The (Not-So) New Media

From first communities to social software

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New Media

- Usually means new trends in mass media making use of information technology: Internet (mostly WWW), interactive multimedia etc

- Also known as Web 2.0 or social software

- Sometimes (mis)used as a buzzword

Two kinds of information

- <u>Passive</u> - "already on Internet", can be retrieved with search engines or a variety of other tools (web databases etc). Simply put, the stuff we can google

- <u>Active</u> - "live", dynamic information that is in the heads of the people participating in online communities (aka "not yet in the Web") – retrieval means active communication with people and constructing the knowledge from pieces of information

Early online communities

- Among the first: 19th century telegraph operators

- 1973:

    – Community Memory in San Francisco

    – PLATO Notes at UIUC

- 1974 – EIES at New Jersey Institute of Technology

- 1979 – MUD1 at Essex University

- 1985 – WELL (Whole Earth 'Lectronic Link) in California

Community Memory

- The first computerized bulletin board

- UC Berkeley 1973-75, started as a research/social project (Resource 1)

- SDS 940 computer at the university and a teleprinter at a local music store, 110 baud modem connection

- Everyone was free to read messages (writing had a 25 cent charge) - 'Information flea market'

- Benway, the first online persona

http://images.computerhistory.org/revonline/images/102682838p-03-04.jpg?w=600

PLATO

- G.I. Bill 1944 – WWII veterans were entitled to free education (including college level), increasing remarkably the workload on higher education. Automation was seen as a solution

- The University of Illinois at Urbana-Champaign (UIUC) – relatively away from the two cradles of IT on the coasts

- ILLIAC supercomputer series – from 1952 to today

- PLATO I (Programmed Logic for Automatic Teaching Operations) launched in 1960. Subsequent systems worked up to 2006

- PLATO Notes (1973) – considered the first online community

- Considered a pioneer in several fields of IT:

  – Plasma display and touchscreen

  – Predecessors of sound cards and MIDI

  – Several game types

  – Various educational technology (e.g. online testing => Pearson VUE)

  – Screen sharing

  – Message boards and online chat

http:// images.computerhistory.org/ revonline/images/500004894-03- 01.jpg?w=600
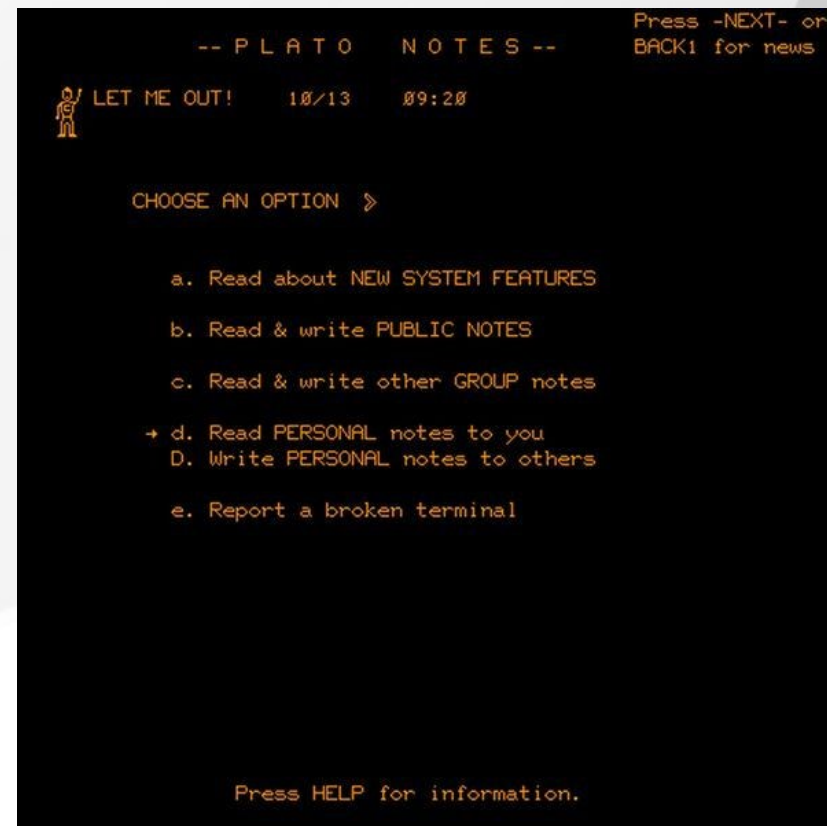
Mailing lists

- Likely the oldest component of New Media still in use: started in 1973, soon after the introduction of e-mail

- A swarm of lists with different goals and rules, see http://www.tile.net/lists/

- Netiquette – the basic rules of good behaviour

- Moderation

- Recommended reading: How to Ask Questions the Smart Way by Eric S. Raymond (http://www.catb.org/esr/faqs/smart-questions.html)

Usenet

- A hierarchical discussion system with a long tradition (created in 1980 at Duke University). In decline today, yet has an important part in Internet history and substantial archives containing materials on many important events (e.g. birth of WWW or Linux)

- Hierarchical network of topical discussion groups

- Technically similar to mailing lists, but is a 'pull medium', users need to download the material by themselves (ct mailing list 'pushing' the content to mailbox)

Example

- comp.os - computer operating systems

    – comp.os.ms-windows – MS Windows OS-s

        • comp.os.ms-windows.apps – applications for MS Windows

        – ….

- Works as a network of Usenet servers. Every server owner would choose which groups to serve – messages to these groups will be available from the local server, and all messages posted locally will be forwarded to other servers catering to the same newsgroup

- Needs client software (for a while, e-mail clients did Usenet too)

8 classic hierarchies + 1

- comp. - computers

- misc. - various

- news. - topics about Usenet itself

- rec. - recreation (music, sports etc)

- sci. - natural and exact sciences

- soc. - society and culture

- talk. - various (often controversial) topics

- humanities. - humanities (languages, philosophy)

- In 1987, the *alt* was added – free creation of new groups

Later developments

- Regional groups (ee. was quite popular for a time)

- Web gateways

- http://groups.google.com/

- Gradual shift to binary content (incl. some shady kinds)

  - At first, the 60K character limit for articles

  - Turn of the century: new ways to add binary files

  - Gradual growth of binary traffic (up to today!), decline of traditional content – AOL stopped in 2005, Duke (the birthplace) in 2010 and news.unc.edu in 2011
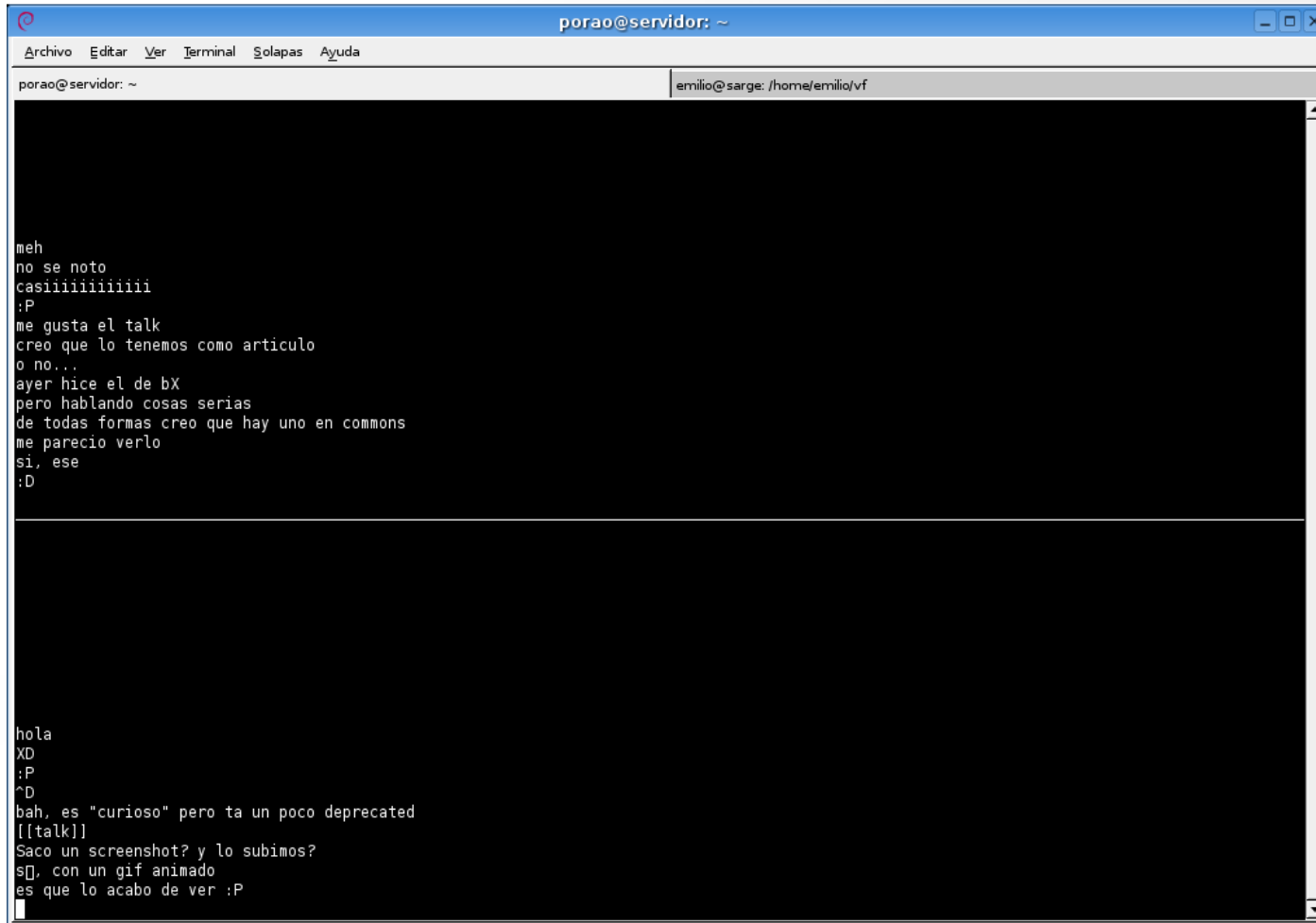
- Readers were reprofiled for binary files

Online journalism

- 1970 – NY Times starts collecting abstracts of articles online

- 1971 – Project Gutenberg (https://www.gutenberg.org)

- 70-s – news agencies offer 'teletext'

- 80-s – commercial news channels

- 1991 and onwards – the web media

- 90-s – web versions of papers and journals, news portals, later the blog boom

Realtime chat

- A number of solutions from different times:
    - Unix Talk
    - Talkers
    - MUDs
    - IRC
    - Instant messaging
    - Social networks

talk

https://upload.wikimedia.org/wikipedia/commons/5/5e/Unix_talk_screenshot_01.png

Talker

- A simple "virtual world" with rooms to communicate on three levels (private, room, world)

- Boomed in late 90s, later replaced by IM and social networks

- Talker.com hosted ~100 talkers in 90s

- Classic ones used Telnet, later ones had Web interfaces

- Once in Estonia, every university, trade school (and many secondary schools) had one

- Formed several strong virtual communities that also acted offline, some still exist (perhaps in other forms, e.g. on Facebook)

A pioneer in .ee: map of Anna's (~1995)

```
==========================================================
            Jututare skeem kui niisugune
==========================================================

               PALKON    JUTUTUBA
                 |          |
MAGAMISTUBA-----KORIDOR-----ESIK-----PELDIK    KONKU
    |        |    |  |  |    | |    |        |
 VANNITUBA--+    |  | KOOK   | | +-ELUTUBA-----BAAR---SAUNAESIK
    |            |  |        | |                |          |
 POONING--+     |  |        | +---KABINET   BASSSEIN-SAUNARUUM
          |     |           |                  |      |
       PANIPAIK |           |                  +-----LEILIRUUM
                |           |
             JARV-----AED-----KOERAKUUT
                |
    METS-----+-----MAGI
       |          |
       +---LAGENDIK--+


==========================================================
```
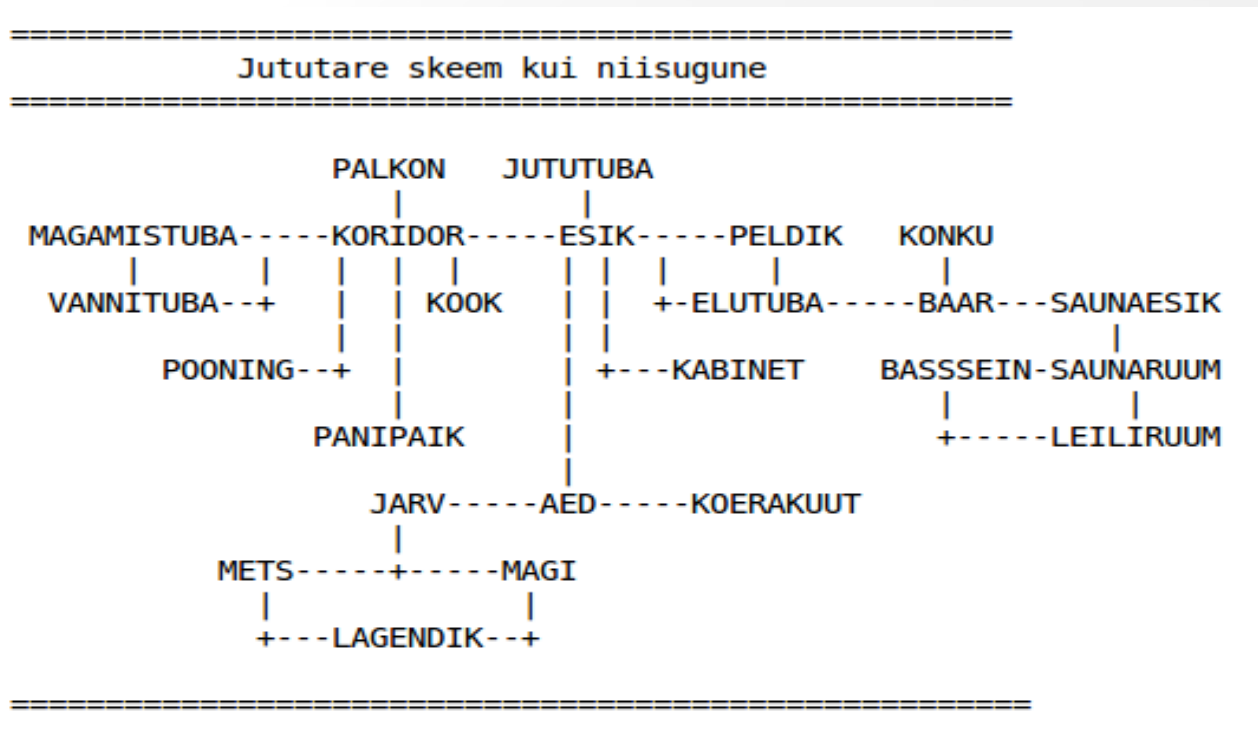
MUD

- *Multi-User Dimension/Dungeon*

- Technically similar to talker, but adds game functions (objects, mobs, NPCs, combat, quests) and experience gathering (levelling)

- RP vs XP vs PK (ct Bartle's four gamer types!)

- Text vs graphics

- MUD vs MUSH/MUSE/MUX

- New century – MMORPG and MOBA

Take a walk in Grey Havens: MUME

```
*>w
Guild Street
There is an old street-lamp on the border of the street.
A little dog is here.
A woman is here, looking for someone to chat with.
A little boy is here, running around.
Exits: East [South] West.

*>w
Guild Street
There is an old street-lamp on the border of the street.
An old man is walking around, cleaning up.
Exits: East West.

*>w
Guild Street
There is an old street-lamp on the border of the street.
Exits: East South West.

*>s
The Guild of Warriors
A weapons rack stands against the wall.
Huor of Dor-Lómin is standing here, ready to teach his arts.
Exits: North [West] Up.
```

IRC

- Internet Relay Chat, 1988 by Jarkko Oikarinen

- Channels (a bit similar to Usenet groups)

- Source of most terms used in chat (bot, ban, kick...)

- Declining in use, but like Usenet has historical importance (e.g. the Soviet coup in 1991 was largely reported over IRC)
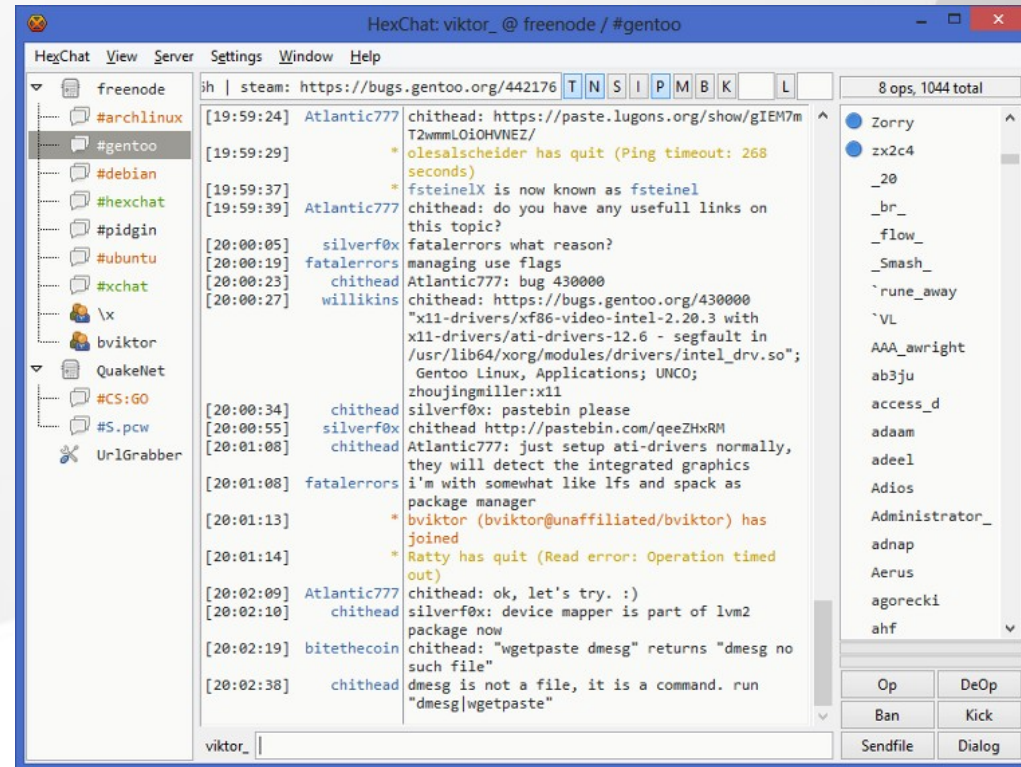
https://upload.wikimedia.org/wikipedia/commons/5/56/Screenshot_of_HexChat_in_Windows_8.png

Search engine

- Software that gathers online information, indexes it and allows searching by keywords

    - First experiments (Wandex, AliWeb) 1993, the first full-text production system was probably the WebCrawler by Brian Pinkerton (1994)

    - 1995 – AltaVista (Digital Corp). Multi-language support

    - 2001 – Google

- The main mechanism – the periodically web-crawling 'robot'. Rapid expansion of the Web => less effective

- The results can be influenced from both sides (engine and Web). SEO and Google bombs

Web Directory

- In essence, a managed collection of web links

- The first large player: YAHOO (Yet Another Hierarchical Officious Oracle – in its original form), started out as Jerry's Guide to the World Wide Web – David Filo & Jerry Yang 1996

- Nowadays is typically merged with other services

- Compared to search engines, the database is managed more by hand

Yahoo on Feb 1, 1997

https://web.archive.org/web/19970201021647/http://www3.yahoo.com:80/

Web forums and -groups

- Web forums added a web interface to earlier board systems

- A wide variety of services and software available today (e.g. Nabble.com, phpBB etc)

- Webgroup - web-based crossover with mailing lists and Usenet

- https://groups.yahoo.com and https://groups.google.com

- At the user's preference, can work as

  - a web portal (similar to e.g. Gmail)

  - a mailing list

  - a newsgroup

Instant messaging

- ICQ 1996 (*I seek you*)

- MSN Messenger

- AIM

- Yahoo! Messenger

- Jabber

(Web-based) social networks

- Predecessors in 90s - TheGlobe, GeoCities, Tripod

- Friendster, Rate.ee (2002)

- MySpace, Orkut, LinkedIn, Bebo (2003)

- Facebook (2004)

- From Gazzag.com to Firesheep

- http://gadgets.boingboing.net/2009/08/28/the-venn-diagram-of.html :D

Graphical virtual worlds

- Earlier used as venue for games

- Possibly the first: WorldsAway 1996 (CompuServe) – other candidates also include PLATO and LucasFilm's Habitat (1986-88)

- Second Life 2003

- OpenSimulator 2007

- IT College simulator (OpenSim) 2008-15, again somewhat active since 2019

- Main point: metaverse or alternate reality; not a ready-made world but rather a platform for builders, designers, teachers etc

Second Life / OpenSimulator

Newsfeeds

- A method to forward (aggregate) online content (usually news or other rapidly changing info) to other web pages or special reader software

- 1996 – Netscape (RDF) jt

- Currently two XML-based standards - RSS and Atom

- An important component of blogs and other new media channels

Blog

- Online diary or journal

- First examples from very early days (incl the very first web page of Tim Berners-Lee). Justin Hall in late 90s

- The boom started with the advent of RSS

- Substantial influence on traditional media, sometimes to whole society (e.g. Iran)

- Different: generic/topical, text/pictures/links, comments allowed/ disallowed, written by one/many etc

Wiki

- Hawaiian wiki-wiki (< Quickly)

- 1995 – WikiWikiWeb, Ward Cunningham

- Self-regulation, "Order through disorder"

- 2001 - Wikipedia

- Currently (February 2020) over 52 (in one year, +3) million articles in 309 (+6) languages - English has 6 (+0.2) million, Estonian has over 206 000 (+19 000; 43th in the world, +1)

- Increasingly common elsewhere (companies, e-learning...)

Because we can (again)

- Wikipedia (http://www.wikipedia.org

- Flickr (http://www.flickr.com), photos

- YouTube (http://www.youtube.com), videos

- SlideShare (http://slideshare.net), presentation slides

- FanFiction.net (http://www.fanfiction.net), Fan fiction

- Also FB, Snapchat, Linux and other FLOSS...

Web 2.0

- Another popular term

- Network (Web) as a platform – browser as the "killer app" (e.g. Google Docs)

- Dynamic, rapid changes

- Participation, inclusion, communities

- Technologies: XHTML and HTML5, CSS, LAMP, AJAX, tagging, blogs, RSS, wikis, forums

Internet of Things

- Internet began as a computer network

- Now there are phones, TVs, watches...

- ... increasingly also toasters and fridges

- Needs the breakthrough of IPv6 – the address space of v4 is too limited

- On the one hand, ample new opportunities. On the other, similarly ample threats (PIBKAC, privacy, security, Big Brother, junk…), possibly creating the Internet of Bad Things

Net Neutrality

- One of the reasons for the rapid spread of the "Internet of old" was neutrality of data – no discrimination by apps, devices, owners etc

- Alas, some businesspeople are inventive (e.g. the original MSN)

- Danger of artificial scarcity (ACTA etc)

- The EU 'telecom package' of 2009 and ongoing NN wars in the U.S. – results remain to be seen

Creative freedom

- The former "intellectual property" has started to falter:

    - Free software (GPL etc)

    - Free documents (FDL, CC)

    - Free research (Open Access)

    - Free content (Creative Commons, Free Art License)

    - New repositories (Flickr, Scribd, SlideShare etc)

For conclusion

- Internet as a media channel has broader influence than it may seem

- Traditional media and legal system are changing

- Quantity vs quality

Thanks