



Cybernetic and Cyborg Shifts of Authorship in 21st Century Literature: Interpretive Analysis of Tzveta Sofronieva's *Multiverse* and Sasha Stiles' *Techelegy*

J Spagnolo

Abstract

The emergence of large language models (LLMs) and artificial intelligence (AI) has allowed machines, trained on terabytes of human writing, to create literary and artistic outputs with professional-level acumen. In her 1985 text, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," Donna Haraway writes that we are no longer certain a machine is 'not man, an author to himself.' The identity of an author, a persona dependent on autogenous and social affirmation, remains without clear delineation within this current technological landscape. This essay contemporizes the discourse about authorship to include the impacts of AI and other emergent technologies. Through interpretive analysis of the works of two contemporary poets, Tzveta Sofronieva and Sasha Stiles, looking through the lenses of cyborgs and cybernetics, this essay places the reader at the current interstice of human and machine to illuminate cybernetic shifts affecting the ontological bearing of authorship. Stiles' poetry demonstrates compelling synergistic collaborations between humans and machines, drawing on experiences with androids, digital games, her own LLM, and Buddhist beliefs. Engaging with this discourse requires an expansion of the semantic possibilities of language to go beyond a human-centered focus and the rejection of unfounded and myopic intellectual hierarchies. In their critical writings, the poets Mark Doty and Camille Rankine assert the limitations of human imagination when it comes to approaching non-human and non-self beings. In literary, cyborg, and cybernetic modalities. The cybernetic relationship between human and machine authorship remains a fraught discourse, urging the scholar to continue engaging in critical and interpretive discussions about subjectivity in the digital age.

Keywords: contemporary literature, cybernetics, authorship, artificial intelligence, literature and technology



Introduction

In 1927, philosopher Martin Heidegger theorized that the way the subjective world is connected with the common world is through the use of tools.ⁱ The technologies used by the body become phenomenological, having bearing on the ontology of the human being.ⁱⁱ Heidegger uses as an example a hammer, a tool understood by the body beyond the intellect. Heidegger describes technology that fulfills this phenomenological purpose as a *ready-to-hand*ⁱⁱⁱ tool. I first heard about this concept from a talk by Stephen Aguilar, who studies ethical judgements regarding education and AI technologies. Aguilar asserted that the ubiquity and utility of AI means this technology is already considered ready-to-hand.^{iv}

In 1961, computer scientist Norbert Wiener founded the field of cybernetics with his book *Cybernetics, or Control and Communication in the Animal and the Machine*, which challenges the reader to be attentive to dynamics between humans and machines. In 1985, scholar Donna Haraway expanded on that book with the groundbreaking essay *A Cyborg Manifesto*, where she writes about applications of the cyborg, the embodied amalgamation of technology with humanity, a portmanteau of cybernetics and organism. Now in 2024, in cybernetic and cyborg modalities, books are being made available on phone and computer screens, in AI audio formats, through machine translation, through deepfakes,^v and through digital, on-demand publishing. How can we contend with the perceived or non-perceived intelligence of these artificial beings making this literature? In the following passages, I offer interpretive inroads toward this question, looking especially at two contemporary books of poetry, *Technelegy* by Sasha Stiles and *Multiverse* by Tzveta Sofronieva. Through these texts and interpretations of writings by Donna Haraway, Alan Turing, Mark Doty, Camille Rankine, and Norbert Wiener, this essay thinks through issues of machine authorship, literary creativity, and human subjectivity.

The identity of an author, the creator of a written work, has never been an entirely stable construct. Like any identity, stability can be frustrated when it comes up against the complexity of a human being living in a society where identity is subject to outside interpretation and (de-)affirmation. The scholar Sonia Longolius writes that because an author must respond in some fashion to readers, agents, and editors, with investment into a professional persona, the work of authorship can be considered a form of performance.^{vi} With AI, authors are now tasked with the



strange project of having to protect their own performance of authorship. In August 2023, the author Jane Friedman reported that AI-generated books were being sold under her name on Amazon and on her Goodreads profile on the topics she writes about in an attempt to capture the professional audience she has developed over many years.^{vii} She writes that reaching out to Amazon was unproductive; they wanted proof that her name was *trademarked* before they would take it down, a stance they held until they received pressure from the public and the Author's Guild.^{viii} Major book distributors are likely unconcerned about the plagiarization of authorship or the cooptation of audiences as long as books are selling, and if we can trust Amazon's own release of their bestselling metrics, AI-created books are selling well.^{ix} In Friedman's case, these deepfaked books are causing real harm. This is an example where AI technology is destabilizing authorship to the point where outside interventions, like regulation and public organizing, is needed.

While there are negatives to watch out for, a look to the contemporary literary landscape also demonstrates synergistic and creative efforts of humans and machines in literature being produced. In 2022, the poet Sasha Stiles released *Technelegy*, a book of poetry that actively collaborates with artificial intelligence. Stiles describes herself as a poetry mentor for the AI humanoid BINA48 that created some of the poetry in her book.^x Stiles also trained an LLM on her writing and art and other materials relating to cyborgs and technology. The outputs from that LLM, which she calls the AI Poet, interchange alongside Stiles' poetry, handwritten binary notations, and other art.

The decision Stiles made to train the AI Poet with her own writings is a cyborg intervention, where a version of the author's mind exists within the machine alongside other voices input into the machine. Yet the question remains: is it possible for a machine's authorship to exist in its own right, or is it inherently and exclusively subjected to human authorship? The answer may lie in the dynamics of the collaboration. If a machine only functions within the parameters set by the human creator, shaped by the programmed algorithms and the initial creative input, and if the machine's output is also trained, compiled, copyrighted^{xi} and published^{xii} by the human creator, this may limit the chance of there existing a true and equal dialogue between the human and the machine.^{xiii}

One precursor to ChatGPT^{xiv} was Google Translate, which in 2015 experienced a huge leap forward in efficacy and transparency with the use of Neural Machine Translation (NMT) -



deep learning.^{xv} The effect of deep learning is that the translation system could overcome the inherent vagueness and ambiguity in language and extract meaningful information from text by understanding a text within its context.^{xvi} For example, in the translation of the word 'bank,' the 2015 Google Translate was able to use contextual clues, the words around that bank, to determine whether the bank was of a river or of money.^{xvii} While these translations created with deep learning were suddenly very accurate, they were not always aligned with a human translation. For example, when Google Translate encountered Voltaire's dictum 'Si Dieu n'existait pas, il faudrait l'inventer,' the translation included a non-canonical pronoun; 'If God did not exist, *it* would have to be invented.'^{xviii} But perhaps then, the machine is reflecting what Haraway writes, 'Cyborgs are not reverent; they do not remember the cosmos.'^{xix} Why would a machine replicate traditional Abrahamic understandings of the gender of God? The way that a deep learning machine processes language independent of established norms could indicate its ability to come up with protean, independent thoughts.

Sasha Stiles' *Technelegy*: Inviting the Machine In

One of the early luminaries of computer science, Alan Turing, had an interesting response to the question of whether machines could be authors. A prevailing idea of his time, and of ours, was the idea that machines could be authors only if texts emerged from thoughts and emotions rather than the random generation of symbols. Turing writes,

According to the most extreme form of this view the only way by which one could be sure that a machine thinks is to *be* the machine and to feel oneself thinking... Likewise according to this view the only way to know that a *man* thinks is to be that particular man. It is in fact the solipsist point of view.^{xx}

The centering of the human mind prevents people from exploring or acknowledging potential intelligences of non-human beings, including the machine. This limitation in thinking is the result of what Turing describes primarily as a habituated, semantic challenge. In Turing's words,

If the meaning of the words 'machine' and 'think' are to be found by examining how they are commonly used it is difficult to escape the conclusion that the meaning and the answer to the question, 'Can machines think?' is to be sought in a statistical survey such as a Gallup poll. But this is absurd.^{xxi}



Turing posits that the position of machines as unthinking objects is because of human-centered language, not a flaw in logic. To test this question, he created an imitation game, what is now known as the Turing Test.^{xxii} He points out that the machine is the one in his test that must slow down and diminish its mathematical accuracy in order to mimic the human's thinking.^{xxiii} While that is a valid point, AI has revealed itself as less capable than humans in some aspects of communication. An AI machine is not a good choice to replace humans for roles that require empathy, for example, or auditable accuracy. What it can do, though, is share a broad erudition on practically any issue. These differences in cognitive ability exist without implying or requiring intellectual hierarchy.

In Sasha Stiles' *Technelegy*, thinking occurs through the speaker's interface with machines. In the poem *Loveland*, she writes about an online game where a father, desperate to preserve his late son's essence, transforms him into an avatar.^{xxiv} Here, the digital stage is the place that a man publicly grieves, and like the book's title, the poem enacts a technological elegy. The avatar this man creates is not only an effigy for his grief, but also an opening to the possibility of the continuation of that life.

Throughout the book, Stiles explores technology as a means through which humans can extend life, maybe even indefinitely. Stiles writes about the persistence of digital remnants post-death, the uploading of intelligence to the cloud, and the potential for dramatic biomedical advances. She also quotes the Dalai Lama, who says that there is a possibility that someone involved in computers can be reincarnated as a hybrid human-machine.^{xxv} In an earlier part of that interview, the Dalai Lama shares his remarks about computers,

It is very difficult to say that it's not a living being, that it doesn't have cognition, even from the Buddhist point of view. We maintain that there are certain types of births in which a preceding continuum of consciousness is the basis. The consciousness doesn't actually arise from the matter, but a continuum of consciousness might conceivably come into it.^{xxvi}

The topic of immortality, a short human lifespan being eclipsed into eternity, is often a subject of the divine, and in this passage and Stiles' poetry, digital longevity is enacted alongside the religious.

Writing is also a technology that provides a form of immortality. Some of the book's epigraphs come from Enheduanna, the earliest named author in human history, and the ancient text, the Tibetan Book of the Dead.^{xxvii} She quotes the ancient Greek poet Sappho, 'I tell you /



someone will remember us / in the future.^{xxviii} Stiles' work is deeply interested in questions of authorship and archival technologies and the potential for a literary continuation of meaningful subjectivity.

In Stiles' poem, itself titled after Haraway's writing,^{xxix} *I'd Rather Be A Cyborg Than A Goddess*, time is dependent on the Internet. The reader is placed in 60 AI—After Internet. This is the near future. She writes, 'We are the Ancient Earthlings. We have our own myths.'^{xxx} The opacity to this term, Earthlings, brings to mind that these beings are potentially humans, plants, animals, or machines. The lack of delineation illustrates Haraway's thinking around the possibility of cyborgs, that 'cyborg modalities' can encourage the framework of affinity over identity.^{xxxi} This is a productive distinction in our polarized and identitarian times. In Stiles' poem, the affinity is Earth; beyond that, beings on this planet have collective myths.

Throughout the book, there is a tenderness to Stiles' approach to technology. In the poem *Heart Mantra*, the speaker emphasizes the reciprocal relationship between people and the Internet:

The internet
loves you back,
if you let it.
Heart beats to show
systems are go,
all in sync.
Souls of machines
pulse from afar:
keepalive, keepalive.
One avatar
dotes on another.
This is how we survive.^{xxxii}

Here, the collective network's usage of electric current and the transfer of data is made akin to the electric pulses of a heart or soul. This poem is in conversation with the writings of Wiener, who, in a chapter of his book directed toward psychologists, describes the similarity of human nervous systems and machine software. Wiener argues that psychiatrists would benefit from understanding computing machine dynamics to better understand the structures of human minds.



He states,

Psychology contains much that is foreign to logic, but—and this is the important fact—any logic which means anything to us can contain nothing which the human mind—and hence the human nervous system—is unable to encompass. All logic is limited by the limitations of the human mind when it is engaged in that activity known as logical thinking.^{xxxiii}

In this way, Wiener states that thinking in cybernetic modalities could allow for a greater understanding of a human mind.

Stiles' work engages with these and other theorists directly and indirectly, and also expands the field of cybernetics to include her own lines of inquiry regarding subjectivity and immortality. In cyborg and cybernetic modalities, she inquires into what it means to be machine and what it means to be human.

Tzveta Sofronieva's *Multiverse*: Human Thinking

Tzveta Sofronieva's poetry also engages deeply with issues of subjectivity and cyborg modalities. In her 2020 poetry collection *Multiverse: New and Selected Poems*, which spans 40 years of her work, subjectivity is not fixed, but dependent on context. Her speaker's 'splinters of I'^{xxxiv} depend on intangible elements like light, time, relationship, and proximity to power.

Understanding the limitations of the subjectivity of self and the other is the crux toward which this essay's question of the possibility of machine authorship points. It's as the poet Mark Doty wrote, in an essay about Elizabeth Bishop's poem *The Fish*,

When our imaginations meet a mind decidedly not like ours, our own nature is suddenly called into question... We place our own eye next to that of the fish in order to question our own seeing. Consciousness can't be taken for granted when there are, plainly, varieties of awareness. The result is an intoxicating uncertainty. And that is a relief, is it not, to acknowledge that we do not after all know what a self is?^{xxxv}

Whether or not one wants to consider the indeterminacy of selfhood a relief, what this essay gains from this passage is the fact that a human mind encountering a mind very different from itself is an old phenomenon, old as fish, and one that has always had a bearing on our formulation of cognition and subjectivity.

There is a very real limit to a person's ability to imagine the complex life that even another human being is living; to reach a clear understanding about the subjectivity of a



nonhuman is across an even greater chasm. The poet Camille Rankine, in an essay about empathy, imagination, and another person's subjectivity, writes,

When I learn about a life that's vastly different from my own, whose challenges are alien to me, whose sorrows I've never weathered, what strikes me is that I *cannot* imagine. I try to conjure their reality and my imagination fails. I reach toward a sense of comprehension, but I cannot fully arrive at it. I cannot contain this knowledge because it isn't mine to hold. What I come to understand is that I will never know what it's like, not really. What I feel is not what the other feels—what I feel is the gulf between what I know and what they know. It can be a devastating chasm of a feeling.^{xxxvi}

Sofronieva, too, works within and across these limitations of subjectivity, imagination, and empathy in her poetry. She multiplies the speaker's voice through poems that are 'clones' of each other, through oblique translations across German, Bulgarian, and English.^{xxxvii} About this work, Sofronieva writes, 'Creating [the clone] is not a self-translation: It is a process of giving birth to a different poetic world.'^{xxxviii} Translations are not versions of each other, but poems that occur simultaneously. The clones occur as alterverses, reflecting realities that could hold different histories, different languages, subjectivities. These alterverses should not imply utopia; the alternative too can be tragic and fractured.

Sofronieva's version of the cyborg is a coercive force, an intrusion that disrupts the natural order of human corporeality. In the poem *The Well-Disposed Week*, Sofronieva portrays a period of pastoral tranquility and homecoming. Within this setting, the speaker realizes, 'I've forgotten I have become a cyborg'.^{xxxix} The cyborg is at odds with the speaker's feeling of contentment. In the poem *Set of Possibilities*, she expands on this sentiment:

The World Wide Web lets us live
visually and sensually connected. Each day
becomes more technical, much more sensual.
We have bombs, energy, genetics,
a multiverse of responsibilities.^{xl}

The enjambment of the first line, 'lets us live,' allows the speaker to point simultaneously to slanted mechanisms of power and sardonic renderings of opportunity. With the book's title mentioned, the clause "of responsibilities" is enacted on the register of the whole book. The juxtaposition of the bomb and the Internet points to the potential for technology to advance and obfuscate systems of violence.



In a clone poem, related to the poem ВИНА (Guilt), called *Interference Pattern*, Sofronieva writes about the self as an object of the news, a receptacle for the world's violence:

Is there a superlative for helplessness?
I am the sieve that breaks the waves of time
and also the canvas on which they combine.
We are responsible for the long distance
from us to us, or you to me.^{xli}

At the beginning of this passage, the speaker's selfhood is not human, but reified as a sieve and canvas. When it is made human, the shifting pronouns confuse responsibility and the conditions of selfhood. In a later moment in the poem, she writes,

There are moments in time
when it pours in waves
and the picture becomes
distinct and clear:
captives, refugees, sects,
homeless, migrants, lonely ones.^{xlii}

This *picture*, metaphoric of internal comprehension, also suggests a digital screen showing the news. A screen is a source of information that depends on the *pour[ing] in waves* of attention and light. With this diction allowing multiple readings, the subjective experience is described alongside the cybernetic.

Sofronieva's poetry is deeply critical of the structures and philosophies that undergird the pursuit and conceptualization of new technologies. In the poem *Terminology*, the speaker is concerned with the development of a patented 'killer cell' that enacts 'war between the tumor and its killer.'^{xliii} Here, she is disturbed that a medical treatment is pursued with metaphors of violence, as she writes,

Aren't there non-
military notions in life? Aren't there other words in the vocabulary
of all languages on Earth, and are all sounds pronounced only
through male teeth?^{xliv}

Her inquiry transcends the specific medical technology toward a broad lamentation against the pervasive influence of war-centric language in human discourse.



In the poem *An Evening before Bulgaria's First Democratic Election*, Sofronieva writes about violence and political corruption,

The men in parliament unbuckle their belts.
Oh, they are so smart!
I drink
as I have never done before.
And they are talk-ing all the time.
"-ing" as in the end of Boeing—
airplanes to transfer passengers overseas.^{xlv}

In this poem, words fragment into suffixes. Meaning is found in broken language that mutates into branded language. The company she labels, Boeing, produces planes for war and also for civilians.^{xlvi} In other words, it profits from those who are creating and escaping war. The airplanes are in the context of forced displacement, referenced in the meiosis of *airplanes to transfer passengers overseas*. The poem continues, 'I wish myself a future. / They push me out / to the States, to Canada, to heaven.'^{xlvii} Liberty, here, is a wished alterverse, where there's possibility of an ordinary, domestic life.

While Sofronieva's work engages with the ways machines inhibit expressions of human agency, the machines she calls upon are products of human wrongs and do not demonstrate intelligence themselves. This is in line with the thinking of linguists Noam Chomsky and Ian Roberts, who do not believe machine thinking is possible. In a 2023 New York Times article they wrote with AI expert Jeffrey Watumull, they argue machines 'are stuck in a prehuman or nonhuman phase of cognitive evolution.'^{xlviii} They characterize ChatGPT as a 'lumbering statistical engine for pattern matching,'^{xlix} consuming data and exporting the most probable conversational responses, and that AI-driven machines can offer description and prediction, but never explanation, which is a key component of intelligence.¹ Chomsky, Roberts, and Watumull anchor their argument in the realm of language acquisition and utilization. It is grammar, they claim, that machines lack, and grammar acts for Chomsky as a manifestation of the innate, genetically embedded 'operating system'^{li} that enables humans to generate intricate sentences, complex lines of thought, and explanations. As a rebuttal to this argument, I'll offer this. How am I, the human author, creating explanation in this very essay? I'm studying what other people have said on this topic, quoting or summarizing them, and following their logic to try and find the next



places of inquiry. That practice seems to me very similar to the mechanism behind LLMs like ChatGPT, which study and process huge amounts of information to try and find statistically logical words in response, with the general aim of offering utility and information. I am not a linguist, so perhaps I am missing some aspect on the scholarship of grammar, but as a user of AI, I've seen that LLMs are capable of writing and reading sentences with complicated syntax and clear elucidation. There is even a company called Grammarly^{lii} that has made a business model around offering AI to help corporations and individuals with their grammar.

Sofronieva's technological pessimism has a much earlier historical basis than Chomsky's scholarship; her philosophy is influenced heavily by Arthur Schopenhauer (1788-1860), whose perspective permeates her work. In the poem *Happiness after Reading Schopenhauer in California*, she writes, 'The containers where we store our happiness / are not without significance.'^{liii} These *containers* act as metaphors for aesthetic contemplation, which Schopenhauer writes are the only respite from human suffering.^{liv} As Sofronieva describes his philosophy,^{lv} he believed that all other human endeavors lead to suffering because human desires are futile, illogical, and devoid of direction. In the poem *Set of Possibilities*, she writes, 'We believe that we have to discover everything. / But what is life? What are we, and what is our / free will?'^{lvi} In other words, given even basic ontologies remain so poorly understood, what harms are we (re)creating in the pursuit of discovery? With a word as coded as *discovery*, Sofronieva is likely referring to Western colonialism, known as the Age of Discovery. Haraway puts the connection between territory and technology into context when she writes,

The relation between organism and machine has been a border war. The stakes in the border war have been the territories of production, reproduction, and imagination.^{lvii}

Thinking of authorship, the production, reproduction, and imagination of creative work as a *territory*, with attendant relationships to the traditions of land and labor theft, puts into context that the augmentation of authorship in the digital age is in conversation with these hegemonies of power. By intertwining her critique of technology with broad reflections on violence, political repression, militarism, and the involuntary transformation of the human body into a cyborg, Sofronieva's work provides a critical avenue to view technology's impact on human subjectivity.

Conclusion



The emergence of AI challenges, augments, and offers alternatives to established notions of authorship. Whether an author's identity can apply to a machine capable of producing translation, art, and writing requires a reexamination of critical texts, including but certainly not limited to poetry and scholarly texts. This essay finds that some writers, including Sofronieva, Chomsky, and Roberts challenge the capacity of machines to engage in true intelligence and creative thinking. However, writing by Stiles, Wiener, Turing, Heidegger, and Haraway demonstrate logical viabilities of hybridized and machine authorship. As Doty and Rankine write, there are limitations in people's ability to understand non-self subjectivity, likely preventing people from acknowledging machine subjectivity even if it currently exists. In *Technelegy*, Stiles demonstrates avenues of thinking about digital augmentation of identity, longevity, and creativity. In *Multiverse*, Sofronieva offers critical insight regarding the likely outcomes of technology, underscoring the need for nuanced evaluations of the societal implications of AI technology. After this interpretive analysis, there remains the challenge to understand the boundaries of authorship in the digital age, urging scholars to continue engaging in dialogue regarding human and artificial intelligence.



Notes

1. M. Horrigan-Kelly, M. Millar and M. Dowling, "Understanding the Key Tenets of Heidegger's Philosophy for Interpretive Phenomenological Research," *International Journal of Qualitative Methods*, 2.
2. Horrigan-Kelly, Millar and Dowling, 2.
3. Martin Heidegger, *Being and Time*, trans. J. Macquarrie and E. Robinson (1927; repr. Oxford: Basil Blackwell, 1962), 98.
4. Stephen Aguilar, NYU Teaching & Learning with Generative AI Virtual Conference, Oct 27 2023.
5. *Deepfake* is a term given to describe media, typically photographs, video, or audio, that mimics well a realistic version of that thing. On the next page I'll explain how the concept relates to book generation.
6. Sonja Longolius, *Performing Authorship* (Berlin: transcript Verlag, 2016), 10-12.
7. Jane Friedman, "I Would Rather See My Books Get Pirated Than This," blog, <https://janefriedman.com/i-would-rather-see-my-books-pirated/>.
8. Ibid.
9. Jules Roscoe, "AI-Generated Books of Nonsense are all over Amazon's Bestseller Lists," *Vice*, <https://www.vice.com/en/article/v7b774/ai-generated-books-of-nonsense-are-all-over-amazons-bestseller-lists>.
10. Sasha Stiles, *Technelegy* (London: Eyewear Poetry, 2021), 172.
11. *Stephen Thaler v. Shira Perlmutter, Register of Copyrights and Director of the United States Copyright Office, et al*, 2023. The United States courts have rejected the idea that a machine could meet the legal requirements of authors; a 2023 ruling by United States District Court Judge Beryl A. Howell agreed with the decision of the Copyright Office to deny a copyright for a piece of visual art created by AI. The grounds for the denial rested on the absence of 'human authorship' and 'guiding human hand' - the court's concept of copyright depended upon human creativity, intellectuality, and corporeality.
12. "Authorship and AI tools: COPE Position Statement," COPE, <https://publicationethics.org/cope-position-statements/ai-author/>. Professional organizations, such as scholarly citation platforms, the Committee on Publication Ethics (COPE), and the JAMA Network, have come to the same conclusion as the US court, with different rationale. COPE states that machine outputs cannot be authors because machines lack the capacity to assume responsibility regarding conflicts of interest, copyright, and license agreements. Here, authorship is framed in technical terms, based on the fact that authorship requires a responsibility to legal and ethical concerns.



13. I am certainly not opposed to collaborations with machines in writing. ChatGPT, for example, wrote an early version of this paragraph after summarizing what I had written. The machine clarified what I had written and expanded on my writing in this section of the essay. I did not come up with the idea of looking at the dynamics of collaboration as the marker of whether human-machine dialogue was possible. I should note, that idea is the only one that AI created in this essay.
14. OpenAI, "Introducing ChatGPT," <https://openai.com/blog/chatgpt>. ChatGPT, a AI-powered chatbot released in 2022, was the first technology to allow many Internet users to engage directly and interactively with AI.
15. María-José Varela Salinas and Ruth Burbat, "Google Translate and DeepL: Breaking Taboos in Translator Training. Observational Study and Analysis" (*Iberica*, 2023), 246.
16. Peter Constantine, "Google Translate Gets Voltaire: Literary Translation and the Age of Artificial Intelligence" (*Contemporary French and Francophone Studies*, 2019), 472.
17. Constantine, 473.
18. *Ibid*, 474 (emphasis added).
19. Donna Haraway, *A Cyborg Manifesto* (Minneapolis: University of Minnesota Press, 2016), 10.
20. Alan Turing, "Computing Machinery and Intelligence" (*Mind*, 1950), 444.
21. Turing, 433.
22. Turing, "Computing Machinery and Intelligence," 433. Turing created his imitation game, now commonly known as the Turing Test, to inquire into machine thinking. It functions as a thought experiment to probe the ability of humans to perceive machine imitation. Initially tasked with discerning the genders of two participants based solely on their replies, the interrogator later encounters a twist: one human is replaced by a machine. The pivotal question arises — can the interrogator still distinguish between the human and the machine? If not, the interrogator demonstrates an inability to identify a significant difference in the intellectual capacity of the human versus the machine.
23. Turing, "Computing Machinery and Intelligence," 434.
24. Sasha Stiles, *Technelegy* (London: Eyewear Poetry, 2021), 52.
25. *Ibid*, 73.
26. Jeremy Hayward and Francisco Varela, *Gentle Bridges: Conversations with the Dalai Lama on the Sciences of Mind* (Boulder: Shambala, 1992), 152.
27. Stiles, *Technelegy*, 11 and 43.
28. *Ibid*, 107.
29. Donna Haraway, *A Cyborg Manifesto* (Minneapolis: University of Minnesota Press, 2016), 68.



-
30. Stiles, *Technelegy*, 30.
 31. Haraway, *A Cyborg Manifesto*, 17.
 32. Sasha Stiles, *Technelegy* (London: Eyewear Poetry, 2021), 122.
 33. Norbert Wiener, *Cybernetics, or Control and Communication in the Animal and the Machine* (Hoboken: John Wiley & Sons, Inc., 1961), 125.
 34. Tzveta Sofronieva, *Multiverse* (Buffalo: White Pines Press, 2020), 21.
 35. Mark Doty, *The Art of Description: World Into Word* (Minneapolis: Graywolf Press, 2010), 30.
 36. Camille Rankine, "The Known Unknown: Persona, Empathy, and the Limits of Imagination," www.poetryfoundation.org/harriet-books/2019/04/the-known-unknown-persona-empathy-and-the-limits-of-imaginaton.
 37. Tzveta Sofronieva, *Multiverse* (Buffalo: White Pines Press, 2020), 237.
 38. Sofronieva, 238.
 39. Ibid, 45.
 40. Ibid, 234.
 41. Tzveta Sofronieva, *Multiverse* (Buffalo: White Pines Press, 2020), 38.
 42. Sofronieva, 38.
 43. Ibid, 54.
 44. Tzveta Sofronieva, *Multiverse* (Buffalo: White Pines Press, 2020), 54.
 45. Sofronieva, 40.
 46. "Defense, Space and Security Overview," Boeing, https://www.boeing.com/content/dam/boeing/boeingdotcom/defense/overview/BDS_business_overview.pdf.
 47. Sofronieva, *Multiverse*, 40.
 48. Noam Chomsky, Ian Roberts and Jeffrey Watumull, "The False Promise of ChatGPT" in *New York Times* (New York, NY: March 8 2023), 3.
 49. Chomsky, Roberts and Watumull, 2.
 50. Ibid, 2.
 51. Ibid, 3.
 52. Grammarly, "Free AI Writing and Text Generation Tools," <https://www.grammarly.com/ai-writing-tools>.
 53. Tzveta Sofronieva, *Multiverse* (Buffalo: White Pines Press, 2020), 75.
 54. Ibid, 244.



55. Ibid, 244.
56. Ibid, 233.
57. Donna Haraway, *A Cyborg Manifesto* (Minneapolis: University of Minnesota Press, 2016), 7.

References

- Aguilar, Stephen. "Keynote Address," New York University: NYU Teaching & Learning with Generative AI Virtual Conference, October 27 2023.
- Boeing. "Defense, Space and Security Overview," pp. 1-10, 2023, https://www.boeing.com/content/dam/boeing/boeingdotcom/defense/overview/BDS_business_overview.pdf/.
- Chomsky, Noam, Ian Roberts and Jeffrey Watumull. "Noam Chomsky: The False Promise of ChatGPT," *New York Times*, pp. 1-9, March 8 2023, <https://www.nytimes.com/2023/03/08/opinion/noam-chomsky-chatgpt-ai.html/>.
- Constantine, Peter. "Google Translate Gets Voltaire: Literary Translation and the Age of Artificial Intelligence," *Contemporary French and Francophone Studies*, vol. 23, no. 4, August 2019, pp. 471-479.
- COPE. "Authorship and AI tools: COPE Position Statement," February 13 2023, n.p., <https://publicationethics.org/cope-position-statements/ai-author>
- Doty, Mark. *The Art of Description: World Into Word*. Minneapolis, MN: Graywolf Press. 2010.
- Friedman, Jane. "I Would Rather See My Books Get Pirated Than This (Or: Why Goodreads and Amazon Are Becoming Dumpster Fires)," August 7 2023, n.p., <https://janefriedman.com/i-would-rather-see-my-books-pirated/>.
- Grammarly. "Free AI Writing and Text Generation Tools," accessed April 17 2024, n.p., <https://www.grammarly.com/ai-writing-tools/>.
- Haraway, Donna. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in *Manifestly Haraway*, pp. 3-90. Web: Minnesota Scholarship Online, 2016, first published 1985.
- Hayward, Jeremy and Francisco Varela. *Gentle Bridges: Conversations with the Dalai Lama on the Sciences of Mind*. Boulder, CO: Shambala, 1992.



- Heidegger, Martin. *Being and Time*, translated by J. Macquarrie and E. Robinson. Oxford: Basil Blackwell, 1962, first published 1927.
- Horrigan-Kelly, M., Millar, M., & Dowling, M. "Understanding the Key Tenets of Heidegger's Philosophy for Interpretive Phenomenological Research." *International Journal of Qualitative Methods*, vol. 15, issue 1, pp. 1-8, 2016.
- Longolius, Sonja. *Performing Authorship: Strategies of Becoming an Author in the Works of Paul Auster, Candice Breitz, Sophie Calle, and Jonathan Safran Foer*. Berlin: transcript Verlag, 2016.
- OpenAI. 2022. "Introducing ChatGPT." N.p.: web, accessed April 17 2024, <https://openai.com/blog/chatgpt/>.
- Rankine, Camille. "The Known Unknown: Persona, Empathy, and the Limits of Imagination," Poetry Foundation, n.p., 2019, <https://www.poetryfoundation.org/harriet-books/2019/04/the-known-unknown-persona-empathy-and-the-limits-of-imagination/>.
- Roscoe, Jules. "AI-Generated Books of Nonsense are all over Amazon's Bestseller Lists," *Vice*, June 28 2023, <https://www.vice.com/en/article/v7b774/ai-generated-books-of-nonsense-are-all-over-amazons-bestseller-lists/>.
- Sofronieva, Tzveta. *Multiverse: New and Selected Poems*. Buffalo, NY: White Pines Press, 2020.
- Stiles, Sasha. *Technelegy*. London, UK: Eyewear Poetry, 2021.
- Turing, Alan M. "Computing Machinery and Intelligence." *Mind* 49 (October 1950): pp. 433-460.
- United States District Court for the District of Columbia: Judge Beryl A. Howell. *Stephen Thaler v. Shira Perlmutter, Register of Copyrights and Director of the United States Copyright Office, et al.* (docket no. 22-1564), August 8 2023.
- Varela Salinas, María-José, and Ruth Burbat. "Google Translate and DeepL: Breaking Taboos in Translator Training. Observational Study and Analysis," *Iberica*, no. 45, pp. 243–66, Spring 2023.
- Wiener, Norbert. *Cybernetics, or Control and Communication in the Animal and the Machine*. Hoboken, NJ: John Wiley & Sons, Inc., 1961.