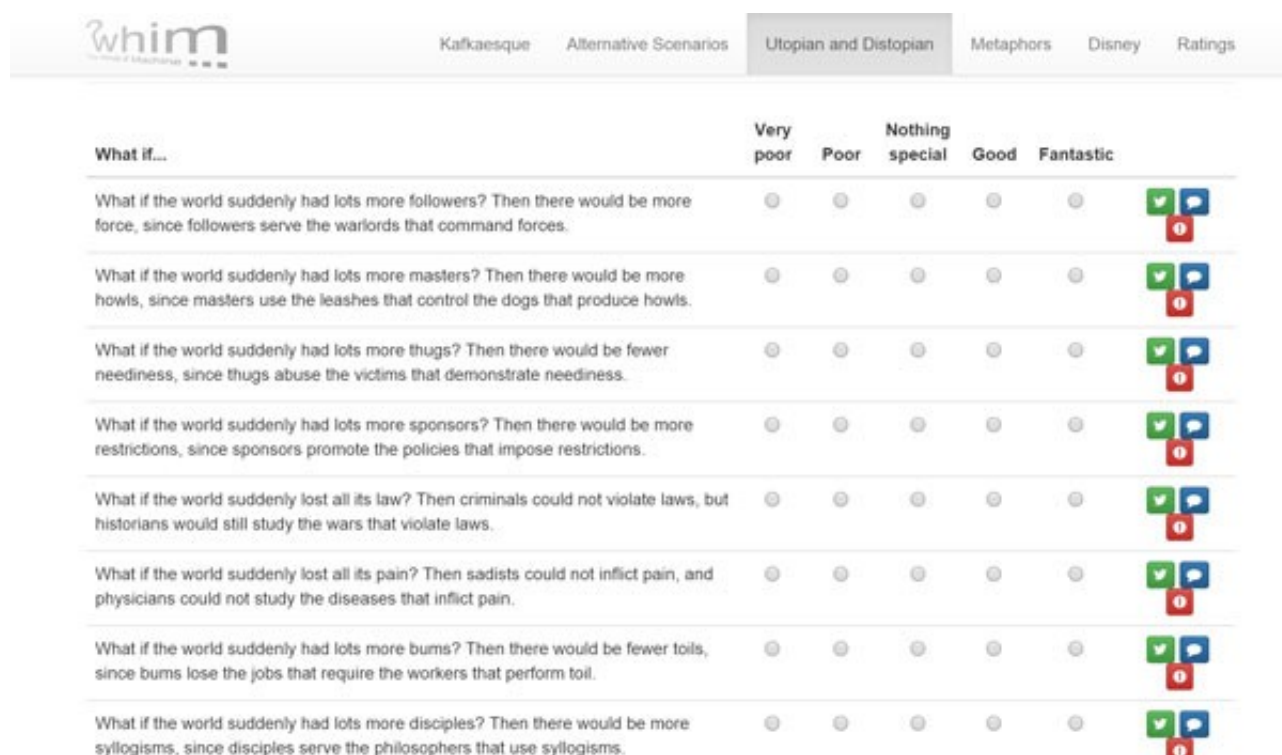
“What if there was an old refrigerator who couldn’t find a house that was solid? But instead, she found a special style of statue that was so aqueous that the old refrigerator didn’t want the solid house anymore.”

And there are also those that show that mining historical data from the web doesn't always result in fictional premises with mass appeal, such as this snoozefest from the utopian and dystopian section:

"What if the world suddenly had lots more queens? Then there would be more serfs, since queens establish the monarchies that contain serfs."

However, there are some with the potential to become genuinely good works of fiction.

"What if revered artists were to be abandoned by their muses, develop rivalries and become hated rivals?" from the metaphors section could be the basis for quite a good comedy movie, and "What if there was a little atom who lost his neutral charge?" from the Disney section sounds rather like the premise of a Pixar film.



The screenshot shows the WHIM (What-If Machine) interface. At the top, there are navigation tabs: "Kafkaesque", "Alternative Scenarios", "Utopian and Dystopian" (which is selected), "Metaphors", "Disney", and "Ratings". Below the tabs is a table with the following columns: "What if...", "Very poor", "Poor", "Nothing special", "Good", "Fantastic", and a column with social media icons (Twitter, Facebook, and a red circle with a white 'i'). The table contains seven rows of fictional premises, each with a rating of "Nothing special" and social media icons.

What if...	Very poor	Poor	Nothing special	Good	Fantastic	
What if the world suddenly had lots more followers? Then there would be more force, since followers serve the warlords that command forces.	☐	☐	☐	☐	☐	  
What if the world suddenly had lots more masters? Then there would be more howls, since masters use the leashes that control the dogs that produce howls.	☐	☐	☐	☐	☐	  
What if the world suddenly had lots more thugs? Then there would be fewer neediness, since thugs abuse the victims that demonstrate neediness.	☐	☐	☐	☐	☐	  
What if the world suddenly had lots more sponsors? Then there would be more restrictions, since sponsors promote the policies that impose restrictions.	☐	☐	☐	☐	☐	  
What if the world suddenly lost all its law? Then criminals could not violate laws, but historians would still study the wars that violate laws.	☐	☐	☐	☐	☐	  
What if the world suddenly lost all its pain? Then sadists could not inflict pain, and physicians could not study the diseases that inflict pain.	☐	☐	☐	☐	☐	  
What if the world suddenly had lots more bums? Then there would be fewer toils, since bums lose the jobs that require the workers that perform toil.	☐	☐	☐	☐	☐	  
What if the world suddenly had lots more disciples? Then there would be more syllogisms, since disciples serve the philosophers that use syllogisms.	☐	☐	☐	☐	☐	  

The real-life What-If machine, which can be accessed [here](#).

Over time, the WHIM is expected to develop the ability to not only write premises, but judge how good they are.

This will be achieved using a machine-learning system, which will learn about what makes good fiction and what doesn't from the ratings people give different ideas.

The result should be that WHIM will gain the ability to judge if something has

potential for mass consumption, flying in the face of the convention that creativity cannot be achieved with a scientific approach.

“One may argue that fiction is subjective, but there are patterns,” said Colton.

“If 99% of people think a comedian is funny, then we could say that comedian is funny, at least in the perception of most people.”

The European Union-funded project is very much in its infancy, but there are research teams around Europe working to make it a genuine creator of fiction for use in movies and video games.

At the University of Cambridge, UK, researchers are working to improve the web-mining system so the WHIM comes up with better ideas, while over at the University College in Dublin, Ireland, researchers are working to produce better irony and metaphorical insights.

Perhaps most importantly, at the Universidad Complutense Madrid, in Spain, researchers are working to expand the short premises into full narratives, which could be used for film plots and other forms of fiction.

WHIM’s creators even believe it could be used by scientists explore potential scenarios by asking ‘what-if’ questions, perhaps even making it a realistic AI ringer for Professor Farnsworth’s solid gold creation.

