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**The role of social media in societal change:
Cases in Finland of Fifth Estate activity on Facebook**

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Abstract

The Internet can be used to reconfigure access to information and people in ways that can support networked individuals, and enhance their relative communicative power vis-à-vis other individuals and institutions, such as by supporting collective action, sourcing of information, and whistle-blowing. The societal and political significance of the Internet is a matter of academic debate, with some studies suggesting a powerful role in creating a “Fifth Estate,” and other studies challenging such claims. Research on this issue has not yet comprehensively focused on social network sites and those operating in a very liberal-democratic context. Based on an embedded case study of Facebook use in Finland, this study focuses on uses of social media in building communicative power, such as in capacity to foster social movements in ways that conform to conceptions of the Internet’s Fifth Estate. The case study combines qualitative and quantitative methods to examine a sample of 2,300 Facebook pages, and their online and offline activity and impact qualities. The results located 27 pages that reached a threshold we established for identifying online social movements with the potential for enhancing their communicative power, with a small minority of four cases appearing to have actualized communicative power. These findings reinforce the potential of Fifth Estate activity on social media, but also underline the challenges of societal change in this predominantly entertainment-oriented social

context. In addition, the study showcases the intertwined process of online and offline attributes affecting societal influence of online social movements.

Keywords

Social media, communicative power, Fifth Estate, social movement, Facebook

Introduction

The use of social media, or social network sites (SNS), has increased exponentially since 2004 when Facebook was launched, followed by many other SNS, such as Twitter in 2006. Given the worldwide diversity of SNS, it is difficult to generalize about their role, but they are primarily focused on supporting the networking of social interaction, such as in connecting friends. Nevertheless, the use of social media for societal change and political activities is potentially critical because these networks are formed around important social communities and relationships that could be turned to societal influence.

Despite famous examples of the use of social media such as in the Arab Spring (Rane & Salem, 2012), not much SNS research is focused on an overall societal picture of communicative power formation, including “networked individuals” (individuals as independent actors interacting via ICTs with numerous diverse others via multiple Internet

arenas simultaneously (see e.g., Rainie & Wellman, 2012), challenging both governance institutions and corporations, and the media impact in all this. SNS research has been more focused on specific political activities and networked individuals' intended activities, such as building on friendship ties (Ellison & boyd, 2014). Studies of the political uses of SNS have focused on a general worldwide scale or on non-democratic, newly democratic or relatively authoritarian national contexts (e.g., Bakardjieva, 2011; Bennett & Segerberg, 2012; Lim, 2012; Castells, 2012; Curran, Fenton, & Freedman, 2012).

This study explores the degree that SNS have been used for societal influence in the broadly liberal-democratic context of Finland, where national political-administrative traditions would be open to citizen initiatives and collective action. We ask whether SNS are used in ways that can enhance the relative “communicative power” of their users relative to other individuals and institutions (Habermas, 1996; Dutton, 1999; Castells, 2007). Although the role of SNS in political initiatives and collective actions is a matter of considerable debate in Internet studies, various research has concluded that the Internet as well as SNS can play an important role in social movements and collective action (e.g., Bennett & Segerberg, 2012; Castells, 2007, 2012), civic political engagement and participation (e.g., Feezell, Conroy, & Guerreo, 2009) and civic corporate monitoring and challenging (e.g., Champoux, Durgee, & McGlynn, 2012).

Habermas (1962, 1996) introduced the public sphere as an (offline) arena where individual people joined together to critically debate and unite against illegitimate use of power and state domination, and theorized how this discourse creates communicative power. Flynn (2004, p. 434) further explains that Habermas's communicative power is "the key normative resource for countering the norm-free steering media of money and administrative power". Whether or not one adopts notions of a public sphere, the potential for the media and the Internet in particular to be used in ways that enhance the "communicative power" of networked individuals has been developed by a number of scholars (Garnham, 1983; Dutton, 1999), such as by enabling the rise of a Fifth Estate that could hold institutions more accountable in ways analogous to the press in an earlier era (Dutton, 2009; Hidri, 2012). However, questions have been raised about whether communicative power online can translate into meaningful societal or political change as opposed to a form of "clicktivism" – simply generating online activity.

The potential communicative power of individuals networked through social media is the focus of this study. Specifically, on Facebook, are the individuals networked around liking particular "pages" which are seen in this study as prime paradigms of "online social movements", that is, collectivities of individuals using Internet and social media to organize and achieve societal change (Snow, Soule, & Kriesi, 2004; Castells, 2007), which

operate today in both online and offline arenas (Castells, 2012), and may be capable of translating their communicative power into a fifth estate. Collective action is one of a number of strategies of the Internet's "Fifth Estate" (Dutton, 2009; Newman, Dutton, & Blank, 2012), but this is a central aspect of online political and societal change that merits study in a particular online context. The Fifth Estate develops from individuals, enabled by ICT networking and sourcing information that is independent of authorities, to increase their communicative power to bypass and hold powerful institutions of society (media, corporations, and state) accountable. We use the term "actualized communicative power" (ACP) in this study to denote the achievement of societal influence or change, conforming to the potential attributed to the Fifth Estate.

The key objective of this study is to identify as a specific case of SNS, online social movements on Facebook that exhibit a potential for enhancing the relative communicative power of their users vis-à-vis institutions, or others that are the target of their activities. This is executed by searching all Facebook pages within a well-defined population to detect those fitting a set of five selection criteria that are anchored in theories of communicative action (further detailed below in discussion of data and methods).

The study's related objective is to detect those movements we have identified that make a difference and achieve ACP. We determine this through qualitative case studies of

each of the pages identified as potentially relevant to Fifth Estate activities. In doing so, we also explore possible attributes of online and offline activity and impacts that appeared to explain why some pages were successful in actualizing their communicative power.

Given that there is no accepted scale nor set of attributes for determining the political or societal effectiveness of online movements' actions, the paper also seeks to move closer to a definition of the attributes and possible scales that could be used to compare the relative effectiveness of online social movements in translating communicative power into societal change.

Finland was viewed as an important setting for this case study since the nation is at the high-end in its use of Facebook (95% of all Finnish SNS users following Facebook, Statistics Finland, 2014b), and also has a global reputation for its liberal-democratic political-administrative traditions. Facebook was chosen as the object of study not only as it is the most popular SNS in Finland, but also because it offers the facility for individuals to create pages to network while also providing open access for researchers. The database of *Fanilista.fi* that lists more than 2,300 of the most popular Finnish Facebook pages was the source of the sample population.

The study sought to examine three specific research questions (RQs) in its main objective of examining the extent of SNS in building the communicative power of online

social movements, the process of their online and offline activities, and their influence on the achievement of societal change. The RQs were as follows:

1. How many Facebook pages from this population fit the set criteria of online social movements with potential for creating greater communicative power?
2. Are there examples of pages creating movements with this potential demonstrating actual societal change in ways that conform to conceptualizations of a Fifth Estate?
3. How do relevant online (online activity and gained membership size) and offline (offline activity and gained media visibility) page attributes influence the effectiveness of online social movements in translating communicative power into societal change?

Communicative power online

There are a number of distinct but often complementary perspectives on the emergence of communicative power in the online world, including the ways in which the Internet enables individuals to search independently; and otherwise source, distribute or leak information; network with others, and become sources of collective intelligence (Dutton, 2012). The Internet's role in supporting social or political movements can be seen as one

important form of communicative power. Social movements have been defined by Snow et al. (2004, p. 11) as:

collectivities acting with some degree of organization and continuity outside of institutional or organizational channels for the purpose of challenging or defending extant authority, whether it is institutionally or culturally based, in the group, organization, society, culture, or world order of which they are a part.

More generally, Castells (2007, p. 249) has defined social movements as “collective actions aimed at changing the values and interests institutionalized in society, what is tantamount to modify the power relations.”

Social movements have been tied to the Internet as a space for launching or reinforcing their activities and interactions, and the Internet has been found in many cases to be useful to achieve their objectives (e.g. Zimbra, Abbasi, & Chen, 2010). Castells (2007, 2012) especially emphasizes the potential influence of people coming together in digital social networks and forming against government and corporations which formerly controlled channels of communication. These networked social movements born in the

digital age have power because they are autonomous, free from institutional control, and operate in different venues, such as online as well as offline social networks and public space. To some scholars, such as Snow et al. (2004, pp. 4–5), “social movements and the activities they sponsor” have become one kind of “a fifth estate” activity, as we posit in this paper.

Dutton (2009, 2012) and also Newman et al. (2012) argue that networked individuals are enabled by ICTs to develop relatively more communicative power by sourcing and disseminating information independently from authorities or institutions. Collective action is one of many ways in which their sourcing and collaboration might be used to exercise this communicative power, but remains one important approach. By linking up with each other online, networked individuals can enhance their communicative power relative to other estates (such as government, corporate, and media) and hold them more accountable, thereby challenging institutional authorities and power holders, and effecting change in policy or practice.

The written press, first described as the “Fourth Estate” by Edmund Burke in 1787, and later defined (de Tocqueville, 1835; Carlyle, 1846), has been a strong institution and societal controller/monitor in many liberal democratic societies since the nineteenth century. The Fifth Estate reflects an additional source of pluralist accountability that might

also shift the relative power of other estates in particular circumstances. Through giving voice and independent sources of information to the users, that is, individuals as producers and users of digital information, SNS tools can contribute to leveling societal roles and increasing citizen involvement in democratic processes (Bruns, 2007). For example, bloggers as a manifestation of the Fifth Estate have been seen as “watchers of the watchdog” in their power to monitor and hold mainstream media accountable (Cooper, 2006). Hidri (2012, p. 19) further explains that the Fifth Estate is not against an extension of, or the end of the Fourth Estate, but merely a “new approach to building social reality outside of the dominant molds of media and regulations applied in the communication industry and production of meaning.”

Social network sites and communicative power

Prime paradigms of SNS, such as Facebook, Twitter and Myspace, are classified as venues that can support more democratic participation and expression, creating a place for people to communicate and network with people with similar concerns and interests (Lai & Turban, 2008). Papacharissi (2013, p. 208) argues that by SNS a “networked self” can be actualized, saying:

The flexibility of online digital technologies permits interaction and relations among individuals within the same networks or across networks, a variety of exchanges and ties, variable frequency of contact and intimacy, affiliation with smaller or larger, and global and local networks formed around variable common matter.

(Papacharissi, 2013, p. 208)

One of the most studied aspects of SNS has been online political discussion and citizen engagement. Research has shown that SNS group usage can have positive effects on political participation (e.g., Bode, Vraga, Borah, & Shah, 2013; de Zúñiga, Jung, & Valenzuela, 2012). More precisely, Kushin and Kitchener (2009) found that Facebook, due to its unique features, increases the possibilities of political discussion and bringing together people with different perspectives. Feezell et al. (2009) found that membership of political Facebook groups increases offline political participation.

Beyond the political sphere, narrowly defined, the Internet has also enabled networked individuals to challenge or monitor businesses, corporations, and media companies: “Today, corporate wrongdoings, public gaffes, and unsatisfactory service that originate offline migrate into the social media sphere within minutes in the form of angry posts, wall-based conversations, and activist-orchestrated attacks” (Champoux et al., 2012,

p. 22). Facebook, more than other SNS, has been seen as a venue for angry consumer groups targeting companies. These outbursts are also often quickly picked up by mainstream media (Champoux et al., 2012.)

At the same time, critics of this view have argued that political participation on the Internet most often amounts to little more than “slactivism” (Morozov, 2009). This term describes a feel-good type of activism online which is easy to do, and which is a product of the click-based culture of SNS. Further, SNS have been viewed as an inefficient venue of political mobilization because they are oriented to such low levels of commitment, which leads to protests instead of long-term political projects, and are not only perceived as self-referential and motivated by users’ personal fulfillment but also as lacking sufficient coordination and organization to produce concrete results (Curran et al., 2012).

The Finnish context and Facebook

Finland is a Nordic welfare state with a population of just over 5.4 million. In comparison to 150 other countries, the World Audit (2014) ranks Finland as the third highest with respect to democracy, press freedom and lack of corruption. Also, the Finnish culture is considered to be a consensus-driven political culture, oriented to discussion and problem solving (Reunanen, Kunelius, & Noppari, 2010) and it has not traditionally been a

foundation or arena for radical challenges against governmental or business organizations. In comparison to totalitarian countries where oppositional views and political movements are restricted or denied, Finland possesses numerous free venues of expression and networking for political action. Consequently, social media in political action is seen as having less significance (Nordenstreng & Wiio, 2012.)

Finns, across both genders, are comparatively active Internet users. Official statistics (Statistics Finland, 2014a) for 2014 show that for the adult (16–74 years old) population, Internet usage within a three-month period was very high (92%) as was usage several times a day (70%). Finns are also active SNS users with 56% of the population being registered to a SNS (Statistics Finland, 2014b). Founded in February 2004, Facebook has not only become the largest SNS worldwide, with over a billion monthly active users and over 54 million pages (Statistic Brain, 2014), but also the most popular in Finland with 95% of SNS users as followers (Statistics Finland, 2014b).

Facebook is generally comprised of people's individual profiles, newsfeeds, different applications, groups and "pages". Pages were designed originally to be used for real businesses and brands to communicate to the public (cf. groups for individuals' usage). In practice, pages have been created very often for networking purposes by individuals. Pages are founded by one or more person as an administrator. They can found

and seen by anyone, and are joined by “liking” the page. They have therefore become a primary space on Facebook for collective efforts at networking around particular issues or causes.

Data and methods

This study applies the analysis of Internet and Facebook content, quantitative communication data analysis, media analysis and case studies to determine the degree to which Facebook pages are being used for social movements, and whether they are effective in changing policy or practices targeted by the movements. Facebook was chosen because of its nationwide popularity and because it enables individuals to create pages for networking. Furthermore, Facebook’s format provides open access for page-content research. While open groups are almost as open as pages, other types of groups are more restricted. Moreover, there is a list available as an online database, of Finnish Facebook pages, while none exists for groups, thus making a comprehensive group database for research less feasible to define.

Detection of Facebook pages with potential communicative power

The main data of the study consists of a weekly updating of the official listing of the most popular Finnish Facebook pages on the Fanilista.fi (2014) database. Preliminary qualitative reviews of this database indicated that activities of some citizen-based Facebook pages shared many features of common definitions of social movements, and could be discovered through this dataset. These online communities, if successful, should be capable of challenging the power-holders of society and causing real-world power-shifts in line with the potential of a Fifth Estate. On the basis of developing definitions of online “social movements” (Snow et al., 2004, p. 11; Castells 2007, 2012) and the “Fifth Estate” (e.g., Dutton, 2009, 2012; Hidri, 2012), the authors set five selection criteria for identifying pages with potential to achieve communicative power and the role of a Fifth Estate. The five criteria are pages which:

- 1) were set up by individuals acting with some degree of organization and continuity,
- 2) use ICTs to enable creation of networks of individuals,
- 3) work independently, outside of conventional institutional or organizational authorities,
- 4) use Internet-enabled sourcing and dissemination of information, and

- 5) were formed for the purpose of challenging, supporting or holding to account a societal authority, institution, or issue (i.e., seeking to effect societal change).

The process of identifying and selecting Facebook pages for in-depth analysis consisted of four phases (see Table 1). On January 1, 2014, the aggregate of the Fanilista.fi sample (N=2329 pages) incorporated a set of categories (N=142), of which the six most popular categories by number of pages (n) were Local businesses (n=182), Companies (n=155), Communities (n=151), Musicians/Bands (n=148), Products/Services (n=119) and Non-profit organizations (n=118). The less popular 136 categories had a range of page counts from 1 to 85. These categories were combined for the purpose of the study as “Other.”

When applying the selection criteria to each of the 142 categories only two categories were suitable for further analysis: “Communities,” which was populated by 151 pages and “Other,” which had a small but distinct category of Causes with six pages (see Table 1). As it was not clear if all the remaining pages fit the five criteria we established, all 57 pages within these two categories were reviewed and grouped into eight new categories defined according to the basic objectives and activities of the pages, enabling further evaluation of them fitting the main selection criteria. These eight categories were: [1]

Discussion/Entertainment/Informative (those whose main activity/objectives include discussion and entertainment) (n=61), [2] Corporate/Organization (official corporate/organization brand pages) (n=53), [3] Cause/Mission (pages with specific joint social movement missions, challenging an authority or societal state of issues) (n=16), [4] Protest/Support (pages specifically protesting/supporting a cause/person) (n=11), [5] Dare mission (such as breaking records) (n=7), [6] Politics (such as official pages for politicians or parties) (n=3), [7] Spam/Advertising (n=3) and [8] pages on the list but not found in Facebook (n=3).

Table 1. Four-Phase process of detecting the Finnish Facebook pages with the most potential for enhancing communicative power

PHASE 1		Identification of ready-made Facebook pages (N=2329) by Categories (N=142)					
PHASE 2		6 most popular Facebook categories (n=pages) Other comprising 136 Facebook categories (n=pages) + category of Cause (n=pages)					
Local business n=182	Company n=155	Community n=151	Musician/ Band n=148	Product/ Service n=119	Non-profit organization n=118	Other n=1450	Cause n=6
PHASE 3		New categories developed by study for community and cause pages N=157 pages					
Discussion n=61	Corporate n=53	Cause n=16	Protest n=11	Dare n=7	Politics n=3	Spam n=3	Not Found n=3
PHASE 4		Categories selected for analysis of potential communicative power N=27 pages					
CAUSE / MISSION N=16				PROTEST / SUPPORT N=11			

Further content analysis of the 157 pages indicated that only two categories comprising 27 pages met all of the selection criteria: [3] Cause/Mission (n=16) and [4] Protest/Support pages (n=11) (see Table 2), providing a basis for addressing the first research question. The final 27 pages were found to be formed in the SNS context by individuals independent from institutions or organizations and using ICTs to source data, to disseminate data, discuss, network and organize. Furthermore they could all be defined as communities with an aim of forming social movements and/or challenging powerful institutions of society over issues, and in this respect, pursuing societal change.

Table 2. The 27 Finnish Facebook pages judged to have the potential to enhance online communicative power

Founding date	Finnish page name translated to English	Objective / activity description	Member count
March 2013	875 grams	Campaign to collect money for children's hospitals	118,071
Oct 2010	General strike 15.10.2010	Strike movement against pay raises for government officials	79,453
Feb 2013	I do 2013	Campaign and citizen legal initiative for equal marital rights for same sex couples	75,105
Oct 2010	Kimmo Wilska support group	Movement to support the reinstatement of a popular news anchor	42,894
Sept 2013	Chow radar	Community monitoring food producers and suppliers	37,703
Sept 2010	I promise to use Viking Line ships if	Campaign to persuade a ferry line to	20,762

	new vessels are ordered from Finland	order its fleet from a Finnish shipbuilder	
Sept 2011	Pro gender neutral marital law	Campaign for gender-neutral marital laws	18,015
Dec 2011	Option for ABC	Community protesting against the use of the gas station & restaurant chain ABC	14,846
April 2011	I did not vote for the True Finns	Protest community against the nationalist political party True Finns	8,434
Aug 2010	I say NO to increasing supervision, surveillance and patronage	Community promoting privacy rights and protesting state surveillance	6,640
April 2012	School discipline in order, power back to teachers	Community protesting violence against teachers and supporting their rights	6,432
Dec 2010	I want to see other things also	Community addressing people's right to decide on outdoor advertisements	5,678
Nov 2012	Sense into copyright law	Citizen legal initiative to change the Copyright Act	5,179
March 2013	Sorry I am a journalist	Movement against bad journalism via self-criticism	5,164
Feb 2013	Hands off student benefits	Community questioning the limiting of student benefits	5,063
May 2010	Call your Grandma <3	Campaign aiming to sensitize people to seniors' loneliness	4,774
Feb 2011	Finnish Defense League (FDL)	Citizen organization against Islamic extremism	4,586
June 2013	Helping others should not be taxed	Community movement against taxation of voluntarily helping others	4,175
Aug 2011	Real milk comes from Satakunta	Community supporting the use of local milk products	3,674
July 2010	Save Vantaa river	Community movement to maintain a river in good condition	3,533
Jan 2011	I support basic income	Community movement in favor of adequate income support for all citizens	3,235
Oct 2012	Sensible days	Community protesting against consumer hysteria	2,918
Oct 2012	Myyrmäki movement	Community promoting activities supporting the well-being of a city	2,573
Sept 2012	Unusual matters	Movement against the social exclusion of young people	2,268
Oct 2010	Hate has no room in Finland - Against discrimination and hate	Communities protesting against hate groups targeted at foreigners	1,771
Oct 2012	"Program is barely subtitled"	Community protesting against poor subtitles on TV programs	1,696
Feb 2011	Save Our Burgers	Campaign to preserve the quality of fast food	1,176

The study of whether a SNS enables an online social movement to enhance its communicative power requires a mix of both qualitative and quantitative methods to assess a set of attributes (see Table 3) on which the Facebook pages could be evaluated. The qualitative aspect of the study was made from the researchers' observation and analysis in January 2014. Specifically, the pages' offline activity evaluations were based on observing page administrators' and members' page wall post suggestions, discourse of events and activities, formed events, and Internet sources and news stories related to their actualization and reporting of participants. The first example (translated into English) is of the Viking Line page administrator's wall post discourse indicating offline activity (i.e., the leader participating on a ship cruise with other page members), and one member's comment:

Greetings from Grace, from the first seminar on the brand new ship (2013, 16 January)

Today trying the Viking Grace! ☺ (2013, January16)

The second example is of a media news story concerning the I do 2013 campaign's sold-out support concert:

The since spring planned I do 2013 support concert's tickets were sold out in ten minutes (Hokkanen, 2013, April 24)

Offline activities were also quantified from all the pages that had official listings of their events (a feature of Facebook pages). Thus, the specific quantifiable values of offline activities (see Table 3) were based on an overall evaluation of both aspects (see evaluations in Appendix 1). The pages' general societal influence (SocInf) was based on the researchers' case study evaluations of either or both the mission success of specific pages and any general societal change they achieved, which this study considered as "actualized communicative power" (ACP) and paradigmatic of an emerging Fifth Estate. The short case studies grounding the SocInf analysis are presented at the end of the Results section.

The data required for quantitative analysis of each page's online activity was retrieved via Facebook semi-public APIs,¹ including FQL and Graph APIs. The retrieved content included all public posts by administrators and members to the page wall. These

¹ The Facebook semi-public APIs are Application Programming Interface tools provided by Facebook allowing outside web developers to read and retrieve open data from the service's social graph. The specific data tool organizing the content has been created by an IT specialist working in a Finnish research group, which includes the first author of this paper.

data represent numerical accumulations since the day each page joined Facebook up to March 30, 2014.

Media analysis was conducted using two different search engines during Week 14 in March, 2014. First, *Mediabase*, a software tool, was programmed to subscribe to RSS-feeds of Finnish news and media outlets and enable word searches, and analysis of the news content was used to do Internet searches for the 27 pages' names.² By the time the analysis was conducted in March 2014, the tool had been in operation saving news content for exactly 12 months and included 53 online versions of the most popular traditional Finnish newspapers.³

Secondly, because some of the pages had been active before *Mediabase* was used to begin searching in March 2013, Google was used to search for the page names. The first 50 returned articles for each page name were then reviewed. All the stored news stories were read and those made by recognized online newspapers, TV and radio, relating to the activities of the respective pages, were saved and stored. While this review concurrently

² Created by the same IT specialist mentioned in Footnote 1.

³ Although there are around 200 Finnish newspapers online (Finnish Newspapers Association, 2014), most have very small circulations and are local.

provided a valuable qualitative perspective on the pages, the primary objective of this search was to count the number of stories mentioning each of the pages.

This study recognizes the problem that the “age” of the pages affects the results of the pages’ attribute results as some pages had been alive under a year and others many years at the observation period, but it still focuses on the entire life-spans of attribute results. This is because the age of the page is not a stable variable of, for example, how much online activity occurs on a page: Some pages’ high peaks of activity have already passed at the beginning of the period due to the specific mission characteristic, such as the General strike which was focused on a one-day event after which all activities and media attention vanished, and others continue as long-term projects, such as the Chow radar page.

Attributes and levels of measuring Facebook pages’ communicative power

One objective of this study was to discover whether there are specific online and offline action and impact attributes that shape the relative success of Facebook pages’ objectives. Since research into SNS pages has not previously used this approach, a list of attributes was developed for this study. The study relied on (a) qualitative observations and the studies of other researchers to indicate which attributes were most likely to have the most significant effect and (b) an in-depth analysis of the six most, and the six least, popular

pages with the attributes. The authors finally settled on seven attributes that appeared most significant, all of which except for #1 were evaluated on a scale of 1 (low) to 5 (high), see Table 3.

The overall scale 1–5 was selected for consistency with all the scales, as the results could be adjusted to them in their overall result contexts. First, the existing member counts and months of pages’ existence could be indicated by an acceptable value point from 1 to 5 from the smallest to the largest. Second, the overall results of coverage, lowest and highest scores by page, average of six smallest and largest, and overall average amounts of media articles found (e.g., N=171, lowest n=0 / highest n=79, average 6 smallest=1.5, / 6 largest=27, general average=14.25) and page wall posts were used to set scales best describing the level of the action in their overall result context. Finally, offline activity and societal influence scoring was made on the same scale but through a more qualitative evaluation, uniting quantitative event notices to observation analysis in offline activities, and using the overall case studies as indicators of societal influence.

Table 3. Attributes of Facebook pages, descriptions and value calculations

Attribute	Description	Measurement / calculation of quantifiable value
#1. Page type and purpose	The issue/mission of the page needs to be of importance at least to some segment of	No quantifiable value. Pages are evaluated to have important topics if they

	society for the page to attract followers.	attract members.
#2. Member count	Numerous members mean more are disseminating information and inviting others to connect, which will increase the allure of the page. Numerous members may also attract media attention and increase the image of power among societal power holders.	6 largest pages = 5 points Next largest 5 pages = 4 points Mean 5 pages = 3 points Next smallest 5 pages = 2 points 6 smallest pages = 1 point
#3. Media visibility	Media's agenda setting and power to shape opinion can have an effect on pages' publicity, popularity, member count, officials' and corporations' attention and success in reaching the pages' objectives.	An aggregate number of media articles found by <i>Mediabase</i> and <i>Google</i> . >50 = 5 points – Very high >10<50 = 4 points – Quite high >5<10 = 3 points – Mean >1<5 = 2 points – Quite low <1 = 1 point – Low
#4. Online activity: Administrators and members	Active administrators are potentially the driving forces of any online pages. They have to spread news of the page and when the member base is secured, they can activate the members online. Pages may also be active due to an active member community online diffusing information and activating others.	Number of page wall posts by administrators and members. >300 = 5 points – Very high >100<300 = 4 points – Quite high >50<100 = 3 points – Mean >10<50 = 2 points – Quite low <10 = 1 point – Low
#5. Offline activity: Administrators and members	Social movements operate in both online and offline social networks (see Castells, 2012) and online groups have the potential of mobilizing participation by performing offline group-like civic functions (e.g. Feezell et al., 2009). Offline activities may have an impact on members' perception of pages' power, attract more members and be a way to get media's and officials' attention.	Aggregate evaluation of qualitative case analysis of Facebook pages, news and Internet, and quantifiable event results from Facebook pages. Very high activity = 5 points Quite high activity = 4 points Mean activity = 3 points Quite low activity = 2 points Low activity = 1 point
#6 Age	The time-span of the pages' existence may increase their potential for success and societal influence.	48-60 months = 5 points 36-47 months = 4 points 24-35 months = 3 points 12-23 months = 2 points

<p>#7. Societal influence = Evaluation of ACP and fifth estate potential</p>	<p>Regardless of pages' objectives, their communicative power can be measured on the basis of how they are able to reach their end goal(s) and create concrete societal influence.</p>	<p>0-11 months = 1 point</p> <p>Case study evaluation of pages' objective success and/or general societal influence.</p> <p>Very high effects = 5 points Quite high effects = 4 points Mean effects = 3 points Quite low effects = 2 points Low effects = 1 point</p>
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Results

First, because all the 12 pages under scrutiny attracted members of the public, they were all judged to be of some importance to a segment of society. In addition, we knew the sizes of the pages' memberships – those who “liked” the page – and the “ages” of the pages.

Hence, Table 4 displays how the pages were analyzed with points ranging from 1 to 5 (1=low, 5=high) according to the number of memberships and the remaining four attributes: media visibility, online activity, offline activity, and the attribute measuring ACP and Fifth Estate potential, that is, general SocInf.

Table 4. Six most and six least popular Facebook pages rated according to attributes and societal influence

Page name	Member count	Media visibility	Online activity	Offline activity	Age	Societal influence
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875 grams	5 N=118,071	5 MB=48 G=13	A=4/M=5 AD=228 ME=406	A=5/M=3	2 M=13	5
General strike 15.10.2010	5 N=79,453	2 MB=0 G=3	A=1/M=4 AD=1 ME=289	A=2/M=2	4 M=42	2
I do 2013	5 N=75,105	5 MB=67 G=12	A=5/M=5 AD=420 ME=403	A=5/M=5	2 M=15	5
Kimmo Wilska support group	5 N=42,894	2 MB=0 G=3	A=2/M=2 AD=10 ME=26	A=1/M=1	4 M=42	1
Chow radar	5 N=37,703	3 MB=1 G=7	A=4/M=4 AD=177 ME=125	A=1/M=1	1 M=7	5
I promise to use Viking Line ships if new vessels are ordered from Finland	5 N=20,762	3 MB=0 G=8	A=3/M=4 AD=72 ME=284	A=5/M=3	4 M=43	5
Sensible days	1 N=2,918	2 MB=0 G=3	A=2/M=2 AD=38 ME=19	A=1/M=1	2 M=18	2
Myyrmäki movement	1 N=2,573	2 MB=0 G=4	A=5/M=4 AD=579 ME=133	A=5/M=4	2 M=18	3
Unusual matters	1 N=2,268	2 MB=0 G: 2	A=3/M=2 AD=70 ME=29	A=2/M=2	2 M=17	2
Hate has no room in Finland	1 N=1,771	1 MB=0 G: 0	A=3/M=2 AD=64 ME=25	A=1/M=1	4 M=42	1
“Program is barely subtitled”	1 N=1,696	1 MB=0 G= 0	A=3/M=2 AD=73 ME=17	A=1/M=1	2 M=18	1
Save Our Burgers	1 N=1,176	1 MB=0 G=0	A=4/M=2 AD=102 ME=22	A=1/M=1	4 M=38	1

MB: number of Mediabase news; G: number of Google news; A: administrators' activity; M: members' activity; AD: number of administrators' posts; ME: number of members' posts; M: months of pages' existence; Offline

As SocInf reflects the apparent actualization of communicative power, four of the largest pages were judged to have acquired very high ratings in this respect, noted by (5) influence values (see Table 4) and thus can be considered as case examples of pages with the potential for communicative power that actually reached a level of influence on society (ACP). To visualize how the action and impact attributes related to the success of the SNS pages, the other attribute results are displayed in Figures 1–5 in relation to SocInf values. A basic hypothesis common to the relationships displayed in the figures is that the value/significance of the attribute is judged in comparison with the page’s SocInf (equal or higher SocInf compared to each attribute = high significance of the attribute).

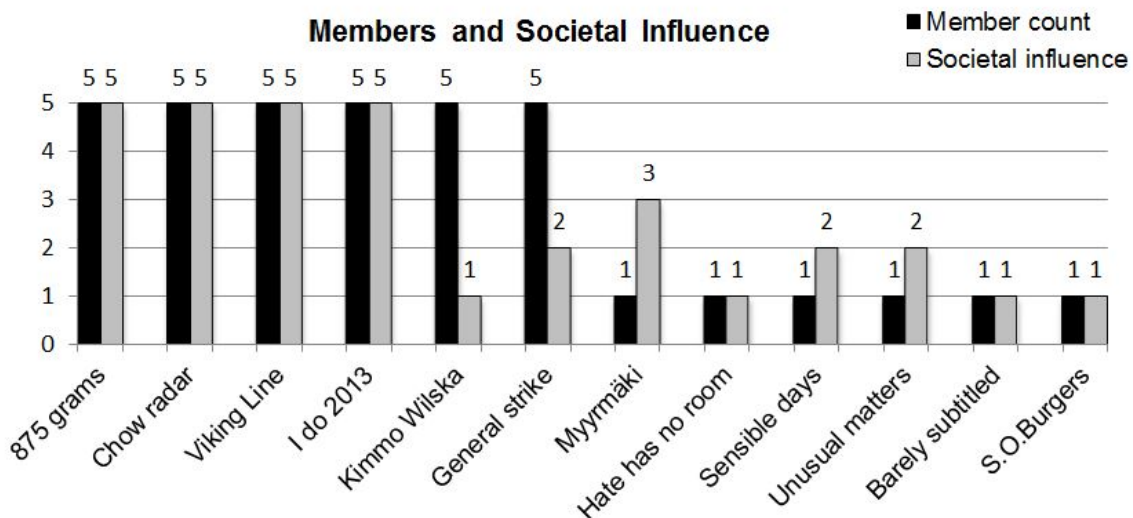


Figure 1. Facebook pages' memberships related to societal influence evaluated in a range of 1 (low) to 5 (high).

Figure 1 suggests four different types of pages (see Table 5). Four are among the most popular and influential, high on number of likes and influence, such as *875 grams*. Three are low in popularity and influence, such as *Hate has no room*. However, there were some popular pages that had relatively little influence, and less popular that had relatively more influence.

Table 5. Types of pages according to popularity and influence

Members	Influence	
	Lower	Higher
Higher	Kimmo Wilska, General Strike	875 grams, Chow radar, Viking Line, I do 2013
Lower	Hate Has No Room, Barely subtitled, S. O. Burgers	Myymaki, Sensible Days, Unusual Manners

In the context for the size of membership (Figure 1), the results indicate that the common hypothesis is valid in 83% of the cases as the SocInf values are equal or higher compared to member counts, but that amongst the other 17% there are anomalies. Amongst the four highest SocInf pages the member count value average is 5.

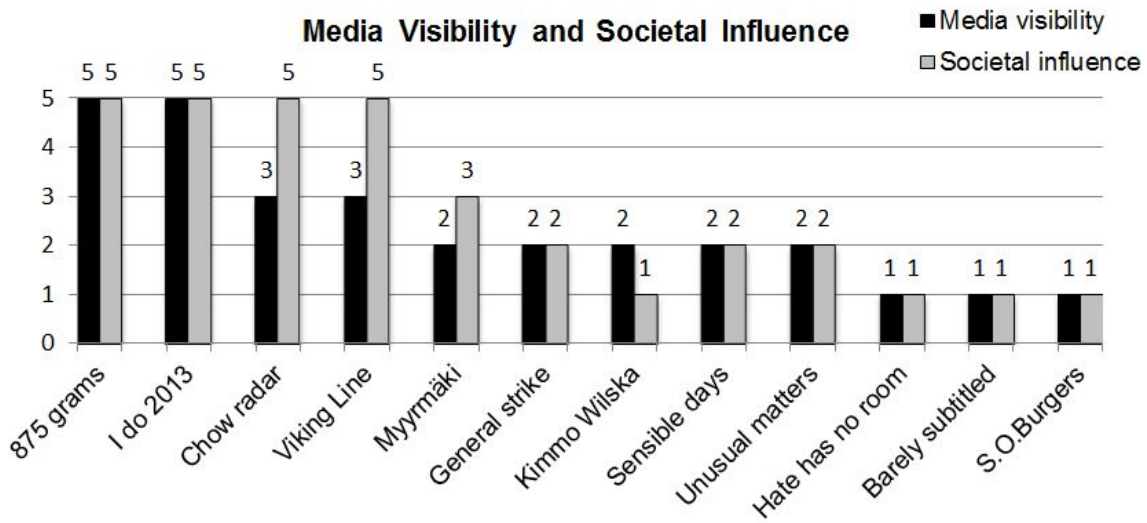


Figure 2. Facebook pages’ media visibility and correlating societal influence evaluated in a range of 1 (low) to 5 (high).

In the context of media visibility (Figure 2), the results indicate that the common hypothesis is valid for 92% of the pages. Amongst the highest SocInf pages the media visibility average is 4 – media visibility roughly corresponds with societal influence.

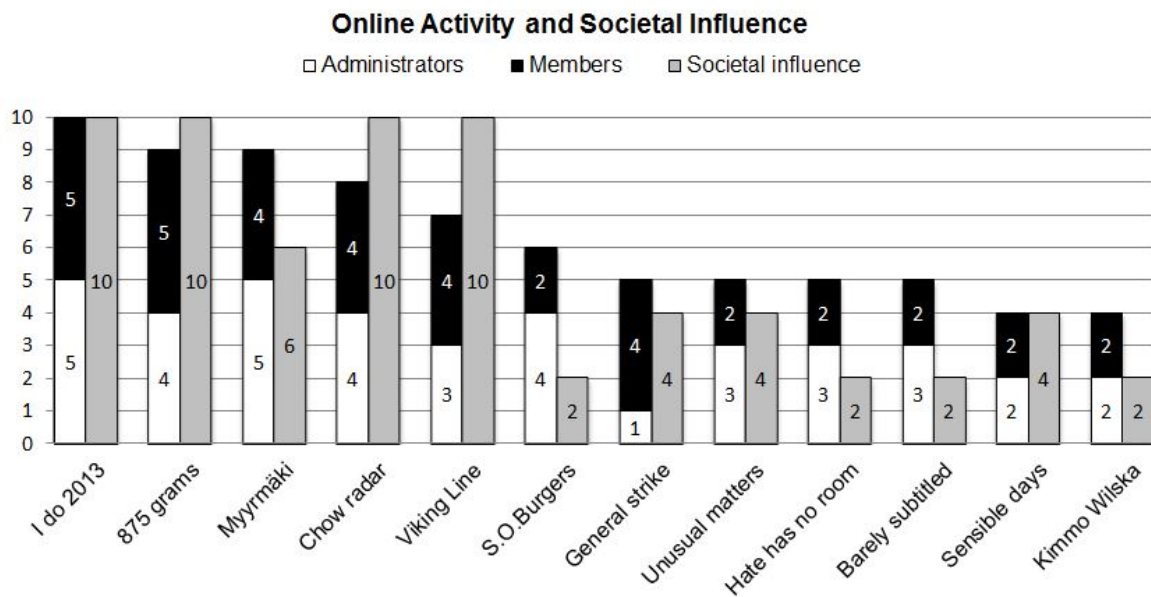


Figure 3. Facebook pages’ online activity and correlating societal influence analyzed with separate administrator and member activity evaluated in a range of 1 (low) to 5 (high).

In the context of online activity (Figure 3), there are interesting differences. On the one hand, SocInf values for 58% of the pages are lower than their online activities, however, on the other hand, those that were relatively high in activity online did tend to

have more social influence. For example, among the four highest SocInf pages the online activity average is 4.25.⁴

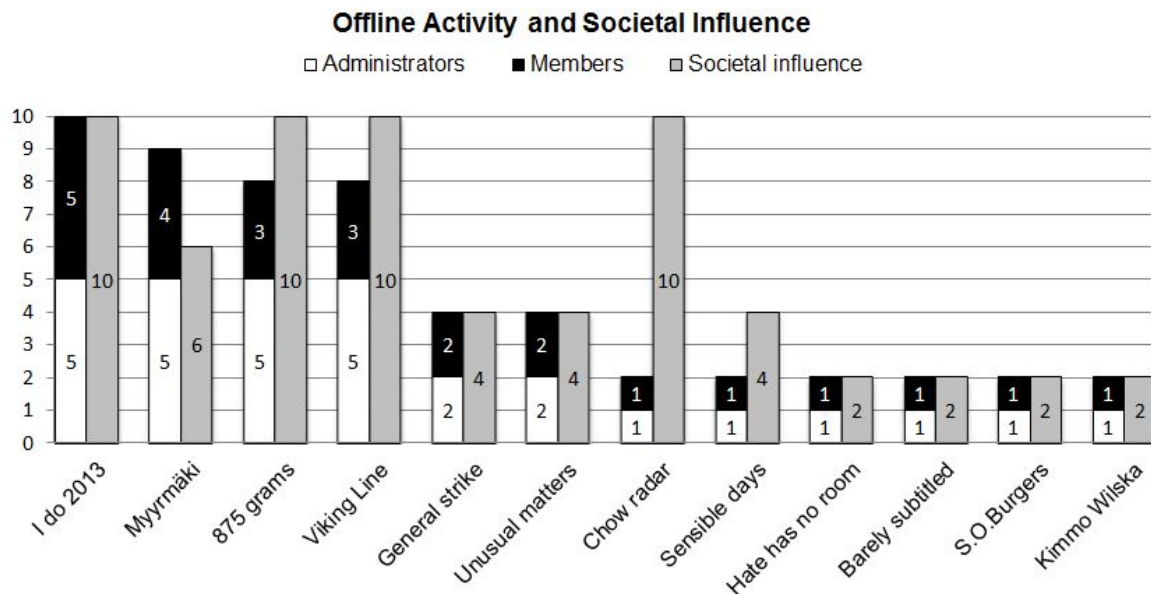


Figure 4. Facebook pages' offline activity points and correlating societal influence analyzed with separate administrator and member activity evaluated in a range of 1 (low) to 5 (high).

⁴ In order to display the online and offline activities of administrators and members, the total possible value for both the activities and the SocInf were increased to 10.

In the context of offline activity (Figure 4), expectations are supported in that 92% of the pages that were influential had higher offline activity. Among the four highest SocInf pages the offline average is 3.5 with one major anomaly lowering the average, where *Chow Radar* indicated low offline activity but high influence.

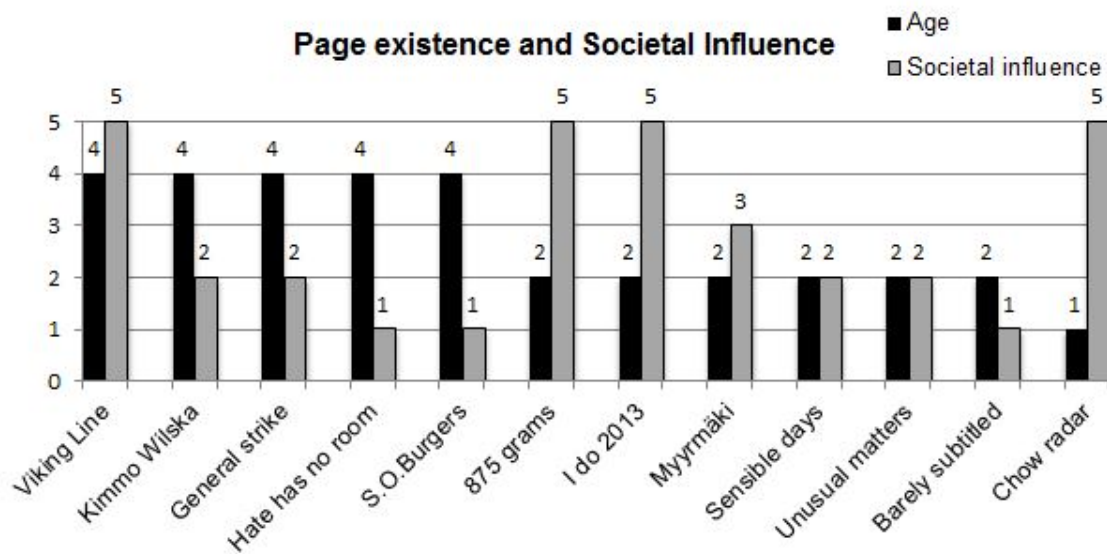


Figure 5. Facebook pages' existence related to societal influence evaluated in a range of 1 (low) to 5 (high).

The life-span of the pages' existence appears not to be the best indicator of pages' SocInf (see Figure 5). Although the hypothesis is valid in 58% of cases, most of the "older" pages have low SocInf, and among the four highest SocInf pages the age average is 2.25.

Overall the first, but overly simplistic observation is that the size of membership seems to be one key attribute, because pages with large memberships generally have more success in achieving ACP. However, there are major exceptions that are interesting alternative patterns.

In the following chapter the case studies, on which the SocInf values were based, are covered and used to further examine the dynamics of the qualitative aspects of the specific pages to determine various success factors and, for example, why ACP was not the automatic preserve of the largest pages, and why for instance some pages succeed without offline activities.

Brief case studies

Although, especially among the most popular societal causes, there are various actors and campaigns involved in certain issues which had been in operation before the current cases, the pages presented here are identified by the authors based on the case study observations as the leaders and/or main actors of the specific causes. Moreover, the identifications are

seen to be reinforced by the public, media and authorities, especially among the cases recognized as achieving ACP.

The largest page, *875 grams*, had the greatest possible SocInf value. The father of a premature baby created the page. The page's initial mission was to provide an environment that enabled friends to display their interest in the baby's well-being. As the interest expanded beyond the couple's familial, the father changed the mission of the page into an official campaign for collecting money for children's hospitals. The specific campaign, carrying the *875 grams* name and the "father" as its public face, received high popularity among the (online) public and (mass) media. High media visibility is probably the result of high levels of administrator activities both on and offline, which was ably supported by the members, as well as celebrities who have supported the campaign. The media have referred to the page as a Facebook phenomenon (e.g., Tamminen, 2013, March 31). The success of the specific fund-raising campaign has raised around €300,000 in donations for a new children's hospital and helped to donate an incubator. The page's ability to tap into people's inherent empathy with the plight of premature babies and to raise significantly large funds indicates a high level of ACP.

The *General Strike 15.10.2010* page, despite having the second largest membership that at one time peaked at over 100,000 was unable to convert its potential into high

SocInf. The page was formed to plan a general strike protest against government officials' pay rises. Societal institutions were unsupportive, the media described the mission as a failure, and local government branded the strike and all its activities as illegal. On October 15, 2010, the day of the General Strike, less than 100 strikers turned up. Explanations of the mission's failure may include, first, that the threshold of signing up to a protest page on a SNS is much lower than actually joining the protest, and second, the poorly planned and organized unrealistic mission lowered the potential of the page in the eyes of the participants, and the media and authorities did not grant it legitimacy.

The *I do 2013* page achieved maximum SocInf value. Since March 2012 the Finnish government has been required by law to consider passing into law any civic initiative that has more than 50,000 certified adult signatures. The aim of the page, originally formed by friends, was to achieve equal marital rights for same sexes via a civic initiative petition. The minimum number of signatures was achieved the day the campaign went public and within six months the Facebook page had become a registered citizen association, had gained the support of armies of volunteers, human rights organizations, and public figures, and gained a total of 167,000 signatures. The page's "leader" handed the signed petition to the parliament proceedings. Although the parliament's law committee decided against bringing the petition into law in June 2014, the parliament

plenary session voted in favor of the law on November 28, 2014, and historically approved the first crowdsourced civic law initiative in Finland. Although there have been other groups aiming at the same law change, and no doubt have raised awareness of the issue before thus paving the way for the initiative to be passed, the *I do 2013* campaign can be seen as the main driving force of the final law change, also recognized by the media, public and authorities.

The *Kimmo Wilska support group* despite having the fourth largest membership failed to convert its potential into high SocInf values. The page seeks to persuade Finland's public broadcasting service to reinstate one of its popular news anchors who pretended to be drinking beer while reading news during a live broadcast. What was meant to be a joke related to an alcohol control news story. The failure of the mission may be due to the fact that although people found the gimmick and its media attention interesting for a while, the issue is not close or personal enough for people to take more action than mere "like" clicks of support. In addition, the mission lacked recognition by the media or authorities.

The *Chow Radar* page gained high SocInf value. A collective of anonymous administrators created what they later claimed to be Finland's most influential food media. The page's mission is to reveal scams concerning the sale of unhealthy food and provide information on better options. The mission does not seem to need offline activities,

preferring to operate strategically as an online source that uses public pressure to challenge corporations and officials. The offline activities in this case are the societal impacts, that is, consumer behavior changes. Each of the many online actions, for example, law petitions and boycotts, have been supported by as many as several thousands of people who have joined the actions, and disseminated activity-related information through their own Facebook pages. Consequently *Chow Radar* has received quite a lot of media exposure and gained the attention of enterprise corporations. We conclude that the page's success in achieving ACP is due to its recognized role as a corporate, official and societal moderator and source of information.

The *Viking Line* page achieved a high level of ACP due to achieving its aim of persuading Viking Line AS (a ferry line) to order its proposed addition to its fleet from a Finnish shipbuilder. A key component of the page's campaign was to link "liking the page" to a promise by the members to use Viking Line ships at least once a year for three years if the company purchased a Finnish-built ship. The page's leader actively contacted Viking Line, and once the page member count reached close to 20,000, Viking Line invited representatives of the Facebook page to open cooperation discussions. In October 2010, Viking Line ordered the new ship from the Finnish shipbuilders STX Turku. News stories indicated a connection between the Viking Line's order decision and the Facebook

page, and the ferry line company legitimated the mission by recognizing its communicative power through cooperation.

The case studies to some extent explain why sheer size of membership cannot be considered as a direct indicator of reaching success in societal change (ACP). Two of the largest pages failed in SocInf due to many factors. The *Myyrmäki movement* was able to attract a good-sized membership in its local environment and activate people effectively both online and offline, thus achieving average SocInf. The other smaller national *Sensible days* and *Unusual matters* pages reached only some SocInf perhaps due to quite low levels on all of the measured aspects.

Discussion

While the influence of SNS on societal and political change is a matter of debate, there are case studies of instances when online networks played a critical role in social movements, and other Fifth Estate activities. The question not addressed is how common are these instances in the larger scale of social networking. This study looks at Facebook pages as prime paradigms of online social movements in one country as a basis for estimating the prominence of societally and politically influential sites.

To do this, with a step-by-step content analysis process, the study searched the Fanilista.fi database of first categories and then individual pages that could have a potential for communicative power by using criteria developed from the theoretical definitions of social movements and the Fifth Estate. The findings show that while 2,302 of the 2,329 pages are corporate or business based or oriented to entertainment and discussion, a small, but visible and significant number 1% (27 pages) can be considered as examples of Facebook pages with potential to achieve communicative power.

We then identified examples of the Facebook pages that appeared to have achieved their ambitions and therefore conformed to conceptualizations of an effective Fifth Estate role. By evaluating the general SocInf of the six largest and the six smallest pages (by membership), the study identified four cases as having achieved significant communicative power: Chow Radar, Viking Line, 875 grams, and I do 2013. At this first analysis level, unifying factors among the pages appear to be their membership size, their ability to tap into the societal consciousness of people and to attract cooperation and/or enough group power to force recognition in the eyes of legally or otherwise societally recognized institutions/organizations.

Looking more closely at online and offline attributes that may be significant in achieving influence, the study selected five attributes (pages' membership size, media

visibility, online and offline activities, and age) for evaluation and compared the attribute results of the 12 pages against the SocInf values. The results showed that especially the online attributes (size and online activity), but also all the first four, were important in building success. Among the most successful four pages, their significance was in the following order: 1) membership size, 2) online activity (especially leaders), 3) media visibility, 4) offline activity. Pages' ages were not considered as reliable indicators of SocInf in this study (specifically designed to focus on the entire life-spans of attribute results) as the pages were in different stages of their mission: some old (failed) ones still alive on Facebook, but inactive and some old and new pages continuously active in both online and offline activities. Further studies should concentrate on online social movements' success factors specific to their respective mission stages.

Nevertheless, no one attribute appeared to dictate ACP alone, and their variance and aggregate impact should be further tested. By indicating and testing possible online and offline attributes to measure communicative power, this study provides further possibilities for examining how significant the detected attributes are for online social movements with different strategies and objectives. A number of factors beyond the attributes, and beyond the reach of the brief case study explanations, could also be seen to affect the achievement of ACP and need further research. Some of these can be classified

as a) good leadership and organization, b) provision of good background information, along with active information sourcing and dissemination, and c) the crowdsourcing of freelance professional help.

This study concludes that in online social movements, online and offline arenas are interdependent in shaping the significance of their communicative power (e.g., Castells, 2007, 2012): Unlike the “former” ruling arena of public discussion, the press and (mass) media (addressing societal issues, which lead to offline discussion and at times also activities, which sometimes lead back to media agenda), the Fifth Estate arena also functions as a space allowing information input, and powerful networks, of individuals, potentially leading to constant shifts of discussion and actions from online to offline, and back online. Table 6 summarizes how the Fifth Estate era process of communicative power formation, supplemented by the still strong and meaningful Fourth Estate public discussion processes (see Hidri, 2012) is a combination of case by case changing online and offline activities and impacts, where both are significant and intertwined.

Table 6. Online and offline activities and impacts entwined within the Fifth Estate arena process of communicative power formation, building on the grounds of the traditional Fourth Estate arena

Fourth Estate arena processes	Fifth Estate arena processes	Viking Line page as a case example
	Societal issue rises offline and/or is set on the media agenda	<i>Offline</i> societal and <i>media</i> focus on the ferry line's decision to use either a national or a foreign ship builder
Issue discussed in media (stories decided by journalists) + discussion between media and societal power holders and in offline close networks of people	Issue discussed online in social media platforms (people source and disseminate information independent from press and authorities)	The influences of the ferry line's decision on the future of Finnish dock industry discussed by the press in traditional <i>media</i> and by individuals in many <i>online</i> social media platforms
People organize offline in close networks	People organize in online platforms (=networked individuals)	<i>Online</i> : Page formed on Facebook gathering people to join a campaign where "liking the page" is a promise to use Viking Line if the company purchase a Finnish-built ship
Offline meetings, protests, sit-ins, signature collections for petitions, collecting money, boycotts of products, etc.	Online petitions, protest websites, virtual sit-ins, online information diffusion to create boycotts or influence consumer behavior, etc.	<i>Online</i> : Discussion, diffusion, and vast amount of people joining the campaign <i>Offline</i> : Page leader contacts the corporation, meetings with corporate representatives, supporters' collective ship cruises etc.
Media focus on the offline activities/impacts	From online and offline activities/impacts the discussion returns to social media platforms	People link <i>media</i> news to the <i>online</i> page and report about <i>offline</i> activities/impacts on the <i>online</i> page
The issue gets more publicity	Online activities and online diffused information get media's and larger public's attention	Due to the page's high <i>online</i> member count and information shared by the leader of <i>offline</i> activities, media attention and online discussion escalate
	The issue gets powerful institutions', Authorities' or corporation's attention	Due to all <i>online</i> & <i>offline</i> activities/impacts and <i>media</i> attention, the campaign's power is recognized by the ferry line and cooperation continues
Discussion continues in media and in offline close	Discussion and activities continue in social media	<i>Media</i> report on the proceedings and the page leader and members continue

networks of people	platforms	discussion on the <i>online</i> page, report proceedings and meet <i>offline</i>
HYPOTHESIS		OUTCOME
Discourse of the issue remains between societal power holders and media => citizens have low communicative power	Group power created online, supplemented with media attention => increased communicative power of networked individuals	Online-originated citizen-organized group pressure and positive consumer lobbying has an effect on corporate decision making => increased communicative power of networked individuals

Overall, although we conclude that it is possible for Facebook pages to develop a Fifth Estate role, there are high thresholds, and the emergence of social movements is the exception rather than the rule. This may be due to various reasons. First, the number of potential online pages with Fifth Estate aspirations is low, because the possibilities to create pages and groups for networking purposes on SNS like Facebook are still dominated by the entertainment and social functions, for which the site was designed. Although entertainment and discussion objectives do not necessarily exclude formation of communicative power, and might well increase the potential for reaching larger communities, these pages are less likely to pursue concrete societal change than to participate in activities that are social and entertaining. Secondly, online social movements may still lack recognition as legitimate actors of society as Internet and SNS activism is seen more as “slactivism” (Morozov, 2009) and as motivated by users’ personal fulfillment, without the ability to create concrete results (Curran et al., 2012).

Nevertheless, SNS do provide a platform for well-organized and led social and political movements. SNS pages in Finland with a legal and culturally accepted basis (non-radical social movements) have gained positive reactions and cooperation from corporations and media, and, despite some hesitation, from political decision makers and government. This may reflect a subtle shift from traditional representative politics towards citizen involvement in decision making and their political empowerment in Finland. In addition, the press adopting news topics from SNS pages and their missions can increase the Fifth Estate's role in societal agenda setting as so called "gatewatchers" alongside the Fourth Estate (see Bruns, 2003).

Conclusions

The Internet is an effective innovative public space, which has the potential to enhance social movements by facilitating individuals to network with other like-minded people in ways that can enhance their communicative power consistent with conceptions of the Fifth Estate. This study shows how the Fifth Estate can be actualized in the context of one SNS, Facebook. Although very limited in frequency, about 1% of Facebook pages created in Finland developed the potential to enhance the communicative power of networked

individuals. No one expects all or most Facebook pages to lead to social movements – that would be absurd.

The importance of this study is that, firstly, the study methods reveal one way of detecting and content analyzing a SNS, and drawing a picture of the Facebook “page” scene from the perspective of enhancing the communicative power of online social movements. Secondly, this study is one example of the possibility of developing operational definitions of the communicative power of online pages, although it leaves many questions unanswered. As neither a scale nor set of online and offline attributes, against which the communicative power of online movements can be measured exists, this study made a move in the direction of providing relative rankings of sites on critical dimensions of both. The study suggests that further research might advance the development of theory and reliable indicators of the impact of SNS and their potential to contribute to a Fifth Estate role.

This study is not without limitations. As there are no available success criteria for achieving communicative power, the study relied much on the researchers’ qualitative analyses, observations and judgments of the Facebook pages and their influence. Thus, the results are guided by qualitative assessments that are subjective but strive to be transparent

and which appear to yield conclusions that have a reasonable level of face and construct validity.

Furthermore, a comprehensive database of Finnish newspapers and their news would require purchasing access to each existing digital news media archive. Consequently, the study relied on other options, such as the Mediabase research tool, which provides good quantitative data but cannot be considered comprehensive due to its current scope and timescale, and the Google search for online news, which usually gives different return results, and whose results are affected by the users' Internet activities. Nevertheless, the analysis appeared to provide a relative ranking of media coverage that would be likely to hold up to the inclusion of further media.

The study gives a view of communicative power formation in a specific online environment, cultural context and target sample, leaving room for various future research possibilities. Similar research could be replicated in different social media and SNS platforms and also in different cultural contexts.

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References

- Bakardjieva, M. (2011). Reconfiguring the mediapolis: New media and civic agency. *New Media & Society*, 25, 91–104. doi: 10.1177/1461444811410398.
- Bennett, W. L., & Segerberg, A. (2012). The logic of collective action: Digital media and the personalization of contentious politics. *Information Communication and Society*, 15(5), 739–68.
- Bode, L., Vraga, E. K., Borah, P., & Shah, D. V. (2013). A new space for political behavior: Political social networking and its democratic consequences. *Journal of Computer-Mediated Communication*, 19, 414–429. doi:10.1111/jcc4.12048.
- Bruns, A. (2003). Gatewatching, not gatekeeping: Collaborative online news. *Media International Australia Incorporating Culture and Policy*, 107, 31–44. Retrieved from http://eprints.qut.edu.au/189/1/Bruns_Gatewatching.PDF/. Accessed September 20, 2015.
- Bruns, A. (2007). Producers: Towards a broader framework for user-led content creation. *Proceedings Creativity & Cognition 6*. Retrieved from <http://eprints.qut.edu.au/archive/00006623/01/6623.pdf/>. Accessed September 20, 2015.

- Carlyle, T. (1846). *On Heroes, Hero-Worship, and The Heroic in History: Six Lectures: reported with Emendations and Additions. In engl. Sprache.* London, UK: Chapman and Hall.
- Castells, M. (2007). Communication, power and counter-power in the network society. *International Journal of Communication, 1*, 238–266. doi: 1932-8036/20070238.
- Castells, M. (2012). *Networks of outrage and hope: Social movements in the Internet age.* Cambridge, UK: Polity Press.
- Champoux, V., Durgee, J., & McGlynn, L. (2012). Corporate Facebook pages: When “fans” attack. *Journal of Business Strategy, 33*, 22–30. doi: 10.1108/02756661211206717.
- Cooper, S. D. (2006). *Watching the watchdog: Bloggers as the fifth estate.* Spokane, DC: Marquette Books.
- Curran, J., Fenton, N., & Freedman, D. (2012). *Misunderstanding the Internet.* New York, NY: Routledge.
- De Tocqueville, A. (1835). *De la démocratie en Amérique [On democracy in America].* Paris, France: Michel Lévy frères libraires éditeurs.
- De Zúñiga, H. G, Jung, N., & Valenzuela, S. (2012). Social media use for news and individuals' social capital, civic engagement and political participation. *Journal of*

Computer-Mediated Communication, 17, 319–336. doi: 10.1111/j.1083-6101.2012.01574.x.

Dutton, W. H. (1999), *Society on the line: Information politics in the digital age*. Oxford, UK: Oxford University Press.

Dutton, W. H. (2009). The fifth estate emerging through the network of networks. *Prometheus*, 27(1), 1–15.

Dutton, W. H. (2012). The fifth estate: A new governance challenge. In D. Levi-Faur (Ed.), *The Oxford Handbook of Governance* (pp. 584–98). Oxford, UK: Oxford University Press.

Ellison, N. B. & boyd, d. m. (2014). Sociality through social network sites. In W. H. Dutton (Ed.), *The Oxford Handbook of Internet Studies* (pp. 15–72). Oxford, UK: Oxford University Press.

Fanilista.fi. (2014). *Listing of the most popular Finnish Facebook pages*. Retrieved January 1, 2014, from <http://www.fanilista.fi/>. Accessed September 20, 2015.

Feezell, J. T., Conroy, M., & Guerrero, M. (2009). Facebook is... Fostering political engagement: A study of online social networking groups and offline participation. Paper presented at the American Political Science Association meeting in Toronto, Canada, September 2009. Retrieved from

<http://irevolution.files.wordpress.com/2009/09/apsa-feezeell-2009.pdf/>. Accessed September 20, 2015.

Finnish Newspaper Association. (2014). *Sanomalehdet verkossa [Newspapers online]*.

Retrieved March 20, 2014, from

http://www.sanomalehdet.fi/sanomalehdet/sanomalehdet_verkossa/. Accessed September 20, 2015.

Flynn, J. (2004). Communicative power in Habermas's theory of democracy. *European Journal of Political Theory*, 3, 433–454. doi: 10.1177/1474885104045914.

Garnham, N. (1983). Public service versus the market. *Screen*, 24(1), 6–27.

Habermas, J. (1962). *The structural transformation of the public sphere: An inquiry into a category of bourgeois society*. [English Translation 1989]. Cambridge, MA: MIT Press.

Habermas, J. (1996). *Between facts and norms: Contributions to a discourse theory of law and democracy*. [W. Rehg, Trans.] Cambridge, MA: MIT Press.

Hidri, A. (2012). The fifth estate: Media and ethics. *Journal of Arab & Muslim Media Research*, 5, 1–27. doi: 10.1386/jammr.5.1.49_1.

Hokkanen, M. (2013, April 24). Tahdon2013-tukikonserissa rokattiin rakkauden nimeen [In the I do 2013 support concert people rocked in the name of love]. *City Digital*.

- Retrieved from <http://www.city.fi/yhteiskunta/tahdon2013-tukikonsertissa+rokattiin+rakkauden+nimeen/5822/>. Accessed September 20, 2015.
- Kushin, M. J., & Kitchener, K. (2009). Getting political on social network sites: Exploring online political discourse on Facebook. *First Monday*, 14(11). Retrieved from <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/2645/>. Accessed September 20, 2015.
- Lai, L. S. L., & Turban, E. (2008). Group formation and operations in the web 2.0 environment and social networks. *Group Decision and negotiation*, 17, 387–402. doi: 10.1007/s10726-008-9113-2.
- Lim, M. (2012). Clicks, cabs, and coffee houses: Social media and oppositional movements in Egypt, 2004–2011. *Journal of Communication*, 62, 231–248. doi: 10.1111/j.1460-2466.2012.01628.x.
- Morozov, E. (2009, May 19). The brave new world of slacktivism. *Foreign Policy*. Retrieved from http://neteffect.foreignpolicy.com/posts/2009/05/19/the_brave_new_world_of_slacktivism/. <? I can't get this presently>
- Newman, N., Dutton, W. H., & Blank, G. (2012). Social media in the changing ecology of news: The fourth and fifth estates in Britain. *International Journal of Internet*

- Science*, 7(1), 6–22. Retrieved from http://www.ijis.net/ijis7_1/ijis7_1_newman_et_al.pdf/. Accessed September 20, 2015.
- Nordenstreng, K., & Wiio, O. A. (2012). *Suomen mediamaisema [Finnish media scene]*. Tampere, Finland: Vastapaino.
- Papacharissi, Z. (2013). A networked self: Identify performance and sociability on social network sites. In F. L. F. Lee, L. Leung, J. L. Qiu, & D. S. C. Chu (Eds.), *Frontiers in new media research* (pp. 207–221). New York, NY: Routledge.
- Rainie, L. & Wellman, B. (2012, May 24). Networked individualism: What in the world is that? *Pew Internet: Pew Internet and American Life Project*. Retrieved from <http://networked.pewinternet.org/2012/05/24/networked-individualism-what-in-the-world-is-that-2/>. Accessed September 20, 2015.
- Rane, H. & Salem, S. (2012). Social media, social movements and the diffusion of ideas in the Arab uprisings. *Journal of International Communication*, 18(1), 97–111.
- Reunanen, E., Kunelius, R., & Noppari, E. (2010). Mediatization in context: Consensus culture, media and decision making in the 21st century, the case of Finland. *Communications*, 35, 287–307. doi: 10.1515/comm.2010.016.

Snow, D. A., Soule, S. A., & Kriesi, H. (2004) Mapping the terrain. In D. A. Snow, S. A. Soule & H. Kriesi (Eds.), *The Blackwell Companion to Social Movements* (pp. 3–16). Malden, MA: Blackwell publishing.

Statistic Brain. (2014). *Facebook statistics*. Retrieved February 10, 2014, from <http://www.statisticbrain.com/facebook-statistics/>. Accessed September 20, 2015.

Statistics Finland. (2014a). *Use of information and communications technology by individuals. One half of Finnish residents participate in social network services*. Retrieved February 4, 2014, from http://www.stat.fi/til/sutivi/2014/sutivi_2014_2014-11-06_tie_001_en.html /. Accessed September 20, 2015.

Statistics Finland. (2014b). *Puolet suomalaisista yhteisöpalveluissa (korjattu) [Half of Finns are on social network sites]*. Retrieved January 4, 2015, from http://www.stat.fi/til/sutivi/2014/sutivi_2014_2014-11-06_kat_004_fi.html/. Accessed September 20, 2015.

Tamminen, J. (2013, March 31). Facebook-ilmiö yllätti isän – “Suuremman luokan tempu” [Facebook phenomenon surprised father – “Larger scale stunt”]. *Uusi Suomi*. Retrieved from <http://www.uusisuomi.fi/kotimaa/58008-875-grammaa-ryhmasta-tuli-ilmio-facebookissa/>. Accessed September 20, 2015.

World Audit. (2014). *Democracy table January 2014*. Retrieved January 25, 2014, from <http://www.worldaudit.org/democracy.htm/>. Accessed September 20, 2015.

Zimbra, D., Abbasi, A., & Chen, H. (2010). A cyber-archaeology approach to social movement research: Framework and case study. *Journal of Computer-Mediated Communication*, *16*, 48–70. doi: 10.1111/j.1083-6101.2010.01531.x.

Appendix

Facebook pages' offline activity evaluations for determining quantifiable values

Page & value	Administrators' offline activities	Members' offline activities
875 grams A=5/M=3	Various offline activities performed by the leader, such as TV-appearances, newspaper interviews, participation in fundraising events, and a published book on the issue. No event creation info in FB.	Members mostly function as a support base in FB. FB wall communication indicates some statements of interest and participation in activities. No event participation info in FB.
General strike 15.10.2010 A=2/M=2	The leader encouraged members to take part in one demonstration on the strike starting date in Helsinki or their home towns. One event presented in FB.	According to news stories, only around twenty people gathered in front of the congress building to protest with posters and megaphones despite indicated will in FB wall. 117 event participation confirmations in FB.
I do 2013 A=5/M=5	Various newspaper and TV interviews and numerous events, concerts, standup shows, picnics and recruiting local leaders to form signature gathering groups on the streets initiated by the leader(s). 11 events presented in FB.	FB wall communication indicates strong interest in and support for various offline activities. 2,339 event participation confirmations in FB.
Kimmo Wilska support group A=1/M=1	No event or other offline activities suggested, encouraged, or reported. No event creation info in FB.	No suggestions or indication of participation in offline activities. No event participation info in FB.
Chow radar A=1/M=1	No event or other offline activities suggested, encouraged, or reported. No event creation info in FB.	No suggestions or indication of participation in offline activities. No event participation info in FB.
I promise to use	Leader has made many FB wall reports	FB wall communication indicates quite

Viking Line ships if new vessels are ordered from Finland A=5/M= 3	of contacting and meeting with company representatives and organizing group celebration cruises. No event creation info in FB.	strong interest in and support for offline activities, e.g. participation in the group cruise, meetings and indications of keeping the cruising promise. No event participation info in FB.
Sensible days A=1/M=1	No event or other offline activities suggested, encouraged, or reported. No event creation info in FB.	No suggestions or indication of participation in offline activities. No event participation info in FB.
Myyrmäki movement A=5/M= 4	Various offline activities organized from streets cleaning, yard sales, and dinners to general meetings initiated by the leader(s). 46 events presented in FB.	FB wall communication and event pictures indicate quite strong interest and participation in offline activities. 2,441 event participation confirmations in FB.
Unusual matters A=2/M=2	Some encouragement and reports of recruiting local volunteers by the leader(s). Mostly info around other projects' events. One event presented in FB.	FB wall communication indicates small levels of interests and participation in offline events. 3 event participation confirmations in FB.
Hate has no room in Finland A=1/M=1	No event or other offline activities suggested, encouraged, or reported.	No suggestions or indication of participation in offline activities.
"Program is barely subtitled" A=1/M=1	No event creation info in FB.	No event participation info in FB.
Save Our Burgers A=1/M=1		
FB: Facebook; A: administrators' numerical overall activity evaluation value; M: members' numerical overall activity evaluation value.		