AI writing in the classroom

Hochschuldidaktiktag

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Part 1 of 3:
Background

What we do
The Ang3 Hexagon

- "Linguistics Content" was weighted toward earlier parts of degree

  - so, the linguistics itself is largely in service of the other five

- Curriculum is not structured for great depth or breadth

- Most of our (my?) students overtly express disinterest in linguistics

Character   Applications

Research   Linguistics
                            Content

                    Communication
Data   Skills
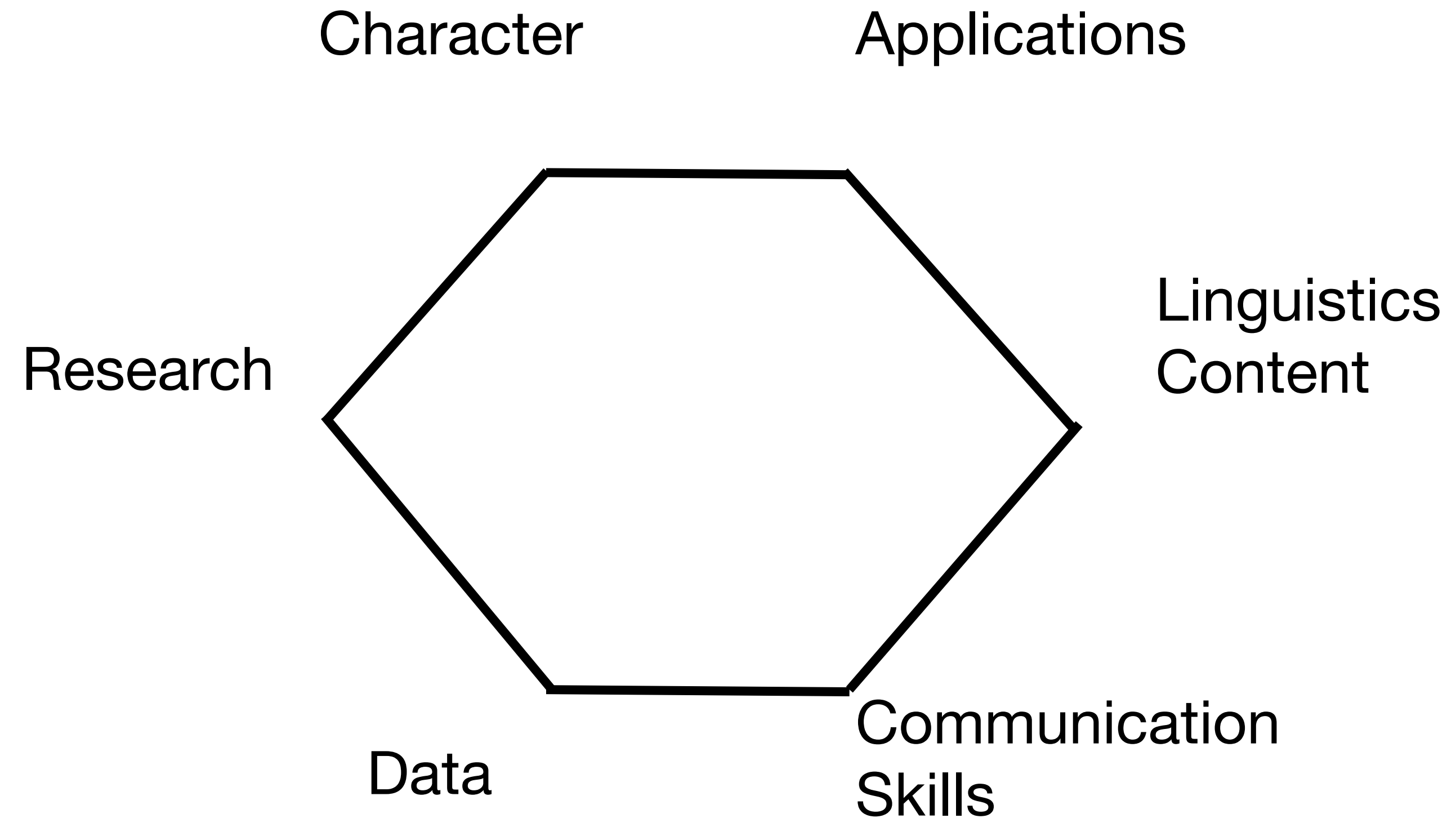
What do we offer English Studies?
(Chris' angst, in productive form!)

- Resistance to unsubstantiated opinions on language

- *Quantitative* and *qualitative* data skills

- …

- Literacy in emerging language technologies is very relevant for this mission

WHAT CAN YOU DO WITH YOUR ENGLISH DEGREE?

Find out about from real and live HHU Alumni!

- marketing/PR(x5)

- education management(x3)

- UX research

- client services(x2)

- entrepreneur

- actor/director

- speech therapy

So what is this ChatGPT, anyway?
and the GPT-3 it's based on

- A sophisticated deep neural net

  - trained on a lot of text

- Interface like a chatbot, it generates responses that mimic the patterns it has seen

  - "hallucinations" of plausible-sounding text

"Think of ChatGPT as a blurry JPEG of all the text on the Web. It retains much of the information on the Web… but, if you're looking for an exact sequence of bits, you won't find it; all you will ever get is an approximation.
But, because the approximation is presented in the form of grammatical text, which ChatGPT excels at creating, it's usually acceptable. You're still looking at a blurry JPEG, but the blurriness occurs in a way that doesn't make the picture as a whole look less sharp"
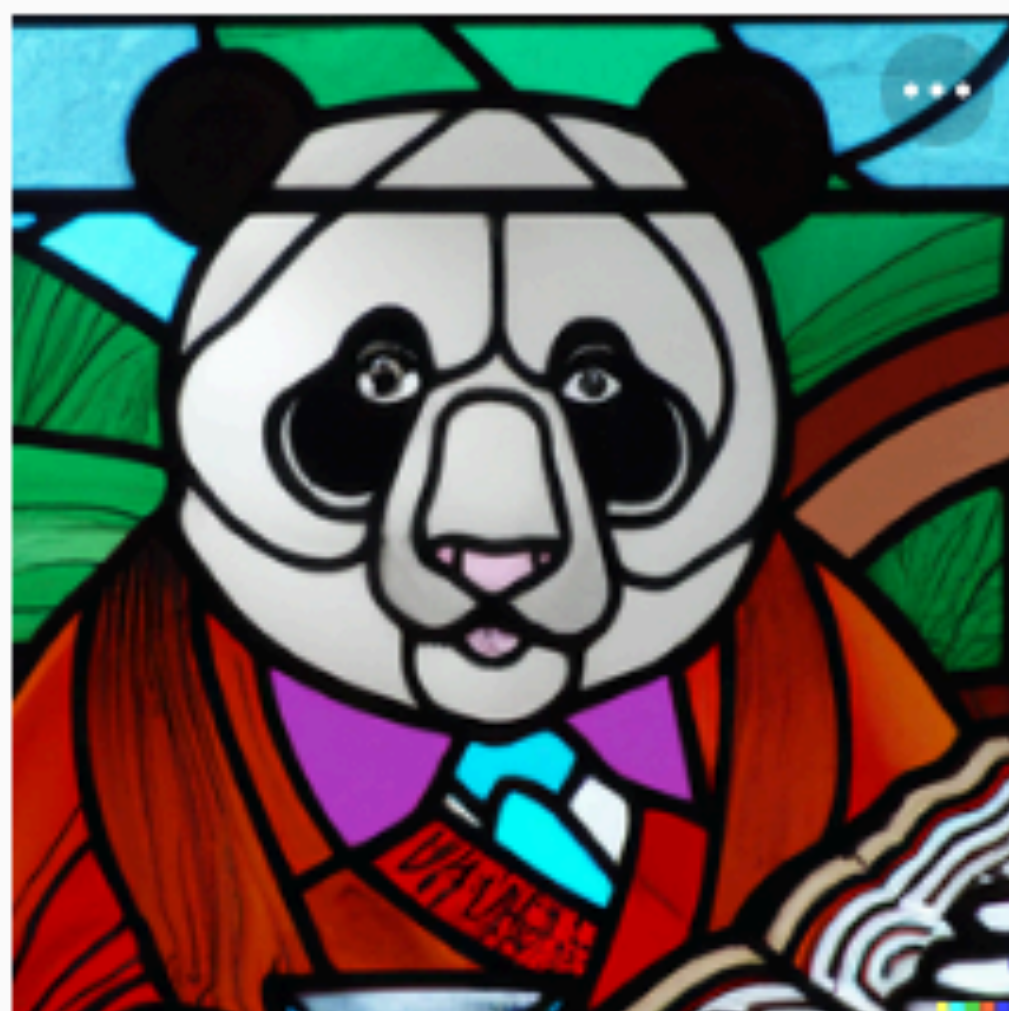
Chiang, Ted. 2023. ChatGPT Is a Blurry JPEG of the Web. *The New Yorker*.
https://www.newyorker.com/tech/annals-of-technology/chatgpt-is-a-blurry-jpeg-of-the-web

Analogy: image AI

e.g. https://openai.com/product/dall-e-2

- "professor of linguistics who is a panda"

- "stained glass window depicting a professor of linguistics who is a panda"

Why do educators care?
aka academia drama

- Students might use it to cheat

  - GPT models [are really good](#) at US standardized tests

- Technology can replace human workers

- New opportunities!

  - [Khan Academy](#) just launched a GPT-4 interactive tutor

Part 2 of 3:
Examining ChatGPT

Trying it out

- chat.openai.com

- 1) Let's try it

- 2) Reading some texts

- 3) Reporting on what we read

Reading AI texts
https://cageissler.github.io/resources/

- What were the prompts and responses?

- What are some ways it is *similar to* a decent student?

- What are some ways it is *different from* a decent student?

- What did you learn from reading the texts?

Text 1
observations from 15 March 2023 workshop

- the first task provided an almost perfect summary

- good paraphrasing, but also literal repetition from original text

- as student writing it was almost too perfect/too professional

- the student experiment it suggests looks plausible

- more concrete follow-up tasks lack content, remain hollow

- required uncertainty is discussed, rather than simply displayed (overuse of first-person pronouns, modals)

Text 2
observations from 15 March 2023 workshop

Text 3
observations from 15 March 2023 workshop

Text 4
observations from 15 March 2023 workshop

- What are some ways it is similar to a decent student?1. Clearly demarcated paragraph
  2. Sections of the term paper is clear
  3. Has a good conclusion but doesn't have specific details

- What are some ways it is dissimilar to a decent student?
  1. No citations.
  2. Lack of depth.
  3. It lies - it provides no overview of laboratoy phonology
  4. The paper is incomplete as its not 7 pages. Also, the last sentence is incomplete.

- What did you learn from reading the texts?
  1. There is a hard limit on the amount of generated text
  2. No grammatical/spelling mistakes. We can maybe use this is a cue for detecting AI generated text.
  3. It matches the genre - it could understand what term paper means
  4. No specific method(s) was mentioned.
  5. Overuse of the operative phrase, in this case 'laboratory phonology' is over used.

Text 5

observations from 15 March 2023 workshop

Part 3 of 3:
AI Opportunities

Think-Pair-Share

For a course you have taught…

- How does your course help your students understand AI?

- How could your students use AI in the current course?

  - What impact would doing this have on their learning?

  - How could you modify the assignment/course to improve it?

Resources

- More reading: Teaching_with_AI Zotero group

- HeiCAD

- Digital Humanities (Coordinator: Stefan Reiners-Selbach)

- Data visualization using chatGPT:

  - https://datavizcatalogue.com/blog/how-useful-is-chatgpt-for-data-visualisation-work/

  - https://conormclaughlin.net/2022/12/iteratively-generating-data-visualization-code-with-chatgpt/

Closing thoughts
an early draft

- Ang3 can, and should, prepare students for living with AI

- Skills needed to work *with* AI are the skills of a successful Ang3 student:

  - empirical work

  - advanced reasoning (not plausible-sounding BS)

  - process of writing (e.g. emphasize drafts over end product)

Some more applications of GPT-type AI
from group discussion

- Writing first drafts to heavily edit

    - both prose and for bits of code

    - drafts for graphs

- Summarizing

- Grammar checks, paraphrasing

- What kinds of questions should we be asking in our classes?