

Disinformation and Counter-strategies in Challenging Times – The German Case

Extract from the Integrated Report on Trust and the Media, Part 3 “Fake news and Counter-strategies – Country reports” (September 2022)

URL:

<https://entrust-project.eu/files/2022/10/Trust-and-the-Media-integrated-report-WP4.pdf>

EnTrust research project:

Enlightened Trust: An Examination of Trust and Distrust in Governance – Conditions, Effects and Remedies

Project Information

Project Type: Collaborative Project
Call: H2020 SC6 GOVERNANCE-01-2019: Trust in Governance
Start date: February 2020
Duration: 48 months
Coordinator: Prof. Dr. Christian Lahusen, University of Siegen
Grant Agreement No: 870572
EU-funded Project Budget: € 2,978,151.25



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 870572. The contents of this publication are the sole responsibility of the authors and do not necessarily reflect the opinion of the European Union.

www.entrust-project.eu

Disinformation and Counter-strategies in Challenging Times – The German Case

Ulrike Zschache

1. Introduction

Germany has a very varied and dynamic media landscape, including a well-established public broadcasting service (with national and regional branches), private broadcasting, nation-wide quality newspapers, daily regional and local (subscription) newspapers, tabloids and digital media (online-formats of the various media organisations, or independent ones). Basically, Germany's media landscape is strongly shaped by the country's federal structure and regional diversity. In fact, the country's media structure and media policy are significantly influenced by the 16 federal states. In particular, the 16 single federal states have primacy in the field of public broadcasting, and nation-wide regulations are based on inter-state broadcasting agreements. Moreover, Germany has a long tradition of periodic press, and with its many mid-size and larger towns and cities, a large number of newspapers have emerged across the country. In contrast to public broadcasting, the press sector is commercially organised and regulated only to a minimum. Hence, while public broadcasting is largely financed by broadcasting fees, newspapers are, in most cases, dependent on revenues from subscriptions and advertising. Similar to the situation in many other countries, the German newspaper landscape has been characterised by a substantial concentration of media markets over the past decades. While there is still a high diversity of press outlets, ownership figures show that a large share of the print market is controlled by only a handful of large media companies (Röper 2020). Against the backdrop of harsh competition over advertising clients, enhanced digitalisation and changing media consumption patterns, it has become particularly difficult for local and regional newspapers to adapt or survive. According to media researchers, newspapers continue to be important sources of information and political opinion formation (see e.g., Beck 2018: 175). Currently, however, there are clear signs that digitalisation has led to substantial changes in news consumption behaviours, and in the ways in which the public informs itself and forms a political opinion. In the age of digitalisation, information and news are disseminated through many different channels, including a variety of websites and social media accounts at different levels of quality and integrity. For many people, and particularly the younger generation, social media like Facebook, Instagram, YouTube (but increasingly also TikTok) have become a major, if not the main source for news consumption (Köhler 2020: 14). Against this backdrop, researchers observe a considerable differentiation of the public and a growing heterogenisation of specialised audiences with particularistic interests and perceptions (ibid.) In this regard, scholars shift particular attention to "platformisation" as a core component of digitalisation, and argue that the current transformation constitutes a "third, digital structural change" of the public sphere (Eisenegger 2021: 17; also, Jarren 2021). Yet, in media and communication studies, it is still controversially debated as to what extent the domestic public sphere is increasingly transformed into differentiated public spheres. Moreover, further research is needed to better understand if and how disintegrating effects of digitalisation and "platformisation" affect the functioning of the public sphere for political information and opinion formation in today's mass mediated democracy (e.g., Rau/Stier 2019).

Yet, what has become clear in recent years is the change in the structure of communication and information sources and senders. The pre-digital age was aptly characterised by Luhmann's

renowned observation: “What we know about our society, indeed about the world we live in, we know through the mass media” (Luhmann 1996: 9). However, in times of digitalisation and the liberalisation of access to means of communication, the dissemination of news and information is no longer confined to established mass media organisations and professional journalists as the gate keepers of public information flows. Instead, publishing news content online and on social media platforms has become possible for a broad range of very different actors, be they journalists or not. In consequence, digitally available news content does not necessarily meet professional criteria of objectivity and reliability. In fact, media scholars underscore that this trend has led to the blending of facts with subjective opinions, as well as the dissemination of mere assumptions, unverified rumours, disinformation and conspiracy stories, which eventually contribute to media scepticism and the erosion of media trust. In this regard, the media researcher Tanja Köhler (2020: 14) emphasises that “disinformation is usually not (immediately) recognisable as such, which increases mistrust in the credibility and quality of sources, as well as media scepticism. These losses of credibility and trust are also felt by established media. They express themselves in accusations of gaps, lying press and fake news, or in a blanket criticism of the ‘mainstream media’, the ‘system press’ and the ‘state radio’.”

When looking at survey findings, a general decrease in media trust can, however, not be observed in Germany. In fact, the share of people in Germany trusting mass media has remained stable over the past decade, or has even somewhat increased. At the same time, there is a part of society that distrusts the mass media. This group of distrustful people has also remained rather stable during the past decade. Media trust in Germany is thus characterised by the consolidation of a cleavage between the trusting and distrusting parts of the population. When it comes to the distribution of these two categories, there is some variance between the different surveys (also depending on the exact wording of questions/answers, and the scales). The “long-term survey media trust” by the Institute for Media Studies at the University of Mainz, for instance, indicates that the trustful part of the population nowadays forms the majority, while the distrustful part is heavily outnumbered (see Figure 1). In the Eurobarometer Surveys (Standard Eurobarometer 76; 78; 80; 82; 84; 86; 88; 90; 92; 94; 96, 2011 – 2021/22), the contrast between the share of those who “tend to trust” and those who “tend not to trust” is not as strongly pronounced; nevertheless, the trustful respondents are clearly in the majority (see Figures 2 and 3).

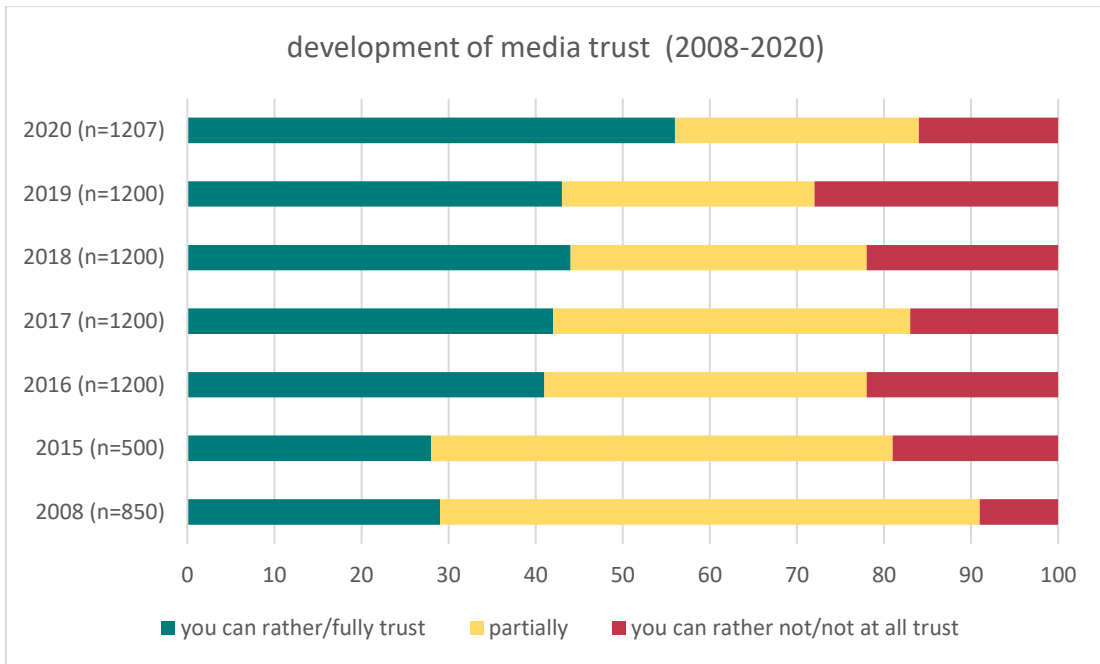


Figure 1: development of media trust 2008-2020, adopted from the “Long-term Survey Media trust” by the University of Mainz, question “When it comes to truly important issues, such as environmental problems, health risks or political scandals: How much can one trust the media?” Source: Institut für Publizistik der Johannes Gutenberg-Universität Mainz 2020, <https://medienvertrauen.uni-mainz.de/forschungsergebnisse-der-welle-2020-3>

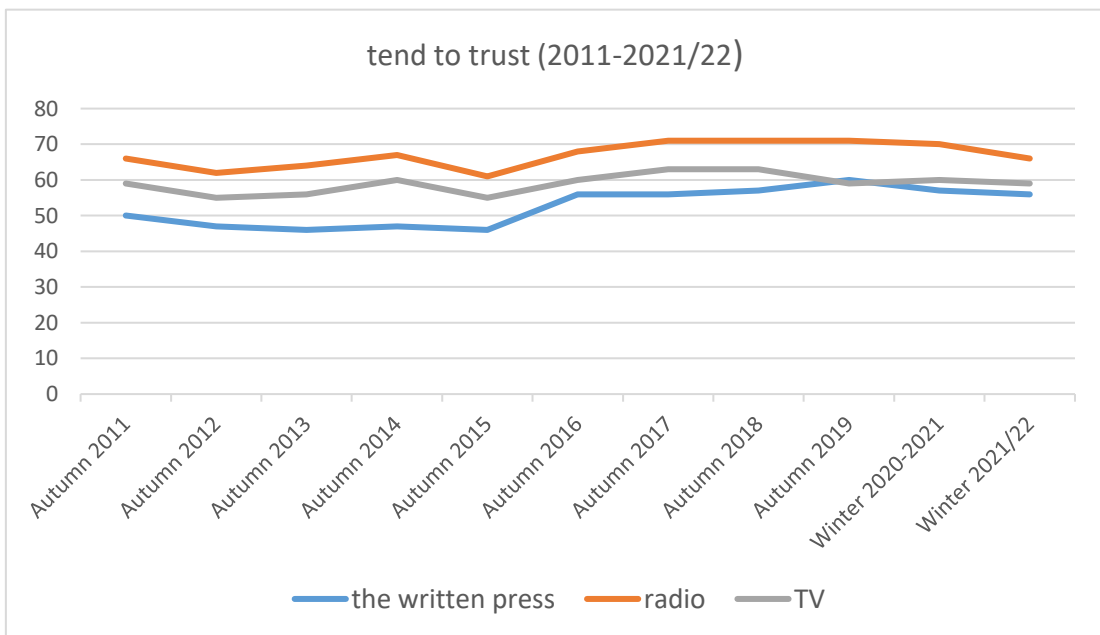


Figure 2: “tend to trust” over time, based on Standard Eurobarometer 2011 – 2021/22, QA6a.1 “How much trust do you have in certain media? For each of the following media, do you tend to trust it, or tend not to trust it? - The written press / Radio / Television (%)”

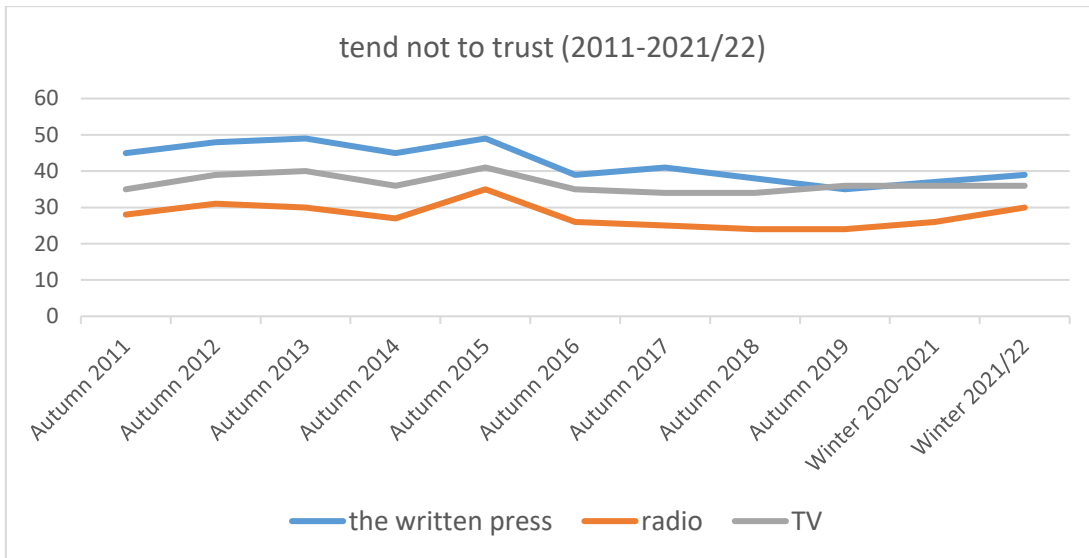


Figure 3, “tend not to trust” over time, based on Standard Eurobarometer 2011 – 2021/22, QA6a.1 “How much trust do you have in certain media? For each of the following media, do you tend to trust it, or tend not to trust it? - The written press / Radio / Television (%)”

Overall, surveys indicate that those who trust the mass media, or have at least a bedrock of media trust, form the majority in society, while clear distrust of mass media is expressed only by a minority. The pattern of a cleavage between trusting and distrusting parts of society also applies to other core institutions. As regards trust in the German national government, the divide in society is even more pronounced. According to the latest Eurobarometer Survey of Winter 2021/22 (Standard Eurobarometer 96, Public opinion in the European Union), there were almost as many respondents who tend not to trust the national government as those who trust (48% tend to trust; 44% tend not to trust). In comparison, science and research enjoy relatively high trust, particularly in recent years. Nevertheless, there is a minor section of the population that distrusts “mainstream” science and experts (Wissenschaftsbarometer 2021) (see Figure 4).

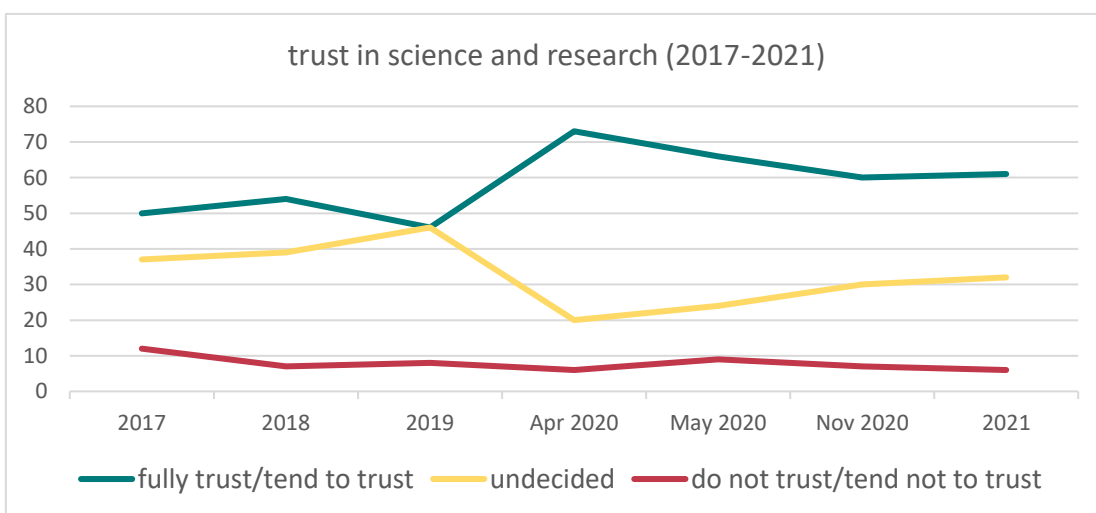


Figure 4: Trust in science and research 2017-2021, adopted from “Wissenschaftsbarometer 2021”, Q: “How much do you trust science and research?”, (Wissenschaftsbarometer, Wissenschaft im Dialog, Leaflet 2021, page 11)

In order to investigate the development of media trust and the phenomenon of distrust in Germany more profoundly, and to elucidate counter-strategies of different experts concerned with tackling disinformation, we conducted expert interviews with journalists from various backgrounds, civil society actors, as well as representatives of governmental institutions, specialised in monitoring and curbing disinformation. The following table provides an overview of our interview partners.¹ In the following text, references to original statements are, however, anonymised, because some of the respondents preferred not to be directly quoted. Given the limited number of interviews, anonymisation was applied to all respondents to protect single individuals.

Table 1: interviewed experts and their affiliations

| Public broadcasting media | |
|---|--|
| Patrick Gensing | ARD Tagesschau Faktenfinder |
| <p>“Fact finder” of the “Daily News” website of the Consortium of public broadcasters in Germany: a unit of journalists aimed at checking/verifying information. At the time of interview, Patrick Gensing was head of the fact-finding unit of the online section “tagesschau.de”.</p> <p>https://www.tagesschau.de/faktenfinder</p> | |
| Vanessa Valkovic | Südwestrundfunk SWR3 Faktencheck |
| <p>Fact checking unit of the South-West public service broadcaster: unit of journalists aimed at checking/verifying information. Vanessa Valkovic is multimedia journalist at SWR3 Faktencheck.</p> <p>https://www.swr3.de/aktuell/fake-news-check</p> | |
| Janina Lückoff | Bayrischer Rundfunk BR24 #Faktenfuchs |
| <p>Fact checking unit of the Bavarian public service broadcaster: unit of journalists aimed at checking/verifying information. Janina Lückoff is journalist at BR24 #Faktenfuchs.</p> <p>https://www.br.de/nachrichten/faktenfuchs-faktencheck,QzSlz3</p> | |
| Joscha Weber | Deutsche Welle Faktencheck |
| <p>Fact checking unit of Deutsche Welle, the German foreign public service broadcaster (member of the Consortium of public broadcasters in Germany, ARD): unit of journalists aimed at checking/verifying information with an international scope; Joscha Weber is head of fact-checking at Deutsche Welle.</p> <p>https://www.dw.com/de/faktencheck/t-56578552</p> | |
| Press agencies | |
| Jan Russezki | Agence France-Presse AFP Faktencheck (German unit) |
| <p>French Press Agency Fact checking unit: unit of journalists checking/verifying information. Fact-checking in France since 2017, in Germany since 2020. Jan Russezki is journalist of the German-speaking unit at AFP fact-checking.</p> <p>https://faktencheck.afp.com/list</p> | |
| Newspapers | |
| Martina Schories | Süddeutsche Zeitung (SZ), development unit, data and investigative research |
| <p>Journalists of the of the SZ development unit are engaged in data and investigative research. A major data research project was the investigation about the radicalisation of communication on Telegram during the Covid-19 pandemic, called “#hassmessen”. Martina Schories is a former data journalist at Süddeutsche, and was involved in the “#hassmessen” data research.</p> <p>https://www.sueddeutsche.de/projekte/artikel/politik/radikalisierung-in-der-corona-krise-e742536/?reduced=true</p> | |

¹ I would like to thank Stephanie Schneider who contributed to conducting interviews in Germany.

Non-profit, independent journalism projects

Sarah Thust

Correctiv Faktencheck (Correctiv gGmbH)

Correctiv is an independent, non-profit newsroom with a specific fact-checking unit. Correctiv Faktencheck is a unit of journalists checking information since 2017. Sarah Thust is journalist at Correctiv Faktencheck.

<https://correctiv.org/faktencheck>

Thomas Laschyk

Volksverpetzer (VVP gUG)

Volksverpetzer is an “Anti-Fake-news-Blog” by a non-profit project that mainly works on a voluntary basis. Its purpose is checking/verifying information, yet dissimilarly from journalistic fact-checking teams, it has a more political approach, takes a political stance and often uses humour and satire to debunk fake news. Volksverpetzer started its work in 2014 at the regional level (Augsburg) and has existed in its current form since 2018. Thomas Laschyk is founder and leader of Volksverpetzer.

<https://www.volksverpetzer.de>

Civil society organisations

Kristin Marosi

Codetekt e.V.

Codetekt is a non-profit association aimed at developing strategies for detecting and curbing disinformation, and empowering citizens. Its main instrument is the online platform codetekt.org that allows interested citizens to join the online community of volunteers (co-detectives) who actively engage in checking the trustworthiness of doubtful online news and information. Kristin Marosi is part of the leading team at Codetekt e.V.

<https://codetekt.org>

Juliane von Reppert-Bismarck Lie Detectors

Lie Detectors is a news literacy organisation with a European approach. A core activity of the project is to prepare and organise classroom sessions by journalists with the aim of raising awareness about disinformation and promoting news and digital literacy among pupils and teachers (with a current main focus on Germany, Austria, Switzerland, Belgium and Luxembourg). Awareness raising about the importance of news literacy in educational curricula and related advocacy are also important activities of the project. Juliane von Reppert-Bismarck is the founder and leader of Lie Detectors.

<https://lie-detectors.org>

national government units

Hanna Katharina Müller

Federal Ministry of the Interior, unit H III 4 “Political governance models and hybrid threats”

The ministerial unit “Political governance models and hybrid threats” belongs to the section: “Well-fortified democracy, political education and prevention”; it aims to monitor, analyse, evaluate and -if need be - debunk disinformation that may pose a risk to the government, society or democracy. A special focus in this regard is on authoritarian governments and non-state actors, their ideologies and impact on public opinion and political policy-making in Germany (and Europe). The unit contributes to a task force on disinformation, coordinating all related activities on behalf of the entire national government. Hanna Katharina Müller is the leader of the unit H III 4.

Simon Kreye

Federal Ministry of Foreign Affairs, Steering Group Strategic Communication

The Steering Group Strategic Communication at the Federal Ministry of Foreign Affairs is geared to monitor, analyse and evaluate disinformation and propaganda by foreign states that may pose a threat to German policy making and security. A further task is strategic positive communication about the German government and the country addressing mainly foreign target groups. Moreover, the unit contributes to fostering media literacy and resilience-building with the help of local actors in a range of partner countries worldwide (e.g., the Baltic states and the western Balkans). Simon Kreye is leader of the Steering Group Strategic Communication at the Federal Ministry of Foreign Affairs.

2. Problem identification

Among the interviewed experts, there is clear consensus that a distinction must be made between disinformation and misinformation.² While the latter refers to the unintentional dissemination of incorrect information, disinformation (in German “Desinformation”) denotes the intentional spreading of targeted false or misleading information³, and is regarded as a deliberate attempt to confuse, manipulate and deceive the public while promoting a specific “alternative” narrative in order to achieve one’s own or group-specific (political or economic) interests or gain an advantage, to erode the public’s trust or fuel distrust, fear and anger and cause public damage. The underlying motivations or intentions can be manifold and may include, among others, the aim to manipulate the outcome of democratic elections or democratic opinion and will formation in a broader sense, erode societal cohesion and cause social divide and polarisation, commercial (profit) motives (e.g., by using scandalisation to attract high numbers of users on one’s website or social media page, and thus increase advertising revenues) or indeed hybrid warfare.

While the meaning of “disinformation” widely overlaps with the term “fake news”, the consulted experts largely agree that they reject using “fake news” for two main reasons.⁴ On the one hand, they argue that the term “fake news” has become highly politicised and also misused by populist, typically far-right political actors and groups (most prominently Donald Trump) to accuse legacy media of false reporting and manipulation and to defame true, but inconvenient information. On the other hand, “fake news” is considered too vague and dazzling, and to some extent an inappropriate concept to describe the problem (see also Sangerlaub 2020). In fact, disinformation is only partly based on completely and overtly false information. Very often, there is some true essence, but the information is lacking context, or is embedded in a misleading or wrong context which changes the information’s meaning or message substantially (see also Boberg et al. 2020). Indeed, in contrast to “fake news” and fictitious conspiracy narratives, one of the key mechanisms of disinformation is that it works as an instrument of subtle manipulation that “is more suitable for the masses, i.e. which is not quite so abstruse and not quite so clearly marked as information that is completely made up out of thin air, but which has been kept so vague or prepared in such a way that it can also be suitable for the masses and can unsettle them” (Interview_DE_9).

With regard to the phenomenon they are dealing with, our interviewed experts state that disinformation is clearly the focal point of their attention. Nevertheless, there are some nuances depending on the field of action. Institutional representatives explain that they are also dealing with “propaganda”, which in their understanding is not misleading information about others, but an instrument

² Even if this distinction is not so well known and/or widespread in German everyday language use, compared to its usage in English.

³ Information is not only text-based information, but also includes pictures, audio or audio-visual material. It may be spread in public arenas, but also in closed social media groups, in private chat (groups), at local public events, or during personal interaction.

⁴ The term “fake news” is particularly rejected by interviewees with a professional journalistic or political background. In a few instances, interviewed experts (like a civil society actor) used “fake news” as a synonym of disinformation or a related expression, because “fake news” seems more common and connectable in the everyday parlance of readers/users. According to the literature (e.g., Primbs 2018), the recoding of the term “fake news” into a fighting term of the far-right has not been as successful in Germany as it has in the U.S. In Germany, it is still used as a colloquial term to describe false or confusing information by alternative media sources. As Primbs (2018: 116) notes “In Germany, this reinterpretation of the term has also been attempted by the right, but it has not succeeded - at least this seems to be proven by surveys. In this country, fake news still means ‘misleading information in the guise of news’.” Hence, in contrast to the literality of the term “fake news”, this expression is typically used as a more general concept to refer to a variety of false or misleading information that may also include misleading quotations or interpretations of statistics, decontextualised quotes or misleading inciting prejudices (Primbs 2018: 117).

to improve one's image by stretching the edges of truthfulness a little. Moreover, the regionally anchored public broadcasting fact-checking units have a broader approach, and often deal with various kinds of claims and rumours from everyday life that their users or other citizens find irritating, or would like to understand better, but they do not necessarily have to be wrong (e.g., if sun blockers may cause cancer, if vaccinated people are contagious).

Looking at the development of disinformation, experts underline that the dissemination and exchange of false and distorted information is nothing completely new and has existed for a long time, often linked to contentious issues, conflict and power struggles (see also Turcilo/Obrenovic 2020). However, in the recent past, a substantial change has occurred with the digitalisation of communication, and particularly the use of social media and private messaging services like WhatsApp or Telegram. What in former times had been mostly confined to particular groups and constituencies has now become much more visible and influential for the broader masses of people on social media platforms, in messengers and on alternative media sites. In that sense, the dynamics of disinformation in Germany follow a similar trend to that in other contemporary societies: "What is different is the speed, scale and massive proliferation and consumption of false information disseminated on dominant digital platforms such as Facebook and Twitter. Information unvetted by conventional news organizations has gained wide presence in widely popular platforms and is easily accessible." (Waisbord 2018: 1867). The new potentials of digital communication, the Internet and social media have been particularly exploited during times of conflict and crisis, where different populist or radical actors and groups in society have sought to undermine and fight official policies. The spread of politicised disinformation became particularly salient in the U.S., most evidently since the 2016 elections and the Trump presidency. But in the meantime, it has increased more and more in Europe, as well (e.g., in the context of Brexit in the UK). In Germany, the so-called "refugee crisis" of 2015/16 was one of the earlier occasions that gave momentum to a rise in politicised disinformation and the strategic manipulation of public discourse. Its effect on society and public debate, however, is considered relatively moderate as most citizens had little direct experience with refugees and asylum seekers, were barely affected by the policies, and were thus less motivated to engage with the issue. Another salient issue that triggered disinformation over the previous years was climate change, and the responsibility of humans for the current climate crisis. Yet, following scholars in the field, Germany has been less affected by the spread of disinformation than other countries (Bayer 2021; Hegelich/Thieltges 2019). For instance, the 2017 German parliamentary elections have been little disturbed by disinformation and manipulation, which is explained by the proactive public awareness raising, and other preventive measures of the established political actors and institutions that made the population better prepared and less vulnerable to disinformation campaigns (Bayer et al. 2019). Disinformation has been mainly used "to generate confusion, and to support extremist political opinion. This type of communication has a ritual function rather than an informative one. Its primary purpose is to represent and reinforce identities, and it is closer to political propaganda than to conscious misleading with regards to facts" (Bayer 2021: 2).

At the same time, it is widely acknowledged that the enhanced spread of disinformation by means of digital communication has contributed to a considerable polarisation in society between the radicalised small minority of those rejecting legitimate facts and adhering to conspiracy echo chambers, and the majority of society. In this respect, one of the journalists states:

In my observation, these networks have expanded considerably; they are more powerful, a parallel public sphere has formed that has largely disconnected itself from the general public, who only use it when they find media reports that fit into their own narrative. And I can see quite clearly that there is a polarisation, a fragmentation of public discourse. And that there are also quite a number of people who are lost and who can no longer be reached. To be honest, I don't know whether that has always been the case. To a certain extent, I'm sure. [...] but digital communication is new, the way we live it now. And the problems and risks are obvious, of course, that the possibilities of manipulation through the new technologies, through the extremely fast consumption of news, through the social networks whose algorithms reward emotionality above all, these risks are obvious and relatively new. And that's why, in my opinion, there's little point in looking now [...] at the fact that there was already propaganda in the past and so on. That's all true, but the framework conditions have changed completely. Radically. (Interview DE_4)

And another one explains:

What I have observed over the course of this intensification and polarisation of society is that people increasingly believe that their own truth is the only valid one. And with that, they clash with the person opposite them, who in turn believes that this is the only valid truth. And this kind of confrontation through belief and mistrust, that is, on the one hand, the belief in one's own narratives and sources, and mistrust of everything else that they encounter, that is one of the core problems why we observe and everyone feels this division (Interview_DE_12).

The experts interviewed for this study unanimously agree that the Covid-19 pandemic was an important driver of a massive surge of disinformation in this country, too. The pandemic's ramifications on the whole of society, and the related emergency measures, together with the high levels of uncertainty and anxiety about the new virus made larger groups of society, including less politicised people, more vulnerable for targeted disinformation and the incitement of fear, anger and distrust. As one respondent states:

The pandemic had a very big effect, [...] the pandemic was extremely advantageous for this filter bubble because it was something that was absolutely unavoidable for many people, [...] when we're all sitting at home, when we all have to worry about our jobs, about our health, about our relatives, et cetera, et cetera. And there are a lot of fears and insecurities that can be exploited. And this filter bubble was also able to get extremely involved and also politicise many people who were previously rather apolitical, and then also mobilise a lot and incite and generate anger from the rather esoteric corner, the extreme right-wing scene (Interview_DE_3).

Similarly, another respondent argues:

With respect to the crises in particular, there were always individual spurts. And the Corona pandemic was, I think, the biggest push, so that a lot of news or dubious news sites were created and a lot was shared on Facebook (Interview_DE_8).

Moreover, while previous critical occasions, such as national elections, have been shaped to a larger extent by foreign disinformation sources and their domestic supporters, the pandemic enhanced the emergence and activity of domestic players (see also section 4 below), so that disinformation has become an "organic part of domestic political communication, as well" (Bayer 2021: 1).

Another recent trend of the past two to three years is the migration of the community of spreaders of disinformation from Facebook or YouTube to other platforms, such as Telegram and alternative video platforms. This needs to be read as a clear effect of stricter national regulation⁵ and enhanced self-regulation and anti-disinformation policies of the large social media platforms like Facebook. Experts are concerned that this may lead to a reinforcement of selective exposure effects in ideological echo chambers, a narrowing down of reality perceptions and a growing inability to get in contact with and learn about facts and legitimate, evidence-based narratives from established mass media, science and politics.

In these closed groups,

[...] they are only paired with like-minded people. And there, fake news, disinformation, lies are not even recognised as such, and they lose the ability to critically question them and, on the contrary, become downright allergic to true news, to true facts that do not fit into their narrative and are then reflexively rejected. And that promotes radicalisation to an extreme, and actually through the hatred that is also stirred up there, because individuals are always highlighted who are then supposed to stand symbolically for evil in the respective narrative, who are then also belittled with lies and with insults. This also increases hatred and the potential for violence and conflict in everyday life because people forget how to compromise, admit mistakes, communicate and revise their opinions (Interview_DE_3).

With regard to the conflicting, incompatible perceptions of reality, some experts argue that the “dynamics have definitely increased, and we are already, to some extent, in a post-factual social discourse that has been fuelled by many actors in recent years. And the result can be seen in the fact that many people now perceive that society seems more divided than it perhaps was a few years ago” (Interview_DE_12). At the same time, experts underline that the community of conspiracy and disinformation believers is a loud yet small minority. Thus, it would be inappropriate to speak about a division of society, as such. Instead, what we observe is a radicalisation by which certain groups have drifted further away from the rest of society.

3. Trust in news and journalism

The spread of disinformation affects trust in journalism in nuanced ways and to varying degrees. Experts agree that there is a growing divide between members of filter bubbles, categorically distrusting the established media, and the majority of society who has basic trust in professional journalism and quality mass media. Within those groups of society that already distrust established media and dominantly consume alternative media, an increased radicalisation and alienation has been observed. At the core of the problem are people who are not sceptical of mass media on the grounds of reasonable arguments, or a healthy vigilant attitude. Instead, among these groups, a fundamental, fanatical distrust and rejection of mass media (particularly with regard to public broadcasting) has taken hold that tends to make its followers inaccessible to professional journalism. As one journalist explains: “I think there is a majority in this country that does not say that all [news] [...] is 100 per cent true. [...]. But they do understand that there is professional journalism that tries to present reality as realistically as possible. That falls apart a lot. I think this polarisation is actually the new thing, that there is such a hard, such a fanatical criticism of the media, which has

⁵ See https://www.bmj.de/DE/Themen/FokusThemen/NetzDG/NetzDG_node.html

really already lifted itself into its own ideology” (Interview_DE_4). In fact, in Germany the fighting term “lying press” (“Lügenpresse”) has again become popular among right-wing protestors since late 2014 to categorically accuse the media of false reporting, disguising information and manipulating society, similar to the way Donald Trump and the far right in the U.S. have been using “fake news” to defame legacy media (see also Beiler/Kiesler 2018)⁶. Over the past decade, aggression against journalists, insults and hate speech have increased, while in most recent times, journalists have also experienced more direct violence while doing their job (e.g., while conducting interviews, or reporting at demonstrations).

In contrast to the cementation of fundamental media distrust among a minority of people, the increased spread of disinformation in the public sphere has more subtle effects among the majority within society. Overall, large parts of the country still trust the established mass media, especially the independent, non-commercial public broadcasting and the leading quality newspapers.⁷ Yet, experts are concerned that the strategic, repeated and concerted dissemination of disinformation and the defamation campaigns against the established mass media are starting to make people from the mainstream of society insecure about the reliability and truthfulness of news reporting, and recognise its potential to step-by-step diminish their trust in formerly trusted media outlets. The oft-repeated targeted spread of the same false narratives and accusations claiming that established mass media hide relevant information, lie and deceive the public (on behalf of the government or other elites) undermines their credibility, and fuels uncertainties and more scepticism towards professional journalism and news coverage in parts of the population. One journalist explains:

One disinformation strategy is to attack established media and reputable media, and to portray them as untrustworthy, as faulty, as incomplete. And sure, that doesn't reach everyone. But if you hear that again and again and again, then at some point, it settles in your head and you are then more sceptical and then move further and further away. [...]. And it is, of course, very, very difficult to convince them again and to give them the feeling and to show them that we are trustworthy (Interview_DE_8).

A related problem is that targeted disinformation campaigns take up single mistakes or inaccuracies of specific media outlets – and politicians, brand them as deliberate lies or manipulation attempts, and inflate them in such way that they appear as a huge and fundamental problem. What is more, disinformation campaigns do not only make generalised claims about the media outlet, or the politicians at stake, but also about the media and politics as such, suggesting that all the mass media and politicians or the government are untrustworthy. The same respondent states:

Mistakes are pointed out again and again, or reports are invented [...]. Of course, this is detrimental because these individual cases are always made very, very big, and are shared on many different channels, which can create the impression that this is an everyday problem. [...] It is not only the individual cases that are then made big, but also a generalisation that is then made about "the media". [...], everything is then lumped together. [...] Of course, this [disinformation] leads to a loss of trust in state institutions and the state and the media, and so on (Interview_DE_8).

⁶ The term “lying press” (“Lügenpresse”) has already been used by the German National Socialist Party during the 1930 and the Nazi regime to defame the press and destroy public trust (Koliska/Assmann 2021). In 2014, it was taken-up again by the Pegida movement, and subsequently used by various anti-democratic right-wing movements.

⁷ This has been confirmed by recent surveys, for instance “Glaubwürdigkeit der Medien 2020” (infratest dimap, 2020) and “Langzeitstudie Medienvertrauen”, (Institut für Publizistik Johannes Gutenberg-Universität Mainz, 2020).

Another key mechanism of targeted disinformation is the populist stirring up of discontent against the elites. Messages promote black-and-white thinking patterns, and are often structured in a way that enemy images are created, such as "we little citizens and those up there," thus referring to politicians, the government, or the media in a very sweeping way. In this context, disinformation campaigns claim to elucidate the public and bring the truth about those elites to light.

Overall, these mechanisms appear to work particularly for such kinds of disinformation that is less evidently made-up, has some fact-based elements and sounds relatively reasonable and potentially true. Indeed, in order to gain credibility and influence false claims, alleged disclosures and accusations are substantiated with many arguments and supposed facts that often sound quite realistic at first, and require a certain effort to be checked. Two of the interviewed journalists underline, for instance:

Even more dangerous are the messages that sound even more realistic. They are alarming, but in such a way that one does not recognise at first glance that it is somehow a false report. And I do believe that [...] especially public or mainstream media, as it is often called, that they are always being attacked to some extent, and then [these false reports] also lead to a greater mistrust. [...] And I believe that trust in the media is also influenced by the fact that this leaves a mark on people. Even if you don't believe every false report, the danger is definitely there (Interview_DE_9).

They obviously sound very logical and very, very factual to some people, and this naturally leads to the question, okay, why haven't I read anything about this, why aren't politicians talking about it, and so on. And then a feeling of a reporting gap is constructed, so to speak. And that harms, of course, [...] because then the impression is strengthened once again that either nothing is being reported, or it is being reported incorrectly by politics and the media (Interview_DE_8).

According to the journalists and fact-checkers, the effectiveness of disinformation and defamation campaigns varies considerably between different groups in society. While education in general is seen as one factor that can make people less vulnerable, media literacy and particularly knowledge and experience in the use of digital media are considered the most important conditions for people to critically encounter and recognise disinformation. In the words of one respondent:

I see in younger people that they have more of an understanding of what is possible in the social media, that there are many, many things circulating there that are fake, as they say. And that they control themselves more because they interact much more with each other. That is of course a very important corrective, that they correspond with each other more often and are perhaps made aware of something. That doesn't have to be universally valid, but at least in principle there are people [...] who grew up in the analogue age, where a daily newspaper was still a daily newspaper, and where everything that was printed there was, so to speak, set like this. They look at some pages on the Internet [...] and think, that looks reasonable. Then it must be correct. But nowadays, it's so easy to create a false impression or manipulate pictures and things like that; they are sometimes overwhelmed by the flood of information 24/7 on the Internet. [...] They are also often lonely people who spend a lot of time alone in front of the computer (Interview_DE_4).

Other interviewed experts underline that it is equally important to strengthen digital news literacy among young people as they search for information almost exclusively on (often peer-group

specific) digital media and consume news and information typically alone without being accompanied by parents or experienced readers that may give guidance to help distinguish between professional news journalism and opinions, entertainment, manipulation or propaganda.

Another respondent shares the observation that

[...] the lower the school-leaving certificate, the less time there is on the educational pathways to impart media news competence [...] And on the other hand [...] many in this age range, let's say around 50, [...] so to speak, the generation that didn't grow up with the Internet, we see quite often that they sometimes don't have this access to know that everyone can put information on the Internet, what is possible in terms of technology, how influential news can really be (Interview_DE_11).

In this respect, experts underscore the importance of educating people to be cautious and to critically question online and social media content. One journalist also expresses astonishment that those who strongly distrust the established media are often simultaneously very uncritical and trustful of alternative media.

Not only interviewed journalists, but also the representatives from state institutions and civil society, are concerned about the implications of a lack of, or eroding, trust in professional journalism and mass media for democracy and society as such. While there is a strong consensus that a healthy degree of scepticism, vigilance and mistrust, as well as justified criticism of journalism, is important and needed as both a corrective in a democratic society⁸, a lack of basic trust in news and professional journalism, and decided distrust in mass media, are seen as a serious problem.

Experts are particularly worried about how to reach out to those that already fundamentally distrust established media, and how to (re-)integrate them in a joint public discourse and democratic opinion formation. Core to the problem is that those who are already strongly alienated from the centre of society would by default presuppose that the media, together with state representatives, science and other parts of the so-called establishment are, in principle, always lying and deceiving. As one journalist says:

When there is a basic attitude of suspecting that the reporting is deliberately false, of course, this makes it incredibly difficult to convey information if the basic attitude is that a journalist is trying to exploit something, or to pursue some kind of plan. If there is such a basic attitude of distrust, which I believe is often promoted by false reports or fake news or disinformation campaigns, it naturally makes it difficult to find any access at all. And especially in the case of public service broadcasting, the task of informing is of course part of it, and one wants to reach and inform many people with it. And I think that naturally makes the work more difficult when there is such a basic distrust (Interview_DE_9).

And another one explains:

⁸ What is more, fact-checkers also underline that it is indeed part of their mission to raise awareness and educate the citizens to be critical, independent and reflective media consumers. As one of the journalists states: "In fact, that's exactly what we teach: 'Don't believe everything right away, look twice, don't share right away,' and many other skills on how to take a close look at media. In this respect, distrust is formulated positively; we rather call it scepticism or caution, or, as I said, the second glance, an important virtue in order not to immediately fall into these traps" (Interview_DE_12).

When people ask critical, objective questions about our work, when they criticise us, that is of course perfectly fine. That is definitely part of the discourse. But [...] what irritates me very much and gives me a lot to think about is the malice that we are accused of. That we deliberately want to manipulate, that we are a propaganda department [...] and that we are all just lining up to lie to people. And I see how many colleagues really do work very hard and put a lot of effort into research (Interview_DE_4).

What makes such categorical distrust a fundamental problem is the lack of openness to and the denial of facts and arguments contradicting one's own views, and the enshrined unsubstantiated doubt about everything: *"Because then, if I say that nothing is true anyway, and I don't even bother to look at what might be substantiated and what is serious reporting, then I can somehow choose what my reality is"* (Interview_DE_4). This notion relates to the post-truth debate where it is argued that public communication in the post-factual era is marked by categorical relativism and the denial of objective facts and where truth as a principle of debate has been replaced by personal belief and an appeal to emotion (McIntyre 2018: 5; Zackariasson 2018: 1). Yet, in line with recent research in media and communication studies (e.g., Michailidou/Trenz 2021; Waisbord 2018: 1867), the journalists and fact-checkers interviewed on behalf of our study underscore that the phenomenon of fact-denial and post-truth attitudes is, from their observation, confined to a clearly limited circle of radicalised groups in society, while the largest share of society is still interested in objective facts and fact-based journalism.

Having said this, experts also emphasise that the issue should not be underrated. Particular attention is shifted to the fact that media distrust is not seldom related with distrust in the government, the state, science and democracy, as such. The notion of the "lying press" is typically part of a more encompassing ideology, considering the established media, and particularly the public service broadcasting, as part of a larger conspiracy plan of the so-called elites (see also, for instance, Koliska/Assmann 2021: 2733; Richter/Salheiser 2021). In addition, it is argued that the erosion of media trust can also make less radicalised, but still unsettled people, more vulnerable to be drawn deeper into the spiral of conspiracy narratives. In this respect, one respondent argues, for instance:

I think the lack of trust in news and journalism makes people more prone to believe other things that are not necessarily fact-based. And I think the distrust of news also makes people more susceptible to believing that there is some big plan behind something [...] and the media are somehow, mainstream media are a cog in that wheel and then contribute to that [...]. And I believe that such a distrust of the media and journalism makes people more susceptible to believing such news (interview_DE_8).

At the same time, experts are well aware of the risks for democracy and society that an erosion of basic trust in professional journalism and mass media within larger parts of the population may have. So far, Germany has been well prepared to prevent noteworthy influence of disinformation campaigns on democratic elections (preventive measures have been taken, for instance, in the context of the national elections, 2017 and 2021). Nevertheless, journalists and fact-checkers underscore that growing uncertainty about media credibility, reliable sources and a weakening of trust in news media coverage in wider groups of society can have serious implications for democracy. An erosion of basic trust in quality media among wider parts of the population would, in particular, impair the functioning of the mass-mediated public sphere as the space where reliable information about democratic processes, political issues and potential solutions, policy makers and other public actors is provided, and fact-based arguments and opinions are exchanged as the basis for democratic opinion and will formation (see also Turcilo/Obrenovic 2020).

Reflecting on the impact of lacking trust, one journalist specifies that

[...] journalism is there to provide information and to provide education and, of course, to be a basis to form an opinion. [...] Journalism is also there to provide perspectives that would otherwise not be available, and to give society a broader and more diverse view. And of course, it's important for people to realise that a democracy doesn't just consist of its bubble and its social milieu, I would say, but is very diverse. And democracy is also about majorities, majority decisions and so on. Of course, this helps us to understand such processes and to somehow be able to put ourselves in other perspectives. And disinformation, or a lack of trust, is naturally a problem in this case, simply because different decisions are made, for example, in elections. If you suddenly no longer trust the reports, trust the perspectives, of course, then you make different decisions, which can then become a problem, also for the person making the decision (Interview_DE_8).

At the same time, journalists underscore that the fomenting of uncertainty about reliable information and trustworthy information sources can have direct implications on individual decisions and behaviour in everyday-life contexts. To illustrate the issue, a respondent explains:

"The best current example is probably the Corona pandemic. This group, for example, of vaccination sceptics [...] is not that big in terms of the population. But it is a very, very loud group and a group that very strongly influences this discourse about, for example, [...] the benefits and [...] disadvantages of vaccination [...]. Of course, this helps to steer the debate and then also leads to a distorted image in people who are not at all sure how they stand on this and then also to an action accordingly, which can then also become relevant in terms of health" (Interview_DE_8).

While media distrust has grown and been cemented in a minority of the German population, an opposing trend can be observed in the majority of society. In line with studies showing an increase in media credibility (Infratest dimap 2020) and media trust (Jackob et al. 2020), journalists and fact-checkers state a growing interest in and appreciation of sound, fact-based journalism, fact-checking and data journalism.⁹ This is also corroborated by polls on media usage, indicating a rise in the consumption of already highly-trusted PSB TV-programmes and premium online news in the context of the Covid-19 pandemic (Infratest dimap 2020; Deloitte 2021). In times of increased uncertainty, many people search for reliable information and develop a renewed appreciation of legitimate quality news sources (see also Trenz et al. 2021). While the pandemic, with its new anxieties and challenges, was an important driver (see Section 5 below), scholarly literature from pre-Covid times suggests that this trend is also related to a changed information behaviour in the context of a surge of disinformation campaigns. Waisbord (2018: 1867), for instance, argues that "certain brands of journalism around the world are more careful with facts than ever (Glasser 2016). Globally, the upsurge of quality investigative journalism (Schiffrin 2014), data journalism, and the fact-checking movement (Graves 2016) indicate growing interest in news that carefully document reality."

Overall, what we observe in Germany (similar to many other countries) is a growing polarisation in society between a minority that distrusts the established mass media (above all, public service broadcasting) and a majority that trusts them (in particular, public service broadcasting and quality

⁹ A trend, which clearly refutes the notion of a "post-truth" era.

newspapers), and acknowledges the value of professional quality journalism (see also EB Media & News Survey July 2022).

4. Originators of disinformation

When it comes to the originators of disinformation in Germany, the interviewed experts concerned with fact-checking and tackling disinformation explain that there is a relatively small number of rather professionalised actors who spread disinformation with a wide reach (see also Sangerlaub 2020: 11; Hegelich/Thieltges 2019). Their motivations can be varied, but political, economic and self-marketing/attention-seeking motives rank highly. Among the most visible originators are political activists, movement entrepreneurs, business entrepreneurs, publishers and journalists (some of whom used to work for established “mainstream” media) earning money from the disinformation business, and some artists. With regard to political motives, disinformation is used as a strategy by a broad range of political actors and movements from various backgrounds, depending on the specific political agenda to be promoted and the issues and conflicts around which they mobilise. However, right-wing actors are most salient, and particularly those belonging to the far-right party, Alternative for Germany (AfD), or those who are close to it, are considered to be the most successful in spreading political disinformation in Germany in recent years. The prominent actors are described as the guiding figures and opinion leaders for their followers and communities, who subsequently circulate false or misleading information variously, thus multiplying their reach and visibility. Indeed, anti-democratic movements and ideological communities, such as the so-called “lateral thinking” (“Querdenker”) movement and Pegida, are organised in large numbers of smaller, often regionally-rooted social media or Messenger groups. While the individual groups and actors behind them achieve only a limited reach, they are all sharing the same false narratives and misleading messages, thus enhancing their visibility. Before this backdrop, fact-checkers underscore that the spread of disinformation is, to some extent, rather opaque and confusing, making it sometimes impossible to clearly trace it back to its originators. In addition, to domestic originators, foreign sources of disinformation play a relevant role. These can be either authoritarian, anti-democratic states (like Russia, China) and their troll farms, or foreign political movements or entrepreneurs (like the QAnon movement) aiming to circulate propaganda, infuse false or misleading information and eventually influence domestic political, social and economic processes and outcomes or, more generally, fuel distrust in established procedures and institutions.¹⁰ According to the interviewed experts, domestic and foreign sources of disinformation are often also interlinked with each other, and sometimes it is difficult to identify which source was the first to circulate false reports. Some of the manipulative content has, for instance, been first disseminated by foreign agents (e.g., the Russian TV channel RT or the U.S. American QAnon movement), but has then been picked up, adapted and pro-actively disseminated by domestic sympathisers.

A further striking observation of fact-checkers is that different issue-specific waves of disinformation, to a remarkable extent, are spread within the same social media communities and, as it seems, often by the very same spreaders. This observation resonates with media research about the spread of disinformation in Germany in times of the Covid-19 pandemic, corroborating showing that right-wing alternative online news media tend to merge different narratives of the far right, e.g., about the so-called refugee crisis, climate change denial, state of emergency and worst-case

¹⁰ Not surprisingly, propaganda and disinformation from foreign sources and anti-democratic states are the main focus of government representatives specialised in monitoring and tackling disinformation.

scenarios and the new Corona virus, fitting them into one overriding conspiracy narrative (Boberg et al. 2020; Welker 2021).

Disinformation is disseminated across a broad variety of communication channels, including social media and video platforms, messengers, alternative news websites or blogs, but also through more classic communication channels like TV, radio, print outlets, flyers or by public oral presentations. Overall, the situation is described as very dynamic and rapidly changing. For a longer time, Facebook and WhatsApp used to be among the most dominant channels, while YouTube is described as one of the popular video platforms, from where disinformation videos have been widely shared in WhatsApp chat groups or similar. In the context of enhanced political regulation, particularly the so-called domestic Network Enforcement Act of 2017 and its 2021 revision (BMJ 2021), and self-regulation of the social media businesses, the spread of disinformation has moved to more unregulated and closed communication spaces, above all Telegram¹¹, and a growing number of alternative news sites, online blogs and alternative video platforms.¹²

5. Effects of the pandemic

As touched on in the previous sections, the pandemic was an important driver for the upsurge in the spread of disinformation in Germany over the past three years, and has had a considerable impact on trust in journalism. Most strikingly, the pandemic has contributed to an enhanced cleavage between a majority of society that trusts professional journalism and the mass media and a minority that fundamentally distrusts established mass media and journalism, and in this distrustful attitude has lately been alienated from the “mainstream” of society in more radical ways. For those who trust the media and journalism, their trust is surely not unconditional and blind. However, according to the interviewed experts and recent empirical research (e.g., Infratest dimap 2020; Jacobs et al. 2021; EB Media & News Survey 2022) there is a clear majority of people in Germany who have a basic trust in quality news media and think that journalism in Germany, and particularly public service broadcasting and the leading quality press, are committed to the principles of truthfulness and objectivity. Particularly in the earlier stages of the pandemic and the related new anxieties and uncertainties, the awareness about the need for reliable news and professional trustworthy journalism increased, and existing trust in quality news and quality journalistic media has been further enhanced. Interviewed journalists and fact-checkers argue that the pandemic provided momentum to revitalise trust in professional news journalism (even if this is not the direct purpose of their work). In order to meet the citizens’ search for reliable, trustworthy information, and to counterpose the flooding of the public sphere with irritating, misleading or false information from unreliable sources, journalists bolstered their pure fact-based reporting and transparency in news journalism, on the one hand, while several editorial teams and civil society actors expanded existing or newly set-up new fact-checking and awareness-raising initiatives, on the other hand. In this regard, a journalist explains:

¹¹ Telegram was able to take advantage of the fact that it is a private messenger service which is not subject to the Network Enforcement Act. According to the interviewed experts, also Tic-Toc has been increasingly used for the spread of disinformation.

¹² There are a number of studies that have analysed, in more detail, right-wing alternative news sites, providing clear evidence about the recent growth and dynamics in this field (e.g., Puschmann et al. 2016; Schweiger 2017; Bachl 2018; Heft et al. 2019; Frischlich et al. 2020; Boberg et al. 2020)

I believe that the pandemic has once again shown many people how important the information provided by the public broadcasters is. I emphasise, for many people, not for everyone. Many people, I believe, appreciate exactly this kind of reporting, which is thoroughly researched, which ideally [...] has no political bias and which is [...] also based on a broad social consensus, namely that we need several independent media in Germany. [...] On the one hand, it is an increase in trust in a [...] sector of society that, I believe, appreciates being informed about current developments, discourses, new measures in the context of the pandemic. [...] Positive signals are definitely increased reach. [...] Information on the pandemic, scientifically based information has been received very, very strongly and is still being received. [...] That is a positive signal for us, that information that enlightens, for example, also fact checks that show on the grounds of transparent research paths how we arrived at certain results on circulating questions. These were elements that were in great demand. That's why I believe that this demand also implicitly shows that society is looking for something like this, that even or perhaps especially in the post-factual age, many people are again looking for and need facts and information (Interview_DE_12).

Similarly, another journalist states:

I believe that the founding of many fact-checking editorial offices, or the expansion of fact-checking editorial offices, may have contributed to this. [...] I could imagine that this has definitely contributed to more trust being placed in the media again, or that simply correcting individual stories or individual allegations has had an effect. [...] Of course, problems have also arisen because we are all experiencing a pandemic for the first time, both science, politics and the media. Of course, there is also reporting that changes again and again. The information that is correct today can be wrong again in two months. [...] Many media and many colleagues have done a very, very good job and have also explained a lot of basics and how all the processes work. Many also explained how the media work. Of course, that was done before. But through this transparency and this explanation, trust can of course also be strengthened. [...] We already noticed in the pandemic that many more people learned to deal with sources [...] And we can already see that there is simply, I think, a bit more scepticism, that a lot of things are being put right. That could perhaps be seen as a positive development from the pandemic and its handling (Interview_DE_8).

In contrast to the trusting part of society, distrust of those who were already rather distrustful of established mass media, and largely sought for information on alternative news media sites seems to have grown during the pandemic. While available survey data indicates that there was no increase in the numbers of people clearly distrusting the media (e.g., Long-term Survey Media Trust by the University of Mainz 2021), there are signs suggesting that a radicalisation within the group of distrustful citizens took place during the pandemic. As interviewed experts report, established media have increasingly been confronted with insults, hate speech and accusations of being notorious liars, dependent transmitters of government statements, and part of an elitist conspiracy circle preparing a hidden agenda, while they have also experienced physical violence. This is particularly experienced by journalists from public service broadcasting, who have been confrontation with verbal and physical aggression:

There is another section of the population [...] that is very critical of the Corona measures, the government and also the mass media. I would almost go so far as to say that the pandemic has even further distanced this section of the population from the public media. There is absolute pure distrust, which has also been expressed at demonstrations, sometimes even with

the use of violence or, in any case, with insults. [...] On the one hand, it is an increase in trust in a [...] sector of society [...] that, I believe, appreciates being informed [...]. And at the same time, this other part, where – due to the alleged dissemination of only the government line [...], a dissolution of the boundary [...] between politics and journalism [...] -- the whole complex is despised and distrusted. Thus, these two developments can be observed in Germany. But some things are still in flux. The pandemic is still not completely over, and there are also patterns of behaviour that can change again (Interview_DE_12).

What journalists and fact-checkers also describe is an enhanced withdrawal into ideological world views and conspiracy narratives that made a certain group of people inapproachable regarding information on pandemic-related issues deviating from their own beliefs. According to one of the interviewed journalists, the basic problem is indeed that “there are parts of society that are no longer open to accepting new facts, new information, if they contradict their own view of the world” (Interview_DE_12). Another one explains “You could also see during Corona, for example, this discussion about children and the danger for children, the risks for children, how people can become quite radicalised. And no longer want to perceive new findings” (Interview_DE_4).

In comparison with the small minority of citizens who fundamentally distrust the established media, there is a considerable number of citizens, according to the experts, who became more critical towards mass media reporting and generally unsettled during the pandemic. The interviewed journalists and fact-checkers strongly agree that the pandemic has brought about a particularly difficult challenge for media coverage and its recipients (as it has for scientists and policymakers) because of the novelty of the virus, the immense lack of knowledge and the rapidly changing and partly contradictory facts and findings about Covid-19, in addition to suitable measures against its spread. This situation led to media reporting that often had to withdraw and revise earlier statements, while the complex, unclear, highly dynamic evidence base, as well as the fact that most journalists lacked specialised knowledge in life sciences, caused mistakes, inaccuracies or misinterpretations. This problem had been amplified by targeted disinformation and defamation campaigns that framed such mistakes as a deliberate strategy of the media to hide information, deceive and manipulate the public. According to the journalists and fact-checkers, this whole situation led to increased uncertainties among parts of society.

One of the journalists underscores that “the biggest challenge about the Corona pandemic was actually that the situation was changing all the time. Constantly. And that findings and knowledge that were considered correct just a few weeks or months prior, and that were also plausible and certain, were no longer necessarily true in the next wave. And that was actually the amazing thing about this Corona pandemic” (Interview_DE_4).

Another respondent shifts attention to the effects of the new challenges and uncertainties within those parts of society that developed doubts during the pandemic but are distinct from the radical minority that categorically distrusts the mass media:

There is [...] this group that is simply unsettled by disinformation because they cannot recognise and classify it. [...]. They are also worried. Well, this pandemic is of course also something that is new for everyone, and everyone is somehow affected. That is, politics, science, the media, every single citizen [...] first had to learn what it is all about. And there is simply a lot of uncertainty at play and answers are being sought. And of course, the answers that science gives are never or rarely simple. That means you really have to engage with it. And that is also a challenge that journalism has faced, or still faces, because a large part of the journalists

are not specialists in virology, for example. And disinformation, of course, also takes advantage of that because they give supposedly simple answers. Of course, it is easier to say that the pandemic does not exist or that the virus is not that dangerous [...]. And the facts are often more complicated and difficult [...]. And yes, this uncertainty, I think, also plays a role for many people, which is probably why many more people suddenly reacted to disinformation during the pandemic (Interview_DE_5).

Yet another journalist explains:

I believe that mistakes have been made by many media outlets because the pandemic has simply given rise to an area of interest [...] where a great deal of science journalism has inevitably been done, which many journalists do not have a clear view of. [...] Many went to journalism schools, others, for example, studied political science [...] And science journalism was previously rather a small section [...], a small subject area, which then suddenly became the largest, and then suddenly everyone reported on it. I think that cooperation with science has improved a lot, but of course mistakes have also been made (Interview_DE_8).

On a more critical note, one interviewed fact-checker of a civil society organisation argues that apparently many people have become more critical of established media because they perceive media coverage about pandemic-related issues to some extent as rather one-sided and uniform. In their interaction with users, the organisation gained the impression that “as far as disinformation and misinformation are concerned, the public media, or actually large media houses, mainstream media [...] above all, are said not to report in a diverse way, to report in a very one-sided way. And that, of course, reduces the trustworthiness of these media in particular. Yes, that can definitely be seen, and that's why alternative media are also very strongly consumed. [...] I do believe that curiously enough, the broader population still consumes [...] the ‘Tagesschau’, but has become more critical” (Interview_DE_11)¹³.

¹³ On this very argument, journalists themselves argue that news coverage is, of course, selective, but that this selection follows the principles of relevance and legitimacy. While particularly public service broadcasting, but also professional journalism as such, is required to provide an unbiased, balanced picture, this would not imply that extreme minority views or already falsified or unproven information need to be covered, as well. In this respect, one of the journalists states: “Whether you depict a false balance and say that we have a totally crude position here and we have a rational, factually based position and simply place them next to each other and say that the truth will lie somewhere in the middle. Or whether you name it clearly. So I think you also have to have the courage to say what is nonsense [...], what is not coherent and for what there is no evidence. That's where the famous discussion about neutrality comes in. I don't believe that one can be neutral in the face of conspiracy legends and lies, but rather one must clearly state that these claims are not true. That makes you vulnerable, of course. But otherwise, if you just put that as a legitimate position next to totally well-founded positions and just depict it, then you make it very easy for disinformation to spread” (Interview_DE_4). (The debate of a “false balance” in public service broadcasting is indeed very topical, also beyond Germany. See for instance the debate about the BBC coverage on Brexit, e.g., Dittert 2022). Following media content analysis (e.g., Quandt et al. 2020; Degen 2021; Leidecker-Sandmann et al. 2022), the first phase of media coverage of the Covid-19 pandemic, when anxieties and uncertainties were particularly pronounced, was characterised by a strong focus on government representatives and virologists, while scientists from other disciplines, politicians of the opposition, or other voices, were only rarely represented. Likewise, in times of extreme crisis management, reporting was centred on information transmission, while there was comparably little space for interpretation, contextualisation and critique. However, at later stages of the pandemic, especially when infection figures went down, interpretation, contextualisation and critique returned into media reporting about the pandemic. According to the media studies (ibid.), media coverage became indeed more multifaceted and inclusive of a variety of perspectives and (party) political positions. Moreover, the study of Leidecker-Sandmann et al. 2022 comes to the result that media reporting about Covid-19 covered a higher diversity of experts than media coverage of earlier pandemics, and was less centred on only a few specific scientists. In addition, their study finds that the selection of scientists was strongly guided by the principle of high scientific expertise and that, compared to previous pandemics, media coverage on the Corona pandemic gave more voice to acknowledged, reputable scientific experts.

For the journalists and fact-checkers, citizens who have been unsettled by the uncertainties of the pandemic and disinformation campaigns against established mass media are a very important target audience because they still appear approachable for fact-based journalism, and it is still an open question if their trust in established mass media will grow or further erode. On this argument, one journalist explains:

I think it depends on how well the disinformation catches. [...] In the worst case, serious journalism is seen as part of the conspiracy, like 'they are not reporting on it' or 'they are controlled'. [...] But it can also have the opposite effect, namely that those who are unsettled and also specifically look for statements other than those of the alternative media – i.e., those who are prepared to look at 'what is behind this' or 'is there still something to it' or 'are there also other reports on it' – perhaps come to a different conclusion. They might end up with the serious media and traditional journalism. [...] If they get the answers and are willing to deal with it, this could have the effect of strengthening trust in journalism (Interview_DE_5).

Looking at the latest developments since the beginning of the Russian war in Ukraine in February 2022, interviewed experts perceive that the pandemic has been widely replaced by this new topic on alternative media sites and social media accounts spreading disinformation. Indeed, it is striking for them to observe that, in various instances, the very same websites, platform accounts or messenger channels - and hence the same spreaders of disinformation - have changed their issue focus from the Covid-19 pandemic to war propaganda (e.g., formerly “lateral thinkers” became Putin supporters). One journalist, for instance, explains: “It is quite interesting - we are currently researching this in more detail – it turns out that many, many platforms that actually belong to the ‘lateral thinkers’ movement are now sharing pro-Putin content. In other words, some of the accounts have not changed at all, but the content is now spilling over. So, before it was the ‘concerned mothers’ who shared disinformation about vaccination, about child vaccination, who are now spreading pro-Putin content. Sometimes it's not entirely clear whether some of them are troll accounts. But a part of the movement is also simply very close to this pro-Russian stance” (Interview_DE_5). At the same time, fact-checkers have the (yet preliminary) impression that the circle of people spreading and consuming disinformation has shrunk to radical, mostly right-wing communities, which partly have become even more radicalised, while a larger share of the people who had been unsettled during the pandemic are barely concerned with war-related conspiracy narratives, propaganda and “alternative” facts.

The basic pattern characterising trust in the mass media and professional journalism in recent times can be observed in similar ways also with regard to latest trends for trust in science and expertise. Both empirical studies (e.g., Wissenschaftsbarometer 2021; Peritia 2022) and the insights provided by the interviewed experts provide a clear picture of how German society is divided between a distrusting minority and a majority trusting science and scientists (with trust in science being even higher than media trust). Trust in science and scientists has been high and even grown during the pandemic, and a strong majority is in support of evidence-based policymaking, while at the same time, there is a significant part of society who is undecided – and apparently unsettled by the confusing and rapidly changing data basis and competing (dis)information on Covid-19, and a small minority who clearly distrusts science and research (Wissenschaftsbarometer 2020; 2021). According to our interviewees’ observations and experiences, the pandemic has substantially strengthened the public’s interest in and appreciation of sound evidence-based information and scientific facts, and has helped science journalism to grow from a marginal niche sector to an important field

of media coverage. The media organisations, on their behalf, responded to this demand not only with the above-mentioned extensive provision of fact-centred news, but also with various formats offering low-threshold science education and explaining basics and principals of empirical research (also Degen 2021: 126). In this context, journalists also responded to a certain degree of irritation, incomprehension and mistrust among the population about the fact that scientific findings about the Covid-19 virus were often withdrawn and revised after a short while. In contrast to the majority with a solid bedrock of trust in science, or at least an openness towards scientific facts, there is a minority in society distrusting facts, scientific evidence and established scientists and believing in “alternative” facts and conspiracy narratives that appeared to be further cemented and radicalised in their views during the pandemic. According to the perceptions and experiences of the consulted experts in this study, there is indeed a community of categorical opponents of the “mainstream” of society that lumps “mainstream” mass media, scientists and the government together within the same conspiracy narrative, and appears as inapproachable for fact-based journalism and recognised scientific expertise. In this context, one of the fact-checkers argues that trust in journalism and trust in science “often go hand in hand. Those groups who spread distrust towards reputable media, also spread general distrusts towards science. I believe this is hardly separable. Because serious scientists usually use those public platforms in the public service media [...] of course, in order to reach a larger audience, and also in order to use media of broad reach and high trust. And the conspiracy myths, which of course must be very simple enemy images, also mixed things up more and more. Thus, for them it was one and the same enemy image. There was science and the media and the government and politics, in general, were one and the same enemy image” (Interview_DE_3).

6. Counter-strategies

In Germany, there is a variety of actors taking action to combat disinformation, ranging from the state to mass media organisations, civil society organisations and scientists to social network owners. For the **German government**, tackling disinformation is a cross-cutting activity that has received growing attention in recent years. At the federal level, various ministries and public authorities are engaged in curbing disinformation and its effects within and outside the country. In terms of legal regulation, state intervention confines itself to acting against hate crime, criminal disinformation and other criminal content, including insult, defamation, depiction of threat and violence, incitement of the people or public incitement to commit criminal acts, while not infringing freedom of speech and the freedom of the press (hence, lies as such are not a crime). An important legal instrument in this regard is the “Network Enforcement Law” that was adopted in 2017 and further developed with its 2021 reform (BMJ 2021). This law has the purpose to improve law enforcement in social networks. It obliges social network providers to facilitate and deal with user complaints about illegal content in a swift and encompassing way, investigate claims and complaints, and delete or block criminal content within 24 hours.

Furthermore, the Federal Ministry of Foreign Affairs, the Federal Ministry of Defence and the Federal Ministry of the Interior, together with its subordinated authorities (like the Federal Office for the Protection of the Constitution and the Federal Office for Information Security) are engaged in monitoring and analysing disinformation that may pose a hybrid threat and have a relevance to security policy, such as (war) propaganda, manipulation of public opinion and other ways of direct or indirect illegitimate interference by foreign states (being the specific focus of the Ministry of Foreign Affairs), or foreign or domestic non-state actors, as well as cyber-attacks and espionage.

During the Covid-19 pandemic, monitoring and screening Covid-19 related disinformation also became an important task within the Federal Ministry of Health. Apart from monitoring, these federal ministries are also countering security-relevant disinformation by raising awareness about disinformation and building resilience within the entire government and the political sphere, the economy and society. In the past few years, proactive public communication, information and other outreach activities to sensitise the public about disinformation have been markedly reinforced. Moreover, debunking and correcting disinformation takes place in those serious instances when disinformation poses a clear threat to government action and public security, or if it implies a risk of severely interfering with public opinion. Indeed, an explicit addressing and debunking of disinformation is applied very restrictively. What is more common is strategic government communication that uses monitoring to identify issues of concern and proactively offers its own positive narratives and information on the theme without mentioning related circulating disinformation (thus preventing further attention to it). While monitoring, screening, analysis and evaluation are subject to regular exchange and cooperation between the different ministries (supported by a task force of the Ministry of the Interior), public communication and information activities are more clearly organised according to divided responsibilities. In line with their subject areas, strategic communication of the Federal Ministry of Foreign Affairs, for instance, addresses target groups abroad, whereas communication by the Federal Ministry of the Interior is typically geared towards domestic targets. In addition to the different ministries, the Press and Information Office of the federal government is responsible for providing general information about disinformation and counterstrategies, as well as government information for the population about imminent risks due to current targeted disinformation campaigns (Bundesregierung 2022a). In its endeavour to counter hybrid threat, the state also cooperates variously with international partners. In particular, the Federal Ministry of Foreign Affairs participates in joint programmes and alliances, either bilaterally, or in the context of the EU (e.g., in the context of the European Action Plan against Disinformation), G7 or NATO (Bundesregierung 2022b).

A focus on prevention and resilience building is applied by the support schemes of the Federal Ministries of the Interior and of Family Affairs, promoting projects geared to encounter disinformation, hate speech and misanthropic behaviour by fostering media and news literacy, sensitise about disinformation and conspiracy narratives and develop prevention strategies against anti-democratic conduct (Bundesregierung 2022c).¹⁴ In addition, the German Ministry of Science set up a scheme to promote in-depth research about the spread of disinformation and viable remedies in the previous year.

As said above, state regulation of disinformation on online platforms and in social networks is confined to crime acts, while disinformation, as such, is not prohibited or punished by law. This is where self-regulation of **social network and platform owners** comes in. Initial steps towards self-regulation have been taken, particularly by META with its fact-checking programme that was first established in 2016 and has been operating in Germany since 2017. This project involves cooperation with various independent fact-checking teams of news agencies and media organisations that fact-check and verify content on Facebook, Instagram and WhatsApp marked as dubious by its users. In Germany, the programme is supported by the independent, non-profit newsroom, Correctiv (since 2017) and the news agencies dpa (since 2019) and AFP (since 2020). The main purpose of the programme, besides deleting illegal content, is to reduce the reach of content that fact-checkers have identified as false or misleading, while also offering check-/verification-related and evidence-based

¹⁴ In comparison, the Ministry of Foreign Affairs cooperates with local partners in other countries in order to promote media literacy and resilience-building projects (Federal Ministry of Foreign Affairs 2020).

information. False or misleading content is marked with a label indicating the form and gravity of the disinformation, and this is linked to the full fact-checking article. Moreover, a warning about the negative fact-checking result is sent to users who have already shared, or still seek to share, content identified as disinformation, including again the link to the detailed fact-checking report.

In German **journalism**, combatting disinformation started to be a more targeted activity with the development of specialised fact-checking units (since around 2017) following the US election campaign of Donald Trump, and in the context of the 2017 Federal elections in Germany). Among the pioneers in this field were, for instance, the non-profit independent newsroom, Correctiv (**Correctiv Faktencheck**), the Bavarian public service broadcasting (**BR24 #Faktenfuchs**), the South-Western public service broadcasting (**SWR3 Faktencheck**) and the Consortium of public broadcasters in Germany (**ARD Faktenfinder**). Other media organisations started to establish fact-checking units in the context of the Covid-19 pandemic, for instance, **Deutsche Welle** (the German international public service broadcaster) and the German section of the French news agency, **Agence France-Presse**.¹⁵ In comparison to the usual approach in journalistic investigations, fact-checking refers to checking and verifying presumed false or misleading information, or of issues that involve considerable doubt and uncertainty among the public. In other words, journalistic fact-checkers investigate themes and content that appear doubtful, irritating, unclear and/or potentially wrong and, at the same time, are sufficiently relevant for investigation (e.g., in terms of reach, impact, harmfulness) (see also Stern 2020). Accordingly, the overriding aim of journalistic fact-checking projects is to verify factual claims, reveal disinformation, shed light on the underlying mechanisms and strategies, and provide related objective, reliable information and answers on issues that are shaped by widespread uncertainty and fear, and thus, ultimately to contribute to both awareness raising and an informed and independent political opinion and will formation of citizens. Moreover, the interviewed fact-checkers explain that, in comparison to daily news coverage, their fact-checking usually covers a broader subject area that is not confined to typical (political) news subjects, but also takes up other relevant issues associated with disinformation and public unsettlement. Regarding the spectrum of themes, there are some differences between the various fact-checking initiatives. While the fact-checking of the news agency, AFP, the ARD fact finder, DW and Correctiv tend to be more strongly linked to disinformation and factual claims relating to political, economic or societal issues, the fact-checking work of the regionally-rooted public service broadcasters apply a broader thematic approach, and are also regularly oriented towards their users' uncertainties, concerns and questions of everyday life, for instance, if certain ingredients of cosmetics are harmful to health. One journalist of the SWR3 fact-checking team explains:

We always look very closely at who our target group is, who the people are who listen to us, who read us, and what interests them, what unsettles them? [...]. Hence, the topics we deal with are always very, very close, if possible, to what somehow moves people in their everyday lives. That's why we don't just deal with the classic political topics, which we also do, but we also deal with topics from everyday life. [...] It is very important to us that we explain these topics and their background in a way that somebody who hasn't heard a lot about it yet is able to understand it. Therefore, we also try to be as close as possible to people's everyday lives and as close as possible to what moves our user groups in terms of political topics (Vanessa Valkovic, SWR3).

¹⁵ Other fact-checking units of German media organisations are, for instance, [ZDFheuteCheck](#), [MDR Faktencheck](#), [dpa Faktencheck](#). Of relevance to the German speaking countries are also the fact checking sections of the Austrian Press Agency, Profil, and the civil society organisation Mimikama.

Overall, fact-checkers refer to various sources that identify relevant themes and topics for fact-checking. Basically, they all apply a mixed approach including proactive monitoring of social network communication (“Social listening”) and the trending of issues in the (digital) public sphere (for instances, in Google searches), on the one hand, and user comments and requests for clarification, on the other. For Correctiv, AFP and dpa, additional input about doubtful and potentially false or misleading content is provided by Facebook in the context of META’s fact-checking cooperation project. Fact-checkers use the same, or similar, methods and tools to check and verify information in its various forms (e.g., videos, pictures, statements, alleged quotes, statistics, etc.). In order to check factual claims, statements, narratives and their context, fact-checkers employ classic procedures of journalistic investigation and consult the original sources, including scientific studies, statistics, expert opinion, original documents, information from official authorities and statements of directly involved actors, such as witnesses or concerned parties. At the same time, fact-checking makes use of a range of software tools and other techniques geared to verify the authenticity, truthfulness, and origin of digital content. One journalist, for instance, states “The federal election [...] was new for us in that the disinformation was then very personalised. That suddenly the focus was on the people in the election campaign, that false quotes were planted on them. That people were deliberately denigrated, and no longer, as in the pandemic, was the topic the subject of misinformation. And now, in recent times, it is of course issues around the Ukraine war. There we also encounter a lot of propagandistic material. [...]. There, it's also about the difficulties; we deal more with verification, so to speak. What normally we have classic fact checks, where we investigate topics and claims, we are now also much more involved with image and video verification to determine ‘Did it take place where it is claimed?’, ‘Is that the building that was allegedly destroyed there?’ and so forth” (Interview_DE_5).

Some of the fact-checking units are even involved in the development of innovative verification tools. One of the pioneers, in this regard, is the Deutsche Welle (DW), which has contributed to various verification tools in the context of different research and innovation projects.¹⁶ A useful overview of key verification tools has, for instance, been published by BR24 Faktenfuchs under the URL: <https://start.me/p/xbk65R/verifikations-toolkit-br24-faktenfuchs>.

An important principle of fact-checking is to be as transparent as possible, in particular by providing references to the sources used, and linking fact-checking articles to original sources and further information, where possible, with the purpose of enhancing credibility and trust, on the one hand, and imparting media literacy and verification skills among recipients, on the other. While there are minor differences in terms of the extensity of referencing and linking, the following statement by one of the journalists seems illustrative of all other fact-checking projects consulted for this study:

We show how we get to the information. In journalism, if you look at it critically, there are far too many articles where the sources are not clearly named, even though these are actually basic rules of journalism. And we try to make it very clear, for instance, through hyperlinks, [...] further information in the text and also by explaining how we came across an aspect within the research, to make it clear how we work. In this way, we want to create trust. We are comprehensible, verifiable, for example, similar to how science functions. And that makes us plausible. At least that's our approach (Interview_DE_12).

Text-based online articles are the main format where fact-checkers present their investigation results, since they are the most suitable way to account for the complexities of the issues, to

¹⁶ <https://innovation.dw.com/outcomes>

specifically link to sources and further information and to expand arguments and explanations. In addition, fact-checks are provided, for instance, in video format (e.g., SWR3¹⁷, BR24, Deutsche Welle), podcasts (e.g., ARD¹⁸) or newsletters (e.g., Correctiv). Typically, social media networks are used to reach out to target groups and attract attention to the fact-checking websites. Moreover, some of the fact-checking teams (e.g., of the news agency AFP or the independent newsroom Correctiv) cooperate with news portals or platforms of broad reach (like MSN, Firefox Pocket) to further enhance their public visibility.

Some differences between the fact-checking units can be found with regard to the geographic scope. Very basically, the scope ranges from a dominantly global approach (Deutsche Welle) to an approach where considerable attention is also dedicated to regional issues in Germany (regional public service broadcaster, like BR24 Faktenfuchs and SWR3 Faktencheck). Overall, fact-checkers usually take up issues of significant relevance for public debates and/or opinion formation in Germany. Yet, these issues do not necessarily have to be domestic issues or disinformation campaigns. German fact-checking teams also deal with disinformation about or from other countries, provided it has considerable relevance for and/or impact on domestic public discourse.¹⁹ Deutsche Welle, in contrast, follows per se a more international approach. Being the German international broadcaster and offering its services to target groups worldwide and in 32 languages, the fact checking unit of Deutsche Welle checks information of global relevance, or that is of relevance for a specific target group in any of the target countries or regions of the world. The other fact-checkers target recipients in Germany (AFP also those in Austria and Switzerland), while their work is, in many instances, also of relevance for other German-speaking countries (particularly where more universal issues are addressed, e.g., vaccines, climate change, etc.). Fact checking by the regional public service broadcasters is more closely targeted towards their regional audiences.

In addition to fact-checking units that belong to media organisations, there are also a number of **civil society organisations** that are committed to combatting disinformation in Germany. One of the outstanding projects is the “anti-fake news blog” of the non-profit organisation, **Volkerverpetzer**. Among the civil society initiatives, Volkerverpetzer is the project with the largest overlaps with the aforementioned journalistic fact-checking teams. Similar to the independent non-profit newsroom Correctiv, Volkerverpetzer is non-commercial and geared towards goals of public interest, such as promoting an open and resilient democratic society. Yet, unlike Correctiv, its work is largely based on the commitment of a community of volunteers, with only a very small core team of paid staff. Similar to the other fact-checking teams, Volkerverpetzer aims to uncover disinformation, reveal the underlying mechanisms and strategies, and raise awareness among the public. However, while the journalistic fact-checking teams are strongly committed to providing objective, factual, evidence-based information, and being as neutral as possible, Volkerverpetzer follows an explicitly different approach. To a large extent, their articles and contributions express a clear opinion and take a stand on a topic. Moreover, their fact-checks and investigations are often permeated with emotionalisation, wit, irony and satire to attract attention in social media debates, as well as keeping up with the methods of successful disinformation campaigns. In this sense, they underline on their website that at Voksverpetzer, they “try to debunk the narratives of extremists and conspiracy ideologues, sometimes emotionally, sometimes satirically, sometimes factually. We are a

¹⁷<https://www.youtube.com/c/faktencheck/videos>, last updated in February 2022

¹⁸ <https://www.tagesschau.de/faktenfinder/podcast>

¹⁹ This also depends on capacities. In terms of checking information from abroad, the fact-checking teams belonging to the German public service broadcaster and the press agencies can benefit from the advantage of having a world-wide network of foreign correspondents who can provide support. It should also be mentioned that some of the fact-checking projects have started to publish some of their fact checks in English for a broader audience (e.g., Correctiv, <https://correctiv.org/en/investigations-2>)

supplement to the classical enlightenment, an attempt to reach many through wit and emotion, who otherwise would not get to see the facts because of the algorithms of social media. [...] We try to deliver more than just dry fact checks [...] to expose the narratives and claims of extremists and conspiracy ideologues, and how they use social media to manipulate your opinion with framing and lies” (Volksverpetzer 2022).

Furthermore, there are other civil society initiatives in Germany that engage in combatting disinformation. These initiatives stand out because they place key priority on raising awareness, building resilience and educating citizens about media and news literacy, and critical thinking.²⁰ For this purpose, these projects have a strongly participatory, community-based approach that puts emphasis on the involvement of citizens in the entire monitoring, screening and fact-checking process. Among the forerunners and most salient civil society initiatives in Germany, are the non-profit association **codetekt** e.V. and the transnational non-profit organisation **Lie Detectors**. The original idea behind the non-profit volunteer association **codetekt** was developed in the context of the hackathon **WirVsVirus**²¹; and hence, the association was founded against the backdrop of the Covid-19 pandemic. Aimed at developing strategies to identify and curb disinformation, **codetekt** has created a community platform **codetekt.org** that, on the one hand, allows every user to submit requests for information that appear suspicious or unreliable to be checked. On the other hand, and comprising the core of the project, the **codetekt** platform offers interested users the opportunity to join an online community of amateur “detectives” and to actively engage in checking cases of dubious information themselves. This participation-based, learning-by-doing empowerment approach is strongly geared to improving investigative skills and media literacy, and raising awareness about disinformation strategies and mechanisms of individual participants. Based on a multi-stage evaluation and peer review process, checked articles and online content is made available in an online archive in order to make the evaluation process transparent for a broader audience, and curb the spread of disinformation. Inspired by online games, “co-detectives” are guided through the checking procedure of a “case” by a catalogue of questions that allow them to evaluate the reliability and credibility of information. As one of the core members explains “I don't have to do it on my own, but I get asked questions: ‘Okay, go to the page. Take a look at the imprint. Who's in there? Google him. Does he have financial and political interests? What are the sources? Are there different sources? Are there quotes? Who makes them? And is the person an expert, expert in the field? Are the quotes taken out of context?’ And checking images, of course, also involves a huge spectrum [of tools], with Google Reverse Image Search, for example” (Kristin Marosi, **codetekt**). Given that these amateur detectives usually do not have the knowledge and/or resources to conduct a proper fact-check, the main purpose of the investigation task is conceptualised as “trust checking” (**codetekt** 2022), geared at evaluating the credibility and trustworthiness of online information on the basis of core journalistic quality criteria. Moreover, what is currently prepared is a “trust checking kit”, including a handbook, presentations and other helpful material, that can be used in education to introduce pupils to the topic of disinformation, and teach them how to use the **codetekt** platform.

Another education-oriented, participatory approach is applied by the transnational independent non-profit organisation **Lie Detectors** that currently operates mainly in Germany, Austria, Belgium, Switzerland and Luxembourg, but is planning to target further European countries (e.g., Poland) and has a European-wide reach with its advocacy work. Founded in 2018, **Lie Detectors** developed

²⁰ Education and empowerment are to some extent also part of journalistic fact-checking initiatives (e.g., SRW, see for instance, <https://www.swr.de/unternehmen/medienkompetenz/unterrichtseinheit-fakefinder-100.html>; <https://swrfakefinder.de>; Correctiv, see for instance <https://reporterfabrik.org>; <https://crowdnewsroom.org>)

²¹ <https://wirvsvirus.org>

a concept to teach media and news literacy to pupils (10-15 years), to raise their awareness about disinformation mechanisms, and promote skills for identifying and assessing disinformation, as well as assessing the credibility and reliability of digital information in general. Based on the cooperation of a large network of professional journalists, Lie Detectors offers free-of-charge interactive classroom sessions to schools of different educational tracks that are taught first-hand by specifically trained professional journalists. During these lessons, pupils are provided with basic knowledge about the various forms of disinformation, the political background to the phenomenon and the principles of professional journalism and news coverage, and have the possibility of gaining an authentic account of the journalists' working routines. Moreover, the pupils are acquainted with different methods and strategies for checking disinformation, and receive preparatory and follow-up material to deepen their knowledge and skills. Beyond educating children, the organisation is engaged in sensitising teachers to the functioning and risks of digital media, and offers workshops and mentorships with journalists to improve digital literacy among teachers. Moreover, Lie Detectors advocates for the systematic inclusion of media and news literacy in the curricula of educational sciences and training and in school curricula across Europe. To this purpose, Lie Detectors also contributes to various expert committees, such as, for instance, the High-Level Expert Group on Fake News that provides recommendations to the European Commission and the Commission Expert Group on Tackling Disinformation and Promoting Digital Literacy Through Education and Training in the context of the Digital Education Action Plan (2021-2027).²²

Strikingly, educating citizens in media and news literacy in the digital age is one of the aspects that almost all interviewed journalists draw attention to. According to their experience, digital media and news literacy is a key component when it comes to curbing the spread and effects of disinformation, and enhancing citizen resilience. At the same time, fact-checkers observe a considerable deficit in society in this regard, and underscore that much more should be done by the formal and informal education system and policy-makers to promote these basic competences. Similar to Lie Detectors' aims, several of the fact-checkers strongly recommend that media and news literacy should be more systematically included in school curricula and informal political education. This claim is also supported by a recent study about media literacy showing that there are indeed larger deficits across the German population in terms of news literacy and the skills to recognise disinformation (Meßmer et al. 2021).

The various fact-checking projects and initiatives against the spread of disinformation were affected by the most recent crisis, hence first the pandemic and then the war in Ukraine, in different ways. As described above, some of them started their work in reaction to the pandemic and the surge in the spread of disinformation. Those experts, who had already been active before the pandemic, did not witness substantial changes in their work. What changed with the pandemic was most evidently the increased interest of citizens in fact-checks, and also their growing readiness to read and make themselves familiar with detailed, evidence-based, science-related forms of information. What also changed were the themes fact-checkers have to deal with, and the manipulation strategies and ways in which disinformation is constructed. Hence, while still some years ago, disinformation was more easily recognisable because it consisted of evidently false facts, in relation to the pandemic and the war in Ukraine, it is now more strongly disguised in half-truths, inaccurate assignments or contextualisation, while there is also an increase in right-wing and antisemitic conspiracy narratives that cannot easily be proven wrong by only correcting individual factual claims, but that, due to their complexity, need more profound explanations and provision of contextual knowledge. Finally, several journalists emphasise that the most recent crises shifted additional attention to the

²² <https://education.ec.europa.eu/focus-topics/digital-education/action-plan>

importance of making knowledge gaps transparent and describing not only what is known, but also what is not (yet) known (e.g., either because solid scientific evidence is still lacking, or because journalists do not have access to war zones) in order to secure credibility.

Among our respondents, there is consensus that fact-checking needs to be sensitive about the risk of further contributing to the spread of disinformation and drawing attention to it in wider circles of the population. It is a common practice to thoroughly evaluate the public relevance and potential implications of each factual claim at stake. Typically, fact checkers abstain from publishing about disinformation if its spread remains within the core ideological community and filter bubble. If, however, disinformation has already spread beyond the core community, and is more widely circulated in society, fact checkers address and encounter these false or misleading claims and narratives. Apart from that, there are some variances in the fact-checkers' approach to balancing transparency and their information and clarification mandate, on the one hand, and disinformation containment, on the other. Fact-checkers taking part in the Facebook fact-checking programme, for instance, link all fact checks to the original Facebook post identified as disinformation. Here, the strategy to prevent a further spread of disinformation entails labelling the respective post with the fact-checking rating (e.g., false, manipulated, partly wrong, missing context), while further sharing attempts are combined with a warning. Other fact-checkers abstain from linking back to the original post, or article, etc., to prevent a further sharing across social networks. Nevertheless, in order to be transparent, they provide screenshots or link to an archived version of online content to prevent its dissemination. As one interviewee explains:

Every day is a balancing act, do we touch the issue or not. [...] we look at how viral a piece of content is, if a certain narrative, a false claim, a fake piece of content was only spread on a very, very small scale, if it hardly reached any people. Then that is more of a reason for us not to go on it and not to unintentionally help this account or content to get even more traffic. Conversely, we often go for more viral content that has already spread without us, where we don't contribute significantly to its further spread. Point one. Point two, we take great care that we do not contribute to the spread of disinformation, even through links. That means we tend to use screenshots, we use archived versions of Tweets, Facebook posts or other things to prevent exactly that (Interview_DE_12).

Despite the different technical solutions, journalists have to make sound decisions based on professional considerations and the way in which they perceive their journalistic role and mandate. Due to the complexity of the issues at stake, as well as the different target audiences, these considerations require conscious reflections. One of the journalists, for instance, emphasises that in their department they

[...] have discussions about this time and again [...]. My core argument is actually always, education about disinformation is not disinformation. And I definitely trust our audience to make this distinction. That's why I think it's really important to deal with the question sensitively and to weigh it up [...]. But fundamentally we have a completely different role [...] one reports on [an issue] and does so in a detached manner, with all the basic journalistic rules, and therefore this must also apply to dealing with disinformation. If you approach disinformation in a fact-based, informative and neutral way, then that must also be possible (Interview_DE_12).

7. Conclusions

Overall, combating disinformation has received growing attention in the past five years in Germany, and resources have been pooled to implement counter measures more effectively. With its independent fee-funded public service broadcasting, Germany is particularly well prepared because it avails of a large network of broadcasting stations and editorial offices that work on behalf of a public information mandate. Being independent from the commercial imperative to seek profit, the public service broadcasting has considerable leeway for experiment and innovation and fact-checking units that operate beyond the demands of daily news coverage. In this respect, it is not surprising that some of the most active and salient fact-checking teams belong to the public service broadcasters (ARD Faktenfinder, SWR3 Faktencheck, BR24 Faktenfuchs, MDR Faktencheck, Deutsche Welle). A similar argument applies to the fact-checking unit of the French Press Agency. With a legal status that somewhat resembles German public service broadcasting, and substantial funding from the French state, AFP is also relatively independent from direct market pressures, and has more room for manoeuvre for fact-checking investigations beyond the daily news coverage routines. In this context, it is also striking to observe that fact-checking and combatting disinformation is furthermore done by independent, non-profit media and civil society organisations that are committed to societal goals, such as fostering a democratic and resilient society. In comparison, commercial media organisations, be they the press or private broadcasting, do not seem to be engaged in systematic, specialised fact-checking units or projects.²³ Even if some steps have been taken in this direction (e.g., the data and investigation project of Süddeutsche Zeitung, as well as single fact-check articles), it seems more difficult for commercial, profit-oriented media organisations to provide or pool resources for fact-checking units working on top of the daily news business.

With regard to future development, the experts identify a number of major challenges that are, however, not specific to the German context, but appear relevant for contemporary digitalised societies, more generally.

First of all, it is assumed that the complexity and speed of information flows and exchange on the Internet and in social media networks will further increase, making it more challenging to maintain an overview and keep track of disinformation. What is more, experts expect that technological progress, and particularly the use of artificial intelligence, will make it more difficult to identify and verify false content, such as deep fakes, and to distinguish between authentic-reliable and fake information. While fact checkers hope that technological development will simultaneously lead to adequately sophisticated verification tools for keeping up with advanced disinformation technologies, they shift particular emphasis on the need to improve media and news literacy among the population, and to strengthen awareness raising about disinformation strategies and methods. Enhancing digital media and news literacy of citizens is regarded all the more important because the Internet is becoming increasingly dominant for societal debates and political opinion and will formation. Several of the journalists argue that democracy cannot be taken for granted, but requires continuous effort and support. This also implies preparing society for a democracy that is no longer confined to the analogous world, but takes place widely in digital settings, and the challenge of increased digital disinformation is one element to it.

As regards the role and influence of professional journalism, journalists assume that quality media will be confronted with a heightened competition over public attention, and potentially new technical barriers and dependencies to gain visibility in thigitalised public sphere. In their view, online

²³ While, of course, checking facts is a core task in all quality news journalism.

platforms and social media networks are likely to gain more power and influence, with potentially negative implications for the role of quality journalism for public debate and democratic opinion and will formation. In particular, algorithms and artificial intelligence will probably be used more extensively to provide tailored, individualised information and news to audiences, thus contributing to the enhanced fragmentation of the public sphere. At the same time, online platforms and social media networks might become so central in a digitalised society that traditional mass media could become dependent on them in order to remain visible. In addition, the future could bring about an increased competition between professional journalism and those actors who spread disinformation across online platforms and social media networks, and strategically seek to undermine the credibility of quality media and democratic institutions, as such. Even if they do not reach the majority of society, journalists see the risk that already unsettled groups of the populations could be pushed further apart and become unapproachable for professional journalism and democratic public discourse. Against this backdrop, several journalists underline that major efforts should be made to approach and remain in dialogue with all citizens, and in particular with those who turned to alternative media, to prevent a societal divide.

Furthermore, keeping the right balance between an open, liberal society and the need to take action against harmful disinformation is considered one of the core challenges. Both institutional representatives and journalists underscore the importance of maintaining society's openness to a pluralistic culture of debate, tolerating different perspectives and opinions, and avoiding any overregulation in the direction of censorship, or state intervention claiming to decide what is right and wrong. The ban of Russia Today by German and European authorities is mentioned as an exemplary case showing how difficult recalibrating this balance is, and that a sound societal debate needs to be led about how a liberal, pluralistic society should deal with targeted disinformation and propaganda by authoritarian states, particularly if they may influence domestic political processes and governance.

Finally, systematically promoting news and digital literacy is considered a crucial task that needs urgent action. Empowering citizens to understand the mechanisms of news media, and enabling them to encounter digital information in an informed and critical way is regarded as a core condition to making the population resilient against disinformation, and strengthening democratic opinion and will formation. This preventive, empowerment approach is seen as particularly important because checking, debunking and correcting false or distorted facts can only ever be possible for an "excerpt" of the digital media reality, with its manifold and dynamically changing platforms, channels and forms of manifestations.

References

- Bachl, M. (2018): (Alternative) Media Sources in AfD-centered Facebook Discussions, in: *Studies in Communication and Media*, 7(2), 256–270.
- Bayer, J. (2021): Policies and measures to counter disinformation in Germany: the power of informational communities, Brussels: Heinrich-Böll-Stiftung, <https://eu.boell.org/en/2021/10/13/policies-and-measures-counter-disinformation-germany-power-informational-communities>.
- Bayer, J. et al. (2019): Disinformation and propaganda – impact on the functioning of the rule of law in the EU and its Member States, Brussels: Policy Department for Citizens' Rights and

- Constitutional Affairs. Directorate General for Internal Policies of the Union, [https://www.europarl.europa.eu/RegData/etudes/STUD/2019/608864/IPOL_STU\(2019\)608864_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2019/608864/IPOL_STU(2019)608864_EN.pdf).
- Beck, K. (2018): Das Mediensystem Deutschlands. Strukturen, Märkte, Regulierung, 2.nd edition, Wiesbaden: Springer VS.
- Beiler, M. & Kiesler, J. (2018): "Lügenpresse! Lying press!" Is the Press Lying? A Content Analysis Study of the Bias of Journalistic Coverage about 'Pegida', the Movement Behind this Accusation, in: Kim Otto, Andreas Köhler (eds.): Trust in Media and Journalism. Empirical Perspectives on Ethics, Norms, Impacts and Populism in Europe, Wiesbaden: Springer VS, 155-179.
- BMJ (2021): Regeln gegen Hass im Netz – das Netzwerkdurchsetzungsgesetz, Bundesministerium der Justiz, https://www.bmj.de/DE/Themen/FokusThemen/NetzDG/NetzDG_node.html.
- Boberg, S., Quandt, T., Schatto-Eckrodt, T. & Frischlich, L. (2020): Pandemic Populism: Facebook Pages of Alternative News Media and the Corona Crisis - A Computational Content Analysis, Muenster Online Research Working Paper 1/2020; <https://arxiv.org/abs/2004.02566>.
- Bundesregierung (2022a): Gefährliche Falschnachrichten Was die Bundesregierung unternimmt und was Sie tun können, <https://www.bundesregierung.de/breg-de/themen/umgang-mit-desinformation/gefaehrliche-falschnachrichten-1905340>.
- Bundesregierung (2022b): Umgang mit Desinformation, <https://www.bundesregierung.de/breg-de/themen/umgang-mit-desinformation>.
- Bundesregierung (2022c): Geförderte Projekte. Gemeinsam Desinformation bekämpfen <https://www.bundesregierung.de/breg-de/themen/umgang-mit-desinformation/foerderprogramme-demokratie-leben-1871300>.
- Codetekt (2022): Trust checking, <https://codetekt.org/trust-checking>.
- Degen, M. (2021): Aus der Schockstarre zur Akteurszentrierung – die Phasen der Pandemie-Berichterstattung, in: Zeitschrift für Politikwissenschaft 31, 125-131.
- Deutscher Bundestag (2017): Bundestag beschließt Gesetz gegen strafbare Inhalte im Internet, <https://www.bundestag.de/dokumente/textarchiv/2017/kw26-de-netzwerkdurchsetzungsgesetz-513398>.
- Dittert, A (2022): Emily Maitlis in Edinburgh: Eine Rede als Warnruf: Die BBC versagt als Aufklärer im Zeitalter des Populismus, Übermedien, 29th August 2022, https://uebermedien.de/76128/eine-rede-als-warnruf-die-bbc-versagt-als-aufklaerer-im-zeitalter-des-populismus/?utm_source=pocket-newtab-global-de-DE; last checked 14th Sept 2022.
- Eisenegger, M. (2021): Dritter, digitaler Strukturwandel der Öffentlichkeit als Folge der Plattformisierung, in: Mark Eisenegger; Marlis Prinzing; Patrik Ettinger; Roger Blum (eds.): Digitaler Strukturwandel der Öffentlichkeit. Historische Verortung, Modelle und Konsequenzen, Wiesbaden: Springer VS, 17-39.
- Eurobarometer (2011): Standard Eurobarometer 74 - Autumn 2010 - Januar 2011 - - Eurobarometer survey, <https://europa.eu/eurobarometer/surveys/detail/918>.
- Eurobarometer (2012): Standard Eurobarometer 76 - Autumn 2011 - Juli 2012 - - Eurobarometer survey, <https://europa.eu/eurobarometer/surveys/detail/1020>.
- Eurobarometer (2012b): Standard Eurobarometer 78 - Autumn 2012 - Dezember 2012 - - Eurobarometer survey, <https://europa.eu/eurobarometer/surveys/detail/1069> .

- Eurobarometer (2013): Standard Eurobarometer 80 - Autumn 2013 - Dezember 2013 - - Eurobarometer survey, <https://europa.eu/eurobarometer/surveys/detail/1123>.
- Eurobarometer (2014): Standard Eurobarometer 82 - Autumn 2014 - Dezember 2014 - - Eurobarometer survey, <https://europa.eu/eurobarometer/surveys/detail/2041>.
- Eurobarometer (2015): Standard Eurobarometer 84 - Autumn 2015 - Dezember 2015 - - Eurobarometer survey, <https://europa.eu/eurobarometer/surveys/detail/2098>.
- Eurobarometer (2016): Standard Eurobarometer 86 - Autumn 2016 - Dezember 2016 - - Eurobarometer survey, <https://europa.eu/eurobarometer/surveys/detail/2137>.
- Eurobarometer (2017): Standard Eurobarometer 88 - Autumn 2017 - Dezember 2017 - - Eurobarometer survey, <https://europa.eu/eurobarometer/surveys/detail/2143>.
- Eurobarometer (2018): Standard Eurobarometer 90 - Autumn 2018 - Dezember 2018 - - Eurobarometer survey, <https://europa.eu/eurobarometer/surveys/detail/2215>.
- Eurobarometer (2019): Standard Eurobarometer 92 - Autumn 2019 - Dezember 2019 - - Eurobarometer survey, <https://europa.eu/eurobarometer/surveys/detail/2255>.
- Eurobarometer (2020/21): Standard Eurobarometer 94 - Winter 2020-2021 - April 2021 - - Eurobarometer survey, <https://europa.eu/eurobarometer/surveys/detail/2355>.
- Eurobarometer (2021/22): Standard Eurobarometer 96 - Winter 2021-2022 - April 2022 - - Eurobarometer survey, <https://europa.eu/eurobarometer/surveys/detail/2553>.
- Eurobarometer (2022): Media & News Survey July 2022, Flash Eurobarometer FL011EP, <https://europa.eu/eurobarometer/surveys/detail/2832>.
- Federal Ministry of Foreign Affairs (2020): Feature – Strategische Kommunikation, <https://www.auswaertiges-amt.de/blob/2400018/1a1228c190b453523d3aab68c4176680/feature-stratkom-data.pdf>
- Frischlich, L., Klapproth, J., & Brinkschulte, F. (2020): Between Mainstream and Alternative – Co-orientation in Right-Wing Populist Alternative News Media. In: Grimme, Christian; Preuss, Mike; Takes, Frank W.; Waldherr, Annie (eds.): Disinformation in Open Online Media. First Multidisciplinary International Symposium, MISDOOM 2019, Hamburg, Germany, February 27 – March 1, 2019, Revised Selected Papers. Lecture Notes in Computer Science, Bd. 12021. Cham: Springer, 150-167.
- Heft, A., Mayerhöffer, E., Reinhardt, S., & Knüpfer, C. (2019): Beyond Breitbart: Comparing right-wing digital news infrastructures in six Western democracies, in: *Policy & Internet* 12(1), 20-45.
- Infratest dimap (2020): Glaubwürdigkeit der Medien, Umfrage, <https://www.infratest-dimap.de/umfragen-analysen/bundesweit/umfragen/aktuell/glaubwuerdigkeit-der-medien-2020>.
- Institut für Publizistik der Johannes Gutenberg-Universität Mainz (2020): Medienvertrauen. Forschungsergebnisse der Welle 2020, <https://medienvertrauen.uni-mainz.de/forschungsergebnisse-der-welle-2020-3>.
- Jakobs, I.; Schultz, T., Viehmann, C., Quiring, O., Jakob, N., Ziegele, M. & Schemer, C. (2021): Mainzer Langzeitstudie Medienvertrauen 2020. Medienvertrauen in Krisenzeiten, in: *Mediaperspektiven* 3/2021, 152-162.

- Jarren, O. (2021): Öffentlichkeitswandel durch Social Media – Auswirkungen der Plattformisierung auf die gesellschaftliche Vermittlungsstruktur, in: Mark Eisenegger; Marlis Prinzing; Patrik Etinger; Roger Blum (eds.): Digitaler Strukturwandel der Öffentlichkeit. Historische Verortung, Modelle und Konsequenzen, Wiesbaden: Springer VS, 41-63.
- Köhler, T. (2020): Chancen und Disruptionen des Nachrichtenjournalismus im Zeitalter der Digitalisierung, in: Köhler, Tanja (ed.) Fake News, Framing, Fact-Checking: Nachrichten im digitalen Zeitalter, Digitale Gesellschaft, Bielefeld: transcript, 13-20.
- Koliska, M. & Assmann, K. (201): Lügenpresse. The lying press and German journalists' responses to a stigma, in: Journalism 22 (11), 2729 -2746.
- Leidecker-Sandmann M, Attar P, Schütz A, & Lehmkuhl M. (2022) Selected by expertise? Scientific experts in German news coverage of COVID-19 compared to other pandemics. Public Underst Sci. 2022 Jun 20:9636625221095740. doi: 10.1177/09636625221095740.
- Luhmann, N. (1996): Die Realität der Massenmedien, Opladen: Westdeutscher Verlag.
- McIntyre, L. (2018): Post-Truth. Cambridge/Mass; London: MIT Press Essential Knowledge series.
- Meßmer, AK.; Sänglerlaub, A., & Schulz, L. (2021): „Quelle: Internet“? Digitale Nachrichten- und Informationskompetenzen der deutschen Bevölkerung im Test, Stiftung Neue Verantwortung, https://www.stiftung-nv.de/sites/default/files/studie_quelleinternet.pdf.
- Michailidou, A. & Trenz, HJ (2021): Rethinking Journalism Standards in the Era of Post-Truth Politics: From Truth Keepers to Truth Mediators,. in: Media, Culture & Society 43(7), 1340-49.
- Peritia (2022): Public Attitudes towards National Governments and Other Institutions – Germany, presentation of survey findings, https://peritia-trust.eu/wp-content/uploads/2022/05/National-government-and-institutions_DE.pdf
- Primbs, S. (2018): Was Verifikations-Einheiten tun, in: Gabriele Hooffacker, Wolfgang Kenntemich, Uwe Kulisch (eds.): Die neue Öffentlichkeit. Wie Bots, Bürger und Big Data den Journalismus verändern, Wiesbaden: Springer VS, 115-124.
- Puschmann, C.; Ausserhofer, J.; Maan, N.; Hametner, M. (2016): Information Laundering and Counter-Publics: The News Sources of Islamophobic Groups on Twitter. In: Workshops of the Tenth International AAAI Conference on Web and Social Media: Technical Report WS-16-19. Menlo Park, CA: AAAI Press. 143-150. <https://www.hiig.de/wp-content/uploads/2016/06/13224-58371-1-PB.pdf>.
- Quandt, T, Boberg, S., Schatto-Eckrodt, T. & Frischlich, L. (2020). Pandemic news: Facebook pages of mainstream news media and the Coronavirus crisis—A computational content analysis. Münster Online research (MOR) working paper 2/2020. <https://arxiv.org/abs/2005.13290>.
- Rau, JP & Stier, S (2019): Die Echokammer-Hypothese: Fragmentierung der Öffentlichkeit und politische Polarisierung durch digitale Medien? Zeitschrift für Vergleichende Politikwissenschaft 13: 399-417.
- Richter, C & Salheiser, A (2021): Die Corona-Pandemie als Katalysator des Rechtsextremismus und Rechtspopulismus in Thüringen, Deutschland und Europa?, in: Institut für Demokratie und Zivilgesellschaft (ed.): Wissen schafft Demokratie, Schwerpunkt: Demokratiegefährdungen in der Coronakrise 09/2021, Jena, 76-87.

- Röper, H. (2020): Daten zur Konzentration der Tagespresse im I. Quartal 2020, Tageszeitungen 2020: Schrumpfender Markt und sinkende Vielfalt, in; Media Perspektiven 6/2020
- Stern, J. (2020): Fakt-checking und Verifikation. Neue Formen des Faktenprüfens im Nachrichtenjournalismus in: Köhler, Tanja (ed.) Fake News, Framing, Fact-Checking: Nachrichten im digitalen Zeitalter, Bielefeld: transcript, 119-149.
- Thieltges, A & Hegelich, S. (2019). Desinformation und Manipulation. Wie soziale Netzwerke die Meinungsbildung steuern. Ein Werkstattbericht. In: Klaus Holetschek (Hg.): Mittelpunkt Bürger: dialog, digital und analog. München: Hanns-Seidel-Stiftung e.V (Aktuelle Analysen / Hanns-Seidel-Stiftung, Akademie für Politik und Zeitgeschehen, 71), S. 97-108.
- Trenz, HJ, Heft, A., Vaughan, M. & Pfetsch, B. (2021): Resilience of Public Spheres in a Global Health Crisis, *Javnost - The Public*, 28:2, 111-128, DOI: 10.1080/13183222.2021.1919385.
- Turcilo, L. & Obrenovic, M (2020): Misinformation, Disinformation, Malinformation: Causes, Trends, and Their Influence on Democracy. *A Companion to Democracy #3*, Berlin: Heinrich-Böll-Stiftung, https://www.boell.de/sites/default/files/2020-08/200825_E-Paper3_ENG.pdf
- Volksverpetzer (2022): Über uns, <https://www.volksverpetzer.de/ueber-uns>.
- Waisbord, S. (2018). Truth is what happens to news: On journalism, fake news, and post-truth. *Journalism studies*, 19(13), 1866-1878.
- Welker, B. (2021): Narrating the Covid-19 Crisis: How German populist far-right alternative online news media have framed the global pandemic during 2020. Master Thesis University of Helsinki, https://helda.helsinki.fi/bitstream/handle/10138/331224/Welker_Bianca_thesis_2021.pdf?sequence=2&isAllowed=y.
- Wissenschaft im Dialog (2020): Wissenschaftsbarometer 2020, <https://www.wissenschaft-im-dialog.de/projekte/wissenschaftsbarometer/wissenschaftsbarometer-2020>.
- Wissenschaft im Dialog (2021): Wissenschaftsbarometer 2021. Broschüre, https://www.bosch-stiftung.de/sites/default/files/publications/pdf/2021-11/Wissenschaftsbarometer2021_Broschuere.pdf
- Zackariasson, U (2018): Introduction: Engaging Relativism and Post-Truth, in: Mikael Stenmark, Steve Fuller, Ulf Zackariasson (eds.) *Relativism and Post-Truth in Contemporary Society*, Palgrave Macmillan, 1-17.