

Inequality in Local Digital Politics: How Different Preconditions for Citizen Engagement Can Be Explained

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Digital technologies have struggled to achieve more equal participation in politics, the so-called "unresolved dilemma of democracy." Previous research has emphasized the drivers of involvement in digital politics from an individual perspective, but studies looking at the general prerequisites of online engagement in politics are lacking. Not much attention has been directed toward the supply side, namely the online presence of political actors and the structures created by them. Applying a mixed-method design, this article examines the supply of channels for digital politics distributed by Swedish municipalities. Quantitative data collected from municipality websites are used for both a description and explanation of the varying opportunities for involvement encountered by Swedish citizens as a result of where they live. Two extreme cases are then examined in depth in which preconditions for involvement are particularly weak. We find that significant variation exists between municipalities and that these patterns are explained primarily by population size, but also by economic conditions and education levels. The cases show how a lack of policies and unenthusiastic politicians creates poor possibilities for development. The findings also verify previous notions that without demand from citizens, in combination with internal ambition from politicians, successful provision of services for digital politics will be hard to achieve.

KEY WORDS: citizen engagement, digital politics, local democracy, local government, ICTs, Sweden

Introduction

There is no controversy in arguing that much of the modern political process is now digital (Chadwick, 2006). Even though technology has changed the foundation of democracy, information and communication technologies (ICTs) as tools for bringing democracies closer to their utopian ideals have not yet been realized. Paraphrasing Lijphart (1997), the fundamental argument of this study is that the only "unresolved dilemma" of modern democracy, that is, equal participation in political processes, is neither solved nor diminished with the help of digital politics.

This argument is nurtured by findings in recent studies that state that significant variations in opportunities for citizens to politically engage through ICTs remain, even between (e.g., Åström, Karlsson, Linde, & Pirannejad, 2012;

Lee, Chang, & Berry, 2011; Vaccari, 2013) and within (e.g., Bonsón, Torres, Royo, & Flores, 2012; Holzer, Zheng, Manoharan, & Shark, 2014; Reddick & Norris, 2013a; Zheng, Schachter, & Holzer, 2014) otherwise fully democratic states. The main reason is the considerable variation in government supply of conditions for online involvement. Engagement is first and foremost dependent on the right opportunities, meaning the supply of such services (Rose, 2005; Saglie & Vabo, 2009). This study directs attention to how local governments that represent the arena with the lowest barriers for civic engagement design their policies regarding digital politics.

There is currently no comprehensive understanding of the drivers of variation in local online engagement options. Although quantitative scholars studying the local level have hitherto only been able to deliver snapshots of evidence (cf. Bimber & Copeland, 2013), and thereby neglected appropriate tools for capturing rapid and continuous technological innovations, qualitative researchers have struggled to provide anything more than ideographic findings, that is, related to anything beyond specific cases. Not surprisingly, more integrated perspectives have been called for (see e.g., Parvez & Ahmed, 2006). This study combines cross-case explanations with in-depth studies on the different governmental offerings for digital politics from a Swedish perspective. The objective is to identify patterns and explore how varying levels of supply of digital politics in the local Swedish political arena have occurred. The study draws on data that includes all 290 local governments in Sweden for a period of five years (2009-13) and combines this with rich material of a qualitative character collected from two case studies of struggle with digital forms of politics. The case studies were selected to gain insights into cases in which preconditions for participation in digital politics appear to have been particularly restrictive and can thereby provide theoretical leverage in a still developing field.

Sweden represents a well-developed example of a society in which ICTs have had a great impact on many different sectors. For example, Sweden has one of the highest Internet penetrations in the world and also utilizes the technology, at least according to measures of success of e-government and e-participation (United Nations, 2014). At the same time, Sweden is characterized by a considerable variety at the local level, including everything from metropolitan areas to extreme sparsely populated municipalities. The combination of fundamentally good prerequisites for digital politics and substantial subnational varieties creates specific possibilities to provide insights into the question of development of digital politics.

Perspectives on Digital Politics

Declining civic engagement has been one of the most significant concerns related to the development of modern democracies (e.g., Putnam, 2000). However, some have been optimistic and consider that ICTs have the capacity to counteract this (Barber, 2003; Rheingold, 1993). Potentially,

technology can be a remedy to this problem by empowering citizens and creating new spaces for interaction. Still, a critical look is required to analyze how such tendencies are played out and, possibly, combined (Papacharissi, 2010).

Theoretical claims on how to understand the application of ICTs in political processes, often summarized into concepts such as "e-democracy," "digital democracy," or "e-participation," have correctly been characterized as a challenging endeavor (Sæbø, Rose, & Skiftenes Flak, 2008; Susha & Grönlund, 2012). This is because the field is still theoretically immature with embedded vague concepts, but there is increasing effort to identify different positions within this area of research (Dahlberg, 2011).

In a review of definitions of the concept of e-democracy, Coleman and Norris (2005) establish that e-democracy concerns the use of ICTs to enhance democratic structures and processes. This is something of a point of departure for definitions, and alternatives exist that try to narrow its scope. Chadwick (2003) separates out two alternatives, one in which information dissemination and some features of deliberative processes are supplied to the public, while the other has the ambition of being a virtual public sphere involving the civic sector (Papacharissi, 2002). Instinctively, Chadwick's (2003) strategy seems reasonable, separating vertical linkages between citizens and the government from horizontal relationships among citizens in civic society.

The perspective suitable for this study would be directed toward notions of supply of digital politics. To be more specific, this is about maintaining the channels that are preconditions for citizens to engage in digital forms of politics. Saglie and Vabo (2009, p. 388, original in italics) state that this aspect is crucial for citizen engagement: "Online citizen participation in local democracy depends on the opportunities offered by the municipality. For example, citizens can hardly send e-mail to local councillors unless the addresses are posted on the municipal website." Hence, this is an essential part of the overall understanding of the concept, as it is institutionalized in the political system.

The preconditions discussed above call for a definition that can cope with these delimitations without being too specific or losing its empirical applicability. A review of the literature reveals one convincing argument that stresses the advantages of viewing digital politics from a procedural perspective (Grönlund, 2003; Macintosh, 2004; Vedel, 2006). As Vedel (2006) argues, the concept is then embedded in democratic theory, which will add the core issues that form the structure of e-democracy. The most explicit perspective is the one defined by Grönlund (2003), which states that the term e-democracy is only convenient shorthand for ICTs that are used in democratic processes. Both Macintosh (2004) and Vedel (2006) elaborate on this by referring to how such a perspective can be applied to all elements of the policy processes, ranging from activities relating to the supply of information to discussion and decision making. Deriving from these persuasive arguments, digital politics is defined here as the use of ICTs in democratic political processes concerning information, discussion, and decision making.

Explaining Digital Politics From the Local Perspective

Explaining the phenomenon under study requires a theoretical understanding of how political changes are brought about. This study is derived from the understanding of how structural conditions embed ambitions of transformations in any social system, but that changes are brought forward by social actors (Coleman, 1998; Hedström & Swedberg, 1998). In relation to this basic understanding, three more detailed arguments are given. First, social structures embed practices of digital politics and influence the conditions for agency (e.g., Chadwick, 2011). Second, social change is forced forward by individuals. Thus, satisfactory explanations must ultimately be anchored in hypotheses about individual behavior (Elster, 2007). Third, in order to identify agency, the actors' motivations and interplay when reconstructing processes of decision making need to be uncovered (Farrell, 2012). In the following discussion, these standpoints are considered using a theoretical framework that follows two strategies. First, structural influence is sketched out by looking at how economic, technological, and political aspects of society influence the development of digital politics. Second, agency is brought into focus by examining how transformations (although embedded within the aforementioned conditions) that are achieved by actors result in change for digital politics.

Starting with structural conditions, previous research points toward a number of important circumstances that can enhance the development of digital politics. Above all, such approaches have focused on how transformations of the economy toward a postindustrial society have resulted in social and political change. An advanced and knowledge-based economy driven by a well-educated workforce demands online services (Reddick & Norris, 2013a, 2013b), which will lead to incentives for the public sector to invest in mechanisms to support digital politics. However, development of this nature is costly because of the requirements for technological infrastructure and the right human resources. Ceteris paribus, a larger society should have better economic opportunities to develop its online tools in accordance with economies of scale (Viborg Andersen, Henriksen, Secher, & Medaglia, 2007), bearing in mind that financial constraints are experienced as perhaps the top barrier (Norris & Reddick, 2013). Findings from Eastern and Southern Europe (Borge, Colombo, & Welp, 2009; Sobaci & Eryigit, 2015) as well as the United States (Scott, 2006) emphasize population size as a crucial factor for success in digital politics among local-level municipalities. Another argument implies that a smaller population size would reduce motives for and effort in digital politics as closeness is present between political representatives and citizens. Comparative findings are robust, pointing out a negative relationship between population size of a municipality and citizens reaching out to local political actors (Denters, Goldsmith, Ladner, & Rose, 2014).

Without reasonable levels of technological infrastructure, digital politics are not possible. The mechanisms are sketched out by Norris (2001) in terms of how availability of technology sets the boundaries for incentives to develop functions for digital politics; theories in this vein state that technological infrastructure is

the single most important factor for digital politics. This notion has been verified in cross-national studies (Åström et al., 2012; Lee et al., 2011; Williams, Gulati, & Yates, 2014), but the results from examinations at the local level are more ambiguous. However, Bonsón et al. (2012) find that technological development related to investment in e-government services also seems to trigger possibilities for online democratic exchange at the local level.

Digital politics could revitalize democracy. This could be done through increased distribution of and transparency in the spread of political information as well as by encouraging new and more inclusive forms of political participation. However, the success of digital politics could be conditional on the success of other forms of political development. Norris (2001) argues that the institutions of democracy can function as factors that strengthen digital politics and provides evidence supporting this idea. Some examples from a North European local context (Lidén, 2013) do, however, report opposing results: high levels of voter turnout, measured as a proxy for political engagement, are found to be negatively related to levels of digital politics. Drawing from this, we could speculate that achievements in digital politics are above all regarded as necessary in municipalities with nonfunctioning democratic processes and a potential approach for handling a low level of engagement.

Shifting the analytical level to agency, two dimensions can be emphasized. First, structural circumstances will influence crucial stakeholders. Technological and societal developments will put pressure on actors to be alert and modern (Margetts & Dunleavy, 2013) and will spill over to put pressure on the political organization (Reddick & Norris, 2013a). Second, assumptions on agency behavior within political systems could provide crucial guidelines. In relation to the focus of the study, two relevant actors can be identified: politicians and public officials. The effect of technological changes on such actors has become an increasing focus in the literature (e.g., Pollitt, 2011) and has resulted in the formulation of assumptions on how political actors behave in relation to digital politics.

Labeled the "middleman paradox," Mahrer and Krimmer (2005) claim that politicians will oppose the development of digital politics; the politicians may experience such changes as a step back from representative democracy that could ultimately put their own power at risk. Deriving specifically from a local perspective, Firmstone and Coleman (2015) add another element to this argument. Their findings are hard to interpret as anything other than the studied politicians having a half-hearted attitude toward digital politics. Budget constraints are described as the dominant motive.

Turning to assumed agency of public officials, previous studies at the local level have described top officials as "community builders and enablers of democracy" (Nalbandian, 1999, p. 187). Besides such noble motives, the current literature also provides motives from a more administrative perspective; in short, digitization could strengthen discretion and autonomy for bureaucrats and is, therefore, desired (Buffat, 2015).

Research Methods

The theoretical framework presented a model in which structure and agency are decisive for organizing presumptions on how digital politics are developed. To be able to scrutinize theoretical assumptions, mixed methods design to ensure inquiries of both structure and agency are required. To achieve this, a design that integrates both different methods and different types of data is applied. Deriving from Tarrow's (2010, p. 106) metaphor on the value of mixed methods research that is, "putting qualitative flesh on quantitative bones"—this study will provide "bones" through statistical analyses of digital politics at the Swedish municipalities level and "flesh" by complementing such outcomes with two case studies that pinpoint the internal process of the evolvement of such ambitions. This design will facilitate mixed methods integration through two strategies. First, quantitative findings will be used to determine the selection of cases (Seawright & Gerring, 2008). In this study, two extreme cases are to be selected that serve a specific purpose. They will explicitly engage with the question of how varying possibilities of digital politics among societies can be explored from the perspective of agency. Second, case studies will facilitate analyses of how structural conditions interact with agency within the organization and can, therefore, provide a richer perspective of the development of digital politics (e.g., Coppedge, 1999). This is in harmony with the presented logic on how practices of digital politics are both embedded in social structures (Chadwick, 2011) but also driven forward by individuals (Elster, 2007).

Statistical Analysis

The operationalization of municipalities' supply of digital politics is collected from an annual examination carried out by the Swedish Association of Local Authorities and Regions. This investigation is an extensive content analysis of the websites of Swedish municipalities. One theme is the examination of transparency and influence. The focus in this section is on issues that consider how citizens can access information supplied by the municipalities and elected politicians as well as on issues concerning insight about participation in the democratic process (SKL, 2013).

The content analysis enables us to see whether features relating particularly to information but also (though to a restricted extent) to discussion exist fully or partly on municipalities' websites (cf. Vedel, 2006). This study creates an index for 32 of these factors, awarding 1.0 where the information is fully evident and 0.5 if it is partially evident. A mean average is then calculated, meaning that this measurement can vary between 0.0 (no supply of digital politics) and 1.0 (full supply of digital politics) and will function as the dependent variable in the analyses. The collected data set consists of all 290 Swedish municipalities.

Three different themes of structural preconditions that can affect municipalities' work with digital politics have been discussed, and in this section they are operationalized into variables.

A traditional line of argument found in research that focuses on the role of technology in societal development (Norris, 2001) is that knowledge societies, characterized by a modern and well-developed economy as well as a considerable level of human capital, can provide the right conditions for e-democracy. Hence, a higher level of average income and the proportion of citizens with a postsecondary education can be assumed to positively influence demand for digital politics. Even if these two measurements are strongly correlated, they are not completely overlapping, particularly not at an aggregate level. Moreover, economic conditions can be related to population size, creating reasons for including this variable. Investment in digital politics can be costly for a municipality. This can certainly be related to its potential due to population size, but the present economic situation in the municipality could also be an influence. To account for this, a measurement of financial solvency is applied, which shows the proportion of municipal capital in relation to the sum of assets in the balance sheet.

In line with previous research, the technological infrastructure could be more than a condition for digitization of politics: it could also be a driver for development. Arguments from technological determinism combined with evidence from previous studies (Bonsón et al., 2012) make it reasonable to account for such aspects. Focusing on the physical infrastructure would, though, be a troublesome restriction, and to cope with this, data for both wired Internet access, including conditions for high-speed Internet, and wireless Internet access will be included. Therefore, a higher proportion of municipalities' household having access to the Internet through DSL, fiber, or wireless can be assumed to pose a positive influence on work with digital politics.

Although some scholars in the field have tried to draw from democratic theory (Lidén, 2013), the realm of digital politics is especially undeveloped (cf. Macintosh, Coleman, & Schneeberger, 2009). Due to these uncertainties, this study derives from the idea that political civic engagement can positively influence the political system (Putnam, 1992). As a proxy for political engagement, two measurements are used: voter turnout and use of preferential voting. A high proportion of *voter turnout* and the use of *preferential voting* can be assumed to positively influence digital politics.

Qualitative Analysis

Statistical findings are complemented with within-case analyses. Two extreme cases are selected where the opportunity for digital politics has been proven to be utterly poor (Seawright & Gerring, 2008, p. 301). This strategy is chosen to illustrate the considerable variation within otherwise fully democratic states, such as Sweden, and to shed light on the decision-making process that has created such an outcome and thereby generate additional explanations to the phenomenon under study. The time frame of 2009–13 is chosen as it corresponds to the quantitative data.

Exploring and Mapping Digital Politics in Sweden

Analogous to democracy, the appliance of ICTs in political processes is not a static phenomenon, and due to the never-ending technological innovations, it seems reasonable to assume that the technological development, obviously a necessary condition for the concept, will create additional opportunities for increasing the level of digital politics.

In Figure 1, Swedish municipalities' level of digital politics over time is illustrated through a series of boxplots. As is evident from this visualization, the general tendency is an annual increase in services of digital politics, although the growth rate has diminished over the years. At the same time, a quite polarized development is visible. As an example, the lowest value in the distribution has not increased from 2011 to 2013. In addition, a significant proportion of Swedish municipalities have scored low at least since 2010. In the light of rapid technological development and the fact that the index measures the same factors in 2009 as in 2013, this must be regarded as quite surprising.

Explaining the Variation in Digital Politics

The five models in Table 1 present multivariate regression analyses (OLS) of Swedish municipalities' level of digital politics from 2009 to 2013 with the dependent variable being the index of digital politics for each year. Turning to the estimations, they reveal models with an explanatory power of between 34 and 43 percent, although the number is declining over time. As this is a trend that inverts the increasing level of digital politics, it could signify that something is lacking in the theoretical development.

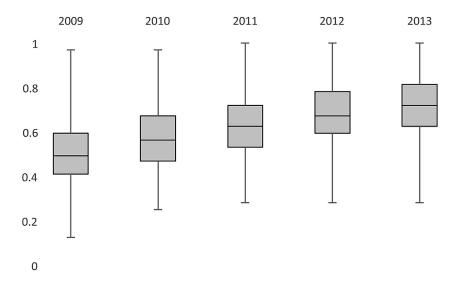


Figure 1. Boxplot Over Level of Digital Politics Among Swedish Municipalities.

Table 1. Estimations of the Local-Level Digital Politics in Sweden

Cross-Section Analyses						
	Model 1 Model 2 (2009) (2010)		Model 3 (2011)	Model 4 (2012)	Model 5 (2013)	
Average income	0.0003 (0.0003)	0.0002 (0.0004)	0.0002 (0.0003)	0.00001 (0.0003)	-0.00003 (0.0003)	
Proportion with secondary education	0.005* (0.002)	0.005* (0.002)	0.004 (0.002)	0.003 (0.002)	0.002 (0.002)	
Population size (log)	0.065** (0.012)	0.073** (0.012)	0.065** (0.012)	0.060** (0.012)	0.058** (0.012)	
Financial solvency	0.001* (0.0003)	0.00007 (0.0004)	0.0004 (0.0004)	0.001* (0.0004)	0.001* (0.0004)	
Internet access— DSL	-0.208 (0.107)	-0.241 (0.139)	-0.071 (0.121)	-0.027 (0.123)	-0.066 (0.120)	
Internet access— wireless	0.139 (0.144)	1.422* (0.578)	0.460 (1.171)	0.105 (1.198)	0.309 (1.343)	
Internet access— fiber	-0.014 (0.034)	-0.006 (0.036)	0.008 (0.032)	-0.012 (0.032)	-0.005 (0.033)	
Voter turnout	-0.004 (0.002)	-0.004 (0.003)	-0.005* (0.002)	-0.003 (0.002)	-0.003 (0.002)	
Preferential voting	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.002 (0.001)	-0.003* (0.001)	
N Adjusted R ²	290 0.424	290 0.428	290 0.375	289 0.345	288 0.337	

Notes: Entries are coefficients followed by standard errors. All independent variables are lagged one year besides voter turnout and preferential voting. Multicollinearity is controlled for, not allowing a variance inflation factor larger than 5.0. *Significant at the 0.05 level, **significant at the 0.01 level.

Considering conditions related to economy and development, level of education is significant during the first two years but shows a decreasing effect and loses significance, whereas income levels completely lack influence. A similar pattern has been found elsewhere (Reddick & Norris, 2013b) and a reasonable assumption would be that it is rather the sociocultural effects of education than the economic consequences of it that function as a driver for digital politics. Since previous research has not included any significant time spans, the diminishing effect of education is more of a novel finding. One cause could be that experiences of technological paradigms, of this character, appear to diffuse from social elites to the broader population after time, making educational levels less decisive.

Population size has unquestionably the strongest effect on the dependent variable of all the predictors and thereby mirrors the results of what is already known (Borge et al., 2009; Sobaci & Eryigit, 2015). In addition, the financial solvency of each municipality reports positive significance in three of the five models. Hence, empirical results from an aggregate level do support what previously has only been theoretical assumptions (Viborg Andersen et al., 2007) or data collected from surveys (Norris & Reddick, 2013), namely that a positive economic situation will enhance conditions for digital politics.

Turning to technological dimensions, the surprising outcome is that only one of the predictors reports significance and that for only one of the studied years; wireless Internet access yields a significant effect in 2010. Keeping in mind the robust findings from the national level in regard to the effect of technological infrastructure on digital politics (Åström et al., 2012; Lee et al., 2011; Williams et al., 2014), the Swedish situation both diverges from this pattern as well as indicates that different effects can come into play at the subnational level. A closer look would still be required since wireless Internet access at least hints that technological requirements could be a potential driver, although not being convincing enough in this case.

Finally, regarding the influence of political variables, the effect of voter turnout reveals a similar pattern, only being significant in one of the five years. The direction is unexpected even if previous research (Lidén, 2013) has reported similar results. Further, the predictor of preferential voting reveals a similar pattern, reporting a negative effect in 2013.

To conclude, the quantitative inquiry of municipalities' variation in digital politics points out the decisiveness of the structural conditions originating from an economic line of reasoning (cf. Norris, 2001). Potentially, however, different mechanisms are put into play, relating both to the importance of the expected demand from a well-educated citizenry as well as municipalities' own financial preconditions and their advantage of achieving economies of scale. At the same time, technological and political circumstances that based on previous assumptions could be expected to show importance must, in this example, be discarded.

A Qualitative Look at Digital Politics: Selection of Cases and Analytical Techniques

Selecting extreme cases builds on the logic of identifying cases that represent unusual values, meaning that a strategic selection for the dependent variable will be utilized. As discussed extensively in the literature (King, Keohane, & Verba, 1994), this could make both descriptive and causal inference challenging since there are no variations to address. However, this approach, in conjunction with the logic of a most different systems design (Przeworski & Teune, 1970), creates a framework in which evidently important structural factors are controlled for. This enables an analytical shift to the micro-level in which the unraveling of the black box of decision making can be approached.

The two selected cases are the municipalities of Gagnef and Kiruna. In Table 2, average data for these cases on four variables are presented, including the dependent variable and the three determinants from cross-sectional analysis that

Table 2.	Summarizing	cases
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	Gagnef	Kiruna	National Average
Average index of digital politics	0.394	0.366	0.617
Average population size	10,063	23,025	15,274 (median)
Average proportion with secondary education (%)	17.05	16.97	17.95
Average financial solvency	28.9	37.8	50.2

shows significance for at least 2 of the 5 examined years. The values given are based on average means.³ In connection with the logic for a most different systems design, variation is apparent among otherwise influential structural conditions.⁴

Concerning the municipalities' supply of digital politics, both Gagnef and Kiruna report quite extreme values in which opportunities for digital politics through government channels have been poor for all examined years. As an example, in 2012, Gagnef and Kiruna report the lowest value for the index of municipalities with a population above 10,000 inhabitants. Likewise, they have a lower index increase over the measured years than the national average.

Turning to Gagnef's and Kiruna's scores for the independent variables, they show a variation that is in line with the criteria for selection of cases. Gagnef is placed below the national median of population size while Kiruna is placed above. Concerning the proportion of citizens with secondary education, both cases have, on average, quite similar values. However, five out of six years have reported considerably larger differences between the cases than captured by the average mean, which tends to indicate an incorrect equalizing effect.⁵ Finally, Gagnef reports a significantly lower financial solvency than Kiruna, notwithstanding that both municipalities are below the national average.

Both municipalities were visited in autumn 2014 and six interviews with informants were held in each, including a smaller number by telephone. Besides interviewing the chair of the municipal executive board, leading opposition politicians were also included. Interviews were also held with a number of public officials, such as municipal chief executives, public officials in leading positions as well as those working directly with these issues. Interviews were semi-structured and were recorded and thereafter transcribed. An interview guide was used that included three more generic themes⁶ as well as specific questions related to the local conditions. The records for each municipality's protocols from the executive board and the local assembly were screened for tasks related to digital politics and, when such were detected, additional documentation was required.

The results are analyzed with the ambition to reconstruct those decision-making processes that have resulted in a low level of digital politics. Even if structural conditions are controlled for logically with selection criteria, an explorative analysis of a qualitative nature will still be helpful in elucidating how such conditions will affect agency. The qualitative analysis will be guided by the two assumptions of agency behavior. First, politicians are expected to oppose the

development of digital politics (Mahrer & Krimmer, 2005). Second, public officials, on the contrary, will support the development of digital politics (Nalbandian, 1999). An intensive focus enables a process-tracing strategy that aims to explain a specific outcome (Beach & Pedersen, 2013) through reconstruction and categorization of occurred events. Of specific importance is the temporal dimension of the cases, with the ambition of reconstructing relevant events through a within-case approach that enables reasonable causal ordering to be modeled.

Gagnef—Traditional Forms of Engagement Dominate

Gagnef, a small Swedish municipality located in the western part of the middle of the country, resembles the historical illustration of Sweden with its traditional agricultural landscape with the largest Swedish river, the Dal River, ever present in the surroundings. The dominant competing political parties in Gagnef have been the Social Democratic Party and the Centre Party. The latter has, during the last two terms of office, ruled the municipality together with the other parties from the Alliance.⁷ In interviews, the local democracy is described in ambiguous terms. Informants are united in stating that the municipality is a polity with an engaged citizenry, specifically expressed through a strong civil society. This is exemplified by the latest chair of the executive board, Sofia Jarl, (Interviewed: 22-10-2014): "The municipality has almost no charge for road maintenance ... the 70 road maintenance associations handle this." The internal democracy within the municipality is described in gloomier terms. Irene Homman (22-10-2014), the leading opposition politician during 2012-14, describes the local politics as lacking transparency and being ruled by a limited elite. Although this could be a tendentious opinion, the creation of a new party "Kommunal Samling" in 2014, with its leading statement of "It is time to reintroduce democracy in Gagnef" (Kommunal Samling Gagnef, 2015), strengthens this perception. Parts of the electorate appeared to share this opinion, indicated by the party gaining around 13 percent of the votes.

Reconstructing Gagnef's work with digital politics from 2009 to 2014 results in portraying an inefficient process in which the relationship between politicians and public officials resembles a continuous power struggle. The domain for the government website was registered as early as 1995, making it one of the first municipalities to be online (Hellquist, 08-08-2011). Any long-term policy for developing digital politics does not, however, exist (Gyllander, 22-10-2014). The latest more strategic efforts were done in 2006–10 in which the aim was to develop a better match between citizen demand for services and what was supplied. However, there was little development of the website during the examined years, hence, verifying the quantitative data. Some exceptions include individual Facebook pages for different parts of the administration and a specific project where adolescents are consulted through a text-message panel on topical questions (Stenberg, 27-10-2014). Digital politics has still been receiving more political attention during the last two terms of office than previously (Hellquist, 22-10-2014).

Although the public official in charge of these issues has continuously applied for funding, it has not been prioritized by politicians. Thus, what can be interpreted as increased political engagement has, hitherto, mostly been empty words. Even if leading public officials have had a desire to enhance digital politics, they have not allocated sufficient funding. As stated by the official in charge of information, Tomas Hellquist (22-10-2014), since no financial scope is given for development the administration hesitates to engage in anything that is not prioritized to handle these issues. In 2010, the executive board appointed a committee to deliver a Web strategy proposal, mainly focused on the design and content of a new website (Hellquist, 08-08-2011). This process used the indicators for measuring digital politics as employed by the Swedish Association of Local Authorities and Regions. However, this development has been considerably delayed due to changes in priorities in the administration.

The local leader for the liberal-conservative Moderate Party, Stefan J. Eriksson, has, however, frequently raised the question of a neglected digital politics. There are two significant examples of proposals. First, in 2011, Eriksson proposed that council meetings should be filmed and made available through the website (Eriksson, 2011). The executive board approved this motion with the reservation of first investigating the technology and funding required. However, with the help of a consultancy, the conclusion was that this would be too costly (Hellquist, 22-10-2014). Second, in 2014, Eriksson proposed involvement in additional digital channels saying that it was inexcusable that the municipality was not present in those channels where their citizens were (Eriksson, 2014). To some extent, it is surprising that despite Eriksson's intense engagement, none of these proposals, nor two other suggestions on the same theme launched in late 2014, have materialized, especially considering that his party was the second largest within the ruling alliance. Regarding this matter, Eriksson (22-10-2014) clearly states that his ideas have not been listened to. It is not that alliance colleagues oppose Eriksson's ambitions but they have not been prioritized.

In summary, Gagnef's work with digital politics from 2009 to 2014 shows some contradictory events. From the administration perspective, any significant ambitions have not, besides the ongoing project for a new website and the one targeted at adolescents, been achieved during this period. Shifting focus, there is still an increased support among politicians, indicating that this issue, in the long term, must be focused on. Three main reasons for a lack of support for digital politics can be identified. First, taking into account structural preconditions, such as population size and education levels, most political engagement appears to be channeled through a traditional civil society and since such forms of exchange are characterized by closeness digital forms of communication can appear to be redundant (e.g., Denters et al., 2014). Second, digital politics are not considered a priority. Some form of resistance, at least financially, is evident, specifically bearing in mind that the ruling elite still has incorporated at least one strong proponent of digital politics. Third, the administration has reported a somewhat cautious attitude toward engaging fully in digital politics, referring to financial reasons and not being willing to engage without doing it whole-heartedly, and it still raises questions if the present conditions could not lead to higher ambitions. The reduced priority of a new website reflects this.

Kiruna—Online Dialog Is Frequent But Without Municipal Participation

The northernmost region of Sweden, where Kiruna is located, has for about 6,000 years been settled by the Sami people, with the modern life of the city founded in 1900. Since then, Kiruna has expanded as a settler town and now faces a completely unique situation as the current town center will be moved to enable future mining of iron ore. Kiruna is known for hosting several local political parties and this has created quite unusual and broad coalitions as well as some political turbulence. The dominating force has always been the Social Democratic Party and during the examined time, 2009-14, the chair of the executive board represented this party, though at times in coalition with everything from left-wing parties to more liberal ones. The current chair of the executive board, Kristina Zakrisson (26-01-2015), describes the local political arena as being characterized by a tough atmosphere, a situation that has also influenced digital politics. The political climate is the main reason for her not engaging in social media even if she communicates online through a blog. Likewise, the leading opposition politician, Gunnar Selberg, representing the Centre Party, utilizes similar arguments, although he takes part in online discussions: "Facebook is just a nightmare ... There are so many haters there" (11-12-2014).

Kiruna's work with digital issues has been through a number of phases. Ulrika Hannu, in charge of information at the municipality, describes previous websites using a design based on the internal organization rather than incorporating a citizen perspective. However, in 2013, an updated version was launched which included a changed graphic profile, although without adding new services. However, functions that enhance dialogue have not, aside from claims for engagement in social media, been requested by citizens at all. The quantitative information suggests that small steps have been taken in a positive direction. Following from this, a few departments from the organization have got their own Facebook pages. A comprehensive strategy has, however, not been reached (Hannu, 12-12-2014). According to leading public officials, a long-term policy, including measures for taking more of a holistic approach concerning these matters, has been lacking. Another illustrative example is the fact that Kiruna, as the only municipality in the county, chose to not participate in the creation of an e-committee with the aim to realize national ambitions for e-society. Due to uncertainties, such as risking local influence as well as hazards related to technological harmonization, public officials recommended that leading politicians refrain from this cooperation (Dahlberg, 11-12-2014; Kiruna Municipality, 2013).

Hannu (12-12-2014) describes diminishing resources over the last decade, including a lower number of employed staff today. Others, such as the deputy municipal chief executive Mats Dahlberg (11-12-2014), state that most resources have been directed toward the development of strengthening digital infrastruc-

ture in the wider municipality. Concerning the work with digital politics, a process driven by the administration is most apparent. The municipal chief executive, Peter Niemi (11-12-2014), cannot recall any significant differences on this matter due to different political leadership. Dahlberg (11-12-2014) stresses that these issues have been initiated by the administration after screening for relevant examples of development. Politicians have been receptive when presented with the need for developing digital channels, although have not been the driving force. Selberg presents a similar narrative, indicating that the measures taken represent public officials' ambitions about portraying the municipality as a serious organization. In Selberg's words, "It is not about getting the democracy to work. It is about creating the image, strengthening the trademark ... I think public officials want to tell municipal chief executives from other municipalities, when they are attending a conference for municipalities and county councils, well what have you done in Kiruna then? One cannot say that ... we have not done anything" (11-12-2014).

A somewhat unexpected circumstance noticed in Kiruna is how the media, compared to other cities outside the metropolitan areas, tend to expand rather than reduce their local coverage. As Peter Niemi (11-12-2014) says, "Kiruna has always been interesting concerning media coverage. But now it is exceptional." In reply to a direct question of whether this has reduced the pressure from the municipality to act as a local distributor of information, several of the informants state that this has probably increased citizens' feeling of being up to date. As Hannu (12-12-2014) argues, "I suppose one feels not uninformed." Similarly, great distances and at least a considerable population do not appear to constrain means of communication within the local municipality. Niemi (11-12-2014) says that citizens in Kiruna are used to direct ways of communication: if they want something, they just visit the town hall, telephone, or email.

When summarizing the analyzed events in Kiruna, two circumstances seem particularly decisive. Concerning the internal organization and behavior by key actors, the development appears to be driven almost completely by the administration. Any demands from citizens, channeled through their representatives, or originating from leading politicians are hard to grasp, the latter being an indication of either lack of interest or unwillingness to challenge the traditions of representative democracy (Mahrer & Krimmer, 2005). Rather, aspirations from the administration of reaching at least decent levels represent the dominant force. The reduction in resources will lead to limitations on what ambitions are achievable. Moreover, citizens in Kiruna have good opportunities for information about local politics. Through vibrant local media and uncomplicated, albeit mostly traditional, communication with the municipality, demands for more digital services appear to have been circumvented. Any deficit of information is hard to prove, though the quality is another matter. Still, continuous discussions about local democracy are occurring in Kiruna. One could imagine that if more information came straight from "the horse's mouth" or additional means of exchange with the official side of Kiruna, it could lead to a more fruitful discussion.

Comparing Cases

With the logic of the criteria for case selection, Gagnef and Kiruna diverge on potential structural determinants of digital politics. As has been evident from the depiction above, differences appear from a closer look at local circumstances: there seems to be no noticeable demand for online dialog in Gagnef, whereas Kiruna constantly faces rather dramatic and harsh disputes online. Further, Kiruna has an unusually well developed local media, whereas Gagnef has a civil society with embedded traditional associations as crucial actors for local engagement.

It is also interesting to look at the common characteristics. Three circumstances should be highlighted. First, a long-term policy is absent in both cases. One interpretation would be that this has neither been called for by the political leadership nor has it been prioritized by the administration. As indicated by research from other contexts (Firmstone & Coleman, 2015), this can be due to a lack of expertise and challenges in moving to more sociopolitical questions. A strategy of this character will reflect a condition that will have an effect on agency but that will require qualitative assessments to be grasped. Although strategies and plans are important to achieve success, they need to be transformed into action. Second, without one exception, no leading politician has described ambitions of digital politics in an enthusiastic way. Examples from Gagnef are telling, whereby the profound engagement of the local leader of the Moderate Party has not been sufficient to create substantial advancements. This is close to verifying Mahrer and Krimmer's (2005) assumptions of politicians being resistant, even if the motives for this are hard to uncover. Third, behavior of public officials is in no way self-evident. The findings indicate a fairly motivated administration that keeps the system working sufficiently but hesitates to do more without funding. Also, it is clear that the administration has not taken on the role of community builder (Zheng et al., 2014).

Conclusions

A positive trajectory of digital politics in Swedish municipalities is apparent during the examined time period. However, great differences still exist for citizens, depending on where they live, when it comes to opportunities for engagement in local politics via official municipal sites. There is ample evidence to suggest that population size has a positive influence on Swedish municipalities' level of digital politics. Linked to this is the idea that the preconditions that a larger population creates in conjunction with a sufficiently strong local economy is decisive in the Swedish case, whereas any potential importance of technological or political preconditions can be rejected based on the outcome of quantitative estimates. In line with the argument by Viborg Andersen et al. (2007) that efforts of digital politics are costly, and with the notion that larger societies have better conditions for carrying such costs, prior perspectives on how financial aspects constrained an attempt to evolve digital politics (Norris & Reddick, 2013) are placed in a wider context. This corroborates both theoretical assumptions and

survey data on how certain preconditions also on the aggregate level will encourage development in digital politics. Further, this implies that methods of distributing information and channels for maintaining continuous forms of dialog are to a larger extent digital in larger and better-off societies, while "analog" methods prevail in smaller and poorer ones. Even if such societies could also reflect well-functioning political systems, there is a risk of increasing inequalities between municipalities, in which citizens in one municipality face a battery of possibilities, while in another their options are much more restrained.

Turning again to the two extreme cases with poor possibilities for online engagement, theoretical assumptions behind politicians' efforts concerning digital politics appear to be modest. This tendency is indeed an additional empirical evidence that corroborates Mahrer and Krimmer's (2005) original argument of the expected scepticism from politicians. Despite some deviating examples of pressure from politicians and the administration, politicians have resisted, mainly referring to economic restraints. Motives originating in a reluctance based on the possibility of digital politics circumventing representative democracy are harder to substantiate.

In general, structural conditions of this kind will restrain possibilities. However, if internal strategies of digital politics had been applied, they could function both as a way to structure efforts within this area as well as to play the role of internal pressure on how to prioritize. The role of public officials is more intricate. They are in both cases more dedicated to developing these issues than the politicians but it would be an exaggeration to claim that they function as either community builders (Nalbandian, 1999) or act in order to increase their own discretion (Buffat, 2015). Rather, public officials are loyal to leading politicians but tend to uphold the minimum level of digital politics even if funding is inadequate. Combining these intrinsic organizational aspects with what appears to be a low demand from the citizenry, previously pointed out as a substantial driver (Reddick & Norris, 2013a), these two cases indicate that profound and successful development of local democracy via the help of ICTs will not be solved in-house without commitment and guidance. At least in the Swedish case but plausibly also elsewhere, a number of the discussed preconditions need to coincide to achieve success in digital politics, involving both the right surrounding conditions as well as motivated and committed actors. Future research could indeed continue the quest for identifying the combination of such circumstances in other contexts as well.

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Notes

- 1. See Appendix B for details about this index.
- 2. Temporally, the dependent variable is measured on five occasions, 2009–13, while the independent variables, besides those of a political character, indicate the years before these (t-1)

- and therefore range from 2008 to 2012. The index is based on indicators that are internally significant, and an estimation of the Cronbach's alpha for data reflecting 2013 gives a value of 0.783.
- 3. All calculations are derived from municipalities as the applied unity. Independent variables reflect the mean for the years 2008–13, whereas the dependent variable reflects the years 2009–13. Since a few Swedish municipalities have a much higher population size than most, median values are calculated for each year and then averaged over the years.
- 4. Although not in focus for the rationale of the case selection, it can still be added that there are also differences between the studied cases on other potentially important factors. In Gagnef, the voter turnout is on average higher than in Kiruna, whereas the use of preferential voting is more frequent in Kiruna than in Gagnef. Both municipalities report high levels of access through wireless connection or DSL but Kiruna reports a considerably higher proportion of households with the possibility to access Internet through fiber than is the case in Gagnef.
- 5. The main reason for this is that Gagnef has increased their educational level considerably, from being behind Kiruna to now reaching higher levels. As an example, in 2008, Kiruna reported a score 0.43 percent higher than Gagnef. However in 2013, Gagnef reported a score 0.36 percent higher than Kiruna. Hence, actual differences are more important than revealed by the average value.
- 6. These were (i) general perspectives on democracy in the municipality; (ii) description of efforts concerning digital politics; and (iii) explanations about constraining or supporting circumstances concerning digital politics.
- 7. This involves the Moderate Party, the Liberals, and the Christian Democrats.

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Appendix A. Descriptive Statistics

	Year	N	Min.	Max.	Mean	Std. Deviation	Source
Index of digital politics	2009–13	1,449	0.125	1.000	0.617	0.156	SKL (2009–13)
Average income	2008–12	1,450	185.8	480.4	241.3	32.3	Statistics Sweden (2014)
Proportion with secondary education	2008–12	1,450	9.6	46.9	17.8	5.9	Confederation of Swedish Enterprise (2014)
Internet access— DSL	2008–12	1,450	0.529	1.000	0.958	0.07	Swedish Post and Telecom Authority (2014)
Internet access— wireless	2008–12	1,450	0.19	1.000	0.996	0.033	Swedish Post and Telecom Authority (2014)
Internet access— fiber	2008–12	1,448	0	0.999	0.351	0.247	Swedish Post and Telecom Authority (2014)
Voter turnout	2009–13	1,450	59.5	90.5	81.1	3.5	Statistics Sweden (2014)
Preferential voting	2009–13	1,450	19.1	72.0	35.1	7.6	Election Authority (2014)
Population size (log)	2008–12	1,450	7.8	13.7	9.82	0.941	Statistics Sweden (2014)
Financial solvency	2008–11	1,449	-14.2	86.6	50.2	18.1	Database for Local and County Councils (2014)

Appendix B. The Dependent Variable

Indicator Presented on the Web Page

The complete budget

General information about how the municipality compares with other municipalities

The work on how complaints and opinions are handled

Information about coalition, alliance, and technical Contact information for chairpersons of the cooperation in elections or the like

Information about email addresses for all the politicians in the municipal council and on the committees

Frequently asked questions are collected

The complete annual report is presented Possibility of subscribing to electronic newsletters

Information (or details of agenda, time, and place) about municipal executive board meetings

Documents for municipal council meetings before meetings have occurred

Documents for committee meetings before meetings have occurred

Protocols of municipality's executive board meetings

Possibility for citizens to search in the municipality's records

The web page allows information to be heard The web page has information in sign language

Municipal council meetings are distributed through web-TV

A simplified version of the budget

General information about how complaints and opinions are handled

Information on distribution of seats from the last election

municipal council, municipal executive board, and committees

Information about the telephone numbers of all the politicians in the municipal council and on the committees

A search function and an A-Z index with municipality's responsibilities and contact persons for these

A simplified version of the annual report Information (or details of agenda, time, and place) of municipal council meetings

Information (or details of agenda, time, and place) about municipal committee meetings

Documents for municipality's executive board meetings before meetings have occurred Protocols of municipal council meetings

Protocols of committee meetings

The web page is adapted to be easy to read

The web page is adapted for the visually impaired Information about municipality activities are found in languages other than Swedish Information about municipality's insurance