## Google's Forgotten Platforms

In our discussion of the Kirschenbaum reading, we looked at the materiality of digital storage; how the material trace is inscribed into an environment "engineered to model ideal conditions of immateriality" (Kirschenbaum 71). In keeping with that analysis of the material infrastructure of communications technology, we discussed the history of network exchanges in relation to Tung-Hui Hu's A Prehistory of the the cloud. I was reminded of Andrew Blum's work on the creation of internet exchange points in Tubes: A Journey to the Center of the Internet. Despite the titular "Center", Blum's work challenges (in the same vein as Hu) the notion of the internet as an universally connected plane. He traces the origins of modern internet exchanges back to the codification of network access points by the National Science Foundation.

I was thinking about these physical structures afford interlocking layers of networks and protocols. For example, Content Delivery networks like Cloudflare cache webpages and assets to both serve that content more quickly and protect against DDoS attacks. Services like these act as another layer of centralization that complicate notions of centralized networked control.

In relation to these interlocking layers of control, I'd like to discuss Google's infrastructure. Google (or Alphabet, their parent company) has a number of physical infrastructure projects: Google Fiber provides fiber-optic internet access to its customers and Project Loon aims to provide internet access to remote and rural areas. Google has developed the operating system for phones (Android) for years, but just this month they began selling phones under their own brand, pixel. In relation to software, this week, Google released their data studio, a platform that fits neatly into their suite of cloudbased office software, along with google docs, google sheets and google drive. It seems that Google's aim is to control the tools that knowledge workers use at every level: the network infrastructure, the physical devices, and even the software.

In response to this, I'd like to quickly iterate over some of Google's obsolete products:

- google buzz, a messaging application (2010-2011)
- google knol, a repository of articles (2008-2012)
- google reader, an rss feed reader and aggregator (2005-2013)

Buzz was one in a chain of attempts by Google to break into the social media circuit (Google Friend Connect (2008-2012), and Orkut (2004-2014). Google Plus.

Google knol failed to differentiate itself from blogging communities, and Google killed the project, deleting all the content that was posted to it (some of it survives on the internet archive). It became a wordpress plugin: https://annotum.org

It seems that Google reader was also a victim of Google's push to centralized its users onto one social platform, as Kit Eaton argues:

Google plus ushered in a "new era of APIs that are limited or locked down in some way. The death of the free and fully open API is an inevitable trend" (https://www.fastcompany.com/3013890/reader-may-have-died-to-f eed-googles-apis)

The closing of Google reader had a profound impact on how a number of people read and sorted web-syndicated bulletins: "Google Reader is the core of my information diet." -user wslh on hackernews.

The readiness with which Google is willing to abandon its platforms is telling. Moreover, these interventions highlight the need for academics to take ownership of their own digital writing practices.

Software is habitually going obsolete – and proprietary tools can be withdrawn from public support at any moment. We need to be developing and sharing our own tools in response. Works Cited

Kirschenbaum, Matthew G. *Mechanisms: New Media and the Forensic Imagination*. Cambridge, MA: MIT, 2008. Print.