1. Submit a position paper of no more than six pages. The paper should include

(a) A discussion of your understanding of "coherence", as a theoretical or analytical construct, or as a practical result of the use of a CMC system.

For me "coherence" is the integration of the multiple facets of a social space into a composite perception that guides social interaction. In the physical world the coherence of perception is the subject of several areas of sustained inquiry of which the phenomenological, ethnomethodological, and interactionist approaches are my preferred models. In these methodological and theoretic traditions the coherence of the social world is an actively and interactively constructed achievement that is built from ritual exchanges and presentations of self. These activities, in turn, rest upon the capacity to perceive many (frequently subtle) details of social settings and interactions. In many computer mediated environments these details are latent or obscured, making the application of many pre-existing social practices difficult or impossible.

I see a major goal of the evolution of computer mediated interaction to be the production and presentation of facets of social context that can be reintroduced. As a design goal, then, "coherence" is the functional integration of multiple data types into a unified whole. Since there are many facets to social cyberspaces the integration of data from multiple dimensions at multiple scales is a meaningful challenge. When accomplished, users have the ability to generate complex understandings of social cyberspaces with minimal effort.

(b) A description of your approach to analyzing or designing to support coherence, applied to a specific CMC system or data set.

My main focus is on the enhancement of asynchronous conversational systems to include information about multiple dimensions of authors, conversation spaces, and conversations. My initial area of exploration is Usenet which for a number of reasons (size, scope, social organization) offers a great test for evaluating tools that enhance large conversational spaces. The Netscan project is a social accounting reporting service for the Usenet. Netscan provides reports on the activity of newsgroups and the histories of authors in those newsgroups. The Microsoft Collaboration Technologies Group created Netscan (available at http://netscan.research.microsoft.com) as a service to the research community and a test-bed for enhanced community services.

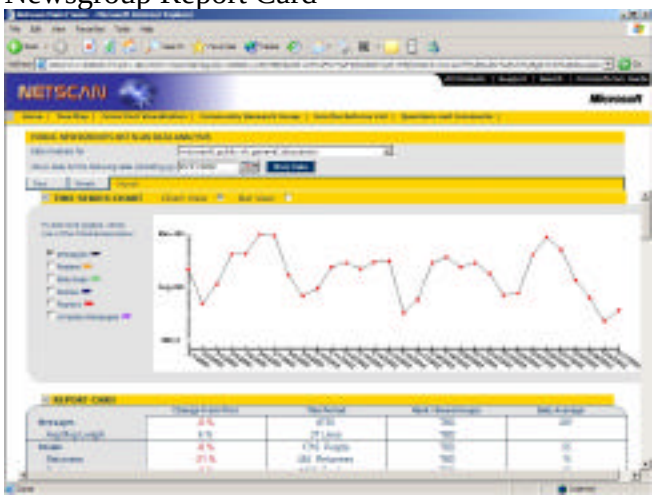
(c) Examples of the graphical representations produced by your approach, and some discussion of what they reveal about or how they support coherence.

Netscan contains multiple components as described below:

Netscan Newsgroup Data Grid

Netscan offers reports on all Usenet newsgroups that we receive in our news feed, currently 103,000 newsgroups. Through Netscan you can access newsgroup reports for any day, week, or month starting from the first of January, 2000. Netscan can be used to track the activity and read the most active threads in any newsgroup.

Newsgroup Report Card

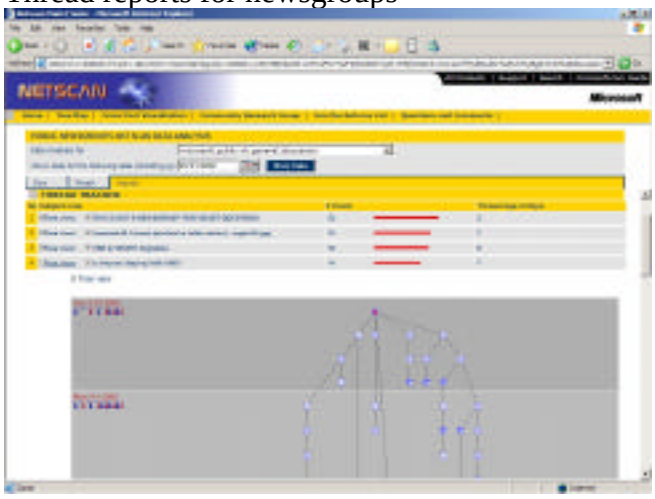


Get a focused report on any individual newsgroup we track, including graphical representations of daily activity for each month.

Author Tracker

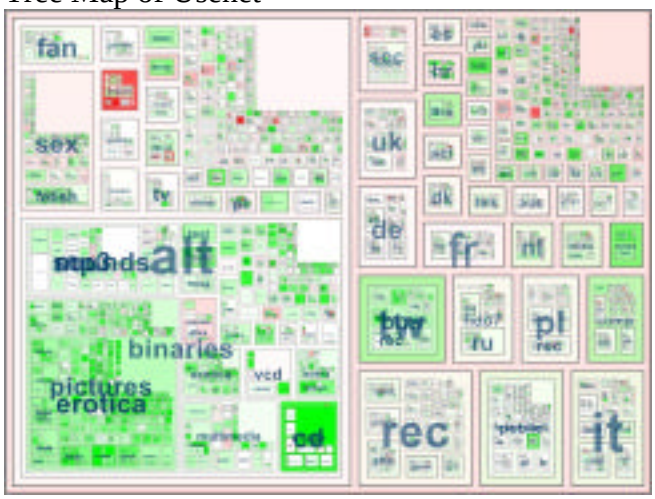
Identifying the most valuable authors in each newsgroup can be an effective vector for finding the most valuable content. To explore this approach, Netscan now offers an Author to Thread report that lists the most frequently active participants in each newsgroup and the threads they contributed to most often. This can be a great way to highlight the most valuable content in each newsgroup.

Thread reports for newsgroups



Sorting threads by size should be a common news browser feature, but it isn't. Netscan now provides reports on the biggest threads in every newsgroup for every day, week, and month in the data set. Each thread is visualizated in an effort to highlight structure and temporal patterns in its development.

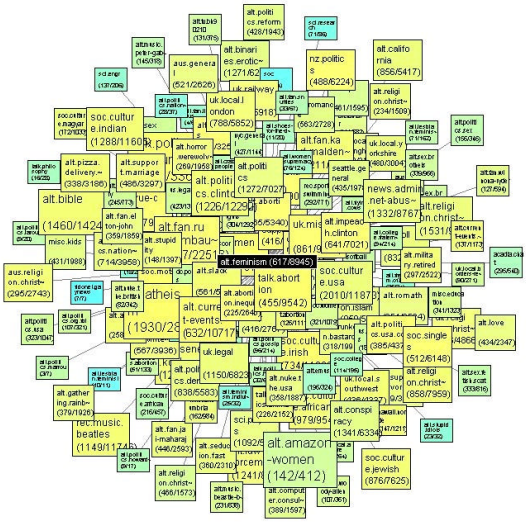
Tree Map of Usenet



Get an overview of the entire Usenet at one glance. Tree Maps are an interesting way to visualize large hierarchical structures -- like Usenet. Our Tree Map service allows you to zoom into just the neighborhood of newsgroups you are interested in and generate maps for any month in the data set.

Crosspost network visualization

See the patterns of interlinked newsgroups starting from any set of anchor newsgroups you select.



2. The position paper should include, as an appendix, a profile of yourself consisting of:
(a) a short biography (no more than 250 words)

Marc Smith
www.research.microsoft.com/~masmith
http://netscan.research.microsoft.com

Marc Smith is a research sociologist at Microsoft Research specializing in the social organization of online communities.

He is the co-editor of _Communities in Cyberspace_ (Routledge), a collection of essays exploring the ways identity, interaction and social order develop in online groups.

Smith's research focuses on the ways group dynamics change when they take place in social cyberspaces. Many groups in cyberspace produce public goods and organize themselves in the form of a commons. Smith's goal is to visualize these social cyberspaces, mapping and measuring their structure, dynamics and life cycles. He has developed a web interface (http://netscan.research.microsoft.com) to the "Netscan" engine that allows researchers studying Usenet newsgroups to get reports on the rates of posting, posters, crossposting, thread length and frequency distributions of activity.

This research offers a means to gather historical data on the development of social cyberspaces and can be used to highlight the ways these groups differ from, or are similar to, face-to-face groups. Smith is applying this work to the development of a generalized community platform for Microsoft, providing a web based system for groups of all sizes to discuss and publish their material to the web.

Smith received a B.S. in International Area Studies from Drexel University in Philadelphia in 1988, an M.Phil. in social theory from Cambridge University in 1990, and a Ph.D. in Sociology from UCLA in 2001.

(b) the discipline(s) you are situated in

Sociology

Interactionist traditions: ethnomethodology, ethnography, symbolic interactionism.
Social Network Theory
Collective Action Dilemma Theory

Computer-Human Interaction

User interface design
Information visualization

(c) a brief description of your relevant analytical and/or design work, with references (URLs preferred)

See http://netscan.research.microsoft.com

(d) a pointer to someone else's design or analysis that you think is interesting (URLs preferred)

Related Links

Tree Maps for space-constrained visualization of hierarchies
Cyber Geography Atlas
MIT Media Lab Sociable Media Group
Conversation Maps
Microsoft Research Social Computing Group
Microsoft Research Collaboration and Multimedia Group