"And it looks like we're running low on time today, so I think we'll stop here." Gwaru Zhanatre clapped her hands together as she addressed the dusty lecture hall. "In two days, we're going over evaporites. Remember, we're starting off with a quiz." She turned off the slideshow. "Have a good weekend, everyone!"

The 17 students that sat before her filed their computers into their bags almost in unison, before slinging their bags over their backs and leaving the room. Several of them head-bobbed at her on the way out. This gesture was a universal sign of appreciation. Its exact meaning varied based on context; here, it was a token of respect.

After the students had left the room, Gwaru finished her coffee, erased the many notes and diagrams she had written on the blackboard, grabbed her pack and left the room as well. Heading down the now-crowded hall, she found a gap between floors and leapt down. Her wings helped cushion the fall to the Drazin Building's lower floor, where her office was located. The office hours for her sedimentary geology class were immediately after lecture. Nobody was there when she got there. This wasn't unusual; her office hours were normally empty. Whether this reflected her students' studiousness or their laziness would only be revealed during finals. But part of it was that she was considered pretty "unorthodox" by most of raptor society; although to be fair, this society was a lot more conservative than Gwaru would have liked. She was on the younger side for a professor; faculty that didn't know her routinely mistook her for a graduate student. She had dyed her primaries red; primary-dyeing was also frowned upon, as it was associated with hooliganism. She was a vocal advocate of reform of North American government; its corruption had become quite eminent in recent years. And not only was she a mammal paleontologist – and most raptors didn't think very highly of mammals – she was also a proponent of many less-than-popular ideas.

One of these was her interest in the mammaloid.

About 20 years prior, paleontologist Leutaek Heshanto had authored a pretty lengthy book, *A Progressive View on Deep Time*. It was aimed for a more general audience than his other writings and elaborated on numerous new perspectives in paleontology and evolution, including exploring speculative scenarios. A large portion of the book was devoted to the "mammaloid" — a hypothetical sapient mammal, from a world where mammals were the dominant species on the planet. This book tanked his reputation among some scientific circles; he was blasted for affording this much time and thought to, in the words of one critic, "unscientific drivel".

However, the book had hooked Gwaru's interest when she was very young. Ever since age five she was fascinated with the prospect of a mammal-dominated planet. What could have potentially caused history to change to lead to this outcome? This had driven her to study paleontology herself, to understand the factors that shaped evolution and earth's history, as an indirect answer to this very question. She had written her dissertation on the paleoecology of Jurassic mammals, a topic that few other raptors cared about. Now she was a professor, teaching younger generations about deep time.

Gwaru sat down at the computer at her desk, her taloned feet resting on a keyboard placed on the floor. No new emails worth reading had rolled in during lecture. With nothing immediately pressing, she decided to message Tena Akwachko, fellow professor at Cha Sigwazgeu University and expert in quantum physics. The two had begun dating a few months ago, but by now it sort of became on-off. It

just didn't work out 100%, and it's surprisingly difficult to foster intimate relationships when you're both full-time professors and under intense scrutiny from people who think you're weird.

So about parallel universes. Gwaru messaged him. Do you think it is possible that, out there, there is a world where mammals were the sophonts?

I can't say that it is impossible. He responded. If parallel universes exist, then there are bound to be an infinite number of them. So a mammal-dominated world is definitely on the table.

It would be pretty cool if that were the case. She replied.

Which ones do you think would become intelligent? You're the mammal expert.

Primates. Primates are the second-smartest mammals alive today. I can see them making the leap.

Second smartest? What are the smartest?

There are a few species of aquatic marsupials that live in lakes in central Asia. *Those* are the smartest. But I doubt that they'd do it, because their intelligence is very different from those of primates. And of raptors.

Well, I didn't know that! Goes to show my ignorance.

Hush, Tena. I barely knew anything about how the universe worked until I met you. We're all still learning.

I still love your endless optimism.

Enough, you're too kind.

Anyways: what would need to change for mammals to take over? What evolutionary changes would have to have happened?

Get rid of most of the dinosaurs. Dinosaurs have been the dominant group of animals on this planet for about 180 million years. Between dinosaurs, pterosaurs, crocodilians, and ontwes, there basically wasn't enough ecological room for mammals to get bigger than, say, a jesh. And most of the mammals that did get big were herbivores. So you'd need to get rid of the big dinosaurs somehow. Assuming the path the climate took stayed the same, that would do it.

You should write a book about this or something. How long has it been since Heshaento's book?

About 20 years.

You could popularize the mammaloid again. You have quite a way of explaining abstruse concepts and making them fun. I'd love to read it.

Thank you.

Hey: would you be available for dinner tonight? It's been a while and I know you've been busy and all.

Sure, I have no plans. Would you want jeshburgers?

Works for me. North Odzan Grill at 18:30?

Perfect. I have a lecture now. See you tonight.

Closing the messenger app, Gwaru shook her head. Still nobody had come to the office hours, and there were still 21 asyuks to go. She decided to continue work on one of the multiple in-progress manuscripts she was authoring or coauthoring. The University's expeditions to the Gyadichleu Formation had recovered hundreds of Late Jurassic mammal fossils, and nobody else wanted to study it, providing ample material to keep her busy. And as long as the research was done, University bureaucracy would put up with her other quirks.

But the chat with Tena lingered in her head. Perhaps a book about the mammaloid, and the world it might live in, might not be such a bad idea.