These articles document several years of research on the role of computer-mediated communication in disaster response. Palen and Liu describe the growing role of public participation, arguing that new information pathways have substantial implications for both response organizations and technology researchers. To make the most of opportunities, relief coordinators need tools that can aggregate and interpret a large volume of public communications, and impromptu organizations need ways to better coordinate group activities; together, these needs suggest a number of avenues for future research. Mendoza, Poblete, and Castillo present a more focused study of Twitter use following the 2010 earthquake in Chile, with the aim of assessing network characteristics and information quality. The authors conclude that activity around the crisis closely resembles networks under general circumstances, and that quality signals can be discerned from the rate at which tweets are questioned among recipients, pointing the way to methods that might increase information reliability via automated lexical analysis. Finally, Gao, Barbier, and Goolsby summarize the role of social media in disaster relief as of 2011, noting both its growing importance and a number of outstanding issues. Prominent among these are needs related to verification, summarization, and scalability, echoing sentiments expressed in earlier reports.

Considering the role of social media and crowdsourcing in disaster response raises issues familiar from our recent study of political change movements, highlighted by the need to connect good intentions with meaningful action. There is clearly a place for new information and communication technologies in response strategies, but the best way to integrate these elements remains unclear. What appears most likely is that traditional responders will learn to draw on new resources offered by social media, while developing ways to coordinate large numbers of enthusiastic but geographically distributed volunteers. As general mechanisms supporting internet-enabled collective action continue to evolve, disaster response is an area where substantial benefits should be expected.

The Benefits of Facebook "Friends:" Social Capital and College Students' Use of Online SNS

This was a very interesting article in general, but I think the results in this case may be mostly the result of the position Facebook occupied at the time among the few social networks available. When this data was collected My Space was still considered the dominant social network, but users in the network were in an arms race to see who could make the most complex (and therefore slow to load) page. And many users in My Space liked to brag about how dispersed around the world their network was with friends in places they had no interest or time to ever visit. Facebook back then represented a whole new concept by forcing users to a very simple generic page and keeping networks local. Therefore it is very likely that users who valued social capital were the ones attracted to what Facebook was at the time. It is unlikely that the current form of Facebook would be as strong in those characteristics, more likely Linkedin that keeps users connected mostly to people there actually known professionally, and Ello, which has lately attracted users with a strong pro-social sense would be the networks more likely to be strong in social capital.

Social Capital on Facebook: Differentiating Uses and Users

Awesome! I usually write my reading reactions after reading each article, and this article pretty much supports what I had predicted in the previous reaction. Suppose I should learn to skim all articles before reacting to the first one, as many intelligent people advise. Regarding this article, it does make sense that people who participate in conversations would be associated with grater bridging social capital while just reading about events would not. And since in the beginning of Facebook there was limited news to consume, most people who used to site would have likely been interested in participating in conversations. I also wonder how this relates to specific groups, like autistics who are more likely to be information consumers than participants, and also probably would rate low in social capital.

Mirror, Mirror on My Facebook Wall: Effects of Exposure to Facebook on Self-Esteem

This article is interesting because it connects social media use to psychological results. However, I have some doubts about the conclusions. Low self-esteem can definitely have a negative effect on a person's interest on their own appearance. So a person's decision to do changes to their profile in during an experiment likely says something about them, it may be that they have a lot of self-esteem. Or it may be that they are very concerned about managing how they appear to others (impression management is the psychological term) and therefore would also be more likely to exaggerate on a self-esteem survey to seem "better" to the researcher. This caveat doesn't mean that the article is not useful, but I would prefer to see replications with different methodologies before I rely on the results.

Lowyck and Poysa's "Design of collaborative learning environments" is a thorough, but concise review of the state of collaborative learning environments at the end of the last century. The authors provide a clear account of the progression of design philosophy in the field, from a designer controlled, media focused perspective, to the current direction of user focused, research-supported instructional design. They make it clear that the users, the learning environment, and the community at large that supports them must all be seen as important contributing factors in educational endeavors. The manner in which the authors detail each important component of the learning such as the facets of learner control, learner characteristics, and program variables. Important concepts, such as the need for increased motivation to increase time-on-task, are stressed.

The few things I take issue with involve the view that a user group should so often be taken as a whole, rather than tending to the needs of diverse (even small) groups. That it is always a assumed that lessons must be grounded in "authentic" experience denies those learners who prefer purely theoretical or abstract concepts the ability to focus on what is important to them, for example. They mention the value of cognitive diversity on the community, but occasionally it must be remembered that some individuals may have greater potential to thrive on their own.

They mention all the benefits of collaboration and group learning, but don't seem to give any attention to learners who might benefit from other modes of instruction. When they talk about Effectiveness and the extent to which the environment is interactive, do they factor in that some students may prefer not to interact as much as others? It would be very interesting to see whether learning outcomes (and self-efficacy, along with other such markers) from some members of collaborative groups decline based on common learning strategies/personality profiles. On this point, referencing Clarebout (1998), they mention the need for adaptive support as a requirement for engagement. In another section they mention the attempts at individualization, and perceived failure of intelligent tutoring systems (at that time). I believe if such a review was done today, the advances in adaptive meta-cognitive scaffolding provided by cognitive tutors would gain greater support, even in such collaborative, constructivist learning scenarios.

SOYLENT

Soylent has been a favorite paper of mine for quite some time. I think it is a brilliant implementation of crowdsourcing and really feels like the human version of microservices. With Soylent, the authors examined document creation and editing and how one could trade one resource (time) for another resource (money) and examining how distributing that resource to a group of people could result in an adequate amount of work being done.

Soylent is a plug-in for Microsoft Word that integrates with Amazon's Mechanical Turk service to have individuals provide a small piece of an editing task that an author needs. Soylent supports three tasks -- all of which are difficult for AI/ML services to accomplish with accuracy. It provides Shortn, which asks Turkers to summarize and shorten a portion of text, Crowdproof, which has Turkers examine a section of text for spelling and grammar issues, and the Human Macro, which attempts to distribute a simple but boring task to other workers.

In this experiment and the related literature, several issues were identified that can be problematic for crowdsourcing. First, the Lazy Turkey, who does as little work as possible to get rewarded. In addition, there are Eager Beavers, who go "above and beyond" and may make things worse that way. Turkers also generate errors. This is especially problematic when the incorrect output is used as an input for another step.

To reduce these issues, the authors developed the Find-Fix-Verify pattern for crowdsourced work. This pattern divides the tasks up into additional steps and assigns different Turkers to handle these steps. A certain threshold of agreement must be met before the output of one Turker will move onto the next step. In this manner, Soylent harnesses the wisdom of the crowds to find the most likely candidates for completed work.

The authors found that the work completed by the Soylent Turkers was roughly 70% correct for all three possible tasks. Each task had different sources of error. Outside of errors, monetary, privacy, and legal issues may need to be considered when crowdsourcing in this manner.

FASHION

I love papers like this, since they really demonstrate Computing For Good and improving it with new technology and concepts. This paper discusses the fashion problems that visually impaired individuals. The authors start with a diary study done by ten visually impaired individuals and then follow this up with a general survey of more individuals. The purpose of the diary study was to see how tasks such as clothing selection were currently performed and the follow up study investigated potential ways to improve or change these tasks

The authors then talk about VizWiz and how it can be adapted for the clothing picking scenario. Three volunteers provided fashion advice to the people using the application. Although slow at first, the subjects were able to use the application and became more confident in the volunteers and in themselves.

One issue that is discussed in the paper is the problem of picture quality and how lighting and position may affect the perceived color of the clothing. An excellent (and meme-tastic) example of this is the recent "what color is this dress" meme that was briefly everywhere. Because lightning may affect coloring so drastically, things like the camera's flash can change the perceived color, causing the volunteer to give bad advice.

A potential problem with all crowdsourcing system is the Bad Actor. This is a person who works within the system in order to decrease its efficiency or introduce errors. Such a person can negate a lot of work and the

system must be carefully designed to handle these events. Soylent works by using its Find-Fix-Verify staging, but this means that additional money and time must be spent in order to filter out the Bad Actor's work. In situations where the source pool is small (such as the volunteers in the Fashion study), this problem can be greatly exasperated.

Fun links:

http://engineering.flipboard.com/2014/10/summarization/

http://www.npr.org/blogs/alltechconsidered/2014/03/05/279669610/post-a-survey-on-mechanical-turk-and-watch-the-results-roll-in

Structural Holes and Good Ideas

In this paper, Burt discusses how "structural holes" in organizations and what sort of effects theses holes have on the organization and its personnel. This discussion is done through the lens of an survey of a major American electronics company. The author hypotheses that the people who straddle these holes will generate better ideas than those who occupy spaces within the organization.

As the author notes, this idea is well known and can be found in existing literature regarding creatives of all sorts. Burt brings up the definition that "social capital exists where people have an advantage because of their location in a social structure." This definition is much broader than just structural holes and is somewhat related to the concept of political capital. With regards to structure and holes, the hierarchical nature of many organizations leads to a natural development of social capital as people are placed into management roles and develop controls over their own groups.

The author then describes concept of "brokerage", which may be considered the act and ability to bridge structural holes. The lowest level of brokerage is simple acknowledge of those on the other side of the hole. The next level up involves incorporating best practices from the other group in your own group. The third level involves the ability to incorporate different, but analogous, routines. Finally, those familiar with both groups will be able to create new processes based on information from both.

The research and analysis of the supply chain of the electronics company takes up the bulk of the paper. It is a very detailed study that incorporates a variety of surveys in order to determine the social connections of the various managers, what kind of connections these are, and how these connections affected the managers' work. The study itself is too long and detailed to discuss, but one aspect was particularly interested. Burt asked each of the managers to think of one idea to improve their job. These ideas were then graded by senior-level managers for the amount of perceived value these ideas would add. The value of ideas was strongly correlated with those who bridged structural holes. Such people were also more likely to discuss their ideas with others.

In general, bridging structural holes was correlated with a number of positive qualities: salary, promotions, creativity, etc. From this, it is easy to see how access to a diverse set of opinions can lead to greater idea and product quality. Since it is so easy to see and such common sense, it leads one to ask: why would you NOT want to promote this behavior? I think that one of the managers in the article sums it up well, when he stated that sticking with existing options is 90% good enough, so having people spending time thinking of alternatives doesn't add any real value.

In my own field, people are strongly encouraged to switch jobs every few years -- ostensibly for salary reasons ("the best way to get a raise is to get a new job"). At the same time, this practice leads to idea diversification and benefits the industry as a whole. Academics are encouraged to attend conferences and read journals. Such things not only broaden their knowledge but also introduce them to competing ideas. However, in some cases this sort of diversification is actively frowned on. Startups routinely filter for people who are NOT diverse, in order to minimize conflict in the early stages. Whether this is better than a diverse marketplace of ideas would make for a good related study.

Anonymity and Self-Disclosure on Weblogs

Before the Internet, people were anonymous in different ways. Pen names were common, as were letters to the editor. However, this paper made me think: is this a shift in the way we relate? Being able to freely, without editor, instantly publish anonymous thoughts for all to read...that has never existed before in the history of humankind. There's a freedom in blogging, although it seems as though the "anonymous" thoughts are still curated in some regard.

Taking risky opportunities in youthful content creation: Teenagers' use of social networking sites for intimacy, privacy and self-expression

Relating this back to the paper where "self" seemed to translate to Facebook profile...awesome. Especially interesting is that we can determine the stage in life by MySpace profile. It's amazing to have a visual representation of this. I wish that MySpace had been around longer, so we could see if there was a generational shift. It is depressing, in some regards, that our sociotechnical systems change so quickly that we can't really compare use between generations!

And, one more thought on this...just need to write it down before I forget. Has anybody compared campaigns like #GamerGate to natural disasters in any way? I wonder if there's any similarities in the formation of these campaigns.

The Presentation of Self in the Age of Social Media: Distinguishing Performances and Exhibitions Online

Amazing paper. This quote, in particular: "It further suggests that there is a third party (Facebook's servers) that knows who is considered an appropriate audience member for this con- tent and who is not." Privacy is contextual. If all representations are performance, but we can determine personality from social media, what does this mean? And, should every single post on the Internet be considered a performance piece for anybody with an Internet connection?

Information Revelation and Privacy in Online Social Networks

The thing I was most curious about in this article was the male/female distribution in early facebook. It might have been something specific about CMU or it might have been related to the adoption of the social network early on. I also found the description of the users as "quite oblivious, unconcerned, or just pragmatic about their personal privacy" very interesting in that it provides very little actual information. Regarding the question of stalking, serious analysis would have to be based one piece of information I do not have, whether staking is a crime of convenience or not (or if there is variability). In a small college community a stalked could find the class schedule of someone else over weeks with a combination of asking question and following. So it ends up being an empirical question whether facilitating the stalking by having information online would significantly increase the incidence of stalking. But then, even if no stalking, having online information of future location is probably not advisable for multiple other ways, so the question is mostly moot.

Facebook Privacy Settings: Who Cares?

This to me is connected to the broader complex and hotly debated question in the legal field about whether individuals can actually be expected to read and understand the small print in contracts and agreements. Even within legal circles many people consider it ridiculous that companies are allowed to put print into consumer contracts that is almost impossible to comprehend by anyone, and by simple calculation if we actually read the consumer "contracts" and binding policies in their entirety we would barely have time to do anything else productive. Even lawyers I know sometimes admit to not reading the small print. The fact that more people would be likely to give away right that would actually become relevant to their lives based on facebook's policies than when installing new software or buying a ticket with small print in the back is unlikely to make most try harder to understand that agreement.

Facebook, Youth and Privacy in Networked Publics

I found interesting the statistic that 20% of people had deactivated their profile. I know a lot of people who have tried to leave facebook at some point, but very few people who have actually succeeded for long. I suppose it has to do with the fact that some information updates from family and friends can only be found there, and since most people assume that once in facebook the information will be diseminated, they usually dont go out of their way to provide the information via other channels. There have also been a number of attempts to get a critical mass of people to leave facebook at the same time and pick one network to move to in mass. Those attempts have also been generally unsuccessful. The latest news worthy one being the reaction to facebook discriminating against transsexuals and transvestites and people trying to promote a general move towards Ello. But I wonder how big of a coordinated move would it take for facebook to lose its advantage, and what kind of an event could be necessary for this to happen. I also noticed the racial correlation to use of nicknames, but have no theory about the nature of that effect.

Social networking sites have observed a tremendous growth in the last decade through out the globe. The "digital divide" has observed significant shift in its boundary with diverse generation of user joining social media. Social media like Facebook and twitter have become vast ocean of personal and public data which is susceptible to privacy intrusion. One may argue that social site can provide privacy settings that can protect privacy of oneself. Whereas privacy is very subjective term which varies from person to person so there is no solid boundary which can be set for private and public information. Also there are several publicly available information which contains latent private information and can be easily used to interpret one's personal life. For instance experiment by Target where they predicted whether a girl is pregnant before their parents did was all based on those latent data. These circumstance makes research on online privacy very crucial and non-trivial.

Paper by Gross et. al. studies what information people generally publish online and how that increases vulnerability of their privacy. An online profile to build an Avatar is most common way through which user starts revealing information online. One one hand it is necessary to develop social capital and trust on the other hand they release some of the crucial information that helps intruders to infer latent information about the user. From the time of research social media has changed a lot and is more information rich as it collects information in several other manner. Several application on social media are explicitly released to crawl information about the user without even letting user its use and scale of application. Although I am little skeptic about method of face matching for profile information gathering but is quite interesting methodology which if works today can do wonders(Mostly in negative way). For instance if someone has a fake profile with real pic (Which i don't understand why) and also has a linked in profile then in all probability one can infer too much about that person.

Second paper by boyd et. al. and third by Tufekci discuss on whether people care about privacy and how it is related to gender or age. They refute the general claim of association with gender or age. Tufekci specifically elaborate on how the general claim about teenagers being ignorant about privacy is invalid. This paper was quite interesting in terms of bringing up ethical issues like default of privacy setting as "public". I strongly agree with the effect of default value. This is somewhat similar to "Terms and condition" document where one always agree. It is not exactly analogous but only users with internet skills explicitly go and change privacy setting. Facebook changes its privacy setting quite often it was done around 2-3 months back and again they are going to do it this January so it is quite difficult even for frequent users to monitor that. Also keeping default as "No" under public sharing would annoy many users as majority of users(My assumption) like public sharing concept of Facebook so it would be so non-intuitive for them to go and explicitly change it to public.

These discussions are always controversial due to vague boundaries. Several research like Facebook's mood control experiment has been very much controversial which gives so much importance to research on privacy so that social media can capture privacy requirements and allow a seamless way to socialize at the same time.

The first paper by Honeycutt and Herring addresses how twitter is being used for more for collaboration and conversation. Through their study they found out that across all languages the use of the '@' symbol was increasing, which meant that a lot of the twitters users were using tweets as a means of conversation and collaboration. In-fact nowadays a lot of people turn to twitter to complain or provide feedback on products or services. I have even heard of a case where someone got offered a job through a series of twitter conversations. Surely, since the time the paper was published, twitter is now largely used for conversation, however I still don't believe it will serve as a good tool for collaboration. It can certainly help in connecting with people and help in the initial stage of developing or strengthening collaboration. I don't use twitter, but I do not see how tweeting a message is a better option than say, versus emailing/texting or calling people

The second paper by Starbird and Palen, talks about the Tweak the Tweet which is a way of standardizing tweets for better retrieval and filtering. They studied this TtT syntax during the Haiti Earthquake incident. They observed that several users welcomed TtT because it gave a sense of standardization and made it easier to recognize and filter tweets, especially when it concerned personal or serious topics like the earthquake. The observed that users/volunteers not only added their own TtT tags before retweeting and others also performed advanced tasks such routing and verifying information. Clearly tweeter is a good medium to get the message across finding applications like disaster relief, public service messages etc. A tool like TtT will help make communication and information relay easier.

The last paper studies the structure and organization of enterprise social networks. I do not think just studying IBMs Connection tool data is enough, even if they have an international presence. They studied Human and Intellectual capital, however I still think that given it is a formal, work type social network, a lot of the people won't actively join communities and participate like they would in facebook or twitter. Plus there is also the problem of age and professional bias in this data. Nevertheless they found quite a few differences when they studied structure and collaboration through Human Capital (no of people), Intellectual Capital(common or shared resources) and Relational Capital. I wish the authors had address better question, than just comparison they did in this paper. Perhaps something in the lines of what causes an increase in participation, who are the influential users in this network or the usage patterns and lexical/textual content of this network; Is it used for office work collaboration or socializing?

The Livehoods Project: Utilizing Social Media to Understand the Dynamics of a City

This article looked at Livehoods to understand how a city is represented, however, researchers didn't use the data to its full potential. This topic is so deep, it can't be encapsulated in a paragraph so I will do my best to be brief. The greater field of study researchers are delving into is human geography. This field of study looks at the ecology of a city and how different resources, organizations, cultures and religion play into this. The 3 crucial parts to a city's structure are central places, transportation, and specialized functions. Different layouts for cities lead to different infrastructures. Each layout has its strengths and weaknesses in terms of economy and other social factors. Authors did not connect their computing model directly to any current theory of human settlement sufficiently. A better analysis of their data would have connected the Foursquare data lexically to a cultural plane. I think more important to the identity and formation of a neighborhood(s) than the characters and environment is what they are talking about. Humans are connected by language and culture (as their article shows culture is stronger than municipal borders), but if they saw that to be the case why didn't they put a heavier emphasis on the language and culture? A great way to have done this would have been to look at the news. A study of local and online newspapers could have provided a strong framework to not only give a clearer map of neighborhood interaction (with more explanatory variables) but allow their research to connect to other online communities through the news medium. I think better understanding city layouts may be a key to gathering better models for seeing into online communities' network structure like we read about earlier, at least in local scope.

The Shortest Path to Happiness: Recommending Beautiful, Quiet, and Happy Routes

This article took a simple but novel idea, computing the emotions of different paths, and transformed it into a reliable service. A nice extension will be applying this concept to different communities. Currently, it is setup to simply have a path like happy. Futuristically, the emotions could be specialized to reach more audiences. To expand the scoring system and probabilistic classifier could approximate how likely different words and syntaxes are associated with certain driving roles. For example, urban planners, real estate agents, photographers, astronomers, could all have different interpretation of beauty and happiness. Thus it might make more sense to associate the paths with the characters it was intended to appeal to. Thus I think we must consider that the city wasn't designed in the way researchers analyze it. Urban planners didn't decide "let's scale up the happiness here", they were trying to reach different types of people. An important principle of social computing made sense to me after I read this. For a better understanding ie not oversimplified with tons of variables difficult to relate to humanity, figure out where what you're studying evolved from. Whether it be a city, a way of transportation, or a particular community, learn its history and who has studied it before.

Tweets from Justin Bieber's Heart: The Dynamics of the Location Field in User Profiles

There's an old saying, "Necessity is the mother of invention." I think is made clear in this article, users seem to input information into the geographic field based on their social purposes described in table 1, although this isn't said explicitly due to the focus of the article. People's motivation for using software outweighs the developers intention just like we read in the first article about Friendster. Authors faced a challenge during this study because they are the pioneers; they endeavored to use word-location tie probabilities to predict user location with limited predictive information. Sports, local news, local places, and local vernacular were the best predictors of location. These are great lexical approaches, I'm surprised that authors didn't examine the weather or lighting. Couldn't local temperatures help with major country distinctions? Couldn't common tweets describing lighting such as "beautiful day" or "warm sun" help distinguish time zones and thus countries? I thought that the authors could have discussed other good predictors and misleading predictors more since it would be highly valued by future researchers.