

Text Generation and Oulipian Language Modelling

Altering the x value of the $P+x$ technique affects directly the logic of each individual lines of the poem. The value x represents the number of different predictions we request from GPT-2, or the number of new sentences it can generate from one prompt. By setting the prediction level to a specific x , such as 7, we ask the model to generate 7 new sentences from a pool of possible completion to our previous sentence. With this in mind, we can understand that a greater x may result in a wider range of word choice and stylistic or tonal change in a sentence, than a lower x would offer.

Increasing the prediction level to 18 has introduced unexpected word choices to the sentences, sometime changing even the punctuation. The sentences were either completely illogical, having no meaning at all, or felt unfinished. This is expected because increasing x results in a model where the words selected have a less common usage or nuance. This was great in term of creativity, but seriously affected the readability and style of the original poem.

To implement a $P+x$ technique that would specifically replace nouns, one would need to identify and extract all nouns of a prompt. Then ask a model to generate alternative nouns choices for each tagged word in the prompt, based on their surrounding context. This method is the only one that I can think of that would replicate the $P+x$ technique similarly to our exercise, while keeping as much of the context of the original prompt.

256 words