1 Digital Transformations of the Public Arena

Look anywhere in the world today, and you see political discourses shifting. Governments, political elites, and news media find themselves challenged and their legitimacy questioned. New voices have emerged that sometimes contribute a more diverse set of viewpoints and opinions and sometimes expose societies’ underbellies of exclusionary or reactionary beliefs and demands. Established news organizations are under massive economic pressure, which has not only reshaped the business of news but also its institutional and normative basis. At the same time, new sources of information have emerged that often do not conform to established journalistic norms of news production and that cater to groups that have formed around certain partisan issues or represent purely commercial interests. Furthermore, new types of private companies have become powerful conduits for the visibility and reach of information that are primarily in the business of selling ads by getting people to spend time on the platforms they provide and to socialize and share material there. In reshaping attention, they are tethering citizens and elites in new but potentially skewed ways. In short, digital media have thoroughly transformed our shared political information environment – the public arena.

These transformations of the public arena create wide-ranging but unfocused fears: digital media have allegedly pulled societies apart, allowed cunning politicians to manipulate a hapless public, given authoritarians unprecedented tools of social control, and destroyed a shared sense of social reality through rampant floods of misinformation. Many believe that digital media enabled the election of Donald Trump in 2016, supported the Brexit vote in the UK, strengthened the extreme right, and promoted COVID-19 denialism and anti-vaccine protests in Germany, while at the same time strengthening the authoritarian grip of Xi Jinping in China.

Examining these fears and diagnoses more closely shows that there is surprisingly thin evidence and little explanatory power to many of these analyses. Overall, digital media do not seem to tear societies apart by creating political homogeneous echo chambers or filter bubbles (Dubois & Blank 2018; Flaxman et al. 2016; Kitchens et al. 2020). While the informational quality in the public arena is increasingly contested – in view of the prominence given to partisan news organizations and to political elites that are comfortable in playing fast and loose with facts – this is not an exclusive feature of digital information environments. At the same time, proper disinformation via digital media is a marginal phenomenon with comparatively limited reach and dubious causal effects (Jungherr & Schroeder 2021). While the contemporary public arena clearly offers a stage for ambitious as well as...
haphazard attempts at manipulation of voters or foreign influence operations using digital media, the impact of these efforts on elections is much smaller than popular belief might suggest (Rid 2020). For example, we can explain the likely impact of media on the 2016 election of Donald Trump much more convincingly by looking at how his Twitter use translated into traditional media coverage thereby providing a broad stage for his populist ideas (Schroeder 2018a) and his open embrace or tacit acceptance of racist and ethnonationalistic ideas and groups (Bonikowski 2019; Gorski 2020). Even in authoritarian China, the fabled level of supposedly absolute digital control is more in the mind of propagandists or Western commentators rather than the reality on the ground (Stockmann 2020).

The unfortunate tendency to attribute every ill of contemporary society to digital media and in turn to reduce the discussion of digital media to the latest daily scare has done little for our understanding of the organization of contemporary political discourse and its institutional structures, a constellation we call the public arena. Make no mistake, digital media have deeply transformed these structures. This includes the transformation of the economics of news, weakening the traditional gatekeepers of politics and thereby enabling challengers, and the emergence of new actors that control digital infrastructures and so the reach and visibility of political information and public attention. But to understand these transformations, we must stop relying on singular cases of deviance or putative success and instead systematically examine the structures, functions, and continuities of the public arena. This also means taking a comparative stance and overcoming the relentless focus on isolated countries and cases. In practice, this means treating the United States and its enthusiasms and sorrows as only one specific, albeit comparable, case—especially as other constellations of the public arena may be less prone to temporary doldrums like those recently experienced there.

Hence we focus on the infrastructures of the public arena. What structures allow the publication, distribution, reception, and contestation of information that enable people to exercise their rights and duties as citizens? What structures allow elites to reach and to read publics in order to respond to grievances or demands? And how do digital media impact and transform these structures? Our argument is thus not predominantly about the quality of discourse or of content but about the structures that give space to and shape it. We take a comparative stance and analyze the transformation of public arenas in three different countries, each providing a different constellation of media, political, and economic systems: China, Germany, and the United States. This comparison highlights different ways in which digital media transform the public arena and the tensions in these systems. We argue that analyzing the public arena in this
way is useful not just for understanding current tensions but also for developing suggestions to managing them more successfully.

We begin by presenting a definition of the public arena and charting its current transformation through new infrastructures. Building on this, we then present different constellations of the contemporary public arena in three instructive cases: China, Germany, and the United States. We close by previewing the role of the public arena in some emerging areas of conflict: solving financial crises, climate change, and the management of the COVID-19 pandemic.

2 The Public Arena: A Definition

Understanding contemporary politics is impossible without the concept of the public arena established through media. The structure of the mediated public arena shapes political discourses and consequently beliefs, the conditions of political competition, and the representation of social groups. As a consequence, the structural conditions of information environments, their transformations, and consequences are central objects of study for sociologists, communication scholars, and political scientists (Rauchfleisch 2017). The structures providing the environment for discourse, the public sphere, matter (Habermas 1962). But the recent structural transformation of communication spaces through digital media, their uses, and associated effects (Jungherr et al. 2020; Neuman 2016; Schroeder 2018b) makes it necessary to reconceptualize the public arena in order to account for its mediated nature and the subsequent consequences of shifts in media technology and audience behaviors. To do so, let us start with a definition of the public arena:

(1) The public arena consists of the media infrastructures that enable and constrain the publication, distribution, reception, and contestation of information that allow people to exercise their rights and duties as citizens.

(2) This excludes how people use these infrastructures for private life or for commercial purposes except when these uses come to bear on people’s rights and duties as citizens.

(3) These infrastructures mediate the relation between citizens or civil society on the one hand and political elites or the state on the other.¹

This definition focuses on the characteristics and boundedness of structures and how they enable and shape political discourses and political competition; in other words, discourses about questions of civic concern in non-private

¹ In the following, we use the pairings of citizens/political elites and civil societies/states interchangeably.
contexts. Our discussion focuses on technological and institutional aspects of infrastructures that allow the publication, distribution, and reception processes concerning political informedness. We follow Fraser (1990) in her argument that discourses in media and political communication are characterized by conflict as well as by cohesion. This contrasts with Habermas’ conception with its normative dimension positing that the goal of political discourse should be agreement (Habermas 1962). That is why we use the term arena rather than sphere (Schroeder 2018b).

Academic discussion about the public sphere consists of various strands. We follow authors who focus on the structures of discourse and their influence on forms and determinants of rational discourse and its legitimacy (Habermas 1962) and the contestation of dominant discourses and discourse participants (Fraser 1990; Warner 2002). Again, we use the term public arena to emphasize the importance of contestation. We are mainly not concerned with the quality or modes of discourse but rather with the structures and transformations, including how infrastructures are regulated.

Today, as in the past, the public arena is primarily constituted by media infrastructures. In the past these were organizations and distribution networks for newspapers, television, or radio programs. Today this also includes digital media, “institutions and infrastructures that produce and distribute information encoded in binary code” (Jungherr et al. 2020: 7–8). This includes digital-born news sources, search engines, and other digital infrastructures providing spaces for connecting information producers with consumers without themselves producing informational content.²

Our analysis builds on the “media systems” approach by Hallin and Mancini (Hallin & Mancini 2004). We follow Hallin and Mancini in their emphasis of international comparison. Like news media, digital transformations of the public arena should vary between countries or regions depending on their histories and institutions. More specifically, to understand contemporary public arenas, we need to consider the opportunities and constraints of governments, transnational bodies, and civil societies to regulate and control infrastructures. This includes variations such as national regulatory traditions and how they influence internationally operating platform companies. For example, in highly market-based media systems like the United States, state actors experience

² Some of these digital media have become known as platforms. We prefer the broader term infrastructures. The latter term is broader than the term platform, which was originally linked to a very specific business model. But the term infrastructures allows us to include search engines and noncommercial digital media like Wikipedia. Nevertheless, we will also use the term platform in cases where digital media correspond to the platform business model, narrowly understood.
exceptional difficulties in regulating actors that provide the infrastructure of the transnational public arena. In contrast, actors in strong public broadcasting systems find this less of an issue. For actors in authoritarian systems, it is difficult to differentiate the state from media organizations in the first place, making regulatory interference comparatively easy. Hence too the technological foundations of the public arena can be similar while their effects on discourse vary as state actors have greater or lesser opportunities to shape communicative infrastructures.

Yet we also depart from Hallin and Mancini (2004). By focusing on system-level variables, Hallin and Mancini settle on an essentially static view of media systems and their constitutive features and consequences. As we will show, the contemporary public arena introduces new actors and new tensions between states, companies, and publics. A more differentiated view of grouping countries with shared conditions is needed, as is a more dynamic view of the continuous competition for influence among states and their civil societies, including in various macro-regions (Mann 1986; 2013; Mann & Riley 2006). Thus we focus less on eternal system-level conditions but instead on the transformations of the structures that constitute the public arena.

New Media Infrastructures and Their Impact on the Public Arena

Media infrastructures provide three functions in the public arena. They produce information that societies need to pursue the public good. This includes the coverage of events, actors, and societal conditions but also extends to a role as “watchdogs” by critically covering elites, institutions, and groups. They also distribute information by providing audiences access to it. And finally, they also make participants visible to each other. This last entails covering actions and views of elites or the public and providing opportunities for elites or the public to publish their views themselves. In turn, media infrastructures need to monetize or otherwise find support for providing these functions in the public arena.

In the past, organizations providing media infrastructures typically combined two of these functions – information production and distribution. A commercial newspaper – for example the New York Times – had within its organization a dedicated subunit for the production of information – the editorial desk. Other subunits within the same organization were tasked with running the distribution of the paper – such as the unit tasked with subscriber management or the unit tasked with organizing the logistics of getting the newspaper to points of sale. In other words, the same organization was tasked with information production and distribution for the public arena.
In today’s public arena, this is different. While we still have organizations that produce, distribute, and monetize information — such as commercial news organizations or public broadcasters — there are also new media infrastructures that exclusively distribute information provided by others and monetize this distribution service. Examples include digital platforms like Facebook or Twitter that allow users to post links to content or others like Google that provide dedicated information aggregation services with previews to content by other sources. The popularity of these services means that they have become crucial for information producers to reach audiences, even if this means losing control of an important part of the distribution of their content and its monetization opportunities. This leads to a weakening of traditional media infrastructures and mechanisms to reach audiences. At the same time, there is uncertainty over the role in the public arena of these new distributional actors and what societies can reasonably expect from them or, if need be, demand from them through mandatory regulation.

**Shifting Norms**

In the past, the public arena predominantly relied on media infrastructures provided by journalism. This infrastructural role of journalism was supported by a shared set of institutional norms among media organizations and individual contributors. These norms included a shared code of impartial coverage of events, actors, and societal conditions, clear delineation between coverage and commentary, and standards of quality control in content production (Kovach & Rosenstiel 2021; McQuail 2013). These norms underpinned what journalism was supposed to achieve and they were institutionally maintained and transmitted. This allowed for public debate, critique, and contestation. This made clear what people could expect from media infrastructures and enabled challenging specific outlets or individuals if they were seen to be deviating from these norms. Of course these standards and norms were far from universally adhered to and contested, but that is beside the point. By providing a clear standard by which to measure specific behavior or content, journalism and its contribution to the public arena could be evaluated and legitimately criticized and provided the basis of an autonomous social institution. We can see the strength of these norms and their society-wide acceptance in a recent survey by the Reuters Institute Digital News Report (DNR). A broad majority of people — more than two-thirds in Germany and the United States — supported the ideas that news media should reflect a wide range of views and provide equal space to all sides. Over two-thirds among respondents in Germany also agreed that news media should remain neutral in debates while approximately half thought so in the United States (Robertson 2021, 41).
Nevertheless these norms focused on the production side of media infrastructures rather than the distribution side. In the past, this was not much of an issue. In organizations providing journalistic media infrastructures, the subunits tasked with information production were the units most closely connected to the ideational purpose of the organization, but other subunits like those tasked with the distribution of information by and large followed these ideational norms and goals. This is clearly not the case with new media infrastructures that are only concerned with the distribution of information. These infrastructures started out with goals and purposes clearly outside the scope of the public arena – such as the facilitation of interactions between friends and acquaintances in their private lives or an ill-defined “community” of users somehow independent of the public arena. But the growing popularity of these services and the extension of their use beyond people’s private lives made them into important extensions of the infrastructures of the public arena. This shift of societal function and its attendant responsibilities is not yet internalized within these organizations and does not always fit well with their organizational culture. This is exacerbated by the fact that while the norms of journalism work well for organizations combining the functions of information production and distribution, they do not provide guidance for the challenges faced by organizations tasked with providing space for and distributing information provided by others.

At the same time, the institutional norms of journalism for information production have also been challenged from a different side: the norms of impartiality and separation of neutral coverage and opinionated commentary are not necessarily adhered to by new information providers in the digitally expanded public arena. Here, we find sources explicitly dedicated to providing explicitly partisan or even hyperpartisan coverage, sources funded by nonprofits or philanthropists supporting specific societal goals, sources exclusively following a for-profit logic that provide political content if it allows them to sell ads, and sources provided by volunteers dedicated to shared goals or issues. These diverse organizations and their staff follow different economic incentives and societal missions. Considering this, the role of journalism as advocacy in support of or opposition to political factions or societal goals has also grown in prominence among these new media organizations and young journalists (Agarwal & Barthel 2015; Eldridge 2018; Scott et al. 2019). As legacy news organizations adapt to the new business of news in digital environments and start to learn from digital-born competitors and hire from the pool of their contributors, conflicting views of the role of journalism have come to feature within these organizations (Wiedeman 2020). This normative shift away from media infrastructures committed to the goal, however imperfect, of impartiality...
in political and societal competition and toward open advocacy raises questions concerning their role in hosting, enabling, and adjudicating discourse and political competition in the public arena.

**Rules of Access and Distribution**

For media infrastructures predominantly concerned with the distribution of information produced by others – such as digital platforms like Facebook, Google News, Twitter, or YouTube – it is necessary to discuss different issues of governance from those that are first and foremost concerned with information production. In the past, the space for information in the public arena was limited by available column inches or broadcast minutes in the media infrastructures of its time. Today, the media infrastructures forming the public arena can accommodate virtually limitless information. There is little by way of scarcity of space but rather a scarcity of audience attention (Schroeder 2018b). This has led to the emergence of different selection criteria for different infrastructures. Organizations presiding over infrastructures with limited space select information based on its merits, such as being factually correct, being relevant to audiences, or conforming with specific rules of decorum (Shoemaker & Reese 2014). By contrast, organizations presiding over infrastructures with virtually unlimited information space principally allow all information access, except for information with negative characteristics – such as being illegal, harmful, or violating others’ rights. Currently, the specific characteristics to include in this list of negative features are being negotiated. But overall, the consequence of this shift in selection mechanisms is that much more challenging, incorrect, and impolite content grabs attention in the public arena than when information was actively selected for its journalistic features or newsworthiness.

With the shift in prominence toward infrastructures with virtually unlimited space for information and mainly concerned with the distribution of information and not its production, the discussion about governance norms has come to be concerned with questions of access to distribution channels and amplification (Douek 2021; Gorwa 2019; Kaye 2019; Keller 2018a; Klonick 2018; Suzor 2019). The main issue is what types of information, actors, or sources should be allowed access to the public arena via digital infrastructures and what types should be prohibited. What types of information are amplified or muted and by what mechanisms? Does amplification follow algorithmic selection based on features or reactions, social curation through public interactions, dedicated editorial interventions by staff, or paid-for interventions foregrounding specific information for specific audiences? This is closely connected to the question of whether there are opportunities for privileged partnerships for selected actors,
for example those of high societal repute or those willing to pay, offering them higher visibility or greater opportunities to selectively distribute information. Of course, the converse is also a challenge: which actors and sources to consistently exclude.

These decisions can happen on the level of a piece of information/content by determining its negative properties, for example by virtue of it being deemed illegal, potentially harmful, or violating others’ rights. Or it can happen on the level of actors or sources based on their characteristics or behavior in the past. Or these decisions can be based on the system level, examining whether the composition of information streams conforms with normative goals such as balance or diversity. Access decisions can happen at the point of publication through automated or editorial checks according to the criteria listed above. Alternatively, decisions to revoke access can also happen after publication based on editorial decisions, social or automated filtering, or complaints. In all of this it is important for organizations running these infrastructures that there are clearly stated and publicly accessible internal governance policies and transparency about their application and the process underlying specific decisions. This allows people, elites, and competing organizations to contest specific decisions or, more generally, the underlying policies and processes. Suffice it to say that the current situation is very far from conforming with these requirements.

Negotiating Mutual Visibility

Media infrastructures also make people and elites mutually visible. For one, media infrastructures show elites to people and people to elites. At the same time, they also make people visible to each other. In the past, this surfacing of public opinion happened under strong editorial control by having peoples’ voices feature in media coverage, allowing them space in interviews or letters to the editor, or aggregating them in statistics (Herbst 1993; Igo 2007). Today, people can take to social media to express their views, find others who share certain views, and be recognized by elites (McGregor 2019, 2020). This has beneficial consequences in surfacing unrecognized voices, injustices, or airing grievances. At the same time, these infrastructures also allow for nonmainstream but previously isolated voices to find and reinforce each other, thereby giving structure and coherence to radical movements and potentially contributing to the radicalization of individuals (Miller-Idriss 2020). Infrastructures also connect impolite voices directly with elites or groups and the individuals they are targeting. In the past, political speech was not necessarily polite and elites were in for a considerable amount of verbal abuse. Yet this remained confined to
small gatherings and did not always reach those for whom it was intended. Today this is different. Impoliteness, hostility, or verbal abuse travels far, inspires imitation, and reaches its targets (Sobieraj 2020; Theocharis et al. 2016). Societies and media infrastructures have not yet found answers to these challenges of mutual and increased visibility in the public arena by negotiating the associated benefits and drawbacks.

International Reach

A further complication lies in the international nature of new media infrastructures (Kaye 2019; Schmidt & Cohen 2013). In the past, public arenas predominantly ran along national or language barriers according to the reach of their media infrastructures. Today, most countries’ public arenas depend on media infrastructures that are run by organizations that have their origin and main seat in other countries – predominantly the United States. This introduces new tensions in the governance of these infrastructures. For one, there are geopolitical questions regarding the security of media infrastructures and foreign influence. Even more tricky are questions regarding the rules these international structures are supposed to follow. Do we expect a Western-based organization running an international media infrastructure to follow the laws and regulations of its home country, or change its functions to follow the laws and regulations of the specific country a user logs in from? Should a global set of internal governance rules that are applied globally be designed and followed, irrespective of the laws and regulations of any given country? In other words, should Google, Facebook, or Twitter treat every user as if they were based in the United States, or instead feel beholden to local rules and customs, or should they define a new set of international rules applicable to all?

The international role of media infrastructure introduces two important complications to the governance of the public arena. First, there is the issue of cultural dominance of media infrastructures provided by companies based in the United States or China for crucial elements of many countries’ public arenas. The other, even thornier, issue is the role of these infrastructures in countries with more restrictive rights of free expression than the West. If one accepts the primacy of local laws and regulations for the governance of media infrastructures run by companies in foreign countries, this can make these companies complicit in restrictive measures by authoritarian governments. Do we then demand that companies based in Western democracies should leave countries that enforce laws and regulations that do not uphold variants of Western rights to free expression and personal rights? If so, then these media infrastructures cannot be made complicit in the pursuit of dissidents or users that fall foul of...