

Karoline Helbig

DEMOCRACY AND DIGITAL COMMUNICATION

The Effects of Social Media Platforms
on Deliberative Systems

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Democracy and Digital Communication

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Contents

Acknowledgements	7
1. Introduction	9
2. The Deliberative Systems Approach	21
2.1 Deliberation	28
2.1.1 Systems Approach Perspectives on Deliberation	29
2.1.2 Refined Conceptions of Deliberation, Deliberative Standards and Deliberative Qualities	38
2.2 Deliberative Sites	47
2.2.1 Defining Deliberative Sites	48
2.2.2 Deliberative Qualities in Deliberative Sites	52
2.3 Connections between Deliberative Sites	57
2.3.1 Defining Deliberative Connections	58
2.3.2 Connections and Deliberative Qualities	66
2.4 Deliberative Systems	74
2.4.1 The Definition and Traits of Deliberative Systems	74
2.4.2 Systemic Deliberative Qualities	83
3. The Digital Constellation as a Context for Deliberative Systems	91
3.1 The Digital Constellation	95
3.2 The Restructured Public Sphere	100
4. Social Media Platforms as Parts of Deliberative Systems	121
4.1 The Logics of Social Media Platforms	122
4.1.1 Collecting, Standardising and Storing Data	123
4.1.2 Content Moderation and Recommender Systems	127
4.2 The Relevance of Social Media Platforms for Deliberative Systems	143

4.2.1	An Oligopoly of Platforms	144
4.2.2	Social Media Platforms' Interwovenness with Deliberative Systems	149
5.	Platform Architectures and Their Implications for Deliberative Systems	157
5.1	Specific Forms of Expression on Social Media Platforms and Their Value for Deliberation	162
5.1.1	One-Click Reactions and the Quantification of Communication	164
5.1.2	Images and Sounds	172
5.2	Fundamental Structures of Communication Processes on Social Media Platforms ..	177
5.2.1	Identifying Sites and Connections on Social Media Platforms	178
5.2.2	Platform Architectures' Significance for Deliberative Systems	188
6.	Reifications of Social Structures on Platforms and Their Effects on Deliberative Systems	201
6.1	Reifications of Time	203
6.1.1	High-Speed Communication and Long-Term Accessibility	204
6.1.2	Timescapes	209
6.2	Reifications of Communicational Conventions	213
6.2.1	Languages	215
6.2.2	Communicational Conventions of Platform Communities	221
6.3	Reifications of Identity	242
6.3.1	Author Identity, Anonymity and Pseudonymity	243
6.3.2	Group and Role Identifications	253
7.	Conclusion	269
8.	References	281

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1. Introduction

In the world we know, communications and decisions trivially take up a certain space and time of their own, they consume an energy of their own, they require a separate expenditure of organizational capacities, and so on. [...] In addition, the communications media intervene with a selectivity of their own in [the] social distribution of knowledge. The structures of the public sphere reflect unavoidable asymmetries in the availability of information, that is, unequal chances to have access to the generation, validation, shaping, and presentation of messages. Besides these systemic constraints, there are the accidental inequalities in the distribution of individual abilities. The resources for participating in political communications are in general narrowly limited. This is evident whether one examines the time available to individuals and the episodic attention to topics and issues with histories of their own; the readiness and ability to make one's own contribution to these topics; or the opportunistic attitudes, affects, prejudices, and so on, that detract from a rational will-formation. (Habermas 1996: 325–326)

Jürgen Habermas wrote these words before 1992, when his work *Faktizität und Geltung* (*Between Facts and Norms*) was first published in the German original edition. In this book, Habermas lays some of the foundations of what will become deliberative democratic theory – one of the most cited fields of democratic theory. Moreover, many of his ideas will return in the deliberative systems approach that marks the latest turn of deliberative theory. As a result, *Faktizität und Geltung* influences even today's conceptions of collective democratic decisions, which are made through society-wide communication systems, in other words, through deliberative systems.

But since then, the contexts of and infrastructures for society-wide communication have changed. In 1992, the World Wide Web was still in its infancy, mainly giving access to data from governmental, scientific and commercial institutions. Few private households owned personal computers. In this time of

the Web 1.0, communication via the internet, and specifically such communication between individuals, was unheard of by the general public. Since then, societies have increasingly become characterised by the use of digital technologies. In other words, they have increasingly become subject to the conditions of the digital constellation (cf. Berg et al. 2020b: 18). This has various implications for social and political life. While some of Habermas's points cited above are obsolete, others remain valid, still others are truer than ever and many have developed in a direction that must have been unforeseeable in 1992.

For example, what seemed so trivial to Habermas – that communication processes “take up a certain space and time of their own” – might still be true for individual acts of communication. However, digital many-to-many communication puts the notions of time and space into new perspective. It occurs instantaneously over long distances, it can be archived and revisited over long stretches of time and it is often reordered independently of chronology. The question of what space is taken up by communications is no longer one of how much physical space is needed and what geographical coordinates it has, but rather one of what digital platform is used and what architectures structure the communication there.

In the quotation above, Habermas also says that communications media intervene “with a selectivity of their own in the social distribution of knowledge”. In the digital constellation, these communications media have diversified and are still doing so on a scale that would have been unforeseeable for Habermas. However, the resulting “asymmetries in the social distribution of knowledge” still stand, as is testified by the large corpora of academic literature on the polarisation, discrimination and fragmentation of the public sphere that result from the digital transformation.¹

Furthermore, Habermas refers to the attitudes of individuals who participate in political will formation. Where he sees these attitudes as dependent on the *individuals* themselves, digital communication is *structurally* more prone to “opportunistic attitudes, affects, prejudices”. This is partially a result of the specific logics and architectures of social media platforms. For instance, a post that is more affect-oriented will inspire more clicks, shares, likes and interactions; this generates more ad revenue, which increases promotion on platforms and thus increases the reach of that post among other social

1 To name just a few works in these regards: Bail (2021); Barberá (2020); Chambers (2023); Dahlgren (2021); Dubois/Blank (2018); Kubin/Sikorski (2021); Lambach (2020); Pariser (2011); Vo (2020).

media users. Thus, modes of communication “that detract from rational will formation” have become the default mode of digital interaction.

These three examples of how digital communication differs from what Habermas described in 1992 – the new perspective on time and space, the diversification of communication media and the influence on participants’ attitudes – already hint at the unique way in which communication processes are structured in the digital constellation. Throughout the book, I will elaborate on these unique characteristics and their implications for democracy. I will show that major parts of deliberative systems (as conceived 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. Thus, I will analyse the influence of social media platforms on democratic decision-making from a deliberative theory perspective, and more specifically from the perspective of the deliberative systems approach.

The discussion about the impact that digital technologies in general – and social media platforms more specifically – have on democratic processes is almost as old as the internet. Academic literature on digitisation often points to the effects of the digital transformation on democracies, and many of the conveyed arguments refer to the communicative aspects of democracies. One can see this by observing some of the most prominent scholars in this field. Andrew Chadwick (2013), for instance, concerns himself with how older and newer media logics blend in today’s political communication. Jose van Dijck and co-authors (2018) take a look at how news items are shaped by the platform ecosystems on the internet. Zizi Papacharissi (2015) zooms in on the communication processes of lay people and the public display of emotions that plays a primary role within these processes. Cass Sunstein (2017) describes how social media platforms’ logics lead to fragmentation, polarisation and even radicalisation. Jodi Dean (2002), on the other hand, argues in the opposite direction and states that due to its economic logics, the World Wide Web cannot resemble a true public sphere. Helen Margetts and colleagues (2017) analyse the “tiny acts of participation” that are enabled by new formats of social media communication, the publicity of which can motivate other people to contribute, too. While these and other scholars engage with various angles of digital communication and its implications for democracy, they often focus merely on the challenges put to democracy. Moreover, they frequently use vague concepts of democracy, which are not soundly founded on democratic theory, let alone deliberative theory or

the deliberative systems approach. On the other hand, scholars who are well versed in deliberative theory have thus far hesitated to approach the social and political effects of digital technologies. Throughout this book, I will demonstrate that the deliberative systems approach – as a concept based in deliberative theory – is especially well suited to analyse the effects of digital technologies on democratic processes.

In order to provide a solid theoretical foundation for the exploration of the effects of digital technologies on collective, communicative democratic decision-making, I will adopt the perspective of the deliberative systems approach (cf. Parkinson/Mansbridge 2012; Bächtiger/Parkinson 2019). Moreover, in doing so, I will expand the way that digital technologies are thought about: I will not only point out the challenges they present for democracy; I will also acknowledge their benefits. This more nuanced picture helps to pinpoint both the empirically provable challenges that social media platforms, in the interplay between technology and society, pose for democracy and the positive impacts that these platforms have on democracy. Thus, the challenges might be tackled at their roots by political actors while the more beneficial effects can be protected. In addressing my research question from this perspective, I will proceed as follows: I will commence by presenting the deliberative systems approach with its central concepts (chapter 2); I will follow up by introducing the digital constellation and its relevance for deliberative systems, especially the public sphere (chapter 3); I will zoom in on social media platforms, describing their central logics and their role within deliberative systems (chapter 4); I will focus on the platforms' architectures and their effects on deliberative systems (chapter 5); and I will describe how some social structures reify within these architectures and affect deliberative systems (chapter 6). In the following, I will elaborate on my line of argument and my methods of theory-building.

Deliberative democratic theory in general is an inherently normative theory "about making collective decisions and exercising power in ways that trace to the reasoning of the equals who are subject to the decisions: not only to their preferences, interests, and choices, but to their reasoning" (Cohen 2007: 220). Based on these more general ideas, the deliberative systems approach draws a model for coming to these decisions through communication processes that are distributed throughout society (cf. Mansbridge et al. 2012: 2–3). More specifically, communication processes in a system occur "in multiple, diverse yet partly overlapping spaces" (Elstub et al. 2016: 139–140) or sites, and there is a division of labour between these sites (cf. Mansbridge et al. 2012: 4). But while all sites contribute in their own way to the system's making of legiti-

mate democratic decisions, the sites must adhere to deliberative standards to different degrees, depending on their positions within the deliberative system (cf. Mansbridge et al. 2012: 2–3; Thompson 2008: 514). For instance, a parliamentary debate on a new law is, and must be, very different from a discussion that took place over a beer in a pub and generated an idea that fed into the discourse leading to that law. Among the variety of sites, the sites within the public sphere – including pub discussions – are considered to be especially vital for deliberative systems (cf. Mansbridge 1999: 228). In order for ideas to actually feed into a discussion that leads to a law, all the sites within a deliberative system must be interconnected. In other words, all relevant sites must be part of the system, so that ideas and reasons have at least the chance of being transmitted to other sites and thus of being introduced into the system-wide decision-making process (cf. Chambers 2012: 54). Therefore, the deliberative systems approach is a useful lens for examining society-wide communication processes that result in political decision-making.

Though the deliberative systems approach is thus based on normative ideas, it is less bound to normativity than other theoretical approaches in deliberative democratic theory. That is, while it proposes ideas regarding an ideal deliberative system, it also serves as a link for empirical observations: it “offers a set of normative criteria upon which the actually existing democracies can be analysed, criticised and improved” (Erçan et al. 2017: 206).² Thus, “practices within and pertaining to the system may be appraised, criticized, or designed on the basis of the role they play and what they contribute to the system and its overall deliberative quality” (Milstein 2021: 5–6). Several scholars who have empirically studied communication processes in this way have used normative theoretical conceptions from deliberative theory as a basis for their operationalisations.³ In this book, when conceptualising the deliberative standards by which I assess the effects of digital technologies on deliberative systems, I will primarily use the normative demands formulated by deliberative theory scholars. In chapter 2, I will extract central standards – inclusivity, equality, accountability, reciprocity, rationality, respect, openness, authenticity and comprehensibility – from the deliberative theory literature; and I will describe how these standards are applicable to deliberative sites,

2 Similarly: Elstub et al. (2016: 146), Mansbridge et al. (2012: 3).

3 Among others: Elstub (2014), Esau et al. (2021), Fung/Wright (2003), Fishkin (2009), Grönlund et al. (2014), Mendonça (2015), Smith (2009), Steenbergen et al. (2003).

the connections between these sites and deliberative systems in their entirety. Thus, I will first address the ground matter of deliberative systems, which involves two questions: What types of communication are conceptually included? What standards are conceptualised for the assessment of a communication's deliberative qualities? The latter part of the chapter is concerned with the structures within deliberative systems, the conceptualisation of deliberative sites (chapter 2.2), the connections between deliberative sites (chapter 2.3) and the manners in which these sites and connections combine to form deliberative systems (chapter 2.4).

In the subsequent chapters, I'll focus on deliberative systems that operate under the conditions of the digital constellation. In other words, I'll address those systems that operate in the context of societies that are shaped by the use of digital technologies in a fundamental and dynamic way (cf. Berg et al. 2020b: 18). The observation that "the digital increasingly structures the contemporary world" (Berry 2014: 209) is not a new one. This influence of digital technologies is particularly important with regard to political interaction, since "a growing proportion of political communication uses digital means" (Parkinson 2012a: 1), especially in the public sphere. Digital technologies thus provide an important infrastructure for the exchange of information, perspectives and ideas on political subjects. Moreover, they represent a reference point and a horizon for political communication. In other words, digital technologies can be referenced in political debates as a subject themselves or as a source for information, and the society characterised by the use of digital technologies, with all its possibilities, limits and conventions, is the context in which people communicate and make collective decisions. Political communication within society is thus shaped by digital technologies. Conversely, digital technologies are developed for use by society, they are developed within the economic, social and legal parameters of society and they operate and self-optimize based on the data they have about society. Thus, digital technologies represent an infrastructure, a resource and a horizon for societies and deliberative systems, even as they are simultaneously and dynamically developed within the parameters of these societies and systems. This interwovenness of digital technologies and societal discourse has been captured in the concept of the digital constellation (see chapter 3.1). It is especially relevant and especially visible in the public sphere (see chapter 3.2). As I have indicated above, the public sphere is considered a central part of deliberative systems by many scholars of the systems approach, while other parts, like the decision-making spaces, have become less emphasised as a result of the systemic turn of deliberative theory. At the same time,

the public sphere is a part that has been particularly affected by digital technologies, as well as by the economic and social dynamics that drive the development and deployment of these technologies, and it has experienced various structural changes. The communication processes within the public sphere adjust to the new possibilities and necessities of the digital transformation; and these adjustments, in turn, bring about new technological and social developments. A structural influence on such an important part of the deliberative system has effects throughout the whole system. This is because the public sphere is an important focal point of politics, and policies may be proposed and decided upon in consideration of what is perceived as the public opinion or the public's wishes. Moreover, the structuring effects of digital technologies set the background for how individuals communicate, how they perceive their possibilities and how the data generated via these technologies can be and are being used in political processes beyond the communication processes on these platforms.

Thus, digital technologies, digital spaces of interaction and the dynamics of the digital constellation are highly relevant to deliberative systems. However, deliberative theory scholars have been hesitant to address the specific characteristics of digital spaces and to acknowledge the fundamental differences between digital and non-digital spaces. Simultaneously, “[t]echnological changes are reshaping public life more quickly than theorists are amending their conceptions of deliberative democracy” (Chambers/Gastil 2023: 1). Yet, I will demonstrate throughout the book that deliberative theory and, in particular, the deliberative systems approach are highly useful conceptual frameworks for describing the effects of digital technologies on societies and democratic decision-making, as they “focus[...] on the heart of the digital revolution – communication, information, and social influence” (*ibid.*: 1–2). Moreover, the digital constellation represents a major factor in the wider discursive context of deliberative systems, and “anyone concerned with deliberative democracy must also be concerned with the wider discursive context – and indeed the institutions and practices that structure that wider context” (Owen/Smith 2015: 217). Consequently, viewing the influence of digital technologies through the lens of the deliberative systems approach is not only sound, fitting and feasible, but also a desideratum within deliberative democratic theory itself.

Conversely, digitisation research frequently mentions deliberative theory perspectives when addressing the effects of digital technologies, but the publications usually do not go into theoretical detail beyond citing deliberative demands, such as those stating that communication must be rational,

truthful, inclusive or respectful.⁴ Yet, deliberative theory and, in particular, the deliberative systems approach are much more complex, as they take into account numerous other factors that are highly relevant for the exploration and assessment of digital technologies' influences on democracy. For example, the systemic approach's attention to the contextuality of communication processes and the functional division of labour within a deliberative system can enable scholars to perform more nuanced assessments of these influences. Moreover, standards regarding deliberative qualities of communication processes are founded on intensive theoretical and empirical research, and an informed application of these standards can therefore provide a basis for assessing the democratic value of digital communication processes that is more thorough than what has been commonly found in digitisation literature thus far. Therefore, both deliberative democratic theory and digitisation research can benefit from the connection of the research areas.

Within the deliberative systems that operate under the conditions of the digital constellation, and especially within the public spheres that are part of these systems, large shares of the communication processes are mediated through social media platforms. Social media platforms are technological infrastructures that link third parties with each other and thus give access to, host, store, organise and transmit content provided by third parties on the internet (cf. Gillespie 2018a: 19; OECS 2010). In order to do so, they collect, store and process data, and they use these data in part for their content moderation (see chapter 4.1). Platforms like Facebook, YouTube, Twitter/X, Instagram or TikTok have billions of users worldwide and, as a result, have come to display oligopolistic tendencies. Countless acts of communication are performed daily on a relatively small number of platforms, and the platforms are economically incentivised to constantly increase both user numbers and the time users spend on the platform. Consequently, the platforms provide the space for large parts of the communication within deliberative systems. They are interwoven with different spheres of these systems, most importantly the informal communication processes between individuals in the public sphere (see chapter 4.2). While the platforms do not produce content themselves, through their design and architecture they still shape the conditions in which users operate (cf. Muldoon 2022: 26–27) and they thereby structure the communication processes in a unique way.

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

In the last two chapters, I will elaborate on these structuring processes and on their effects on deliberative qualities. In chapter 5, I will address the platform architectures themselves and analyse their effects on how platform communication is structured, how sites and connections are formed and how the architectures affect the deliberative systems beyond the platforms. In chapter 6, I will identify several social influences and contexts that structure communication processes generally, that produce specific patterns in the communication processes on the platforms and that affect the deliberative qualities of these processes. I will show that some of the effects produced by these architectures and patterns increase the deliberative qualities of the communication processes, and some decrease them.⁵ Some of my conclusions directly derive from the nature of the architectures.⁶ For most of the aspects I address in these chapters, however, I will take an explorative and secondary analytical approach. That is, I will collect and present the results of studies from digitisation research, deliberative theory approaches and adjoining academic fields that have been published on the respective aspects. In doing so, I will not compare digital to non-digital spaces but will instead focus on the specific characteristics of the communication processes found on social media platforms. In this book, instead of conducting case studies on specific spaces, I will remain on a higher level of abstraction. I proceed in this manner because my aim is to give an overview of the effects of platform communication on deliberative systems and to provide as comprehensive a picture as possible. This overview can then be used in future research that explores the subject matter empirically.

Social media platforms have various architectures that structure communication processes, and these architectures affect the deliberative qualities of these processes in numerous ways. The platforms' architectures allow for different forms of expression, some of which are not available or usually found in non-digital communication processes (see chapter 5.1). Expressions via

5 Of course, neither architectures nor social structures are static. They constantly form and reform in the interplay of technological developments and the application and regulation of technologies within societies.

6 For example, a limitation on the character number per post inherently produces shorter posts. Such posts can be produced through lower complexity, or higher density, but both these options result in lower comprehensibility and/or rationality. Alternatively, users can connect a string of posts, but this still inhibits comprehensibility, as the argument needs to be broken into pieces, and elaborate conventions might be needed to convey that posts belong together.

one-click reactions, for instance, are closely tied to the platforms' architectures. Such expressions are not only a result of the architectures that allow for such forms; they are also tied to architectures like content moderation systems, which structure platform communication. Platform architectures also structure the formation of sites on the platforms and the connections between these sites by providing different ways to connect contents and users with each other (see chapter 5.2). Since the platforms are strongly embedded in the wider deliberative systems, there are various ways in which the effects of their architectures' structuring spread beyond the communication processes on the platforms themselves (see chapter 5.2.2).

But the communication processes are not structured by the platforms' architectures alone. In addition, I will identify social influences and contexts that generally structure communication processes within society, that – in an interplay with the platform architectures – also structure communication processes on the platforms and that affect the deliberative qualities of these processes. More specifically, I will describe how social structures such as time (chapter 6.1), communicational conventions (chapter 6.2) and identification (chapter 6.3) reify in specific ways and produce specific patterns in platform communication processes.⁷ These digital-specific reifications in turn have retroactive effects in the social world beyond the digital spaces. They represent a set of constraints and possibilities for communication and therefore are a horizon not only for platform communication, but for the wider deliberative system. Moreover, the individuals that interact within these patterns transmit contents and perspectives that have been generated and processed within these patterns to sites beyond the platforms. For example, on social media platforms, there are patterns such as polarisation or platform. Individuals that use the platforms gain experience in navigating these patterns that they can also apply when interacting beyond these platforms. The transmitted contents and perspectives also affect the individuals' personal stances and feed back into communication processes beyond the digital spaces. The effects of these platform-specific patterns thus disseminate into the communication processes and the social world beyond the platforms.

This book analyses how digital technologies, especially social media platforms, affect deliberative systems. It thereby addresses one of the most drastic societal transformations of the last centuries (digitisation) by focussing on

7 Incidentally, these sections revisit the three comments I have presented regarding the introductory Habermas quotation.

one of the most important areas of democracy (collective reasoning and decision-making) from the vantage of one of the most comprehensive approaches to democratic theorising (the deliberative systems approach). It makes a connection between digitisation research and deliberative theory in a systematic and detailed manner that has been long overdue. By methodically combining these research fields, it provides a solid foundation for further research on the impact of social media platforms on society-wide democratic decision-making and communication processes more generally. It provides theoretical scholars from both deliberative theory and digitisation research with a more detailed understanding of the ways that the theories of their fields connect. For empirical researchers exploring this nexus, the book offers a structured review – one that can serve as a foundation for their research – of central platform architectures and their effects on communication processes and deliberative systems.

Moreover, insights on how digital architectures affect communication give important pointers about how digital sites can be aligned with democratic values such as equality and inclusivity. Both designers of digital sites – including those on social media platforms – and political actors who regulate such sites can benefit from these kinds of findings. Lastly, such insights provide digital literacy. Knowledge about how discourses develop in such spaces and how they are structured by the architectures surrounding them improves one's perspective on the information that emerges from these spaces. For example, it produces an awareness of the complexity and volatility of how and why posts, expressions and opinions are promoted in feeds and transmitted from site to site and of the roles platform architectures and social structures play in this process. Such insights enable every participant in deliberative systems that operate under the conditions of the digital constellations – in other words, almost any member of any marginally democratic society – to assess information from and about digital sites and to participate in societal discourse in an informed and circumspect manner.

2. The Deliberative Systems Approach

The deliberative systems approach provides the theoretical foundation of my observations regarding digital communication processes. I will therefore begin by presenting this approach, describing its central conceptions and ideas. Following this, I will introduce some reconceptualisations that are necessary for the analyses that I provide later in this book.

In the tradition of deliberative democratic theory, the systemic approach marked the latest theoretical turn, combining many of the ideas that had been formulated by the previous “generations”. Four of these generations can be distinguished.¹ Scholars from each generation have focussed on different aspects of the theory and its practical implementation in real world democracies. However, all of their considerations start from the premise that democratic decisions need to be deliberative in order to be legitimate. In other words, it is presumed that these must be decisions that “‘everyone could accept’ or at least ‘not reasonably reject’” (Mansbridge et al. 2012: 25). According to this reasoning, the legitimacy of a decision depends on two aspects. Firstly, “decisions are seen as legitimate to the degree the individuals subject to them (or their representatives) have the right, capacity, or opportunity to participate in deliberation about their content” (Dryzek 2007: 242).² Secondly, deliberation must meet certain standards, so that the participants “as a result grant their reflective assent

1 Literature on the distinctions between these generations varies. While Mansbridge et al. (2012) identify three different phases, both Elstub (2010) and Elstub et al. (2016) describe four generations. I follow the latter description, since it is considerably more detailed and since the former can be included within it. A rather similar approach to the distinguishing different branches of deliberative democratic theory has been made by Chambers (2003), who, however, identifies five different research areas, three of which parallel Elstub et al.’ first three “generations”.

2 However, if I wanted to argue normatively, I would argue that the individuals should have the right, capacity *and* opportunity to participate.

to the outcome” (ibid. 2007: 242). The more ideal the deliberation – that is, the higher the deliberative quality – the more legitimate its outcome. Yet, deliberative democratic theory certainly has developed since its beginnings in the early 1990s. Across the generations, different conceptualisations of deliberative quality, of its preconditions, realisation and evaluation, have been developed.

The first generation drafted normative demands for deliberative quality in an almost entirely theoretical fashion. Scholars such as Haberman (1996), Cohen (1997) and Gutmann and Thompson (1997) emphasised the importance of deliberative procedures and laid out normative standards that obviously cannot be fully realised but should be aimed at in political practice (cf. Mansbridge et al. 2012: 25). Habermas’s *Between Facts and Norms* (1996) played a prominent role in initiating this school of thought (cf. Chambers 2003: 309–310; Elstub et al. 2016: 141). He defined several standards for democratic deliberation: it must be a communication process that is characterised by the argumentative exchange of information and reasons between the parties, by inclusivity for all potentially affected persons, by publicity of discourse, by the absence of external constraints, by the absence of internal constraints (such as hierarchies or hegemonies), by openness to all topics amenable to public interest, by the aim of all deliberators at consensus (or at least compromise) and by the willingness of all deliberators to change their pre-deliberative views (cf. Habermas 1996: 305–306). These principles largely concur with what Cohen (1997) and Gutmann and Thompson (1997) regard as deliberation. The more these principles apply to a specific deliberative process, the better the deliberative qualities of that process. Moreover, Habermas laid the foundations for the systemic approach by describing how societal discourse is ordered as a network. He envisaged deliberative processes in terms of concentric circles. The best arguments would be “sluiced” throughout the system, from the outermost periphery to the centre. Thus, the most reasonable arguments emerging from deliberations among affected individuals, intellectuals and others in civil society would be transmitted, through deliberative sites that are located within increasing proximity to the political centre, into the political centre itself (which consists of the executive, judicative and legislative bodies) (cf. Habermas 1996: 381). This means that the extent to which communication processes classify as deliberation – in other words, the nature of deliberative quality – is not only defined by the degree of adherence to deliberative principles. It is also delineated by how society is ordered at the macro level and by the quality of the connections throughout society.

The second generation softened the theoretical demands formulated by first-generation scholars and took them closer to the realities of existing democracies. Scholars such as Bohman (1998), Dryzek (2000), Deveaux (2003) and Young (1996) acknowledged the existence of cultural pluralism and criticised previous deliberative theory for having been “too vague and abstract about the real-world barriers to authentic deliberation” (Chambers 2003: 322). In consequence, they opened the field to “‘real-world’ conflicts and dilemmas” (Elstub et al. 2016: 142) such as “potential inequalities within discursive processes” (ibid.), the “possibility of instrumentalization or strategic use of deliberation by powerful actors” (ibid.) and the systemic exclusion of permanent minorities and their perspectives (cf. ibid.: 293–294).³ Second-generation scholars therefore added equality and diversity to the list of desirable deliberative qualities. Moreover, they softened the demand for consensus⁴ and argued that, to enable greater inclusivity, deliberation should include – in addition to rational argumentation – storytelling, rhetoric and greetings as legitimate forms of communication (cf. Young 1996). Decisions resulting from deliberation are legitimate as long as they are made by a majority of participants and are “reached through compromise under deliberative conditions” (Elstub 2010: 296).

The third generation⁵ marked the empirical turn of deliberative democratic theory. Authors such as Ackerman and Fishkin (2002), Fung (2003), Fung and Wright (2003), Gastil and Levine (2005), Elstub (2014) and Grönlund et al. (2014) focussed on the micro-level implementation of deliberative processes in real-world democracies via democratic innovations like mini-publics. On the one hand, these scholars focussed on deliberative theory’s feasibility and on how to practically apply it to actually existing democratic processes (cf. Mansbridge et al. 2012: 25); on the other hand, they analysed these designed deliberative sites empirically in order to ascertain the conditions and design choices that enhance deliberative quality (cf. ibid.). Accordingly, they “sought [...] suitable

3 By thus acknowledging the cultural pluralism of real-world democracies, scholars made the idea of deliberation more compatible with adjacent theoretical fields, such as postmodern difference theory and diversity theory (cf. Chambers 2003: 320; Elstub et al. 2016: 141–142).

4 They turned it into an appeal for “plural agreement” (Bohmann 2000) and “deliberative disagreement” (Gutmann/Thompson 1997), which emerge “if citizens are willing to accept the resulting majority decisions, or if these decisions are at least sufficiently acceptable that citizens continue to participate in deliberation” (Elstub 2010: 294).

5 For Mansbridge et al. (2012), this is the second phase of deliberative democratic theory.

methods” – that is, methods that would “enabl[e] the systematic and close investigation of deliberative processes” and that would “determine the required parameters for institutional design” (Elstub et al. 2016: 142).⁶ These parameters were largely based on first-generation thoughts (cf. *ibid.*; Fishkin 2009: 33–34; Steenbergen et al. 2003: 27–30). Newer projects additionally considered the embeddedness of the analysed site in the discourse – by observing, for instance, the site’s impact on public discourse and political outcomes (cf. Gastil/Brogghammer 2021: 11) – and thereby took a step towards a more systemic understanding. Likewise, on the basis of their site analyses, third-generation projects often considered how democratic innovations must be organised and structured in order to produce high deliberative quality.

The fourth generation of deliberative democratic theory turned full circle. The ideas produced by the first three generations were considered, criticised, taken up and modified by the fourth generation of deliberative democratic theory (cf. Elstub et al. 2016: 143–144). Against this backdrop, fourth-generation scholars developed a macro-approach to deliberation: the deliberative systems approach. The term “deliberative system” was first coined by Jane Mansbridge (1999).⁷ In 2012, John Parkinson and Mansbridge presented the first collection of papers on “deliberative systems” (cf. Kuyper 2020: 17; Owen/Smith 2015: 214–215). The introduction⁸ to this collection is still the most comprehensive and most referred-to text on the approach, and it has even been called the “manifesto for the systemic turn” (Owen/Smith 2015: 213).

In many regards, the systems approach has returned to first-generation ideas – especially those of Habermas (cf. Mansbridge 1999).⁹ Most importantly, it has gone back to acknowledging the importance of different sites and the connections between them, which had first been done by Habermas (1996). However, systems approach scholars have criticised the idea of hierarchically ordered deliberative sites that was implied by Habermas’s concentric circles and have challenged the high profile given to democratic institutions (cf. Gaus

6 Major projects were the “deliberative opinion polls” conducted by Fishkin (2009) and the Discourse Quality Index by Steenbergen et al. (2003).

7 The idea was then taken up by Robert Goodin (2005), Carolyn Hendriks (2006) and John Dryzek (2009).

8 It was authored by Mansbridge, James Bohman, Simone Chambers, Thomas Christiano, Archon Fung, John Parkinson, Dennis F. Thompson and Mark E. Warren.

9 See also: Boswell et al. (2016: 263), Dryzek (2010: 7), Gaus et al. (2020: 5–6), Mendonça (2018: 34), Owen/Smith (2015: 214–215), Schäfer/Merkel (2020: 465).

2016: 517). In contrast, they have argued that different aspects of the deliberative task are distributed across different sites and that these sites should consequently be held to different deliberative standards (cf. Mansbridge et al. 2012: 2–3). Thus, deliberation “occurs in multiple, diverse yet partly overlapping spaces” (Elstub et al. 2016: 139–140), some of which must be more deliberative while others must be less so, with all of them contributing in their own way to the system’s making of legitimate democratic decisions (cf. Mansbridge et al. 2012: 2–3; Thompson 2008: 514). Moreover, systems approach scholars have formulated normative demands for deliberative systems.¹⁰ According to them, sites within the public sphere are considered to be especially vital for such systems (cf. Mansbridge 1999: 228). All sites within a deliberative system must be interconnected (cf. Chambers 2012: 54), and all relevant sites must be part of the system. Ideas and reasons must at least have the chance of being transmitted to other sites and thus of being introduced into the system-wide deliberation. This way, deliberative deficiencies in one site can be evened out “if the particular deficiency in one venue helps advance the deliberative quality of the system as a whole” (Bächtiger et al. 2018: 16). Thus, the deliberative systems approach both takes up and supersedes the previous generations’ ideas.

Three aspects of the deliberative systems approach are especially interesting for analysing digital communication processes and studying the impact of digital technologies on society-wide, democratic decision-making processes. Firstly, the deliberative systems approach

demonstrates that deliberative democratic ideals can be pursued on a large scale in ways that link particular forums and more informal practices, such as communication in old and new media. Deliberative democracy is not utopian; it is already implemented within, outside, and across governmental institutions worldwide. (Curato et al. 2017: 29)

Deliberative democracy after the systemic turn thus “offers a set of normative criteria upon which the actually existing democracies can be analysed, criticised and improved” (Ercan et al. 2017: 206; see also: Elstub et al. 2016: 146;

10 Though I will not argue normatively myself, I will use these normative demands when conceptualising the deliberative standards that will serve as standards for assessing the effects of social media platforms’ architectures on the deliberative qualities of digital communication processes.

Mansbridge et al. 2012: 3). That is, “practices within and pertaining to the system may be appraised, criticized, or designed on the basis of the role they play and what they contribute to the system and its overall deliberative quality” (Milstein 2021: 5–6). In other words, the deliberative systems approach delivers a tool to *assess the deliberative qualities* of actually-existing deliberative systems, including their sites and the connections between these sites.

Secondly, the approach “introduces into the analysis large contextual issues and broad systemic inadequacies that have an impact on individual sites and shape the possibilities of effective deliberation” (Mansbridge et al. 2012: 3). Already in the beginnings of the approach, Mansbridge stressed that “anyone concerned with deliberative democracy must also be concerned with the wider discursive context – and indeed the institutions and practices that structure that wider context” (Owen/Smith 2015: 217). Thus, the deliberative systems approach not only considers the communication processes within and between sites but also reflects on *what structures these processes*.

Thirdly, with its conception of interconnected deliberative sites, this approach is most suitable for addressing online communication and its role in democratic decision-making (cf. Ercan et al. 2019: 20; Mendonça 2018: 34). In fact, as Ercan et al. (2019: 20) state, “it enables the evaluation of this [digitised] era in ways that elude other democratic interpretations”. Even scholars from outside the immediate range of deliberative democratic theory are aware of the systems approach’s suitability to *assess democracies in the digital constellation*:

The digital revolution has created the hope that the need for representation is now over and that all citizens can and should now deliberate with each other at once, online, in what can be theorized as “mass online deliberation.” The recent “systemic” turn in deliberative democracy may perhaps be read as a similar extension of the hope of realizing direct deliberation on a mass scale. (Landemore 2017: 57)

In sum, the deliberative systems approach is suitable as a basis for this book because it addresses deliberative qualities and the structuring forces beneath communication processes and because it is suitable for assessing democracies in the digital constellation.

The following chapters will zoom in on the deliberative systems approach itself, addressing its central theoretical concepts. Chapter 2.1 addresses the ground matter of deliberative systems, that is, the questions of what types of communication are conceptually included and of what standards are con-

ceptualised in order to assess a communication's deliberative qualities. The latter three sections of the chapters are concerned with the structures within deliberative systems. They focus on the conceptualisation of deliberative sites (chapter 2.2), the connections between deliberative sites (chapter 2.3) and the ways these sites and connections combine to form deliberative systems (chapter 2.4). None of these concepts are unanimously defined within the existing literature. For each concept, I will therefore portray the state of research, and I will summarise, weigh and sometimes criticise the scholars' differing views. Based on these observations, I will conclude each definitional chapter by proposing a comprehensive definition for the respective concept. Each chapter on a core concept of the deliberative systems approach will include observations on that concept's relation to deliberative qualities and, if necessary, formulate standards by which the deliberative qualities of the respective empirical realisations of each concept might be assessed. Together with the introductions to the digital constellation (chapter 3) and social media platforms (chapter 4), this theoretical outline will form the foundation for my analyses of the influences that structure digital communication processes.¹¹

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- 11 Throughout this chapter, it will become apparent that there are several parallels to the deliberative systems approach to systems theory and network theory – at least with regard to the terms. These parallels, however, remain mostly superficial. With regard to social systems theory based on the work of Niklas Luhmann, there is some obvious terminology overlap. Terms like system and communication, as well as strong and loose coupling, are central to both theoretical branches. Therefore, one might find it surprising that social systems theory has not been more substantively addressed by scholars of the deliberative systems approach, especially since Habermas himself repeatedly refers to Luhmann (positively, as well as negatively) in *Between Facts and Norms* (Habermas 1996), one of the foundational works not only for deliberative democratic theory, but also for systemic thinking. However, Luhmann notably developed a new conceptual toolkit for his sociological analyses of society. Each term in this toolkit, which for the most part is distinct from previous social theory, is meticulously defined and connected to his theoretical framework (cf. Rosa et al. 2009: 176). His analyses address completely different levels and perspectives, and, consequently, the concepts behind the terms bear entirely different gravamens. Additionally, the deliberative systems approach is more connected to the Anglo-Saxon scientific community, where Luhmann's social systems theory is less known (cf. Rehg in Habermas 1996: xx). In my own adaptation of the deliberative systems approach, I will refer to social systems theory that is based on Luhmann's thinking only in few instances. In network theory, the most appropriate approach seems to be the Actor Network Theory, and specifically the observations by Bruno Latour. Like Luhmann, Latour aspires to rethink and enlighten sociology by reconstructing action chains and illuminating hidden practices (cf. Gerten-

2.1 Deliberation

The definition of deliberation has been contested from the beginnings of deliberative democratic theory. “Beyond the bedrock agreement that democratic process should involve communication about, rather than merely aggregation of, (fixed) preferences, there is not much consensus about how deliberation is best conceptualized” (Bächtiger et al. 2010: 35). The definition of deliberation has evolved over the four generations, and scholars have stressed different aspects of its traits, procedures and functions. Thus, the standards that define deliberation vary throughout the research field. They have been adapted, amended and supplemented by scholars from the first generation of deliberative theorists onwards, and they continue to be discussed by systems approach scholars as well. This work has even been continued throughout the development of the systemic approach – in the early works prior to the “manifesto for the systemic turn” (Owen/Smith 2015: 213), in the “manifesto” itself and ever since.

Deliberative systems scholars have used various concepts, including deliberation, deliberative standards and deliberative qualities. These concepts represent different theoretical dimensions of the question: how can a scholar determine whether a communication process is deliberative? Deliberation refers to a communicative sequence that has certain characteristics and contributes

bach/Laux 2019: 199–200). His thoughts, too, have never been featured in the deliberative systems approach. Yet, Latour specifically addresses political questions, concerning himself with the nature of political issues (2007b), as well as with how these issues are discussed in various parts of society – that is, various collectives (2004). However, though there are obvious parallels between these schools of thought, Latour focusses on questions that serve as preludes to deliberative systems, and when he does address systemic processes that are relevant to deliberative theory or to my own project, he often provides less detail than the systemic approach. Therefore, there are only a few instances in which Latour’s work will complement my thoughts. One of these instances is when he extends the scope of what can be part of a network and thereby acknowledges the relevance of non-human objects to processes within a network. This aspect will be relevant for structuring features, as well as for my reflections on the relevance of digital communication for deliberative systems. Moreover, in contrast to the deliberative systems approach, neither of these theories address the specifics of political communication or collective decision-making, and thus they lack the democratic angle of my research question. However, some aspects of social systems theory and network theory do seem useful, and I will include them in my conceptualisation accordingly.

to a democratic decision-making process. Deliberative standards are the characteristics that define a deliberation. Deliberative qualities in turn refer to the degree to which these standards are met. The definitions of all three concepts are subject to ongoing scholarly discussions of varying intensity. Therefore, in the literature, they are neither as clear nor as distinct as I have presented them just now. I will sketch the development of these concepts throughout deliberative systemic thinking before proposing the conceptualisations of deliberation, deliberative standards and deliberative qualities that I am going to use in my analyses of digital communication processes.

2.1.1 Systems Approach Perspectives on Deliberation

In the scholarly discourse surrounding the conceptions of deliberation, deliberative standards and deliberative quality, widening the range of admissible speech was one of the core points. Likewise, it was of central importance within the first article, by Mansbridge (1999), to ever introduce deliberative systems. In this article, Mansbridge

draws attention to the fact that talk in its everyday sense can be part of a process of practical reasoning in some formal or informal group oriented to practical judgment, and that the larger deliberative system can correspondingly be understood as a process that includes many forms of reason-giving between equals oriented to a shared practical judgment (Owen/Smith 2015: 217).

Thus, Mansbridge emphasises the importance of everyday talk for deliberative systems.¹² This everyday talk “does not meet all of the criteria implicit in the or-

12 Prior to this, Lynn Sanders had already argued for the worth of supposedly undeliberative forms of communication. She even argued that deliberation – as conceptualised by the first generation of deliberative democracy – can systematically exclude potential participants from communication processes and thus have undemocratic effects: “taking deliberation as a signal of democratic practice paradoxically works undemocratically, discrediting on seemingly democratic grounds the views of those who are less likely to present their arguments in ways that we recognize as characteristically deliberative. In our political culture, these citizens are likely to be those who are already underrepresented in formal political institutions and who are systematically materially disadvantaged [...]. Deliberation requires not only equality in resources but also equality in ‘epistemological authority,’ in the capacity to evoke acknowledgement of one’s arguments” (1997: 349). In other words, the first generation’s version of deliberation

dinary use of the word ‘deliberation’” (Mansbridge 1999: 211), as it “is not always self-conscious, reflective, or considered” (ibid.). But it is “nevertheless a crucial part of the full deliberative system” (ibid.) and an integral part of political decision-making. The definition of “political” in this context is “that which the public ought to discuss, when that discussion forms part of some, perhaps highly informal, version of a collective ‘decision’” (ibid.: 214). Decision-making is thus not limited to the formal state apparatus here, but also addresses “[l]arge numbers of mutually interacting individual choices, weighted unequally through patterns of domination and subordination, chance, and other justifiable and unjustifiable inequalities, [that] together create a host of collective choices” (ibid.: 214–215). Everyday talk is one of the primary modes of communicating that is used to make these collective decisions. In sum, and according to Mansbridge (1999), standards of deliberation such as self-consciousness, reflectiveness and consideration by the participants must be met to varying degrees. Moreover, deliberation is assessed regarding the extent to which a subject is of public concern and the degree to which an orientation towards decision-making is displayed.

Just as Mansbridge pleads for the inclusion of everyday talk, Dryzek (2000: 1–2) argues for allowing “argument, rhetoric, humour, emotion, testimony or storytelling, and gossip”, as they support the authenticity of deliberation. “The only condition for authentic deliberation is then the requirement that communication induce reflection upon preferences in non-coercive fashion” (ibid.). This requirement of non-coercion in turn “rules out domination via the exercise of power, manipulation, indoctrination, propaganda, deception, expressions of mere self-interest, threats (of the sort that characterize bargaining), and attempts to impose ideological conformity” (ibid.: 2). Thus, for Dryzek, a central deliberative standard is authenticity in terms of the inducement of reflection and the absence of coercion.

Moreover, in these early stages of the deliberative systems approach, scholars already pointed to the need to treat deliberative standards in a more systemic manner. That is, they have stressed the need to consider the division of labour within a deliberative system and assess the adherence to deliberative standards accordingly: “Different aspects of the ‘deliberative task’ are assigned

results in “the devaluation of content uttered by those with low identity-related social status” (Asenbaum 2020: 234), and, to circumvent this, deviations from standards such as rationality are necessary. A similar argument has been presented by Iris Marion Young (1996: 123).

to different institutions, which can then be held to different deliberative standards” (Thompson 2008: 514). These standards include, for example, candour, reasonable arguments, common-good orientation, finding mutually acceptable compromises, fostering mutual respect and articulating the public interest (cf. *ibid.*). Goodin (2008: 194) concludes from a similar thought that deliberative sites (“agents”) acting in concert within a system should be held to different standards than a single deliberative site performing the entire deliberative task.

In a world of delegated deliberation, where different parts of the deliberative task are divided up and shared among various different agents, appropriate behaviour within each component part of that distributed deliberation is not necessarily the same as appropriate behaviour where one body is performing the whole deliberative task on its own. (Goodin 2008: 194)

Thus, it is not just that different deliberative sites must adhere to different deliberative standards, but that the behaviour of the participants within a site must meet its specific standards.

These are only some examples of how early scholars of deliberative systems – prior to the publication of the “manifesto for the systemic turn” (Owen/Smith 2015: 213) – widened the concept of deliberation and shifted its focus. They already indicate how the specific deliberative standards are somewhat side-lined by the new systemic perspective on deliberation. For systemic thinkers, it is more important to consider the different deliberative tasks, the way they are divided within a system and the deliberative qualities that are required for the fulfilment of these within each part of the system. It is less important to define universal deliberative standards to which all deliberation must adhere.

These considerations are collected and brought to the point in the “manifesto” of the deliberative turn (Mansbridge et al. 2012). In this “manifesto”, Mansbridge and her co-authors circumvent the definition of deliberative standards almost entirely. There are two reasons for this. First, “a systemic approach complicates the question of standards. What might be considered low quality or undemocratic deliberation in an individual instance might from a systems perspective contribute to an overall healthy deliberation” (*ibid.*: 12). Thus, “[j]udging the quality of the whole system on the basis of the functions and goals one specifies for the system does not require that those functions be fully realized in all the parts” (*ibid.*: 13). The second reason the “manifesto” authors sidestep a clear definition of deliberation is that they perceive the

systems approach as an add-on to other deliberative approaches rather than a free-standing theory of deliberative democracy:

While we may at times favour certain directions and theoretical orientations over others, we want to stress that the approach we outline could be taken up by any number of theories of deliberative democracy. Like any useful paradigm, deliberative democracy theory contains many theoretical variations, competing articulations, and contested definitions. (Mansbridge et al. 2012: 4)

However, the directions and theoretical orientations favoured by the authors become evident in several parts of the “manifesto”. For example, they make some suggestions about the kinds of communication that should be included in the deliberative system. These suggestions unsurprisingly bear great similarities to the concepts proposed by Mansbridge (1999). Firstly, the authors argue for including only discussions that “involve matters of common concern and have a practical orientation”, the latter meaning that “the discussion is not purely theoretical but involves an element of the question ‘what is to be done?’” (Mansbridge et al. 2012: 9).¹³ Secondly, they return to the distribution of collective decisions throughout society. They conceive societal decisions as decisions that emerge from these distributed decision-points (cf. *ibid.*: 8), which once more shifts the focus from deliberative standards to the systemic view on deliberation.

Moreover, Mansbridge and colleagues (2012) describe three possible functions of a deliberative system: an epistemic, an ethical and a democratic (inclusive) function. “The successful realization of all three of these functions promotes the legitimacy of democratic decision-making by ensuring reasonably sound decisions in the context of mutual respect among citizens and an inclusive process of collective choice” (*ibid.*: 12). The authors argue that “high quality

13 The necessity of orientating a deliberation towards actions and decisions has been under discussion ever since. Smith (2016: 161), for example, regards action as constituting a deliberative system and the deliberation leading to the decisions upon such actions as necessarily practically oriented (cf. also Chambers 2012: 58). Bächtiger and Parkinson (2019: 14) also see the benefits of deliberation for a system in more indirect ways, “perhaps by educating citizens and collectivities or by performing a trust-based function”. However, “if deliberation is not related to decisiveness or is just reduced to indirect effects, then its role for democracy is oddly restricted and in opposition to the original aspirations of deliberative theory” (*ibid.*: 14).

deliberation promotes these functions effectively” and that “low quality deliberation fails to do so as effectively” (ibid.: 13).¹⁴ In order to achieve high-quality deliberation, “appropriate standards for deliberation that promote these functions” (ibid.) must be met. Here, the “manifesto” stops short of actually defining any standards of deliberation. Regarding the specifics of these standards, the authors refer the reader to a previous article, written by largely the same set of authors.

In this prior article, Mansbridge and colleagues (2010) describe the evolution of deliberative standards over time. They present a collection of deliberative standards that they consider to be the common denominator throughout this evolution:

The deliberation should, ideally, be open to all those affected by the decision. The participants should have equal opportunity to influence the process, have equal resources, and be protected by basic rights. The process of “reason-giving” is required and central. In that process, participants should treat one another with mutual respect and equal concern. They should listen to one another and give reasons to one another that they think the others can comprehend and accept. They should aim at finding fair terms of cooperation among free and equal persons. They should speak truthfully. The criterion that most clearly distinguishes deliberative from non-deliberative mechanisms within democratic decision is that in the regulative ideal, coercive power should be absent from the purely deliberative mechanisms. Participants should not try to change others’ behavior through the threat of sanction or the use of force. (ibid.: 65–66)

Additionally, Mansbridge and colleagues (2010) argue that, under certain conditions, both self-interest and the negotiation of conflicting interests can be considered compatible with these common deliberative standards. They maintain that deliberation – while not being “just any talk” – “can include the recognition and pursuit of self-interest, including material self-interest, and some forms of negotiation, constrained by the deliberative democratic ideals of mutual respect, equality, reciprocity, mutual justification, the search for fairness,

14 The conceptual line between deliberation as a communicative sequence and as a systemic process is being blurred here.

and the absence of coercive power” (ibid.: 94). The authors consider these situations¹⁵ “forms of *deliberative* negotiations” (ibid.: 3, orig. emph.).

In the “manifesto”, Mansbridge et al. (2012) give examples to illustrate the traits of and interdependencies within deliberative systems. In these instances, in order to legitimise the conceptualisation of the deliberative system, many of the common standards listed in the prior article by Mansbridge et al. (2010: 65–66), as well as the newly acknowledged forms of deliberative negotiation, are referred to. For example, with regard to highly partisan rhetoric, the authors argue that “even while violating some deliberative ideals such as mutual respect and accommodation, [it] may nonetheless help to fulfil other deliberative ideals such as inclusion” (Mansbridge et al. 2012: 3). Another example illustrates that “elite discourse [in the European Union] provides expertise, reasoned and informed mutual accommodation, and mutual respect, while the nationally instigated deliberation provides perspectives that might otherwise not be heard” (ibid.).

There is one deliberative standard that is addressed in a more elaborate manner by the “manifesto”: the absence of coercion, or, to use Habermas’s language, the “forceless force of plausible reasons” (1996: 24). Mansbridge and colleagues (2012: 17–18) stress the necessity of distinguishing between pressure through coercion and persuasion, since “[d]eliberation is about genuine persuasion, not pressure”. The question they pose regarding a “full systemic theory of deliberation” is: where one should draw the line between those two? They pose this question because there are forms of coercion that are not deliberative in a strict sense but that might nonetheless contribute to a system’s overall deliberative qualities. For example,

[b]oth paying people to agree with you and disrupting normal activity until you get your way appear to violate the very core of deliberative persuasion. But money and protest can be effective political tools to advance important social and political causes. A deliberative system approach allows us to step back and ask how this expenditure of money (e.g. in campaign advertisements) or that protest (e.g. an anti-immigrant demonstration or a Greenpeace action) enhances or detracts from the deliberative system. (ibid.: 18)

15 Mansbridge et al. (2010: 70–72) distinguish between four types of non-coercive, deliberative negotiations: convergence, incompletely theorized agreements, integrative negotiation and fully cooperative distributive negotiation. All these types “incorporate self-interest without deviating from the criteria for good deliberation” (ibid.: 70).

Thus, the deliberative systems approach seeks to acknowledge not only deliberation in a strict sense, but also other forms of communication that contribute to or impede the democratic decision-making process of a deliberative system. Prior generations would generally not have regarded protest as having any deliberative value. The systems approach nevertheless defines protest as being valuable for the system's deliberative qualities without necessarily considering it deliberative in a stricter sense. Instead of generally dismissing non-deliberative action, the systems approach assesses whether it contributes to or obstructs the realisation of the system's deliberative functions. Acknowledging the importance of non-deliberative acts is one of the central points of the "manifesto". However, this makes it necessary to (re)define the distinction between what deliberation is, what other forms of democratic communication there are and what is separate from this process and has no influence over it.

This distinction has mainly been discussed in later works that adopt the deliberative systems approach. One of the most thorough accounts has been given by André Bächtiger and John Parkinson (2019: 86–72). They maintain that the definition of deliberation does not have to be expanded any further, but that other forms of communication, with their independent contributions and their roles in democratic communication, should be acknowledged as distinct from deliberation and assessed independently (cf. *ibid.*: 68–69).¹⁶ As they remark, "if every communicative act is deliberative or deliberative in function, then the concept loses its analytical and critical bite" (*ibid.*: 68). The deliberative qualities of these other forms of democratic communication must be assessed independently and with regard to the respective context (cf. *ibid.*: 71–72).¹⁷

After the publication of the "manifesto", acknowledging the importance of non-deliberative acts has remained central the approach. David Owen and Graham Smith even stress that "[n]on-deliberative speech acts and practices may have an important role to play in such sequences [of systemic deliberation] and, indeed, may be constitutive of the overall 'distributed deliberative' quality of the system" (2015: 219). Bächtiger and Parkinson likewise maintain that "deliberative forms of communication inevitably combine with other forms", and they "think of such clusters of communication as not just real-world approximations of an ideal, but as essential in realizing deliberative goals" (2019: 19). Thus, they arrive at a concept of deliberation that does not need

16 Owen and Smith (2015), too, criticise this move towards widening the definition of deliberation and handling the deliberative standards more flexibly.

17 I will elaborate on this in chapter 2.1.

to expand to include a fuller account of democratic communication. Quite the reverse: it is that deliberative processes can be seen as clusters of different, often non-deliberative practices which vary by goals and contexts *without giving up on the idea of core deliberative values*. Deliberative processes entail a variety of communication modes and acts, including but not limited to deliberation strictly defined. It will just be the case that the precise configuration of the cluster – the balance between different communicative modes – will vary according to the demands of the moment, the setting, the issue, the participants, and their repertoires. (ibid.: 28)

Since the “manifesto”, much work has addressed the differentiation between deliberative and non-deliberative acts. Scholars have discussed where the line between the two should be drawn, whether non-deliberative acts should be considered contributions to deliberation and the conditions under which this inclusion is legitimate.¹⁸

Of course, the acknowledgement of the worth of non-deliberative acts by deliberative systems scholars has also been criticised. Dominant among these critics are Owen and Smith (2015). Disapproving primarily of the way in which deliberative systems theorists consider non-deliberative speech acts and practices, they caution against the “currently dominant articulations of the deliberative system [that] could [...] result in judging a system as deliberative with little, or even nothing, in the way of actual democratic deliberation between citizens taking place” (ibid.: 218). They acknowledge the need “to be attentive to the ways in which non-deliberative acts and practices enable or disable democratic deliberation”, but they are concerned about the “uncomfortable position vis-à-vis the central tenets of deliberative democratic theory” (ibid.) that proponents of including non-deliberative acts are placed in. Owen and Smith strongly recommend that scholars “recognise and account for the *deliberative wrongs* that such acts involve and the harm that they frequently cause” (ibid.: 223); they also strongly recommend that scholars become aware of any trade-offs between, for example, opening up the public sphere through certain kinds of (hostile) rhetoric and undermining the freedom and equality of the members of a democratic polity (cf. ibid.).

The acknowledgement of the value of non-deliberative acts for a deliberative system depends, firstly, on where in the system the communication

18 See, for example: Smith (2018), Owen/Smith (2015), Bächtiger/Parkinson (2019: 19), Kuyper (2020: 24), Elstub et al. (2016: 145), Dryzek (2017: 620), Boswell/Corbett (2017: 815), Bächtiger (2016: 271–272).

process takes place and on who exactly acts in a non-deliberative way. While, for example, non-deliberative acts by minorities or marginalised groups perform an important role in the attention economy and therefore might be welcome from a normative perspective, the performance of such acts by powerful and privileged actors is considerably more problematic (cf. Bächtiger 2016: 271–272). Secondly, whether non-deliberative acts are considered valuable depends on whether certain standards are upheld in the communication process in question, as well as in the larger system. According to the systemic approach, deliberative functions and standards must be realised in the wider system. But in view of the division of labour, some of these functions and standards can be regarded as systemically realised if they are addressed in specific but limited parts of the system.¹⁹ Since the publication of the “manifesto”, there has been continuous discussion of these standards. But the focus of this discussion has shifted a little,²⁰ and the older works’ more general ideas make them more accessible to my equally general conceptualisations of deliberative standards.

In summary, deliberative systems scholars have ambiguously conceptualised deliberation, deliberative standards and deliberative quality. However, there are some ideas that are specific to systemic thinking and that have prevailed within fourth-generation literature. First and foremost, scholars have identified a division of labour within a deliberative system that ascribes different tasks to different parts of the system, rendering it necessary to have different expectations regarding deliberative standards. Thus, the exact standards that are to be met depend on the part of the system that is currently under analysis. Second, scholars generally agree that it is necessary to widen the range of admissible speech within a system. Thus, forms of everyday political talk – including rhetoric, negotiation and other modes of speech – are acknowledged as forms of deliberation, though not particularly deliberative ones. Third, scholars acknowledge the influence of non-deliberative acts on deliberative systems; they presume that these acts can make systems more deliberative or less so. Consequently, systems approach scholars distinguish between deliberation,

19 This point will be detailed in chapter 2.4.

20 The interesting questions now are: How can the systems approach, as an add-on, be connected to a certain set of theoretical ideas? What standards should be applied to what part of the system, and to what degree? Are there standards that should be applied to all parts equally? How can low performance regarding a certain standard in one part be compensated for by performance in another part?

non-deliberative acts that contribute to the deliberative system and non-deliberative acts distinct from the system. In the following section, based on these thoughts by deliberative systems theorists, I will propose my own conceptualisations of deliberation, deliberative standards and deliberative qualities.

2.1.2 Refined Conceptions of Deliberation, Deliberative Standards and Deliberative Qualities

In defining deliberation, I will take many of these ideas as points of departure, but I will sharpen the concept in some instances. I will start out by characterising the kind of statements that have the potential to contribute to a deliberative system in the first place: statements that communicate *political content*. According to Mansbridge, “political content” can be defined as what the public must discuss in order to come to a collective decision (1999: 214). This does not mean, however, that every expression should be aimed at making a decision. Communication that is potentially deliberative also includes all communication preliminary to the actual decision-making, that is, all communication that potentially influences the decision-making process, independently of its intentionally doing so.²¹ For “communication”, I will lean on an aspect that has been stressed by Niklas Luhmann in his social systems theory.²² He maintains

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- 21 The notion that deliberation does not have to result in actual decision-making was also advocated by Bächtiger and Parkinson (2019: 14, 88–89). They maintain that while deliberation and certain deliberative sites may be aimed at other democratic benefits, deliberative systems as a whole are defined by their intent to make democratic decisions at some point.
- 22 Interestingly, there does not seem to be an explicit, widely used definition of communication within deliberative democratic theory. Rather, the term communication – together with “talk” or “interaction” – is used as an auxiliary term in defining deliberation and has not been contested as such. There are some implications for Habermas’s understanding of communication in his 1970s Princeton lectures (cf. Geulen 2010: 165–166). But these are of a rather normative nature and based on his take on an ideal speaking situation, which includes the participants’ willingness to strive for the following qualities: “1. Jede Äußerung muss so abgefasst sein, dass sie für die anderen ‘verständlich’ (in einem durchaus alltagssprachlichen Sinne) ist. 2. Es wird unterstellt, dass Äußerungen in ihrem sachlichen, d.h. auf Gegenstände bezogenen Gehalt im Prinzip ‘wahr’ sind. 3. Der Anteil der Äußerung, der als eine soziale Handlung zu verstehen ist (in der Terminologie der Sprechakttheorie der ‘illokutionäre Gehalt’, z.B. ob sie als Mitteilung, Frage, Aufforderung, Rüge usw. zu verstehen ist) muss ‘richtig’ sein, d.h. allgemein für die betreffende Situation anerkannten Normen entsprechen. 4. Die

that communication occurs between at least two entities – the ego and the alter. When the ego expresses something for the alter to understand, she does not only try to transmit information; she also anticipates the alter's reaction:²³

The action understands itself not only as carrying out its intention but also (and often primarily!) as an action "for you," "against you," "in front of you," as an action meant for perception, or as a document of its own intention that does not want to be understood as an intention of documentation. (Luhmann 1995: 130)

Based on this, I conceptualise communication as an expression that is relayed in order to be heard and understood by at least one other individual. Therefore, the communicating individual not only relays her thoughts, but also anticipates how the receiving individuals might understand and react to these thoughts and then expresses the thoughts accordingly.²⁴

Secondly, I follow the distinction that Bächtiger and Parkinson (2019) make between deliberation in a strict sense – that is, communication that adheres to certain deliberative standards – and communication processes that may possess certain deliberative qualities in certain contexts – and consequently may affect the deliberative system – but that are not deliberation in a strict sense.²⁵ I follow this distinction not because I think that pure deliberation exists in reality but because I seek to clarify the conceptual gap between, on the one hand, the normative concept of deliberation and, on the other hand, communication that may or may not be considered deliberative, depending on the respective empirical situation. In my analyses of real-world communication processes, I will therefore generally avoid the term "deliberation" and use "communication

Äußerung muss 'wahrhaftig' sein, d.h. das zum Ausdruck bringen, was der Sprecher subjektiv tatsächlich meint" (ibid.: 166). The definition by Luhmann is minimal enough that it works well both with the ideas that have been presented by deliberative theory scholars on definitional, normative and descriptive levels and with Habermas's normative ideas of functioning communication.

- 23 Luhmann calls this "double contingency". There could possibly be a third entity, an audience; but I would argue that an audience would be equally anticipated by a speaker and thus qualify as part of the alter.
- 24 This distinction is not specified in the deliberative systems approach, but it is relevant for the conceptualisation of deliberative sites.
- 25 In doing so, I differ from the scholars that advocate a broader definition of deliberation.

processes” instead. These communication processes can adhere to the deliberative standards to varying degrees but will typically not qualify as strict deliberation.

Moreover, I will focus on the procedural traits of communication processes rather than their outcome. Procedural concepts “evaluate the deliberative performance of a system by the characteristics of the process(es) of deliberation (inclusiveness, fairness, etc.)” (Fleuß et al. 2018: 15) and “focus on the different tasks to be undertaken in deliberation” (Knops 2018: 122). Thus, a procedural focus addresses the deliberative standards that usually aim at realising certain functions and goals. Concentrating on the outcome of a deliberation would mean concentrating on “the performance based on the output of this very process” (Fleuß et al. 2018: 15), that is, on how far the desired goals and functions have been realised by a deliberation. While I will sporadically address this aspect as well, my focus on the procedural standards of deliberation aligns more naturally with an exploration of the structuring influences on digital communication processes and their impact on systemic communication.

More concretely, there is a certain set of procedural deliberative standards that can be condensed from the literature on deliberative systems; most of these standards have their roots in the works of prior generations of deliberative theory. These standards are normative in nature. But they can also be used descriptively, that is, they can serve as categories or measures for describing the effects, for instance, of social media platforms’ architectures on the deliberative qualities of digital communication processes. In my analyses, I will therefore use these inherently normative standards in a descriptive manner.

Though not all deliberative systems scholars equally agree on a defined set of standards, André Bächtiger and John Parkinson have identified a “classic core” (2019: 22) of deliberative standards that comprises rational argument, common-good orientation, listening and interactivity, respect, equal participation and authenticity (cf. *ibid.*).²⁶ I will use and add to this list of standards. Since the terminology applied by the different scholars is inconsistent, I will cluster the standards in reference to the ideas behind them and name the different terms from the literature for each of these ideas.²⁷ An overview of all standards can be found in Table 1 (p. 44).

26 However, the standards themselves and their status as part of a theoretical “core” have not been uncontested (cf. Bächtiger/Parkinson 2019: 22–23).

27 Further references regarding the specific standard will be collected in footnotes at the end of each paragraph.

Inclusivity, diversity, openness to individuals and perspectives. A first requirement of democratic deliberation is that communication processes be accessible to and inclusive of a wide variety of perspectives and individuals. This implies that “[n]o one may be excluded in principle; all of those who are possibly affected by the decisions have equal chances to enter and take part” (Habermas 1996: 305–306). In the “manifesto”, Mansbridge and colleagues take up this first-generation idea and stress that the

inclusion of multiple and plural voices, interests, concerns, and claims [...] is the central element of what makes deliberative democratic processes democratic. Who gets to be at the table affects the scope and content of the deliberation. For those excluded, no deliberative democratic legitimacy is generated. (Mansbridge et al. 2012: 12)

Consequently, no individual should be excluded without a justification that is acceptable to both included and excluded individuals, and inclusion and equal opportunities to participate in the system should be actively promoted (cf. *ibid.*).²⁸

Equality, non-coerciveness. Closely connected to the inclusivity standard is a second demand with regard to deliberation: that no participant be dominated by factors that are external or internal to the communication process. “Each has an equal opportunity to be heard, to introduce topics, to make contributions, to suggest and criticize proposals” (Habermas 1996: 305–306). This demand has also been reiterated by deliberative systems scholars, and it is considered a part of the “classic core” of deliberative standards (cf. Bächtiger/Parkinson 2019: 22).²⁹

Rationality, reason-giving, validity, truth. This standard requires that perspectives that are rational, true and valid for their argument should prevail over rhetorically loaded, emotional or bargaining contributions – the “forceless force of plausible reasons” (Habermas 1996: 24). This fourth standard is one that has been at the core of deliberative theory since its beginnings, though

28 See also: Bächtiger/Parkinson (2019: 105–106, 2019: 9), Habermas (1996: 305–306), Rosenberg (2007: 9), Mansbridge et al. (2012: 12).

29 See also: Cohen (1997: 74), Fishkin (2009: 33–34), Habermas (1996: 305–306), Mansbridge (1999: 225), Mansbridge et al. (2010: 65–66), Mendonça (2018: 36), Rosenberg (2007: 9–10).

the systemic approach also acknowledges the deliberative worth of rhetoric and emotion for certain communication processes.³⁰

Reciprocity, interactivity, listening, reflection. A fourth, repeatedly mentioned requirement is that participants should react to the contributions of other participants in a communication process. This implies that participants listen to each other, reflect on the points that are being made and address these points in the communication process, as “deliberation is not just about expressing one’s views on an issue at stake” (Ercan et al. 2019: 25).³¹

Respect. Mutual respect implies that one is open to being convinced by another’s arguments and that one acknowledges the other “as a source of reasons, claims, and perspectives” (Mansbridge et al. 2012: 11–12).

Prudentially, mutual respect helps keep the deliberative system running. It serves as the lubricant of effective communication. [...] To deliberate with another is to understand the other as a self-authoring source of reasons and claims. To fail to grant to another the moral status of authorship is, in effect, to remove oneself from the possibility of deliberative influence. By the same token, being open to being moved by the words of another is to respect the other as a source of reasons, claims, and perspectives. (ibid.: 11)

Hence, respect is a precondition of listening and reflection. In turn, it depends on equality and non-coercion between participants, “because relationships of domination have already short-circuited mutual respect and, with this, deliberative influence” (ibid.: 11–12).³²

Openness, orientation towards the common good. According to this standard, participants weigh their own interests against those of others and aim their argumentation at finding and pursuing a solution that is favourable (or at least acceptable) to all. “The aim is to negate the influence of particular, selfish desires and to encourage the consideration of more general, social concerns” (Rosenberg 2004: 1). This standard concerns the attitude of the participants, that is, their general willingness and openness to put a common good above

30 See also: Bächtiger/Parkinson (2019: 2), Cohen (1997: 74), Gaus (2016: 507), Habermas (1996: 24–25), Mansbridge (1999: 213), Mansbridge et al. (2010: 65–66).

31 See also: Bächtiger/Parkinson (2019: 105–106), Elstub/Escober (2019: 20), Ercan et al. (2019: 25), Dryzek (2009: 1381, 2017: 612), Habermas (2022: 159), Mansbridge (1999: 222), Morrell (2018), Scudder (2020).

32 See also: Mansbridge (1999: 223), Mansbridge et al. (2012: 11–12), Rosenberg (2007: 9–10).

their own. The actual identifying of the common good additionally involves the standards of listening and reflection, as well as respect.³³

Comprehensibility. In order to reflect, weigh and be convinced by other perspectives, these perspectives must be presented in a way that can be understood by other participants. This standard is included in the literature mostly in an implicit manner, but it is important for some aspects of my analyses.³⁴

Authenticity. This is one of the more widely and ambiguously discussed standards within the literature. For my analyses, I follow the more classic understanding that authentic contributions “are grounded in experience, reflection, or evidential argument” (Bächtiger/Parkinson 2019: 12).³⁵ These contributions can also “reveal (as in ‘testimony’) the pain and anger, hate, or delight in another’s pain, that someone actually feels, when expression or knowledge of those feelings furthers the understanding that is the goal of deliberation” (Mansbridge 1999: 223). Contributions are thus presented in ways that “those who do not share one’s point of view can find meaningful and accept” (Dryzek 2010: 10). Authenticity is therefore closely connected with, but conceptually distinct from, comprehensibility.³⁶

Accountability, publicity, visibility. According to this last standard, communication processes can be observed by the public and participants can be held responsible for their behaviour in communication processes. Publicity and accountability often serve as incentives for abiding by the other deliberative standards, which call for participants to behave in ways that are respectful, rational, open, authentic, etc. (cf. Thompson 2008: 510). Thus, “reason-giving is done visibly, both to exercise a disciplining force on the claims and proposals that can be made in a deliberative democracy [...] and to ensure that scrutiny and accountability can be effectively exercised” (Bächtiger/Parkinson 2019: 12).³⁷

33 See also: (Bächtiger/Parkinson (2019: 22), Bohman (1998: 402), Elstub (2010: 295), Knops (2018: 121), Rosenberg (2004: 1).

34 See also: Bächtiger/Parkinson (2019: 40–41), Knops (2018: 121), Mendonça et al. (2022: 163).

35 There is also the concept of authentic deliberation, which is closer to what I described as openness (cf. Smith 2018: 22) or a superordinate for a set of other qualities, including non-coerciveness, rationality and reciprocity (cf. Dryzek 2009: 1382). To avoid confusion, I will not use the term authentic deliberation.

36 See also: Bächtiger/Parkinson (2019: 12), Dryzek (2009: 1382, 2010: 10), Mansbridge (1999: 223).

37 See also: Boswell et al. (2016: 278), Bächtiger/Parkinson (2019: 12–13), Chambers (2005), Dryzek (2009: 1386), Mansbridge (1999), Thompson (2008: 510).

Table 1: Deliberative qualities of communication processes

Deliberative Standards	Description
Inclusivity, diversity, openness to individuals and perspectives	Communication processes are accessible to and inclusive of a wide variety of perspectives and individuals. All who are potentially affected by the decision have the chance to partake in the deliberative system.
Equality, non-coerciveness	No participant or site is dominated by external or internal factors in the communication process. "Each has an equal opportunity to be heard, to introduce topics, to make contributions, to suggest and criticize proposals" (Habermas 1996: 305–306).
Rationality, reasoning, validity, truth	Perspectives that are rational, true and valid for their argument prevail over rhetorically loaded, emotional or bargaining contributions – the "forceless force of plausible reasons" (Habermas 1996: 24–25).
Reciprocity, interactivity, listening, reflection	Participants or sites react to the contributions of other sites or participants in the communication process.
Respect	Mutual respect implies that one is open to being convinced by another's arguments and that one acknowledges the other "as a source of reasons, claims, and perspectives" (Mansbridge et al. 2012: 11–12).
Openness, orientation towards the common good	Participants weigh their own interests with those of others and aim their argumentation at finding and pursuing a solution that is favourable (or at least acceptable) to all.
Comprehensibility	In order to reflect, weigh and be convinced by other perspectives, these must be presented in a way that can be understood by other participants.
Authenticity	Authentic contributions "are grounded in experience, reflection, or evidential argument" (Bächtiger/Parkinson 2019: 12) or in emotion (cf. Mansbridge 1999: 223) and are thus presented in ways that "those who do not share one's point of view can find meaningful and accept" (Dryzek 2010: 10).
Accountability, publicity, visibility	Participants are held responsible for their behaviour in communication processes. Communication processes are public in order to ensure accountability and, consequently, participant behaviour that is respectful, rational, authentic, etc.

Thus far in this text, deliberative standards have only been formulated with regard to deliberative quality in deliberative sites. Thus, all the standards I presented above have been conceptualised in reference to communication processes in individual sites. However, deliberative systems would not be deliberative systems if these sites were not connected in a “deliberative” way and if the composition of sites and connections within the systems were not “deliberative” after a fashion. Thus, there also must be deliberative standards for connections and systemic composition. On the one hand, some of the standards I presented here – such as inclusivity and equality – are also applicable to connections and systems. Though systems approach scholars have not made it as explicit, their assessments of communication processes on all these levels reveal as much. On the other hand, there are further deliberative standards that are specific to either connections or system composition. These standards can be derived from the definitions for and requirements of connections and systems that deliberative theory scholars have presented, and I will make this derivation in the subsequent chapters.

Using “deliberative qualities”, I will address the degree to which sites, connections and systems meet the various deliberative standards, as well as the specific reification of how these standards are being met. However, there will be citations that refer to “deliberative quality” as an aggregated count of the deliberative qualities of a site or a system. Due to the complexity and context-dependency of such an overall assessment, even on the level of a single communication process, I refrain from suggesting that there is a reliable and systematic way to calculate an overall deliberative quality. By using the plural form, I maintain the distinction between the standards and stress the nuance involved in assessing communication processes.³⁸

A last point I want to take up in my own conceptualisation of deliberative standards and qualities is that not all communication processes must abide by the same standards equally. Rather, deliberation and the communication processes that contribute to a deliberative system may have different contexts.³⁹ The assessment of the deliberative qualities of communication processes must be adjusted accordingly.

38 However, I will not be able to fully avoid citations that use “deliberative quality” in this less nuanced way.

39 Cf. Mansbridge et al. (2012: 11–13), Bächtiger/Parkinson (2019), Owen/Smith (2015: 228–229), Bächtiger et al. (2010: 33).

The context of deliberation refers to how the different goals of communication processes provide different incentives, norms and scripts that shape human action, including deliberative behaviour.⁴⁰ Conceptuality has been addressed in contested and even “unfortunate” (Bächtiger/Parkinson 2019: 37) ways. Bächtiger and Parkinson (ibid.: 39) particularly stress the necessity of considering whether a specific communication process takes place within an institution designed to realise deliberative ideals.

The problem with such ideal or “transcendental” institutions is that they tend to ignore or downplay deep-rooted, real-world practices that are equally valuable to the functioning of democratic systems; or to treat those things as constraints and imperfections to be regretted. This is unwise for reasons we have already noted in the previous section: it blinds scholars to non- or not-terribly-deliberative but nonetheless highly valuable practices that undergird a democratic society, including in unfamiliar settings. (ibid.: 39)

Therefore, a consideration of the context is crucial to assessing the deliberative qualities of the communication process and their effect on the system's deliberative qualities.

In conclusion, Bächtiger and Parkinson (ibid.) argue – and I agree – that the assessment of how well a certain deliberative trait is achieved depends on the goal of this deliberation and the context in which it is placed. To take an example: suppose a deliberation's goal was to listen to as many perspectives as possible in coming to the decision, but only three individuals actually participated. In this instance, whether the decision that follows a deliberation is particularly well attuned to the common good is of no consequence, because the

40 Bächtiger and Parkinson identify three central democratic functions of communication processes within a deliberative system: inclusivity, representation and the capacity to make and impose binding decisions (cf. 2019: 9–14). Combinations of these functions with different weightings are, of course, possible. Moreover, Bächtiger and Parkinson differentiate between five deliberative goals: “epistemic, ethical, legitimacy-oriented, emancipatory, and a combined transformation and clarification goal” (ibid.: 15). These different deliberative goals “may lead to the activation of different deliberative and non-deliberative components”, they “will entail selective deployment of its various components according to the goals of the event” and they will necessitate the application of different deliberative standards (ibid.: 72). I implicitly include these notions of possible goals and functions in my concept of context, without further addressing them throughout my analyses.

deliberation had a completely different goal. Similarly, the deliberative qualities of a communication process must be assessed in reference to where and when it takes place within a systemic deliberative process and in reference to what the intentions regarding deliberation have been for the respective situation.

This also translates to the systemic level. Scholars trying to assess the deliberative qualities of an entire system do not only need to assess the deliberative qualities of the individual communication processes in accordance with their respective contexts. They also need to consider that the “interplay of sites, agents, discourses, and other macro forces [produces] overall deliberative qualit[ies]” (ibid.: 136). Thus, one can perceive systemic deliberative qualities as qualities that are “produced by the scale and complexity of a given system, and not simply [as] ingredient[s] which go[...] into a system” (Parkinson 2018: 440). Hence, “a deliberative system can be made up of parts that do not meet all the deliberative criteria at once” (ibid.: 441), and “those goods [meeting the criteria] are emergent qualities of the interaction of many different elements” (Bächtiger/Parkinson 2019: 133). Therefore, assessing the deliberative qualities of a single site, or of a single instance within the communicative sequence, vastly differs from assessing the deliberative performance of a system.

2.2 Deliberative Sites

The concept of deliberative sites is one of the core concepts of the deliberative systems approach. Scholars have described sites belonging to a deliberative system by many names – including “spaces” (Elstub et al. 2016), “discursive arenas” (Mendonça 2018; Esau et al. 2021), “venues” (Doberstein 2020), “discursive spheres” (Hendriks 2006), “loci” (Erman 2016; Fleuß et al. 2018) and “forums” (Bächtiger et al. 2018; Bächtiger/Parkinson 2019). Meanwhile, most scholars refer to them as “deliberative sites”.⁴¹ These sites represent the building blocks of a deliberative system, and without deliberative sites there cannot be a deliberative system. In the following sections, I will elaborate on how deliberative sites are (not) defined in the deliberative systems approach and how deliberative qualities are addressed in the theory.

41 To name just a few: Boswell/Corbett (2017), Mansbridge (1999), Mansbridge et al. (2012), Parkinson et al. (2020 // 2022).

2.2.1 Defining Deliberative Sites

Although deliberative sites represent a central concept of the deliberative systems approach, and although scholars have given them many names, it seems difficult to define deliberative sites with regard to their principal features and their boundaries. The definitions given in the literature are hazy at best. Therefore, after collecting and connecting points of definition that have been made by systems approach scholars, I will propose an amended definition that will later enable me to identify deliberative sites on social media platforms and to distinguish them from other communicative interactions, such as the connections between deliberative sites.

In lieu of a definition, scholars usually provide lists of examples of deliberative sites that are systematised to varying degrees. The following collection gives an impression of the diversity of these examples and, simultaneously, of the difficulty involved in avoiding both maximalist and minimalist definitions.⁴² Sites may include

nation state bodies at different levels of government and with their different legislative houses, administrative agencies, the military, and the staffs of all of these; international bodies at different levels and their staffs; multinational corporations and local businesses; epistemic communities; foundations; political parties and factions within those parties; party campaigns and other partisan forums; religious bodies; schools; universities with their departments, fields, and disciplinary associations; unions, interest groups, voluntary associations and non-governmental organizations (NGOs) both *ad hoc* and long-standing; social movements with both their enclaves and their broader participation; the media including the internet, blogs, social media, interactive media, books, magazines, newspapers, film, and television; informal talk among politically active or less active individuals whether powerful or marginalized; and forms of subjugated and local knowledge that rarely surface for access by others without some opening in the deliberative system. (Mansbridge et al. 2012: 10)

Dryzek (2009: 1382–1383) adds to this list “[d]esigned forums – such as citizens juries and assemblies, deliberative polls, consensus conferences, stakeholder dialogues”, and Bächtiger/Parkinson (2019: 113) further include, for example,

42 That is, the definition should not include theoretically irrelevant attributes or exclude theoretically relevant ones (cf. Munck/Verkuilen 2002: 9).

“departmental calls for tender for service delivery and research; court deliberations and judgments; policy discussion papers”, as well as “banners, posters, flyers, and graffiti; consultation processes; minipublics; petitions and protest”.

Obviously, the list of possible deliberative sites is long, manifold and far from complete. But the relevant point here with regard to arriving at a general definition of deliberative sites is that there is very little overlap between all of them. For example, when imagining deliberative sites, “multinational corporations and local businesses” (Mansbridge et al. 2012: 10) are much easier to picture than are “forms of subjugated and local knowledge that rarely surface for access by others without some opening in the deliberative system” (ibid.). Thus, the keys to reconstructing a definition of deliberative sites are finding similarities, defining admissible differences and distinguishing sites from non-sites.

There seems to be only one *similarity* between all the sites listed above: some content of political nature is communicated from one party or medium to another. This refers back to two points that have been made with regard to defining admissible forms of communication for a deliberative system (chapter 2.1). With Mansbridge, political content can be conceptualised as “that which the public ought to discuss, when that discussion forms part of some, perhaps highly informal, version of a collective ‘decision’” (Mansbridge 1999: 214). The demand for decision-orientation has been qualified to an even greater extent by later scholars (cf. Bächtiger/Parkinson 2019: 14, 88–89), as well as in this text. Communication, on the other hand, can be thought of as an expression that is relayed in order to be heard and understood by at least one other individual.

Since there may be very little similarity between sites, the *admissible differences* appear to be all the more numerable. It is plausible that this goes back to the deliberative standards of equal participation and inclusivity. On the system level, these standards require that all individuals who are potentially affected by a decision on a certain issue must be involved in the preparational communication on that issue and that their perspectives must have equal chances of being heard. Since these individuals are usually dispersed across society, they are active in diverse deliberative sites. Scholars of the systems approach have addressed this diversity of sites, focussing on numerous aspects of these sites: their various perspectives on an issue (cf. Parkinson et al. 2020), their relations to the state (cf. Ercan/Dryzek 2015; Ercan et al. 2017: 196), their goals and contexts (cf. Bächtiger/Parkinson 2019: 79), their functions within the system (cf. Beste 2016: 297; Ercan et al. 2019: 26; Mansbridge et al. 2012: 12), their degrees of

formality,⁴³ their degrees of structure (cf. Hendriks 2006: 499–500), their degrees of stability (cf. Ercan et al. 2017: 196; Hendriks 2006: 499–500) and their degrees of inclusiveness (cf. Hendriks 2006: 499–500). The diversity of the sites is connected with the functional division of labour within a deliberative system, due to which the different sites have different deliberative contexts. This makes different expectations regarding deliberative standards necessary. “Deliberative site” therefore does not necessarily mean that all the communication within the site actually is deliberation in a strict sense or that there is a high quality of deliberation for every standard. Dryzek has advised that one should

not make the mistake of thinking [a site] has to be already deliberative – or meet some minimum threshold of deliberativeness to be analyzed in these terms. Rather, it is best to think of a particular system as being potentially deliberative. It is then possible to look at the actual performance of the parts – and the whole – in light of some deliberative standards about what they ought to be doing. (2016: 210–211)

Similarly, I will treat “deliberative sites” as being potentially deliberative. This approach is based on my awareness that it is rare for a communication process within a site to completely abide by all deliberative standards; rather, deliberative and non-deliberative modes of communication “inevitably combine” (Bächtiger/Parkinson 2019: 19) to produce the site’s communication processes. However, “[m]ost spheres have a predominant form of communication” (Hendriks 2006: 499–500) that favours specific deliberative qualities.

The list of potential deliberative sites also includes sites that cannot be expected to greatly adhere to deliberative standards but that are still important to the system. The example most frequently quoted in this regard concerns the “politically partisan media”: they “are of very low deliberative quality, but in conjunction with other media of equally low deliberative quality [they] bring out information and perspectives that television stations or newspapers aiming at the middle of the road do not raise or address” (Mansbridge et al. 2012: 7). In consequence, there is no fixed, ideal configuration of deliberative sites (cf. Bächtiger/Parkinson 2019: 20). On the contrary, “there are many different possible configurations of sites, actors, and roles that will achieve deliberatively democratic outcomes” (Parkinson 2012b: 152). Thus, the admissible differences

43 Cf. Elstube et al. (2016: 145), Ercan/Dryzek (2015: 241–242), Ercan et al. (2017: 196), Fleuß et al. (2018: 16–17), Hendriks (2006: 499), Parkinson et al. (2020 // 2022).

between deliberative sites are manifold, due to the fundamentally inclusive concept of deliberative systems itself.

The concluding step of reconstructing a definition of deliberative sites is *distinguishing sites from non-sites*, that is, delineating the concept against the backdrop of all that, from a systems approach perspective, is *not* considered a deliberative site. Based on the required similarities between sites that I described above, it can be concluded that any site that does not host communication of political content cannot be a site included in a deliberative system. However, not all communication in deliberative system occurs within a site, since communication processes can also be transmission processes between sites. In the systems approach literature, the conceptual distinction between sites and connections is sometimes not very clear.⁴⁴

In summary, the definition of deliberative sites in the systems approach literature is blurry at best. I therefore propose a revised definition of deliberative sites that enables a sharper conceptual distinction between a deliberative site and a connection between different deliberative sites. According to my definition, deliberative sites are arenas where individuals have the opportunity to communicate with each other on political issues. These individuals – henceforth: participants – are aware of other individuals’ participation in the site. Participants “communicate” in the sense that has been given in social systems theory and proposed above: their expressions are relayed in order to be heard and understood by the other individuals; the communicating participant therefore not only expresses her thoughts, but also anticipates how the receiving participants will understand and react to these thoughts and then expresses herself accordingly. All participants have the possibility of listening to each other’s contributions and the opportunity to react to them, though the respective opportunities do not have to be similar, and participants do not have to avail themselves of these opportunities in a similar manner. At least some of the participants must take the opportunity to interact.

This definition is considerably more fine-grained than the one reconstructed from the examples above, and it allows me to distinguish between various deliberative sites within the entities that have been considered to belong to one and the same site by Mansbridge and colleagues (2012: 10). For example, while ministries, companies and NGOs are listed as examples of deliberative sites, in my definition, deliberative systems are composed of several deliberative sites that are connected to each other via reports or individuals

44 For an example, see chapter 2.3.

participating in different sites. Moreover, a distinction is made between the actual media outlet and the discussion on its design and content – the outlet being a connection between, on one hand, the site of editorial and journalistic discussion and, on the other, the audience that filters the content and takes it into other deliberative sites.⁴⁵ In this book, the term “deliberative site” does not imply that the site exclusively or mostly features pure deliberation. It merely refers to the fact that a site belongs to the deliberative system and thus contributes to (or detracts from) the system’s overall deliberative goals.

2.2.2 Deliberative Qualities in Deliberative Sites

Deliberative qualities within deliberative sites have been a prominent subject from the beginnings of deliberative democratic theory onward, and I have already presented the most important standards that have been considered in this discussion. Scholars of the first three generations based their theories on the assumption that a site displays high deliberative quality only when deliberative standards are realised as far as possible. Most scholars of the deliberative systems approach, however, have widened this definition of deliberation and “broaden[ed] the scope for admissible forms of speech” (Bächtiger et al. 2010: 43), as I described in chapter 2.1.

What is considered to be deliberation that adds value to the systemic process – and therefore what standards and degrees of deliberative qualities are called for – varies in accordance with the specific site’s contexts (cf. Bächtiger/Parkinson 2019: 19). These contexts, in turn, “alter actors’ goals and the ways actors talk and deliberate, as well as the standards we should invoke when judging the democratic and deliberative quality of these acts” (ibid.: 40). Moreover, the contexts are themselves “dynamic, not fixed, and intersecting with different deliberative goals. This leads to a much broader panoply of deliberative ‘behaviours’ than would be expected by a one-context-one-behaviour approach”

45 Parkinson makes a similar point: “There are decisions to be made about what counts as a connection and not a node: for example, are the news media simply channels which pump out whatever is pumped into them, or a set of venues, institutions with their own imperatives, which select, frame, and systematically structure outputs in various ways (Dahlgren 2005)? If they are the latter – and I think they are – then what *are* the connections between nodes meant to be representing?” (Parkinson 2018: 438, orig. emph.). In chapter 2.3, I will explain the concept of connections, so that the difference from sites will become clear.

(ibid.: 69).⁴⁶ In consequence, the assessment of a site's deliberative qualities must likewise account for a site's contexts.

The varieties of both sites and deliberative standards make it nearly impossible to make general statements on requirements regarding the deliberative qualities of sites. Many scholars in the deliberative systems approach have resorted to differentiating deliberative sites in terms of their degree of formality. More formal sites are expected to display different deliberative qualities than less formal ones. The following examples are positioned along this range from formal to informal sites: representative assemblies, public assemblies, the public sphere and everyday talk (cf. Elstub et al. 2016: 145).⁴⁷ In order to account for the different contexts, while still feasibly assessing the deliberative qualities of communication processes on a systemic level, Dannica Fleuß and colleagues (2018) have differentiated three categories of deliberative sites: sites of highly formal deliberations, sites of semi-formal deliberations and sites of informal deliberation.⁴⁸ I will use this distinction throughout the book, since it acknowledges the potential differences in contexts and the necessary adjustments involved in assessing the qualities of deliberative sites, while allowing for at least a minimum of generalisation.

Highly formal sites are those “that are constitutionally or otherwise legally installed, that follow certain (procedural) rules while deliberating and that have the power to make collectively binding decisions” (Fleuß et al. 2018: 17). They include national courts and parliaments, as well as democratic innovations such as mini-publics and participatory budgeting projects that have been legally established and “are empowered to make collectively binding decisions” (ibid.; see also Hendriks 2006: 502). Generally, sites of highly formal deliberation are expected to meet the “classic core” of deliberative standards – rational argument, common-good orientation, listening and interactivity, respect, equal participation and authenticity – to a higher degree than semi-

46 This proposition – that not only the level to which deliberative standards should be realised in a site but also the selection of the standards themselves should be adjusted according to the site's situation within the system – slightly differs from the more traditional view that different sites “should still be judged on the criteria [by which the respective scholars ground their work], while not expecting the same level of the criteria in each venue” (Elstub et al. 2016: 145; see also: Ercan et al. 2017: 196; Mansbridge 1999: 213; Smith 2016: 161).

47 See also: Ercan/Dryzek (2015: 241–242), Hendriks (2006: 492), Mansbridge (1999: 212).

48 They built this categorisation on considerations of Conover/Searing (2005), Mansbridge (1999) and, ultimately, Habermas (1996).

formal or informal sites (Fleuß et al. 2018: 16). Most of these sites are actually designed in such a way as to realise deliberative standards as far as possible. However, their specific contexts further influence their goals and the expectations regarding deliberative standards (cf. Bächtiger/Parkinson 2019: 40). Sites situated in the political centre, such as parliaments and national courts, will instead focus on legitimacy goals (cf. *ibid.*: 34–35) and ethical goals, that is, on generating mutual respect (cf. *ibid.*: 31). They therefore can be expected to display, for example, a higher degree of rational argument, respect and common-good orientation and a lower degree of authenticity. Democratic innovations are similar in this regard, but they also have epistemic goals, that is, they will also aim “to connect statements of ends with knowledge of means, and to connect the results with political representatives who should instruct and monitor the bureaucracy to act accordingly” (*ibid.*: 29). Therefore, they will, for example, abide by the standards of listening and interactivity, as well as equal participation, to a higher degree. But despite these general pointers, scholars always must account for specifics of the respective site when they are assessing highly formal sites.

In *semi-formal sites*, the expectation of adherence to deliberative standards is generally lower than in highly formal sites (cf. Fleuß et al. 2018: 16). These sites comply with two criteria, but they otherwise remain rather vaguely defined: a semi-formal site is “(1) the zone where members of the political elite and members of the public sphere deliberate, or where such encounters are prepared, and [a zone where] (2) there is a certain degree of institutionalization” (*ibid.*: 17). They include, for example, “conversations between constituents and government officials, and conversations in political parties, interest groups, and the media” (Conover/Searing 2005: 270); they also include conversations in clubs, professional associations, academies, universities and grass-roots initiatives, as well as NGO-related spaces and meetings, trade unions and other lobby groups (cf. Fleuß et al. 2018: 17). Semi-formal sites thus connect the formal institutions and the informal sphere within a deliberative system. Like the highly formal democratic innovations, epistemic goals are very important in semi-formal sites. Moreover, many of these sites will have emancipatory goals, that is, they will aim at providing opportunities for individuals to exercise their political freedom independently of their pre-deliberative positions in the existing political and societal structures (cf. Bächtiger/Parkinson 2019: 35–36). These sites can thus be expected to display, for example, higher degrees of rational argument and authenticity. However, with respect to the specifics of the site, expectations regarding deliberative

standards in semi-formal sites differ even more than those regarding highly formal sites.

Informal sites host “less deliberative everyday discussions among political activists, attentive publics and general publics”; these discussions involve “a form of political talk that is essential to the system’s democratic character” (Conover/Searing 2005: 270), in short, communication processes within the public sphere. As presented above, such informal political communication processes constitute “a crucial part of the full deliberative system that democracies need if citizens are, in any sense, to rule themselves” (Mansbridge 1999: 211). For Mansbridge, informal sites comprise more open communication processes within the public sphere, including “everyday talk, as well as the media,^[49] interest groups, and other venues of discussion” (ibid.), along with social movements (ibid.: 213) and the corridors of public forums (cf. ibid.: 223–224). More contemporarily, scholars also include “ad hoc forums, or online spaces within which ordinary citizens, members of social movements, and civil society actors can engage in discussion and debate” (Smith 2016: 154), along with “offline and online comments in response to news items, as well as marketplaces and their culturally specific equivalents” (Fleuß et al. 2018: 17; see also Hendriks et al. 2016: 1105–1106). But informal sites can also be very private spaces such as “the arms of a best friend” (Mansbridge 1999: 223) and other “informal settings, [...] mostly with close friends and family” (Ferris 2020: 14). These sites are not regulated by formalised rules; they are rather “spaces of unmediated authenticity” (Mansbridge 1999: 223–224). Most of these sites are situated in civil society, and they are “the venue[s] where public opinion is formed, shaped and contested” (Hendriks 2006: 502). Beyond that, the variety of informal sites appears to be infinite.

Communication within informal sites is not expected to “meet all of the criteria implicit in the ordinary use of the word ‘deliberation.’ It is not always self-conscious, reflective, or considered” (Mansbridge 1999: 211; see also Fleuß et al. 2018: 16). In some sites, then, classic core standards such as rational argument, listening or respect might not be met to a very high degree.

However, informal sites can have many advantages for the deliberative system, and they can, in some respects, display more deliberative qualities

49 While Mansbridge (1999: 213) considers “[t]elevision, radio, newspapers, movies, and other media [that] influence their intended audiences and are influenced by them” to be deliberative sites, I categorise them as media outputs and therefore as connections between different sites (see chapter 2.2.1).

than formal sites. Correspondingly, Mansbridge (1999: 221–225) presents a whole list of advantages. According to her, creative thought often thrives in the protected space of informal sites, which are beyond the requirements of publicity and accountability; all the values subsumed under “reciprocity” by Gutmann and Thompson⁵⁰ can apply to informal talk; incivility is more justifiable in informal talk, and informal talk is “sometimes necessary not only to ‘promote mutual respect in the long term’, but also to ‘achieve authenticity’ and to ‘break down the barriers of the status quo’ (ibid.: 223); and, finally, informal sites provide “freedom for everyday talk” since they are “relatively free from power” (ibid.: 224). These examples therefore focus on authenticity and respect. They show that there are different ways in which informal deliberative sites can achieve these goals that, in the first instance, might seem contrary to each other. Thus, both the presence and the absence of respect within a site could benefit the wider deliberative system, depending on the site’s role within the system. Moreover, with regard to mass public debate online, Parkinson et al. (2020: 562) note that participants may “indeed hold each other to deliberative norms” such as giving reasons and evidence or calling out abuse. They furthermore establish that some informal deliberative sites “that otherwise had nothing to do with politics [...] are more likely to allow people to debate across boundaries than expressly political sites” (ibid. 2020: 562). Parkinson and colleagues’ observations refer to the standards of rationality, respect and interactivity. Ferris (2020: 14–15) adds that minority opinions can have greater influence in informal deliberations, especially if the group is “just having a discussion for its own sake [...] and if the minority accept fundamental group norms and share an identity with the rest of the group, as is likely to often be the case in everyday talk between friends or neighbours”. This observation, too, addresses the standards of respect, listening and interactivity. Again, the deliberative standards that are to be applied to and realised within a deliberative site depend on its specifics – even more so than in highly formal and semi-formal sites, since the variety is much larger.

In sum, different sites have different contexts and, accordingly, different deliberative standards to be applied to and realised within them. Generally,

50 “Gutmann and Thompson group under the heading of ‘reciprocity’ the values of mutual respect, the goals of consistency in speech and consistency between speech and action, the need to acknowledge the strongly held feelings and beliefs of others, and the values of openmindedness and ‘economy of moral disagreement’ (seeking rationales that minimize the rejection of an opposing position)” (Mansbridge 1999: 222).

scholars project that the less formal a deliberative site is, the lower is the expectation regarding the deliberative qualities of the communication within it.⁵¹ However, the determination of which deliberative qualities in an individual site are positive or negative for the systemic deliberative qualities depends on the contexts of the site and its position within the system. Therefore, what might figure as low deliberative quality on a generalised scale can still be just what the site needs to deliver to the system in order to produce systemic advantages. However, the deliberative qualities within most individual sites are not decisive with regard to the system's overall deliberative qualities.⁵²

2.3 Connections between Deliberative Sites

The connections between the various deliberative sites constitute the second key point of the deliberative systems approach (cf. Mendonça 2018: 40; Hendriks 2016: 45; Ercan et al. 2017: 201; Boswell et al. 2016: 264). “[D]eliberative systems require transmission of perspectives, norms, and claims from one setting to another” (Bächtiger/Parkinson 2019: 81). In other words, sites must be connected, so that the participants of one site can consider the arguments that have been brought forward in another site. This is because the many different sites, due to their different contexts, are likely to display different patterns and dynamics and therefore to discuss an issue differently and develop different perspectives on it (cf. *ibid.*). “Indeed, a diverse multiplicity of deliberative sites can only be described as a system insofar as its constituent parts are interconnected” (Ercan et al. 2017: 201).⁵³ In other words, without connections, there cannot be a deliberative system. In this chapter, I will address how these connections are conceptualised in the deliberative systems approach and what

51 The degree of formality is not the only distinction responsible for differing expectations, nor is it the most precise one. In fact, the list of advantages that informal deliberative sites carry already shows that there are many aspects of the different degrees of formality (ad-hoc quality, lack of formal rules, no publicity or accountability, etc.). I will revisit these aspects and break them up in the course of my analyses.

52 Parkinson (2012b: 154) even claims that whether perspectives resulting from the communication processes within a site “are generated deliberatively or not is neither here nor there so long as the decision-makers’ processes themselves are deliberative” (*ibid.*). Lacking deliberative qualities can be compensated for by other deliberative sites within the system (cf. Dryzek 2009: 1388; Smith 2016: 152) – see chapter 2.4.

53 See also: Boswell et al. (2016: 264), Hendriks et al. (2020b: 00:17:53–00:18:15).

connection-specific deliberative standards can be derived from these conceptualisations.

2.3.1 Defining Deliberative Connections

Despite the centrality of connections to the deliberative systems approach, they have not been the focus of much conceptual work.⁵⁴ In the literature that has addressed this point, most of the studies have been concerned with connections between sites on supposedly different levels of the deliberative systems, that is, vertical connections.⁵⁵ Examples of vertical connections include reports that must be sent to sites that are closer to the decision-making spaces (cf. Hendriks 2016), hearings that include participants of sites on different levels (cf. Boswell et al. 2016: 268–269), decisions made in sites of participatory budgeting that are binding for the decision-making bodies (Smith 2009: 1–2) and petitions and other institutionalised kinds of designed connections that inform the participants in decision-making spaces about the views of the wider public (cf. Hendriks 2016: 47; Bächtiger 2014). Furthermore, the input of individuals who circulate between different sites on different levels within the system has been analysed as an instance of vertical connection between deliberative sites (cf. Doberstein 2020: 6). The hierarchy between

54 This has also been noticed by Bächtiger/Parkinson (2019: 93).

55 However, scholars do not explain the criteria that position one site over the other within a system. From the examples of vertical and horizontal connections given in the literature, it seems plausible that most of the scholars' understanding of hierarchy goes back to Habermas's original model of the deliberative system. He expected transmissions to migrate through the system, mainly from the periphery to the political centre, that is, from the private sphere to the empowered sphere, from bottom to top (cf. Habermas 1996: 381). He also described how important it is that the actors of the political centre explain their reasoning to the public (cf. *ibid.*: 183–184) and that the public is potentially able to "eclipse" the "processing matters according to the usual conventions" in cases of conflict (*ibid.*: 357). He clearly rates these vertical connections as being more important than horizontal ones, and this tendency is also evident, decades later, in the work of many scholars of the deliberative systems approach. This emphasis on vertical connections also explains why Habermas uses the "sluicing" metaphor, instead of "filters", for example. However, hierarchies could also be established due to the degree of formality, the degree of democratic legitimatisation of the sites, the number of participants, the attendance of elected representatives of specific groups or a site's overall influence within the system – not all of which correlate. Generally, the distinction of vertical and horizontal has been vague in the literature.

sites thus seems to be tied to the distance of the respective site from the decision-making. The analysis of supposedly vertical connections represents the majority of work that has thus far been done on deliberative connections.

However, most of the connections between digital sites can be considered horizontal, that is, as taking place between sites of equal positions within a deliberative system. I do not want to overemphasise the distinction between vertical and horizontal connections, since it seems imprecise and fruitless to try to ascribe exact positions to all sites within the hierarchy of a deliberative system. Nonetheless, I want to stress that connections that might be considered horizontal – including those on social media platforms – cannot be disregarded from a deliberative systems perspective. In fact, there are good theoretical and empirical reasons to consider horizontal connections as at least as important to deliberative systems as vertical ones are.

In scholarship on deliberative theory, horizontal connections have rarely been addressed, let alone in a systematic manner.⁵⁶ The little work that there is approaches these connections in a rather broad manner. For instance, Simon Beste (2016: 298) expects the discourses of the “anarchic” and the “organised” public to somehow “converge” without specifying anything about the horizontal connections that would be needed for such a convergence. Most of the more specific ideas concerning horizontal connections can be found in the ideas on individuals who circulate between different deliberative sites (cf. Doberstein 2020; Mendonça 2018). At first glance, the focus on vertical connections between sites seems reasonable. Even if there were no horizontal connections between sites at all, one could argue that the “higher levels” of deliberative sites filter, evaluate and consider the input from the “lower levels” and thus compensate for the lack of horizontal connections.

However, there are several reasons for the deliberative systems approach to consider horizontal connections. This becomes especially clear when considering what happens if the sites on similar levels within a system do not interact with each other, or if their interaction is too infrequent. First of all, without horizontal connections, citizens will not be able to know other perspectives, to position their own opinions in relation to them and to get a sense of a common good based on the variety of perspectives. Due to this lack of knowledge, they will not be able to hold accountable the decision-making spaces that claim

56 The few exceptions include qualitative empirical studies that sporadically mention horizontal connections (though usually not in these terms), such as Hendriks et al. (2020a) and Hendriks et al. (2016).

to have decided in the interest of a common good. Moreover, even in the beginnings of deliberative thinking, Habermas stressed the importance of connections between deliberative sites for developing and maintaining a common language. This common language is of paramount importance for deliberative democracy:

Semantically closed systems [for example, deliberative sites] cannot be induced to invent on their own the common language necessary for the perception and articulation of the relevant issues and standards of evaluation that apply to society as a whole. For such tasks, an ordinary language is available, circulating throughout society and lying beneath the threshold of the special codes. (Habermas 1996: 352)

This circulation throughout society is simplified, if not enabled, by horizontal connections. If there is no common language, democratic exchange is severely hindered. Without a common language, participants in a deliberative system have no reliable ground for reasoning and, consequently, less potentiality for empathy in the face of dissenting experiences and opinions. Hence, there is less potential that participants will acknowledge a good argument that outweighs their own arguments. Finally, the grounds for democratic compromise, let alone consensus, are more limited. The result of a lack of horizontal connections is fragmentation, a situation that has been especially addressed with regard to the effects of online communication – the frequently used terms being “filter bubble” (Pariser 2011) and “echo chamber” (Sunstein 2002), among others.⁵⁷

Empirically, horizontal connections do exist. They are especially paramount in the digital realm; connections between sites within digital platforms, connections to other platforms and connections to other kinds of deliberative sites are everywhere. Moreover, they constitute one of the core selling points of digital communication. These digital sites are becoming increasingly important to today’s deliberative systems, as I will show in chapter 4.2. But there are also horizontal connections beyond the digital realm, for example, between NGOs, activist groups and other public actors that pursue a common goal and organise accordingly in order to gain more leverage. So, since deliberative theory seeks to be applicable to the real world, it should also consider the horizontal links that exist in the real world.

57 See also chapters 3.2, 5.2.2 and 6.3.

A last aspect concerning the importance of horizontal connections is the fact that the sites of a deliberative system can and do influence each other by definition. This relational interdependence is one of the core concepts that make a deliberative system an actual system (see chapter 2.4). Consequently, cultural norms and conventions can spread across sites, too (cf. Mansbridge et al. 2012: 22–23).⁵⁸ These cultural norms constitute one aspect of the contexts of deliberation that “provide incentives, norms, and scripts that shape human action, including deliberative behaviour” (Bächtiger/Parkinson 2019: 37). Such norms therefore influence what is communicated within a site, how it is communicated and how it is transmitted between different sites. Due to the relational interdependence within deliberative systems, the norms can disseminate vertically, or they can disseminate via horizontal connections, and in the latter case, they invariably affect what is transmitted to the “higher” levels. Hence, “meso and macro changes are almost certainly driven by different types of communication depending upon how those modes manage to tap in to, or disrupt, group norms” (Kuyper 2020: 24).

In sum, there has thus far been an implicit assumption that there is a hierarchy among the various sites of a deliberative system, and vertical connections have thus far been at the centre of systems approach scholars’ theoretical and empirical research. However, there are good reasons to regard horizontal connections as at least equally important as vertical ones. The importance of horizontal connections becomes especially clear in analyses of communication processes as digital sites. The existence and characteristics of connections affect the deliberative qualities of digital communication processes, and they shape how digital publics and communities are formed and, thus, how transmissions flow across the system (see chapters 5 and 6). Horizontal connections should therefore be considered more often and more diligently in analyses of deliberative systems.

A second aspect of systems approach scholars’ discourse regarding connections between sites that is relevant to my analyses is the distinction between “coupling” and “transmission”. Scholars of the deliberative systems approach have developed both concepts, though the difference between them seems rather implicit. For example, coupling is one of the central subjects in the “manifesto” of the deliberative systems approach:

58 This, again, especially applies to digital communication on social media platforms (see chapter 6.1).

The ideal of a deliberative system, then, is a loosely coupled group of institutions and practices that together perform the three functions we have identified—seeking truth, establishing mutual respect, and generating inclusive, egalitarian decision-making. (Mansbridge et al. 2012: 22)

On the other hand, Dryzek (2009: 1385–1386) conceptualises transmission as “some means by which public space can influence empowered space.” According to him, such means include not only broader collective action like political campaigns or “social movements that come to pervade the understandings of formally empowered actors”, but also small-scale connections like “personal links between actors in the two kinds of spaces” (ibid.: 1385). Moreover, he includes communicative forms such as “the deployment of rhetoric” and “the making of arguments” in his concept of transmission (ibid.). Both concepts seem to be fairly vague and quite similar in meaning.

Carolyn Hendriks (2016) was the first to explicitly conceptualise the distinction between coupling and transmission. According to this distinction, coupling stands for the more or less stable connections between certain sites. Thus, the coupling metaphor “draws our attention to the nature and strength of relationships between different parts in a deliberative system, and to the spaces that might develop in-between” (ibid.: 44). So, sites can be visualised as bodies of water, while couplings are the channels connecting them. The water running through these metaphoric channels are the reasons, pieces of information and opinions⁵⁹ that are “sluiced” (Habermas 1996: 356) from one site to the other.

I want to reiterate three differences between coupling and transmission that Hendriks (2016: 45–46) describes. First,

59 Bächtiger/Parkinson (2019: 97) refer to these reasons, opinions and pieces of information as memes: “Memes are units of meaning that may be focused on a word or group of words but are also likely to include physical symbols, even actions or action sequences – the steps and agenda of an event are themselves symbols that convey meaning beyond the substantive topics listed. Memes will evolve and take different shapes depending on competing goals and strategic action, especially as they pass through a system and need to adapt in order to pass successfully through different settings: the words and action sequences used on a single topic will be rather different depending on whether it is being discussed in a community information session, a council decision-making forum, or a legal hearing.” Though this actually concurs with my own conception of potential transmissions, the term memes is impractical in a work that largely addresses communication in the digital sphere, an integral part of which are memes with a generically different meaning. I will therefore stay with expressions such as contents or transmissions, depending on the context in which I use them.

coupling focuses our analytic attention on the relational patterns between different components of a deliberative system, particularly where there may be both interdependence, as well as independence. Whereas transmission focuses on the flows and blockages in communication, the coupling metaphor evokes images about relationships – for example, linkage, interaction, interdependence and networking. (ibid.: 46)

In other words, “coupling” refers to the architecture of institutionalised connections between sites – that is, whether such connections exist at all and how they are constructed. “Transmission”, on the other hand, addresses the communication processes performed through these connections. In other words, it refers to the flow of reasons, information and opinions between connected sites and throughout the system.⁶⁰

Second, conceptualising coupling as connective architecture allows for analysing “multidirectional linkages between sites, rather than focusing on flows predominately from public to empowered sites” (ibid.). Hence, transmissions can flow in both directions across a coupling between two sites, independently of any hierarchies between these sites. This conception of transmission thus goes beyond a mere “uptake of reasons” from the public space by the decision-making sites.

A third distinction Hendriks makes is that “coupling brings into focus the deliberations, institutions and spaces that develop between parts of the system” (ibid.). This idea aligns with the fact that,

[t]o date[,] transmission processes within deliberative scholarship have largely been conceptualised via institutions (for example, parliaments and media connecting the public sphere with decision-makers) or actors (for example, activists, social movements promoting discourses into the public sphere) (Ercan et al. 2017: 202).

60 Parkinson concurs with this take on transmission, but notes that the term implies too much permanence of the transmitted ideas. “It might be more appropriate to borrow more organic concepts of political ideas and transformation [...]. Doing so might help square two conflicting deliberative requirements: the expectation that a system faithfully transmits ideas, yet also transforms them. Instead of focusing on ideas as fixed entities in the minds of participants, a more cultural focus, perhaps, would look at the processes by which ideas are created, shared, transformed, adapted, combined, and so forth, by agents, in contexts, for purposes” (2018: 441–442).

This again goes back to the focus on the connection between the decision-making sphere and the public sphere. According to this conception, less formal communicative situations, such as designed informal meetings of members from both spheres, fall into the category of coupling (Hendriks 2016: 53). But even more institutionalised setups, like mini-publics (cf. Boswell et al. 2016: 270), political parties (cf. *ibid.*: 269) and the media (cf. Parkinson 2018: 438), are occasionally treated as mere communicative connections between the empowered sphere and the public sphere.

In my eyes, however, this conception of coupling substantially blurs the distinction between coupling and site. More precisely, it blurs the line between a coupling between, on one hand, a site A and a site B and, on the other hand, an additional site C that might be positioned between sites A and B. This conundrum can be illustrated through the example of the categorisation of mini-publics and political parties: while Boswell et al. (2016: 269–270) define them as transmission mechanisms, many scholars of deliberative systems agree that they are valid and valuable sites of deliberation (cf. Fleuß et al. 2018: 17; Hendriks 2016; Mansbridge et al. 2012: 10), and most scholars do not categorise them as one or the other, but merely consider their relevance for systemic deliberation in general. As already observed (when defining deliberative sites), there is a discrepancy among scholars regarding the distinction between a communicative connection and a deliberative site. Especially concerning the substance of connections, “deliberative literature is unclear on this point, even that which attempts to address the question directly” (Parkinson 2018: 438).

So, while I propose to dismiss this last distinction of Hendriks’s, I will introduce another one of my own: couplings and transmissions may each exist in the absence of the other.⁶¹ While there might be a formal coupling between two sites, this does not necessarily mean that any reasons, opinions or pieces of information from one site are being taken up by the other. Therefore, couplings are merely the institutionally established links between sites (cf. Doberstein 2020: 5). First among these link-establishing institutions is, of course, the law (cf. Habermas 1996: 448), but couplings can also be upheld by technologies, rules, institutional design and political culture (cf. Mendonça 2018: 40), as well as by cooperations and partnerships between different institutions and orga-

61 The examples cited in the following two passages are conceptualised as inducers of connectivity by the respective authors, whilst I add to each of them the categorisation as either couplings or alternative carriers of transmissions.

nizational structures within the state. Doberstein (2020: 5–6) identifies three types of such couplings:

- (1) a reporting linkage, whereby one venue issues information reports to another; (2) a recommendation linkage, whereby one venue issues recommendations to be considered at another decision-making venue; and (3) an implementation linkage, whereby one venue makes decisions that must be interpreted and implemented by another.

Thus, couplings can be understood as the institutionally established links between two sites, independently of whether transmissions are actually conveyed through these links – that is, independently of whether, for example, the reports actually convey meaningful content and whether their content is introduced in the subsequent deliberation.⁶²

Conversely, transmissions do not need the architecture of a coupling. They could be conveyed via alternative carriers of transmissions. Returning to the metaphor of the system of water bodies, transmissions can be imagined as random runnels or small amounts of water being carried from one body to another in an unsystematic manner. In the deliberative system, alternative carriers of transmissions might be uninstitutionalised ways of conveying communication, such as information sheets or pamphlets, but most importantly, transmissions beyond couplings are realised through “individuals participating in both sites carrying the outputs or insights from one site to the other, and vice versa” (Doberstein 2020: 5). For example, in most deliberative systems there are “regular representatives” who are “deeply engaged with certain issues and [...] end up taking part in multiple conversations that occur across multiple arenas and moments of a deliberative system” (Mendonça 2018: 46–47). Doberstein (2020: 6) differentiates three types of connections that are reified via individuals:

- (1) shared membership across venues, whereby some actors are participants in multiple venues in the system; (2) guest membership across venues, whereby some actors visit venues for a specific purpose; and (3) a public engagement broker, an individual whose primary task is to share developments across the policy subsystem.

62 However, it can be argued that as the potential for actual transmissions and their uptake in the second site declines, the number of transmissions actually conveyed by the couplings declines.

Thus, transmissions can be conveyed through stable and institutionalised couplings or through unstable, alternative carriers of transmissions. Coupling and transmission are separate concepts, and their empirical realisations may appear independently of each other. Thus, each concept contributes in its own way to the systemic flow of reasons, opinions and information throughout a deliberative system.

In summary, I have made two adjustments to the conceptualisation of connections that has been presented by deliberative systems scholars. First, I have argued that horizontal connections are at least as important to deliberative systems as vertical ones are and that they should therefore be considered more often and more diligently in analyses of deliberative systems. Second, I challenged and dismissed the conception of couplings as communicative spaces that develop between parts of the system. Instead, I introduced the notion that couplings and transmissions may exist independently of each other.

2.3.2 Connections and Deliberative Qualities

The standards for the deliberative qualities of couplings and transmissions are as different as the respective concepts, though they can all be traced back to the deliberative standards I presented in chapter 2.1. Therefore, they will be addressed separately in the following two sections. The first section will outline how the deliberative quality of couplings varies in accordance with the strength of the connection and with its directionality. The second section describes how the deliberative qualities of transmissions are defined by the specific content that is actually transmitted and how this content is selected. The qualities of both couplings and transmissions contribute to the qualities of the overall system.

Deliberative Qualities and Couplings

As outlined above, couplings are stable and institutionalised connections between two or more sites within a deliberative system. Their deliberative qualities may vary, depending on the angle from which they are assessed. On the one hand, they “might approximate deliberative norms [such as being reflective, respectful and dialogic] to a greater or lesser extent” (Smith 2016: 161); in other words, the deliberative standards I introduced in chapter 2.1 can likewise be applied to couplings. For instance, Mansbridge and colleagues (2012: 24) have remarked on the possibility of social domination that “arises when a particular social interest or social class controls or exerts undue influence over

[other] parts of the deliberative systems". Such domination arises if there is a low degree of *equality* between the connected sites.

Another standard applicable to connections is *reciprocity*. In the context of connections, scholars have termed it directionality, but the idea is the same. Couplings can be designed as unidirectional, as well as bi- or multi-directional.⁶³ While unidirectional connections can hold systemic value, deliberative systems scholars generally advocate for bi- (or multi-)directional connections where "outputs or insights from one venue feeds [sic] into other venues" (Doberstein 2020: 13). This is because "mutual influence and adjustment between different parts of a deliberative system is more likely when institutional design facilitates two-directional or even multidirectional coupling" (Hendriks 2016: 57), that is, where there is reciprocity between sites.⁶⁴

On the other hand, connections must additionally be assessed with regard to the opportunity that they provide for transmissions to cross from one site to another. Within the deliberative systems approach, this opportunity is usually addressed in terms of the *strength of a coupling*. Normative discussions on deliberative connections have concluded that the ideal strength is "a form of loose connectivity where institutions and actors mutually influence and adjust" (Hendriks 2016: 55). Such loose coupling is generally perceived as the ideal form of connectivity because it allows a natural deliberative filtering of good reasons through a system and because the defects of one site can be compensated for in the sites it is coupled with (cf. Mansbridge et al. 2012: 22–23; Hendriks 2016: 57). In practice, however, "the desirable strength of coupling between sites and activities depends on what is being connected, and where" (Hendriks 2016: 57), as well as on the time lapse between the connected communication processes. Couplings that are too tight or too loose are deemed problematic by systems approach scholars. These cases are the ones that attract the most attention in the deliberative systems literature.

Overly tight coupling has negative effects, not only on the sites involved, but potentially on the whole system. A particularly tight coupling can be visualised

63 Valuable unidirectional couplings include, for example, documents that summarise the central points of the deliberation of one site that are to be considered at another, such as reports or expert statements. Bi-directional couplings might be feedback mechanisms between sites or institutionalised hearings.

64 On a systemic level, reciprocity does not depend on the bidirectionality of individual connections, since reciprocity can also be established transitively, that is, via intermediate sites. In chapter 2.4, I will elaborate on the inherent value of mutual influence and adjustment between different parts of a deliberative system.

as a connection between two water bodies that is so wide that the bodies almost appear as one. So, there is much transmission and little filtering between the sites. However, one “virtue of a deliberative system is that failures in one institution can be compensated for in another part” (Mansbridge et al. 2012: 22). If the coupling between two sites is too tight, this “self-corrective quality is lost” (ibid.: 23). Failures, such as dominant xenophobic or nationalist thinking in one site, may largely be transmitted to others (cf. ibid.). Again, there are also situations in which “tighter coupling may be desirable in some parts of the deliberative system to ensure that there are procedural mechanisms in place to hold decision makers to account” (Hendriks 2016: 57). Thus, tighter coupling might place empowered sites and their participants under public scrutiny, which these participants might otherwise try to avoid (cf. ibid.).

But coupling can also be too loose; sites and whole parts of a systems may become decoupled. The effects of *overly loose coupling* can be as negative as the effects of overly tight coupling. Visualised as the connections between water bodies, couplings are particularly loose if they are especially long or especially narrow. Long channels may represent couplings that have a considerable time lapse, during which the context of the deliberative output changes or due to which the transmissions are not remembered correctly. The water thus evaporates or is muddled. Long channels can also mean that the transmissions do not go directly from one site to the other but are forced to pass through several non-site locations. Such chains might, for example, be institutionalised procedures like parliamentary questions (“parlamentarische Anfragen”) that lead to the production of documents by ministry staff. These documents are then processed throughout the various levels of administration and shortened into ever more condensed abstracts before they are received by the parliament and potentially introduced in its debates. In such cases, transmissions may be gradually altered, much in the same way that a story is altered in a game of “Telephone”.

If a coupling is too loose, opinions, information and reasons may not be able to pass from one deliberative site to the other. Moreover, one may carry transmissions to another site in an intentionally partial manner in order to pretend that there is a unison of perspectives within this site’s deliberation.

In a broad process in which discourses ignore or neglect each other, specific discourses (or fragments of this constellation) may be mobilized as if they were the result of a proper deliberative process of opinion formation. Discour-

sive fragments can, hence, be taken as representative of the public opinion and not as isolated stars within the constellation. (Mendonça 2018: 37)

In situations of overly loose coupling, such a fragmentation of transmission might go undetected.

Moreover, couplings can be overly loose if “some parts [of the system are] particularly resistant to arguments from other parts” (Mansbridge et al. 2012: 23). In extreme cases, this can lead to a decoupling where whole parts of a system might be so divided by ideology, ethnicity, religion or other cleavages that the divided-apart sides will not even acknowledge transmissions from each other (cf. *ibid.*: 24). However, decoupling might in some cases be desirable. Emergent social movements or marginalised groups, for example, may need to deliberately prepare their opinions and reasons before seeking to influence other sites within the system (Hendriks 2016: 57). The systemic value of the strength of a specific connection therefore must be assessed, once again, in accordance with the involved site’s contexts.

Deliberative Qualities and Transmissions

“[A]lthough crucial, the institutional linkage between different spheres alone does not guarantee a successful transmission” (Boswell et al. 2016: 269). Thus, a suitable coupling does not guarantee a high-quality connection. The transmission processes can likewise have varying deliberative qualities. On the one hand, there is the question of the selection process itself, that is, the question of how reasons, pieces of information or opinions are selected for the transmission. The selection of transmission items can be explored with the deliberative standards *non-coerciveness*, *rationality*, *authenticity* and *comprehensibility*. So, the questions to be answered here concern the criteria that determine the selection process and the ways in which the transmissions are presented in the receiving site. In the spirit of systemic thinking, the assessment of the selection processes must once again consider the specific contexts of the involved sites; and there are no general standards for what a good selection process entails.

On the other hand, scholars need to consider how transmissions are heard and introduced within the communication processes of the receiving site. A successful transmission process implies not only that the respective transmission is carried out correctly and without bias, but also that it is included in the communication process it has been transmitted to. This inclusion “does not imply a deterministic ‘use’ of deliberations, recommendations, or decisions, but rather that the outputs from venues are shared, considered, and built upon as

decisions make their way through a complex governance system” (Doberstein 2020: 17). So, the standards of *listening* and *reflection* are applicable to transmissions as well.

I want to present two factors that shape both the selection process and the reception of those transmissions and that are especially relevant for digital communication processes. Firstly, transmission processes are shaped by the cultural, political and institutional context.⁶⁵ Secondly, individual carriers of a transmission have their own – individual – contexts that affect how they select and present their transmissions and how these transmissions are received in a site.

The cultural, political and institutional context of the system, the sites and the connections determine what is deemed important, what is taboo, how things can be said and understood and so on. So, a transmission “is vulnerable to the vagaries of the institutional and political context in which it occurs” (Boswell et al. 2016: 276). Laws, rules, institutional design and political culture do not just institutionalise couplings; they also influence what is transmitted from one site to another.⁶⁶ Institutionalised connections, in particular, would not be used to transmit societally sanctionable, much less illegal, contents.

According to Ercan et al. (2017: 204), “[m]uch of the empirical research on the institutional backdrop of public deliberation to date has focused on the structure of different political systems.” Such research often

considers the deliberative quality of certain political systems as independent of the actors or issues that trigger deliberation in the first place. The underlying assumption here is that the presence of certain institutional settings alone would ensure high quality deliberation. Studies relying on such assumptions emphasize [...] “the explanatory power of the structure of rules and norms that constrain individual agency”. (Ercan et al. 2017: 204)

However, the cultural context of the sites is no less important. Cultural norms usually prompt a certain behaviour and discourage variant actions. They establish “notions of who and what are considered reasonable, sensible and legitimate” (Koopmans 2004: 451) over the issue at stake”, as well as of “who is recog-

65 Though the institutional, political and cultural context has been addressed neither frequently nor systematically by systems approach scholars, it is still important, especially with regard to digital communication.

66 The platform-related counterparts to laws, rules and institutional design are the platforms’ logics and architectures.

nized as the main meaning-making body on the issue at hand” (Boswell et al. 2016: 269). The perceptions of the cultural, political and institutional context “vary to some extent from one policy arena to another, and from the point of view of one collective actor to that of another” (Koopmans 2004: 451).⁶⁷ The existence of a similar institutional, political and cultural context in all the involved sites will lead to a trade-off regarding the deliberative qualities. It will support qualities like *comprehensibility*, *listening*, *reflection* and *respect* between sites but at the same time reduce *inclusivity* and *diversity* of experiences, opinions and reasons (cf. Kuyper 2020: 8–9). Moreover, the reception of transmissions depends on how the sites transmitting them are being perceived by the sites receiving these transmissions. If, for example, the communication processes in a site are viewed as especially rational, truthful, authentic, common-good oriented and so on, transmissions might be taken up more willingly by other sites.⁶⁸

How transmissions are presented and received (*authenticity*, *rationality*), how they are understood (*comprehensibility*) and who or what decides on the selection (*non-coerciveness*) are highly influenced by the specific institutional, political and cultural context of the involved sites. Therefore, scholars assessing the deliberative qualities of connections must “not only look *inside* particular venues but also at how those events are being perceived from the *outside*, and on what basis judgements are being made by onlookers” (Bächtiger/Parkinson 2019: 79, orig. emph.).

Besides the cultural, political and institutional context of the connection, there are also *individuals* who will filter the transmitted content at different points during the transmission process. There are individuals who decide upon what is to be included in reports and other transmission documents, individuals who carry the transmissions beyond the institutionalised couplings and individuals who introduce certain ideas from other sites in a deliberation.⁶⁹

67 In chapter 6.2, I will elaborate on the different cultural and communicational conventions of platform communities.

68 This depends on the value of the respective standards within the specific culture.

69 In the case of a report that is prepared in a mini-public and submitted to a legislative committee, for example, the filtering is performed in the decisions on what should be included in the report, which remains untouched throughout the transmission process itself and during its presentation in the legislative committee. What and how much content the coupling transmits is determined by possible institutional requirements concerning the report (addressing, for example, length, depth or formatting), as well as by the individuals that decide on the contents of the report. Another example would be committee members who directly observe the deliberation of the mini-public. What is

Individuals may follow different goals when they are transmitting contents between sites. They may want to generate policy impact; but they might also use a “transmission as a form of acknowledgment, legitimating the political value of identities (respectively activist, citizen and expert) that had been excluded or under-acknowledged” (Boswell et al. 2016: 276). To reach these goals, individuals may use their agency in various ways. They may assume a “mentoring role by encouraging others to listen to the voices of weaker publics and then ensuring that these publics’ preferences are transmitted (with greater legitimacy) into empowered spaces” (ibid.: 277). Conversely, they may also “choose not to amplify particular claims” (ibid.: 277–278).

Depending on their respective positions in the sites, individuals will be more or less successful in their endeavours to introduce certain transmissions into a deliberation. Particular policy actors are “crucial in shaping what voices were heard and how messages were transmitted into more empowered sites” (ibid.: 277). Their importance may derive from their official status within a site, or even within the system. Experts or officials with decision-making power, for example, can easily dominate a deliberation (cf. Fleuß et al. 2018: 15; Thompson 2008: 509). But individuals might also gain an elevated status within sites by being present in many different deliberative sites that are all deliberating the same issue. “These regular representatives [...] tend to become well known (in a positive or negative way) within policy communities and are usually regarded as individuals whose positions cannot be ignored” (Mendonça 2018: 47). The more important the position of an individual within the site, the better their chances to introduce certain transmissions into the deliberation.⁷⁰ With regard to deliberative qualities, an individual’s ability to introduce transmissions in a site may have varying effects. On the one hand, the dominance of certain individuals counteracts equality. On the other hand, an influential individual’s introduction and championing of relevant minority views might just as well enhance the inclusivity of the transmission (cf. Boswell et al. 2016: 273). Once

transmitted to the committee for deliberation depends on which committee member observed the mini-public at which point of the deliberation, for how long and with what intention; it also depends on what that member heard, understood and chose to repeat and on how they chose to frame it in the committee’s own deliberations. These examples are based on a study presented by Hendriks (2016), and more details can be found in her publication.

70 In chapter 6.3, I will come back to the individual’s influence on a deliberation and its meaning for deliberative quality.

again, the assessment of the transmission process must include the sites' contexts.

Apart from the importance of a position within the deliberative site, there are other factors that may help to introduce transmissions into a deliberation by generating attention and influence. For example, "willing and well-resourced citizens" at the grassroots level may "work in ways that are informal, social, fun, and agile while, crucially, delivering results that are relevant to their electorates" (Hendriks et al. 2020a: 64). Individuals can use innovative modes of presentation to transmit content, rather than following intentionally designed, top-down participatory processes. Moreover, they can employ these modes to attract attention and thus to introduce transmissions into a deliberation. While the first generations of deliberative democratic theory frowned upon the use of innovative modes of transmission, the deliberative systems approach has acknowledged their value and the possibility that they "may have consequences that are positive for the deliberative qualities of the system as a whole" (Owen/Smith 2015: 221).⁷¹

Of course, the actions of individuals are always affected by the cultural, political and institutional context they act in at a given time. For example, these contexts assign certain positions to certain individuals. Such contexts may enable these individuals, may give them a certain influence over transmissions or may restrict their influence over the reception of a transmission. The contexts also set the limits of what can be said; they define taboos and give certain guidelines on what is appropriate at a given position within the system (regarding network and sequence). Thus, the context of a connection shapes transmissions not only directly but also via the individuals acting within it. Conversely, the individuals find their own ways of handling these principles that apply in a given context. For instance, they might diverge from the usual conventions in order to bring certain transmissions to attention. The deliberative quality of a transmission is affected accordingly.⁷²

In summary, the deliberative qualities of transmissions can be assessed by the general standards I introduced in chapter 2.1, especially *authenticity*, *rationality*, *comprehensibility*, *non-coerciveness*, *equality* and *inclusivity*. The deliberative

71 In chapter 6.1, I will address the various modes of presenting reasons, opinions and information on social media platforms, and I will comment on their effects on deliberative qualities.

72 In chapter 6.3, the interdependences of individuals, societal contexts and communication will again be addressed.

qualities are shaped by the institutional, political and cultural background of the transmission, as well as the individuals involved in the transmission process.

2.4 Deliberative Systems

Thus far, I have alluded to most of the central ideas regarding the concept of deliberative systems. In this chapter, I will give some theoretical and empirical background for these ideas and connect them with the points I have made concerning deliberation, deliberative sites and connections. On this basis, I will present a definition of deliberative systems that will serve as the foundation for the analyses in the following parts. In the second step, I will make the connection to systemic deliberative qualities. The following explications will mainly be based on theoretical work by scholars of the deliberative systems approach, since research thus far on the systemic aspects of deliberative systems has largely been done from a theoretical perspective.⁷³

2.4.1 The Definition and Traits of Deliberative Systems

In contrast to deliberative sites and the connections between them, deliberative systems have been defined, and their traits have been analysed in abundance – though no less ambiguously. In their definitions, different scholars place their emphases on different aspects and thus arrive at slightly (or less

73 Empirical research is difficult due to the vastness and complexity of most deliberative systems. The majority of the studies conducted thus far have focussed “on the connections between one or more small-scale, citizen-centred forums and a wider or more formal democratic process” (Parkinson et al. 2020: 544). They have often studied the connections between just two or three sites and concentrated more “on deliberation, the noun, rather than the distributed, adjectival, deliberative quality that social systems theory suggests is so important” (ibid.: 544). Moreover, Boswell et al. (2016: 265) found that existing empirical research covers mainly two areas: the links between mass media coverage and legislative attention, on the one hand, and policy responsiveness to public opinion, on the other. “However, neither body of literature encompasses the broad array of sites and institutions through which claims travel in a deliberative system” (ibid.). Thus, they have called for “a deeper analysis of how diverse viewpoints are expressed, acknowledged and facilitated, and whether the claims associated with these viewpoints cross-pollinate different deliberative sites” (ibid.).

slightly) different definitions.⁷⁴ In the following sections, I will present the points where scholars of the systems approach agree and where they differ, and I will present my own conception of deliberative systems based on that.

The first account of deliberative systems was given by Jane Mansbridge (1999: 211) in a piece on the importance of everyday political talk.⁷⁵ The following pieces in early deliberative systems theory add further aspects and emphases to this conceptualisation and build the foundation of the “manifesto” of the systemic turn by Mansbridge and colleagues (2012).⁷⁶ The authors of the “manifesto” define deliberative systems as follows:

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- 74 Within the literature on the deliberative systems approach, definitions are usually given by starting from the macro-aspects and going through to the micro-aspects of the approach. Thus, the system is usually defined first, and then – if at all – scholars turn to the connections and sites. This is why some points made in the following with regard to defining the concept of deliberative systems have already been addressed in the course of defining deliberative sites and connections.
- 75 Mansbridge described deliberative systems as “talk among formal and informal representatives in designated public forums, talk back and forth between constituents and elected representatives or other representatives in politically oriented organizations, talk in the media, talk among political activists, and everyday talk in formally private spaces about things the public ought to discuss [in order for citizens] to understand better what they want and need, individually as well as collectively” (Mansbridge 1999: 211). According to this account, democracies need such a full deliberative system “if citizens are, in any sense, to rule themselves” (ibid.).
- 76 Central among these contributions are those by Robert Goodin (2005), Carolyn Hendriks (2006) and John Dryzek (2009).⁸³ Goodin (2005; 2008: 186) presents a model of distributed deliberation in which deliberation is viewed as sequential. The deliberative process develops over different stages in various component parts, with different agents playing different deliberative roles, and each stage has to answer different deliberative expectations. Hendriks (2006) explores the role of civil society within the system-wide deliberative process. Based on her analysis, she promotes the concept of an integrated deliberative system that emphasises the multiplicity of “discursive spheres” and the connections between these spheres, as well as the significance of actors (cf. ibid.: 499). Dryzek (2009) concerns himself with how to evaluate the deliberative capacity of a system. Pursuing this angle, he defines five components of deliberative systems: public space, empowered space, transmission, accountability and decisiveness, and he later adds meta-deliberation (2010: 10–12) to this list. He introduces the idea that these components may be more or less deliberative and, furthermore, that “[s]eemingly low deliberative quality in one location [...] may be compensated by, or even inspire, higher deliberative quality in another location” (2009: 1388) or – conversely – undermine it.

A *system* here means a set of distinguishable, differentiated, but to some degree interdependent parts, often with distributed functions and a division of labour, connected in such a way as to form a complex whole. It requires both differentiation and integration among the parts. It requires some functional division of labour, so that some parts do work that others cannot do as well. And it requires some relational interdependence, so that a change in one component will bring about changes in some others. A *deliberative* system is one that encompasses a talk-based approach to political conflict and problem-solving – through arguing, demonstrating, expressing, and persuading. (ibid.: 4–5)

According to this account, a deliberative system is generally talk-based and oriented towards the solving of political problems. Both of these aspects can apply to deliberation processes of all types and sizes – within sites and across systems. Moreover, for a system to be a system, it must be constituted of different parts or interconnected sites. Thus far, this account revises parts of what was addressed in the previous chapters. However, it also introduces a genuinely systemic angle: the sites should not only be connected in a certain way; they should also feature a “functional division of labour” and “relational interdependence” between the sites in order to build “a complex whole”.

The division of labour refers to the idea that “the entire burden of decision making and legitimacy does not fall on one forum or institution but is distributed among different components in different cases” (ibid.: 5). Therefore, different parts of the system fulfil different functions and contribute differently to the systemic decision-making. Hence, “not all the virtues need to be displayed to equal extent – or even at all – in different locations in a deliberative system” (Dryzek 2016: 212). However, Simone Chambers rejects

a full division of labour in which one part of the system, say representative institutions or mini-publics, performs an epistemic function based in high quality deliberation, while another part of the system, say elections, performs a democratic function of mass participation. (2012: 65)

As she goes on to remark: “This would be dysfunctional it seems to me” (ibid.). Rather, one site can pursue different goals at the same time, and different sites fulfil the various goals to different degrees (cf. ibid.: 65). Yet it is unlikely that one will find a site that can realise all goals at once.

Deliberative systems scholars have not addressed the relational interdependence between deliberative sites as expressly as they have the division of

labour. But the idea that “change in one component will bring about changes in some others” (Mansbridge et al. 2012: 4–5) nonetheless appears in their work. It can be understood as the conceptual counterpart to the division of labour, and it is an integral aspect of the system: in order to have a systemic effect, a division of labour needs to combine the results of this labour. This is because “[d]eliberative systems do not exist naturally and they cannot be assumed as being already or always there. The porosity between discursive arenas must be built and supported, requiring inducers that contribute to stitching the parts together” (Mendonça 2018: 40). For example, in a deliberative system, there must be sites for listening to and reflecting on different views, but in order for these sites to influence the deliberation in other sites and, perhaps, the actual decision-making, their results must somehow be transmitted to and acknowledged by the other sites. Thus, “the problem is not the lack of spaces for listening and reflection, but whether these spaces are integrated with spaces involving expressive function and decision making” (Ercan et al. 2019: 26).⁷⁷

Relational interdependence not only concerns the different deliberative functions and goals of a system. It also means that a certain part can set or alter the context of deliberation for other parts. For example, “[i]nformal discussion can contribute to an eventual state decision and to broad societal decisions [if] the majority of a society or a subgroup changes its norms and practices, bringing to bear social sanctions on those who deviate from the new norms and practices [...]” (Mansbridge et al. 2012: 8). Thus, relational interdependence is integral to a system’s being a system. It resembles the conceptual counterpart to the division of labour because it addresses the connections between different parts, which have different goals and functions that may affect each other’s deliberative contents and contexts.⁷⁸

In sum, there is a consensus among scholars that deliberative systems are based on political communication, that they aim at political decision-making,

77 According to Ricardo Mendonça (2018: 40), this likewise translates to the participants in the sites: “The actors discussing in a particular point in time and space ought to be affected by whilst also affecting discussions happening in other points in time and space, if a system is to be a system.” However, it seems very implausible that participants will be aware of and responsive to all other perspectives within the system. Moreover, this demand seems to partially defeat the purpose of deliberative systems, as the sluicing of perspectives and the decision-making in the dedicated spaces is supposed to absolve the individual lay participant of the need for omniscience and absolute circumspection.

78 I will revisit relational interdependence in chapter 2.4.2.

that they are composed of diverse interconnected sites with different contexts and that they display a division of labour and relational interdependence. But there are further conceptual aspects that are treated more ambiguously among scholars. For instance, there have been two dominant models for visualising deliberative systems since the beginnings of the systems approach: a networked and a sequenced model.

The networked model conceptualises deliberative systems as a “map of nodes [...], with multiple forms of communication among them” (ibid.: 10), where the nodes are the various deliberative sites that are connected with each other. Such a view enables scholars to “model[...] patterns of communicative inclusion and exclusion, including the theoretically-important concept of deliberative enclaves” (Parkinson 2018: 439). Moreover, this kind of model demonstrates the weight of the more informal sites of the public sphere by indicating their sheer numeric preponderance. It is also a useful tool for empirical research on deliberative systems due to its relative simplicity (cf. ibid.).

However, Parkinson (ibid: 438–439) sees two major disadvantages of network maps. First, they cannot clearly show the substance of the connections between the nodes, and the difference between nodes and connections remains concealed.⁷⁹ Second, networked models are largely static, since they “better represent formal or well-institutionalized relationships, or moments in time of what is otherwise a dynamic and evolving set of relationships” (ibid.). The notion that deliberative systems are not stable but are instead “complex, porous and shifting in nature” is also stressed by John Boswell and Jack Corbett (2017: 801). According to them, deliberative goods are, on the one hand, “distribut[ed] across space and time” and thus “flow across the system” (ibid.: 809). On the other hand, “their shape is inherently unstable. Because of their complex, ongoing interaction, they cannot manifest in exactly the same way in different contexts” (ibid.). Moreover, Parkinson (2018: 439) warns that networked models of deliberative systems are inadequate for revealing critical junctures of a deliberative process, like moments of collective decision or agenda-setting.

To capture these junctures, Parkinson (2006) and Goodin (2008) introduced an alternative, sequenced model of deliberative systems. This sequencing can be regarded as another mode of the division of labour (cf. Mansbridge

79 I have addressed, in chapter 2.3, the necessity of distinguishing between site and connection.

et al. 2012: 6–7). Therefore, like sites, different stages of the process have different contexts (cf. Goodin 2008: 194–201). But

instead of modeling formal relationships between venues in a static fashion, [sequenced models] start with stages in a decision-making process, and thus model the dynamics as an idea or claim (or set of claims) passes – ideally – from the informal public sphere into formal processes in which policy options are generated, linked with evidence and arguments, weighed, and tested, before a binding collective decision is made and executive powers coerced into action. (Parkinson 2018: 439)⁸⁰

Mansbridge and colleagues likewise conceptualise deliberative processes as “relatively open deliberations at the beginning[,] narrowing to a focus as the point of decision is reached” (Mansbridge et al. 2012: 6). Bächtiger and Parkinson (2019: 90–92) go into more detail by roughly distinguishing three steps of the ideal deliberative sequence. The first step aims at democratic inclusiveness; there “should be relatively wild, inclusive, uncontrolled debate in the public sphere” (ibid.: 92). Such a debate can be initiated by formal leaders as well as by social movements or other actors (cf. ibid.: 90). The public sphere is thereby the birthplace for deliberative systems, and the degree of its diversity and inclusiveness shapes the diversity and inclusiveness of the entire system. In the second step, this wild debate is given “some institutional focal points [...] to which other publics can and do attend” (ibid.: 92). These institutions may be smaller-scale deliberative institutions, like deliberative mini-publics, public inquiries or parliamentary committees (cf. ibid.: 90). They “channel public debate into the agenda-setting process” (ibid.: 92), testing and filtering the arguments in order to see which ones are supported by evidence and argument or are consonant with public values (cf. ibid.: 90). Based on that, they “provide

80 A similar distinction is made by Finlayson (2019: 105). Based on Habermas (1996), he differentiates between civil society, which raises problems, the “impulse-generating periphery”, which gives these problems to the parliamentary complex, and the further discursive treatment of the problems in the formal public of the parliamentary system. In contrast to this bottom-up approach, Goodin (2008: 194–201) proposes four stages (beginning with caucus room discussion, which is followed by parliamentary debates). The public is involved only in the communication accompanying the election campaign and the election itself. The final step is the post-election bargaining. However, the bottom-up approach proposed by Parkinson starts long before an issue is brought to the attention of political parties and seems more akin to systemic thinking.

focused deliberation on the issues at hand, providing recommendations for further action” (ibid.: 92). The third step is the decision-making itself. Since it will be binding on everyone in a state, in order to be legitimate, it “ought to be made by every member of that state in a referendum or by their duly authorized and accountable representatives in a legislature” (ibid.). Thus, the deliberative process is distributed throughout the network as well as over time (see also Elstub et al. 2016: 144–145). Sometimes, the different sites and different steps produce different perspectives and arguments on an issue. Sometimes, the steps build upon each other, and “arguments made in one part of the system will be tested in another part” (Mansbridge et al. 2012: 6–7). But it is not only the contents of deliberation that are distributed across network and sequence. Similarly, “the component deliberative virtues are on display sequentially, over the course of this staged deliberation involving various component parts” (Goodin 2008: 186).

However, sequential models, too, have some major weaknesses. First of all, they “can lend a rationalist glow to processes which almost never proceed in such an orderly fashion”, as in reality “solutions frequently precede problems” (Bächtiger/Parkinson 2019: 89). Even more importantly, sequenced models “can often miss peripheral players that network analysis reveals” (Parkinson 2018: 439) and that are nonetheless relevant to the decision-making within the system. Therefore, in my own definition, I will opt for a hybrid model that includes aspects of both networks and sequences.

In doing so, I conceptualise deliberative systems as consisting of communication processes that are relevant to the system’s foundational issue. These communication processes occur within the various deliberative sites, as well as in the form of transmission processes between these sites. Even communication processes within disconnected sites belong to the systems – although the disconnectedness usually detracts from the inclusivity of the system. Their exact position in reference to the network and sequence of the system is a relevant context for the assessment of the communication processes’ deliberative qualities.

In order to distinguish between different deliberative systems, scholars have presented several approaches to defining the boundaries of a deliberative democratic system. Three main approaches of boundary setting have been discussed: institution-based, issue-based and action-based boundary setting. In an approach to boundary-setting based on political institutions, “the deliberative system is conceptualized and evaluated as it functions within the boundaries of nation states, supranational states, international decision-

making bodies, and [...] international institutions” (Mansbridge et al. 2012: 8). If a deliberative system has issue-based boundaries, it is not perceived as a stable structure waiting to process the next issue. Rather, a new system “always needs to be constructed and performed when an issue arises” (Dryzek 2010: 81). Lastly, defining action-based boundaries is a more normative endeavour (cf. Smith 2016: 160). These boundaries are “drawn around action that contributes to realizing its deliberative capacity” (Smith 2018: 17). This means that “[t]hose actions that[,] all things considered, enhance the epistemic, inclusive, or consequential credentials of the system might be categorized as internal to it, while those actions that likewise frustrate these functions might be categorized as external to the system” (ibid.).⁸¹

In defining the boundaries of a deliberative system, I opt for a mainly issue-based approach that also takes account of actions.⁸² Singling out an action-based or institution-based approach poses problems: Boundaries based on purely deliberative action would only ignore important non-deliberative action, including probably any communication happening in the digital realm. Focussing on institutions alone would lead to the omission of non-institutionalised sites that may be central to certain deliberative processes. Therefore, I argue that scholars should define boundaries as issue-based but that they should also consider aspects of action in the process: only sites whose communication processes potentially contribute to deliberative decision-making should be considered part of the system. In other words, a deliberative system contains only deliberation and non-deliberative actions that are relevant to the systemic deliberation on its specific issue. “Relevant to the systemic deliberation” means that these actions address the issue central to the respective

81 Mark Bevir and Kai Chan further distinguish the ways that scholars of the systems approach treat boundary-setting. On the one hand, they identify functionalist approaches that “include as parts of the deliberative system those practices and sites that currently effect, or at least have the potential to effect, [the system’s predefined] functional needs” (2021: 8). On the other hand, there are the interpretivist approaches that, in order to define what practices fall within a deliberative system, focus on the intentionality of the relevant agents (cf. ibid.: 11).

82 I follow Bächtiger/Parkinson (2019: 91, 2019: 112–113, 2019: 17), as well as Owen/Smith (2015: 215–216), who regard deliberative systems as connected with and contextualised by nation states, but not identical to them. “We can imagine systems that are focused on the formal institutions of nation states [...] but even those that are focused on a given territory’s decision making institutions are not likely to be coextensive with its borders” (Bächtiger/Parkinson 2019: 112–113).

deliberative system, and the systemic deliberation on this issue eventually culminates in a political decision. Deliberative systems thus include “a variety of institutions and social practices [that] combine to produce [deliberative] goods on an issue, over time and place, with differently situated actors” (Parkinson et al. 2020: 545). The shape of the system is nonetheless closely connected with its issue. For example,

a communication system surrounding economic policy is likely to be characterized by transnational governance networks operating in relative isolation from the narratives of the wider public sphere; while, on the contrary, a system about migration is likely to be closely entangled with public sphere narratives, and have many national or regional characteristics with transnational linkages at the margins, but also feature enclaves of academic and activist opinion which have relatively little resonance in formal or informal debate. (Bächtiger/Parkinson 2019: 113)

Hence, the actual form of a deliberative system is shaped by the issue under deliberation and the relevant expertise. The system is terminated by the final decision. Of course, in the system's sites, there will still be communication processes on the issue that cannot be included in the decision-making and that continue parallel to it. But these processes are part of further deliberative systems that may be consecutive to, and therefore may include, the original system.

From this perspective on the boundaries of deliberative systems, I would add that several systems may overlap and influence each other. A system may also comprise one or more smaller deliberative systems on issues relevant to or included in the overall system. Deliberative systems can become very large and complex when their issue is a particularly broad one. Since a broad issue is one in which many people are affected, many sites are involved and the expertise is spread widely, the deliberative system is especially complex.

The latest works on deliberative systems widen the focus yet again. Scholars are interested not only in communicative practices, but also in other practices that are not even potentially deliberative. Deliberative systems are now conceptualised as parts of wider democratic systems. Warren (2017: 39) terms these wider systems “democratic political systems” and formulates several demands of these systems that are closely related to, but not limited to, the ideas of deliberative systems scholars. Bächtiger and Parkinson (2019) likewise shift their demands from purely deliberative ones to those allowing for democratic

systems with a “deliberative timbre” (ibid.: 5). They claim “that deliberation is just one value among several in a democracy; and that the precise form it takes and its relationship to other forms of action depend on goals and contexts” (ibid.: 19). Similarly, Owen and Smith understand democratic deliberation “as one amongst many practices through which democratic institutions and systems realise a range of democratic goods. It is not the only democratic practice and will not always be appropriate” (2015: 231). Therefore, the systemic question is focussed on “the role of deliberation within democratic systems, rather than [on] whether democratic systems are deliberative in nature” (ibid.: 232).⁸³ However, these approaches do not contradict the points I am going to make by way of my definition and analysis. Since my main interest lies with communication processes across systems, be they “deliberative” or “democratic”, I will keep my focus on the much more widely discussed deliberative systems approach.

In summary, deliberative systems can be modelled as systems that are composed in order to feature a division of labour and relational interdependence between its constituent parts. The systems consist of interconnected communication processes on a specific issue. These processes are contextualised by this issue, as well as by their individual contexts. The system culminates in the binding decision on its issue.

2.4.2 Systemic Deliberative Qualities

Deliberative systems, their composition and their performance have thus far been addressed mostly from a theoretical angle. Drawing on an account from Finlayson (2019: 105), which itself draws on key phrases from Habermas (1996), the following can be said: a system is working well if, after problems have been raised in civil society and transmitted through the “‘impulse-generating periphery’”, “the flows of communication and discourse are able to enter the parliamentary complex through the ‘sluices’ and ‘portals’ of representative government”. Mansbridge (1999: 211) gives further detail to this observation:

83 According to Asenbaum (2022: 88), “democratic theorists situated in the participatory tradition have entered this debate” on how to go “beyond deliberative systems”. One approach from a participatory democracy point of view involves exploring the systemic connections in large-scale democratic innovations, as is done by Dean et al. (2020) and Parry et al. (2021). Moreover, Asenbaum investigates how not only participatory, but also agonistic and transformative systems approaches can contribute to conceptualising “democratic ecosystems”.

If a deliberative system works well, it filters out and discards the worst ideas available on public matters while it picks up, adopts, and applies the best ideas. If the deliberative system works badly, it distorts facts, portrays ideas in forms that their originators would disown, and encourages citizens to adopt ways of thinking and acting that are good neither for them nor for the larger polity.

One might add that there are many more ways a deliberative system could work badly. It could, for example, fail to transmit any problems or contents to the decision-making spaces. Or it might connect only some of the potentially affected individuals to the decision-making. Either way, what deliberative democratic systems “need are institutions which allow for diversity of *input*, but then processes in which those inputs are *structured* into distinct perspectives”, where this “structuration process is visible and open enough to allow for individual *endorsement*” (Bächtiger/Parkinson 2019: 10, orig. emph.) – this is spoken from the perspective of a normative systems scholar.⁸⁴ Attempts to assess deliberative systems in a more empirical manner are still in their beginnings. Scholars have done case studies on a limited number of sites and connections at a time (cf. Hendriks 2016); they have also done studies on how issues are dispersed across various sites (cf. Hendriks et al. 2020a). Other scholars have concerned themselves with how to conceptualise and measure the quality of deliberative systems (cf. Bächtiger/Parkinson 2019; Fleuß et al. 2018; Fleuß/Helbig 2021). In this section, I will build on my conceptualisation of deliberative systems and draw from both theoretical and empirical work by deliberative systems scholars in order to show how several of the deliberative standards I introduced in chapter 2.1 can be applied on the system level.

The starting points for most scholars of the deliberative systems approach are *inclusivity* and *diversity*. As I already stated, all individuals who are potentially affected by the decision on a certain issue must be involved in the preparational communication on that issue,⁸⁵ and since all these individuals are usually dispersed across society, they are involved in diverse deliberative sites. The diversity of sites demands a division of labour within the systemic deliberative

84 For the description of a system's deliberative qualities, the standards of systemic *inclusivity* and *diversity* can be derived from this normative statement.

85 Among others: Boswell et al. (2016: 277), Fleuß et al. (2018: 15), Habermas (1996: 181), Knops (2018: 121), Mansbridge et al. (2010: 65–66), Parkinson (2012a: 67), Smith (2016: 162).

process. Or, from the reverse angle, it can be said that a “system with a division of labour is deliberative to the extent that it increases the pool of perspectives, claims, narratives, and reasons available to decision-makers” (Parkinson 2012b: 154). The network nodes of a system must be composed in a way that promotes the system’s goals. In view of the division of labour, different sites may perform different deliberative tasks. For example, deliberative systems need spaces for voice and expression, spaces for listening and reflection and spaces that involve decision-making (cf. Ercan et al. 2019). But there is no “fixed, ideal configuration of deliberative sites: deliberative acts can be spatially and temporally distributed and combined and recombined in sometimes surprising ways” (Bächtiger/Parkinson 2019: 20).

“Different sites can contribute to deliberative capacity [later: deliberative systems] in different proportions, in different societies and systems” (Dryzek 2009: 1383). Moreover, the deliberative qualities of this process are considered “dispersed goods” (Parkinson et al. 2020: 545). Among the variety of sites, “few, or perhaps none, entail all the ideal aspects of democratic deliberation in isolation, but, ideally, as a collective they foster inclusive and reflective discussion on matters of common concern” (Ercan et al. 2017: 196; see also Smith 2016: 161). Moreover, what “might be considered low quality or undemocratic deliberation in an individual instance might from a systems perspective contribute to an overall healthy deliberation” (Mansbridge et al. 2012: 12–13). Consequently, a site “which in itself may have low or even negative deliberative quality with respect to one of several deliberative ideals, may nevertheless make an important contribution to an overall deliberative system” (Mansbridge et al. 2012: 2–3; see also Bächtiger et al. 2018: 16). Mansbridge and colleagues offer a rather technocratic example for this:

[S]erious discussions on European Union (EU)-wide matters take place mostly among elites, while the national media and, to a lesser degree, national politicians, organize the public debate on EU issues. Although the overall system is far from ideal epistemically, the elite discourse provides expertise, reasoned and informed mutual accommodation, and mutual respect, while the nationally instigated deliberation provides perspectives that might otherwise not be heard. By enhancing inclusion, the national media also increase the EU’s normative democratic legitimacy. (2012: 3)

On the other hand, “high-quality deliberative acts in specific venues may not always mean higher deliberative quality at the system level” (Bächtiger/

Parkinson 2019: 80). If there is too much deliberation or communication on a matter, democratic functions such as decisiveness, accountability or responsiveness might be impaired (cf. *ibid.*).

Similarly, deliberative quality is distributed across time, that is, across the various steps of the deliberative sequence. Goodin (2008: 195) presumes that “each of those ‘stages of the deliberative process’ will display different virtues”. For example, while he associates the respectful exchange of arguments with parliamentary debates and post-election bargaining, he assumes that authenticity is more likely to be found in the caucus room exchanges that precede and serve as preparation for the parliamentary debates (cf. *ibid.*: 196). In his eyes, the quality of a distributed deliberative process “presumably depends on having all of the deliberative virtues on display at *some* point or another in the decision process” (*ibid.*: 201, orig. *emph.*). This point is similar to what has been said with regard to the network distribution of deliberation.

In consequence, (1) measuring the deliberative performance of sites through use of a general measure applied to all the sites and communicative processes of a system and (2) cumulating these measurements in an additive manner will not lead to a reasonable assessment of the deliberative qualities of a system. Rather, each site and communication process must be considered with regard to its contexts, including the communication process’s position in both the network and the deliberative sequence. For example, there is a difference between, on one hand, communication processes that occur directly before a decision and in a site that is directly connected with the decision-making space and, on the other, processes that occur during “wild, inclusive, uncontrolled debate in the public sphere” (Bächtiger/Parkinson 2019: 92), far from the actual decision-making in network and sequence. Both these types of sites contribute differently to the systemic process, and this must be reflected in the assessment of the deliberative qualities of these communication processes and the overall deliberative system.

Hence, truly systemic assessments of deliberative quality also must account for relational interdependence within deliberative systems, that is, for *connectedness* and *reciprocity* between the sites. Connections between the different sites, with their different qualities, are essential for the compensation and balance of deliberative qualities across the sites I just described. Through “processes of convergence, mutual influence, and mutual adjustment, each of these parts would consider reasons and proposals generated in the other parts” (Mansbridge et al. 2012: 23). The perspectives are discussed in the various sites, and some of these perspectives are structured and selected in order

to be transmitted further through the system (cf. Bächtiger/Parkinson 2019: 10).

The diversity of deliberative sites comes with a diversity of deliberative qualities. The relational interdependence between the sites can affect these deliberative qualities as well.

Seemingly low deliberative quality in one location (say, corporatist state institutions) may be compensated by, or even inspire, higher deliberative quality in another location (say, a flourishing public sphere). Conversely, high deliberative quality in one location may undermine deliberative quality in another. For example, if legislators know that their more dubious collective decisions will be overruled by a constitutional court, then they are free to engage in irresponsible rhetoric. (Dryzek 2009: 1388)

In other words, “it is the *interplay* of venues that can produce the deliberative quality [...] in a democratic system” (Bächtiger/Parkinson 2019: 20, orig. emph.; see also Ercan et al. 2017: 201). For example, some communication processes might take place behind closed doors, but the results of these conversations must be known in order to be put forward for the public’s consideration and censure (cf. Bächtiger 2016: 271). This reciprocity between the various sites is constitutive of a systemic flow of transmissions.

Reciprocity is equally important with regard to the sequences of deliberative systems. According to Goodin, the quality of systemically distributed deliberative processes “presumably depends on the deliberative virtues coming in the right combinations and the right order” (Goodin 2008: 201). For example, formal governmental decisions will reflect the considered will of the citizenry “only insofar as that will has gone through a process of effective citizen deliberation – in the everyday talk of homes, workplaces, and places where a few friends meet, as well as more formal talk in designated public assemblies” (Mansbridge 1999: 212). Only after these views have been collected in such “wild, inclusive, uncontrolled debate” (Bächtiger/Parkinson 2019: 92) can they be properly included and filtered in the systemic deliberation. Therefore, reciprocity regarding both the network and the sequence of a deliberative system is important for the systemic flow of transmissions.

However, the mere existence of connections does not guarantee reciprocity, much less a systemic flow of transmissions. As described above, connections can be formed by couplings or alternative inducers of transmissions. Both are “factors that can contribute to promote an actual system, in

which the parts do not ignore each other or operate independently” (Mendonça 2018: 40). These connections “may promote not only an awareness of what has been said in other arenas, but the consideration of discourses throughout the system” (ibid.). Yet stable couplings may be “clogged”, or they may be used in a way that allows only heavily biased contents to be transmitted. Therefore, they are ideally reinforced by alternative inducers of transmissions.⁸⁶ This means that transmission will still occur, even if one of the connections is dysfunctional. Moreover, reinforcement of connections presumably leads to a wider variety of transmitted contents. Different couplings and alternative transmitters will follow different guidelines, incentives, interests and emphases in the contents they choose to transmit. Moreover, if contents are introduced into a discussion from multiple angles, they will probably generate more attention and discussion time in a site. Therefore, when there are more connections between two sites, there is probably a greater degree of transmission and uptake, and the connections are less biased by specific goals of transmitting and less filtered.

Here, I want to introduce another aspect regarding the structure of deliberative systems, one for which I can draw from some findings from systems approach scholars.⁸⁷ Deliberative systems develop clusters of sites with reinforced connections. These clusters may result in “deliberative ecologies’, in which [certain] contexts facilitate some forms of deliberation and avenues for information while others facilitate different forms and avenues” (Mansbridge et al. 2012: 6). Some of these clusters may form because similar political interests are communicated within the sites, and some may arise because the sites and the connection have a similar cultural, political and institutional context. Of course, to a certain degree, these clusters have their *raison d’être*: they increase comprehensibility and authenticity and thus support listening, reflection and respect within the cluster. Moreover, “[l]ike-minded conversations [...] are important for democracy because they may strengthen the positions of weaker political actors and foster the reinterpretation of public clashes of discourses” (Mendonça 2018: 35). For a balanced discussion of the various

86 Generally, individuals acting as carriers of a transmission across multiple sites and multiple steps of a deliberative system “play an important role in bringing parts of the system closer to each other” (Mendonça 2018: 47).

87 The concept of clusters has been inspired by the fragmentation discourse from digitization research and will become relevant in my analyses throughout chapters 3.2, 5 and 6.

transmissions across the system, however, these clusters must be embedded in the wider deliberative system. This embeddedness may have to counteract deep-rooted incompatibilities between the different parts. Incompatibilities occur

because the logics, dynamics, and nature of given arenas may push debates in contrasting directions that cannot be combined. Even if content may flow across arenas and the substance of a speech may be translated, discourse cannot be reduced to its “content”. Discourse [...] is embedded in the arenas where it was formulated [and the] incompatibility of communicative dynamics can contribute to keeping certain feelings and worldviews invisible, due to a lack of translatability[, as there] are processes that occur in diverse arenas that simply cannot be transposed to other types of arenas. (ibid.: 39)

Yet, if clusters dominate the systemic deliberation, simply because they include more sites and individuals and have more connections beyond their own ranks, the systemic communication process displays low equality and non-coerciveness (cf. Mansbridge et al. 2012: 23–24).

Lastly, the systemic communication processes that collect diverse perspectives and structure them into diverse perspectives while sluicing them through the system need to be “visible and open enough to allow for individual endorsement” (Bächtiger/Parkinson 2019: 10, orig. emph.). Moreover, *visibility* and *publicity* are needed to ensure *accountability*, *respect*, *reflection*, etc. (cf. ibid.: 12; Thompson 2008: 510). On the other hand, visibility can be detrimental for other deliberative qualities. For example, “politicians who deliberate in private are more inclined to make candid arguments, recognize complexities, and offer concessions” (Thompson 2008: 510). Moreover, “some kinds of learning and the freedom to forge agreements often require deliberation and bargaining behind closed doors, so that the weight of prior commitments does not lock participants into predetermined positions” (Bächtiger/Parkinson 2019: 40–41; similarly, Mansbridge 1999: 221). More generally, “in the everyday talk of the larger deliberative system, creative thought often thrives in protected space” (Mansbridge 1999: 221). From a systemic perspective, the “visibility condition is one that must be [...] fulfilled during the democratic process but should not be seen as [a] universal principle guiding the entire process” (Bächtiger/Parkinson 2019: 12). The adequacy of visibility depends, once again, on the position of the communication processes within the systemic network and sequence.

[I]n the public square, political actors need to be effective advocates rather than just being open to the force of the better argument; but they can be expected to provide good reasons and engage with the arguments of their political opponents. By contrast, in a context behind closed doors, where pressures of public scrutiny are reduced, we can expect other deliberative virtues – reflection, open-mindedness, listening, and respect – to flourish more fully. (ibid.: 40–41)

Moreover, Mansbridge has concluded that a deliberative system needs “some mixture of protection and publicity in the early stages of a deliberative process, but maximum feasible publicity in the final stages” (1999: 221). Publicity therefore has positive effects in some parts of the system, whereas it is problematic in others.

In summary, integrated systems display high inclusivity and reciprocity. Deliberative systems can increase their inclusivity and diversity by including various sites and communication processes with diverse backgrounds. Reciprocity can be enhanced through the connections between deliberative sites. These connections can be reinforced by alternative inducers of transmissions in order to support a systemic flow of transmissions. Clusters of sites and communication processes with reinforced connections may enhance the system's deliberative qualities, but they must be connected to the system in equal and non-coercive ways in order to secure a system's overall equality. Furthermore, the publicity of communication processes can have different effects on the deliberative qualities of different parts and sequences of a deliberative system.

3. The Digital Constellation as a Context for Deliberative Systems

The digital constellation is a theoretical concept that was first presented by Sebastian Berg, Niklas Rakowski and Thorsten Thiel (2020a). It refers, in a holistic manner, to societies that are characterised by the use of digital technologies. In other words, it provides a heuristic that allows one to analyse the interdependencies of digital technologies and society on different levels while avoiding monocausalistic inferences. It is explicitly designed to be accessible for the political sciences, and specifically for democratic theory. It is therefore a particularly useful tool for assessing deliberative processes in the digital realm and their role within the wider deliberative system.

The socio-technical dynamics of the digital constellation generally shape the deliberative systems that form in and operate under the conditions of this constellation. This is because deliberative systems are based on political communication and “a growing proportion of political communication uses digital means” (Parkinson 2012a: 1). It is not just that everyday political talk increasingly takes place in digital spheres; democratic innovations as well as empowered spaces are expanding into the digital realm, too (cf. Asenbaum 2020: 245–247; Chwalisz 2021: 171).¹ Meanwhile, digital technologies offer new means of communication and new spaces for interaction. So, digital technologies provide a communications medium of ever-growing importance.

Moreover, digital technologies provide the “horizon” of all practices and possibilities for action in the social world, since digital communication channels are fundamental reference points and resources (cf. Couldry/Hepp 2017: 15). More specifically, they represent a reference point for the possibilities of communication and organisation. Individuals who interact within the digital

1 See also chapter 4.2.

constellation are aware of the existence of digital technologies and the possibilities they provide. These individuals will adapt their actions in line with this knowledge. On the other hand, digital technologies are a resource. They provide access to information on societal issues and perspectives. Moreover, they can be used to organise discourse and social movements in the non-digital spheres of deliberative systems. Therefore, the properties and affordances of digital techniques also influence the wider deliberative system and ultimately feed into the decision-making. Additionally, digital technologies can themselves be the subject of societal discourse and political decision-making, as the growing number of legal attempts at regulation and media discourses indicate.

Consequently, a growing proportion of contemporary political communication – online as well as offline – is affected by the innumerable effects of digital technologies. At the same time, the conditions of the digital constellation tangibly restructure the public sphere. New spaces and arenas emerge; traditional media lose their centrality; social movements are facilitated. The public sphere represents a large and especially important part of deliberative systems. If such a large sphere is structurally influenced, this also affects the parts of a system beyond this sphere. The conditions of the digital constellation thus represent the context of any communication process within any of these deliberative systems.

The conditions of the digital constellation consequently have “transformative implications for the way democracy is understood and practised” (Ercan et al. 2019: 21). Yet the deliberative systems approach has thus far been slow to engage with the digital transformation and its implications. Scholars have frequently mentioned digital spaces as parts of deliberative systems (cf. Bächtiger/Parkinson 2019: 113; Curato et al. 2017: 29; Mansbridge et al. 2012: 10). However, they have thus far treated a communication process’s “technical basis as an exogenous variable” (Feenberg 2017: 189) and disregarded the specific characteristics of digital communication. Other scholars have voiced their scepticism regarding the deliberative democratic potential of mediated and online communication (cf. Mansbridge et al. 2012: 21) or have outright denied any such potential (cf. Goodin 2008: 93). But most of the time, both deliberative theory in general and the deliberative systems approach in particular have addressed digital communication as a secondary topic.

Nonetheless, some studies have surfaced that are explicitly directed at the nexus of digitisation and deliberative democratic theory research – although not as many as one would expect for such prominent research fields – and the authors of these studies have approached the subject in diverse manners. Sev-

eral of the scholars have treated online communication processes merely as examples of deliberative processes in general.² Other scholars have studied individual processes in online spaces, measuring and comparing their deliberative qualities.³ Still others have engaged with the specifics of online communication, such as platform design,⁴ the theoretical and practical blind spots of algorithmic moderation (cf. Alnemr 2020), the theoretical conception and implications of disembodied communication (cf. Asenbaum 2021, 2020, 2023), the communication features of specific platforms (cf. Forestal 2020), the effects of anonymity, pseudonyms and real-name requirements on communication (cf. Moore et al. 2020; Strandberg/Grönlund 2018), the influence of interfaces on deliberative quality (cf. Peacock et al. 2019) or the factors that foster disrespect in online debates (cf. Sarmento/Mendonça 2016). Some scholars have concerned themselves with how to design platforms that promote high deliberative quality (cf. Alnemr 2020; Hartz-Karp/Sullivan 2020), and some have even sketched out online democratic innovations (cf. Gastil 2016). I will integrate the observations and conclusions of these more detailed and more narrowly focussed studies into my own analyses. Moreover, a number of researchers have addressed systemic aspects of online communication, but these accounts remain rather descriptive and address neither the specific properties and affordances that lead to the structures being accounted for nor the wider societal embeddedness of the digital communication processes being described.⁵ All the studies have used different research approaches to address their respective topics. Many of them are based on empirical data,⁶ while others mainly rely on theoretical conceptualisation (cf. Chambers 2020; Ercan et al. 2019; Wright 2012). Some studies review other studies on online communication, formulate

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- 2 For example: Chambers (2020), Lawrence/Bates (2014), Maia et al. (2021), Parkinson et al. (2020 // 2022), Pedrini (2014), Stroud et al. (2015). My analyses later in the book will show, however, that communication processes on social media platforms have attributes that derive specifically from the platforms' digital architectures.
 - 3 For example: Esau et al. (2017), Hendriks et al. (2016), Rishel (2011).
 - 4 For example: Alnemr (2020), King (2018), Manosevitch (2020), Peacock et al. (2019), Strandberg/Grönlund (2018), Wright/Street (2007).
 - 5 For example: Ercan et al. (2019), Lyons (2020), Parkinson et al. (2020 // 2022), Rossini et al. (2020), Rousiley (2018), Strandberg/Grönlund (2018), Vicari et al. (2020).
 - 6 For example: Esau et al. (2021), Hendriks et al. (2016), Maia et al. (2021), Lawrence/Bates (2014), Parkinson et al. (2020 // 2022), Peacock et al. (2019), Pedrini (2014), Rishel (2011), Rossini et al. (2020), Sarmento/Mendonça (2016), Stroud et al. (2015), Vicari et al. (2020).

theoretical or methodological critiques of them or make proposals for future studies.⁷ The quality of all these studies varies considerably. Almost all of them are strongest and most firmly grounded in only one research area, either deliberative theory, communication sciences, digitisation theory or digital methodology.

Few scholars have so much as touched upon a more holistic view that takes into account the implications of a digitised society for deliberative systems and communication processes across and beyond the divide between digital and physical spaces (cf. Asenbaum 2023; Chambers 2020; Wright et al. 2018). Consequently, what is needed is not only “a full-blown rethinking of the construction of everyday reality” (Couldry/Hepp 2017: 6), but also a full-blown rethinking of the construction and procedures within deliberative systems.⁸ The concept of the digital constellation represents a first step in this direction. This concept captures the interwovenness of digital and non-digital spheres of (political) society, and it can be used as a tool to analyse the formation of political communication under digitised conditions. Therefore, I will present this concept in this chapter and use it in the subsequent ones to explore how the conditions of the digital constellation affect deliberative systems. I will thus widen the scope of the deliberative systems approach.

Moreover, I will demonstrate the interwovenness of digital and non-digital spheres of political society by presenting central aspects of how digital technologies in general affect the public sphere. As I have indicated throughout the previous chapter, the public sphere is considered a central part of deliberative systems by many scholars of the systems approach. At the same time, it is the part that has been especially affected by the properties and affordances of the digital constellation, as well as by the economic and social dynamics that drive the development and deployment of digital technologies, and it has experienced various structural changes. This digitally restructured public sphere provides the background for my analyses in the subsequent chapters. Though social media platforms play a significant role in the restructuring processes, I will here focus on the more general effects of digital media on the public sphere

7 For example: Holst/Moe (2021), Mendonça (2015), Rousiley (2018), Strandberg/Grönlund (2018), Wright et al. (2018).

8 Of course, communication is not the only mode of participatory practice affected by the digital transformation. Especially in view of the current trend to open up the deliberative systems approach in favour of democratic systems, a constriction of deliberative theory to the communicative level (cf. Antic 2017: 139) should be avoided.

before I zoom in on the more specific logics of social media platforms and their relevance for and impacts on deliberative systems.

3.1 The Digital Constellation

With their presentation of the digital constellation, Berg and colleagues “aim[...] to reflect on the conditions under which politics takes place in a society that is characterised by the use of digital technologies” (Berg et al. 2020b: 18). In other words, a society that habitually uses digital technologies to such a degree that it can be said to be characterised, shaped, distinguished and recognised by these habits can be described in terms of the digital constellation. This digital constellation is now the context in which Berg and colleagues propose to analyse how politics take place in these societies.

In their introduction of the digital constellation, Berg and colleagues emphasise that

[t]he digital constellation is explicitly not to be understood as an elaborated research programme or even an independent theory. Rather, it serves as an epistemological guide that helps to structure theoretical reflection on the interrelationship between digitisation and political questions. (2022: 256)

This epistemological guide is designed to enable researchers to address questions such as: What technical factors have a formative significance for society and in what way? What opportunity structures are formed and consolidated by these technical factors? How do politics affect the technologies, their development and their social realisation? And what social or political practices prevail and become self-evident in light of this socio-technical environment? (cf. Berg et al. 2020b: 17–18). Thus, the concept “link[s] political science – especially political theory – with the discussion about digitisation and society” (ibid.: 6).⁹ This political focus, in turn, makes the concept of the digital constellation compatible with the deliberative systems approach. I will proceed to conceptualise

9 Ideas regarding the latter discussion are drawn from theoretical and empirical research in sociology, political science and German legal studies. The concept has thus far been developed and discussed with a decided focal point on the German scientific community.

the digital constellation and to then demonstrate its compatibility with the deliberative systems approach.

One of the core ideas of the digital constellation is that the digital and the non-digital sphere are irreversibly interwoven in societies that operate and communicate under the conditions of the digital transformation. On the one hand, digital communication presupposes the physical world, since “things that are communicated [via digital means] involve real people who take up, occupy, share, and contest physical space” (Parkinson 2012a: 1). On the other hand, “the digital increasingly structures the contemporary world” (Berry 2014: 209).

This interwovenness affects both the individual and the societal level. On an individual level, “the ways in which we make sense of the world phenomenologically become necessarily entangled with the constraints, affordances and power-relations that are features of media as infrastructures for communication” (Couldry/Hepp 2017: 7). In this context, notions of a “new new media ontology” (Lash 2007) – where “we can no longer think of our lives as *mediated* by information and software”, since these lives are “increasingly *constituted* by or *comprised* of” the latter (Beer 2009: 987, *emph. added*) – have been raised. “Even if we do things without directly using media, the horizon of our practices is a social world for which media [that is, tools of mediatisation] are fundamental reference-points and resources” (*ibid.*). This translates to the social level. The social world has been “changed in its dynamics and structure by the role that media continuously (indeed recursively) play in its construction” (Couldry/Hepp 2017: 15), and it “has significantly more complexity when its forms and patterns are, in part, sustained in and through media and their infrastructures” (*ibid.*). In this constellation, “[t]he human-machine bond shapes our common life together, our modes of social integration and communication” (Hofmann 2019a: 5), and “[e]ncounters between individuals and the technologies that connect them proliferate with a myriad of consequences” (Feenberg 2017: 9). Overall, the digital and the physical world have become irreversibly intertwined.

The concept of the digital constellation provides a holistic approach to the digital transformation. It “does not interpret digitisation as a domain phenomenon but as a comprehensive, multifaceted process in which society and technology interact dynamically and continuously in concrete ways” (Berg et al. 2020: 18). It commences from the perspective that society and digital technologies are interrelated:

digitisation can only be adequately understood as a socio-technical transformation process in which every innovation, in its genesis, is linked to numerous technical and social premises and is in turn accompanied by a variety of social upheavals, which provide the starting point for further processes of development. (Schrape 2021a: 82, author's translation)

The argument that society and technology are interrelated has been directly or indirectly formulated by several authors (cf. Baecker 2018; Feenberg 2017; Nassehi 2019). To capture this interrelation in a term, Berg and colleagues “refer to the concept of constellation as it was applied in the tradition of the Frankfurt School”, mainly referring to Adorno and Habermas (2022: 257).¹⁰

Berg and colleagues draw from those ideas the common assumption “that a transformed social constellation would put previously valid factors into a new relationship with each other, one which would be accompanied by a necessity to adapt analytical and normative patterns of thought” (Berg et al. 2020b: 19). The digital constellation therefore is the constellation transformed by digitisation, in the context of which “sedimentations of social practice and institutions previously assumed to be fixed are placed in new social relations, which necessitates the adaptation of analytical and normative patterns of thought” (Berg et al. 2022: 257). In order to investigate this new and evolving constellation in more detail, Berg and colleagues propose three levels of analysis: properties, affordances and social configurations.

The first level focusses on the *properties* of digital technologies.¹¹ Archivability, algorithmic processability and networkability are “particularly noteworthy” (Berg et al. 2020b: 19) examples of properties. Archivability – or, conveyed in tech language, storability – refers to the possibility of storing data that reflect the entire experienceable world in zeroes and ones (cf. Lenk 2016: 228). Both digital images of non-digital phenomena and digital data that have no non-digital counterparts can be stored using digital technologies (cf. Brumme 2020: 77–78). These data archives provide the basis for the algorithmic processing and the statistical analysis and comparison of these data (cf. Lenk 2016: 228). Thus, digital technologies can be interpreted as acting entities that can be tasked with nearly any kind of activity, including computation, simulation and

10 For a more detailed account, see Berg et al. (2020b: 19).

11 In a similar attempt to enable concrete descriptions and developments connected with digitisation, Brumme conceptualises “das Digitale” as a structure that can be understood as medium, storage and actant (cf. 2020: 77–78). These three characteristics resemble the properties of the digital constellation as it is defined by Berg et al. (2020b).

navigation (cf. Brumme 2020: 78). Lastly, networkability refers to the mediating qualities of digital technologies. It arose with the emergence of the internet, which resulted in an explosion of world-wide communication between humans and humans, between humans and machines and between machines and machines (cf. Lenk 2016: 228). The capacities for storage, connection and processing are “ever-expanding” (Rieder 2020: 35) and represent “abstract properties [that] form a constant that can take on different forms in connection with action practices and contexts” (Berg et al. 2020b: 20). The mediating qualities of digital technologies give a structural, network-like character to the digital constellation that enables, forges and stabilises connections throughout society (cf. Brumme 2020: 78). Storability, processability and networkability form the foundation for any other properties of digital technologies, for example, for the possibilities that social media platforms provide for users to connect and interact with each other (see chapters 4 and 5).

The second level of analysis addresses the *affordances* realised in practice.¹² Berg and colleagues conceptualise affordances as “collectively established forms of action that result from the perceived spaces of possibility for digital technologies” (Berg et al. 2020b: 20). Behind this definition lies “the consideration that technology does not determine social structures but provides structures that make practices available” (ibid.). More specifically, these structures “shape the possibilities for using specific technologies in the perception of social actors” (Berg et al. 2022: 257–258). The afforded modes of action include both the “proper” use of the technology and the resistant appropriation (cf. ibid.: 258). Affordances therefore resemble “a multifaceted relationship structure between a technical artefact and its user, which, in a concrete situation, enables or limits potential outcomes” (Berg et al. 2020b: 20). By connecting technology and social practices in this way, affordances make themselves accessible for political thought:

12 Affordances are the issue of a very large field of research, and they could even be understood to constitute their own sub-discipline. Having been proposed in 1960 by Gibson (2015), the concept of affordance has been used in many contexts and many disciplines. Works that are central to research concerning human-computer interaction include Hutchby (2001), Norman (2002) and Evans et al. (2017). An overview over the manifold use of the concept has been given by Heras-Escribano (2019). Due to the complexity of this field of research, I will limit my remarks to what is explicitly addressed by Berg and colleagues regarding the second level of the analysis of the digital constellation. They base their conception of affordances on Hutchby (2001), Latour (2007a), Dahlberg (2011), Evans et al. (2017) and Deseriis (2020).

While the affordances of a technology always refer to concrete situations and depend on the subjectively perceived context that exists in that situation, the description of affordances realised in practice is, however, in political science terms, extended to a generalisation of the affordances that were realised in a similar way under similar conditions and from which path dependencies that can be reflected on for society as a whole result. (ibid.)

Thus, Berg and colleagues arrive at their proposal to analyse the affordances of technologies in the digital constellation and come to “a generalised statement about collectively established forms of action that result from the perceived spaces of possibility for digital technologies” (ibid.). An example of such a generalisation is many-to-many communication (cf. ibid.), a conceptualisation of communication shaped by interaction processes between a large number of participants and content moderation techniques that, in turn, have been made possible by the storability, processability and networkability of digital technologies: communication can be stored as data points that are then processed and ordered according to specific criteria; users can specify these criteria in queries when they access the data via the network, and further data processing facilitates the prioritisation of data for each query. Such affordances also shape the communication processes within deliberative systems that operate within the digital constellation.

The third level of analysis concentrates on *social configurations* or political transformations. These (re)configurations result from the socio-technical change processes that are interlinked with the other two levels (cf. ibid.: 20). “Technical characteristics and political dynamics are then firmly linked in the process of adaptation and produce relatively stable socio-structural phenomena” (ibid.). A prominent example of social configurations given by Berg and colleagues (ibid.) is the platform economy as an advertising-influenced infrastructure of interaction. Another societal configuration can be seen in the public sphere that has been structurally transformed under the conditions of the digital constellation.¹³ These structural transformations are based on the digital infrastructures that enable the connections between individuals. The infrastructures have historically been built upon the basis of the World Wide Web, and they have been somewhat stabilised in their path dependency – meaning that they would be very different in appearance and function if

13 In chapter 3.2, I will elaborate on the various aspects of the digitally transformed public sphere.

they were to be built from scratch today. Nonetheless, they are constantly developing, as new codes are written, new devices are invented, new use cases emerge and new affordances develop. Hence, the material characteristics and the protocols of these infrastructures are not the only aspects shaping the digitally transformed public sphere as a phenomenon; the usage habits and conventions of all players involved also play a formative role and are indeed themselves heavily path-dependent.¹⁴

In sum, the concept of the digital constellation provides a holistic approach to the digital transformation. It captures the dynamic and continuous effects of digital technologies throughout society, while it emphasises the interwovenness of digital and non-digital spheres. The three levels of analysis enable scholars to explore the societal and political implications of the digital transformation in more detail. In the subsequent chapters, I will use the concept of the digital constellation to analyse the effects of digital technologies – specifically social media platforms – on deliberative systems.

3.2 The Restructured Public Sphere

As I have already indicated, many scholars of the deliberative systems approach regard the public sphere – or public space, as it is often termed in the deliberative systems approach – as central to the system. These scholars “place citizens and their narratives at the heart of the model” (Bächtiger/Parkinson 2019: 17), while democratic institutions, and especially the parliament, become less prominent (cf. Gaus 2016: 517). The public sphere therefore represents a vital part of any deliberative system it is part of, and a structural transformation of such a sphere consequently affects the systemic processes.

Moreover, the public sphere is especially affected by the digital transformation. Consequently, the digital transformation has more than once¹⁵ been dis-

14 The concept of “networked publics” presented by danah boyd (2011) seems similar on first sight and might be considered a societal configuration of the digital constellation as well. However, the concept appears narrower than what I understand as the digitally restructured public sphere, as it seems to still be focussed on interactions in the digital realm. Deliberative systems themselves are not configurations of the digital constellation, since they are by definition issue-dependent and therefore temporally limited to the decision-making process.

15 Cf. Eisenegger et al. (2021), Imhof (2011), Muldoon 2022: 141–142), Seeliger/Sevignani (2021c), Seeliger/Villa Braslavsky (2022).

cussed as the inducer of a new structural transformation of the public sphere – not least by Jürgen Habermas (2020, 2021) himself, who had first coined the term of a “structural transformation of the public sphere” (Habermas 1993). As I indicated in chapter 2, Habermas is one of the authors whose works provide a foundation for the systems approach. He recently described the contribution that political communication in the public sphere makes to the whole democratic process as one that is essential but limited – essential because the public sphere is the only sphere of truly inclusive political opinion- and will-formation, and limited because the public sphere’s scarcity of collectively binding individual decisions (cf. Habermas 2022: 150–151). But how do Habermas and, based on his works, deliberative systems scholars conceptualise the public sphere?

In an earlier work, Habermas depicted the public sphere as “a network for communicating information and points of view (i.e., opinions expressing affirmative or negative attitudes)”; he added that “the streams of communication are, in the process, filtered and synthesized in such a way that they coalesce into bundles of topically specified *public* opinions” and that the public sphere “is tailored to the *general comprehensibility* of everyday communicative practice” (Habermas 1996: 360, orig. emph.)¹⁶ The communication structures of the public sphere are anchored in the individual’s lifeworld by the “more or less spontaneously emergent associations, organizations, and movements” (ibid.: 366–367). These are “attuned to how societal problems resonate in the private life spheres, [and they] distill and transmit such reactions in amplified form to the public sphere” (ibid.: 367). In its structure, the public sphere

represents a highly complex network that branches out into a multitude of overlapping [...] arenas. Functional specifications, thematic foci, policy fields, and so forth, provide the points of reference for a substantive differentiation of public spheres [...]. Moreover, the public sphere is differentiated into levels according to the density of communication [and] organizational complexity [...]. Despite these manifold differentiations, however, all the partial publics constituted by ordinary language remain porous to one another. (ibid.: 373–374)

16 The study of public opinion, in fact, is a field of research in its own right, and it has been for a long time (cf. Minar 1960). Newer, very comprehensive works on public opinion that include many thoughts on how to introduce digitisation research into the subject have been presented by Slavko Splichal (1999, 2022).

The public sphere, with its network of more institutionalised discourses, represents the core of civil society (cf. *ibid.*: 367). Together, civil society and the public sphere generate impulses for the decision-making in the political centre (cf. *ibid.*: 442). Moreover, they need to have the capabilities to “ferret out, identify, and effectively thematize latent problems of social integration (which require political solutions)” and to find “sufficient occasion to [...] introduce [these problems] via parliamentary (or judicial) sluices into the political system in a way that *disrupts* the latter’s routines” (*ibid.*: 358).

The deliberative systems approach’s conception of the public sphere, or public space, is often explicitly based on Habermas’s conception, or it is at least quite similar to his conception. In two of the first publications on deliberative systems, Dryzek (2009: 1382–1383) leans on Habermas in conceptualising public space. He contrasts public space with empowered space (cf. *ibid.*: 1385), and he describes the former as “ideally hosting free-ranging and wide-ranging communication, with no barriers limiting who can communicate, and few legal restrictions on what they can say” (Dryzek 2010: 11). Public space “thereby featur[es] a diversity of viewpoints” (Dryzek 2009: 1385). Similarly, Simone Chambers portrays the public as deliberating in “a decentred, plural complex set of overlapping conversations taking place in multiple and divergent settings”, the outcomes of which are “political opinions about what is to be done” (2012: 64). Moreover, Parkinson (2012a) distinguishes between a formal and an informal public sphere, with the latter resembling Habermas’s civil society. Specific actors have to make each of these parts aware of the narratives circulating within the other part (cf. *ibid.*: 37). Discussing the legislature in deliberative systems, Simon Beste (2016) likewise leans on Habermas. He stresses the importance of “the permeation and infusion of input from the public sphere into the legislature”, since “the legitimacy of the institutionalised core of the political system depends on its responsiveness towards the demands of the public sphere in order to maintain a critical level of legitimacy” (*ibid.*: 298).¹⁷ And, finally, Milstein emphasises the public sphere’s role as “a crucial resource for monitoring power” (2021: 12).

Precisely because the public sphere is relatively “formless,” it has a unique ability to afford the greater reflexivity and communicative freedom necessary for the mobilization of demands, issues, awareness, and “counterknowl-

17 For a similar argument, see Chambers (2012: 64–65).

edge” that may escape more formally institutionalized parts of the deliberative system. (ibid.)

The conceptualisation of the public sphere, or public space, within the deliberative systems approach thus appears to be very similar to – if not explicitly based on – Habermas’s concepts of civil society and the public sphere. It therefore appears legitimate to apply the idea of a structural transformation of the public sphere to the respective parts within deliberative systems, as well, and thus connect these theoretical concepts.

This conception of the public sphere can now be connected with digitisation research. More specifically, a theoretical connection can be established between the structural transformations of the public sphere and the digital transformation as portrayed in digitisation research.¹⁸ In *The Structural Transformation of the Public Sphere* (1993), Habermas describes various consecutive transformation processes that have changed the public sphere over time. Since the publication of this work, another structural transformation of the public sphere has occurred, according to Seeliger and Seignani (2022: 6) and Habermas (2022: 145) himself. One of the driving factors of this last transformation is the rise of digital technologies.¹⁹ Habermas attributes a “revolutionary

18 Although doing so appears to be rather obvious, thus far only German academia seems to have considered this line of thought, most importantly by means of two collections whose respective angles of approach differ. First, Eisenegger et al. (2021) edited a collection of articles authored mostly by scholars of the communication sciences. These articles make use of the Habermasian term “structural transformation” and integrate it into the terminology and methodology of media and communication studies – a very interesting approach, but not particularly compatible with my own theoretical framework. In the same year, Seeliger/Seignani (2021b) published their collection of articles by authors from sociology and political science. The authors in this collection include Jürgen Habermas himself, as well as Thorsten Thiel, who, in another capacity, co-conceptualised the “digital constellation”, as presented above (cf. Berg et al 2020b). I will primarily base my descriptions of the digital transformation of the public sphere on the latter collection.

19 When analysing transformation processes in his original work from 1993, Habermas uses different frames of reference, one of which pertains to technical distribution media and their impact on communicative action within the public sphere (cf. Seeliger/Seignani 2022: 6). In the analysis of this new structural transformation of the public sphere, the media- and technology-related frame of reference address the effects of digitisation (cf. Seeliger/Seignani 2021b). It is the frame in which the ambivalence of this newest structural transformation becomes most apparent (cf. Seeliger/Seignani 2021c: 33) and the frame that is most relevant to my own analyses. In the following, I

character” to the emergence of the new, digital media and describes them as a turning point in the history of media that is comparable to the introduction of the printing press (*ibid.*: 158). The social world is “changed in its dynamics and structure by the role that media continuously (indeed recursively) play in its construction” (Couldry/Hepp 2017: 15), for our daily communication is now composed of a weave of face-to-face and mediated communication (*cf. ibid.*: 16). Consequently, the complexity of communication increases; “the networking of actors is more complex, processes of self-organisation are facilitated by improved observability and enforced by the rising heterogeneity of public actors” (Waldherr 2017: 541, author’s translation).

There are different aspects of digitisation that shape the structural transformation of the public sphere and increase the complexity of the social world – many of which have been presented by Seeliger and Seignani (2021c: 31). I will devote the remainder of this chapter to delving a little deeper into these aspects. I will thus set the scene for my analyses of communication processes on social media platforms – pointing out the conditions under which users communicate in digital public spaces and how these communication processes are embedded within wider societal processes, even beyond deliberative systems. A large share of these communication processes is mediated through social media platforms. Therefore, even though these platforms are not the focus of this chapter, they will be mentioned repeatedly. Yet, deliberative systems and public spheres under the conditions of the digital constellation reach far beyond the communication on social media platforms. Understanding their inherent dynamics is fundamental to understanding the role and influence of social media platforms, with their specific relevance, logics, architectures and structures.

For the various aspects of the digital transformation of the public sphere that I want to address, I will draw from, and add to, Seeliger and Seignani’s differentiation.²⁰ I will present these aspects in the analytical framework of the digital constellation, while adding and adjusting some facets; I will also comment on the concept of the digital constellation from a deliberative systems perspective. Nonetheless, I will avoid writing a treatise on everything that has

will focus on this frame of reference and describe how the introduction of digital technologies affects the fundamental structures of the public sphere.

20 I will not recount all the aspects they present but will focus on those that are relevant for my argument regarding deliberative systems.

ever been said about digitisation and its influence on the public sphere. Instead, I will present merely a brief overview of the most relevant aspects of the digital transformation of the public sphere, thereby connecting my own thoughts on deliberative systems with those from adjoining research fields, while focussing on the public sphere.²¹ Throughout the remainder of this book, I will repeatedly refer back to the points I make here.

First, public spheres under the conditions of the digital constellation become *geographically unbounded*. In scientific literature as well as more journalistic works, one commonly finds the notion that digital communication makes geographical distances obsolete and therefore facilitates political communication.

Indeed, one of the strengths of Internet technologies for politics is the way they remove the physical constraints of forming publics over vast geographical distances, or between administrative boundaries. Not having to meet face-to-face means that people can participate in [...] controversies without the burden of being physically present. (Hendriks et al. 2016: 1121; cf. also Strandberg et al. 2019: 45)

The worldwide use of social media platforms increases the potential for global discussion of issues and transnational alliances (cf. Laux/Schmitt 2017: 517). But these platforms also represent “a stage upon which local communities are seeking to reshape and influence place-based controversies”, as Hendriks and colleagues (2016: 1120) have found when analysing the communication processes on Facebook in the context of a local, controversial coal seam gas project in Australia. Indeed, geographically close ties have been proven to be overrepresented on Twitter, with long-distance ties simultaneously being underrepresented (cf. Takhteyev et al. 2012: 76–77).²² Nonetheless, participants can use social media platforms to convey and organise communication processes of any scale (cf. Strandberg et al. 2019: 45). Communication can

21 For example, an attempt to define the public sphere in a comprehensive manner would open yet another large field of political theory. The same goes for reconstructing the argumentation of *The Structural Transformation of the Public Sphere*. I will therefore limit my explanation to what is absolutely necessary for my own argument.

22 This is the case even though the platform's users are distributed across the world and its architecture of one-way followership encourages weaker ties between the users, allowing for less dependence on local proximity or in-person contact than other platforms (cf. Gruzdt et al. 2011: 1296).

become detached from the physical context; “[l]ocal politics, the politics of proximal communities, can in that way be meshed with global governance, connecting us with others who share our concerns, who are affected by similar problems, regardless of where they are” (Jungherr et al. 2020: 213). From a deliberative systems perspective, this increases inclusivity, since any person who has functioning and unfiltered internet access can in principle participate, independently of geographical distances and other physical constraints. Public spheres and the deliberative systems containing them are therefore not limited to a country – at least at the level of the civil society and public sphere – even though the actual decision-making takes place separately in the various national legislative bodies.²³

The second important aspect of how digitisation shapes the structural transformation of the public sphere was presented by Seeliger and Seignani (2021c: 30–32); it regards the *many-to-many communication* and the consequent *decentralisation* of the public sphere. This aspect requires that I elaborate on some points I already made when introducing the digital constellation and to lay the groundwork for subsequent aspects. As I indicated above, the many-to-many communication afforded in the digital constellation provides the possibility of “multifaceted communicative connection [that is] open to networking that facilitates the spontaneous exchange of possible contents between potentially many users” (Habermas 2022: 159). Other deliberative theorists have noticed this shift as well:

Technologically, a fundamental difference between the mass media and the digital era is the shift from broadcast (one-to-many) to networked (many-to-many) communication, with effectively zero marginal costs of information and communication. The digital infrastructure of the public sphere is defined by this distinctive flow of information in which there are many more providers and distributors of content; people thus enjoy vastly greater choice among kinds and providers of information; and particular content can be directed (or targeted) by providers, advertisers, social media platform companies, or other actors to particular users or groups of users. (Cohen/Fung 2021: 36)

All these actors and users “encounter each other as participants in communicative exchanges on spontaneously chosen topics who are in principle equal and

23 Habermas attributes “ambivalent explosive power” to this tension between transnational public spheres and nationally limited legislation (2021: 493).

self-responsible" (Habermas 2022: 159). This aligns with deliberative systems scholars' idea of informal political talk within private and public spaces.

Many-to-many communication transforms the roles of all participants from traditional media audience members to potential authors (cf. Habermas 2022: 166; Ritzki 2021: 307). While this transformation is based on the properties of storability, processability and networkability, it only emerges because people actually use these technologies and develop their own procedures and habits in using them. For example, internet users find ways to use social media platforms to comment on news items that have been published by traditional media actors; these ways are gradually institutionalised within the user communities, while platforms try to facilitate them by adapting their infrastructures. In consequence, more actors have access to public communication, and "any topic or statement can in principle participate in the game of public relevance; gaps and errors in mass media reporting can be identified and spread more immediately than before" (Schrape 2021b: 14–15). A large part of the content is published on social media platforms, which makes the latter an important sphere of public discourse.

The communications of all the users who are promoted to authors lead to a restructuring of the public sphere, a decentralisation of communicative channels.²⁴ Whereas traditional mass media and their professional staff used to be the dominant contributors to public communication, in the digital constellation anybody can potentially contribute content that has immense outreach. Additionally, many deliberative sites are transformed and new sites emerge (cf. Waldherr 2017: 538). A large number of informal deliberative sites within the public sphere have been transferred into the digital realm and are thereby restructured to fit the requirements of digital communication. Other sites are becoming hybrid; a digital sphere is emerging that supplements and partly mirrors the face-to-face interaction. Still other sites are genuinely new spaces that are enabled solely by the properties and affordances of digital technologies and that have no clear offline counterpart (cf. Forestal 2021: 3). These sites usually are of large scale, with international participants, and are global in scope (cf. Ercan et al. 2019: 21).

From a deliberative systems point of view, this decentralisation affects the respective parts of the system in terms of both network and sequence. Networks presumably become more fine-grained, with more connections per site or individual and fewer hubs that have a considerably higher-than-

24 Habermas (2022: 166) even diagnoses an "unstructured public sphere".

average number of connections. The sequences of the system will all include ongoing informal communication that is accessible by political decision-makers and therefore potentially introducible into the decision up until the very last moment.

In many-to-many communication, the transmission of contents is less controlled via journalistic codes of conduct and legal regulations due to the lack of professional sluices (cf. Habermas 2021: 494). Simultaneously, additional moderation techniques have been introduced by new actors, such as social media companies. Combined, these processes lead to a supposed *fragmentation of the public sphere*. The dominant digital moderation techniques generate personalised outputs for each of the users.²⁵ Consequently, content is presented and consumed not according to its societal relevance but rather with reference to the user's individual patterns of interaction and preference. Gatekeeping and agenda-setting for the consumption of specific contents are largely relegated to the domain of algorithmic systems (cf. Seeliger/Sevignani 2021c: 30; Maschewski/Nosthoff 2021: 338–339). There are many scholars who have published on the perceived problems with this tendency (most prominently, Pariser 2011; Sunstein 2002, 2017), and the notions from these works have become widely referenced by journalists and politicians. Consequently, there has been a huge societal and academic discussion about how these moderation techniques can be controlled and adapted in the least problematic way (with regard to democratic norms of all shades) and about who should be entrusted with the task of controlling and adapting. Put very briefly, scholars have identified a loss of a common frame of reference among citizens and a fragmentation of the public sphere, and they have delivered various empirical proofs and normative assessments of this diagnosis (see chapter 5.2). From a deliberative systems perspective, however, the differentiation and homogenisation of sites and site clusters is not necessarily a problem as long as these sites are adequately connected to the wider system. I will repeatedly return to and elaborate on the effects of content moderation techniques on societal discourse – from a deliberative systems perspective – throughout the remainder of this book.²⁶

A third aspect of how digital technologies shape the structural transformation of the public sphere concerns the *acquisition, analysis and utilisation of user data* (cf. Seeliger/Sevignani 2021c: 31). These processes have become

25 I will elaborate on these techniques in chapter 4.1.

26 See, in particular, chapter 5.2.2 and chapter 6.1 through 6.3.

widespread customs among providers of internet services, including the platform companies that supply large parts of the digital communication infrastructure. Information is both collected and stored as data points, which may be analysed to identify patterns.²⁷ The possibility of collecting, storing and processing data has resulted in an ever-growing number of affordances and ideas on how these data may be used for different purposes. In turn, ever more kinds of data are being collected and processed, and ever more techniques are being developed to do so. Information on communication, consumption, movement, health, recreational activities and any other kind of quantifiable data is being collected, stored, processed and traded in order to turn a profit – thus far, mainly by selling ads.²⁸ Information has thus become a resource in the sense that it is “an input into [a] decision-making, production, or bureaucratic process” (Braman 2009: 12).

This resource is exploited by different actors for different purposes. Firstly, this kind of data use is the central source of profits, especially for social media platforms. In fact, the design of these platforms “directly reflects the epistemic needs of the data scientists whose analytic operations are key to their commercial model: to target information to groups of friends, to track shares and likes in the aggregate” (Marres 2018: 435). By controlling large datasets and selling such predictions based on these data, social media platforms wield power over clients, competitors and users (cf. Cohen 2017; Pistor 2020; Zuboff 2019). Secondly, data are collected and used by state executives in order to exert power, for example, in performing administrative or executive tasks.²⁹ Thirdly, representational bodies such as political parties analyse user data in order to identify the preferences of their constituents. These data include not only demo-

27 These patterned data – and data about patterns – add context and structure to the information, as Braman (2009: 15) explains: “Information from this perspective has a past and a future, is affected by motive and other environmental and causal factors, and itself has effects”.

28 In chapter 4.1, I will elaborate on how social media platforms collect and process data.

29 Foucault reasons, in fact, that governments and political actors always had to rely on public opinion research and statistical analyses to some degree: “Government [...] entails more than just implementing general principles of reason, wisdom, and prudence. Knowledge is necessary; concrete, precise, and measured knowledge as to the state's strength. The art of governing, characteristic of reason of state, is intimately bound up with the development of what was then called either political statistics, or arithmetic; that is, the knowledge of different states' respective forces. Such knowledge was indispensable for correct government” (1979: 245–246).

graphics but also the contents and engagement data of the users. In this way, “casual speech acts have turned into formalized inscriptions” (Couldry/Hepp 2017: 15), and “[c]ommunications networks have gradually been transformed into sensing networks, organized around always-on mobile devices that collect and transmit highly granular streams of structured information via proprietary interfaces and protocols to powerful, proprietary machine learning systems” (Cohen 2017: 143).

This has consequences for democratic representation:

increasingly, a notion of democracy is being articulated in which the reading of singularised preferences, rather than the civic expression of opinion through active participation, is being interpreted as a democratic principle [...]. The idea of representation as an active and reciprocal process [...] is therefore withdrawn [...]. The identification of preferences comes to occupy the place once occupied by political contestation [...]: representation without the public sphere. (Staab/Thiel 2022: 140)

Thus, the analysis of data that are generated in the course of society's use of digital technologies is adding to – if not supplanting – public opinion research. Michel Dormal (2021) has presented the implications of this process. On the one hand, data on the opinions of users of digital technologies can be retrieved without actively approaching the users and, therefore, seemingly without influencing the observed objects (cf. *ibid.*: 17). Of course, this perspective omits the many other ways users and data are being influenced.³⁰ On the other hand, configurative processes seem to be weakened by this new, datafied form of public opinion research (cf. *ibid.*: 17–18). These configurative processes include the development of relations, the transformation of constellations, formative action and active participation (cf. *ibid.*: 10). Moreover, algorithmic systems analysing the data on individuals are perceived as knowing more about individuals' motivations than the individuals themselves, which affects how individuals enter into formative processes in the first place (cf. *ibid.*: 18).

In a similar way, data on digital communication are gradually supplanting opinion polling in news coverage. “Social media posts and quantified metrics are interpreted by journalists as measures of public opinion, which impact coverage of candidate qualities and qualifications and assessments of a campaign's fortunes and competitiveness – both of which shape public attitudes

30 I will address these ways throughout the rest of this book.

and behaviours, including voting” (McGregor 2019: 1081). The public sphere is still present in this scenario – embodied by the mass media. However, it portrays communications and engagement metrics on digital social media platforms as emergent representations of public opinion, despite the fact that the participants on these platforms are not even representative of the public at large.³¹

From a deliberative systems point of view, this seems problematic. For instance, as Goodin describes, the mechanical collection and counting of information without deliberation misses additional information that can thus help assess the authenticity of the information and that can only be gathered in actual discourse: “Sometimes the extra information concerns the reliability of our informants [and other] times the extra information concerns the proper interpretation of the information that others are conveying to us” (2008: 104–105). Furthermore, “[o]nce we abstract the world into numbers and data, we remove existing narratives and new stories are then told with the data” (Beer 2020). Yet with these additional pieces of information provided in discourse, participants can adjust for known biases of a speaker; they can avoid a collective solution that is too cautious, because all contributors have individually underrepresented or undersold their real opinion; they can avoid unnecessary decisions built upon actions of others without knowing the reasons for those actions; and they can promote action by laying open reasons for it (cf. Goodin 2008: 95–104). “In short: pooling information discursively yields extra information, and that extra information proves crucial to reaching the right conclusions” (ibid.: 104–105).³²

31 Observations and thoughts about such datafied versions of representation have also been presented, for example, by Splichal (2022), Vogl (2021b) and Zuboff (2019).

32 Goodin argues, moreover, that “[a]ggregation is fine for facts, but deliberation is required when values come into play. In so far as facts and beliefs about facts are concerned, simply adding up the votes will usually yield the right results; people ordinarily ought rationally to alter their own beliefs as to the facts of the matter accordingly, once the votes are in. But where values are also involved, the grounds for respecting mere aggregations of votes collapse. More reflective and deliberative processes, taking account of reasons rather than merely counting people’s own bottom-line votes, are then required” (2003: 227). While I agree that values can only be negotiated discursively, I do caution against the notion of aggregation being fine for facts. The public debate and the academic debate on “fake news” and disinformation strategies have likewise made it blatantly obvious that facts are contextual and interpretable and must be subject to discourse – though this notion is much older.

Moreover, the configurative processes Dormal describes are central to the forms of communication envisaged by deliberative theorists. Inferring public opinion³³ from collected and processed data on expressions of individual, singularised opinions technically “emulates” the processes of group constellation and mobilisation, rhetoric address and symbolic framing (cf. Dormal 2021: 18). It foregoes the formative processes of the development of relations, the transformation of constellations, formative action and active participation. It foregoes the actual deliberations within the sites, the transmissions, the “sluicing”; it disregards the characteristics of the various sites, their connections, their division of labour. Issues and perspectives are not fed into the system by groups of participants that weigh the various arguments in an ideally reasonable manner. They are introduced not through the aggregated demands of diverse interest groups but through the patterns and irregularities in datasets (cf. Ulbricht et al. 2018). Thus, issues and perspectives that would never have been brought up if not for data science might be addressed (cf. Dormal 2021: 17). This provokes the question of whether issues and perspectives are being presented by groups and individuals that are potentially subject to decisions, or whether they are indirectly selected by data scientists who design the algorithmic systems that, in turn, analyse the datasets (cf. Ulbricht et al. 2018).³⁴ Algorithms would produce the groups to be represented; configurative processes would recede to specialised second order arenas, such as algorithmic audits, that negotiate the guidelines of algorithmic representation (cf. Dormal 2021: 17–18). From a deliberative systems perspective, such procedures are problematic, since deliberative systems, by definition, must be based on communication and therefore possess at least the potential for deliberative qualities.

Here, a related aspect of how digital techniques shape the public sphere can be added: the *merging of public and private*. Firstly, public discourse is conducted largely on platforms provided by private companies, and therefore it must answer not only to state law, but also to the rules and codes of the host

33 Saying this, of course, requires setting aside the fact that something like a unified public opinion that can be inferred by any means might not actually exist.

34 Arguably, the filtering and selection of issues and perspectives from a data pool is a behavioural pattern that can also be attributed to political professionals selecting the perspectives they cite according to their political agenda. However, neither data scientists nor the algorithmic systems are identified as political actors with political intentions, and their selections might therefore be construed as neutral and apolitical, even though they are not (cf. Risse 2023: 94–97).

platform.³⁵ Secondly, “[u]tterances previously expressed offhandedly are now released into a public domain where they can have far-reaching and long-lasting effects” (van Dijck 2013: 7; similarly, Moore 2018: 184). Again, social media platforms are the primary infrastructures in this regard. Considering that these data may be interpreted as a proxy for public opinion and that everyday talk can thus be taken as a vote, the formalisation of formerly private, informal remarks reaches yet another level. Thirdly, some political actors use their digital, far-reaching public channels to flood the public sphere with private messages and actively undermine any public debate and opinion formation. “Failure to adopt the appropriate standards of public speech that should accompany contributions to public problem solving is part of a political strategy aimed precisely at undermining the democratic function of the public sphere” (Chambers 2023: 66). Fourthly, state institutions process and even publish information on the private lives of individual citizens in large datasets to gain information on “the public”; they do this in pursuit of economic, state-executive or political purposes, as I described with regard to the third aspect. Lastly, and in a similar fashion, public and private merge on the content level of these discussions. “The nature of political talk in everyday online communities dedicated to lifestyle issues, topics and needs (e.g. TV/Films, parenting, personal finance) tend[s] to be deeply rooted in the personal” (Wright et al. 2018: 79). In consequence, “the structural transformation of the public sphere simultaneously transpires to be a structural transformation of the private sphere – while the public is being privatised, the private is being publicised” (Seeliger/Sevignani 2021c: 31, author’s translation). Again, these merging processes re-

35 The relation between social media platforms and the public sphere is subject to discussion. Some scholars argue that “[c]ommercial social media do not constitute a public sphere and a participatory web” (Fuchs 2014, cited in Feenberg 2017: 90). It might be more to the point to dub them “semi-public platforms” (Muldoon 2022: 141). For they are “public spaces of political communication that utilise privately owned and controlled forums in which companies set the digital architecture, format and rules for communication” (ibid.). Thus, “they are neither public nor private in the traditional sense of these terms”, but “form a new hybrid space” (ibid.). With regard to deliberative systems, the actual label of social media platforms does not signify much. Their characteristics and logics that influence communication processes within and across sites, as I describe them throughout this book, are of much more importance. In chapter 6.1, I will specifically elaborate on the effects of legislation and regulation on deliberative systems.

sult from the interplay between technical and societal developments, between properties, affordances and configurations.

Deliberative systems scholars have also addressed the merging of public and private. In one of the first works on deliberative systems, for example, Mansbridge (1999) discusses the question of where to draw the line between what is private and what is of public interest. “What the public ought to discuss is contested and essentially contestable” (ibid.: 211). Generally, she supports the notion that “some matters, hitherto thought too intimate for the public to discuss, or of so little importance that they did not need to be discussed by the public [are] matters on which the collective, the public, ought to deliberate” (ibid.). Moreover, the expressions used when talking about private experiences and sentiments, such as emotions or humour, appear to “foster a communicative environment that was about learning rather than winning or convincing”, thus promoting “solidarity rather than polarization among participants” (Graham 2009: 168).³⁶ Therefore, from a deliberative point of view, the tendency of online communication to merge politics with private matters seems potentially conducive to deliberative quality and systems.

Another aspect that Seeliger and Seignani (2021c: 32) present with regard to digitisation's impact on the public sphere is the reconfiguration and changing role of *journalism and traditional media*.³⁷ Habermas ascribes them a twofold role within the public sphere. On the one hand, he sees traditional mass media playing a mediating role within society:

In view of the complexity of society, the media are the intermediary which, in the diversity of perspectives of social situations and cultural forms of life, whittle out an intersubjectively shared core from among the competing interpretations of the world and validate it as generally *rationaly accepted*. [...] [W]ith their daily stream of new information and interpretations, the media constantly confirm, correct and supplement the blurred everyday image of a *world that is presumed to be objective*, and which virtually *all contemporaries* as-

36 I will come to the role of rhetoric in chapter 6.1.

37 Traditional media are yet another subject to which an entire research field is devoted. In the deliberative systems approach, too, they are often listed as important actors. Therefore, I have introduced them as a context for deliberative systems operating under the conditions of the digital constellation. Throughout the remainder of this book, they will nonetheless remain a side topic, and I will focus on the communication processes between individuals.

sume is also accepted by everyone else as “normal” or valid. (Habermas 2022: 163, orig. emph.)

On the other hand, and by the same means, the media are meant to support the evolution of rivalling public opinions that adhere to the standards of deliberative politics (cf. Habermas 2022: 157). The “*public communication* steered by *mass media* is the only domain in which the noise of voices can condense into relevant and effective public opinions” (ibid., orig. emph.). The mass media are equipped with professional staff able to assume the role of gatekeeper for public communication (cf. ibid.). Though these have arguably never been perfect, they “nevertheless ensured some minimum standards of epistemic quality and political responsibility” (Chambers 2023: 63).

With the transition of print to online media, the form of distribution changes; the outreach increases depending on the engagement that can be generated (cf. Seeliger/Seignani 2021c: 32). Consequently, segments of customers, advertisements and even journalism itself are being restructured once more, employment practices in the news industry change and news coverage experiences another shift in focus, from entertaining to engaging the audience and thereby generating ad revenue (cf. ibid.). In other words, the social configurations around traditional media are changing in the digital constellation.

Simultaneously, social media companies still acknowledge the value of the standards guiding professional journalistic outputs. For example, after the 2015 terrorist attack in Nice, YouTube rewrote and retrained its algorithmic systems to promote the contents of traditional media on certain issues in order to avoid misinformation and borderline content (cf. Roose 2020a). Traditional media are perceived as more reliable due to their professional staff’s capability and responsibility to condense the constant stream of information into relevant and effective public opinions (cf. Habermas 2022: 157). This role was acknowledged by YouTube, too, and there are many similar examples on other platforms. Therefore,

it is by now empirically evident that the ongoing digital transformation is not accompanied by a general loss of relevance of journalistic services, mass media, or mass-received content in itself, and that despite increased connectivity, fundamental social selection thresholds remain in public communication, which are challenging to overcome (Schrape 2021b: 6).

Hence, journalism and traditional mass media retain an important position within the public sphere, even though they adapted in several aspects to the logics of the digital constellation, and even though their importance has decreased relative to the increasing number of other major actors in public communication.

From a deliberative systems point of view, the relative loss in consequence of traditional media is another example of what has been addressed above as the decrease of hubs within deliberative systems, and this would imply that news coverage has a smaller impact on the systemic deliberative process. However, empirically, traditional media are still the nodes with the largest outreach – even in pure online communication (cf., e.g., Larsson 2019).

The last aspect I want to address here are the new potentials arising for *social movement* (cf. Cohen/Fung 2021: 25).³⁸ Many-to-many communication affords increased opportunities for coordinating collective action, lowering information costs (cf. *ibid.*: 39) and widening the frame of reference of public communication and of political power (cf. Seeliger/Sevignani 2021c: 30). Thus,

[m]assively intermediated, platform-based media infrastructures have reshaped the ways that narratives about reality, value, and reputation are crafted, circulated, and contested. Platforms enhance the ability to form groups and share information among members, to harness the wisdom of crowds, and to coalesce in passionate, powerful mobs, but they also magnify the dark side of each of these forms of collective action. (Cohen 2017: 148)

Social movements use digital channels in various ways. On the one hand, political actors use digital channels internally for mobilisation and coordination. “Digital technologies enable activists to mount large protests more easily than in the mass-media public sphere, when that sort of collective action required efforts to build interpersonal trust and organizational infrastructure” (Cohen/Fung 2021: 39). On the other hand, political debates can be framed and influenced via digital media (cf. Seeliger/Sevignani 2021c: 32). There have been many examples of social movements that have been seeded and promoted via digital communication, leading to cultural shifts in thinking as well as solid political subversion, with the Arab Spring, MeToo, BlackLivesMatter and Fridays for Future being among the most prominent of them. Such debates can develop momentum in the digital sphere, whose speed and intensity often massively

38 The study of social movements is yet another field of research in its own right.

surpass that of the traditional mass media (cf. *ibid.*). On the basis of platforms and their properties, new forms of collective action emerged and new affordances developed: “new forms of collective meaning-making, such as memes and flash mobs; new infrastructures for facilitating both traditional charitable giving and other types of ‘pay-it-forward’ generosity” (Cohen 2017: 149).

At the same time, the increased use of digital communication channels formed and reformed these channels. Social movements set up their own digital channels, thereby providing different means for communication and organisation; moreover, they use the dominant social media platforms to further their cause. The platform companies, on the other hand, repeatedly adjusted their services to the social results of these movements and to their own changing norms. For example, Facebook first acknowledged the importance of its platform as infrastructure for movements such as the Arab Spring, but then tried to retreat from this role when problematic movements, such as the storming of the US Capitol on January 6, 2021, also used these infrastructures (cf. Lima 2021a; Newton 2022b). Nonetheless, digital channels remain central infrastructures for social movements.

However, the political sustainability of digitally induced and organised social movements has been questioned from a deliberative theory point of view:

information is not persuasion, mobilization is not organization, and knowing where people are gathering is not communicative power. [...] [E]asy mobilization can be counterproductive for building communicative power. Activists in the digitally mediated public sphere can achieve a short-term end (mass protest) without building the political, civic, and relational infrastructure that sustains collective action over the long term. (Cohen/Fung 2021: 39)

Thus, social mobilization might be easier, but in many cases it is short-term, since it lacks democratic fundamentals and infrastructures. Moreover, as “on the internet virtually all the relevant space is privately owned public space[,] [...] [a]ccess to such space is bought with consent to surveillance” (Müller 2019: 213). This, in turn, empowers the “corporations owning the spaces where protest is taking place” (*ibid.*) to keep order and thus influence the movements themselves. In the deliberative systems approach, social movements are consistently

mentioned as important deliberative sites or events.³⁹ An increase in the numbers and impact of social movements will thus be profitable for the deliberative system as a whole, as long as these new sites are adequately connected to the wider system.⁴⁰

In sum, the latest structural transformation of the public sphere is an on-going and ever-evolving process.⁴¹ There are several aspects of this transformation that are relevant for deliberative systems and that help set the scene for my later analyses. Firstly, digital technologies afford the geographical unbounding of public spheres, since communication can occur instantly over long distances. Secondly, many-to-many communication has afforded a change of actor roles within the public sphere, with passive audience members becoming potential active authors. Algorithms, especially those personalising content selection for the respective user, are used to sort the enormous amount of communication, which results in decentralisation and fragmentation of the public sphere. Thirdly, the properties of digital technologies enable the acquisition, analysis and utilisation of user data by different actors for different purposes. Fourthly, in the digital constellation, the public and the private tend to merge in different ways. Fifthly, the role and incentives of journalists and traditional media shift. While still holding an important position in the public sphere, traditional media adapt their contents and presentation to the engagement-centred logics of digital technologies and dissemination channels, and their role within society keeps shifting. Lastly, social movements are facilitated by the rise of digital technologies, in terms of initiation, organisation and momentum. All in all, the digital transformation is no sudden change of the world, but a sociotechnical transformation process “in which every innovation is, in its genesis, coupled to numerous technical and social premises, and comes with various societal convulsions that provide the basis for further developments” (Schrape 2021a: 82). It both introduces new societal phenomena and amplifies existing ones.

39 Among others: Bächtiger/Parkinson (2019: 90), Dryzek (2009: 1385), Ercan et al. (2017: 202), Hendriks (2016: 57), Mansbridge (1999: 213), Mansbridge et al. (2012: 10), Smith (2016: 154).

40 In chapter 5.2.2, I will come back to the effects of digital technologies and logics on social movements.

41 Of course, digitisation, with its new technologies and its effects on political economy, is not the only explanans for this transformation. Other specific societal constellations have also promoted it (cf. Seeliger/Sevignani 2022: 12).

The digital transformation of the public sphere has different implications for deliberative systems. The public sphere represents a large and especially important part of most deliberative systems. At the same time, it has been affected by the properties and affordances of the digital constellation and has experienced various structural changes. All kinds of political interaction adjust to the new possibilities and necessities of the digital transformation; and these adjustments, in turn, bring about new technological and social developments. Moreover, a structural influence on such an important part as the public sphere affects the parts of a system beyond public spaces. The public sphere is an important focal point of politics, and policies may be proposed and decided upon in consideration of what is perceived as the public opinion or the public's wishes.⁴² Simultaneously, digital technologies – including those used for social media platforms – structure all kinds of digital communications. The effects of digital technologies go beyond the effects of social media platforms. They set the background for how individuals communicate under the conditions of the digital constellation, how they perceive their possibilities and how the data generated via social media platforms can be and are being used, beyond the communication processes on these platforms, in political processes. However, social media platforms serve as a central infrastructure for communication processes. They influence how interactions take place, and they even influence what contents can be communicated and to whom, if and how the contents are being stored, if they are publicly accessible and to whom exactly and so on. Contents and data that emerge from these communication processes may be transmitted to other deliberative sites, both digital and non-digital ones, within the public sphere and beyond. Throughout the remainder of this book, I will therefore zoom in on the more specific logics of social media platforms and focus on their relevance for and impacts on deliberative systems.

42 These perceptions can be generated and received, for example, through the regular connections within deliberative systems, including the social movements facilitated in the digital constellation. They can also be gathered by means of data mining. Both influences have nearly opposite effects in the assessment of a system's deliberative qualities and the legitimacy of its decision-making, as I described above.

4. Social Media Platforms as Parts of Deliberative Systems

Social media platforms are highly relevant for individuals and societies under the conditions of the digital constellation.¹ They are a dominant infrastructure for communication under the conditions of the digital constellation. Digital platforms, more generally, connect people with each other, and they thus “*set the stage for actions to unfold through ordered emergence*” (Bratton 2016: 47, orig. emph.). It does not surprise, therefore, that the platforms and their logics also considerably shape the deliberative systems that operate under the conditions of the digital constellation.

The term platform has been a buzzword of academic literature in recent years – and has consequently been modified in various ways, including “platformisation” (Nieborg/Poell 2018; Schrape 2021b), “platform capitalism” (Srnicsek 2017), “platform socialism” (Muldoon 2022) and “platform” combined with practically any other supplement. However, what is conveyed by this term varies widely. Diverse scholarly communities use it differently; for example, “there are subtle variations in the ways that platforms are understood by computer scientists, economists, digital media scholars, and lawyers” (Gorwa 2019), as well as by the companies providing platform services themselves (cf. Carrigan/Fatsis 2021: 33). Even among digitisation and social media researchers, its definition varies depending on who uses it and with what aim and focus it is used (cf. *ibid.*). But there are some central logics to social media platforms that most scholars agree on. I will first present these logics – which will form the basis for my analyses in chapters 5 and 6 – and I will then, in

1 The importance of social media platforms to society-wide political communication has already been alluded to during the previous chapter, and I will further elaborate on that in chapter 4.2.

the second part of this chapter, address the role and relevance of social media platforms for deliberative systems.

4.1 The Logics of Social Media Platforms

“A working technical definition of platform, in general, may include references to a standards-based technical-economic system that simultaneously distributes interfaces through their remote coordination and centralizes their integrated control through that same coordination” (Bratton 2016: 42). In the case of digital platforms, the foundational standards of such systems include the production, encoding, storing, distributing, decoding and consumption of information in binary code (cf. Jungherr et al. 2020: 7). The systems then mostly reify as

hardware- and software-based, programmable and algorithmically structuring technological infrastructures [...] through which information is exchanged, communication is organized, work and markets are coordinated, a broad spectrum of services is offered or digital and material products are distributed (Dolata/Schrape: 14).

They are thus “an infrastructure for processing that data (content, traces, patterns of social relations) for customer service and for profit” (Gillespie 2018c: 254). Acting as intermediaries, platforms facilitate transactions between third parties on the internet. They give access to, host, store, organise and transmit content, products and services provided by third parties on the internet (cf. OECD 2010; Gillespie 2018a: 19). Thus, they “link actors, information, and events across multiple spatial and temporal scales at once” (Bratton 2016: 50). While platforms do not produce contents themselves, they still shape the conditions in which users operate through their design and architecture (cf. Muldoon 2022: 26–27), determining what type of content is published, how it is seen and by whom. They are

environments that have been painstakingly developed to guide users towards actions that are profitable for the company. Alongside explicit policies that regulate how parties will interact and on what terms, digital architects have built online landscapes that encourage certain types of behaviour through a deep understanding of human psychology and motivations built

up over decades of social psychology and marketing studies. The seemingly smooth and open online space is in fact a carefully designed gradated and stratified world with gentle slopes that guide users towards specific sets of behaviours. (ibid.)

Consequently, the platform metaphor has been repeatedly criticised for obfuscating the active interventions and the value-adding performed by the services themselves.²

Many of the digital platforms that can be described in this way are social media platforms. The contents transmitted on social media platforms are limited to communication, rather than services. Platform users produce “content of their own”; they “see and interact with the content of their friends or other users online” (Balaban et al. 2019: 31). Users meet as essentially equal participants in a communicative exchange on topics of their own choice (cf. Habermas 2022: 159).³

The platforms structure and personalise this exchange for each individual user. In order to do this, social media platforms collect and *store* user data, and they *process* these data for a variety of different purposes, mainly to generate value for their shareholders (see chapter 4.2). Thus, platforms use a “research-centric apparatus”, an “analytic architecture” (Marres 2018: 435) that is based on data regarding user behaviour.

4.1.1 Collecting, Standardising and Storing Data

The data may include not only data concerning the contents explicitly provided by the users, but usually also specifics about user behaviour on the platform itself and beyond. Platforms are “assembling data points that invariably result from even the most innocuous actions, and even inactions, that individuals take in everyday life” (Pistor 2020: 111–112). A user is not necessarily aware that her data are being harvested; she “may have been put on notice in the agreement that she clicks when accessing a platform, but the act of surveillance is not

2 Cf. Gillespie (2010, 2017), Muldoon (2022), Nieborg/Poell (2018: 4276). Nonetheless, I will stick with the term, since it is widely used – even by critical authors – to describe the procedures that I address in my analyses.

3 Thus, social media platforms cannot be classified as traditional media outlets that produce content for the mass market. Neither are they neutral transmission service providers, such as the postal service (cf. Schrape 2021a: 155, 2021b: 5–6; also: Habermas 2021: 498).

felt or heard” (ibid.). Thus, social media platforms collect and store a wide variety of data.⁴ These data include the contents a user has posted⁵ and the respective meta-data,⁶ as well as “explicit feedback” data (cf. Cardon 2019) regarding the user’s interaction with the contents of others,⁷ other behavioural data⁸ and information that has explicitly been given.⁹ Moreover, platforms store “implicit feedback” data (cf. ibid.);¹⁰ they gather information on a user’s navigation on the Web and on their device even beyond the respective platform,¹¹ as well as meta-data on files that are stored on the device and granted access via the platform (cf. ibid.); and they store contextual data such as unique identifiers,¹²

4 The following enumerations in this paragraph and the respective details in the footnotes have been condensed from the detailed lists that can be found in Meta’s Privacy Center (cf. Meta 2022a) for Facebook and Instagram, TikTok’s privacy policy statement (cf. TikTok 2022) and Google’s Privacy & Terms (cf. Google 2022) YouTube, as well as from Cardon (2019) and Rieder (2020).

5 These include comments, videos, audios, pictures, comments and direct messages. Platforms can store them independently of the user’s actively uploading or saving them to the platform; they also store anything that has been loaded into the buffer memory in order to copy it to or anything from the platform. They analyse the contents on videos and pictures, identifying and storing data on objects and landscapes, faces or other body parts and text of what has been spoken on a video.

6 This term refers to data regarding when, where and by whom the contents have been produced.

7 This includes data such as clicks, reactions, sharing and comments and their respective meta-data (cf. Cardon 2017; Lada et al. 2021; Stark/Stegmann 2020: 6) – these interaction data provide information on all participating individuals and on those individuals that might be mentioned in the contents, as well as on the relationships between all these individuals (cf. Pistor 2020: 104–105).

8 This includes time span and frequency of platform use, user settings, query and search terms, consumed contents, interaction with ads, voice and audio information when assistants are used, purchase activities and data concerning the user’s contacting of the platform when reporting violations against community standards and laws or when requesting technical support, as well as data from surveys, advertisement and marketing campaigns, competitions and events.

9 This includes name, date of birth email address, payment information, biography, profile picture or contact lists imported from the mobile phone.

10 This includes reading or scrolling speed, watch time, movements of the mouse and patterns and rhythms of keyboard typing.

11 This involves collecting referrer URLs and cookie data or plug-in data.

12 This can be for device, browser, app or user; it is done for tracking cross-device use of the platform.

the network through which the user enters the platform,¹³ performance data¹⁴ and data concerning the device,¹⁵ as well as movement traces in navigational or physical spaces, device signals¹⁶ and sensor readings (cf. Cardon 2019; Rieder 2020: 36).¹⁷ They usually also have agreements with advertising, measurement and data partners to exchange these data, so that they can complete the user profiles.

Based on these data, the platforms generate user profiles – “*whether they are desired or not*” (Bratton 2016: 49, orig. emph.). These profiles reflect user behaviour on three levels: their knowledge-seeking (represented by data on their queries and data on navigation on the platform and beyond), their physical data (approximated trace data of physical navigation, sensors of the environment such as smart homes, sensor data on their bodies, e.g., from smart watches) and their social data (gathered from explicit feedback, friendships, group or list associations, subscriptions, etc.) (cf. Stalder 2016: 189–190). Of course, these profiles do not mirror the actual individuals, but only the information that is available to the platform (cf. Bail 2021: 7–8; Gillespie 2014: 173–174; Stalder 2016: 196).¹⁸ Therefore, the platforms’ structuring of communication processes cannot respond directly to the individuals involved but only to the datasets collected for their user profiles.

Not all the different types of data are collected and used by all social media platforms in the same way and with equal weight. Differences depend on

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- 13 This includes mobile provider, language, time zone, mobile number, IP address, SIM card, transmission speed, data on other devices within the network and WiFi access points.
 - 14 This includes crash reports, event logs and performance protocols.
 - 15 This includes data on ID, model and age of the device, operating system, hardware and software, battery charge, signal strength, available memory, browser type and names and types of apps and data.
 - 16 These include GPS, Bluetooth, WiFi, cell towers and beacons.
 - 17 These include data collected via accelerometer or gyroscope.
 - 18 These data – even those that constitute smaller amounts of publicly available data – can be and often are used by third parties as well. A Silicon Valley data analyst described an example of a company assessing credit scores: “with your social media profile, they know your name, they know the names of your friends, and they can tell if you’re black or not. They can tell how wealthy you are, they can tell if you’re a credit risk” (Tarnoff/Weigel 2020: 119). There is a “shadowy data industry that runs parallel to these major platforms – comprised of innumerable data brokers and other similar firms – [that] function as surveillance machines just as much as Mark Zuckerberg’s platform does” (Srnicke 2020: 86).

the platform's aim, economic model, ethical standards and legal context. The content moderation systems of social media platforms mainly rely on data concerning the contents, connections, behaviour on the platform, devices and physical position of a user. In the past, platforms mostly based their moderation on explicit feedback data, but now they increasingly rely on implicit feedback data, too (cf. Cardon 2017: 140; Wei 2020). They gather extensive data on users, since otherwise, algorithmic moderation would not work as effectively (cf. Tarnoff/Weigel 2020: 112).

In order to process data, platforms need to standardise them (cf. Gillespie 2014: 170). The collected data must be "cleaned up" and "oriented" in a certain way before "facing" an algorithm (cf. *ibid.*: 170–171).¹⁹ This is necessary, for instance, in order to make the data accessible for technical, formal and discursive protocols, interfaces and formats (cf. Bratton 2016: 44, 47), as well as for algorithmic systems. The processes of cleaning and orienting data include allocating data to specific categories or formats.²⁰ The specific modes of standardising and accessing data preform the possible ways that a platform can actually process these data. In fact, the different use cases of data processing are the main reason why platforms need data standardisation (cf. Stalder 2016: 182).²¹

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- 19 Arguably, "raw data" is an oxymoron (Gitelman 2013), as data are not even "raw" while they are collected. "Both data and variables are always already 'cooked', meaning they have been generated by cultural operations and formed in cultural categories" (Stalder 2016: 193, author's translation).
- 20 The granularity and rigidity of standardisation in data storing has changed over time. "In the earliest database architectures, information was organized in strict and, as it turned out, inflexible hierarchies" (Gillespie 2014: 171). Since then, other modes of database management have been developed. Bernhard Rieder describes these new developments as following the notion of the *fini-unlimited*, whose central element is "the idea that a limited number of elements can yield an (almost) unlimited number of combinations or arrangements" (2020: 31).
- 21 Data standardisation mostly targets the properties level of digital technologies. But it can be argued that standardisations occur on the affordances and the social configurations level of the digital constellation as well. Technical protocols and platform community guidelines produce a "tendency on the part of some [social] systems and social processes to transform themselves according to the needs of the platforms that might serve and support them, both in advance of their participation with that platform and as a result of that participation" (Bratton 2016: 42). Moreover, this translates to the social configurations emerging under the conditions of the digital constellation. They "capture" activities by "channelling them through designed functionalities, interfaces, and data structures" (Rieder/Hofmann 2020: 2). For example, real-world political campaigns increasingly rely on digital social media platforms and accordingly adapt

4.1.2 Content Moderation and Recommender Systems

A central use case of data processing for social media platforms is content moderation, especially in recommender systems. “[R]anking, filtering, and recommending have become central techniques for facilitating the ‘right’ connections, whether between consumers and products, users and contents, or between people seeking interaction, friendship, or love” (Rieder/Hofmann 2020: 2). Content moderation is “the central commodity platforms sell”. It is “meant to draw users in and keep them on the platform, in exchange for advertising and personal data” (Gillespie 2018b: 210). Algorithmic content moderation therefore is an integral part of the business model of social media platforms.²²

There are several reasons why platforms moderate and why they do so with the help of algorithms. First, in order to actually generate profit, platforms sell advertisements that are presented to the user either as part of their personalised feeds or coupled with specific contents. Therefore, “[a]lgorithms for on-line content selection are designed to maximize [...] what social media commentators stubbornly persist in calling ‘engagement’” (Marres 2018: 430–431). Meanwhile, the sheer number of third parties that need to be connected make some kind of general, neutral way of connecting the third parties – for example, providing chronological or alphabetical indices of the entries and profiles – highly unpractical. In order to make sure that users continue using their services and in order to “present their best face to new users, to their advertisers and partners, and to the public at large” (Gillespie 2018a: 5) and to thus make

or reinvent their entire campaign strategies (cf. Maschewski/Nosthoff 2021), and certain standards must be kept when placing political ads on the platforms. Individuals get used to these behavioural standards as well as to the fact that digital technologies thus “take part in the social” (Dickel 2022: 21). So, due to the channelling of real-world situations and activities through the designed functionalities of digital platforms and the acceptance of these measures by society, the platform’s inherent logics standardise real-world situations and social configurations.

- 22 Platforms also employ other modes of content moderation. For instance, they introduce frictions for posting less desirable contents like fake news, and they provide easier access to more desirable modes of expression such as one-click reactions. Moreover, they label certain types of posts, limit their reach or entirely remove them, and they can limit the visibility of certain groups or ban such groups from their services. All these types of moderation are at least partially performed by or based on the output of algorithms. I will come back to them throughout chapters 5 and 6.1.

money, platforms have to recommend contents an individual user might like and react to. While doing so, they also aim “to protect one user from another, or one group from its antagonists, and to remove the offensive, vile or illegal [content] to protect the users” (ibid.). Therefore, “platforms do, and must, moderate the content and activity of users, using some logistics of detection, review, and enforcement” (Gillespie 2018a: 21; for more detail, see Gorwa et al. 2020).

The most important moderation tool used by social media platforms is the algorithmic system. The “available data [...] make algorithmic matching highly attractive” (Rieder/Hofmann 2020: 2). The datasets on user behaviour “have gotten large enough where you can start to consider variable interactions in a way that’s becoming increasingly predictive” (Tarnoff/Weigel 2020: 112). Platforms therefore “process and analyze [datasets] with the goal of perfecting predictability about the future behavior of their targets” (Pistor 2020: 105).²³ Not all of these data are predictive in and of themselves, or directly after collection.

[T]here are a number of problems where the actual individual variables themselves don’t have a lot of meaning, or they are kind of ambiguous, or they are only very weak signals. There’s information in the correlation structure of the variables that can be revealed, but only through really huge amounts of data. (Tarnoff/Weigel 2020: 112)

This information can be retrieved with the help of algorithms. More to the point, platforms *need* algorithms to retrieve the necessary information from the databases, since “[p]latforms’ business models need a *scale* that is ungovernable by anything other than statistical techniques” (Ananny 2020: 364). The platforms “gain size and strength by mediating unplanned and perhaps even unplannable interactions” (Bratton 2016: 44), and these interactions are therefore so numerable that they can be managed only by algorithms.²⁴ In short, algorithmic content moderation is instrumental to the workings of social media platforms, and communication processes occurring on these platforms are fundamentally shaped by these moderation systems. Therefore, I will now present the central logics of the algorithmic moderation systems used by social media platforms, give an example of a recommender system

23 Especially large datasets may even enable predictions at the macro-level about aggregate behaviour, such as with GDP forecasts (cf. Pistor 2020: 105).

24 It is “inconceivable that all of the large-scale social media platforms will be broken up and become small enough for exclusively human curation and moderation” (Ananny 2020: 364).

and comment on the accessibility of these systems for scientific research. On this basis, throughout chapters 5 and 6, I will analyse the implications of these algorithmic systems for deliberative systems.

The term algorithm is often used as a “sloppy shorthand” (Bogost 2015) for complex data processing systems. From a computational perspective, however, the term captures the combination of logic and control. Logic is “the problem domain-specific component and specifies the abstract formulation and expression of a solution (what is to be done)”, while control refers to “the problem-solving strategy and the instructions for processing the logic under different scenarios (how it should be done)” (Kitchin 2017: 16–17). So, in the first place, algorithms are merely a series of specific instructions on what to do, a “recipe” (Amoore 2020: 11).²⁵

Within a digital platform, algorithmic systems can fulfil different tasks: “online search, social media filtering, linguistic translation, email spam filtering, content moderation, voice dictation, chaotic storage, route planning, fraud detection and content recommendation are *only* a few examples of what has become ubiquitous within platform firms” (Carrigan/Fatsis 2021: 46, orig. emph.). Arvind Narayanan (2023) distinguishes between algorithms that process contents and algorithms that propagate contents (see Table 2; p. 130).²⁶ These algorithms are, in fact, “a whole suite of algorithms, but they are tightly coupled” (Narayanan 2023); in other words, they are algorithmic systems.

25 Algorithms “need not be software: in the broadest sense, they are encoded procedures for transforming input data into a desired output, based on specified calculations” (Gillespie 2014: 167). Therefore, “the formulation of an algorithm is, in theory at least, independent of programming languages and the machines that execute them” (Kitchin 2017: 17). However, the algorithms and algorithmic systems used by social media platforms for predicting user behaviour and moderating communication are, of course, based on specific programming languages.

26 In this listing by Narayanan (2023), “content moderation” refers to the handling of contents that are unlawful or against the community guidelines. Though this conception of the term is fairly common, I will use content moderation in the more general sense of “ordering contents and matching them with users”, since this is more compatible with the deliberative theory understanding of “moderation”.

Table 2: Major Social Media Content Algorithms (Source: Narayanan 2023)

Major Social Media Content Algorithms	
Content processing	Content propagation
Face recognition	Search
Image filters	Recommendation (feeds)
Annotation (e.g. image tagging)	Ad delivery and targeting
Audio transcription	Content moderation
Language translation	Friend recommendation
Augmented & virtual reality	Notification
...	Trending
	...

For analysing deliberative systems, the most important algorithmic systems of social media platforms are recommender systems.²⁷ Recommender systems match contents with users at a given point in time. Based on these data pools, social media platforms perform algorithmic matching using two main logics of categorisation. The first logic uses datasets with predefined categories, and the second categorises the data dynamically with the help of machine-learning techniques. The general aim of both techniques is to present users with contents that they will engage with. In fact, the prediction of engagements represents the core of algorithmic systems (cf. Narayanan 2023).

To calculate the probabilities for engagement, algorithmic systems categorise users and posts by using similarity metrics, that is, by using data science techniques to calculate the similarity between users. As already mentioned, the platforms establish user profiles containing extensive sets of various kinds of standardised data and calculate similarities between users with regard to their networks, behaviour and demographics (cf. Narayanan 2023).²⁸ Simultaneously, algorithmic systems categorise the posts themselves,

27 However, they “may only be a small component in a much larger system that includes other various instances of ordering, ranging from data modelling to user-facing interfaces and functions that inform and define what users can see and do” (Rieder/Hofmann 2020: 5).

28 Network refers to followers/followees, subscriptions, commenting, etc.; behaviour similarity refers to whether or not users have engaged with a similar set of posts; demographics refers to attributes such as age, gender and, most importantly, language and geography (cf. Narayanan 2023). This last form of categorisation, in particular, is a highly political process that shapes a platform’s possibilities for using these data: “For-

based on the posts' similarities regarding their content and their similarities regarding the users that have already engaged with the posts. In accordance with these categorisations, algorithmic systems predict a user's engagement with a post based on the behaviour of similar users with similar posts. In other words, "[a]s we rate and approve, upvote and downvote, we sort ourselves into clusters. Recommendation systems in turn feed us content similar to what is popular with 'people like me,' [...]" (Silver 2021). This approach is called collaborative filtering (cf. Healy 2015: 191). With time, these categories have become ever more fine-grained and dynamic. The statistical methods used to analyse the data have been developed to become increasingly sophisticated, and the algorithmic systems they are part of have become increasingly complex.

In addition to these methods from statistics and data science, platforms have introduced machine-learning techniques into their systems. These techniques aim to predict user behaviour and to optimise their own prediction methods in the process (Tarnoff/Weigel 2020: 114). In consequence, "[y]ou can start to see new things emerge that would not emerge from more standard ways of looking at problems" (ibid.: 113). Machine-learning systems are highly dynamic; multiple data are factored in, and the platform companies and designers, content providers and users that react to these contents each contribute in specific ways; everything takes place in a specific cultural context and is shaped by certain social practices, and all these different factors interact with and influence each other (cf. Rieder/Hofmann 2020: 8).

In order to unravel this – and in order to prepare for more detailed analyses of the effects of these moderation systems on deliberative systems – it will be helpful to look at how Meta explained the basic logics of the Facebook News Feed algorithm. Though there may be specific differences between YouTube, TikTok or any other system that make personalised content recommendations to users, these broad logics apply to all of the major platforms (cf. Narayanan 2023).²⁹

mats for gender, race, health, and credit specify the shapes of our data, be it via high-performance, machine-learning systems or legacy paper machines like punch-card indexes. These formats are political not only in the way that they function as political prostheses for classical political dynamics of coercion, but more significantly they are political in the way they serve to perform the work of [...] 'fastening' subjects to all manner of databases and systems" (Koopman 2021: 4).

29 It is to be expected that these logics will be complemented by artificial intelligence models in the foreseeable future. Yet the main logics behind the matching on social media platforms will still apply.

Lada and other authors from Meta (2021) describe how the platforms seek to provide each user with individualised recommendations. The algorithmic system of Facebook's News Feed uses multiple machine-learning models to produce different predictions about what content on the platform a user might engage with. "Each model tries to rank these pieces of content for Juan [an exemplary user]. Sometimes they disagree [...]. So we need a way to combine these varying predictions into one score" (ibid.). Broadly speaking, this integration happens in five steps.

First, the system collects all the candidate posts we can possibly rank for Juan [...]. This eligible inventory includes any post shared with Juan by a friend, Group, or Page he's connected to that was made since his last login and has not been deleted. (Lada et al. 2021)³⁰

To this pool, the algorithmic system adds "posts that were ranked for Juan (but not seen by him) in his previous sessions" (unread bumping logic), as well as "posts Juan has already seen that have since triggered an interesting conversation among his friends" (action-bumping logic) (cf. Lada et al. 2021).³¹ In a second step, "the system needs to score each post for a variety of factors, such as the type of post, similarity to other items, and how much the post matches what Juan tends to interact with" (ibid.). This is where the similarity metrics I mentioned above come into play. Each post is compared with posts the user has already interacted with, its similarity to these posts is assessed and the contents are clustered accordingly. In a third step, the pool is further narrowed down to approximately 500 posts and pre-ordered by some preliminary processes. The fourth step is the main scoring pass. Most of the personalisation happens in this process.

Here, a score for each story [that is: post] is calculated independently, and then all 500 posts are put in order by score. For some, the score may be higher for likes than for commenting, as some people like to express themselves more through liking than commenting. Any action a person rarely engages

30 According to this description, the algorithmic systems only suggest contents from profiles that are already connected to the user. At a later point, Meta also introduced "recommended posts" from unconnected profiles into the feeds of Facebook and Instagram (cf. Newton 2022b).

31 This has implications for the temporal structures of communication processes (see chapter 6.1).

in (for instance, a like prediction that's very close to zero) automatically gets a minimal role in ranking, as the predicted value is very low. (ibid.)³²

So, the ordering here is largely weighted by predictions about the user's preferences regarding engagement with contents; these predictions are inferred from the user's past behaviour. With any action the user takes on the platform, the algorithm adapts the weights attributed to the respective actions. Thus, the system always "learns" more about the user and how to improve its recommendation, and it self-optimises accordingly. In other words, "[t]hese techniques develop decision models inductively [...], based on an arrangement between data, feedback, and a given purpose" (Rieder/Hofmann 2020: 7). In a fifth step, the contextual pass is applied. In this pass, "contextual features like content type diversity rules are added to make sure Juan's News Feed has a good mix of content types and he's not seeing multiple video posts, one after another" (Lada et al. 2021). This diversity "is also a defense against the algorithm's uncertainty about what the user wants at any given moment, because even the best algorithm is far from perfect at predicting engagement" (Narayanan 2023).

In sum, the process followed by the algorithmic system behind Facebook's News Feed continually narrows down the pool of contents that might cause the user to engage, with the probability of an engagement being approximated by similarity metrics and statistics based on the user's past behaviour.³³ Such systems are complex and multi-layered, and my descriptions are merely highly

32 In chapters 5 and 6, the relevance and impacts of one-click reactions and quantified communication will be repeatedly addressed.

33 The recommendations that are produced by such systems are neither neutral nor reproducible; they are not even necessarily the best recommendations the user could have received. Or, put more poetically: "From the gigantic haystack of searchable information, results are generated that are immediately declared to be the needle. How these results come about [...] is only rudimentarily explainable, at best. But as long as the needle is even moderately functional, most users are content, and the algorithm registers this contentment in order to validate itself" (Stalder 2016: 202, author's translation).

superficial sketches of their inherent logics.³⁴ Their inner workings are largely obscure to outsiders and even to the engineers who programmed them.

There is another aspect that feeds into the content moderation systems of social media platforms: regulation through legal codes and through the platform's own policies. Though platform companies are largely autonomous in their handling of content moderation (cf. Ciepley 2013: 141; De Gregorio 2020: 7), there are some codified rules that guide these systems. First, there is legislation that generally regulates public communication and also applies to social media platforms. In many countries, communication processes are protected through the freedom of expression. On social media platforms, this expressive liberty is mostly ensured via legislation that exempts hosting providers from liability from third-party content so that these providers are not motivated to drastically censor or moderate the communication processes.³⁵ But there usually are some constraints in criminal law that regulate what kinds of publicly expressed contents entail sanctions. This legislation applies in both non-digital and digital communication, and it has been the primary means by which nation states regulate digital communication (cf. Pereira/Keller 2022: 2659).³⁶

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- 34 Due to the complexity, there are multiple points of potential error, many of which have been described by Bianca Prietl (2019). One can assume, for example, that errors may occur when designing the several layers involved in downsizing the content pool, as well as in the specific codes of each layer. Secondly, the input data may be skewed, which – due to the path dependency of learning – would affect all future operations on these data (such as adjustments in categorisation and clustering), as well as how the system self-optimises and consequently how the output itself is being produced. Thirdly, a self-learning algorithm always errs in categorisation, clustering or predicting behaviour, and the standards and ratios of error or success that are applied here form the path by which these systems are developed further. Fourthly, users might misinterpret or manipulate the outputs and thus skew the data on which the system bases its optimisation. Lastly, the systems are constantly re-evaluated in their context of use and optimised by coders. This can result in self-enforcing feedback loops and feedback asymmetries in the platform architectures.
- 35 The most influential laws in this regard are the US Communication Decency Act (specifically Section 230, CDA) and the Digital Millennium Copyright Act (DMCA), as well as the EU's e-Commerce Directive (cf. De Gregorio 2020; Helberger 2020).
- 36 Such laws differ from country to country. Some states have anti-hate speech laws like the Danish *racismeparagraffen* (§ 266b of the penal code), and some states aim to prevent misinformation, such as France, with its *loi contre la manipulation de l'information* (LOI n° 2018–1202 du 22 décembre 2018). Infringements of these laws can lead to criminal prosecution. In the international, complex and fragmented space of digital com-

Though many states have authorities that browse the Web for such infringements,³⁷ the task of finding and sanctioning unlawful contents is mostly performed by the platforms' own content moderation systems. Their terms of service generally prohibit the posting of unlawful contents. On this basis, platforms moderate and filter the posts – this usually takes place after they have been posted. When users see posts they deem illegal (or against community rules), they can notify the platform, whose content moderators and algorithmic systems review the contents and handle them accordingly. Such “[f]lagging is now widespread across social media platforms, and has settled in as a norm in the logic of the social media interface, alongside favoriting and reposting” (Gillespie 2018c: 267). In addition, parts of the platforms' algorithmic systems have often been trained explicitly to filter posts with unlawful contents. Copyright laws, for example, can thus be enforced even before a post is uploaded.³⁸ When platforms have identified infringements, they can, on the one hand, report these infringements to state authorities, and they can, on the other hand, sanction the offenders on their own platforms through deletion of the offending posts or, at least, by not featuring these posts in other users' newsfeeds.

Moreover, the range of laws that seek to install procedural safeguards directly in the platforms' moderation procedures is increasing (cf. De Gregorio 2020: 10–11; Helberger 2020). For example, the EU's Digital Services Act (DSA) requires platforms to remove specific kinds of contents, to provide complaint mechanisms for the users whose contents have been removed and to disclose

munication, of course, not all users interact under the constraints of the same legal code. What law applies to what user is determined based on the country code in the IP address, but also on other factors. Facebook, for example, was criticised in early 2022 by German NGOs for distinguishing private “consumers” from “all other cases”. The former users can sue in German courts whereas the latter users are referred to the laws of Ireland, where the Facebook servers are stationed (cf. Klaus 2022). The diversity of applicable codes of law on social media platforms is countered by the uniform rules that are imposed by the platform companies themselves. They often implement the strictest regulations for all their users – even those who are located where the laws are less strict – because using too many different frameworks is usually costlier than using fewer but stricter frameworks.

37 The German *Medienanstalten*, for instance, have developed an algorithmic system that searches for crimes against human dignity, racism, pornography and the endangering of youths, amongst others (cf. Greis 2023).

38 German copyright law, for instance, compels platforms to use upload filters to scan posts for copyright violations before they go online (cf. Hurtz 2021).

information about their activities, for example, in their terms of service and in regular reports (cf. Klausua 2023: 64). Similar procedural safeguards are included in the EU's Regulation on Terrorist Content (cf. De Gregorio 2020: 10), the EU's Directive on Copyright in the Digital Single Market ("Copyright Directive") (cf. *ibid.*: 9–10) and the German Netzwerkdurchsetzungsgesetz ("NetzDG") (cf. Klausua 2023: 64). While supporting the transparency and accountability of platform behaviour, this kind of legislation usually does not interfere in the actual content moderation techniques of the platforms.³⁹

Platforms additionally have "the right to establish and enforce rules within [their] jurisdiction *beyond* those of the laws of the land" (Ciepley 2013: 141, orig. *emph.*). Versions of these rules are publicly available in documents like the platforms' community guidelines and their terms of service. The community guidelines specify how users are expected to behave on the platform, what to do and what not to do. The terms of service constitute the contract through which the parties agree to follow and abide by a specific set of rules, including

39 However, a special case of platform regulation is presented by the German Medienstaatsvertrag ("IMT"). Like the above-mentioned laws, the IMT states what contents are prohibited and ensures that users have the possibility of complaining against and counteract platform decisions. Moreover, it provides a "positive discrimination of certain content of value" (Klausua 2023: 64): "by imposing non-discrimination rules as well as the bias towards certain content providers, the German legislator has started to introduce traditional journalistic value sets into the new world of digital media. [...] Cautious to avoid prescribing rules and values as such [...] they promote legacy actors which already embody said norms. This approach is a difficult balancing act: On the one hand, the state is careful not to interfere with substantive moderation by stipulating mainly procedural aspects like non-discrimination, transparency and alike. On the other hand, it demands a positive bias towards certain content of value without giving the platforms any leeway to choose the respective content themselves" (*ibid.*: 63). Thus, the IMT supports journalistic standards and actors on the platforms without the state's interfering with substantive moderation (cf. *ibid.*: 63). This measure thus realises a demand formulated by Habermas, who insists on "reviv[ing] the normative standards guaranteed by journalistic gatekeepers now undermined by the business models of platform corporations" (Thiel 2023: 74; cf. Habermas 2022: 151). It is reasonable to suspect an increasing amount of regulations that actively intervene in digital moderation systems, such as those of social media platforms, in the nearer future. But regulating these systems – ideally in a democratic manner – necessitates that there is a minimal understanding of the platforms and their logics among legislators and throughout society (cf. Coyle/Weller 2020). These processes will be further complicated by the platforms' reluctance to be regulated (cf. Culpepper/Thelen 2020: 301; De Gregorio 2020: 8) or even to disclose the procedures of their systems.

those that are codified in the community guidelines.⁴⁰ The content policies, specifically, are rather dynamic: they take up the task of “anticipating violating content” while also “reacting to unprecedented forms of content violation and operationalising new regulations” (Gillespie 2018c: 264).⁴¹

The platform companies’ motivations to establish their specific sets of rules seem to vary. First and foremost, they all have three main incentives: to keep users on their platforms and thus keep generating profit from users (cf. De Gregorio 2020: 2; Gillespie 2018a: 5), “to protect their services from becoming unusable” (Douek 2021: 768) and to keep the platform company out of legal and societal trouble (cf. Stanley-Becker/Dwoskin 2020). But there seem to be further factors that motivate these companies to impose their specific sets of rules in specific manners, including: a sense of responsibility (cf. Roose 2020a); an intrinsic motive to “prevent [...] their digital spaces [from] turn[ing] into hostile environments for users due to the spread[,] for example, of incitement to hatred” (De Gregorio 2020: 2); an intrinsic motive to deliver accurate information (cf. Newton 2020f; Roose 2020a); the aim to stay politically neutral (cf. Newton 2020a); the aim to avoid politics on the platform (cf. Lima 2021a); the aim to keep the regard and trust of users (cf. Culpepper/Thelen 2020: 297–298; Tarnoff/Weigel 2020: 151); and the aim to protect their brand (cf. Newton 2020f). So, platforms usually must keep different groups within society content through their policies and moderation efforts; they are “stuck [...] halfway between users with different values, halfway between policymakers and the people they seek to regulate, halfway between a conduit and a curator, and halfway between the pressure of internal aims and external demands” (Gillespie 2018c: 272). Accordingly, their rules “are written to encompass multiple interests, not just individual speech rights” (Douek 2021: 763).

Again, the platforms enforce these rules through their content moderation systems, and they have different means of doing so that reflect different levels of escalation.

40 However, De Gregorio (2020: 8) argues convincingly that this kind of contract “leads users in[to] a status of subjection vis-à-vis online platforms”, rather than serving as a contract between equal parties.

41 These sets of rules have thus far been largely similar across all the major platforms (cf. Gillespie 2018c: 263–264).

The basic idea here is to allow for a maximum of political speech, and to answer the most problematic speech with more speech, in the form of labels. The platforms have offered no positive conception of what political speech should be or do there. Instead, they police it as beat cops, running off the worst posts while writing speeding tickets for lesser offenses. The idea rests upon a foundational belief that both parties are good-faith actors when it comes to political speech, all available evidence to the contrary. (Newton 2020b)

So, there are different levels of sanctioning, ranging from adding labels and warnings to posts (cf. Newton 2020e; Silverman 2020), to demoting contents in recommender systems, to preventing content sharing and blocking posts from the view of other users (cf. Ananny 2020: 363–364; Narayanan 2023; Roose 2020a, to deleting posts and banning users from platforms (cf. Roose 2020a; Guardian 2021). Arranged in this order, the sanctions escalate regarding both their level of restriction and their effectivity in reducing visibility. While a label might only lead to a 10% decrease in sharing (cf. Silverman 2020), “a 20% reduction [of visibility through recommender systems] causes [a post’s] reach to drop *tenfold*, and the content only reaches the poster’s immediate network” (Narayanan 2023, orig. emph.); a platform’s ban prevents future postings altogether.⁴² These various measures have been combined with other strategies – some platforms provide stable links to established news pages in prominent places, and some platforms add information banners in reaction to coordinated campaigns of rule infringement that seek to influence, with varying success, political events such as US elections (cf. Newton 2020e, 2020f; The Election Integrity Partnership 2021; Wakabayashi 2020).⁴³

42 This is especially the case if “our policies don’t allow people to come back”, as was proclaimed in 2021 by the CFO of the website formerly known as Twitter (Guardian 2021).

43 However, content moderation “will always be a matter of probability[, which] makes it unrealistic to expect rules to be applied correctly in every case” (Douek 2021: 765–766). This is because, as I described above, what is happening within a content moderation system is emergent from both the individuals that interact on the platforms and the contextual influences that interfere with each other while structuring the communication processes (cf. Rieder/Hofmann 2020: 8). Moreover, the scale of data and posts that social media platforms process makes it hard for platforms to keep up with assessing and sanctioning contents (cf. Gillespie 2018c: 265). Accordingly, they have to formulate their rules for regulating user behaviour “with awareness of the error rates inherent in enforcing any rule at the truly staggering scale of major platforms” (Douek 2021: 763).

However, the platforms can enforce their rules mostly at their own discretion. They do this “by virtue of the control over their digital spaces [...] without the need to rely on a public mechanism such as a judicial order” (De Gregorio 2020: 7).⁴⁴ This right has, for a long time, been “relatively uncontroversial” and largely “unencumbered by the constraints of public law” (Douek 2021: 768), though, increasingly, “[p]arliaments and legislatures in all liberal democracies have the regulation of the digital public sphere on their agendas” (Chambers 2023: 67).⁴⁵ Nonetheless, the actual content moderation does not necessarily mirror the rule sets codified in the documents, but might rely on internal guidelines that are not disclosed to the users (cf. De Gregorio 2020: 7). In fact, the actual enforcement of platform codes often seems to depend on the policies and business model of the platform, as has been observed in several instances (cf. Newton 2020d; Schröder 2020; Stanley-Becker/Dwoskin 2020). Gillespie thus sees these rules as “statements of both policy and principle – struggled over by the platform operators at some moments and ignored at others, deployed when they are helpful and sidestepped when they are constraining [to the platform company]” (2018c: 264).

In sum, the platforms provide their users with personalised feeds that are based on similarity metrics and the individual user’s behaviour and that are additionally guided by legal requirements and self-imposed platform rules. Nonetheless, the platforms provide different possibilities for users to tweak

The platforms therefore “are now firmly in the business of balancing societal interests and choosing between error costs on a systemic basis” (ibid.: 762).

44 However, some of the major platforms have established councils to supervise these decisions. For instance, Meta has established the Facebook Oversight Board, X (the website formerly known as Twitter) has the Trust and Safety Council and TikTok has the Content Advisory Council. But still, the companies are only honour-bound – not legally required – to accept the decisions of these councils (cf. Newton 2020c).

45 In particular, the private power of platform companies that allows them to moderate communication at their own discretion “sits uneasily with the primary responsibility and ultimate obligation of states to protect human rights and fundamental freedoms in the digital environment” (Kettemann/Tiedeke 2020). Several legislative bodies have therefore begun to pass legislation that specifically targets social media platforms and their content moderation techniques – an approach to content regulation that is known as the “new school” of regulation (cf. Balkin 2018; Klaus 2023; Pereira/Keller 2022: 2670). It makes use of techniques that “regulate speech through control over digital networks and auxiliary services like search engines, payment systems, and advertisers; instead of focusing directly on publishers and speakers, they are aimed at the owners of digital infrastructure” (ibid.: 4).

their personalised feeds. The degree and form of the influence of these tweaking possibilities on the feed varies according to platform. On most platforms, users can actively follow, flag or even block other profiles and groups; on some platforms,⁴⁶ they can subscribe to certain lists, topics or groups that can be used as filters and that – in the case of closed groups – might enable them to see the post and receive the feed notification in the first place; on some platforms,⁴⁷ they can generate their own lists according to topic or importance to the profile owner; on some platforms,⁴⁸ users can hide certain posts from their feed; on some platforms,⁴⁹ they can adjust their settings to prioritise certain profiles, turn on notifications for every new post on a profile or temporarily or indefinitely exclude certain profiles from their feed; on some platforms,⁵⁰ they can reset or delete the feedback that the algorithmic system bases its recommendations on, or even only parts of it; moreover, on most of the dominant platforms,⁵¹ they can use apps that are external to the social media platform in order to adjust their feeds. On a few platforms (TikTok being the most prominent example), the feeds are generated almost purely by algorithms. “Merely by watching some videos, and without having to follow or friend anyone, you can quickly train TikTok on what you like” (Wei 2020). These platforms’ recommendation systems put more weight on actual user behaviour – such as viewing time, scrolling speed and one-click reactions – than on subscriptions or profile settings. The less influence the users have over their feeds, the more untransparent the feed and its production appear.

The lack of transparency of algorithmic systems is one of the central problems for researchers who try to evaluate the effects of algorithmic systems or to develop ideas on how to judicially govern them.⁵² This lack of transparency

46 These include Facebook, TikTok and the website formerly known as Twitter (cf. Freeman 2011; TikTok 2020a).

47 These include Facebook, Instagram and the website formerly known as Twitter (cf. Facebook Help Centre 2022c; Mudit 2022; Freeman 2011).

48 These include YouTube, Instagram and TikTok (cf. Mudit 2022; TikTok 2020a; Writtenhouse 2022).

49 These include Facebook, YouTube, Instagram and TikTok (cf. Facebook Help Centre 2022c; Mudit 2022; TikTok 2020a; Writtenhouse 2022).

50 These include Instagram and YouTube (cf. Writtenhouse 2022; Mudit 2022).

51 These include Facebook, Instagram, TikTok and the website formerly known as Twitter.

52 The same circumstances make digital platforms inscrutable to their users. In fact, a “platform’s actual processes may be very different from how they are understood by their Users, who may form mental images of those processes based on their own individual interactions or on how the platform has represented itself to them” (Bratton

has multiple causes. First of all, the companies behind algorithmic systems do not usually share the details of the program codes with the public, since these codes are treated as trade secrets (cf. Bennett/Lyon 2019: 9; Bennett/Oduro-Marfo 2020: 49).⁵³ But even if the codes were publicly accessible, they would still remain highly obscure. Even apart from machine learning, algorithms are hard to interpret.

[T]he presence of different programming languages and execution environments adds further complications, and so do the many subsystems and modules that concrete programmes often draw on. Algorithmic decision procedures “may not happen all in one place” (Dourish, 2016, p. 4) but can be distributed over many different locations in a large programme or computer network. [...] The result is a continuously evolving metastable arrangement. (Rieder/Hofmann 2020: 7)

Moreover, in order to wrangle the vast amounts of data, the systems need to be as efficient as possible. They can achieve this efficiency by processing the data “in various steps, strategically arranged to make it fast and to limit the amount of computing resources required” (Lada et al. 2021). One such arrangement is what Gilbert Simondon calls “concretization” (2012) and “what technologists themselves call ‘elegance’” (Feenberg 2017: 72). “In contrast to a design in which each structure is restricted to a single function, an elegant structure serves many functions at once” (ibid.: 72–73). As devices and algorithmic systems develop, “they are continually redesigned to multiply the functions served by their components” (ibid.). They thus become increasingly efficient, but also increasingly intricate and inscrutable.

2016: 50). Consequently, each user adapts to their own perception of how the platform is working and is responding to their behaviour.

- 53 Of course, there are considerable similarities between the recommender systems of the major platforms. In fact, “most major platform companies are quite open about discussing their recommendation algorithms at academic and industry conferences, and learn from each other. [...] But it turns out that the set of details that matter from a research and engineering perspective are subtly different from those that matter to users and society. And companies seem to have little incentive to be transparent about the algorithm with those stakeholders. [...] Besides, companies have shared precious little about the effects of algorithms” (Narayanan 2023). However, when the exact source code of Twitter was leaked in early 2023, there was great consternation (cf. Mac/Conger 2023).

Furthermore, the criteria for selecting one content over another are mostly hidden. “What is unstated is how these criteria are measured, how they are weighed against one another, what other criteria have also been incorporated, and when if ever these criteria are overridden” (Gillespie 2014: 176). They are hidden either deliberately by the platform (*ibid.*: 192) or in the constant self-optimisation of machine-learning techniques. The reason for this is that the coders do not devise the actual rules for algorithmic ordering, but they set the rules for how the system is supposed to learn to reach a certain aim. The resulting strategies are often so complex that they cannot even be understood *post factum*. It is difficult to interpret them experimentally, and they cannot be interpreted logically.

Lastly, the algorithmic systems of social media platforms are highly dynamic. On the one hand, data change with every click of every user. For example, “[t]he tweets we post, items we purchase, and likes we hand out all factor into the sum total”, and this, in turn, “modif[ies] what becomes visible to us and to our networks” (Bucher 2018: 154). Therefore, every query delivers slightly different results. Systems including machine-learning algorithms are even more internally variable. They “evolve by definition as they encounter new data” (Cotter/Reisdorf 2020: 747), because platforms “are not just providing information to users but also users to their algorithms. And algorithms are made and remade in every instance of their use because every click, every query, changes the tool incrementally” (Gillespie 2014: 173).

On the other hand, platform companies often adjust their policies and services in order to keep their clients and users, to gain new ones and to generally stay ahead of their competition. Moreover, they develop their systems to make the systems more “elegant” and efficient (*cf.* Feenberg 2017: 72), and the aim of doing this is to handle the ever-growing amounts of data without unnecessary delays. Their algorithmic systems are constantly “subject to examination, intervention, and refinement” (Healy 2015: 193). They can be “easily, instantly, radically, and invisibly changed” (Gillespie 2014: 178). The “iterative design of algorithms and A/B testing of different iterations mean that to some extent algorithms ‘never take durable, observable forms’” (Cotter/Reisdorf 2020: 747).⁵⁴ At the same time, user habits and demands change, providing another reason for

54 Changes to the code are “inherently framed and shaped by all kinds of decisions, politics, ideology and the materialities of hardware and infrastructure that enact its instruction” (Kitchin 2017: 17–18).

platform companies to adjust their systems – and re-adjust them if the original adjustments backfire (cf. Newton 2022b). Moreover, policy adjustments are visible in preparation for, during and in the aftermath of important events, such as elections, pandemics, terrorist attacks or other crises.⁵⁵

In sum, there are some general logics that are incremental to social media platforms. First of all, they rely on vast amounts of data. The platforms standardise these data for the purpose of processing, and they process the data for diverse reasons, including the moderation of interaction on the platform. Central tools of content moderation include algorithmic recommender systems that, based on similarity metrics and statistics about the past behaviour of individual users, predict what contents will generate engagement by what users. Moreover, the platforms are guided in their moderation procedures by legal requirements and by their own, self-imposed rules, which are formulated in community guidelines and terms of service. But beyond these general logics and guidelines, algorithmic content moderation systems are largely untransparent and highly variable. Even the self-imposed platform rules do not allow reliable conclusions to be drawn about the details of platform procedures. As a result, it is impossible to generalise the effects of platforms' algorithmic systems in a scientifically sound manner or to pretend that detailed analyses about such effects have a long half-life. My own analyses must therefore be limited to what is actually known about these systems and to the more stable logics embedded in the systems.

4.2 The Relevance of Social Media Platforms for Deliberative Systems

The notion that social media platforms are relevant for democracy is as old as the oldest platforms, and I have repeatedly alluded to their relevance for deliberative systems already. These platforms are central communication and

55 One issue that usually appears in these contexts and that has gained momentum in the public debate concerning social media platforms is misinformation. It has been discussed in the context of the US presidential elections, and specifically in the context of the COVID-19 pandemic and the vaccination campaigns. Platforms have introduced different systems to prevent misinformation, including a system to reduce the distribution of all posts that are from people who routinely share misinformation (cf. Wagner 2021), as well as flagging systems and fact-checking by human content moderators (cf. Ananny 2018; Gillespie 2018c; Marres 2018).

information-gathering infrastructures. Communication on these platforms mostly occurs in more informal manners, but information on this communication is transmitted to all kinds of spheres in the system. These transmissions thereby amplify informal communication processes between individual citizens and make these processes relevant to a wide variety of sites within the entire system. Moreover, the platforms structure the communication processes that take place on them in accordance with their own logics and rules. Due to their oligopolistic tendencies, few platforms gain large amounts of resources and influence in different parts of deliberative systems through their structuring and through the transmissions into the wider system.

4.2.1 An Oligopoly of Platforms

Social media platforms are highly relevant for individuals and societies under the conditions of the digital constellation. Since digital platforms connect third parties with each other, they “*set the stage for actions to unfold through ordered emergence*” (Bratton 2016: 47, orig. emph.). Large parts of the communication processes that are thus structured occur on only a small number of social media platforms. This is because platform companies have developed “an immanent, quasi-natural tendency to build monopolies, respectively oligopolies” (Vogl 2021a: 10, author’s translation; similarly, Jungherr et al. 2020: 25; Zuboff 2022: 3). This process is largely caused by the effects these platforms have on their users, such as the lock-in effect, the network effect and the log-in effect.⁵⁶

The “lock-in” effect (Arthur 2014), or the “generative entrenchment” effect (Bratton 2016: 47), describes a situation in which users have gotten used to a certain platform’s interfaces, standards and services to such a degree that their staying on this platform is easier and needs less effort than switching to another platform with other standards (cf. *ibid.*). For example, most social media platforms provide specific editing programmes for the formats they support. Instagram has its own photo editing programmes while TikTok allows video editing in its app. Getting used to working with these editing programmes that only work with the respective platform – or at least do so considerably better – may induce the users to stay on the respective platform.

Moreover, social media platforms have a network effect that causes new users to sign up for them and established users to continue using them (cf.

⁵⁶ Moreover, the process has been “systematically facilitated” by “legal institutions, including both entitlements and regulatory institutions” (Cohen 2017: 133).

Jungherr et al. 2020: 24; Vogl 2021a: 10). If “everyone I know” interacts on a certain platform, I do not want to miss out. Or, put more generally, the more users there are on a platform, the more attractive it gets, and as it gets more attractive, more users will join. Additionally, large user numbers help these platforms improve their services – for example, the precision of their recommender systems – which makes them even more attractive for users and advertisers (cf. Muldoon 2022: 30), which in turn draws in even more of both. Consequently, user numbers of already big networks exponentiate, which contributes to “a tendency for mono- or oligopolies to emerge” (Jungherr et al. 2020: 25).

Exponential effects similar to the network effect can be witnessed with regard to the “log-in” effect, which refers to the user’s time spent on a platform. “The use of a platform for any user increases exponentially with the number of all available users on the platform. Linear user growth on a platform thus still leads to exponential growth in the use that users are expected to make of the platform” (ibid.: 24–25). Encouraging users to spend as much time as possible on the platform is one of the central concerns of platforms’ architectures and moderation systems.

Hence, platform companies aim to make users join the platform (the network effect), stay on it (lock-in effect) and use it (log-in effect).⁵⁷ Due to their network, lock-in and log-in effects, large platforms tend to become even larger; and, ultimately, a few platforms dominate large shares of the various resources in an oligopoly of platforms. Next to money and user numbers, these resources include users’ senses of community, users’ time spent and engagement on the platform, data, advantages from machine learning and, ultimately, money – all of which are inherently connected. That is, as users spend more time on a platform and interact there with an increasing number of other users, their sense of connection becomes greater. “The largest of the global networks exercise a near monopoly over this resource” (Muldoon 2022: 50). Of course, there are “avenues to pursue community in real life and on other networks online, but the dominant position of a few tech companies cannot be denied” (ibid.). The sense of community further intensifies platform effects and oligopolistic tendencies. As a result, a few large platforms have large shares in users’ time and engagement. This means that only a few platforms can generate comprehensive datasets concerning user behaviour; the most detailed user profiles are generated by only a few platforms, and these platforms secure their exclusive

57 The reverse effects are also possible for platforms that suddenly seem unattractive, as has recently been demonstrated by Twitter/X (cf. Statista 2024), among others.

access to these data by erecting technological barriers around them (cf. Pistor 2020: 123).⁵⁸ Companies that own several platforms can combine the respective databases, thus deepening the tendency towards a data oligopoly for each of their platforms. In the wake of data oligopoly, an oligopolistic tendency regarding the advantages of machine learning follows, since

what success [machine learning] is liable to achieve will tend to accumulate over time through the growth of the datasets and past trajectories of machinic interaction with them. This cumulative advantage creates an oligopolistic tendency because there are few players with the computational or human resources to fully take advantage of these opportunities. (Carrigan/Fatsis 2021: 38–39)

The user number oligopoly, the data oligopoly and the machine-learning oligopoly support further oligopolistic tendencies regarding the market share in ad placement. Where many users are constantly logged in, there are many potential views, clicks and buys, which is the ultimate aim of placing an advertisement. Larger datasets, more accurate user profiles and more potent machine learning enable more effective ad targeting to specific user groups, making the larger platforms even more attractive to advertisers (cf. Gillespie 2018a: 19; Vogl 2021a: 15). In other words, oligopolistic platforms have control over massive amounts of these assets, and it is only this control that can be effectively monetised:

The value of data is not revealed by the price others are willing to pay for data points or even the sum of all these data points, but by the processing and analytical capacity of the data controller. This capacity depends on scale; that is, on the volume of data already captured and on future access to data. (Pistor 2020: 112)

58 Simultaneously, platform users are practically forced to provide their data to the dominant platforms, since “individual consent is tied to services that most data producers want and for which there are increasingly few, if any, viable alternatives. Individual consent by dispersed data producers who are faced with a take-it-or-leave-it option is not very meaningful, especially in a situation where they face oligopolies or even monopolies that control access to digital platforms” (Pistor 2020: 110). The consent that users give to platforms for collecting and using their data is therefore not given in an entirely voluntary manner.

The clients buying the advertisement spaces that are predicted to be most effective, meanwhile, “have no way of discovering market prices through repeat transactions” (ibid.). This is because the specific effectivity depends on numerous variables, including the time of day and various characteristics of the users who are targeted by the ad. “Every data application is unique and allows the seller to set prices without a market test” (ibid.). Critical political economists, moreover, emphasise “(1) the inherent accumulative tendency of capital and corporate ownership and its subsequent effects on the distribution of power and (2) the precarious and exploitative nature of cultural and (immaterial) labor of both producers and end-users” (Nieborg/Poell 2018: 4279). Consequently, “new digital hierarchies [emerge] between those who exercise control and decision-making power over platform architecture, protocols and rules and those who must submit to these conditions” (Muldoon 2022: 53). The larger the platform, the bigger its sphere of influence. The “globespanning nature of these firms is leading to a transformation of existing international hierarchies and the creation of new forms of digital colonialism” (Srnicek 2020: 89–90).

This even translates to the physical world and the material infrastructures of these platforms. The existence and characteristics of the material infrastructures⁵⁹ depend on the geographical, economic and political conditions of the respective region, as well as on who owns the infrastructures and the rights to build them. If the oligopolistic platforms invest their monetary resources in these infrastructures, they can further increase their data resources. In the Global South, for instance,

Big Tech CEOs act as envoys, meeting heads of state and offering shiny deals of free infrastructure and services in exchange for the collection of data and control over the system. This includes cloud services to government agencies, building broadband cables and even using high-altitude balloons to create an aerial wireless network connecting remote areas of the country. Facebook’s notorious “Free Basics” offers a bare-bones version of the internet to countries in the Global South who receive free access to a limited number of data-light websites and services. (Muldoon 2022: 133)

59 Digital communication depends on material infrastructures such as wires, servers, internet junctions and satellites and other transmitters. These newer infrastructures, in turn, “rely on the older infrastructures of water, energy, and human transit, as a nervous system relies on a circulatory system” (Stine/Volmar 2021: 14).

The ownership of these central infrastructures determines who controls them, what services can be accessed, what laws apply, what filters are in place, who collects the data, who profits from the services and in what ways they can profit.

Accordingly, the dominant platforms and their corporate owners wield an “awesome power” (Newton 2022a). They “have the power to *frame the social world*, *name* it and in the process, categorize and *order* it through their algorithms... changing how the social world is organised [...] and changing how we *imagine* the social world” (Couldry 2021, orig. emph.). Consequently, they change the conditions under which democratic decisions are being made.

The implications of the oligopolistic social media platforms regarding democracy are rather Janus-faced:

Social media is the site of much hatred and delusion. It is also the soil where social movements can take root. Hashtags enable individual incidents of injustice to go viral, revealing systemic patterns. Yet that virality is made possible by monopoly – it requires one Facebook, one YouTube, one Twitter. And these large concentrations of unaccountable private power endanger the basic premise of democracy – the idea, often invoked but rarely attempted, that the whole of the people should determine how society is run. (Weigel et al. 2018: 14)

In other words, as the platform becomes larger, so does the group of users with the potential to interact with each other, independently of time and space, and this increases the number of potential connections between different users, sites and site clusters. The dominance of a few platforms provides “important affordances for bottom-up organizing, collective creativity, and crowd-sourced, democratic action” (Cohen 2017: 153), since many individuals meet in few places. On the other hand, such resources can be used for various purposes that are problematic for democracy. As the platform becomes larger, the amount of communication that is moderated and structured by one single actor becomes larger, and this means that the influence of this not democratically legitimated actor becomes larger. Thus, the “particular configurations that those technologies have assumed within the political economy of informational capitalism also make them sites of extraordinary manipulability, creating new risks [for] the human project of democratic, inclusive, sustainable coexistence” (ibid.). Or, put more succinctly, “[o]ligopoly in the economic realm shades into oligarchy in the societal realm” (Zuboff

2022: 1). The control over the data harvested from their users gives platforms “unchecked power to impose their economic or political preferences on the data producers” (Pistor 2020: 110): “While not every data point, in isolation, that is captured raises human rights concerns, amassing enough information to constitute digital identities of individual data producers and using that information to influence their behavior to the benefit of the data controller does” (ibid.). The consequence is a “democratic deficit refer[ring] to the fact that private companies make the choices that set norms and directly influence the behavior of billions of users” (Haggart/Keller 2021: 2). Platform oligopoly thus simultaneously represents chances for and threats to deliberative systems.

The oligopolistic tendencies resulting from platform effects explain in part why some platforms obviously arrive at and remain in the centre of public, political and academic attention. The published studies that are relevant to my analyses in chapters 5 and 6 will largely pertain to the platforms Facebook, Instagram, YouTube, Twitter/X, Reddit and TikTok. All of these platforms adhere to the logics I have described above. Moreover, they are oligopolistic in the sense I just illustrated, as they rank among the social media with the highest user numbers worldwide (cf. Statista 2023) and consequently have greater access to all the other resources I referred to. These platforms have different aims, interfaces and features; they focus on different forms of content and communication. But incidentally, users find ways to introduce political topics and communication about political opinions on all of them – though arguably to different degrees. All of these platforms are therefore potentially part of deliberative systems; in fact, they are highly interwoven with these systems.

4.2.2 Social Media Platforms’ Interwovenness with Deliberative Systems

There are several aspects to how and why social media platforms are practically woven into the fabric of deliberative systems. On the one hand, this is due to the platform’s centrality as a communication infrastructure. Platforms serve as a central infrastructure for communication, social connections and communities.⁶⁰ The platform effects described above lead to the tendency of very many people to use very few platforms. This, in turn, results in many users’ experiencing a “fear of missing out” if they do not join and regularly use the platforms being used by so many others from their immediate and their not so

60 Cf. Bratton (2016: 46), Carrigan/ Fatsis (2021: 35–36), Couldry/Hepp (2017: 7), Dolata/Schrape (14).

immediate social environment (cf. Bloom et al. 2019: 1251). By provoking such effects, “platforms can make users feel like they could not live without the social [...] benefits that accompany access to their network” (Muldoon 2022: 30). While “there is a significant minority who don’t use social networks and seem to get along just fine” (ibid.: 50), many people use social media platforms primarily to access community. Dependence on these digital connections can vary widely, ranging from using them for mere entertainment to being dependent on them, due to professional reasons, for one’s livelihood. The latter applies specifically to professional political actors who are dependent on information about and communication with communities and other political actors. The increase in the proportion of communication that is being performed via social media platforms also means that political communication is increasingly performed on these platforms. This in turn implies an increasing relevance of these platforms for deliberative systems.

On the other hand, the influence of social media platforms is attributed to their logics and *modi operandi*, and especially to their content moderation practices. Social media platforms were among the first digital spaces where many-to-many communication could be realised, and content moderation is their main way of handling the vast amounts of communication. But

[p]latforms don’t just mediate public discourse, they constitute it. They are designed to invite and shape participation, toward particular ends. This includes what kind of participation they invite and encourage; what gets displayed first or most prominently; how navigation tools direct the movement of users and content; how revenue models impose price mechanisms; and how they organize information through algorithmic sorting, privileging some content over others, in opaque ways. And it includes what is not permitted, and how and why that prohibition is enforced [...]. (Gillespie 2018c: 257)

Hence, platforms shape participation and structure communication processes. They “insert themselves into the democratic process by changing who can communicate with whom and how, and in doing so, who can participate in the political process” (Jungherr et al. 2020: 225). They define the algorithmic logics and design the interfaces that shape the dynamics of reception and communication (Schrape 2021a: 160).⁶¹ By moderating communication, platforms

61 I will elaborate on this in chapter 5.

are also “curating” the information users are presented with and have access to. “The curation of *political* information through secret algorithms gives the social media platforms enormous power over our worldviews, and extraordinary abilities to modify our political beliefs and behaviours” (Bennett/Oduro-Marfo 2020: 49, orig. emph.).

Both these aspects – their centrality as a communication infrastructure and their shaping and intervening in communication processes – make social media platforms relevant for and influential in deliberative systems that operate under the conditions of the digital constellation. They influence not only the respective communication processes but also the preconditions and the context, as well as the consequences and follow-ups of these processes in the digital and the non-digital realm. Thus, the mediated communication on platforms “is interwoven with our face-to-face communication in manifold ways” (cf. Couldry/Hepp 2017: 16).

Almost all of the sites that are mediated through social media platforms are informal in nature, but many of these informal sites are highly relevant to and connected with sites of semi-formal and highly formal communication. Informal sites can include sites that are not explicitly political in nature, such as “online communities dedicated to lifestyle issues such as personal finance, parenting/childcare, popular culture, sports, and hobbies” (Wright et al. 2018: 74–75). They “foster a connection between the personal and political and can potentially help bridge the gap between the everyday lives of participants and formal politics” (ibid.: 75). In such spaces, it is also “more likely that people will inadvertently [...] come across people with divergent political views as social boundaries appear to be weakened online” (ibid.: 83). Moreover, deliberative systems attribute to such informal spaces

the potential to enable more malleable and innovative forms of political expression, such as storytelling and the use of diverse audio and visual tools [...]. And since audiences can co-produce scripts, question meanings, and re-configure debates, there is potentially greater political improvisation. These features suggest that social media could help facilitate broad dialogic communication [...], as well as open up space for new voices to enter debates and potentially form alternate alliances that cut across, or bridge, opposing positions. (Hendriks et al. 2016: 1105–1106)⁶²

62 In chapter 6.1, I will come back to the implications that a widened range of admissible forms of expressions on social media platforms has for deliberative systems.

Social media platforms should therefore be considered in any analysis of deliberative systems within the digital constellation, if only because of their relevance for informal political talk.

But social media platforms are also relevant for sites of semi-formal communication, such as spaces of traditional media (cf. Conover/Searing 2005: 270).⁶³ The platforms' importance to a majority of individuals throughout society renders them a central infrastructure for both traditional media and individual journalists (cf. Newton 2023). But in addition to distributing their contents on social media platforms, journalists also use these platforms to collect information on and assess the societal relevance of current events. This is because the users themselves have become part of the flow of political communication on social media platforms by individually posting and sharing information, comments or public exchanges – whether on their pages or their (semi-)public profiles on social media platforms – and by collectively exerting influence on moderation algorithms via their engagement with news items (cf. Jungherr et al. 2020: 11). The rise of social media platforms has consequently “increase[d] the number of actors injecting and amplifying items in the flow of political information [...] and ‘tether[ed]’ political elites, journalists, and audience much more closely to one another” (ibid.).

Furthermore, social media platforms facilitate the initiation, organisation and momentum of social movements – which are likewise sites of semi-formal communication (cf. Fleuß et al. 2018: 17). With their billions of users, the platforms provide a central infrastructure for all these processes (cf. Seeliger/Sevignani 2021c: 30), while simultaneously structuring these processes according to their own logics. Individuals and organisations can make their cases to a potentially broad audience, they can organise events in real-time and issues can spread geographically and socially very far in very short time spans.⁶⁴ But the degree to which a platform supports the spread of politics in general, and

63 In chapter 3.2, I already addressed some more general aspects of how the digital transformation affects traditional media.

64 There even have developed some purely digital variants of social activism, campaigns and fundraisers. For example, the “ALS Ice Bucket Challenge” has traversed several different platforms since 2014. In this specific challenge, users were dared to empty an ice bucket over their heads and to donate to several organisations concerned with amyotrophic lateral sclerosis (ALS). The campaign received world-wide participation and donations. On the one hand, challenges resemble non-digital campaigns, as the respective videos are very similar and convey the same simple messages. On the other hand, they could hardly be realised without social media platforms that have such a

individual political issues more specifically, depends on its content policies, its moderation systems and the applicable national law applicable. While “people around the world continue [to] view social networks as critical venues for protest and debate”, one of the “biggest questions of the next-half decade will be in how many places Facebook, Twitter, YouTube and others can live up to that ideal” (Newton 2021a). Some platforms explicitly do not engage with politics, and others are retreating. TikTok, for example, aims at being purely for entertainment; ostensibly, its “mission is to inspire creativity and bring joy” (cf. TikTok 2020b). The platform designs its interfaces and algorithmic systems accordingly (cf. Wei 2020).⁶⁵ Meta – at that time Facebook – used to engage with politics. It explicitly promoted a global community: “an inclusive community that reflects our collective values and common humanity from local to global levels, spanning cultures, nations and regions in a world with few examples of global communities”; “a civically-engaged community in a world where participation in voting sometimes includes less than half our population” (Zuckerberg 2017). After having had some bad experiences with participation in collective movements in the direction of the US Capitol in 2021, however, they announced a reorientation of Facebook and Instagram predominantly towards connecting friends and families (cf. Lima 2021a; Newton 2022b).

Furthermore, social media platforms are connected with the highly formal sites of the empowered spheres of deliberative systems. For example, political actors in empowered spaces can be just as affected by social media platforms as any individual in the digital constellation. But due to their political relevance, the implications of many-to-many communication and moderation are different. Political actors can be monitored by individuals and institutions, their digital communication with the public can be mediated or unmediated, their perception of citizens and citizens’ wishes is shaped by the moderation and interfaces of the platforms and their political information environments become fragile due to the dynamics on the platforms (cf. Jungherr et al. 2020: 5). Thus, the impact of social media platforms on the empowered sphere “is pervasive,

high number of participants and a global reach and that take place over such a long stretch of time.

65 However, political communication and the organisation of social movements via the platform cannot even be avoided by TikTok (cf. Cockrell 2019; Dornis 2020; Lorenz et al. 2020; Gilbert 2022; Lorenz 2020b, 2020c; Lorenz et al. 2020; Medina Serrano et al. 2020, 2020; Washington Post 2022).

albeit not necessarily transformative in changing fundamental characteristics in practiced democracy” (ibid.).

Conversely, participants in empowered spaces can use social media platforms to monitor the public. As I described in previous chapters, platforms collect data from interactions taking place on social media platforms, and representative public opinion research is increasingly complemented with, if not supplanted by, analysis of these data (cf. Dormal 2021: 16). “The possibilities to analyze and predict behavior by collecting and combining all digitally available traces in order to ‘read’ the public have begun to compete with participatory modes of will formation that are traditionally identified with the democratic process”, and such techniques’ promise of “comprehensive and neutral representation is appealing to decision makers and can change expectations and structures over time” (Thiel 2023: 73).⁶⁶ In consequence, data on informal and semi-formal communication processes become increasingly important to the spheres of political decision-making.

Yet if political actors equate social media data with public opinion polls, they interpret these data as mirrors of the users’ preferences, which generates several problems. Firstly, as I have already shown, these data are singularised, and their accumulation is not equivalent to public opinion formed by open, ideally deliberative communication.⁶⁷ Secondly, these data are not only based on what users explicitly mark as their political opinion but are often gathered from the users’ behaviour without their knowledge or intention. Therefore, the data do not reflect what citizens want their representatives to understand as their political opinions and wishes. Thirdly, the demographics of platforms widely differ from those of nation states or most other constituencies. For example, platform users tend to be younger, more female and better educated than the general demographics in their respective countries (cf. Gambo/Özad 2020; Mellon/Prosser 2017; Ribeiro et al. 2020; Wojcik/Hughes 2019). Lastly, data are immensely coloured by the platforms’ behaviour toward their users. User interaction is shaped by the designs and affordances of the platforms’ services, as well as by the algorithmic systems that are moderating communication. Thus, there is an imbalance between, “*on the one side, [...] users with ‘influence-able’ and ‘target-able’ opinions, tastes, and preferences, [and], on the other side, [...] authoritative data analysts who ‘know’ the population’s fine-grained and ever-changeable preferences and tastes*” (Marres 2018: 437, orig. emph.). Future

⁶⁶ In chapter 3.2, I described this in more detail.

⁶⁷ See chapter 3.2.

communication is moderated according to this “knowledge”, generating more data and continuing a feedback cycle. The data regarding user interactions are therefore heavily shaped by the platforms’ rules and processes. All in all, if political decision-makers are placing weight on the data of social media platforms, they are placing weight on a skewed image of a non-representative part of society, an image that is accumulated from singularised data and heavily coloured by the platforms’ own conduct.

In sum, platforms are interwoven with various spheres of deliberative systems. They are central communication and information-gathering infrastructures. Communication mostly occurs in more informal manners, but information is gathered by all kinds of spheres within the system; consequently, the platforms amplify informal communication processes between individual citizens so that these become relevant to a wide variety of sites within the entire system. Simultaneously, they structure the communication processes in accordance with their own platform logics and rules. Due to their oligopolistic tendencies, a few platforms gain large amounts of resources and influence in different parts of deliberative systems.

5. Platform Architectures and Their Implications for Deliberative Systems

As I have established thus far, communication via social media platforms is especially relevant in deliberative systems that work under the conditions of the digital constellation. These platforms provide vital infrastructure for their communication processes. At the same time, their architectures structure the behaviour and interaction of their users: “the design choices that underlie the built environment can be just as effective at reshaping ‘user behavior’ as more traditional manifestations of power, like laws[, and] this remains just as true in digital environments as it is for the more traditional physical ones” (Forestal 2021: 13; similarly, Pereira/Keller 2022: 2661).

In other words, platform architectures can be partially read as the digital counterpart of the spatial context of face-to-face communication processes. Considerations on the spatial conditions surrounding deliberation have been repeatedly addressed by scholars of deliberative democratic theory; the most prominent work has been presented by Parkinson (2012a). These spatial arrangements are said to have a considerable influence on communication processes: “it can be the case that only certain kinds of spatial arrangements will do, or that certain arrangements amplify or mute particular behaviours that democrats find valuable” (ibid.: 4).¹ Parkinson identifies

three ways in which form might relate to political behaviour: it can be (a) absolute, physically preventing, or mandating certain action; (b) suggestive,

1 Parkinson names numerous examples to this effect, including a debate on three broad templates of parliamentary buildings – the Westminster model, the French Estates General model and theatre style – and their implications for the communication processes in plenary sessions (cf. Parkinson 2012a: 105).

encouraging certain kinds of behaviour at the expense of others; and (c) symbolic, triggering a sense of identification or recognition, which in turn impacts on such things as political efficacy. (ibid.: 77)

In short, the architectural features surrounding a communication process structure and shape the participants' behaviours and interactions with different degrees of force.

Similarly, communication on social media platforms is structured by the platforms' architectures. These architectures comprise the technical protocols, interfaces and algorithmic systems of the platforms.² They provide the platforms with "many different ways in which [they] can promote, shape, and constrain public communication" (Moore 2018: 175), and they "profoundly shape the reception of [the exchanged information] by constituting the environment within which these cultural encounters happen" (Carrigan/Fatsis 2021: 54). Platform architectures thus contribute to the platforms' "role in, for example, spreading misinformation, fueling inter-group conflict, or mobilizing social movements", and they "profoundly shape[...] the ways we engage – or not – in democratic activity" (Forestal 2020: 2). Hence, the design of specific architectures "gives social media platforms enormous potential to influence and perhaps modify our political beliefs and behaviours, through the secret algorithms that shape online content" (Bennett/Lyon 2019: 9).

In the public discourse, and even in most works by deliberative systems scholars, the entire platform is treated as one deliberative site, with its community being represented as a homogeneous group – the often-cited "Twitter-Öffentlichkeit" ("Twitter public") in the German discourse, for example. But the community of the platform formerly known as Twitter neither was nor is a homogeneous group, and it has never been the case that there is only one site with one ongoing communication process. Instead, there are multiple smaller sites that develop based on the specific platform's architectures. This applies to any of the larger social media platforms. In the following, I will propose a way to analytically differentiate sites and to grasp the connections between them. These sites and connections represent the fundamental structures of communication processes on social media platforms.

2 Moving forward, I will not address specific codes or devices that can be used to access the platforms but will focus on the basic logics of connecting with other users and discourses.

Many of the architectural elements that form sites and connections are based on the central platform logics of data management and content moderation that I described in chapter 4.1. The collection, standardisation and storage of data are embedded in the fundamental, coded structures of the platforms and provide the basis for the algorithmic systems. Meanwhile, content moderation, and especially recommender systems, reify as architectures that are directly perceptible to the users and immediately shape their possibilities and probabilities of interacting with other users.³ Rather than function as the digital counterpart of spatial contexts, they mirror the moderation – or “facilitation” (Curato et al. 2017; Dryzek 2007; Ferris 2020) – of deliberative democratic theory.

Moderation and moderators have been subject of scholarly research, especially with regard to democratic innovations. This kind of research considers how communication processes must be organised and structured in order to improve the deliberative qualities of specific communication processes. Often, human moderators – or facilitators – are appointed to further this endeavour. They can “seek to assure that the weak, and not necessarily those with the best ideas or arguments, have ample time to speak and express themselves” (Fung 2003: 344); they can aim to “ensure[...] that discussions are on-topic, civil and not dominated by specific individuals” (Baccaro et al. 2016: 552); moreover, they may try to influence the participants and “encourage the development of a greater capacity to self-reflect, to self-direct and to do so in a way that is more responsive to the needs of others and the common circumstance that the self and others share” (Rosenberg 2004: 14). Thus, moderation in the deliberative theory sense aims at improving the deliberative qualities of communication processes.

On social media platforms, the goal of moderation is different. When content moderation aims at improving communication, it does not do so in order to make political decisions in a deliberative way. Rather, platforms moderate and order contents in order to keep them “clean” and interesting for their users, since users will not stay on platforms where they are insulted or confronted with illegal or mostly irrelevant and uninteresting contents (see chap-

3 Moderation on social media platforms is not always exclusively based on algorithmic predictions. For example, Facebook uses a purely algorithmic recommender system to curate user feeds (cf. Lada et al. 2021), while Reddit appoints moderators among their users for each subreddit (cf. Duguay 2022: 1189), and all the major platforms employ human content moderators to filter for problematic contents (cf. Gillespie 2018a).

ters 4.2 and 6.1). Nonetheless, the impact of moderation on the communication processes' structures is immense – arguably, it is significantly higher than in moderated face-to-face scenarios. This is partially due to the moderation's being ingrained in the architectural elements that form sites and connections. For example, as I will show in the following sections, platforms' content moderation systems emphasise certain aspects of a communication process through rankings, shape connections between sites and determine the visibility of sites for users in a personalised manner.⁴

Though deliberative theory scholars seldom directly address the content moderation systems of social media platforms, some have commented on these systems' effects on deliberative qualities. Chambers, for example, remarked that they have “a negative impact on both epistemic and normative functions of the public sphere, which is to say, on the circulation of reasons and the inclusiveness of debate” (2023: 63). Moreover, Ercan and colleagues noted that the hiding of contents from participants in a site decreases listening and reflection, as, “[o]bviously, it is impossible to listen to something that does not reach you, let alone to reflect upon it” (Ercan et al. 2019: 24). Amoores commented that inequality between contents and participants is a necessary side effect of content moderation systems, since the “very essence of algorithms is that they afford greater degrees of recognition and value to some features of a scene than they do to others” (Amoores 2020: 8) – if some contents are bumped up in a feed, others must move downwards. These are just some assessments regarding the influence of platform architectures on the deliberative qualities of digital communication processes, but all of them similarly imply that these architectures are perceived to have significant effects.

To unravel these effects, I will focus, in turn, on the afforded forms of expression on social media platforms, on the reification of deliberative sites and connections and on the effect that platform architectures have on the embeddedness of digital sites and on the wider deliberative systems, in turn.⁵ I will outline how the architectures structure the respective communication processes and how that affects the deliberative qualities of these processes.

4 Therefore, such a system can likewise be viewed in a spatial dimension – as resembling a dynamic maze that presents itself differently to each individual user.

5 In doing so, I will largely refrain from describing the influence of app layouts and interfaces, since they mostly affect the user's individual behaviour rather than their interaction with other individuals.

The structures of communication processes are generally shaped by a variety of aspects that differ with regard to the degree and direction of their influence. Moreover, there are no obvious and static causes that produce a specific structure. Rather, the communication structures and interaction patterns on social media platforms are a result of the interplay between various conditions and influences (see chapter 4). Yet there are certain architectural traits that make the development of certain structures more probable, that lead the structuration in certain directions, that support certain deliberative qualities; and I will address these traits in this chapter. I will indicate where the architectures support or enforce certain behaviour and communication structures, which in turn enhance or lessen the various deliberative qualities to different degrees. Moreover, I will cite relevant empirical studies – if available – to support my findings.⁶

Of course, interaction is not shaped and structured only by the spatial arrangements and architectures around it. Rather, “any behaviour observed is a result not just of the setting but of that plus its ‘attached standing pattern of behavior’” (Parkinson 2012a: 108). It is set in an “agglomeration of people and practices, symbolic and normative associations, as well as the power relations that drive spatial production and reproduction” (ibid.: 88). This also applies to social media platforms.

Highly structured fields of activity, they are made out of software protocols and codes influenced by the culture and outlook of the designers, the rules and regulations of the platform (shaped by owners’ economic and ideational outlook) and the social behaviours enforced by user communities (Finlayson 2020: 4–5; similarly, Docherty 2020) .

In this chapter, I will mainly address the immediate effects of platform architectures. How these architectures act in combination with more general social structures will be addressed in chapter 6.

Parallel to structure of chapter 2, I will start this chapter by addressing the ground matter of the communication processes and describing the forms of

6 These more general reflections can be used to assess specific communication processes. Such an assessment would have to reflect the communication process’s specific contexts for the system. Due to this context-dependency of deliberative qualities, and since I do not perform any case studies, in this book, I cannot draw any definite conclusions regarding the general impacts of platform architectures on the deliberative qualities of communication processes.

expression that are afforded on social media platforms (chapter 5.1). In doing so, I will focus on two forms of expression that are uniquely prominent in platform communication and that already have structuring effects on communication processes and implications for deliberative qualities. The latter part of the chapter is concerned with the structures of platform communication. It describes how sites and connections can be identified in these processes, how these sites and connections combine, how they are connected to wider deliberative systems and how the sites' and connections' specific characteristics affect their deliberative qualities and the qualities of the deliberative systems (chapter 5.2).

5.1 Specific Forms of Expression on Social Media Platforms and Their Value for Deliberation

Most social media platforms specialise in a certain kind of content.⁷ Nonetheless, all of them support some kind of verbal communication, and text-based and oral communication are the most common forms of expression on these platforms.⁸ Among deliberative theory scholars, these verbal forms are the most commonly discussed. But non-verbal forms of expression are likewise very important within the communication on social media platforms, and they have brought new aspects to deliberative systems that operate under the conditions of the digital constellation.

Many deliberative theory scholars of the earlier generations do not ascribe particular deliberative value to non-verbal forms of expression. Therefore, these scholars deny that such forms are admissible for deliberation. The discussion on the admissible forms of expression has a long-standing tradition in deliberative theory, and this discussion has been picking up in recent years. As I have described in chapter 2.1, the importance of non-deliberative speech acts, such as bargaining and storytelling, has been especially stressed by scholars of the deliberative systems approach. Lately, the role of non-verbal

7 Videos are prominent on YouTube or TikTok, photos are prominent on Instagram, texts or memes are prominent on Twitter/X, Facebook or Snapchat and so forth.

8 Both are, of course, specific neither to the digital constellation nor to social media platforms. Verbal forms are therefore interesting to discuss only in conjunction with other architectures, affordances and social configurations that are "digital-specific". I will do so throughout chapter 6, specifically in chapter 6.1.

forms of expression has gained some attention as well. Ricardo Mendonça and colleagues (2022), in particular, have addressed this matter.⁹ To their understanding, non-verbal dimensions of communication are especially relevant in the contemporary public sphere, which “involves a richer variety of communicative repertoires, including a range of non-verbal modes of expression such as symbols, images or even silences” (ibid.: 154).¹⁰ In most instances of communication, words and non-verbal forms of expression are combined, and “the meaning of these words is not simply determined by the words themselves, but it is co-constituted by the sound of the voice and the visual, sonic and physical context in which they are situated” (ibid.: 156). However, non-verbal forms of expression are not secondary to verbal forms but are meaningful in themselves and “can contribute something beyond words to deliberation” (ibid.: 155). They “may convey messages quickly; they can bring to light discourses and actors frequently neglected or ignored; they may engage with and challenge alternative perspectives that are beyond words” (ibid.: 167); and they often add affective qualities to communication (cf. ibid.). Therefore, non-verbal forms of expression can contribute to as well as reduce the deliberative qualities of communication processes, and they must be assessed by the same standards (cf. ibid. 155).

On social media platforms, most of the communication processes contain non-verbal forms of expression. “While these [forms] have always existed, they have gained further relevance in contemporary public spheres where public discussions are held in various platforms (both online and face to face) featuring diverse forms of communication” (Mendonça et al. 2022: 167). Social media platforms are among the primary communication channels that allow for communication not only through written text, but also by means of pictures, video, audio and one-click reactions. Due to their support for the use of such “alternative repertoires and symbols” (Hendriks et al. 2016: 1121), the platforms “have the potential to extend the boundaries of where and how publics form and meet” (ibid.). In this section, I will focus on the forms of non-verbal com-

9 However, before them, scholars such as Smith (2018: 21) and Bächtiger/Parkinson (2019: 70–71) have made remarks to a similar effect.

10 This is not a new notion to sociological thinking, which has a long tradition of analysing the importance of non-verbal forms of expression and symbols (cf., among many others, Berger/Luckmann 1980; Foucault 2002).

munication that are both specific to and central for communication in the digital constellation, especially on social media platforms.¹¹

5.1.1 One-Click Reactions and the Quantification of Communication

One-click reactions are the first form of non-verbal expression that I want to address here, because they are specific to digital communication and, in fact, central to various aspects of the workings of social media platforms. Users can react to other posts by clicking once on a link and thus submitting sentiment-centred reactions such as “likes”, or they can do so through the uncommented duplication and dissemination of the post (“share”, “retweet”).

One-click reactions purely express the user’s sentiments regarding a post. Positive sentiments are usually expressed by “likes” (Facebook, YouTube), “hearts” (X, TikTok), “love” and “haha” (Facebook) or “upvotes” (Reddit). Negative reactions can be expressed by “dislikes” (Facebook, YouTube, X) or “sad” and “angry” (Facebook).¹² Though the concept of tracking emotional responses is not new,¹³ it has considerably gained in prominence since the rise of social media platforms. Positive reactions, in particular, belong to the central design features of all the major platforms. They are prominently displayed, easily accessible, important to the users and, therefore, much used. The implementation of negative one-click reactions is more controversial than including positive ones in a platform, and it often takes more effort to submit one of the

11 I will not address text-based communication here since this is not specific to communication in the digital constellation. But I will cite deliberative theory scholars’ considerations on verbal forms of expression when I address the secondary structuring influences that *are* specific to – or especially important in – this constellation (chapter 6).

12 Facebook has experimented with a larger variety of reaction than other platforms, including positive, negative and even neutral reactions (such as “wow” and “hug”), in order to “give people more ways to share their reaction to a post in a quick and easy way” (cf. Meta 2022b).

13 “Together with other innovations [...] mid-century Columbia University sociologists Paul Lazarsfeld and Robert Merton devised like and dislike buttons as a novel data-collection technique. Lazarsfeld and Merton showed videos to regular people (such as housewives being encouraged to cook with less meat) and gave them buttons to record their emotional responses” (Silver 2021).

former.¹⁴ A version of positive one-click reactions is “sharing” (on Facebook) or “retweeting” (on X) a post, that is, duplicating it and disseminating it among one’s own contacts. This type of reaction is used to spread information or raise awareness of an emerging issue (cf. Bruns/Burgess 2015: 21), or it is used to express support for or approval of the sentiments conveyed by the post (cf. Veenstra et al. 2015). It is understood to express support for a post more strongly than liking a post does.¹⁵

Seen from a deliberative systems perspective, one-click reactions in and of themselves are rather non-deliberative, and standards such as common-good orientation, authenticity or reason-giving hardly apply. But they seem to enhance at least some deliberative qualities. For example, pushing the focus on one-click reactions has been a central instrument for Twitter in its attempts to support respectful communication and thus resolve its issues with harassment and abuse (cf. Newton 2020g); these latter kinds of communication are precluded by the non-verbality of one-click reactions. Moreover, platforms “utilize a system of up- and down-voting so that (pseudonymous) users can signal what is or is not acceptable according to the group norms of their digital space” Forestal/Philips 2020: 591. These architectures therefore seem to support an increase in *respect* and civility within digital communication processes – or at least, positive one-click reactions are designed so that they do not afford disrespectful communication.

Moreover, due to their accessibility and the one-person-one-vote mentality behind them, one-click-reactions appear to have heightening effects on *inclusivity* and *equality*. Helen Margetts and colleagues (2017) describe participation through following, liking, tweeting, retweeting, sharing text or images relating to a political issue as “tiny acts” of political participation; Margetts (cf. 2019: 108) adds signing up to a digital campaign to the list of such “tiny acts”.. Tiny acts of political participation – or, as Jeanette Hofmann terms it, “digital political involvement ‘to go’” (2019: 39, author’s translation) – are very convenient for the users themselves, because these acts demand less collective identification from them while giving them more room to experiment with individual self-efficacy (cf. *ibid.*). The acts thus lower the bar for participation, “draw-

14 For example, to submit dislikes on Facebook, users need to install a browser add-in, and for signalling non-interest in a TikTok video, users need to enter a pop-up menu and scroll through the choices (cf. Krasnoff 2021).

15 This is why academic studies have sometimes analysed retweet networks on Twitter (now X) as a proxy for support networks (cf. Gruzdt et al. 2011; Kuyper 2020: 9).

ing new people into politics, particularly young people, whose absence political commentators have been bemoaning for years” (Margetts 2019: 108). The acts thereby increase inclusivity and equality.

On a systemic level, tiny acts of political participation can scale up in emergent phenomena such as attention spirals and information cascades, and these can result in large-scale mobilisation (cf. *ibid.*: 109). The shift towards these unpredictable and ephemeral forms of mobilisation that are based on tiny acts of digital participation “has brought an era of what we labelled [...] *Political Turbulence*, where politics becomes harder and harder to predict” (*ibid.*: 109–110, orig. emph.).¹⁶ This turbulence “threatens democratic institutions of all kinds, by showing that political figures from outside the mainstream [...] can win, or at least garner huge levels of support in surprising ways in a short space of time” (*ibid.*: 110). On the one hand, this can be read as an increase of *inclusivity*. On the other hand, Margetts and colleagues seem to imply here that information and campaigns can circumvent the legitimate and *rationality*- or *authenticity*-based filtering mechanisms that ideally lead to the mainstream by, instead, using alternative, platform-based methods to generate attention.¹⁷ Consequently, “[s]ocial media seem to inject instability into traditional democratic institutions” (*ibid.*).

However, there are aspects to one-click reactions, as well as to textual comments, that are highly relevant for deliberative qualities: all these kinds of reactions are quantifiable; and the reaction statistics for each post are prominently displayed in its vicinity and build the primary foundation for recommender systems and algorithmic moderation. I already addressed some more general implications of quantification for deliberative systems when I described the digital transformation of the public sphere (chapter 3.2). Here, I want to zoom in on the most important effects on the deliberative qualities of digital communication processes.

16 The concept of “political turbulence” is further explained by Helen Margetts and her colleagues (2017) in the similarly named book.

17 For example, “trending information, showing the most popular petitions, has been shown to concentrate petition signing in those petitions at the expense of the petitions not making it to the trending box” (Margetts 2019: 110–111). Thus, it is not the most rational or sensible petitions that gain support but the ones that have been featured by the platform as trending. The attention and engagement that lead to trending can be caused by all kinds of reasons, including controversy and humour (as I will explain below and in chapter 6.1).

First, the quantification of interaction influences the participants' communications with regard to both their contents and their forms of presentation. "On social media, [...] we know straight away how many people like, follow, share, view or discuss an issue or news item" (ibid.). Consequently, users can compare posts in a digital deliberative site by considering the number of reactions. They are likely to give more weight to those posts that have caused more reactions overall, and specifically to those posts with more likes, reposts and comments.

Hence, though one-click reactions do not actually contribute new aspects to a communication process, they express support for certain viewpoints – or the lack thereof. They can thus affect the general direction of the communication within a site. Furthermore, "decades of social science show that information like this is a crucial influence on how much we ourselves support something" (ibid.). In other words, people tend to agree with statements that conceivably have high support from other people, instead of making their own judgements based on *reason*. This tendency is potentiated by the recommender system's reliance on exactly the same supporter counts when selecting the order in which to present results. Consequently, statements that already have elicited many reactions are shown to more users, and these users are themselves more willing to react to them due to the already-high reaction numbers.

Moreover, quantification can change the incentives for communicating in the first place. On the one hand, the engagement metrics on platforms like Twitter (today known as X) function as scoring mechanisms, as C. Thi Nguyen (2021) argues. Achieving higher scores often substitutes for other goals of conversation, such as *truth-seeking* and collective understanding (*comprehensibility* and *openness*), "because it feels so good to watch those numbers go up and up" (ibid.). Or, in a more negative interpretation, users are driven by fear in their adaptation to the centrality of interaction scores: "Once people sense that they might be judged for the frequency and volume of their interactions, they are likely to start interacting to match the expected performance levels. The visibility of interactions through data will inevitably fuel the interactions themselves" (Beer 2002).¹⁸ On the other hand, some users can profit financially from high reaction scores. Those users whose income depends on these scores have thus been motivated to spread misinformation, even independently of their

18 David Beer (2020) has predicted that this tendency will increase in the future, due to increasing user numbers and to the consequently increasing need to make networks and feeds manageable by analysing and trimming them back.

personal political opinions. For example, in a misinformation campaign in the run-up to the 2016 US presidential campaign, “at least some distributors had no particular political axe to grind, but instead were simply exploiting the affordances of the network by circulating ‘clickbait’ carefully designed to earn the clicks, views, shares, and retweets that generate advertising revenue” (Cohen 2017: 151). So, users are induced to participate in communication because they want to improve their interaction scores, not because they want to convince other users by their reasoning or want to know what these other users think. These two inducements are incompatible. The platforms “can’t offer a score based on quality of engagement, empathy, or depth of thought”, because the interaction scores have to be “easily legible to its systems: like whether or not somebody clicks on Like” (Nguyen 2021).

Consequently, many users participate in communication as if it were a game, or they even internalise the scores, permitting their enduring goals to be influenced by the platforms’ scoring mechanisms. To do so is highly alluring. For example,

Twitter makes the scoring system pervasive and highly salient through its user interface. The ready availability of this pre-fabricated, neatly packaged evaluation system may, by itself, discourage further reflection on one’s values. More importantly, Twitter’s metric is hard-wired into the system. Even if we managed to discover that we did, in fact, want to adjust the heuristic, that adjustment is hard to do on our own – because the scoring system is embedded in an externally-controlled technology. [...] Twitter’s interface comes with a pre-fabricated, hard-wired measure, which points its users firmly in the direction of popularity – rather than allowing the user to search out the heuristic that best matches their own interests. (ibid.)

This forced shift and simplification of communication goals clearly jeopardises deliberative qualities such as *authenticity*, *reflection* and – in the case of disinformation – *truth*. This is especially the case when users who approach platform communication explicitly as a game “don’t clearly mark themselves as game-players”, when they “are conversing in bad faith [and] are presenting themselves as engaging in a discursive, epistemic practice while actually being guided by non-epistemic motives” (ibid.). Moreover, when “other [...] users take game-playing users as serious participants in sincere discourse, [...] these others will be mistaking gaming talk for serious testimony” (ibid.). This im-

pairs *mutual comprehensibility* and the ability to contextualise the game-players' posts and assess their authenticity.¹⁹

Though I would refrain from the generalisation that each and every social media user communicates purely with the aim of generating reactions, I would concede that the platforms' architectures endorse such a mentality, that how to generate reactions is a central point of interest in the discourse surrounding platforms²⁰ and that many of the users probably often compose their posts with at least the partial aim, at least, of generating reactions.²¹ Indeed, Nguyen himself describes users who have "avoided internalizing the scores of Twitter in any way" and who treat the quantified reactions "merely as useful data" (ibid.). Yet while the platforms' architectures are not actually enforcing gamification or value change on their users, they still offer "an intoxicating hedonic reward" (ibid.) for trying to elicit as many reactions as possible.

Deliberative theory scholars have discussed the possibilities of and attempts at using gamification techniques to the advantage of deliberation. According to John Gastil and Michael Broghammer, there are forms of gamification that can prove beneficial to deliberative sites and connections. "Lab and case studies have shown that different game-inspired features may draw people into [deliberative] spaces, hold people's attention, and alter their behavior and attitudes – whether to induce purchases, forge social connections, or build bridges across cultural divides" (Gastil/Broghammer 2021: 11). In these experiments, the scoring systems were much more complex and in line with deliberative standards than the simple reaction-based scoring systems of social media platforms. However, the authors also caution against the potential downsides of gamification and warn that it can produce unwanted results. For instance, a study on participatory budgeting showed that gamified digital spaces for political communication "could prove so enticing that they draw too much energy away from other political channels, such as public protest and campaigning" (ibid.: 10; citing Meloni et al. 2018). Gamification of sites might thus actually decrease *inclusivity* on a systemic level and reduce the diversity

19 In chapter 3.2, I already described in more general terms how quantified data omit additional information that can help participants assess the authenticity of particular information.

20 For every major platform, there are courses to learn the dos and don'ts involved in the quest to generate engagement (cf., e.g., Melotti 2018).

21 The latter is one point in the definition of communication that I introduced in chapter 2.1, though, according to this definition, the anticipated reactions do not have to reify as one-click reactions.

of sites, since they draw participants to the gamified spaces that have very specific contexts. This warning seems even more plausible in light of the sheer number of social media users and the platforms' importance for deliberative systems, in combination with the fact that, despite the platforms' ostensible support for meaningful communication, they are actually driven by simple reaction-based scoring systems.

As I already noted, the more negative reading of the gamification argument implies that users are driven by fear in their adaptation to interaction scores. The importance of quantified reactions seems to build pressure for the users and to turn platform communication into a competition.²² "The competition for the validity of one's own arguments has turned into a competition to secure one's own visibility in the digital realm" (Cardon 2017: 139, author's translation); the *rationality* of an argument is superseded by the striving for reactions. Consequently, a "friendship or interaction economy is formed in which we are judged and ranked in a marketplace of engagement based on our volume and frequency of connection" (Beer 2020) – not on the *rationality* or *truthfulness* of our contributions to the discourse. Due to this pressure, platforms such as Instagram have repeatedly been criticised for being detrimental to mental health (cf. Newton 2021c; Spiegel 2021). Mental health problems of the participants, in turn, would negatively affect deliberative qualities such as *rationality*, *authenticity*, *non-coerciveness*, *truth*, *open-mindedness* and *orientation towards a common good*.²³

Social media users employ various techniques to provoke reactions and thereby achieve higher scores. For example, "one reliable way to encourage people to comment is to post divisive content" (Narayanan 2023). Similarly, "sensational rather than factual content turns out to satisfy this criterion of maximal 'share-ability' best" (Marres 2018: 430–431). Another effective way to reach a large audience – and increase the potential number of reactions – is to "[s]teal some questions that went viral somewhere else, spam them on your page, and presto: you're one of the most-viewed links for the entire quarter on the world's biggest social network" (Newton 2021d; similarly, Melotti 2017). All these strategies imply a lack of qualities such as *authenticity*, *truthfulness* and *rationality*.

22 Influencers, who directly monetise reaction and follower counts, especially depend on the public display of these numbers (cf. Spiegel 2021).

23 Instagram tested hiding the number of likes, and it found that "removing likes doesn't seem to meaningfully depressurize Instagram" (Newton 2021c).

Yet it is not only individual actors that are trying to artificially increase their reaction scores, but often “large, well-coordinated groups”, and the platform companies are acutely aware of this (Tarnoff/Weigel 2020: 95). That is, users also join ranks in order to employ more systemic methods of increasing reaction and follower counts and thereby increasing their visibility. For example, before and after the 2016 US elections, the Russian propaganda organisation “Internet Research Agency” aimed to influence the public discourse on various platforms through various orchestrated operations (cf. Diresta 2018; Thompson/Lapowsky 2018). It used strategies such as the deployment of fake accounts, the mass posting of divisive content, posting memes, targeting contents to specific audiences, selling vast arrays of merchandise and recruiting users with job listings or suspect advertisements (cf. Diresta 2018; Thompson/Lapowsky 2018).²⁴ Additional cases in which strategic combined efforts have been used to gain reactions and attention include: Macedonian teenagers who made advertisement money by spreading sensationalist misinformation on Facebook (cf. Silverman 2016); “collab houses” where influencers live together for the entertainment of their followers (cf. Lorenz 2020a); Instagram comment pods, where users agree to react to each other to increase their scores (cf. Melotti 2018); organisations that sell followers for different platforms in a gradual way that is not detectable by fraud detection algorithms (cf. *ibid.*); and countless versions of automated and semi-automated reaction generators that users can pay for (cf. *ibid.*). Again, qualities such as *rationality*, *authenticity* and *truthfulness* are impaired when the quantity of reactions is more important than their actual contents. Moreover, in this situation, the orchestrated and joined efforts are detrimental to *equality* between the users who join the effort and those who do not, as the organised insiders outweigh and therefore dominate the unorganised outsiders.

24 Since then, platforms have reacted in order to prevent many of these measures as far as it is possible. For example, Facebook has taken measures to “make it more difficult for people to disguise their identities or countries of origin” (Newton 2021d), and it “routinely removes networks of pages where the creators’ identities are suspect” (*ibid.*). The platform now also has “a policy against ‘abusive audience building’ – switching topics and repeatedly changing a page’s name for the purpose of growing a following” (*ibid.*).

5.1.2 Images and Sounds

Social media platforms also provide architectures that allow the inclusion of various forms of *images* in the communication processes and thereby “enabl[e] rapid and easy circulation of (moving) images” (Mendonça et al. 2022: 156). These images “are used not only to mobilize support and build solidarity, but also to rescript the discursive and geographical contours of [...] controversy” (Hendriks et al. 2016: 1118). Photographs, for example,

add an unspeakable dimension to the issues at stake by inducing shock, disdain, amusement or sympathy [...]; they can also draw attention to certain issues, expose suffering in traumatic situations, challenge existing interpretive frames, advance new agendas, evince wrongdoing and mobilize citizens for action (Mendonça et al. 2022: 160).

Thus, images can go beyond words. They “assemble complex information and make it perceptible at a glance” (ibid.: 158), and they “can express reasons that are difficult or impossible to put into words” (ibid.: 158; see also Curato et al. 2019; Shifman 2014). For example, there is an image that often travels through social media platforms in the context of a discussion on a general speed limit on German highways. This image shows a map of Europe with signs indicating the speed limits on the highways of each country. The sign for Germany varies according to the political standpoint and humorous intention of the author – from signs conveying the *Richtgeschwindigkeit* of 130km/h, which downplay the problem by implying an equivalence of speed limit and *Richtgeschwindigkeit*, to a sign indicating the ridiculously high speed limit of 350, to a sign indicating a speed limit of 88, which points to the right-wing tendencies of the arguments that have thus far prevented the introduction of a general speed limit on German highways.

Thus, images can aid in the expression of and reflection on reasons that would otherwise be overlooked (cf. Mendonça et al. 2022: 158–159) and thereby promoting deliberative qualities such as *reason-giving* and *inclusion*. Images, furthermore, are particularly apt for conveying and inducing emotions. Hence, they can also “enhance empathy and induce reflection that would not be achieved through mere verbal exchange” (ibid.: 160), and they can “make other people’s views and realities more comprehensible, thus nurturing other-regarding views” (ibid.: 161). Therefore, marginalised groups “may make their arguments perceptible by visual illustration rather than by verbal expression”

(ibid.: 159). Images can thus also improve qualities such as *listening*, *reflection* and *respect*.²⁵

On social media platforms, conveying and supporting political messages through images is especially common. On these platforms, particularly, users enter into a “peer-to-peer exchange of self-created news through digital visualization [that] challenges entrenched divisions of power” (ibid.: 160). There are countless examples in which users document occurrences of discrimination, abuse and war crimes and thus raise awareness of and reflection on issues through the power of visual images. Among the most prominent examples of the last years are the documentations of police brutality against members of ethnic minorities that have been circulated across social media platforms and have resulted in global discussion on racial power asymmetries (cf. ibid.). From a deliberative systems perspective, this exactly fits the notion that sites of the public sphere are often the best places for bringing issues to the political forefront – a notion that has already been voiced by Habermas (1996: 354). The central qualities for this are *inclusivity*, *listening* and *equality*, all of which are displayed to a high degree in these examples.

Images that are communicated on social media platforms often come in the form of memes. Generally, memes are “social or cultural elements whose primary purpose is replication” (Edwards 2022: 29). They “spread through social networks as they are picked up and transmitted from one person to another by means of reposts, reactions, and modifications” (ibid.: 29–30).²⁶ Though, essentially, memes can be generated from any cultural object, the most popular memes on social media platforms are based on images. Elements of these images are reappropriated “in order to contribute to ongoing conversations” (ibid.: 30):

Activists of Occupy Wall Street, for instance, created memes using a photograph of a riot policeman in military gear, pepper spraying students sitting on the ground as part of a sit-in protest. The image was then taken up and reproduced in various memes showing “pepper spray cop” spraying Jesus Christ at the last supper, Rosa Parks sitting in the front of the bus and the protester

25 In chapter 6.1, I will come back to the relevance of the expression of emotion.

26 Though older cultural forms, such as fables, caricatures, and political cartoons, can be seen as historical predecessors for memes (cf. Lyons 2020: 12), the properties and affordances of digital communication render the internet “the ultimate meme hothouse” (Rintel 2013: 256).

standing in front of a tank in Tiananmen square. Another version shows “pepper spray cop” spraying ink over the US constitution [...]. Social actors who create and share these memes intend to make a public argument about the dangers of institutional violence, recurring to signs and figures capable of resonating culturally to their audiences. (Mendonça et al. 2022: 159)²⁷

Thus, memes contribute to arguments; their consistent part “links visual arguments to one another, while alteration of the image articulates a response and adds new content to the conversation” (ibid.: 159). In this manner, they “often assume archetypical scripts, normative messages, and cast actors involved as stock characters” (Lyons 2020: 14), and they thus “provide accessible scripts with which to enter and shift debate” (ibid.). With these strategies and characteristics, memes increasingly enter political discussions. There, they “can be utilized by users to take stances on and react to political events, they can challenge mainstream discourses and viewpoints, and they can mobilize voters, but they can also simplify, divide, and perpetuate dominant ideologies and falsehoods” (Chevrette/Duerringer 2020: 242). Due to this inclusion in political discussions, they represent an “online performance of citizenship” (ibid.). The many levels of an image that are created in a meme make an argument visible in a strong, often emotive way and in one glance convey many of its facets to those who follow the communication process. Consequently, memes are important contributions to the communication processes of the digital informal sites of deliberative systems that operate under the conditions of the digital constellation.

Hence, memes must also be – and they have been – evaluated with regard to their impact on the deliberative qualities of these communication processes. First of all, memes are by definition *reciprocal*. That is, their nature of imitating and adjusting tokens that have been brought forward by other participants implies a minimum of *listening*, *comprehension* and *reflection* on the part of the users that post them. Moreover, memes “dramatize politics by way of binary representation of issues [...] and are often vivid renderings that elicit emotional responses” (Lyons 2020: 14). They therefore “offer grounding for abstract policy points, making debate more *inclusive*” (ibid., own emph.). Depending on whether the projected emotions are positive or negative, memes can, moreover, increase or decrease deliberative qualities such as *listening*, *comprehension* and *reflection*, and they can convey *authenticity* (cf. Chambers 2009: 336; Wright

27 The *Richtgeschwindigkeit* map is another example of a meme.

et al. 2018: 78; Graham 2009: 160). While Zizi Papacharissi (2015: 120) has cautioned that a predominance of emotion in communication processes ^{jeopardises} qualities such as *rationality* and *truthfulness*, Mansbridge (1999: 225–226) has argued that emotion and reason are conjunct. Since memes mostly play on the emotions of the audience, both these assessments apply here as well. However, memes are “ambiguous and negotiable” and users can “emphasize them differently in different contexts” (Lyons 2020: 14). So, the comprehension of and emotional response to memes can differ widely. The same meme can both contribute to and detract from deliberative qualities, depending on the context of the communication processes it is part of.

Audio and sound elements provide another means of expression that is afforded by the architectures of most social media platforms. Like images, sounds can convey messages in a way that goes beyond words. Deliberative theorists have found that sound elements “play a significant role in public deliberation” (Mendonça et al. 2022: 161). They “can be used to draw attention to the causes of marginalized groups”, and they can “engage with dominant discourses and induce reflection about their meanings” (ibid.). On social media platforms, the effect of sound is different than in face-to-face encounters. In the latter, singing, chanting or drumbeats may be used to draw attention to a perspective or drown out other voices (cf. ibid.). Digital communication usually occurs in separate posts, due to the technical infrastructures enabling it, and sounds are utilised in a different manner. Attention-catching and drowning-out effects, on the other hand, are achieved by non-sonic tactics such as flooding sites with specific posts, gaming content moderation systems or “trolling”.

One of the especially important forms of sonic contribution to communication processes on social media platforms is music.

Pitch, rhythm and sonic qualities convey meaning beyond words that can work to include marginalized groups. Songs cannot be reduced to the content of their lyrics only [...]. Music offers a way of perceiving the world; it “reflects the manufacture of society; it constitutes the audible waveband of the vibrations and signs that make up society” (ibid.: 162; citing Attali 1985).

From a deliberative theory perspective, therefore, music can be seen to “work as an important element for inclusion in deliberative processes” (ibid.: 162).²⁸ On social media platforms, music is often combined with (moving) images and used to convey emotions and atmosphere, which supports *authenticity*.²⁹

Another prominent sonic element in digital communication processes is the sound of voices. On the one hand, platforms by now provide architectures that enable users to record their voices and post these recordings, usually in video formats. On the other hand, users can talk in spaces that resemble conference calls, such as Audio Rooms on Facebook or Spaces on the website formerly known as Twitter (cf. Newton 2021b, 2020g).³⁰ Here, the sound of voices becomes especially important. “Sound is inherent in all non-written linguistic expression as talk does not only consist of mere words but of voice and its sound as well” (Mendonça et al. 2022: 163). Kayvon Beykpour, the head of product at the website formerly known as Twitter, reasoned in a similar manner when he explained the introduction of Twitter Spaces:

When you can hear someone’s voice, you can empathize with them in a way that is just more difficult to do when you’re in an asynchronous environment. ... We think audio is powerful, because that empathy is real and raw in a way that you can’t achieve over text in the same way. (Newton 2020g)

This stress on empathy shows the qualities Twitter has hoped to increase with this format – *listening*, *reflection* and *respect* through empathy and *authenticity*. This aligns with the observation made by Mendonça and colleagues that the specific sound of a voice, its timbres, intonations, accents, rhythms and frequencies, may induce or hinder these qualities (cf. Mendonça et al. 2022: 163). The voice “can bring the speaker closer to listeners because [it] speaks of life

28 Mendonça et al. (2022: 162) give the example of rap music in order to illustrate music’s ability to convey political messages. Beyond the messages contained in the lyrics, sounds in rap music “work to vent anger about the injustice of marginalization at the intersection of class, race and age, aiming at promoting the inclusion of certain voices in the public space. [Rap music] is an attack in the form of defence, amplified by the beat of the drums and the volume of the loudspeakers”.

29 See chapter 6.1.

30 Moreover, the constantly developing dominant platforms repeatedly work on introducing new audio formats. For an example regarding Facebook, see Newton (2021b).

experience and social positionality” (ibid.).³¹ How participants speak and hear voices, moreover, “is produced by, and reproduces, codings of power, class, gender and race” (Kanngieser 2012: 339). It therefore may enhance or decrease deliberative qualities such as *inclusivity* and the *absence of domination* within a communication process.

Very often, images, sounds and text are combined in *video formats* on social media platforms. The effects of these different forms of expression on deliberative qualities are combined here, too. Thus, users tend to interact more with video contents than with other forms of expression, even on platforms that primarily focus on still images (cf. Newton 2022b). One might argue that communication via video comes closest to face-to-face communication. However, the logics of communication processes on social media platforms, such as how individual posts are connected to discourses and how they are ordered and presented to the users, reveal that the remaining gap is still very wide.³² The functions and value of communication through social media platforms, with their specific architectures for deliberative systems, are different from those of face-to-face interactions – which fits well with the notion of a division of labour within systems that is advanced by the deliberative systems approach.

5.2 Fundamental Structures of Communication Processes on Social Media Platforms

Social media platforms do not only allow for specific forms of expression. They also provide architectures that lead to specific structures of the communication processes that, from a deliberative systems view, can be interpreted as deliberative sites and as the connections between these sites. In this chapter, I will first demonstrate how sites and connections can be distinguished to make the complex structures of communication on social media platforms more accessible. Based on my conceptions of digital sites on platforms and the connections between them, I will proceed to analyse the role and embeddedness

31 Moreover, if people hear specific voices more frequently, they often get the impression of knowing the person, while, in reality, there never has been a direct contact with the person. In chapter 6.3, I will come back to such parasocial relationships.

32 Even when taking into account the architectures for livestreaming and the reactions that many platforms provide, one must consider the missing physical dimension, whose effects on deliberation are described by Parkinson (2012a) and Mendonça and colleagues (2022).

of digital sites and connections for deliberative systems and how that affects the deliberative qualities of the respective communication processes.

5.2.1 Identifying Sites and Connections on Social Media Platforms

Here, I will demonstrate how sites and connections can be identified and distinguished on social media platforms. In this first part of the chapter, I will only sporadically comment on the effects of deliberative qualities that are implied by the architectures, as there is too little context to make many reasonable assessments at this level of abstraction. But I will revisit many of the points I make here throughout the remainder of this book.

Sites

In chapter 2.2, I defined deliberative sites as arenas where participants have the opportunity to communicate with each other on political issues. The participants are aware of other individuals' participation in the site. They "communicate" in the sense that individuals express their thoughts according to their expectations of how these expressions will be understood and reacted to by other individuals. Each participant has the opportunity to react to each other participant's contributions, though the respective opportunities do not have to be similar, and participants do not have avail themselves of such opportunities in a similar manner. At least some of the participants take the opportunity to interact.

The architectures of social media platforms produce structures, that is, certain clusters of communication, that adhere to this definition of deliberative sites. These clusters address political issues, the authors of the contributions are aware that other users are viewing their posts, other users take the opportunity to react to these posts, and all the posts belonging to the cluster are tied to a common anchor. I therefore propose to approximate digital sites with such clusters of posts. The anchors can be singular posts, issues, groups or profiles, as I will describe in the first section of this chapter. Further patterns within these often-large digital sites are generated by referencing techniques. In the second part, I will address how commenting on a post, implicitly referring to the content of other posts, "mentioning" other users or referencing multiple anchors will produce such patterns. These patterns can furthermore result in smaller deliberative sites.

All social media platforms provide spaces where users can direct a post without any specific context at a general audience in the hope that it will

be distributed widely via the platform's moderation systems. When posting such blog-type communication, individuals "are not so much 'talking to one another' as they are 'posting notices for all to read'. Others might (or might not) take note of them, and reply" (Goodin 2003: 176). While such posts may contribute to a wider discourse or implicitly refer to contents that have been posted by other users, they do not refer to a discourse in a way that automatically connects them to it and makes them particularly visible to other users contributing to it. Deliberative theory scholars argue that "merely posting notices on billboards or the internet [...] does not in and of itself constitute communication, much less full-blown deliberative democracy" (ibid.: 177). Though, per my definition of communication, such blog-type posting does constitute communication, this clearly does not necessarily qualify as *reciprocal* communication. In practice, pure blog-type communication is very rare. Most platforms provide different possibilities to explicitly anchor posts on deliberative sites.

There are different facets of a discourse that can serve as anchors for posts. Users can explicitly contribute to a debate, for example, by commenting on a post, by including hashtags or by contributing to groups or profile pages. These types of anchoring result in different spaces of interaction that can be interpreted as deliberative sites.

The first type of sites emerges when users "comment" on a specific post. Users can take up a point made in the anchor post and comment on it, frame it or add to its arguments. Comments usually take the form of text but may be supplemented by any other form of expression the respective platform architectures support. If the anchor post concerns an issue of a deliberative system, all comments on this post form a deliberative site, and the authors of these posts are its participants. Viewed from a deliberative systems perspective, post-anchored sites imply at least a minimum of *interactivity*, since reacting to something in and of itself means connecting anchor and comment at least on a technical level.

Thirdly, some social media platforms provide the architecture for users to join groups and thus anchor the post on the space of the respective group. Platforms

have lowered the costs of forming affinity groups of all kinds. Platform users can more easily find and connect with others who share their hobbies and passions, their political affiliations and goals, their racial, religious, or gender identities, their affiliations with real-world communities (such

as neighborhood or parent-teacher associations), and many more. (Cohen 2017: 148–149)

Groups on social media platforms remain relatively stable. Users can exit or join them and thus become participants in the site, but doing so involves slightly more friction than contributing to an issue-anchored site.³³ Groups can therefore be less *inclusive* than other types of digital sites. On some platforms, groups are “a place to communicate about shared interests with certain people”, and “[y]ou can create a group for anything – your family reunion, your after work sports team or your book club” (Facebook Help Centre 2022a). As can be seen by this description of Facebook Groups, these spaces are designed to mirror social configurations that already exist in non-digital spheres. Thus, their participants may display greater *authenticity*, mutual *comprehensibility*, *listening* and *respect*. Since the participants cannot effectively hide behind their pseudonyms but may be held accountable for their contributions in the parallel non-digital constellations, they are more likely to refrain from acting out an alternate persona.³⁴

Lastly, digital social media posts can be anchored on specific profiles. On many social media platforms, profiles come with spaces for other users to publicly or semi-publicly address the profile owner, comment on her posts or otherwise interact with her.³⁵ The posts in these spaces are anchored on the respective profile and can additionally be anchored on specific posts. The profile spaces can be considered deliberative sites if they address an issue of a deliberative system.³⁶ These spaces can then be viewed as “*stage[s]* where political com-

33 That is, joining a group often requires an application to do so and confirmation by some group moderator.

34 In chapter 6.3, I will elaborate on the implications of anonymity and pseudonymity. Of course, there also are more temporary groups that, for instance, revolve around certain events and dissolve after the event has happened.

35 To give an example, Facebook provides the architecture to set up pages that represent individual persons, organisations, other social groups, pets and much more. On these pages, the profile owners as well as their friends can submit posts. YouTube provides similar spaces where content producers with their own channel can address and interact with their “community”.

36 In fact, one of the very few qualitative analyses of digital deliberative sites focussed on these kinds of profiles when it analysed partisan Facebook pages regarding a specific issue (cf. Hendriks et al. 2016). This study by Carolyn Hendriks and her colleagues finds that “environmental controversies enacted on social media share many features with offline venues of political contestation” (ibid.: 1117).

munication is performed” (Hendriks et al. 2016: 1103). Depending on the profile owner, they can be closely connected to specific issues. For example, pages of gas companies or environmental activists are partisan sites in a deliberative system on gas well projects almost by definition, as Hendriks and colleagues (ibid.: 1107–1108) argue in their study. Such sites are often

scripted and staged to emphasize or support particular values [...]: they project particular frames, provide interpretations of events and decisions, assert particular “facts” and contest others, promote particular events, and cast protagonists and antagonists to highlight the trustworthiness (or lack thereof) of key players (ibid.: 1117).

But profile spaces can also be more topically open and only occasionally touch upon a system’s issue. Profile-anchored sites are relatively stable, as long as the profile is active. The deliberative qualities of such sites largely depend on the platform architectures and profile owners. To name an example, on many platforms, these sites are curated by the owners and are therefore susceptible to their *domination*. In consequence, other qualities, such as *inclusivity* and *publicity*, as well as *respectful communication*, are dependent on the profile owner’s profile settings, curation and moderation. Moreover, the staging of political communication can undermine the *authenticity* of contributions.

Which of these types of anchoring are dominant on a platform depends on the culture and collective practices of the specific platforms and their communities. For example, using the picture-sharing platform Instagram to post pictures and videos that are not connected with a particular issue seems to be more rational than using Twitter/X to post political opinions that are unconnected to any former discourse. Moreover, these types of anchoring are often combined in practice; for instance, any anchored post can itself serve as an anchor for comments. The connections that are thus formed between the posts represent the fundamental structures of the communication processes on social media platforms.

Some of the sites I just introduced can become extremely broad due to their wide accessibility and their low thresholds for participation. In such broad sites, users can form smaller groups or communities within a site by using referencing techniques. That is, users can *reference* each other or each other’s posts. They can thus immediately and noticeably react to what has already been relayed within the site. Different platforms provide slightly dif-

ferent referencing techniques, but there are roughly four methods that are available on nearly all of the platforms.

Firstly, patterns within larger deliberative sites can result from the reactions to a post. As I have described above, users can react to posts with one-click reactions or by commenting on a post. All forms of reactions can be quantified (which produces the various effects on deliberative qualities that I described in chapter 5.1). Regarding the patterns within a site, moreover, posts that generate more reactions are perceived as more important by other participants. The quantification of reactions thus emphasises certain contributions and side-lines others. Content moderation systems increase this effect, as they use the numbers of reactions to select and order the supposedly most important posts. Posts with the highest numbers of reactions are thus perceived as more important, though the higher weight does not usually reflect a higher degree of deliberative qualities like rationality (see chapter 5.1).

Secondly, patterns can emerge through the users' implicitly referencing other posts, that is, through referring to other posts without explicitly adding the respective anchors.³⁷ The referenced contents might have been presented on the same platform in the same anchored deliberative site, but they can likewise be tokens from more widely known popular culture. By directly reacting to another post, users can form patterns within the respective site. Noticing and understanding implicit references requires all participants to know of and reflect on the referenced post and even the context it was posted in. It therefore involves deliberative qualities like *listening*, *reflection* and *interactivity*, but it can also *exclude* those who are not familiar with the reference from the communication process.

Thirdly, users can "mention" other participants through adding an @-handle to a post. The use of @-referencing has two effects. On the one hand,

37 For example, not all posts of a conversation that has been inspired by a certain anchor include the anchor in every post. This might even be founded in the wish to enhance deliberative quality, for, "to hashtag a response to a previous hashtagged tweet, in fact, may be seen as *performing* the conversation in front of a wider audience, by comparison with the more limited visibility which a non-hashtagged response would have" (Bruns/Burgess 2015: 19, orig. *emph.*) – performing conversation is here equated with lower quality. Conversation might thus simply "hang off" the anchor and develop outside the original site (cf. *ibid.*: 22). Another example of implicit references are memes. "The consistency of the image [...] links visual arguments to one another, while alteration of the image articulates a response and adds new content to the conversation" (Mendonça et al. 2022: 159).

platforms automatically notify the profile owner who is being mentioned, for example, by introducing the respective post in their feed. Referencing a handle in a post, in this case, signals the aim to include the mentioned profile owners in the conversation and to provoke their reaction. This enhances the potential for deliberative qualities such as *reciprocity* and *listening*.³⁸ On the other hand, @-referencing is often used to indicate that the post is referring to something that has been previously communicated by the referenced profile owner. Users may, for example, express their support for or opposition to contents that the mentioned user has previously posted on the site. In such cases, @-responses are used for “the smaller, micro-level of human interactions [...] between people who don’t know each other and never would have found each other without the [digital site]” (Rocheleau/Millette 2015: 245–246). Thus, these new connections enhance *inclusivity*, and the more personal address might support *authenticity*. Moreover, by expressly referencing posts and users, participants can more easily follow the argumentation and *comprehensibility* can be increased.

Lastly, patterns within deliberative sites can result from users’ referencing multiple anchors in one post. Referencing multiple hashtags, for example, “can be understood as an organizational strategy, allowing users in a hashtag community to manage information while broadcasting it” (ibid.: 244). Users who reference the same set of hashtags form sub-clusters within the deliberative sites of the respective single hashtag-anchored sites.³⁹ The co-occurrence of a

38 Consequently, references have been used to assess interactivity within a digital site. Thus, Axel Bruns and Jean Burgess based parts of their study on the assumption that a “high volume of [@-]response messages would indicate that users are not merely tweeting *into* the hashtag stream but also following what others are posting” (2015: 21).

39 An example to this effect has been given by Sylvain Rocheleau and Mélanie Millette in a study on hashtag co-occurrences on Twitter. They found that under a common meta-hashtag, several other hashtags have been used as markers to cluster the respective contributions. Thus, the meta-hashtag is the “[m]ain hashtag in a specific community or network” that is used “to differentiate the tweets relevant for this community from the entire Twitter stream” (Rocheleau/Millette 2015: 250). The hashtags that structure the communications within this community include civic and cultural markers that are “used to characterize or to distinguish a subject or an object in a given online community”, location markers that are “used to locate the tweets in a geographical context” that “may or may not contain a political or cultural connotation”, political markers that are “used to identify the level of government the tweet refers to or their corresponding politics and political topics and that “usually have a long-term presence in Twitter”, as well as topical markers that are “associated, for the most part, with news, events and

meta-hashtag with various clustering hashtags leads to cluster patterns within the digital site anchored on the meta-hashtag. The implications for deliberative qualities depend on the types of anchors that are combined.

The reification of patterns is heavily shaped by the culture and milieu on the specific platforms and in user communities (see chapter 6.1). Thus, patterns on YouTube might be more the product of @-responses, while hashtag-anchored sites on Twitter/X might include many more instances of multiple referencing.⁴⁰ Nonetheless, taking note of such patterns can give additional orientation in the analysis of the often vast and complex deliberative sites on social media platforms.

Connections

The platforms also provide different architectures to connect these digital deliberative sites. According to the deliberative systems approach, connections between deliberative sites can generally be relatively stable couplings between sites, or they can be established via alternative carriers of transmissions (see chapter 2.3). Both these types of connection are present on social media platforms. But since this chapter addresses platform architectures, I will focus here on the couplings.⁴¹

Couplings are mostly established by the platforms' specific technical features, and there are two modes of technically coupling deliberative sites on social media platforms. On the one hand, social media platforms provide architectures for direct couplings via hyperlinks, the use of which leads a user immediately from one deliberative site to another. For example, including a hashtag in a comment links the respective hashtag-site with the site at which the comment has been posted, and this link remains stable as long as the post is online. Hyperlinks provide full access to the site itself, as using a hyperlink leads a user

current affairs" and that are "[c]ommonly used to promote an event or comment on breaking news" (ibid.). I will come back to why and how these clusters build around community, geography and political leaning throughout chapter 6.

40 It should furthermore be noted that the reference types do not only produce patterns within anchored digital sites but also can occur across various digital sites or even entirely beyond the system, for example, by combining several large hashtags on different issues.

41 In chapter 6.3, I will address the individual user's role as a potential carrier of transmissions.

to the other site, but they do not actually transmit the contents.⁴² The *reciprocity* of these links depends on whether the connection is accessible from both sites. This is the case when a post includes multiple hashtags, which makes it occur in all the tagged sites. But even uni-directional links enable rather *strong* connections, as any user from one site can follow the link to access the other site. They can thus listen to and reflect on all or at least large parts of what has been discussed in the other site. In practice, this usually results in a problem of scale: nobody follows every link that has been referenced in one site and reads everything that has been discussed in the respective other sites.⁴³ But, the more users who follow the link and transmit contents and perspectives back into the original site, the tighter the coupling becomes. Therefore, the actual filtering is done by those users who include the hyperlink in the first place and transmit and frame contents from the other site in the process. Those users who follow the link and transmit further contents strengthen this connection.

On the other hand, social media platforms provide architectures for more indirect, volatile and complex connections between digital sites. There are spaces on social media platforms that display lists of posts that double as hyperlinks to the sites they have been posted in.⁴⁴ These link lists do not directly and inevitably link two or more specific deliberative sites. Instead, users can view the various links and choose for themselves which links to follow and how to behave in the respective sites. The selection of transmissions between two sites connected through such lists therefore depends primarily on the users that access the link lists and transmit contents between the sites. But

42 However, depending on the specifics of the platform architecture, couplings might not exist for all users in the same way. If the post is submitted to a specific group, forum or profile page with restricted access, users without access will not be able to view the post in the hashtag-anchored site (for example, cf. Facebook Help Centre 2022b).

43 Selecting the links to follow and the communication processes to read can be interpreted as the second instance of selecting transmissions. But in contrast to the first instance, this is a more dispersed and second-order kind of process, to which the definition of transmission I have given above does not fully apply. Here, different users make different choices as to what input they gather via the connections that are provided in a site. The contents they view in other sites are not actually transmitted to the first site and are thus not viewable for all the participants equally.

44 Such couplings might be classified as what Hendriks called “spaces that develop between parts of the system” (2016: 46). However, they are most probably not what Hendriks had in mind with her description (see chapter 2.3), since link lists do not resemble a communication process but merely display a collection of links that lead to different deliberative sites.

the probability that contents will be transmitted from one site to the other increases because they are part of the same list. Still, indirect couplings via link lists are much more loose than direct couplings via links.

The most prominent version of such a link list is the personalised feed that recommender systems provide for each user. This system predicts the posts with which the user is most likely to interact.⁴⁵ On most platforms, these feeds are based on the more stable connections between users. As a result, they present a selection of the latest posts by friends and followees (see chapter 4.1).⁴⁶ Many platforms furthermore introduce contents from users that, thus far, are not connected with the profile owner (cf. Healy 2015: 195–196; Newton 2022b; Scharkow et al. 2020: 2762). Users are thus repeatedly reminded of their existing connections with other users and, moreover, encouraged to forge new connections.

This can affect the strength of a coupling between digital sites and lead to site clusters (as I described them in chapter 2.4). Users that are technically linked as friends or followers are repeatedly encouraged to enter the same sites, because they are notified of each other's activities within these sites through their feeds. More specifically, one user may post in a site, and some followers of this user will be notified of the post and will have a direct technical link to the site in their feed. If these followers, in turn, react to the post or participate in the site, some of their own followers will be notified of the activity, and the user that has first posted in the site and thus inspired the second user's posting will most likely be included in this notification. This can cause the first user to participate in the site again and thus induce an interaction cascade for the set of users that are notified of the activities within the site. When there is an increase in the number of activities in a site from users within the same network

45 Moreover, there are spaces that display a list of all the posts that have been published by a profile owner, and such lists can then be viewed by users who click on the respective user handle. These lists are not personalised to the viewer, but otherwise they work similar to recommender feeds. Some social media platforms provide additional link lists that display more specific personalised recommendations concerning, for example, groups to join, pages to visit or individual users to befriend. Another type of link lists is the list of search results that a social media platform displays in reaction to specific user queries.

46 Such connections can be one-directional (usually “followers”) or bi-directional (mutual “followers” or “friends”, depending on the platform). In contrast to bidirectional links, connections between follower and followee do not have to be mutual, and followees usually do not need to confirm the link.

of friends or followers, there is an increase in the probability that these activities will be featured in the feeds of other members of this network and thus that the more of these members will participate in the site. Hence, the technical links between users (friends, followers) often overlap with the participants in digital sites and are mirrored by the referencing patterns within these sites. In cases where this dynamic applies to two or more separate sites at the same time, several users will repeatedly enter both sites. The probability of transmissions between both sites increases with each user and each user activity. In practice, one of the users will connect the sites with a direct link sooner or later. Thus, the coupling between two sites is not only initiated but also strengthened via personalised user feeds.

A similar consideration applies on a larger level to posts that are from individuals previously unconnected to the user and that are recommended in the feed. These recommendations are usually based on similarity metrics and the reaction numbers of the respective post. Similar posts that have already gained much attention are presented in more user feeds, which generates even more reactions. Hence, the probability of several users entering the same sites increases, which strengthens the connection between these sites. Thus, similar sites that are popular are more likely to have stronger connections than less popular sites or sites that are dissimilar. As I described in chapter 2.4, connections within site clusters are considered beneficial for comprehensibility. Empirically, this hypothesis has been tested, for instance, regarding language clusters and platform communities. As I will relay in chapter 6.2, clusters of sites display an above-average level of comprehensibility as a deliberative standard, due to a similar language and similar communicational conventions. Higher comprehensibility and higher homogeneity between sites are, in turn, estimated to strengthen systemic inclusivity, in the sense that the like-minded communication within and between sites can strengthen the positions of weaker political actors in the system (Mendonça 2018: 35).⁴⁷

In sum, there are various platform architectures that afford the development of post clusters that can be interpreted and conceptualised as deliberative sites, as well as hyperlinks and feeds that resemble direct and indirect couplings between these sites. These digital sites and connections represent the fundamental structures of the communication processes on social media

47 However, there is no empirical evidence to support this for social media platforms, specifically.

platforms. In the next sections, I will use the conceptualisations of and preliminary assumptions about platform architectures' effects on deliberative qualities in order to analyse the significance of these architectures for deliberative systems.

5.2.2 Platform Architectures' Significance for Deliberative Systems

As I described in chapter 4.2, social media platforms are highly interwoven with all parts of the deliberative systems they are part of. In the previous sections, I have also shown that social media platforms' architectures shape how their users interact with each other, how deliberative sites form and how they are connected. Consequently, these architectures likewise affect the wider deliberative systems. More concretely, they enable and constrain the ways in which the sites forming on the platforms are embedded within the wider deliberative system through these digital sites' connections to sites that are situated both in the digital realm and beyond. Systems approach scholars concur that social media platforms must be analysed with regard to how they are organised and implemented in deliberative systems (cf. Dryzek et al. 2019). For instance, "[w]hen viewed in the broader framework of deliberative systems [...] the deliberative potential of online systems depends on how they may fit into a larger institutional context" (Gastil/Broghammer 2021: 8). Platform architectures, specifically, can have varying effects on these systems, and these effects can spread far beyond the immediate confines of the platforms, or even the digital realm. Therefore, I will now turn to the effects of social media platforms' architectures on the deliberative systems they are part of.

Digital Sites' Connections to and Embeddedness within Deliberative Systems

Sites on social media platforms are embedded within the parts of the system that are situated on the same platform, within digital parts of the system beyond the platform and within the entire deliberative system, with all its non-digital spheres. As I have shown above, there are different ways in which sites on social media platforms are embedded among other sites on the same platform. Scholars of both the deliberative systems approach and digitisation research have observed and empirically studied various effects of this embeddedness. For example, Selen Ercan and colleagues note that "online spaces in particular can play a crucial role in establishing connections across different publics", and they can "facilitate transmissions in deliberative systems" (2019:

24). They find that both of these functions are essential in a healthy deliberative system. But while these connections are technically afforded by the platforms' architectures, they are not necessarily used to bridge different publics or work out an understanding between different perspectives. Thus, Jonathan Kuypers cites a quantitative Twitter study covering the 2010 US midterm elections that found that "users retweet information in ways that lead to polarization, but mention other users in ways that cross partisan divides" (2020: 9). In a qualitative Facebook study on environmental debates, Hendriks and colleagues come to a similar conclusion. They find that "the architecture of the networked publics mediated through social media encourages horizontal forms of interaction" (2016: 1121–1122), but that "their capacity to transform polarized debates and bridge opposing viewpoints on divisive environmental issues remains limited [due to] the tightly scripted performances that define the scope of such interactions" (ibid.). These performances "were more aimed at building solidarity (by sharing information and stories) and antagonizing opponents than forming bridges across deep community divisions" (ibid.: 1120–1121). Consequently, they found "very few opportunities for open public debate and critical questioning of core assumptions in controversies" (ibid.: 1121), as well as "little evidence [...] of diverse perspectives coming together to engage in reasoned open public debate" (ibid.). In other words, the platforms' architectures generally support communication on differing viewpoints – either in heterogeneous sites or through the connections of partisan sites with the wider system. But this seldom leads to communication processes that are oriented towards or that result in converging opinions. Thus, the architectures provide the opportunity for *heterogenous*, *inclusive* and *reciprocal* sites, but the users seem reluctant to *listen* to and *rationaly reflect* on transmissions and perspectives from viewpoints that differ from their own.

The observation that, in social media communication enhanced by platform architectures, users tend to be impervious to differing viewpoints often culminates in the diagnosis that there is a polarisation of discourse on these platforms.⁴⁸ This diagnosis is not a new one, and the platform companies have taken different measures to counteract polarisation and its political repercussions. Some platforms have tweaked their algorithms so as to prevent political contents as far as possible (cf. Lima 2021a; Narayanan 2023) – with vary-

48 Among others: Gillespie (2014), Helbing et al. (2017), Nguyen (2021), Pariser (2011), Sunstein (2002, 2017), Turow (2011) – in this discussion, the publications by Sunstein and Pariser have had the largest impact.

ing success. Other platforms have opted for trying to bridge the divides by recommending contents that express different views (cf. Wei 2020) or that, concerning certain issues, give preference to established, more moderate news outlets rather than the contents of private users (cf. Roose 2020a).⁴⁹ Either way, the platform companies actively influence the establishment of connections between sites – and thus the embedding of specific sites within the platform-based parts of deliberative systems – by adjusting the platforms' architectures.⁵⁰ Since the platforms' approaches differ and since such architectural adjustments happen continuously, it is not surprising that scholars have had varying empirical results over the years with regard to the degree of polarisation and fragmentation on social media platforms.⁵¹ I will elaborate on the fragmentation thesis in the next section.

Moreover, sites on social media platforms can be connected with digital sites that are not themselves situated on the same platform, especially through hyperlinks to external URLs.⁵² Within the digital site, these links are “used to support deliberative arguments with supplementary facts” (Lyons 2020: 8), thereby transmitting these facts to the site. Therefore, “hyperlinks allow us to see connections among sites of deliberation being made at a granular level” (ibid.). From a deliberative systems perspective, these connections thus embed the sites on a platform in the wider deliberative system beyond the platform – regarding both the system's network and its sequences:

Joining an evolving Twitter discourse to other documents and forums on the Web, hyperlinks bring together commentary emanating from mass media, government, advocacy organizations, and the public. In doing so, they also connect across time, surfacing five-year-old press releases or buried YouTube

49 In such cases, the interdependence of society and technology becomes apparent again: content moderation increases the fragmentation of societal communication, and the discourse addressing this fragmentation prompts the platforms to reform their content moderation technology.

50 In the wake of such adaptations, official documents that declare, for example, the platforms' codes of conduct are likewise updated.

51 Cf. Bright (2018); Conover et al. (2011); Soares/Recuero (2021); Wadman (2020).

52 By now, all the dominant platforms provide the architectures for doing this. On sites that concern political subjects, external URLs often belong to traditional media organisations, and the web pages present contents such as newspaper articles or professional video reports. Some platforms also provide APIs that allow users to crosspost, for example, comments that they posted in the comment space of a newspapers on their own Facebook timeline (cf. Moore et al. 2020: 59–60).

videos and casting old content in a new light. These tools allow users to re-frame old arguments and generate new meaning. (ibid.: 9)

In fact, the most widely shared posts on the platforms often do not originate in the platform itself, but are links to other social media platforms or websites from news organisations (cf. Newton 2021d; Wakabayashi 2020; Zannettou et al. 2017: 412). However, the platforms differ in their exact use of such linkages due to the differences in architecture and user demographics (cf. Wright et al. 2018: 81–82; Zannettou et al. 2017: 412). Some platforms' architectures limit the possibilities, allowing only the referencing of certain URLs or enabling such referencing only in specific spaces on the platform, and some limit or prevent the possibilities for users to disseminate posts beyond the platform (cf. Muldoon 2022: 145).⁵³

Regarding deliberative qualities, these links support the strength of the connections between sites and therefore systemic *inclusivity* and *diversity*. The lack of such links, on the other hand, “is associated with enclaves and single-discourse *dominance* which is self-reinforcing” (Lyons 2020: 8, own emph.; for more details, cf. Stevenson/Dryzek 2012). As I have repeatedly cited, such tendencies are considered detrimental to a system's deliberative qualities.

Hyperlinks likewise embed the sites on social media platforms in wider systems beyond the digital realm, since digital spaces are used by individual citizens, news organisations, NGOs, political professionals and so forth who can act as alternative carriers of transmissions to and from non-digital spaces. Political communication on social media platforms usually is about events and issues that originate at least partially in the non-digital world. As Parkinson, a deliberative theory scholar, put it, “while a growing proportion of political communication uses digital means, the things that are communicated involve real people who take up, occupy, share, and contest physical space” (2012a: 1–2). Thus, news can travel from face-to-face situations that are covered by journalists, who publish them online, and can then be cited and linked by social media users. Conversely, discussions on social media platforms are regularly cited by other media formats and even become news stories themselves: “User-generated social media posts not only serve as content fodder for large-audience digital aggregators like BuzzFeed, but content created on Tumblr, Instagram, Reddit and other platforms is then picked up and broadcast by mass media” (Lyons 2020: 6). Thus, social media platforms provide architectures that can be

53 They thus produce the network, lock-in and log-in effects I described in chapter 4.2.

used to embed digital sites, by means of hyperlinks, within wider deliberative systems.

The transmissions via these connections make the system more *connected*, *diverse* and *inclusive*. “Social media messages possessing high retransmission potential [...] may filter up to more empowered sites in traditional mass media [...] and outward to peripheral face-to-face conversations”, thus serving as “connections which reduce the importance of demographics” (ibid.). Thus, the possibility of sharing social media contents via hyperlinks counterbalances the demographic discrepancies between digital and non-digital sites, and it connects these diverse sites through the transmissions flowing between them.⁵⁴

Disseminating Effects of Platform Architectures

The architectures of social media platforms do not only enable the embedding of digital sites within the wider deliberative systems; they also produce affordances that spread throughout these systems. For example, the platforms' content moderation techniques individualise the media repertoires of their users.

The shifts in the digital production of the public sphere are crystallised [...] in the substitution of the filter functions of traditional media by automated evaluation and selection practices like the Facebook Newsfeed algorithm. Facebook thus acts as upstream, prejudicial programme architecture that decides who gets to see which contents, which public and when. (Maschewski/Nosthoff 2021: 338, author's translation)

The content moderation systems and architectures dynamically structure and individualise the information they provide their users with, and each individual's use of different platforms, communication channels and media outlets enhances this diversification (cf. Schrape 2021a: 162). Media repertoires subsequently vary according to individuals' social milieus and their private and professional environments, as well as according to their life-world requirements and life situations (cf. ibid.). This not only restructures the development of de-

54 In fact, Facebook spokespeople have explicitly stated that the platform's “mission was to provide its own digital infrastructure and tools to support online communities, which have the potential to ‘strengthen existing physical communities’ and ‘enable completely new ones to form’” (Muldoon 2022: 46). Therefore, “in a world where this physical social infrastructure has been declining, we have a real opportunity to help strengthen these communities and the social fabric of our society” (ibid.).

liberative sites and connections, but also diversifies the informational basis on which people communicate with each other:

If news [items] [...] are programmed and sorted less according to societal relevance or ratio than according to the patterns of individual interaction and preferences, [and] users and voters are “performed for” as “core target groups” or *audience*, [...] a collective frame of reference for political opinion-information threatens to disappear and be replaced by situational affiliation. (Maschewski/Nosthoff 2021: 338, orig. emph., author’s translation)

So, the content moderation architectures of the platforms massively contribute to the individualisation of media repertoires and the subsequent dissolution of a common frame of reference in political communication.⁵⁵ From a deliberative systems perspective, the diversification of information, perspectives and sites signals an increase in the *inclusivity* of a system. However, the dissolution of a common frame of reference may lead to a dissolution of a common language among the sites (see chapter 2.3) and thus may impair the *systemic connectedness* and the *comprehensibility* of transmission processes – which would consequently impair the *listening*, *reflections* and *rationality* in the receiving sites. This, in turn, would negatively affect the *inclusivity* of the system: only such perspectives that have been adequately included in the systemic decision-making can be correctly understood and deliberated. Therefore, increased contextualisation becomes necessary in order to understand and process not just the transmissions from other sites, but even the contributions of individual participants from within a site. For the systemic composition, this implies that systems need to be closely knit with strong connections in order to avoid faulty contextualisation and interpretation. Sluicing information, moreover, becomes more complex, since many digital sites are larger and more complex and since the relevant information transmitted from one site to another will likewise increase in amount and complexity.

Relatedly, scholars have argued that the polarisation and fragmentation of the communication processes within the platforms disseminate beyond these

55 However, one must dispute the idea that there ever was a common frame of reference within the public sphere, much less an entire system. The “notion of a public has often been charged with normative values and suggests a uniformity that in fact cannot be achieved” (Schrape 2021b: 12). Hence, it appears “hardly instructive to simply assume a digitalization-induced disintegration of a uniform public” (ibid.).

platforms, leading to the development of many parallel publics and self-referential social spaces (cf. *ibid.*: 338–339; Seeliger/Sevignani 2021c: 30–31). As content moderation systems partially base their recommendations on similarity metrics, they are criticised for clustering users and posts into homogeneous sites. As I explained above, these sites, in turn, tend to cluster into homogeneous site clusters, due to the interaction of recommender systems and user behaviour. This is said to fragment society even beyond the digital communication processes, and the discourse around such phenomena and their effects on the public sphere, in particular, has gained momentum within digitisation research: Habermas warns that the “great emancipatory promise [of society-wide discussion] is being drowned out by the desolate cacophony in fragmented, self-enclosed echo chambers” (Habermas 2022: 159). To him – and to many other authors, too⁵⁶ – self-supporting social spaces such as “filter bubbles” and “echo chambers” are real and serious challenges to a society-wide democratic discourse (see chapter 3.2). These spaces

share with the classical public sphere their porousness to further networking; at the same time, however, they differ from the fundamentally inclusive character of the public sphere – and the contrast to the private sphere – through their rejection of dissonant and the inclusion of consonant voices into their own limited, identity-preserving horizon of supposed, yet professionally unfiltered, “knowledge”. [...] From the limited perspective of such a *semi-public sphere*, the political public sphere of constitutional democracies can no longer be perceived as an inclusive space for possible discursive clarification of competing claims to truth and the generalisation of interests; precisely this public sphere, which hitherto presented itself as inclusive, is then downgraded to one of the semi-public spheres competing on an equal footing. (*ibid.*: 166, orig. emph.)

The existence and omnipresence of digital echo chambers, filter bubbles and rabbit holes have been doubted, and the respective publications have been empirically challenged by many scientific studies.⁵⁷ It must also be noted that “a selective perception and a preference for opinions close to one’s own point of

56 Among others: Gillespie (2014), Helbing et al. (2017), Nguyn (2021), Pariser (2011), Sunstein (2002, 2017), Turow (2011).

57 Among others: Bail (2021: 4–6), Barberá (2020), Chen et al. (2023), Dahlgren (2021), Dubois/Blank (2018), Jürgens et al. (2014), Rau/Stier (2019).

view [...] have been known in social sciences for a long time and cannot be attributed to platformization alone" (Schrape 2021b: 11; cf. also Chambers 2023; Dahlgren 2021; Scheuerman 2023). However, there seems to be an academic agreement that the rise of digital communication technologies has caused a decrease in the number of spaces that a majority of citizens at least occasionally use for information acquisition and political communication (cf. Ritzi 2021: 308).

According to the systemic approach, the differentiation and homogenisation of sites is not necessarily a problem for deliberative systems. On the contrary, communication in homogeneous groups can even improve the deliberative quality of the communication and help the group to form and strengthen a certain viewpoint. It creates "the fertile, protected hothouses sometimes necessary to generate counter-hegemonic ideas", which, in turn, "may play powerful roles in the broader deliberative system, substantively improving an eventual democratic decision" (Mansbridge et al. 2012: 7). Consequently, minorities within a system can enhance their chance of being heard and considered in the wider system, and *systemic inclusivity* increases. Hence, the fragmentation of informational bases is problematic for systemic deliberative qualities only if the deliberative sites are systematically disconnecting from the system and the perspectives cannot flow and be filtered through the system.

While the informational basis of communication becomes more individualised, many communication processes themselves become more public. Social media platforms' architectures afford their users the opportunity to communicate with a potentially very large public.⁵⁸ This way, social media platforms can increase *inclusivity* and *equality*. The deliberative systems scholar Ricardo Mendonça has warned that, in deliberative systems,

relatively weak actors [...] do not have the resources to make their positions present in many arenas. Some actors are not strong enough to push their discourses across the various levels of the system and they end up becoming invisible. Other actors may strategically interpret this type of invisibility not as proof of the weakness of the actors, but of the positions they advocate. A lack in financial and human resources can lock up some actors and, more importantly, their perspectives in specific discursive arenas, while maintaining their consideration as full participants in the system. (2018: 36)

58 Of course, the actual visibility of individual posts often depends on the platforms' content moderation systems.

Participation in political communication on social media platforms is not dependent on financial resources. On the contrary, these platforms generate their profits mostly by selling advertisement space. They try to bind as many users as possible, and therefore they do not charge them monetary fees but instead collect their data. Social capital from beyond the platform can be helpful in the content distribution on the platform. But many of the influential profiles with large outreach generate their social capital directly on the platform itself. Besides, minorities can gather more easily on these platforms, since geographical distances are being bridged and communities of people with similar interests can be found more easily. Thus, “digital media simplify the access to public spheres” (Seeliger/Seignani 2021a: 461–462, author’s translation). Weak actors with little capital can be heard better on these platforms, since the logics there differ from the formation of the – pre-digital – deliberative systems on which Mendonça founds his critique.

This *inclusivity*, in turn, can improve the *openness* and *common-good orientation* of the participants. Because “spaces in which one can encounter the demos in all its variety have an important democratic function – they help us see and recognize others and make us more willing to take their right to make claims on us seriously when we encounter them in political debate” (Parkinson 2012a: 67). The platforms’ architectures thus afford heterogenous sites that raise the participants’ awareness of the varieties of other participants. This awareness affects not only the citizens’ online communication, but also their perception of “all those affected”. Depending on their deliberative stance, citizens either show more acceptance of others and more common-good orientation, or they resist alternative perspectives, which leads to polarisation and hardened fronts between partisan groups; there are several studies that suggest that the latter is more common (cf. Bail 2021: 21; Yang et al. 2022).

Moreover, awareness of other participants and perspectives brings to recognition that there are different kinds of societies and political systems that are democratic to different degrees. Depending on individuals’ experiences, these systems can seem more or less desirable. As Elisabeth Stoycheff has found,⁵⁹ “an open global internet does indeed provide new perspectives that citizens can use as a barometer of their own government’s performance” (2020: 401). On the one hand, this might lead to heightened expectations in the public regarding decision-makers’ *rationality*, *authenticity* or *common-good*

59 Stoycheff (2020) conducted a large-scale comparative survey that was simultaneously administered in Russia and the United States.

orientation and “may undermine leaders’ legitimacy should the political climate change” (ibid.).⁶⁰ On the other hand, “a one-internet model also provides individuals exposure to new, nondemocratic alternatives” (ibid.); and, especially in today’s deliberative systems, “authoritarians have excelled in projecting their own institutions as powerful and secure” (ibid.). Therefore, whether the platform architectures’ effects on deliberative qualities are positive or negative depends on the specific context of sites and systems.

Another systemic effect of platform architectures is the dissemination of forms of expression that are originally specific to digital communication. For example, political memes have originated in “subcultural internet areas”, but they can now be found in mainstream discourse both online and offline (cf. Lyons 2020: 12). The “convergence” (Jenkins 2006) of platform architectures – that is, their similarities and their mimetic tendencies – “contributes to an environment in which memes can flow, and therefore link spaces, in previously unseen ways” (Lyons 2020: 12). Therefore, memes

are transmitted through basic protocols such as hyperlinks and retweets, and exposed to more general audiences through the technical affordance of platforms’ Trending topic features [...]. Crucially, they pass through platforms’ personal networks that are to some degree isomorphic to users’ offline social circles after often originating in the interest or issue-centric communities common online. Users also transmit these messages from their original platform to others, typically remediating them in the process [...]. Memes so selected through collaborative filtering hold great capacity to connect to mass media and non-mediated discussion space and thus bear some influence on decision making. (ibid.: 11)

In other words, meme-based political statements “spread via new iterations across participatory media, into embodied conversations, and through pundits addressing massive audiences” (Milner 2016: 174).⁶¹ From a deliberative systems perspective, the “use of memes [...] allows speakers to enhance deliberation at a system level” (Lyons 2020: 13). As empirical studies show, memes assist

60 Although “evidence from other authoritarian states shows that attitudes toward censorship and other undemocratic practices normalize over time” and that “dissatisfaction may fade into apathy or ambivalence”, Stoycheff concludes that “now is the time to have the fight for a singular global internet – while users can still remember it” (2020: 401).

61 For empirical examples, see Chevette/Duerringer (2020) and Lyons (2020).

discussions between dissimilar points of view due to their general accessibility, comprehensibility and openness to interpretation (ibid.: 13–14). All in all, “political Internet memes are important connective tissues in the deliberative system [and] they can connect discussions occurring across networks, sites, and spaces in the greater deliberative system” (ibid.: 17), thus supporting *inclusivity*. This important connective tissue was originally afforded by the architectures of social media platforms and has spread into the wider deliberative systems operating under the conditions of the digital constellation.

Social media platforms have disseminated into the wider systems not only their affordances, but also some of their fundamental logics – most importantly, the logics of quantified communication. As I have already described, almost any communicative action on social media platforms is counted, weighted and processed in the recommender systems that order and connect communication on these platforms. The logic of quantification builds the backbone of most of these platforms’ architectures. But it has spread from there into entirely other spheres of deliberative systems. For example, political actors make use of these metrics to gain political momentum (cf. Conger/Perlroth 2020). They employ countless strategies⁶² to generate reactions and other “tiny acts of participation” and thus to acquire greater influence in public discourse. As I already mentioned, these tiny acts of political participation “can scale up dramatically and rapidly” (Margetts 2019: 109) to “large-scale mobilisations and campaigns for policy change that have brought major shocks and surprises to political regimes all over the world” (ibid.). By affording and promoting this kind of quantifiable participatory behaviour, social media platforms additionally prepare their users for such digital social movements. As the German publicist Sasha Lobo put it,

It is practically impossible not to come into contact with one form of activism or another on Twitter, Instagram or TikTok. Even the widespread so-called challenges, a kind of mass participation competition on social media, can be seen as a dry swim of activism to keep the dissemination tools pliable for the real thing. (2022; author’s translation)

The shift towards these unpredictable and ephemeral forms of mobilisation led into an era of *Political Turbulence* (Margetts 2019: 109–110). In this era, “political figures from outside the mainstream – such as Jeremy Corbyn and Donald

62 See chapter 5.1.

Trump – can win, or at least garner huge levels of support” (ibid.: 110), due to the architectures that afford quantifiable tiny acts of participation.

For deliberative systems, this means that “[s]ocial media seem to inject instability into traditional democratic institutions” (ibid.: 110). This is because one cannot predict whether tiny acts will scale up to a movement and outbalance traditional political institutions. Moreover, actors can garner attention and influence, regardless of whether they originally belonged to any political elite. From a deliberative theory perspective, this is not necessarily detrimental to a deliberative system. According to Habermas, civil society and the public sphere must be able “to ferret out, identify, and effectively thematize latent problems of social integration (which require political solutions) [and to] introduce them via parliamentary (or judicial) sluices into the political system in a way that *disrupts* the latter’s routines” (1996: 358, orig. emph). From this perspective, social media platforms can be viewed as a tool for the periphery’s intervention in the political system’s routines. By scaling tiny acts of participation, issues emerge and are brought to the attention of political actors who can then act as carriers of transmissions and sluice them into deliberative sites that are closer to the decision-making processes. However, such a procedure skews and circumvents the more institutionalised deliberative sluices that are supposed to forward only relevant, true and rational information from one site to the other. The relevance of issues and perspectives is not ascertained through deliberation but emulated through counting individual reactions. This emulation foregoes some processes that are central to deliberative systems theory, including active participation, communicative opinion-formation and the filtering and “sluicing” of relevant information throughout the system.⁶³ By definition, the normative ideal of systemic communication with distributed labour between the sites, as well as gradual formation and convergence of opinion, cannot be achieved through the mere accumulation of data on individual opinions. Moreover, “[c]rowd-based judgments about relevance can create information cascades that lend sensationalized, false, and hatred-inciting online material extraordinary staying power” (Cohen 2017: 149–150), and “[e]fforts to remove hurtful material typically backfire by drawing additional attention to it, intensifying and prolonging the unwanted exposure” (ibid.). Thus, the quantification logic of platforms seems to hinder, rather than simplify, the identification of actually relevant issues and the deliberative sluicing of these issues in

63 I have described the effects of emulation on the public sphere and deliberative systems more elaborately in chapter 3.2.

accordance with deliberative qualities such as *rationality*, *openness* and *authenticity*.

In sum, social media platforms have various architectural traits that structure the communication processes on the platforms themselves, and, moreover, many of their logics and effects spread into the wider deliberative systems the platforms are part of. But the architectures are not alone in their structuring of communication processes. They do so in conjunctures with further social structures that originate beyond the platforms and reify in the platform communication in specific ways. The following chapter will address the most significant reifications of social structures and will relay their effects on sites, connections and systems.

6. Reifications of Social Structures on Platforms and Their Effects on Deliberative Systems

Platforms and their architectures are not independent islands of communication in a vacuum. Conversely, democratic practices that structure communication

are not confined to a given democratic space but are always interwoven with society. The bodies, performances, and ideas of democratic subjects circulate through societies mediated through digital and other communication devices and through everyday talk with family, friends, and wider networks (Asenbaum 2023: 163).

Therefore, the communication processes are not structured by the platforms' architectures alone, but there are additional, social influences and contexts that structure any communication process. In an interplay with the platform architectures, they produce specific patterns in the communication processes on the platforms and affect the deliberative qualities of these processes. These digital-specific reifications, in turn, affect the social world beyond the digital spaces. Firstly, the specifically digital patterns represent the possibilities of interaction and therefore become a horizon for interaction, generally. Secondly, the individuals that interact within these patterns transmit contents and perspectives that have been generated and processed within these patterns to sites beyond the platforms. The individuals gain experiences within these patterns of, for instance, polarisation, platform communities, heterogeneous communication processes and interactions where they can explore new identifications. The transmitted contents and perspectives affect the individuals' personal stances and feed back into communication processes beyond the digital spaces. Moreover, the systemic effects of these patterns affect the systemic communication process on a higher level; their influence within the decision-

making process increases as the share of platform communication within the system increases. These new patterns thus disseminate into the communication processes and the social world beyond the platforms. Hence, in the terminology of the digital constellation, “society and technology interact dynamically and continuously” (Berg et al. 2020b: 17).

I will address three such influences that are especially significant for communication processes on social media platforms and that have varying effects on the deliberative qualities of these processes. Firstly, platforms are embedded in the temporal structures of societies. They operate within the frameworks of these general structures, they produce new temporal patterns in the digital communication processes and they thereby simultaneously reform the implications of, for instance, speed within the wider societies. The affordances that allow one to communicate instantly with a large number of people that are not in geographical proximity generate the expectancy that, for instance, political actors will immediately and publicly react to events and enquiries and that they will generally act more speedily (cf. Rosa 2009). Secondly, the platforms are embedded in their users’ innumerable communities, which all have their own sets of communicational conventions. These conventions can originate both externally and internally to the platforms, and they structure the communication processes within and between the communities interacting on the platforms. Both the conventions and their structuring effects disseminate back into the wider social world. Thus, for instance, dog-whistling terms like “unalive” (a euphemism for killing and suicide), which circulate on the major platforms¹ as a means of avoiding automatic deletion by algorithmic content moderation, can now be witnessed in the spoken-language vocabulary of their users beyond the platforms. Thirdly, the platforms are embedded in each user’s life individually. They are a tool to express or negate specific aspects of a user’s identity and to explore new ones through interaction with other users, and this, of course, also has repercussions beyond the digital realm. The anonymity architectures, specifically, allow individuals to explore various aspects of identity, and these experiences and connections with like-minded individuals likewise shape their offline life (cf. Asenbaum 2023: 14). In the following chapters, I will address these social influences. I will describe their structuring effects on the communication processes, and I will illustrate their effects on the qualities of deliberative sites and connections on the platforms, as well as for the deliberative systems.

1 However, the term originated in comics like *Deadpool* and *Spider-Man*.

6.1 Reifications of Time

Platforms and the communication processes on them are embedded in the general temporal structures of societies. But there are also temporal patterns that are specific to these communication processes due to the affordances and architectures of the platforms. These patterns affect the deliberative qualities of these processes and the deliberative systems beyond them.

Within digitisation research, time seems to be a rather tangential issue that is addressed frequently, but seldom very thoroughly. It is a common observation that digital technologies speed up most aspects of life due to their affordances of high-speed communication, even over long distances (cf. Barassi 2020: 1548–1549; Jungherr et al. 2020: 22–23; Lee 2021: 79). Slightly less frequent is the observation that the internet never forgets (cf. Jungherr et al. 2020: 24). The scholars that *do* elaborate more on the nexus of time and the digital constellation agree that digital technologies afford different temporalities in interaction and that temporal patterns seem to grow more complex. “Media technologies thus constitute [...] *temporal* infrastructures, architectures, and systems” (Stine/Volmar 2021: 9, orig. *emph.*).² In consequence, the linear clock time that has dominated the world’s conception for so long is complemented by a more complex version of time, by a construct of asynchronous but interconnected temporalities. Terms such as “timescape” (Pond 2021; Kitchin 2023), “temporal geography” (Stine/Volmar 2021), “chronotopographies” (Crang 2007) and network time (Hassan 2003; Pond 2021; Starosielski 2021) have been used to try to describe this phenomenon. But in spite of this illustrative terminology, there is neither unity nor clarity on the core of the matter. For questions such as those surrounding what exactly is implied by this complexity, what the different temporalities are, how they are connected and whether there are regularities, the answers remain rather elusive.

However, time is a very important structuring influence in any communication process:

Gesellschaft besteht aus der zeitlichen Fortsetzung von Sequenzen kommunikativen Handelns. [...] Handlungssequenzen sind ihrer schieren Natur nach wesentlich zeitliche Strukturen kommunikativen Handelns. Sie schaffen Zeitlichkeit durch ihre Abfolge, sie nehmen in ihrer Wechselseitigkeit

2 The technical foundations of the temporal patterns produced by these infrastructures are expounded in Ernst (2021), Sprenger (2020) and Volmar/Stine (2021).

besondere Formen an, und sie schaffen durch ihre Typik bzw. ihre Rekursivität soziale Strukturen, auf die im zeichenhaften kommunikativen Handeln wieder legitimierend so Bezug genommen wird, dass sie eine Ordnung annehmen. (Knoblauch 2017: 292)

A similar view can be found in the deliberative systems approach. On the one hand, sequenced models of deliberative systems imply a chronology on a systemic level, that is, between communication processes. On the other hand, Bächtiger and Parkinson stress that, within the sites, “particular communicative events are also sequenced” (2019: 43–44). Hence, temporal structures shape the communication processes on all levels of deliberative systems.

In this section, I will unravel the temporalities that reify in digital communication processes specifically and that are most dominant in what little literature there is on the matter. On first sight, there seem to be two basic paces of digital communication that are afforded by the properties of digital technologies: high-speed communication and long-term accessibility of posts. But the algorithmic ordering systems circumvent and counteract these chronological conceptions of time and produce more complex timescapes.

6.1.1 High-Speed Communication and Long-Term Accessibility

Digital technologies are usually associated with high-speed or even instantaneous communication (cf. Jungherr et al. 2020: 22–23). The “desire spawned by digitalism for speedier, multiple interconnectivities is also considered utilitarian in a world of complex searches and research” (Lee 2021: 79; cf. also Barassi 2020: 1548–154). High-speed communication is afforded by different factors. First, “the processing power of modern computing combined with incredibly low latencies in the network architecture construct hyper-fast, polymorphic and networked temporalities that have a self-propelling logic” (Pond 2021: 1203).³ Moreover, the contributions themselves become shorter, and some platforms even have maximum character counts, with Twitter/X being the most prominent example. On these platforms, participants can use only a limited number of characters per post, which makes the communication

3 The time-lag that occurs due to technical reasons, as described by Lohmeier et al. (2020: 1522), is a question of only fractions of seconds and thus does not affect communication processes between human participants.

faster. But even on platforms without limited character counts, the posts tend to be shorter than newspaper articles or parliamentary speeches.

In addition to this, the attention span for individual posts is potentially very low, shifting the focus to current events. Thus, posts “will either be picked up within seconds, minutes (or hours) or they [will] probably perish without echo in the masses of messages” (Laux/Schmitt 2017: 494, author’s translation). This speed and ephemerality of interaction and topics is manifest on a systemic level as well. Users are quick to adopt political causes, but their commitment to these causes tends to be short-lived and superficial. “Rather than identifying with issues, forming collective identity and then acting to support the interests of that identity (or voting for a political party that supports it), in a social media world, people act first, and think about it, or identify with others later, if at all” (Margetts 2019: 110). This is supported by the platforms’ architectures. As I described above, social media users participate in political discourse partially through “tiny acts” of political participation. It is not only that such tiny acts, which demand less collective identification, are convenient for the users themselves (cf. Hofmann 2019: 39). It is also that these acts are promoted and prioritised by the platforms themselves, which give such acts prominent places in their interfaces and comparatively high weights in their algorithmic systems (see chapters 4.1 and 5). Because of this heightened accessibility, tiny acts of political participation can scale up in phenomena like attention spirals and can thus result in large-scale mobilisation. Yet, this kind of mobilisation remains ephemeral, and

even when a mobilisation does succeed in getting a million people on the street, or signing a petition, or even a revolution of sorts as in Egypt, the very fact that it is possible to get there without the normal organisational trappings (such as nascent parties or leaders) of a movement or revolutions means that it will usually be unsustainable. (Margetts 2019: 110)

The shift towards these unpredictable and ephemeral forms of mobilisation based on tiny acts of digital participation has brought about an era of political turbulence, where politics become ever less predictable (cf. *ibid.*: 109–110).⁴

4 Hartmut Rosa has argued in a similar but more general way that technologies have enforced a social acceleration, which has led to a tendency towards situationalism even in the work of political actors: “The very idea of an ‘institution’, whose Latin root indicates its static, durable character, is incompatible with the idea of total acceleration

The brevity, speed and ephemerality of contributions affect the deliberative qualities of the communication processes. Where there is not enough room to broach an argument in a fundamental way, participants must give their reasonings an abbreviated, more superficial form, and comprehensibility might therefore be impaired. Moreover, a tiny act of communication such as liking “typically records a user’s positive first-impression response to a tweet” (Nguyen 2021). Thus, it

seems far more likely that a user will Like a tweet if it, say, expresses a view that they already agree with, than one that presents a challenging or subtle view that the user will have to wrestle with for a while. This is not because tweets somehow can’t be profound by their very nature. Rather, it is a feature of how Twitter’s interface captures the data to feed its metrics. A user might eventually come to appreciate a challenging tweet, but they are far less likely to go back and find that tweet, weeks later, to press Like (ibid.).

Therefore, posts that incur reflection rather than quick reactions are less appreciated within the recommender systems, the posting user is less rewarded by high metrics and the post itself will reach fewer other users. Thus, such posts have lesser influence in communication processes and users are discouraged from posting them in the first place. This is detrimental to qualities like *reflection* and *rationality* in the communication processes.

Yet, on the other hand, speed and simultaneity are not detrimental to all deliberative qualities. More users will be willing to participate if they do not have to commit for longer stretches of time, making tiny acts of participation more *inclusive* (see chapter 5.1). Furthermore, unlike in face-to-face situations, fast or simultaneously posted contents do not become *incomprehensible* because a speaker talks too fast, nor do they drown each other out – at least not due to the simultaneity of their conveyance. If two posts are published at the same time, other users can simply read them consecutively. This leads me to the counterpart of speed and ephemerality – and the second specific temporality of digital communication: the long-term accessibility of posts.

Almost everything that has been posted on social media is accessible in the long term, and messages remain stably connected with the sites they have been

[...]. As a result, politics, too, has become situationalist: it confines itself to reacting to pressures instead of developing progressive visions of its own” (2009: 102).

linked with.⁵ Even if a user deletes a post from a service, almost every platform stores the meta-data on the original post, and copies might also be saved in other parts of the platform or other parts of the internet.⁶ Long-term accessibility likewise applies to connections between users. “There is little decay of network connections in digital media. Once connected, users normally stay connected” (Jungheer et al. 2020: 24). So, social media platforms’ architectures enable both high-speed interaction and long-term accessibility. Long-term accessibility likewise affects the deliberative qualities of digital communication processes. Users can be held accountable in the long-term for their posts and might thus be motivated to communicate more *truthfully* and *respectfully*. Violations of the platform rules and laws that support these qualities can be sanctioned in the long term. On the other hand, the speedy attention spirals on social media platforms undermine the much slower sanctioning efforts. Due to the scale of data and posts, the platforms need to scan for violations:

Nearly all platforms must embrace a “publish-then-filter” [...] approach: user posts are immediately public, without review, and platforms can remove questionable content only after the fact. This means that even heinous content may get published, at least briefly, and criminal behavior may occur (and have its intended impact) before anything is done in response. Plenty of content that violates site guidelines remains online for days, or years, because of the sheer challenge of policing platforms as immense as these. (Gillespie 2018c: 265)

So, violations might be sanctionable in the long term and this might prevent users from violating the rules and regulations; but posts that represent violations can still take effect before being sanctioned with lower visibility or deletion.

The long-term existence of connections between users has effects on deliberative qualities as well. It leads to ever-larger numbers of network ties of which individual users remain aware, in consequence of which “information

5 However, there are platforms, such as Snapchat, that revolve around the automatic deletion of contents after a certain timespan. The different platforms have different policies and architectures for handling storage, remembering and forgetting.

6 Of course, the links that are connected to the posts might not be indefinitely available, due to technical changes such as the discontinuance of the host server. But this applies more to the free internet and less to the large and centrally organised social media platforms.

can travel much more quickly and broadly among communities of interest” (Jungherr et al. 2020: 24). Hence, the originally time-consuming process of political opinion formation and positioning in the public sphere is likewise speeding up. This affects the connections and overlaps of these high-speed parts of a deliberative system with those parts of the system that work inherently more slowly, like political institutions and the traditional media, resulting in processes of desynchronisation (cf. Laux/Schmitt 2017: 517). Regarding the quality of these connections, this affects systemic *reciprocity* and *equality* between the sites. The faster digital sites are almost able to constantly transmit information to the slower sites, which are forced to decide between reacting under pressure or not reacting at all.⁷ The slower sites are thereby put at a disadvantage in reacting to other ideas, in developing their own ideas and in transmitting these ideas throughout the system.

In spite of the possibility of high-speed communication and due to the long-term accessibility of posts, communication on social media platforms is often asynchronous. Digital technologies enable users to individualise their leisure-time behaviour, since users do not have to be present at a certain time in order to experience a certain event. In other words, “individual temporal regimes took the place of centrally produced rhythms” (Engels 2020: 80–82, author’s translation). These individualised temporal regimes affect the communication processes on social media platforms. Participants do not necessarily answer immediately to a post, and communication processes thus often stretch over longer time periods. The effects of this asynchronicity have been empirically tested by deliberative theory scholars, with mixed results. On the one hand, asynchronicity of communication processes has been found to “enable broad participation in debates” (Jungherr et al. 2020: 229) and thus increase *inclusivity*. On the other hand, the “possibility of stepping back and revisiting assumptions or finding new information has been associated with greater *reflexibility* in debates” (ibid., own emph.). Some scholars have found that greater flexibility enhances deliberative qualities such as *reflection*, *rationality* and *respect* (cf. Janssen/Kies 2005; Stromer-Galley/Martinson 2009; Stromer-Galley/Wichowski 2011), while other scholars have found “no evidence for a positive influence of asynchronous discussion on the provision of reasons” (Esau et al. 2017: 336). The differences between these results probably

7 Studies on how political actors handle time pressure have been presented, for instance, by Luhmann (2018) and Schimank (2011).

have a variety of reasons.⁸ The one reason I want to stress here, once again, is that asynchronicity is only one – not at all omnipresent – attribute of digital communication. There are many confounding factors that interact with each other and that influence the qualities of communication processes on all levels of stability.⁹

6.1.2 Timescapes

On social media platforms, these basic paces also combine with the content moderation systems that structure interaction. New temporal patterns of interaction emerge. One of these new patterns is the detachment of communication processes from chronology. As I have already described, social media platforms order the contents posted on them, at least in part, with the help of algorithmic systems. The contents that an algorithmic system predicts to be currently most interesting to a specific user will be favoured in her feed. In the temporal dimension, therefore, “most social media platforms are more concerned with delivering information at the right-time, not necessarily as soon as something has been posted” (Bucher 2020: 1699).

The order of contributions to a communication process thus adheres not to chronology but to timeliness. This phenomenon has been explained by Taina Bucher (2020). According to her, the algorithmic systems on social media platforms try to predict when a user is most likely to interact with a post. Timeliness, therefore, “is about probabilistic projection or likelihoods of getting the timing right” (ibid.: 1706). The right timing depends on several factors, including: the platform that is trying to predict the right time and that is steered by specific practices and a specific business model; the kind of services for which

8 Among other factors, the differences in empirical findings probably occur because of different operationalisations of rationality and the possibly misguided assumption that there is a fundamental difference between Facebook news pages and other news forums and news websites. For instance, in the estimation of Esau and colleagues, “[d]ue to technical infrastructure and social practices, the response time on Facebook is shorter and the rate of commenting is higher, which may result in the experience of a quasi-synchronous discussion in which many participants contribute posts at the same time” (2017: 329).

9 In fact, asynchronous communication is just as much a mere affordance of digital communication as high-speed communication is. Whether the interactions include time lags may vary even within one communication process, and therefore it is not at all a stable factor.

timing is needed (ads, updates from pages, stories); the individual attributes and habits of a user; the status of the post (i.e., new, read, popular, or missed); and the system's optimization goals at a given point in time (cf. *ibid.*: 1705). Of course, chronology is still relevant, and to "receive fresh and recent updates still matters[,] but, arguably, not more than receiving relevant news and updates at the right-time" (*ibid.*: 1708).¹⁰ Therefore, chronology and timeliness are intertwined. To determine the right timing of a post, algorithmic systems must consider, for example, the temporal habits of a user, which are measured in clock time, that is, chronologically. But such a system

slices and dices time to fit its purpose of delivering the right content at the right-time [and] algorithms expand *chronos* [meaning chronological time] in rather creative ways. Sometimes, a user may have already read or seen a post, but that does not mean, therefore, that it loses its relevance. More important than when it was posted for the first time is the extent to which a post remains important. It is one thing to read an interesting post by a friend, it is another to follow the post as it evolves and changes over time as others are reacting to it. (*ibid.*: 1709)

Thus, content moderation systems bring a new temporal order into the communication processes on social media platforms, one that relies on the platforms' support of high-speed communication and long-term accessibility but goes beyond both these chronological conceptions of time.

From a deliberative systems perspective, this has several implications for the qualities of communication processes. First, the content moderation systems' orientation towards timeliness resurfaces posts and news items that are deemed important by the system because they have triggered many reactions, even though they might not be the most recent contributions to a communication process. Thus, users "can rely on the system to deliver the most relevant updates that have [...] taken place 'while you were away'" (*ibid.*: 1709–1710). Consequently, asynchronous communication processes can take place in which users

10 Hence, the prediction technologies that estimate timeliness lead to the collision of past, present and future, since they "*draw[...] on past data traces to inform present decisions in order to mitigate future risks*" (Barassi 2020: 1550, orig. *emph.*) or, in the case of content moderation systems, reaction counts. Thus, the data "fold-back into future interactions and connections [and] through these feedback loops, the data take on an active or performative role in the shaping of networks and social relations" (cf. Beer 2020).

are presented with the contents that have been considered most important, or most worthy of reactions, as well as the contents that are predicted to be most important to the individual user. On the one hand, the timeliness orientation therefore equalises the communication process and makes it accessible to more participants, thereby enhancing deliberative quality regarding *equality*, *inclusivity* and *comprehensibility*. On the other hand, users are made aware of specific posts in a personalised manner, which might give minor argumentations a second chance of succeeding, thereby increasing qualities such as *listening*, *reflection* and the probability of a “forceless force of plausible reasons” (Habermas 1996: 24–25, own emph.). Moreover, the whole communication process will appear more interesting to each user if the proposed contents of the personalisation systems are selected well, and it might thus enhance qualities such as *listening*, *reflection* and *respect*. On the flipside, most of the communication will never resurface through the algorithmic systems. To notice these posts, users would have to actively follow a chronological feed of a communication process (or a specific author) in the moment the posts are published. Thus, qualities such as *reciprocity* and *interactivity* are impaired, since posts that have not been seen cannot be answered. Furthermore, the posts that actually do resurface are not necessarily the ones with the highest levels of *rationality*, *truthfulness* or *respect*. Rather, reactions can be triggered by various kinds of posts (see chapter 5.1); and the algorithmic systems sort posts not according to their deliberative qualities, but according to their potential to keep users on the platforms and to generate ad revenue (see chapter 4.2).

Overall, the timeliness aspect of content moderation systems seems to have rather positive effects – or at least the potential for positive effects – with regard to the deliberative qualities of many-to-many communication processes on social media platforms. Where there is a large number of participants communicating over long stretches of time, content moderation systems can help to keep the participants apprised of the most important events and thereby increase *comprehensibility* and *reciprocity*. But whether the effects are actually positive or negative depends on the aspects that factor into the specific content moderation system and the concrete context of the communication process in question.

The different temporalities do not exist independently of each other, of course, but interact and are intertwined. “Digital interconnectivity brings independently running time orders into a relationship of mutual visibility and disturbability” (Otto 2021: 113). Thus, “social temporalities are structured and

challenged by the (micro-)temporalities of digital infrastructures" (ibid.: 112).¹¹ Consequently, there must be an

infrastructural and infrastructuring process [that] consists of the continuous weaving of a relational assemblage between disparate entities and their different temporalities, which does not harmonize them, but makes them relevant to each other in their heterogeneity and plurality, in the first place. (ibid.: 108–109)

In communication on social media platforms, these processes reify in different ways with different implications for the interaction. Firstly, temporal relations "between technologies as maintained through standards and protocols" (Stine/Volmar 2021: 11) are needed, for example, for the synchronization of internet traffic, and thus they "create[...] an artefactual tempor(e)ality" (Ernst 2021: 92).¹² In fact, the technologies themselves "are in a crucial sense time machines", for they "pattern the movement of mechanisms, the flow of electrons, or the operations of symbols to meet temporal demands such as synchronism, succession, repetition, and pace" (Stine/Volmar 2021: 9). Secondly, there are procedures, such as schedules and working hours, that "coordinate the relations between technologies and human beings, who serve as interlocutors, care givers, proxies, and delegates" (ibid.: 11). Both these types of processes affect communication on social media platforms in so far as they secure the infrastructure needed for the interaction. Thirdly, the algorithmic content moderation systems themselves connect chronology and timeliness. By presenting contents at the "right time" to each user, they enable, for example, interaction for users with different temporal habits. They thus connect the

11 However, though digital technologies produce many unique forms of temporalities, the multiplicity of temporalities is not necessarily tied to the digital constellation. The multiplicity "could also be described from the sociological perspective of Barbara Adams, who sees a variety of other times included in the shaping of social time, 'a multitude of times which interpenetrate and permeate our daily lives,' including memories, anticipations, travel, and mobile working hours, as well as weather conditions and temporalities of the involved media" (Otto 2021: 112).

12 Central among these processes is the UTC protocol that is synchronising the time protocols of the majority of existing technical devices and that regularly inserts a leap second in order to synchronise astronomical and atomic clock time. This has severe implications, for example, for financial transactions that depend on millisecond-level timing (cf. Otto 2021). But temporalities on social media platforms are – though appearing high-speed to users – too slow for the leap second to signify.

different temporalities that have emerged due to the differentiation of leisure-time behaviour that is afforded by digital technologies (cf. Engels 2020: 80–82) or due to the time differences between participants from different time zones.

In sum, there are different temporalities at work in the communication processes taking place on social media platforms. There is the chronological clock time that still builds the basis for societal and technological processes. But some of these processes are vastly sped up while others slow down, so that asynchronous communication becomes possible. Moreover, the content moderation systems of the platforms reassemble the chronological timeline according to timeliness. The various temporalities – within platform communications and in comparison to other sites beyond the platforms – are connected through various social and technical temporal infrastructures.

6.2 Reifications of Communicational Conventions

The next set of social structures with specific reifications in the communication processes on social media platforms are the social and communicational conventions, that is, the unspoken rules and practices that permeate interaction between users. I have already introduced the forms of expression that are afforded specifically by the platforms' architectures (chapter 5.1). Within these architectural frameworks, platform users have developed communicational conventions that are specific to communication on these platforms. They have done this by using a combination of conventions that are known from contexts beyond platforms and the various available forms of expression.

Generally, the degree to which the participants of a communication process know and can apply social and communicational conventions determines the degree to which they can grasp the meanings of each other's contributions and convey their own meanings. In the extreme, the sharing and not sharing of communicational conventions determines if a communication process is at all possible. Communicational conventions therefore structure communication processes. This has also been addressed by deliberative theorists. Goodin observed that "[i]nsofar as we each have an interest in communicating with one another at all, it is in the interests of each of us to share the same conventions about the usage of words (and other signs and symbols)", and he added that we usually "want our messages to be *meaningful* to one another" (Goodin 2008: 189–190). Dryzek refers to the capability of making one's own messages meaningful to others as "discursive accountability" (2010: 74–75). According to

him, this capability is especially important if an individual acts as transmitter between different sites that hold different sets of conventions: such a transmitter has “to communicate in terms that make sense in the discourse being represented, even as he or she makes representations to other actors, institutions, or discourses” (ibid.). Bächtiger and Parkinson – using the term scripts for what I call conventions – observe that the capability to make oneself understood differs from individual to individual.

The range of scripts that an individual can draw on is causally significant to their actions in that it defines the strategies of action available to them. Yet because societies contain diverse and conflicting scripts, which change over time, this “repertoire” interpretation of culture does not imply a uniform direction in which scripts influence members of a group, [...]. Likewise, the same scripts may not be available in equal measure to all participants: some may have more “cultural capacities” than others (2019: 26–27).

In other words, different sites communicate on the foundations of different scripts that are available to their participants to a different degree.¹³ Habermas, finally, connects conventions with structures and deliberative qualities by observing that

the rules of a *shared* practice of communication are of greater significance for structuring public opinion. Agreement on issues and contributions *develops* only as the result of more or less exhaustive controversy in which proposals, information, and reasons can be more or less rationally dealt with. (1996: 362)

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- 13 A very fitting metaphor in the context of digital communication has been proposed by Bruno Latour. In his book *Reassembling the Social. An Introduction to Actor-Network-Theory* (2007a), he uses the term “plug-in” to refer to discursive requirement topographies that provide standardised patterns of behaviour, thinking and perception and guide processes of socialisation (cf. Gertenbach/Laux 2019: 139). These plug-ins circulate in the networks; participants can subscribe to them, and they can download them in order to “become locally and provisionally competent” (Latour 2007a, orig. *emph.*). “Individuals thus acquire their social action competence via such plug-ins. A download of the current standard profile generates social recognition, [while] a permanent disregard of the updates, on the other hand, leads to social exclusion [...]. The more frequently a plug-in is downloaded and installed by actors, the more likely it is to be said to be an effective rule or a social standard of behaviour” (Gertenbach/Laux 2019: 139, author’s translation; see also Latour 2007a).

That is, the different sets of conventions – or rules of shared practices of communication – structure communication processes by allowing for a different level of rationality in deliberating on proposals, information and reasons.

This certainly rings true, yet there are even more ways in which different sets of conventions structure communication processes. For example, Berger and Luckmann argue that “[l]anguage builds up semantic fields or zones of meaning that are linguistically circumscribed” and that “[v]ocabulary, grammar and syntax are geared to the organization of these semantic fields” (1980: 39). Similarly, scholars of discourse analysis more fundamentally suggest that “ordering works through linguistic systems, through ‘vocabularies’ or ‘repertoires’ that shape the way in which people perceive and judge concrete situations” and that “[t]hese linguistic regularities [...] provide stability and organizational orientation as actors collaborate in interpretative communities that share a particular way of talking about policy situations” (Hajer/Laws 2009: 261). For deliberative qualities, this means that *comprehensibility* is enhanced for all those who know and can apply the respective scripts and vocabularies, which, in turn, can support interactivity. However, participants are only capable of participating in the communication processes in so far as their knowledge of the scripts and vocabularies allows them to. This introduces a hierarchy between users and decreases *equality* between the participants.

In the following sections, I will address different types of communicational conventions, how they structure communication processes on social media platforms and how that affects the deliberative qualities of these processes. First, I will describe the structuring effects of different official languages on the communication on social media platforms. These languages produce the larger patterns on the platforms. Second, I will turn to platform communities and how their specific sets of conventions structure digital communication into more granular patterns.

6.2.1 Languages

The variety of official languages used on social media platforms is the most obvious structuring influence within the realm of social and communicational conventions. The interest in studying language diffusion and structuring in social media platforms peaked in the early and mid-2010s and has considerably

waned since then.¹⁴ Though these studies must be taken with a grain of salt,¹⁵ the fundamental logics have prevailed, and the studies can still give an approximation of how language structures communication on these platforms today.

The users of most of the major social media platforms are spread all over the world. Consequently, they are positioned in countries with a great variety of official languages, and this variety is also displayed in communication on the platforms. The differences in language heavily cluster the users, and they structure the communication processes on social media platforms. In fact, “language is a key force [in] structuring ties in the network” (Hale 2014: 833). Different types of studies have found that users tend to communicate with users who primarily use the same language.¹⁶ According to these studies, users are much more likely to connect with users of the same language than with users of a different language.¹⁷ Similarly, most digital sites “are composed of a single, dominant language” (ibid.: 837),¹⁸ or display reference-induced patterns

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- 14 In this period, computational text analysis tools were still in their infancy and scholars were constantly developing new tools for detecting and analysing different languages and their application in social media platforms. In comparison to today's tools, such as Large Language Models, the techniques that approximate a user's dominant language use via a user's self-description (cf. Hale 2012) or self-reported location and time zone (cf. Lotan et al. 2011; Poell/Darmoni 2012) seem a little wooden, but they are nonetheless effective.
 - 15 Ten years is a long time in the life of such a platform, and platform architectures as well as user demographics and behaviour can change significantly in this time.
 - 16 This includes follower-following studies (Takhteyev et al. 2012; Kulshrestha et al. 2012), studies that analyse anchoring and referencing patterns (Hale 2012; Hale 2014; Hong et al. 2011) and studies that analyse specific sites (Bruns et al. 2013; Poell/Darmoni 2012).
 - 17 These tendencies manifest themselves irrespectively of how many people in the world use a specific language (cf. Hale 2014: 839).
 - 18 Nonetheless, the dominant language within a site can shift over time, depending on the participants within the site. Thus, Axel Bruns and colleagues found that – in the course of the Arab Spring – the site of #egypt displayed “a substantial shift over time, from a comparative dominance of users tweeting in Latin characters to an overwhelmingly Arabic-speaking user base. This shift may be driven in part by the early prominence of alternative hashtags [...]. But our analysis has also shown the already considerable presence of an Arabic-speaking elite among the top 1% of most active contributors to #egypt even at this early stage; [...] and as long-term interest by international participants waned, this established elite became the nucleus around which a largely Arabic-language discussion unfolded” (2013: 894). Poell/Darmoni (2012: 19) have made similar observations in their own study of #sidibouzid in connection with the Tunisian revolution of 2011.

that cluster around the occurring languages (cf. Poell/Darmoni 2012: 28). This finding is to be expected, since “[s]ocial interaction depends on the two parties’ ability to communicate, which nearly always requires that they are competent in the same language” (Takhteyev et al. 2012: 75). Communication processes are thus clustered around languages.

From a deliberative systems perspective, the language-based clustering of users and communication processes means that information, reasons and opinions tend to flow within the boundaries set by languages: they are exchanged within sites whose participants share a primary language and between sites with the same dominant language more often than is statistically expected for a network with randomly distributed network ties (cf. Hale 2014: 836). Since social media platforms are among the primary spaces where groups of participants who are from all over the world and who speak all kinds of languages can communicate, these findings can be taken as an indication that even deliberative systems operating under the conditions of the digital constellation tend to be structured by language. Deliberative sites, as a space for exchanging opinions and information, are inclusive only of participants who understand the languages in which the contents are expressed. Technically, tweets in any language can be anchored on any hashtag, but qualities such as *interactivity* and *reciprocity* occur only if the contents are comprehensible to the participants.

On social media platforms, users communicating in different languages vary not only regarding their grammar, syntax and vocabulary, but also regarding their preferred use of the platforms’ architectures. Hong and colleagues “discovered cross-language differences in adoption of features such as URLs, hashtags, mentions, replies, and retweets” on Twitter (Hong et al. 2011: 518). For example,

German users were distinctively more likely to include URLs and hashtags than users of other languages [...]. In contrast, Indonesian and Malay users were more likely to retweet and include mentions [...]. Thus, German users appeared to have a stronger propensity for content-related behaviors. Indonesian and Malay preferred social and message-broadcasting behaviors. This shows two distinctive ways of using Twitter for either information sharing or social networking (ibid.: 520).

This, in turn, affects the structures of sites and connections across the platforms, as well as their embeddedness in the wider system. The content-related

behaviour of the Germans in the study rather resembles blog-type posting (though posts might be anchored on a hashtag), but it is less interactive than the behaviour of the Indonesians who tended more towards using retweets as a form of reaction to content and using @-referencing as a form of specifically addressing other users. In the first case, deliberative qualities such as *inclusivity* and *reason-giving* are at the fore, while the second kind of behaviour rather supports qualities such as *interactivity* and *reciprocity*. Moreover, including URLs embeds the respective sites in the wider system and thereby supports systemic inclusivity.

Of course, social media platforms are not entirely fragmented by language. There are different forms of bridges between language divides, but they all hinge on a number of users being proficient in more than one language. Multilingual users “play a unique bridging role in the network and are critical to the global connectivity of the network” (Hale 2014: 838).¹⁹ These bridges exist across all languages, but the language with the most important bridging role is English (cf. Hale 2012: 1365; Hale 2014: 840–841; Takhteyev et al. 2012: 80). Several studies found that multilingual users are more active than monolingual ones (cf. Bruns et al. 2013: 875; Hale 2014: 836; Poell/Darmoni 2012). These users author content in different languages (cf. Hale 2014: 841), share URLs across languages (cf. Hale 2012: 1366–1367) and are instrumental in bridging the language divide in information exchanges (cf. Bruns et al. 2013: 894).²⁰ They thus play a central role – both literally and metaphorically – for parts of deliberative systems that operate via social media platforms. They act as carriers of transmissions, with all the power and effects I described earlier (see chapter 2.3). They establish connections between sites formed around different languages, and they use the different languages strategically. In the context of the Tunisian revolution of 2011, for example, one of the most active multilingual users reflected:

19 There do not seem to be any recent studies surveying the share of multilingual users on social media platforms. Hale's 2014 study calculates them to be at around 11% (cf. Hale 2014: 836). The percentage varies across languages but independently of the number of users writing in a specific primary language (cf. *ibid.*: 838); that is, the specific share of multilingual users in a language is independent of the overall number of users who use this language primarily.

20 However, the overall importance of English for the World Wide Web has been declining with the introduction of internet access all over the world, which has led to ever more users communicating in their respective native languages (cf. Hale 2012: 1364).

In English, we mostly tweet about news and facts, no debates. We also tweet about human rights, since this issue makes a lot of “noise” in the West. We used French mostly to criticize and “insult” the French because of their cowardice at the beginning of the revolution. For us Classical Arabic was more important than the Tunisian dialect. We wanted the rest of the Arabs to understand us, and our actions. Even when we communicate with Tunisians we use Classical Arabic, if we think it’s a matter that concerns all Arabs. Tunisian dialect is only used, if we consider the tweeted information as a local matter. About 20 to 30% of our communication is in Tunisian dialect, mostly to make jokes and use irony. (Poell/Darmoni 2012: 22–23)

These individuals, thus, have used different languages strategically to address and connect with different communities. They have furthermore translated contents and transmitted them to clusters and sites with other primary languages, again addressing different language clusters strategically, as becomes apparent from the interviews:

[one multi-lingual Twitter user] recounted that he and his collaborators were first translating all of the relevant news on Twitter from Tunisian Arabic to English. “That’s when the Western media started taking us seriously. All of a sudden, the media power structure was reversed: the western media became dependent on us because we were giving them valuable information.” In addition, he said they posted the information in Classical Arabic and “asked all our Arab contacts to tweet about this: in Egypt, Morocco, Saudi Arabia, Qatar, Libya, Lebanon, et cetera.” (ibid.: 23–24)

By thus selecting the contents and transmitting them between sites of different primary languages, multilingual users can shape what contents come to the awareness of the receiving sites. Moreover, they can influence the perspective according to which these contents will be received by commenting on them or stressing certain aspects within them (cf. Hale 2012: 1365; Hale 2014: 840–841). In this manner, the interviewed multilinguals that were central to Twitter communication during the Tunisian revolution “understood their task as one of ‘information escape’: reproducing and structuring information from Tunisia and making it accessible to international media [as well as] to media and publics in the Arab world and France” (Poell/Darmoni 2012: 28–29). So, multilingual users are important bridges across language divides, and they strategically use this position within the deliberative system; they increase the *connectedness* between its sites and thereby the *systemic inclusivity*.

But multilingual users are not the only drivers of transmissions between languages. The platforms' architectures, likewise, can support cross-language communication. As Scott Hale observed, Twitter's "single data store across all languages seems to facilitate the sharing of links" (2012: 1367). Moreover, a "[s]earch occurs irrespective of the majority language of the tweet or the language of the user", and this "results in users of Twitter more likely encountering foreign-language information and then reposting that information" (ibid.). The role of platform architecture in bridging language divides will most probably increase in the nearer future, as soon as the platform companies integrate translation tools in the platforms' interfaces and recommender systems. Already, deliberative theory scholars attribute these technologies to bridging effects, as can be seen, for example, with the situation in Ukraine since 2022:

Google translate has created a European public sphere where journalists, pundits, and citizens communicate instantaneously across multiple language barriers. Millions of Europeans follow Zelenskyy whose tweets are automatically translated into the followers[] native language[s], and social media are creating links between ordinary Ukrainians and Europeans where they are exchanging information in real time. Google translate has an enormous potential for the future of supra and intra national debate. (Chambers 2023: 65–66)

Tools such as Google Translate are still external to social media platforms, which means that there are frictions in communication across language divides that take the shape of copy-pasting text between the platform and a translation website or app. These frictions will be reduced when platforms start to integrate MML-based AI systems for real-time translation²¹ into their interfaces and recommender systems; users might be able to seamlessly communicate across language divides, and inter-linguistic, supra-national communication processes might increase, which would increase the *systemic connectedness*. The importance of multilingual users would decrease with such a development. However, language divides often correlate with the follower-following clusters of users (cf. Hale 2014: 836) and with the issues discussed (cf. Poell/Darmoni 2012: 19–21). The causalities and dependencies between these factors – along with the question of whether seamless communication

21 An example of such a system is DeepL.

across language divides actually decreases language-based clustering – will become apparent only when such systems are integrated and when scholars are consequently able to negate the role of language as a structuring influence.

Lastly, platform architectures afford forms of expression that are independent of official languages, such as one-click reactions, images and sounds. These more universal forms can also serve as bridges. Thus, the example of the sprayer meme I cited in chapter 5.1 demonstrates how images can convey political messages without spoken or written language. Though non-verbal forms of expression hardly allow sound and detailed debates, they can serve as bridges across language divides.

In sum, communication is structured by the specifics of the languages that users employ to communicate with each other on social media platforms, since the use of different languages comes with different ways of communicating and different uses of the platforms' architectures. Users of the same language can understand each other better and therefore tend to prefer communicating among each other over communicating with users of a different language. Multilingual users and translation systems act as bridges between language divides. But even if users communicate in the same language, they do not necessarily communicate in the same way. This is because varying communicational conventions also develop in different platform communities of the same primary language – that is, they develop different jargons and institutionalise specific ways of using rhetoric. Thus, within these broader patterns along language divides, there are more granular patterns that develop around platform communities, with their respective sets of communicational conventions. I will address these communities and their conventions in the following section.

6.2.2 Communicational Conventions of Platform Communities

The more specific sets of communicational conventions that are developed within the various platform communities can have similar effects on the structures of communication on the platforms. Platform community is one of the buzzwords, especially in journalistic works on social media platforms. The term often refers to the entirety of users on one platform, and indeed, on a platform like Twitter, “all tweeps belong to the worldwide set of tweeps who understand Twitter’s norms, language, techniques, and governing structure” (Gruzd et al. 2011: 1312–1313). Papacharissi applies the concept of *habitus* to this understanding of platform affordances and their utilisation:

the habitus informs the manner in which the capabilities of a particular platform are utilized and thus informs the texture of digitally enabled forms of expression and connection. [...] The dialectical and relational practices adopted as people express themselves and connect online are the product of what the technology invites and of pre-established practices that people feel comfortable engaging in. (2015: 123)

However, I have already described various instances of how platforms are furthermore composed of a multitude of sites and user clusters that are interconnected but still distinguishable. These clusters and sites form “multiple and shifting communities, across multiple nations and cultures and religions, each participating for different reasons, often with incommensurable values and aims” (Gillespie 2018d: 176). These communities “do not independently coexist on a platform. Rather, they overlap and intermingle – by proximity, and by design” (ibid.). These platform communities largely form around specific sites or sets of sites that are rather homogeneous regarding their perspectives on political issues. In the deliberative systems terminology, these are partisan sites. Moreover, platform communities can be shaped by more general social groups that “are parts of a structured society” and that precede the individuals (cf. Stets/Burke 2000: 225).²² But not all sites produce platform communities. There are also more heterogeneous sites where different communities can interact with each other.

Platform communities can vary with regard to their communicational conventions. Different studies from digitisation research have addressed the interaction patterns and communicational conventions that develop in platform communities, with their specific sociocultural contexts. For example, Gruzd and colleagues studied in detail the follower network of one specific user called Wellman and observed that the members of this community “regularly meet, talk, provide support, and help each other on Twitter” (Gruzd et al. 2011: 1313). These users display a sense of belonging to the community, and they have the ability to influence others in the network through their communication (cf. ibid.). Moreover, this community has developed specific communicational conventions, in addition to the conventions widely accepted on the entire platform (cf. ibid.: 1302). “These specific conventions were introduced by either Wellman or his followers and were adopted by others in his personal community” (ibid.). Papacharissi, likewise, found that the “role of

22 With regard to group identifications, see chapter 6.3.

sociocultural context in shaping the outcome of digitally enabled expression and connection cannot be emphasized enough” (2015: 122). In her various case studies, “the discursive affordances of Twitter supported diverse practices that developed in a variety of directions because they were born out of singularly combined sociocultural conditions” (*ibid.*). Thus, different communities interact in different sociocultural conditions and develop specific conventions by which community members interact within the platform’s architectures.

In the deliberative systems approach, a similar idea is presented by stressing the importance of the diversity of deliberative sites within a system. This diversity refers not only to the different contexts, but also to the inner workings of these sites. Many of these diverse sites within a deliberative system are the regular spaces of communication for a specific community, especially in the informal sites of civil society. They are the spaces where communicational conventions develop. Thus, not only do “people behave very differently in a courtroom than a bar-room” (Bächtiger/Parkinson 2019: 26–27), but even within one barroom there might be different groups and communities, with their own specific conventions, that form separate sites within the barroom – much like the patterns that form within one hashtag-anchored site. All the bar guests must abide by the rules within the bar, but each community and site has its own additional set of rules and scripts that shape the communication processes. The distinctions between the communities and their conventions thus “extend beyond institutions and institutional rules to encompass informal beliefs, customs and practices, too” (Boswell/Corbett 2017: 810).

But even though the political cultures and communicational conventions of platform communities can differ widely, they do not necessarily do so. On social media platforms, user networks and communities often overlap, communities can be present in several sites and the recommender systems additionally connect sites. Through these connections, not only contents but also communicational conventions are transmitted between sites and communities (*cf.* Gruzdt et al. 2011: 1302). This implies that sites that are strongly connected also transmit more communicational conventions and tend to converge, with regard to these conventions, over time. Moreover, a similar political culture – including a similar set of communicational conventions – in both sites will enhance unbiased and correct transmission and its inclusion in the consecutive deliberation.²³ Applied to communicational conventions, this means that already similar political cultures will converge further and that changes in one

23 I have described this effect in chapter 2.3.

set of community conventions will quickly transmit into other communities with similar conventions.²⁴ Thus, for example, “it is well known that the social networks that matter for language change are often strongly homophilous in terms of both demographics and geography” (Eisenstein et al. 2014: 11).²⁵ Conventions thus spread across a multitude of sites, and as more users and communities use a convention, it spreads more quickly.²⁶ Simultaneously, the platforms’ recommender systems are mostly based on similarity metrics and the individual user’s past behaviour, which means that they tend to confront users with contents that are similar to what users already reacted to. Moreover, these systems rely on individual users’ networks of friends and followers, who likewise tend to interact in similar communities with similar conventions. The recommended contents therefore usually pertain to ever more similar communicational conventions. Consequently, platform users will be more exposed to sites and contents that are communicated through similar conventions.

So, there are different sets of communicational conventions that are used in platform communication. They partially overlap and partially differ greatly, and they thus structure the communication process within and between digital sites. These sets of conventions contain both jargon and the institutionalised use of rhetorical means.

By *jargon*, I refer to the specific terminologies, linguistic patterns and phrases that belong to the communicational conventions of a community. In this regard, it is not only differences between national languages that

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- 24 Conversely, if the initial similarity of conventions is lacking, transmission of jargon and phrases may be hindered, even though they are intended to be spread. For instance, the study by Parkinson and colleagues showcases an example of an anti-Brexit campaign page on Facebook whose author team had composed a selection of talking points and “was pushing its talking points, come hell or high water, with little direct impact on the language of ordinary citizens” (Parkinson et al. 2020 // 2022: 556).
 - 25 Some rhetorical means even spread across sites of different communities. Rossini and colleagues, for example, found “that candidates’ rhetoric can influence public discourse by setting the tone and fueling attacks across party lines in an already polarized scenario. In turn, the amount of incivility in public comments can undermine the potential for citizens to effectively talk about politics on social media, and at the same time, it makes it even harder for candidates and political elites to benefit from informal conversations among citizens and understand the core issues that affect the electorate” (Rossini et al. 2020: 104).
 - 26 This also shows in the findings of Eisenstein et al. (2014: 10), who observed that jargon changes on Twitter have been transmitted from larger cities to smaller ones, as well as from demographically younger cities to older ones.

are relevant. Deliberation is additionally structured by differences between the jargons of various fields of knowledge (cf. Nguyen 2018), for example, or between elites' cultivated forms of language and the language available to the masses (cf. Dryzek 2009: 1395). Research on social media platforms has produced many accounts of diverse jargons in platform communication.

Firstly, there are jargons that are used specifically in digital communication or on a specific platform, that is, there are jargons that belong to the common sociocultural context of the diverse platform communities. For communication on social media platforms, "[w]ritten language has been forced to adapt to meet the demands of synchronous conversation, resulting in a creative burst of new forms, such as emoticons, abbreviations, phonetic spellings, and other neologisms" (Eisenstein et al. 2014: 1). Due to differences in platform architectures, different adaptations to these specific platforms have also developed. Gruzdt and colleagues, for example, found that "Tweetspeak is important for facilitating productive conversations and identifying oneself as part of the overall Twitter community" (Gruzdt et al. 2011: 1303).²⁷ Similarly, TikTok users share a jargon based on images and humour that allows them to communicate across geographical and political borders, while still identifying as part of the TikTok community (cf. Dornis 2020). Moreover, Tommaso Trillo and colleagues found that "people consistently recognize genre-specific values in portraits and evaluate them through a narrow set of communication-related criteria" (Trillò et al. 2023: 235). They added that "[s]uch evaluations vary across cultures" (ibid.). Hence, images can be part of a jargon, too, as they are interpreted according to the communities' conventions and values.

Secondly, there are jargons that are primarily used within specific communities on a platform. For instance, the Wellman community analysed by Gruzdt and colleagues identified the language convention that

when a user replies to somebody else's message, he or she often uses initials (e.g., "Wellman") or "Me" followed by colon (:) to indicate where the answer begins. For instance, in the following message, Barry Wellman replies

27 Most of the example terms presented there are by now either obsolete or no longer limited to the architecture of the website formerly known as Twitter. They include the use of Hashtags, as well as of "RT" [...] to signify a 'retweeted' or forwarded message, 'via' to signify a highly edited message, and @name to identify the username of whom you are talking about" (Gruzdt et al. 2011: 1301).

to a user with a username redlog: “RT @redlog does the ASA have an official twitter stream? Wellman: Yup, @asanews.” (Gruzd et al. 2011: 1302).²⁸

Sometimes, such jargon development is pursued intentionally by one or more participants. Thus, another example has been presented by Parkinson and colleagues, who analysed political campaigns in the context of Brexit and found that the “Better Together Facebook team seems to have deployed [talking points] in language that combines short, sharp ideas in entirely idiosyncratic ways [...] with little direct impact on the language of ordinary citizens” (Parkinson et al. 2020: 555–556). One of the multilinguals interviewed by Thomas Poell and Kaouthar Darmoni likewise “tried to develop an Arab Twitter language that is informative yet personal” (2012: 23).

Thirdly, there are jargons that are used in communities interacting on platforms and beyond. This accounts for the finding that “despite the fact that social media facilitates instant communication between distant corners of the earth, the adoption of new written forms is often sharply delineated by geography and demographics” (Eisenstein et al. 2014: 1). Thus, for example, Eisenstein and colleagues found that, in their corpus of Twitter messages,

the abbreviation *ikr* (I know, right?) occurs six times more frequently in the Detroit area than in the United States overall; the emoticon *^ ^* occurs four times more frequently in Southern California; the phonetic spelling *suttin* (something) occurs five times more frequently in New York City (*ibid.*).

But while geographical aspects are prominent, “the absolute difference in the proportion of African Americans is the strongest predictor”, and “[a]bsolute difference in the proportion of Hispanics, residents of urbanized areas, and median income are also strong predictors” (*ibid.*: 10). The analysis “suggests that such differences persist in the virtual and disembodied realm of social media” (*ibid.*). In some regions, users have even started to mix languages in their platform communication in order to adapt to the platform’s architectures. Thus, Arabic writing users had to use Latin characters on Twitter, since the platform did not support right-to-left hashtags for a time (*cf.* Bruns et al. 2013: 873–874). Even more translingual practices have been developed by university students in contemporary, post-socialist Mongolia – practices that

28 There were further conventions to accommodate Twitter’s limitation of tweets, at that time, to 140 characters (*cf.* Gruzd et al. 2011: 1302).

are “exceedingly mingled with an array of English, Russian, Japanese, Korean and Turkish linguistic, cultural and semiotic resources” and include “japanized Mongolian phrases, twisted Verlan-like Mongolian terms, anglicized Korean jargon and emotional and mood signs” (Dovchin 2015: 455–456). Each one of these translanguing practices “has its own sociolinguistic history, culture and background” (*ibid.*).

Prashanth Bhat and Ofra Klein (2020) presented yet another highly interesting example of community jargon that has developed in the specific conditions of the digital constellation. The scholars analysed how a community of white supremacists developed strategies of dog whistling, which may be defined as follows: “the use of words, phrases, and terminology that mean one thing to the public at large, but that carry an additional, implicit meaning only recognized by a specific subset of the audience” (*ibid.*: 153–154). This kind of jargon is thus strategically developed in order to afford covert communication in a specific community, allowing “the speaker and their audiences to violate certain social norms while plausibly denying doing so” (*ibid.*: 154). Dog whistling is not specific to the digital constellation, but digital technologies – and social media platforms in particular – have eased the dissemination of the codes (*cf. ibid.*: 166). Moreover,

dog whistling has also become a popular online strategy, especially after the introduction of Google’s Perspective tool aimed at detecting insults and online toxicity. The automated removal of explicit insults forces hate groups to use symbols and keywords so as to circumvent these forms of detection (*ibid.*: 156).

Thus, a group of users on the (controversial and relatively small) platform 4chan set out to create “a coded language that would circumvent such A.I. systems”, and they “came up with a list of words, where seemingly innocent terms, most of which were names of computer-related tech companies, were used in lieu of racial slurs” (*ibid.*).²⁹ Individuals have used other terms of this jargon “to (1) signal belonging to a political group; (2) identify as a strong male; (3) express identification with and pride in one’s (supposed) cultural heritage” (*ibid.*: 162); generally, they have used such terms “to extract themselves from the mainstream discourse while still injecting ideas into that same discourse” (*ibid.*: 167). The

29 Moreover, the community used specific symbols and numbers as dog whistles (*cf. Bhat/Klein 2020: 160–161*).

scholars found that elements of this jargon partially originated in and eventually diffused to other platforms and even political speeches (cf. *ibid.*: 159).³⁰

To deliberative theorists, the implications of different jargons for deliberation are neither new nor specific to digital communication. But true to the scholars' focus on vertical connections, they mostly address the obstacles to deliberative qualities that occur "when elites cultivate a form of language unavailable to the masses as a way of bolstering their standing and power" (Dryzek 2009: 1395). More generally speaking, the development of jargon in communities can be seen to have a twofold impact on deliberative qualities. On the one hand, communication within the communities is facilitated for all participants that are familiar with the jargon and able to actively use it (cf. Goodin 2008: 189–190). Thus, *comprehensibility* is enhanced among participants that use the same conventions. It might be even furthered if communication is simplified through certain codes and terms that stand proxy for larger ideas, so long as all participants understand the deeper meanings behind the language. This dynamic becomes more extreme as the community becomes more specialised regarding a specific field or common ground of knowledge, for "each field requires not only its own technical jargon and specialized knowledge, but its own specialized form of reasoning" (Nguyen 2018: 107). Moreover, participants might grant *authenticity* and *listen* more readily to a speaker who uses their common jargon "correctly" in expressing her view on the common issues and perspectives. On the other hand, the use of jargon inherently *excludes* potential participants that are not fluent in the jargon, or it at least sets these participants at a disadvantage regarding comprehensibility. *Comprehensibility* and *rationality* cannot be secured where fields of human knowledge "are mutually incomprehensible to one another" (*ibid.*) and where conceptions of a good argument vary radically from field to field (cf. *ibid.*). *Publicity* and *accountability* are likewise impaired, even more so in cases of dog-whistling jargons that are explicitly developed in order to exclude individuals by lowering comprehensibility and publicity and to avoid accountability.

30 In the introduction to chapter 6, I also mentioned a current example of dog whistling: the term "to unalive", which is taken from traditional comic books (*Deadpool*, *Spider-Man*), has been introduced rather widely in platform communication in order to serve as a dog-whistling term for "to kill" or "to commit suicide" and thus avoid automatic blocking of posts by the platforms. Often, such terms have counterparts in other languages (for example, "unlebensdienlich" in German).

Besides the specific terminology and signs involved in jargon, communicational conventions can also include institutionalised uses of *rhetoric*. That is, the members of a community and participants in the respective sites may have formed habits of using rhetoric in specific ways. From a deliberative systems perspective, rhetorical means can serve different functions; they have different effects on the communication processes, and their use is context-dependent.³¹ Depending on their intentions for and perceptions of the communication process, participants can use different means.³² Moreover, the use and acceptance of specific rhetorical means depend on the site's position within the deliberative system and sequence. Thus, for example, Esau and colleagues found that positive emotions were more often expressed in more formal arenas, whereas negative emotions were more often expressed in arenas of informal communication (cf. Esau et al. 2021: 104). Consequently, different rhetorical means also have a different influence within a site, "depending upon how those modes manage to tap in to, or disrupt, group norms" (Kuyper 2020: 24). Graham, for example, found that

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- 31 Though scholars have addressed these specific means occasionally, they have more commonly addressed rhetorical means and their effects in a more general fashion, especially in the discussion on the value of non-deliberative acts (see chapter 2.1).
- 32 For instance, "[w]e will see actors who use language and symbols to bolster formal arguments when needed, who are respectful because they learnt something during the process but simultaneously have strategic impetuses, who use reasons to persuade but also to mobilize an audience" (Bächtiger/Parkinson 2019: 75). Different rhetorical means help the participants with "the formation of better arguments[,] as individuals can express themselves in ways that attach to their cultural, social, and psychological make-up" (Kuyper 2020: 24). Regarding the individual speaker's intentions in using rhetoric, Chambers stresses the distinction between deliberative and plebiscitary rhetoric. Deliberative rhetoric "makes people think, it makes people see things in new ways, it conveys information and knowledge, and it makes people more reflective" (2009: 335); it "creates a dynamic relationship between speaker and hearer" (ibid.) and "treats its audience as autonomous deliberators deserving of respect" (ibid.: 337). Plebiscitary rhetoric, on the other hand, "refers to speech that is concerned first and foremost with gaining support for a proposition and only secondarily with the merits of the arguments or persuasion for that matter" (ibid.). It "seeks to attract voters and as such treats its audience as means to power" (ibid.), that is, in more general terms, it creates inequality between speaker and audience. But even deliberative rhetoric "is still rhetoric and so embodied in an essentially asymmetrical relationship between speaker and hearer" (ibid.: 335).

forums where the topics of discussion are represented by more conventional “hot” issues, which are grounded in a competitive communicative environment, may tend to foster the use of [rhetorical means] in a more impeding fashion than those forums where the topics of discussion are more personal, which tend to foster a more supportive, affirming, and encouraging communicative space. (2009: 161)

Thus, the use of rhetorical means often adapts to the communicative conventions within the site and its community.

Within a site, rhetorical means can serve to foster bonding within a community. For example, Lawrence and Bates have analysed the use of cooperation metaphors that “emphasize[...] the importance of friends, helpfulness, open-mindedness, understanding, and working cooperatively to affect change” (2014: 10). Therefore, the structuring of communication on a more systemic level, through the use of rhetorical means, is twofold. On the one hand, rhetorical means can be used directly to establish and express affiliations and entrenchments between users, independently of platform communities. In fact, “bonding rhetoric is the kind generally feared by democrats, because it is likely to deepen divisions with out-groups, to invoke dangerous emotions, to mobilize passions, and to move groups to extremes” (Dryzek 2010: 76–77). On the other hand, platform communities can institutionalise specific uses of rhetorical means. The similarities and dissimilarities between these institutionalised uses determine the comprehensibility of the meanings behind the rhetorical figures for the participants in the sites or the recipients of transmissions containing these transmissions – which additionally structures communication at the level of site and system. I will exemplify these more general observations on rhetorical means for humour, affect and (in)civility.³³

Digitisation scholars have found and analysed a large variety of humour types that serve a large variety of ends, especially in political communication on social media platforms. They include “parody accounts, sarcastic content, gifs, memes, and clever intertextual remixes” (Davis et al. 2018: 3899), as well

33 Of course, there are other rhetorical means that structure communication processes and affect deliberative systems. For example, several scholars have addressed the role of symbols and metaphors for communication processes within and between deliberative sites in the digital constellation (cf. Ercan et al. 2017: 203; Lawrence/Bates 2014; Parkinson 2012a: 75). But humour, affect and incivility have been the means that have been most addressed in digitisation research.

as “[j]okes, sarcasm, wordplay, irony, and mockery” (ibid.: 3904). In these reifications, “humor on social media is indeed a vehicle for serious political engagement” (ibid.: 3905–3906), including political discussion as well as civic support such as voting, fundraising, rallying and mobilisation (cf. ibid.: 3910). All in all, scholars have found humour to be “a widely used and highly valued practice within political deliberations as they take shape through intersecting social platforms” (ibid.: 3900).

Users apply humour to convey not only their thoughts and political opinions but also their identifications with platform communities.³⁴ One does this “by ‘reclaiming’ derogatory labels, connecting one’s political preferences with other valued statuses, and establishing oneself as part of a political bloc” (ibid.: 3909). This can also involve “creating a sense of shared experiences, which participants would occasionally allude back to during the course of a discussion or later in another thread” (Graham 2009: 158). On the other hand, humour can unify by demonstrating opposition to groups and opinions (cf. Davis et al. 2018: 3907; Graham 2009: 158–159). Davis and colleagues even found that

humor on social media [is] a distinct cultural form. Humor remains tied to cultural bounds, but those bounds are perhaps loosened through articulation on the Twitter platform. At the same time, social media’s shared vernacular and convergence culture may emerge more bounded when articulated through humor, politics, and/or their combination. (2018: 3912–3913)

In other words, though there seems to be such a thing as, for example, Twitter humour that converges across the platform, there are also humour styles specific to communities that are shaped by their respective cultural backgrounds. Thus, like jargon, humour distinguishes communities and thereby structures communication processes. Rodriguez came to similar findings in his study of affiliative humour, that is, humour that “involves jokes that [...] are shared to improve relations between people” (2020: 268). He found that affiliative humour “can be argued to foster a sense of community” (ibid.: 272), as it “focuses on enhancing social interaction through the use of inside jokes” and can “help process reality and share a common cause” (ibid.). Affiliative humour is therefore highly contextual and comprehensible only to users who know the current

34 In chapter 6.3, I will address further forms of group identification and ways of conveying it on social media platforms.

political situation and what has been going on in the site (cf. *ibid.*: 279).³⁵ For example, in October 2016, a user posted on Twitter: “Mother of 2 strong girls, business owner, feminist, caring, does for others, stays informed, leader, voter, proud ‘NASTY WOMAN’ #imwithher” (Davis et al. 2018: 3909). To understand the implications of this tweet, users had to know that presidential candidate Hillary Clinton had been publicly called a “nasty woman” by her opponent Donald Trump, that her candidacy to become the first female president had great symbolic implications, that the role of women in society has still been controversial and mostly underestimated in society, that some of Clinton’s supporters among Twitter users had started to reclaim and reinterpret the label “nasty woman” and so on. As the platform community becomes more stable, the knowledge that participants need in order to understand the allusions becomes more specific – like community history or some personal knowledge about individual members. Hence, contextualisation, by excluding users that are not familiar with these contexts, represents another instance of structuration. Consequently, such expressions of humour structure communication “by generating collective identities, dividing insiders from outsiders, and galvanizing political positions” (Chevrette/Duerringer 2020: 249).

Several deliberative theorists have long since acknowledged the worth of humour for communication within deliberative systems.³⁶ Some digitisation researchers have even reflected on the effect that humour in digital communication processes has on deliberation in more detail. They found that humour on social media can lower barriers to political participation – and thus increase *inclusivity* – since “humor ‘softens’ discursive style, [while] digital social platforms provide an alternative to elite-controlled broadcast conglomerates” (Davis et al. 2018: 3901). In Todd Graham’s study, humour “acted as a social lubricant, creating a friendly and playful atmosphere, and was used to enhance and support rational-critical debate” (2009: 158). At the same time, the contextuality of humour can lead to the *exclusion* of certain users: “If social media are increasingly relevant to political action and if humor is central to social media communication practice, then exclusion from either due to

35 In fact, it seems safe to say that all styles of humour are contextual. This is why it is next to impossible to present meaningful examples in a comprehensive way. However, the studies I cited here contain an abundance of examples along with detailed descriptions of the respective contexts.

36 See, for example, Dryzek (2000: 1–2, 2009: 1381, 2017: 612); Graham (2009: 148); Hendriks et al. (2020a: 79).

access, skill, or media literacy will be increasingly detrimental to already marginalized voices” (Davis et al. 2018: 3912).³⁷ In addition, humour in digital communication has been suspected to “foment cynicism, apathy, and general distrust in the political process” (ibid.: 3901; see also: Baumgartner 2007; Shifman et al. 2007), which would decrease qualities such as *listening*, *respect* and *common-good orientation*. Often, humour also derails conversation by either igniting “humor fests” or “degrading exchanges” (Graham 2009: 158–159). In such cases, humour decreases qualities such as the communication’s *rationality* and *common-goal orientation*.

A second rhetorical means in political communication on social media platforms is the conveyance of affect and emotion. For example, “[m]aking one’s emotions known through the Twitter love icon has become a norm to express one’s point of view and to comment on others’ tweets” (Bouko/Garcia 2020: 177). Next to these one-click reactions, users can also express their emotions within their posts through emoticons (e.g., “:-)”), emojis (e.g., “😊”), emotive hashtags like #headdesk (cf. Bruns/Burgess 2015: 20) and, naturally, any means that are generally afforded by text-based communication. The latter include, for example, “fixed figurative expressions (e.g., my heart sank) or psycho-physiological descriptions of emotional experiences, like in ‘my voice trembled’” (Bouko/Garcia 2020: 179), as well as “linguistic markers that conventionally signal the speaker’s emotions: punctuation, interjection, intensifiers, swear words, for example” (ibid.). Finally, emotions can also be expressed more indirectly through narratives, that is, by “telling stories, helping others feel what it is to be in another’s shoes, and making public claims on the basis of those experiences” (Parkinson 2012b: 153). The use of storytelling to convey arguments and affect in political communications has been found to be especially prevalent in deliberative sites on social media platforms (cf. Esau et al. 2021: 104).

Besides expressing opinions, emotions and affect have other functions in political communication processes. On an individual level, emotions are used to “signal to other participants how one would like to be perceived” (Bouko/Garcia 2020: 177). By displaying emotions, users can convey personal views regarding an issue as well as their identification with specific perspectives and communities. Furthermore, emotions can be utilised to mobilise support for perspectives and communities. For example, by portraying viewpoints on public issues in an emotional and passionate manner, these viewpoints

37 Similarly: Jacob (2017: 33), Risse (2023), Wacjman (1991).

“are staged to appear personal; ordinary people and townsfolk are cast center stage, and the performances rely heavily on their stories and experiences”, as Hendriks and colleagues (2016: 1120) found in their analysis of communication processes that took place on Facebook with regard to an environmental controversy. Likewise, Esau and colleagues observed that “negative emotions in the [digital] sample deliberations were often used to mobilize likeminded readers to also participate in the discussion, whereas positive emotions were primarily used in support of other participants’ statements” (Esau et al. 2021: 107).³⁸

Thus, the expression of emotions can structure communication by enforcing a distinction between “us” and “them”. This kind of enforcement is especially intensified by the platforms’ architectures. These architectures provide emotive one-click reactions that are prominently placed and very easy to use. Moreover, users are encouraged to avail themselves of these possibilities to react, because these reactions noticeably have relatively heavy weights in the platforms’ recommender systems.³⁹ By prioritising emotional expressions, platforms hope to generate more engagement and therefore, ultimately, more profit (cf. Merrill/Oremus 2021; Roose 2020b).⁴⁰ The result of the users’ deployments of affect for mobilisation purposes and the platforms’ preference for emotional expressions in their algorithmic systems is

the emergence of political clusters that resort to binary affective rhetorics. In a political condition where polarizing binary politics and/or binary discourse are entrenched, affective political enclaves – especially those that are based on extreme emotions such as hate and love – are more likely to emerge on social media. Each of these enclaves is [...] a discursive arena where individuals,

38 In turn, Aragón et al. (2017) have found that negative communications statistically induce more – and even deeper and more complex – discussion. In another interesting study, Duguay (2022) analysed positive and negative political communication on Reddit and found that a) sites tend to be composed more heterogeneously in terms of political leaning when the overall tone of the posts is more extremely positive or negative (cf. *ibid.*: 1193) – implying that more extreme expressions seem to induce more extreme answers – and that b) new users of the platform, in particular, tend to be more extreme in their positive and negative expressions (cf. *ibid.*: 1199).

39 The impact of the different weights on communication processes and their developments in Facebook’s recommender systems has been comprehensively described by Merrill and Oremus (2021).

40 Bouko and García (2020: 176–177) – among others – term this kind of reasoning “digital affective capitalism”.

afforded by social media algorithms, voluntarily form an affective political cluster that is exclusively developed to promote the wellbeing, rights, and interests of their own, while negating the rights of “the Others.” (Lim 2021: 198–199)

In other words, the formation of platform communities is furthered by the users’ expression of emotions and the platforms’ prioritisation of these emotions in their architectures.

Both deliberative theorists and digitisation researchers have addressed the effects of emotion on deliberative qualities of digital communication. In this regard, there are two dominant trains of thought. Firstly, many scholars agree that emotion and affect have a positive influence on qualities such as *listening*, *comprehension* and *authenticity* (cf. Chambers 2009: 336; Wright et al. 2018: 78). Graham found in his study “that emotions tended to enhance political talk by providing a sense of genuineness and realness to these arguments” (2009: 160). In Hendriks and colleagues’ study, likewise, “identities, voices, and images of ordinary people [were] crafted into personal stories for the audience to relate to” (2016: 1119).⁴¹ This applies not only to communication processes within a site, but also to connections and systemic composition. Thus, for example, “[f]or marginalized cultures, affective statements are part of performing identities that otherwise become further repressed” (Papacharissi 2015: 119), and, over time, “affect may lead to subtle disruptions of power hierarchies, which cumulatively may produce considerable energies of resistance and renegotiation of boundaries” (ibid.: 120). Of course, the contrary can likewise be observed. Where emotion is primarily used to oppose other views and to degrade other participants, it decreases the qualities of *listening*, *respect* and *equality* (cf. Graham 2009: 159–160).

Secondly, many scholars caution that the prioritisation of emotion on social media platforms is detrimental to the qualities of *truthfulness* and *rationality*. Affect may “distract from factuality” (Papacharissi 2015: 120), since “[a]ffective mechanisms increase awareness of an issue and in so doing amplify the intensity of that awareness [and] do not inherently enhance understanding of a problem, deepen one’s level of knowledge on a particular issue, or lead to thick forms of civic engagement with public affairs” (ibid.). Thus, for example, “Facebook’s data scientists found that angry reactions were ‘much more

41 This effect is intensified when emotions are conveyed through narratives (cf. Gastil/Brogghammer 2021: 16).

frequent' on problematic posts: 'civic low quality news, civic misinfo, civic toxicity, health misinfo, and health antivax content'" (Merrill/Oremus 2021).⁴² Relatedly, scholars stress the distinction between rational deliberation and the affective communication on social media platforms (cf. Ananny 2020: 358; Cohen 2017: 148; Papacharissi 2015: 116–117). Mansbridge, on the other hand, has argued that "emotions always include some form of appraisal and evaluation, and reason can proceed only rarely without emotional commitment, if only an emotional commitment to the process of reasoning" (1999: 225–226). In sum, the influences of emotion and affect, as well as the influence of their structuring capacities, are mixed.

The third rhetorical means often discussed with regard to social media platforms is incivility. "Uncivil discourse is a pervasive feature of online political talk and can be found in nearly any venue where people engage in discussions" (Rossini et al. 2020: 92). This loss of civility was one of the reasons why Parkinson professed "to be extremely cautious" (2012b: 165) in stating that digital communication has value for deliberative systems. On social media platforms, incivility "regularly takes the form of personal attacks, name-calling, pejorative speech, and vulgarity" (Rossini et al. 2020: 92–93). Obviously, these rhetorical means are closely related to – and have a similar structuring effect as – the expression of anger, for example, since they create a distinction between "me/us" and "you" in a like manner.

"In the context of deliberative democracy, civility refers to interpersonal respect and to one's ability to engage in respectful interactions and to recognize others' views as legitimate even when faced with disagreement" (ibid.: 93). It is therefore connected with the deliberative quality of *respect*. However, both deliberative theorists and digitisation researchers caution against directly condemning incivility as detrimental to democracy. "Both in a public forum and in everyday talk, there are justifiable places for offensiveness, noncooperation, and the threat of retaliation – even for raucous, angry, self-centered, bitter talk, aiming at nothing but hurt" (Mansbridge 1999: 223). Uncivil expressions can promote mutual respect in the long term, achieve *authenticity* and reveal negative emotions, the expression or knowledge of which might further the other participants' *understanding* of and *openness* to the expressed perspectives (cf. ibid.). This applies especially to like-minded participants. As Alan Finlayson observes with regard to digital communication, "[t]he more

42 Similar observations have been reported by Bakir/McStay (2021), Graham (2009: 159–160) and Marres (2018: 430).

a speech act violates norms and provokes a reaction, the more it can be experienced as a heroic instantiation of ‘free speech’ and self-expression, and considered intrinsically valuable regardless of its content or actual contribution to ‘public reason’” (2020: 5). Thus, incivility in and of itself has a bonding effect on communities, it conveys the authenticity of the expressed opinion without regard to the contents, it expresses a certain liberty of the speakers and it can promote the *equality* of the speakers with other participants. These latter thoughts can also be found in Mansbridge’s work:

uncivil forms of talk are also often necessary as means to the end of approaching both liberty and equality in deliberation. Sometimes only intensity in opposition can break down the barriers of the status quo. No one always listens attentively to everyone else, and members of dominant groups are particularly likely to find they do not need to listen to members of subordinate groups. So subordinates sometimes need the battering ram of rage. (1999: 223)

Thus, incivility can serve as a flagpole for issues, opinions and minority groups that might otherwise be overlooked (cf. also Mansbridge et al. 2012: 21). Similarly, Patrícia Rossini and colleagues observed that participants use incivility “as a rhetorical device to amplify their opinions” (2020: 101).⁴³ Rossini has counselled in a further study that

it is important to disentangle expressions of incivility, which refer to tone, from expressions of intolerance, which refer to substance, to understand the conditions in which online speech is dangerous and democratically harmful from the ones it is not. Unlike incivility, which is contextual, not inherently offensive, and subject to interpretation [...], intolerant discourse that threatens, harasses, or silences people or groups, particularly based on personal or cultural characteristics, undermines the positive outcomes of political talk. (2020: 417)

43 They found that “[p]eople are significantly more likely to be uncivil in their posts that are attacking candidates, the news media, or other members of the public, and less likely to be so when posting messages that are supportive of others or the news media”, which suggests that “uncivil discourse is strategically employed by the public to emphasize negative views” (Rossini et al. 2020: 100).

Thus, while intolerance – along with its expression in hate speech – is detrimental to deliberative qualities in general, and specifically to respect, mere incivility can have positive effects on deliberative qualities such as *comprehensibility*, *authenticity*, *respect*, *listening* and *inclusivity*. Yet Rayza Sarmiento and Ricardo Mendonça observed in their study on YouTube comments that “the great majority of disrespectful comments [...] serves uncivil purposes of stigmatizing and humiliating collectivities” (2016: 724) and thus falls into the intolerance category. Possibly healthy incivility therefore seems well outweighed by definitely unhealthy intolerance.

All in all, rhetorical means can express identification with platform communities, enhance bonding between community members and produce and demonstrate distance from other users and communities. But they can also be used to build bridges between communities and to facilitate the conveyance of ideas between communities. Platform communities can interact in basically two ways: within heterogenous sites, where the participants identify with different communities, and via transmissions between largely homogeneous sites, that is, sites whose participants usually belong to the same community. These types of interaction handle the disparities of communicational conventions differently.

Heterogenous sites on social media platforms can be, for example, large hashtag-sites, comment columns on controversial posts or pages set up by government agencies to interact with the public. Social media platforms are not mini-publics with rules and facilitators that enforce pure deliberation. However, the wider framework that governs both the platform rules⁴⁴ and the more general conventions of the platform community (e.g., “Twitterspeak”) still applies. In such contexts with fewer and looser conventions, “it may (often) be necessary that people try different means of communicating, even deliberately disruptive means, before decision-makers [or other participants] start listening” (Parkinson 2012b: 158). For example, in a Facebook page set up by the US Department of State Bureau of Consular Affairs to answer questions on travelling abroad, participants who were not interested in travel questions high-jacked the site to express their frustration with the current US immigration policies, using humorous contributions that intentionally misinterpreted the aim of the page (cf. Rodríguez 2020). They thus effectively built a counterpublic in this site and used humour “as a way to strengthen bonds while interrogating existing power structures” (ibid.: 280). In a further study, Rossini found that

44 See chapter 4.1.

incivility is also a frequent means to generate attention in heterogeneous sites. According to Rossini, “online incivility does not prevent participants from engaging in [...] heterogeneous conversations in which people are exposed to different views” (2020: 417).⁴⁵ So, rhetorical means can be used within both homogeneous and heterogeneous sites. By raising awareness and making the contents accessible to the various participants, rhetorical means serve deliberative qualities such as *listening*, *authenticity*, *comprehensibility*, *respect* and *inclusivity*. Though deliberative theorists have initially marked them as detrimental to deliberative qualities, they have been shown to enhance deliberative qualities in certain contexts, including the communication processes on social media platforms.

Platform communities can also interact with each other through connections between their homogeneous sites. As I explained above, homogeneous sites are often positioned in clusters of similar sites where similar communities interact based on similar communicational conventions. Within these clusters, users can presume that the other participants understand certain allusions, terms and codes that are specific to these conventions and the dominant political culture. Transmissions between similar sites can thus be more poignant, less descriptive and more rhetorically artistic. They convey more meaning to the other participants, since much of this meaning is implied and transmitted via the conventions. But they will also convey fewer variant experiences, opinions and reasons (cf. Kuyper 2020: 8–9). Within the receiving sites, these kinds of transmissions are therefore more *comprehensible* but less *diverse*.

Yet I have already described that communities on social media platforms can also be quite different and, therefore, that not all sites on social media platforms pertain to the same conventions. A more decided division between communities can be enforced, for example, by language differences or fundamental discrepancies regarding political views. Thus, there are platform communities and site clusters that hardly overlap, and their political cultures and communicational conventions can differ widely, developing various slang and rhetorical standards. Transmitting contents between such varying sites necessitates translation processes – even if both sites operate in the same national

45 She reasoned that “the pervasiveness of uncivil discourse online might be a reflection of the types of people who opt to engage in these debates, who are more likely to experience positive emotions when faced with incivility, and who are not necessarily offended by it” (Rossini 2020: 418).

language. Without efforts of translation or other kinds of bridges, differing conventions and political cultures can hinder *comprehensibility* of and *openness* to transmissions in the receiving site. Scholars of both deliberative theory and digitisation research have observed several ways of bridging and thus transmitting contents between sites with different communicational conventions in a manner that allows these contents to remain comprehensible to both sites.

Firstly, the contents can be translated into a common language that is equally accessible to all sites. Most societies have some kind of ordinary language that “is available, circulating throughout society and lying beneath the threshold of the special codes” (Habermas 1996: 352). Such a language is “necessary for the perception and articulation of the relevant issues and standards of evaluation that apply to society as a whole” (ibid.). In other words, contents pertaining to the issue of a deliberative system can be translated into ordinary language in order to be understandable and to potentially be considered by all sites and participants throughout the system.

Secondly, contents can be directly translated from one set of conventions to the other. Much like the multilinguals I described above, individuals can act as transmitters by purposely translating contents. For example, Poell and Darmoni described how – to the multilingual Twitter users they interviewed – “[d]eveloping Twitter communication in particular languages entailed active negotiating between specific language cultures” and how, consequently, these users “indicated that beyond addressing particular publics through a specific language they were communicating differently in the various languages” (2012: 23). In other words, these users had to translate not only linguistically but also in terms of the respective communicational conventions.

Thirdly, “rhetoric can play an essential part in communicating across and so linking differently situated and differently disposed actors, forums, and institutions” (Dryzek 2010: 73). Such “bridging rhetoric takes seriously the outlooks (ideally, the discursive psychology) of an intended audience that is different in key respects from the speaker – and from the kind of people or discourses the speaker represents” (ibid.: 77).⁴⁶ Boswell and colleagues, for instance, found that narrative that is composed for a diverse audience “is indeed a key mechanism of transmission in deliberative systems” (Boswell et al. 2016: 274). According to their case studies of transmission mechanisms across a range of deliberative sites, narrative “facilitates a ‘communicative miracle’ of sorts [...],

46 To Dryzek, the counterpart to bridging rhetoric is the aforementioned bonding rhetoric (cf. 2010: 76–77).

allowing lay actors, scientists, professionals, policymakers, NGO and industry representatives a common language with which to assess the problem [...] and prescribe policy solutions” (ibid.). However, their analysis also shows the distortion of narratives that are transmitted across a system, how they are “invariably blunted, muted and emptied of specificity as they enter or approach empowered space” (ibid.).

Similarly, memes can transmit ideas and perspectives between different sites, as I have explained earlier. They can “supplement argument [...] with visuals, humor, and intertextuality, while coalescing into narratives that penetrate mass media and public dialogue [and thereby] connect discussions occurring across networks, sites, and spaces in the greater deliberative system” (Lyons 2020: 17). Benjamin Lyons gives the example of Occupy Wall Street’s “99%” meme, which

is likely OWS’s most enduring contribution to public discourse[.] It is now a broadly adopted narrative, the result of a collaborative series of memetic anecdotal storytelling that is both the product and origin of deliberation. 99% memes followed a formula featuring a handwritten statement concerning an individual’s economic hardships, held up for the camera (ibid.: 15).

This has not only had an inclusive effect; “it also opened the message up to appropriation” (ibid.). Another group has created the very similar “53%” meme in appropriative critique (cf. ibid.). “The inclusive mimetic-narrative ‘Percenter’ structure allowed both those who identified as marginalized at the hands of bankers and those who felt put-upon by the entitled protesters to enter into the discussion and respond to one another through meme” (ibid.).

Thus, the role that rhetorical means play in the structuring of communication processes is twofold. On the one hand, they can be part of communicational conventions that are specific to platform communities and therefore might be incomprehensible to outsiders to this community. On the other hand, they can facilitate interactions and transmissions between different communities. They can advance the *comprehension* of and *openness* to the transmitted contents in the receiving site. Yet they can also be misinterpreted and modified in their reception, which often hinders the full transmission of contents and undermines qualities like *authenticity* and *truthfulness*.

In sum, communicational conventions reify in specific ways on social media platforms and produce patterns within the sites and on a platform level. Conventions include both jargon and rhetorical means. They can be used to

bridge and divide the platforms' users and to express a user's identification with a platform community. While different platform communities can develop different sets of communicational conventions, the closer the communities are connected, the more their conventions converge. Platform communities can interact with each other either in heterogeneous sites or through the connections between their distinct, more homogeneous sites. In these interactions, rhetorical means can serve to facilitate the exchange.

6.3 Reifications of Identity

Individuals' various possibilities of identification constitute the last set of social structures that permeate communication processes on platforms while also producing specific patterns there. How users identify and are identified by others structures the communication processes on the platforms and beyond. Yet there are specific ways of identification that are unique to digital communication, and the degrees to which platform users can reify their identities in digital communication go beyond those of face-to-face interaction.

On one end of the spectrum, digital communication affords users the capacity to not disclose anything about their person beyond the contents they post. Incidentally, research on anonymity and pseudonymity has produced a considerable share of digitisation research.⁴⁷ The statement "on the internet, nobody knows you're a dog" (Christopherson 2007) is emblematic for how this discussion was led in earlier times of digital communication. On the other end of the spectrum, platform architectures potentially afford a high degree of visibility and identifiability. Machine-learning systems can recognise patterns in contents and language that might not be perceptible to humans, and they can thereby identify and categorise users independently of their portrayed identity. Moreover, platforms give potentially any user a vast audience, making potentially any one of them identifiable even beyond the platform.

But anonymity and identifiability are not absolute statuses. There are different degrees and different reifications of identification, especially in digital communication. On the one hand, individuals can be identified – or not identified – in an absolute sense. That is, authors of posts can be connected

47 Though anonymity and anonymous communication have been addressed even before the rise of digital technologies (cf. Moore 2018: 172), "[t]alk of anonymity abounds in the twenty-first century" (Ponessa 2014: 304).

with their legal identities; they can create pseudonyms that might be connected across sites or platforms but distinct from their legal identities; or they can be anonymous in the sense that they are neither identified nor even identifiable (cf. Thiel 2017: 153). On the other hand, individuals can be identified in a relative sense, meaning that they can identify with or be identified with specific groups and roles and thus position themselves relative to other members of society. Due to the anonymity and pseudonymity architectures of platforms, users can emphasize specific identity aspects, negate other aspects and explore new aspects. In the following sections, I will elaborate on both absolute and relative identification and consider their effect on the structures and deliberative qualities of digital communication processes.

6.3.1 Author Identity, Anonymity and Pseudonymity

Scholars of anonymity mostly use “identification” in the sense of “identifying the author of a post”, that is, connecting a communication with an individual author’s legal identity. Thus, Thiel describes anonymity as a situation in which it is impossible to identify an author:

Anonymität lässt sich verstehen als Zustandsbeschreibung in einer intersubjektiven Handlungssituation, in der es unmöglich ist, eine Handlung oder Kommunikation, die selbst sichtbar ist, einem Individuum oder Subjekt korrekt zuzuordnen und es hierdurch über diesen Kontext hinaus erreichbar/verantwortlich zu machen. (ibid.: 152)

In other words, anonymity means that an actor is neither identified nor even identifiable. While identification is a state an individual is usually aware of, identifiability refers to a situation in which the identification can occur later, possibly even without the knowledge of the actors (cf. ibid.: 154). Therefore, individuals might assume they are both unidentified and unidentifiable in a specific communication process and act accordingly; yet, they could be proven wrong with regard to identifiability and be identified post factum (cf. ibid.). Author identification – or the lack thereof – can have different implications for communication processes and the behaviour of the participants. For instance, the knowledge of identification, or at least identifiability, influences how individuals communicate. Empirical studies have found that participants in anonymised communication processes “tend to express emotions more explicitly [...] than in face-to-face interactions, given that they are less scared

of face-threatening acts, especially in anonymous or pseudonymous environments” (Bouko/Garcia 2020: 176). Other studies found that participants express less respect and use less civil language if they presume themselves unidentified and unidentifiable (cf. Jungherr et al. 2020: 229–230; Moore 2018: 178; Sarmento/Mendonça 2016: 724–725). Thus, it seems, “anonymity is performatively deployed to express renditions of identity dissociated from a user’s legal identity and overall reputation that they could not otherwise perform” (Curlew 2019: 11).

Author identification and author identifiability do not have to be fully reified on social media platforms. Different platforms have different architectures that limit author identification – and sometimes author identifiability – to varying degrees. Some platforms’ terms of services require the use of the everyday name for the creation of an account, and the platform displays this name for any post that is published from the account (cf. Facebook 2024). The platforms thereby connect each post almost⁴⁸ directly with the individual that is represented by the account. This means that authors are identified and identifiable at all times. Other platforms do not ask for a real name (Twitter 2024). In principle, users can communicate with each other anonymously; they are neither identified nor identifiable. However, these platforms still collect large amounts of data from which identity information can be inferred (cf. Reddit 2022; Twitter 2024), and users are free to share their identities on the platform and their handles beyond it. Lastly, there are platforms that ask for a real name when individuals create new accounts and then provide them with the possibility of creating a pseudonym for their account (Instagram Help Center 2024). Users are thus not identified within a communication process, but they are generally identifiable. Hence, the dominant platforms differ with regard to their author-identification architectures and policies.⁴⁹

Arguably, all of these identification architectures involve the creation of pseudonyms. Platforms that implement real-name policies – for both account creation and ordinary interaction – still have access only to the information that they can scrape with the available technologies from the user’s behaviour;

48 The communication is still mediated, and there are still ways to circumvent real-name policy, so that accounts are not created or operated by the individuals they are supposed to represent.

49 The cited platforms and their policies are mere examples. As I already explained in chapter 4.1, platform rules and policies are rather dynamic. Therefore, the policies on identification for creating user profiles can change.

they cannot actually read the user's thoughts.⁵⁰ Conversely, most of the platforms that allow their users to interact in a fully anonymous manner still create pseudonyms to give continuity to each user's communication and make them addressable. But these pseudonyms differ regarding their traceability to the individual behind them, their durability and their connectedness with the pseudonyms the same individual has created in other sites. This distinction has been brought forward by Alfred Moore (2018: 170–177), and the differences he describes create varying effects on communication structures on the platforms.

For Moore, traceability refers to “the extent to which your contributions can be traced to your real identity” (ibid.: 175). But in the context of deliberative systems, I propose to widen the view to the different positions that are involved in pseudonymisation. The question asked here is: who is anonymised by whom and to whom? Hence, the first two positions are the anonymiser – or creator of the pseudonym – and the anonymised or pseudonymised (cf. Anon Collective 2020: 26). In digital communication processes, the pseudonymised are the individual users, while the pseudonym creators can be the users themselves or the platforms. Moreover, there is a third position: the potential identifier who necessitates anonymity or pseudonymity in the first place (cf. ibid.). Without someone from whom identities need to be concealed, anonymity and pseudonymity are obsolete. In digital communication, this third position includes other users, platform companies and governmental organisations. Anonymity vis-à-vis other users is horizontal, whereas anonymity vis-à-vis institutions with larger resources and power, such as platform companies and governments, is vertical (cf. Thiel 2017: 153).⁵¹

50 In an elaborate – and methodologically highly interesting – study on the political communication of social media users, Christopher Bail describes several examples of inconsistencies between what is known to the platform about a user's behaviour and that user's general opinions and offline behaviour (cf., e.g., 2021: 7–8).

51 It can moreover be argued that there is a fourth position, since the anonymity of an individual in an action is only secured if there are other individuals who likewise could have performed the action (cf. Thiel 2017: 152–153). Transferred to pseudonyms, this means that there must be other individuals that could potentially be represented by a pseudonym. On the one hand, social media platforms have millions of users that might occupy this position. On the other hand, most of the platforms create pseudonyms for each user, and the platforms' data-scraping technologies are more than equipped to identify each individual user, if not by legal name then at least regarding a large range of attributes. In this light, every user is unique, and no one can serve as a potential

Anonymised or pseudonymised individuals do not have to be equally unidentified to all potential identifiers. For example, masked participants in a physical protest march can be horizontally identified to fellow protesters while being vertically anonymous to the authorities (cf. *ibid.*: 152–153). Conversely, there are social media platforms that require legal identification for creating an account and then allow the individual to create one or more pseudonyms. There, identification reifies only vertically, while the users horizontally interact under pseudonyms. In the digital constellation, generally, vertical anonymity vis-à-vis a platform company is very rare.⁵² The possibilities for actors with many resources to trace the individuals behind pseudonyms have increased, and only a few data points are needed to attribute various characteristics to an individual – including group and role identifications (cf. Anon Collective 2020: 17–18; Moore 2018: 175–176; Thiel 2017: 154). Moreover, some platforms accredit verifications to many of their accounts, showing that these accounts have been verified to actually be operated by the individuals and companies they claim to represent (cf. TikTok Help Center 2024; X Help Center 2023). The economic models of platform companies, meanwhile, incentivise the platforms to collect, store and processes as many data as possible and thus to increase the vertical identification – or traceability – of their users. Moreover, within many platform communities, a culture of self-portrayal and identity curation has developed (cf. Curlew 2019; Gorea 2021; Thiel 2017: 154). The occupants of the three positions in pseudonymous communication processes, together with the relations between them, structure these processes; they “change[...] the conditions for actions, enabling desirable and undesirable practices, contributing to the shape that organizations [or platform communities] take, modifying collectivities and social behaviour” (Anon Collective 2020: 27).

From a deliberative theory perspective, traceability and the types of potential identifiers have implications for the deliberative standards of *accountability* and *inclusivity*. Untraceability allows participants to avoid accountability, which can have both positive and negative effects on the communication processes. “The same feature that enables a teenager from a repressive religious community to talk freely about his sexuality without fear of exposure also enables cruel and abusive responses that may inhibit such expressions”

substitute for the anonymised or pseudonymised. This demonstrates how improbable vertical anonymity is in comparison to horizontal anonymity.

52 This is the case, at least, for users of the internet, as opposed to the darknet.

(Moore 2018: 169). In other words, untraceable participants are insulated horizontally from soft social pressures and vertically from hard sanctions and punishments, which enables them “to speak in public in a way that is consistent with their own private views” (ibid.: 181). This, in turn, increases inclusivity by “(1) affording marginalized individuals access to public speech or (2) expanding the ‘marketplace of ideas’ by protecting unpopular perspectives” (Forestal/Philips 2020: 574–575). Hence, untraceability can support inclusivity regarding both participants and perspectives.

On this basis, Jennifer Forestal and Menaka Philips furthermore argue that untraceability – or, in their terminology, anonymity – has an associational function, which “concerns the processes by which people generate and negotiate collective identities, discussions and actions as part of wider publics or social spheres” (ibid.: 575). In their case studies,⁵³ they found that

anonymity helped citizens define and internalize common aims and experiences as the basis for new modes of cooperative engagement which rested not on individual, but on collective accountability – whether aimed at ratification or else organized around calling attention to realities of university life. [For the users in both case studies,] anonymity shifted participants away from their individual inclinations and towards the negotiation of public issues through the identification and articulation of shared concerns or experiences. (ibid.: 576)

Hence, the associational function of untraceability is twofold. First, it “works to draw individuals out of their singular perspective and forces them to engage in public debate from an alternative, collaborative position” (ibid.: 590). It thus supports participants to develop a *common-good orientation* that is aimed at the specific collective. Second, untraceability “disseminat[es] responsibility differently within and between smaller collectives and the broader public sphere” (ibid.). It “disrupts the narrow chain of accountability that ties actions to distinct individuals and thus invites reconsideration of the mechanisms of responsibility that underlie democratic politics” (ibid.: 590–591). Perceived problematic behaviour is tied not to the individual speaker but to the entire community. Once again, the content of what is being said is decontextualised, arguments can “stand or fall on their own merits rather than the social position

53 They studied communication processes on two smaller platforms that build on full anonymity, that is, on platforms whose architectures support neither identification nor identifiability (cf. Forestal/Philips 2020).

of their authors” (Moore 2018: 172–173) and the inherently better argument may win and be transmitted to other sites. Public networks and arenas emerge “in which anonymous circuits of communication are detached from the concrete level of simple interactions”, and this provides spaces “for free-floating opinions, validity claims, and considered judgments” (Habermas 1996: 171), that is, *rational* communication.

But there are also negative sides to the circumvention of accountability. First, many deliberative theorists consider accountability itself an important standard of deliberation.⁵⁴ These authors mainly refer to political decision-makers’ accountability vis-à-vis the public sphere, that is, to top-down, vertical accountability. Demands of horizontal accountability within deliberations have been challenged among deliberative theorists for the inclusivity-related reasons I just cited (cf. Chambers 2003: 322; Mansbridge 1999: 222). But if social media users are protected from social or legal sanctions by the platform’s anonymity architectures, they are more likely to behave *disrespectfully* (cf. Sarmiento/Mendonça 2016: 724–725; Jungherr et al. 2020: 229–230; Moore 2018: 178). Disrespect, in turn, can impair *inclusivity*, since it might deter individuals from participating in a communication process. Consequently, disrespect in digital anonymous communication processes “not only inflicts harms on particular individuals; it also degrades discourse” (Moore 2018: 179–180). Scholars have stressed that moderation techniques that determine acceptable behaviour within a community – such as Reddit’s up- and down-voting technique – are important for retaining untraceability’s positive effects and preventing its negative ones (cf. Forestal/Philips 2020: 591), and they have proposed that “an intermediary platform could hold the user’s identity, reserving the possibility of revealing it to the relevant authorities, but masking that identity from other users” (Moore 2018: 179–180).⁵⁵

The second aspect Moore proposes for distinguishing different kinds of pseudonyms is the durability of these pseudonyms. Durability refers to “the ease or difficulty with which identities” – that is, pseudonyms – “can be acquired and changed” (ibid. 170). Hence, the “concept of durability opens

54 For example: Boswell et al. (2016: 278), Dryzek (2009: 1386), Elstub et al. (2016: 145), Mansbridge (1999: 221–222), Bächtiger/Parkinson (2019: 7), Mendonça (2018: 36).

55 The latter is a practice that has already been adopted by all platforms that request a real name for account creation and allow a different account name for pseudonymous communication (cf. Instagram Help Center 2024).

up a distinction between easy anonymity, in which actors are able to easily create new and multiple identities, and stable or durable pseudonyms” (ibid. 171). Some platforms even process every post individually, creating new pseudonyms for each one of them or naming each pseudonym “anonymous” per default.⁵⁶ From a deliberative systems perspective, this range holds different implications.

The effect of varying durability on deliberative qualities is at least twofold, and it concerns the individuals’ accountability and the reciprocity of communication. The ease of creating new pseudonyms influences the individual’s *accountability* for their actions – “for claims they make” – and it thereby “enabl[es] challenges in terms of consistency, and [challenges in terms of] exposing uncivil or abusive commenters to sanctions” (Moore 2018: 176). Less durable pseudonyms provide a lesser degree of horizontal accountability, because “if you acquire a reputation for abusive or untrustworthy behaviour you can just create a new pseudonym and start again” (ibid.).⁵⁷ But

[w]here hurdles such as registration and verification are introduced, it remains possible to create new identities [that is, pseudonyms], but it becomes a little harder and more time-consuming. Users are more likely to stick with a particular name. This opens them to the reputational consequences of their behavior. (ibid.)

56 This concerns smaller platforms such as 4chan and YikYak. They come very close to actual horizontal anonymity, but still provide the possibility of using more stable pseudonyms.

57 In this context, Moore cites an extreme case presented by Auerbach (2012). It shows that on platforms like 4chan, which provide untraceable and ephemeral pseudonyms, a distinctive community develops that is “characterised by what he [Auerbach] calls anonymity as culture or ‘A-culture’. [...] A-culture removes the possibility of distinction by characteristics and instead relies ‘on interests rather than the personalities of users’ to sustain a community, and involves an ‘intentional disconnect between one’s real life and one’s online persona (or, frequently, personae)’. The evanescence of pseudonymity in these spaces [...] creates an ‘economy of suspicion’, as ‘pervasive gaps in information and this focus on masquerade produce a general sense of unreality’. With so little stability and a pervasive decontextualisation of statements, it is not only hard to tell true from false, and sincere from insincere; the instability generates a ‘conflicted co-existence of sincere personal involvement and detached spectatorship’” (Moore 2018: 184–185). From a deliberative perspective, therefore, *accountability*, *authenticity*, *rationality* and *truth* are questionable within A-culture.

These consequences might motivate participants, in turn, to behave *respectfully* but also more in line with the more common views, as I have described above. Therefore, longer durability increases horizontal accountability and respect but potentially decreases *inclusivity*.

Closely connected with horizontal accountability is *reciprocity*, as “[m]aking a demand for justification requires a continuity of identity such that one can get a response or recognise the absence of a response” (ibid.: 187). That is,

when you say one thing and then immediately say something contradictory, or something which implies a contradictory position, you can be called out on it. Others can extrapolate and make claims about the implications of your position, and challenge you to either defend those implications or refute the reasoning that would connect those implications to your position (ibid.: 187–188).

Therefore, “[d]eliberation requires an exchange of arguments, which is to say, a degree of back and forth over time in response to arguments, information, and demands for clarification and justification” (ibid.: 187). In architectures of ephemeral pseudonyms, participants will be less able to directly address each other or to note inconsistencies in users’ posts and question the *authenticity* of these posts. Consequently, durability, at least for the continuation of one communication process, is necessary for achieving reciprocity within this process.

Moreover, Moore and colleagues found that cognitive complexity is affected by the durability and traceability of pseudonyms. Cognitive complexity is a concept from psychology literature that “refers to the degree of perception of the multidimensionality of a given problem” (2020: 52), and it captures the quantity of information and problem dimensions as well as the degree to which interrelationships within a problem are understood (cf. ibid.). Cognitive complexity can therefore be interpreted as an aspect of *reason-giving* or *rationality*. In their study, Moore and colleagues observed that different phases⁵⁸ of the pseudonymity architectures of the comment section of an online newspaper afforded different levels of cognitive complexity (CC):

The most striking finding from our data set is that the CC of comments shows a marked improvement in the shift from non-durable to durable

⁵⁸ The newspaper experimented with different kinds of anonymity architectures over time (see the quote below).

pseudonymity. But CC reduces again in the “real-name” phase, when comments are made under the users’ Facebook names. We find this pattern repeated when we restrict the analysis to those present through all three phases under study. (ibid.: 58)

Hence, the rationality of posts was lowest in posts under ephemeral pseudonyms, considerably higher in architectures that afforded untraceable pseudonyms and slightly lower when pseudonyms became traceable. In this study, longer durability therefore caused a decided increase in the cognitive complexity aspect of rationality.

The last aspect Moore proposes for distinguishing different kinds of pseudonyms is the connectedness of pseudonyms across different sites. “Connectedness refers to bridging and linking communication across different social contexts” (2018: 171), or, in deliberative theory terms, sites.⁵⁹ For example, the use of real names in different sites “opens the possibility of connectedness in the sense that your statements can potentially become known to your family, colleagues, friends, and other social groups with whom you are associated” (ibid.). But pseudonyms can also be connected across different sites without being traceable to the individual. Thus, the consistency of one user’s contents can be determined across various sites, while the pseudonym remains disconnected from the individual’s legal identity. Within the dominant platforms, individuals normally use the same pseudonym for all sites, especially if a real name is required to create the account. Between digital sites operating within different architectures, a pseudonym can be connected, for example, by using the same name or (hyper-)linking the profiles from a different platform, though there is always the possibility that an individual will link to a pseudonym that is not their own or that an individual uses a pseudonym that is used by another individual on another platform. Yet there are even ways to securely link pseudonyms between digital sites. For example, such links are afforded by architecturally connected platforms such as Facebook, Instagram and Threads. Moreover, blockchain procedures can accredit

59 In contrast the deliberative quality *connectedness*, Moore’s concept refers to the connections between the sites that may be forged through individuals but may also reify in different ways. Moore’s connectedness is therefore a part of a deliberative system’s connectedness, if the connected sites belong to the same system.

an individual's identity with or without revealing their legal identity.⁶⁰ Thus, a pseudonym can be linked with or without reference to the real name and legal identity of an individual, that is, they can be traceable or untraceable. Due to the connections of pseudonyms between sites, an individual's statements can "travel with them" (cf. *ibid.*) – or be referred back to – across the various sites. So, other participants may check an individual's context and consistency across different sites.

From a deliberative systems perspective, connectedness across multiple sites has effects on accountability, authenticity and the filtering mechanisms for transmissions between sites, in cases of both traceable and untraceable pseudonyms. The *accountability* and *authenticity* in question here are global rather than local, as well as rather horizontal than vertical. If other participants can retrace a pseudonym's remarks within other sites and check them for consistency, they might give more credit to the sincerity and *authenticity* of the posts, even though they might not be able to trace the pseudonym to the individual behind it. Thus, participants can build up "a cross-referenced, cross-platform (including real-life) reputation, of the sort you would want if you were renting out your apartment to someone you didn't know (as in Airbnb)" (*ibid.*: 177). This also transfers to the questions of whether you want to include other users' experiences in your political opinion formation and decision-making and whether you want to be sure that these experiences are authentic.

On the other hand, Curlew found that connectedness across sites and with an individual's real name is exactly what leads to a perceived lack of authenticity. Exposure "to lateral levels of surveillance [...] leads to scrutiny over the various curations performatively deployed by a social actor"; as a result, these curations "are aggregated into a reputation system" (2019: 11).⁶¹ Such scrutiny shapes the individual's behaviour and prompts the use of identity curation techniques, which has – in turn – consequences for the individual's perceived authenticity:

60 For instance, they can display a blockchain-accredited Reddit avatar in their Instagram account (cf. Newton 2022c), which ensures that the actual owner – who is blockchain-accredited, as well – is the individual behind both these accounts.

61 Moore (2018: 184) calls this surveillance the "tyranny of intimacy": connectedness allows interaction partners from different parts of an individual's life – such as work, family and friends, public political discussion, etc. – access to an individual's statements in different sites, while disconnected pseudonyms can provide a protection against the social sanctions and pressures arising from this tyranny.

All respondents expressed their concern for the forms of identity curation they were made to partake in when they used social media platforms that subscribe to “real name” conventions. Furthermore, respondents had largely made clear that they considered performative acts over Facebook and Instagram as disingenuous due to the identity curation involved in the presentation of self over the respective platforms[, and] these results do indicate that users reflexively understand their curation of self as largely artifice. (ibid.: 11)

So, both the individuals performing identity curation for their connected pseudonyms and their audiences seem to feel that the connectedness of the pseudonyms leads to the compulsion to curate a consistent and likable pseudonym that is disingenuous and thus unauthentic.⁶² Thus, the effect of pseudonym-connectedness on deliberative qualities is ambivalent.

In sum, the reification of author identity can take many forms. It is “often partial, situational, fragile, and temporal” and “often not simply a binary state but situated in the gray areas of practice” (Anon Collective 2020: 24–25). Prominent among these reifications is the creation of pseudonyms, and this is especially the case in digital communication. These can have varying degrees of traceability, durability and connectedness across sites. Depending on these aspects, pseudonymity can have different and ambivalent effects on the deliberative qualities of digital communication processes.⁶³ As I have described, these effects vary depending on the degrees and configurations of traceability, durability and connectedness, as well as on the moderation techniques within the sites (cf. Forestal/Philips 2020: 591). In the following sections, I will focus more specifically on the influences of group and role identifications.

6.3.2 Group and Role Identifications

Group and role identifications are aspects of identity that have been addressed by social identity theory (from social psychology) and identity theory (from sociology). Jan Stets and Peter Burke have found that, in both theories, “one’s

62 This is supported by Timur Kuran’s (1995) more general observations on preference falsification. He states that individuals tend to misrepresent their private preferences in order to align with perceived public opinion, which, in turn, leads to a decrease in societal *inclusivity* regarding more unconventional views.

63 When experimenting with digital communication processes, Janne Berg (2016) found that pseudonymity had no effect at all on qualities such as rationality and reciprocity.

identities are composed of the self-views that emerge from the reflexive activity of self-categorization or identification in terms of membership in particular *groups* or *roles*" (2000: 225–226, orig. emph.).⁶⁴ On one hand, the social-psychology idea of group identification refers to the idea that "the self is reflexive in that it can take itself as an object and can categorize, classify, or name itself in particular ways in relation to other social categories or classifications" (ibid.: 224). These categories or groups "are parts of a structured society" and precede individuals (cf. ibid.: 225). Each of them "has more or less power, prestige, status, and so on" (ibid.).⁶⁵ On the other hand, the sociological identity theory states that the core of an identity is the individual's self-perception "as an occupant of a role, and the incorporation, into the self, of the meanings and expectations associated with that role and its performance" (ibid.). These meanings and expectations "form a set of standards that guide behavior" (ibid.). Both these theoretical approaches conceptualise the self-perception and self-expression of individuals.

However, group and role identifications also affect the individual's interaction with others. An individual herself will approach others according to its own self-perceptions, and it will be treated according to the identities that others ascribe to it. With regard to group identification, for example, there are countless studies that empirically observe how behaviour in online communication processes differs according to demographic markers such as gender, ethnicity and age – all of which are at least partially connected with bodily attributes.⁶⁶ For instance, Ryan Kennedy and colleagues (2021: 78–79) found that they could improve their predictions of gender, age and race by analysing the language of the social media users. Gender and race differences have also been observed regarding the number and length of comments and posts from users in political debates (cf. Heger et al. 2022: 4; Kennedy et al. 2021: 74–75). Specific aspects of a user's group identification can therefore be deduced or emulated, even though the user may not have explicitly disclosed them. Social media platforms in particular "rely on revealing users' characteristics such as age, race,

64 In order to structure this chapter and clarify the influence of identity reifications in digital communication, I will lean on some aspects and terms of these theories, but without elaborating or being overly precise in doing so.

65 Platform communities are examples of such groups.

66 However, it is debatable whether there actually is the kind of homogeneity that is often presumed for such social categories, as – among others – Haslanger (2000) illustrates.

gender, and level of education, and thereby connect users to offline sources of social status” (Moore 2018: 184).

In the concept of role identification, the adaptation of behaviour is already implemented in the theory, as “the basis of role identity resides in the differences in perceptions and actions that accompany a role as it relates to counterroles” (Stets/Burke 2000: 228). The reification of identity is thus performed both by the self-identifying individual and by others that ascribe identities to an individual. In a deliberative site, such roles include proponent, opponent, moderator, decider and audience, and participants can change roles throughout and between the communication processes (cf. Bächtiger/Parkinson 2019: 76; Knops 2018: 124–125. Group and role identifications structure communication processes within and between deliberative sites by ordering individuals in clusters and in specific relations to each other.

Arguably, “one always and simultaneously occupies a role and belongs to a group, so that role identities and social identities are always and simultaneously relevant to, and influential on, perceptions, affect, and behavior” (Stets/Burke 2000: 229). But both types of identification produce different relations with interaction partners. While the concept of group identification stresses the similarities and the homogeneity within the group and the differences to out-groups, the concept of role identification describes an individual's position and functions within the interactional context (cf. *ibid.*: 226). This context can be a homogeneous group that serves as basis for group identification (cf. *ibid.*: 225–226), for instance, a platform community. Hence, though group and role identification overlap in an individual and may even overlap in an interaction,⁶⁷ they are analytically distinct.

Digital techniques and social media platforms provide users with new ways of expressing and exploring identifications. On the one hand, users can express their identification with specific groups on their profile spaces. Or, they can do so in the communication processes themselves “through avatars, pictures, videos, emoticons, and other digital reifications of corporeality”

67 Individuals do not – and cannot – usually activate all their group and role identities in every kind of situation. Identifications can be salient and activated depending on the current situation and context (cf. Stets/Burke 2000: 230). Usually, only some of the identifications reify in a specific communication process. In a discussion on the disadvantages of patriarchal societies, for example, an individual's identification as male, white and heterosexual, as well as his roles of mediator and activist, might be salient identifications in the context of his contributions, while his identification as a fan of the local football club or his role as a bartender might be latent.

(Asenbaum 2020: 244–245). They can also form or join groups on a platform, or they can follow certain accounts and thus join the respective platform community. Most of the biggest platforms are based on such community formation, or at least they heavily lean on it for their recommender systems.⁶⁸ On the other hand, the platforms usually include architectures that differentiate various roles of users. Some platforms appoint moderators among the users (cf. Duguay 2022: 1189; Reddit Help 2023), some distinguish between verified and non-verified users (cf. X Help Center 2023; YouTube Help 2023a), some provide certain advantages and affordances to users with more followers (cf. YouTube Help 2023b) and some have architectures specifically for groups, which differentiate between the members, visitors and participants of these groups (cf. Facebook Help Centre 2023). Thus, various platform architectures extrinsically identify users with specific groups and roles or allow the users to do so intrinsically.

Within these architectures, users can choose to express a specific set of group and role identifications. With the help of anonymity and pseudonymity architectures, they can negate identifications, they can continue identifications from other contexts and they can explore new identifications (cf. Asenbaum 2020: 244–245). Identity reifications can therefore be indirect, partial and incongruent.⁶⁹ All these forms of identity management are unique to communication processes via digital technologies. And while identification and anonymity are handled differently by the various platforms, anonymity architectures “continue[...] to be a critical feature of popular social media platforms from Twitter to Reddit; the proper relationship between anonymity and the democratic public sphere therefore remains a pressing issue for democratic theorists and citizens alike” (Forestal/Philips 2020: 590).

68 Facebook’s architectures, for example, have been tweaked to prioritise groups over public posts (cf. Newton 2020a). This shift was originally intended to depoliticise the platform (cf. Lima 2021b).

69 An example of such architectures for partial anonymity are Reddit avatars. “Reddit avatars [...] are aliens, meant to highlight aspects of a user’s personality without giving away their true identity. ‘You can reveal your hobby without revealing your race. You can reveal some of your style without revealing your age or your gender’”, which substantiates “the idea of capturing some of your own identity there, on your own terms”, said Reddit’s Steve Huffman (Newton 2022c).

Group and role identifications will be ascribed to a user independently of the user's intentions in presenting their identity.⁷⁰ This kind of extrinsic identification can be performed by other individuals and by the platforms. Other individuals assess whether their interaction partner's behaviour or habitus is similar to their own behaviour, or whether it is more similar to their stereotypes of out-groups (cf. Jacob 2017: 28).⁷¹ Based on this assessment, they will make certain assumptions on the interaction partner's attributes and preferences, and they will address the interaction partner accordingly. This kind of extrinsic identification draws from certain stereotypes and activates pre-established hierarchies (cf. Asenbaum 2018). Though platforms may prohibit explicit discrimination, they are unable to prevent the expectations, stereotypes and biases that are the foundations of group and role identifications and that structure interaction.

Moreover, extrinsic identification by other individuals raises expectations for and assumptions about the interaction with the identified individual. Thus, the extrinsically identified individuals are expected to take on the role of representatives for the group they are perceived to be a member of. This is because

every method of direct public engagement entails a selection of people who are expected to speak for others like them, or others who chose them, or who instructed them, or who endorsed their claims in some way. Even in the case of mass plebiscites the issues and options are structured into distinct clusters by [...] actors [who] make representations. (Bächtiger/Parkinson 2019: 11)

But if, for example, "black people are supposed to speak for black people by virtue of their corporeal attributes, the identity of the individual is fixed in accordance with the associated group identity, personal preferences are undermined, and stereotypes are activated" (Asenbaum 2020: 237). In sum, a specific group identity is ascribed to the users, they are expected to act in the role of representatives of this group and they will be approached according to the stereotypes associated with this group and role, rather than according to their

70 However, the identifications by the identifiers might well align with the intentions of the identified user.

71 There are large corpuses of literature focussing on such issues, and these texts are based, for example, on the works of Pierre Bourdieu, including his "Distinction" (1984).

individual experiences and preferences.⁷² This is because a “social actor can never be fully outside their social and cultural contexts [and users] still adhere to socialized sets of norms” (Curlew 2019: 11–12). Consequently, even the affordances of social media platforms that allow one to conceal identifications or adopt new ones do not allow users to exit the social structures that are formed beyond the platforms – and the expectation structures connected with them. Rather, the external structures are reproduced within the platforms, but they reify in new forms due to the anonymity and pseudonymity architectures of the platforms.

Moreover, extrinsic identification can be performed by the platforms, as their algorithmic systems emulate the group and role identifications of a user. The systems analyse the user’s behaviour and categorise the user accordingly. These analyses are based on training data that reflect the social structures and biases of the platforms’ users (cf. Prietl 2019: 311–315). Therefore, the systems can hardly avoid basing their predictions on these biases, even if the specific variables reflecting a bias are excluded from the algorithmic analysis. As a data scientist working in a large platform company puts it:

The machine isn’t doing anything wrong, and the algorithms are not doing anything wrong. It’s just that they’re literally amoral[, and] even if you remove those specific variables, if the signal is there, you’re going to find correlates with it all the time [...]. But I feel sensitive toward the machines, because we’re telling them to optimize, and that’s what they’re coming up with. They’re describing our society. (Tarnoff/Weigel 2020: 122)⁷³

Such correlates of racially biased data, for example, include the zip code of a person and the racial demographics of this zip code (cf. *ibid.*: 120–121). Thus, categorisations and algorithmic group identifications are based on the same stereotypes as the extrinsic identifications by other humans. Simultaneously, the categorisations performed by these systems are undercomplex and unable to capture the variability and disparity of human behaviour, and, moreover, they are blind to power structures and conflicts of interest (cf.

72 Hans Asenbaum argues that this is the case even if users assume new identities in anonymity architectures; this “new prison might benefit from an improved image, but it is a prison nevertheless” (2020: 237).

73 However, it must be noted that it is exactly the machine’s dependence on the data on society and the consecutive biases that make the machines, indeed, political and that attribute moral implications to them (cf. Risse 2023: 95–96).

Prietl 2019: 311–312). By disregarding contextual factors, algorithmic systems even exaggerate the original bias from their training data. For example, AI models for detecting hate speech have been found to be “1.5 times more likely to flag tweets written by African Americans as ‘offensive’ compared to other tweets” (Ghaffray 2021). So, the algorithmic systems reproduce and increase social biases, which affects the structures of communication processes on the platforms.

Group and role identifications structure communication in so far as they group the individuals with a certain side of the argument or ascribe them certain functions in the communication process. Other identifications remain concealed. For example, the identification of a person with a group of plant-lovers will seldom be relevant in a communication process on feminism. Similarly, an identification with the role of mediator in one communication process may well be irrelevant for the same person's participation in another communication process. Therefore, identifications, as different aspects of one individual, reify according to context, and they structure communication by attributing to the participant specific sides or functions.

From a deliberative-theory perspective, group and role identifications have various implications for the qualities of communication processes. On the level of sites in general, deliberative theorists have reasoned that corporeal differences between the participants support *inclusivity* and *diversity*. Thus, Asenbaum argues that “political claims-making through embodied presence is valid because different bodies represent different social positionalities” (2020: 235–236; similarly, Kuyper 2020: 10). This consideration connects to presumed more visible group identifications such as gender, age and ethnicity, and it implies higher deliberative quality in face-to-face interaction. However, I have described other possibilities of expressing specific group and role identities for participants in digital communication processes, and these represent positionality in a similar way. For instance, avatars are as present in digital communication as corporeal attributes are in face-to-face interactions. Furthermore, inclusivity

is not just about class or race or gender or even intersectionality but about the experiences that people have in different roles and the views and values that emerge from those rich contexts. It is to treat people as the multi-faceted, role-playing beings they really are, rather than reducing them to a few, fixed categories. (Bächtiger/Parkinson 2019: 10)

In this line of thinking, inclusivity is achieved not through the inclusion of various groups and roles in a communication process or deliberative system, but through the acknowledgement of the variety of perspectives that individuals produce through their experiences and their specific sets of identifications with groups and roles. On the other hand, the possibility of enacting specific identifications “serves the freedom to rediscover and playfully express the multifaceted self [and] thus contributes to the inclusion of various aspects of identity into the democratic system” (Asenbaum 2020: 244–245). While social media platforms support this version of inclusivity by providing the architectures to reveal and conceal identifications at will, they also counteract it by broadly categorising their users and thereby reproducing the social structures and stereotypes in the process.

In other instances, deliberative theorists have argued that group and role identifications of participants provide context for their contributions, and this can make participants appear more authentic and comprehensible to other participants. Deliberative theorists have argued, for example, that information about an individual can give *authenticity* to her statements. On the basis of group and role identifications, other participants

might decide some people’s information or experience is such that their opinions should weigh much more heavily than others’. [...] The opinion of a more reliable minority, if it is sufficiently more reliable, might weigh more heavily with you than the opinion of a less reliable majority. (Goodin 2008: 96–97)

Experiences from groups and roles can therefore give authenticity to a speaker and increase the probability that she will convince others.⁷⁴ Thus Mansbridge, for example, argued in 1993

that empathy, sensitivity, and intuition as female characteristics are constitutive for democratically organized communities, which rely on social connections of trust, love, and duty. Some difference feminists interpret this as a superior culture of women who excel at persuading, listening, asking ques-

74 Apparently, however, the speaking style of a participant and what it reveals about the participant’s background does not affect that participant’s influence over other participants’ opinions (cf. Bächtiger/Parkinson 2019: 52).

tions, moderating, and integrating (Mansbridge, paraphrased in Asenbaum 2020: 236)⁷⁵

Though this might seem overly generalising from today's perspective, it illustrates how experiences can form roles and expectations in communication processes. Social media platforms, in particular, "rely on revealing users' characteristics such as age, race, gender, and level of education, and thereby connect users to offline sources of social status" (Moore 2018: 184).

Roles, too, can give context to the contributions of a participant. For example, there are activists in many communication processes, which means that there are persons who are "deeply engaged with certain issues and [who] end up taking part in multiple conversations that occur across multiple arenas and moments of a deliberative system" (Mendonça 2018: 46–47). These connective activists "tend to become well known (in a positive or negative way) within policy communities and are usually regarded as individuals whose positions cannot be ignored" (ibid.). Thus, their role as connecting activists is a relevant background for their contents. The weight and connotations of the respective groups and roles within a site depend, of course, on the given opportunity structures; that is, they depend on "the question of who is recognized as the main meaning-making body on the issue at hand" (Boswell et al. 2016: 269).

All in all, group and role identifications provide a context for the contributions of participants. Conversely, "[a]nonymous speech leaves the listener unable to judge the interests, agendas, and biases of the speaker, and thereby creates opportunities for strategic and deceptive communication" (Moore 2018: 182).⁷⁶ Architectures that afford users the capacity to mask and to stage specific group and role identifications separately can therefore decrease authenticity in the immediate interaction. For this reason, deliberative theorists have generally been sceptical regarding anonymous communication (cf. Thiel 2017: 157).

Furthermore, identifications affect the *equality* within communication processes, that is, the "extent to which arguments offered by all participants are considered on the merits regardless of which participants offer them"

75 A similar argument regarding the connection between roles and experiences has been made by Parkinson (2012a: 37).

76 According to Moore (2018: 182), it "is the logic behind the use of automated or paid anonymous commenters to intervene in public discussion, a practice that has recently been revealed in the case of the Chinese and Russian governments, and in Britain's EU referendum."

(Fishkin 2009: 34). Participants in digital communication might choose to opt out of revealing specific identifications. This is because these identifications

reinforce stereotypes, trap the individuals in the group in the images traditionally held of the group, make it hard for those individuals to treat their identities flexibly and performatively, de-emphasize lines of division within groups to the advantage of dominant groups within the group, and harden lines of division between groups (Mansbridge 2005: 623).

The implicit categorisation of participants into specific groups produces inequalities that derive “not only from economic dependence or political domination but also from an internalized sense of the right one has to speak or not to speak, and from the devaluation of some people’s style of speech and the elevation of others” (Young 1996: 122). To a certain degree, these inequalities can be avoided in digital communication.⁷⁷ The architectures of many social media platforms allow users to escape being identified by other users in ways they might experience as traps in a specific communication process. This “levels the playing field and promotes meritocracy” (Asenbaum 2020: 247). As a result, equality is enhanced and “[d]iversity is claimed discursively rather than visually” (ibid.: 244).

Thus far, I have demonstrated that group and role identifications structure communication processes within digital sites and affect their deliberative qualities. But there are also implications of identification for systemic communication processes. First of all, the emphasis of social media platforms on groups has been heavily criticised, even by platform engineers, for its resulting in pigeonholes. Casey Newton describes an interview with one of these engineers:

An engineer who worked on groups told me they found the group recommendation algorithm to be the single scariest feature of the platform – the darkest manifestation, they said, of data winning arguments. “They try to give you a mix of things you’re part of and not part of, but the aspect of the algorithm that recommends groups that are similar to the one that you’re part

77 Although the style of speech – which is also a basis for extrinsic identifications – is not masked by platform architectures, an individual can purposely adopt a certain style or a certain set of conventions and thereby express specific identifications (see chapter 6.2).

of are really dangerous,” the engineer said. “That’s where the bubble generation begins. A user enters one group, and Facebook essentially pigeonholes them into a lifestyle that they can never really get out of.” (Newton 2020a)

Here, the emphasis on group identification leads to the recommendation of groups that are similar to the ones a user has already joined, resulting in the strengthening of already existing connections between these groups and the neglect of connections with groups that express different views. As a result, homogeneous site clusters are fortified.

This dynamic is strengthened by other processes of group formation and community building. For example, I already described how communities develop their own distinct patterns of expression. Rhetorical means such as humorous memes “enact[...] citizenship by generating collective identities, dividing insiders from outsiders, and galvanizing political positions” (Chevrette/Duerringer 2020: 248). The developing communities are not necessarily centred around political issues, and though their contents “do not always engage with specific policies, legislation, or events clearly recognizable as ‘political,’ they nonetheless align political positions through affective resonances and affiliative identifications” (ibid.: 257). These processes thus simultaneously strengthen the intrinsic identification of the users with the specific groups through affective resonances and demarcate the political positions of the group in contrast to those of other groups.

Expressed in the terminology of the deliberative systems approach, these processes, due to both platform architectures and communicational conventions, lead to the formation of relatively stable partisan sites that provide users with a sense of security through homogeneity, but that are also disconnected from sites where different political perspectives are discussed. The first aspect is not implicitly problematic, since partisan spaces are described in the “manifesto” as “the lifeblood of any deliberative system designed along adversarial lines to advance the flow of information and insight through the marketplace of competition in ideas” (Mansbridge et al. 2012: 20). Partisan sites within a system “enhance deliberation by offering new reasons or making it more likely that old reasons are considered in an equitable way” (ibid.: 24). However, a disconnection of these spaces – that is, a *lack of connections and systemic integration* – would raise concerns from a deliberative systems perspective. On social media platforms, such a disconnection can appear on a technical level, where partisan sites and participants are discouraged from seeing or unable to see arguments from other perspectives. Disconnection furthermore arises on a social

level if individuals are unwilling to listen to other perspectives. Consequently, “the deliberative system suffers when citizens, legislators, and administrators are so divided, by ideology, ethnicity, religion, or any other cleavage, that they will not listen to positions other than those emanating from their side” (ibid.). The stronger the technical disconnection is in a system, the more distinct the perspectives of the groups are, and this intensifies the social disconnection.

Both these kinds of disconnection sustain the spread of misinformation. In a connected system, the partisan sites “may contain their own partial corrective for this pathology, as the other side is always looking for the false move of its adversary” (ibid.: 21). Without connections to “the other side”, however, this corrective is precluded. Especially on social media platforms, the spread of misinformation is a main concern, as is demonstrated by a large and ever-growing body of scientific literature and by the attempts of platform companies and legislative bodies to regulate these platforms. However, academic studies and regulation experiments by the platforms show that intentionally connecting partisan sites does not necessarily prevent misinformation (see chapters 5.2 and 6.1). Therefore, in addition to a lack of *systemic transmission flow* and *effective sluicing*, the disconnection impairs *rationality* within the affected communication processes.

There are, moreover, specific deliberative roles in digital communication processes that have a systemic impact, most notably the role of an individual carrier of a transmission. As I introduced in chapter 2.3, individuals can themselves act as carriers of transmissions, influencing the *selection, framing and reception of these transmissions*. According to deliberative systems scholars, individuals who act as connections “participat[e] in both sites [by] carrying the outputs or insights from one site to the other, and vice versa” (Doberstein 2020: 5).⁷⁸ These transmissions can also be found on social media platforms. For example, users can indirectly reference the contents of other posts and sites, they can copy and paste parts of communication processes in other sites or they can just be inspired by the community of a site or set of sites and then paraphrase the ideas of other sites. As in other parts of deliberative systems, social media platforms host “regular representatives” who are “deeply engaged with

78 This includes “(1) shared membership across venues, whereby some actors are participants in multiple venues in the system; (2) guest membership across venues, whereby some actors visit venues for a specific purpose; and (3) a public engagement broker, an individual whose primary task is to share developments across the policy subsystem” (Doberstein 2020: 6).

certain issues and [...] end up taking part in multiple conversations that occur across multiple arenas and moments of a deliberative system” (Mendonça 2018: 46). Generally, any user who interacts in more than one site acts as a carrier of transmission – this is arguably the whole point of these platforms. But there are users who interact with a considerably higher-than-average number of sites or contributions. Examples of representative roles that these users fill include the activist, the social media influencer, the expert, the journalist, the lobbyist, the political professional and so forth.⁷⁹ Moreover, these roles are important to the deliberative systems themselves (cf. Ercan et al. 2017: 200; Hendriks 2006: 495; Parkinson 2012a: 10), because the role carriers have a considerable influence on the systemic flow of transmissions.

This influence becomes even more immanent if the role is filled in a manner that is perceived by other users as more personal. Generally, role and author identity can be closely connected, but they remain conceptually separate (cf. Parkinson 2012a: 38). A more detailed knowledge about the role holder, for instance, leads other participants to perceive this person less as a role holder and more as an individual. Expectations and contextual information regarding the person's contributions change. Statements have a different ring depending on whether they come from a former president of the United States or from Donald Trump. More detailed knowledge about a role holder can thus be the result of higher scrutiny due to a role's high societal status. Familiarity can also be the result of repeated interaction in the same deliberative site or in others – the more people interact with each other, the more they know about each other and the more they learn to differentiate between role and individual. Furthermore, the perception of familiarity can be produced by the role holders themselves. One of the defining traits of social media influencers, for example, is that they produce and present themselves as a brand, in order to gain large follower counts, create the perception of a close and personal connection with these followers⁸⁰ and gain influence over their followers' perspectives.⁸¹ More-

79 Several studies have observed and explored these different roles in political communication processes on social media, including Poell/Darmoni (2012: 24).

80 This is called a “parasocial relationship” (cf. Balaban et al. 2019: 33; Duckwitz 2019: 4; Helbig 2021).

81 The perceived close connection induces the followers to revisit their pages and consistently view their contents and thereby generate ad revenue – which is the business idea behind both the platforms' allowing and supporting the role of influencer and the individual influencer's investment in filling this role (cf. Bause 2021: 298; Enke/Borchers 2019: 268; Helbig 2021; Schach 2018: 20).

over, scholars assume that there are “hidden influentials” (Waldherr 2017: 542) beyond the obvious influencers that adhere to this definition. These “influentials” act as brokers for parts that are less integrated in the system, and they can initiate large information cascades throughout a network due to this action (cf. *ibid.*). Both obvious and hidden “influentials” are therefore highly important for the systemic flow of transmissions.⁸²

Due to their centrality and widespread presence, the users who fill these roles have a large influence on the selection, framing and reception of the transmissions between sites.

By posting information, comments, or public exchanges on personalized websites or blogs and (semi-)public profiles on social networking platforms, such as Facebook or Twitter, individual users are clearly part of the flow of political information. They pick up on news coverage and elite communication, or actively point out stories that in their view have been underreported. [...] Digital media thus increase the number of actors injecting and amplifying items in the flow of political information (Jungherr et al. 2020: 11).

Thus, central roles have a quantitative influence on the systemic flow of transmissions due to the large number of connections. Once again, this effect is increased by the logics of quantification – more followers lead to more reactions, higher rankings in the recommender systems and more views, which in turn indicate a higher capacity to spread messages across a platform and beyond (cf. Cardon 2017: 138–139). The role holders can gain additional qualitative influence if they also establish the perception of a positive, more personal connection with other participants (cf. Helbig 2021), which includes a shift from role to individual.⁸³ Both quantitative and qualitative influence can be viewed as social capital (cf. Duckwitz 2019: 4),⁸⁴ and these influences increase the probability that one can convince other users of one's own perspectives.

This influence on the systemic flow of transmissions can have negative effects on the *rationality* of communication processes on a systemic level. The Election Integrity Partnership (2021: 218–219) found that

82 Conversely, they can be identified through an analysis of this transmission flow (cf. Jungherr et al. 2020: 24).

83 Such a shift can also have negative effects on the individual influence if the role holder falls short of the expectations connected with the role.

84 Though it remains to be explored whether the quantifiable digital contacts are as exploitable as social capital from other forms of interaction is.

the primary “influencers” in the online production and dissemination of false and misleading narratives about the 2020 election were verified, blue-check accounts belonging to partisan media outlets, social media influencers, and political figures. [...] These narratives persisted throughout our analysis [...] and spread through and across diverse social media platforms – and through the broader information ecosystem, including cable news.

In order to improve systemic rationality, this effect would need to be counteracted by parallel couplings and carriers of transmissions between the sites that transmit different contents. Such parallel structures strengthen the connections between the sites and increase the overall systemic connectedness.⁸⁵

In sum, users on social media platforms – as in other social interactions – can be identified with various groups and roles. Identification can be performed both intrinsically, by the users themselves, and extrinsically, by their interaction partners and the algorithmic systems of the platforms, and it is based on experiences and biases from social structures beyond the platforms. The various reifications of group and role identifications are enabled by the platforms’ anonymity and content moderation architectures, and therefore they differ from non-digital reifications of group and role identifications. The users’ identifications have an eminent influence on the structures and deliberative qualities of communication processes on social media platforms. Within deliberative sites, identifications affect how participants perceive each other’s perspectives, how they position themselves relative to other participants and, consequently, what contents are perceived as more valid and important. On a systemic level, identifications affect how information and perspectives flow across that system and how information and perspectives are framed by and selected for the transmission processes. These structures thus affect what contents are sluiced into the wider systems and thereby take effect in the social world beyond the platforms. Moreover, the experiences that these extrinsically and intrinsically identified individuals have on social media platforms, where they interact in terms of these groups and roles, are carried into their non-digital interactions. Thus, identifications reify in specific forms

85 Studies have shown, however, that a large share of these central “influentials” of various social media platforms are closely connected (cf. Baeza-Yates/Saez-Trumper 2015: 69; Zannettou et al. 2017: 415), which suggests that those individuals probably select similar transmissions and frame them in a similar manner.

on the platforms, and the effects thereof disseminate into the deliberative systems and social world beyond the platforms.

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.

8. References

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