Is it real art? The endless cycle of AI generated creativity

Github Repository: https://github.com/luk-ryan/eecs-4461-group-11

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Our phenomenon of interest is AI-to-AI interaction in creative fields such as visual art, writing, and music. With the rise of advanced generative models, AI models are increasingly collaborating, influencing, and even competing with each other in producing creative content. This phenomena challenges traditional perceptions of creativity as being something which is uniquely human.

Key dynamics include the automated exchange of creative inputs between AIs, where one system generates original ideas, another refines, critiques, or transforms these ideas. For example, in visual art, one AI may "create" a painting, which another AI then modifies for enhanced aesthetics. In writing, language AI models can collaborate to produce coherent narratives without direct human intervention.

This phenomenon raises ethical concerns around originality, attribution, and cultural impact. AI-generated works may inadvertently mimic existing human-created content, raising questions about intellectual property and the potential wearing away of creative integrity. As AI-to-AI interactions become more prevalent, there is a risk that traditional human-driven creative fields will face diminishing opportunities, with AI content flooding digital ecosystems. Understanding the implications of these interactions is crucial as we explore the evolving role of creativity in the age of AI.

References

Colton, S., & Wiggins, G. A. (2012). Computational creativity: The final frontier? In *Proceedings of the 20th European Conference on Artificial Intelligence (ECAI)* (pp. 21–26). IOS Press.

Huang, C. Z. A., Vaswani, A., Uszkoreit, J., Simon, I., Hawthorne, C., Shazeer, N., ... & Eck, D. (2019). Music Transformer: Generating music with long-term structure. *arXiv preprint arXiv:1809.04281*.