

# A “Two-Level Social Capital Analysis” of the Role of Online Communication in Civic Activism: Lessons From the Role of Facebook in the Sunflower Movement

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Social Media + Society  
October–December 2016: 1–16  
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sagepub.co.uk/journalsPermissions.nav  
DOI: 10.1177/2056305116671967  
sms.sagepub.com  


## Abstract

In this article, we propose a “two-level social capital analysis” for the study of the role of online communication in new, contemporary forms of civic activism. We assess the applicability and value of the proposed analytical framework in a small-scale study of the role of Facebook in Taiwan’s Sunflower Movement. The case study showcases that the proposed two-level social capital analysis can offer depth and nuance in the analysis of the role of online and social media platforms such as Facebook in civic activism by unpacking the attributes of online social capital and untangling their links to offline activism undertaken within complex, both online and offline, forces and actors. At the same time, we acknowledge the need for further evaluation of the proposed analytical framework, and we note lessons that future research should take into account.

## Keywords

civic activism, online communication, social capital, social media, Sunflower Movement, Taiwan

The Internet and associated technologies of online communication have puzzled scholars, researchers, and practitioners as to their effects on civic activism and have posed questions as to whether activism has been refreshed, extended, or simply placed in new technological, communicative, and institutional contexts.

Research into the role of online communication in events of civic activism has delivered fragmented and inconsistent insights. On one hand, a volume of research has reported that the Internet overcomes institutional, spatial, temporal, and legislative constraints on communication and that, in doing so, it enhances information exchange, communication practices, and action resources, furthering civic mobilization and boosting participatory democracy (Bennett & Segerberg, 2011; Bimber, 2003; Carty, 2010; Harlow & Harp, 2012; Kavada, 2015; Kellner, 2004; Rosa, 2014). On the other hand, such positive accounts have been met with skepticism by those who argue that the Internet’s political role is neither its major nor its most common or important function (Earl & Kimport, 2011; Hampton & Ling, 2011; Poell, 2014; Tremayne, 2014), while Skoric, Goh, and Pang’s (2016) meta-analysis suggests that social media use has a small-to-medium-sized positive relationship with social, civic, and political engagement.

Civic activism takes different forms at different times and in different contexts, and the relationship between (online)

mediated forms of communication and civic activism appears unlikely to be fully clarified shortly. In addition, there are a number of difficult issues that must be tackled when one considers the role of online communication in civic activism as well as the boundaries between online and offline activism, such as the extent to which online communication creates new forms of activism—online and/or offline—or simply mediates existing ones; the resources and means through which online communication is employed for civic activism purposes and whether just technical means or also technologically mediated forms of human agency are mobilized; the unpredictable and often varying effectiveness with which the qualities and functions of online communication are utilized for the purpose of civic activism.

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With the aim of contributing to the study of such difficult issues, this article proposes a “two-level social capital analysis” of the links between online communication and civic activism that may be applied to any national, socio-economic, or political context. We argue that a social capital perspective will enable researchers to develop a clearer understanding of the complexities of the role of online communication in civic mobilization and activism. At the same time, we acknowledge that the applicability of such a perspective must be illustrated via case-study empirical research, and in this article, we present initial findings from a small-scale qualitative interview study of the role of Facebook in Taiwan’s Sunflower Movement.

The first part of the article presents two sets of literature—literature on the role of online communication in civic activism and literature on the development of social capital in online communication processes—each feeding different aspects of the proposed two-level social capital analysis. In the second part of the article, we present our proposition for a two-level social capital analysis and point out its benefits for future research. The third part of the article presents the method and the findings of an initial evaluation of the proposed analytical framework through its employment in a qualitative study of the role of Facebook in Taiwan’s Sunflower Movement. The article concludes with a reflection on the case-study findings concerning the insights the proposed two-level social capital analysis can offer. It additionally points to lessons for the future study of the role of online communication in instances of civic activism and mobilization.

## Literature Questions, Answers, and New Questions

### *Online Communication and Civic Activism*

The literature has supported various and often conflicting evidence regarding the influence of online communication on communicative/semantic, affective, and practical elements of civic activism.

Positive accounts of the role of online communication have largely paid attention to the prevalence of dialogic, flexible, deliberative, and inherently democratic forms of communication online. Kahn and Kellner (2004) referred to “online activist subcultures . . . a vital new space of politics and culture” (p. 94), while Bimber, Flanagin, and Stohl (2005) illustrated that online technologies offer more flexibility and independence to collective action through enabling “private-to-public boundary crossing.” Bennett and Segerberg (2011), in turn, argued about the fostering of “personalization of collective action” online, with digital media facilitating the potential for personal networks to play a more prominent role in a protest or another form of action.

Regarding the qualities and functions of online communication in the context of civic activism, it has been argued that online applications (e.g., discussion boards, listservs, and

social network sites) have enhanced the transmission speed and reach of protest-related information and multimedia content (e.g., Ayres, 1999; Rosa, 2014). Others have deliberated on the innovative features of online-based forms of public engagement, such as online petition sites, online boycotts, and email campaigns, and their potential to change well-established forms of public engagement without there being any necessity for offline protest (e.g., Bennett & Fielding, 1999; Earl, 2010). Some others have even argued that online community spaces lead to new forms of activism that are often not related to pre-existing offline social movements, as they initiate new reasons for participation and are likely to be run by people not previously involved in social movements (e.g., Earl, 2010; Gurak & Logie, 2003).

As far as social media platforms are concerned, Harlow and Harp’s (2012) cross-cultural study of activists in the United States and Latin America found that social networking sites mobilize both online and offline and that online activism translates into offline activism. Furthermore, Kavada (2015) provides nuanced reflections on how communication practices and processes on social media enabled the Occupy Movement to act as a collective, inclusive, and, at the same time, distinctive actor with its identity. Regarding Facebook, in particular, it has been suggested that Facebook is a tool for political activism (e.g., Conroy, Feezell, & Guerrero, 2012; Valenzuela, 2013), environmental advocacy (Martinello & Donelle, 2012), and town planning (Mandarano, Meenar, & Steins, 2010). Facebook has been widely presented as a mobilization tool, a “springboard” for “recruiting” new movement members and preparing them for offline action (Gerbaudo, 2012, p. 145), much of which involves instances of spatial assembling, with spatiality incorporating both symbolic and material standing (e.g., the Occupy Wall Street Movement and activists occupying central public squares, from Tahrir Square in Cairo to Syntagma Square in Athens).

On the other hand, there is scholarly work which takes a more careful approach, suggesting that online communication does not replace but only supplements existing face-to-face communication channels and practices (e.g., Flaherty, Pearce, & Rubin, 1998; Hampton & Ling, 2011) and identifying the disadvantages of online communication in creating new spheres for communication and deliberation, such as the fragmentation of online communication (Dahlgren, 2005, p. 152) and the “transitional effects” of technology on citizens’ contact with politicians (Bimber, 1999). Such a careful approach to the role of online communication can be also found in scholarly accounts of recent civic revolts of international socio-political appeal, such as Arab Spring, Occupy Wall Street, and Indignados (e.g., Christensen, 2011; Earl & Kimport, 2011; Poell, 2014; Tremayne, 2014). Indicatively, in the buzz of the so-called Arab Spring, the 2011 special issue of *Communication Review* presented a line-up of papers which, according to the special issue Editor, aimed to “unpack a number of the assumptions inherent in the concept of a ‘Twitter Revolution’, and to

maintain a critical, contextualized perspective on the relation between technology and politics at the local, national, and transnational levels” (Christensen, 2011, p. 157). Around the same time, Earl and Kimport (2011) recognized that online communication does not necessarily change the fundamental structures and forms of activism since it is the extent and use of the two key activism-specific benefits that arise from the Web—the reduced cost of protest organization and participation and the decreased need for activists to physically get together in order to act—that determine the role of the Web in civic activism.

Specifically about the role of social media, in his study of Twitter and the Occupy Wall Street protests, Tremayne (2014) suggested that researchers should continue to examine the role of social media, as

what Twitter and some other social media platforms do is connect disparate people who have similar ideas . . . To the degree that social media are connecting people by ideas, people who might have little else in common, something new is likely taking place and worthy of continued study. (p. 124)

In a more critical tone, Poell’s (2014) study of the social media reporting of the Toronto Community Mobilization Network that coordinated protests against the 2010 Toronto G-20 summit showed that the scale on which activists embrace corporate social media grows, and, thus, they increasingly lose control over the data they collectively produce and over the architecture of the communication spaces they use.

Overall, one can conclude the lack of consistent evidence and arguments in the literature. This is confirmed in meta-analysis reports, such as Boulianne’s (2009), which found that although there is strong evidence against the Internet having an adverse effect on engagement, the positive effect of Internet use is small in size and seems to increase non-monotonically over time. In a similar spirit, a recent meta-analytic study by Skoric et al. (2016)<sup>1</sup> suggests that social media use has a small-to-medium-sized positive relationship with engagement and its three sub-categories (i.e., social capital, civic engagement, and political participation), a finding that prevents researchers from adopting a celebratory rhetoric about the role of social media in civic engagement.

### *A Social Capital Perspective*

Social capital is a concept that is largely missing from the study of the role of online communication in facets of civic activism. There has been limited work in this area (Pasek, more, & Romer, 2009; Valenzuela, Park, & Kee, 2009), and some have voiced their concerns about this gap (Gibson & McAllister, 2012; Valenzuela, 2013). But let us first review the conceptual foundations of social capital.

Coleman (1988) and Putnam and colleagues (Putnam, 2000; Putnam, Leonardi, & Nanetti, 1993) have conceptualized social capital, placing it within social theory and

political participation frameworks, respectively.<sup>2</sup> Coleman (1988) argued that the facets of social capital “consist of some aspect of social structures, and they facilitate certain actions of actors—whether persons or corporate actors—within the structure” (p. S98). For Coleman (1988, pp. S102–S104), an important form of social capital stems from effective norms and from associated rewards and sanctions that control actions with broad implications. Whatever the form, for Coleman social capital is a public good, and thus, it is vital not only for the individual but also for the broader community.

Coleman has been criticized for omitting to focus on the micro-scale dynamics of social capital (Halpern, 2005, p. 16). Furthermore, Coleman (1988) seems to think of the strength of social relations in terms of the “closure” of structures (p. S105) where new actors are precluded and fixed boundaries are drawn up, as this enables, according to Coleman, the application of norms and the development of trustworthiness. Some of these problems have been addressed, to a degree at least, in Putnam’s work.

Putnam defined social capital as “features of social organization, such as trust, norms and networks, that can improve the efficiency of society by facilitating coordinated actions” (Putnam et al., 1993, p. 167). For Putnam, social capital is associated with social connectedness and the related values of reciprocity and trust. He distinguished between “thick” and “thin” trust as well as between “balanced” and “generalized” reciprocity, and, in contrast with Coleman, he regarded thin trust (i.e., trust beyond the circle of people we know personally) and generalized or diffused reciprocity as those aspects of social capital that can stimulate civic activism and shape the core of democratic politics (Putnam et al., 1993, p. 172).

Influenced by Granovetter’s (1983) theory of “weak” and “strong” social ties, Putnam’s emphasis is on manifestations of social capital, such as networks and associational practices, and on the two primary processes of “bonding” and “bridging.” Accordingly, bridging forms loose, fluid, diverse, and inclusive social bonds that include or form associations between diverse agents or network members, whereas bonding forms tight, strong, and selective bonds in a network with all associated actors being committed to the norms and rules of the network to ensure its homogeneity and uniformity (Putnam, 2000, pp. 22–23).

Woolcock (2001) refined Putnam’s distinction between bridging and bonding and added the dimension of “linking.” He did so to suggest that people with different levels of power and resources and from different social classes can be linked, enabling new arrangements of power and resources for the service of social links between dissimilar or even antagonistic groups (e.g., grassroots and authorities). Halpern (2005, p. 25) suggested that linking is conceptually close to bridging social capital, as it implies a vertical bridge amid and across asymmetrical power and resource distributions between groups and networks. In this sense, bridging or linking processes can strengthen

society's networked and connected characteristics, while bonding can benefit individuals but might leave society broadly fragmented and disconnected.

The role of people's social ties in civic activism has been debated, with some emphasizing the importance of "bonding" (strong ties) and others supporting the significance of "bridging" (weak ties) (e.g., Hampton, 2011; Huckfeldt, 2007; Magee, 2008; Mutz, 2006; Putnam, 2000). For instance, Hampton (2011, p. 510) has argued that the "overall network diversity is a more consistent and substantive predictor of civic and civil behaviours than the size or heterogeneity of the small number of ties that make up the core network of most people" (p. 510). Putnam (2000) himself found evidence that the greater the homogeneity of a group or community, the lesser its public and political engagement. In this regard, "high levels of bonding social capital relative to bridging social capital may adversely affect groups" (Aldridge & Halpern, 2002, p. 33).

Regarding the links between social capital and online communication, the literature has presented largely conflicting arguments. On one hand, it has argued for the positive effects of online communication on enhancing social capital (Gil de Zúñiga, Jung, & Valenzuela, 2012; Hampton, 2011; Jennings & Zeitner, 2003; Johnston, Tanner, Lalla, & Kawalski, 2011; Kavanaugh, Carroll, Rosson, Zin, & Reese, 2005; Kobayashi, Ikeda, & Miyata, 2006; Mandarano et al., 2010; Polat, 2005; Young, 2011). For instance, Mandarano et al. (2010) spoke about "digital social capital" and Hampton (2011, p. 524) found that online communication gives room to heterogeneous networks where disagreement and the bridging function of social capital can feed new forms of public engagement. In the age of social media, Gil de Zúñiga et al. (2012) found that seeking information via social network sites is a positive predictor of people's social capital and participatory behavior both offline and online. Young (2011) found that social ties are strengthened and social networks are expanded on Facebook, while Johnston et al. (2011) suggested a strong association between the intensity of Facebook use and perceived bridging, bonding, and maintained social capital and that Facebook might be beneficial to those experiencing low self-esteem and life satisfaction.

On the other hand, a lot of both early and recent literature has taken a critical or careful approach to the effects of online communication on people's social capital. For instance, some early literature (e.g., Nie, 2001; Nie & Erbing, 2000; Noveck, 2000; Putnam, 2000) viewed the Internet as a depersonalizing medium that encourages the atomization of communication and takes over people's free time, thus weakening social cohesion and diminishing civic discourses. For Putnam (2000), anonymity and fluidity in the online world promote "'easy in, easy out', 'drive-by' relationships" that discourage the development of trustworthiness, commitment, and reciprocity online (p. 177). Other early studies problematized the potential of the Internet to foster a virtual public sphere and argued that the Internet promotes elitism, exclusion, single-issue focus,

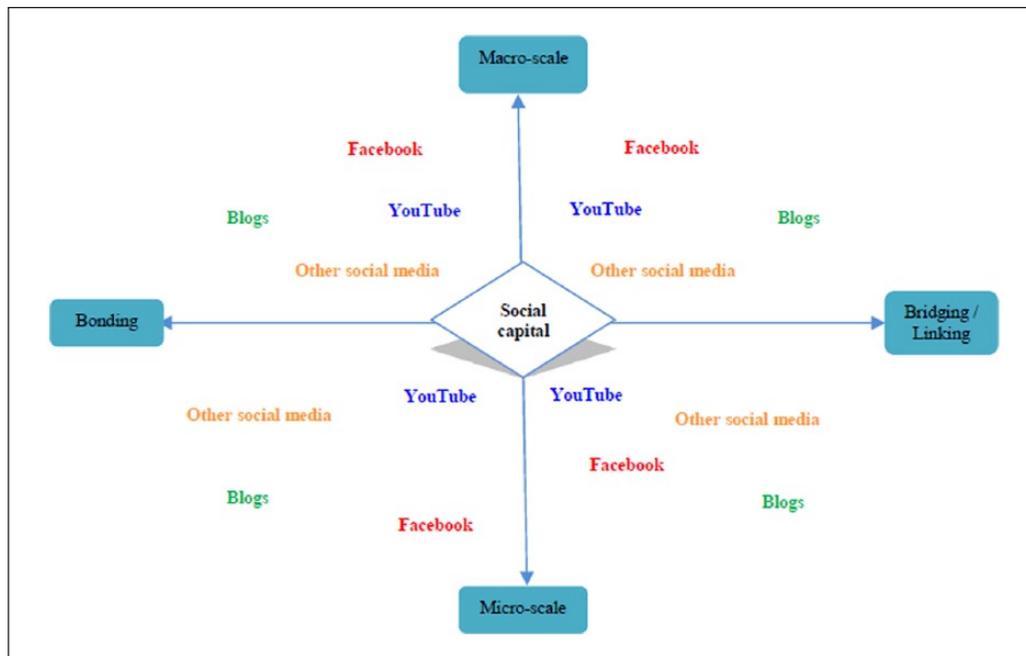
fragmentation, and corporate control (e.g., Dahlberg, 2001; Papacharissi, 2002; Polat, 2005; Wilhelm, 2000). Some other early literature took a rather careful approach (e.g., Shah, Kwak, & Holbert, 2001; Uslaner, 2004), declaring that the Internet is "neither the tool of the devil nor the new Jerusalem" (Uslaner, 2004, p. 229). Similarly, more recent literature (e.g., Hofer & Aubert, 2013; Lee & Lee, 2010; Pasek et al., 2009) has largely refrained from adopting dystopian or highly critical discourses, as it has aimed to provide a rich account of social capital online and shed light on mediating factors and types of online media use. For instance, Pasek et al. (2009) suggested the existence of site-specific cultures that can either encourage or hinder social capital. Furthermore, Hofer and Aubert (2013) found that the number of followers/followers on Twitter influences users' online bridging/bonding social capital, but only to a certain point.

## **Our Proposition: A Two-Level Social Capital Analysis**

### *Why a Two-Level Social Capital Analysis?*

The review above illustrates that the study of the role of online communication in civic activism has devoted itself mostly to the effects of information exchange, communication, and other functions of online platforms on civic activism, rather than to the role of social capital. While it has employed overlapping concepts, such as "collective identity," "community," "sharing," and "connective action," and has studied associated processes in online communication (e.g., Bennett & Segerberg, 2011; Kavada, 2015), the conceptual elements and real-life manifestations of social capital are distinct and should not be conflated with such concepts. In addition, although one should not omit reference to Warren, Sulaiman, and Jaafar's (2015) model for the study of the role of social capital in online civic engagement behavior on Facebook, this model does not approach social capital holistically, as it adopts three specific dimensions to measure social capital—social interaction ties (structural), trust (relational), and shared languages and vision (cognitive). Furthermore, Warren et al.'s model neglects the study of offline forms of civic engagement, and it is unclear whether it can be employed for the study of other social media platforms than Facebook.

At the same time, the social capital literature sheds light on the influence of online communication on the enhancement of social capital, but it neglects the study of how social capital is employed, invested, and furthered or developed (if at all) in online communication. This omission invites researchers to examine why such social capital processes in online communication might be essential for civic engagement and mobilization. This is another gap that the two-level social capital analysis we propose here aims to fill in, as we essentially espouse Putnam's (2000) argument that "it is more plausible that social capital is a cause, not merely an effect of contemporary social circumstance" (p. 294).



**Figure 1.** First-level analysis.

In what follows, we present both levels of the proposed two-level social capital analysis.

### *The First Level of Analysis*

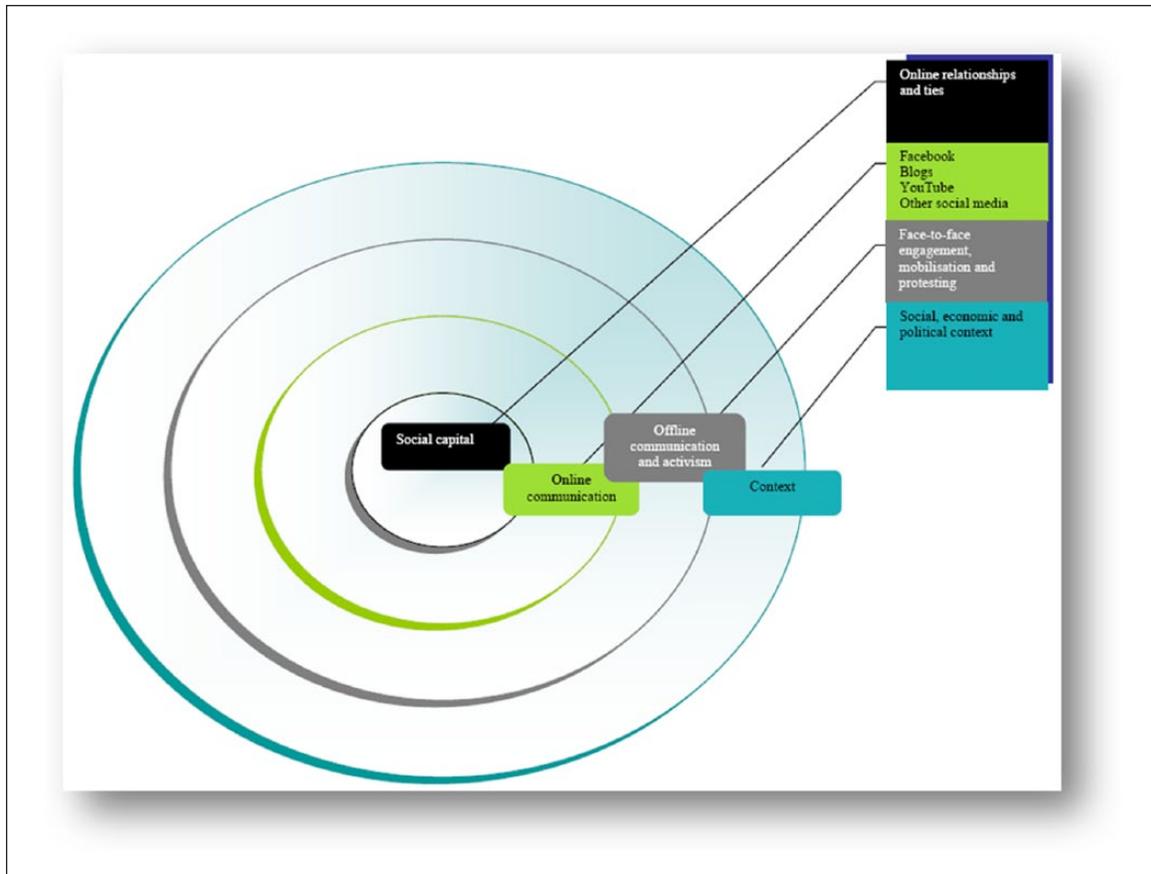
The first level of analysis invites researchers to examine the binary dimensions of “micro vs macro” and “bonding vs bridging/linking”—as per Putnam’s conceptualization—for the social capital developed and fostered within online communication settings. Micro versus macro measures the degree of individualism or collectivism in online relationships. Bonding versus bridging/linking measures openness and diversity or, contrastingly, the closeness and homogeneity of groups and networks online, as well as their internal and external links with other, often antagonistic groups.

The four-part space depicted in Figure 1 offers a graphical depiction of this level of analysis. It deploys the two binary dimensions of social capital within the online communication setting and uses social media (e.g., blogs, Facebook, YouTube) as examples of platforms for the conduct of online communication. The examples of social media platforms shown in Figure 1 appear in all four quadrants, since any social media platform and any instance of communication on these platforms can potentially find itself in any of the four quadrants, fostering any of the following types of social capital: micro and bonding capital, micro and bridging/linking capital, macro and bonding capital, and macro and bridging/linking capital. It is for the actual analysis on this level to find evidence on the instances of communication under study and the quadrant in which they should be placed in, with different cases of communication on the same platform

possibly belonging to different quadrants. Thus, if empirical data on the features and qualities of online social capital were plotted in this four-part space, numerous lines could cut through that space. In turn, each of those lines could take a different direction, with social media usage embracing either individual (micro) or the collective (macro) region and being either about bonding and homogeneity or about bridging and linking heterogeneous individuals and communities.

Hence, this first level of analysis invites researchers to move beyond narrow conceptualizations of social capital that restrict it to the concepts of trust and reciprocity (e.g., Kobayashi et al., 2006). It supports a dialectical conceptualization of social capital in online communication contexts, such as in social media, and supports the study of key facets and often antithetical dimensions of social capital. To identify and analyze the micro or macro and the bonding or bridging/linking qualities of online social capital, we propose the study of the following parameters (or variables), which populate each dimension of social capital and derive from Putnam’s conceptualization as well as from empirical research that employs Putnam’s social capital:

- *Micro-scale social capital parameters:* individual discourses, values, ideas, and norms in communication; references to self-interest and personal practices and life circumstances during communication; references to personal, non-goal-oriented relationships developed within or outside the particular communication setting.
- *Macro-scale social capital parameters:* community/collective discourses, values, ideas, and norms in



**Figure 2.** Second-level analysis.

communication; existence of a spirit of altruism in communication discourses and practices; references to collective practices and broader life circumstances during communication; references to impersonal or goal-oriented relationships developed within or outside the particular online communication setting.

- *Bonding social capital variables:* closure, homogeneity, and intolerance of the networks, groups, or ideas developed within the particular communication setting; strength of the ties and connections developed inside this communication setting.
- *Bridging social capital variables:* openness, heterogeneity, and tolerance of the networks, groups, or ideas developed within the particular communication setting; weakness or looseness of the ties and connections developed inside this communication setting.
- *Linking social capital variables:* links or associations (e.g., cooperation or antagonism) between the groups, networks, or ideas developed through online communication with other (online or offline) groups, networks, or ideas or with institutions and/or the government.

The analysis of the above parameters by qualitative means (e.g., interviews, ethnographic study) can enable researchers

to dig deeper into the traits and qualities of online social capital with regard to its collective or individualistic and inclusive or selective nature. This way, researchers can move on to exploring—on the second level of analysis—the association of such online social capital traits with civic activism offline.

### *The Second Level of Analysis*

As shown in Figure 2, the proposed second level of analysis situates social capital not only within a social media (and online) communication context (i.e., green circle) but also within face-to-face and other offline communication processes (i.e., gray circle) and the broader socio-economic and political context (i.e., aqua circle) in which civic activism takes place.<sup>3</sup> This second level of analysis does not aim to prove the existence of a causal or one-directional relationship between online social capital and civic activism. On the contrary, it situates online social capital within an online and offline communication and activism context so as to encourage the furthering, expansion, and critical assessment of accounts that favor the association of online means of communication with social capital and related participatory practices (Ellison, Lampe, Steinfield, & Vitak, 2010; Gil de Zúñiga et al., 2012).

More specifically, at this level of analysis, researchers can assess whether online social capital can change established forms of civic activism and contribute to novelties in their organization, structure, tactics, or purposes by, first, understanding the reasons people get together and develop relationships, ties, groups, or networks online and, second, capturing the action characteristics and activism elements of social capital online so as to obtain evidence of the possible links between online communication and offline activism. Thus, we propose that the analysis at this level explores the following parameters (or variables), which draws partly from existing study on online communication and civic activism and partly from the goal of this level of analysis to identify any possible links between online social capital and offline civic activism within the broader socio-economic and political milieu:

- *Drivers of online social capital*: information seeking, information sharing, communication, networking, influencing or being influenced by others, coordination of offline action, dialogue development, innovative action (online), and target-oriented action (online).
- *Online social capital and offline action*: links of the ties developed in the online communication setting with face-to-face communication, with street or sit-in protesting, with gatherings, or with newly emerged or novel forms of offline activism (e.g., public discussions, artistic events, and public confrontation of politicians).
- *Offline action characteristics* (as presented in the context of the social capital developed online): long-term versus short-term prospects (i.e., continuity in the future vs sporadic and episodic action); collective versus individual action; structural and organizational characteristics of action (e.g., structured vs flexible action; tactical, instrumental, or ad hoc action); prevalent forms of action (e.g., protesting, gathering, civic disobedience); and action against interest-group-based and parliamentary democracy versus action targeting “single-issue politics.”

The above parameters can provide researchers with evidence on whether and how the features and qualities of online social capital—explored at the first level of analysis—are translated into participation and civic activism in the offline world. Moreover, they can inform the researcher on which elements and instances of activism are associated with online social capital the most. Thus, at this level, the researcher can capture even unconventional, radical, or disruptive forms of activism and their association with specific features and qualities of online social capital.

To sum up, the proposed analytical framework suggests a two-level analysis of Putnam’s conceptualization of social capital in the context of online communication and civic activism research. Figures 1 and 2 visually demonstrate the

two levels at which research can apply Putnam’s conceptualization for the study of the role of online communication in activism, and thus, they highlight not only the value of Putnam’s conceptualization but also the need for researchers to systematically employ it in order to explore qualities and traits of online social capital and their influence on facets of activism. In this respect, the proposed two-level social capital analysis does not suggest any conceptual novelty, but it comprises an analytical framework which researchers can employ for the sake of systematically and longitudinally testing and refining both their assumptions and extant knowledge on the role of online communication in activism.

## Case-Study Application of the Proposed Two-Level Social Capital Analysis

Besides presenting the proposed two-level social capital analysis, we advocate evaluating this analytical framework and how it can offer a better understanding of the traits and qualities of social capital in online communication settings and their role in civic activism. Hence, this section presents the method and the findings of an initial evaluation of the proposed framework through its employment in a qualitative study of the role of Facebook in Taiwan’s Sunflower Movement.

### The Sunflower Movement

The Sunflower Movement in Taiwan is one of the most recent social movements to arise and is known around the globe. It received NT\$6,630,000 (US\$206,423.09) in contributions within 3 hr of posting a series of advertisements in the *New York Times* entitled “Democracy at 4 am” (Chen, Liao, Wu, & Hwan, 2014). This movement is a suitable case study for the evaluation of the proposed two-level analysis, as it involved various groups—over 20—that developed a sort of community consciousness in the context of this movement (Chen et al., 2014), suggesting that movement participants developed “new connections with people they did not personally know but shared a common offline connection with” (Skoric et al., 2016, p. 7). Regarding the role of online communication, Facebook appeared to be the most popular social media platform among movement participants. Facebook pages were created to publicize and disseminate information against the Cross-Strait Service Trade Agreement (CSSTA)—the focus of the movement. These pages included “Civic 1985,” “The Sunflower Movement,” “Hei Se Dao Guo Qin Nian Zhan Xian,” “Democracy at 4 am,” and “Fan He Xiang Fu Mao Xie Yi.”

The Sunflower Movement was formed by a coalition of students and civic groups and consisted of a series of civic protests, including the occupation of the Legislative Yuan—Taiwan’s parliament—from 18 March to 10 April 2014. The movement was against the CSSTA<sup>4</sup> with China, which was signed by the Association for Relations Across the Taiwan

Straits and the Straits Exchange Foundation. The protesters were concerned that the agreement not only showed how much influence mainland China has over Taiwan but also could ultimately give China government control over the political system and economic development of Taiwan.

The problems began on 17 March 2014, when the ruling party—Kuomintang of Taiwan (KMT)—attempted to pass the agreement in the Legislative Yuan without a clause-by-clause review. The so-called black-box operation caused uproar, and crowds of protesters climbed over fences to occupy the parliamentary chamber on 18 March. In the evening of 23 March, a group of students occupied the Executive Yuan, the seat of Taiwan's executive branch of the government, for about 10 hr, while more than 100,000 protesters were enlisted to occupy the Executive Yuan via Facebook and the PTT Bulletin Board System.<sup>5</sup> On 30 March, students organized a demonstration that saw more than 500,000 Taiwanese citizens taking to the streets in support of the movement's cause. On 26 March, the movement activists drafted an undertaking document for a law that would ensure the supervision of cross-strait agreements and asked all lawmakers to sign the document to show their approval. On 6 April, the legislature's speaker, Wang Jin-pyng, visited the occupied chamber and offered a concession. In response to this concession, the protesters held a press conference on 7 April in which they announced their decision to vacate the Legislative Yuan on 10 April but not to stop their efforts to inform and protect Taiwanese society.

The Sunflower Movement officially concluded on 10 April 2014, when the students left the premises of the Legislative Yuan. Regardless of its short duration, it has broadly been perceived as a movement that awoke an awareness in the younger generation of politics, democracy, and the identity of Taiwan while also demonstrating the clever use of technology and digital media for its purposes.<sup>6</sup>

## Method

In contrast to Warren et al. (2015), who applied their social capital and online civic engagement model through quantitative survey research, we employed semi-structured qualitative interviews to flexibly explore the value of the proposed two-level social capital analysis for the study of the role of Facebook in the Sunflower Movement. Our decision to evaluate the proposed analytical framework through qualitative interviewing of a small number of movement participants acknowledges the value of individual observations in unpacking the complex interrelationships between social capital, online communication, and offline activism.

The interview topic guide applied the proposed two-level analytical framework depicted in Figures 1 and 2, and it was populated by the specific variables/parameters listed in the previous section. Specifically, it assessed the usefulness of the proposed framework by exploring the features and qualities of the social capital fostered on Facebook (i.e., first-level

analysis) and whether such Facebook-enabled social capital influenced the organization, purpose, forms, and other aspects of the Sunflower Movement (i.e., second-level analysis). It included general questions about the Sunflower Movement as well as specific questions on how the interviewees used Facebook as part of their involvement in the movement. For the questions specific to Facebook, we encouraged the interviewees to reflect on the communication, networking, and collaboration tools of Facebook and whether such tools made a difference to the kind, range, and efficiency of movement-related activities they undertook offline. In this respect, the interviews were not based on the assumption that there is a definite relationship between the online social capital that movement participants enjoyed, if any, and their actions within the movement. Besides, as shown in the detailed presentation of the proposed analytical framework in the previous section, the framework does not assume that some relationship between online social capital and offline activism is always and necessarily in existence. On the contrary, it aims to examine the under-studied relationship between online social capital and offline activism, allowing the researcher to explore all possibilities ranging from the existence of a strong (positive or negative) to limited or no relationship at all between online social capital and civic activism.

We interviewed 10 students (see Table 1) who participated in the movement and made use of Facebook for movement-related activities. Although one could argue that not only students but also academics and other civic groups participated in the movement, students were the leading group. Furthermore, we can hypothesize that, due to age and lifestyle, this group engaged with social media such as Facebook in ways that could provide interesting insights into the relationship between "online" and "offline" in the context of the movement.

Participant recruitment involved several steps. One of the researchers had personal connections with students in Taiwan and asked those contacts to recommend friends of theirs who were both active on Facebook and involved in the movement. When a sufficiently long list of potential participants had been put together, the researcher sent a Facebook invite to each to explore whether they would be interested in taking part in the study. Then the researcher followed the Facebook accounts of those who agreed to participate in the study, checking their Facebook posts both to gain background knowledge of their profiles and to ensure that all study participants were users who had demonstrated some (even limited) activity on Facebook in relation to the movement.

All 10 interviews were conducted via Skype, through video-enabled, synchronous conversation, and in this respect, the interviews can be likened to the face-to-face interview context. The duration of the interviews ranged from 1 to 2 hr, and it was dependent on the interviewees' personality and openness as well as on their level of involvement in the movement. The interviews underwent verbatim transcription in Chinese and then they were translated into English. In total, the interview data amounted to 104 pages

**Table 1.** Interview Sample.

Name	Age	Gender	Profession	City
Jiayu Li	20	Male	Student	Taipei
Xiangheng Zhao	19	Male	Student	Taipei
Cai	22	Male	Student	Taipei
Eddie	22	Male	Student	Gaoxiong
Feixiang	22	Male	Student	Taizhong
Gina	23	Female	Student/part-time worker	Taipei
Jack	22	Male	Student	Gaoxiong
Leka	29	Male	Student/part-time worker	Taipei
Manni	24	Female	Part time student/banker	Taipei
Sunny	23	Female	Student/investor	Taizhong

of transcripts, which were analyzed with the assistance of NVivo software.

We employed thematic analysis, and the codes assigned to the themes identified in the interview texts were derived from and captured in the key indicators of the two-level analytical framework, namely, the parameters presented in the previous section. At the same time, the analysis process was highly reflective and enriched the set of pre-defined codes with codes that derived from the interview texts. To ensure reliability and consistency in data analysis, we employed NVivo inter-rater reliability testing. Specifically, we first conducted pilot-independent coding of two transcripts. Then, we ran a coding comparison query for the two coded transcripts and all the nodes (i.e., codes) assigned to them. The query results showed an exceptionally high degree of agreement, both in the “Percentage agreement” and in “Kappa coefficient” results, while for the instances of coding discrepancy we looked into the visual representation of each coder’s coding practices and both the codes and analyzed text where disagreement appeared. Upon the coders developing a good understanding of the reasoning behind disagreement and after agreeing on the right codes to apply to cases of disagreement, the coding of the remaining transcripts took place, with the leading coder (and first author of this article) overseeing the coding and running reliability tests throughout the analysis.

We should stress that the analysis of the interview data did not aim to populate with data the generic analytical framework that we propose and present in Figures 1 and 2. The proposed framework is not a model of quantitative nature and its operationalization through qualitative data collection and analysis has resulted, as shown in the next section, in findings that apply to the specific case study examined and are presented through both text and graphs

### Case-Study Findings

Starting with the first-level analysis of the proposed analytical framework, we analyzed both binary antithetical dimensions of online social capital—bonding versus

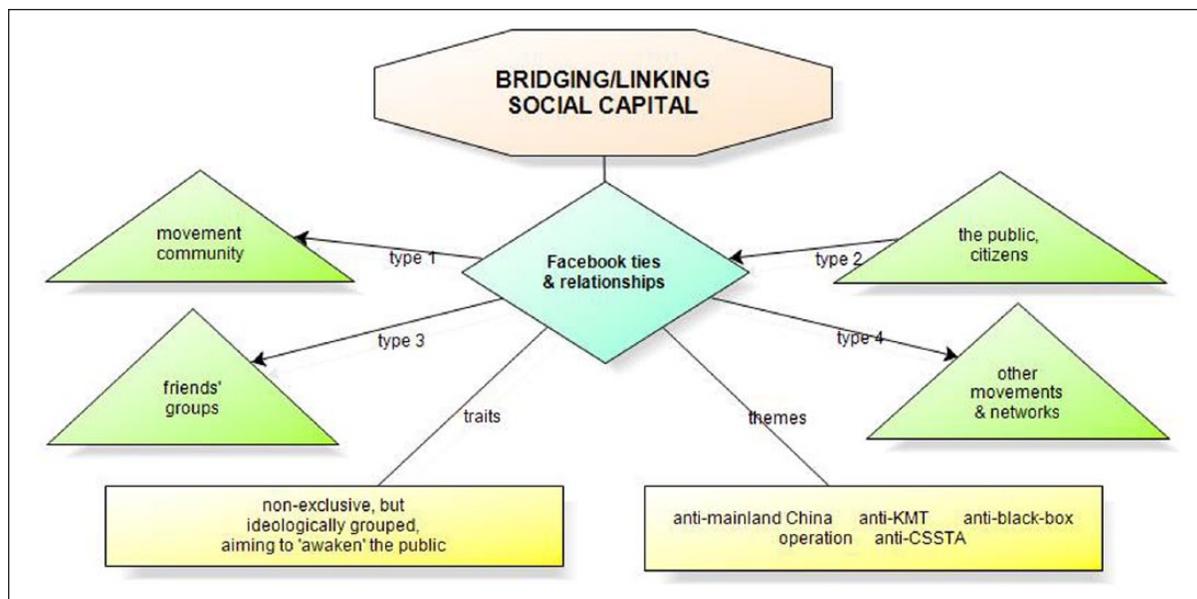
bridging/linking and micro versus macro scale—that are depicted in Figure 1, but we reflected on the obtained results only for the parameters that appeared prominent in the interviewees’ discourses.<sup>7</sup>

The interviewees referred to social capital qualities enabled by Facebook, such as the free exchange of ideas and multi-layered processes of co-learning and deliberation, and they suggested that the bridging/linking dimensions of Facebook-enabled social capital were central to the movement. Due to the openness of the platform and the speed at which information can be circulated across it (largely facilitated by the “comment” and “follow” tools), the interviewees could link, as shown under “types”<sup>8</sup> of Facebook-enabled ties and relationships in Figure 3,<sup>9</sup> not only with Facebook friends’ groups and the movement community but also with diverse online and activist groups and the broader public. As shown under “themes” in Figure 3, the dominant themes of concern to the ties and relationships that movement participants developed on Facebook were themes of broad public interest and appeal and against the government’s practices, the black-box operation, the CSSTA itself, and mainland China’s increasingly prominent role in the country.

Interestingly though, regarding the traits of such relationships and ties on Facebook and as shown in Figure 3, although movement participants were in contact with a range of groups and networks on Facebook, they demonstrated a sort of ideological closure, as they joined Facebook groups that they were in agreement with ideologically:

I prefer to look [on Facebook] at the views shared by opinion leaders. If I agree with them, I will directly share them. If our opinions are different, I will keep the part that I agree with and rewrite [critically comment on] the part that I disagree with. (Cai)

In this sense, the openness of online networks and the development of (mostly) weak ties with other movement participants, groups, and networks on Facebook did not necessarily result in ideological openness and flexibility. On the contrary, the bridging/linking features of Facebook-enabled social capital for Sunflower Movement participants were



**Figure 3.** Interview discourses on the bridging/linking dimensions of Facebook-enabled social capital.

present mostly at the level of communication and networking and a lot less in the realm of exchange of ideas, as ideas appeared to be rather inflexible and rigid.

Regarding macro- versus micro-scale discourses, the interviewees sustained collective discourses and argued that, thanks to the movement, the public engaged more in politics than previously. Such macro-scale discourses were reflected in the interviewees' words about the role of Facebook in the movement, as they stressed that Facebook played a role in the public domain and especially in developing young people's interest in politics and collective life circumstances:

Young people in Taiwan would not talk about politics before. Many of them thought that politics is corrupt and dirty, so they stayed away from it. But after promoting the movement through Facebook, they started to care about politics' future in Taiwan. (Sunny)

Furthermore, the concept of altruism was brought up when the interviewees discussed Facebook users' action toward disseminating and responding to protesters' calls for food, equipment, clothes, and so on.

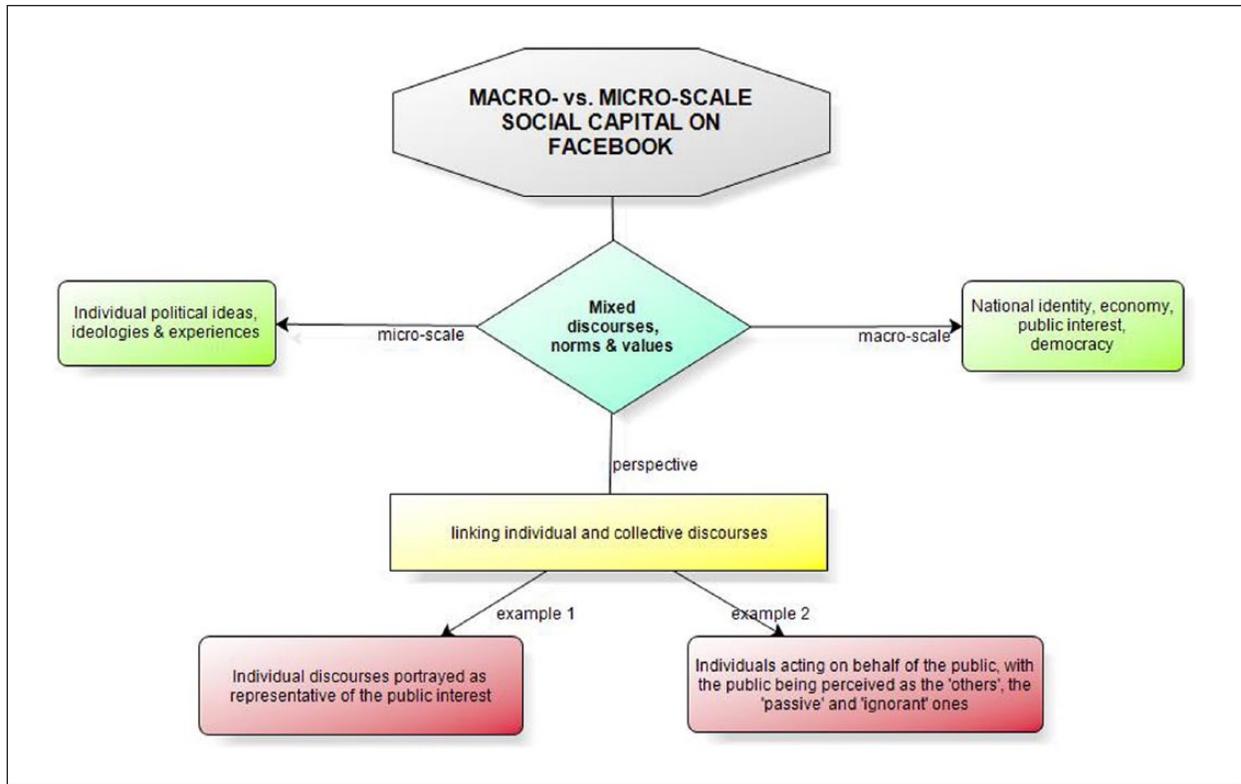
On the other hand, as shown in Figure 4, many of the interviewees used mixed language, with references to collective well-being and interests (i.e., macro scale) being coupled with references to self-interest as well as personal perspectives on the CSSTA and the importance of the movement (i.e., micro scale). As Figure 4 shows, through Facebook, the interviewees not only put forward discourses and norms concerning Taiwan's system of governance, their national identity, and the wider public interest but also expressed their individual standpoints and shared personal experiences, thus making individually driven use of the weak

ties and relationships on Facebook: "Actually, I don't tend to follow my friends' opinions [on Facebook], because I think everybody has their own standpoint and thoughts . . . I'll be passing on my own standpoint and my own thoughts" (Jack). Overall, as shown under "perspective"<sup>10</sup> in Figure 4, the interviewees linked their individual discourses with collective discourses and interests and thus, for example, they presented their individual standpoint as representative of the public interest and their acting as necessary to make up for the public's passiveness and lack of awareness.

Moving on to the second-level analysis of the proposed analytical framework, we explored the following parameters for the case of the Sunflower Movement: drivers of online social capital; online social capital and offline action, namely, the links between the ties developed on Facebook and forms of offline activism; and offline action characteristics as presented in the context of the social capital developed on Facebook.

Regarding the drivers of the social capital developed on Facebook, most interviewees emphasized the information-dissemination and information-sharing tools of the platform. The coding distribution (i.e., NVivo matrix coding) shown in Table 2 demonstrates that movement participants viewed obtaining and sharing information as the main drivers for forming networks, ties, and relationships on Facebook. Other significant drivers appeared to be communication, which involved communication and exchange of views on matters concerning the movement, coordination of offline action, as well as dialogue development for the movement and the situation in Taiwan more generally.

More specifically, the information-spreading and information-sharing tools of Facebook enhanced most of the



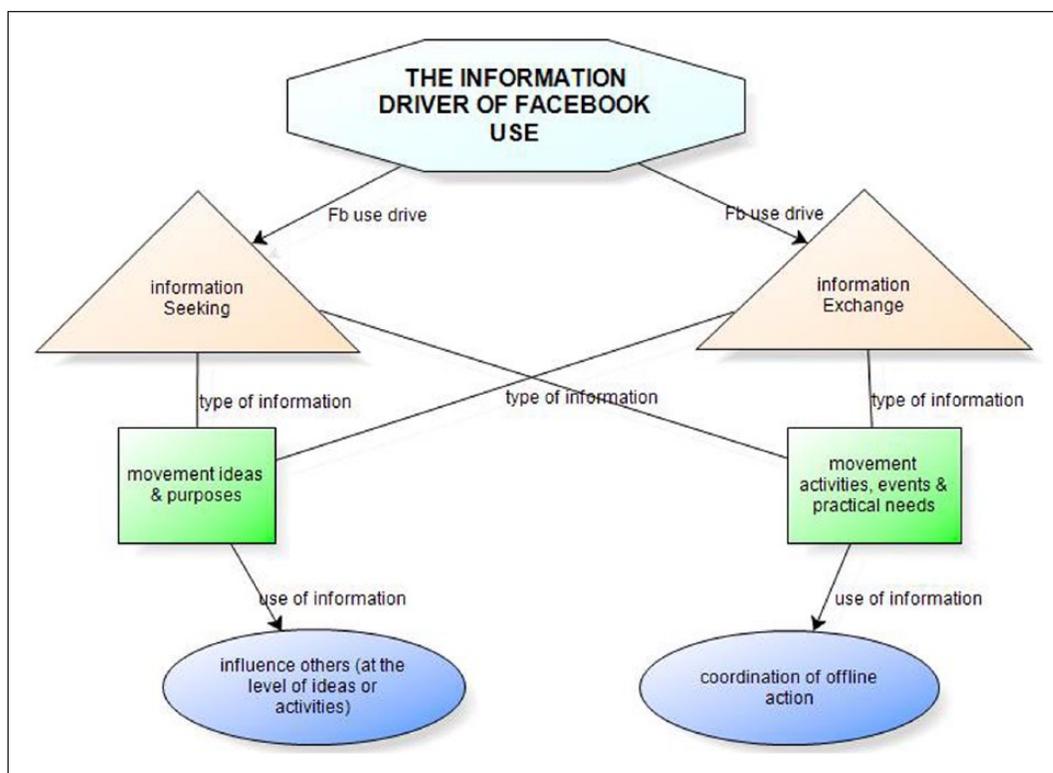
**Figure 4.** Interview discourses on the micro- and macro-level dimensions of Facebook-enabled social capital.

**Table 2.** Matrix Coding of the Interview Discourses for Drivers of Online Social Capital.

Drivers	Interviewees	Drivers of online social capital: coding distribution										
		Sunny	Jiayu Li	Xiangheng Zhao	Manni	Gina	Feixiang	Eddie	Leka	Jack	Cai	Total
Communication		3	3	2	2	6	3	3	3	4	2	31
Coordination of offline activity		4	1	0	5	1	1	1	1	6	5	25
Dialogue development		3	2	1	2	3	3	3	1	0	0	18
General action (online)		0	0	0	1	1	1	0	0	0	0	3
Influence or be influenced by others		8	4	2	3	2	2	4	0	3	0	28
Information seeking		9	7	6	7	9	11	5	1	15	5	75
Information sharing		12	5	4	4	7	4	3	2	7	3	51
Innovative action (online)		0	0	0	0	0	0	0	0	2	0	2
Networking		0	0	0	1	1	0	0	1	0	1	4
Target-oriented action (online)		1	0	0	0	2	0	1	0	7	0	11

interviewees’ engagement with the movement. As shown in Figure 5, these tools allowed movement participants to obtain or spread news about the movement’s ideas and aims while also disseminating and exchanging news about movement activities and events as well as the movement’s practical needs. Spreading information about the movement’s ideas and aims was in turn linked to the “influence” driver of social capital development on Facebook, as interviewees

who used Facebook to disseminate and share information about the movement’s goals and ideas were hoping to influence the ideas or actions of others (i.e., non-movement participants). Furthermore, disseminating or exchanging news about movement activities was linked to the “coordination of offline action” driver, as many interviewees used Facebook in order to assist the offline activities of the movement, such as provision of supplies to offline sites of action and adequate



**Figure 5.** Interview discourses on the information driver of Facebook-enabled social capital.

response to calls for assistance with event organization: “Before going to the scene, I will first have a look at the information [on Facebook] to see which zones don’t have enough people or supplies. If possible, I will take supplies with me to the scene” (Cai).

Regarding the links of the social capital developed on Facebook with forms of offline activism—the second main parameter (variable) of the second level of analysis in the proposed analytical framework—coordination of offline action, one of the key drivers for the use of Facebook by movement activists, constituted the most prominent link between online social capital and forms of offline action in the movement, such as offline protesting, sit-ins, and innovative forms of activism (e.g., occupation of the Legislative Yuan, artistic events):

Through [Facebook] there were calls for people to join the crowd at the perimeter. I couldn’t stand still, looking at all these. I thought, even though I was tired, I could at least sit there and be part of the crowd to support the other students. (Manni)

On the other hand, we did not find compelling evidence that online social capital had a remarkable influence on face-to-face communication in the context of this movement.

Finally, regarding offline action characteristics in the context of the social capital developed on Facebook, the main forms of offline action undertaken by movement participants

were protesting, sit-ins, and the occupation of the Legislative Yuan, and these activities were often coordinated and supported, both practically and symbolically, through communication and other practices on Facebook (e.g., blacking out profile photos; petitions; responses to calls for food, equipment, and other support). While the interviewees provided a mixture of references to collective and individual action undertaken in the offline context, they usually referred to collective action in connection with how they communicated and planned such action on Facebook, whereas Facebook was mentioned a lot less in relation to individual action. In addition, many interviewees stressed the single-issue politics of the movement, targeting either the black-box operation or the CSSTA agreement itself, and just a minority of interviewees looked at how the movement tackled the entire democratic regime of the country. Nevertheless, the interviewees presented both the single-issue and broader politics targeted by the movement within the context of a Facebook-based web of macro-scale discourses in which collective interests and Taiwan’s well-being offered legitimacy and ideological support to the movement.

## Concluding Remarks

This article has argued that research broadly examines the effects of information exchange, networking, communication resources, and other qualities and functions of online

communication on civic activism as standalone and out-of-context factors, lacking consideration of the role of the complex ties and relationships that people create online to a smaller or a bigger degree. The article has also suggested that social capital literature is concerned with social capital processes in online communication, treating such processes as an outcome rather than a complex set of ties, relationships, and associated events, the role of which in civic activism must be analyzed in an informed and systematic way.

To address these gaps, the article has proposed a two-level social capital analytical framework. The proposed framework places social capital at the core of the research endeavor and invites the identification of the dynamics, processes, and battles involved in social capital formation that mediate between technology, civic activism, and communication of all kinds. By distancing itself from narrow conceptualizations of social capital (e.g., Kobayashi et al., 2006), the proposed framework embraces the key facets and often antithetical dimensions of social capital and supports the examination of social capital as both an integral element of online communication and a possible enabler of activism, going beyond whatever “spillover effect” there may be of online engagement on civic activism. However, the proposed framework does not assume an automatic causal relationship between online communication practices and civic activism; on the contrary, it aims to encourage research to study the ties and relationships that individuals, groupings, and communities develop online so as to produce nuanced and in-context accounts of the utilization of information, communication, networking, and other qualities and functions of online communication for the purpose of civic action.

The case study of the role of Facebook-based social capital in Taiwan’s Sunflower Movement illustrated the insights that the proposed two-level social capital analysis can offer. Specifically, the first-level analysis suggested that movement participants developed bridging/linking social capital via Facebook while coupling online collective discourses with references to self-interest and their personal perspectives on the movement. At the second-level analysis, we found that the information-dissemination and information-sharing tools of Facebook were the prevalent drivers of Facebook-enabled social capital, with such information tools serving the dissemination of the movement’s ideas and activities as well as the coordination of offline action. Finally, while online social capital seemed not to influence, in particular, face-to-face communication within the Sunflower Movement, the main forms of offline action in the movement, namely, protesting, sit-ins, and the occupation of the Legislative Yuan, were largely coordinated and supported through Facebook.

The employment of the proposed two-level social capital analytical framework for the study of the role of Facebook in Taiwan’s Sunflower Movement helped us to identify certain factors, practices, complexities, and dynamics in the ways in

which the information, communication, networking, and other qualities and functions of Facebook were utilized for the purpose of the Sunflower Movement. The findings we obtained for the Sunflower Movement comprise a first example of the empirical application of the proposed two-level social capital analytical framework and of how examining the four antithetical attributes of online social capital and untangling their links to offline action undertaken within complex, both online and offline, forces can generate a systematic evaluation of the role of online social capital in specific cases of civil activism. Furthermore, the findings for the Sunflower Movement offer insights into the role of online social capital in a movement which has not been sufficiently studied in the western scholarship as yet, thus contributing novel knowledge to the field. Hence, we suggest that other researchers elaborate on our findings further, particularly drawing their attention to the following two findings: that the claimed inclusive nature of activist groups and initiatives on Facebook is coupled with ideological closure and that the information-dissemination and information-sharing functions of Facebook seem to be the main driving force for the online social capital that activists form on the platform.

However, this article did not aim to take a position on the positive or adverse effects of social capital. This discussion is controversial and can easily drift into normativeness. Furthermore, we do not examine the assertion that social capital is in decline (Aldridge & Halpern, 2002; Putnam, 2000): social capital goes through life cycles, responding variously to human and social needs. Instead, of concern to this study have been the new and still interesting manifestations of social capital and the role of online communication in giving space to such manifestations. In addition, we recognize the difficulties inherent in measuring social capital forms and the simultaneous bonding and bridging processes that take place within networks and groups of people, particularly in cyberspace: “no reliable, comprehensive, nationwide measures of social capital . . . neatly distinguish ‘bridgingness’ and ‘bondingness’” (Putnam, 2000, p. 23). Such difficulties can be addressed only partly by the proposed two-level social capital analysis, as this analytical framework envisages a qualitative exploration of social capital traits and processes in an online communication context.

Another limitation is that the article reported rather limited findings from the case study of the Sunflower Movement, while a more detailed presentation of this case would shed more light on the insights the proposed two-level social capital analysis can offer. We also understand that the usefulness of the proposed analytical framework should be illustrated further and in relation to other cases of civic activism, as time moves on and online communication takes novel forms amid a series of evolving socio-political and economic challenges. Future research could employ the proposed framework from an interdisciplinary (not just media-focused) perspective and could address questions such as “Is social capital an element or outcome of online communication

concerning civic mobilization and citizen political action?” “How does online social capital differ from or resemble offline social capital and what are its implications, if any, for how citizens congregate and form collective action?” and “Is social capital a useful concept and practice for understanding the ways in which online activism is translated into offline action and mobilization?”

### Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

### Notes

1. This meta-analytic study should be treated with some skepticism though, as it relies solely on survey measures of social media use and participation for methodological and practical reasons.
2. This does not mean we should overlook other social capital accounts. For example, see Aldridge and Halpern (2002), Halpern (2005), Lee and Lee (2010), and Woolcock (2001).
3. The second level of analysis must be considered only if certain social capital features emerge in the first-level analysis.
4. See <http://www.ecfa.org.tw/SerciveTradeAgreement1.aspx?pid=7&cid=26&pageid=0> (in Chinese).
5. The PTT Bulletin Board System is the largest terminal-based bulletin board system in Taiwan.
6. Read “Taiwan’s sunflower protest: Digital anatomy of a movement” at <http://flipthemediamedia.com/2014/07/social-media-taiwan/>
7. According to the interviewees, bridging/linking social capital on Facebook appeared to be prominent among those who used the platform in the context of the Sunflower Movement. This means that the study did not obtain any remarkable findings on bonding social capital on Facebook.
8. “Types” suggest the kind and scope of the relationships and ties that Sunflower Movement activists developed on Facebook, for instance, relationships with other movement activists, with activists from different movements, or with the public at large. This is distinct from the other two labels in Figure 3—“traits” and “themes.” Traits refer to the characteristics of Facebook-enabled ties and relationships, such as the characteristic of ideological closure versus ideological openness, while themes refer to the topics and issues that activists who developed such ties and relationships drew their attention to.
9. Figures 3 and 4 depict NVivo network outputs that overview interview discourses for the key parameters of the proposed first-level analysis. Table 2 and Figure 5 present NVivo matrix coding and network outputs, respectively, for the key parameter of “drivers of online social capital” of the proposed second-level analysis. This is to say that we present the case-study findings both graphically and textually and for both levels of data analysis. The graphical representation of the case-study findings was determined by the mode of interview data analysis we applied, namely, NVivo 10.0 assisted

qualitative analysis, and this is why all graphical representations of the findings constitute NVivo network outputs (i.e., networks of discourses found in the analyzed interview texts). More generally, this means that the researchers who might decide to apply the proposed two-level analytical framework are not restricted with regard to the type and strategy of data analysis they will employ and can report their findings through a range of visual/graphical or textual means, as long as their data result from and reflect the variables/parameters listed in the article for each level of the proposed two-level social capital analysis.

10. “Perspective” refers to the interviewees’ perspective from which they approached the role of individual and collective interests in their participation in the movement, and it explains why the interviewees held rather mixed discourses, linking their individual interests and actions with what they presented as being the public interest.

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