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# Digital Dialogues

## The downfall of a Prime Minister and the role of Twitter

A Cultural Studies Honours Thesis

2010

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**BACHELOR OF ARTS (HONOURS) IN COMMUNICATION**

CULTURAL STUDIES

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***DIGITAL DIALOGUES***

*The downfall of a Prime Minister and the role of Twitter*

*Daniel Stone*

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# Contents

<b>List of Figures</b>	<b>i</b>
<b>Preface</b>	<b>iii</b>
<b>1. Introduction and Foundation</b>	<b>1</b>
1.1 Introduction	1
1.2 Literature Review	1
1.3 Method	12
<b>2. Current Issues</b>	<b>19</b>
2.1 Conversation: The keystone to political understanding	19
2.2 Conversation and Public Opinion	21
2.3 A separate world? The discursive construction of “Cyberspace”	23
2.4 Concerns about the decay of social capital	24
2.5 Dark alley fear	25
2.6 Utopian dreams	25
2.7 Prejudice free zone? Questioning the ‘clean slate’	27
2.8 Towards maturity and synthesis.	29
2.9 Questioning the divide	30
2.10 Computer on the street	31
2.11 Twitter	32
2.11.1 Address	35
2.11.2 Attribution	35
2.11.3 Affiliation	37
<b>3. The Spill: Findings</b>	<b>41</b>
3.1 Twitter is a large group conversation	41
3.2 Information is key	44
3.3 Engaged and Evaluative users	49
3.4 A coherent community	52
3.5 The role of information institutions and the problem of preconceptions	54
<b>Appendix</b>	<b>59</b>
<b>Citations</b>	<b>63</b>





# List of Figures

<b>Fig. 1</b>	<b>32</b>
<i>BlackBerry and iPhone unit sales against Twitter users and tweets per day</i>	
<b>Fig. 2</b>	<b>38</b>
<i>Pear Analytics coded research findings</i>	
<b>Fig. 3</b>	<b>45</b>
<i>Post Frequency</i>	
<b>Fig. 4</b>	<b>49</b>
<i>SkyNews broadcasting team using SMS and Twitter live on air to gather information</i>	
<b>Fig. 5</b>	<b>53</b>
<i>Personal Pronoun frequency</i>	
<b>Fig. 6</b>	<b>55</b>
<i>@Reply Network</i>	



# Preface

Before delving into the following study, it is important to recognise how the information trading (i.e. news) business functioned during the 20th century. For most of this time, information flowed through a conduit, where reporters and editors would gather facts and observations and turn them into stories, which were then committed to ink on paper or waves in the air, and finally consumed, at the far end of those various modes of transport, by the audience.

Clay Shirky (2010) suggests a pipeline is the simplest metaphor for that process, whether distribution of news was organised around the printing press or the broadcast tower. Part of the conceptual simplicity of traditional media came from the near-total division of the roles between professionals and amateurs, and the subsequent clarity that division provided. Reporters and editors (and producers and engineers) worked “upstream,” which is to say as the source of the news. They created and refined the product, decided when it was ready for consumption, and sent it out when it was, to readers or listeners or viewers.

Meanwhile, we, the audience, were “downstream.” We were the recipients of this product, seeing it only in its final, packaged form. We could consume it, of course (our principal job), and we could talk about it around the dinner table or the water cooler, but little more. News was something we got, not something we participated in. If we wanted to put our own observations or opinions out in public, we needed permission from the pros, who had to be convinced to print our letters to the editor, or to give us a few moments of airtime on talkback radio.

That pipeline model still shapes the self-conception of working professionals in the news business (at least working professionals of a certain age), but the gap between that model and the real world has grown large and is growing larger as the formerly distinct spheres inhabited by professionals and amateurs continue to intersect and blur in unpredictable ways.

# 1 Introduction and Foundation

## *Introduction*

The 2010 ALP Leadership Challenge which installed Julia Gillard as Australia's Prime Minister in the place of incumbent Kevin Rudd has been referred to colloquially by some political commentators as "one of the cornerstone moments" which "proved the value of Twitter" (Farnsworth, 2010, pers. comm., 23rd September; Middleton, 2010, pers. comm., 23rd September as well as Bergin, 2010; Posetti, 2010). However, no extensive study or analysis has been carried out in regard to the form or effects of Twitter discussions during that 24-hour period. This is partly due to the technical difficulty of acquiring a dataset from the high-volume and high-speed flow of conversation on Twitter, but most substantially because of the difficulty involved with measuring media effects. This study hopes to contribute to our understanding of this event and theorises about the role of an enlivened conversational space—arguing the conversations which occur through computer mediation are indeed conversations and these conversations have a powerful ability to create meaning for individuals. It also argues that now these meaningful conversations are public, searchable and measurable we must move to a more dialogical model of public opinion and agenda setting.

## *Literature Review*

The interplay between communications technologies and political engagement has been of interest to researchers for some time. A cornerstone text on this relationship is Benedict

Anderson's "Imagined Communities", in which Anderson suggests the standardisation of print vernaculars is core to the development of the nation state. Saying, "[standardised languages] created unified fields of communication and exchange below Latin...[as such] speakers of the huge varieties of Englishes, Frenches or Spanishes, who might find it difficult to, or even impossible to understand each other in conversation, became capable of understanding [and communicating with] one another in print and paper" (Anderson, 2006:44).

However, elements of this view have been challenged over time, notably by Paul James, who suggests that Anderson's theory is overly teleological and fails to account for "a layered dialectic of continuity-and-discontinuity, a layering of ontological formations, that qualifies the pivotal emphasis on an epochal shift from traditionalism to modernism" (James, 2006:153). He suggests a more genealogical approach to the development of communication technology and political formation, "...as orality was overlaid by script as part of a more general change in the dominant modes of organising political community, the nature of polity and community was [...] transformed" (James, 2006:151). He also suggests that the abstract sense of community suggested by Anderson was bound not only by language and technology, but the values embedded within them.

Moving forward to the impact of the internet, much thinking draws either directly or contextually from the macro-sociological work of Manuel Castells (1996, 1997, 1998, 2004, 2006), who argued traditional understandings of both space and time no longer reflect experience. Through his idea of a "Space of Flows" he sought to "reconceptualize new forms of spatial arrangements under the new technological paradigm"; a new type of space that is no longer bound to a particular place and as such allows distant synchronous real-time interaction (2004:146). The "Space of Flows" is understood in contrast to a

“Space of Places”, in which Castells suggests people construct identities that feed into social movements that contain the seeds of social transformation.

Despite broad respect for his work, criticism exists around key elements of Castells’ theory. Some argue Castells became too caught up in utopian visions of “cyberspace”, believing we are living in an entirely new era (the “information age”), capable of increased productivity and equality if we open ourselves to the world and manage to avoid certain tribalistic scenarios (Saukko, 2006; Golding, 2000; Smart, 2000). Additionally, some scholars challenge the binary logic of the concepts used, such as envisaging the world torn between the “space of flows” and “space of places”, suggesting such concrete thinking ignores the subtlety and dialogism of everyday life (Waterman, 1999; Friedmann, 2000; Saukko, 2006). Similar to criticisms about the binary nature of the concepts, recent scholarship has also criticised Castells’ distinct conception of each space, particularly because of the increase in mobile internet-connected devices which results in individuals being able to experience both spaces concurrently (Chae and Kim, 2003; Ishii, 2004; Fig. 1).

When it comes to Twitter, the pragmatics of its usage have only begun to be discovered. In a conference paper which is perhaps the first study of Twitter use, Java et al. (2007) identified three main categories of Twitter users: information sources, friends and information seekers. Information sources post news and tend to have a large base of “followers”; these sources may be individuals or automated services. Friends is a broad category that encompasses most users, including family, co-workers, and strangers. Finally, information seekers tend to be users who may post rarely but who follow others regularly.

Java et al. (2007) also identified several categories of user intention on Twitter, including daily chatter, where users discuss events in their lives or their current thoughts; sharing

information or URLs; and reporting news, which includes commenting on current events or automated news agents posting weather or news stories. According to the researchers (2007: 8), this latter development “has evolved due to easy access to the developer API (application programming interface)”.

The fourth—and most relevant to the present study—category of user intention is conversation. Taking the appearance of the @ sign as an indicator, (Java et al, 2007) found that 21% of the users in their study used Twitter for this purpose, and that 12.5% of the messages were part of conversations. Similarly, Mischaud (2007: 30) found that in his sample, “many postings often read like fragments of virtual conversation”. He added that when the @ sign appeared in a tweet, it “was clear that a fellow Twitter user was being interacted with”. However, his study was conducted with the relatively small sample of only 60 users. Boyd, Golder and Lotan (2010: 1) broaden the definition of “conversation” beyond the deliberate and utilitarian view of Java et al (2007) in their exploration of the conversational qualities in retweets, arguing “while retweeting can simply be seen as the act of copying and rebroadcasting, the practice contributes to a conversational ecology in which conversations are composed of a public interplay of voices that give rise to an emotional sense of shared conversational context”.

Mischaud (2007), a MSc student at the London School of Economics, also explored user appropriation and identity construction within Twitter. The findings of his content analysis based study found users generally disregarded the suggested form of messages, which was seen as evidence that technologies operate under user influence rather than anything inherent to the technology—and as such the technology is open to extensive user appropriation. It also found Twitter users primarily engaged in sharing news-like information with others and publishing their personal viewpoints and thoughts.



Although much of the existing research, as mentioned above, has observed and reflected on the Twitter network as a whole, some research has explored the role of Twitter around specific events. Shamma, Kennedy and Churchill (2009, 2010) explore user usage patterns around media events, specifically around the semantic structure and content of the media object across two conference papers. Firstly, “Tweet the Debates” (2009) and secondly “Tweetgeist: Can the Twitter Timeline Reveal the Structure of Broadcast Events?” (2010). Their work finds a strong connection between news media and community annotation. However, their results only draw from an analysis of volume and neglect the content of the messages in their corpus. The idea of Twitter playing a supporting role to major events is also continued through the conference paper work of Hughes and Palen (2009) who discuss its role during four mass convergence events (Republican National Conference, Democratic National Conference and two hurricanes), finding that Twitter played a key role in information sharing and opinion forming during these times—and as such, created meaning for users. They also provide preliminary evidence to suggest users who join during (and in apparent relation to) a mass convergence or emergency event are more likely to become long-term adopters. The work of McNely (2009) comes to a similar conclusion, adding the act of conversing in writing and in a mobile, personal space appears to increase the likelihood for users to then engage in action, collaboration or organisation.

The role of users expressing their viewpoint in writing during an event is also taken up in the Systemic Functional Linguistic approach of Michele Zappavigna (2009) in an unpublished conference paper. She explores the ability for Twitter users to express personal evaluations to a large body of users, allowing a loose sense of group forming which she refers to as “ambient affiliation”. This concept is similar to the concept of ambient awareness advocated by Clive Thompson (2008: 1), which he describes as “very much like being physically near someone and picking up on [their] mood through the little things [they do, such as] body

language, sighs, [and] stray comments...”. Ambient affiliation as described by Zappavigna, however, suggests users not only come to have an ambient understanding of each others mood, but bond over common topics and are invited to share in the values presented within their discussions. She also finds a broad range of user appropriation as users expand the typographic meaning potential through the use of #, RT and @ markers.

Axel Bruns, Jean Burgess et al (2010a, 2010b, 2010c, 2010d) have been applying Communications and Cultural Studies questions to computer science based visualisation techniques in an effort to map Australia’s online social networks as part of a major research project. As the project progresses, preliminary findings have been posted on a public blog (2010a, 2010b, 2010c, 2010d), showing the significant social capital held by traditional information points within the space as well as elaborating on the technical and theoretical methods underpinning their quantitative analysis (explored further in Chapter 3)

The work of O’Connor et al (2010) also explores the potential for conversations on Twitter to be assessed as representative of broader “public opinion”, as expressed by traditional mass media methods through a comparison. They find over a 2-year period, high levels of correlation (up to 80%) between the sentiment of Twitter conversations and traditional polls, capturing important large-scale trends and highlighting the potential for text streams to act as a substitute and supplement for traditional polling. The study does not, however, take into account the current difficulty of assessing demographics within a mediated communications space.

As is evident, past research has yielded important insights into how Twitter is used broadly as a platform as well as in specific international case studies to support users in generating meaning and knowledge from conversation. This study specifically hopes to further validate

these claims while building our knowledge of how this platform is operating within the Australian context—particularly during an unusual media event of national significance. It argues that public, mobile and real-time services like Twitter allow real people to conduct real conversations in which values, opinions and views are informed and shared. Acknowledging the legitimacy of these opinions and exploring the process in which they are shared and developed provides us with great insight into the views of individuals and may play a large role in the assessment of public opinion in years to come.

Beyond research which specifically addresses Twitter, work exploring the role of community, mediated communications and identity construction online underpins my thinking. In particular, the work of Jim Macnamara around community and mediation (2010); Clay Shirky (2008, 2010) on the influence exerted by communities which aggregate labor at reduced resource costs, as well as the role of group forming and the move towards a real-time internet; Deanna Zandt (2010) who explored the ability for personal sharing and transparency to improve trust, reciprocity and social capital amongst individuals and Henry Jenkins who extensively explored the cultural consequences of new communication and distribution processes.

In the above works and others, key discursive themes repeated from early debates around the role of the internet, namely the ideas of technological determinism, space, and the digital divide (the later two are explored in Chapter 1).

The first of these is technological determinism, a reductionist theory which argues that social structures and cultural values which form after the involvement of technology are inherent to the technology, following an “inevitable course” (Williams, 1974/2003; Friedman, 2005; Marx & Roe-Smith, 1994; Olivier, 2003; Smith, 1994: 38). This view approaches a question

at the core of my work, which is how technology is integrated and manipulated in our lives. However, I argue that technological determinism is an overly simplistic understanding of the influence of technology within society and advocate a more moderate view. Of interest theoretically is the role of society—and more specifically individual users—in shaping and constructing the technologies that surround us. Two more moderate key theories exist, the social shaping of technology (SST) and social construction of technology (SCOT). The latter is of particular interest as it has led to the development of ‘interpretative flexibility’: the idea that a technology, depending on who is using it, has many readings, uses, and implications that determine its function (MacKenzie & Wajcman, 1999: 21, 113). Both of these theories also relate to the work of Langdon Winner and his efforts to dispel the notion that technologies are themselves neutral, arguing instead that some technologies can be inherently political and capable of influencing and shaping society (ibid: 4-5).

If changes to social structures and cultural values can be attributed to a more dialogical exchange between users and technology—it is then important to explore the level of engagement users have with these technologies and the broader political process. Schildkraut (2005: 2) suggests there has been a standard set of “individual level factors” used to examine political engagement for much of the 20th Century. These include, for example, a person’s income, level of education, political interest and age. Towards the end of this period, it has become standard to use more expansive datasets that included system level factors such as mobilisation efforts by political parties, candidates and interest groups (Rosenstone and Hansen, 1993; Shaw, de la Graza, and Lee, 2000; Verba and Nie, 1972/1987; Verba, Schlozman, and Brady, 1995). However, scholars have recently begun to argue that these

factors overlook other details key to political engagement, such as experience and social capital (Leighley, 2001; Jackson, 2003; Michelson, 2006; Schildkraut, 2005).

The influential work of Robert Putnam (2001, 2003, 2004, 2005, 2010) places great emphasis on the role of social capital as an influencer of political behaviour, arguing “highly clustered network ties improve information flow and increase reciprocity at a societal level because everyone is looking out for everyone else” (2001: 31). The three qualities Putnam advocates as defining social capital (Trust, Reciprocity and Group/Network) are consistent with broader understandings of social capital, in that they describe the qualities of social relations needed to have productive benefits, specifically within small groups of interpersonal relations. This relates most particularly to the work of Bourdieu (1986: 248) who describes Social Capital as “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition”. However, it is worth acknowledging Social Capital does not have a clear, undisputed meaning for both substantive and ideological reasons (Dolfsma and Dannreuther, 2003; Foley and Edwards, 1997).

Markus Freitag (2003) suggests “most Social Capital studies ignore the networking component, and focus only on the political impact of trust and reciprocity” within clearly delineated groups. The exact form of these ‘networks’ is often fluid, with a study by Ikeda and Richey (2005: 240) finding “vast differences in the organisation and type of interaction within networks” before highlighting some common examples, such as “organised voluntary associations”, “informal networks”, “hierarchical networks” and “equal networks”. The exact nature of “engagement” has also been disputed, however general consensus appears to

conclude there are two primary categories of engagement. Firstly, behavioural engagement, which refers to political action such as voting and campaigning, and secondly, attitudinal engagement, which refers to a person's likelihood to engage in political conversation, form opinions and attitudes about his or her connection to the political system, such as patriotism or trust in government (Citrin and Highton.,2002; de la Garza, Falcon and Garcia, 1996; DeSipio, 2002; Leighley, 2001; Miller et al., 1981; Sidanius et al., 1997).

Due to the heavy emphasis placed on conversation in Twitter, it is this attitudinal form of communication which is of most interest. Many scholars (Tarde, 1898/1969; Coser, 1966; Herbst, 1995; Carey, 1992; Katz, 1995; Habermas, 1984; Oakeshot, 2010; Moscovici, 1985) believe conversation is, if not the fundamental building block for political action, very much at its core. Elihu Katz's "Two-step flow of communication" model is useful for exploring the impact and value of conversation.

The Two-step flow of communication model, which was first introduced by sociologist Paul Lazarsfeld et al (1944/1968) but later elaborated by Elihu Katz and Lazarsfeld (1955/2005), hypothesises that ideas flow from mass media to opinion leads and from them to a wider population. According to Lazarsfeld and Katz, mass media information is channeled to the "masses" through opinion leadership. That is, those with the most access to, and literate understanding of media content, explain and disseminate the content to others. The division between these steps was seen as quite rigid at the time of writing, flowing from media professionals to engaged citizens and on to their personal networks in a pipeline effect. This division is now more blurred, as professional information traders (e.g. journalists) are now engaged in the same pool of information as others (see Chapter 4.3). Now playing a more curatorial role by elevating information seen as valuable while also engaging with the voices of others they have previously been protected from. Information is also contributed to the

pool from all participants—whether that be a journalist with personal insight/information, to people who have Sky or people with information of their own (such as public sightings of well known figures and their activities).

The Two-step flow of communication mentioned above is of significance, as numerous studies have found the most influential element in determining political action is other people (Katz and Lazarsfeld, 2005; Christakis and Fowler, 2009). These studies found that within each common social network (a sports club, social group, family or online community) there was usually a set of individuals who exerted an above average level of personal influence over the views of others within that network—commonly referred to by Katz and Lazarsfeld as Opinion Leaders. The research of Lazarsfeld, Berelson (1948/1986) and Katz (1955/2005) began in the 1940s, and their conclusions have been regularly revised and built upon since (Campbell, 1971; Glaser, 1959; Straits, 1990; Knack, 1992; Kenny, 1992, 1993; Beck et al, 2002)—acting as a foundation in the field of network theory. The work of Huckfeldt and Sprague (2004, 1987), as well as Christakis and Fowler (2009), suggests the influence of Opinion Leaders often snowballs beyond the original social group, as those influenced are often the Opinion Leaders of other groups.

However, many of the above studies on Social Capital, Conversation and Public Opinion avoid speaking of the role played by individuals, instead speaking of “society” as to assume they are also speaking about the individual in the process. This neglects the key shift in audience studies away from these massified notion of behaviour towards individual agency, originally advocated in the work of de Certeau (1974) who examined the ways in which people individualised mass culture by altering things, from utilitarian objects to street plans, rituals, laws and language in order to make them their own. This was then built upon by the work of Fiske and Hartley (1978), Ang (1985), Penley (1988), Hall, Morley and Chen

(1996), Nightingale (1996, 2003, 2007), and Jenkins (2006) who argue that massified notions of audience fail to acknowledge the unique behaviour and social and cultural factors of each individual. Jenkins (2002) cautions, however, that although many have now come to accept the arguments made by cultural studies researchers during the 1980s and 1990s (that audiences were active, critically aware and discriminating individuals) it is wrong to assume we are somehow being entirely liberated through improved media technologies. As such, rather than talking about the technologies, it is important to document the interactions that occur amongst individual media consumers, between media consumers and media texts and between media consumers and media producers.

### *Method*

Building on this background, I then sought to find a research method which would enable me to gather a body of data, as well as a mode of analysis that would provide some qualitative understanding of the significance of that data. I was particularly interested in exploring these datasets for insights into the role of this digital dialogue in real time political discussions. This was due to my fascination with the candid, informal and everyday way people appear to express themselves on Twitter, particularly during periods of energetic discussion and debate within the broader community. I was interested in what effect this portable, “always-on, hyper-connected” form of communication (Rheingold, 2002: 190-191) might have on civic engagement within Australia.

The ability afforded by Twitter to render personal conversation both aggregatable and searchable is relatively new, and from a research perspective the public and text-based nature of these interpersonal conversations provide a stimulating resource for understanding the complex forms of civic discourse. To study this resource, I attempted to triangulate my research using both quantitative and qualitative approaches to corpora analysis, as well



as interviews with prominent users who are also influential in civic debate beyond the platform (and had been long before its development). I believe that combining a macro and micro perspective study of Twitter is important as it provides a broader understanding of the form of discussion by exposing not only the views of individual users but also the interconnectedness of those users, the frequency and intensity of discussion, as well as a long view of just how large the pool of users and conversation really is.

It became clear during early tests that due to the real-time, high frequency and largely disposable nature of the posts made to Twitter, I would have to develop a record of discussions on which to build my study. This became one of the great challenges of the project, as Twitter only makes the last 1,500 posts (dev.Twitter, 2010) available through its API (Application Programming Interface, which facilitates interaction with Twitter from external programs). Realising that, technically, Twitter offered no realistic method to track posts around a search term for an extended period of time I began to develop an application to scrape data at a set interval.

This application, developed with the assistance of Greg Poole, became playfully known as “The Agglomerator” because of the way it helped form Twitter’s live stream of information into a mass dataset. This was built using BASH scripting to scrape all tweets containing a nominated search term at a nominated interval from the Twitter API and site search function. The script then paginates through these messages and serialises them to disc in chronological order. These results contain only messages from the public conversation, not those marked as private through either a platform setting or through the exclusion of the public hashtag. Upon hearing gossip (via Twitter no less) of a possible challenge to Kevin Rudd’s leadership of the Australian Labor Party (and as such, his role as Prime Minister of Australia) I set the Agglomerator to scrape messages on each hashtag which had more than

100 messages dedicated to the discussion. Those search terms, in order of activity, were: *#Spill*, *#Spillard*, *#Ruddroll*, *#Spill2* and the terms “Rudd” and “Gillard” generally. The discussions on each of these tags were recorded over a 24 hour period between 8pm 23rd of June, 2010 and 8pm 24th of June, 2010.

This presented a stark manageability problem, with 128,556 individual messages captured<sup>1</sup>, so I decided to focus on the primary site of community discussion—which was the popular *#Spill* strand. This particular corpus contained almost half of all discussions tracked, with 52,045 posts recorded during the 24 hour period. The software application SCP (Simple Concordance Program) was used to find the frequency of words, while Excel was used to plot the post frequency against time (after consolidating posts into 15 minute blocks). Visualisations developed in these applications were then further processed in Illustrator.

This also made it clear that compiling a corpus which would be representative of broader Twitter usage is well beyond the scope of this study. Instead, the aim was to instead conduct a case study in which field variables, that is, the topic and timing of the posts, were held relatively constant to afford a rich investigation of communication forms in a single domain on Twitter. Additionally, the nature of collecting publicly made messages reduces the concern of the Observers Paradox (Labov, 1972), as conversations were carried out without knowledge of the researchers presence.

To begin analysing this large body of data, I consulted a number of other papers which had attempted to study Twitter. Discovering a significant number of other studies had used .....

1 #Spill: 52,045 / Gillard: 39,547 / Rudd: 29,772 / #Spillard: 3,088 / #RuddRoll: 2,398 / #Spill2: 1,716. There may be some overlap between each of these numbers, as many posts included multiples of each

similar API scrape data collection methods (Shamma, Kennedy and Churchill, 2009; 2010; O'Connor et al, 2010; Hughes et al, 2009; McNely, 2009; Krishnamurthy, Gill and Arlitt, 2008; Zappavigna, 2009) as well as a few who had conducted surveys (Marwick and Boyd, 2010; Ebner and Schiefner, 2008). However, the quality of each program varied widely, with some regularly missing messages and scanning at a slower rate. Almost all of these studies approached analysis through quantitative methods, most popularly through content analysis.

One of these conference papers, however, came closer to the quantitative assessment of quality I was aiming for—which was the Systemic Functional Linguistic analysis of Michele Zappavigna (2009). Some quantitative statistics were generated through the use of corpus analysis programs, however the study primarily focused on the qualitative linguistic structures of 100 randomly selected messages from within the corpus.

Another interesting approach to analysis comes from the media and communications academic Axel Bruns (2010a, 2010b, 2010c, 2010d) working to map online communities as part of the research team for the *New Media and Public Communication: Mapping Australian User-Created Content in Online Social Networks* project. The team applies Media, Communications and Cultural Studies questions to Computer Science methods to try and uncover the shape and dynamics of online political communication in Australia. They have currently gathered a variety of corpora for popular Australian hashtags (such as the discussions around the 2010 Federal Election on the *#ausvotes* hashtag, as well as some light work on the *#Spill* discussion itself). Results have been achieved by statistically processing their corpus and interpreting the results. As such their findings suggest the extent to which sharing is popular amongst these discussions, showing many people refer to external media within the conversation. Their research has also illustrated some of the primary policy concerns of those engaging in Twitter conversation during the election, showing

that discussions around certain policies spiked during policy announcements and that gay marriage, asylum seekers, climate change and the proposed Internet filter were consistently the most popular. This approach manages to get an understanding of the primary concerns and opinion leaders within the space. However, it fails to explore the experiences or comments made by users within the corpus or to consider how language is used to convey values and form groups within each message.

It became clear that to uncover the form of discussion within my corpora, it would be necessary to contrast findings from both qualitative and quantitative analysis, while comparing them to the experiences of active users. However, it was also clear I could learn a great deal from the approaches and techniques developed by others, particularly in regards to quantitative analysis.

In addition to my corpus work, I decided to contextualise my understanding of the impact Twitter was having on the civic sphere through a series of interviews with influential figures in traditional civic debate who have also become prominent Twitter users—the aim of this was to understand what they felt was new and powerful about Twitter as well as what they thought was overstated or conventional. In addition to the difficulty of organising access with these people, I needed to approach these interviews in a considered way. This qualitative approach to interview research provided the challenge of setting a new tone for interviewing, by encouraging a sense of empowerment and honesty in the participant. As such I sought to help the participant “enlarge on the definition of the situation as interview by reading the interview also as an interesting and satisfying encounter, as a chance to express his or her dislikes, disappointments and ideas” (Brenner, 1978: 130). This was achieved by engaging the subjects in a casual and conversational way which invoked a play frame in which the norms and rules of the world outside are suspended (Bateson, 1972/2000).

As Hachamovitch suggests, “issues of privacy and intellectual property control have become incredibly complex in the web of today which values personal transparency and sharing” (Hachamovitch, 2010: 3). This is particularly true of Twitter, which balances the public and the private. Therefore it is important to consider the ethical implications of collecting information such as posts and author information. As such, only users operating accounts set to be publicly visible and messages deliberately including the #Spill hashtag to join in the public conversation have been included. I believe it is fair to understand these interactions as being within public space.



# 2 Current Issues

## *Conversation: The keystone to political understanding*

A broad range of scholars such as Tarde, Speier, Habermas and Katz have suggested that conversation is the fundamental building block for participatory democracies: “Conversation is the crucible in which opinion is tested and shaped; it is the rehearsal hall for political action” (Katz, 1995: 32). Others have also suggested this has been historically demonstrated, through the central role enclaves of conversation performed during the development of participatory democracy in England, France, Germany and the United States (Tarde, 1989/1969; Coser, 1966; Herbst, 1995; Carey, 1989/1992).

To evaluate this idea, we must explore our understanding of the term “conversation”. Over a century ago, French sociologist Gabriel Tarde (1899/1989: 87) defined conversation as “any dialogue without direct and immediate utility, in which one talks primarily to talk, for pleasure, as a game, out of politeness”. It is also in this vein that Habermas (1984: 35) understands conversation as “communicative action for mutual understanding”, contrary to “purposive-strategic action for specific goals.” However, these understandings subtly imply “conversation serves no deliberate purpose” (Oakeshott, 2010), a view which Slade and Thornbury (2006) contests, suggesting that casual conversation plays a fundamental role in communicating values and information. She argues: “Conversation is the informed, interactive talk between two or more people, which happens in real time, is spontaneous, has a largely interpersonal function, and in which participants share symmetrical rights” (2006: 25).

Katz and Habermas further the view, suggesting it is through such conversation that citizens can bridge their personal experiences with the political world. Kim et al (1999: 362) suggests political conversation often happens in the private sphere but, “(a) its inputs (e.g., information, topics, and issues) come from outside the private sphere, particularly from the political system and the political world, and (b) its outputs (e.g., public opinions, issue positions, voting preferences, participatory activities) are fed back into the political system and the political world.” This model can be summarised as “Information > Conversation > Action”.

Since the early work of Bryce (1888/1973), Tarde (1898/1969) and Dewey (1927), many scholars have emphasised the crucial role of conversation in democracy (Barber, 1985; Carey, 1995; Cohen & Arato, 1994; Habermas, 1984, 1996; Lasker, 1949; Oakeshott, 2010). Even after nearly 100 years of mass-media institutions dominating the distribution of information and operating as self-ordained public agenda setters, interpersonal communication remains a fundamental building block of democracy, as William Greider (cited in Anderson, Dardenne, & Killenberg, 1996: 13) points out: “Strange as it seems in this day of mass communications, democracy still begins in human conversation.”

However, the centrality of conversation to democratic process has been contested, with some scholars questioning the real value of conversation in political understanding. Schudson (1997: 305), for example, contends that casual and spontaneous conversation has little to do with democracy inherently and asserts that “nothing in conversation itself suggests democracy”. Schudson argues that conversation and political talk are two discrete processes and we must distinguish casual conversation from “democratic talk,” since (a) democratic talk is not spontaneous but civil, (b) democratic talk is essentially public but not necessarily



egalitarian, and (c) talk in democracy is oriented to the explicit, available, transferable communications found in print and broadcasting rather than in face-to-face conversation. Slade (2006), Katz and Lazarsfeld (1955/2005) amongst others acknowledge the difference between casual conversation and other types of speaking (such as prepared speeches, presentations, interviews, etc) however, they are keen to emphasise this doesn't reduce the critical role played by conversation in the process of civic understanding for individuals. Furthermore, a number of studies suggest computer mediated communications can function in a variety of these modes, often simultaneously (Herring and Honeycutt, 2009; Boyd, Golder and Lotan 2010; Shamma, Kennedy and Churchill, 2009; 2010b).

The question, then, is how can casual and informal political conversation produce, among other things, the impartial and rational opinions that are said to serve democracy? This should be possible if conversation is a communicative action oriented toward mutual understanding, as Habermas (1984) contends. As such, conversation can foster "enlarged minds" and cultivate "representative minds" (Arendt, 1958/1998) which, in turn, produce impartial reciprocity (Chambers, 1996; Gutmann & Thompson, 1996; Habermas, 1996). At an individual level, conversation provides people with the opportunity to think through and challenge their "idea elements" and reduce cognitive inconsistency (Zaller, 1992; Zaller & Feldman, 1992), thus enhancing the quality of an individual's opinions and arguments (Billig, 1996; Kuhn, 1991; Lasker, 1949).

### *Conversation and Public Opinion*

Over the last 80 years researchers have sought to measure these individual level opinions, often only from those in small sample groups, in a process which has been collectively referred to as "public opinion". This term (a consequence of mass communications systems)

presents some challenges, as it has been argued to represent anything from (1) an opinion held by a majority of citizens (de Sola Pool, 1973), (2) a kind of “reasoned public” in which it is the opinion of those who either have the intellectual capabilities to arrive at socially useful beliefs and attitudes and discuss them publicly (Habermas, 1962/1991) or who have the power and instruments to make their views publicly known (Hennis, 1957) (3) or any opinion at all regarding “public affairs” (de Sola Pool, 1973).

The common discursive thread through discussions of public opinion suggests the most accepted and useful understanding is a formalised, personal view which is expressed in a measurable way. Historically, the measurement of these views has been a challenging feat, often resolved through the use of public opinion surveys or focus groups. Katz criticises surveys as they “routinely ask about the frequency of talking politics, but this evokes a too generalised self portrait that gives little insight into the dynamics of everyday talk about politics.” (1995: 32). Many have also criticised focus group methodology, suggesting it can only tell us how people talk about something when asked to and not whether and how they do so independently (Gamson, 1992; Liebes and Katz, 1994; Delli Carpini and Williams, 1994). One of the values of my study and others around computer mediated communication of social and political issues is the ability to address these long standing concerns in some way.

Work on public opinion remains of value as it explores the macro-representation of interpersonal conversations over the last 80 years and the consequences of those representations more broadly. Schoenbach and Becker (1995) note that politicians, civil servants and other elites often read the media (then conventional mass-media) as representative of public opinion. Katz (1995) suggests we need to know much more about

how these elites take account of public opinion in day-to-day functioning and in policy-making, as well as the kinds of actions that bring opinion and public opinion out of privacy, out of public space and onto the agendas of the powerful. These issues have become even more important in the time of computer mediated communication, as a number of policy makers, politicians and journalists increasingly see these conversations occurring on platforms such as Twitter as reflective of broader public opinion. Indeed the Member for Lyne, Rob Oakeshott, spoke to this, suggesting many MPs now conduct their own media monitoring via platforms such as Twitter (2010, pers. comm., 23rd September).

### *A separate world? The discursive construction of “Cyberspace”*

To understand current debates around the value of conversations through computer-mediated communications platforms it is important to understand the context in which these conversations occur and the way this space has been discursively constructed since the early days of computer network conversation—predominantly the internet.

The term Cyberspace was originally coined by William Gibson in the 1982 novel “Burning Chrome”, but popularised by his later novel “Neuromancer” (1984). It was commonly used during the early stages of the public internet to refer to the space of social engagement permitted by networked computers, where online relationships and alternative forms of identity were enacted. The term raised questions about the social psychology of internet use (Wallace, 1999), the relationship between “online” and “offline” forms of life and interaction (Foster, 1999) and the relationship between the “real” and the virtual (Golding, 2000).

In discussions of Cyberspace the spaces of “online” and “offline” are often unhelpfully placed in binary. This binary constructs each as a discrete space, of which only one can be occupied consciously at a time. As such, early discourses about internet use were framed in this binary, with one of the primary concerns being the possibility people would choose to ignore their “offline” lives in preference for their new “online” identity. Those concerned about this shift primarily framed their concerns around the impact of cyberspace on communities (Uslaner, 2004).

### *Concerns about the decay of social capital*

Perhaps the most vocal of those concerned was Robert Putnam (2001, 2003, 2004, 2005, 2010) who saw technology as coming between the “virtuous circle” of trust, group membership, and informal social ties that he refers to as “social capital” arguing social capital helps make society and its government run more smoothly. He suggests this social capital is in shorter supply now than it used to be due to a steep decline in membership for civic clubs (such as Rotary Clubs, League of Women Votes, Bowling Leagues and Card Clubs) since the 1960s. As a consequence people converse and socialise less with friends and neighbours and, in America, vote less often.

Putnam argues the principal villain in the decline of social capital is technology, especially television but he also targets the Internet (Putnam, 2001, ch. 13). This view has been heavily criticised, with a number of scholars arguing that neither television (Uslaner, 1998; Newton, 1999) or the internet (Uslaner, 2004; Norris, 2000; Shah, 1998) has a role in this decline. They argue that there is no evidence “for the claim that people who have stronger social support networks in the ‘real world’ avoid the web, the web is a haven for people who don’t trust others or that people who spend time online are less likely to trust others” (Uslaner, 2004:224).

However it is worth noting that Putnam's views have begun to soften, recently claiming there has been an upswing in civic engagement and resulting social capital over the last 5 years. He attributes this to a "different kind of engagement" (Putnam and Sander, 2010:14) facilitated by "technological civic inventions" such as Social Network Sites and communication platforms like Twitter which draw on a community reinvigorated by the events of September 11, 2001.

### *Dark alley fear*

In addition to the discursive binary set up around "online and offline worlds", another existed about the possibilities afforded by the Internet. One side of this discourse saw the internet as an untamed frontier, free of the security and protection afforded by regulation. The internet was seen as a secret world where anonymous elites sought to manipulate and exploit more ordinary citizens, where "charities" solicited funds for non-existent causes (Abelson, 1999) and unscrupulous hackers uncovered your credit card numbers (Marton, 2010). The newsmagazine U.S. News and World Report (2000:36) published an illustrative report suggesting that "the amount of bad stuff out there is truly staggering"—adoption scams, stalking complaints, rigged auctions, and even "the first Internet serial killer". We are drawn to picture a street gang hiding behind every corner.

### *Utopian dreams*

Conversely, discourses on the opposite side of the binary saw the internet (and "Cyberspace") in a utopian light. Foster (1999) suggests this was often promoted by commercial interests, citing a number of advertisements run by telecommunication companies which "celebrate computer-mediated communication in explicitly utopian terms. Typically, such advertisements stress the obsolescence of physical appearance and bodily markers of difference: Cyberspace, the imaginary site of social interactions conducted

through networked computers, is a 'place' where gender, race, and physical disability cease to matter, we are told" (1999: 144). However, commercial interests were not the driving force of utopian discourses around the internet. Rather, it was those disenfranchised with existing political structures and problems who saw the internet as an opportunity to start over. The work of Howard Rheingold (1993/2000, 2002) is particularly influential in this area and John Perry Barlow's often quoted "Cyberspace Declaration of Independence" (1996) is illustrative,

Governments of the Industrial World, you weary giants of flesh and steel,  
I come from Cyberspace, the new home of Mind. On behalf of the future,  
I ask you of the past to leave us alone. You are not welcome among us. You  
have no sovereignty where we gather. We have no elected government, nor  
are we likely to have one, so I address you with no greater authority than  
that with which liberty itself always speaks. I declare the global social space  
we are building to be naturally independent of the tyrannies you seek to  
impose on us. You have no moral right to rule us nor do you possess any  
methods of enforcement we have true reason to fear.

Governments derive their just powers from the consent of the governed.  
You have neither solicited nor received ours. We did not invite you. You do  
not know us, nor do you know our world. Cyberspace does not lie within  
your borders. Do not think that you can build it, as though it were a public  
construction project. You cannot. It is an act of nature and it grows itself  
through our collective actions.

However this utopian discourse has also been heavily criticised from a number of

perspectives. Markley (1995) argues these discourses are uncritically invested in the ideology of scientific progress, which he calls “the meta-narrative of technological development” and “the rhetoric of ‘new’ that is endemic to both academic and popular writing in cyberspace, post-modernism and late capitalism” (1995: 7,9). Shapiro & Leone (1999:38) suggest cyberspace has become a much over-imagined and emotionally conceptualised space that deflects our attention from real issues. Macnamara (2010:107) adds, “[The problem with Cyberspace] is that it focuses attention on things happening in some other space, not here, and it posits interactions conducted through these media as virtual reality”, with the implicit suggestion these experiences are somehow inferior to those grounded in materiality and physicality.

### *Prejudice free zone? Questioning the ‘clean slate’.*

Henry Jenkins (2008) also argues that “gender, race and physical disability cease to matter” is a distinctively white liberal framing. Reflecting on a forum he held some years earlier, titled “In Cyberspace, nobody knows your race unless you tell them. Do you?”, Jenkins writes,

...many of the forum’s minority participants—both panelists and audience members—didn’t experience cyberspace as a place where nobody cared about race. Often, they’d found that people simply assumed all participants in an online discussion were white unless they identified themselves otherwise. One Asian American talked of having a white online acquaintance e-mail him a racist joke, which he would never have sent if he had known the recipient’s race. Perhaps covering up for his own embarrassment, the white acquaintance had accused the Asian-American man of ‘trying to pass as white.’ Even when more than one minority

was present in a chat room, the forum participants said, they didn't recognise each other as such, leaving each feeling stranded in a segregated neighbourhood. If they sought to correct ignorant misperceptions in online discussions, they were accused of 'bringing race into the conversation'. Such missteps were usually not the product of overt racism. Rather, they reflected the white participants' obliviousness about operating in a multiracial context.

Sarah Gatson (cited in Jenkins, 2008) suggests this behaviour is a consequence of the discursive and narrative frames of earlier identity politics and civil rights movements:

[these frames] have great influence over how people understand things—especially new things with which they may actually have very little experience—the insertion of colour-blind (or post-racial) discourse into the online context is important. On the one hand, colour-blind discourse has as one of its often implicit foundations the idea that racial identity in particular is or should be invisible. This idea is obviously rooted in the discourse of the civil rights movement itself, but its use after the last successes of this movement in 1968 has arguably (as pointed out in the now classic work of Michael Omi and Howard Winant, *Racial Formation in the United States*) been turned on its head (or, re-articulated in Omi and Winant's terms). Instead of focusing on race and what it does (what we make it do, what it does to us) in the real world, we are told not to focus on race because in an ideal world, it does not (should not) matter. Cyberspace, as in some ways it is the ideal "ideal world" (this is arguably one of the two dominant narratives about cyberspace), fits very well with



this post-racial/civil rights discourse. I think that sometimes we don't want the problems of the "old world" invading our shiny new cyberspace, especially when so much of what many of us ordinarily do online involves leisure and entertainment.

As the internet is increasingly considered core to civic communication and the operation of power it is of key importance to acknowledge the texts, language and the discursive practices that structure and enable communication transcend the "online/offline" binary that has been constructed in traditional discussions. Texts do not passively report upon the world, but they imbue it with meaning, fabricate it, shape perspectives and call the world into being. The broad term discourse can be employed in these circumstances as it refers to the various ways in which communication between people is achieved. Fairclough considers discourse as an 'active relation to reality' (1992: 41) which is similar to Foucault's (1972/2002) idea which Lessa (2006) defines as, "systems of thoughts composed of ideas, attitudes, courses of action, beliefs and practices that systematically construct the subjects and the worlds of which they speak".

### *Towards maturity and synthesis*

As the internet moved towards a decade in public use, it became clear neither of these two views reflected consensus experience. Theorists moved towards a more moderate third perspective: the internet itself neither destroys nor creates social capital. There are both altruists and scoundrels, benefits and drawbacks online, just as there are in everyday life (Bimber, 2000; Wallace, 1999:190; Uslander, 2004). Suggesting the internet mirrors everyday life, Bimber argues what people do online is pretty much what they do offline: "They shop, they get sports news and weather, they plan their vacations, and, most of all, they communicate with people they already know". At least one survey from the time

(Cole, 2000) and a time-diary study (Robinson et al, 2000) suggest “Net surfers” socialise with others about the same amounts as other people. It would seem neither side of the traditional binary is close to the truth—The Net is not a threat. But it is not Nirvana either.

However, the discursive binaries set up in discussions of a good/bad internet, and an online/offline world still continue to frame much thinking. As discussed earlier, the work of Manuel Castells plays a key role in this thinking. However as internet access becomes more and more ubiquitous, the old ideas of a networked elite tied to their computers become increasingly difficult to picture.

### *Questioning the divide*

As internet access becomes more common, we must reconsider other popular concerns in discussions about the role of computer mediated communication—such as that of the “digital divide”, described by Bharat Mehra in simple terms as “the troubling gap between those who can use computers and the Internet and those who cannot” (2004: 782). This divide is still considered to be a key concern internationally, however with the development of comparatively cheap and mobile technology (such as transmission towers and mobile handsets which can be installed at significantly lower cost than traditional hard-wire networks) many people previously excluded from communication networks are now able to connect with others (see Macnamara, 2010: 77; Marriott, 2006). This study, however, is primarily concerned about communications behaviour within the Australian context, where the divide has been reduced dramatically with 98% of homes have personal computers (ACMA, 2008:12), and 73% of the population having broadband internet at home (ACMA, 2008:30). However, as the divide between those who have the access to internet

infrastructure and those who do not is reduced, a number of scholars are arguing for a reconceptualisation of digital divide along traditional social and cultural fault lines such as class, education level, geography, ethnicity, gender, age and cultural factors (Cullen, 2001; DiMaggio et al, 2001; Norris, 2000). Jenkins (2006) describes this as a “participation gap” resulting from those with a lower rate of digital literacy. As seen later in this study, a high level of digital and media literacy is often required to engage in computer mediated conversations—so overcoming this divide is a key concern if these conversations are to represent a truly broad scope of individual level opinions.

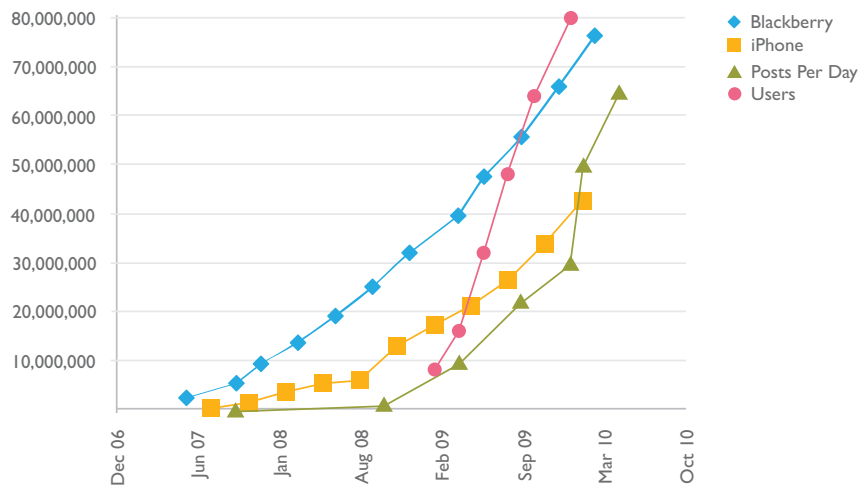
### *Computer on the street*

In addition to the rise in internet access through traditional desktop or laptop computers, internet-enabled mobile devices are becoming increasingly popular (ACMA (2010) reports 2.4 Million people accessing the broader internet via mobile phones as of June 2010, up from 1.6 Million a year earlier, Fig. 1), allowing users to increasingly experience both real and online worlds concurrently. These internet-enabled mobile devices mark a significant shift in our understanding of the Internet, allowing for a real-time, personal and non-spatially bound experience. This shift has only recently been felt in the western world, but Internet enabled mobile devices have been popular for some time throughout Africa and Asia due to cheaper infrastructure costs at both ends (such as transmission towers and devices). Japan has had a substantial mobile internet user-base since the early 2000s. Studies such as Ishii’s (2004) have found that these devices were particularly popular due to their lower buy-in costs, and a perception these devices were “a more time-enhancing activity while PC Internet is a more time- displacing activity” (2004:1), which has made them particularly appealing for the younger members of Japanese society. Ishii also argues that communication through mobile devices is often of a more

personal nature than PC based communications. Chae and Kim (2003) agree, suggesting “It is not uncommon for people to share their desktop computers, whereas it is very rare for them to share mobile Internet phones. Therefore, the mobile device always carries its user identity.” (2003:240).

In the west, devices such as Research in Motion’s Blackberry series and Apple’s iPhone have led the charge in popularising mobile internet usage. I argue that these devices have cultivated the growth of a new kind of real-time, personal and multimedia rich internet communication service, most commonly exemplified by Twitter (developed in 2006). This is demonstrated by the fact that the exponential growth of these mobile devices can be held against the growth of Twitter (in terms of both users and average posts per day), showing a clear correlation between their growth patterns (Fig. 1, overleaf).

**Fig. 1 - BlackBerry and iPhone unit sales against Twitter users and tweets per day**



Data Source: Publicly stated company data

### Twitter

The word “Twitter” has its origins in late 14th Century English, and as such it is useful to consider the genealogical definition of the word before discussing the service. The New Oxford Dictionary presents two definitions, “Twitter (verb): (of a bird) give a call consisting of repeated light tremulous sounds.; talk in a light, high-pitched voice: old ladies in the

congregation twittered; talk rapidly and at length in an idle or trivial way: he twittered on about buying a new workshop” (Pearsall, 1998:2001). At its base, to twitter is to casually engage in short intervals of communal communication and response.

It was this abstraction which Twitter’s founders seized upon when searching for a title for their new group SMS messaging service. This service encourages users to send text-based posts of up to 140 characters, which are then made publicly visible upon the users’ online profile (although senders can restrict message delivery to a pre-approved list of contacts known as “followers”). Each user can also “follow” the posts of others or view a real-time stream of all user postings on Twitter’s public timeline.

Although originally designed for use with SMS on mobile phones, Twitter’s user interface is now accessible across multiple platforms and third party applications including, Twitter.com, Instant Messaging applications (AOL, MSN Messenger, Yahoo), plug-ins embedded in popular social network sites (SNSs) such as Facebook, compatible external clients (such as for Smartphones) and the original SMS (Glaser, 2007; Wikipedia, 2010; Twitter, 2010). Regardless of which channel of input a user chooses, they are able to incorporate links to external media (commonly still and motion pictures taken on a mobile device) and shortened aliases of longer hyperlinks.

The term “micro-blogging” has come to represent the communication-style of short bursts of personal thought which are seen on Twitter (Codel, 2006; Glaser, 2007). This style of interaction is also seen on Jaiku (Oulasvirta et al, 2009), Google’s Buzz, a French site called Frazr.fr and a German site known as Wamadu.de (Diaz, 2007) amongst others. These services, particularly Twitter, are relatively free of regulation (both behavioural and technical) allowing a wide variety of experimentation and innovation by their user base. An

example of this experimentation can be seen in the way real-time information generated through user messages has been aggregated by a variety of third party applications such as *Twittervision.com*, which plots each post against a map; *Tweet for your Team*, which tries to assess the sentiment between two rival groups (originally designed for the World Cup, but used by the ABC during the 2010 federal election); and *tagmap*, which plots popular keywords and hashtags against geographic region to illustrate regional concerns.

As Twitter grew, its community of users developed a variety of techniques for addressing, attributing and affiliating users, as these features were not originally supported by the platform. As these techniques were community developed, they were designed to exist within the existing restrictions of the platform and, as such, each concern has been addressed using typographic markers embedded in the content of each post.

The embedded nature of address, attribution and affiliation has facilitated what Bakhtin characterises as “heteroglossia” (1981/2004), a term describing the coexistence of, and conflict between, different types of speech. It was characterised by him as “another’s speech in another’s language, serving to express authorial intentions but in a refracted way” (1981: 138). Zappavigna (2009: 3) uses heteroglossia to describe Twitter’s capacity “to bring other voices into [messages on Twitter] by addressing other users, republishing other tweets, and flagging topics that may be adopted by multiple users.”

## Address

To address another user, what I refer to as the “@reply” was developed, in which a message starts with “@username” designating specifically whom the author is addressing. Eg.

MISSPRPIXIE: @paulmp not that I've seen so far #spill

Despite the message being addressed to a specific user, it remains publicly visible like any other message on the service. This renders each post public and performative, with words chosen to enact the authors identity in negotiation between both the private and public conversation. My interpretation here refers to the work of Austen (1962: 16) who said that to state or name objects is to constitute those objects from our own perspective or according to our own beliefs: what we say is what we do and who we are.

In use, an @reply can be about a person as much as it is to them. For example, in the following messages, the users reveal their own political stance:

AFDEMPSTER: This better all be over before @GruenHQ is on, or shits will be cracked. :-( #spill

LUKEMCCORMACK: Do you think Julia Gillard will check into 4sq & say I just ousted @KevinRuddPM as the Prime Minister of Australia? #spill #RuddRoll

RENAILEMAY: Awesome: Gizmodo starts a campaign to push @katelundy for Communications Minister: <http://bit.ly/cUzXPt> #spill

MISSAMYABLE: So how long does @KevinRuddPM have left? #spill

## Attribution

“RT” or “retweeting” is simply taking a Twitter message from someone else and forwarding (quoting, syndicating, rebroadcasting) it to your followers. Boyd, Golder and Lotan (2010:

1), however, are keen to emphasize “spreading tweets is not simply to get messages out to new audiences, but also to validate and engage with others”. Common formats to retweet a message include:

RT @username: original message

“original message” (via @username)

such as in the examples below:

CHICKSTAONE RT @KevinRuddExPM: SERIOUSLY GUYS, I GAVE YOU ALL \$950 LAST YEAR FUCK WHAT MORE DO YOU WANT #spill

SHANNON64 News.com.au wins the #spill result graphic competition <http://twitpic.com/1zdiph> /via @duncanriley

It is also common to include a comment about the original message, which adds to the conversational ecology in which conversations are composed. This leads to what Boyd describes as, “a public interplay of voices that give rise to an emotional sense of shared conversational context” (Boyd, Golder and Lotan, 2010: 1).

Comment RT @username: original message

“original message” (via @username) <- Comment!

such as the examples below:

JILLIANBLACKALL: I second that motion RT @kathoc: Petro Georgiou for PM! #spill

SACURREN: Gillard apparently in Rudd’s office NOW! #spill /via @\_leo\_s : is the cleaner there to?



However, It is important to note that this style of retweeting is not a system function and as such there is no formalised style. The variants mentioned above are by far the most common, but users occasionally employ their own style. Whatever style is employed, it is clear the primary function of retweeting is a community building one, with users retweeting to help form a community of interest around a topic in which their specific voice is included.

### *Affiliation*

Hash-tags are also a community-driven convention for adding additional context and metadata to posts. Due to its electronic affordances, the inclusion of a hashtag renders posts aggregatable and searchable, thus allowing the grouping of conversations and interested users. Any user can create a hashtag by prefixing a word with a hash symbol: e.g. #sarcasm, #firstworldproblems. Because they are community driven, hashtags only work once members of the community identify a tag and use it as part of their dialogue . It is also common for a variety of hashtags to exist for a single topic. For example, during the 2010 ALP leadership challenge we find all of the following: #spill #ruddroll, #spillard, #spill2.

In the words of early proponent Chris Messina, “[to address] concerns that it would be challenging for folks to track [a variety of words] on Twitter because of inconsistency in using those words together, we decided to start using [hashtags] as a mechanism for bringing people together around a common term” (2007). It was this mechanism which was key to delineating discussions during the evening of the leadership “spill” from the Deepwater Horizon Oil Spill in the Gulf of Mexico, which was also a popular topic of discussion over the tracked period. Additionally, hashtags bridge the gap between metadata and content, as

each hashtag is featured within the content of the post. As such, each hashtag is part of the meaning making of each post (both discursively and functionally). Eg.

**BUFFINESS:** Work is going to be so boring today. Anyone up for a road trip to Canberra to join in the fun? #spill

**SILVERHELLS:** Standing outside a coffee shop in north Sydney watching the #spill like a nerd.

**INFLATABLENERD:** Seeing non Australian, non #spill tweets in my timeline is like seeing that one kid who forgot it was mufti day

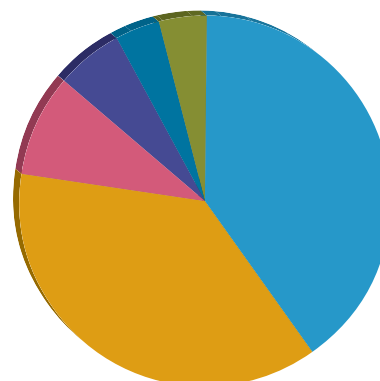
**GNOMEANGEL:** For those of you that missed it in the #spill excitement I GOT TIX TO SEE @stephenfry !!!!

Unsurprisingly the service has been criticised, with one technology commentator opining “Twitter is the poster child of a new ‘micro-trend’ that has reduced the social networking tool to single sentences, pictures and the most everyday emotions and events” (Nuttall, 2007). Others have raised concerns over privacy (Leader, 2007) and its “attack” on “our powers of concentration” (Pontin, 2007).

Understanding the character of communication on Twitter has been a difficult task, with many studies trying to assess its utility, value and meaning. One of the most frequently cited studies was conducted by market research firm Pear Analytics in 2009. It analysed 2,000 messages over a 2-week period in August, all of which originated from the U.S, were made in English and were posted during office hours. The messages were coded into 6 categories:

**Fig. 2 - Pear Analytics Tweet Coding**

- Pointless babble — 41%
- Conversational — 38%
- Pass-along value — 9%
- Self-promotion — 6%
- Spam — 4%
- News — 4%



Source: Pear Analytics (2009)

However, it is worth recognising that each of these categories is the construct of Pear Analytics, so that 'Pointless babble', for example, is simply their interpretation of the significance of a large portion of the messages. I would also suggest that each category includes conversational elements, as seen in the discussion of conversational modes above. However, The "pointless babble" perception is shared by cultural theorist Henry Jenkins (2009a) who argues the rise in "meaningless noise" and the restricted character limit of Twitter messages are leading to a decline in critical thinking. He argues that, "there is an awful lot of relatively trivial and personal chatter intended to strengthen our social and emotional ties to other members of our community. The information value of someone telling me what s/he had for breakfast is relatively low" (Jenkins, 2009a). In response to Jenkins, McWilliams (2009) argues, "No tweet can be interpreted in isolation. No Twitter stream exists wholly independently of any other. Twitter's depth exists precisely in the delicate intertwining of inanity with complexity." Danah Boyd, in response to the Pear Analytics study, argues that what Pear researchers labelled "pointless babble" is better characterised as "social grooming" and/or "peripheral awareness". She explains the term as "[users] want[ing] to know what the people around them are thinking, doing and feeling, even when co-presence isn't viable" (Boyd, 2009). Linguist Michele Zappavigna (2009) adds "the kind of evaluative language sampled [in her study of the Obama election victory] suggests the tweets may be forming a more interpersonal social function in which users are affiliating around shared values".

Criticism, however, hasn't slowed the popular adoption of the service. The relative ease of staying in contact through the use of a one-to-many application makes Twitter one of the most popular and fastest growing communication platforms online (Pontin, 2007, Fig. 1). The qualities which make it so successful, such as its real-time and mobile nature—as well

as the public and performative interactions it promotes—have increasingly been incorporated into a variety of services and platforms such as Facebook, MySpace, Jaiku and Plurk amongst others. As such, these qualities seem certain to have a place in future communication platforms.

Through the above discussions it is clear that conversations conducted through computer mediated communication platforms are indeed real and come loaded with the values and experiences of real people (for good and ill). As these real-time, mobile, public and performative platforms become increasingly common to Australian internet users it is necessary we begin to understand how conversation is conducted on these platforms, as well as how they could be used to support public political participation and engagement. As such, the following chapter explores just how fundamental conversation is to Twitter through a case study of the unusual event of a sitting Prime Minister being challenged for the leadership of their party. Additional analysis exposes the loose social ties which allow interest topic communities to form, as well as the high degree of information sharing, evaluation and engagement amongst users such a community fosters.

# 3 The Spill: Findings

Early in the preceding chapter I argued that computer mediated conversations are indeed real conversations conducted by real people—and as such are imbued with values, prejudices and assumptions that impact others (e.g. the role of race and gender in conversation discussed in 2.7). Further to this, I have also shown that conversations can have real and meaningful effects on individual level understandings of not only politics but interest topic areas in general—shown in the work of Katz (pg. 15) who suggests conversation is fundamental for understanding and opinion forming as well as Putnam (pg. 24) who argues conversation plays a key role in group coherence and engagement. In the following chapter I seek to further validate the significant role played by conversation on Twitter before exploring the high level of engagement and literacy shown by individuals in these discussions, as well as the effects they are having on institutions which have traditionally controlled the perception of public opinion and flow of information. In addition to the significant role of evaluative and information focused conversation, I also discuss the role of loose communities which form to facilitate these group discussions.

## *Twitter is a large group conversation*

As discussed earlier, messages on Twitter are commonly imagined to be part of a group discussion, in which statements are directed to all participants, not specific users. This is common in a variety of settings, from the discussions within a classroom to discussions within a hashtag. However, the capacity exists on Twitter to direct specific statements to specific users.

As mentioned in Chapter 1, this is achieved through typographic markers which define messages as either an individual comment, comment on a quote or address to a specific user. Through a qualitative exploration of the quantitative volume of these markers we can assess the mix of conversational modes within the corpus. Within the 52,195 posts which form the corpus developed for this case study, there were 18,014 instances of attribution (Retweeting) and 30,376 instances of “@” character used in address. Although it is worth noting there is some overlap between the modes of attribution and address (both statistically and in practice), it is clear that referrant based conversation plays a fundamental role in the mediated social interaction that occurs between users of Twitter.

Additionally, it would appear that the “@” character serves to reduce two concerns within the multi-participant public environment of Twitter, those being addressivity and coherence. Addressivity is a strategy for creating cross-turn coherence online (Herring, 1999; Panyametheekul & Herring, 2007). Coherence in the context of computer-mediated communication can be defined as sustained, topic-focused, person-to-person exchanges (Zelenkauskaite and Herring, 2008). Addressivity, as defined by Werry (1996) in regard to Internet Relay Chat (IRC), is a user indicating an intended addressee by typing the person’s name at the beginning of an message. He notes that a high degree of addressivity is required in spaces with a large amount of participants conversing publicly, as the addressee’s attention must be recaptured with every new message. Bays (1998) observed that addressivity functions in a similar manner on IRC as gaze does in face-to-face conversations, directing the next turn either to one particular person or to the group as a whole. Explicitly addressed

turns may be followed by responses directed back to the turn initiator or to the group at large, if the respondent wishes to open the discussion, and thus perform the important work of turn allocation (Panyametheekul and Herring, 2007; Sacks, Schegloff and Jefferson 1974).

Coherence, however, can often be problematic in computer-mediated communication, especially in multi-participant, public environments such as chat-rooms and discussion forums. This is because messages are posted in the order they are received by the system without regard for what a message is responding to. As a consequence, messages that logically respond to one another are often disrupted by intervening messages (Herring, 1999). This is in contrast to face-to-face conversations, which tend to have higher degrees of turn adjacency—that is, responses occur temporally adjacent to the initiating messages (Sacks, Schegloff and Jefferson 1974). The more participants there are in a conversation, the greater the likelihood that turns will be disrupted and the greater the number of intervening messages between turns. To address this concern, two approaches exist. Firstly, many direct conversations step away from the hashtag (of which the corpora is specifically composed). We must be mindful of this while interpreting the size of conversations related to each hashtag—as the current data gathering tools only provide conversations that have been specifically and individually marked as part of the wider public conversation. Wardle (2010, pers. comm., 23rd September)—in a modern take on the two-step flow concept—suggests it is easy to get caught up in the figures of data analysis and forget that conversations generated by content on the #spill hashtag can leave the internet entirely, heading into peoples' lounge rooms, bars and other non-computer mediated social spaces.

Secondly, retweets are often used to address coherency concerns by increasing the “volume” of individual messages users see as valuable. However, the relative incoherence of multi-

participant computer mediated communications does not make them less popular. On the contrary, the ability to engage in multiple interleaved conversations appears to be appreciated by many computer mediated communications users, who may find the level of activity stimulating and the need to match responses to their initial message as an enjoyable challenge (Sacks, Schegloff and Jefferson, 1974).

Twitter is a “noisy” environment, due to the large number of messages and the speed with which they are sent. This, combined with the fact that messages are posted in the order received by the system, leads to a high degree of disrupted turn adjacency when a tweet responds to another tweet—much higher than in a typical chatroom or discussion forum. In this noisy environment, use of the @ sign is a useful strategy for relating one tweet to another and, indeed, for making coherent exchanges possible. As such, it is clear that conversation is at the very core of a users experience on Twitter, even if it often operates in a variety of modes.

### *Information is key*

Within these conversational messages, information plays a substantial role. As Stevens (2007) state, “the value of Twitter is the network” and, consequently, in the learning and connections one can make while contributing to a spontaneous pool of ideas and stories, while pointing to numerous links and resources. The work of Java et al (2007) found that 13% of all tweets included a link to an external resource. However, their study sought to discover the routine rate of information sharing in everyday discussions, something that could not be said of the #spill corpora, which is an example of a high profile and non-routine situation where we saw spontaneous mass-convergence. Hughes and Palen (2009) suggest that time frames are often compressed and routine life is disrupted or changed in



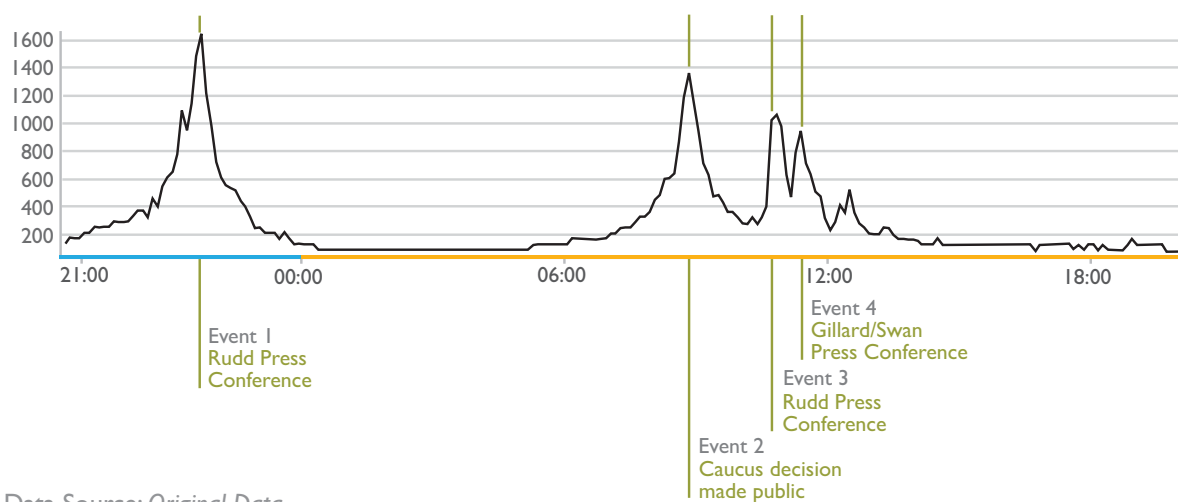
some fashion during these periods, with the distribution of new information prioritised.

The consequence of this disruption on sharing can be elucidated from the data, with a slightly higher rate of sharing observed. This includes 7875 (15%) unique instances of “http://” as well as 4758 (9%) instances of the URL shortener bit.ly, making it the most popular shortening service within the corpora.

Furthermore, as the informational needs of a non-routine situation are more substantial, and ‘normal’ conversation is disrupted by an eruption of event orientated conversation, it is important to reveal how these unusual conversations behave.

Through plotting the rate of messages posted to the service, I have been able to reveal the activity of these conversations in order to gain an understanding of their volume. This graph may also stand as a proxy to assess interest. When examined over time, areas of high and low activity, spikes and pits, are clearly visible in the traffic volume. Twitter volume increased sharply during major events, Fig. 3 showing the overall volume found in the sample.

**Fig. 3 - Post Frequency**



Data Source: Original Data

Looking firstly at the two post-caucus media conferences (events 3 and 4), which occurred during a period of live television coverage, we can see these appear to operate consistently with research into social chat and watch systems (Shamma and Liu, 2009). These studies found people that are most conversational towards the end and after their engagement with video media. These studies, however, primarily assessed spoken conversation in these situations. I suggest that due to the text based nature of Twitter, users are more able to converse during a media event without reducing their ability to interpret speech, as would be the case if groups were to “speak over” the video. It is also interesting to note a small peak after the initial rise during the second Rudd press conference, which occurred during the period of his speech where he became uncharacteristically emotional.

If these two periods of conversation are to be considered as consistent with the findings of Shamma and Liu (2009) in volume, they only serve to emphasise the unusual rate of discussions within the earlier periods of the sample. The first spike is particularly unusual in the sense there was little publicly confirmed information at this point and, as such, traditional mass-media news sources were hesitant to dedicate coverage (only Sky News, then the only 24 hour news channel providing rolling coverage—and even then only to subscribers). Despite this lack of conventionally legitimated information, gate-keeper ordained legitimacy or mainstream profile, the sample recorded the highest intensity of conversation over the longest period of time during this period.

It is also inconsistent with the work of Shamma and Liu (2009), as the rate of incline is greater during the period leading up-to an event, as speculative conversation ran riot, than afterwards—suggesting users were not “reacting” to a media event, but were actively participating in its evolution. It is important not to dismiss the decline though, as it still recorded a high level of activity within the sample for upto two hours after the event, with a

rate of decline which was consistent with the other events. The second peak, leading into the caucus decision the next morning (arguably the most “newsworthy” event of the sample), follows a similar pattern—showing steady conversational intensity leading up to the event, followed by an slow decline—however on a smaller scale.

As mentioned earlier, traditional media institutions (particularly television, which has long been seen as the dominant live news platform) were hesitant to break from scheduled programming to report on the events unfolding in Canberra during the evening of June the 23rd. This perhaps explains the intensity of conversations during this period, as users were driven to establish and interpret the story themselves. It may also explain why, during the next morning when television networks carried live coverage and there was arguably a lot more to talk about, the intensity of conversation was reduced in comparison to the night time high-water mark.

The role of SkyNews is particularly interesting in this respect, being the only major media outlet to cover the events live during the night. The subscriber based nature of SkyNews led to an information equity divide which was collaboratively overcome by users, with those having access relaying information back to the broader conversation.

Examples include,

CRAZYJANE13 Sky reporting that Libs being told to ‘shut up’ about the #spill

GOLDIEP This is one of those times I really want SkyNews #spill

MADEINMELBOURNE “she’s played the traditional female role” says Women’s Day editor of Gillard’s support for Rudd on Sky News. So. Freakin. Mad. #spill

MPESCE RT @Mrgareth: Skynews says West Aust. Victoria and Aust Workers Union have dropped Rudd. QLD still in play. Surely NSW will go with Baron Arbib? #spill

CLIMATEMADNESS #spill Labor source: "Rudd's dead" (from Sky)

A number of people commented on the role and value of Twitter in situations like this

URTHBOY an hour on Twitter is a day of normal media... they would've made a statement ages ago if they could've #spill

MISSRENEELJ Twitter has got real exciting, let's see if anything actually happens (finger crossed for Julia) #girlpower lol #Spill

GARGLEBUTT If this was all just a misunderstanding I think Twitter has laid opinion bare regardless. #spill

ROCHELLEZAKNICH Twitter is the best thing in the world when there's talk of a #spill. Settling in for the night...

MSNAUGHTY I love it. There's a rumour of a leadership #spill and instantly Australians gather together on Twitter to collectively take the piss.

BRONTLE Urgh #spill #spill2 I have no news channel and no proper internet—only Twitter.

STUHASIC #spill What were you doing when Rudd was booted? Oh yeah. Tweeting.

GIRLZED @jessamineve Twitter infinitely more amusing at times like these #spill #whoneedsTV

but also mentioned some of its flaws

PLU #spill - can the retweets be pushed to the side so I can see more clearly what is happening.

ALBIGEOIS god dammit it's too hard to keep up with all the tweets on #spill and #ruddroll... i need more eyes and several monitors

RADICALXSTITCH 445 #spill tweets in the time it took to feed a baby

The value of Twitter as a real-time, mobile and public conversational platform was further validated as users relayed the significant role it was playing for SkyNews itself, with journalists playing a curatorial role by elevating messages from Twitter (and through their private contacts via text message) that they deemed to be of value to the wider community.

*MADEINMELBOURNE* Love that all these anchors are working their contacts live on air via their mobiles, all staring at screens. #spill #skynews

*EXCLAMATIONJACK* Modern journalism. Mobile phone in hand, tweeting and checking SMS live on air on Skynews. #loveit #spill

**Fig. 4** - SkyNews broadcasting team using SMS and Twitter live on air to gather information



Source: @fmome

### *Engaged and Evaluative users*

As many were caught off guard by the spill and little information existed—users, media organisations, politicians and other information institutions collaboratively scrambled to unearth details. As a result a great deal of information began to enter circulation and it became clear that assessing the accuracy of this information was a key challenge.

Observations and tiny facts were contributed to the discussion primarily by members of the press and politicians themselves, but also by members of the public (such as the sighting of

Bill Shorten in a Kingston restaurant with a list of names and two phones and Kate Ellis being seen rushing back to Parliament House in an unusual hurry). These elements are often difficult to verify, as their contributors carry little social capital within the broader conversation and, on their own, don't reveal very much—but were perpetuated by much more influential users who felt they were either valuable on their own or consistent with the broader narrative that was forming. As such the “truth” of the evening appeared to continually evolve and form by consensus, running largely on gossip but with inaccurate information fading out of the cycle.

Some time after the #spill, I discussed this process of meaning creation with a number of key figures. The United States Ambassador to Australia, Jeff Bleich, (who had served a key strategic role in the 2008 US Presidential Campaign serving as California Co-Chair for the Democratic party) cites collaborative fact finding as particularly effective during the Obama presidential campaign. He suggests that the labour of fact checking was aggregated, leading to correct or corrected information appearing extremely quickly and with an onus to prove itself (2010, pers. comm., 23rd September). Jodee Rich, founder of PeopleBrowse (a commercially focused social media data mining and analysis company) agrees, suggesting “when a[n information] failure is uncovered, people quickly move forward. When there is fraud or deception (as there are in all levels of society) it is quickly disproven by the wisdom of the crowd and we all move on” (2010, pers. comm., 23rd September). Senator Kate Lundy, on the other hand, is slightly more cynical, suggesting, “false information often echoes around long after it has been disproven” leading to a persistent uncertainty as to what is accurate (2010, pers. comm., 23rd September).

The need to quickly interpret the legitimacy and accuracy of information is indicative of the high level of engagement and media literacy required by users. This level of literacy and engagement can express itself in a number of ways and not always in a serious fashion. One example is the understanding of referential humour seen in the use of hashtags such as #Spillard, #RuddRoll, which partly referred to the popular internet phenomenon of “RickRolling”. Another example is seen in jokes such as “Do you think Julia Gillard will check into 4sq & say I just ousted @KevinRuddPM as the Prime Minister of Australia? #spill #RuddRoll” which refer to the popular location based social network FourSquare as well as its complicated sense of territorialism and ownership (Wilmott, 2010). Another example of humour which requires a high level of literacy and engagement are broader community injokes, such as the knowledge that “@malcolmtturnbull” is a joke account, with the real Malcolm Turnbull using “@turnbullmalcolm”.

This kind of engagement is often dismissed as it isn’t “serious”. However, Flamson and Barrett (2008) argue intentionally produced humor is a form of communication that evolved “to broadcast information about the self and to obtain information about others by honestly signaling the fact of shared common knowledge”. According to this model, humorous utterances and acts are encrypted in the sense that what makes the joke funny is not merely its surface content, but a relationship between the surface content and one or more unstated implications which are known by both the sender and the receiver. It is the non-random nature of the match between this unstated knowledge and the surface content which provides evidence that the producer possesses that knowledge and that those who appreciate the joke do as well, thus rendering humor a means of assessing shared underlying knowledge, attitudes, and preferences. The acknowledgement of shared understandings is

further evidence of the strong sense of group coherence constructed by users on Twitter. Although this group formation is quite loose, the sense of interpersonal alliance and shared cultural understanding can be politically very powerful. Building on this, Wardle (2010, pers. comm., 23rd September) argues the use of humour within computer mediated social spaces is actually one of the highest levels of engagement and literacy and that it should not be easily dismissed. She suggests it is often through humour that users convey their evaluations.

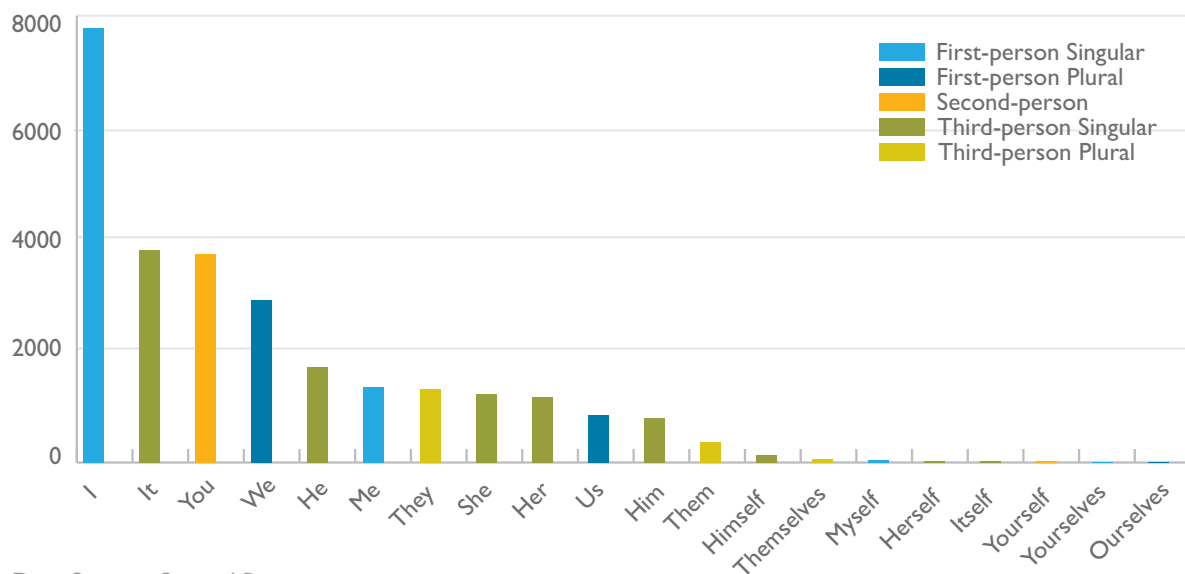
### *A coherent community*

This strong sense of community and interpersonal alliance is further emphasised through an analysis of personal pronoun usage within the corpus, which reveals that solidarity can be activated and displayed through the choice of pronomial addresses, with terms like “I”, “We”, “You” factoring at a much higher rate than “them” or “they”.

This analysis also reveals a highly evaluative community, closely tied to the views of the individual user. This is most clearly illustrated (Fig. 5) by the dramatically high frequency of the “I” address which is seen at twice the rate as its nearest pronoun. This is often coupled with the evaluative verb such as “think” (542 instances), “feel” (210 instances), “know” (140 instances), “believe” (77 instances) or “reckon” (42 instances). These results are indicative of the empowering effect of Twitter on users conversations, in opposition to traditional frameworks for casual political conversation which suggest that participants speak about actors as “others”, relying on pronouns which distance the speaker—such as “they” or “them”.



**Fig. 5 - Personal Pronoun frequency**



Data Source: Original Data

Beyond being evaluative, the high rate of first and second person pronoun use indicates solidarity can be activated and displayed with the choice of pronomial address, as suggested by Biber (1988). Tannen (1982) suggests that “involved” discourse is unplanned or informal in nature. A high frequency of first and second personal pronoun use was one of the features of Collot and Belmore’s (1996) study of a corpus of Bulletin Board electronic messages. In addition, Nevalainen (2004) proposes that personal letters are also of the oral or “involved” category. The abundance of first and second pronouns which appear in Twitter frequency analysis is preliminary evidence which suggests that, like personal letters and bulletin board electronic messages, Twitter conversations are characterised by informality and spontaneity.

Beyond a linguistic approach, interviews with prominent politicians who use Twitter suggest that their discussions there are by far the most reasoned and fair computed-mediated conversations they have with constituents. This further emphasises the view of Twitter as composed of a critically thinking, evaluative community with a strong sense of belonging. Senator Christine Milne (2010, pers. comm., 23rd September) suggests, “on Twitter and Facebook, people are trying to engage with you and build a relationship in some way so

they're more prepared to say 'this is what you think, this is what I think - okay'. They don't go there to be abusive generally. Where as with email, if people just want to have a partisan go, they just send an email - its very easy to do". Malcolm Turnbull (2010, pers. comm., 23rd September) states, "I totally agree with Christine that you get much more abusive communications on email than I have on Twitter. I think the fact Twitter is a public media means if you write something really poisonous - lots of people will jump on you, even though they mightn't know who you are. Where as people can send you, being a politician or anyone really if they've got your email address, a very abusive email."

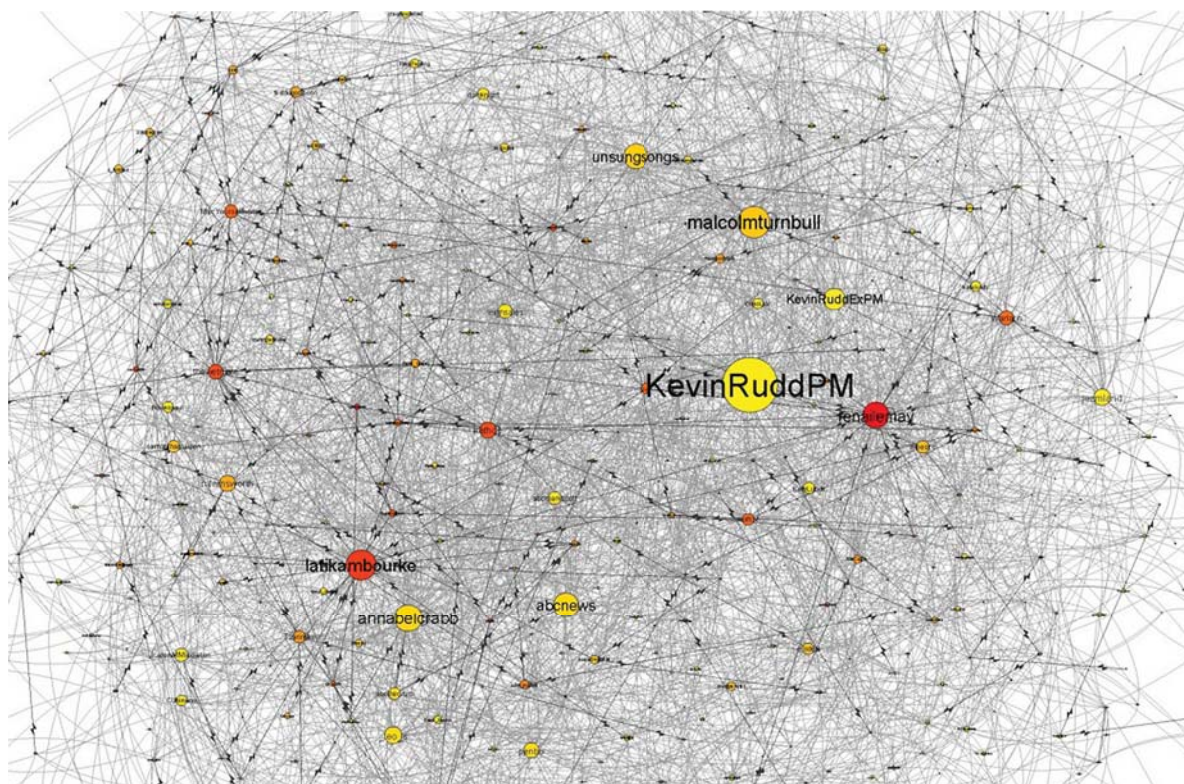
### *The role of information institutions and the problem of preconceptions*

The comments of both Milne and Turnbull reveal that although individual users are now able to have a voice, it is still the politicians, journalists and information brokers with social capital who are in the most demand and have the loudest voices in computer mediated conversations. Bruns et al (2010a) developed the following visualisation (Fig. 6) to assess the question of who has social capital within a Twitter discussion, with users organised according to their strength of interlinkage (how often each user writes to each other). The circles representing each user increase in size as they receive increasing @replies directed to them and gradually turn red as the rate of posts increased. This visualisation of user behaviour gives us an indication of those with the greatest social capital in the #spill discussion, with almost all major figures drawing their influence from outside the platform—such as the then Prime Minister Kevin Rudd, Journalists Latika Burke, Annabell Crabb, David Penberthy (Penbo), Samantha Maiden, Leigh Sales and the ABC News service itself, as well as commentators, comedians and others with a public profile such as Marcus Westbury (unsungsongs), Dominic Knight, Malcolm Farnsworth and Mark Pesce.

However, it is important to remember that this corpus only includes messages specifically marked with the #spill hashtag, and not all @reply conversations will necessarily continue to do so in further tweets. One way of describing this is to say that where #spill is missing from follow-up messages, the users @replying to one another have stepped away from the crowd and begun a quieter discussion with a higher degree of addressivity and coherence. What is of interest to us is the messages that were specifically included within the broader discussion.

This illustration suggests that, beyond Kevin Rudd who played a major role in the events surrounding the #spill, the majority of users who have a substantial amount of social capital within the discussion are all traditional information points. This legitimates the view stated earlier that journalists and other trusted information sources still play a substantial role in public discourse on Twitter, even if that role is no-longer seen as infallible.

.....  
**Fig. 6 - @Reply Network**



Source: Bruns, 2010b

See appendix for larger size

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It has become clear through this study that Twitter is a platform which hosts a complex system of conversations between individual users. These conversations are largely evaluative and information driven, promoting topics of interest into the public eye and inviting others to join the discussion. Twitter is at its most valuable when all users collaboratively work together to understand a complex and evolving story. However it would also seem that many within the traditional information professions—particularly journalists—are finding it difficult to understand this aggregated information source and distributed discussion, instead viewing the platform through their entrenched traditional broadcast paradigm. Indeed, Peter Martin (2010, pers. comm., 23rd September) of *The Age* says he feels a sense of “discomfort with the whole notion that anyone can report on anything”. Other career journalists ignore the interpersonal foundations of the platform in remarks such as “it’s great for all the people out there who can now follow the tweets of journalists and see in real time just how we do our jobs” (Curtis, 2010, pers. comm., 23rd September) and “it’s our job to decide what most people will think is important” (Middleton, 2010, pers. comm., 23rd September). Bernard Keane of *Crikey* has a more considered view, saying that: “For generations mainstream media has been the source of almost unquestioned authority, and has played a dominant role - yet now it finds itself in a much more contested and congested marketplace of ideas and its users face a far vaster variety of choice and are far more empowered than ever before”, (2010, pers. comm., 23rd September) going on to suggest that the greatest shift in this area is that audiences are now connected to each other and able to engage in conversation. He cautions utopian interpretations of this statement with the remark, “however the one thing institutions are very good at offering is trust and certainty, which is always very highly prized and one thing I think new media is really going to struggle to provide.”

In conclusion, we can see that the real conversations which occur on Twitter have a meaningful impact on the way individuals process, relate and understand topics and events of importance. This is due to the high level of engagement, literacy and focus on engagement that this study has shown to be a factor in the realtime, mobile and public platform that is Twitter. These qualities also make it particularly valued during times where information is scarce or during quickly evolving events, of which the #spill corpus is both. Under these circumstances, users are able to quickly form a loose community in order to collaboratively share and evaluate information. However, it is important to note that journalists and traditional information points still play a significant role in providing and assessing information, a role the community appears happy for them to provide.

To draw on the true value of Twitter we must engage in a paradigmatic shift towards a more dialogic and interactive model of public opinion, agenda setting and news gathering.



# Appendix











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