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"WhatsApp in Politics?!": Collaborative Tools Shifting Boundaries

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Abstract. We examine the technological aspects of political collaborative practices in one of the first studies of participatory constitution writing in the course of its progression. In particular, we examine how digital collaborative and communicative tools can facilitate (or inhibit) the permeation of boundaries, which manifest through the differences in political ideologies and partisan beliefs. Our study is grounded in interviews with 15 members of the Constituent Assembly in the canton of Valais, Switzerland, and its primary contribution is in constructing a fine-grained contextualized understanding of political collaborations, their evolution, and their relationship with collaborative tools. Our findings demonstrate the centrality of versatile and widely available digital tools (such as WhatsApp and Google Docs) in political work. In addition, elected lawmakers prefer tools that allow them to organize their collaborative and communicative actions based on dynamic social boundaries, and their need for asynchronous work practices. We observed a tendency of simultaneously using multiple digital tools to accomplish specific political objectives, and leveraging them in plenary sessions for strategic advantages. On the one hand, collaborative tools enabled strategic advantages by *selective permeation* of boundaries across political ideologies. On the other hand, lack of awareness about boundaries between 'private' and 'public' on social networks were considered as privacy blind spots. By focusing on boundaries of different kinds, our paper elucidates how the introduction of digital technologies into political process transforms the long-established categories, distinctions and divisions that are often taken for granted.

Keywords: CSCW · Participatory politics · Constitution writing · Collaborative and communicative tools · Political boundaries

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1 Introduction

Politics[1] is defined through the boundary between participation and exclusiveness. Even in the most open political systems the responsibility for government and decision making is placed in the hands of a selected group. The boundary between those who are in power, and those who are not, is one of the fundamental structural aspects of modern societies. Nevertheless, boundaries matter to politics in a number of other senses, from ideological delineation between political parties, through barriers in political participation, to borders in a geographical or national sense. In this paper, we use the notion of *boundaries* as a sensitising concept for an empirical exploration of how technologies –particularly, digital collaborative and communicative tools– can assist in making various boundaries more (or less) permeable, and facilitate (or impede) overcoming diverse differences. The boundaries which we examine in this article are particularly the partisan and ideological boundaries which are ubiquitous and inflexible within the domain of political work. Furthermore, we seek to understand the ways in which these boundaries are rendered (more or less) permeable through digital collaborative/communicative tools and assist politicians in overcoming the aforementioned differences. More specifically, our study aims to analyze a particular *constitutional moment* [1] –defined as "*brief periods in which, through the unending contestation over democracy, basic rules of political practice are rewritten, whether explicitly or implicitly, thus fundamentally altering the relations between citizens and the state*" [25]– in the canton (or state) of Valais in Switzerland, where the new constitution is being produced in a bottom-up fashion by several groups of constituents and members of political parties.

Participatory democracy has been linked to digital communication technologies since the inception of the Internet, and recently also to the variety of social media and networks [32]. Digital communication was often seen, in an utopian way, as a transformative tool in the political engagement within the Habermasian "public sphere" [20]. Lately, many scholars focused on ICT "as part of the mundane activities of 'everyday life'" [58], and in the context of politics analyzed their subversive potential (for example, [6,21,30,54]). Our research is based on a qualitative study of a quite different case: ICT is not utilized for politically *disruptive activities* [32] but rather for *constitutive activities*, i.e. mediated interactions of participants who are taking part in the officially approved, mundane, daily work of "doing politics" and "co-writing a constitution". In this regard, our study examines actual uses of ICT in a constituent assembly consisting of elected officials who were mandated by the citizens to write a new constitution.

Our contributions are two-fold. *Firstly*, we document and examine the communicative and collaborative actions in the domain of participatory politics – particularly addressing an electoral mandate aimed at the complete revision and re-writing of the state constitution. *Secondly*, by focusing on boundaries of different kinds, we investigate how the introduction of digital technologies into the

[1] https://www.merriam-webster.com/dictionary/politics (Last visited on 23rd January 2021).

political process transforms the established categories, distinctions and divisions that are often taken for granted.

1.1 Background and Context

In the Swiss canton of Valais (or Wallis in German), the new state constitution is being written since 2019, and will replace the old constitution –last written in 1907– in the year 2023. The process of complete revision of the state constitution started in March 2018, when the general populace voted to accept a popular initiative to revise and replace the existing constitution. The initiative also entrusted the work of re-writing the constitution to a '*Constituent Assembly*' (henceforth '**CoA**'), which was elected by the general public on November 25th, 2018 and comprised of 130 members (elected from 13 districts of the canton).

The work presented in this article began shortly after the CoA *1)* adopted the regulations which underpinned the *modus operandi* within the Assembly, and *2)* appointed the members of the different –10 *thematic* and 3 *institutional*– commissions (see Table 1) which formally started the process of collective planning, negotiations, discussions and co-creation of the content (set forth as Articles and Paragraphs) that will manifest as the blueprints of the new constitution. Each thematic commission comprises of 13 members and every member of the CoA is part of exactly one thematic commission. The representation of different political movements within these commissions is proportional to their overall representation in the CoA. Moreover, besides thematic commissions, there are also 3 institutional commissions, the members of which also belong to thematic commissions (i.e., Citizen Participation Commission, Coordination Commission, and Drafting Commission).

It is worth noting that the majority of elected members of the CoA (95 of the 130 members) do not have a prior background in politics and never had an electoral mandate. All members hold ordinary jobs and their work on the new constitution only makes up a small part (approximately 10%) of their monthly work percentage. In addition, most of the elected members, on the one hand, represent the different political parties of the region within the CoA. On the other hand, there are also some elected members (16 out of 130) in the CoA who belong to a non-partisan movement which was conceived especially to allow citizens not affiliated with a political party to participate in the process. Members of this non-partisan movement also contested the election for the CoA, and were elected by the general populace.

Through our research, we examine *a)* the way diverse digital (communicative/collaborative) tools are used by the members of the CoA, *b)* the entailed effort to change one's practices while adopting a certain tool (owing to group pressure, for instance), and *c)* how recent advancements in these tools are profoundly changing the established –*collaborative* and *communicative*– practices, protocols, and experiences of policy makers. Moreover, we contribute to the domains of HCI and CSCW by examining the context of participatory politics, and by establishing the potential routes of designing collaborative tools which are well-suited and integrated into the modern political landscape, and can support participatory

political efforts in a seamless and meaningful manner. Still, it is worth noting that these collaborative practices lie within the scope of normal democratic practices (within the CoA), and do not refer to the practices unique to the digital or internet democracy (such as e-voting). Additionally, the co-writing of constitution is just an observational context and not an objective i.e., it is not our goal to evaluate the quality of procedures for effectively co-writing a constitution, but to examine how it was done in our context.

2 Related Work

The presented work is situated at the intersection of participatory policy-making and the tools used in accomplishing the collective political objectives. The latter aspect is extensively and rigorously investigated within the domains of CSCW and HCI, especially in the context of personal and organizational collaborations. Consequently, in this section, we will review the relevant researches which inform and inspire our work.

2.1 Participatory Constitution Writing

Over the past three decades, there have been numerous cases where a participatory approach was adopted in drafting of a constitution. Among the earliest examples, even before the age of digital networking and social media, there is the constitution of Brazil written in 1988, which collected over 70,000 amendments from citizens [4]. Other similar cases include Uganda in 1995, South Africa in 1996, and Kenya in 2001. With the advent of social media platforms such as Facebook and Twitter, citizens' participation in constitutional processes appears to be more frequent, such as in Egypt in 2012, Iceland in 2012 [23,29], Chile in 2016 [18], and Ireland in 2016–2017. For example, several existing studies investigate the use of instant messaging in the context of public involvement in politics [27,46].

Besides these numerous instances of participatory constitution writing, in recent years, we have also seen technological developments which enable such large-scale participative endeavors in policy making. In 2012, the Net Democracy Foundation (a non-profit organization) released an open-source web-based platform called 'DemocracyOS[2]', to facilitate dialogue and deliberation between politicians and general populous on legislative aspects [35]. This platform has since been incorporated by numerous local governments and communities to engage in matters of policy making by enabling communities to vote on legislative motions, and also allowing law makers to gather opinions and concerns from their constituencies. 'Consider.it[3]' is another open-source web-based platform, which affords for "*personal deliberation in the realm of public deliberation* [28,51]". Precisely, it allows users to *a)* add opinions/arguments along with

[2] DemocracyOS URL: http://democracyos.org/ (Last visited on 20th January 2021).
[3] Consider.it URL: https://consider.it/ (Last visited on 20th January 2021).

reflections regarding their arguments' position being in favor or against a specific motion, *b)* highlight crucial attributes behind their contributions, *c)* consider others' contributions and adopt them in their own arguments, and *d)* emphasize the salient elements of their personal deliberations in relation to the proposed motion.

Therefore, by far, the case of Valais is not the first example of participatory constitution writing. However, it is still specific in a number of aspects, which were discussed in the previous section. Furthermore, our research differs in its focus on the constitution writing as an ongoing social activity, which is currently (at the time of our study and the writing of this article) in progress and engages both the citizens and politicians.

2.2 Communicative Aspects of Technologies

Owing to the nature of communicative practices in the Constituent Assembly, which are asynchronous in time and happen over a distance (Space-Time Taxonomy by [15,17]), here, we will review works which have examined technological aspects of supporting such communicative practices. In particular, we focus on the utilization of technological devices in communicative practices as part of the daily work on the constitution. Previous research shows that users of communication technologies tend to distribute their social relationships across different apps and appropriate the features and technical constraints of these apps (such as the ability to monitor the delivery status of a message [22]), in order to serve specific aims and purposes [40]. Even while engaging in communication through one particular tool such as Facebook, users "maintain independent social spheres", which can lead to perceived tensions and conflicts [3]. Current organization of work involves "media toolboxes" within "communicative ecologies" [53,59], where users might show preference for a certain tool. Such "media toolboxes" provide users with a number of technological tools that they can use and combine in order to achieve a certain task in a given context [59]. In making a selection from the range of available communication tools, users' decisions are influenced by a number of factors, such as material features of the tool, familiarity with it, and the situated local circumstances of a particular communicative process [26]. In particular, WhatsApp is perceived as more intimate [41], utilizable in mediated interaction within small groups, even while in physical co-presence [5]. It is seen as a tool for chatting rather than formal message exchange, which is the case with SMS [10]. At the same time, people use multiple communication tools and devices simultaneously in "temporal and sequential interdependence" [52].

Besides supporting communicative practices in diverse social and public spheres, digital communication tools, in particular Social Media, have been linked to the global protest movements and their disruptive effects on the political landscape (e.g., Arab Spring [60], Hong Kong protests [45], and Black Lives Matter [14]). Shah et al. [49] has referred to this phenomena as "personalized politics" where diverse individuals and communities have rallied behind multiple causes which comprise of public's demand for fair democratic establishments, economic

justice, human rights, and environmental protection. Yet another politically relevant aspect of the use of social media is the dissemination of conspiracy theories [11]. Moreover, Semaan et al. [48] have observed the ways in which social media tools support users' interactions with others in the context of political deliberations. Their findings reveal the relationship between affordances of different social media platforms and how they support or inhibit users' engagement and dissemination of political information, and particularly, users' adaption of alternate tools in the face of external impositions that challenge their civic agency [47,48].

2.3 Technological Support for Co-writing Activities

In particular relevance to our study, large-scale distributed and asynchronous collaboration facilitated by technologies has been extensively studied in the context of collaborative writing (on platforms such as Google Docs and GitHub). Ishtaiwa and Aburezeq [24] examined the impact of Google Docs on collaborative learning amongst students and their instructors, and observed an enhanced interactivity with the content. In addition, the authors suggest putting in place a comprehensive set of regulations and task-division to ensure effective moderation of co-created content as well as improved collaboration experience. Olson et al. [42] also studied collaborative writing within student teams at undergraduate levels with Google Docs, and found variability in collaborative writing strategies ranging from synchronous to asynchronous. Moreover, they also observed the inherent dynamism in acquisition and transfer of roles during writing and editing activities, and found that balanced participation and exhibited leadership in student teams resulted in high-quality writing (similar observations in collocated student teams were also reported by [55,56]). Awareness tools that visualize individual contributions, document change history, and overall collaboration synthesis have also been developed and evaluated in the context of collaborative writing with Google Docs [57]. On the other hand, GitHub –a popular online service for software development within large distributed teams– has also been widely studied for collaborative writing of software, owing to its attributes of transparency and versioning [12,16]. GitHub has also been appropriated for other collaborative scenarios which differ from software development, for example, management of archival activities in libraries [13], and open collaboration on textual documents [33]. Furthermore, the use of GitHub in collaborative writing projects aiming to develop non-software digital artifacts has been examined by Pe-Than et al. [43]. The authors reported observing online or face-to-face meetings as the prominent activities in the early stages of the project, while GitHub was found useful especially in the later stages requiring audience participation and project management activities.

3 Research Questions and Methods

In this article, we generally aim to inquire the emerging patterns of usage of digital collaborative tools, and the evolution of these patterns, amongst the members of the Constituent Assembly (CoA) who are co-writing the constitution of Valais.

Particularly, we seek to comprehend the means of organizing and maintaining communication, negotiation, and coordination at different levels of social conformity – amongst closest colleagues, peers from the same commission, colleagues from the same/different political group(s), or with all members of the CoA. In addition, what factors necessitate the formation of these different levels of social conformity, and more importantly, how permeable and temporal are these social boundaries (implying how easily they change and how long do they last)? Moreover, which digital tools assisted or inhibited the seamless achievement of aforementioned intended social objectives? In order to address these inquiries, we conducted an interview study with 15 elected members of the CoA.

3.1 Interview Study

Initially, a formal e-mail of invitation to participate in our study was sent to the President of the Constituent Assembly (CoA), who disseminated our invitation to the elected members. 15 members (7 females and 8 males between 25 and 74 years old), some of them with a previous experience in politics, accepted to participate in our study (see Table 1). Next, we sent an e-mail containing *1)* the general objective of our research without revealing the specifics of the questions we intended on asking, in order to prevent biasing their responses, and *2)* the description of our research approach including the approximate time required on the participants' part. In addition, the participants were also informed that we will properly acknowledge them in our research publications and that there was no financial compensation.

We have opted for interviewing as the primary method for several reasons. First, it was not possible to observe and interview participants *in situ*. Our participants often work asynchronously and over distance, and so there were simply no collocated sessions of collaborative work to be directly observed. Moreover, political work within commissions is not open to the public (based on the regulations of the CoA) and potentially sensitive in nature, hence disqualifying the possibility of observations and contextual inquiry. Although plenary sessions are public, citizens are seated in different areas separated from the politicians. This all hindered the use of observational methods.

The interview study was designed to gather fine-grained insights about participants' –individual and collaborative– work in the CoA, and the nature of its entanglement with diverse digital tools. Starting with specific questions about participants' political work and background, their involvement and role in commissions, and their familiarity with digital tools and modern technologies, the significant part of the interviews focused on specific themes relevant to our study. In particular, we discussed about participants' *1)* experiences with the ongoing policy making practices and protocols in the CoA, *2)* perceptions about how different tools support or impede their attainment of specific political objectives, *3)* reflections about the strategic advantages inspired by the accessibility to an ecosystem of digital tools and how they are profoundly changing policy making, *4)* concerns about security and privacy issues, and *5)* perspectives about the role and position of digital tools and technologies in the future constitution.

Table 1. The table illustrates the participants' involvement in our interview study. In addition, it also describes the participants' memberships to different thematic (T) and institutional (I) commissions. The only thematic commission which is not represented by any of our participants is "10. Municipalities and territorial organization".

Participant	Gender	Commission memberships
P01	Male	T04: Principles, finance and economic development
P02	Female	T06: Social and other tasks of the State
P03	Female	T02: Fundamental rights, social rights and civil society
P04	Male	T01: General provisions, social cohesion, preamble and church-state relations, final provisions
P05	Male	T02: Fundamental rights, social rights and civil society
P06	Female	T03: Political rights IB: Coordination
P07	Female	T01: General provisions, social cohesion, preamble and church-state relations, final provisions
P08	Female	T09: Judicial power IA: Citizen participation IB: Coordination
P09	Male	T07: Legislative power IA: Citizen participation
P10	Male	T04: Principles, finance and economic development IA: Citizen participation
P11	Male	T05: Territorial development and natural resources IB: Coordination
P12	Female	T08: Executive power IA: Citizen participation
P13	Male	T03: Political rights IA: Citizen participation
P14	Female	T06: Social and other tasks of State
P15	Male	T03: Political rights

The interviews were conducted in semi-structured manner and lasted for approximately an hour. Interviews were conducted in the participants' preferred venue (cafeteria, home, or office). Three interviews were conducted over Skype, and one over telephone. The interviews were audio recorded and were later transcribed by two researchers, followed by open coding with recurrent topics and themes that emerged from the repeated reading of the interview transcripts by three researchers. After the open coding phase, the co-authors organized two sessions to interpret and consolidate the codes into relevant categories and themes. During this phase, relevant segments of the interviews were aggregated into categories and further compared in order to identify common approaches to discussed topics among the participants [9].

4 Analysis and Results

The interviews aimed at eliciting fine-grained aspects of communicative and collaborative activities within the Constituent Assembly (CoA). Particularly, we sought insights into the participants' use of digital tools and technologies, and how they are appropriated in the interplay between malleable social boundaries and the temporality of collaborative routines and practices. Next, we will describe the emergent themes from the semi-structured interviews. Our findings are organized in the following sections along *five* binary distinctions: *1)* Informal and Formal, *2)* Novice and Expert, *3)* Private and Public, *4)* Advertence and Multiplicity, and *5)* Instruments and Environments. These binary distinctions are guided by the notion of boundaries, which we use as a sensitising concept. However, we need to stress that it is a post-hoc analytical construction, and boundaries (in a general sense) were not explicitly discussed with the interviewees, although the term is nevertheless occasionally mentioned by them.

4.1 Informal and Formal

Reflections about the use of digital collaborative/communicative tools often led to associations whether the tool, or its intended usage, was 'informal' or 'formal'. This boundary, and its perception, can be attributed to the well-established and normative nature of political customs and protocols (in democratic societies), which in turn are the manifestation of the dichotomy between "*what is visible*" and "*what happens backstage*" (cf. [2]).

The members of the CoA work asynchronously, part-time, and remotely, with less possibilities for frequent collocated meetings – "*we are like the 'militia', we live our normal lives and do our normal jobs, but we also contribute to the constitution*" (P09). As a consequence, our participants unanimously affirmed that e-mails are the accepted channel for *formal* and *official* communication. They afford for lengthy and complete information exchange with multiple stakeholders, while allowing for the transfer of documents and links (also observed by [7,26]). However, the use of e-mail does not necessarily guarantee a reply from the recipient (P05, P09, P10). Furthermore, the use of multiple e-mail accounts and the "Reply All" feature often floods the inboxes, and sometimes important e-mails are marked as spam (P12), which in-turn leads to messages getting lost and overwhelming its users (P08, P09, P11). P11 referred to this phenomenon as the "*e-mail ping-pong*" which "*requires a lot of effort to remain up-to-date*".

On the other hand, WhatsApp was referred to as a *lighter*, *informal*, and *rapid* alternative to e-mails (as reflected by P03, P05, P08, P09, P11, and P12), which affords for approachability –since it is mostly used on a phone and people generally carry it with them– and the push notifications increase the likelihood that messages are seen. The participants, however, added that WhatsApp is not an ideal channel for deep and meaningful conversations unlike telephone calls or e-mails (P03, P12), and sending short messages might lead to misunderstandings (P09). Also, push notifications were reported as "*intruding in private life, where the boundary between politics and home is blurred*" (P05, P08, P09,

P14; cf. [31]). Moreover, the membership to a high number of WhatsApp groups and the numerous messages received on a daily basis, overwhelmed the participants and caused a "*catching-up*" fatigue (P07, P14). In addition, the lack of a functionality to search old messages/conversations (unlike e-mail) complicates the process of navigating amongst old messages (P03, P05). Finally, Facebook's ownership of WhatsApp was also reported as disadvantageous in terms of privacy concerns. However, a lack of a popular alternative gives WhatsApp a competitive advantage. P09 expressed this by noting that "*It's again the classical freedom versus convenience dilemma*".

Contrary to the use of WhatsApp, phone calls were reported as another *informal* channel for discussions. Attributed with the qualities of enabling a clear medium and facilitating elaboration of ones' ideas or concerns, which assist in swift attainment of conversational agreement, phone calls were reported as affording "*a large space for discussion in uncertain situations or with people who are not proficient with digital tools*" (P09, P10). However, it requires prior synchronization and planning to set-up the call (which was also referred to as "*messy*" by P09), and at the end of a long call there is no tangible trace of what was discussed (P06, P12).

With regards to collaborative activities, such as the co-creation, modification, and review of documents, participants preemptively and collectively formalized the rules of engagement. Google Docs was reported as the popular choice for co-creation by our participants, especially for the ongoing work within the different commissions. P05 and P09 noted that they collectively organized a workshop for their colleagues to familiarize them with Google Docs, especially the elderly members who had never used Google Docs before (see also Sect. 4.2). Specific rules for fair usage (or best-practices) of these tools were explicitly predefined ("*Please do not delete others' comments or work!*", "*Be respectful to others and their contributions*", etc.), and roles were assigned to individuals who were responsible for resolving conflicts and preparing the final version of the documents.

These findings underline a tension between the "formal" and the "exceptional" use of collaborative tools – in particular, how this boundary is intentionally constructed to enable better coordination and fair collaboration practices while creating documents. On the other hand, this boundary is shifted, or even temporarily deconstructed, to resolve immediate urgent concerns over WhatsApp and phone calls.

4.2 Novice and Expert

Before the commencement of work on the constitution, a working procedure for solving routine tasks had been negotiated within the Constituent Assembly (CoA), including an implicit agreement (which was open to future adaptations) on the use of different collaborative and communicative tools. Additionally, such negotiations about the choice of appropriate digital tools happened within different political groups. However, the specific level of knowledge regarding different tools varies for each participant – they belong to different age groups and have

varied professional backgrounds. During the interviews, we asked participants to self-assess themselves on a scale from "physical" to "digital" (spontaneously, some of them used a scale from 1 to 10). Cumulative results of responses to this question are displayed in Fig. 1. Still, it should be noted that the distribution of participants is approximate, since their understanding of the scale reflects two concurrent conceptions of being digital or non-digital. On the one hand, it pertains to *knowledge and familiarity* with various collaboration/communication tools, on the other hand, there is the aspect of *usage preferences*, and related attempts to intentionally limit the digitality of their lives (for example, putting their phone into flight mode while at home [P09]).

In organizing collaborative work in the CoA, general preference seems to be given to popular and widespread tools, apps, and devices. The process of selecting a tool for the group takes into account several factors: "*You have to balance the interest between the time it takes to understand a new tool, make people use it, and what it can offer*" (P12). It is also important to note that the decision does not happen only once, but it is often temporary, in the *wait-and-see* fashion. The need for a new tool can emerge in real time while working on specific tasks, as the same participant explains: "*When we were working on the rules of the CoA, we were discussing between several parties on WhatsApp, and shortly after starting, we realized that we had to move to something like a Word document and share it if we wanted to get things done, or pick up the phone and talk to each other.*" A possible explanation for the specific role of technology in policy-making in the CoA was provided by P15 – who has a prior political background unlike many of the elected members in the Assembly. Comparing his work at the CoA with his parallel duties at the Legislative Council, he noted that "*there is a bit more technology use in the CoA than in the Legislative Council, because of a different and younger population ... On the contrary, in politics we are not educated about these tools*".

Thus, in some cases, in order to be able to collaborate with others smoothly within the Assembly, participants had to start using technologies that they did not know before. Several participants stated that their work in commissions heightened their familiarity with Google Drive (P04, P06, P08, and P14). They find it useful overall: "*Being able to collectively interact on the same document at the same time is really time saving for us*" (P08). On the other hand, working in a group of people with uneven knowledge of collaborative tools can also create

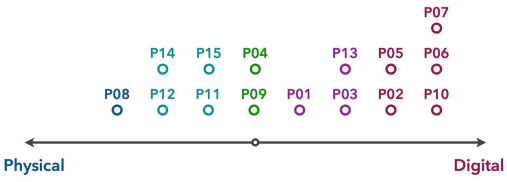

Fig. 1. Distribution of interview participants along the digital-physical scale, according to their self-assessment.

an environment of "peer pressure" for more tech-savvy users, who are required to use means that they might not find very efficient or beneficial. P03 criticized her colleagues' way of using Doodle: "*they do not use the orange checkbox ... they just wait until everyone is there*". WhatsApp seems so ubiquitous that it almost appears as a necessity: "*WhatsApp is not necessarily a group pressure, but it's simply so well established in society that [communication] can't be done without it*" (P02). However, some participants pointed to certain negative aspects of this tool: "*If the number of groups grows more, then it would lose its efficiency*" (P08). In addition, "*WhatsApp can be annoying when people are sending a lot of things about their holidays ... But you can always shut it down*" (P06).

4.3 Private and Public

Participants reflected about the boundary between private and public in relation to the use of social networks (primarily Facebook). In particular, participants who are new to politics and relatively younger, used the platform in the campaigning phase before their election, which compelled them to add strangers and acquaintances to their network. This phenomenon was reported as causing a major shift in their perceptions and experiences with privacy. P08 reflected that "*with Facebook the boundaries between what is private, and what is public are becoming thin, almost invisible*". Others (P01, P02, P09, P13, and P14) also reported having similar experiences where their private and public personas were perceived as indistinguishable by the outside world. Moreover, this influenced participants to put in place varied self-identified best practices. For example, P02 created a separate Facebook profile for her political objectives, whereas P08, P09, and P14 subjected their posts to extra scrutiny. P09 recollected an anecdote from his personal experience that "*within the political context, [he] learned quickly that it is not wise to criticize or joke about another party on Facebook*", as the controversy led him to "*exercise discretion*" and treat every post since this incident "*as a public statement you give to a journalist*". P08, on the other hand, "*stopped adding [her] opinions along with the posts [she] shared*". P13 and P14 reported that their posting activity on Facebook has been significantly reduced since their election into the CoA, and they use the platform primarily to "*follow and observe social opinions, concerns, and movements*".

Between the younger and the elder participants, we observed a disparity in the awareness about privacy aspects, and the means of effectively managing it. Amongst the elderly participants, P04 (who is over 70 years) expressed a feeling of pride that he has over 1500 members in his social network, and he frequently shares his ideas and opinions over Facebook. Furthermore, P05 recalled an incident involving an elderly colleague, whose post on the social network platform was regarded as incongruous with their political ideology. Consequently, other members of the party urgently demanded the responsible person to remove the post, and addressed the gaps in their colleague's awareness about the potential risks with privacy on social networks. P05 further added that "*these permeable boundaries between private and public on social network platforms are awareness blind-spots for people who are not knowledgeable about the risks*", and expressed

a desire to "*make this distinction more salient*" by adopting the principles of 'seamful design' [8] concerning privacy on social networks.

Few participants also expressed their concerns about the risks associated with Facebook's use in light of the recent global scandals surrounding the platform. P01 stated that "*... trust in politics and politicians has suffered as [Facebook] was used to influence elections. Consequently, the entanglement of politics and Facebook is not good as the trust is clearly lacking*". Furthermore, both P01 and P09 referred to Godwin's Law[4] as a reason to avoid organizing discussions or canvassing opinions on the platform. P02 further noted that "*seeking neutral and honest opinions on Facebook has a certain 'tiredness', and [she] would rather prefer to subscribe to several newspapers to inform [herself] about public concerns*". Finally, P07 informed us that the CoA has commissioned an ad-hoc and secure participatory tool that will enable the citizens to engage with the commissions and their work in the Assembly.

As discussed in the previous section, participants noted using Google Docs to collectively create, review, and edit documents. In response to a question whether participants perceived risks in using a commercial third-party platform, which can be subjected to malicious activities such as hacking, most replied "*the nature of our work is public, and we have nothing to hide*" since prior measures have been collectively taken to define best practices. Furthermore, P09 elaborated that the preemptive policy of establishing accepted behaviors a priori, and defining regulations mitigate the likelihood that, in the event of a leak, the content and comments cannot be used adversely.

4.4 Advertence and Multiplicity

Participants reported conventionally using multiple digital tools simultaneously in their political work. In addition, the tools themselves have become versatile and support multiple concurrent activities, for example, "*... Google enables searching for articles and laws from other states and countries, translating them, and sharing it with your colleagues in less than a minute*" (P05). Still, the most striking revelation was the appropriated use of WhatsApp during plenary sessions to facilitate '*Silent Lateral Communication*'. P05, P09, and P11 noted this phenomenon in response to the question – Does the accessibility of digital tools make the modern political work different from past efforts in constitution writing?

Plenary sessions of the Constituent Assembly (CoA) are important public events attended by the general public and journalists, and the proceedings are broadcasted live on state television. P05 stated that "*the use of smartphones by the elected members during these sessions are not perceived well by the public, as they might presume that you are inattentive or distracted ... but since WhatsApp is also available on our laptops, we frequently use it to coordinate in real time to strategically present our ideas and prepare our arguments*". Moreover, similar to parliamentary proceedings, each member is awarded a 5 min time-window

[4] https://en.wikipedia.org/wiki/Godwin%27s_law (Last visited on 23rd January 2021).

to speak, which is primarily used to propose a new motion, present arguments in response to existing discussion, and answer questions raised by others. This adherence to protocol, time constrains, and social perceptibility entails microscopic collective planning, negotiation, and organization which are afforded by WhatsApp. Since these recurrent sideways communicative actions co-occur with the proceedings of the Assembly, and are invisible to the eyes of the public and press, we refer to them as 'Silent Lateral Communications'. Both P09 and P11 recollected engaging in such conversations which also involved members from different parties. This finding confirms that chat at work is used when information is "*timely* and *pertinent to ongoing work*" [38].

The multiplicity of tools –different tools supporting different tasks– was observed by a few participants as "*adding to the complexity*" which makes it more likely to "*exclude some people from actual discussions*" (P15). Further illustrating his argument, P15 used an example scenario: "*Before a meeting, discussions happen primarily over e-mail or Google Drive, however, during the meeting people who did not contribute online would be at a disadvantage*". Moreover, combined influence of aspects related to the partial nature of work in the CoA, and the varying levels of accessibility afforded by different tools, resulted into a "*catching-up fatigue*" (P06, P07). The affordances of WhatsApp (availability on phone and push notifications) render it permanently accessible, and subsequently a source of "*frequent intrusion in private and family time*" (P05, P08). Participants also noted establishing different coping mechanisms to prevent such intrusions resulting from numerous notifications. For instance, P09 stated that "*when at home, [he] puts [his] phone on the flight mode, and turns it back ON again after [his] kids are sleeping*".

4.5 Instruments and Environments

Finally, we will review the results related to more general questions focusing on the role of technological tools in the daily political work of the participants, in the foreseeable future, and on the overarching role of ICT in contemporary society as a whole.

Nearly all of the participants see technologies primarily as means to an end. What will ultimately count is only the result of their work – that is the final text of the constitution, which is "*the end product*" (P04). P01 noted that "*the technological tools are there to optimize and simplify the writing process ... If the final constitution is there, no one is interested in what the process was like*". Or even more concisely, as P07 put it: "*The tool is a mean, the constitution is a value*". Once the goals are reached, the road and the obstacles will be simply forgotten. Grasping the technology as an *instrument* –a pragmatic mean for achieving a definite goal– can be conceived as one pole of a conceptual scale.

The understanding of technology as an instrument is also reflected in response to the question about the imagined position of technology in the future constitution. Most of the constituents do not see a real reason to dedicate any articles of the constitution specifically to digital technologies. Our interviewees often mentioned that a need might emerge for approaching the digitization of society in

a generic way in the constitution, but that it is rather a topic which should be regulated at the level of laws (P02, P04, P11, P12, and P13).

In addition to the instrumental conception of technology, on the other end of the scale, we encounter the notion of technology as an *environment*. While reflecting on the difference between their own work on the constitution and the creation of previous constitution in 1907, the role of technologies is seen as central and beneficial: "*Every element that you used to have when you wrote the constitution, 100 years ago, you always had to meet. That's very cumbersome*" (P01). The lower necessity of face-to-face meetings and possibility of distant working is seen as an advantage by some (P12, P01), and many appreciate that the whole process is much faster (P03, P06, P08, P10, P13, P14). Although generally positive, several participants also noted disadvantages of mediated interaction as a basis for political work: "*I believe that the dynamics of face-to-face discussions can have an impact on the outcome, although I am not so sure, just a feeling ... In real meetings, there is a lot in the attitudes ... You know, the non-verbal attitudes, ability to convince or manipulate the opinions, this doesn't happen while editing the documents collaboratively online*" (P09). In addition, the easy and quick availability of information online was also evaluated critically: "*In the past it was about knowledge, which you had to have, today it is more about where you can get knowledge. But there can also be a surplus of information and distractions*" (P11).

Although sometimes reserved about the true value of technologies, participants also reported that the digital communication tools are not used in their full potential: "*In this respect we are at the beginning of a great journey to discover what technology can still do and what possibilities it will still offer*" (P01). Several participants (P02, P03, P12, P15) emphasized the disparity in the rate of changes in digital technologies and the change in human practices: "*Everything is getting faster at the moment, and its overwhelming to keep up to it*" (P02). Indeed, this is only part of the story, as in many cases the inefficient use of technology is not caused by insufficient cognitive capacities, but rather lack of technical skills and sometimes also unwillingness: "*Skills of people are not enough. It would be good to educate people...But a change of culture is also needed. Some people still think that everything should be discussed during face-to-face meetings only. We can do much better, and I have the feeling that culture will change in the future*" (P15).

5 Discussion

In this section, we discuss the presented findings from the interview study, and elaborate the implications for our project context and the overarching role of HCI/CSCW research in the political landscape.

5.1 Adapting Collaborative Tools for Political Practices

Owing to the *a)* peculiarity of the participatory constitution writing process, *b)* amalgamation of elected members with varying political experiences, and *c)*

temporal positioning of our qualitative inquiry, our research work has certain uniqueness. In addition, we present one of the first studies which examine the participatory constitution writing process in its progression. In this way, our contributions to the domains of HCI and CSCW are not limited to the extension and reinforcement of existing literature by adding the context of participatory politics, but can also open up avenues for designing tools that can better support the communicative and collaborative activities within politics.

The part-time engagements of politicians in the Constituent Assembly (CoA), and limited opportunities for collocated collective efforts ostensibly favor digital tools which support asynchronous collaboration over a distance. These factors, thus, explain the centrality and affinity to tools like WhatsApp and Google Docs in the CoA. On the other hand, tools that support synchronous communicative actions (such as Skype and phone calls) were discouraged because they require prior planning, which was not in agreement with the varied professional responsibilities of elected members. Furthermore, our study was conducted prior to the onset of the COVID-19 pandemic, and despite the disruptions caused in the ways of working and collaborating, the work in the CoA continued as before. Consequently, the onset of pandemic does not invalidate our findings, but reinforces them as the foundations of our social fabric are being redefined and restructured by the changes brought forth by this situation.

Another interesting finding that seems to underpin the value of these tools in the constitution writing process is related to the phenomenon of *catching-up*. This cultural phenomenon captures the purposeful and systematic set of activities that a person undertakes, in order to minimize an epistemic gap created by the tension between a possible immediate knowledge of happenings and the current point in time. Moreover, this social phenomenon is not limited to the use of digital tools to support collaborative and communicative actions *per se*. It has also been observed in the conduct of 'fly-in-fly-out families' [37], as well as in the context of social media and political protests [44], and immigration [61]. Still, this phenomenon may be the consequence of transformation of social time in the modern era [50], such as the *time-space distanciation* [19]. In our context, both WhatsApp and Google Docs enable the opportunity of checking-in and catching-up at a chosen point of time, thus, affording participants a chance to manage their own time in a very flexible, personalized way. This is important, especially since the elected members have daily jobs beside their involvement in the CoA.

We consider the '*temporal permanence*' of collaborative/communicative tasks, and '*levels of social conformity*' (or the dynamic social boundaries which are opportunistically created to afford strategic political advantage) as the two dimensions to assess the functional quality of varied tools used by the participants. Both WhatsApp and Google Docs occupy a wider spectrum across these dimensions. As noted by the participants, their memberships to numerous groups – including peers from the same party, colleagues from the same commission, as well as friends within and outside the CoA, affirms that the scope of WhatsApp and Google Docs is effortlessly adaptable for collaborations with individuals as well as groups. Furthermore, keeping several, yet distinct, WhatsApp groups and conversations is also an elegant solution to the classical issue of role conflict, especially in conflicting political roles that one individual has in respect to other individuals [39]. In addition, they

are well suited to short-term transitory (for example, creating a group for a specific plenary session) as well as long-term (keeping a record of commission work for the whole duration of constitution writing process) collaboration needs. However, e-mails and phone calls present only a narrow spectrum within this two-dimensional space. On the one hand, phone conversations are relatively ephemeral and afford one-to-one communications; on the other hand, e-mails are episodic in terms of temporality but simultaneously adapt to varying levels of social conformity. Also, this two-dimensional space has implications for technology designers to assess the scope and scale of their tools, in order to ascertain their seamless diffusion in contexts such as participatory politics.

Collaborative tools and political practices are related to each other in a reflexive way: the tools and practices mutually influence and establish each other. The tools are designed with practices in mind, but once introduced, they are repurposed by users in ways that were not previously imagined by the designers and engineers. In this sense, the shifting boundaries of political work open new spaces for intervention from the HCI and CSCW communities.

5.2 Shifting Boundaries of Political Landscape: HCI's Space for Intervention

Access to a wide variety of digital tools is fundamentally changing the policy-making practices, enabling politicians to look beyond their region or state, and seek inspiration from global events and movements. As revealed in our studies, participants proactively sought inspiration and ideas from constitutions written in other states and countries. In addition, the ubiquity of social networks and accessibility to public opinions and trends have brought the politicians closer to their constituents, and enabled the realisation of efforts to write a constitution in a participatory manner.

The versatility of instant messaging tools like WhatsApp have also fostered the emergence of new collaborative practices like 'Silent Lateral Communication' (see Sect. 4.4 above), especially in public proceedings during plenary sessions. These practices manifest as opportunistic and improvised cooperative acts between elected members with homogeneous political objectives – often involving members from different political parties. The elected members' need to attain a real-time strategic advantage coupled with the peculiar affordances of WhatsApp and its simultaneous availability on computers, have led to the wider acceptance of this emergent practice in the Constituent Assembly (CoA). Furthermore, the concerns about privacy and third-party ownership of these tools has led the politicians to establish rigorous regulations and best practices as preemptive prevention against malicious activities. Aforementioned findings illustrate the evolving nature of policy-making practices, and present numerous opportunities and implications for the HCI community to intervene and design effective and secure tools which can support and encourage the participatory approaches within the political landscape.

Our article contributes novel insights into the shifting boundaries of evolving political practices in the context of current digital societies. We have shown how collaborative technologies shift boundaries of informal and formal activity,

the categories of novice and expert in relation to the use of ICT, the sphere of the public and the private, and facilitate simultaneous communicative actions. In some aspects, these boundaries are rather "*selectively permeated*" to gain strategic political advantages in plenary sessions (for example, Silent Lateral Communication). In other cases, they are "*selectively constructed*" to facilitate better coordination (for example, predefined regulations and best practices), and to mitigate adverse effects of security and privacy breaches. Our use of the term 'selective' underlines the inherently dynamic and opportunistic manner in which social objectives are constantly redefined in such political collaborations, and conformity to specific groups is malleable over time.

Yet another conceptual outcome that emerged from our analysis of empirical materials is the distinction of *technological tools as instruments and environments*. Instruments and environments are two opposite conceptions of technology, exemplified in our data in the tension between "means to an end" on the one hand, and, on the other hand, conditions structuring more fundamentally the social activities that constitute political work. The central difference is that *tools as instruments* are tied to solving clearly outlined *problems* (such as "writing a document together"), while *tools as environments* transform the horizon of *possibilities* in a more essential sense (such as the faster pace of work under digital conditions). In this sense, it is also easier to assess the digital *tools as instruments*, because their utility can be judged by measuring whether, or to what extent, the tool helps us reach the goal. Evaluating digital *tools as environments* seems to be more complex and problematic, because the ontological changes it brings around –for instance the pace of communication– can have both positive (volume of work) and negative (cognitive overload) impacts. While formulated on the grounds of our specific study of collaborative constitution writing, we believe that the conceptual relationship of instruments and environments merits further advancement and verification in other social settings.

In conclusion, our examination of collaborative constitution writing provides valuable insights into an understudied area of politics, particularly focusing on the role of ICT. It is clear that –at least in our context– technologies play an important role in supporting politics and political issues. As demonstrated throughout the paper, the use of digital communication tools is omnipresent and ubiquitous in political work, reflecting and reinforcing the broader social developments in recent decades [34,36]. Moreover, although the role and impact of communicative/collaborative tools is more pronounced in relation to the varied everyday activities and tasks that constitute political work, their role in the evolution of politics is still nuanced, spontaneous, gradual and hard to assess in the time frame of a study such as ours.

Our research shows that the constitutive boundaries which have been characteristic of politics for centuries (for example, the clear partisan divisions, or citizens' detachment from the actual details of everyday political work) are being profoundly transformed by the use of ICT. Interestingly, many of the ways technologies are currently utilized in our interviewees' political work have been redeployed from other domains of work, such as industry, business and services. It remains an open question how these changes can be effectively evaluated within the specific domain of political work, taking into account its unique disposition.

Although it was not our purpose in this paper to formulate assessments of our participants' work practices, we rest confident that the reported results can serve as grounds for further research in this important direction.

Finally, the design implications of our work seem to be grounded in the existence of two types of boundaries. First, there are *desirable boundaries*, which are necessary or inevitable – for example, the private/public dichotomy. These are not to be overcome or removed but they should be made explicit and transparent. Second, there are *undesirable boundaries*, where the designers/researchers should provide instruments and environments that actively hinder emergence of boundaries – for example, between novice and expert users. In short, spaces are open in political work for HCI and CSCW to *design for* and *design against* the frictions we identified and described in politicians' everyday praxis, oriented to the collaborative constitution writing. Indeed, such design solutions need to be created in close collaboration with the practitioners themselves, serving their variable and multifarious needs and requirements.

6 Concluding Remarks

We present a qualitative examination into an ongoing participatory effort of constitution writing in the Swiss canton of Valais (or Wallis). With an aspiration to comprehend the dynamic and multi-layered collaboration practices within the political landscape, we present an interview study about the ways politicians use ICT to collaborate and acquire a strategic political advantage in public spheres. Our study documents how a relatively rigid and steady domain of social life has undergone substantial transformations in the last decade. Various boundaries which have been built into in the cultural understanding of political activities –such as the line between public and private, or the difference of formal and informal– seem to shift and merge in novel and sometimes surprising ways due to the increasing use of ICT for routine everyday communication. In this paper, while aiming somewhat "impatiently" to analyse an ongoing political process of collaborative constitution writing still in its course, we hope to have also identified and specified some of the more general ongoing societal tendencies.

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