1 Visualizing Conversation

The article discusses methods of visualizing data about conversational platforms that is not normally easy to obtain. It discusses two projects: Chat Circles, which is an interactive chat platform, and Loom, which is a visualization of threaded conversations on Usenet. The need for these programs emerges from the limitations of text-only conversation software such as chat and email. Face-to-face communication employs a multitude of gestures, pauses, interrupts, expressions, and other visual information that text systems lack.

The paper presents Chat Circles as a solution to some of the problems with text-only real-time chat. Some things that are not normally visible are represented, such as the size of the audience, the level of activity of the members, and the organization of the members into separate conversational groups. It does this by representing members as circles whose size is in proportion to their frequency of utterances. To indicate where the user’s attention is focused, they can move the circle around the screen in order to “hear” conversations on another part of the screen.

This usage of visualization seems like it provides several benefits, especially that it provides a sense of the size and makeup of the audience, for instance the proportion and distribution of lurkers. Having the user’s avatar shrivel with disuse seems like it would be a good incentive to maintain an active conversation. However, outside influences on the user’s attention are not always an indication that the user is becoming disinterested; it might be better to explicitly indicate a status change visually. Also, the system might punish users who have the ability to maintain more than one active conversation at a time.

The Loom program provides quick overview information of Usenet groups by visually representing information about both the level of activity and mood of the messages. As long as it is reasonably accurate, the automatic categorization of message emotion could be a very valuable tool to decide whether to participate in a group. The granularity could be extended to threads to quickly determine which threads have been taken over by flames. The view which shows activity on the group with dots over time could be modified to indicate the mood of the posts those users made; this is important to tell the difference between a dedicated poster and a troll who won’t leave.

It would be interesting to see user feedback for these projects, especially to see how Chat Circles affects user interaction.
2 Medium Effects: Turn-Taking and Back Channels

This chapter presents two effects studied in discourse: turn-taking behavior and information back channels, as they appear in MUDs. Turn-taking behavior has to do with the way people in a face-to-face conversation alternate speaking roles. Since MUDs are text-only, they lack many of the mechanics of face-to-face conversations that help let the speakers know when it is their turn to speak (or stop speaking). In two-person conversations, it is an issue of alternation, while in multi-user environments, this behavior is sometimes studied in terms of holding the “floor.” The conclusion of the author is that users adapt their behavior to accommodate the technology available, developing tricks and behaviors that accomplish some of the same task as facial cues, gestures, gaze, and “back-channel” comments.

In a MUD (or other text chat systems), a statement is sometimes broken up into multiple “utterances,” which are typed then entered sequentially. Whether in two-person or multi-person chat, sometimes an interjection occurs interleaved which renders the yet-unsent portion of the statement irrelevant, wrong, or contextually different. The author theorizes that MUD users alleviate this effect by making shorter utterances, bringing down the average number of words per posting. The author also says that long posts decrease the real-time sense of presence, which is important in a MUD. The author’s measurements indicated further that the number of words per post fell as the number of members in the group increased.

MUD users developed mechanisms that help with the problems of turn-taking and back-channels. Sometimes posts are prefixed with a single “starter” word, like “so,” “well,” or “then.” These starters help the speaker claim the “floor” so that the real post won’t be interrupted. Also, the emote mechanism is able to act as a back-channel in place of absent visual cues. The author found that in larger groups, this back-channel information made up a substantial portion of all the posts, as in a “party atmosphere.”

The paper is very informative on methods of discourse analysis and was very insightful in its comparisons of the MUD behaviors to real behaviors. The author’s conclusion that a floor-based analysis is more fruitful and that turn sizes are smaller seems well founded based on her analysis, however, a larger sample size would have made the point more convincing. Furthermore, the samples chosen include the author herself and seem to repeat many of the same members. It is not clear that these conversations are really representative. That said, the author presents a wide variety of different tricks in the MUD universe and the examples do bear them out.
3 Managing the Virtual Commons: Cooperation and Conflict in Computer Communities

The authors’ analysis of social organization on Usenet rests on their choice of the “Commons” as an analysis tool. They begin by defining and elaborating the free-rider problem and the tragedy of the commons. They argue that there are electronic resources that can be analyzed in these terms. Bandwidth, or attention, refers both to the physical bottleneck of processing and storage that news servers do, and also the amount of text users are willing to sift through for a given amount of information. If the “signal-to-noise ratio” is too low, it becomes difficult to communicate and the group breaks down. Another resource the authors claim to be held in common is information. On a group, if every member simply read and did not contribute or answer questions, the value of the group would be nil. Therefore, the argument is that the informational and helpful content of the group is a shared resource. Lastly, a resource of the group is decorum. The quality and tone of the messages is the responsibility of the posters. Some groups are very orderly and well-mannered and some are not, which has an impact on real value.

Approaching the problem of online communication in this way is very unique, and probably very well suited to Usenet where there is (supposed to be) a sense of community on a group. However, it is hard to agree about the second resource category, information. Surely it is important that a group have active contributing members, but given that is the case it does not matter how many lurkers the group has. Lurkers can’t do anything to negatively affect the group’s value. It might be appropriate to call them free-riders, but they should not be in the same category as the other resources which are actively harmed by misuse.

The authors analyze what guidelines affect the success of social groups and whether Usenet has these properties. Briefly, the groups of properties are Group Size and Boundaries, Rules and Institutions, and Monitoring and Sanctioning. They argue that one area where Usenet is deficient is in defining group boundaries. Things like cross-posting and trolling definitely threaten the sanity of some groups. Besides mediation, there is not much to be done about this problem. Rules and Institutions is an interesting study. Usenet has developed its own “official” rules of decorum, and they are frequently quoted. It is not clear, however, that they have a large effect. Trolls, flamers, and especially the large amount of newbies are all hard to reach with regulations. Finally, as to monitoring and sanctioning, the authors point out that an electronic medium makes it easy to monitor behavior since every post is logged. However, basically the only sanctioning available to (non-moderated) groups is the kill-file. There is not a standard graded sanctioning mechanism.

The authors make a solid analysis of how Usenet falls short of some of the guidelines that lead to successful societies. While it is an interesting study, it’s not clear that any recommendations can be readily implemented due to the distributed nature of Usenet, or if they could, that the diversity and energy of Usenet would survive a more authoritarian structure.