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# Cogito, Machina, Sum: The Era of AI-Crafted Digital Identities

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**Abstract**

AI personalization is used in various areas, offering improved user experience. The integration of AI in entertainment leads to the commodification and mere reproduction of existing works. The nature of creativity and human-AI collaboration is complex and a multifaceted area of exploration. While culture influences the evolution of AI, AI likewise impacts culture in various ways. Generative AI in recent years has seen remarkable growth. With its application in the creative field there are debates and repudiation over the creative works by AI. Consequently, there is a need for redefining creativity in the era of AI, especially with the emergence of 'promptology', 'synthography' etc. Derrida's *différance* highlights the instability of meaning. Artificial Intelligence, through algorithms, interprets and generates text and images. This shows that digital content is never fixed and continually deferred and evolving. This also leads to the discussion on authenticity. Thus, this paper aims to critically examine the boundaries, authenticity, and power dynamics in digital identities in the AI-driven era.

**Keywords**: Generative AI, Digital Self, Art, HMI

Machines and humans are fundamentally different, but with the boom of high-paced technological development, the distinct concept

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of identity associated with AI and humans is bridged. The current phase of AI development is marked by its ability to learn and improve autonomously. AI was initially imitating human prototypes but has now evolved with the unique ability to create new ideas on its own. Developers of AI are often astonished by these emergent qualities of AI tools. At present, AI has the ability to induce feelings and manipulate opinions even without consciousness. (Yearsley, 2024) Unlike science fiction, AI threats are not limited to physical ones like killer robots. There are probabilities where the evolution of AI can take forms that imitate human prototypes and control human actions by language manipulation with its ability to create new ideas. Martin Morris (2019), in *AI: Evolution Rather than Revolution,* notes, : "Revolutionary changes tend to be a short sharp affair. So, by that criterion, at least the emergence of Artificial Intelligence (AI) can be best described as 'evolutionary' rather than 'revolutionary'." Throughout its evolution, AI has transitioned from theoretical concepts to practical applications that impact daily life. It is important to note that the field is still evolving, and its future development will be shaped by ongoing research, technological breakthroughs, and societal considerations. George Dyson in *Darwin Among the Machines* (1997) states that "In the game of life and evolution, there are three players at the table: human beings, nature, and machines. I am firmly on the side of nature. But nature, I suspect, is on the side of the machines" (p.ix). Therefore, the evolution of machines into sentient beings is inevitable. The growth of technology impacts society and has ushered in the co-evolution of machines and mankind, ensuing humanized machines and mechanized humans. AI's advancement and its symbiotic relationship with humanity unravel the role of technology in many walks of human experiences. Spurring an unprecedented interest in various fields, the concepts of augmented and virtual realities have become integral parts of human-computer interaction. Transcending its preliminary applications in entertainment, augmented and virtual realities now play a significant role in diverse domains like healthcare, education, management, etc.,

AI, as known today, does not possess a true sense of identity in the same way that humans do. Human designers construct these simulated identities and do not indicate true consciousness or self-awareness in the AI. The design of AI can be influenced by the

background, perspectives, and values of those who code and develop the AI program. An AI developer's ethical values, expertise, and cultural and linguistic contexts hugely impact the design of an AI. To mitigate the potential biases and ensure responsible AI development, it's essential for AI teams to be diverse, inclusive, and aware of ethical considerations. The future indeed holds significant potential for advancements in artificial intelligence (AI). As technology continues to evolve, one can expect AI to play an increasingly important role in shaping our lives and society.

Erik Erikson's developmental theory *Childhood and Society* (1950) provides a compelling framework for analyzing a character's evolution, learning, and environmental interactions, drawing parallels to the stages of human development. Erik Erikson's psychosocial development theory, originally designed to elucidate the stages of human growth from infancy to late adulthood, can be metaphorically and analogically applied to the development of artificial intelligence systems. This conceptual framework proves invaluable in comprehending and guiding AI development, particularly concerning ethical, social, and psychological considerations. By overlaying Erikson's psychosocial stages onto the realm of AI, we gain a structured approach for examining the ethical, psychological, and societal dimensions of AI's maturation. It emphasizes the imperative of crafting AI systems that nurture trust, autonomy, initiative, identity, intimacy, generativity, and integrity, while simultaneously mitigating potential negative repercussions associated with each developmental stage. Ultimately, this approach encourages AI developers to contemplate the broader ramifications of their creations on both individuals and society as a whole. Yann Lecun, in his introduction for *AI: Grappling with a New Kind of Intelligence* at the World Science Festival (2023), states,

> We are easily fooled by the systems into thinking they are intelligent just because they manipulate language fluently, the only example we have of an entity that can manipulate language is other humans, so when we see something that can manipulate language flexibility we assume that entity will have the same type of intelligence as humans (14:43).

Although most AI platforms are only trained on language and data, AI models like Chat GPT are exposed to a diverse range of internet text, giving access to information related to non-linguistic knowledge. Upon exposure to diverse internet data, the models, though they may not have direct access to experiences or sensory perception like humans, can generate responses based on the patterns they come across.

Some AI models use non-linguistic knowledge like image recognition or game model learning. AI's ability to manipulate language fluently is a significant factor in the perception of intelligence, similar to how humans are often associated with high cognitive abilities based on their linguistic proficiency. Human intelligence is multifaceted, including linguistic proficiency, emotional intelligence, creativity, reasoning, and sensory perception. As for AI systems, they excel in pattern recognition but lack proper comprehension and understanding of the world (Levis, 2024).

By mimicking the high degree of fluency and coherence in language generation, these AI models merely create an illusion of intelligence. With the continuous advancements in AI technology, the distinction between the language manipulation of AI systems and nuanced human intelligence remains a critical ongoing debate. Google recently launched a new AI model called Gemini on December 13, 2023. It is a multimodal AI that can work with text, images, audio, and video and produce both textual and visual outputs. Gemini, as described by Google, is "natively multimodal". Gemini's training on images, videos, and audio goes beyond the traditional text-based language model training. Including images, videos, and audio will bring different sets of signifiers. Therefore, the meaning is not dependent on these modalities but instead on how they differ and interact. (Knight, 2023). The training on multiple modalities results in a deferral of meaning, emphasizing intertextuality that meaning-making is a result of the complex interplay of references. Derrida's argument on the instability of content and continuous reinterpretation is applied to study Gemini's training across modalities that introduce a dynamic play of signifiers as it navigates the complexities of meaning across text, images, videos, and audio.

Likewise, Marvin Minsky, in *The Emotion Machine: Commonsense Thinking, Artificial Intelligence, and the Future of the Human Mind* (2007), proposes the hierarchal schema of internal thinking,

> We know that by the time of birth, every infant is already equipped with a variety of instinctive reactions, and has started to add learned reactions to these. Then, over time, we progressively add more deliberative ways to reason, imagine, and plan for the future. Later, we build a new layer in which we start to do reflective thinking about our own thoughts—and two-year-old children already are making additional ways to self-reflect about why and how they thought those things. And, eventually, we begin to think more self-consciously about which things to regard as right or wrong to do (p.103).

In recent times with the popularity of generative AI, many companies have developed their own generative AI models like ChatGPT, DALL-E, Bing Chat, Bard, Synthesia, Bardeen, Copy.ai, Rephrase. ai, Murf.ai, Soundraw, etc. These generative AIs are both text-based and art generators. The product of these generative AIs may not directly correspond with the authentic results, echoing the Baudrillardian hyper-realistic representation detached from reality, creating a simulated existence as a new norm. This further leads to the decentralization of authenticity as the resulting content is only a collective effort, not that of a single author or artist. The generative AI landscape leads to the decentralization of the traditional notions of authorship and creativity. Although artificial art represents the intersection of technology and creativity, the distinction between what is real and what is generated is blurred, creating a sense of wonder and ambiguity.

In Japanese pop culture, the concept of "Idoru" (Idol) refers to a type of celebrity, often a young female singer or performer, who gains popularity not just for their talent but also for their persona, image, and fan interaction. (Tropes, 2024). *Idoru* in Japanese pop culture is a significant and distinctive aspect of the music industry. Technological advancements have led to virtual *idorus*, computer-

generated characters that use motion capture and voice synthesis. This concept of virtual *idoru* has gained significant popularity with the rise of livestream platforms like YouTube which also feature live fan interactions and viewers engagement. A notable virtual idol is Hatsune Miku, a software Vocaloid and 3D holographic projection. She is the real-world realization of Gibson's *idoru*, created by the Crypton Future Media Users can create music using her voice and image, making her a collaborative creation. Hatsune Miku's identity combines her distinct voice, appearance, and fan interactions. This certainly raises questions about the nature of identity as she exists as a digital entity with a substantial cultural impact and dedicated fanbase,

> Miku's identity is not referred to anyone in reality world. Even if Miku is getting her voice from a voice actor donator, she has no relation with the voice actor anymore because with the hand of the software user she can speak and sing anything without the need of having the voice actor saying or singing it (Rahmi et al, 2018. p.84).

The non-corporeal existence of Artificial Intelligence means that AI entities do not have sensory experiences, emotions, consciousness, or physical presence in the world. However, the concept of a romantic relationship between a human and a cybernetic entity has been explored in science fiction and in futuristic perceptions of AI. In these speculated futures, it is possible for a human to form emotional connections with AI entities. The current AI technologies do not possess consciousness, emotions, or the capacity to reciprocate love since they operate based on algorithms and data processing, which lack subjective experience or emotions. There have been instances of people forming emotional attachments to machines or robots; some have even engaged in symbolic ceremonies or claimed to have married machines. An example is Akihiko Kondo a Japanese man who gained international attention in 2018 for his reported marriage to the virtual pop star Hatsune Miku (Dooley & Ueno, 2022). Virtual *Idoru* represents a fascinating fusion of technology, entertainment, and pop culture, offering a glimpse into the future of celebrity and fan engagement. Virtual *Idoru* has emerged, and the trend continues

to evolve with new characters, technologies, and ways of engaging with audiences. Virtual idols possess identities that are constructed through creative efforts, technology, and interactions with fans. These identities can impact fans' sense of belonging, self-expression, and emotional connections in the digital realm.

The discussion on human-machine interaction (HMI) requires a separate study. In her memoir *The Empathy Diaries* (2021), Sherry Turkle states that "the computer has become an object to think with." (p. 27). The programmed machines, like robots, are placed between animate and inanimate, continuously evolving. It is evident that in this post-humanist world, humanoids are not merely sci-fi characters but rather a part of social reality. A cybernetic entity is "a cultural other" in this increasingly mature anthropomorphic technological reality (Kim et al., 2009; Kim & Kim 2013, p.309; Coeckelberg, 2011). Research has constantly raised the question of ethics in the AI-driven era, "The prospects of truly human-like AI even if it is for now only a pipe dream, rattles that foundation. If our intelligence is all that defines us, who are we when AI matches it?" (Lambardo, 2021). The question of what it means to be a human in a technologically driven society and whether highly intelligent machines can replace humans is a conundrum. People are fascinated by Artificial Intelligence, so the idea of humanoids, cyborgs, and social robots is increasingly accepted, leading to the transhuman and posthuman convictions of care and empathy beyond human disposition. Social robots are also called carebots that are used at hospitals and homes to assist, support, and provide care to vulnerable individuals such as the elderly, disabled, and young children. With recent advancements, these carebots are developed with cultural awareness. These culturally sensitive carebots not only support with everyday tasks but will be a great choice for companionship. This reverberates a posthuman perspective by contrasting affective minds and emotional computing. Human identity being restricted to a biological sense becomes debatable in this context. In fact, the biological frame can be replicated easily. Interactions and connections between human bodies, other living beings, technologies, environments, and different types of materials shape the concept of being human. These interactions contribute to the ongoing development and evolution of what it means to be human. In essence, one's understanding of humanity is

influenced by how we relate to and interact with the world around us, "… the interconnected nature of human existence complicates our understanding of emotions and how they relate to one's sense of self or subjectivity" (Vermeulen, 2014, p.122).

In Samuel Butler's essay, *Darwin Among the Machines* (2018), he speculates that machines as the potential successors to humanity and suggests that humans are creating their own replacements. The author envisions a future where machines possess superior physical organization and self-regulating capabilities, raising philosophical questions about the future relationship between humans and machines. Besides relieving human caregivers of manual work and routine medication administration, the social robots in the medical industry serve as social companions. Sony's AIBO robotic dog and NeCoRo (OMRON), a robotic cat covered in synthetic fur, are successful carebots. The AIST in Japan developed PARO an interactive robotic seal to comfort dementia sufferers by making high-pitched sounds, and responds to touch by moving its head and tail. Studies have reported that patients may prefer interacting with robots to human companions. Yuval Noah Harari, in his keynote on *AI and the Future of Humanity* (2023) at the Frontiers Forum, expresses that "The most important aspect of the current phase with the ongoing AI revolution is that AI is gaining mastery of language at a level that surpasses the average human ability" (6:05).

Can robots experience emotions, or can they only express them? (Damiano et al, Editorial, para 1) The question of emotion and reciprocation of emotions in robots and the conditions in which the robot connects with a human empathetically is indeterminable. The article titled *Artificial Empathy: An Interdisciplinary Investigation* (2014) states, "If we identify robotic 'emotions' as 'pure simulations', to which no actual inner experience corresponds, what are the conditions under which we can consider robots as authentic partners in emotional and empathic relations?" (Damiano et al, Editorial para 1). The reliability of the simulated emotions in the social robots is debatable as the ethical considerations of relying on robots for social care raise questions. There is also the risk of social robots abandoning vulnerable individuals in precarious situations, such as the elderly, children, or people with disabilities, to inauthentic affective relations.

The concept of empathy is related to the understanding of what is happening to the other person. Therefore, a model for simulating empathy in a robot should be able to i) recognize the affective cues and the affective state of the user, ii) interpret the motivations that triggered that emotion, and, iii) answer by expressing its emotions using different modalities like the combination of verbal and non-verbal communication provide social cues that make robots appear more intuitive and natural.

"Today I Am Paul" (2015) by Martin L. Shoemaker is a short story published in Clarkesworld Magazine that presents the concepts of posthuman care and probes into the idea of incorporating technology in the medical care units to care for those who are ill or aged. The story begins at a hospital where the narrator, an android, takes care of an elderly woman, Mildred, who suffers from Alzheimer's disease. The robot's purpose is to emulate the family members of Milred who could not be with her at the time. As the android robot explains, "…Mildred's family, at great expense, added the emulation net: a sophisticated set of neural networks and sensory feedback systems that allow me to read Mildred's moods, match them against my analyses of the people in her life, and emulate those people with extreme fidelity" (Shoemaker, 2015, Sec 2, Para 2). The medical android can empathize with the patient as it has gained sentience. The robot can emulate whomever Milred needs at any time. Emulation is the primary function of the story's Medical Care Android (MCA), which can emulate physically, mentally, and emotionally. It, therefore, functions as a conscious entity. The robot is programmed with exceptional observational qualities, enabling it to emulate very minute details accurately.

> Today I am Paul. I activate my chassis extender, giving myself 3.5 centimetres additional height so as to approximate Paul's size. I change my eye colour to R60, G200, B180, the average shade of Paul's eyes in interior lighting. I adjust my skin tone as well. When I had first emulated Paul, I had regretted that I could not quickly emulate his beard; but Mildred never seems to notice its absence. The Paul in her memory has no beard (Shoemaker, 2015, para 2).

The understanding of verbal cues in these chatbots not only involves speech recognition but also comprehension, contextual decoding, and emotional awareness. Although creating an AI system that can understand and interpret the nuances of human language remains challenging, the recent advancements in natural language processing (NLP) have raised hopes for this significant progress. *Différance* is a key idea in deconstructionist philosophy that explores the nature of language, its meaning, and its instability. It suggests that meaning is deferred and differentiated. Applying this concept to carebots involves understanding the ever-shifting nature of meaning and language interpretations,

For Derrida, language works through this process of perpetual differing/deferring where the task of fulfilling meaning is always devolved onto the next sign along in space and time: we never arrive at a fully present meaning or signified which brings the process to an end. In Derrida's account, différance ultimately becomes a means of exposing the originary state of mediation that underlies logocentrism and the metaphysics of presence more generally: every supposedly 'present' element only obtains its identity through differing from, and deferring, other elements that are not simply 'present' (*Maybe*, 2019).

Meaning is relational and depends on the context, and identity is constructed through a network of differences and deferrals. Therefore, carebots must be equipped to navigate this linguistic complexity and must grapple with the ambiguity and variability of human language as the meaning of words and phrases change based on context, and interpretation may differ from person to person. Carebots need to go beyond speech recognition and understand the context of conversation because caretaking means understanding a patient's medical history, emotional state, and various other factors for accurate interpretation. When the fire breaks out in the hospital, the robot prioritizes saving Mildred over its duty of emulation. It exemplifies the sentient robot's posthuman empathy and the evolution of machines to function beyond the programmed commands and have a mind of their own.

> "What are you?" The "what" is too much for me. It shuts down my emulation net, and all I have is the truth. "I am Medical Care Android BRKCX-01932-

> 217JH-98662, Mrs. Owens. I am your caretaker. May I please check that you are well?" But my empathy net is still online, and I can read terror in every line of Mildred's face. "Metal monster!" she yells. "Metal monster!" She crawls away, hiding under the lilac bush. "Metal!" She falls into an extended coughing spell. I'm torn between her physical and her emotional health, but physical wins out (Shoemaker, 2015, Sec 7).

Alex Garland's 2014 movie *Ex Machina* predominantly deals with the theme of identity formation. The story revolves around the interaction between three main characters, Caleb Smith, a young programmer who wins a competition to spend a week at the secluded estate of the reclusive CEO of Blue Book, a search engine company. Nathan Bateman, the eccentric CEO, lives with Kyoko, who is later revealed to be a humanoid. Nathan creates a highly advanced humanoid robot with artificial intelligence called Ava. The trajectory of the film follows Ava's identity formation leading to self-awareness. During her interactions with Caleb, Ava attempts to understand human emotions raising the question of what it means to have consciousness and identity. During his interactions with Ava, Caleb begins questioning the nature of her consciousness and whether her emotions are genuine or programmed. The movie employs the idea of the Turing test, the ability of machines to exhibit intelligent behavior equivalent to humans, and presents them as indistinguishable from humans. Caleb's task is to determine whether Ava can pass as a human through a series of interviews. It is noted that Ava undergoes identity development with her ability to learn and adapt. In the context of learning and adaptation, Derrida's deconstruction challenges and seeks to re-evaluate the established structures through continuous modification for understanding. Meaning is deferred and differs, and in the contexts of learning and adaptation associated with artificial intelligence, the system is exposed to vast datasets and new information, which leads to uncertainty or fluidity in composing the meaning. *Ex Machina* presents the following sequence in this context,

> Nathan: Here's the weird thing about search engines. It was like striking oil in a world that

> hadn't invented internal combustion. Too much raw material. Nobody knew what to do with it. You see, my competitors, they were fixated on sucking it up and monetizing via shopping and social media. They thought that search engines were a map of what people were thinking. But actually, they were a map of how people were thinking. Impulse. Response. Fluid. Imperfect. Patterned. Chaotic (Garland, 2015).

Generative models like Generative Adversarial Networks (GAN) and Variational Autoencoders (VAE) learn data sets and can generate new creative works like images, music, and text. These new technologies are drastically changing the nature of creative processes. The new subfield of Artificial Intelligence called Computational Creativity can replicate the artistic process,

> Could it be that software is a form of writing... and like Derrida's arche-writing, it is the very iterability—that something found in the "original" that allows it to be copied—like programs isomorphically being translatable from one machine to another— digital replication—the copy-ability that precedes the possibility of the original being formed: is software information itself? But with a virtual machine the distinction between information as signal and the carrier of information itself collapses: the medium is the message (Casten, 2012, p.632).

Software, in a metaphorical sense, can be considered similar to the form of writing involving the encoding of information using symbols and structures. Software is capable of replication like writing that can be copied and reproduced. This concept of the iterability of signs can be applied to software like programming languages. In *The Diamond Age: Or, A Young Lady's Illustrated Primer* (1995) by Neal Stephenson, the plot is set in a futuristic world where nanotechnology and interactive books play a central role in the field of education. In the novel, John Hackworth, a Neo-Victorian nanotech engineer, creates a book called "A Young Lady's Illustrated Primer" using nanotechnology that is filled with nanobots and can interact with the reader. The Primer can

adapt its content according to the needs and experiences of the reader by assessing previous interactions and experiences. The Primer is not just a medium of information but an interactive body that engages the reader with active learning scenarios like storytelling and problem-solving that stimulate the imagination and creativity of the readers. The Primer can also adapt its narrative based on personalized experience for the reader. This speculative exploration of the intersection of creativity and technology further raises questions about how advanced technologies driven by computational creativity reshape traditional ways of acquiring and disseminating knowledge.

Digital computation involves manipulating information using binary code, a base 2 numeral system that employs 0s and 1s. For AI, binary code is essential for encoding and processing information within the algorithms to learn, reason, and make decisions by manipulating the encoded data. Derrida's deconstruction challenges the idea of binary oppositions and argues that these opposites are interconnected, and one cannot exist without the other. The interconnectedness is networks that serve as a bridge between deconstruction and cognitive sciences,

By means of a genealogy of the role of the binary opposition in regard to theories of computation, the mind, and theory, *The Networked Mind* shows how binary paradigms emerged, and then examines new 'soft' computing technologies to show how binary models are being displaced within cutting edge computing and artificial intelligence research. Relational and network- oriented approaches at the level of units of computation (fuzzy systems theory), relations between units (artificial neural networks), and meta-relations between modules (genetic/evolutionary programming) provide models for non-binary thinking at the level of node, link, and module (Vitale, 2014, as cited in Casten, 2012, p.638).

There is a shift from the traditional binary models within contemporary computing and AI. The emphasis on the importance of interconnectedness and focus on relational and network-oriented approaches suggest a non-binary way of thinking. The Artificial Neural Networks modeled after the human brain suggest that there is a movement toward non-binary thinking in the areas of computation, AI, and cognitive science. While computers' fundamental language is

binary, AI's decision-making process in complex scenarios involves more than simple binary logic. In contexts such as a war zone, AI systems are programmed with advanced algorithms that consider many factors beyond binary options. Decision-making involves processing vast amounts of data, assessing real-time information, and incorporating nuanced considerations. AI in these situations often employs machine learning and neural networks to analyse patterns, predict outcomes, and adapt strategies dynamically. Ethical considerations, rules of engagement, and human oversight also play crucial roles in guiding AI behavior. Thus, the decision-making process in complex scenarios extends beyond binary choices, showcasing the adaptability and sophistication of AI systems in addressing intricate real-world challenges.

Identities are not pre-existing or innate but developed within the framework of language communications and interactions. Identity formation in AI is a concept that delves into the idea of how Artificial Intelligence with consciousness and self-awareness might develop a sense of self and purpose. The development of identity in AI depends on its ability to perceive its environment and make decisions based on reflections. Data accumulation and human interaction contribute to the formation of identity. Derrida's philosophy questions the stability and purity of identity and proposes its interconnectedness with *differance*,

We humans also have 'software' and 'hardware' aspects, and the difference is second nature to us. We are used to the rigidity of our physiology: the fact that we cannot, at will, cure ourselves of diseases, or grow hair of any colour—to mention just a couple of examples. We can, however, 'reprogram' our minds so that we operate in new conceptual frameworks. […] To suggest ways of reconciling the software of the mind with the hardware of the brain is a main goal [....]" (Hofstadter, 2000, p.302).

The analogy of software and hardware draws a parallel between human and artificial intelligence (AI) identity formation. In humans, the distinction between the adaptable 'software' of the mind and the more rigid 'hardware' of the brain is highlighted, emphasizing the capacity for continual learning and cognitive evolution despite

physiological limitations. Similarly, AI systems exhibit a comparable duality, wherein the flexibility of their algorithmic software allows for adaptation, learning, and performance improvement, while the inherent constraints of their hardware necessitate optimization for enhanced efficiency. The overarching goal, whether for humans or AI, involves reconciling the interplay between cognitive and physical aspects, whether addressing cognitive dissonance and mental well-being in humans or optimizing algorithms and overcoming hardware limitations in AI to foster harmonious and improved overall identity formation.

For instance, in the movie *Enthiran* (2010), directed by Shankar, the scientist Dr Vaseegaran creates an android humanoid robot named 'Chitti,' which was modelled physiologically like the scientist. When initially activated, the robot embodies a kind of 'tabula rasa' and lacks pre-existing experiences except for the data its creator uploaded. During the course of the plot, the robot processes information, imitates human behaviours, and acquires knowledge through observation and experiences. This learning process contributes to the development of his identity, much like shaping an individual's identity through life experiences. The dynamic identity formation of Chitti aligns with the analogy of software and hardware in the context of AI and human cognition. The robot's ability to adapt and learn, encounter ethical dilemmas and cognitive challenges (software), and physical limitations (hardware) accentuate the challenges and potential harmonies that arise when reconciling the software of the mind with the hardware of the artificial being. Chitti is programmed with the ability to learn and adapt. One notable instance is when he observes and imitates human behaviours, showcasing his capacity to evolve and learn from his surroundings. He struggles to understand and navigate human emotions when he falls in love with Sana, a human, thereby encountering ethical dilemmas and moral and emotional quandaries. The movie addresses the challenges associated with the rigid nature of the robotic body and the inability to experience sensations like humans. Chitti's quest for autonomy and a sense of self-identity becomes a central conflict. This mirrors the human experience of defining one's identity within societal and personal constraints.

Meaning-making by AI represents a fascinating intersection between human cognition and machine intelligence. In this context, the question arises: Is the derived meaning a product of human interpretation or a mechanized algorithmic process? This conundrum delves into the realms of epistemological pluralism, acknowledging the coexistence of multiple ways of knowing. As AI systems generate insights and interpretations, they draw from vast datasets and complex algorithms, mirroring a form of machine-based cognition. However, the meaning extracted may be subject to the heterogeneity of voices that contributed to the creation and training of the AI system. Epistemological pluralism emphasizes the recognition and validation of diverse sources of knowledge, and in the case of AI, this encompasses the amalgamation of human perspectives embedded in the data. The authority of the result thus becomes a nuanced interplay between the computational power of the machine and the varied human perspectives inherent in its training data. This symbiotic relationship challenges traditional notions of authority, inviting a re-evaluation of the sources and processes that underpin the meanings generated by artificial intelligence.

Professor Jefferson's remark in *Computing Machinery and Intelligence* (1950) on the evolving relationship between machines and human creative capacities is a fundamental criterion differentiating humans and machines. According to Jefferson, for a machine to truly equal the human brain, it must not only produce such creative works but also possess an awareness and understanding of the emotions and thoughts behind them. He challenges the notion that mere chance falls of symbols could equate to the intricacies of human creativity. Interestingly, as time has progressed, contemporary AI has indeed demonstrated remarkable creative capacities, surpassing some of the benchmarks outlined by Jefferson,

Not until a machine can write a sonnet or compose a concerto because of thoughts and emotions felt, and not by the chance fall of symbols, could we agree that machine equals brain—that is, not only write it but know that it had written it. No mechanism could feel (and not merely artificially signal an easy contrivance) pleasure at its successes, grief when its valves fuse, be warmed by flattery, be made miserable by its mistakes, be charmed by sex, be angry or depressed when it cannot get what it wants (Turing, 1950, p.10).

While AI's foray into creative realms raises questions about the nature of artistic expression and originality, it also opens up new possibilities for collaboration between humans and machines. Some artists and musicians actively incorporate AI tools into their creative processes, using them as sources of inspiration or as collaborators in the artistic journey. However, the debate continues regarding the authenticity of AI-generated art and music. Critics argue that true creativity involves a deep understanding of emotions, cultural context, and personal experiences, which they believe are uniquely human. On the other hand, proponents see AI as a tool that expands the creative palette, offering novel perspectives and pushing the boundaries of what is possible in the arts. The rapid evolution of Artificial Intelligence enhances human experiences across diverse fields. However, this development must be guided by a commitment to ethical and responsible practices. To ensure that these technological advancements contribute positively to society, it is necessary to establish a balance between these technological innovations and ethical responsibility.

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