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Editorial: Reconceptualizing public sphere(s) in the digital age? On the role and future of public sphere theory

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Abstract
Theories of the public sphere—or more recently, of plural public *spheres*—are core elements of communication and media research. A lively and dynamic debate exists about the respective theories, and the approaches employed to do so have diversified in recent years. This special issue of *Communication Theory* aims to assess the role and future of public sphere(s) theory in digital societies: if, and where, are concepts of the public sphere(s) still useful and needed, which criticisms are (still) valid, which not, which new ones might be necessary, and which concepts need to be developed or elaborated to respond meaningfully to the digital transformation? This editorial introduces the topic of and contributions to the special issue as well as nine theses on the development of public sphere(s) theorizing.
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The continued relevance and diversification of public sphere(s) theory: Introduction

Theories of the public sphere—or more recently, of plural public *spheres*—are core elements of communication and media research (Calhoun, 2015; Schäfer, 2015). In this strand of theory-building, the public sphere(s) have been defined differently by different scholarly communities (Rauchfleisch, 2017) and with changes over time (Benson, 2009). Mostly, public sphere(s) have been understood as communicative spaces where participation is open, where matters of common concern can be discussed and where proceedings are visible beyond their immediate participants. Proponents of normative approaches towards the public sphere(s) have added that certain ambitious procedures and rules for participation, communication and closure should be observed, based on different normative conceptualizations (Eisenegger & Udris, 2021; Ferree et al., 2002).

Public sphere(s) have been ascribed various elementary functions for contemporary societies: Some scholars have seen them as necessary for monitoring politicians, decisionmakers and elites, and for holding them accountable (e.g., Garnham, 2020). Others have presented public sphere(s) as important pillars of social identity building, allowing citizens to perceive themselves as members of a given society or community (e.g., Asen, 2002; Price, 1995), or as early warning systems for societal problems in need of political attention (e.g., Hove, 2009). Still others conceive the public and civilized exchange of controversial arguments as a prerequisite for a society's learning ability (Peters, 2008).

Theorizing about the public sphere(s) has a long tradition in the social sciences, with the works of German social philosopher Jürgen Habermas being groundbreaking. His concept of the public sphere, rooted in normative theories of deliberative democracy and his theory of communicative action, has inspired numerous subsequent scholars and sparked a lively and controversial debate, with conceptual and empirical criticism coming from feminist, Marxist, rhetorical and cultural perspectives, among others (for an overview Wessler, 2019). These debates have considerably broadened the conceptual scope of public sphere theory and given it both a strong analytical and normative strand.

Scholars have also adapted public sphere(s) theory to sociopolitical, socio-economic and socio-cultural developments over the past decades. On the one hand, these developments included broad societal trends such as individualization, transnationalization or the rise of nationalist and populist movements in many countries (cf. Downey & Fenton, 2003; Fraser, 2007; Hepp et al., 2010; Thimm, 2015). On the other hand, the public sphere(s) were profoundly affected by changes in contemporary communication and media ecosystems over the past two to three decades. These included the rise of online and social media (Gerbaudo, 2022), platformization (Poell et al., 2019), the (related) crisis of legacy media (Eisenegger, 2021; Waisbord, 2019) or the rise of alternative media (Holt et al., 2019), "alternative social media" (Rogers, 2020) or "dark platforms" (Zeng & Schäfer, 2021)—all fundamentally connected to the digital transformation of contemporary communication and media ecosystems.

Conceptually, these developments resulted in a diversification of public sphere(s) theory. They have led, for example, to diagnoses of a "variety" or "multiple" public spheres (Breese, 2011), or to the conceptualization of "counter," "subaltern" or "agonistic" public spheres (for an overview Warner, 2021: esp. p. 65ff.). They also resulted in diagnoses of increasingly "networked," "net-public," "hybrid," "algorithmic" or "digital" public spheres (for an overview, Schäfer, 2015). Some scholars have even argued that we should talk about "post-public spheres" due to the ongoing changes, prevalence of problematic content and pronounced instability of current communication and media ecosystems (Schlesinger, 2020; cf. Bimber & Gil de Zúñiga, 2020).

The ongoing use of public sphere(s) theory in communication and media research, but also its strong diversification

and the numerous, partly fundamental critiques of the general approach or of dominant strands of public sphere(s) scholarship have led us to invite contributions for this special issue of *Communication Theory*. It was designed to assesses the role and the future of public sphere(s) theory in digital societies—i.e., to ask if, and where, concepts of the public sphere(s) are still useful and needed, which criticisms of public sphere theory are (still) valid, which not, and which new ones might be are necessary, and which concepts enable communication and media scholars to respond meaningfully to the digital transformation and the changes described above.

Many scholars from the field responded to the call for this special issue, demonstrating impressively how relevant and lively discussions about public sphere(s) theory still are. Sixty-eight extended abstracts were submitted in response to our initial call for papers, of whom 18 were invited to submit full papers. Ten of those submissions are assembled in the final version of the special issue. Before presenting these articles, however, we present nine theses[1] on public sphere theory in the digital age in general and on the corresponding scholarship in particular.

Theses about public sphere(s) theory today and going forward

Thesis I: Theorizing on public sphere(s) is alive and well (at least quantitatively)

Despite some scholars discussing the fundamental theoretical utility of public sphere(s) as a tool for analyzing communication, the concept is still widely used in scholarship. This has been illustrated, e.g., by the recent publication of special issues on "Habermas, Democracy and the Public Sphere: Theory and Practice" in the *European Journal of Social Theory* (De Angelis, 2021) and on "A New Structural Transformation of the Public Sphere" in *Theory, Culture & Society* (Seeliger & Sevignani, 2022). It is also visible in our analysis: Figure 1 shows that publications mentioning "public sphere*" started to appear in the (late) 1980s and 1990s, and that their number has grown strongly since, going from 100 annual publications around the year 2000 to between 700 and 800 per annum currently (cf. Rauchfleisch, 2017).

It is notable that within this growing body of literature, the relation between primarily theoretical and primarily empirical publications is changing (Figure 2): theoretical contributions accounted for more than 70% of all publications before 2000, but this percentage has dropped to slightly more than 50 now (while systematic reviews and meta-analyses only
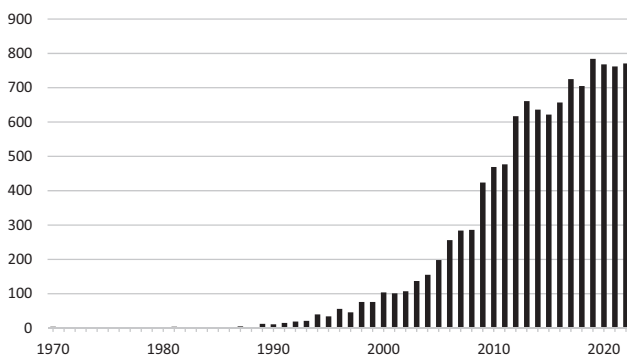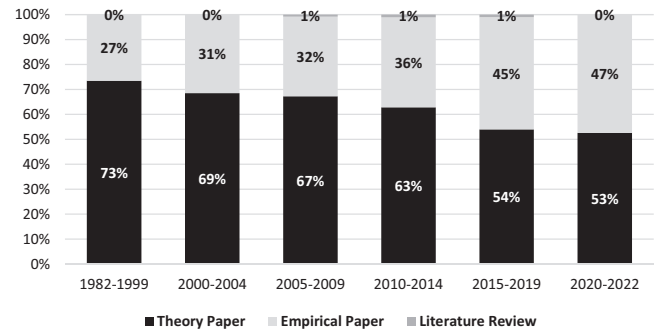
Fig. 2. Percentage of publications on public sphere(s) focusing primarily on theoretical work, empirical work or systematic reviews (manual coding of 1.010 articles, based on Scopus database).

account for between 0 and 1% throughout). Nonetheless, given the pronounced growth of scholarship on the public sphere(s) in general, more theoretical contributions were published in recent years than ever before.

Thesis II: But scholarship on public sphere(s) still has considerable gaps and biases

The pronounced growth of the field does not mean, however, that all relevant aspects and contexts of public sphere(s) in digital ecosystems have received equal or sufficient amounts of scholarly attention. On the one hand, a surprising amount of publications writes about public sphere(s) without defining the term (Figure 3). Overall, 44% of all publications do not explicitly define the term while using it, and this percentage has risen over time and reached a slight majority of 51% after 2020.

On the other hand, scholarship on public sphere(s) has several pronounced biases. A first example is that it is still "Western"-centric—a criticism brought forward early on already, often by scholars from the Global South (e.g., Kang, 2021; Ndlela, 2007). Figure 4, based on our content analysis of scholarly publications, underlines this criticism. It shows that a considerable proportion—40%—of all publications on public sphere(s) focus on North America, Europe or Western countries. Given that another 18% of all publications do not specify any geographical focus, and that the "Global" and "Asia-Pacific" categories also partly include Western countries, it is likely that the majority of publications on public sphere(s) have a Western focus. The analysis also shows that while this Western focus has declined somewhat in recent years, scholarship has not taken more African or Latin-American countries into account. However, the "digital turn" has led to an increase in contributions focusing on Asia, e.g., due to the growing interest in Asian tech and social media platforms like Weibo, WeChat, Duoyin/TikTok, etc.

A second bias concerns the digital platforms analyzed in public sphere(s) scholarship. Generally, and unsurprisingly given their rising importance, more scholars focus on tech and social media platforms when analyzing public spheres in recent years. But while this work has taken a variety of platforms from different contexts into account, most of it concentrates on a small number of Western platforms: Figure 5 shows that 41% of all studies on public sphere(s) that analyze a specific platform analyze Twitter, and that a further 28% analyze Facebook. These two platforms account for almost two-thirds of the respective studies, while highly relevant platforms like YouTube, Instagram or WhatsApp, as

Fig. 1. Number of publications mentioning "public sphere*" in the Scopus database over time.
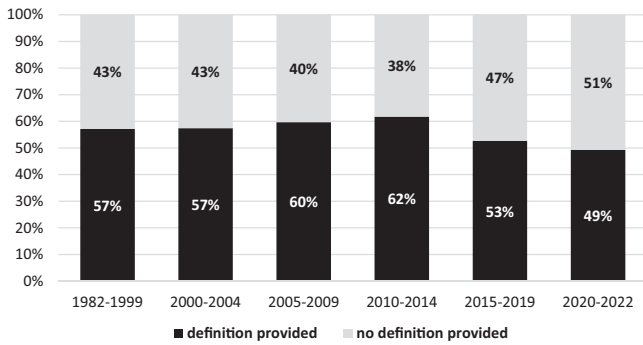
Fig. 3. Percentage of publications on public sphere(s) defining the term "public sphere" when using it—and percentage of publications not doing so (manual coding of 1.010 articles, based on Scopus database).
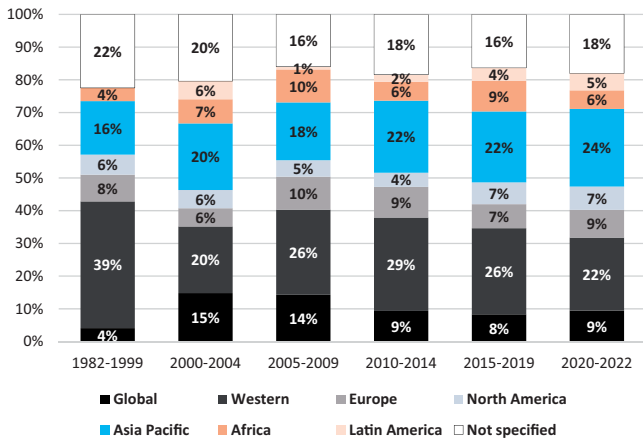
Fig. 4. Geographical focus of publications on public sphere(s) (manual coding of 1.010 articles, based on Scopus database).
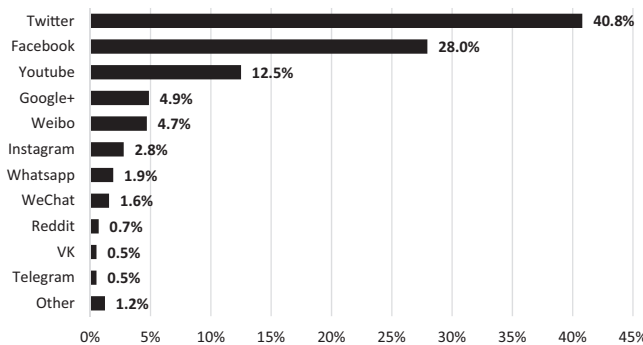
Fig. 5. Percentage of specific platforms mentions among all platform mentions in the abstracts of publications on public sphere(s) (manual coding of 1.010 articles, based on Scopus database).

well as widely used non-Western platforms like WeChat, Weibo or Duoyin/TikTok receive much less attention. Likely, this is due to problems of data access and the general geographic focus of scholarship on Western countries—but nonetheless a bias that needs to be remedied.

A third example is that for many scholars, public sphere(s) theory is synonymous with deliberative theory, i.e., with Jürgen Habermas's work and subsequent, related scholarship (Larsen, 2020). Other theoretical approaches—both normative ones like representative-liberal, constructionist (Ferree et al., 2002) or agonistic pluralist (Korstenbroek, 2022)

approaches and non-normative ones like approaches drawing on social movement theory (Della Porta, 2022), cultural studies (Seeliger & Sevignani, 2022) or sociological theories of resonance (Rosa, 2022)—are considerably less pronounced in scholarship, which leads us to thesis III.

Thesis III: Jürgen Habermas' work is highly influential, but declining in importance since the "digital turn"

Among the most cited English-language publications on public sphere(s) in scholarly discourse, Jürgen Habermas' work on the "Structural Transformation of the Public Sphere" (1989) clearly is the most influential (Figure 6). In this groundbreaking book, Habermas introduced the public sphere as a central realm of social life in modern societies. Prior to the book's translation into English in 1989, there had not even been a distinct name for the phenomenon (Fraser, 2009, p. 148). Beyond the "Structural Transformation," feminist critiques of Habermas' initial concept have been highly influential. Particularly noteworthy is Nancy Fraser's critique of Habermas' idealization of the early bourgeois public sphere which largely ignored the restriction of women to the private sphere (Fraser, 1990). This critique subsequently motivated Habermas (1996) to revise his conception of the public sphere in "Between Facts and Norms" (ranked third, see Figure 6), which also includes his theory of democratic deliberation.

Despite the importance of Habermas's work in English-language scholarship, this importance has declined since the digital turn of the early 2000s (Figure 7). When looking at the resonance and evaluation of Habermas's work in scholarship based on our manual content analysis, we see that the proportion of publications relying strongly on Habermas's theory is declining. In addition, the proportion of publications referring affirmatively to Habermas is declining as well, while critical accounts have slightly risen over time.

Thesis IV: Normatively grounded theories of the public sphere(s) are still useful

Considerable parts of public sphere(s) theory have always been normative, formulating norms for public communication, its participants, characteristics and procedures. Jürgen Habermas' seminal deliberative theory of the public sphere (esp. 1989, 1996; cf. Wessler 2019) is arguably the best-known example: In his view, a legitimate social order has to rely on public communication that is inclusive and fair, allowing all societal groups, particularly from civil society, to participate. By having this opportunity, he argues, they can see themselves as authors of the laws to which they repeatedly subject themselves.

There are other normative theories of the public sphere(s), of course. Ferree et al. (2002) distinguish Habermas' approach from "representative-liberal," "discursive" and "constructionist" normative approaches, while Wessler & Rinke (2013; cf. Wessler et al., 2022) differentiate between Habermas' deliberative and "liberal" as well as "agonistic" traditions of normative theories of the public sphere. These approaches differ in their assessment of who should communicate in the public sphere(s), what communicative norms should govern these exchanges and what goal they should aspire to. While the Habermasian tradition emphasizes broad participation in public communication and advocates to empower voices from civil society in particular, for example,

Fig. 6. Most cited publications in scholarship on public sphere(s) (based on Scopus database).
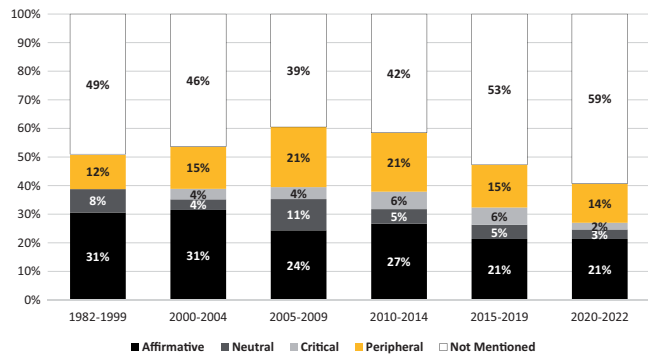

Fig. 7. Resonance and evaluation of Habermas' works in scholarship on public sphere(s) (manual coding of 1.010 articles; based on Scopus database).

such broad "empowerment is explicitly rejected by representative liberal theory as a normative criterion for public discourse" (Ferree et al., 2002, p. 318).

What these approaches all have in common, however, is that they formulate prescriptive, normative criteria for core characteristics of the public sphere(s), and that they made these normative criteria and their underlying assumptions explicit, which are rooted in different philosophical and political traditions, fundamental understandings of human sociality, assumptions about the ideal workings of different (in the case of theories presented here: democratic) societies, etc. This is helpful for fruitful scholarly, and also public, discussions in which real-world debates and the status and development of the public sphere(s) in a given context can be evaluated (Benson, 2009). In a quickly changing, digital communication ecosystem, having such benchmarks based on explicit criteria und assumptions—even using multiple normative perspectives simultaneously in "multiperspectival normative assessments" (Wessler et al., 2022)—will remain as important as ever.

Thesis V: Public sphere(s) theory is applicable to and useful in non-democratic contexts

Public sphere(s) theory, especially its normative variants and particularly the deliberative theory of the public sphere introduced by Habermas (1996), have been largely developed in, and first and foremost applied to, democratic countries. Accordingly, the nexus between public sphere(s) theorizing and democracies and theories of democracy is strong (e.g., De Angelis, 2021; O'Mahony, 2021; Trenz, 2023, in this special issue).

But this does not mean that the utility of public sphere(s) theory is limited to democratic countries.[2] First, non-normative theories of the public sphere(s), e.g., ones trying to describe generalized functions of public spheres along systems and differentiation theory (Luhmann, 2000) or theories applying network analysis to public sphere(s) (e.g., Friemel & Neuberger, 2023, in this special issue) are not bound to particular political systems and can be applied in non-democratic and even authoritarian countries. Second, analytical dimensions that are derived from normative theories and postulate that certain societal groups ought to be represented in public spheres or that certain criteria for communication ought to be met can be applied beyond democratic countries to assess, e.g., the relation between state and civil society or the latter's potential to reflect, assess and potentially criticize politics—albeit by definition from a specific normative angle (Kang, 2021; Rauchfleisch & Schäfer, 2015). Third, a few scholars have debated whether normative theories of the public sphere(s) could be grounded in norms and values other than democratic ones. They have discussed the relation between principles of the public sphere and generalized sets of norms like human rights (Jørgensen, 2019), for example, as well as the possibility of grounding principles of the public sphere(s) on religious premises (e.g., Butler et al., 2011; Regus, 2022).

Thesis VI: In the digital era, many authors abandoned the idea of one public sphere that has an integrating effect on society as a whole

The notion of a unified public sphere that acts as a social integrator across entire societies has been prominent in different strands of public sphere(s) theory. It was already present in Habermas' early writings (and has been extensively criticized; Negt & Kluge, 1972; Fraser, 1990, which led him to adopt the concept of a network of decentralized public spheres in his later works (Habermas, 1996)). Research on European, transnational and global public spheres has also discussed the concept of a unified public sphere (e.g., Risse, 2015; Sicakkan &

Heiberger, 2022), finding that such an overarching sphere is difficult to establish empirically (for example Eriksen, 2005). Scholarship on digital public spheres (Schäfer, 2015) has discussed this as well, but rather moved away from the idea of a unified public sphere. Instead, the conception of a complex and dynamic network of public spheres gained traction, branching into a multitude of overlapping international, national, local, and subcultural arenas. Functional, segmentary, and stratificatory characteristics form the reference points for the highly dynamic differentiation of multiple public spheres. Although research cannot confirm the existence of "echo chambers" and "filter bubbles" in the originally postulated virulence (Bruns, 2021), scholarship in the digital era presents a picture of a fragmented public spheres where bringing together a scattered audience is becoming increasingly challenging. Consequently, the integrative function of the public sphere has been seen as even more unlikely and as a phenomenon that may only happen situationally, if at all—for example around far-reaching societal or transnational crises like the COVID-19 pandemic or the war in Ukraine (Rauchfleisch et al., 2021).

Thesis VII: There is a shift from situational to ubiquitous public sphere(s) in the digital age

According to Neidhardt (1994, p. 10), the defining characteristic of public sphere(s) is the inherent openness of their audience: participants do not know the size and exact makeup of the audience, i.e., how many people are present, listening, watching, reading, etc. Unknown third parties may be actively or passively participating in the specific communication situation. In the digital age, the potential for communication situations to become public, or for an expansion of the audience in a given situation, has expanded dramatically and also extended temporally. Partly, this is because online communication and social media have lowered material communication barriers considerably, and made it easier to disseminate and re-contextualize digital communication situations. Datafication processes (Mejias & Couldry, 2019) catalyze this even further: recording communication situations and storing these recordings over time has been made easier nowadays, and tracked communications and activities of users can potentially become public at any time and in different contexts. While public spheres in the pre-digital age were more closely tied to specific situations, actors, and media that actively generated public visibility, in the digital age, any action can become publicly visible to a potentially unlimited audience—even if it took place in a private setting, went unnoticed at the time, or involved no media or actors actively creating publicness (cf. Stahl, 2020). In the digital age, the public sphere has thus moved from a situational to a *ubiquitous* one, with far-reaching consequences: Some individuals may change their behavior accordingly, exercising increased caution or drawing back from public communication entirely, while others may actively try to expand the reach of their communication for their personal benefits.

Thesis VIII: Infrastructures of the public sphere(s) are changing, weakening established intermediaries

There is wide agreement in public sphere(s) theorizing that communication ecosystems are changing fundamentally currently, driven by processes of digitalization and platformization (Helmond, 2015; Nieborg & Poell, 2018). The big Western and Asian tech platforms are prime examples of such changing infrastructures. They are becoming increasingly influential, organizing large swaths of public communication with profound consequences: A wide range of individuals, groups and organizations from politicians over corporations to NGOs can use these platforms and their social media to communicate—which can empower previously marginalized groups (Della Porta, 2022), but also gives interest-driven, professional communicators the opportunity to target their audiences directly with corporate publishing, content marketing, etc.

This has enormous influence on established intermediaries of public communication such as legacy media and journalists. First, tech platforms allow individual and institutional communicators to bypass legacy media and journalists ("disintermediation," Katz, 1988). Second, the platforms themselves are beginning to function as new intermediaries, "re-intermediating" (Seeliger & Sevignani, 2022, p. 11) public communication. But they do so using (largely opaque) recommender systems (Helberger, 2019) and modes of content moderation (Gillespie, 2020) that deviate considerably from journalistic norms (cf. Beyes, 2022). Third, they indirectly influence established intermediaries by diverting public attention and advertisement revenue away from media houses, increasingly commodifying communication arenas (Seeliger & Sevignani, 2022, p. 12f.; cf. Habermas, 2022).

On the one hand, this leads to a significant deinstitutionalization of news media, visible in a rapid concentration of ownership, the downsizing of staff and worsening working conditions for journalists. On the other hand, it may influence the standards of public communication as communication on tech platforms is not governed by journalistic or deliberative ideals.

Thesis IX: Artificial intelligence will change the public sphere(s) profoundly—and theorizing will need to adapt accordingly

Technological advances and their societal uptake have always changed the public sphere (Papacharissi, 2010). The invention of the printing press played an important role for the emergence of early public spheres (Eisenstein, 1979), the subsequent mass distribution of newspapers, the rise of radio and television (Schulz, 1997) and the emergence of online and social media (Schäfer, 2015) again changed public communication considerably. Artificial intelligence (AI) will be the next technology that changes the public sphere(s) profoundly, and in various ways. So far, AI has already been used to provide and curate arenas for public communication, e.g., via algorithmic filtering of seemingly problematic content, via recommender algorithms or via rule-based, simple chatbots (Jungherr & Schroeder, 2023, in this special issue; Neff & Nagy, 2016). The rise of generative AI that generates original outputs based on prior training data and that is able to create text like ChatGPT, BARD or Anthropic Claude, create imagery like DALL.E, Midjourney or Stable Diffusion, translate or paraphrase text, imitate voices, etc. will further catalyze the impact of AI because it produces human-like content and because the technology exhibits an "increased agency" (Guzman & Lewis, 2020, p. 79). Scholars and others are currently trying to assess the real-world implications of this development. Diagnoses oscillate widely (for an overview Schäfer, 2023) between hopes for easier and better content production and making information accessible and adaptable

to the specific needs of different types of users at a large scale one the one hand, and fears about "wrongness at scale" (Ulken, 2023), a "pollution of our knowledge pool" (Nerlich, 2023) or even an "AI-driven infodemic" (De Angelis et al., 2023, p. 1), on the other hand. While it is still unclear which of these diagnoses is more apt, a diagnosis regarding communication theory is likely on point: As "artificial intelligence (AI) and people's interactions with it (...) do not fit neatly into paradigms of communication theory that have long focused on human–human communication" (Guzman & Lewis, 2020, p. 70), and as this includes large parts of public sphere(s) theorizing as well, theory-building is urgently needed. Such efforts should draw on a range of conceptual approaches, with perspectives on Human–Machine-Communication (Guzman, 2018) and approaches focusing on socio-technological innovations like Science and Technology Studies, Actor-Network-Theory, or Values in Design being particularly promising (cf. Schäfer & Wessler, 2020).

Introducing the contributions to this special issue

Many of the theoretical developments and theses outlined above are tackled by the ten articles compiled in this special issue of *Communication Theory*, and from a variety of perspectives. The special issue aimed to be broad in scope, and it contains a range of disciplinary, paradigmatic and conceptual backgrounds with contributions from communication and media research, sociology, political science, feminist scholarship, internet studies, network analysis, figurational sociology, etc. It also represents a range of geographical backgrounds, with authors coming from Australia, Finland, Germany, Italy, Norway, Switzerland, the UK and the US—but it is notable that these contributions largely represent countries from the Global North.

The ten articles compiled in the special issue are organized in four larger blocks that deal with public sphere(s) theory in digital media environments from different perspectives and in different ways. The four blocks, and the included articles, are sorted from more general, bird's-eye views to more specific contexts and cases.

The first block contains only one article which presents a *meta-theoretical perspective on public sphere(s) theory*. In this article, Axel Bruns argues that public sphere(s) have indeed fractured in contemporary societies, and that scholarly descriptions of these phenomena and processes have multiplied as well. Bruns argues that the field needs an overarching model able to re-integrate this theoretical diversity again, and he presents conceptual building blocks that might be helpful in this endeavor.

The second block assembles articles that aim to *develop public sphere(s) theory further from a specific conceptual perspective*. Two contributions are included here: Uwe Hasebrink, Lisa Merten & Julia Behre posit that conceptual approaches have often struggled to connect the macro-level of public sphere(s) meaningfully to the micro-level of individual citizens. He and his co-authors use sociologist Norbert Elias' figurational analysis to bridge this gap. They propose the concept of public connection repertoires, which models public spheres from the perspective of users, and which represent individuals' structured patterns of connection to different publics and can be assessed empirically using figurational analysis.

Thomas Friemel and Christoph Neuberger are concerned with linking the micro- and macro-levels in theorizing about the public sphere(s) as well, but propose to do so from a different analytical angle. Combining elements of network analysis, speech act theory and the concept of communicative roles, they conceptualize public sphere(s) as dynamic networks of actors and content linked via communicative action and argue that such an approach not only links the micro-level and the macro-level but also allows to grasp dynamic changes in public sphere(s) theoretically.

The articles assembled in the third block of the special issue are concerned with *elaborating specific aspects of public sphere(s) theory*. Sarah J. Jackson & Daniel Kreiss focus on the notion of social power, particularly in theorizing about counter-public spheres. They argue that scholarship in this field has conceptualized social power inconsistently and insufficiently, especially when dealing with right-wing publics online and in social media. To remedy this, Jackson and Kreiss call for a stronger focus of social power in public sphere(s) theory, posit that public spheres should be seen as outgrowths of social structures, and provide an analytical framework to understand them accordingly.

Hallvard Moe focuses on social inequality and distribution. They should be key concepts of public sphere(s) theory, he argues, but have not been focused on enough yet. He argues that citizens divide the work of following politics between them, and that theory should be concerned with analyzing whether they still have a "public connection". He proposes an approach that analyses this connection ethnographically and assesses the distribution of citizens' public connection in terms of the issues, arenas, and communicative modes with which citizens engage with over time.

Pascal Schneiders, Daniel Stegmann & Birgit Stark concentrate on how platformization transforms public spheres and how this may impact social cohesion. The public sphere, they argue, can further social cohesion by representing social heterogeneity and enabling public debates. The authors elaborate how the establishment of social media platforms as an infrastructure for public communication leads to a platformized public sphere which entails both threats and potentials for social cohesion. The paper offers an analytical framework to assess those potentials and threats empirically.

Michael Brüggemann & Hendrik Meyer focus on polarization which is frequently diagnosed in public sphere(s) theory (any beyond) but, as the authors claim, considerably less often systematically unpacked and applied to specific objects. The authors apply the concept to media content and argue that "discursive polarization" may be fundamentally disruptive for the public sphere. They distinguish between ideological polarization about issues and affective polarization between groups which may both be measured in media content.

The fourth and final block of the special issue, consisting of three articles, assesses *public sphere(s) theory in novel contexts*. Hans-Jörg Trenz, against the backdrop of post-democratic scenarios and a deep-rooted disruption of public sphere(s) by digital media, discusses how public spheres and public sphere(s) theory may apply to non-democratic contexts. Arguing that digital media have rebalanced privacy and publicity, changed the rationality of public debate and modified the modes of empowerment of the people, he calls for empirical observations of disruptions of the public sphere and democracy in order to develop self-corrective mechanisms.

Lewis Friedland & Risto Kunelius ask whether public sphere(s) theory is well equipped to address contemporary Global crises. They argue that crucial background assumptions of Jürgen Habermas' theory about truth, justice and authenticity, despite its changes over time, are being exposed and destabilized by current crises. Using the climate crisis, financial inequality in the Global North, and datafication as examples, they argue that complex system-lifeworld dynamics have to be taken into account in order to adequately conceptualize the public sphere in the face of contemporary crises.

In the final article of the special issue, Andreas Jungherr & Ralph Schroeder focus on AI which increasingly affects public sphere(s). They argue that the "public arena" is increasingly impacted by applications of AI that shape information environments, generate content, and communicate with people, and that this affects the core functions of public debates: allowing for societal self-observation and providing spaces for the formation of publics and counter-publics. The authors offer a framework for the conceptualization and empirical examination of AI's impact on the public arena and call for further studies in this field.

We hope that this Special Issue will further scholarly discourse on public sphere(s), which Fraser (2009, p. 148) once described as a fundamental social-scientific discovery comparable to major innovations in the natural sciences. Although, as we have shown empirically, scholarly discourse on the topic is very lively, there is still considerable work to be done.

Notes

1 These theses are partly based on a systematic, quantitative content analysis of scholarly publications on public sphere(s) which we conducted for this editorial. A total of 11,143 English-language scholarly publications containing the keyword "public sphere*" were identified in the Scopus database (not restricting findings to specific years, up to the year 2023, and taking journal articles and book chapters as publication types into account). From this basic sample, a representative random sample of 1,010 articles was drawn and examined further via manual, standardized content analysis.

2 It is also notable here that different types of democracies exist (classically: Almond, 1956; cf. Kaiser 1997), and that "full" or "established" democracies have been distinguished from "incomplete" or "flawed" democracies (e.g., The Economist, 2020).

Acknowledgments

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