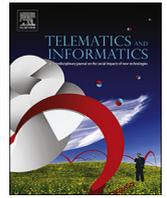




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# Social media and political partisanship – A subaltern public sphere’s role in democracy

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## ABSTRACT

Social media, as a subaltern public sphere (Fraser, 1990), have a democratic function in providing an alternative platform for minorities and marginalized to defy mainstream discourses in the public sphere. However, social media have been found to have an echo chamber effect, which may be detrimental to democracy. They may help to accelerate the ascendancy of a “post-truth” era in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief. A study on political polarization, however, showed that selective exposure and avoidance in social media are weak indicators of polarization (Johnson et al., 2017). This study examines the role of social media in democracy and partisan politics. The authors considered that despite the echo chamber effect, social media have a limited part to play in the formation of polarized stances compared with other factors, such as demographics, political orientation, and mass media use. The study tested two main hypotheses: H1: Social media use is associated with political stance that is marginalized in the mainstream media; H2: Political orientation has a stronger relationship than social media use with the stance toward political values and social issues.

The results supported both hypotheses. Social media are associated with political stance that is marginalized in the mainstream media. However, when compared with other factors, the relationship between social media and stance becomes less obvious. Although the echo chamber effect may reinforce the original stance, social media do not exhibit a strong relationship with the stance toward political values and social issues. Partisan orientation and use of partisan mass media are found to have stronger links with variations in stance. Social media, however, provide a subaltern public sphere for those excluded from the dominant public sphere, thus extending the public sphere to accommodate multiple opinions and perspectives.

## 1. Social media: good or bad for democracy?

Social media, in serving as a subaltern public sphere for a specific group of people, differ from Habermas’ idea of a unitary public sphere that is characterized by rational discourses (Habermas, 1987, 1989, 1992). Subaltern public spheres serve the interests of minorities and the marginalized (Fraser, 1990). They include activists, dissidents, and insurgents who make use of subaltern public spheres to defy the mainstream discourses in the public sphere. The Internet and new media have been considered to extend or reinvigorate the Habermasian public sphere, where the circulation of information, ideas and debates are unfettered in genuine dialogs and rational deliberation on public issues (Brundidge, 2010; Holt, 2004; Kellner, 2014; Wojcieszak and Mutz, 2009).

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Social media communication is a form of “semi-private” communication through which users can engage in “private” exchanges with their acquaintances as well as anonymous others among whom some can be counted as “friends” and some as “friends’ friends.” Social media are “individual” networking media platforms that have a “filtering” effect (Pariser, 2011). Users can control the content to which they are exposed by confining their contacts to like-minded individuals and avoiding those whom they would like to ignore. This ability results in the so-called “echo chamber effect” (Garrett, 2009; Iyengar and Hahn, 2009; Sunstein, 2001), which reinforces existing views of specific issue publics. Incompatible and uncompromising views of reality will erode the grounds for political discussion. Without exposure to opposing views, the ideal of rational deliberation in public sphere will be thwarted. In consequence of the echo chamber effect and the decline in the mass media’s influence on public opinion, some researchers have expressed anxiety about the polarization of the public regarding common issues. Fraser (1990) pointed out that counterpublic spheres are not necessarily rational and virtuous: they can be anti-democratic and anti-egalitarian. Hence, the echo chamber effect may destroy the public sphere; common concerns and solutions to problems could no longer be discussed (Andrejevic, 2013; Bennett, 1998; Dahlgren, 2009, 2018; Entman and Herbst, 2001; Sunstein, 2001).

Dahlgren (2018) observed that the frequent contest of even the most basic descriptions of social realities in Internet media signify a lack of “trust” among people in the era when informational excess dislodges “cognitive certainty.” A decline in both “trust” and “knowledge” (cognitive certainty) is detrimental to democracy, as these two components constitute the civic culture, which is essential to the vitality and survival of democracy. The rise of citizen journalism has added to the informational uncertainty and demise of mainstream journalism. Dahlgren (2018) noted that mainstream journalism has served as an essential institution of democratic public spheres and its decline is profoundly worrisome. In short, the increasing use of social media may contribute to the tunnel vision of voters, thus shaking the foundation of democracy, which requires a rational and well-informed citizenry.

## 2. Echo chamber effects of social media

Many previous studies found that the segregation and polarization of online media users in consuming one-sided content matched their positions or beliefs (Adamic and Glance, 2005; Bimber and Davis, 2003; Kushin and Kitchener, 2009; Mutz and Martin, 2001; Stroud, 2010). People tended to choose media content according to their interests and likes. The theories of “selective exposure” (Sear and Freedman, 1971) and “cognitive dissonance” (Festinger, 1957) have long considered this phenomenon. However, the emergence of social media has exacerbated the anxiety about the polarization of opinions and the balkanization of politics, both of which are considered harmful to democratic development.

A recent study that investigated Facebook and YouTube, for example, found that 94% of Facebook users and 88% of YouTube users were polarized, that is, they concentrated their online reading and interactions (at least 95%) on a specific narrative related to a given controversial topic, such as climate change. The study further found that although the majority of the group was initially open to both sides of content, the participants eventually moved to consuming only one type of information, thus becoming polarized toward one narrative (Uzzi, 2017). Another study on Twitter use by Demos, a cross-party think tank in the United Kingdom, found that the “echo chamber effect” was the strongest among those furthest from the political mainstream. Supporters of the Scottish National Party and the UK Independence Party were much less likely to engage with people who held different beliefs or to retweet material from outlets with opposing editorial stances (Cheshire, 2017). A panel study in South Korea found that participants who actively used social media were more likely to engage in political processes, which led them to develop political attitudes that were more extreme than the attitudes held by those who did not use social media (Lee, Shin, and Hong, 2018).

Social media may help to accelerate the ascendancy of a “post-truth” era in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief. The echo chamber effect can reinforce existing views and inclinations embraced by subaltern publics. They may become overly critical and extreme in their discourses and actions as they refuse to expose themselves to opposing or alternative views. The polarization and extremity of public discourses were demonstrated in the Trump–Clinton Presidential Election in 2016. A study showed that unfounded stories about Clinton, such as “Clinton set up Satanic Network” and “Clinton had Parkinson’s disease,” received much attention in social media by Trump supporters (Sillito, 2016). Supporters on both sides in the election chose to see and believe what they wanted to see and believe.

However, some studies have challenged the idea that social media has negative effects on public life and democracy. In a meta-analysis of 36 current studies on social media use and participation, Boulianne (2015) found that the metadata suggested a positive relationship between social media use and participation in civic and political life. More than 80% of the coefficients were positive although only half of them were statistically significant. The study also found that social media did not affect the likelihood of voting or participation in an election campaign. The metadata provided little evidence to support the claim that social media were successful in changing the levels of participation in election campaigns. In other words, these findings indicate that social media have little influence on voters’ decisions although its use can increase participation in civic and political life.

Another study on political polarization showed that selective exposure and avoidance in social media are weak indicators of polarization (Johnson, Kaye, and Lee, 2017). The authors concluded that the fear that selective exposure and polarization in social media would negatively affect the democratic process was overstated. In a study that analyzed data on the US presidential campaign in 2004, Stroud (2010) found that partisan selective exposure was related to polarization irrespective of media type. The findings showed that partisan selective exposure did not lead to polarization; instead, polarization led to partisan exposure. Moreover, the study showed that online media did not contribute to polarization, but the reverse is true. Previous studies also showed that both homophily and heterogeneity characterized Twitter conversations on abortion (Yardi and Boyd, 2010) and that social media helped to expose its users to a wide range of news and information (Hermida et al., 2012).

### 3. Nature of social media

Social media provide multiple platforms for interpersonal feedback, peer acceptance, and the reinforcement of group norms. They help promote the construction of personal and group identities (Dalton et al., 2009; Valenzuela et al., 2012). The use of social media as a subaltern public sphere is a response to exclusion by the dominant public sphere (Fraser, 1990; Pateman, 1989; Van Zoonen, 2005). The alternative platforms provided by social media can serve as sites of withdrawal from the dominant public sphere as well as bases for counter-hegemonic activities against the dominant public sphere. In a content analysis of online comments on a counter-Euro party in Germany, Toepfl and Piwoni (2015) found that although Euro-skeptic arguments were largely absent from the public sphere of mainstream media, they were predominant in the subaltern online public sphere. They concluded that these counterpublic spheres were enriching and welcome additions to the public sphere.

In the US Presidential Election in 2016, before Trump's ascendancy, the counterpublic's views were not represented in the mainstream media or in the conventional polls. Distraught voters found a means of expression in new media, which did not follow the conventional rules of objectivity, fact checking, and balanced reporting of the elite-controlled mass media. Trump fans and Clinton haters accessed websites that told the "truth" they wanted to hear. For those whose voices are excluded from mainstream media, the Internet and social media serve as platforms of empowerment and collective action. Social media have been found to play an alternative, anti-establishment or insurgent role, depending on the political context (Arditi, 2012; Bennett, 2012; Castells, 2012; Downing, 2001; Juris, 2012; Lee, So and Leung, 2015; Rovira Sancho, 2014; Tufekci and Wilson, 2012).

The echo chamber effect of social media may vary according to the social and political situation. In normal times, social media serve mainly the *social* role of connecting people in social interactions, building and maintaining relationships, exchanging information, and sharing common interests and hobbies. The *social* role of social media is similar to that of telephone conversations between friends and relatives. However, when public issues arise, depending on how controversial they are, the *political* role of social media arises in correspondence to the intensity of the tension generated in debates on the issues. The *political* role of social media ranges from serving as a platform for information sharing to the mobilization of "friends" in collective actions both online and offline.

When controversial issues arise, users are empowered by knowing that they are not alone. Social media tell people it is "alright" to possess certain ideas, attitudes, beliefs, positions, and behaviors that may not be approved by the larger public or mass media. Through interpersonal feedback, peer acceptance, and the reinforcement of group norms, social media promote the construction of personal and group identities that are the key antecedents of protest behaviors (Dalton et al., 2009; Valenzuela et al., 2012). Seeking and being exposed to information in social media also enhance individuals' social capital (Ellison et al., 2014; Putnam, 2000) and mutual support (Gil de Zuniga et al., 2012; Tang and Lee, 2013; Valenzuela et al., 2012), thus preparing the counterpublic to take a collective action.

Social media can provide breeding grounds for undesirable groups, such as racists, terrorists, and hate groups. The echo chamber effect of social media, however, also helps to bolster resistance against authoritarian rule or the tyranny of the majority through cultivating solidarity among "friends" and mobilizing collective actions. In time of controversies, social media are probably not a good venue for rational discussion and persuasion. The opposing sides will not use it to convince one another. It should not be expected that messages of 140 characters or a few hundred words or online videos requiring short attention spans could change deep-rooted attitudes and beliefs, not to say behaviors.

We consider that people selectively expose themselves to one side of an issue or value that is represented in social media because they already take a position that is compatible with that side. Social media could only have a small role in the formation of stance toward controversial political and social issues compared with other factors, such as demographics, mass media use, and political orientation. Social media mainly reinforce existing attitudes and beliefs. We assume that political orientation is probably the most important factor associated with polarized stance among all the factors mentioned above.

Since the reversion of Hong Kong to China in 1997, the political orientation of Hong Kong has evolved into two major camps. One is pan-democratic and the other is pro-establishment. As discussed earlier, because it is a subaltern public sphere, social media are favored by people who are excluded from the mainstream mass media. After 20 years of Chinese rule, most mainstream mass media have been controlled or coopted by China (Chan, 2015; Chan and Lee, 2007; Lee et al., 2017). Many media proprietors have been appointed as members of the Chinese People's Political Consultative Committee (CPPCC) or given the Grand Bauhinia Medal or Star Awards for their loyal services. Many of them also conduct business in China (Chan, 2015; Chan and Lee, 2007). Democrats in Hong Kong have found it increasingly difficult to express their views in the mainstream media. Social media have become an alternative platform for democrats to articulate and express their interests. They have used social media, particularly after the Umbrella Movement in 2014, to counteract the hegemonic discourse in the mainstream media (Lee et al., 2017). Because the democratic aspirations of Hong Kong people have been marginalized by the mass media, we hypothesize that the use of social media is associated with the democratic orientation.

Democratic orientation can be observed in the stance of social media users toward major values and issues. In the study, we selected six major values and issues to examine this hypothesis. These six items were chosen because they can help to logically distinguish the political stance of pan-democratic from pro-establishment camp. Both *democratic development* and *national interest* are important values that are emphasized differently by the two political camps in Hong Kong. The democrats understandably give high importance to democratic development, whereas the pro-establishment camp stresses national (i.e., China's) interests. Similarly, a democratic orientation usually carries with it a negative *attitude toward* and *assessment of China*, the *practice of "one country, two systems,"* and *Hong Kong's future*. Therefore, the first hypothesis, H1, and six sub-hypotheses, H1a to H1f, were formulated:

**H1.** Social media use is associated with political stance that is marginalized in the mainstream media.

**H1a.** Social media use is positively associated with the assessment of the importance of democratic development.

**H1b.** Social media use is negatively associated with the assessment of the importance of national interest.

**H1c.** Social media use is negatively associated with the satisfaction with “one country, two systems.”

**H1d.** Social media use is negatively associated with the trust in China central government.

**H1e.** Social media use is negatively associated with the assessment of Hong Kong’s social situation in the past two decades after its reversion to China.

**H1f.** Social media use is associated with a pessimistic attitude toward Hong Kong’s future.

After considering the relationship between social media (the subaltern public sphere) and the political stance as marginalized in the mainstream mass media (the democratic stance in the case of Hong Kong), we proceeded to examine the major factors that are related to the positions of the two camps regarding political values and social issues. We hypothesized that political orientation has a stronger relationship than social media with the political stance toward political values and social issues. Therefore, the second hypothesis, H2, and six sub-hypotheses, H2a to H2f, were formulated:

**H2.** Political orientation has a stronger relationship than social media use with the stance toward political values and social issues.

**H2a.** Political orientation has a stronger relationship than social media use with one’s assessment of the importance of democratic development.

**H2b.** Political orientation has a stronger relationship than social media use with one’s assessment of the importance of national interest.

**H2c.** Political orientation has a stronger relationship than social media use with the satisfaction with “one country, two systems”.

**H2d.** Political orientation has a stronger relationship than social media use with the trust in China central government.

**H2e.** Political orientation has a stronger relationship than social media use with the assessment of Hong Kong’s social situation in the past two decades after its reversion to China.

**H2f.** Political orientation has a stronger relationship factor than social media use with predicting a pessimistic attitude toward Hong Kong’s future.

## 4. Method

### 4.1. Sample and procedures

A telephone survey was conducted in May 2017 to assess public opinion and political development in Hong Kong. It was funded by the School of Communication at the Chinese University of Hong Kong. Data were collected on people’s views of values and issues under the “one country, two systems” policy practiced in Hong Kong. To derive the sample, phone numbers were first generated through systematic sampling by using the most recent residential phone directories. The last two digits of each number were sequentially replaced by all two-digit figures from 00 to 99, including non-listed numbers. This procedure generated a database from which a computer was used to randomly select some phone numbers. The target respondent in each household was selected using the most recent birthday method. Based on this sampling method, we conducted successful telephone interviews with 1028 residents of Hong Kong aged 15 years or above (sampling error of 3.1% at a 95% confidence level). The response rate was 37%. All data were weighted by the proportions of gender, age, and education according to the most recent statistics of people aged 15 years or above, which were issued by the Census and Statistics Department of the Hong Kong Special Administrative Region (HKSAR) government.

First, we examined the relationship between social media use and the interviewee’s position on political values and social issues. Social media use is indicated by the amount of time people spend on Facebook, which is the most popular social media in Hong Kong. For the dependent variables, we picked six items that clearly distinguished the positions of the two political camps. The six items were chosen to assess the following: the importance of *democratic development* and *national interest* in Hong Kong; *satisfaction with the implementation of “one country two systems”* and *trust in the central government*; *assessment of Hong Kong’s well-being two decades after having been returned to China*; and *Hong Kong’s future development*. These items represent different dimensions of attitudes and beliefs. They can help to determine the relationship of social media with political stance toward different realms.

We then controlled for three sets of variables in a hierarchical regression to examine the relative strength of relationship between social media use and the stance toward political values and social issues: 1) demographic factors of *sex*, *age*, *education* and *family income*; 2) political orientation; 3) consumption of traditional mass media, including TVB, Cable TV, RTHK, *Ming Pao*, *Oriental Daily News*, *Apple Daily*, and *Headline Daily*.

## 5. Measures

**Social media use.** At the time of the study, the most popular social networking sites in Hong Kong were Facebook and the Hong Kong Golden Forum. While 24% of respondents mentioned Facebook as the source from which they most frequently obtained social

and political news, less than 1% named Golden Forum or other social networking sites. Online news sites also had a small audience: no site was named by more than 3% of respondents as their source of information. Facebook was therefore the most important social media and online platform at the time of the study. The measures of social media use ranged from “Don’t use” to “121 or more minutes every day” in seven intervals.

*Consumption of media for social and political information.* The respondents were asked if they obtained social and political information from Facebook, which was the most important social media website in Hong Kong at the time. In total, 24% of the respondents named it as their primary source of social and political information, ranking it third after the mainstream media channels TVB and *Apple Daily*, which were named as the primary source by 66% and 34% of the respondents, respectively. Similarly, the respondents were asked if they obtained social and political information from traditional media outlets, such as television channels (TVB, CableTV, NowTV), newspapers (*Apple Daily*, *Oriental Daily News*, *Ming Pao*, *Headline Daily*), and radio (RTHK, Commercial Radio). The respondents were asked to answer “yes” (1) or “no” (0) when they were asked about their use of Facebook as well as other traditional media channels. In the present study, only media platforms cited by 9% or more of the audience as their source of social political news were included in the analysis.

*Democratic development and national interest.* The respondents were asked to assess the importance of the value of democratic development and national interest in Hong Kong on a scale of 0 (“very unimportant”) to 10 (“very important”).

*Satisfaction with the implementation of the “one country, two systems” policy in Hong Kong by China’s central government.* The respondents were asked if they were satisfied with the implementation of the “one country, two systems” policy in Hong Kong by China’s Central Government on a scale ranging from 0 (“totally dissatisfied”) to 10 (“totally satisfied”) with 5 as “so-so.”

*Trust in China central government.* The respondents were asked to indicate their trust in the central government on a scale ranging from 0 (“no trust at all”) to 10 (“total trust”) with 5 as “so-so.”

*Has Hong Kong become better or worse after its return to China two decades ago?* The respondents were asked to indicate whether Hong Kong society had become better or worse after returning to China two decades ago on a scale from 1 (“better”) to 5 (“worse”) with 3 as “so-so.”

*Pessimism or optimism regarding Hong Kong’s future development.* The measure for this variable was a 10-point scale ranging from 0 (“extremely pessimistic”) to 10 (“extremely optimistic”) with 5 as “so-so.”

*Political orientation.* The respondents were asked to indicate their political orientations by choosing from eight categories, ranging from “localists,” “middle-neutral,” and “pro-establishment” to “no political orientation.” We re-grouped the localists, radical democrats, and moderate democrats in the category of “pan-democrats,” to which we assigned the value of 0. The orientations of pro-establishment, pro-China, and business-industrials were re-grouped in the category of “pro-establishment,” to which we assigned the value of 1.

## 6. Findings

In the sample, 48% was male, and 52% was female. We created four groups according to age: 15–24 years, 25–39 years, 40–59 years, 60 years and above. The percentages of the sample in each age group were 13%, 23%, 38%, and 26%, respectively. About 39% of the sample had received a tertiary non-degree education or college degree, 32% had received a senior secondary school education ranging from Form 4 to Form 7, and 29% had been educated to Form 3 or below. The sample profile was well matched with the demographics of Hong Kong’s population according to the census figures of the HKSAR government, with some minor weighting adjustments.

As shown in Table 1, *social media use* was associated with the stance toward the values of *democratic development*, *national interest*, *satisfaction with the implementation of “one country two systems,” trust in the central government*, *assessment of Hong Kong’s well-being two decades after the return to China*, and *assessment of Hong Kong’s future*.

Social media use was clearly associated with the tendency toward democratic and anti-establishment attitudes. The frequent use of social media contributed to a *positive* assessment of “the importance of democratic development in Hong Kong” but a *negative* view of “the importance of national interest,” “trust in the central government,” “social situation of Hong Kong two decades after returning to China,” and “the future of Hong Kong”. All the betas in the regression were statistically significant. H1, that “social media use is associated with the political stance that is marginalized in the mainstream media” was supported.

The variance explained in the six items ranged from 2 to 5% except “Hong Kong situation in recent two decades,” in which 0.3% of the variance was explained by social media use ( $R^2 = 0.003^*$ ).

A hierarchical regression was run to control the three major sets of independent variables: *Demographics*, *Political Orientation*, and *Information Acquisition from Traditional Mass Media*. The results showed that the relationship of *Social Media Use* with the stance toward political values and social issues was greatly reduced. The variable *Political Orientation* was the most important factor associated with the stance toward political values and social issues. The relationship of *Social Media Use* remained significant with *Democratic Development* ( $\beta = 0.11$ ,  $p < .05$ ), *Satisfaction with “1 Country 2 Systems”* ( $\beta = -0.10$ ,  $p < .05$ ), *Trust in Central Government* ( $\beta = 0.08$ ,  $p < .05$ ) and *Optimism about Hong Kong’s Future* ( $\beta = -0.09$ ,  $p < .05$ ), but it was insignificant with *National Interest* ( $\beta = -0.07$ n.s.) and *Hong Kong Better or Worse in Two Decades* ( $\beta = 0.06$ n.s.). All changes in  $R^2$  attributed to the *Use of Social Media* were no more than 1% across the six dependent variables, indicating that social media use had very little relationship with the stance toward major political values and social issues (Table 2).

*Political Orientation*, in contrast, was strongly related to the stance toward political values and social issues. Across all six dependent variables, the change in  $R^2$  attributed to *Political Orientation* varied from 9% for *National Interest* to 24% for *Trust in Central Government*. The pan-democrats tended to value democratic development positively and national interest negatively and to hold

**Table 1**

Regression Against Stance toward Political Values and Social Issues (Importance of Democratic Development and National Interest; Satisfaction with “1 Country 2 Systems”; Trust in Central (China) Government; Assessment of HK’s Well-being and Its Future).

	$\alpha$	Unstandardized $\beta$	SE	R <sup>2</sup>
Importance of Democratic Development <sup>a</sup>	7.19	0.15 <sup>***</sup>	0.03	0.02
Importance of National Interest <sup>b</sup>	7.87	-0.19 <sup>***</sup>	0.04	0.03
Satisfaction with “1 Country 2 Systems” <sup>c</sup>	6.04	-0.26 <sup>***</sup>	0.04	0.04
Trust in Central Government <sup>d</sup>	5.94	-0.30 <sup>***</sup>	0.04	0.05
HK Better or Worse in 2 Decades <sup>e</sup>	3.74	0.04 <sup>*</sup>	0.02	0.003
Optimism about HK Future <sup>f</sup>	5.34	-0.15 <sup>***</sup>	0.03	0.02

Notes:

<sup>a</sup> Question: How important is “Democratic Development” to you? You can choose from 0 point to 10 points, with 0 representing “Extremely unimportant” and 10 “Extremely important.”

<sup>b</sup> Question: How important is “National Interest” to you? You can choose from 0 point to 10 points, with 0 representing “Extremely unimportant” and 10 “Extremely important.”

<sup>c</sup> Question: Are you satisfied with the implementation of “One Country Two Systems” in Hong Kong by the Central government? You can choose from 0 point to 10 points, with 0 representing “Totally dissatisfied”, 10 “Totally satisfied”, and 5 “So-so.”

<sup>d</sup> Question: How high is your level of trust in the Central government? You can choose from 0 point to 10 points, with 0 representing “No trust at all”, 10 “Total trust”, and 5 “So-so”.

<sup>e</sup> Question: After having been returned to China for two decades, do you think the overall social situation of HK has become much better, a little better, more or less the same, a little worse, or much worse? Scale: 1 = Much better; 3 = So-so; 5 = Much worse.

<sup>f</sup> Question: Are you pessimistic or optimistic about the future of Hong Kong? You can choose from 0 point to 10 points, with 0 representing “Extremely pessimistic”, 5 being “So-so” and 10 “Extremely optimistic” “No trust at all”, 10 “Total trust”, and 5 “So-so”.

\*  $p < .05$ .

\*\*\*  $p < .001$

pessimistic views about Hong Kong’s future. The pro-establishment camp tended to be satisfied with the implementation of “one country two systems,” had higher trust in the central government and a positive assessment of Hong Kong’s well-being two decades after its return to China. The standardized beta of *Political Orientation* in the hierarchical regression was the highest among all independent variables across all six dependent variables:

$$\text{Democratic Development } \beta = -0.46 (p < .001)$$

$$\text{National Interest } \beta = 0.26 (p < .001)$$

$$\text{Satisfaction with One Country Two Systems } \beta = 0.46 (p < .001)$$

$$\text{Trust in Central Government } \beta = 0.43 (p < .001)$$

$$\text{HK Better or Worse in Two Decades } \beta = -0.31 (p < .001)$$

$$\text{Optimism about HK Future } \beta = 0.32 (p < .001)$$

Therefore, H2, “political orientation has a stronger relationship than social media use with the stance toward social issues and political values,” was supported.

The results of the hierarchical regression further showed that some demographic factors and mass media had stronger relationships with the stance toward political values and social issues than social media use. For example, *Sex* had a strong influence on the assessment of *National Interest* ( $\beta = 0.15, p < .001$ ). Females placed a higher value on it than the males in the sample. *Education* also had a strong relationship with *Hong Kong Better or Worse in Two Decades* ( $\beta = 0.17, p < .001$ ), which was negatively assessed by the highly educated respondents. Regarding mass media, the pro-China *Oriental Daily News* had a strong positive relationship with *Trust in Central Government* ( $\beta = 0.18, p < .001$ ), and the pro-democracy *Apple Daily* had a strong negative relationship with *Trust in Central Government* ( $\beta = -0.14, p < .001$ ). All these standardized betas were larger than those of *Social Media Use* for the same dependent variables (Table 2).

## 7. Discussion

The results showed that social media had only a small relationship with the stance toward political values and social issues. Political orientation had a stronger relationship with the stance toward values and issues. The echo chamber effect of social media may have reinforced the original stance, but it has *little* relationship with the variations in stances. Other factors, particularly, political orientation and traditional mass media, have a more important link with the partisan stance. The results of our study showed that social media use was only minimally related to the stance toward political values and social issues when other factors were controlled.

It should be noted that some traditional mass media accounted for greater differences in the stance toward political values and

**Table 2**

Hierarchical Regression of Social Media’s Relationship with Political Values and Social Issues (Importance of Democratic Development and National Interest; Satisfaction with “1 Country 2 Systems” and Trust in the Central (China) Government; Assessment of HK’s Well-being, and Its Future).

Predictors	Importance of Democratic Development <sup>a</sup> β	Importance of National Interest <sup>a</sup> β	Satisfaction with 1 Country 2 Systems <sup>b</sup> β	Trust in Central (China) Government <sup>c</sup> β	HK Better or Worse in 2 Decades <sup>d</sup> β	Optimism about HK Future <sup>e</sup> β
<i>Block 1: Demographics</i>						
Sex (M = 1, F = 2)	-0.004	0.15***	0.11**	0.090*	0.02	0.07
Age	0.08	0.10*	0.04	0.07	0.17***	-0.03
Education	0.09	-0.02	-0.01	-0.03	0.120*	-0.100*
Family Income	0.03	0.08	-0.01	0.002	0.100*	-0.03
ΔR <sup>2</sup>	0.03***	0.08***	0.07***	0.10***	0.04***	0.06***
<i>Block 2: Political Orientation</i>						
Pan-Democrat (0) Pro-Establishment (1)	-0.46***	0.26***	0.46***	0.43***	-.031***	0.32***
ΔR <sup>2</sup>	0.22***	0.09***	0.22***	0.24***	0.11***	0.15***
<i>Block 3: Information Acquisition via Traditional News Media (No = 0)</i>						
TVB	-0.07	0.03	0.07	0.080*	0.01	0.100*
Cable TV	-0.03	0.090*	0.03	0.03	-0.07	-0.001
RTHK	-0.04	0.05	0.01	0.04	-0.03	0.02
Ming Pao	-0.07	-0.07	-0.06	-0.02	0.04	-0.04
Oriental Daily News	-0.11	0.13**	0.14***	0.18***	-0.07	0.15***
Apple Daily	0.090*	-0.07	-0.13***	-0.14***	0.090*	-0.14***
Headline Daily	0.02	0.05	0.01	0.04	-0.03	0.03
ΔR <sup>2</sup>	0.01***	0.02***	0.03***	0.05***	0.005***	0.04***
<i>Block 4: Information Acquisition via Social Media</i>						
Facebook <sup>f</sup>	0.110*	-0.07	-0.100*	-0.080*	0.06	-0.090*
ΔR <sup>2</sup>	0.01***	0.002***	0.006***	0.005***	0.001***	0.005***
Total Adjusted R <sup>2</sup>	0.27	0.19	0.37	0.39	0.15	0.25
F	14.48***	9.50***	22.66***	24.28***	7.55***	13.18***

Note. Figures are standardized beta weights from final regression equation with all blocks of variables in the model.

- <sup>a</sup> Scale: 0 = Extremely unimportant; 10 = Extremely important.
- <sup>b</sup> Scale: 0 = Totally dissatisfied; 5 = So-so; 10 = Totally satisfied.
- <sup>c</sup> Scale: 0 = No trust at all, 5 = So-so, 10 = Total trust.
- <sup>d</sup> Scale: 1 = Much better; 3 = So-so; 5 = Much worse,
- <sup>e</sup> Scale: 0 = Extremely pessimistic, 5 = So-so, 10 = Extremely optimistic.
- <sup>f</sup> 1 = Not use; 7 = Over 121 min per day.
- \* p < .05.
- \*\* p < .01.
- \*\*\* p < .001

social issues than social media in this study. For example, the readers of *Apple Daily*, which has long been known for its pro-democracy and anti-communist stance, strongly espoused the value of democratic development. *Apple Daily*’s readers also exhibited a high level of distrust in China central government. In contrast, the readers of *Oriental Daily News*, which has been known for its pro-establishment and pro-China stance since Hong Kong’s reversion to China in 1997, were more satisfied with the “one country two systems”, and more optimistic about Hong Kong’s future than the non-readers were. The association of both papers with these values and issues was stronger than that of social media (see Table 2).

Furthermore, we found that TVB, which has the greatest audience among all media, was not related to variations in stance in four of six dependent variables with the exceptions of *Trust in the Central Government* (β = 0.08, p < .05) and *Optimism about Hong Kong’s Future* (β = -0.10, p < .05). The RTHK and *Ming Pao* also did not have a significant link with variations in stance across all six variables. These findings indicate that some mainstream media are less partisan; they are attuned to the ideal of providing a Habermasian public sphere.

**8. Conclusion**

Social media are a vehicle for users to maintain and consolidate their relationships in normal times and to empower them when controversial social and political issues arise. Social media can be a subaltern public sphere for the counterpublic to resist the dominant public. They can serve as a counterpublic sphere or insurgent public sphere when anti-establishment movements are mobilized (Arditi, 2012; Castells, 2012; Downing, 2001; Juris, 2012; Lee, So and Leung, 2015; Rovira Sancho, 2014; Tufekci and Wilson, 2012). As shown in this study, social media help democrats to express and articulate their interests outside the dominant public sphere. Hence, social media contribute to the multiplicity and diversity of opinions which are essential to a healthy democracy.

This study shows that social media are not highly correlated to stances in political values and social issues. Partisan orientation and use of partisan mass media are, however, found to have stronger links with stance. If political segregation and polarization exist in society, the main reason is probably *not* the use of social media. Instead, other factors, such as political socialization, demographics, and partisan mass media, contribute to divisive politics. If the foundation of democracy is shaken by the emergence of irrational, uninformed, and extreme publics, social media should not be blamed. Political segregation, partisan mass media, and probably social injustice should have a larger share of responsibility. The presence of undesirable groups on social media, such as terrorists and racists, should certainly be condemned. However, even in the absence of social media, these groups would emerge and exist in other forms. Terrorism existed long before the arrival of the Internet. The intensification of terrorism lies in the human failure to solve differences through peaceful means rather than the segregated use of social media. Social media, however, could serve as a subaltern public sphere for the marginalized groups to express themselves and articulate their interests for collective actions. In playing this role, social media not only help to broaden the issue agenda and diversity of opinions in the public discourse, but safeguard the minority's right to free expression in democracy.

This study has several limitations. First, it is a cross-sectional one-shot study which cannot lay claim to finding causal relationships between the independent and dependent variables. Although correlational analysis with an elaboration of other possible relationships helps us understand the original link between social media use and variations in stance better, cautions must be made that other possibly important relationships have not been examined. For example, parental influence, religious beliefs, and unfair distribution of resources can all be related to variations in political stance. Future research could examine more factors. Second, no data were collected on social media content. In fact, we observed that “friends” usually did not communicate their stance toward political values and social issues. The *political* use of social media was observed only when serious controversies arose. A content analysis could help us understand better the relationship between social media use and formation of different and polarized stances. Third, the study did not examine the content of non-partisan mainstream media consumed by people of differing political orientations. The analysis of such data could help in determining whether partisan divisions inhibit the consumption of content about the opposing side in the non-partisan media, such as public broadcasters. While social media may serve as an echo chamber, non-partisan mainstream media may still serve as a Habermasian public sphere for rational discussion and the formation of public opinion. Finally, the effects of social media on offline political participation and social movements should also be studied. The findings of such research could increase our understanding of social media as a subaltern, counterpublic sphere and its role in democracy further.

## 9. Disclosure statement

No potential conflict of interest was reported by the authors.

## 10. Conflict of interest

No potential conflict of interest was reported by the authors.

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## References

- Adamic, L., Glance, N., 2005. The political blogosphere and the 2004 U.S. election: divided they blog. *Proceedings of the 3rd International Workshop on Link Discovery*. ACM, New York, NY.
- Andrejevic, M., 2013. *Infoglut: How Too Much Information is Changing the Way We Think and Know*. Routledge, Abingdon.
- Arditi, B., 2012. Insurgencies don't have a plan, they are the plan: political performatives and vanishing mediators in 2011. *J. Media Cult. Stud.* 1 (1), 1–16.
- Bennett, W.L., 1998. Ithiel De Sola Pool lecture: the uncivic culture: communication, identity, and the rise of lifestyle politics. *PS Polit. Sci. Polit.* 31 (4), 740–761.
- Bennett, W.L., 2012. The personalization of politics: political identity, social media and changing patterns of participation. *Ann. Am. Acad. Polit. Soc. Sci.* 644, 20–39.
- Bimber, B., Davis, R., 2003. *Campaigning Online: The Internet in U.S. Elections*. Oxford University Press, Oxford.
- Boulianne, S., 2015. Social media use and participation: a meta-analysis of current research. *Inf. Communi. Soc.* 18 (5), 524–538.
- Brundage, J., 2010. Encountering “difference” in the contemporary public sphere: the contribution of the Internet to the heterogeneity of political discussion networks. *J. Commun.* 60, 680–700.
- Castells, M., 2012. *Networks of Outrage and Hope: Social Movements in the Internet Age*. Polity Press, Malden, MA.
- Chan, K., 2015. Press freedom after the reversion of Hong Kong for seventeen years. In: Lee, P. (Ed.), *Hong Kong Media in New Millennium*. Chinese University Press, Hong Kong, pp. 97–113 (In Chinese).
- Chan, J.M., Lee, F.L.F., 2007. Media and politics in Hong Kong: a decade after the handover. *China Perspect.* 2, 49–56.
- Cheshire, T., 2017. Social media “echo chamber” causing political tunnel vision, study finds. *Sky News*. Retrieved from <http://news.sky.com/story/social-media-echo-chamber-causing-political-tunnel-vision-study-finds-10755219>.
- Dahlgren, P., 2009. *Media and Political Engagement: Citizens, Communication, and Democracy*. Cambridge University Press, Cambridge.
- Dahlgren, P., 2018. Media, knowledge and trust: the deepening epistemic crisis of democracy. *Javnost: Publ.* <http://dx.doi.org/10.1080/13183222.2018.1418819>.
- Dalton, R., Sickle, A., Weldon, S., 2009. The individual-institutional nexus of protest behavior. *Br. J. Polit. Sci.* 40, 51–73.
- Downing, J., 2001. *Radical Media: Rebellious Communication and Social Movements*. Sage, Thousand Oaks, CA.
- Ellison, N., Gray, R., Lampe, C., Fiore, A., 2014. Social capital and resource requests on Facebook. *N. Media Soc.* 16 (7), 1104–1121.
- Entman, R., Herbst, S., 2001. Reframing public opinion as we have known it. In: Bennett, W., Entman, R. (Eds.), *Mediated politics: Communication in the Future of Democracy*. Cambridge University Press, Cambridge, UK, pp. 203–225.
- Festinger, L., 1957. *A Theory of Cognitive Dissonance*. Harper & Row, New York.
- Fraser, N., 1990. Rethinking the public sphere: a contribution to the critique of actually existing democracy. *Soc. Text* 25 (26), 56–80.
- Garrett, R., 2009. Echo chambers online? Politically motivated selective exposure among Internet news users. *J. Comput.-Mediated Commun.* 14 (2), 265–285.
- Gil de Zuniga, H., Jung, N., Valenzuela, S., 2012. Social media use for news and individuals' social capital, civic engagement and political participation. *J. Comput.-Mediated Commun.* 17, 319–336.
- Habermas, J., 1987. *The Theory of Communicative Action: Lifeworld and System: A Critique of Functionalist Reason*. Beacon, Boston, MA.

- Habermas, J., 1989. *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*. MIT Press, Cambridge, MA.
- Habermas, J., 1992. Further reflections on the public sphere. In: Calhoun, C. (Ed.), *Habermas and the Public Sphere*. MIT Press, Cambridge, MA, pp. 421–461.
- Hermida, A., Fletcher, F., Korell, D., Logan, D., 2012. Share, like, recommend: decoding the social media news consumer. *J. Stud.* 13 (5–6), 815–824.
- Holt, R., 2004. *Dialogue on the Internet: Language, Civic Identity, and Computer-Mediated Communication*. Praeger, Westport, CT.
- Iyengar, S., Hahn, K., 2009. Red media, blue media: evidence of ideological selectivity in media use. *J. Commun.* 59, 19–39.
- Johnson, T., Kaye, B., Lee, A., 2017. Blinded by the spite? Path model of political attitudes, selectivity, and social media. *Atlantic J. Commun.* 25 (3), 181–196.
- Juris, J., 2012. Reflections on occupy everywhere: social media, public space, and emerging logics of aggregation. *Am. Ethnol.* 39 (2), 259–279.
- Kellner, D., 2014. Habermas, the public sphere, and democracy: A critical intervention. In: Boros, D., Glass, J., Bronner, S. (Eds.), *Re-imagining public sphere: The Frankfurt School in the 21st century*. Palgrave Macmillan, NY, pp. 19–45.
- Kushin, M., Kitchener, K., 2009. Getting political on social network sites: exploring online political discourse on Facebook. *First Monday* 14 (11), 1–16.
- Lee, C., Shin, J., Hong, A., 2018. Does social media use really make people politically polarized? Direct and indirect effects of social media use on political polarization in South Korea. *Telematics Inform.* 35, 245–254.
- Lee, P., So, C., Leung, L., 2015. Social media and umbrella movement: insurgent public sphere in formation. *Chin. J. Commun.* 8 (3), 356–375.
- Lee, P., So, C., Leung, L., Lee, F., Chan, M., 2017. The struggle for hegemony: the emergence of a counter-public sphere in post-1997 Hong Kong. *Chin. J. Commun.* 10 (4), 338–359.
- Mutz, D.C., Martin, P.S., 2001. Facilitating communication across lines of political difference: the role of mass media. *Am. Polit. Sci. Rev.* 95 (1), 97–114.
- Pariser, E., 2011. *The Filter Bubble: What the Internet is Hiding from You*. Penguin, New York.
- Pateman, C., 1989. *The Disorder of Women: Democracy, Feminism and Political Theory*. Polity Press, Cambridge.
- Putnam, R., 2000. *Bowling Alone: The Collapse and Revival of American Community*. Simon & Schuster, NY.
- Rovira Sancho, G., 2014. Networks, insurgencies, and prefigurative politics: a cycle of global indignation. *Convergence* 20 (4), 387–401.
- Sear, D., Freedman, J., 1971. Selective exposure to information: a critical review. In: Schramm, W., Roberts, D. (Eds.), *The Process and Effects of Mass Communication*. University of Illinois Press, Rev. Ed. Urbana, pp. 209–234.
- Sillito, D., 2016, November 14. **Donald Trump: How the media created the president**. BBC. Retrieved from <http://www.bbc.com/news/entertainment-arts-37952249>.
- Stroud, N.J., 2010. Polarization and partisan selective exposure. *J. Commun.* 60, 556–576.
- Sunstein, C.R., 2001. *Republic.com*. Princeton University Press, Princeton, NJ.
- Tang, G., Lee, F.L.F., 2013. Facebook use and political participation: the impact of exposure to shared political information, connections with public political actors, and network structural heterogeneity. *Soc. Sci. Comput. Rev.* 31 (6), 763–773.
- Toepfl, F., Piwoni, E., 2015. Public spheres in interaction: comment sections of news websites as counterpublic spaces. *J. Commun.* 65 (3), 465–588.
- Tufekci, Z., Wilson, C., 2012. Social media and the decision to participate in political protest: observations from Tahrir Square. *J. Commun.* 62, 363–379.
- Uzzi, B., 2017. **Why echo chambers are becoming louder—and more polarizing**. Kellogg School of Management. Retrieved from <https://journal.thriveglobal.com/why-echo-chambers-are-becoming-louder-and-more-polarizing-44aba2a231e7>.
- Valenzuela, S., Arriagada, A., Scherman, A., 2012. The social media basis of youth protest behavior: the case of Chile. *Journal of Communication* 62, 299–314.
- Van Zoonen, L., 2005. *Entertaining the Citizen: When Politics and Popular Culture Converge*. Rowman & Littlefield, Lanham, MD.
- Wojcieszak, M., Mutz, D., 2009. Online groups and political discourse: do online discussion spaces facilitate exposure to political disagreement? *J. Commun.* 59, 40–56.
- Yardi, S., Boyd, D., 2010. Dynamic debates: an analysis of group polarization over time on Twitter. *Bull. Sci. Technol. Soc.* 30 (5), 316–325.