

Friends, Foes, and Fringe: Norms and Structure in Political Discussion Networks

JOHN KELLY, DANYEL FISHER, AND MARC SMITH

1 Introduction

The Internet offers numerous modes of online discussion, with many different forms of control. Some empower one person to control agenda and content. Blogs are perhaps the most extreme version of this, in which one person contributes most of the content and can censor, delete or disallow feedback from others. Moderated discussion groups offer a less extreme version of such control, in which discussants are expected to carry on the majority of the discourse. Still other forums allow collaborative, group controls. Slashdot is a premiere example, in which users deploy randomly assigned rating points to grade particular comments up or down, making them more or less visible to subsequent readers (Lampe 2004). If we envision a continuum of control, from the dictatorial blog on the one hand, through the constitutional monarchy of moderated discussion, to the kind of Athenian democracy (power being randomly assigned to ‘citizens’ for short durations) of Slashdot, the extreme anarchic pole is perhaps best represented by Usenet (Pfafenberger 2003).

Except in the case of a relatively few moderated discussions, Usenet offers no overt forms of control to any participant. At most, one author can add disfavored others to their ‘killfile’ and thus turn a deaf ear toward them

But they cannot diminish any other author's access to the forum, and their only real power is to choose people to engage with, by deciding which posts to reply to. And yet, despite the 'anarchy' of Usenet, its newsgroups feature stable, measurable structural characteristics. Somehow, order is maintained. Most interestingly, these regular structures vary greatly according to the social purpose of the newsgroup. For instance, a technical newsgroup, populated mainly with questions from the befuddled many and answers by the expert few, has a very different network profile from a support group, in which many regulars send welcoming messages to newcomers and there are broadly distributed exchanges of advice and emotional solidarity (Turner, Smith, Fisher, and Welser 2005).

Political newsgroups have their own distinctive network characteristics, and offer an interesting lesson in how regular structural features emerge from individual-level choices (Fisher, Smith, and Welser 2006). Despite persuasive speculation (Sunstein 2001) and the tentative findings of some early Internet research efforts (Wilhelm 1999), online political discussions need not necessarily become echo chambers of the like-minded. The tendency to political homophily clearly exists in blogs (Adamic and Glance 2005) and seems to appear as well in more controlled environments featuring gatekeepers of one sort or another, but the kind of open, anarchic discussions found on Usenet have quite the opposite tendency. We have previously found that debate, not agreement or reinforcement, is the dominant activity in political groups (Kelly, Fisher, and Smith 2005).

Consider the implications of a genre of discourse based around debate rather than information-sharing, emotional support, social coordination, or some other purpose. Clearly, the latter sorts of groups feature rather decisive boundary maintenance. In a technical newsgroup about Unix (for instance), someone offering a recipe for meatloaf would probably be ignored. Likewise someone posing as a Unix expert but offering fallacious advice would soon be identified as a charlatan (Donath 1999), and likewise ignored. In a cancer support group, an author attacking the attitudes of other authors and offering detailed disputations of their posts would be denounced and subsequently ignored by the community. In most newsgroups, antagonism and perceived wrongfulness are a ticket to rapid ostracism through the collective silence of the core author population. 'Newbies' are admonished not to 'feed the trolls'—that is, participants new to the community are asked by seasoned members not to respond to blatantly provocative posts.

By contrast, it would at first blush seem like political newsgroups have no need of such boundary maintenance. As we found previously, the great majority of authors (let us call them *fighters*) preferentially respond to mes-

sages from those on the other side; they respond to opponents more often than their allies. A second, smaller group of authors (we can call them *friendlies*) direct their attention to allies and refuse to engage opponents, despite the fact that they are routinely ignored by the former and harangued by the latter. Because their opponents do not reciprocate their discursive predilections by ignoring them, the *friendlies* are just as central to a political newsgroup's core discussion network as the much more numerous *fighters*. In a political newsgroup, posters cannot be left alone by the opposing cluster even if they try. Indeed, it would seem that the only way to opt out of the fight is by opting out of posting to the newsgroup altogether.

The boundaries of the group are illustrated by a third type of author, even more rare, who tries not to be ignored, and nevertheless usually is. This type of author—the 'fringe'—helps show how boundary maintenance is at work in political newsgroups as well.

We discovered this type of author serendipitously, while looking at ego network diagrams of core political newsgroup authors. In the following section, we will take a look at some of these network diagrams and see how they illustrate the link between authors' microlevel choices about whom to talk to, and macrolevel structure of the discussion network. We also see boundary maintenance at work in an environment where most 'enemies' are *good*, in the sense of being in demand, but how some exceed the bounds of appropriate opposition.

2 Political Discussion Networks

The current paper builds on the same data as our previous research (Kelly, Fisher, and Smith 2005), which contains a detailed account of the base data collection and analysis. In brief, core authors were identified from eight political newsgroups during November 2003. Microsoft Research's Netscan tool was used to capture a wide range of data on author behavior and thread structure and to extract network data on core author behavior. A *core author* is one who was among the twenty to forty most frequent (in terms of days active) contributors to the newsgroup during that month. A corpus of threaded political discussions was assembled containing hundreds of posts by all core authors. These were coded for evidence of political attitudes and for aspects of discursive behavior. Authors were clustered according to political attitudes, with only a small few found to be unclassifiable.

In the previous work, we showed that political newsgroups were found to have some distinctive features:

- Almost all participants can be meaningfully assigned to distinct ideological or issue position clusters, depending on the particular newsgroup, for instance *left* and *right*, or *pro-choice* and *pro-life*.

- Most newsgroups are bipolar or organized around two dominant opposing clusters. In principle, some newsgroups could be multipolar: one of the eight studied in the previous work appeared to be centered around three dominant sides.
- Replies to posts—and thus newsgroup interaction—are overwhelmingly across ideological or issue clusters, not within them.
- Most authors choose to reply to messages by their opponents over their allies and respond to far more messages on average from individual opponents than to individual allies. Further, Fisher, Smith, and Welser (2006) argue that political group members prefer to respond to people who are well embedded in the conversation over new members.
- Those rare authors who prefer to reply to allies are themselves nevertheless disproportionately responded to by opponents. Because of these authors, ‘in-links’ (i.e. responses to an author by others) are very highly predictive of that author’s political position, much more so than their ‘out-links’ (i.e. whom they choose to respond to).
- There are tendencies toward balance in political newsgroups, in the following two patterns:
 - Groups focused on a range of issues and featuring clusters best described as *ideological* (left/right, liberal/conservative, socialist/capitalist, etc.) are generally balanced in both the populations of regular authors belonging to each cluster, and in the amount of message traffic generated by each cluster.
 - Groups focused on a single contentious issue, like abortion or Middle East politics, are generally unbalanced in the population of authors belonging to each *issue-position* cluster. Yet the minority authors post more messages on average, and the message traffic generated by the clusters is thus significantly more balanced than the author populations.

As we will see in detail, these political and discursive tendencies yield a network structure in which an author population of discursive opponents, though politically clustered into two (or potentially more) distinct groups, are tightly bound in a central discussion core by dense bonds of replies that tie opponents to one another more tightly than allies.

This does not mean that authors do not reply periodically to people who agree with them. We can show this visually by looking at a network diagram of the core authors’ reply structure. If a node is a core author, and a network tie is considered to be a single reply, the core author population is so densely connected as to form almost a complete graph, i.e. a network is

which all nodes are directly connected (Figure 1). To see the structure more clearly we must raise the number of replies that constitute a link, filtering out weaker bonds (Figure 2). Figures 1 and 2 show linked discussion cores from the newsgroup *alt.politics.bush*.

In those figures, nodes representing the core authors are laid out in a circle; authors who share a political position are placed near each other: liberals near other liberals (circles); conservatives near other conservatives

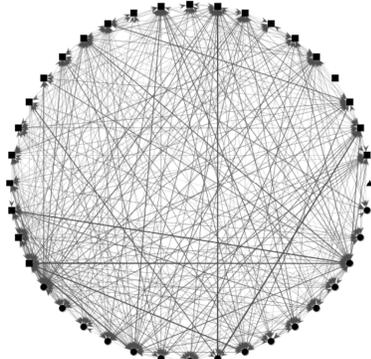


Figure 1: link = 1 reply

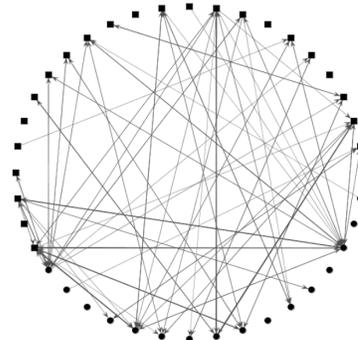


Figure 2: link = 6 replies

(squares). Edges with arrows connect replies: an author ‘points to’ another author by replying; more replies get a thicker edge. Figure 1 shows that virtually all authors have replied to each other at some point or another, while Figure 2 shows that the dominant portion of replies falls across groups. The cross-cluster pattern of replies is very clear when the threshold of replies that define a link is increased.

3 Author Behavior and Network Position

Differences among types of political authors arise from their discursive behavior, and can be seen in (1) their choices about whom to reply to, (2) decisions by network members to reply to them, and (3) their position in the network structure arising from *a* and *b* (in combination with the same relationships among other actors in the network). In Figure 3, we can see microlevel features of author behavior for an exemplar of each of the tree types and the network’s response. In these figures, too, authors from the two dominant political clusters are represented by squares and circles. Minor players—not in the core—are drawn as smaller gray shapes.

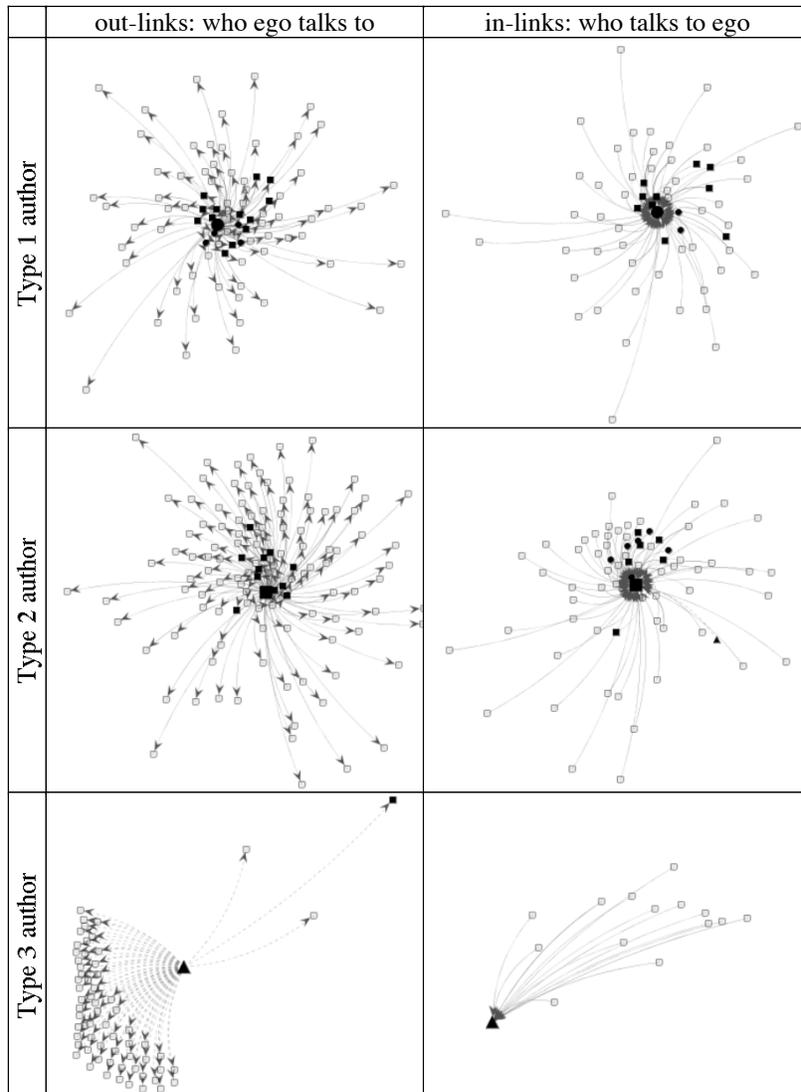


Figure 3: author choices and network response

A *fighter* (type 1 author) preferentially responds to opponents (out-links) and is likewise responded to mainly by opponents (in-links), with only partial reciprocation from friends. The *friendly* (type 2 author) re-

sponds only to friends, most of who do not reciprocate, and is responded to by a number of opponents anyway.

The *fringe* author exists at the edge of acceptable discourse within the group. Remember that the *fringe* author only shows up in the analysis because he (this author self-identifies as male) is a regular contributor to the newsgroup, posting messages to it nearly every day. The *fringe* author's views are extreme and do not fall into the newsgroup's dominant ideological clusters (and so is coded as a triangle). This *fringe* author is a provocateur, posting a great number of initiating posts rather than replies. Many of the replies that he posts are 'cross-posts': he replies to a message in a different group and adds this group to the conversation. (Cross-posts are symbolized with dotted lines.) The author's reply to a message by a core author (coded with a square) is ignored, and the only responses from the mainstream newsgroup population come from new and/or infrequent participants ('newbies', coded light gray).

If we now turn from microlevel reply behavior to network structure, certain implications of that behavior are clear. The network diagrams of Figure 4, like Figure 3, use a so-called 'physics model': nodes repel from ones they are not linked to and try to be a fixed distance from ones that they are linked to. Roughly, 'close' suggests 'likely to be connected', while 'far' suggests 'less likely to be connected'. In these egocentric diagrams, focusing on the neighbors around a single, larger node, we can see that both *fighters* and *friendlies* are well-enmeshed in the discussion core. In fact, it is impossible to tell the difference between the two based on overall network position, because the replies to their messages are so dense. In contrast, the *fringe* author sticks out like a sore thumb. An author whose views are not seen as worthy of rebuttal or response by core authors is, figuratively, expelled from the network. Here we see boundary maintenance at work.

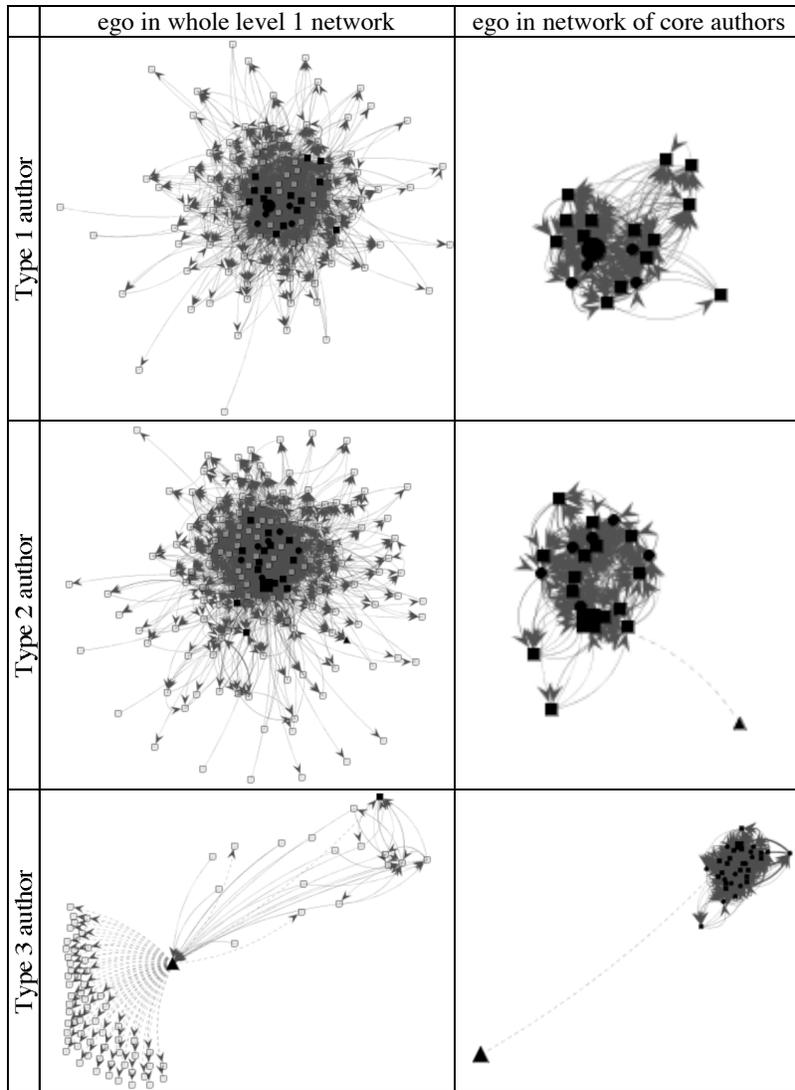


Figure 4: network position by author type

Group members use the one tool available to them, then, to maintain the boundary of ‘acceptable dialogue’: they ignore this fringe author, giving him little satisfaction of triggering a broader discussion. Even in an arena dedicated to opposition—where every issue is contentious—the group

manifests tacit accord on what issues and ideas are not worth discussing, and leaves them behind.

4 Conclusion

Our example *fringe* author is just one instance of the type. We have observed other *fringe* authors in different newsgroups, also far from the mainstream of debate. Their ego networks are similarly distinctive: they are isolated, garnering few responses from the active core of the newsgroup. Some of them attempt to reply more to core authors, some of them generate more or fewer seed posts, but all of them are relegated to the network periphery by the lack of demand for their ideas. What is very important to recognize, and very interesting, is that they are not marginalized because their ideas are uncomfortable, contentious, or, simply, disagreed with by others.

Keep in mind that most interaction, in fact the soul of interaction, in political newsgroups is strong, often vehement, disagreement between opponents. One finds Marxists sparring with Libertarians, liberal Democrats battling conservative Republicans, ‘pro-life’ opponents of abortion calling ‘pro-choice’ authors ‘murderers’, Israeli citizens arguing with Arab nationalists. In Usenet political newsgroups, one finds people with strong and often irreconcilable views fighting each other in extended chains of argumentation. Sometimes it is emotional, with name calling of the worst sort. Sometimes it is highly rational, with detailed point-by-point rebuttals of quoted sentences and paragraphs. Usenet authors seek out those with whom they disagree and expend enormous energy arguing with them. But the authors we here call *fringe* usually can’t get the time of day.

This behavior is noticeably different from that described by Baker (2001). Baker describes an amiable group, fans of a popular television show, that try to work over a period of several months to understand and change the behavior of an egregious ‘troll’. The group repeatedly engages the troll, responding to his posts and discussing his ideas, attempting to change his mind. Nowhere does Baker document a notion of ignoring the troll.

The reason for this requires further investigation no doubt, but is interesting to ponder. How might trolls and *fringe* authors be alike and how different? In some ways, the *fringe* authors behave like trolls, for instance posting incendiary messages and cross-posting their responses to messages into lots of other newsgroups. In other ways, including motivation, they may differ. Trolls often seem to be out to inflame other participants for the sake of being troublesome or disruptive, often appearing disingenuous or inauthentic to an experienced reader. By contrast, *fringe* authors in political groups usually seem quite sincere in their adherence to fanatical views. So,

are *fringe* authors a type of troll? Or are both simply cases of bad citizens in the discursive community? Or are they very different types of actor altogether? In terms of behavior and motivation, and also network response, we should look more closely at *fringe* authors in relation to the more well-studied troll.

The *fringe* authors we have encountered are exactly the ones one would hope to find marginalized in a political discussion network. They are the sort who quote the ‘Protocols of the Elders of Zion’ and offer genetic justifications for racial discrimination. Their views are not ignored because they are considered objectionable or extreme; indeed, extremity is often incorporated into the discussion. They are ignored because their ideas are not considered even mildly relevant to any debate that anyone, on whichever side of whichever spectrum, wants to have. They are not even worthy of rebuttal.

What people participating in political discourse care to discuss, as well as the particular attitudes they have about any given topic, are meaningfully related to the structure of concerns and attitudes in the larger political society to which they belong. In that larger society there are well-established political issues, frames and philosophies. To be involved in democratic life is to be engaged with these. People sometimes fear the Internet as a political discussion medium. On one hand it is accused of promoting smug, ideologically insular echo chambers, and on the other, it is said to hand the keys of the castle to Nazis, violent anarchists, and other assorted ideological bogeymen. But we should take heart from the findings of this study. In anarchic (in terms of rules of governance, not political philosophy) online political discourse networks, there is active boundary maintenance, informed by group norms held even among those who disagree strongly with one another about the topics under discussion. An author must be interesting to be engaged by others. The discourse network is shaped, and maintained, by *demand*, not *supply*. An implication of this is clear. What threatens democratic online political discourse and invites the worst sort of extremity is not the presence of radical voices, but the absence of reasoned ones.

References

- Adamic, L. and N. Glance. 2005. *The Political Blogosphere and the 2004 U.S. Election: Divided They Blog*. Paper presented at LinkKDD-2005, Chicago, Illinois, August 21, 2005.
- Agrawal, R., S. Rajagopalan, R. Srikant, and Y. Xu. 2003. *Mining Newsgroups Using Networks Arising from Social Behavior*. Paper presented at WWW2003, Budapest, Hungary, May 20-24, 2003.

- Baker, P. 2001. Moral Panic and Alternative Identity Construction in Usenet. *Journal of Computer-Mediated Communication* 7(1). Available at <http://jcmc.indiana.edu/vol7/issue1/baker.html> (last accessed August 31, 2008)
- Donath, J. S. 1999. Identity and deception in the virtual community. *Communities in Cyberspace*, eds. P. Kollock and M. Smith, 29-59. London: Routledge.
- Fisher, D., M. Smith, and H. Welser. 2006. *You Are Who You Talk To: Detecting Roles in Usenet Newsgroups*. Paper presented at the Hawai'i International Conference on Systems Science, Kauai, Hawaii, January 4-7, 2006.
- Kelly, J., D. Fisher, and M. Smith. 2005. *Debate, Division, and Diversity: Political Discourse Networks in Usenet Newsgroups*. Available at http://www.coi.columbia.edu/pdf/kelly_fisher_smith_ddd.pdf (last accessed August 31, 2008)
- Lampe, C. and P. Resnick. 2004. Slash(dot) and Burn: Distributed Moderation in a Large Online Conversation Space. *Proceedings of ACM CHI 2004 Conference on Human Factors in Computing Systems, Vienna, Austria, April 24-29, 2004*, eds. E. Dykstra-Erickson and M. Tscheligi, 543-550.
- Pfaffenberger, B. 2003. A Standing Wave in the Web of Our Communications: Usenet and the Socio-Technical Construction of Cyberspace Values. *From Usenet to CoWebs: Interacting with Social Information Spaces*, eds. C. Lueg and D. Fisher, 20-43. London: Springer.
- Sunstein, C. R. 2001. *Republic.com*. Princeton, NJ: Princeton University Press.
- Turner, T., M. Smith, D. Fisher, and H. Welser. 2005. Picturing Usenet: Mapping Computer-Mediated Collective Action. *Journal of Computer-Mediated Communication* 10(4): Article 7. Available at <http://jcmc.indiana.edu/vol10/issue4/turner.html> (last accessed August 31, 2008)
- Wilhelm, A. 1999. Virtual Sounding Boards: How deliberative is online political discussion. *Digital Democracy: Discourse and Decision Making in the Information Age*, eds. B. N. Hague and B. Loader, 154-178. New York: Routledge.

