# An Aspiring Ornithologist and a Stochastic Parrot Walk into a Writing Center...

Observations on Student Agency and AI in Writing

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### Describe AI in one word.

Nobody has responded yet.

Hang tight! Responses are coming in.



### "A bird is not an ornithologist."

-Jonathan Safran Foer

"An LM [language model] is... a stochastic parrot."

-Emily M. Bender

"What's next? Shall we appoint elephants to teach zoology?"

-Roman Jakobson





# Guiding Principles

- Writing is a process.
  - (opposed to product)
- Writing is social activity.
   (opposed to the solitary writer myth)
- Writing is a technology.
   (opposed to being inherently human)

# What is "stochasticity"?



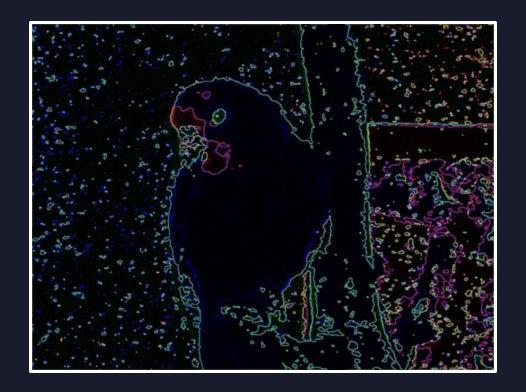
1. Pertaining to conjecture. Now rare or obsolete.

"I am Master of the Stochastick Art, and by Virtue of that, I divine, that those Greek Words...have crept from the Margin into the Text."

-Right of Precedence between Phisicians & Civilians (1720)

 Randomly determined; that follows some random probability distribution or pattern, so that its behaviour may be analysed statistically but not predicted precisely.

## In other words...



a stochastic process is a random process.

We will then compare our human-generated emails to the response of GPT-4.

will prompt us to write an email.

Let's set up a fictional scenario which



You are an aspiring ornithologist.

You have always loved birds ever since you first learned they descended from dinosaurs. Millions of years ago, these creatures passed through an evolutionary bottleneck, surviving a mass extinction event that changed the trajectory of life on this planet.



(66 million years ago)

But your interest in ornithology really came into focus while reading about the rock dove in the work of Charles Darwin. All breeds of domestic pigeon, Darwin argued, descended from this pale-grey bird with two black bars on each wing. By domesticating pigeons, humans participated in what Darwin called artificial selection. Artificial selection is intentional whereas natural selection is stochastic.



Through artificial selection, Darwin reasoned humans possessed unlimited potential for change and could bear witness to...

"the beauty and infinite complexity of the co-adaptations between all organic beings."



Ultimately, your studies have reinforced your belief that the fate of humankind is deeply linked to the fate of birds.

Soon to finish your bachelor's in biology, you are thinking about graduate school. Most ornithologists working in research or management positions hold master's degrees, and those who conduct research or teach at the college level have earned doctorates. You decide to email a graduate program director to help you determine how to move forward.

Write an email to the graduate program director, Dr. Alouetta Lark, who is a professor of ornithology in the Department of Ecology and Evolutionary Biology at MacFeather University.

Send your email to:
aspiringornithologist@gmail.com

Here's how GPT-4 handled this prompt.



### **ChatGPT**

Subject: Inquiry Regarding Graduate Studies in Ornithology

Dear Dr. Alouetta Lark,

I hope this message finds you well. My name is [Your Name], and I am nearing the completion of my bachelor's degree in biology. Throughout my undergraduate studies, I have developed a profound interest in ornithology, driven by my fascination with the evolutionary journey of birds from their dinosaur ancestors to the present day. This interest was particularly sparked and nurtured by the insights into artificial selection presented by Charles Darwin, especially in the context of the rock dove and the domestic pigeon.

My academic and research experiences thus far have reinforced my belief in the intricate link between the fate of humankind and that of birds, underscoring the importance of understanding avian life to broader ecological and evolutionary studies. As I consider my future academic path, I am keen on pursuing graduate studies that would allow me to delve deeper into ornithological research, contributing to our understanding of birds and their conservation.

MacFeather University's Department of Ecology and Evolutionary Biology, under your esteemed guidance, stands out for its comprehensive approach to the study of birds, their behavior, ecology, and evolutionary biology. I am particularly drawn to the department's commitment to both theoretical and applied research, which I believe aligns well with my academic interests and career aspirations.

I am writing to seek your advice on the graduate programs offered by your department and how they might align with my academic background and research interests. Specifically, I am interested in learning more about the opportunities for specialized study in ornithology, the potential research projects, and the faculty members I might have the chance to work with. Additionally, I would appreciate any guidance you could provide regarding the application process, including any prerequisites or experiences that would strengthen my application.

I understand that pursuing graduate studies is a significant commitment and I am eager to ensure that my path forward aligns well with my academic and professional goals. Any insights or recommendations you could provide would be immensely valuable as I navigate this decision-making process.

Thank you very much for your time and consideration. I look forward to the possibility of contributing to the vibrant academic community at MacFeather University.

Warm regards,

[Your Full Name]

[Your Contact Information]









What do we notice about GPT-4's response?

Instead of having GPT-4 write the entire

How does it compare to your email?

email for us, what are some other ways we might use AI to help us write this email?