Kevin Kelly on AI : The inevitable ‘cognification’ of our world

We are finally at the dawn of the age of AI and it will undoubtedly become an increasing part of our daily lives.

One of my favourite writers on technology is Kevin Kelly, one of the co-founders of Wired magazine and author of many books. One of the reasons why I love Kevin Kelly’s work is that he writes about the philosophy of technology. And not from a lofty, academic position, but from how it works in our everyday lives. He looks at how technology interfaces with our culture. The new cultures and new habits and ways of working that technology fosters. This was a big part of the appeal of Wired magazine for me, back in what I consider to be its heyday, the 1990s. It was so good that I used to drive to the next town, 30 miles away, to buy a copy, as they didn’t have it in our town.

So, what does Kelly say about AI?

One of his insights is that we should view it as a utility, like water or electricity. In his book ‘The Inevitable’ Kelly argues that AI will become as widespread and essential as electricity, powering many aspects of our lives. The growth of cloud computing and the accessibility of AI through APIs will enable even small businesses and individuals to tap into AI’s capabilities.

In Chapter 2, “Cognifying,” he explores the integration of

artificial intelligence (AI) into various aspects of our lives and how this will lead to the “cognification” of tools, devices, and services. He envisions a future where AI becomes a ubiquitous utility, much like electricity, and offers numerous examples of how things will become cognified.

Examples of cognifying:

1. Personal assistants: AI-powered virtual assistants, like Siri and Google Assistant, will become more sophisticated and capable, eventually managing our schedules, booking appointments, and handling daily tasks on our behalf.

2. Healthcare: AI systems will be used to assist in diagnosing diseases, recommend personalized treatment plans, and assist in drug discovery, leading to improved patient outcomes.

3. Education: AI-driven platforms will provide personalized learning experiences, adapting to students’ learning styles and pacing, and offering real-time feedback.

4. Transportation: Self-driving cars and smart traffic management systems will become more prevalent, improving transportation efficiency and safety.

5. Entertainment: AI will revolutionize the entertainment industry, with algorithms generating personalized content recommendations, creating new forms of interactive media, and even producing original music, art, or stories.

6. Manufacturing and design: AI-powered tools will enable more efficient and accurate design processes, while AI-driven robotics will automate and optimize manufacturing.

7. Decision-making: AI systems will support decision-making in various industries, from finance to agriculture, by processing vast amounts of data and providing actionable insights.

8. Human-AI collaboration: Rather than replacing humans, AI will augment human capabilities, enabling us to achieve goals

we could not reach alone. An example Kelly gives is the game of Go, where human players team up with AI to perform better than either humans or AI alone.

More recently, Kelly wrote an article for Wired magazine on AI art tools. The article discusses the emergence of AI image generators such as DALL-E, Midjourney, and Stable Diffusion, and the implications of these technologies on the creative process. His first big idea here is that, despite the impressive new AI apps, no artists will lose their job to AI.

AI image generators are capable of synthesizing images based on textual prompts, creating unique visuals that do not exist in reality. The power of these AI tools lies in their ability to generate 2D images, but their real potential lies in the creation of 3D images and video.

In the future, AI could revolutionize various industries by making it possible to produce games, metaverses, and movies quickly and easily. AI-generated content could give rise to new media genres, while professionals could use these tools to create masterpieces with unprecedented complexity. In the past artists could create, say, a masterpiece painting. Imagine in the future an artist creating a fully-designed world that is a masterpiece of visual beauty.

The pattern recognition capabilities of AI image generators could also be applied to other fields, such as drug discovery and design.

However, rather than replacing human creativity, AI generators work best as partners. The fears of AI putting artists and creatives out of work are largely unfounded, as history has shown that technology rarely directly displaces humans from work they want to do. For example, the advent of photography did not lead to the demise of portrait painting, and the rise of smartphones did not reduce the number of professional photographers.

AI image generators teach us that creativity is not a supernatural force but can be synthesized, amplified, and manipulated. Creativity can be generated in a deep learning neural net, independent of consciousness. This newfound ability to create synthetic creativity on demand, in real-time, at scale, and inexpensively is a major breakthrough in human history.

However, AI-generated creativity is different from the profound, world-altering creativity exhibited by humans in significant breakthroughs. This higher level of creativity, that he calls Uppercase Creativity, cannot be replicated by AI and will always require a human in the loop. The creativity provided by AI generators is more mundane, lowercase creativity, which can be found in everyday acts of artistic and design creation.

AI-generated creativity offers tremendous potential for enhancing various aspects of human life. It can be used to inject novelty and innovation into areas that have previously remained stagnant. However, to harness the full power of AI-generated creativity, we must learn to use it responsibly and ethically. By doing so, we can make a positive impact on the world and potentially make a dent in the universe.

I find Kevin Kelly’s AI future inspiring, as it still allows for the warmth of Humanity and Human skill. It also images a near future that could be extremely rich, exciting and surprising.