One of humanities oldest creative arts is also one of the most difficult for Artificial Intelligences to emulate. To date, creative writing has remained the sole province of wetware, however as natural language processing continues to improve, it becomes feasible to ask whether an AI can learn to write poetry, drama, and prose. We have already seen AI-produced poetry, though its merits are certainly up for debate. The inherently exploratory or transgressive nature of many poems makes it difficult to establish objective quality standards. Perhaps a more meaningful question is whether an AI can create poetry indistinguishable from that generated by a human. The Bot or Not project allows readers to rate a poem as written by meat or by silicon. The top half-dozen computer generated poems, successfully fooled the readers more than 55% of the time (botpoet). More rigorously, researchers at the University of Kyoto were able to train a neural network to generate poetry based on images. Human readers found the poetry relevant to the images, and lay readers were almost as likely to pick one of the AI poems as a human poem as representative of the image. Even poetry experts chose the AI poem 40% of the time (Liu, Fu, Kato, & Yoshikawa, 2018).

The explicit and implicit rules, replete with contradictions and loopholes, for writing prose make it a more challenging genre for AI authors. To date, no AI author has published a fiction volume which has either been mistaken for a human creation or had received substantial literary recognition on its own merits. However, we have seen some progress towards that eventuality. In 2019, the Beta Writer AI released a textbook summarizing the current state of research into Lithium-Ion batteries (Beta Writer, 2019). This book is more than a mere compilation of existing work. It extracts key concepts and ideas, generating a true summary of its sources. While true literary success has proven elusive for AI authors, all indications are that more advanced AI systems are poised to break into the field, just as they have in sports, music, art, and video games. Over the next several decades, the entertainment industry seems poised to undergo a computational revolution as profound as the industrial revolution was for manufacturing.

Bot or Not Leaderboard. (n.d.) Retrieved 4 November 2019, from <http://botpoet.com/leaderboard/>

Liu, B., Fu, J., Kato, M. P., & Yoshikawa, M. (2018). Beyond Narrative Description: Generating Poetry from Images by Multi-Adversarial Training. *Proceedings of the 26th ACM international conference on Multimedia*, 783-791.

Beta Writer. (2019). *Lithium-Ion Batteries: A Machine-Generated Summary of Current Research*. 2019. Switzerland: Springer Nature.