

7. Conclusion

In this work, I have broached the thesis that major parts of deliberative systems, as conceptualised in deliberative democratic theory, that operate under the conditions of the digital constellation are mediated through social media platforms whose logics and architectures structure the communication processes and thereby produce both positive and negative effects on the systems' deliberative qualities. Subsequent to the introduction, I presented the deliberative systems approach and its central concepts – deliberation and deliberative qualities, deliberative sites, connections and deliberative systems. Most of these concepts have their ambivalences in the deliberative systems approach, and I sharpened them in order to use them for my later analyses of the communication on social media platforms. In the third chapter, I portrayed the digital constellation and displayed its relevance for the deliberative systems approach. I have shown how digital technologies represent an infrastructure, a resource and a horizon for societies and deliberative systems and how these technologies are simultaneously and dynamically developed within the parameters of these societies and systems. Moreover, I demonstrated that the public sphere, in particular, undergoes fundamental changes under the conditions of the digital constellation and that the public sphere is of primary importance in the deliberative systems approach; and I presented the changes that are most relevant to communication in deliberative systems and on social media platforms, thus laying the groundwork for my later analyses. In the fourth chapter, I zoomed in on social media platforms as one of the central means of communicating in deliberative systems that operate under the conditions of the digital constellation. I presented some points of definition for and some central logics of these platforms, and I described their effects on and significance for societies and deliberative systems operating under the conditions of the digital constellation. The fifth chapter elaborated on the architectures of social media platforms and their effects on the communication processes in sites, connec-

tions and systems. The sixth chapter presented social influences and contexts that generally structure communication processes within society but that have specific reifications in platform communication. In an interplay with the platform architectures, they structure communication processes on the platforms and affect the deliberative qualities of these processes. Each of the latter two chapters addresses the deliberative qualities that are affected by architectural traits and social influences. My conceptions and reasonings throughout this book have been positioned at the nexus between, on one hand, deliberative democratic theory and, on the other, digitisation research by scholars from sociology, political studies and computer science, as well as media and communication studies.

My goal was to provide an overarching picture of the influence of digital technologies on deliberative systems and to address as many aspects as possible. The book thus provides a plentiful basis for further research on and practical approaches to the connection between digital technologies and democratic decision-making that is based on society-wide communication. But in order to provide such an overview, I had to aim for a higher level of abstraction in many of my descriptions, and I had to use data and empirical findings from studies by other scholars. This approach involves some caveats and weaknesses.

First of all, I was only able to use empirical data that were available. Not all the theoretical connections I made or the aspects I addressed have been empirically researched thus far. In some instances, for example, I had to deduce the effects of social media platforms on deliberative qualities directly from certain architectural traits – such as the faster communication that derives from an architectural limitation of characters per post. In other instances, I had to rely on more general theoretical considerations that other scholars – mostly from deliberative theory – have submitted on the basis of empirical findings from different contexts. Sometimes I had to dismiss aspects, as neither of these approaches was available, or neither of them seemed scientifically sound. Moreover, the scope of the project and the availability of empirical data were the reasons for the limited number and types of platforms I addressed. As I described in chapter 4, most platforms are reluctant to share data for research and, as a result, not all platforms have been empirically researched to a similar degree and with similar methods. In my analyses, I focussed on the largest, oligopolistic platforms on which empirical studies were available.

Moreover, the decision to limit my research to social media platforms in the first place is owed to the need for a feasible scope of research. Of course, there are further means of digital communication that are relevant to deliberative

systems, such as messenger services like Telegram and WhatsApp, or digital outlets of journalistic media and their comment spaces. However, these channels have significantly different architectures from the platforms I described and could not be included in my analyses.

Another possible caveat of my research is its sustainability. The architectures and affordances of social media platforms are inherently dynamic, as I explained above. So, I chose a level of abstraction that might be less precise but will hopefully be more sustainable. However, changes in the dynamics and reifications of digital communication processes might become considerably more drastic as soon as the platforms introduce AI tools – Large Language Models in their content moderation systems – into their architectures. For instance, the introductions of automatic translation or writing assistants and image generators might streamline and bring about the convergence of communicational conventions. As these systems are probability-based, they will recommend the most usual way of expressing something within a certain dataset. The delineation of this dataset would determine whether these recommendations align with more general conventions or if they even provide community-specific recommendations. Consequently, the differences between these conventions would either be decreased or increased, which would then affect, for instance, the connections between site clusters and embeddedness in deliberative systems.

Despite these caveats and weaknesses, this book contains many findings that are relevant for the research of both theoretical and empirical scholars in these disciplines, as well as for practitioners operating in these fields.

Conclusions for Theoreticians

As this work is set at the nexus between deliberative democratic theory and digitisation research, it holds important findings for both these academic fields. It informs each set of scholars about the other set's concepts and improves the compatibility of the respective research fields. The connection between the deliberative systems approach and digitisation research revealed several links between the research fields. The conceptualisation of both deliberative systems and social media platforms as networks where temporal aspects are highly relevant allows an almost seamless application of the systemic model to the communication processes on the platforms. Moreover, the existing work on the concept of the digital transformation of the public sphere enabled me to build a further bridge between the fields. Since the respective

literature is already very close to that of deliberative thinking – as both are at least partially based on ideas by Jürgen Habermas – it “prepared” a variety of aspects from digitisation research for the lens of the deliberative systems approach. For example, the existing research on the fragmentation of communication in the digital space aligns well with the concept of site clusters, which I developed in chapter 2.4. Though the concept of site clusters itself has not yet been presented by deliberative systems scholars, there have been some notions that align very well with the concept. The fragmentation discourse in digitisation research and the literature on the digital transformation of the public sphere inspired me to draw these notions together to make them empirically accessible. In consequence, findings I presented in chapters 5 and 6 revealed that, though the existence of filter bubbles and echo chambers could not be empirically supported, the development of site clusters is architecturally supported by social media platforms; these findings also revealed that such clusters can be empirically identified around communicational conventions and platform communities.¹

But the connection of the research fields likewise holds many relevant aspects for each field individually. As I have alluded to before, deliberative theory has thus far been slow to acknowledge the scope of influence that the conditions of digital constellation hold for deliberative systems. Many of today’s societies operate under these conditions, and I have shown that there are dynamics and logics that are specific to the digital constellation and that shape the communication processes in these societies. As I have demonstrated, digital technologies represent an infrastructure, a resource and a horizon for societies and deliberative systems. Simultaneously, digital technologies are constantly developed and repurposed by these societies and within these systems. Societies and technologies are thus interwoven and constantly influencing each other in their developments. They produce the contexts in which deliberative systems evolve.

Thus far, deliberative theorists have conceptualised contexts as the factors that “provide incentives, norms, and scripts that shape human action, including deliberative behaviour” (Bächtiger/Parkinson 2019: 37). Therefore, deliberative theory must acknowledge the relevance of the conditions of the digital

1 It is reasonable to presume that site clusters also exist beyond social media platforms – in fact, this seems rather obvious – but thus far, they have not been addressed in the deliberative systems approach, and empirical research would shed more light on the reasons for and systemic effects of such clusters.

constellation, the impact these conditions have on communication processes and the fact that specific characteristics of this constellation function as the context for deliberative systems. Attempts to achieve these aims can greatly profit from the theoretical concepts and empirical findings that have already been presented by scholars of digitisation. In line with these considerations, I have presented various concepts that are especially relevant within digitisation and platform research – from the digital constellation, through quantification, to anonymity – and demonstrated how they are applicable from a deliberative theory angle. I have displayed how some deliberative theory scholars have already acknowledged digitisation's effects on the structural transformation of the public sphere. I have described some of the most important aspects of this transformation, added concepts and findings from digitisation research and set these analyses within the perspective of the deliberative systems approach. Moreover, in my analyses in chapters 5 and 6, I have used the concepts of digitisation research. Though my conceptualisations and analyses are far from comprehensive, they indicate how findings from digitisation research can be systematically included in theoretical models of democratic – and, specifically, deliberative democratic – theory.

Deliberative theory can even be made more sustainable by including considerations on digitisation and findings from digitisation research. As I mentioned in chapter 2.4, some scholars who have been central advocates of the deliberative systems approach have recently sought to incorporate other democratic processes, such as voting, petitioning and demonstrations, into their theoretical frameworks (cf. Asenbaum 2023: 159; Bächtiger/Parkinson 2019: 19; Saward 2021; Warren 2017). However, my considerations would not be made obsolete by such a turn in theory. Communication processes and their connections with other parts of a system are still an important part of this updated model. Moreover, digital technologies also heavily influence these other parts that are newly under consideration. Understanding their logics and influences, such as I have presented them in this work, will therefore aid in assessing these new territories and integrating the results in the wider theoretical framework. For example, the logics of quantification and datafication not only apply to communication processes directly but also are used in platforms for electronic petitions (cf. Margetts 2019: 109–110). Furthermore, algorithmic systems are used in other branches of democratic systems, such as the judiciary and executive organs (cf. Eubanks 2019), and their influence will probably increase in the future, especially with the rise of LLMs and other AI models. Several of the effects of the digital technologies I described in this work thus af-

fect not only communication processes that could be described in reference to deliberative standards, but also other parts of the conceptually widened democratic systems that operate under the conditions of the digital constellation.

Deliberative systems scholars are not the only ones who could profit from the connection between the two theoretical fields. On the other hand, scholars analysing the effects of digital technologies, and specifically those of social media platforms, can use the deliberative theory-based framework that I presented here to pinpoint these effects more accurately. Admittedly, there have been many works that have alluded to deliberative theory when criticising digital communication and algorithmic recommender systems. Yet, they usually do not go beyond demanding qualities such as rationality, truthfulness and respect.² Furthermore, they do not use a systemic approach, even though this approach would be perfectly suitable for their research. The standards regarding the deliberative quality of sites and connections provide a more accurate way of assessing communication processes and their democratic value. Since these standards are founded on intensive theoretical and empirical research, assertions of threats to or chances for democracy would gain a more thorough basis than they have thus far been given. Moreover, the deliberative systems approach allows one to analyse the effects of digital technologies and platforms on systemic decision-making processes in a systematic manner that nonetheless accounts for the complexity of the issue. Viewing communication on social media platforms as a network of differently configured sites that have additional internal patterns and are connected in different ways enables a more complex analysis than merely considering hashtags or retweets and determining that most posts cannot be considered rational in the deliberative theory sense. The notion that deliberative systems should contain a division of labour between sites acknowledges that sites have different contexts and must thus have differing degrees of adherence to deliberative standards. From this perspective, homogeneous site clusters on social media platforms can also be viewed as safe spaces for minority groups to develop their arguments and gain confidence before they transmit their reasons to the wider system. As long as these spaces are connected to the system, their homogeneity does not necessarily impair systemic deliberative qualities. The deliberative systems approach can therefore help to set certain fears and scepticisms formulated by digitisation researchers into perspective.

2 Cf., for instance, Forestal (2020), Maia (2018), Peacock et al. (2019), Rishel (2011), Stroud et al. (2015).

Conclusions for Empiricists

This work likewise provides some important points of consideration for empirical scholars, especially for those working on the basis of deliberative democratic theory. In a systematic manner, I have analysed some of the most prominent effects of digital architectures and social influences on digital communication processes. I have identified the most prevalent architectures and social influences that structure digital communication, and I described both their effects on various levels – site, connection and system – of communication processes and their implications for the respective deliberative qualities. This systematic approach, which is based on the deliberative systems approach, can be used as a blueprint for further empirical research projects that address different architectural and social influences or different technologies, as well as for projects that seek to empirically back my findings and some of the conjectures I had to make due to a lack of existing empirical data. However, it has to be noted that, due to the dynamic nature of the digital architectures and, consequently, of the affordances and structures they produce, there are limitations to the reproducibility of my findings.

Scholars from both deliberative theory and digitisation research – as well as persons working in journalism or popular science – often comment on the negative influence digital technologies have on communication on political topics. When doing so, they frequently draw conclusions with regard to the state of democracy or society more generally. However, these assessments are often vague and unstructured or are combined with perceived and anecdotal empirics (cf. Pariser 2011; Sunstein 2002). Moreover, the generalisation of the negative influence of digital communication channels on deliberative qualities oversimplifies the matter. My approach to analysing the effects of architectures and social structures on digital communication exemplifies how such analyses can be conducted in a more differentiated, theoretically anchored and systematic manner. I have demonstrated that these structuring influences have varying spheres of influence, as well as both positive and negative implications for the qualities of the communication processes, and I have pointed to the interplays between the different factors. Moreover, I have stressed that analysis of a specific communication process necessitates consideration of the specific contexts of the respective process, and I have displayed several of these context factors that are specific to digital communication.

Conclusions for Practitioners

This book furthermore contains important insights for practitioners. For instance, actors – be they politicians or journalists – who reference “the discourse on Platform XYZ” to support their claims need to be aware that there is not one discourse on Threads, let alone one common opinion among its users. Social media platforms are complex networks of communication processes whose structures and patterns are shaped both by the platforms’ architectures and by social structures in the contexts of platforms and users. Thus, whether a post, a piece of information or an opinion is noted by many users within the platform, and ultimately even by individuals beyond the platform, depends on these platform architectures and social structures. Practitioners that cite from social media platforms need to be aware of the dynamic and serendipity involved in a post’s or a topic’s popularity and transmission (see also chapters 3.2 and 4.2).

Practitioners also include actors that are concerned with the effects of digital technologies on the “relatively wild, inclusive, uncontrolled debate in the public sphere” (Bächtiger/Parkinson 2019: 92) and with the regulation of these technologies. As I described in chapter 4.2, platforms are constrained in their decision-making by various legal frameworks. General challenges, such as polarisation, fragmentation and the spread of misinformation due to the partial migration of public discourse onto social media platforms, are widely cited as threats to democracy that must be counteracted through legal regulation. In my analyses, I have pointed out both negative and positive effects that characteristics of digital communication have on deliberative qualities. I have shown not only that the platforms’ architectures increase the likelihood of polarisation in the public sphere, but also that they also provide possibilities for like-minded people and minorities to connect, to experience and explore cultures and collective identities, to jointly form their arguments and to strengthen their claims. This more nuanced picture helps to pinpoint not only the empirically provable challenges posed to democracy by social media platforms and the way that these challenges are caused by the interplay between technology and society, but also the positive impacts that social media platforms have on democracy. Political actors and regulators may thus tackle challenges at their roots while protecting the more beneficial effects of social media platforms.

A further set of practitioners comprises actors involved in the design of democratic innovations. Currently, there is an increasing number of efforts to

design democratic innovations for the digital space, as well as apps and platforms that display certain democratic qualities. In particular, “third-generation scholars” of deliberative democracy (see chapter 2) are working on designing such spaces in a way that enhances deliberative quality as much as possible (cf. Alnemr 2020; Gastil 2016; Strandberg/Grönlund 2018). Concepts of deliberative quality and preferences regarding different standards may vary among these scholars. However, the concepts and considerations I have presented in this work can be useful to them in different ways. Firstly, I have introduced the systemic approach of deliberative democratic theory as an approach that considers the specific contexts of a deliberative site when assessing its deliberative qualities. I have demonstrated that digital sites can have very specific context variables that affect the deliberative qualities of their communication processes. My work points to factors that affect these qualities in sites and in the connections with other sites, as well as to the interplay of these factors with each other. Both scholars seeking to establish digital democratic innovations and developers of platforms or apps that are meant to display certain democratic or deliberative qualities can use these explanations to estimate whether their designs will have the sought-after effects on deliberative quality. Secondly, I have based my conceptions on ideas not only from deliberative theory, but also from more digitisation research that is more sociologically oriented. Therefore, my work may raise awareness of factors that might not have been considered thus far by scholars with a narrower theoretical focus on deliberative theory. The influence of social structures, in particular, does not yet seem to have featured very much in the design choices of democratic innovations. My analyses can raise awareness of these influences.

Lastly, there are actors within the platform companies who are concerned with the effects of their platforms’ architectures, particularly with regard to communication processes. As I described in chapter 4, they design their systems to generate data and profit, and doing so necessitates the avoidance of legal ramifications and bad press. Thus far, decisions on the rules that regulate user behaviour and shape digital communication processes have been authored and implemented by small teams within the companies (cf. Gillespie 2018c: 266).

At all the big platforms today, average users do not have a say on how this question gets handled. Instead, it’s left to company executives and their policy teams, who often do consult experts, human rights groups, and other stakeholders. But the process is opaque and inaccessible to platform users,

and in general has undermined confidence in the platforms. It's hard to put trust in a policy when you have no idea who made it or why. (Not to mention who enforces it, or how.) (Newton 2022d)

Only a few platforms, like Reddit, incorporate user participation in their content moderation systems by appointing moderators from their user base (cf. Reddit Help 2023). Simultaneously, there is an awareness among the users “that we have the power to reclaim the ownership and control over technology and to repurpose it for our own use” (Muldoon 2022). There have already been incidences in which users protested changes to platform architectures and these protests led to the reversal of the changes (cf. Newton 2022b). Consequently, some platforms have given users the possibility of participating in policy development and decision-making with regard to content moderation (cf. Newton 2022d). For example, Meta has conducted an experiment where a representative sample of its user base deliberated on how the platform should handle problematic climate change information. The reflections by the designers of this experiment show that it has obviously been based on deliberative theory:

We found high amounts of both participant engagement and satisfaction with the deliberative process. As importantly, they demonstrated compelling evidence that participants could engage in meaningful and respectful deliberation around a complex topic. (ibid.)

What Meta calls “platform democracy” (ibid.) has, incidentally, long been known to deliberative theorists as “meta-deliberation”. Many deliberative theory scholars consider meta-deliberation and collective decision on the rules that shape communication to be profitable for deliberative quality (cf. Dryzek 2010: 12, 2009: 1393; Goodin 2008: 67; Thompson 2008: 515), as participants are more likely to accept and follow rules if they participated in their setting (cf. Douek 2021: 766).³ The “platform democracy” that Meta experimented with is a good example of how findings from deliberative democratic theory can be used by practitioners to improve platform communication processes through democratic decision-making on the rules for these processes.

3 Similarly, deliberative theory scholars have argued for including meta-deliberation in digital democratic innovations (cf. Alnemr 2020: 532; Douek 2021: 766).

Conclusions for Participants in Democracy

Lastly, my insights on how digital architectures affect communication provide digital literacy to individual participants in democracy. Knowledge about how discourses develop in digital spaces such as the sites on social media platforms, about how these spaces are structured and about how they connect to other spaces allows one to gain perspective on the information that emerges from these spaces. For instance, it produces awareness of the complexity and volatility of the algorithmic systems that provide news feeds within these platforms, of the dynamics that incentivise users to post on the platforms and of how and why other users react to posts and transmit information to other digital and non-digital sites. It thus conveys the almost serendipitous aspect of how and why posts, expressions and opinions become notable in sites and how they are transmitted to other sites. Such knowledge thereby produces an awareness of the roles that platform architectures and social structures play in this process; it helps one to assess information from and about digital sites and to participate in societal discourse in an informed and rational manner.

Moreover, it provides an understanding of how specific forms of expression and a diversity of communication styles emerge, as well as of how online communities and their specific communicational conventions develop. An awareness of these communicational varieties and of the existence of linguistic techniques like dog whistling, as well as of how forms of expression, conventions and identifications develop, helps participants in democracies to recognise the diversity of ways to talk or post about issues. Insights about how platform communities develop and how identifications can be expressed provide ideas about the multitude of possible perspectives and the potential differences involved in viewing issues. These insights thus enable participants in democracy to understand and partake in societal discourse in a circumspect and open-minded manner.