3 Citizen and civil society perspectives on cyberspace in the European High North

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Executive Summary

This chapter draws attention to the effects that cyberspace and the use of information and communication technologies (ICTs) have on citizens and civil society organisations in the European High North (EHN). We particularly examine the benefits and constraints arising from digitalisation in Northern Norway. This is further explored from a community, regional and cross-border perspective. The qualitative methods of analysis used include structured and semi-structured interviews. The interviews were conducted at five different non-profit civil society organisations. Additionally, a workshop using semi-structured questions was conducted with local inhabitants of Tromsø.

The results of our work include a framework of analysis that can be used as a tool to understand and study civil society in light of the changes brought by digitalisation and ICTs. Moreover, preliminary findings and observations on the perceived integrating and disintegrating effects of digitalisation on civil society in Northern Norway are presented. Civil society in the EHN is both the subject and object of multiple digital and cybersecurity policies. In this regard, our future research will focus on cybersecurity and civil society developments in Northern Norway and will include other case studies, a larger study sample and the application of mixed research methods.

3.1 Introduction

The emergence of cyberspace, the widespread use of information and communication technologies (ICTs) and the digitalisation of important societal services have transformed the way of life for individuals, communities and societies. It is therefore important to move from a mere technological understanding of cyberspace and ICTs to a more profound understanding of the effects of ICTs on democratic politics, societal processes, changes and emancipation.

This chapter examines the beneficial effects as well as the downsides and risks arising from digitalisation and its implications for citizens and especially civil society in Northern Norway. Civil society can be seen as a major component of the society–state relationship, and this relation is essential in defining the socio-political system of any modern state.

As with other communities in the European High North (EHN), local communities in Norway are objects and subjects of a diverse array of digital policies. On the one hand, this means that they have a decisive role in co-defining post-modern cyber reality. On the other hand, it means that they are vulnerable to the pressures of globalisation and nation-state policies.

We identified a lack of research and case studies on the effects of cyberspace on citizens and civil society in the EHN. Our task was to first develop a generic framework of analysis to make sense of digitalisation/civil society interaction that is applicable in this region and

beyond and to second use this tool to understand and empirically analyse civil society in light of changes brought about by the emergence of cyberspace.

Our research addresses human security questions in Northern Norway to give a voice to citizens, local communities and civil society. It particularly focuses on economic, social, political and environmental dimensions from the perspective of individual citizens/inhabitants and civil society organisations. Although there are always several causal factors affecting the formation of societies, our task leads us to focus especially on cyberspacerelated phenomena, such as the internet, social media, ICTs and so forth.

3.2 Cyberspace and civil society

Our initial research sought to illustrate and analyse some of the effects of cyberspace on civil society. In order to do so, a framework for analysis was created. This was used in conjunction with small-scale observations conducted at civil society organisations. We then mainly focused on themes such as self-organisation, participatory democracy, participation in governance, immigration issues and cross-border cooperation. Additionally, our work has pinpointed some of the threats and risks created by cyberspace.

Our work also highlights cyber-dependent infrastructures and vital societal functions in the context of long distances, limited accessibility and harsh environmental and climatological conditions. Challenges and threats arising from social phenomena such as cross-border organised crime, terrorism, jihadism, xenophobic groupings and radicalisation are also addressed. We started with an extensive literature review in order to identify the research problems and gaps in the aforementioned research areas. Methodologically, relevant statistics and data such as qualitative interviews and social media outputs were collected. The initial data collection took place in Tromsø and Oslo. The selected and detailed case studies allowed us to address the issues mentioned under the two blocks.

Although the main geographic focus is on Northern Norway, our research also includes some comparative perspectives between Northern Norway, Norway at large, other Nordic countries and beyond. A complementary, comparative approach is useful to gain understanding of whether location makes a difference in cyberspace, and if so, to understand the mechanisms through which this has developed.

3.2.1 Research questions

The research questions addressed in this study include:

- What effect has the emergence of cyberspace and ICTs had on civil society (citizens) and civil society organisations in the Norwegian High North?
- What advantages/benefits (social, economic, organisational, etc.) do civil society organisations in the Norwegian High North experience or have experienced over the last years? due to the use of the internet and ICTs?
- Regarding cyberspace and the use of ICTs, what constraints or disadvantages do such organisations experience?
- How have particular organisations changed and if so, through which mechanisms?

- Has a transnational dimension enhanced the emergence of cyberspace? If so, how or through which mechanisms?
- Have ICTs enhanced political participation and contact with authorities? If so, how?
- Has cyberspace enhanced or decreased social phenomena such as radicalisation, extremism or xenophobia? If so, what have been the effects?
- Have cyberspace and ICTs helped further cross-border communication and the presence of organisations? If so, how?

3.2.2 An analysis of cyberspace and its effects on civil society

Numerous societal and organisational changes have appeared as a result of the emergence of cyberspace and digitalisation. In order to analyse the areas in which such changes have taken place, a framework for analysis was created to classify and understand the nature of these changes.

Our first publication on the subject (in Montalvan Castilla and Pursiainen, 2019) is an exploratory study that examined the effects of cyberspace on one part of a democratic society, namely civil society.

Civil society is a major component of society–state relations, and these relations can be understood as the main ingredient in defining the sociopolitical system of any post-modern state. Thus, in order to argue that the emergence of cyberspace is constitutive as to the nature and characteristics of civil society, we must move from a mere technological understanding of cyberspace to a more profound understanding that considers democratic politics and emancipation. Civil society is a very complex issue, and the concept has been the focus of political philosophers in the past two centuries. Although the issues at stake amount to a veritable battlefield of different conceptions, we have simplified the issue by dividing the understandings of civil society into four categories: apolitical, political, transnational and 'uncivic' (for example, the mafia) civil societies.

Consequently, we are concerned with the question of what kinds of civil society cyberspace enables or enhances and what kinds it limits or constrains. This framework for analysis is presented in Table 1.

Effects of digitalization	Apolitical civil society	Political civil society	Transnational civil society	Uncivic civil society
Enhances	Entrepreneurship (and possibly individualism)	The construction of social and political consciousness	Cross-border learning and exchange of ideas	Manipulation of popular opinion
	Visibility	Visibility	Cross-border concrete collaborative	Recruitment and mobilisation intolerance- or violence-based
	Mobilisation and recruiting	Mobilisation and recruitment	efforts and mobilisation	extreme right- wing, left-wing and jihadist groupings
	Two-way and mass communication	Two-way and	Cost-reduction and efficiency	Cyber crime
	Cost reduction	communication		targeting to cyberspace assets, or using it as a
	and efficiency	Bottom-up initiatives to challenge or influence elite decision-making		tool to reach non- cyber assets

Constrains	Resource-	Political	Cyber security	Communication
	consuming, and	manipulation	problems	spaces can be
	therefore favours	through	(sensitive	infiltrated,
	larger	cyberspace	information,	monitored,
	organisations		espionage)	hacked and traced
				back in forensic
		Authoritarian		investigations by
	Favours	countries or large	Ignorance of the	the authorities or
	organisations	companies	of criticism of	activist groups
	with younger	control the	transnational civil	
	members	cyberspace and	society of the	State and public-
		use it for their	cyberspace	private strategies
		own benefit	campaigns	and activities to
	Digital exclusion			fight cyber crime
	on individual or			by capacity- and
	group level	Overoptimism of	Overoptimism of	capability
		digital power to	digital power to	building
		create political	create political	building
	Impersonalisation	change	change	
	of			
	communication,	D (1)		
	leading to	Benefits one-	Focus deflected	
	(cultural)	issue activist	away from off-	
	misunderstanding		line activism	
	s and lack of trust	established		
		political		
	From of sub-su	movements		
	Fear of cyber			
	insecurity	Delies lawgely on		
		Relies largely on existing beliefs		
		existing beliefs		
		Fear of cyber		
		insecurity		
		moccurry		
	work for Analysis (Mo			

Table 1: Framework for Analysis (Montalvan Castilla and Pursiainen, 2019).

Through reorganising the existing research according to our framework and adding our own small-scale observations and interviews, we aimed to make sense of empirical cyberspace developments in relation to different modes of civil society activities. Although the empirical focus was on (Northern) Norway, we believe that the framework of analysis developed here can be applied and tailored to any society. It is expected that this framework will facilitate the understanding of the societal changes created by digitalisation.

3.2.3 Methodology

We first studied the online media profiles, presence and activities of five civil society organisations. These organisations were dedicated to human rights, advocating for children's rights and protection, humanitarianism and, in two cases, the environment. Careful observations were conducted regarding a) the interactions of the organisations with general citizens and other members of the organisation, b) their capacity to influence and mediate political and civic arenas and c) their contact and/or cooperation with other civil society organisations abroad.

Secondly, we visited these organisations and conducted in-person interviews. Semi-structured interviews were chosen as a preferable qualitative research method because of their open structure. An interview guide with the main themes and questions was prepared. These themes and questions allowed participants to present their own concerns and narratives regarding the effects of cyberspace on their organisations.

In most cases, the main interviewees were the leaders of the organisations. A few other people working in such organisations also participated and responded to some of the questions. One of the organisations had a professional department for the management of social media networks. In this case, a full-length interview was conducted with the leader of this department in order to understand organisational changes, benefits and challenges that the emergence of cyberspace may have brought.

The humanitarian organisation interviewed was divided into several local departments and/or work teams that addressed different societal needs and provided community services. We primarily interviewed the search and rescue department and the department responsible for the integration of refugees in Northern Norway.

The organisations were chosen because of their active presence in Northern Norway and their transnational dimension, meaning that they continue to expand or grow and have established transnational contacts and partnerships. The literature shows that the emergence of cyberspace or networked communications have had a huge impact in the way organisations, particularly civil society ones, work, develop or are strengthened. This is mainly noticeable through international contacts, alliances or partnerships that partially and increasingly rely on digital ICTs for cooperation. In some cases, contact and joint work between civil society organisations in different countries would not have been possible without the emergence of cyberspace and ICTs.

Having formulated our tentative empirical conclusions, in the final phase of our study we summarised them into five simple multiple-choice questions used in an online survey. This survey was sent to 15 organisations to confirm our conclusions.

3.2.4 Results

Our findings illustrated that cyberspace and ICTs have contributed to significant changes in present day Norwegian civil societies. However, while these changes have been profound in fields such as internal and external communication and interaction between members, the public at large and authorities, they are rather instrumental, not affecting the basic norms, cultures, goals and interests of the organisations.

After exploring some of these changes, it can be concluded that cyberspace has both enhanced and constrained civil society. Thus, we identified the need to analyse these enhancing and constraining effects through a comprehensive theoretical framework. In our analysis of societal changes due to the rise of cyberspace and ICTs, we identified four types of civil society: apolitical, political, transnational and uncivic.

Our research findings showed that cyberspace has opened new paths for both entrepreneurship and individualism for the apolitical civil society. Additionally, we noticed that although cyberspace presents itself as beneficial in many aspects for the transnational civil society, some constraining elements can be identified. For instance, social media platforms are resource and time demanding. This implies that organisations with more resources will have a stronger online presence and potentially attract new members. Thus, these findings shed light on the role that web technologies may play in furthering inequality.

It appears that the emergence of cyberspace has revolutionised the political civil society. Earlier studies (e.g. Howard and Hussain, 2013; Papacharissi, 2004) showed that the potential for civil discourse in cyberspace is strong and that it might promote democratic emancipation and political engagement/participation.

Thus, it appears that digital technologies facilitate the construction of social and political consciousness. In the case of Norway, the evidence suggests that these technologies have considerably enhanced civic and political engagement. For instance, Facebook's ad hoc groups and their communicative power have the potential to raise societally and politically important issues among the public as well as initiate changes. Social media can also exert a strong effect on mobilisation. This can have a direct impact on local communities, concretising local help and development initiatives. In some instances, cyberspace appears to have become a meeting point between people and politicians.

Cyberspace has also had an impact on the transnational dimension. Data coming from researchers at the Norwegian Centre for Research on Civil Society and the Voluntary Sector (see Arnesen et al., 2016; Eimhjellen, 2013, 2014; Eimhjellen and Ljunggren, 2017) showed that some Norwegian non-governmental organizations have benefited from social media platforms, which allow them to keep in contact with other organisations. Our own findings at a humanitarian organisation in the Norwegian High North illustrated the cross-border connections that can be established through digital technologies. This organisation works, exchanges information and coordinates online with another one in Murmansk.

However, mistrust and scepticism toward the internet as an effective place for civic participation have occurred. For instance, cybersecurity issues regarding the exchange of sensitive information online have been reported.

Finally, the uncivil dimension of civil society illustrates the issues arising from openly intolerant and sometimes extremist groups that use cyberspace to communicate. We illustrate this by studying well-known groups in Norway such as Stopp islamiseringen av Norge (popularly known as SIAN), which has thousands of members who communicate with each other and share information through the web and Facebook. Additionally, cybercrime and malicious or criminal acts have occurred in cyberspace. As a result, the National Strategy for Information Security was implemented by Norwegian authorities.

The above notwithstanding, we conclude (somewhat surprisingly given the enthusiasm for cyberspace as an ultimate game changer) that while cyberspace has contributed to some seemingly significant changes in the characteristics of Norwegian civil society, it is more a question of basically instrumental qualities rather than intrinsic transformation of the society. Cyberspace itself has not democratised or undemocratised societies by changing the balance between different types of civil society activities or the basic characteristics of society–state relations.

3.3 Citizens' perceptions on digitalisation: Benefits and challenges

The changes, enablers and constraints brought by ICTs and their effects on civil society can be better understood by approaching a combination of civil society organisations, individuals and local communities in the EHN. In this regard, a second study was designed with the aim to hear stakeholders' perspectives and opinions on the effects of digitalisation in the region on their interrelated everyday experiences.

3.3.1 Methodological considerations

The World Café methodology was applied. Also known as the Knowledge Café methodology, it consists of structured conversations taking place at different tables. The discussions took place in a comfortable local café in Tromsø. This atmosphere was chosen with the aim of helping participants relax and facilitating further discussions. The 12 participants were of different backgrounds and occupations and were recruited by previous familiarity and interest with the projects' scope, through social media and using snowball sampling. Among the participants were two local politicians and the director of an important company with a large presence in the three counties that comprise Northern Norway. Both genders were represented, and the participants' ages ranged from 23 to 60 years. Three table hosts were also present to moderate, guide, focus and balance the discussions. Their role was to ensure that everybody had a chance to speak, give their opinions and share their relevant personal experiences.

Prior to the discussion, the workshop goals and details were introduced and the ethical aspects covered. Six main themes emerged during the discussions. At the end of the sessions, the discussions were summarised.

The themes that were discussed were 1) use of ICTs in everyday life, 2) aspects of life transformed (or not) by ICTs; satisfaction, fears and desires regarding particular ICTs, 3) factors facilitating or hampering digital development and opinions on how to ensure the desired development and prevent counter-productive development, 4) fears, desires and wishes regarding digital and technological development, 5) individual power of influence on regional digital development, 6) digitalisation and the role of

the state, regional and local administration, companies, associations, communities and individuals in developing and maintaining security and trust.

3.3.2 Preliminary results

3.3.2.1 Perspectives on ICTs and their everyday use

Participants were most satisfied with transport-related digital solutions. Tromsø can experience harsh climatological conditions. Temperatures can easily reach -11°C and feel like -16°C. Cold winds and heavy snow falls are also common. The regular traffic flow can be substantially affected due to heavy snowfalls or icy roads, which cause accidents and delays. The municipality's real-time application (app) showing timetables, routes, connections and delays due to climatological conditions was thus praised. Before this app appeared, users waited much longer at bus stops or missed bus connections. The possibility to purchase bus or flight tickets through an app and the municipal parking app were also appreciated.

Regarding ICTs, the use of e-mail, social media (predominantly Facebook, Instagram and Twitter) and diverse websites was part of everyday life. Only one participant said that they avoided social media. Facebook appeared to be an important means of socialisation and organisation of work or study events, facilitating local and global interaction.

ICTs used for inclusive purposes and in the educational system were regarded as positive. Digital health services, such as health applications that allow online communication between patients and medical personnel, were seen as positive by some. However, the fact that these apps and online patient journals keep track of the patients' medical history, concerns and communications was considered to be a risk and possible security threat. Financially, banking and financial transactions done digitally were perceived as beneficial because they increase efficiency and productivity.

Regarding digital services needed, better design tools for architects and designers were requested along with (gender-based) applications focusing on the security of women and apps to report on improvements needed in the city, particularly in relation to lighting. Online shopping opportunities were also valued. However, participants highlighted the need to reduce consumption and further sustainability. Software applications focusing on a sustainable lifestyle and guiding users towards plastic-free or ethically produced items were also requested.

3.3.2.2 Aspects of life transformed by ICTs: Satisfaction, fears, wishes and resistance regarding digital development

Parenting, family life, level and quality of social interaction, education, democracy and social and political spheres were identified as areas significantly transformed by ICTs. Moreover, the way in which we communicate has been transformed, as traditional time and place constraints have been removed, allowing for transnationalism. Regarding fears, the inability to sort out real news from fake news, propaganda and political and social manipulation through the internet and social media were regarded as concerning.

It was expressed that cyberspace had a positive effect on social interaction and social capital. This was illustrated by the experiences of participants who joined online groups. These groups (for example, those with social and humanitarian causes, political groups and hobby groups) connected people with similar interests and goals, sometimes leading to offline meetings.

However, many reported a perceived reduction in social contact or interaction (such as fewer in-person meetings and lectures as well as fewer workers at banks, libraries, supermarkets and stores due to being replaced by automatised digital cashiers, chat bots and online assistants) due to ICTs. Some participants expressed the desire to avoid a future with decreased human contact.

Participants also pointed out that digitalisation has transformed the dynamic between students and teachers, as students could rely on a vast array of online material and depend less on lessons at the university. Satisfaction was also expressed regarding the amount of knowledge one can acquire online, such as practical skills or formal knowledge in a particular field or subject. The ability to research health issues and diseases and the possibility to share information online or communicate with others experiencing similar conditions was seen as a positive development.

Other major concerns were related to cyberspace being used as an arena for bullying and exclusion. Cybercrime, the hacking of smartphones and a potential 'surveillance nightmare' or totalitarian technological surveillance were feared. Participants wished to avoid a future were all personal information is under the control of the government and private companies.

At the personal level, the desire to preserve anonymity and privacy was expressed. Some participants noted that in modern society, children are exposed to society even before birth, with ultrasound pictures posted on social media. Additionally, some participants saw as more negative than positive that children these days are tracked through smart devices.

3.3.2.3 Digital development

Participants found cyber insecurity to be the biggest factor impeding positive digital development. The use of digital health services (for example, patient journals), digital post services, financial scams and use and storage of personal information by websites were seen as potential threats to information security. Other related counterproductive factors were the negative effects of ICTs on democracy due to manipulation of information and the spreading of fake news.

According to some participants, measurements to prevent negative digital development should involve actors such as the local government and public libraries. Both institutions could provide more information and a space for discussion among the city's inhabitants on how to mitigate cyber insecurity and its societal effects.

Factors identified as hindrances to a balanced digital development were online phenomena such as harassment, hate speech, racism, extremism, xenophobia and bullying. The creation of large networks linked to child abuse, pornography and human trafficking was also seen as a negative aspect of ICTs. Actions taken by the police to monitor, prevent and stop such phenomena were thus deemed important.

Additionally, the digital divide and exclusion, particularly of elders and minorities, were seen as hindrances. It was noted that technology has a tendency to overlook or exclude minorities in society. Consequently, digital technologies are not created to meet their needs. Some participants also argued that ICTs can reinforce class differences in society, pointing to differences between the people who produce or own the rights to diverse ICTs, those who pay for them and those who have the adequate knowledge to use them.

It was also stressed that despite the advantages offered by the digitalisation of societal services, direct physical, cognitive or mental stimulation and a greater engagement with an individual's surroundings have been substantially hampered. Participants also acknowledged a lack of focus and increasing disruptions, which occurred when participants became distracted by the internet and social media while performing specific tasks at work, home or university.

A main concern for many participants was that digitalisation may be driven by economic interests and thus not always focus on the best interests of the people. Some statements that illustrated this were: 'the technological development is enormously driven...[by] commercial and economic interests' and 'it is not technology that adapts to our needs. It is us who adapt to the technological solutions that come along'.

Participants also discussed whether telemedicine services in Northern Norway are mainly driven by economics (focused on saving money and resources) and not to the best interests of the patient. One positive aspect of telemedicine was that health services could be provided to populations living in more remote areas.

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It was also noted by participants that attended so-called 'smart city' conferences in Norway and abroad, that these conferences often ended in companies trying to promote and sell their services or technologies.

Participants negatively viewed companies' practice of collecting user data to target potential buyers through custom-made advertisements, predict purchase patterns or influence customers. The development of eye-tracking technology and filming to analyse users' preferences was also seen as controversial. Equally, the imposition of smart electricity meters in Norway was perceived as a potential danger. These meters report when a person is at home as well as patterns connected to household activities.

Surveillance was perceived as a counter-productive factor for desirable ICT developments. Although video cameras connected to the internet can often be used for security, participants were concerned that widespread surveillance can lead to the loss of privacy and freedom as well as increased societal control.

Additionally, it was suggested that for positive development to take place, state-based research should be conducted before acquiring new technologies. Likewise, personal awareness, discussions and reflection on the downsides and benefits of ICTs were viewed as necessary. It was proposed that to facilitate positive development, the state and municipality should have a clear overview of the needs, goals and wishes of the city and its inhabitants. After this is done, the government can begin outlining the pathway needed to bring about this technology. In relation to this, female participants felt that new technologies should include gender perspectives. This may increase security for women and other vulnerable groups.

3.3.2.4 Fears and desires regarding digital development

Common fears regarding digital development included an increasing digital divide, particularly for elders. A participant illustrated this issue by mentioning that several elders visit the Norwegian Labour and Welfare Administration to request assistance submitting online forms now that traditional paperwork is no longer an option.

Some participants agreed that despite fears and perceptions that digital development is purely economically oriented, the digitalisation of societal services saves time and resources in the long term. One concern was that patients who still wished to have in-person consultations might only have the choice of online consultations, as the number of health care providers has been drastically reduced. This may be counterproductive to the treatment of conditions such as depression.

Participants requested ICTs to track and prevent criminal behaviour, especially against women and children. Participants also commented on the terrorist attack in Norway by Anders Breivik, which resulted in the death of 77 people. It is known that Breivik connected with others with similar radical views online and received their support and encouragement. In Norway, operations such as the one known as 'Dark Room' serve men who plan to rape children and share online materials of them being abused. For some participants, these examples illustrated that cyberspace can be an arena for criminal associations.

Other desires included online apps that provide information about cultural events and local history and places. Moreover, there was a desire for the establishment of a local committee on ICTs and digital development. A participant noted that in the Tromsø municipality, there are permanent committees for urban development, the private sector or industries, sports and the educational sector, among others. However, he stressed that the local political organisation lacks and needs a committee that will work towards positive digital development involving citizens.

3.3.2.5 Individual power of influence on (regional) digital development

Most participants expressed that in order to have some influence on the course of regional digital development, it is necessary to first contact the municipality and politicians. Similarly, they acknowledged that cyberspace per se cannot be completely controlled or constricted to local rules.

One participant (a politician) said that at the political level, citizens can influence regional digital development by actively participating in political meetings and discussions at the local and national levels. Institutions ensuring personal information security, such as the Norwegian Data Protection Authority, have resulted from discussions at the civil society and political levels.

The power civil society has to influence local development through social media and online groups was also highlighted. To illustrate this, concrete examples were given, such as online campaigns with high local engagement. These campaigns and online events later led to considerably large offline demonstrations and meetings. For example, the preservation of the Alfheim public swimming pool and building, the pride parade and activities related to LGBTQ rights and the Me Too movement have influenced decision makers.

However, it was noted that online participation does not always lead to offline meetings and active democratic participation. The Tromsø-based online group called No to Road Tolls had about 11,500 online members and followers. However, only 20 people showed up to a demonstration in front of the municipality.

Some participants further argued that digital development influences people and not the other way around. Others added that such development happens regardless of the local population's wishes.

3.3.2.6 Cybersecurity, security and trust

More than half of the participants felt that individuals were responsible for learning how to use ICTs carefully so as to maintain security. It was stressed that a person must have awareness of the risks present in cyberspace. Participants regarded Facebook as an unsafe platform, commenting on hacked accounts and the amount of user information that the site stores and sells. Particularly, the events linked to Cambridge Analytica their social and political consequences were mentioned.

Participants felt that it was the responsibility of the government and local and regional authorities to provide information and training to citizens to improve their digital security. This could be imparted through public or private classes at workplaces or organizations. The Swedish government takes this responsibility seriously, and it mailed letters to citizens discussing issues concerning societal security and vulnerabilities, resilience and cyber(in)security. Two participants emphasised that the private sector has the responsibility to safeguard people's information. One added that companies operating in Norway should assume greater responsibility than they currently do regarding the client information that they collect and keep.

In light of the changes brought by digitalisation, it was argued that the state has an important role in guarding the personal data of citizens and their safety. For example, according to one participant:

It is the state that must keep us safe. If it cannot keep us safe, then it is the same not to have it. This is the actual reason for what I pay taxes for...because they have a national security authority, and organisations such as the Norwegian Data Protection Authority. They [the government] have resources that are used to create order and implement the legislation and that can provide guidelines at all levels and for private companies in Norway.

Finally, to enhance trust, it was suggested that the integration or widespread use of digital solutions that render more effective and cost-efficient services was positive but not enough. Respondents felt that it was also necessary to involve the city's inhabitants and hear about their needs and wishes.

3.4 Digital development in small communities and organizations in northern Norway: a case study from the Lofoten islands.

We were interested in contributing to deepen the current understanding of the perceived impact digitalisation has had in civil society organizations located within small communities, and how these communities and their civil society organizations experience such changes. For our study, we chose the Lofoten archipelago, considered one of the world's northernmost populated regions, located in the Arctic Circle and belonging to the county of Nordland, Norway. Nature-wise, the islands are known for their beauty and dramatic mountains and peaks. Fieldwork took place in Svolvær and in the villages and towns of Kabelvåg, Henningsvær and Leknes. During fieldwork visits carried in the spring of 2018 and the autumn of 2019, eight formal interviews were conducted and two small semi-structured 'citizen cafés' took place, as well as formal and informal conversations with local inhabitants.

The voluntary organizations that were formally interviewed include humanitarian organizations, political organizations, nature or environmental protection organizations, hobby organizations and an organization coordinating volunteering work in the region. Some preliminary observations from the field are presented below, as beneficial and constraining effects brought by the digital development in the area.

Enablements brought by digitalisation, according to citizens and organizations participating in the study include: a) search and rescue operations partially benefited upon the implementation of digital services b) ability to easily connect with other organizations, individuals and communities despite remoteness or vast geographical distances, c) local organizations gained increased support nationally and internationally to promote their environmental and political agendas, c) greater educational opportunities were facilitated by online education, d) efficiency and cost reduction at organizations was enhanced, e) the local economy benefited due to increasing tourism and higher demand of Airbnb accommodations and local services, f) communication with local authorities was enhanced. Main constraints identified by citizens and organizations include: a) Increased tourism in the Lofoten archipelago, as a result of Instagram and Facebook posts, has caused that important natural areas are damaged or affected by littering, b) death and accidents in the local mountains were reported to be linked to tourists' search for the 'perfect selfie' or picture c) search and rescue operations in the mountains and high peaks have increased due to a greater flow of tourists, d) cyber-hate, surveillance and everyday cyber-(in) security issues were reported by organizations and citizens, e) a great number of services have been completely digitalized, some of them against the wishes of individuals (physical banks have disappeared, ATMs, fewer postal service points present, etc.), f) a sector taking part in the local economy was affected, such as the hotel branch and small businesses, as Airbnb and online shopping are on high demand.

Among the changes brought by digitalisation, it is particular to the area that, in the perception of many participants, tourism was greatly enhanced by social media. Pictures and posts shared in Instagram and Facebook, highlighting the exotic and beautiful nature in the Lofoten islands, were seen as a main factor that caused more tourists to visit the area. As reported by individuals, local help groups and search and rescue organizations, this resulted in damage to the natural landscape and littering and contamination.

These and other listed empirical findings, to be explored in-depth in our coming article, throw light on the positive, negative and challenging sides of digitalisation, experienced by citizens and civil society organizations embedded in small communities.

3.5 Preliminary conclusions

We believe that our research may be used as a starting point to illustrate and analyse some of the changes that civil society in the Norwegian High North has experienced due to the use, development and integration of ICTs. The implications of such changes may then be regionally compared and analysed. By shedding light on the constraints and benefits that cyberspace and ICTs have had on individuals, communities and organisations, further recommendations can be provided as to how to mitigate the negative effects and enhance the positive ones.

For instance, due to the digitalisation of services, citizens and organised civil society may become particularly vulnerable in instances of internet and ICT service disruptions. This is particularly true if there is limited technical resiliency and a lack of alternative ways to continue to operate and benefit from these services. It should also be noted that issues connected to privacy or data protection, cybercrime and increased societal vulnerability occur more frequently today. Thus, we hope our research can suggest ways to mitigate or prevent unwanted consequences that may hinder civil society in Northern Norway.

Our findings show that cyberspace has not profoundly changed society in terms of the relative power that one type of civil society can have over another. Digitalisation itself has neither democratized nor undemocratized societies (including the Norwegian society) by changing the balance between different types of civil society modes or altering the essential characteristics of society-state relations. Our results do not adhere to the idea of giving cyberspace the status of 'agency' in its own right.

Digitalisation appears, however, to have had a transformative, generally positive impact in the way communication happens between local communities and civil society organizations in northern Norway. Geographical distances were much less constraining when instant communication and coordination in cyberspace happened, also influencing the transnational level as well as communication with local authorities. Similarly, the rendering of different services (now digital) and their effectivity was seen as positive.

Another preliminary finding strongly suggests that the digital development, despite being praised by some for bringing increased effectivity in services and cost-reduction, has constraining effects. As expressed by several civil society organizations and citizens in Tromsø Lofoten, local communities appear, to some extent, to have been significantly and negatively impacted by the digital development. These findings may suggest the need for new strategies to cope with this kind of unwanted development.

At the citizen level, some of our findings point out that citizens experience enhanced, everyday cyber insecurity and wish for more effective ways to reduce or prevent them. Combined efforts from citizens, local and national authorities have been suggested by citizens and local authorities themselves to safeguard their personal data and to prevent fake news or other possible adverse effects on democracy.

By closely working and interacting with local civil society organisations and individuals, our work has sought to integrate local perspectives into the analysis of digital developments in the EHN. Building on our previous data and the proposed framework of analysis, our work will be expanded and continued. We can then further discuss the implications our findings may have for civil society and issues such as democratic participation and transnational cooperation.

3.6 Follow Up

The civil society framework outlined in Section 2 will be followed up with a more empirical, quantitative, survey-based and indicator-based peer reviewed journal article, which is currently in progress. Over 6000 nongovernmental organisations registered in Northern Norway (Troms and Finnmark regions) will be the empirical focus of that article. Empirical findings from the case study in the Lofoten islands will complement our study. The information from the World Café experiment discussed in Section 3 will be used in a comparative article of Finnish and Norwegian experiences.

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