# How we talk (to students) when we talk about

Al

**Deree-The American College of Greece** 

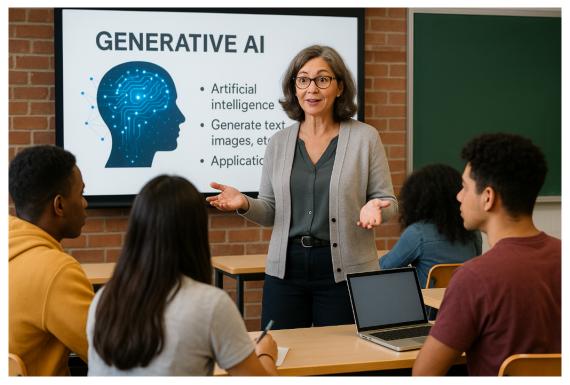


#### **AMICAL 2025**

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**ChatGPT** generated image



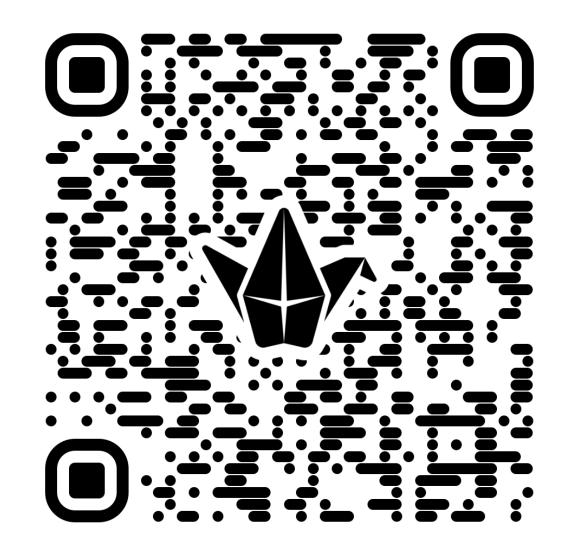
#### Presentation outline

- How do we conceptualize GenAl?
- Impact of the use of metaphoric language
- Selective literature review of recent research on AI metaphors (2023-25)

## Padlet participation: please contribute!

What metaphors or analogies do you use when you talk to students abt AI?

Share your thoughts through the Padlet and access poll and resources!







the language we use in class may (un)knowingly reproduce the pre- or misconceptions we each carry when we discuss new technologies (esp GenAI)

To anthropomorphize?

Or Not To anthropomorphize?

What's at stake?

A more conscious use of metaphoric language when discussing AI in class

Affects student understanding

Develops learners' critical Al literacy



(un)common analogies:

"stochastic parrot"

Bender, E. M., Gebru, T., McMillan-Major, A., & Shmitchell, S. (2021). On the dangers of **stochastic parrots**: Can language models be too big? *Proceedings of the 2021 ACM conference on fairness, accountability, and transparency* (pp. 610–623). https://doi.org/10.1145/3442188.3445922

## On the Dangers of Stochastic Parrots: Can Language Models Be Too Big?

Authors:







Emily M. Bender, 🙎 Timnit Gebru, 🙎 Angelina McMillan-Major, 🙎



Shmargaret Shmitchell Authors Info &

Claims

FAccT '21: Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency • March 2021 •

Pages 610–623 • https://doi.org/10.1145/3442188.3445922

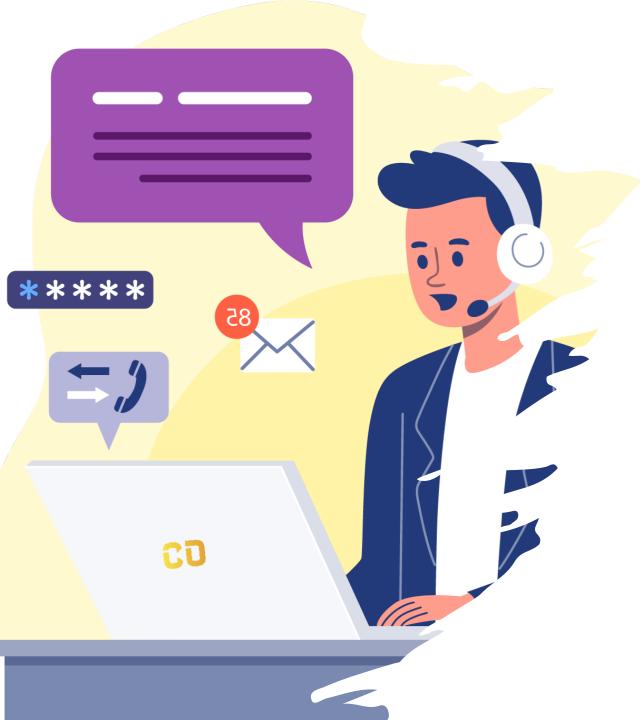
(un)common analogies:

"collaborator" (Anderson, 2023)

Anderson, S. S. (2023). "Places to stand": Multiple metaphors for framing ChatGPT's corpus. *Computers and Composition*, 68.

https://doi.org/10.1016/j.compcom.2023.102778





(un)common analogies:

"intern"

Mishra, P. (2023, July 26). ChatGPT is a **smart**, **drunk intern**: 3 examples.

https://punyamishra.com/2023/07/26/chatgpt-is-a-smart-drunk-intern-3-examples/

Mollick, E. (2023, May 20). On-boarding your **Al Intern**. *One Useful Thing*.

https://www.oneusefulthing.org/p/on-boardingyour-ai-intern

(un)common analogies:

"calculator for words"

Simon, C. (2024, May 2). Did student or ChatGPT write that paper? Does it matter? *The Harvard Gazette*.

https://news.harvard.edu/gazette/story/ 2024/05/did-student-or-chatgpt-writethat-paper-does-it-matter/



"Telling people not to use ChatGPT is not preparing people for the world of the future," said Sam Altman, CEO of OpenAI.

Niles Singer/Harvard Staff Photographer

## ChatGPT 4o claims Bender et al use the calculator metaphor [it's a hallucination]

https://chatgpt.com/share/7e787256-d3ba-4285-b147-0f982c3d5eb3

#### **Emily Bender**

- Source: Bender, Emily M., et al. "On the Dangers of Stochastic Parrots: Can Language Models Be
  Too Big?" FAccT '21: Proceedings of the 2021 ACM Conference on Fairness, Accountability, and
  Transparency, 2021.
  - Opinion: Bender critiques large language models for their lack of genuine understanding and ethical implications. She compares their language generation to mechanical processes, similar to how calculators perform arithmetic operations.
  - Quote: "Language models like ChatGPT operate by calculating the most statistically probable word sequences, much like a calculator performs operations on numbers."

(un)common analogies:

"assistant"



Gupta, A., Atef, Y., Mills, A., & Bali, M. (2024). **Assistant, parrot, or colonizing loudspeaker**? ChatGPT metaphors for developing critical Al literacies. *Open Praxis*, 16(1), 37–53.

https://openpraxis.org/articles/10.55982/openpraxis.16.1.631

van Es, K., & Nguyen, D. (2024). "Your **friendly AI assistant**": The anthropomorphic self-representations of ChatGPT and its implications for imagining AI. *AI & Society*. <a href="https://doi.org/10.1007/s00146-024-02108-6">https://doi.org/10.1007/s00146-024-02108-6</a>

(un)common analogies:

"Funhouse mirror"

"echo chamber"

"digital plastic"

Roe, J., Furze, L., & Perkins, M. (2024). Funhouse mirror or echo chamber? A methodological approach to teaching critical Al literacy through metaphors.

https://doi.org/10.48550/arXiv.2411.14730

Roe, J., Furze, L., & Perkins, M. (2025). GenAl as digital plastic: Understanding synthetic media through critical Al literacy. <a href="https://doi.org/10.48550/arXiv.2502.08249">https://doi.org/10.48550/arXiv.2502.08249</a>



(un)common analogies:

"cybernetic teammate"



Dell'Acqua, F., Ayoubi, C., Lifshitz-Assaf, H., Sadun, R., Mollick, E. R., Mollick, L., Han, Y., Goldman, J., Nair, H., Taub, S., and Lakhani, K. R. The **Cybernetic Teammate**: A Field Experiment on Generative Al Reshaping Teamwork and Expertise (March 25, 2025). Harvard Business School Technology & Operations Mgt. Unit Working Paper No. 25-043, <a href="http://dx.doi.org/10.2139/ssrn.5188231">http://dx.doi.org/10.2139/ssrn.5188231</a>

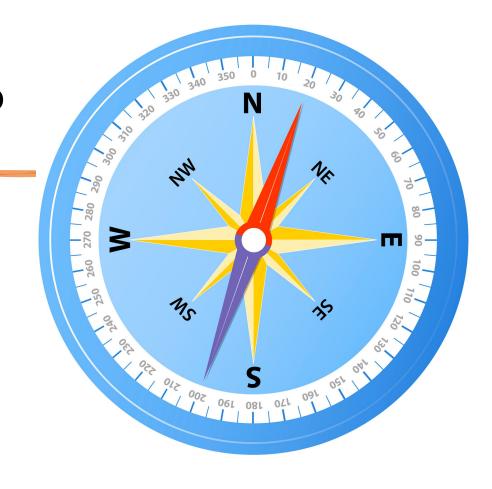
(un)common analogies:

High heels (technical support)

Compass (text development)

Spider-man (transformative potential)

Drug (threat)



Jin, F., Sun, L., Pan, Y., & Lin, C. H. (2025). **High heels, compass, spider-man, or drug?** Metaphor analysis of generative artificial intelligence in academic writing. *Computers & Education,* 105248. https://doi.org/10.1016/j.compedu.2025.105248



(un)common analogies:

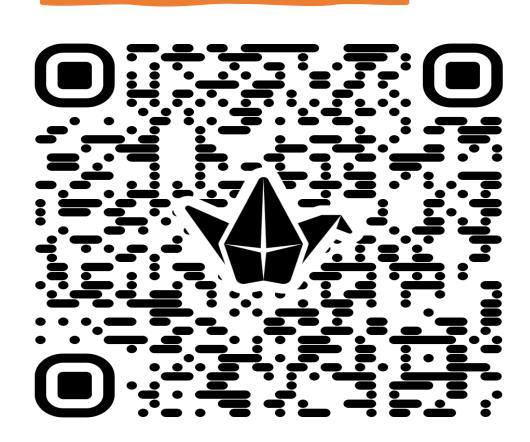
Swiss army knives stochastic parrots drunk interns overlords

Oster, N., McCaleb, L. & Mishra, P. (2025). Swiss army knives, stochastic parrots, drunk interns, and overlords: Understanding AI through metaphors. In R. Jake Cohen (Ed.), *Proceedings of Society for Information Technology & Teacher Education International Conference* (pp. 842-845). Orlando, FL, USA: Association for the Advancement of Computing in Education (AACE).

https://www.learntechlib.org/primary/p/225606/

#### Have you contributed to **Padlet**?

- What are your thoughts on AI metaphors?
- Poll participation







Please continue to contribute to Padlet:

Get in touch any time: logotheti@acg.edu

