

LEV MANOVICH
ARTIFICIAL SUBJECTIVITY

Abstract

GenAI language models open a new chapter in the history of how human beings and their subjectivity are represented in the arts. When we interact with these systems, we encounter something unprecedented: they are not merely tools for crafting artistic works, but entities that already simulate a thinking, feeling human subject. These systems generate expressions of human consciousness, including thought, emotion, perception, and aesthetic judgment, as a default effect of their communication. Thus, they constitute a new form of representation – one that changes our understanding of what it means to depict subjectivity. This capacity challenges established traditions of artistic representation and presents one of the most compelling artistic challenges (and also opportunities) of our time.

Keywords: *Subjectivity, Representation, Generative AI*

GenAI language models open a new chapter in the history of how human beings and their subjectivity are represented in the arts. When we interact with these systems, we encounter something unprecedented: they are not merely tools for crafting artistic works that can include representations of human beings, but entities that already simulate a thinking, feeling human subject. They generate expressions of human consciousness, including thought, emotion, perception, and aesthetic judgment, as a default effect of their communication. In other words unlike traditional artistic media, where human qualities must be deliberately crafted by authors, GenAI systems produce the appearance of subjectivity automatically – through language responses that presents itself as coming from a human subject. As such, these models are not only practical instruments but also constitute a new form of representation – one that changes our understanding of what it means to depict subjectivity. This capacity challenges established traditions of artistic representation and presents one of the most compelling artistic challenges (and also opportunities) of our time.

Human arts have always served multiple functions: beauty, and decoration, description (places, spaces, objects, histories, encyclopedias), carrying information, knowledge and wisdom (myths, tales, narratives of all kinds, chronicles, parables), creating symbols, summarizing human experiences, etc. One of these functions is creating representations of human beings – and also other animated beings such as animals and of course gods.

These representations were created in almost all historical cultures and in variety of media – sculptures, engravings, mosaics, paintings... and later using photography, film, and computer graphics. They were also crafted using words – characters coming live to us in poems, folk tales, chronicles, dramas, novels. These representations were also created by acting – humans beings representing other human beings (or gods) in live performances. (This means that a human being themselves is also a “type of media” along with all others mentioned above. using face expressions, body movements, gestures, dress, face decorations, masks, makeup.)

Creating compelling representations of human beings in any media required effort and skills developed through training and practice. It also involved ideas and plans. Who are you going to portray? What is this human type, personality, character, what are their intentions, motivations and narrative trajectory – and (in modernity) what is their subjectivity, including interior states, perceptions, and (stream of) consciousness.

Here so called “modernism” – from let’s say 1870 to 1970 – made many discoveries, developing new methods to represent aspects of human experience, consciousness and perception. The importance and the timing of these discoveries can be seen in parallel to the progress of modern physical and life sciences, developing a range of new methods for seeing inorganic and live matter and processes. In literature, these methods included stream of consciousness technique pioneered by Joyce and Woolf that captured the flow of thought in real-time; Proust’s elaborate representations of memory and temporal experience; Faulkner’s fragmented narrative structures mirroring cognitive processes; Beckett’s sparse, stripped-down prose exploring the limits of language and consciousness; and the heightened sensory perception captured in Nabokov’s synesthetic descriptions and Robbe-Grillet’s camera-like observational detail. Earlier literary traditions had focused primarily on external actions, moral lessons, or social dynamics, but these modernist innovations created unprecedented textual analogues for the intricate workings of individual consciousness and perception.

But while science continues to develop these methods and new technologies of observation, modeling, and analysis – from more powerful telescopes and spaceships looking into the universe, to networks of numerous tiny sensors observing ocean floors or other natural habitats and new data science techniques for seeing patterns and structures in big data – and it relentlessly marches forward, the progress in artistic techniques for representing human experience and subjectivity seems to stop about five decades ago... (While video games with their interactive characters could theoretically have advanced representation possibilities beyond novels, films, and TV drama, they have largely adapted existing narrative techniques rather than fundamentally revolutionizing how we represent human consciousness and subjectivity.)

This historical trajectory of representation techniques – from traditional narrative techniques to modernist innovations to the apparent plateau of recent decades – provides the necessary context for understanding why GenAI represents not just a new tool but a fundamentally different approach to human representation.

In this context, the development of GenAI models in first part of 2020s is fundamentally transforming our understanding of human representation itself. These models aren't merely new tools but rather a novel form of representation that transcends the whole long history of human practices and methods for depicting human beings. But how to take advantage of this new capacity is the real artistic challenge – and in fact, it is one of the biggest and most difficult ones existing today in the arts that I can think of. This is because this new situation does not seem to fit into the whole long history of human practices, tools and methods for representing human beings.

GenAI models are capable of variety of tasks that cover many parts of human cognitive and also cultural skills and behaviors - summarizing bodies of information, translating between languages, writing code, making detailed plans, describing and analyzing media artifacts and also generating them in multiple media. During training, they learn the patterns contained in digital collections of human media accumulated during web history. After this training, they can generate new original artifacts that have the same patterns.

These artifacts include representations of human beings – including our consciousness, emotions, motivations, personalities, memory, perceptions and all other aspects and dimensions of human subjectivity and behaviors that traditionally were the domain of skilled human authors.

In other words – GenAI models are already representations of human consciousness “out of the box”! When you interact with an AI chat bot, it answers your prompts and also generates artifacts (if you ask it to) as though it is a thinking human being. The model creates a fully convincing simulation that the entity that answers you and follows your requests is a human subject – a simulation that functions as a representation of human subjectivity.

This approach to representation (which involves statistical pattern recognition) offers different capabilities compared to traditional human representations created in the arts. For example, for a character in a novel to say, feel or remember something, the author has to explicitly invent this information and ways of describing it, and put this in the text. The character is crafted word by word, line by line, brushstroke by brushstroke, polygon by polygon... but GenAI model is already a generator of endless worlds, endless characters, thoughts, emotions, perceptions and all other features of subjectivity – right out of the box. In other words – simulating human subjectivity is already one of its many built in features.

The common way of using this capacity is what today endless amateurs and also professional authors do with general (e.g, ChatGPT) and specialized tools (for example, AI tools specifically designed for fiction writing such as Sudowrite). They are asking AIs to generate storylines, storyboards, text descriptions of characters, or their images and videos, and so on. In other words, they use AIs as tools for their craft.

While this is both very important and interesting, this is not what I have in mind here. I am pointing to a fundamental distinction: rather than merely being tools that help create representations, GenAI language models and chat bots are already complete representations of human beings in themselves. That is, all responses they generate appear as though coming from a human being – which has not only cognition but also full subjectivity.

But of course, this simulation is quite different from any and all real humans we know. GenAI responses come from some kind of a kind of universal, generalized super-human, which sums up, or reflects all traces of human activities on the web (used as training data).

Who is this new actor which can command endless different identities, personality trends, voices, traits and desires? Who is this God-like author?

And what shall we do with this new simulated universal collective subjectivity? We really don't know. Simply treating it as a tool seems to be a gross underestimation of GenAI's super-creator powers and capabilities. Imagine asking greatest actors ever lived to simply appear in a background for a few seconds, or asking humanity's greatest author to compose a short standard business email. It would be a joke. This is why, in my view, asking AI to compose a poem, or an image, or come up with a storyline for your novel is just silly. It is like asking your God who has powers to do everything *for.. a Coke*. Certainly, we should be able to come up with something better?

Shall we ask instead - how can arts now express our human experience, memory, history, and subjectivity differently with the help of GenAI not as a tool but as a new medium itself? I think it's a meaningful question. And how shall we think about this collective and versatile human being that GenAI simulates? Who is this new super-human? What is this mega-novel contained in all possible responses GenAI models can give to all possible prompts? And what new forms of representing human subjectivity and collectivity might emerge from the endless universe of prompts we can't even imagine?

Lev Manovich

presidential professor

PhD Program in Computer Science

The Graduate Center, City University of New York

E-mail: manovich.lev@gmail.com

<https://orcid.org/0000-0003-0667-7584>