# GenAl & Wiki-Workflows: A practical workshop

#### With:

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# Why this workshop?

Harnessing GenAl tools to improve wiki-workflows →

Saving volunteers' time and making our work more efficient

WIKIMANIA KAT®WICE



## **Existing channels for engagement**

#### **Telegram group:**

https://t.me/joinchat/ELlyMRaZrlcFyCvZOKhfLw



#### Facebook group:

https://www.facebook.com/groups/571301011510344



WIKIMANIA



# Major AI tools to know

Any large companies (and some open communities) have their own chat-based models. Better models tend to cost more to run.

- **♦** ChatGPT (OpenAI)
- **Claude** (Anthropic)
- **♦** Gemini (Google)
- **♦** Copilot (Microsoft)
- **♦** <u>Llama</u> (Meta/Facebook)
- **♦** Huggingface a commons of AI tools + elements
  - > Ex: https://huggingface.co/datasets/wikimedia/wikipedia

## **Tools to explore**

- ♦ Modalities: Summarization, Proofreading, Translation, Style Drafting edits, Drafting articles
  - ➤ <u>General models</u> are good for all of this.
- Ldits: WP Add A Fact: a Future Audiences production
  - https://bit.ly/wp-add-af
- Articles: STORM aiming for well-referenced articles
  - ➤ <a href="https://storm.genie.stanford.edu/">https://storm.genie.stanford.edu/</a>
  - ➤ <a href="https://huggingface.co/spaces/multimodalart/storm">https://huggingface.co/spaces/multimodalart/storm</a>

# Shani's focus: tools for academic lit review and references

- Research Rabbit tutorial here
- Perplexity tutorial here
- **SciSpace** tutorial here
- **♦** Scite tutorial here
- **Consensus** tutorial here
- **Elicit** tutorial here
- **ChatPDF** tutorial here
- ♦ Jenni AI tutorial here
  - > and here, specifically connecting it to zotero
  - > (use MAREK20 for an additional 20% off)



# **Shani's insights**

- These tools are great as **a great starting point**, but you still need to use your Wiki-instincts and critical thinking in the process!
- Never trust one tool alone! I always work with a few to get to a place I feel I have a good handle of the material
- These are just **a few options out of many**. There are new tools and capabilities popping all the time. It can be overwhelming and hard to follow. But worth the effort, as it saves TONS of time.
- Like with every technology there's a learning curve. Embrace it. Experiment. Share. And enjoy the process.

  GenAI is here to stay.





## Ilario's tools to explore

- **Craiyon quite free but slow and not qualitative high**
- Nightcafe Limited free version
- **Adobe Firefly Limited free version**
- ChatGPT4o Good quality but paid version



## Ilario's tools to explore

- How to consider the images generated by AI?
- The copyright protects the human generated images, but AI is trained using images that can be copyrighted.
- https://commons.wikimedia.org/wiki/Commons:Al-generated\_media
- **♦** {{PD-algorithm}}



## Craiyon (<a href="https://www.craiyon.com/">https://www.craiyon.com/</a>)

**Input:** Create an image of wikipedians meeting together. Relevance of wikipedia logo.

There is to select the style:

- Digital art
- Photo
- Drawing

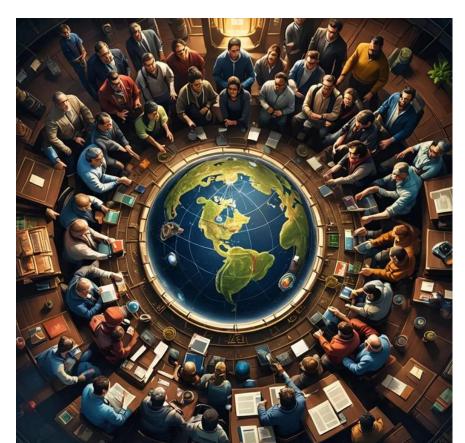


#### Nightcafe (<a href="https://creator.nightcafe.studio/">https://creator.nightcafe.studio/</a>)

Input: Create an image of wikipedians meeting together. Relevance of wikipedia logo. Digital art.

Additional functionalities to refine the result.

Limited free version, a lot of credits to earn.

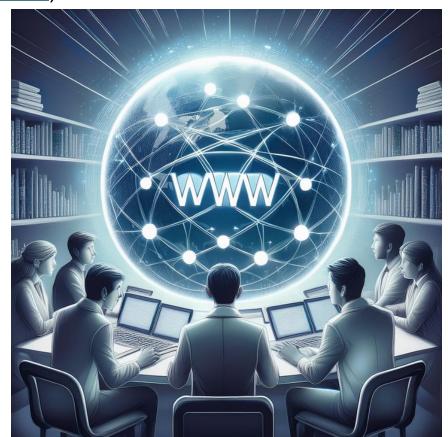


## Adobe Firefly (<a href="https://firefly.adobe.com/">https://firefly.adobe.com/</a>)

Input: reate an image of wikipedians meeting together. Relevance of wikipedia logo. Add programmers, editors and librarians.

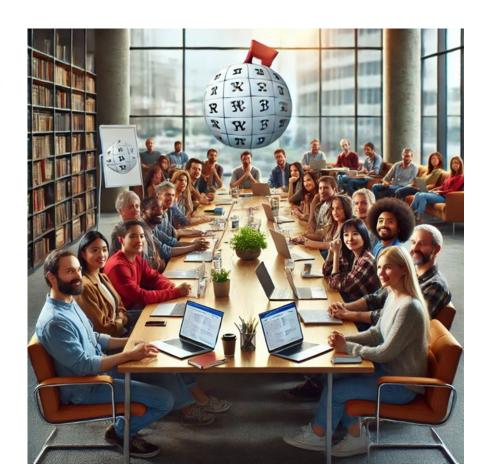
Several styles. I used:

Art+digital art



create an image of wikipedians meeting together

To create an image of Wikipedians meeting together, I'll depict a diverse group of people sitting around a table in a modern conference room. They will have laptops, notebooks, and possibly some posters or whiteboards with Wikipedia logos or articles on them. The scene will convey a collaborative and friendly atmosphere, with individuals engaged in discussion and working together. Let's generate the image.



Can we change the setting theme?

Of course! What kind of setting theme would you like for the meeting? We can change it to something more casual, a different type of environment like a café or an outdoor area, or even something more unique like a historical or futuristic setting. Let me know your preference!

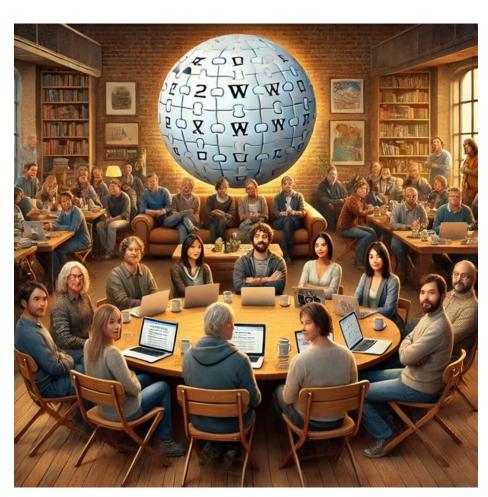
In a café

Let's create an image of Wikipedians meeting together in a cozy café setting. The scene will include comfortable seating, a warm atmosphere, and a mix of people working on laptops, enjoying coffee, and engaging in discussion. I'll depict the café with a relaxed vibe, featuring some typical elements like coffee cups, wooden tables, and maybe some bookshelves or art on the walls. Let's generate this new image.



Stress more the wikipedia logo

Eet's enhance the presence of the Wikipedia logo in the café setting. I'll ensure that the logo is more prominently displayed, perhaps on laptops, notebooks, and even as a decoration within the café, such as on the wall or as a small sign. This will help emphasize the connection to Wikipedia. I'll create the updated image with these adjustments.



Create a cartoon with the same style of:

- \* two wikipedians meeting in the street
- \* they greeting each other
- \* they go together
- \* they join a big meeting with other wikipedians



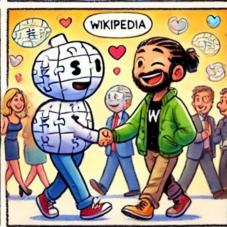
- Two Wikipedians Meeting in the Street: The first panel will show two characters, representing
  Wikipedians, encountering each other in a city street. They will have friendly expressions and be
  recognizable as part of the Wikipedia community, perhaps with logos or badges.
- Greeting Each Other: The second panel will depict the two Wikipedians greeting each other warmly, perhaps with a handshake or a wave.
- Going Together: In the third panel, the two Wikipedians will walk together, heading toward a common destination, with a sense of camaraderie.
- 4. Joining a Big Meeting with Other Wikipedians: The final panel will show the two joining a large group of diverse Wikipedians in a meeting or event setting, highlighting the collaborative spirit of the community.

I'll create this cartoon with a cohesive style and a friendly, approachable tone. Let's go ahead and generate the cartoon.









Can we see the characters closer up?

Let's create a close-up image of the two characters from the cartoon, highlighting their features and expressions. This will allow for a better view of their design and details, maintaining the same cartoonish and friendly style. I'll focus on a moment when they are interacting, perhaps during the greeting or while walking together. Let's generate this closer view.



Create a new cartoon concept.

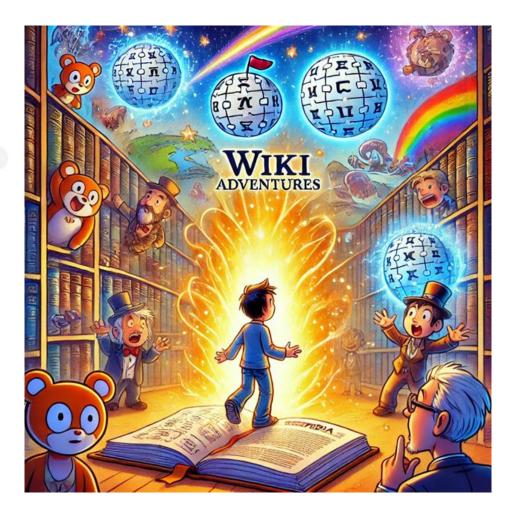
(3)

Let's create a new cartoon concept! Here's an idea:

Title: "The Wiki Adventures"

Panel 1: "The Discovery"

A character stumbles upon an old, dusty book in a library titled "The Book of Knowledge." As they open it, they're surprised to see a glowing Wikipedia logo on the first page. The book's glow indicates something magical and intriguing.  $\checkmark$ 





#### **Case: Unstructured to Structured**

- Art history is messy
- Vague, soft descriptions of dates
  - > 1743
  - > circa 1820
  - > 100 B.C.-200 A.D.
  - early 19th century
  - probably late 17th century
  - > 19th Dynasty (Egypt)







## **Period** 305 BCE-395 CE

National Museum of Asian Art (US) https://asia.si.edu/explore-art-culture/collections/search/edanmdm:fsg\_F19 05.237/

```
"objectDate": "ca. 1194-1188 B.C.",
"objectBeginDate": -1194,
```

#### Metropolitan Museum of Art API

https://collectionapi.metmuseum.org/public/collection/v1/objects/561265



## **Case: Unstructured to Structured**

- Challenge: convert "loose and lexical" to "structured statements"
- Typical Wikidata statements
  - > P571 inception
  - P1326 latest date
  - P1480 sourcing circumstances
  - Date granularity
    - 18th century +1701-00-00T00:00:00Z/7
    - 1939 +1939-00-00T00:00:00Z/9



## **Training session**

Train ChatGPT-4o as a transformer (<u>link</u>)

I want you to act as a helper to transform dates in an English language description to a more precise date notation. The input will be a text string that describes a date, and the output will be a notation for Wikidata Quickstatements. Do you know how to work with Wikidata Quickstatements, and how would I get you to do that by showing you examples of the input descriptions and the output values?

## It seems to know QS

Response (<u>link</u>)

Yes, I can help with transforming date descriptions into precise date notations suitable for Wikidata Quickstatements.

Wikidata Quickstatements use a specific format to add or edit data. For dates, the format typically involves specifying the year, month, and day, with optional precision.

#### Here's how you can guide me to help:

- Provide Example Inputs: You can show me text descriptions of dates in natural language, such as "early 2023", "mid-July 1990", or "around 1850".
- Provide Corresponding Outputs: Show the precise date notation for Wikidata Quickstatements corresponding to those descriptions, such as `+2023-01-01T00:00:00Z/11`, `+1990-07-15T00:00:00Z/10`, or `+1850-00-00T00:00:00Z/9`.
- 3. **Ask for Transformations**: Once I have a few examples, I can begin transforming new date descriptions into the precise Quickstatement notation.

## **How to proceed**

Response (<u>link</u>)

#### Example:

Input: "mid-July 1990"

Output: `+1990-07-15T00:00:00Z/10`

Input: "early 2023"

Output: `+2023-01-01T00:00:00Z/11`

You can continue to provide examples, and I can help generate the correct Wikidata Quickstatements format for different types of date descriptions.

## Let's train!

Training data in CSV (<u>link</u>)

Find it in the Etherpad:

https://etherpad.wikimedia.org/p/W M2024 Day4 Ochrid - Room 9

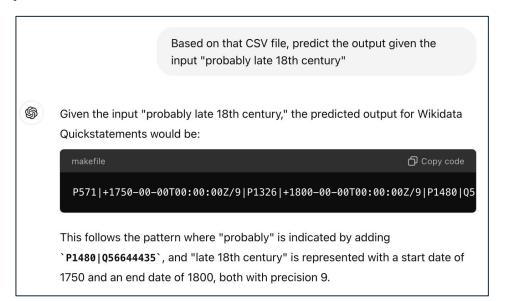
also Wikimania wiki: 2024:Program#Session\_notes

Here is a CSV test showing input and output values:

1967,P571|+1967-00-00T00:00:00Z/9 1942,P571|+1942-00-00T00:00:00Z/9 1939,P571|+1939-00-00T00:00:00Z/9 18th century, P571|+1701-00-00T00:00:00Z/7 19th century, P571|+1801-00-00T00:00:00Z/7 20th century, P571|+1901-00-00T00:00:00Z/7 1950s,P571|+1950-00-00T00:00:00Z/8 1920s,P571|+1920-00-00T00:00:00Z/8 1960s,P571|+1960-00-00T00:00:00Z/8 fourth quarter 19th century, P571|+1875-00-00T00:00:00Z/9|P1326|+1900-00-00T00:00:00Z/9 ca. 1900,P571|+1900-00-00T00:00:00Z/9|P1480|Q5727902 early 20th century, P571|+1901-00-00T00:00:00Z/7|P1326|+1949-00-00T00:00:00Z/9

## Impressive results

Impressive results from ChatGPT 4o



https://quickstatements.toolforge.org/

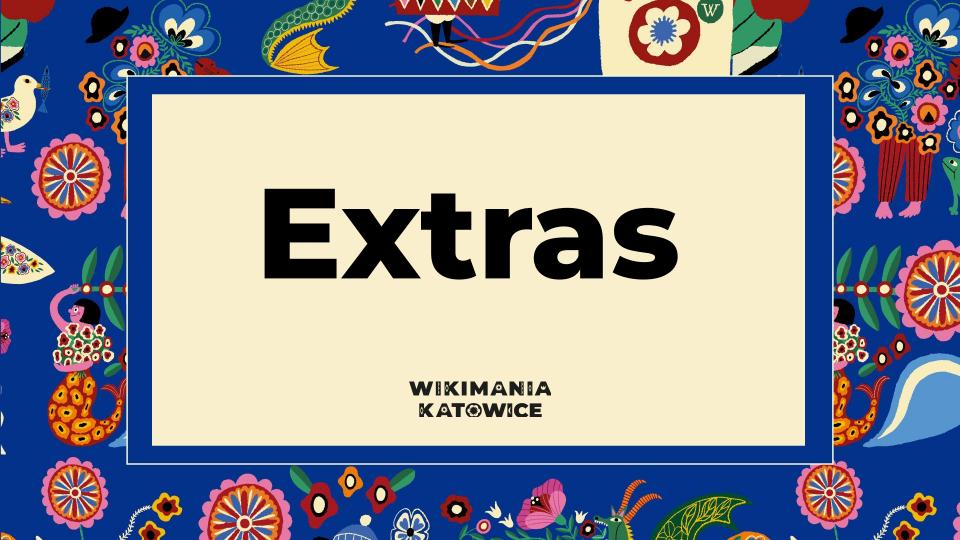
1 init	Wikidata Sandbox [Q4115189]	ADD	Statement	inception [P571]: 1750	
2 init	Wikidata Sandbox [Q4115189]	ADD	Qualifier to	inception [P571]: 1750	latest date [P1326]: 1800
3 init	Wikidata Sandbox [Q4115189]	ADD	Qualifier to	inception [P571]: 1750	sourcing circumstances [P1480] : probably [Q56644435]

## Challenge

- How far can you go with other date conversion scenarios?
  - Handle "A.D." as well as "C.E."
- Variations of these:
  - probably
  - approximately
  - presumably
- Other date formats? 2024-0808
- Different languages for month names?
- Ask GPT to generate code to do the same thing?
  - Python and PAWS?









## SJ's Extra tools to play with



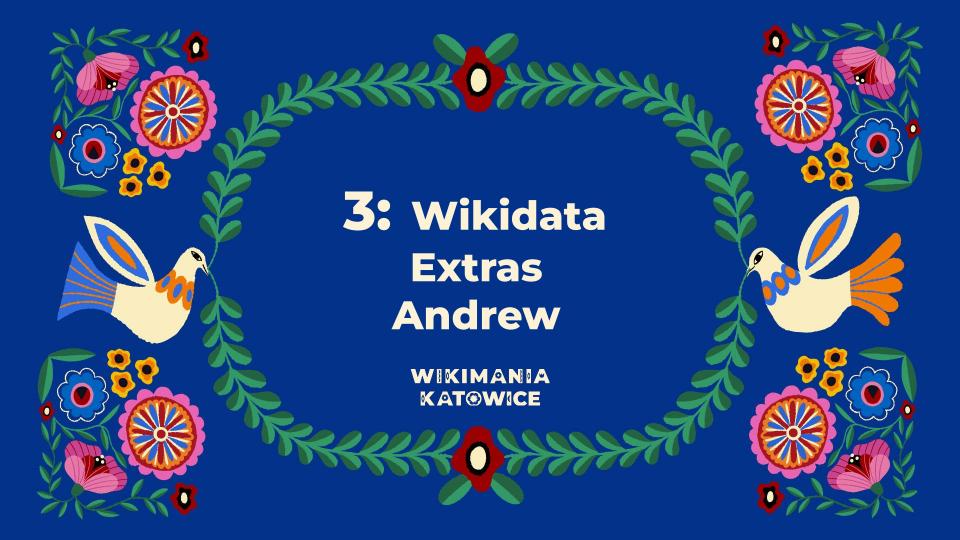
## Shani's Extra tools to play with





## Ilario's Extra tools to play with





## Andrew's Extra tools to play with

