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## **Listening, not Lurking: The Neglected Form of Participation**

‘We are prisoners of our metaphors, metaphorically speaking.’  
R. Buckminster Fuller

### **Beyond Lurking**

What is participation? Over the last decade of Internet studies, the concept of participation has been the subject of much attention. It has most commonly been understood as the process of actively contributing content and commentary online, be it via blogs, wikis, news sites, video and photo sharing services (Karaganis, 2007). In particular, the metaphor of voice has taken hold: with the emphasis being on ‘speaking up’ and ‘having your say’. Online participation in this sense has been discussed within the rubric of democratic potential, of citizens contributing their ‘voice’ to a wider form and contributing to a diverse online public sphere. Participation, in this sense, is understood as visibly adding contributions to public or semi-public spaces: rarely is attention given to other forms of participation, such as private email discussions, or behind-the-scenes direct messaging in social media environments (Nonnecke & Preece, 2003).

But if analogies of voice have held sway for over a decade, what has happened to its metaphoric counterpart of listening? The concept has been overlooked as a critical element of online participation. As a corollary of the celebratory emphasis on public participation as speaking up, there has been a lack of interest in the processes of receiving information. Pejorative terms such as ‘lurking’ emerged in the 1990s to define those who follow an online debate, but rarely or never contribute to the public back-and-forth. Lurkers were defined in the early years of Internet research as being readers rather than writers (Sharf, 1999), passive like TV viewers (Morris & Ogan, 1996), and freeloaders who draw on the energy of online communities without offering anything in return (Kollock & Smith, 1996).

Due in part to the disparaging nomenclature, people who do not contribute overtly in public fora tend to feel uncomfortable about their status as lurkers, with studies indicating that they are more concerned about their behaviour than those actively post (Nonnecke, et al., 2004). But in fact, lurking is the most common state for Internet users. People move between active and inactive status, spending most of their time reading the work of others, and sometimes emerging

when a discussion moves into their areas of interest. But relatively little research has been conducted into lurking until recently, despite the fact that it is such a frequent mode in online spaces. Several studies have demonstrated that over 90 percent of an online community will only practice light public commenting or content sharing, if any at all (Mason, 1999; Zhang & Storck, 2001; Nonnecke & Preece, 2003).

Recent years have seen the first flush of research into lurking, and more evidence is emerging that lurkers play an important role in an online community (Nonnecke & Preece, 2003; Lee, et al., 2006). Rather than free-loading, lurkers are actively logging in and tracking the contributions of others; it is a form of receptiveness. While they may not be contributing public posts, they do not deprive regular comments of resources nor do they detract from an online community (Lee, et al, 2006). In fact, they contribute directly by assuming the role of a listening audience. Yet the term 'lurking' belies this positive contribution, with all its linguistic suggestions of concealment, loitering and ill intention. As the Oxford Dictionary reminds us, the definition of 'lurk' is 'to be or remain hidden so as to wait in ambush' (2003). How could we re-imagine the act, and the name, of lurking? Some researchers have suggested new terms for lurkers, such as 'peripheral participants' (Zhang & Storck, 2001), and 'non-public participants' (Nonnecke & Preece, 2003). While these terms attempt to remove the stigma from lurking, they continue to define this majority group by what they are not: not public, not at the centre, not equally important. As terms, they fail to offer a sense of what is being done, and why it is important to online participation.

My aim is to suggest the concept of listening as a powerful metaphor to capture these forms of online participation. Once the activities defined as lurking are understood as forms of listening, they shift from being vacant and empty figurations to being active and receptive processes. Further, when we consider the ways of receiving and attending to the manifold discussions, ideas, and forms of content online, listening more accurately registers the experience that many Internet users have. It reflects the fact that everyone moves between the states of listening and commenting online; *both are necessary and both are forms of participation*. A deeper consideration of listening practices allows for a more critical assessment of what participation means, and decenters the current overemphasis on posting, uploading and 'speaking' as the only significant form of engagement in online spaces. 'Listening in' becomes a mode of contribution which is present in all spaces; a vector that runs through user-cultures. As Tiziana Terranova writes, from its inception the Internet may be thought of 'not only as diverse communication systems, but also drifting and differentiating communication modes' (Terranova, 2004, p. 52). Modes of listening have always been present online, but neglected and denigrated as a form of legitimate participation.

To be clear, I am not seeking to replace 'voice' with 'listening' as a more significant trope for online engagement. Rather than supplanting the current em-

phasis on ‘having a voice’ online, the aim is to supplement it with an analysis of listening as a concomitant practice, one that ideally occurs in tandem with the many forms of speaking up online. In sum, I argue that listening is a vital part of the activity of online communities, and in particular, within many forms of social media. It is also a term that allows for differentiation and complexity: there are many forms of listening online that can be researched. In this chapter, I consider three kinds: distracted listening, reciprocal listening and delegated listening. But there are more variations. For now, let us consider just some of the ways in which individuals, politicians and corporations are listening, and discovering the benefits (and responsibilities) of tuning in to each other online.

### Listening and the Ladder

There has been a glorification of ‘voice’ as the prime form of participation online ever since ‘the techno-utopianism storm’ of the 1990s (Lovink, 2002, p. 113). Not only has the metaphor of voice been important as the *sine qua non* of ‘being’ online, but it has been charged with all the political currents of democratic practice. Voice is closely tied to the libertarian model of online democracy that was championed by the likes of *Wired* magazine, and writers such as John Perry Barlow, Howard Rheingold and Stewart Brand. By speaking up, individuals were fully participating in the co-creation of ideas, debates and online communities. Further, they were considered to be actively engaged in resisting the one-to-many flows of mainstream broadcast media by developing alternative spaces and counterpublics. Expression is paramount for these U.S-centric techno-libertarians, as Barbrook and Cameron explain: ‘they want information technologies to be used to create a new “Jeffersonian democracy” where all individuals will be able to express themselves freely within cyberspace’ (1996 p. 45).

This privileging of voice, and particularly voice-as-democratic-participation can be seen even in later critical account of online activity. In Henry Jenkins and David Thorburn’s *Democracy and New Media*, the authors argue that the Internet ‘is politically important because it expands the range of voices that can be heard in a national debate, ensuring that no one voice can speak with unquestioned authority’ (2003, p. 2). Having begun with this proposition, Jenkins and Thorburn do take some initial steps to qualify it. They recognise that while speaking is important, it is mere sound and fury if it is not matched with a concomitant process of listening. However, even in this admission there is a narrow focus on *who* they hope to be listening:

The Web is a billion people on a billion soapboxes all speaking at once. But who is listening? The old intermediaries are in place, not likely to wither away any time soon, so long as they command national and international audiences and thus retain their power to deliver commercial messages to millions (ibid., p. 2).

In this vision of online communication, the focus is on people being heard by the masses, and challenging the role of major media organisations, which previously

had the sole capacity to speak to mass audiences. This is assuming a desire to 'out-do' mass media, and with the presumption that this will have wide-ranging political manifestations. Jenkins and Thorburn wonder if the proliferation of online voices will ever be able to replace traditional institutions with ones that more accurately reflect the opinions of the democratic public.

Indeed, there are several historical and political reasons why cultural and new media scholars would adopt this 'speaking truth to power' model. However, it could be argued that this has limited their interest in the concept of listening, particularly the ways in which powerful institutions (the media, the state, the financial sector, the resources sector etc.) do attend to, and then make decisions based on, popular opinion. Instead, the dominant approach is that speaking expands democratic power, listening is demonstrated by having one's ideas acted upon, and the result is social and political change.

But this view of power in the relationship between speaking and listening overlooks the ways in which listening can function as an agentic power itself, and it certainly fails to acknowledge the forms of everyday listening online that can generate powerful bonds of social intimacy and connectedness. Such a perspective is not attuned to the forms of listening that occur between individuals and between groups online, those that are not directed solely towards the purposes of democratic change, debate or resistance. Listening has not been given sufficient consideration as a significant practice of intimacy and emotional connection online.

The pre-existing assumptions grounding the concept of online participation can also be evidenced in the design and deployment of popular collaboration technologies on the web. Wikis, for example, are web sites that allow for multiple authors to contribute or edit content, with *Wikipedia* being one of the best known examples. Ross Mayfield, co-founder of *Socialtext*, a company that designs enterprise uses for wikis, has emphasised that only by contributing writing are people genuinely engaged – the rest are 'free riders upon community value' (2009). In Mayfield's 'Power Law of Participation', reading is given the lowest rating for participation, with writing, moderating and 'leading' given the highest engagement. Participation, by this definition, means any kind of online posting, and reading is of only peripheral importance to an online community. In many regards, this is simply a continuation of the early mistrust of lurking that emerged in the literature of the 1990s. While the so-called Web 2.0 technologies have developed more variety in the modes of online communication, collaboration and social engagement, the analysis and definition of participation remains powerfully slanted towards write-only – the act of reading and 'hearing' is not highly valued.

A problematic example of this kind of 'ranking' of forms of participation can be seen in the work of the technology market research company, Forrester Research. It developed a 'ladder of participation' that ranks six kinds of online

audiences. At the top of the ladder are ‘creators’ – defined as those who ‘publish a blog, upload video or audio you created, or write articles or stories and post them’ (Li, 2007). Then come ‘critics’ and ‘collectors’, those who post reviews and comments or tag and vote for things online. At the very bottom, we find ‘spectators’ and ‘inactives’. Forrester describes these groups as people who read blogs and reviews, watch videos, or do ‘none of the above.’ The ladder is offered as a hierarchical representation of the least to the greatest forms of participation. Not only does this devalue the processes of listening and receiving content, but it fails to capture the way online users move between these modes, not just over the years, but from day to day and hour to hour. Even by its own findings, Forrester admits that the largest group – and continuing to grow – is the ‘spectators’. Yet, according to the ladder model, this group represents the second lowest form of participation. In 2010 Forrester revised the ladder of participation to include ‘conversationalists’, because ‘there was no place for Twitter’ (Bernoff, 2010).

But by considering speaking and listening as equally important forms of online participation, and as modes that often occur together, the limitations of the voice-oriented and linear ranking systems can be overcome. Further, listening is a critical part of how social media services such as *Twitter* work.

## Social Media Listening

### *Background Listening*

Professor Jay Rosen is one of many who have compared the micro-blogging service *Twitter* to radio. Rosen asked his 35,000 followers on *Twitter* what they used the service for. Of the first three hundred responses that he received, he made this observation: ‘Surprise finding from my project is how often I wound up with radio as a comparison’ (Rosen, 2009).

*Twitter* is a social networking service where users send and receive text-based updates of up to 140 characters. They can be delivered and read via the web, instant messaging clients or by mobile phone as text messages. Unlike radio, which is a one-to-many medium, *Twitter* is many-to-many or many-to-few, depending how many followers a user has. People choose whom they will follow, which may be a small group of intimates, or thousands of strangers. Further, *Twitter* accounts can be public or private: each user chooses whether their own messages are in the public domain, or restricted to a circle of friends. Of course, there is no sound broadcast on *Twitter*. It is simply people scanning, reading and occasionally posting written messages. However, the radio analogy is common. As MSN editor Jane Douglas writes, ‘I see Twitter like a ham radio for tuning into the world. There's a lot of static but some interesting operators too’ (quoted in Rosen, 2009).

The act of ‘tuning in’ is part of the process of engagement with social media spaces such as *Twitter* or *Facebook*. A user follows many people, some of whom

will post observations, jokes, links, or news. Many messages will simply be scanned quickly, not focused on, something closer to being tuned out rather than tuned in. This could be described as a kind of listening ‘in the background’, where commentary and conversations continue throughout the day, with only a few moments requiring concentrated attention (Crawford, 2009). The conversational field of activity in these online spaces is dispersed and molecularised, a flow of small pieces of information that accrete to form a sense of emotional connection and awareness. It is this sense of knowing the details of someone’s everyday life, as prosaic as they often are, which give this sense of ‘ambient intimacy’ (Reichert, 2007). This process of ‘background listening’ is critical to the sense of intimacy generated in these spaces; ongoing contact with the minutiae of a person’s life is something normally reserved for family, housemates, and lovers. Further, the receptive audience of listeners is required to provoke disclosures in social media space. There are few *Twitter* or *Facebook* users, for example, who post their updates for an audience of none.

But the act of listening to several (or several hundred) *Twitter* users requires a kind of dexterity: a capacity to inhabit a stream of multilayered information. Some will require attention; many can be glimpsed and screened out. The popular tools for receiving *Twitter* updates, such as *Tweetie* and *Twitterific*, provide ‘pop up’ messages on the user’s screen whenever *Twitter* messages are received, acting as an irregular interruption. With the emergence of ‘always on’ broadband Internet, messages can be appearing night and day, for as long as an individual’s computer is active and connected. This requires a kind of relinquishing of control over when messages are seen, and it differs in important ways from consciously logging in to a web site in order to check and read updates. Similar shifts have occurred in other media forms over the last century. As David Goodman writes, the phonograph made it possible to select sounds in bounded time – a record played for 4 or five minutes and then stopped. But ‘radio also created the possibility of abandonment of choice – you could just let it play on and hear whatever came along’ (Goodman, 2009, p. 17). People could clean the house, work, or socialise while the radio played continuously in the background, audible but not focused upon. This practice of distracted radio listening has many parallels with the kinds of everyday engagement that individuals experience with *Twitter*; it is not passive or ‘free-loading’ lurking, but more akin to allowing messages to come and go, and occasionally ‘tuning in’ and responding.

However, there is a history of concern about the practice of background listening. In America in the 1930s, discussions of radio and distraction were deeply connected to fears about propaganda. Distracted listening was seen as a threat, as people who were listening to the radio in an indiscriminate, ongoing way could be easy prey for messages of political intent (ibid., p. 31). Uncertainties about the social power of radio generated debates about the wide range of possible dangers of undisciplined listening practices. Normative frameworks devel-

oped about what constituted the appropriately attentive listener, and where and how loudly radios should be played. As media scholar Lesley Johnson writes, early radio listeners were entreated to be ‘responsible in choosing from the array of goods’ available on the airwaves (1988, p. 79)

Currently, public debates are emerging about the appropriate uses of social media, how it is best employed, and where responsibility lies in engaging with it. For individuals, they are participating in the construction of a range of norms: be it about the appropriate places and times for checking messages, who to follow or friend (or unfollow or unfriend), or whether and how to respond to direct addresses. But norms of online listening behaviour vary between groups, and between categories of users. In addition to individual users, politicians (on behalf of their parties) and companies are joining social media networks, and each face different expectations about how they will engage, and what kinds of listening practices they employ.

### ***Politicians and Reciprocal Listening***

During President Obama’s first address to Congress in 2009, some senators offered a running commentary on *Twitter*. Commentators were generally unimpressed with this flurry of social media activity, with one newspaper headline observing that ‘Politicians twitter throughout address to Congress like bored schoolchildren’ (Milbank, 2009). Views differ as to whether the use of services such as *Twitter* represents a useful engagement with voters. Certainly, many heads of state such as President Obama, Prime Minister Gordon Brown and Prime Minister Kevin Rudd use social media accounts to augment to their election campaigns and send updates on policy announcements – even when it is their staffers doing the work of writing messages. For politicians, services such as *Facebook* and *Twitter* give access to millions of users and offer the capacity to build a sense of camaraderie and connection with their constituency. But as the popularity of social media increases amongst politicians, important differences are emerging in the ways in which they (and their staff) engage in these spaces. In particular, some politicians engage in ‘reciprocal listening’ with their friends and followers – by which I mean recognising and responding to comments – while some continue to adopt a broadcast-only model.

In the case of *Twitter*, at the time of writing, President Obama has over 5.5 million followers, and he follows approximately 713,000. His campaign team used *Twitter* extensively to send updates about the location and content of speeches and rallies prior to his first election. After that time, restrictions commenced in regard to presidential use of digital technologies, and updates have slowed. Even during the times of heaviest use, Obama’s campaign did not directly reply to any followers, or indicate that direct messages were being heard. Australia’s former Prime Minister Kevin Rudd adopted a similar approach with his approximately 1 million followers – primarily broadcasting policy and press

conference updates, only rarely replying to individual users' questions. Some of the updates are written in the first person, signed as 'KRudd', while others acknowledge the parliamentary staffers as authors. Prime Minister Julia Gillard has adopted this model, signing select messages as 'JG'. At the height of former UK Prime Minister Gordon Brown's *Twitter* presence, his 'DowningStreet' account was followed by 1.7 million people, and it is clearly designated as the 'official *Twitter* channel for the Prime Minister's Office'. Doing without the pretence that the Prime Minister was writing himself, this channel was used actively by his staff with a focus on the multi-platform content issued during the week: with links to video updates, transcripts, *Flickr* pages and policy news flashes. Further, many direct questions and comments from followers were publicly answered, generating an impression that responses are being read and considered. Under David Cameron's leadership, the account was renamed 'Number10Gov', retaining the more institutional, less personality-oriented title.

There are also groups that track and archive all national politicians using *Twitter*, such as *Twixdagen* in Sweden and *Tweetminster* in the UK. *Tweetminster*, for example, re-streams all British politicians using *Twitter*, observing which topics are most popular, and allowing users to search for their local member online. According to the site, it aims to 'connect the public with politics' and 'promote better and more transparent communications between voters and Members of Parliament through open conversations' (Tweetminster, 2009). However, it remains unclear just how much feedback via *Twitter* is being heard by political leaders, or is taken seriously as a form of communication and public accountability. It is difficult to define such engagements as a 'conversation' if a politician is not personally writing the messages, nor encouraging staffers to reply and engage with online responses. When a politician's face and name are connected to an online profile which is clearly being used as a public relations arm by unknown staffers, it can resemble something akin to ventriloquism – a pretence of presence.

As social media spaces develop and mature, astute politicians will become more adept at providing voters with the sense that they are being heard and acknowledged. Joe Trippi, the campaign manager for US presidential candidate Howard Dean, argues that politicians now have no choice but to engage fully with social media, and be highly responsive (Trippi, 2009). But the difficulty remains: politicians that outsource their online presence to staff are not really listening, nor are they fully engaging with that community of users. They are subject to disciplinary regimes of attentiveness, yet are performing a kind of engagement-at-arm's-length. This could be described as 'delegated listening' – a mode where the participant is seen to be listening while not spending the considerable amount of time required to be fully present in social media space. This mode of listening – different from background listening and reciprocal listening – can also be observed in the corporate sector.



### ***Companies and Delegated Listening***

Companies are seeing the possible benefits of using social media to forge a closer relationship with customers, gain information about their products, and enhance their public persona. While some politicians enjoin staffers to update *Twitter* and *Facebook* pages, many companies and celebrities allocate this task to employees. Some choose to hire the services of professional microbloggers to craft a presence for them online. Public relations companies and marketing firms offer to update social media services for clients who would prefer not to do it themselves.

This approach effectively transfers all responsibility for engaging in a social media space to a third party. Yet it remains difficult to outsource the act of listening. When professionals are hired to simulate the presence of a company or celebrity online, they are commonly reduced to the level of an impersonal, unidirectional marketing broadcast. The benefit of being able to hear customers' views, respond to their comments and concerns, and gain insight into how the company is being discussed is sharply reduced. As Bob Pearson, vice president of communities and conversations at Dell argues: 'Quite frankly, one of the most important things we do with *Twitter* is listen. I don't think you can hire someone to listen for you' (quoted in Soller, 2009).

However, a commitment to background listening comes at a cost – the cost of human attention. While a senior executive at Dell may underscore the importance of listening to customers, in practice this has meant that each of the hundreds of *Twitter* accounts emanating from Dell Corp. are connected back to staff members who must personally update and respond. This is listening as labour. But how is this labour to be quantified? For while listening is not considered to be an important part of online participation, of 'low value' in the process of online engagement, it is difficult for it be recognised as an important and value-generating form of work. Employees commonly maintain a microblog presence for their company, NGO or university department without financial compensation. Further, there is little by way of research or data to quantify what the value might be of this presence that both discloses information and listens. Comments such as those from Pearson, however, indicate that there is a direct value created by listening, and underscore the importance of further research into the detailed processes of listening online.

For companies, the value of listening could be considered in three ways. First, there is the value of being seen to participate in a community, and being present to hear people's opinions. Second, there are benefits to customer support: by responding within a social media network to negative feedback or offering assistance, they reduce the load on phone-based support, but also have an ongoing connection to the customer. This allows them to ascertain that a problem has been resolved in the longer term. Finally, they are able to search for every mention of their brand or product, gaining an immediate sense of customer user-patterns and satisfaction. Services such as *Facebook* and *Twitter* can then effec-

tively be used as giant focus groups, spaces where companies can listen in to both positive and negative views. There are clear ethical implications to this kind of listening in. Often users of social media services have no say in how their data will be used or who will use it.

In the influential book by economist and political theorist Albert O. Hirschman, *Exit, Voice and Loyalty*, he emphasises the importance of voice (speaking up) and exit (leaving the association) as the two core responses to organisational decline (Hirschman, 1970). What is under-emphasised in Hirschman's insightful argument is the role of listening in such scenarios. As Romand Coles writes, Hirschman 'gives paradigmatic expression to a focus on voice to the preclusion of listening', which has had ramifications for the many political and economic thinkers who have adopted Hirschman's model (Coles, 2005 p. 682). Similarly, while new media theorists have developed generative concepts to understand participation in terms of user-generated content, there is little analysis of the importance of user receptivity. Beginning that process requires an awareness of the many forms of listening, and how they are adopted by a variety of users.

## **Rethinking Participation**

'Vision is a spectator, hearing is a participator,' wrote John Dewey in 1927. He argued that listening is vital to the way in which the 'flow of social intelligence' is facilitated through the 'communications of the local community' (1927, pp. 218-219). Social media ecologies, I argue, also rely on listening to enable the flow of social intelligence as users interact and engage with each other. Social media networks can act as useful case studies to observe the various ways in which listening functions, and how they function as a vital form participation.

The dominant emphasis on 'speaking up' in public spaces as the definition of online participation has meant that we have only considered half the story. The pejorative use of 'lurking' in the Internet research literature of the late 1990s and early 2000s has hampered a more nuanced and productive analysis of the many ways in which people participate online. As a metaphor, listening is useful; it captures the ongoing processes of receptivity that mark much online engagement. Writing about the advantages of metaphors of hearing to better understand the social, Nick Couldry writes of the 'reciprocal, embodied nature of listening; its embeddedness always in an intersubjective space of perception' (2006, p. 6). This intersubjectivity is important to many online spaces and forms of participation.

The social practices of listening online are still developing, and the rapid uptake of social media services will result in an accelerated development of new norms, habits and conventions. The study of the listening subject is just beginning: as work into the practices of surveillance and the disciplinary gaze produced an understanding of the observed and observing subject, so we need a better understanding of the listened to and listening subject. Couldry's view that

metaphors of listening possess a greater flexibility and capacity for registering the shifting nature of contemporary media seems particularly relevant when applied to services such as *Twitter* and *Facebook*. The concept of listening opens up new ways of understanding the nuances of connection and communication in these spaces. For studies of participation, this means re-evaluating how agency and engagement are developed through listening as much as through voice.

## Acknowledgements

I would like to thank the organisers of the COST 298 conference ‘The Good, The Bad and The Challenging’ in Copenhagen in 2009, where I presented some of these ideas, and the journal *Continuum*, where an earlier version of this paper was published.

## References

- Barbrook, R. & Cameron, A., 1996. The Californian ideology. *Science as Culture*, 26, pp. 44-72.
- Bernoff, J., 2010. Social Technographics: Conversationalists get on the ladder. *Forrester Empowered blog*, 19 January [Online]. Available at: <http://forrester.typepad.com/groundswell/2010/01/conversationalists-get-onto-the-ladder.html> [Accessed 30 January, 2010].
- Coles, R., 2005. *Beyond Gated Politics: Reflections for the possibility of democracy*. Minneapolis: University of Minnesota Press.
- Couldry, N., 2006. *Listening beyond the echoes: Media, ethics and agency in an uncertain world*. Boulder: Paradigm.
- Crawford, K., 2009. These foolish things: On intimacy and insignificance in mobile media. In: G. Goggin & L. Hjorth, eds. 2009. *Mobile technologies: from telecommunications to media*. New York: Routledge, pp. 252-266.
- Dewey, J., 1927. The Public and Its Problems. In: J.A Boydston, ed. 1985. *The Later Works*, vol.2. Carbondale: Southern Illinois University Press.
- Goodman, D., 2009. Distracted listening: On not making sound choices in the 1930s. In: D. Suisman & S. Strasser, eds. 2009. *Sound in the era of mechanical reproduction*. Philadelphia: University of Pennsylvania Press, pp. 17-44.
- Hirschman, A.O., 1970. *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge: Harvard University Press.
- Jenkins, H., & Thorburn, D. eds., 2003. *Democracy and new media*. Cambridge, London: The MIT Press.
- Johnson, L., 1988. *The Unseen Voice: A Cultural Study of Early Australian Radio*. London: Routledge.
- Karaganis, J. ed., 2007. *Structures of participation in digital culture*. New York: Social Science Research Culture.
- Kollock, P., & Smith, M., 1996. Managing the virtual commons: Cooperation and conflict in computer communities. In: S. Herring, ed. 1996. *Computer-mediated communication: Linguistic, social, and crosscultural perspectives*. Amsterdam: John Benjamins, pp. 109-128.
- Lee, Y., Chen, F. & Jiang, H., 2006. Lurking as participation: A community perspective on lurkers’ identity and negotiability. In: *Making a difference: Proceedings of the 7th International Conference on Learning Sciences*. Bloomington: International Society of the Learning Sciences, pp. 404-410.

- Li, C., 2007. *Social Technographics: Mapping Participation in Activities Forms the Foundation of a Social Strategy*. Cambridge: Forrester Research.
- Lovink, G., 2002. *Uncanny networks: Dialogues with the virtual intelligentsia*. Cambridge, London: The MIT Press.
- Mason, B., 1999. Issues in virtual ethnography. In: K. Buckner, ed. 1999. *Esprit 13: Workshop on ethnographic studies in real and virtual environments: Inhabited information spaces and connected communities*. Edinburgh: Queen Margaret College, pp. 61-69).
- Mayfield, R., 2009. Power law of participation. *Ross Mayfield's Weblog*, April 19. <http://ross.typepad.com/blog/2006/04/power-law-of-participation.html> [Accessed 10 February, 2010].
- Milbank, D., 2009. Politicians twitter throughout address to Congress like bored schoolchildren. *The Sydney Morning Herald*, 26 February. Available at: <http://www.smh.com.au/news/technology/web/politicians-twitter-throughout-obamas-address/2009/02/25/1235237790423.html> [Accessed 26 February, 2009]
- Morris, M. & Ogan, C., 1996. The Internet as mass medium. *Journal of Computer-Mediated Communication*, 46, pp. 39–50.
- Nonnecke, B. & Preece, J., 2001. Why lurkers lurk. In: *AMCIS 2001 Proceedings*, paper 295. <http://aisel.aisnet.org/amcis2001/294> [Accessed 12 March, 2010].
- Nonnecke, B. & Preece, J., 2003. Silent participants: Getting to know lurkers better. In: C. Lueg & D. Fisher, eds. 2003. *From Usenet to CoWebs: interacting with social information spaces*. Amsterdam: Springer, pp. 110-132.
- Nonnecke, B., Andrew, D., Preece, J. & Voutour, R., 2004. Online lurkers tell why. *Proceedings of the Tenth Americas Conference on Information Systems*. New York: ICIS.
- Oxford Dictionary of English, 2003. Oxford: Oxford University Press.
- Reichelt, L., 2007. Ambient intimacy. *Disambiguity* blog, 1 March. Available at: <http://www.disambiguity.com/ambient-intimacy> [Accessed 10 March 2010].
- Rosen, J., 2009. Help me explain Twitter to eggheads. *Press think* blog, 4 January. Available at: [http://journalism.nyu.edu/pubzone/weblogs/pressthink/2009/01/04/chronicle\\_hlp.html](http://journalism.nyu.edu/pubzone/weblogs/pressthink/2009/01/04/chronicle_hlp.html) [Accessed 8 March, 2010].
- Sharf, B.F., 1999. Beyond netiquette: The ethics of doing naturalistic discourse research on the Internet. In: S. Jones, ed. 1999. *Doing Internet research*. London: Sage, pp. 243-256.
- Soller, K., 2009. Twitter unmasked. *Newsweek Online*, 13 February. <http://www.newsweek.com/id/184656> [Accessed 17 June 2010].
- Terranova, T., 2004. *Network culture: politics for the information age*. London: Pluto Press.
- Trippi, J., 2009. Campaigning with the Internet. Address to the Sydney Institute, Sydney, 24 February.
- Tweetminster, 2009. [Online.] <http://tweetminster.co.uk/> [Accessed 12 March 2010].
- Zhang, W. & Storck, J., 2001. Peripheral members in online communities. In *AMCIS 2001 Proceedings*, paper 117. Available at: <http://aisel.aisnet.org/amci2001/117> [Accessed 12 March, 2010].