One Social Movement, Two Social Media Sites: A Comparative Study of Public Discourses

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Abstract. Social media have become central places where public discourses are generated, sustained, and circulated around public events. So far, much research has examined large-scale dissemination patterns of prominent statements, opinions, and slogans circulated on social media, such as the analysis of keywords and hashtags on Twitter regarding a political event. However, little attention has been paid to understanding how local socio-cultural-political conditions influence the formation and development of public discourses on social media. To explore this question, we analyzed public discourses about Hong Kong's Umbrella Movement on two distinct social media sites, Facebook and Weibo, the largest micro-blogging service in China. Facebook topped Hong Kong citizens' usage of social media sites, while Weibo's primary user base is mainland Chinese. The social movement and these two social media sites provide a unique opportunity to explore the commonalities and differences between social media discourses generated by two different cultures. Using grounded theory and discourse analysis, we reveal how people on two sites reasoned about the many incidents of the movement and developed sometimes similar but other times strikingly different discourses. We trace the links between different discourses and the socio-cultural-political conditions of Hong Kong and mainland China. We discuss how this study may contribute deeper understandings of public discourses on social media to the CSCW literature.

1. Introduction

Social media have become places where citizens can engage in public discourses about various public issues such as natural disaster response (Vieweg et al. 2010), political events (Hamdy and Gomaa 2012; Starbird and Palen 2012), and local community development (Crivellaro et al. 2014). In this paper, public discourse refers to an assemblage of discussions over a public issue. Political scientists consider public discourses as a critical property of deliberative democracy (Habermas 1991), and online venues as emerging forms of public sphere for the formation of public opinions (Dahlberg 2001, 2006; Dahlgren 2002).

Recent years we have seen a surge of social movements that consist of both offline collective actions such as protests in the streets, as well as online participation in forms of information dissemination, discussion, and opinion poll. Offline actions and public discourses on social media often co-exist and co-develop, with the latter playing an important role in organizing activities at different scales, disseminating actionable instructions (Monroy-Hernández et al. 2013; Qu et al. 2011), and garnering massive solidarity and support from geographically distributed people (Starbird and Palen 2012; State and Adamic 2015). Particularly, slogans and agendas of social movements, often short and compelling, are easily chanted and spread with the support of social media features such as hashtags, location tags, and user profile features.

However, prominent statements and slogans do not necessarily represent the entire corpus of public discourses, or sufficiently explain a public issue. Public discourses involve many distinct human actors, as well as the clash of different, and sometimes conflicting, perspectives, values, and ideologies. For example, in a study of Hong Kong's Umbrella Movement in 2014, Kow et al. found that tensions and pushback existed among local activists as new issues emerged and public support started to decline (Kow et al. 2016). Much work needs to be done to understand the role of local context in impacting how public discourses are produced and sustained on social media. This is an important question if we are to understand how people perform the work of public discourses on social media, and how we can develop better socio-technical systems to support discursive work.

In this paper, we center on one social movement, Hong Kong's Umbrella Movement that took place from September, 2014 to December, 2014. we compare public discourses around this movement on two social media sites, Facebook, the US-based social networking site, and Weibo, the largest micro-blogging site in China. Facebook has topped among Hong Kong citizens' social media site usage in terms of user percentage, while Weibo's primary user base has been in mainland China. Facebook is blocked in mainland China. The two sites thus provide a unique opportunity for us to probe into the commonalities and differences between public discourses that have been constructed and sustained by two different populations that are both concerned with the same public event.

Through thematic analysis of the two discourse corpora, we found that Hong Kong citizens and mainland citizens had different ways to talk about the Umbrella Movement, reflected in differences in reasoning processes, choices of words, and references to shared memories and experiences. Adopting a discourse analysis approach, we showed how social media discourses were localized as their production and circulation relied upon a specific set of shared knowledge, values, and ideology, which catered to a local audience, but at the expense of losing appeal to outsiders. We further analyzed three recurring discursive patterns where Hong Kong and mainland citizens differed, namely political ideology, collective memory, and city identity. We discussed how this work might advance understandings of the relationship between social movements, public discourses, and social media, as well as suggest implications for design.

2. Related Work

2.1 Social Media Use in Civic Contexts

Social media have been widely examined as a means of mass communication that has the global reach in the face of political events. In a study of Twitter use in the 2011 Egyptian uprising, Starbird and Palen analyzed the original tweets generated by the locals who experienced the event and retweets generated by general Twitter users (Starbird and Palen 2012). Viewing retweets as a form of collective work by the crowd on Twitter, they argued that retweets by the global audience of the event expressed social solidarity with local activists and served as information filtering and recommendation mechanisms. State and Adamic documented how three million Facebook users changed profile picture to support same-sex marriage (State and Adamic 2015).

While social media are important in information diffusion, social networking, and political organization, their role is nevertheless mediated by a number of factors beyond social media, such as the socio-economic status of social media users, the role of traditional media, and the local government (Wulf, Misaki, et al. 2013). In situations with limited availability of information and communication technologies, activists needed to overcome barriers with various alternative ways and gradually adapted to various functionalities and changes of social media (Wulf, Aal, et al. 2013). Moreover, social movement participants might use social media to resolve contradictions and conflicts that were less visible to the general public (Kow et al. 2016).

During crises such as war and natural disasters, social media can aid citizens in significant ways, with information dissemination being the most examined one (Olteanu, Vieweg, and Castillo 2015; Qu et al. 2011; Shklovski, Palen, and Sutton 2008; Starbird and Palen 2011). Social media has facilitated people's recovery processes after disasters (Al-Ani, Mark, and Semaan 2010; Mark et al. 2012) or personal crises (Semaan, Britton, and Dosono 2017). After disruption, people

gradually developed new norms that incorporated social media use (Semaan and Mark 2012).

In heavily censored environments, social media become an alternative media for people to generate narratives different from mainstream media. In the Egyptian revolution of early 2011, bloggers reported events and supplied commentary to reveal a counter-narrative to the government supplied version of events (Al-Ani et al. 2012). In the Mexican Drug War, social media often augmented and often replaced traditional media. Citizens witnessing the armed conflict used social media for alerts and information dissemination (Monroy-Hernández et al. 2013). Shklovski and Kotamraju noted that people practiced self-censorship but also published content in more sophisticated ways (Shklovski and Kotamraju 2011).

Recent years researchers have started to analyze public discourses from a developmental perspective, with a focus on how public discourses help produce a unified frame and lead to collective actions. Dimond et al. conducted a study of online storytelling platforms aimed at ending street harassment (Dimond et al. 2013). They showed that through sharing stories and discussing with others online, street harassment victims collectively developed a new way of framing their experience, which empowered them in their future actions. Crivellaro et al. reported that, to redevelop an abandoned public pool, the local residents in Tynemouth, UK used a Facebook page to share their memories of the pool and deliberate new plans (Crivellaro et al. 2014). Social media became a place for the conduct of everyday politics, nurturing future online and offline social movements.

Past HCI and CSCW research has demonstrated the powerful roles of social media in information dissemination and the formation of public opinions, but not as much on the links between local context and social media discourses. This research aims to contribute to this research strand through a closer look at social media discourses in which people discuss public issues and form opinions through a comparative lens.

2.2 Framing and Media Bias

As we consider Facebook and Weibo as two distinct sites and analyze each site's corpus of information, the research is informed by studies and theories of traditional media bias. When a person interprets a particular event, he or she often implicitly refers to a frame, or what Erving Goffman considered "schemata of interpretation" (Goffman 1974). He further explained that:

> *Primary frameworks vary in degree of organization. Some are neatly presentable as a system of entities, postulates, and rules; others-indeed, most others-appear to have no apparent articulated shape, providing online a lore of understanding, an approach, a perspective. Whatever the degree of organization, however, every primary framework allows its user to locate, perceive, identify, and label a seemingly infinite number of concrete occurrences defined in its terms.* (Goffman 1974)

Perhaps one of the most influential framing processes takes place within traditional media such as newspaper and television programs. Trumbo examined a decade of news coverage of climate change in five US national newspapers and

found that the subject matter had become increasingly politicized, with the diminishing role of scientists as well as the increasing participation of politicians and special interests (Trumbo 1996). Semetko and Valkenburg carried out a content analysis of newspaper and television news stories during the Amsterdam meetings of European heads of state in 1997, and analyzed the prevalence of five news frames: attribution of responsibility, conflict, human interest, economic consequences, and morality (Semetko and Valkenburg 2000). They found that sober and serious newspapers and television news programs were more likely to use the responsibility and conflict frames when presenting news, while sensationalist outlets often used the human interest frame.

Critical media scholars concluded that media need to meet some hidden standards to publish news. In the American society, for example, a few scholars noted that media consistently speak in favor of capitalism, patriarchy, heterosexism, individualism, consumerism, and White privilege (Budd, Craig, and Steinman 1999; Entman 2007). Considering the differences between traditional media and social media, we set to study whether bias also existed in social media discourses that comply with certain values and standards, even though social media are often considered as a global platform.

2.3 Framing Social Movements

Mario Diani defined social movements as a distinct social process with mechanisms that actors engaged in collective action. The mechanisms involve conflictual relations with identified opponents, are linked by dense informal networks, and possess a distinct collective identity (Diani and Eyerman 1992). Analyzing the ideational and interpretive processes associated with social movements and continuing Goffman's analysis of frame's functions, David Snow argued that collective action frames also work through the focusing, articulation, and transformative functions of frame (Snow 2004). The focusing function defines what is relevant or irrelevant, the articulation function tries to tie together various punctuated elements to convey one distinct set of meanings, and the transformative function might occur to alter the meanings of objects and their connections to the actors.

Donatella della Porta and Mario Diani suggested two ways of looking at the relationship between frames and culture (Della Porta and Diani 2006): The first stresses the role of values. Action is understood to have origins in social actors' set of principles and concerns. The second underlines the cognitive elements of culture. Here mobilization takes place as social actors assign meaning to their experience. Action is considered as an adequate response to a condition considered "unjust." The second way is most relevant to this comparative study of discourses about the Umbrella Movement, as we focus on how people from two distinct cultures interpreted the movement and developed their discourses respectively.

3. Background

3.1 Political Culture in Mainland China

Mainland China is what scholars usually consider as an "Authoritarian" society, a one-party state where the Chinese Communist Party (CCP) continuously runs the Chinese government. A survey study (Wang, 2007) reported that Chinese citizens support the idea of democracy. However, the majority are not yet ready for a major effort towards democratization. They still see economic growth and social stability as more important than freedom of speech, political participation, and other democratic rights.

Political scientists have examined Chinese citizens' political attitudes, suggesting that Chinese citizens might have formed a coherent set of political values and beliefs in the past few decades. For example, Chinese citizens are likely to favor political leaders who can safeguard the people's wellbeing, using superior wisdom to secure public benefits (Shi & Lu, 2010). Chinese citizens might not favor radical forms of political participation, but are willing to convey their concerns to political leaders (Shi & Lu, 2010). Additionally, Chinese citizens have realized that China must develop a democracy with Chinese characteristics rather than fully adopt Western-style democracy (Barme, 1995; Liu & Chen, 2012; He, 2013). For many Chinese citizens, a decidedly paternalistic idea of government that denies political competition is consistent with their conception of democracy (Shi, 2008).

3.2 Hong Kong and its Umbrella Movement

On July 1, 1997, Hong Kong ended its 150-year history as a British colony and returned to the People's Republic of China (PRC). The joint declaration between Britain and the PRC states that Hong Kong comprises a special administrative area with high levels of social, political, and economic autonomy. Paragraph 3.5 of the joint declaration writes:

The current social and economic systems in Hong Kong will remain unchanged, and so will the life-style. Rights and freedoms, including those of the person, of speech, of the press, of assembly, of association, of travel, of movement, of correspondence, of strike, of choice of occupation, of academic research and of religious belief will be ensured by law in the [HKSAR]. Private property, ownership of enterprises, legitimate right of inheritance and foreign investment will be protected by law. (Zhao & Thatcher, 1984)

In contrast to the joint declaration, since its return, Hong Kong has undergone a series of social, political, and economic changes, because of the change of sovereignty and frequent social, economic, and cultural exchanges between Hong Kong and the mainland. A 2012 news report commented:

Fifteen years after the handover, Hong Kong faces a wide set of challenges, analysts say: property prices have soared to their highest levels since 1997; the gap between rich and poor, already the greatest in Asia, is at its highest

level in four decades; air pollution continues to worsen; and no clear path has been presented to usher in a system to allow the public to directly elect leaders. Beijing has said that direct elections of the chief executive may be held as early as 2017, but it has not given any guarantees. (Drew 2012)

On August 31, 2014, the National People's Congress (NPC) of the PRC proposed a reform for the 2017 Hong Kong Chief Executive election. The proposal stated that a 1200-member committee of Hong Kong citizens would elect two to three candidates for inclusion in an ordinary voter ballot.

Hong Kong's pro-democracy citizens perceived the proposed reform as a failure to fulfill key commitments under the joint declaration (Davis 2015; Lam 2015). They believed the reform failed to achieve universal suffrage, which would allow every citizen to nominate and vote. The frustration and disappointment over Hong Kong's democratic development grew. Many citizens believed that universal suffrage could help improve Hong Kong's economic and political autonomy (Fung 2015).

Striving for universal suffrage and democracy in Hong Kong, the Umbrella Movement began on September 28, 2014. One of the most common slogans of the movement was "We need real universal suffrage!" Thousands of citizens occupied the main streets in several central business districts for 79 days. The movement adopted the term "umbrella" in its title because the movement participants used umbrellas against pepper spray and tear gas from the police (Zhao & Liu, 2015). University professors and students organized class boycotts for nearly a month in support of the Movement. Hong Kong Legislative Council decided to stop, and delayed the legislative process of a number of bills (Lam 2015). The movement officially ended on December 15 when the authorities arrested key leaders and cleared remaining protesters in streets (Zhao & Liu, 2015). The movement did not achieve its goal to stop the NPC's proposed political reform. However, it left a legacy, and pro-democracy activists continued to strive for real universal suffrage in varied forms (Phillips 2015). Lam noted that the movement introduced a new style of political participation (the occupation of central business areas) and the concept of deliberative democracy, and potentially educated the public and strengthened civil society (Lam 2015).

Since Hong Kong is one of China's most economically and politically developed areas, the Umbrella Movement held special and important political relevance to the mainland citizens. It was also the largest pro-democracy social movement in China since the Tiananmen Square protests of 1989. As one mainland citizen commented online, "Today's Hong Kong protest shares many similarities with the Tiananmen Square protests more than 20 years ago. Today's Hong Kong is a weather vane, indicating the future direction of China's politics.

4. Research Method

4.1 Data Collection

Our approach in this study was preceded and informed by ethnographic work. The second and fourth authors resided in Hong Kong. The fourth author was a participant observer of the Umbrella Movement, experiencing several major protests and having obtained deep insider knowledge of the movement. She also actively followed Hong Kong citizens' discussions on Facebook. The field studies in Hong Kong took place between September 2014 and May 2015. The first and third authors are from mainland China. The first author conducted an online observational study of mainland citizens' discussions on Chinese social media including Weibo and popular online forums such as tianya.com from April 2014 to January 2016. From September 2014 to December 2014 when major events of the movement occurred, the researchers from both studies held biweekly meetings to discuss the movement. Such ethnographic approach allowed us to gain insights into people's online discourses. We chose Facebook for studying Hong Kong citizens' social media discourses because Facebook was the most popular social media platform in Hong Kong by the time of the study and the ethnographic work of the movement informed us that Facebook was a major venue for discussions among Hong Kong citizens (Kow et al. 2016). We selected Weibo for analyzing mainland Chinese citizens' discussions because Weibo has been the largest microblogging service in China and a major online public sphere for public discussions (Rauchfleisch and Schäfer 2014).

Our data collection on Facebook and Weibo took place between June, 2015 and August, 2015, by which major events of the Umbrella Movement had ceased. All the four authors participated in data collection. The second and fourth authors gathered discussions from Facebook. The first and third authors collected data from Weibo. Since the movement generated a massive amount of discussions regarding many details, incidents, and events of the movement on both sites, it was infeasible and implausible to cover all of them. Instead, four authors drew on understanding of the movement, discussed the timeline of the movement, and selected three most influential events and turning points. The first event is police use of tear gas against students and citizens on September 29, 2014. The term "Umbrella Movement" was coined as people used umbrellas against tear gas. The second event is negotiation between government and student union on October 21, 2014, when government officials and student representatives sat down on the same table to discuss the future of Hong Kong. The third event is movement leaders' hunger strike and turning themselves in on December 1, 2014, which marked the end of the movement. For each event, we used two sites' keyword search function to locate relevant posts. We manually archived these posts as well as their replies

into two corpora. The Weibo corpus was in Mandarin Chinese, while the Facebook corpus was largely in Cantonese. Table 1 shows basic statistics about the two corpora of data. We translated the data into English when reporting quotes.

Table 1. Descriptive statistics of the Facebook and Weibo corpora.

	# of Posts	# of comments	# of lines	# of authors
Weibo	87	2324	2970	1571
Facebook	108	1987	3207	1690

In Table 1, a post is the original content made by a social media user. The number of comments is the total of all the posts' comments. The number of lines is the total of all the posts' lines plus all the comments' lines. The number of authors are the number of people who had made either a post or a comment. The two social media corpora were of similar size. We observed that mainland Chinese were more likely to engage in conversations with other people under the same post. Hong Kong citizens often used multiple lines to make one comment.

4.2 Data Analysis

At the stage of data analysis, we employed two methods: grounded theory and discourse analysis. We used the former method to identify major themes involved in each set of social media discourses, and the latter method to identify how discourses were constructed in each social media platform.

We employed a grounded-theory approach (Corbin and Strauss 2007) to analyze the two social media corpora. Each of the first, second, and third authors manually analyzed both corpora of discourses. Each first read the data to get an initial sense of what people were talking about on social media. We observed that, on each site, discourses were usually started with the movement, but not always focused on the movement. Instead, the movement sparked conversations along several dimensions, such as Hong Kong-China relation, democracy, and the Chinese Communist Party (CCP). Through an open coding process, each of us identified a set of common themes in each corpus. Table 2 shows the initial themes that each author generated during this process.

Table 2. Initial codes after open coding.

	Weibo discourses	Facebook discourses
1st author	1. economy development 2. democracy's relation to HK 3. HK-China relation 4. movement consequence 5. trust in movement leaders	1. criticism against the CCP 2. HK-China relation 3. criticism against HK political leaders 4. movement consequence 5. trust in movement leaders
2nd author	1. democracy's value 2. movement legitimacy	1. free election 2. the brutality of the CCP

	3. HK government action 4. students' role in movement	3. HK government action 4. local economy 5. HK police action
3rd author	1. student motivation 2. HK government action 3. local societal stability 4. HK-mainland relation	1. free election 2. movement legitimacy 3. HK-China relation 4. the CCP

We then used several round of discussions to aggregate, refine, and consolidate our codes via a combination of inductive and deductive thinking. Because of the iterative processes, we were able to guarantee the inter-rater agreement. Eventually, we identified five themes within on Weibo and four on Facebook, with three overlapping ones. Below are descriptions of the themes.

Three common themes across two sites:

Hong Kong-China relation: They discussed what should be the optimal relationship between Hong Kong and China, especially when the subject matter involves the level of political autonomy for Hong Kong and the central government's influence over Hong Kong.

Movement legitimacy: People argued about the legitimacy of this movement, and whether they should support the movement.

Government actions: They debated whether Hong Kong government's reaction to the movement was proper.

Two unique themes on Weibo:

Western influence: Mainlanders pointed to influence from Western countries and organizations for political purpose to destabilize China.

Democracy: The topic concerned whether democracy, particularly Western models, would work for Hong Kong and China.

On unique theme on Facebook:

Chinese Communist Party: Hong Kong citizens spoke a lot about their concern for the rule of the Chinese Communist Party (CCP), based on their understanding of how the CCP ruled the mainland.

In Chapter 5 "Themes from Two Social Media Sites" we described general patterns under each theme at a higher level. Under each theme, we selected representative examples to present in the results section. We adopt a discourse analysis approach (van Dijk 1993; van Dijk and Kintsch 1983) to examine each discourse instance. Teun A. van Dijk's critical discourse analysis pays considerable attention to the role of discourses in the production, reproduction, and challenge of dominance. Dominance refers to "the exercise of social power by elites, institutions or groups, that results in social inequality, including political, cultural, class, ethnic, racial and gender inequality" (van Dijk 1993). In this study, we consider the dominant themes that permeated discourses and attempted to establish normative ways of talking about the movement. We focused on six aspects of discourse structures raised by van Dijk:

(a) Argumentation: the negative evaluation follows from the facts.

(b) Rhetorical figures: hyperbolic enhancement of their negative actions and our positive actions; euphemisms, denials, understatements of our negative actions.
(c) Lexical style: choice of words that imply negative (or positive) evaluations.
(d) Story telling: telling above negative events as personally experienced; giving plausible details above negative features of the events.
(e) Structural emphasis of their negative actions, e.g. in headlines, leads, summaries, or other properties of text schemata (e.g. those of news reports), transactivity structures of sentence syntax (e.g. mentioning negative agents
in prominent. topical position).
(f) Quoting credible witnesses, sources or experts, e.g. in news reports.
(van Dijk 1993)

Following this strategy, we examined in each selected instance how people constructed their arguments, what key statements were missing, what specific local knowledge they drew to support their narrative, and what points they emphasized. We identified recurring patterns within these discourses and present them in Chapter 6 "Construction of Public Discourses."

5. Themes from Two Social Media Sites

In this section, we present representative quotes under each theme from each social media site at a higher level. The purpose of this section is to present a general picture of public discourses on each site. Next section will introduce a deeper-level analysis of recurring discursive patterns that reflect the different, hidden cultural logics and reasoning processes from Hong Kong and the mainland.

5.1 Movement Legitimacy

Both discourse corpora were concerned with the normative question of whether the Umbrella Movement was legitimate. We observed that different standards were used to evaluate the movement. Here is a Facebook instance where arguments were built against the movement:

> The peaceful occupy central movement has turned into riots, causing economic loss in Hong Kong. The movement has disrupted ordinary citizen's life, which is a shame. We have a life to live. Please stop.

In this instance, the speaker acknowledged the "peacefulness" of the movement's early stage, but criticized the severe consequences of the movement. However, we did observe counterarguments that legitimized these consequences. Here is an example:

> Please understand and accept this short-term inconvenience. This is for Hong Kong's long-term democratic development. This is also for the next generation to have a better life.

From the Facebook discourses, we observed citizens' attempts to either delegitimize or legitimize the movement. Short-term inconvenience and long-term political agenda became two dominant factors in these discourses.

Different from Hong Kong citizens' complicated attitudes, mainlanders were generally against the movement. In their discourses, they considered the democratic politics as an evolutionary approach rather than an antagonistically revolutionary way to make social changes. We observed and collected many excerpts similar to the following one:

> It is not right to make threats by blocking streets. This should not be the way that democratic politics works. Those protesters are acting like a spoiled child that wants no responsibility.

In this instance, the speaker immediately delegitimized the action of blocking streets, without regard to whether such action had negative consequences or its long-term benefits.

5.2 Government Action

After the Hong Kong police used tear gas against participants of the movement, Hong Kong citizens' discourses on Facebook were inclined to critique the police, with some minor voices in favor of the police's actions. For example, the following excerpt criticized the actions:

> I am surprised that the Hong Kong government could make the decisions to harm and suppress peaceful, unarmed students.

However, there were also citizens supporting the police' action, based on the factual information they obtained. Here is an instance:

> I was surprised at first, like everyone else. I know for sure that most protesters were peaceful. But on television I saw protesters who pushed a police officer but immediately put up their hands, pretending to be innocent. A newspaper reports said a protester was kicking the police with feet but keeping his hands up. Also there were protesters provoking the police by calling them "police dogs."

Commenting on police violence, the speaker pointing to protesters' violent side. On Weibo, we observed that the discourses generally supported the Hong Kong police's actions, and criticized some protesters' violent behaviors. Here is an example:

> Hong Kong police is doing a great job. You can't let the mob keep pushing the boundary.

Here the choice of the word "mob" indicated how the speaker viewed the protesters as violent and disruptive. However, key information was missing as to why the speaker considered the protesters as a group of violent people.

5.3 Hong Kong-China relation

Hong Kong citizens' discourses revolved around Hong Kong's political autonomy in the shadow of the central government. The Umbrella Movement's explicit

appeal was universal suffrage, but what it challenged was the authority of the central government. In a similar vein, the extreme expression of defying authority was to call for Hong Kong independence. Here is an example came from a Facebook comment about the tear gas incident:

> Blood is thinker than water? Hong Kong should be independent!

"Blood is thicker than water" is a common saying repeated among some people on both sites, stressing the same cultural and ethnic root shared by mainlanders and Hong Kong people and implying that the two groups of people should seek common ground instead of confronting each other. While sentiments for the Hong Kong independence were fueled by the perceived confrontation and hostility between Hong Kong citizens and authorities, including the Hong Kong government and the central government, there were also voices against such proposal. Here is an instance:

> Just look at the appeals by the pro-democracy camp and student activists: to withdraw the decisions by the National People's Congress (NPC). However, the constitution guarantees the NPC's right of decisions… Hong Kong will eat the bitter fruit. Hong Kong can't blame others.

Above is an opinion regarding why Hong Kong should not and would not leave China. The speaker cited the constitution and forecast a bleak future for Hong Kong.

Mainlanders' discourses, in contrast, revolved around Hong Kong being an inalienable part of China and the movement participants having no right to determine Hong Kong's future. For instance, here is an excerpt from Weibo:

> Why should these protesters decide Hong Kong's future? They may not represent the whole Hong Kong population. This will also be unfair to over 1.3 billion Chinese citizens. Hong Kong is only part of China. Every average person knows what they really want!

Mainlanders believe that Hong Kong is reliant on China's support to be prosperous. The Umbrella movement participants' advocacy for independence may not only undermine the territorial integrity of China as a sovereign nation, but also significantly hurt Hong Kong. For example,

> Hong Kong citizens are stupid to think that independence can make Hong Kong stronger. Hong Kong will become nobody without China's support.

In this stance, the speaker assumed that the movement' goals included Hong Kong independence, and that the movement represented Hong Kong citizens. Based on these assumptions, the speaker considered Hong Kong citizens "stupid" and predicted the consequence of a Hong Kong independence.

5.4 Fear of the CCP in Facebook Discourses

A unique theme among Hong Kong citizens' discourses was their fear of the CCP. Some predicted that it would be a disaster if the CCP directly ruled Hong Kong. Below is an example:

> If we are obedient to the rule of the CCP, Hong Kong will experience societal chaos and economic recession, just like the mainland.

The speaker built their argument upon the perception that the mainland was experiencing societal chaos and economic recession, and the conclusion that the rule of the CCP was the cause. Hence, what happened to the mainland would happen to Hong Kong in the same way.

Some others drew reference from the history of the CCP, mostly how the CCP dealt with the Tiananmen Square protests in 1989:

> The CCP will suppress the movement violently! Today's CCP is still the bloodthirsty monster from 8964.

"8964" refers to the date of June 4th, 1989, when the CCP suppressed the Tiananmen Square protests. According to the speaker, the CCP was violent against protesters in 1989, and would continue to be so towards the Umbrella Movement.

5.5 Suspicion of Western Intervention and Reflection on Democracy in Weibo Discourses

Within the Weibo discourses, two unique themes emerged. One was the suspicion of Western influence. A speaker mocked an imagined group of paid commenters to promote Western ideologies as "America's dogs." They wrote:

> America's dogs are barking! My master represents democracy and freedom! It is okay for my master to kill black people. In the Middle East my master has killed so many people, no consequences! Hehe, the universal values by the USA!

In this instance, the speaker did not directly mention the Umbrella Movement. Nonetheless, the instance represented a popular belief that Western countries are behind societal unrest that takes place in China.

Another unique theme was reflection upon democracy. Weibo discourses showed a complicated attitude towards democracy, pointing to people's perceptions of its advantages and disadvantages. For example, an example is:

> Democracy is a good thing. The mainland society should learn from strengths of Western democratic societies.

Different from this instance, another speaker wrote:

> I heard that the movement is for voting rights and democracy. But I can't agree. Not everyone is capable of making responsible vote. What if the majority do not care about the big picture?

The speaker attempted to make sense of the movement's appeals. The speaker expressed doubt against the basic principles of democracy, which represented an ideological clash between democracy and the one they lived with.

6. Construction of Public Discourses

As major discourses seemed to cover various topics on each social media site, they often reflected people's deep-seated values and beliefs. In this section, we describe a deeper-level analysis of recurring discourse patterns that reflected the different, hidden cultural logics and reasoning processes. Three dominant patterns we will

discuss in this section are: *Political Ideology: Majoritarian Democracy versus Paternalism*, *Collective Memory: Persistence versus Discontinuity*, and *City Identity: World City versus Chinese City*.

6.1 Political Ideology: Majoritarian Democracy versus Paternalism

The most salient difference we noticed between the two sites' discourses lies in their distinct political ideologies. The discourses showed that Hong Kong citizens seemed to lean towards majoritarian democracy, with insistence on the one-person-one-vote principle during both nomination and election processes. For instance, here is an instance:

> I do not think the 1200-member committee can represent all the citizens' will. If we count the actual votes, it would be easy to tell that the minority won and the majority lost!

In this quote, the person cast doubt over the 1200-member committee which was in charge of nomination. The 1200-member committee, to many from the younger generation in Hong Kong, is "an electoral committee of tycoons, oligarchs and pro-Beijing figures" (Iyengar 2014). Now we closely examine the argument schema of this quote (implicit statements in square brackets):

Arguments:
1. [The committee is selected by Beijing and serves its interest, rather than Hong Kong's.]
2. I do not think the 1200-member committee can represent all the citizens' will.
3. [Hong Kong's current Chief Executive, Leung Chun-Ying, is horrible at his job.]
4. [Leung Chun-Ying had won only 689 votes out of the 1200, which was a small advantage.]
5. [The majority of Hong Kong citizens were not for Leung Chun-Ying.]
6. If we count the actual votes, it would be easy to tell that the minority won and the majority lost.

Conclusion:
7. [The majority vote is supposed to be used to determine the election results.]

We have completed the argument schema with four missing statements (1, 3, 4, 5, and 7) to show the entire logic through which the author indicated a conclusion that majoritarian democracy without the intervention of the Beijing government is right and appropriate. Without background knowledge about Hong Kong's present politics, the original quote might appear illogic and incomprehensible to a remote social media user. For example, a U.S. social media user who has noticed this quote on Facebook might ask what the "1200-member committee" refers to. More specifically, the author was discussing two different ways of implementing

majoritarian democracy: whether Hong Kong needs a 1200-member committee at the intermediate level. Attributing the poor performance of the current Chief Executive to the election committee, the author preferred the popular vote. The rationale hidden in the statements from 4 to 7 coincidentally echoed public discourses that ensued the 2016 United States presidential election where it was reported that Donald Trump won the Electoral College vote while Hillary Clinton won the popular vote (Krieg 2016). Hence, the Facebook discourses were not focused on whether Hong Kong should request democracy, but on debating what ways of exercising democracy could represent "true democracy," a term frequently repeated in the discussions.

Strikingly different from Hong Kong citizens' discourses that presumed majoritarian democracy as the only legitimate way of government, the Weibo discourses showed an ambiguous, complicated attitude towards the idea of democracy, as we briefly discussed in Section 5.5. The fundamental idea within the Weibo discourses around political ideology possibly originates from the fact that China has for thousands of years followed a paternalistic mode of governance, and only until recent decades were Chinese citizens thoroughly exposed to Western-style democracies, because of globalization and the aid of information and communication technologies (Wang, 2007). Therefore, we noticed that the Weibo discourses regarding political ideology were complicated, with preference of paternalism in some ways, but also acceptance of democracy, mostly as a vague idea, in other ways. In Section 5.1, we mentioned that mainlanders' discussions were generally opposing social movements, a key feature of modern democracies. Now we analyze the argument schema of a quote from Section 5.1 to discuss how Weibo discourses were constructed towards this goal:

Arguments:
1. [Blocking streets has negative consequences like societal instability.]
2. [Hong Kong citizens used locking streets to threaten the government and other people.]
3. [These two actions are universally wrong.]
4. It is not right to make threats by blocking streets.
5. [Although Hong Kong citizens think this movement is how democracy works.]

Conclusion:
6. This should not be the way that democracy works.

In this instance, the speaker criticized the movement, denouncing the idea of citizens' collective actions. Interestingly, the missing statements, which the speaker might consider as shared understandings and unnecessary to speak out, reflected important normative judgments driven by paternalistic ideas. First, the speaker chose the term "threat" to frame the movement. Such framing was common in the Weibo discourses. Behind this framing strategy was the common belief that contentious actions, especially against the government, were inappropriate in resolving public issues. Such belief was in sharp contrast to the presumption of the

legitimate role of social movements within those discourses on Facebook. Note that even in the first instance in Section 5.1 where the speaker made a criticism of the movement, they only did so because of the perceived violence (i.e., "turned into riots"), which did not mean disapproval of the movement. Second, the speaker did not clarify what entity the movement made threats to. Presumably, the entities could include the Hong Kong government, the Beijing government, mainland citizens, and the Hong Kong citizens who did not participate, because in paternalism the people and the government are viewed as a whole, and the people should not challenge the regime in explicit ways (Shi 2009). When a challenge does appear, the challengers become the opposite of the rest of the nation. This echoed other conversations on Weibo that called the protesters "the mob." With the paternalistic logic, the speakers made a claim to delegitimize the role of social movement in democracy.

The paternalistic tendency also manifested in discourses that downplayed the role of universal suffrage. Here is the argument schema from another quote in Section 5.5:

Arguments:
1. I heard that the movement is for voting rights and democracy.
2. But I can't agree.
3. Not everyone is capable of making responsible vote.
4. What if the majority do not care about the big picture?

Conclusion:
5. [Universal suffrage can be dangerous.]

This narrative reflected a distrust in average citizens' sense of responsibility, as well as a paternalistic political ideal that the government takes responsibility in making important decisions. Such ideal discouraged the idea of entrusting average citizens with the voting right.

However, the Weibo discourses did show certain degree of favor to democracy, but often expected democratization to be a gradual process. Here is an instance:

Arguments:
1. Democratization is a gradual process.
2. If you read the history of the USA, democratic progress such as the end of slavery and women's suffrage did not happen in one night.
3. There is an old saying that "great haste is not always good speed."

Conclusion:
4. [Both Hong Kong and the mainland citizens should be more patient.]

In this narrative, the speaker drew from the history of the USA to argue for the gradual nature of democratization. The speaker criticized the great haste in the movement without entirely rejecting its appeal.

6.2 Collective Memory: Persistence versus Discontinuity

Another element that differentiate the two set of discourses is the collective memory of the past. Collective memory refers to the reconstruction of the past that is used to meet the current needs of a given group and solve its problem

(Halbwachs 1992). We noticed that the ways Hong Kong citizens and mainlanders reconstructed certain political events impacted how they constructed public discourses on Facebook and Weibo. A particular relevant event to both populations is the Tiananmen Square protests in 1989. After the Chinese government suppressed the protests on June 4th, 1989, a few protest leaders fled to Hong Kong and other countries (Tsui and Pang 2014). Ever since then, Hong Kong citizens gathered to remember the event on June 4th on an annual basis. However, public discussions of the event have been strictly forbidden on the mainland (Iyengar 2015). The different information environment and distinct ways of memorizing the past led to collective memories of the 1989 event. Here is the argument schema from a quote in Section 5.4:

> **Arguments:**
> 1. Today's CCP is still the bloodthirsty monster from 8964.
> **Conclusion:**
> 2. The CCP will suppress the movement violently!

The first line contained two statements: (1) the CCP violently suppressed the Tiananmen Square protests; and (2) the CPP has maintained the same, violent strategy in dealing with protesters since nearly two decades ago. Therefore, it was natural for the speaker to conclude that the CCP would do the same thing towards the Umbrella Movement protesters. Memories of the Tiananmen Square protests are an important source for Hong Kong citizens' collective memory regarding the CPP and how it dealt with social movements.

To some movement participants, this collective memory became part of their collective identity, which refers to "*an interactive and shared definition produced by several individuals (or groups at a more complex level) and concerned with the orientations of action and the field of opportunities and constraints in which the action takes place*" (Melucci 2013). As another speaker wrote: "We the young people in Hong Kong still carry the 1989 spirit, which has been lost among mainland people." Here the speaker claimed to be the successor to the Tiananmen Square protesters, and drew distinction from mainland citizens. Such discourse sought to solidify the movement participants' collective identity as concerned and courageous citizens, and maintain solidarity with the majority.

While within Hong Kong citizens' collective memory the 1989 event persists as a genuine social movement, the image of the movement was different on the mainland. Observations of the Weibo discourses showed a different framing of the 1989 event. For example, a speaker wrote:

> **Arguments:**
> 1. Do you still remember 89?
> 2. Unscrupulous politicians exploited innocent students for their own political agenda, made up high-sounding reasons, and fooled those kids onto streets.
> 3. There was no return for many of the students.
> 4. Young people had zealous idealism.
> 5. The reality did not end up as expected.
> **Conclusion:**
> 6. What if bloodshed appeared in Hong Kong?

This argument represents the many instances we observed on Weibo that framed the 1989 event as a political struggle, and student protesters as a political tool. Without providing sufficient factual information, the argument appeared like a conspiracy theory, which refers to *"the conviction that a secret, omnipotent individual or group covertly controls the political and social order or some part thereof"* (Fenster 2008). Therefore, in this narrative, politicians were" unscrupulous" and students were "innocent." Because of the secretive manipulation, it was obvious that "the reality did not end up as expected." The narrative represents a fading collective memory of the 1989 event. It also echoed the discontinuity in people's active pursuit of democracy on the mainland immediately after the 1989 crackdown (Lu 1996). To some extent, the narrative is also consistent with the paternalistic thinking in discouraging contentious, collective actions.

6.3 City Identity: World City versus Chinese City

The third element that permeated both social media platforms was Hong Kong's city identity situated in the drastic transition ever since its return to the PRC. Section 5.3 discussed Hong Kong citizens and mainland citizens' different normative expectations of the Hong Kong-China relationship. At a deeper level was Hong Kong citizens' struggle with their city identity. Many Facebook speakers made a voice that Hong Kong should remain a world city rather than a Chinese city, touting the idea of "Hong Kong independence." Here is an instance:

Arguments:
1. Hong Kong has become worse and worse since 1997.
2. Many mainlanders come in and take advantage of our resources.
3. I miss Hong Kong's good old times.
4. [Hong Kong can be better with independence.]

Conclusion:
5. Hong Kong should be independent.

The speaker attributed Hong Kong's worsening situation to its return in 1997, reminiscing Hong Kong's past. The speaker mentioned the increasing presence of mainlanders in Hong Kong as one major negative consequence of the return. Such sentiment resonates with studies that found Hong Kong citizens' identity crisis with distinct postcolonial characteristics (Choy 2007).

Similarly, we found accounts that drew distinction between Hong Kong citizens and mainlanders, suggesting an attempt to narrate Hong Kong's uniqueness compared to the mainland. For example, a Hong Kong speaker said, "simplified Chinese characters cannot represent Hong Kong." Simplified Chinese characters are used on the mainland, while traditional Chinese characters are the legal written form in Hong Kong. In another instance, the speaker found Hong Kong citizens to be superior to the mainland because "Hong Kong is the place that preserves the good virtues of the Chinese culture."

While the Facebook discourses often insisted that Hong Kong belonged to its own citizens and should have its own developmental path, we observed the

opposite viewpoints on Weibo. Here is the argument schema of a quote from Section 5.3:

Arguments:
1. Why should these protesters decide Hong Kong's future?
2. They may not represent the whole Hong Kong population.
3. This will also be unfair to over 1.3 billion Chinese citizens.
4. Hong Kong is only part of China.
5. [Hong Kong's future should be decided by the will that represents the whole Chinese population.]

Conclusion:
6. Every average person knows what they really want [that is independence]!

Similar to what we discussed about the paternalistic logic on Weibo, statement 1 suggested that mainlanders understood the movement as an attempt to replace the role of government in executing the people's will. Statement 1 was a rhetorical question that was meant to criticize the movement. The person then listed three reasons in a progressive manner (statements 2-4). Statement 4 reached the core understanding of mainlanders that Hong Kong should be a Chinese city first. Hence, the Chinese government, which represents the whole Chinese population per paternalistic principles, had sovereignty over Hong Kong (statement 5). In statement 6 the speaker attempted to generalize his personal judgment to all the Chinese citizens.

7. Discussion

We have reported the commonalities and differences between discourses on Facebook and on Weibo. The case is unique as two distinct populations were largely isolated from each other, were concerned with the same event, but used different channels to talk about it. The comparative study gives us the opportunity to investigate the link between social media discourses and local conditions that had an influence over public discourses. We have shown that people from different societies, even sharing the same cultural and ethnic root, had strikingly different ways of organizing and presenting discourses, and consequently reached different conclusions. Next we will discuss how local circumstances were associated with public discourses on social media, and how discourses were supported by social media. We will discuss design implications for supporting effective public communication.

7.1 Localness of Social Media Discourse

By comparing two corpora of social media discourses, we have shown that online discourses were not generated out of nowhere. The ways that facts were interpreted and presented, words were chosen, and arguments were made had

roots in the standards and values of a society. Reflecting on what constitutes truth in a society, Foucault noted that:

> *Each society has its regime of truth, its 'general politics' of truth: that is, the types of discourse which it accepts and makes function as true; the mechanisms and instances which enable one to distinguish true and false statements, the means by which each is sanctioned; the techniques and procedures accorded value in the acquisition of truth; the status of those who are charged with saying what counts as true.* (Foucault 1980)

In this regard, the Hong Kong society and the mainland society have different ways to produce "truth" about the movement. We observed that the set of Facebook discourses were marked with salient post-colonial characteristics that underlined the promises of true liberal democracy, favored the benefits of globalization, but also saw its reliance on the country, both economically and politically. Thus, when Hong Kong citizens talked about the movement, they needed to make judgments over the movement and government actions, showing either support or opposition. They had to take the Hong Kong-China relationship into consideration, as the movement concerned the future relation of Hong Kong to China, and directly challenged the rule of the central government of China. Additionally, they feared the "brutality" of the CCP, even though the CCP had never directly ruled Hong Kong. The set of Weibo discourses, instead, were dominated by values of nationalism and paternalism that expected Hong Kong to be obedient and collaborative. Sharing with Hong Kong people similar topics under the three common themes, mainland Chinese were additionally concerned with democracy and Western influence. Living in a non-democratic society, mainland Chinese have nonetheless gradually developed interest in the ideas of democracy. Meanwhile, stressing the integrity of their country, mainland Chinese often considered the "malicious" Western influence as a cause of domestic unrest, no matter whether there was explicit evidence.

Scribner used empirical bias to explain how people's own lived experiences impacted reasoning processes (Scribner 1997). We have discussed how different political ideologies, collective memories, and expectations of Hong Kong's city identity impacted discourses on two sites. To some extent, Hong Kong citizens' reasoning about the CCP brutality and mainland citizens' reasoning about Western influence all lacked factual information, and exhibited strong influence from their past experiences. For the former, it is how the CCP violently suppressed the 1989 Tiananmen Square protests, and other similar incidents; and for the latter, it is knowledge of the decades-long hostility between Western democratic countries and communist countries, among other relevant conditions.

The fact that mainland citizens were not co-located with the movement perhaps had a major impact upon the ways they talked about the movement. We observed that the two populations discussed at different levels of abstraction. Hong Kong citizens' discourses often contained conversations around details such as how a police officer attacked a protester, while mainland citizens usually talked in a more

generic term, referring to their general impression of Hong Kong's history, recent tensions between Hong Kong and the mainland, and the Hong Kong-mainland relationship. Hence, even when discussing under the same themes, two populations showed their different levels of knowledge of the movement. For example, when discussing movement legitimacy, Hong Kong citizens would provide more evidences to support their argument, while mainland citizens tended to make normative judgements based on limited information without necessarily knowing the real situations of the protest. A pertinent example is how they generally denounced the movement because protesters blocked the streets. Hence, there was possibility of bias among Weibo users, as they lacked sufficient information, which prevented them from developing informed understanding of the movement. While social media help local events to reach a global audience, people at a distance do not necessarily form informed understanding just by reading a few tweets or Facebook posts. Rather, they draw from their own ideologies and beliefs to reason and make judgments.

Localness of the social media discourses manifested in their incompleteness, or those missing statements. The speakers did not articulate all the reasoning steps, leaving the audience the task to fill the missing links. Those discourses' functioning thus relied upon implicit knowledge shared by both speakers and their local audience. Besides considering how the discursive structures are localized, we shall also note that even the representation of the basic, known fact can be very different, manifest in the choice of word. For at least a portion of the Facebook discourses, the movement was civilized with "peace and love," while mainland citizens uniquely used "mob" to call the protesters.

7.2 Social Movements, Public Discourses, and Social Media

Public discourses are complex in nature, with many participating voices and viewpoints, which sometimes conflict with each other. The Umbrella Movement, best known by its catchphrase "we need real universal suffrage," also spurred social media discourses with a wide range of themes. The Facebook discourses suggest that not all the Hong Kong citizens supported the movement. They had varied concerns and opinions regarding the movement. The Weibo discourses reveal an even more opposing attitude towards the movement. Hence, social media do not always facilitate grassroots movement or foster global solidarity. Rather, how people view and speak about a political event are largely bounded by their own beliefs and political systems. HCI and CSCW scholars have been interested in understanding how social media can facilitate engagement, conversation, and solidarity at a large geographical scale (Harlow and Guo 2014; Lotan et al. 2011; Starbird and Palen 2012). However, social movements and civic actions that were associated with social media discourses were often known to a global audience by their catchphrases, particularly those that stroke a chord with a social media

demographic. It is thus reasonable to assume that compelling slogans like "Hong Kong should be independent!" can easily go viral, compared to lengthy, detailed articulation of the movement's agenda. Our study points to the importance of understanding the depth of civic conversations on social media by exploring the specific elements in the construction of social media discourses.

Perhaps a more daunting aspect of our findings is that, even when Hong Kong citizens and mainlanders belong to the same country, speak the same language, and discussed the same event, they remained largely separated and developed vastly different discourses, with little communication observed. This study coincidentally corresponds to the Brexit and Donald Trump's victory in the 2016 U.S. presidential election, where extremely conflicting discourses co-existed in the public space but mutual understanding and common ground seemed nonexistent. One possible cause is the "echo chamber" effect, referring to a situation in which people only communicate with like-minded others, amplifying or reinforcing their shared opinions and beliefs (Jamieson and Cappella 2008; Key and Cummings 1966). Algorithms on social media might reinforce such effect by selecting what users have pleasure in reading (McNeal 2014; Nunez 2016). This study reveals a similar concern but from the perspective of discourse, that people might reinforce the particular mechanisms of public discourses, rendering them even more difficult for outsiders to comprehend. In this study, it would be very difficult for a Hong Kong citizen to join the Weibo conversations without all the essential background knowledge and ideology; and for a mainland citizen to participate in Facebook discourses for a similar reason. Importantly, mainlanders were not collocated with the movement. Their Weibo talk seemed to contain more normative judgments and less information sharing and fact checking. Very few times did we observed expressed solidarity and empathy on Weibo to consider such phenomenon as a dominant theme. We suggest several reasons, including ideological difference, the worsening relationship between Hong Kong and the mainland since 1997, and mainlanders' lack of actual experience to develop mutual understanding and empathy.

This study joins the HCI research strand on investigating how social media support public discourses that work to interpret, frame, and influence social movements (Crivellaro et al. 2014; Dimond et al. 2013). In line with these two studies, our research on the two social media sites showed how both sites supported citizens to construct their own narratives to resist the Hong Kong and central governments' official narratives. The observation of massive public discourses on Facebook, the most popular social media platform in Hong Kong, and Weibo, the largest Chinese microblogging service, resonates with Crivellaro et al.'s emphasis on the everyday politics on Facebook (Crivellaro et al. 2014). Different from the two prior studies that examined public discourses' **diachronicity**, where frames and narratives change over time, this work uses comparison to expose on the **synchronicity** of public discourses, where several

core social, cultural, and political elements (political ideology, collective memory, and city identity) are meaningfully related and dictate how people constructed their discourses. At a rudimentary level, the elements identified by this work can inform future HCI research on understanding how social media support public discourses in Hong Kong and on the mainland.

More prominently, given the reported biases within social media discourses, studying synchronicity can reveal assumptions and beliefs that are otherwise invisible. For example, by comparing the two corpora of discourses, we identified collective memory as a key element that influenced Hong Kong citizens' belief in movement legitimacy, fear of the CCP suppression, and denouncement of government actions, and impacted the mainlanders' suspect of the movement's true purpose. Without the comparison, the collective memory theme would appear an integral part of Hong Kong citizens' distinct political ideology and thus remain invisible. We suggest that invisibility might exist in two ways in public discourses. First it might lie in missing statements in argument schema. Second, it might exist in researchers' *emic* and *etic* approaches to investigating a social movement, through which the researchers need to negotiate their own understanding, interpretation, and political belief with the phenomenon being studied in a different site or culture.

This paper's emic interpretations of Facebook and Weibo discourses benefited from the authors' cultural backgrounds in Hong Kong and the mainland, as well as the preceding ethnographic studies of the movement and China's social media platforms. Wulf et al. cautioned against using only public data on social media to understand activism on the ground (Wulf, Misaki, et al. 2013). They found that "on-the-ground" studies offer unique benefits that can at least complement analysis of social media data. Prior work on the Umbrella Movement showed how "on-the-ground" investigation, particularly participatory relationship with the protesters, could uncover their social media strategies beyond data on platforms like Facebook and Twitter (Kow et al. 2016). Following these arguments, we further point to the value of authors' cultural awareness in interpreting public discourses where missing links and hidden values might be invisible to outsiders.

7.3 Design Implications

By revealing the different ways public discourses were generated and sustained on Facebook and Weibo, we see important implications for designing sociotechnical platforms that can facilitate online public discourses. First, it is seemingly bizarre that little communication and exchange of ideas was observed between Hong Kong and mainland citizens. Although concerned with the same movement, they gathered on their own favorite social platforms to used their own languages. It is thus unsurprising that mainlanders rarely expressed solidarity on Weibo. Participatory design scholarship has recognized the existence and emergence of

contrasting and often conflicting values among people (Le Dantec and DiSalvo 2013; Grönvall, Malmborg, and Messeter 2016). Viewing participation as an ongoing act of "articulating and responding to dynamic attachments" (Le Dantec and DiSalvo 2013), design should consider ways of gathering people with different values, beliefs, and frames.

Second, we found that in many discourses missing statements were the cornerstone of the arguments. While the speakers' local audience could easily emphasize with these missing statements, the global audience on social media might be unable to comprehend the full arguments, or worse, miscomprehend the movement. Therefore, a critical question is: while social media such as Twitter and Facebook support the dissemination of information for local public events to the global audience and seek solidarity across national boundaries, to what extent is the accurate and detailed information communicated via social media? A following question is how social media design can support the diffusion of a fuller argument schema that allows remote social media users to better understand local events. Our observations of both sites showed that different people construct their arguments with varied levels of details and steps. Some arguments had many missing links while other were complete. We suggest that computational methods can be used to aggregate discourses that expressed similar ideas and recommend similar discourses to the audience, helping them piece together a fuller picture of a local event.

8. Conclusion

In this paper, we presented a comparative study of public discourses on two social media sites, namely Facebook and Weibo, to demonstrate how local socio-cultural-political conditions influenced the ways people constructed discourses online. Against the backdrop of the global surge of conflicting discourses in one single country, most evident in Brexit and Donald J. Trump winning the U.S. presidential election, and the important role of social media discourse in fueling it, there are opportunities and challenges for HCI and CSCW researchers to investigate whether and how social media can truly facilitate online public deliberation in Habermas's terms, enabling online gathering and discussion among people with vastly different interests and opinions. The work contributes to this research strand by offering insights into the localness and the discursive mechanisms of social media discourse.

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