From Cyberspace to the Cloud: Classical Reception in Modern Software

The modern tech landscape with its cutting-edge image might seem at first glance far removed from world of Classics with its focus on the distant past. And yet, as we have seen in so many other areas, the influence of the Classical world—and Greek mythology in particular turns out to be surprisingly pervasive in the tech sector as evidenced in software product names. This phenomenon is something I have discovered with great interest during my own career transition over the past two years from Classics professor to cloud software engineer.

One of the very words that has come to evoke our modern internet-connected technological culture, *cyberspace*, in fact demonstrates this long-standing classical influence. In the 1940s, MIT mathematician Norbert Wiener coined the term 'cybernetics' to describe the emerging study of communication and control systems in living beings *and* machines, and he consciously reached back to the Greek adjective κυβερνητικός, "skilled in (ship) steering", to do so. The major influence of the 1984 novel *Neuromancer* then rejuvenated the concept with author William Gibson's invention of the term *cyberspace* to conjure up futuristic notions of hybrid human-machine control, and ever since the very ancient root 'cyber-' has been applied to all manner of very modern "techy things" from cyborgs to cyberspace to cybermedicine.

More specifically, the product names that software developers (and marketing teams) have chosen for their technology products routinely show the persistent power that classical names have upon the modern cultural imagination. My talk will highlight several of these by way of example. For example, Cassandra is a key-value database (whose data you can always trust), Medusa is a set of e-commerce web components that are 'headless' (meaning the front-end webpage is modularly separated from the backend server), and Kerberos is a security protocol for user request authentication. Sometimes they come in pairs, such as Hermes, a JavaScript engine for building fast mobile apps, which comes with the companion application Hades which serves as Hermes' garbage collector (handles memory management so that extra stuff doesn't bog down the main application). The Roman side is not entirely ignored either, as we can see with a recent project from Facebook/Meta that tests the ability of an AI agent to play and get better at a strategic war-and-diplomacy boardgame (called Diplomacy). They of course decided to call it Cicero.

Most intriguing at least for my own career shift into cloud software, however, is Kubernetes, which has grown over the past decade to become the industry-leading container orchestration software. Kubernetes has been well described as "the operating system of the cloud", and it simplifies the management of multiple virtual computers running on cloud providers like Amazon Web Services or Microsoft Azure. The whole field of software containerization utilizes the metaphor of the modern container ship and associated nautical imagery, and in that context we can better understand why Google (the creator of Kubernetes) named it with the actual ancient Greek word for 'ship pilot'. From cybernetics to cyberspace and now most recently to Kubernetes, the world of modern software stands as yet another example of the enduring presence of classical reception all around us.