

POLITICAL DISCUSSION ONLINE

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In 2002, soon after the United States and its allies went to war in Iraq, Nicholas Thompson wrote an opinion column for the *Boston Globe* on the then current state of online, political conversation. The headline of Thompson's article spoke volumes about his opinion of online talk: "Freedom to Flame. Online Political Chat is an Insult to Democracy." He argued that online political conversation is "sophomoric," ranting, full of insults, and "an insult to democracy."

Thompson's views likely resonate with many who have spent time engaged in online discussions of a political, social, or policy issue. In the United States, as in Europe, it is a common view that online talk is far from the ideals of what political conversation should be. Instead of carefully thought out and reasonably argued positions, we see hastily written, irrational, or poorly argued posts. Instead of a willingness to hear the other side, we see a willingness to attack the other side.

Why then do academics bother studying online political conversation? In the early days of Internet studies, as the Internet was diffusing, there was great optimism about what this new communication technology could offer. Specifically, the channel characteristics of the Internet—the ability to bridge vast distances, to connect diverse people together, to bring together the like-minded, and to do so quickly and relatively easy—seemed to promise a new means for people to hash through the tough problems facing communities, nation-states, and the globe.

The reality, as is usually the case, is starkly different from the hope and the hype. Several studies have been conducted over the years, including some from the first author of this chapter, to help paint a picture of who spends time talking politics online, why they do it, and

whether or not such conversations are any good for those who participate and for their societies. The studies provide a complex portrait of people, motives, and quality of conversation. Sometimes it looks exactly as Thompson described in his editorial piece. Sometimes, though, it is better.

This chapter details that research and its significance. Before that, however, it is necessary to step back and consider why scholars should even contemplate online, political conversation in the first place, and specifically, why political talk in general is thought to be good for society. After providing that explanation, this chapter turns to a discussion of the Internet and its channel characteristics, which provide both affordances and challenges for political conversations. This discussion of the technology and its implications sets the stage for a thorough discussion of what we currently know about people who do and do not talk, the qualities of that talk in democratic countries as well as authoritarian regimes. Along the way attention will be paid to where more research is needed to get fuller understanding of the phenomenon of political conversations channeled over the Internet.

<h1>Why Political Discourse Matters for Democracy

Writing in 1939, John Dewey declared American democracy to be in a state of crisis. Americans mistakenly view democracy as passive, he suggested, “something that perpetuated itself automatically” (Dewey et al. 1993, p. 241). Dewey declared that the only remedy for this crisis is for citizens to rethink democracy, not simply as a mass of government institutions, but rather as a way of life. One remedy was for people to form heterogeneous associations, to interact with and talk to others, for in so doing, a public sphere would be created (Dewey 1946).

This notion of the public sphere has resonated strongly in Western political thought, and perhaps found its strongest voice in Jürgen Habermas's (1962/1989) *The Structural Transformation of the Public Sphere*. This work advanced the idea that educated elites of society, collectively formed into a civil society, should engage in rational-critical debate over issues of public concern thereby creating a public sphere. Critical discussions, firmly grounded in information and reason, would enhance public opinion such that it would influence and create a check on the policies and actions of elected officials. Habermas's conceptualizations of the public sphere and of rational-critical debate situated informed discussion as the corner stone for democratic participation. Benjamin Barber (1984) advanced the ideas of Dewey and Habermas, proposing the notion of "strong democracies": democratic societies in which citizens are active, capable agents influencing change not only to occasionally serve self-interests but also as a function of daily life. Unlike Habermas, Barber's conceptualization of democracy requires participation beyond educated elites, to include all members of democratic societies. Through the very practice of participating in politics, individuals learn how to be effective members of the citizenry, regardless of their prior education or expertise.

These theories of democracy designate political conversation as essential to democratically organized societies. It is through political conversations that members of society come to clarify their own views, learn about the opinions of others, and discover what major problems face the collective. Through such conversations, political participation is made possible, enabling citizens to affect the practices and policies of their elected leaders and ultimately ensuring a democratic process of governance.

In the modern era of mass media, especially television, much concern had been raised about the state of affairs of political participation in the West, particularly the United States.

Putnam's (2000) *Bowling Alone*, Verba, Schlozman, and Brady's (1995) *Voice and Equality*, and Delli Carpini and Keeter's (1996) *What Americans Know About Politics and Why it Matters*, suggested a general decline in organizing, participating, learning, and talking about political and social matters. These authors, especially Putnam, placed the problem squarely on television, citing the powerful relationship between the increase in television viewing and the decline of civic associations specifically and political participation generally in the United States. Television, and other mass media, seemed to turn people off of politics. Then, along came the Internet.

The Internet, as a channeler-of-channels, offers a number of characteristics that invite the possibility for increased political participation generally, and political conversation specifically. The unique characteristics of the Internet enable citizens to produce, comment on, edit, remove and recommend portions of a global dialogue. This has set it apart as a medium with the potential to transform the democratic landscape at large and expand the public sphere.

<h1>Internet and Discourse Online: Features and Challenges

Several scholars have noted the channel characteristics that are important when considering online political conversation. Among the most frequently researched channel characteristics are: interactivity, which permits genuine dialogue between Internet users; the possibility of bridging physical distances between people, which in turn allows people to find both homogenous and heterogeneous groups; the potential for anonymity, which permits expressions without fear of recrimination; and, reduced feelings of social presence in online discussions, which both increases the willingness to speak on political subjects, but also increases the chances for anti-social behavior, such as flaming. Each of these characteristics and their implications is taken up next.

<h2>Interactivity

Conversation online is made possible by one of the defining characteristics of Internet-channeled technologies: interactivity. The ability for moderately computer-savvy individuals to create content, to comment on the content created by others, and to converse with individuals in both asynchronous and real-time forums is arguably the most distinctive and revolutionary characteristic of the Internet as a communication medium. Interactivity is heavily cited as one of the most promising aspects of the Internet in promoting democratic society (McMillan & Hwang 2002; Stromer-Galley & Foot 2002; Stromer-Galley 2004; Sundar et al. 2003; Endres & Warnick 2004; Warnick et al. 2005; Stromer-Galley & Baker 2006; Heeter 1989), in part because it allows for both horizontal communication between citizens and vertical communication between citizens and elites (Hacker 1996).

Interactivity online has been variously characterized, with definitions that span to include interaction with the technology itself, interaction with other people, and interaction as existing in the perceptions of the users. Characterizing interactivity as a function of involvement between users and the technology or between discussants generally refers to the degree and type of reciprocity present in an exchange. In a study by the first author (Stromer-Galley 2000), such reciprocity was conceptualized as being either with the technology or with other people, what she termed “media interaction” and “computer-mediated human interaction” respectively. Media interaction was a common characteristic of political campaign websites in the early days of the World Wide Web as it allowed campaigns to retain a high degree of control, such as online polls and email signups. Equally important, interactive technologies enable distant others to come together (Stromer-Galley & Foot 2002), allowing diverse demographics of people to interact in ways that may be impossible in the physical environment.

<h2>Bridging the Distance: Homophily and Heterogeneity

Yet, for all the ways that Internet technologies permit interaction of diverse peoples, researchers are concerned that heterogeneous discourse online may not be happening. Although one of the great appeals for many users is the ability to find others online who share similar interests both politically and personally in online arenas (Davis 2005; Stromer-Galley 2002a), some theorists have expressed concern that this ability to find like others will result in a fragmentation of online users into interest and issue publics (Sunstein 2000; Doheny-Farina 1996). Research both supports and contradicts this assertion. A study by Postmes, Spears & Lea (1998) found that some of the very characteristics that may attract some users to interacting online, such as anonymity and the ability to find groups with like interests, may result in strengthening of conformation to group norms, which may in turn lead to increased discrimination against those who are different, thereby reinforcing a desire to interact only with those of like-minds. Conversely, the first author (Stromer-Galley 2002a) conducted a series of interviews with participants in online political discussion spaces and found that people both sought out and enjoyed the diversity of opinions that they encountered. The issue of who is talking to whom, if people are only seeking out homogenous groups or venturing into heterogenous discussions, is addressed in greater detail further on in this chapter.

<h2>Free to speak freely

Just as there is a tension between the benefits and drawbacks of finding issue, interest, or hobby groups of like-minded others online, Internet technologies also produce a tension between affording users a forum to speak freely while opening the gate for negative or hostile verbal attacks. The ability to express one's opinion anonymously is often noted as of essential

importance to democratic discourse, as anonymous speech permits the expression of unpopular sentiments or statements by disadvantaged peoples without fear of recrimination (Lee 1996). The option to be anonymous may also permit expression by marginalized or isolated members of a community (McKenna & Bargh 1998). Kling et al. (1999) identify that there is a need, however, to strike a balance between the benefits to be gained by users who perceive anonymity as necessary for free expression and the potential threats to the traditional norms that govern communications, such as personal accountability, which may be lost in anonymous speech. They characterize anonymity as both a “shield” and a “sword,” where those who require protection can benefit from the option to talk anonymously, but this can also empower others to use anonymous expressions as a means to attack from a distance. Anonymous talk online is also attractive for less lofty but arguably equally valuable reasons, such as attracting notice and advocating beliefs (Donath & boyd 2004), permitting catharsis (Davis 2005), and as a venue for self-presentation (Trammell & Keshelashvili 2005; Wynn & Katz 1997).

The dark side of anonymous discussion online, however, is substantial in its effect. *Flaming*—verbal attacks or insults in online discourse—and *trolling*—posts in online community forums meant to disrupt or disparage conversation—are two common phenomena in online discussion forums that may repel many otherwise interested people from participating in the discussion. Unsurprisingly, flaming is found more often in certain interest groups than others. For example, online discussions that are moderated by a neutral party or hosted by government officials or agencies exhibit fewer personal attacks than organic, citizen-hosted discussions (Coleman 2004). As well, research suggests that more flaming occurs in groups with homogeneous than heterogeneous participants (Douglas & McGarty 2001). Yet some researchers have, if not defened, begun to make attempts to contextualize flaming in certain

circumstances. Wang and Hong (1995) argue that in academic discussion lists, for instance, flaming helps to promote effective communication by social sanctioning and enforcing group behavior norms. Others have claimed that flaming has been unfairly attacked due to studies that focus too highly on content rather than considering the context and strategic choice in language chosen based on those contexts (Vrooman 2002). The harmful effects of trolls are less contested, as studies have indicated that trolls are more likely to seek out traditionally underrepresented or non-mainstream groups, such as feminist discussion spaces (Herring et al. 2002).

<h1>Technologies for Political Discourse Online

Before discussing the research about online political discussion, it is important to step back and clarify what we mean by political conversation online. The concept has been defined in various ways and has included or excluded particular channels of communication. Political conversation can be as broad as any exchange between any set of people on a social, political, or current event, or as narrow as an organized and moderated deliberation on a key issue facing a group of people. For the purposes of this review, we cast our net broadly to incorporate organic conversations started and maintained by ordinary citizens as well as moderated deliberations with recruited or invited participants hosted by organizations or governments.

As well, the channels are many through which such conversation occur on the Internet. In the 1980s, users of the Internet had available to them Internet Relay Chat (IRC), MUDs (text-based multi-user domains), message boards, and email lists. In the 1990s, with the development and diffusion of the World Wide Web, conversation spaces expanded to include Web-hosted message boards and forums, such as E-thepeople.org, and synchronous chat spaces, such as Yahoo! chat, as well as community-generated news sites, such as Slashdot.com.

In the 2000s the technology has expanded further to include weblogs (blogs), and social networking sites, such as Facebook and MySpace. For this review, we have included all channels except websites that do not include a forum or message board or comment component. We recognize that the content from citizen, activist, news, and government websites contribute to political discourse online, but the lack of interactivity on such sites excludes them from this analysis.

<h1>Who Talks

Over the past two decades, the portrait of who engages in political discourse online has been fairly consistent. For instance, Davis's (2005) research surveying people who used the Internet in the late 1990s in the United States found that those who reported talking about social or political issues online were generally well-educated, more affluent, younger, and less likely to be married. They also were more likely to follow politics and vote than those who do not talk politics online. A more recent study of weblog users suggests a similar profile. According to Johnson et al. (2007) blog users are more likely to be white, affluent, well-educated, male, and more interested and knowledgeable about politics.

Indeed, over two decades of studies suggest a consistent and large gender gap in online political discussion. Research in the 1980s by Garramone et al. (1986) studied politically-oriented message boards in a university context in the United States and found that the majority of users were men. Similar findings were born out in research in the 1990s (Hill & Hughes 1998; Savicki et al. 1996; Davis 1999). These results were not surprising given that a gender gap in general Internet users existed until the late 1990s in the U.S. Research since then, however, continues to identify a gender gap in political talk online (Stromer-Galley 2002c; Stromer-Galley 2002a; Harp & Tremayne 2006; Trammell & Keshelashvili 2005).¹ A gap also

exists in European countries, including Germany (Albrecht 2006), the Netherlands (Hagemann 2002; Jankowski & van Selm 2000), and Denmark (Jensen 2003a).

The reasons for this gender gap are understudied. In the first author's dissertation research (Stromer-Galley 2002d), she found that of 69 people interviewed who talk politics online, only 9 were women. That research suggested three reasons for such a small number, including that female participants likely receive unwanted sexual attention that leads them to either hide their gender by using gender-neutral or male handles when posting or to leave the discussion altogether. An interview with one of the nine women who used synchronous chat to talk politics indicated that she felt that she was outnumbered ten to one, and that she believed many women did not sustain participation in political chat rooms, because women tend to take disagreements to heart. She said that some of the attacks she received as a participant made her cry, but she loved politics enough to keep participating. She also changed her handle to one that is more masculine so that men would take her seriously. Only one study has systematically investigated why women are not co-equal participants in the online discussion forum of blogs. Harp and Tremayne (2006) found that women were less likely to be top political bloggers in the United States, in part because male bloggers do not link or draw attention to female political bloggers, unless they are also engaging in sexualized talk. These two studies suggest a "boy's club" exists online making it difficult for women to join in the conversation; When they do, they are belittled, attacked, and sexualized. As well, Davis (2005) found that the topics of political discussions online are those that not only do not mirror the concerns facing the U.S., but also do not include typically "female" issues, such as child care, education, and healthcare. A lack of "female" topics likely also means that women are less drawn to participating on the conversation.

As the dynamic of gender has been understudied, so too has race. Survey-driven studies include race as a demographic “control” variable, and the results are mixed as to whether race is a factor in political conversations. If we grant that racial identity still matters online (Burkhalter 1999), then more research is needed that looks specifically at the dynamics of race in online political discussion. One such study by Byrne (2007) investigated African-American political discussion on the social networking site BlackPlanet.com. Her research suggested that few opportunities exist online for African-Americans to network in black-only spaces, but that in the spaces that do exist, conversations that were race-focused were more likely to draw attention and additional conversation than posts that were race-neutral. Studies such as these draw attention to the need for further research not only on broader issues of access and the digital divide, but also what spaces and opportunities exist for underrepresented populations once they get online and what type of activities they engage in once there.

Although race and gender have been understudied, youth engagement has been given greater attention. Heightened attention has occurred for a couple of reasons. First, there is much interest in political socialization and political participation among youth—those who are presumably the next generation of political actors in democratic societies. Second, a pervasive assumption exists that new communication technologies, which tend to be adopted by younger members of society quickly, might bring more youth into the political process. Indeed, the research suggests that those who populate online discussion spaces tend to be younger than the population at large in the United States (Davis 2005), Italy (Calenda & Mosca 2007), and Germany. Albrecht’s (2006) analysis of online discussions in Hamburg, Germany found that young people were over-represented in the discussions as compared with the overall population. He wrote: “Seemingly, the Internet has a positive effect on the participation of

young people” (p. 72). Bers and Chau (2006) observed that a specially designed 3-D environment could foster civic values and engagement among youth. As children of the Internet era come of age, researchers will undoubtedly pay a careful eye to the ways that technology as part of life does or does not translate to civic participation.

Alongside questions of who talks is whether there is a relationship between online and offline political conversation. The first author (Stromer-Galley 2002c), for example, theorized that the Internet’s channel characteristics, including anonymity and the ability to choose discussion partners, might draw people to talk politics online who would not do so face-to-face. Survey analysis suggests that of 87% of those who reported talking politics online “in the past year” reported talking politics with friends and family. That number, however, dropped when the question shifted to political talk with acquaintances. Only 51% of those who reported talking online reported talking with acquaintances, which she takes as a sign that the technology may be affording opportunities for political conversation that are avoided face-to-face.

If we grant that there are people using the Internet to talk with others who are less likely to do so face-to-face, especially with acquaintances like co-workers or community members, are these users as well as those who will talk anywhere actively participating online? The answer seems to be no. Of those who visit online discussion spaces, generally only a small percentage actually contribute comments. The rest engage in what has been perhaps unfairly termed “lurking,” merely reading the discussions. Davis (2005), for example, found in a 1999 survey of U.S. citizens that “lurkers” make up as much as three-quarters of the people who visit online discussion spaces. These results hold for others countries as well (Albrecht 2006; Robinson 2005; Hagemann 2002; Jankowski & van Selm 2000; Jankowski & van Os 2004;

Tsaliki 2002). There is concern that those who participate dominate the conversation, but Hagemann (2002) found that frequent contributors to an email list discussion about two Dutch political parties did not monopolize the discussion. Albrecht's (2006) observations of the Hamburg forum were similar, suggesting that frequent contributors did not dominate the discussions with their own views, but instead "behaved as 'old hands,'" by helping facilitate the discussion (p. 72). Others, such as Davis (1999) and Robinson (2005), suggest that the frequent contributors dominated the discussions they analyzed.

Lack of active participation in online discussions is of particular concern to researchers as it is often interpreted as yet another instance of diminished civic engagement. Yet the picture of participation online may be more complex than this. The online environment affords people the opportunity to visit, or "listen in" on a wide array of ongoing conversations generated by both mainstream news media and unknown others. Yet if they do not post comments, they are considered to be non-participating, or worse "lurking," a term that connotes socially deviant behavior. If citizens were to attend political deliberations in an offline environment, such as those hosted by Study Circles or the National Issues Forum, as audience members, it seems unlikely that this would elicit the same concern. Rather than handily dismissing non-commenting visitors of online discussion sites as disengaged, research is needed to determine what effect this type of activity actually has. If being audience to the diverse points of view that arise from group conversations contributes to political knowledge in offline environments, it is possible that online audiences stand to gain from such exposure as well.

As mentioned in an earlier section, there also is deep concern that people online fragment into like-minded interest or issue groups (Doheny-Farina 1996; Sunstein 2001). The question then is who is talking to whom? Are people online talking with people like themselves

or people different from themselves? The answer is both. There is little doubt that people gather into like-minded discussion groups. There is also evidence, however, that people participate and talk with diverse others. Kelly et al. (2005) analyzed political Usenet newsgroups to ascertain if people of similar political ideologies were primarily talking amongst themselves. Their research suggests a high degree of cross-talk, or conversations between people of differing ideologies. In the blogosphere, research of linking patterns on political blogs suggests that as many as 60% of links to other news and blog sites are not of the political ideology of the author or authors of the blog site (Reese et al. 2007).

Now that we have a picture of who talks, it needs to be considered why they do it. Few studies have investigated why people talk politics online, although there is a growing number of studies that have researched motives for Internet use more generally (Papacharissi & Rubin 2000) and for political information seeking (Kaye & Johnson 2002). This question of why people talk politics online has been the focus of the first author's research (Stromer-Galley 2002a; Stromer-Galley 2002b; Stromer-Galley 2002c; Stromer-Galley 2002d). If, as is popular wisdom, online political conversation is "an insult to democracy," what draws people to engage in it? Interviews conducted with 69 people who participate in online, political discussions suggested a range of motives, including the ability to seek a diverse range of perspectives, to learn about political topics and to learn more about one's own views in the process. They participate in online conversations so that they can "vent" about what frustrates them about politics, to observe the views of those with whom they disagree, to gain information outside the mainstream media context, to find others with similar perspectives, and to pick on or attack others just for the fun of it. This range of motives reflects the range of behaviors that are seen in online discussions, the behaviors which lead us back to the question of the quality of the

discussions. Does the prevailing notion that online discussions are “an insult democracy” bear out in the research? Perhaps it is unsurprising that a large number of studies have been conducted that focus specifically on this question. These are detailed next.

<h1>The Quality of Online Deliberation

Several studies have attempted to measure how deliberative online discussions are. These studies rely on Habermasian notions of deliberative democracy, including the requirements of equality of participation, reciprocity—which is defined in many ways, but generally means the degree to which there is genuine exchange between discussants—and rational argument.

Studies have been conducted both in the United States and in Europe that investigate whether online discussions meet Habermasian ideals. In a European context, Hagemann (2002) analyzed the discussion on two Dutch political party email lists and found that there was a fairly high degree of reciprocity and interaction between participants, but that discussion was of limited rationality. He concludes that the email lists were not deliberative in the Habermasian sense. Jankowski and van Os (2004) analyzed the online discussions established by the city of Hoogeveen, Netherlands to facilitate greater information exchange between residents and political elites. Their results suggested a “gloomy picture” (p. 190). They found a low level of reciprocity and a general lack of mutual understanding of others’ perspectives. In the United States, several studies have analyzed the deliberativeness of online discussions, with similar results. Wilhelm (1998), for example, content analyzed a random sample of Usenet posts and found that for the most part people were talking with like minded others on political topics and that only one-fifth of messages were responding to others. On the question of rationality, he

found that three quarters of the messages provided reasons for opinions expressed, but that the conversations were not sustained or the topics deeply engaged by the discussants. Similar results have been found by Davis (1999) Hill and Hughes (1998) and Schneider (1996).

Yet these studies offer different definitions of deliberativeness, making it difficult to compare results. Others make general claims based on thin observations without clearly defining, operationalizing, and then measuring the elements that signal a deliberative discussion (Davis, 2005). Two studies have addressed that shortcoming. A coding scheme developed by Graham and Witschge (2003) offers a complex coding system for measuring arguments and counter-arguments of messages in an online discussion in an effort to capture “rationality,” an essential component of deliberation. The primary shortcoming is that Graham and Witschge’s coding scheme did not meet standards of systematic content analysis (established by Krippendorf (2004), Neuendorf (2002) and others). By not having multiple people apply the coding to a set of discussions to see if they can achieve a satisfactory level of intercoder agreement, they failed to ensure that their coding scheme was valid and reliable. The first author (Stromer-Galley 2007) created a simpler coding system to measure deliberative discussion, using research from deliberation, small group discussions, and discourse analysis to define and operationalize the categories. She achieved a satisfactory level of intercoder agreement on the content categories in a study of online deliberation that used teleconferencing software. It remains to be seen, however, whether others can adapt and use the coding scheme.

One of the reasons that so many scholars have looked to Internet-channeled discussions for deliberation is because the channel characteristics of the technology seem to invite such a possibility. Dalhberg (2001a), for example, identified several characteristics of the Internet that he believes permit democratic discourse in Western societies. These include the autonomy of

individuals to freely express opinions, the ability and opportunity to criticize claims, and the degree of reflexivity of those expressing opinions. This, however, may be true for certain channels for interaction, but not others. Specifically, email lists, message boards, and blogs may enable reflexive, thoughtful, and rational messages, in part because people have time to contemplate a message, find evidence to support it, and consider how it might be responded to before posting. However, synchronous chat may invite problems for genuinely deliberative interactions, given the shorter messages, faster responses, and incoherence of multiple conversations occurring near simultaneously without clear indication of who is speaking to whom. Weger and Aakhus (2003) studied online political chat and found that the quality of the arguments was low, as exhibited by under-developed arguments, because people opt for short, catchy messages rather than thoughtful and well-crafted positions. The first author's research on this topic (Stromer-Galley & Martinson 2005), by contrast, found that political chat was more coherent and the interactions sustained longer than those on other topics in a chat like cancer support. Moreover, experiments such as that by Price and Cappella (2002) have successfully used synchronous chat for political deliberation, further suggesting that synchronous chat may not be inherently problematic for hosting political conversations.

What this body of research suggests is that the quality of online discussion rests, in part, on the design of the discussion space (Beierle 2004; Noveck 2004; Wright 2006). Wright and Street (2007) argue that "how discussion is organized within the medium of communication helps to determine whether or not the result will be deliberation or cacophony" (p. 850). They argue that the way that discussion spaces are designed matter greatly to whether one sees high- or low-quality discussion. Replicating the study conducted by Wilhelm (1998), but focusing on the European Union's online discussion forum, Futurum, Wright and Street found an overall

higher quality discussion than Wilhelm found of Usenet. They credit the positive results to the design of Futurum, including the recruiting of people who were likely interested in the topics for discussion, the threaded message board, which promoted reciprocity, and the connection to the European Union parliament and hence the possibility that conversations would be heard by policymakers. Other research projects that have studied online discussions that co-mingled citizens and politicians found similar, positive results (Jensen 2003b; Coleman 2004).

Such studies, however, also identified problems that arise when citizens and politicians come together. Coleman's (2004) research examined two online forums hosted by the British parliament on the topics of domestic abuse and communications legislation. Coleman found that participants in the forum about domestic violence in the U.K. were satisfied with their experiences, engaged in a high degree of interaction with each other, but did not feel that the parliamentarians who participated really cared about what they had to say. By contrast, the analysis of the forum on communications legislation suggested that participants did not interact much, but felt that parliamentarians cared about what they had to say—even though there were fewer Members of Parliament. As well, interviews with the MPs indicated the challenges of getting political leaders to participate. MPs were enthusiastic but had difficulty devoting the time to the discussions. In a study of a Danish online discussion between politicians and citizens, Jensen (2003b), found that politicians dominated the debate. They represented slightly more than half the total number of participants and they contributed three times the number of posts. Moreover, citizens and politicians primarily talked with each other; There was little citizen-to-citizen interaction. Jankowski and van Selm (2000) found similar results in a forum that brought together senior citizens, political candidates, and representatives of organizations. Candidates and organizations primarily talked to each other, ignoring citizens who directed

comments at them. This research suggests benefits and challenges when citizens and politicians come together in a shared online discussion.

Another component of deliberation that merits consideration is the absence or presence of a moderator. Albrecht (2006) for example, found that citizens in a discussion about land use in the city of Hamburg, Germany produced a high quality discussion. He attributes this to the existence of professional moderators who helped guide the discussion and helped establish “mutual respect and rational orientation” (p. 73). Research by Trenal (2004) on the role of moderators in “Listening to the City” dialogues focused on lower Manhattan’s redevelopment after the 9/11 attacks, found that moderators had a positive effect on who actively participated in the online discussion, particularly “advanced moderation,” which entailed trained facilitators who kept participants focused on the discussion, intervened if interpersonal conflicts arose, created a respectful climate, balanced the discussion by offering alternative perspectives, and summarized the discussions. Women and minorities were less likely than white men to participate overall in the deliberations, but in the advanced moderation condition they were more likely to actively participate than those in a “basic moderation” condition, where moderators only helped keep the discussion moving forward. These studies indicate that the presence of a moderator can have beneficial effects. More research, particularly experiments with different levels and types of moderation, is needed to further investigate what benefit a moderator might provide for the quality of online discussion.

It should be noted that there is one area quite lacking in online discussion research: that which focuses on political discussions occurring on sites not specifically designated as political. Just as many people talk about politics casually, informally, and as a part of everyday life (Wyatt et al. 2000), it stands to reason that political talk arises amidst conversations about

sports, religion, business, or entertainment. Research into this area may provide insight into the quality and nature of discussions that occur in places not designated as “political,” as well as how to design discussion spaces that capitalize on the ways that people naturally and voluntarily engage in political discussions online.

In sum, online discussions, created by and for citizens and left to their own devices tend not to produce high quality discussions. Better discussions seem to occur when there is moderation of the discussions, well-designed software to promote reciprocity and contemplation, and co-mingling of citizens and political elites.² More research, however, is needed to systematically and carefully identify what elements seem to provide the greatest benefits for quality online discussion.

<h1>Nation-Based Influences of Online Discussion

As noted earlier, most of the research of online, political discussion focuses on discourse in the West, yet there is a growing body of research that has analyzed political discourse online in countries with authoritarian governments. Researchers analyzing political conversation online in China focus on the difficulty of public, political conversations in a context where censorship and government oversight is ever present. Fung (2002) analyzed a chat room on a newspaper website in Hong Kong in order to study the tensions in the government, economic, and civic structures between China and Hong Kong after China assumed governance of Hong Kong from Britain. Fung found that there were two types of posters: ordinary citizens and professional writers. The professional writers appeared on the forums as average citizens, but their use of a distinctively Chinese way of writing coupled with phrases common in China but unknown in Hong Kong suggested that they were members of

the Chinese government sent to marginalize and silence those opposing or critiquing China. The Hong Kong citizens, by contrast, were not well coordinated and were unable to mount effective arguments against those advocating for China. Nevertheless, Fung argues, there were counter-arguments to the pro-China positions, which he notes would not occur in online discussions on mainland China, due either to government- or to self-censorship. He also found other protest strategies, including simply ignoring the pro-China arguments. Fung explained “The silence became effective opposition” (p. 89). Another study of online discussion in authoritarian regimes by Kulikova and Perlmutter (2007) analyzed the role that citizen-written blogs played in the Kyrgyzstan revolution in 2005. Kyrgyzstan was a nation with an authoritarian government and state-controlled media, similar to China. The researchers investigated whether citizen-controlled blogs effectively disseminated unofficial information to citizens, and what role such blogs played in the revolution. They found that they contributed greatly in providing information to people outside of the state-run media and played an important role in the revolution. Studies like these provide important insight into the use of information and communication technologies for resistance and to support revolutions against authoritarian governments. More is needed, especially of countries where the Internet is still diffusing, such as those in Africa.

As is true of Internet studies generally, there is a lack of comparative research focusing on political discussions online. Robinson (2005) provided one of the few studies that looks across multiple countries to see how culture shapes the discussion. She studied three countries, the United States, Brazil, and France and the online message boards hosted on prominent newspapers in each country for two weeks—one week immediately following the September 11, 2001 terrorist attacks in the United States, and one week at the end of October of 2001. Her

research found that the conversations in all three countries quickly divided along ideological lines, and generally into three camps: pro-American, anti-American, and anti-anti-American. She found distinct differences in how the discussants interacted in the three forums. Brazilians adopted formal address to the people with whom they argued, writing notably long messages as compared with discussions in the United States and France. She found that French and Americans used humor, mockery, sarcasm and *ad hominem* attacks in response to posts with which they disagreed. She concluded that differences in the discussions could be attributed to cultural differences: “The ‘intimacy’ strategies of the Americans and the French, for example, were not shared by the Brazilians, who relied upon ‘distancing’ strategies that exacerbated the preexisting ideological antagonisms” (Robinson, 2005, ‘Conclusion’ para 2). More studies of this sort are needed to understand what role culture plays in the quality and kind of political discussions seen online.

<h1>Conclusions

When Thompson wrote his article in 2002 on political discussion, he concluded that online conversation is “an insult to democracy.” What we aim to show in this chapter is a picture that partly confirms and partly rejects Thompson’s conclusion. In order to have high quality discussion, there must be people willing to participate, and willing to abide by the high expectations of political conversation at its best: a willingness to hear other perspectives, to rationally argue for one’s own opinions while grounding those opinions in sound evidence, to aim for identifying problems and solutions that will benefit the greater good (Dahlberg 2001). None of the research studies reviewed in this chapter suggest that political conversations online meet such lofty ideals, especially those that are organically created by citizens for citizens. This

suggests that even if the technology makes online political discussion *possible*, that does not mean people will necessarily use the technology in those ways.

Having said that, why should we think there is any benefit to online discussion? There are at least three reasons. First, for those who use various online discussion channels to talk politics, they derive not only pleasure but also benefits from such participation (Stromer-Galley 2002a; Stromer-Galley 2002b). It would be a mistake to minimize the experiences of those who use these forums, simply because they fail to engage in the kind of discussions theorists hold as an unattainable ideal. Second, for those in non-democratically organized societies, online discussion forums can serve as places for resistance (Fung 2002; Hill & Sen 2000; Kulikova & Perlmutter 2007). In such contexts, online forums are not an “insult” to democracy but rather *enable* it. Third, such online discussions, particularly when they are hosted by government agencies or policy makers, enact democracy by situating citizens as agents within the policy-making process. This not only has benefits for citizens but also for government policy making and for governmental bodies as institutions *of* democracy (for an example see Stanley et al. (2004)).

Although there are benefits, we believe more research is needed to identify those benefits. Specifically: What effects do online political conversations have on those who participate both in the short term and in the long term? By effects, we need to know more about whether and what people learn about political actors, events, and institutions through their conversations. We need to know whether they are more likely to get involved in other political activities as a result of their online conversations. We need to know whether they develop a more sophisticated opinion on the topic and whether they develop greater sophistication of those who hold contrary opinions. Research exists from deliberation experiments that suggest

that there are such benefits (Price et al. 2002), but further investigation is needed of online deliberations that are naturally occurring and not created as part of an academic experiment. We also need more research that compares online and offline political discussions (for one example of such a comparison see Min (2007)). There is a prevailing assumption in much of the online political discussion literature that face-to-face casual political discussion and more structured political deliberation are the gold standard to which online discussions must meet. Yet, we do not have a clear understanding of the quality of face-to-face discussions.

Research also is needed to investigate the larger social impact of online, political discussions. For example, how does online political conversation affect social capital? Much of the research on social capital focuses on Internet use generally, rather than discussion specifically. People who go online for entertainment purposes are not found to be producing social capital as much as information-seekers (Norris & Jones 1998; Shah et al. 2001). Yet participation online generally provides a broader sense of community (Norris 2002) and increased offline and face-to-face social interaction (Matei 2004; Wellman et al. 2001; Parks & Floyd 1996). Participation in online political discussions may increase social capital (Jensen 2006), but more research is needed to know for certain.

Finally, in our estimation, it is not enough to create online deliberation spaces with advanced technological features that offer no true interaction between citizens and politicians or to host unmoderated discussion forums that scare off otherwise interested discussants due to the vitriol of the few. Encouraging participation in political discussion online, as offline, will not happen en masse until it is perceived to be useful, beneficial, normal, or as Dewey (1993) suggested, as a way of life. To this end, more work needs to be done to design forums to promote good discussion. Such work will likely need to be done by good government groups,

advocacy organizations, and governments themselves, in an effort to bring citizens into the political conversation, for their own benefit and for the common good.

<h1>Bibliography

- Albrecht, S. (2006) Whose voice is heard in online deliberation? A study of participation and representation in political debates on the internet. *Information, Communication & Society* **9**, 62-82.
- Barber, B. (1984) *Strong democracy: participatory politics for a new age*. University of California Press, Berkeley, CA.
- Beierle, T. C. (2004) Digital deliberation: engaging the public through online policy dialogues. In: Shane, P. M. (ed.) *Democracy online: the prospects for political renewal through the Internet*. Routledge, New York, pp. 155-166.
- Bers, M. U. and Chau, C. (2006) Fostering civic engagement by building a virtual city. *Journal of Computer-Mediated Communication* **11**, <http://jcmc.indiana.edu/vol11/issue3/bers.html>.
- Burkhalter, B. (1999) Reading race online: discovering racial identity in Usenet discussions. In: Smith, M. A. and Kollock, P. (eds.) *Communities in cyberspace*. Routledge, London, pp. 60-75.
- Byrne, D. N. (2007) Public discourse, community concerns, and civic engagement: exploring Black social networking traditions on BlackPlanet.com. *Journal of Computer-Mediated Communication* **13**, <http://jcmc.indiana.edu/vol13/issue1/byrne.html>.
- Calenda, D. and Mosca, L. (2007) The political use of the internet: some insights from two surveys of Italian students *Information, Communication & Society* **10**, 29-47.

- Coleman, S. (2004) Connecting parliament to the public via the internet. *Information, Communication & Society* 7, 1-22.
- Dahlberg, L. (2001) The internet and democratic discourse: exploring the prospects of online deliberative forums extending the public sphere. *Information, Communication and Society* 4, 615-633.
- Davis, R. (1999) *The web of politics: the Internet's impact on the American political system*. Oxford University Press, New York.
- Davis, R. (2005) *Politics online: blogs, chatrooms, and discussion groups In American democracy*. Routledge, New York.
- Delli Carpini, M. X. and Keeter, S. (1996) *What Americans know about politics and why it matters*. Yale University Press, New Haven, CT.
- Dewey, J. (1946) *The public and its problems: an essay on political inquiry*. Gateway Books, Chicago.
- Dewey, J., Morris, D. and Shapiro, I. (1993) *The political writings*. Hackett Publishing Company Inc., Indianapolis.
- Doheny-Farina, S. (1996) *The wired neighborhood*. Yale University Press, New Haven, CT.
- Donath, J. and boyd, d. (2004) Public displays of connection. *BT Technology Journal* 22, 71.
- Douglas, K. M. and McGarty, C. (2001) Identifiability and self-presentation: computer-mediated communication and intergroup interaction. *British Journal of Social Psychology* 40, 399-416.
- Endres, D. and Warnick, B. (2004) Text-based interactivity in candidate campaign Web sites: a case study from the 2002 elections. *Western Journal of Communication* 68, 322-343.

- Fung, A. (2002) One city, two systems: democracy in an electronic chat room in Hong Kong. *Javnost/The Public* **9**, 77-94.
- Garramone, G. M., Harris, A. C. and Anderson, R. (1986) Uses of political computer bulletin boards. *Journal of Broadcasting & Electronic Media* **30**, 325-339.
- Graham, T. and Witschge, T. (2003) In search of online deliberation: towards a new method for examining the quality of online discussions. *Communications* **28**, 173-204.
- Habermas, J. (1962/1989) *The Structural Transformation of the Public Sphere*. MIT Press, Cambridge, MA.
- Hacker, K. L. (1996) Missing links in the evolution of electronic democratization. *Media, Culture & Society* **18**, 213-232.
- Hagemann, C. (2002) Participation in and contents of two Dutch political party discussion lists on the internet. *Javnost/The Public* **9**, 61-76.
- Harp, D. and Tremayne, M. (2006) The gendered blogosphere: examining inequality using network and feminist theory. *Journalism & Mass Communication Quarterly* **83**, 247-264.
- Heeter, C. (1989) Implications of new interactive technologies for conceptualizing communication. In: Salvaggio, J. L. and Bryant, J. (ed.) *Media use in the information age: emerging patterns of adoption and consumer use*. Lawrence Erlbaum Associates, Hillsdale, NJ, pp. 217-235.
- Herring, S., Job-Sluder, K., Scheckler, R. and Barab, S. (2002) Searching for Safety Online: Managing " Trolling" in a Feminist Forum. *The Information Society* **18**, 371-384.

- Hill, D. T. and Sen, K. (2000) The Internet in Indonesia's new democracy. In: Ferdinand, P. (ed.) *The Internet, democracy and democratization*. Frank Cass Publishers, London, pp. 119-136.
- Hill, K. A. and Hughes, J. E. (1998) *Cyberpolitics: citizen activism in the age of the Internet*. Rowman & Littlefield Publishers, Co, Lanham, MD.
- Jankowski, N. and van Os, R. (2004) Internet-based political discourse: a case study of electronic democracy in Hoogeveen. In: Shane, P. M. (ed.) *Democracy online: the prospects for political renewal through the Internet*. Routledge, New York, pp. 181-193.
- Jankowski, N. and van Selm, M. (2000) The promise and practice of public debate in cyberspace. In: Hacker, K. T. and van Dijk, J. (ed.) *Digital democracy: issues of theory & practice*. Sage, Thousand Oaks, NJ, pp. 149-165.
- Jensen, J. L. (2003a) Public spheres on the internet: anarchic or government-sponsored - A comparison. *Scandinavian Political Studies* **26**, 349-374.
- Jensen, J. L. (2003b) Virtual democratic dialogue? Bringing together citizens and politicians. *Information Polity* **8**, 29-47.
- Jensen, J. L. (2006) The Minnesota E-Democracy project: mobilising the mobilised? In: Oates, S., Owen, D. and Gibson, R. K. (ed.) *The Internet and politics: citizens, voters and activists*. Routledge, London, pp. 39-58
- Johnson, T. J., Kaye, B. K., Bichard, S. L. and Wong, W. J. (2007) Every blog has its day: politically-interested Internet users' perceptions of blog credibility. *Journal of Computer-Mediated Communication* **13**,
<http://jcmc.indiana.edu/vol13/issue1/johnson.html>.

- Kaye, B. K. and Johnson, T. J. (2002) Online and in the know: uses and gratifications of the Web for political information. *Journal of Broadcasting and Electronic Media* **46**, 54-71.
- Kelly, J., Fisher, D. and Smith, M. (2005) Debate, division, and diversity: political discourse networks in Usenet newsgroups. Paper presented at the Stanford Online Deliberation Conference, Stanford University, Palo Alto, California.
- Krippendorff, K. (2004) *Content analysis: an introduction to its methodology*. Sage, New York.
- Kulikova, S. V. and Perlmutter, D. D. (2007) Blogging down the dictator? The Kyrgyz revolution and Samizdat websites. *The International Communication Gazette* **69**, 29-50.
- Matei, S. (2004) The Impact of State-Level Social Capital on the Emergence of Virtual Communities. *Journal of Broadcasting & Electronic Media* **48**, 23-41.
- McKenna, K. Y. A. and Bargh, J. A. (1998) Coming out in the age of the internet: identity 'demarginalization' through virtual group participation. *Journal of Personality and Social Psychology* **75**, 681-94.
- McMillan, S. J. and Hwang, J. S. (2002) Measures of perceived interactivity: an exploration of the role of direction of communication, user control, and time in shaping perceptions of interactivity. *Journal of Advertising* **31**, 29-43.
- Min, S. (2007) Online vs. face-to-face deliberation: effects on civic engagements. *Journal of Computer-Mediated Communication* **12**, <http://jcmc.indiana.edu/vol12/issue4/>.
- Neuendorf, K. A. (2002) *The content analysis guidebook*. Sage, Thousand Oaks, CA.
- Norris, P. (2002) The bridging and bonding role of online communities. *Press/Politics* **7**, 3-13.
- Norris, P. and Jones, D. (1998) Virtual democracy. *Harvard International Journal of Press/Politics* **3**, 1-4.

- Noveck, B. S. (2004) Unchat: democratic solution for a wired world. In: Shane, P. M. (ed.) *Democracy online: The prospects for political renewal through the Internet*. New York, Routledge, pp. 21-34.
- Papacharissi, Z. and Rubin, A. M. (2000) Predictors of Internet use. *Journal of Broadcasting & Electronic Media* **44**, 175-196.
- Parks, M. R. and Floyd, K. (1996) Making friends in cyberspace. *Journal of Computer-Mediated Communication* **1**. [Online] Available at <http://jcmc.indiana.edu/vol1/issue4/parks.html>.
- Price, V. and Cappella, J. N. (2002) Online deliberation and its influence: the electronic dialogue project in campaign 2000. *IT & Society* **1**, 303-329.
- Price, V., Cappella, J. N. and Nir, L. (2002) Does disagreement contribute to more deliberative opinion? *Political Communication* **19**, 95-112.
- Putnam, R. D. (2000) *Bowling alone: The collapse and revival of American community*. Simon & Schuster, New York.
- Reese, S. D., Rutigliano, L., Hyun, K. and Jeong, J. (2007) Mapping the blogosphere: professional and citizen-based media in the global news arena. *Journalism* **8**, 235-261.
- Robinson, L. (2005) Debating the events of September 11th: discursive and interactional dynamics in three online fora. *Journal of Computer-Mediated Communication* **10**, <http://jcmc.indiana.edu/vol10/issue4/robinson.html>.
- Savicki, V., Lingenfelter, D. and Kelley, M. (1996) Gender language style and group composition in Internet discussion groups. *Journal of Computer-Mediated Communication* **2**, [Online] Available at: <http://jcmc.huji.ac.il/vol2/issue3/savicki.html>.

- Schneider, S. M. (1996) Creating a democratic public sphere through political discussion: A case study of abortion conversation on the Internet. *Social Science Computer Review* **14**, 373-393.
- Shah, D. V., Kwak, N. and Holbert, R. L. (2001) 'Connecting' and 'disconnecting' with civic life: patterns of Internet use and the production of social capital. . *Political Communication* **18**, 141-162.
- Stanley, J. W., Weare, C. and Musso, J. (2004) Participation, deliberative democracy, and the Internet: lessons from a National Forum on Commercial Vehicle Safety. In: Shane, P. M. (ed.) *Democracy online: The prospects for political renewal through the Internet*. Routledge, New York, pp. 167-179.
- Stromer-Galley, J. (2000) On-line interaction and why candidates avoid it. *Journal of Communication* **50**, 111-132.
- Stromer-Galley, J. (2002a) Diversity and political conversations on the Internet: users' Perspectives. *Journal of Computer-Mediated Communication* **8**, [Online] Available at: <http://jcmc.indiana.edu/vol8/issue3/stromergalley.html>.
- Stromer-Galley, J. (2002b) Motives for political talk online: implications for political conversations and deliberation. Paper presented at the National Communication Association Annual Convention, New Orleans, LA.
- Stromer-Galley, J. (2002c) New voices in the public sphere: A comparative analysis of interpersonal and online political talk. *Javnost/The Public* **9**, 23-42.
- Stromer-Galley, J. (2002d) *New Voices in the Public Sphere: Political Conversation in the Age of the Internet*. Doctoral Dissertation. Annenberg School for Communication, University of Pennsylvania, Philadelphia.

- Stromer-Galley, J. (2004) Interactivity-as-product and interactivity-as-process. *The Information Society* **20**, 391-394.
- Stromer-Galley, J. (2007) Measuring deliberation's content: a coding scheme. *Journal of Public Deliberation* **3**, <http://services.bepress.com/jpd/vol3/iss1/art12>.
- Stromer-Galley, J. and Baker, A. B. (2006) Joy and sorrow of interactivity on the campaign trail: blogs in the primary campaign of Howard Dean. In: Williams, A. P., & Tedesco, J. C. (ed.) *The internet election: perspectives on the Web in campaign 2004* Rowman & Littlefield, Landham, MD, pp. 111 – 131.
- Stromer-Galley, J. and Foot, K. A. (2002) Citizens perceptions of online interactivity and implications for political campaign communication. *Journal of Computer-Mediated Communication* **8**, [Online] Available at: <http://jcmc.indiana.edu/vol8/issue1/stromerandfoot.html>.
- Stromer-Galley, J. and Martinson, A. (2005, May) Conceptualizing and measuring coherence in online chat. Paper presented at the International Communication Association Annual Meeting, New York, NY.
- Sundar, S. S., Kalyanaraman, S. and Brown, J. (2003) Explicating Web site interactivity: impression formation effects in political campaign sites. *Communication Research* **30**, 30-59.
- Sunstein, C. R. (2001) *republic.com*. Princeton University Press, Princeton, NJ.
- Thompson, N. (2002) Freedom to flame. Online political chat is an insult to democracy. Can it be fixed? *The Boston Globe*, pp. D1.

- Trammell, K. D. and Keshelashvili, A. (2005) Examining the new influencers: a self-presentation study of A-list blogs. *Journalism & Mass Communication Quarterly* **82**, 968-982.
- Trenel, M. (May 2004) Facilitating deliberation online: what difference does it make? Paper presented at the Second Deliberation Online Conference, Palo Alto, CA.
- Tsaliki, L. (2002) Online forums and the enlargement of public space: research findings from a European project. *Javnost/The Public* **9**, 95-112.
- Verba, S., Schlozman, K. L. and Brady, H. E. (1995) *Voice and equality: civic voluntarism in American politics*. Harvard University Press, Cambridge, MA.
- Vrooman, S. S. (2002) The art of invective. *New Media & Society* **4**, 51-70.
- Wang, H. (1996) Flaming: more than a necessary evil for academic mailing lists. *Electronic Journal of Communication* **6**, <http://p7979-shadow.cios.org.libproxy.albany.edu/journals%5CEJJC%5C006%5C1%5C00612.html>
- Warnick, B., Xenos, M., Endres, D. and Gastil, J. (2005) Effects of campaign-to-user and text-based interactivity in political candidate campaign Web sites. *Journal of Computer-Mediated Communication* **10**, [Online] Available at: <http://jcmc.indiana.edu/vol10/issue3/warnick.html>.
- Weger, H. J. and Aakhus, M. (2003) Arguing in Internet chat rooms: argumentative adaptations to chat room design and some consequences for public deliberation at a distance. *Argumentation and Advocacy* **40**, 23-38.
- Wellman, B., Haase, A. Q., Witte, J. and Hampton, K. (2001) Does the Internet increase, decrease, or supplement social capital? Social networks, participation, and community commitment. *American Behavioral Scientist* **45**, 437-465.

- Wilhelm, A. G. (1998) Virtual sounding boards: how deliberative is on-line political discussion? *Information, Communication & Society* **1**, 313-338.
- Wright, S. (2006) Design matters: the political efficacy of government-run discussion boards. In: Oates, S., Owen, D. and Gibson, R. K. (eds.) *The Internet and politics: Citizens, voters and activists*. London, Routledge, pp. 80-99.
- Wright, S. and Street, J. (2007) Democracy, deliberation and design: the case of online discussion forums. *New Media & Society* **9**, 849-869.
- Wyatt, R. O., Katz, E. and Kim, J. (2000) Bridging the spheres: political and personal conversation in public and private spaces. *Journal of Communication* **50**, 71-92.
- Wynn, E. and Katz, J. E. (1997) Hyperbole over cyberspace: self-presentation and social boundaries in Internet home pages and discourse. *The Information Society* **13**, 297-327.