

Patrizia Anesa (ed.)

**Extended reality, AI, and discursive
formations**

Educational and professional perspectives

With a Postface by Stephen Amidon

CERLIS Series

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POSTFACE

STEPHEN AMIDON

When the Machines Become Self-Aware: AI and Creative Writing

My name is Stephen Amidon. I am an American novelist and screenwriter. I am currently at work on my eleventh novel, as well as a screenplay for an Italian production and a television series for Sony Television. I'm writing this postface from Massachusetts, although I have strong ties to Italy, both in terms of my work in movies and my life as an academic - I have taught *Storytelling* at The Holden School in Torino for the past ten years.

In this postface, I'll be discussing the turbulent, complex and rapidly developing relationship between Artificial Intelligence and my profession - creative writing. Before I start, I'd like to offer one important proviso - I speak to you as an artist, not a scholar or a theorist. I know nothing about coding and less about the current landscape of the Artificial Intelligence industry. That said, I am, like almost all writers, acutely aware of the power and risks of Generative Artificial Intelligence. For a variety of reasons, both personal and professional, generative A.I. scares the hell out of writers. When decision theorist Eliezer Yudowsky, one of the grandfathers of this brave new technology, warned earlier this year that "the most likely result of building a superhumanly smart AI, under anything remotely like the current circumstances, is that literally everyone on Earth will die," he struck a special chord with us. After all, we've been writing novels and making movies about this worst-case scenario for the last fifty years.

For screenwriters and novelists, the arrival of A.I. has been almost invariably seen in apocalyptic terms. Indeed, the title of my contribution comes from one of the best of these dystopian fantasies - James Cameron's brilliant *Terminator 2*, whose back story consists of an insurrection by an A.I. system that takes over the world's nuclear weapons and uses them to wipe out humankind.

This storyline is played out again and again in major motion pictures. In Ridley Scott's haunting 1982 film *Blade Runner*, taken from Philip K. Dick's short story *Do Androids Dream of Electric Sheep?*, utterly realistic androids rebel against their human masters, threatening the future of mankind. A similar scenario plays out in Alex Garland's 2014 *Ex Machina*, in which an eccentric billionaire creates a beautiful, amoral, murderous robot whose escape poses untold dangers for the world. And the list goes on. The latest installment of the blockbusting *Mission Impossible* series, the hit television series *Westworld* - there is no end to the ways in which moviemakers have expressed fear of the ongoing revolution in robotics and artificial intelligence.

The grandfather of all A.I. movies, not surprisingly, was made by the great wizard of modern cinema, Stanley Kubrick. In his mind-blowing 1968 masterpiece *2001: A Space Odyssey*, Kubrick, working from a story by the science fiction legend Arthur C. Clarke, chillingly depicts a battle between two astronauts on a deep space mission and HAL, the computer that powers their spacecraft. What is particularly prescient about Kubrick's vision is how he does not present HAL in android form, but rather as nothing more than an unblinking lens and a toneless voice. Kubrick foresaw that the first meaningful arrival of A.I. among us would be as a disembodied chat, and not some human-like robot.

Given this track record of paranoia and dread, it is hardly surprising that the release of Open AI's ChatGPT in November 2022 sent ripples of fear up and down Sunset Boulevard and through the writers' colonies of New England. Chat GPT was fast and smart. It could do something very much like what we did - create sophisticated, legible texts. Suddenly, writers faced the possibility that we were about to be made obsolete. Our scripts and novels would be written in minutes, rather than the months and years of labor it took us. They wouldn't miss deadlines, develop drinking problems or, most importantly, need to be paid. And it was all happening much sooner than anyone had thought.

Being rebellious types, we decided to fight back. Sensing danger ahead, the Writer's Guild of America, or WGA, of which I am a card-carrying member, decided to make guidelines for the use of A.I., a key part of our contract negotiations with the Alliance of Motion Picture and Television Producers, which includes such big studios as Amazon, Apple, NBC Universal, Netflix, Disney, Sony Pictures and Warner Brothers. Usually, the union fights for the usual stuff of labor struggles - better wages, benefits, and working conditions. This time, however, there was a real belief that we were fighting for our lives. A long and difficult strike ensued, in which the biggest obstacle to a settlement turned out to be - you guessed it - A.I. In the end, we prevailed, winning most of our demands when it came to the threatening technology.

So what, exactly, did we win? First of all, A.I. cannot now be used by studios or producers to rewrite literary material. Rewrites and polishes form a big part of a writer's livelihood, and producers would no doubt love to farm this work out to unpaid machines. Now, our work cannot be revised by a computer program - unless we do it ourselves. You will not see "Screenplay by Stephen Amidon and Chatbot 603B" in the final credits. Nor can A.I. be used as source material for a film or series. Most crucially, producers are not allowed to use a writer's work to train A.I. This is very important, because without this restriction, producers would be free to form a sort of virtual version of a writer, a small language model if you will, by feeding all their previous work into an A.I. program, which would then theoretically have the capability to write new material in the author's style and voice.

It was a big win for the WGA, and perhaps for workers everywhere. This is because the strike was the first major industrial action in the United States in which workers demanded contractual protections in the face of this rapidly developing and, frankly, terrifying technology. Workers in other jobs - not only those in the entertainment industry - would be wise to use our contract as a template for their own deals with management.

The most immediate beneficiaries of WGA's bargaining victory could very well be film actors. Perhaps even more than screenwriters, actors' livelihoods are imperiled by A.I. Studios already use 'motion capture' or 'performance capture' to replicate the movements and facial expressions of actors. You can now see this in many films if you look closely at crowds in the background, many of whose members are virtual. Voices, too, are becoming easier to replicate. The nightmare for

actors is that the work of a single day, or a single hour, can be transformed by sophisticated A.I. software into an infinite amount of future performance - for which the actor will not be paid. A virtual Tom Cruise or Jennifer Lawrence might be coming soon to a theater near you...

Novelists and other print authors are also getting in on the action of fighting back against A.I. This battle is being fought out not on the picket lines, but rather in American courtrooms, where novelists and other writers have launched a series of class action lawsuits against big data companies such as Google, Microsoft and Open A.I. The grounds for the suit are copyright infringements. It turns out that, in 'training' the Large Language Models that form the foundation of their A.I., the creators of these programs included our books in the 'data scrapes' that fed staggering amounts of information into their programs. *Without* our permission. The lawsuits maintain that chatbots can now produce "derivative works" that can mimic the work of authors, potentially harming sales and other forms of licensing, without authors being compensated or even notified. As the bestselling author Mary Bly said, "This lawsuit is important because it establishes a line in the sand. If you're going to train things in the future on my books, you need to license them. You can't just take things." To make matters worse, the tech companies got our texts from pirate websites that traffic illegally in our work, like Book3 and OpenLibrary.

The tech companies maintain that they are only using this stolen material for 'training purposes,' much as a writer relies on all the books he has read in his life as the basis for his own work. This is a flimsy argument for two reasons. First, while it is true that I do rely on the work of other writers to inform my artistic sensibility, I try not to steal the books I read. Secondly, this approximation of the workings of a computer program, however large and powerful, with the subtle stirring of an artist's consciousness, seems facile at best. It is like comparing a stalker with a lover. If I sound angry, it is because I am, since I recently learned that four of my books were used as part of this so-called training, without any sort of compensation or request for permission.

However, it is not all conflict and friction. While writers might sometimes sound like Luddites and technophobes who want to go back to working with quill pens on papyrus, many of us are excited about the possibilities of A.I. for our work. Provided, that is, that the technology doesn't enslave, replace, or steal from us. After all, I've been embracing

new technology my whole career, and always to my benefit. I wrote my first book *by hand*, in pencil, then typed it out laboriously on an IBM Selectric typewriter. It was a laborious project, to say the least. My second book was written on a 1987 MacIntosh SE that looked very much like a television. There was no internet connection, of course, and practically no memory in the hard drive. My work had to be backed up on floppy disks. When I finished, the novel took me seven hours to print. In the coming years, I eagerly embraced spell check, email, the cloud - whatever made it easier to get down to the actual creating, I used.

Technology has been even more beneficial for my work as a screenwriter. Screenplays used during the production of a film are devilish, tentacular monsters. There are endless drafts and revisions, many of them done on the morning of production, often just hours before a scene is to be shot. Needless to say, it can be a messy, confusing process. The color-coding system offered by a top end screenwriting program like Final Draft allows changes to be easily tracked, and saves hundreds of hours of labor. And this is just one example of the way digital technology has allowed the writer to avoid drudgery and focus on our true task - creating original, entertaining work. Given the benefits of new technology in recent history, we writers are not Luddites at all. In fact, many of us are coming to embrace the technology, albeit on our terms.

So how, exactly, might chatbots be useful to the author? For the screenwriter, the uses are manifold and potentially more useful than anything since the invention of Microsoft Word. First of all, very few produced scripts are written in bursts of artistic inspiration. They accrue slowly over time; there are lots of layers. There is often a *lot* of preliminary writing that must take place. And much of this is onerous. In order to get funding for a screenplay, the writer usually must produce loglines for the project. These consist of a simple sentence or two that distill the essence of your project. (Producers often don't have the longest of attention spans.) Writers are now finding that a short dialogue with Bard or Claude or ChatGPT can churn out a serviceable logline in moments. This is also true with the longer outline for the script, known as the treatment, which can also be required to get funding. As long as you keep control of the process, A.I. can drastically shorten the amount of time between first dreaming up a project and actually diving into the writing of it.

Another important element in setting up a film project these days is the ‘sizzle reel.’ These are short films that are meant, like the logline, to give the studio executives a sense of what the movie will look like. Traditionally, these are usually cobbled together using clips from previous films. A.I. technology can be extremely useful in putting sizzles together by quickly scouring the whole available catalogue of available clips, then organizing them into a coherent form.

As for the novelist, the uses for A.I. are less clear. Very few novelists need producers or co-writers to create their work. There are no development meetings for the serious novelist; you rarely are asked to write a treatment or present a sizzle reel. You just *write*. I suppose you could submit a finished manuscript to the chatbot and ask its opinion, but my few efforts at doing that have produced critiques that were either simplistic or contradictory, or both. Besides, I have friends and family to be my early readers, and they have served me well enough over the years.

Which leads us to the big question, the one that has haunted creative writers since we first encountered ChatGPT in 2022 - will it one day be able to *write*? I don’t mean, can it generate text. My wife is a college English professor and she can tell you that chatbots have no problem composing simple student essays - she sees dozens of them every week. Rather, can A.I. perform that sublime, inexplicable alchemy that transforms words into *art*.

Early evidence is not promising. Attempts to use A.I. bots to generate original, creatively satisfying fiction or screenplays have generally fallen flat. For instance, a Silicon Valley venture capitalist named Jason Calacanis, claiming to be saddened by the end of the award-winning HBO series *Succession*, decided to see if he could ‘train’ ChatGPT to come up with a treatment for an additional season. He fed eight potential storylines into the chat, such as one titled ‘Reclaiming Power,’ in which the eldest son of the show’s central family, the Roys, seeks to regain control of the family business. Other storylines have names such as ‘Unlikely Alliances’ and ‘Family Feuds.’ Calacanis next instructed the bot to write an eight-hundred-word summary of a season.

In just a few seconds, the bot dutifully spat out a neatly presented, coherently written outline of stultifying banality. Let’s take a peek at episode three of our phantom season: “Turning Tides”. And I quote: “Kendall’s startup gains traction, posing a threat to Waystar. Tom, feeling the heat, proposes a merger to Kendall, hoping to quash

the competition. Kendall declines, intensifying the rivalry. Shiv starts question Tom's leadership." I don't think *Succession*'s brilliant creator Jesse Armstrong has anything to worry about quite yet.

Another interesting experiment was conducted by a New York production company when they made a short film using as much A.I. technology as possible. The result is called *The Safe Zone*. The film's script was generated by ChatGPT (after a little nudge from its human producers). The chatbot also came up with the director's shot list. ChatGPT then provided instructions to the director of photography, ranging from camera placement to which lens to use. It even offered suggestions for costumes.

The best thing you can say about the finished product is that it is only five minutes long. The story, which involves three siblings deciding which one of them will enter a safe room free from the malignant effects of A.I., is boring, static, unoriginal, and worryingly derivative. As with the *Succession* treatment, it never leaves the land of the tamely logical, the blatantly obvious.

My own experimental efforts to use A.I. to assist me in writing fiction confirmed that, for now at least, chatbots are little more than 'glorified autocompletes' when it comes to writing actual fiction. My idea was to feed three short stories I'd already written into two popular chatbots, then instruct them to write a short story in my style. First, I tried Claude, the chatbot created by Anthropic. It was at first uneasy about helping me, responding: "Unfortunately I do not have the creative capabilities to write an original fictional short story from scratch using your previous stories as inspiration. As an A.I. assistant without human imagination or life experiences, I lack the innate skills needed to craft narratives, characters, and compelling literary themes." ChatGPT had fewer reservations about helping. "Certainly! I'd be happy to help you create a short story inspired by your previous works." However, it would not accept my stories as a source - perhaps it knew about those class action lawsuits. In both cases, the amount of creative direction the chats required from me rendered them basically moot as helpmates. I had to do all the creative lifting. And what they did create was obvious, boring and emotionally flat. Sure, they may be of use as help generate basic plot lines - a process we writers call spitballing. But when it comes to the hard work of actual creating, they are not much use at all.

The problem with such admittedly fledgling efforts suggests a deeper problem that doesn't promise to be solved any time soon. A.I.

systems arise from a tech world where content - clicks, eyes on screen - are the bottom line. Streaming services like Amazon, Apple and Netflix see art as just another kind of *content*, something that will occupy the subscribers' mind for a short, profitable period of time, like a photo of women in swimsuits, or a video clip of frolicking panda bears. These streaming services want lots and lots and lots of content. It is the nutriment that sustains the viewers. Quality is secondary, at best. For this purpose, A.I. is ideal for them. It can certainly improve the quantity of content - but at what cost to quality?

This can be seen in the case of HBO, a network traditionally viewed as the flagship of quality television, as reflected in their famous motto: "It's not TV, it's HBO." Recently, however, things have begun to change. The desire for content, content, content can be seen in HBO's streaming service, 'Max' - a phrase which is, after all, short for maximum. It contains thousands of programs and movies, from 'The Sopranos' to 'Dr. Pimple Popper.' As if this wasn't enough, Max recently announced that writers and directors would all now be called simply 'creators,' lumping them together with anyone who pushes out content, as if Instagram models filming their Marbella holidays were on a level with Emmy-Award winning dramatists. Although they quickly dialed back the idea after a lusty outcry, it was an ominous sign for the future.

It seems as if some of the tech companies might be sensing that, when it comes to this voracious need for content, they have created a Frankenstein's monster. Amazon, for instance, has recently begun to try to stem the tsunami-like flow of A.I.-generated books. It posted guidelines for self-published authors, requiring them to disclose whether they had used A.I. to create texts. It also limited the number of titles users can upload to its self-publishing platform to three a day. And the company has announced that in the near future authors will have to disclose to customers if a book was created by A.I.

This, to me, is why the answer to the question "can it *write*?" is a resounding no, and probably will remain so for a long time (or whatever constitutes a long time in our rapidly-accelerating world). At the end of the day, it is a question of *sensibility*. Yes, A.I. can think faster than us. It knows more than us. Soon, when a true generative AI system is developed, it will even be able to think *like* us. The problem with this is that writing is not really a matter of thought, at least not in the way it is understood by algorithmists, neuroscientists, and venture capitalists.

Creative writing is not fundamentally a function of intelligence. I've published ten novels, had three movies made from my work and am currently writing a television series for a big Hollywood studio. By most reasonable standards, I am pretty successful. And it is not because I'm smart. I can assure of that. Lucky, yes. Gifted, if you must. But if I relied on intelligence alone, I'd have given up the game a long time ago.

No, true artistry, whether it be novels or screenplays, stems from a complex interplay of emotion and instinct, sensuality and thought. That mysterious thing we call a *sensibility*. Marcel Proust's *In Search of Lost Time* begins with the memories evoked by the smell of a madeleine cake; Hamlet, the greatest fictional character ever created, remains fascinating after 400 years primarily because he *cannot* use thought to solve his problems. True writing is about casting shadows as much as shedding light; it is about creating riddles, not solving them. It is about emptiness as much as content. It is about something we call the sublime.

Let me finish by very briefly discussing a fascinating concept I came upon while researching this talk; one that may suggest a future in which A.I. potentially could write. It is the idea of 'hallucination,' the term A.I.'s designers use when their language models fabricate answers to questions, or make definitive statements on uncertain facts. The result are non-sequiturs and nonsense. For instance, Bard may tell you that Toronto is in England. I recently asked the chatbot Claude to help me design a writing course, and one of the first bits of information it provided was that the stories of Anton Chekhov, who died in 1904, were written within the last twenty years.

It is a disturbing and uncanny phenomenon that the tech geniuses cannot explain. Some think it is because LLMs are designed to give full and fluent responses to prompts, so they will fill in uncertain data to create convincing answers. In other words, they bullshit. A recent Microsoft report on the phenomenon claimed A.I. systems are "built to be persuasive, not truthful. This means that outputs can look very realistic but include statements that aren't true." Which raises a fascinating, if worrying, prospect. Maybe, somewhere in the shadowy whirrings of these supercomputers, lies the possibility that they really *can* one day create true fiction. Because is not that what writers do? Make things up to please people? If, instead of rushing to correct errors, creators and consumers of A.I. encouraged these confabulations, might they one day create a truly artistic bot, one that is not literal minded, that has no core allegiance to factual truth? One that shares all the

unpredictability and intuition and flaws of the true artist? Will A.I. one day be able to dream of *real* sheep?