

AI Policy

- **You are strongly encouraged (but not obligated) to make use of the AI tools and resources listed in the policy for your writing**
- **Everything must be disclosed**

(Large) Language Models

What is a language model ?

Yesterday, at 1pm I ate my _____

chair

dinner

friend

car

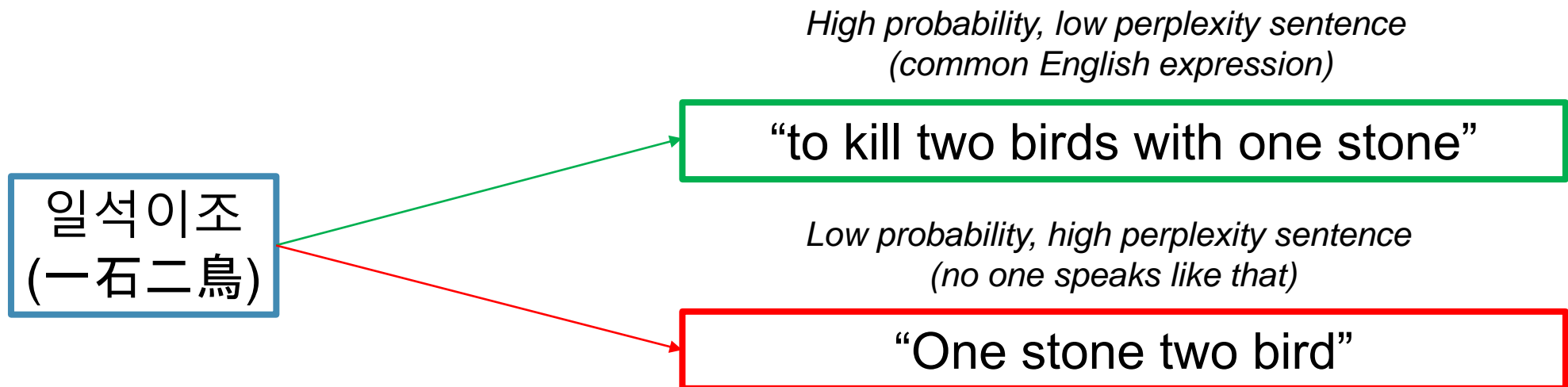
lunch

restaurant

(Large) Language Models

What is a language model ?

- A language model assigns a probability to a word or sequence of words.
- Language models can assign probabilities to full sentences (= perplexity).
 - Useful for text generation, grammar/spell checking, speech-to-text, automated translation...



Effective use of Large Language Models


- Large language models (LLMs) like ChatGPT can help you write better and faster
- But they won't do all the work for you:
 - AI-generated “smell” (phrasing is too conform, = low perplexity)
 - Facts will very often be wrong (“hallucinations”)
 - Bland research questions and arguments

Effective use of Large Language Models

Hallucinations

- LLMs are trained to produce outputs that are likely, not true or correct. That their output is sometimes true is an accident, not a property.
- LLMs will often present wrong information in an authoritative manner.

BE Write a 200 word paragraph about the 1975 meeting between Kim Il Sung and Park Chung Hee

 The 1975 meeting between North Korean leader Kim Il Sung and South Korean President Park Chung Hee was a historic event that marked a rare moment of détente in the tense and often violent relationship between the two Koreas. The meeting, which took place in the North Korean capital of Pyongyang, was the first summit between the two leaders since the division of the Korean Peninsula in 1945. The talks were aimed at improving inter-Korean relations and exploring the possibility of reunification, but ultimately failed to produce any concrete results. However, the meeting was seen as a significant breakthrough in the long-standing conflict between North and South Korea, and represented a glimmer of hope for the possibility of peace on the peninsula.



Convincing output,
but that meeting
never happened

Effective use of Large Language Models

Hallucinations

BE

Write an essay about the Yoon presidency in South Korea



The Yoon presidency in South Korea began in 2022 after a highly contested presidential race that saw Yoon Seok-youl emerge as the winner. Yoon's presidency was marked by significant policy changes, diplomatic initiatives, and domestic reforms.

One of the key priorities of Yoon's presidency was to strengthen the South Korean economy and create more jobs. He introduced a range of measures aimed at stimulating economic growth including tax cuts for small businesses, increased investment in infrastructure, and support for startups and innovation. These policies helped to boost the South Korean economy, which saw strong growth during his presidency, with unemployment rates falling to record lows.

Another major policy priority for Yoon was to improve relations with North Korea and promote peace and stability on the Korean Peninsula. He pursued a policy of engagement with North Korea, seeking to establish dialogue and cooperation between the two countries. Yoon's efforts resulted in several rounds of talks between the two Koreas, including a historic summit in Pyongyang in 2023, which marked a significant breakthrough in inter-Korean relations.

Mostly true, but uses the past tense for a current event (1 year into the presidency)

Wrong (tax breaks only for companies with > \$300 million in profits)

Wrong:

- **No engagement policy**
- **Yoon is a North Korea "hawk"**
- **No summit so far (and unlikely to happen this year)**

Effective use of Large Language Models

A much more efficient way to use Chat GPT is to improve something you have already written

Last section has discussed about development of Korean literature culture in 1930s in the process of contacting with Japanese and Western moder literature. This follow section focuses on the change of style and language in Korean novel. The development of adopting Japanese literature style is distinguished with three periods since late 1910s, corresponding to social contexts shifted in history. To begin with, by the end of 1910s social and economical and political circumstances in peninsula Korea are significantly changed, which is observed as the first turning point regarding the change of literary culture.



ChatGPT

The preceding section has expounded on the evolution of Korean literary culture in the 1930s as it intersected with Japanese and Western modern literature. The ensuing section is dedicated to exploring the shifts in style and language within Korean novels. The adoption of Japanese literary style can be delineated into three distinct phases dating back to the late 1910s, each corresponding to social contexts that evolved throughout history. Initially, the end of the 1910s witnessed a notable transformation in the social, economic, and political circumstances of the Korean peninsula, serving as the first pivotal moment in the shift of literary culture.

Effective use of Large Language Models

Other effective use cases:

- Get a full, decently-written paragraph from scattered thoughts
- Get ideas for research questions

The output you will get is almost never usable as such. You will need to work to further polish it.

Effective use of Large Language Models

The quality of LLMs' output is very dependent on the “prompts” (instructions) you give as input.

ESSENCE OF PROMPT ENGINEERING

The capital of Belgium is ... $\xrightarrow{\text{GPT3}}$ a nice city

The capital of France is Paris.
The capital of Belgium is ... $\xrightarrow{\text{GPT3}}$ Brussels



We can guide GPT3 by providing **relevant examples** or by altering the shape of the prompt.

Automated Translation

If using automated translation:

- Keep your sentences in the source language **very short and simple**
- Translate one or two sentences at a time, check the output
- Double check correctness of strange expressions with a strict Google search

Also, the transgression of privacy in digital technology touches ethical and humane boundaries, and the preventive technique is the heed and wormwood for the LGBTQ community since it could be misapplied as a Gaydar.

Automated Translation

"heed and wormwood"



All Images Videos Shopping

About 887,000 results (0.45 seconds)

No results found for "heed and wormwood".

Results for **heed and wormwood** (without quotes):

Put your search query in quotes so that the search engine looks strictly for that expression and not for the words separately

"No results found", i.e. the expression is never used and is incorrect

Automated Translation + ChatGPT

You can also use ChatGPT to polish the output of an automatic translator

Korean Original	Google Translate	ChatGPT Corrected Output <small>(Prompt: Correct the following paragraph for grammar and so that it reads more smoothly)</small>
<p>지난해 11월 오픈AI가 챗GPT를 공개한 뒤, 생성AI에 대한 관심이 여전히 뜨겁다. 처음엔 세상을 구할 것처럼 등장해 떠들썩하더니, 최근엔 대필, 표절 문제가 불거지고 있다.</p>	<p>After OpenAI unveiled ChatGPT in November of last year, interest in generative AI is still hot. At first, it appeared as if it would save the world and made a lot of noise, but recently problems with ghostwriting and plagiarism are emerging.</p>	<p>Since OpenAI unveiled ChatGPT in November of last year, interest in generative AI has remained high. Initially, it seemed that this technology had the potential to change the world, and it garnered a lot of attention. However, recently, issues such as ghostwriting and plagiarism have started to surface.</p>

Automated Translation + ChatGPT

You can also use ChatGPT to polish the output of an automatic translator

Being **in a tiger corner**, the South Korean LGBTQ human rights organization, has announced a statement accusing the media of increasing social threats.

? 虎穴 ? Not an English idiom

Automated Translation + ChatGPT

BE

Correct this translation from a Chinese sentence obtained via automatic translation to turn it into idiomatic and academic English, only using common expressions and vocabulary:

"Being in a tiger corner, the South Korean LGBTQ human rights organization, has announced a statement accusing the media of increasing social threats."



"The South Korean LGBTQ human rights organization, currently facing a challenging situation, has released a statement accusing the media of contributing to the escalation of social threats."