



# Are we inventing ourselves out of our own usefulness? Striking a balance between creativity and AI

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In this contemporary, dynamic changing era often described as “the digital age,” the focus of every book, article, or news piece tends to hone in on specific aspects of the digital innovation. Some highlight the emergence of ground-breaking technologies like Artificial Intelligence (AI), while others explore the profound changes in our daily lives brought about by digitalisation. Additionally, there are discussions concerning the requisite adaptations in management to thrive in this evolving digital landscape. Essentially, many of us are prompted to seek out the next major breakthrough, often accompanied by hype for faster, better, and more advanced solutions. As individuals, we can easily become ensnared in the excitement and hype surrounding digital innovation, rather than considering whether such innovation effectively addresses particular challenges. For example, scholars delve into the profound transformation of AI on our daily lives and there are also emerging research addressing the necessary adjustments in management to thrive in this evolving digital landscape. In essence, many of us are encouraged to look for the ‘next big shiny thing’ and hype often goes along with this territory for faster, better, and intelligent digital solutions. As individuals, we may find ourselves drawn into the excitement and buzz surrounding digital innovation, as opposed to whether the innovation can actually help solve a specific problem. For example, within an AI context, when pressed for an answer to “What is the problem to which generative AI is a solution?”, many may struggle to answer this although they may appreciate its innovative capabilities. Therefore, it is possible that these technological advancements also serve as a mirror of society, offering solutions to alleviate daily tasks that we perceive as repetitive, monotonous, or difficult. Consider ChatGPT, for instance, a generative AI tool. While ChatGPT has the ability to produce text resembling human language based on given context and

previous interactions, it may exhibit limitations in terms of creativity. Chomsky and other linguists argue that AI systems are incapable of generating genuine knowledge because true knowledge requires the ability to provide explanations through deduction, whereas AI is constrained to offering descriptions through induction. Generative AI tools tend to only return the most probable outcome given a task (or prompt) and available training dataset but lacks the ability to harness human creativity, curiosity, and compassion. Yet, looking through human history, one core trait which fuelled our evolution has been creativity and we may be in danger of delegating this to ‘the machine’.

Creativity has always been a slippery and vague concept. However, if we peel away the layers of etymological layering, we uncover a fundamental truth: it is the capacity to generate something out of nothing. Put differently, it should be regarded as a power rather than a mere ability. Being creative extends beyond the ability to produce something from nothing in response to a specific need or deficiency. It is not solely the capability to manufacture a new product demanded by the market. Creativity qualifies as a power because it blends knowledge, agency, and most crucially, the desire to craft something that has not yet existed. It should have the potential to propel society into uncharted spheres of existence and push new boundaries of our ‘intelligence’. Indeed, creativity has always been central to our human identity. It drives us to create art, write melodies, ideate and develop solutions but what exactly is the essence of creativity?

Within a digital context, we need to question whether creativity is an exclusive domain of humans. Now as we stand at the threshold of an AI-driven era, we must ask whether AI can genuinely grasp human creativity or even nurture it. If it can or cannot, what does that reveal about machines, our very essence, and how creativity is central to this. Whether we look at traces of creativity from Prehistoric Art, Renaissance, Baroque to more Contemporary Art, the broad genre of film and music, or even the magnificent

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structures of ancient Egypt to ancient Greece and Rome, to Neo-Modernism and Parametricism—humans were designing and constructing new realities with creativity and intelligence at the core. We know that human creativity often involves taking risks, making mistakes, and learning from failures. Machines, on the other hand, are designed to minimise errors, follow algorithms, and optimise performance, which can limit their ability to truly explore and innovate.

As we get caught up in the hype of technological advancements and begin to question our own usefulness in various aspects of society, we need to strike a realistic balance between AI and creativity. On the face of it, AI systems might seem creative, quick and convenient, yet they rely on vast data sets and patterns. However, we need to be open to whether this analysis of data patterns can ever match the spark of original creativity. Consider, ‘The Taking of Christ’ by Caravaggio and the decisions about how he placed the figures close to the picture plane and the use of a strong light-and-dark contrast, giving the scene an extraordinary sense of drama. Today, the National Gallery of Ireland report that we can see “numerous pentimenti” (which reflects changes of mind during the painting process) that became more visible due to changes over time in the paint layer. Here, we are reminded of Caravaggio’s human touch and the process of trial and error in creativity. We are taken back in time with awe as to how this master was able to use his eye and the natural world to perceive such beauty and drama. These are not just visuals but profound emotional experiences and insights into the artist’s soul.

True creativity has an agency which connects with our life stories, our joys, our traumas, and aspirations. Yet can a machine without emotions and experiences ever capture such depth? Technological advancements might reproduce patterns, but can it truly create from nothing something profound and deeply resonant? AI image generators (for example, DALL-E 3 or Midjourney) generate customised image content in seconds, but often simply takes repetitive steps and lacks uniqueness. If we use our imagination and visualise an AI tool writing a novel as captivating as *Ulysses*, Orwell’s *Nineteen Eighty-Four*, or more recent fantasy stories such as *Harry Potter*, what then would we say AI can resonate with human emotion? Or does it simply suggest that creativity, even human creativity is more pattern-based than we would like to admit?

Historically, we can determine how movements such as the Renaissance stood as a testament to human creativity. We know that this was not just about individual creativity genius but was much more meaningful about representing the spirit of that era ranging from new politics, discoveries, and societal shifts. We dared to dream. Can an AI tool isolated from the natural flow of life ever truly understand this complex web of creativity? The process of creation is often filled with struggles from being bogged down by

endless brainstorm (because creative people enjoy generating new ideas), perfectionist tendencies, and realisations is vital to many artists. So, what do we lose if AI removes this creative journey producing masterpieces instantly through prompt engineering? Does it change our perception of value, effort, and authenticity of creative outputs from music, art, stories, or designs. Many works also go beyond the visual aspects and carry hidden meaning. One example of this includes ‘The Lady of Shalott’ by John William Waterhouse using symbolism and realism to convey the ending of Alfred, Lord Tennyson’s poem.

To strike a balance, I have an optimistic perspective. If we were to step back from the hype surrounding AI and its perceived threat to human creativity and view AI as a collaborator rather than a competitor, we could consider this as a tool much like a canvas, a camera lucida in art, or some other aid to a painter or writers, we could explore new ways to extend creative capabilities. AI could offer an interesting fusion of styles with a blend of ideas to enhance our vision. In addition, as we question the continued blurring of social and technical worlds, we are left with a multitude of philosophical questions and ethical considerations around responsible digital technology. Whilst AI’s ability to replicate and at times enhance creativity is evident for small tasks, its ability to truly understand remains debatable and we should begin to question the actual ‘intelligence’ being generated. As we progress in this technologically advanced era, we must carefully rethink what creativity truly means to us. Is it just about the outcome (for example, a new product) or is the journey towards this outcome just as important? As AI tech giants claim to be getting closer to our creative core, might we need to redefine creativity itself and identify the responsible use of digital technology?

This article urges us to think deeply amidst the current era saturated with hype surrounding AI. The abilities of AI showcase impressive results and we cannot underestimate their influence or impact into the future. We can see how AI tools imitate, replicate, and even innovate based on patterns but AI lacks the raw emotional depth and human experiences. Taking the example of Caravaggio’s ‘The Taking of Christ’, we do not simply view the painting as a mere manifestation of skill, but rather it is an embodiment of the artist’s very soul, life story, and the point in history they lived through. Can AI genuinely reach the depths of such intricate connections? Should it? Across the creative and cultural industries, we also need to consider artistic control and consider how to develop provable digital record of authorship relating to a specific work (for authorship, proof or creation, licencing, and digital portfolio development amongst other factors). Creative and cultural industries play a pivotal role for creativity in society, fostering innovation, expression, and cultural exchange.

Even if we were to entertain the idea of AI creating a novel masterpiece reflecting some historical depth, would it be an authentic creation or just an intricate processing of pattern recognition? Although the general narrative around AI has been focussed on comparing humans to machines, this should never be our intention. The focus ought to be on how humans work collaboratively with intelligent machines to reach new levels of creativity and pushing the boundaries within this digital era. We can refer to this as augmented intelligence. Augmented intelligence allows us to consider AI as an ally and a collaborative partner in our creative process can unlock a future enriched by human creativity and AI's vast capabilities. We need to better understand the wider implications of AI (for example, ethical and legal). We need to shift the conversation away from the threat of AI to jobs and focus on the responsible use of AI as we stand at the intersection of technology and humanity. We can now question what aspects of our creativity are unique and cannot be replicated and how they may be enhanced with AI. So, all is not lost. Creativity allows us to value and understand the unique essence of human imagination whilst machines can replicate patterns to support us. Let's try to strike a balance and draw more focus towards augmented intelligence within the realm of AI and human creativity. More importantly, we need to remember that unlike AI, which operates within pre-defined algorithms and certain software restrictions, human

creativity knows no bounds. Perhaps we need to open new research possibilities around responsible algorithmic creativity and consider if AI serves a mirror of society, what may be the endless possibilities to nurture human creativity.

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