

## Assignment 2 Reflection

Leah Song

40321005

Changing the x value shifted the poem's tone to varying degrees, from subtle to absurd.

I began by setting the x value to 17:

"One must have a mind of  
To regard the frost and the sudden  
Of the pine-trees crusted with dried [...]  
Which is the sound of the waves  
Full of the same and  
That is blowing in the same bare bottom  
For the listener, who listens in the context  
And, nothing himself, that  
Nothing that is not there and the nothing that goes."

As shown in this example, the replacement values remained relatively close to the original poem. The language creates a subtle sense of estrangement, but the transformation is restrained and not immediately striking. Because this version did not feel particularly engaging, I decided to increase the x value to 77:

"To regard the frost and the spring  
Of the pine-trees crusted with rose  
And have been cold a long kind [...]  
For the listener, who listens in the pre  
And, nothing himself, actually  
Nothing that is not there and the nothing that stops."

This version emphasized absurdity more clearly than the previous one and felt closer to the intended goal of the assignment. The poem retained its structure, but the semantic shifts became more playful and surprising. Curious about how far this effect could be pushed, I added another seven and moved on to 777:

"One must have a mind of five  
To regard the frost and the turbulence  
Of the pine-trees crusted with metals  
And have been cold a long decent [...]  
For the listener, who listens in the blog  
And, nothing himself, next  
Nothing that is not there and the nothing that pier."

At this point, the poem became difficult to understand. While the grammar was still mostly intact, many lines lost semantic coherence and began to resemble a word salad rather than a meaningful transformation.

I continued increasing the value until I encountered an error at 77777. After testing my code further, I found that the maximum token value for GPT-2 is 50257. When approaching this limit, many characters appeared as empty boxes, and at 50257 the poem became largely illegible, containing unreadable symbols, unfamiliar words, and numbers. At this extreme, the output no longer functioned as language.

Overall, this experiment demonstrated both the creative potential and technical limitations of AI-based constraints. If I were to implement a P+7 technique that replaces all nouns, I would first identify nouns using a predefined dictionary or part-of-speech. Each noun would then be replaced with its seventh-highest probability alternative while preserving context. Applying replacements sequentially would allow earlier substitutions to influence later ones. I am curious how the model would respond if both the first and last nouns were altered simultaneously.