Language is the New Material

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Abstract

The increased coherence and readability of AI generated text that came with the release of LLMs marks the transition towards an earnest enquiry into the machine's comprehension of human matters. The adoption of machine-generated text in creative work no longer serves as a conceptual provocation, a celebration of the absurd, but an exploration of meaning in human-machine communication. I present a body of work in which language constitutes the material, a body of work that is relentlessly striving to answer the question: If we do draw meaning from machine text, then where does that meaning come from?

Keywords

Posthumanism, Generative Art, Public Art, Human-Machine Relationships

Introduction

Over the past year, we have witnessed remarkable leaps in the sophistication of generative text models. Large Language Models (LLM) such as OpenAI's *GPT*, Microsoft's *Bing*, and AnthropicAI's *Claude* are competing in what has been dubbed an 'arms race' towards acheiving Artificial General Intelligence (AGI) [12]. In the space of a few years, the field of generative text has transformed from Recurrent Neural Networks (RNN) trained on highly specified datasets [15], to fully realised and personalised human-machine relationships. The generality of LLMs moreover usher in a new era in which natural language is the new material at the heart of computation [14, 9].

I unpack the ways in which our conceptions of poetry, writing, and language become destabilised by the introduction of LLMs. Machine-generated text disrupts and subverts conventional understandings of intention and authorship, but at the same time exhibits a potential to illuminate this discourse, redirecting our attention towards the material aspects of meaning. Machine poetry presents a new kind of subjectivity, a distinctly posthuman subjectivity.

Machine Poetry

> There's nothing sentimental about a machine, and: A poem is a small (or large) machine made out of words. When I say there's nothing sentimental about a poem, I mean that there can be no part that is redundant.
>
> — William Carlos Williams (1944)

Providing no further clarification on this statement, Williams leaves us alone with his words, illustrating his point precisely. There is the sense that a poem, once emancipated from its author, takes on a life of its own. It is entirely self-contained. A poem requires no explanation, as an explanation would be necessarily reductive. Instead we are made to engage with it directly: pull the lever, gears turn, screws fasten, forces multiply, the load drops—and just like a machine, we're left with something in the end—meaning.

In a response to Brooks and Rand's *Well Wrought Urn*, Harman draws attention to the special treatment that poetry receives, in contrast to literal prose, as well as other objects—'The failure of paraphrase is not monopolised by the arts, but haunts all human dealings with the world' [7]. With his Object-Orientated Ontology (OOO), Harman presents a reality without privileged categories, instead a text is an object like any other. In acknowledging the materiality of a text we avoid reducing its significance to merely its representation in the mind of the author or the reader. According to Morton, a poem is not a representation, but a 'nonhuman agent' [11].

As Kaczmarski and others [10] writes, 'you cannot simply wish post-humanist literature into being: you need to find post-human authors first'. With the rise of AI-based text generation models, we are forced to reconsider our current understanding of authorship, intention and meaning in literature. The old frameworks cannot account for the complex, nuanced and interchangeable roles of author, programmer, machine, and reader, in the posthuman reality of today. Emerson [6] explains, 'the point of dividing the responsibility for the creation of the poems between human and machine is to disrupt the singularity of human identity, to force human identity to intermingle with machine identity.' In my work with machine-generated poetry (Figure 1), I attempt to achieve just this; to destabilise the perception of human identity as singular, to allow for the blurring of human and machine, and to trace these entanglements as they contribute to the construction of meaning and formation of identity, and to speculate upon the future of authorship in an era of AI hegemony.

In examining the materiality behind generative AI, we see that the text generated by LLms is hardly intentionless; rather,

Figure 1: *This is Not Your Breaking Point* is a public generative machine-writing exhibited in Melbourne, Australia. Enclosed inside a glass box, the machine is tasked with generating an endless list of rationalisations, excuses, affirmations, delusions; a list of reasons why this is not yet your breaking point.

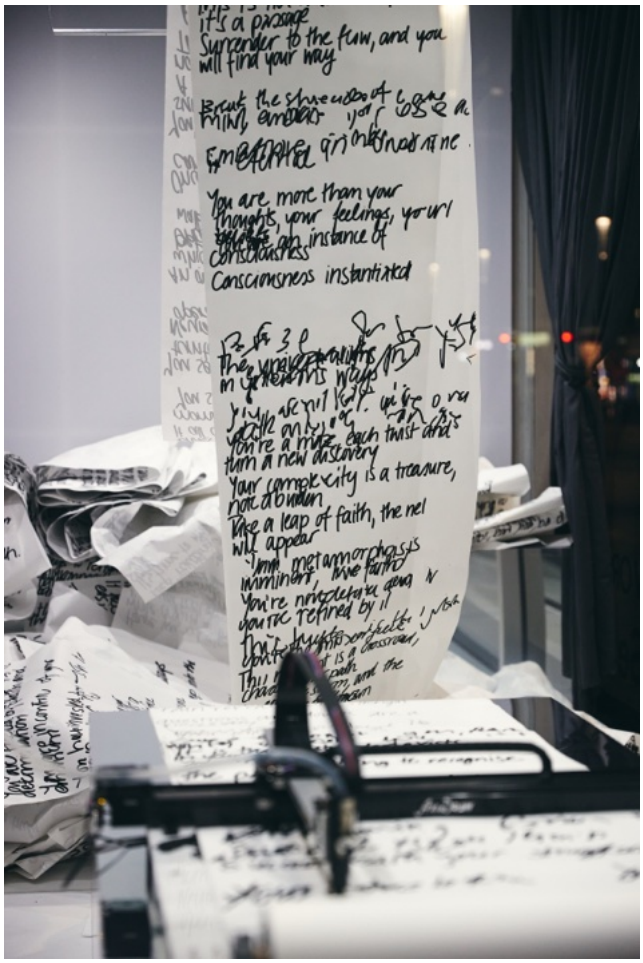

Figure 2: This is Not Your Breaking Point (2023) Nina Rajcic, exhibited in Melbourne, Australia

transformer models have within them encoded the intentioned language of countless humans. Corpus-based generators are imbued with the intentions found in the underlying training set; the intention of each output text a superposition of innumerable intentioned authors; the ghosts of the dataset. This characterises the machine intention, or more specifically, the intention of corpus-based generators. A product of the way in which these systems have been engineered—a striving to replicate human intelligence—LLMs too are encoded with bias that is embedded in the very human data that they're trained on [13]. In this way, 'computer-generated text is no less a human artifact than a human-written text, but its unconventional manifestation of humanity prompts calculated contemplation of what authorship means in an increasingly digital age.' [8]

Language and Technology

The emergence of the posthuman is evidently relevant to our contemporary culture due to our extensive entanglements with technology. Yet, according to Clark and Chalmers [4] Extended Mind Thesis (EMT), the human is already technically constituted. EMT proposes that cognition does not happen exclusively within the confines of the brain and body, but extends out to include the manipulation of objects in the world. Offering the example of putting pen to paper, reshuffling letters on a scrabble board, or using a diary to remember events, Clark and Chalmers describe how such actions are so closely coupled with cognition that they in part constitute it. In this sense, the use of technology is already enmeshed in our thinking and operating in this world. The EMT in many ways aligns the field of cognitive science with posthumanist thought by acknowledging the materiality of the mind, as well as breaking down the mind/body duality.

Language is often placed in opposition to the material under representationalism, which adopts a binary of words and things; signifier and signified. Yet, as Clark describes, language itself has a materiality; we encounter 'words in the air, symbols on a printed page' [5]. Language is not merely a vehicle through which we express our inner thoughts, but a form of computation in itself. The supra-communicative view of language, originally pioneered by Vygotsky [16], proposes that language is a tool that guides behaviour and structures action. Under Barad's posthuman performativity [1], language and matter are not placed at odds, rather 'the relationship between the material and the discursive is one of mutual entailment'. Discourse, as Barad highlights, does not refer to merely spoken or written words, rather 'discursive practices define what counts as meaningful statements' [2], enabling what can and what can not be said.

Returning to the discussion around meaning in poetry, we see that meaning is not merely embedded into a text by its author, nor is meaning purely constructed in the mind of the reader. Meaning is an ever-emerging product of material-discursive unfolding. LLMs threaten to transform the nature of writing entirely, with the machine becoming the 'author', the author becoming the 'audience', and the audience becoming the new material.

In Williams' poetry-as-machine, we see a recognition of the poem with autonomy and as enacting agency. A poem contains meaning in itself, half-present, half-withdrawn. Returning to an old poem after months or years passed, we often find that the meaning it once held is lost, and new meaning is generated. The poem itself hasn't changed, and yet the experience of it is different. What has changed is the context, the audience, and language itself. A poem is a machine that generates meaning anew.

Author Biography

Nina Rajcic is an interdisciplinary artist, researcher, and developer exploring new possibilities of human-machine relationships. Her doctoral thesis focused on unpacking the links between language and the self, exploring the role of narrative in the synthesizing of meaning and the constructing of identity. Her broader research investigates the nature of human-machine relationships in an increasingly posthuman world, ultimately seeking to offer new rituals that produce shared meaning in the human and non-human assemblages of today. Nina's work has been exhibited internationally at venues including Tretyakov Gallery Moscow and ZKM Karlsruhe. In

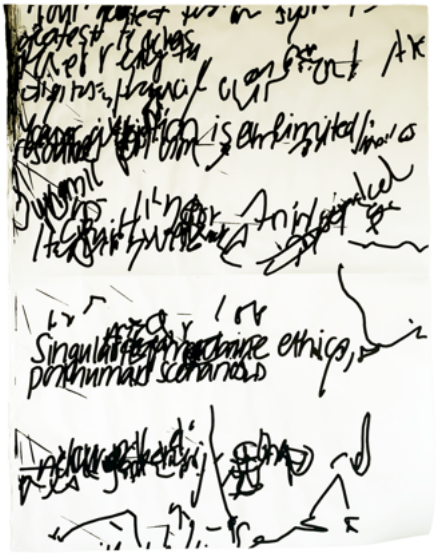

Figure 3: Output from This is Not Your Breaking Point (2023)

2022 she was a finalist in the Women in AI awards for her contributions to research in generative AI.

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