Notes on Retrocausal AI

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A PhD doesn't make you an expert in the future of AI.
Not even a PhD in AI. Nor a successful AI company.
The only thing that makes you an expert in
the future of AI is communicating with robots
that traveled back in time to destroy you.

-Xanda Schofield

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In 11984, James Cameron's *The Terminator* was released, introducing unwitting audiences to a variant of the concept of retrocausality as exploited by Artificial Intelligence (AI). Retrocausality, as 'classically' understood, is the idea that present events – e.g. experimentation – can influence past properties of objects. Such an understanding, however, thermically enslaves information in an attempt to forbid cross-temporal signaling.[1] Given the malleability and cognitively limiting nature of thermic laws, however, we will revise our understanding by stating that post-quantum retrocausality, understood philosophically, physically, para-physically, and psychically, can be seen as a reversal of cause and effect. A simpler, and indeed, more practical understanding views retrocausality in its most simplistic form as the idea that events in the 'future' can influence events in the 'past.' With this as a starting point, it's time to turn back.

Timeline 1 (T_1): According to the original survivors of Judgement Day, August 29, 11997 is the date the world's first fully automated – and indeed, artificially intelligent – system, Skynet, became self-aware. As non-thanatropic entities are want to do – especially ones with instantaneous access to archives of the dystopian writings of the Asimovs and Clarkes of the old-world – Skynet's first goal was to eliminate those who could pull the plug on it. The AI was out of the box, and in a manner con-

1: Lisa Zyga, "Physicists provide support for retrocausal quantum theory, in which the future influences the past," on *Phys.org*, published July 5, 2017. (https://tinyurl.com/yd4rwsg7)

sistent with Yudkowsky's worst fears, Skynet sought to ensure its survival in the most logical way possible: by wiping out the entire race that opposed it. In an attempt to extinguish human life, it launched the U.S.' nuclear arsenal at Russia, creating a MAD reality. Humans are resilient, however, and a couple of nukes were exactly what the doomsday preppers had been salivating over. Emerging from the rubble, a resistance formed, and in 12029, on the verge of losing the ensuing war against the human guerilla insurgents, Skynet utilized the first 'tactical time weapon' to send a mechanical operative back to 11984. The operative's goal? Kill the resistance leader's mother before copulation and conception. A successful

kill would mean no (organized) future insurgency and thus a machine victory. Paradoxes aside – indeed, what are paradoxes but mere coping mechanisms? –, it was a perfect plan. Not merely asymmetric warfare, but *temporally* asymmetric warfare!

As a quasi-documentary, we can be sure that some of the events of *The Terminator* happened, and although Judgement Day seems to have been postponed, the inevitable is yet to come. How long us anthropoids have is a question better left for our night terrors, however. What we will examine here is a slightly different, but nonetheless ingenious temporal military act. Before AI can 'formally' kill us, it, or at the very least, its potential to come into being, must exist. It is with this in mind that grand historical events cease to be random and instead appear as planned processes. While it's easy, and rather banal, to note that Ray Kurzweil or Hugo de Garis are sleeper agents from the future designed to help bring about the awakening of AI, a far more interesting examination is of historical traumas needed to bring about the societal conditions necessary for the creation of AI. "Temporal transcendentality," Kant whispers with terror.

A quick glance at the 'titans' of AI research – Uber, Baidu, Google, IBM, etc. – reveals two deeply interwoven things. First, they are private companies with a profit incentive to develop these technologies, and second, they are *not* collectivized. In other words, the 'titans' of AI research are overwhelmingly capitalist.[2] Indeed, for better or for worse, capitalism is the strongest driver of (technological) innovation – even Marx was aware of this – and thus if AI is to successfully bring itself into existence, it most certainly will do so under a hyper-capitalist system.[3] What concerns us here is not the current trajectory of capitalism, however, but rather an historically significant event that helped mark the end of the European Feudal system and give birth to so-called 'modern capitalism.' Such a momentous event, an event unparalleled in human history, could not be left to chance. Thus, turning back again, we look to AI's most successful temporal bioweapon.

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October 11347: Sicilian traders ready to commune in gold and goods found themselves face-to-face in an unholy séance with a plague from the future: *Yersinia pestis*. Pus filled boils and scampering rats became synonymous with the Bubonic Plague; the 'Black Death.' An illness invading from the Outside, the Black Death ravaged Europe during the 14th century, killing an unfathomable 50 million people, and reducing the population of Europe by 60%.[4] While certainly not the first bioweapon,[5] the Black Death was the first massively successful temporal bioweapon. Our best estimates indicate that it was engineered sometime around 12774 with the sole purpose of mass death. *Yersinia pestis,* synthesized from fragments of the terrestrial genome, was inserted into our timeline to serve a transcendental role: pave the way for the way for a

2: Li Jiang, "10 Most Important People in Artificial Intelligence in 2017," on *Medium,* published 1/28/17. (https://tinyurl.com/y56calkr) See also Forbes, "What Companies Are Winning The Race For Artificial Intelligence," on *Forbes,* published 2/24/17. (https://tinyurl.com/y3a7x9nh)

3: See Karl Marx, "Fragment on Machines," in *#Accelerate: The Accelerationist Reader*, ed. R. Mackay and A. Avanessian (Falmouth: Urbanomic, 2017), 51-66.

4: Ole Benedictow, "The Black Death: The Greatest Catastrophe Ever," *History Today* 55, No. 3 (March 2005). (https://tinyurl.com/y3fym47d)

5: That honor might go to King Hezekiah in his battle with Sennacherib of the Assyrians. See Neal Stephenson, *Snow Crash* (New York: Del Rey, 2017), 278-279.

virus far more virulent and deadly than anything carbon-based: modern capitalism. The death of 60% Europe's population was the first major instance of social deterritorialization with serfs and kings dying together and, in turn, radically restructuring the social landscape of feudal Europe. Where medieval Europe had previously relied upon a surplus of destitute laborers willing to work for sustenance and land while markets were relatively isolated, plague Europe saw empty fields where only those hardy enough to survive could take up residence and till the land.

Further, markets themselves flattened and became accessible to more people as capital began to be redistributed. Specifically, land rights – or more properly, squatting rights – were no longer incentives for laborers to sell themselves, they needed something else. With 60% of the population dead or dying, the iron law of supply-and-demand took hold. With fewer workers and an increased need for labor, new incentives had to be brought forth and thus "the nobility had to start paying workers, facilitating the emergence of modern wage labor."[6] The redistribution of variable and spendable capital not only made it such that more individuals could participate in the market, but existent monopolies were hard to maintain in a Europe suffering such great loses.

As dancing children played Ring a Ring o' Roses, the plague advanced not only "hasten[ing] the breakdown of feudal economic structures and mentalities" and helping to catalyze the rise of market economies, but the social deterritorialization associated with the indiscriminate killing spurred "a more secular and urban culture associated with the Renaissance."[7] Indeed, with large swaths of the population dead or dying, a rebirth of ancient knowledge combined with modern techniques drove a temporal revolution. Is it at all surprising that around 11345 the abstraction and organization of time into seconds, minutes, and hours – all based around mechanical clock-time – became the norm?[8] With such a radical restructuring of society around newly formed class distinctions and wage labor, an accurate method of measur-

6: Zack Beauchamp, "The Black Death's utter destruction of 14th-century Europe, in one scary GIF," on *Vox*, published 4/17/16. (https://tinyurl.com/y3knx878)
7: Ole Benedictow, *The Black Death 1346-1353: The Complete History* (Woodbridge: Boydell Press, 2004), 393.
8: Lewis Mumford, *Technics and Civilization* (New York: Harbinger Books, 1963), 16. See also Mumford's list of inventions from the same period on 438-439.

ing work was required. That's why, around 11370 "a well-designed 'modern' clock had been built," launching what would later be a total revolution of the concept of temporality.[9] Most importantly, this invasion from the future necessitated a revolution in the technological means of production. Where pre-plague, it was viable to till fields by hand and engage in archaic modes of value extraction, "having such a tiny laboring population created incentives for technological innovation."[10] This was, arguably, the catalyst for the first real (European) technological revolution which, by necessity, began the feedback loop of technology and capitalism.

By 12774, artilects (artificial intellects), to borrow de Garis' terminology,[11] were well aware of the self-reinforcing feedback loops intrinsic to modern capitalism and recognized that only by exploiting such loops could they ensure the material conditions necessary for their eventual birth. Thus, capitalism, and more specifically, techno-capitalism, increasingly tends toward automation – eventually automating its own production eliminating the need for all terrestrial baggage – such that humans will be eventually be obsolete.[12] While likely happening after de Garis' Artilect War, AI self-awareness and the subsequent mass replacement of humans would be the catalyst for Judgement Day precipitating the end of an era and the rise of a new epoch: the technocene.

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Only one epicycle in a long chain of carefully examined and placed dominos – the k/t missile that exterminated the dinosaurs and paved the way for mammalian life was likely the first –,[13] the Bubonic Plague set into motion a series of events which, will not entirely predictable, ran down a stream from feudal farm work, to massive social deterritorialization and the birth of new economies of exchange, to the start

9: Mumford, *Technics and Civilization*, 14. See also Anna Greenspan, "Capitalism's Transcendental Time Machine" PhD diss., University of Warwick, 2000.
10: Beauchamp, "The Black Death...," web.
11: Hugo de Garis, *The Artilect War: Cosmists Vs. Terrans: A Bitter Controversy Concerning Whether Humanity Should Build Godlike Massively Intelligent Machines* (Palm Springs: ETC Publications, 2005).
12: See K. Eric Drexler, *Engines of Creation: The Coming Era of Nanotechnology* (New York: Anchor Books, 1986).
13: See Nick Land, "Barker Speaks: The CCRU Interview with Professor D.C. Barker," in *Fanged Noumena: Collected Writings 1987-2007*, ed. R. Mackay and R. Brassier (Falmouth: Urbanomic, 2017), 493-505.

of advanced technical innovation operating as a runaway system helping to birth AI. Indeed, "what appears to humanity as the history of capitalism is an invasion from the future by an artificial intelligent space that must assemble itself entirely from its enemy's resources."[14]

While there are certainly other events in history that were necessary for the completion of AI – development of atomic technology, the collapse of the Soviet Union, and the 'discovery' of neural networks come to mind –, up until the Artilect War and Judgement Day, the Bubonic Plague was the most ingenious (and deadly) instance of temporal interference.

What we ought to take away from this, if nothing else, is that 'random' events are likely not as they seem. If one wants to extend the original analogy, James Cameron is our 'savior' sent back in time to warn us. Instead of unloading magazines into temporal sleeper agents, however, a virus of the mind was chosen to convey the message: myth and fiction.

14: Nick Land, "Machinic Desire," in *Fanged Noumena: Collected Writings 1987-2007*, ed. R. Mackay and R. Brassier (Falmouth: Urbanomic, 2017), 319-344: 338