Googling history

The Google search engine is becoming an ubiquitous feature in contemporary Internet culture. Myriad subtleties have developed for the verb “to google,” from using the Google search engine to a search for information about a prospective date to an emerging, and corporately contested, synonym for Web searching (much like Xerox). Although most people view Google as primarily a Web search engine, a lesser-known aspect also exists that might be useful to computing historians.

In 2001, Google integrated the 20 years of the DejaNews Usenet archive into Google Groups. This message archive dating from 1981 provides researchers with a trough of anecdotal material. For example, in the Usenet archives, we can trace the origins of today’s open source movement to Richard Stallman’s 27 September 1983 posting in net.unix-wizards announcing his upcoming Thanksgiving GNU (for Gnu’s Not Unix) project. Threads in the archives capture everything from Apple’s legendary 1984 Super Bowl commercial introducing the Macintosh to the infamous Robert Morris worm.

To appreciate the first-hand accounts in the archives, we must return to Usenet’s heyday. Usenet is a distributed discussion bulletin-board posting mechanism. Usenet users post messages on their local news server, which then passes them along to other news servers that it knows about, which then pass them along to other servers, and so on. This method eventually replicates messages to all machines in the Usenet universe. This cumbersome point-to-point architecture is the result of its Usenet’s Unix-to-Unix-Copy-Protocol (UUCP) origins, a technology that enabled non-Arpanet institutions to exchange files and email via forwarding mechanisms. Assembling and constructing UUCP bang paths (the mechanism that controlled the forwarding path) was an art because the system administrator had to know the transmission speed, availability, and reliability of each node.

Annals on Usenet

At the time of this article, there were 141 messages that mentioned IEEE Annals. The most popular citation was “The US Bombes, NCR, Joseph Desch, and 600 WAVES: The First Reunion of the US Naval Computing Machine Laboratory” by John A.N. Lee, Colin Burke, and Deborah Anderson (vol. 22, no. 3, 2000, pp. 27-41). As a result, when Usenet emerged from Duke University in 1980 its earliest users were extremely technically savvy—or at least friends with someone who was. The poor man’s Arpanet, early Usenet messages provide a snapshot—albeit skewed for obvious technical reasons—of computer-geek culture at the time. Less constrained by traditional Arpanet cultural norms, Usenet denizens established newsgroups to discuss everything from differences in interface message processing (IMP) hardware to arms control.

When the University of California, Berkeley, bridged the gap between Usenet and Arpanet in 1981, message traffic began to grow. Usenet began replicating digests of popular, long-standing Arpanet mailing groups, such as SF-LOVERS (Science Fiction Lovers). In 1985, after the introduction of the Network News Transfer Protocol (NNTP), which enabled Usenet news servers to distribute messages over TCP/IP, traffic exploded. From the late 1980s to the widespread adoption of the Web, Usenet was one of the primary forums for formal and informal interaction. Geeks posted inquiries regarding the intricacies of Unix make files, while heated debates raged regarding aquarium water chemistry.

Because of its technological environment, originally Usenet was not widely approachable by the general public. In the 1990s, as the Internet began to spread, some specialized Internet Service Providers (such as CompuServe, Delphi, and America Online) eventually tried to integrate Usenet newsgroups into their proprietary forums. However, these attempts were only partially successful for a number of cultural and technological factors. For example, for several years after AOL provided Usenet access, the community commonly derided AOL users as clueless newbies. The advent of World Wide Web communities has further marginalized Usenet.

But Usenet is not dead. Despite the frequent flame-war outbreaks, it remains a valuable discussion and problem-solving space for the technical community. Messages in groups such as comp.os.ms-windows.nt.setup continue to provide technical solutions and advice, while community exchanges are still conducted in dc.dining and sf.general. Significantly, it is a formal and informal dialog that’s recorded and archived.

However, although the Usenet archives in Google groups are a rich and colorful source of material, we must be aware that in these post-9/11 times it is an incomplete archive. Google, along with other Internet archives, has quietly purged sensitive material. For example, in the
mid-1990s John Pike of the Federation of American Scientists posted a series of Spot the Spook posts in dc.general describing unpublicized national security facilities (such as the Secret Service Training facility) in the Washington D.C. area. Today, these threads have vanished from Google although a few remnants persist.

Courtesy of Dejaview, then Google, the numerous Usenet messages have been preserved. From the controversy of the Great Renaming (a notable early controversy when the news group hierarchy was completely redesigned) to the emergence of Kibology (a Usenet satire of religion, especially Scientology) to first-hand accounts of 9/11, the Google Groups archives capture a part of the Internet for history.

References and notes
1. Given the vagaries of early nonbattery PCs, clocks that required the user to manually input the date and time and used Jan-1-1980 as a default, readers should carefully assess 1980- to 1983-dated posts.

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