603-102-MQ Literary Survey Guide to Using ChatGPT to Help Write Literary Essays

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Accessing ChatGPT

You can log in or sign up for an account <u>here</u>. ChatGPT has sometimes been unavailable due to high demand. When this happens, my experience has been that hitting refresh on a browser every 10 seconds or so can result in gaining access quite quickly.

There is also the option of using ChatGPT <u>Playground</u>, which is more aimed at app developers. This interface offers more controls, such as dictating the length of the output via the "Maximum length" slider. A big advantage that Playground offers is being potentially available at times when regular ChatGPT is not.

ChatGPT's Potential and Pitfalls

Students are encouraged to make use of ChatGPT, an AI chatbot, to help them write their Take-Home Essay on *Sir Gawain and the Green Knight*. There are many ways in which ChatGPT can offer useful assistance. There are also limits to that assistance, and using ChatGPT's output without bearing in mind those limits can create problems for the user.

Accordingly, Sam Altman, the CEO of ChatGPT's creator OpenAI, has declared that "ChatGPT is incredibly limited, but good enough at some things to create a misleading impression of greatness. It's a mistake to be relying on it for anything important right now. It's a preview of progress; we have lots of work to do on robustness and truthfulness."

The Nature of ChatGPT

Elizabeth Weil explains that large language models (LLMs) like ChatGPT "work by looking for patterns in huge troves of text and then using those patterns to guess what the next word in a string of words should be." In other words, ChatGPT has analyzed a vast dataset to determine probabilistic relationships between words, and on the basis of those probabilities it produces its own words in response to a prompt.

To make the same point, Emily Bender, a computational linguist, has dubbed LLMs "stochastic parrots" (Weil), where "stochastic" designates "that [which] follows some random probability distribution or pattern, so that its behaviour may be analysed statistically but not predicted precisely" ("Stochastic"). As Bender explains, a stochastic parrot "haphazardly stitch[es] together sequences of linguistic forms ... according to probabilistic information about how they combine, but without any reference to meaning" (Weil).

It is then possible to understand why John Warner, a former college writing teacher, says that "the algorithm does not 'know' anything. . . . It is not programmed with the rules of grammar. It does not sort, or evaluate the content. It does not 'read'; it does not write. It is, at its core, a bullshitter. You give it a prompt and it responds with a bunch of words that may or may not be responsive and accurate to the prompt, but which will be written in fluent English syntax." The term "bullshitter" may seem gratuitous, but Weil explains why it is a perfect descriptor: LLMs are "great at mimicry and bad at facts. Why? LLMs . . . have no access to real-world, embodied referents. This makes LLMs beguiling, amoral, and the Platonic ideal of the bullshitter, as philosopher Harry Frankfurt, author of *On Bullshit*, defined the term. Bullshitters, Frankfurt argued, are worse than liars. They don't care whether something is true or false. They care only about rhetorical power — if a listener or reader is persuaded."

LLMs being bad at facts and good at bullshit is consistent with them producing what the artificial intelligence field calls "hallucinations." Greg Kostello explains that an AI hallucination results from "the AI model generat[ing] output that deviates from what would be considered normal or expected based on the training data it has seen" (Petkauskas). For example, when I experimented with ChatGPT in December 2022, I asked it to analyze Ken Kesey's novel *One Flew Over the Cuckoo's Nest*. ChatGPT declared that "despite his efforts, McMurphy ultimately fails in his attempt to lead the other patients to freedom. Nurse Ratched successfully maintains her control over the hospital." However, this conclusion is a hallucination (i.e. completely wrong): at the end of the novel, Chief Bromden reports that Ratched is "losing her patients one after the other," reflecting how those patients obtain their freedom thanks to McMurphy's influence. Also, Ratched's control is shattered: Bromden explains that "she couldn't rule with her old power anymore" (321).

Another illustrative example of a ChatGPT hallucination riffs on a well-known trick question, which is asking what weighs more: a pound of feathers or a pound of bricks. People often fail to notice the equal weights and wrongly respond that the bricks weigh more than the feathers. Steven Walton had the idea of asking ChatGPT "which weighs more, a kilogram of bricks or one and a half of feathers?" ChatGPT replied with confidence that "a kilogram of bricks and one and a half kilograms of feathers both weigh the same amount." That ChatGPT would produce this hallucination is unsurprising a) given that ChatGPT's dataset doubtless included many responses to the feather/brick weight question explaining that the weights are the same and b) given that ChatGPT doesn't understand or know that one and a half is greater than one because ChatGPT doesn't understand or know anything.

Features of ChatGPT's Output

The following features of ChatGPT's output are a consequence of it being a stochastic parrot:

- Its responses almost always feature natural-sounding, formal and correct English, although I've infrequently seen punctuation and preposition errors
- It will sometimes confidently assert that which is partly or even completely wrong
- When ChatGPT is asked to produce analysis, what results is often superficial, vague and/or illogical with some irrelevant and/or repetitive elements
- ChatGPT's sentences tend to be disconnected from each other, and its writing can be wordy
- ChatGPT is incapable of original thought: it generally offers conventional wisdom or mainstream perspectives along with their attending biases (e.g. sexism, racism, homophobia), and it may protest if it is prompted to produce unconventional/alternative responses

Using ChatGPT

In his brief "How to... Use ChatGPT to Boost Your Writing" (which I recommend reading), Ethan Mollick explains that "ChatGPT, like all generative AI systems, is a tool. Tools are used by humans to accomplish specific tasks. Thinking of it that way helps unlock its potential, but also avoid its pitfalls. For example: Don't ask it for facts that you can't easily check. Don't ask it to provide references. Don't have it do math, or conduct analysis. It will happily fake doing these things for you and the output will mostly likely be wrong. ChatGPT... is far from the all-knowing AI that the movies taught us to expect. But as a tool to jumpstart your own writing, multiply your productivity, and to help overcome the inertia associated with staring at a blank page, it is amazing."

To paraphrase Mollick, ChatGPT is completely untrustworthy. Thus, students must always critically evaluate its output and take responsibility for their use of that output. With those caveats firmly in mind, here are some ways students might constructively use ChatGPT to assist them with writing a literary essay.

Identifying Relevant Quotations

Bear in mind that ChatGPT may fail to mention relevant quotations and/or may mention less relevant or irrelevant quotations.

Example prompts

- "List quotations from Beowulf that deal with the subject of violence."
- "List quotations from Beowulf that portray Grendel as violent."
- "List quotations from Beowulf in which Hrothgar displays skill with language."
- "List quotations from *Beowulf* in which Hrothgar seeks to distract from or diminish his inability to defeat Grendel."

Generating Plot Summary

Watch out for ChatGPT's tendency to insert generalizations and analysis/opinion.

Example prompts

- "Summarize Beowulf in two sentences."
- "Summarize Beowulf in four sentences, with the third and fourth sentences illustrating how the subject of courage arises in the poem."

Identifying Arguments and Counter-Arguments

Example prompts

- "Explain why Beowulf can be considered courageous."
- "Explain why Beowulf might not be considered courageous."

Analyzing Quotations

Be careful: ChatGPT tends to produce smart-sounding but superficial, questionable and even illogical analysis.

Example prompts:

 "Referring to specific wording in the quotation, explain how the following quotation suggests that Beowulf is courageous: 'When it comes to fighting, I count myself / as dangerous any day as Grendel. / So it won't be a cutting edge I'll wield / to mow him down, easily as I might."

Improving Writing

While producing correct English is one of ChatGPT's strengths, it can sometimes be very wrong when asked to analyze or correct grammar/syntax/punctuation.

Example prompts

- "Is this sentence written correctly? Why or why not?"
- "Is the grammar of this sentence correct? Why or why not?"
- "Could this sentence/paragraph be more concise?"
- "Is there any vague language in this sentence/paragraph?"
- "Could the language in this sentence/paragraph be more precise?"
- "Does the following sentence/paragraph feature an academic and formal tone?"
- "Could this paragraph feature a better flow due to increasing the use of transition words or phrases?"
- "Could this sentence/paragraph be improved?"

Obtaining Definitions and Synonyms

Remember that the college library gives students free and online access to the <u>Oxford English</u> <u>Dictionary</u>, arguably the best English dictionary.

Example prompts

- "What's the definition of X?"
- "How do three different dictionaries define the word X?"
- "What's a synonym for X?"
- "What's a near synonym for X that includes an element of Y?"

Advice for Composing Prompts

Mollick points out that ChatGPT "isn't a human that you are giving instructions to. It is a machine you are programming with words." Thus, he calls for ChatGPT users to forget about being polite and instead craft prompts that are "elaborate and specific." For example, he encourages users to ask ChatGPT "to be concise or wordy or detailed, or ask it to be specific or to give examples. Ask it to write in a tone (ominous, academic, straightforward) or to a particular audience (professional, student) or in the style of a particular author or publication (New York Times, tabloid news, academic journal). You are not going to get perfect results, so experimenting (and using the little 'regenerate response' button) will help you get to the right place."

Mollick also explains how asking ChatGPT to revise its previous work is a powerful technique. Let's illustrate that idea by asking ChatGPT to produce a memorable ending for an essay about *Beowulf*. Here's what results from telling ChatGPT the following: "in three sentences call for a future essay to explore the impact of Unferth's cowardice on social order."

A future essay could explore the implications of Unferth's cowardice on the social order of the poem Beowulf. Unferth, a prominent warrior in Hrothgar's court, is shown to be a coward, which raises questions about the hierarchy of the society depicted in the poem. The essay could examine how Unferth's cowardice might challenge the traditional notion of heroism and how it reflects on the larger social structure.

Good: ChatGPT has produced the required three sentences, and they largely discuss Unferth, his cowardice and the impact of that cowardice on social order. However, this memorable ending is far from perfect:

- The passive phrase "is shown to be a coward" begs the question of what shows Unferth's cowardice
- The last sentence's discussion of heroism is off-topic, and the phrase "how it [what?] reflects on the larger social structure" is vague and even incomprehensible

So, a next instruction might be "improve this paragraph: in the second sentence, say what Unferth does that is cowardly. In the third sentence, don't mention heroism or the larger social structure." ChatGPT's initial response to this prompt failed to mention a specific act of cowardice by Unferth, so I hit "regenerate response," and the result was much better:

A future essay could investigate the implications of Unferth's cowardice on the social order depicted in Beowulf. Unferth, a respected warrior in Hrothgar's court, fails to face Grendel, which challenges the hierarchy of the society. This essay could explore how Unferth's cowardice questions the traditional concept of heroism and its potential impact on the social structure of the community.

Good: there is now mention of a fairly specific act of cowardice in the second sentence: failing to face Grendel. However, ChatGPT failed to eliminate the mention of heroism in the third sentence, and "social structure of the community" is little different than "larger social structure." Let's try being more firm: "Do not change the preceding paragraph's first and second sentences. Delete its third sentence. Add a new third sentence declaring that low-born soldiers who have bravely died fighting Grendel arguably possess more status than the high-ranking but cowardly Unferth."

A future essay could investigate the implications of Unferth's cowardice on the social order depicted in Beowulf. Unferth, a respected warrior in Hrothgar's court, fails to face Grendel, which challenges the hierarchy of the society. Low-born soldiers who have died fighting Grendel arguably possess more status than the high-ranking but cowardly Unferth, and this essay could explore the potential impact of this on the social structure of the community.

ChatGPT successfully preserved the first two sentences, and the first half of the third sentence is great (after all, it is largely mine!). Sadly, ChatGPT couldn't resist adding a redundant and vague second half once again speaking of "the social structure of the community"! It may now be time to say goodbye to ChatGPT and have the human finish the paragraph off themselves, notably by deleting the second half of the third sentence and adding a transition at the start of the third sentence (e.g. "This challenge arguably results from . . .").

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