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#c3t An Agreeable Swarm:

Twitter, the Democratization of Media & Non-localized Proximity

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Abstract—This paper explores the way that Twitter has democratized usage and enabled non-localized proximity for users. We examine some recent changes in usages to demonstrate how public discourse, communication and information distribution affords users new ways of socializing and communicating. We also examine how Twitter has enabled individual non-technical users to communicate, collaborate and distribute information across social and geographic boundaries.

Keywords-twitter; foursquare; social networking; social media; #c3t

I. INTRODUCTION

Imagine a Parisian cafe: people sipping espresso, writing longhand, sketching. A friend stops at a table, wanting to debate the merits of a performance. A philosopher sitting a few seats down overhears and interjects his own opinion. The artist sitting between scrunches down further in his seat, hearing but not listening. Seven decades ago, this scene required physical proximity. Now, the philosopher overhearing the debate might be responding via @replies.

"It's agreeable, because you can hear all the people swarming beneath you, yet you are totally peaceful..." [1] said Simone de Beauvoir on her work in the Cafe de Flore on the Left Bank in Paris. The authors of Paris have traditionally sipped cups of espresso, written longhand, and engaged in heated debates in the Cafes along the waterfront. Sartre kept working hours at a cafe, writing, arguing, speaking with friends, and even scheduling appointments in these buzzing spots.

The modern Left Bank is not a physical space, despite its very real closeness. Instead, we can find the same peaceful swarming, arbitrary isolation and engagement, in the notional proximity of Twitter. Just as the authors appropriated the cafe for their very own usage, so will we argue that the users of Twitter appropriated the service for their very own needs: as the cafes embraced the social behavior of their habitués, so too did the designers of Twitter. This paper explores how Twitter and similar platforms are providing a space that is similar to the Left Bank for discourse, distribution and the creation of ideas.

Twitter is a social media application, served through the web. It is an application that enables users to create or repurpose content, publish it and to share information using online social networks. It challenges traditional notions of media control, publishing and distribution. Twitter users select other users to 'follow' and are in turn 'followed' by other users, thus enabling users to create relationships that are based on networks of affiliation. Mutual following is often termed "friendship". Twitter also provides users with the ability to create and make public lists of Twitter users they find interesting or worthy of sharing [2].

Most communication on Twitter is done in public, in an open *agora*. The public nature of these tweets and @replies is a key to providing ordinary people with a global public platform for communication. This public discourse also enables these people to find like-minded people and to form *ad hoc* networks. Twitter has provided a publishing and distribution network for ordinary people that give them a global reach.

II. THE DEMOCRATIZATION OF MEDIA

A. Twitter

Twitter is a realization of Foucault's idea of the *énoncé* as the basic unit of discourse [3]. Communication is reduced to the sparseness of 140 characters. Yet, in these short messages, users create sufficient meaning and rapport to build conversations. In a Foucauldian sense, the context gives semantic life to those statements.

A common assumption is that Twitter is a tool used mainly by a youthful group of participants. However, demographic data indicates that the user base skews to older users: 33% aged 18-29 & 22% aged 30-49. It is also interesting to note that 42% of Twitter users have some college education or are college graduates. Around 40% of Twitter users earn more than US\$50,000 a year. And around 67% of them have more than three wireless devices [4].

While there is some debate as to precisely how many of these are actually active [5], active user numbers appear to be increasing. However, this may stabilize as Twitter becomes part of the mainstream and is integrated with traditional news media. Many television news programs now incorporate Twitter as a mechanism for audiences to communicate with them regarding the program or breaking news.

Twitter has become a medium for discourse. Activists are using Twitter to mobilize forces for action. We can see this new mobilization in the Greenpeace action against Nestlé regarding palm oil. Here, Greenpeace created media such as

YouTube videos and then exhorted people to share them. Twitter was a prime medium for sharing this call to action [6]. Now, Twitter is seen as the place where breaking news occurs and many journalists use it to discover news stories and to share ideas [7]. Businesses and marketers are starting to see Twitter as an important communications platform that enables them to speak directly with their consumers and other stakeholders.

B. The Democratization of Media

Through these transformations of use, media is being democratized. In the past, individuals and activists needed to invest large amounts of money to create media equivalent to that made by large corporations and news organizations. Now with the investment of small amounts of cash, time, and effort, anybody can create content and share it easily via Twitter. This democratization is made possible by the distribution platform that Twitter offers.

Social media forms a web-network structure: people create webs of Online Affiliation through the relationships that grow up between users [8]. The notion of a 'mesh' is fundamental to relationships on Twitter; relationships mediated via Twitter can be compared to a bowl of spaghetti. Multiple layers of affiliation groups are formed and users participate in many of these at the same time without centralized command and control.

Twitter's power lies in the power of network amplification: the power of a single user is magnified by the power of their network plus their network's network. Ordinary people seldom are able to leverage the power of such broad networks except by participating in traditionally controlled media. Twitter now provides the average person with access to much broader communication networks than ever before. The original usage pattern for the Internet was one-to-one or one-to-many and people published much in the manner of traditional media. Now we are approaching a situation where users are moving beyond the traditional publishing models. The new model is many-to-many shared public discourses.

The rapid growth of social media mediated via social networks is evidence that many users have moved their social usages to these platforms [9]. In these networks, the web is undergoing a fundamental democratization of communication: ideas and usage have become viral. People adopt usage patterns that they see and like; people then see other people practicing new usages and repeat the process. The growth of these social media relationships is driven by real world social networks. As the user increases participation in online activity, their social network shifts online. Once the online social network affiliations are established, online relationships reciprocate back to offline interactions. In Australia, evidence of this reciprocation is the growth of meet up groups. These groups are known as Twitter Underground Brigades, where users gather at meetings called "tweet-ups". Here we see real life socializing prompted by the extension of online affiliation networks into offline activity.

Online social networks are a new form of social interaction. Their virtual nature makes relationships and activities that were once inconceivable now commonplace. People are now no longer tied to networks with others who are physically proximate to them. Proximity has become a virtual thing and we can be virtually proximate to many other people at the same time via platforms such as Twitter.

We should consider what has made Twitter a compelling tool for this user community. The basic web interface of Twitter is not easy to use. Novice users are often confused about how to find friends and how to update their profile. What has made this easier for users is the way that Twitter opened up their API to third party applications. These applications enable users to access Twitter services with easier to use interfaces. Each of these applications extends and simplifies the process of tweeting. Many also offer reporting and tracking of tweets and responses that is not available in the core Twitter web application.

Other web content is now regularly shared as hyperlinks via Twitter, as noted in a recent study, "Twitter is the most common share button. Two thirds of the top 100 blogs have a dedicated "share on Twitter" option [10]. This simple and easy to use sharing functionality has been critical in driving adoption of Twitter by business and individual web publishers. The power of the retweet is now perceived as a powerful information distribution mechanism.

C. Foursquare

Twitter, however, is not the only network that affords the democratization of media. Foursquare takes the basic social sharing concept from Twitter and overlays sharing of specific geographic locations visited together with 'shout-outs' or short text messages to friends that can also be reproduced on Twitter. Foursquare is also formatted as a game where users unlock badges and attain virtual rewards for participating.

The key differentiator with Foursquare is that this is available via mobile phones and not via computer (except for a very rudimentary web interface provided for older non-smart phones). Because Foursquare is designed to be a mobile application and it uses geo-tagging and broadcasting of location to friends it is easily co-opted as a marketing tool. For instance, if a particular store knows that many users visit it can offer them special deals in return for repeat business or for referrals to new visitors.

Participants and venues engage in a two-sided game, in that venues are able to compete for the attention and custom of the users. Venues can add their own details into Foursquare and make special offers, such as discounts or coupons, to users who visit the venue and check-in using the Foursquare application. Regular visitors to a particular venue who also check-in on Foursquare can become 'mayor' of the venue and receive additional rewards. For example, the 'mayor' of a café might be asked to select the soup of that day for that venue for the café to publicize on their website. Or a venue might offer a regular visitor a free item if they bring a new visitor who also checks-in via Foursquare. Thus Foursquare is driving collegiality between customers and venues. It is also providing a low cost platform for venues to increase attendance and encourage re-visits.

Foursquare also have an API so that third-party developers can create applications that consume services provided by the Foursquare application (http://foursquare.com/apps/). These applications are focused on creating social usages of Foursquare in addition to those provided by the base application. Thus, for example, the Beerby application enables Foursquare users to track, comment and share regarding the craft or boutique beers that the users drink (http://foursquare.com/app/beerby). It also enables them to share the location for the beers consumed. Thus Foursquare is facilitating social sharing of non-synchronous beer consumption among its users.

Since it is a mobile phone based application, on the face of it, there appears to be less opportunity for users to change the mechanic of the platform. However, since the user community is used to voicing its desires and needs on Twitter and having them addressed, it is likely that user feedback will also strongly influence the technology direction with Foursquare. Already we are seeing tweets asking Foursquare to change certain features and users are asking them to provide badges to display on their other internet sites such as Twitter or Facebook. There is also evidence of Foursquare users cooperating on Twitter – by tweeting and retweeting requests - to encourage Foursquare to amend the application to suit their needs.

Thus, we see that social sharing behavior is now habitual for many of the users of social networks. It has now become customary for these users to display their participation in one social network to their friends on other social networks as well. For example, we are seeing users seek to display their Foursquare participation badges on other social networks such as Twitter or Facebook.

III. THE DISINTERMEDIATION OF MEDIA

The fast responses, low barriers to entry, and ability to create virtual proximity make Twitter a revolutionary platform. It is disintermediating traditional news media organizations for breaking news. Journalists are now looking to Twitter for 'buzz' that might turn into a news story.

A recent example of this growth of Twitter as the place where 'buzz' happens was the recent replacement of the Australian Prime Minister, Kevin Rudd, by Julia Gillard. Twitter played a major role for journalists seeking break and report on this important Australian news story [11]. Journalists were using Twitter in addition to their traditional sources and methods of acquiring information regarding a breaking news story:

"To highlight just how much activity the #spill discussion was creating on Twitter, the words 'Kevin Rudd' and 'Julia Gillard' were the No.1 and No.2 ranked trending topics in the entire world at one stage - no mean feat given England was about to start its World Cup clash with Slovenia and there seems to be 5 billion people in the world who like typing 'Bieber' at any given moment." [12]

News media organizations have now embraced Twitter as part of their communications arsenal. Looking at @3aw693, "Melbourne's most successful radio station," we can see a traditional outlet not only using the venue for a different news reporting media, but as a way to engage in a dialogue with its traditional listeners. This dialogue has the advantage of passing the organization both options and breaking stories ahead of the

timetable of what traditional "sources" would provide. The benefits of non-localized proximity and near real-time communication are providing utility to diverse user groups. Other growing Twitter user groups are politicians and business. They are using this medium to both bypass and supplement traditional media channels, communicating directly with constituents or customers.

IV. NON-LOCALIZED PROXIMITY ...

Twitter allows people to build relationships without the need for physical proximity. In the past, to create and maintain a relationship with another individual over a distance required mediation via slow or low-bandwidth transmission technologies, such as posting a letter or scheduling a landline phone call. Letters were hard to share with many people at once even with access to broadcast media such as newspapers or television. Phones required dedicated time and equipment to reach even a tiny audience.

With Twitter, an individual may publish a tweet immediately to many people within their online networks of affiliation. Those networks can now very quickly and easily share information or respond to tweets. We now can see the phenomenon of tweets regarding the Los Angeles earthquake being received on the other side of the Pacific Ocean faster than news from traditional news media organizations [13].

In Australia, programs such as Q&A on the ABC television channel show a selection of tweets with the hashtag #qanda across the screen throughout the program [14]. The compère then uses selected tweets to ask questions of the panel during the program. Twitter also plays host to a lively back channel conversation and commentary on the program that users can follow on Twitter as they watch the television program. Twitter users from all around the country are able to converse in real-time about a television program that they are all watching.

It is as if the viewers are all sitting together, despite being in separate locations physically distant from one another. This togetherness is an example of non-localized proximity, where the proximity between these watchers of the program and users of Twitter is *virtual* rather than geographical. In the past, physical proximity was necessary for large and diverse groups of people to share an experience simultaneously. With Twitter, that need is obviated. The immediacy of the communication is also important, distinguishing Twitter from other "Webenabled" ports of old technology. The conversation between the viewers is almost instantaneous, and they can monitor the broader conversation regarding #qanda by viewing the search for this hashtag in real-time.

$V. \hspace{0.5cm} \dots \hspace{0.1cm} \text{AND THE VILLAGE} \\$

With Twitter, the importance of physical proximity is reduced. A key feature of this non-localized proximity is that it enables users to build wider networks of affiliation than is possible in a closed network model such as Facebook. For in Facebook only "friends" and "friends of friends" can see or participate in the shared discourse. While in Twitter the discourse is, in most cases, open to anyone.

In everyday life much social contact is often constrained by physical or power distance between individuals. However where this contact is facilitated and mediated via Twitter these constraints are significantly diminished. This is because Twitter provides both a platform and usage patterns that enable an open social discourse that bridges both physical and power distance. It is also worth noting how Twitter returns its participants to the village in terms of power distance [15]. Because most communication on Twitter is public, it is relatively easy to 'call out' to persons with whom one does not have a prior acquaintance, despite vast gulfs in real or social power.

Twitter's provision of ongoing ambient social contact that builds relationships without the constraint of physical proximity is important as this is the basis for growth of trust [16]. In much the same way, regularly meeting someone at the water cooler in the office allows us to build up a perception of that person, the ambient contact cloud in Twitter performs a similar function.

Granovetter's idea of 'weak ties' also provides an explanatory model for the kinds of relationships that are developing between people as mediated via Twitter. He notes, "Individuals with few weak ties will be deprived of information from distant parts of the social system and will be confined to the provincial news and views of their close friends" [17]. With Twitter, the loose ties afforded by virtual proximity ensure that individuals can obtain access to broader information, such as availability of jobs within the network or other opportunities. In the past, such opportunities were only available to individuals within physical proximity. It is this ability to interact with people without the constraint of physical or power distance is the most revolutionary aspect. This feature makes the social interaction on Twitter qualitatively different from previous closed group social networks such as Facebook.

The asynchronous nature of Twitter based interactions facilitates the development of weak ties as proposed by Granovetter. It means that individuals in different time zones can participate in the affiliation networks based on loose ties and facilitated by ambient contact afforded by Twitter. These kinds of ideas are even encroaching upon modern businesses, with Bryant noting that "Even though modern companies see themselves as organic, network-based entities, the systems that people are supposed to use for communication and collaboration are based on an IT-driven command and control model that is grounded in 1950's management thinking" [16]. This situation has also been true for users of Internet technologies up until recently. Twitter is subverting even this 'traditional' relationship between users and technology.

VI. CRASHING DEGREES OF SEPARATION

The kind of non-localized proximity afforded by Twitter also has the effect of crashing the degrees of separation between individuals [18]. We are seeing politicians on Twitter interacting with their constituents via Twitter with direct access that constituents have not seen since early last century [19].

Twitter, and the non-localized proximity it offers, is a good exemplar of the future directions for the web. The next generations of the Internet are evolving and changing even more quickly than earlier incarnations due to the high levels of involvement from users and to their appropriation of social platforms and applications. Twitter itself, as an instance of this technological growth is not important. It will eventually be eclipsed by the "Next Twitter Killer". However, as a means of democratized communication, publication and distribution, it is still vital to use Twitter as a case study to guide our understanding of the evolution of web technologies and their adoption by users.

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