

Title : AI Creativity and the Human-AI Co-creation Model

Summery : Artificial intelligence (AI) is bringing new possibilities to numerous fields. Among the human dominant abilities, creativity is one of the most important yet the least understood of all intellectual abilities. This paper introduces the preliminary definition of "AI Creativity" and the corresponding Human-AI Co-Creation Model. This paper explains that AI Creativity is a new philosophy to collaborate with all achievements of mankind across time and space. Between 34% and 44% of global companies surveyed are using AI in their IT departments. The potential contribution of AI to the global economy will reach \$15.7 trillion by 2035. Collaboration between humans and AI varies across domains. Human leads where tasks are more about creative or strategy and compassion is needed, while AI leads for routine tasks. Creativity is often considered as an "intuition" and can't be easily interpreted in a rational way. The creativity of AI can be considered as a new tool but also beyond a tool. From AlphaGo to AlphaFold, AI created something which have never existed before. Our study shows that AI can work far more than a black box, but can assists humans throughout the entire creative process. In the era of AI, various sensors and big data gives humans expanded views in both perceptual and rational perspectives. The Human-AI Co-Creation Model is consistent with this theory: AI can generate amy riadofex plorations and present the preliminary selections for humans to choose for further "evolving". Future-oriented creativity requires people to learn and create in a constantly evolving technological landscape. The "Human-AI Co-Creation Model" is a circular process model including 6 major phases: perceiving, thinking, expressing, collaborating, building and testing. The first phase is to perserve, where human perception can be enhanced by big data and sensors with AI. An AI application is only qualified as an AI Creativity case when AI is used creatively or AI enhances human creativity. Rehearsing gives people a chance to predict how things will go and to prepare ourselves for real-world events. During this creative process, human and AI can complement each other and unleash the great potential of both sides. Scientists are working hard on the next generation of AI to break today's constrains. Individuals could become transparent to all kinds of ubiquitous sensors and AI applications. Privacy could become very vulnerable in the era of AI. Addressing the security issue also needs AI Creativity. Artificial Intelligence (AI) has been making significant impact in various fields, bringing new possibilities and challenges to human society and individuals. The topic of AI education aims to give all kids a balanced education in addition to STEM, and provide a method of development for kids who do not have an aptitude for STEM.

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