



Reacting to disinformation. The multilevel EU fact-checking approach

Marinella Belluati, Alice Fubini

1. Introduction

In recent years, online disinformation in both political communication and in the media has spread pervasively in many countries around the world, posing a growing challenge for democratic systems and their citizens (Trappel, Tomaz 2022).

Complex and multi-faceted, disinformation has no predominant cause, nor can it be solved with a single targeted action. Some forms of disinformation have gained ground not only thanks to the communication environment's increasing digitalization, but also through their use as a tool of political propaganda.

How resilient or how vulnerable a society is to disinformation depends on a variety of factors, including trust in media systems, levels of media literacy, the political setting and legislative guarantees.

Well aware of the need for targeted strategies, the European institutions have taken a multilevel approach in their policies for countering disinformation, extending their more general policy-making model to this sphere. The foundations for this effort were laid by the High Level Expert Group (HLEG)¹ on Fake News and Online Disinformation set up by the European Commission in 2018, the group of 39 experts from several EU countries appointed after an open selection process consists of representatives from academia, journalists, platform managers and NGOs, which formulated the main policy lines and drafted a Code of Practice² that identified four domains for action. First, it urges attention to the political dimension, as it is both a source and a target of the phenomenon. This is demonstrated by the numerous disinformation campaigns during election seasons, and more recently regarding vaccines, undermining trust in the media and politics³. The second domain is the mainstream information system: though the news media play an important part in fighting disinformation, they often contribute involuntarily to propagating it. The third domain is that of involving civil society in fighting disinformation: if forms of participation are expanded and the education tools and skills needed to recognize and deal with fake news are provided, civic engagement can be a valuable resource. Lastly, policy efforts must involve the digital environments and platforms: as social networks, instant messaging and search engines now have a major role in everyday consumption of media content, their activities must be regulated and made more transparent, increasing their accountability.

Marinella Belluati, Università di Torino, marinella.belluati@unito.it

Alice Fubini, Università di Bologna, alice.fubini2@unibo.it

¹ <https://digital-strategy.ec.europa.eu/en/news/experts-appointed-high-level-group-fake-news-and-online-disinformation> (last access February 2022).

² <https://digital-strategy.ec.europa.eu/en/policies/code-practice-disinformation> (last access February 2022).

³ Fake news and disinformation online, Flash Eurobarometer 464, April 2018 <https://europa.eu/eurobarometer/surveys/detail/2183> (last access February 2022).

On the European scale, this perspective calls for a multilevel governance approach (Piattoni 2010; Volkmer 2014) to disinformation that: a) stimulates action on all the geographical levels involved, be they international, supranational, national or local; b) deploys a more comprehensive institutional strategy combining top-down and bottom-up solutions in a horizon encompassing the public sector, private interests, civil society and the media systems; c) adopt integrated regulatory measures for content checking.

Starting from the debate around the term fake news and the alternative concept offered in the literature, this article analyzes the EU's response to disinformation, understood "as verifiably false or misleading information that is created, presented and disseminated for economic gain or to intentionally deceive the public, and may cause public harm"⁴.

Specifically, the paper investigates the multilevel strategy that the EU is now promoting through the fact-checking network of the European Digital Media Observatory (EDMO), our empirical case study. As its stated mission, EDMO "brings together fact-checkers, media literacy experts, and academic researchers to understand and analyse disinformation, in collaboration with media organisations, online platforms and media literacy practitioners"⁵.

The paper is organized as follows: section 2 introduces the concept of fake news, going on to specify how disinformation impacts societies in the digital age and indicate possible ways of countering it. Section 3 illustrates the main components of the European strategy. Lastly, section 4 presents and discusses the findings of 94 fact-checking projects involved in the EDMO network.

2. Disinformation in the digital age

What do we mean by disinformation? Why is curbing its spread more and more urgent? What strategies can be used to fight it? This section first offers some thoughts on the inextricable link that connects disinformation and how it is defined to the macro-phenomenon of fake news. Second, it reviews why it is necessary and urgent to take organized action to combat this phenomenon that takes shape in the hybrid media system (Chadwick 2013), whose transformations stem from a process in constant evolution such as digitalization and its consequences in terms of datafication (e.g., Mayer-Schönberger, Cukier 2013; van Dijck 2014) and platformization (e.g., Gillespie 2010; Helmond 2015; van Dijck *et al.* 2018). Lastly, the section discusses the tools introduced to combat disinformation: fact-checking practices, and their limits and potential.

2.1 What do we mean by disinformation: beyond the "fake news" label

"It's Time to Retire the Tainted Term "Fake news"⁶: such was the headline topping

⁴ Communication on tackling on-line disinformation, COM (2018) 236

⁵ <https://edmo.eu/edmo-at-a-glance/>

⁶ Margaret Sullivan, "Perspective | It's Time to Retire the Tainted Term 'Fake news'". Washington Post, January 8, 2017, https://www.washingtonpost.com/lifestyle/style/its-time-to-retire-the-tainted-term-fake-news/2017/01/06/a5a7516c-d375-11e6-945a-76f69a399dd5_story.html.

that the term was by then so bereft of specific meaning that it would be better to abandon it altogether. There are two reasons for doing so, or at least for using the term fake news more judiciously, *i.e.*, it oversimplifies the problem, and is subject to politically motivated distortion: “First, it is woefully inadequate to describe the complex phenomenon of information pollution. The term has also begun to be appropriated by politicians around the world to describe news organisations whose coverage they find disagreeable” (Wardle, Derakhshan 2017:5). The label “fake news” is also criticized as being “too vague, politically dangerous, indistinguishable from past forms of disinformation, charged with an over-simplistic idea of truth” (Bounegru *et al.* 2018: 6-7), and has come to be considered “as a global buzzword” (Farkas, Schou 2018).

At least part of the reason that the problem is so complex and so difficult to define lies in the fact that we are dealing here with an all-encompassing phenomena that makes itself felt in the public and political spheres as much as it does in the media system:

[...] It is precisely because its forms and contents are designed to mimic those of mainstream media — and precisely because it travels through similar circuits — that fake news offers us the occasion to study not just the strategies and formats of fake news, but the politics and composition of the media and information environments of the digital age more generally (Bounegru *et al.* 2018: 7).

Hence the need for other terms that better reflect the problem’s many different facets, such as “misleading information” (Fallis 2015; Giglietto *et al.* 2016) or “information disorder” (Wardle, Derakhshan 2017) and can circumscribe its perimeter: the former, for instance, distinguishes between misinformation and disinformation; the latter between misinformation, disinformation and mal-information.

According to Fallis (2015), the concept of misleading information can be broken down into two categories: disinformation, defined “as a bit of false information deliberately aimed at deceiv[ing]” (Giglietto *et al.* 2016: 5), and misinformation, “intended as a false or inaccurate information circulating as a result of honest mistakes, negligence or unconscious biases” (*Ibid.*). However, while Giglietto and colleagues’ study (2016) recognizes the distinction between misinformation and disinformation, it includes both in a “meta category” that takes a more markedly process-oriented perspective.

In turn, the term “information disorder” comprises and distinguishes between misinformation and disinformation, but adds mal-information, which is “when genuine information is shared to cause harm, often by moving information designed to stay private into the public sphere” (Wardle, Derakhshan 2017).

The literature has also introduced the “Infodemic” (Cinelli *et al.* 2020, Zarocostas 2020), comparing the diffusion of fake news to the dynamics of viral infection (Tambuscio *et al.* 2015).

2.2 How disinformation impacts societies in the digital age

To understand why it is so urgent to curb disinformation, we must look at what makes it different in the digital age. False and fake news have always existed. What

has changed now is the nature of the problem, from three standpoints (Fubini 2018): first, the way false information is presented has changed, becoming pseudo-journalistic to the extent that the literature now speaks of “the fake news genre” (Egelhofer, Lecheler 2019). Second, fake content has become more pervasive thanks to the very nature of the social environments where it circulates. Social media in particular is an enabler for fake news consumed and shared in echo chambers (Jamieson, Cappella 2010) and filter bubbles (Pariser 2012) whose effect is to reinforce and polarize opinion (Quattrociocchi, Vicini 2016; Sunstein 2002). Lastly, the politicization of fake news is ever more intense, so much so that the European Parliamentary Research Service has spoken of it as a “global phenomenon with political impact”⁷, regarding the 2016 US presidential election as the true turning point not just because it brought the issue into the mainstream, but also because of its political instrumentalization by Donald Trump.

These trends point to the need to consider what the literature has called the risks and consequences for democratic processes of the “global rise of fake news” (Lee 2019). As early as 2013, the World Economic Forum referred to the phenomenon as a worldwide risk, and warnings have been raised of a “fake news crisis” (Nelson, Taneja 2018).

It is a crisis that has roiled both the political and media spheres. In the former, a recent study commissioned by the European Parliament (2021)⁸ found that disinformation has impacted democratic processes by weakening trust in the institutions. In addition, disinformation has impacts on human rights, and specifically on the right to freedom of expression, the right to privacy and more generally on economic, social and cultural rights. As regards the media system, Tsfaty and colleagues (2020) have drawn attention to the causes and consequences of fake news dissemination in mainstream media, noting that fake news (and thus also disinformation) are able to influence agenda-setting processes (McCombs *et al.* 2014) in view of the dynamics typical of network agenda setting (Vargo *et al.* 2018) and the pluralization of pressure spheres (Marini 2017).

2.3 How to fight disinformation: fact-checking, debunking and their limits and potential

The most widespread practices for countering disinformation include fact-checking (Robertson *et al.* 2020) and debunking (Chan *et al.* 2017; Lewandowski *et al.* 2020), whose effectiveness is a key issue in the debate on the topic (Cotter *et al.* 2022). Indeed, while fact-checking and debunking initiatives have multiplied (Amazeen 2020; Graves 2016), recent studies have concluded that these practices have a number of limitations. First, there is the problem of mismatched publics: very often, the public that consumes fake news is not the same as that which has access to fact-checking sites (Guess *et al.* 2018). Second, certain “blocking” dynamics, mostly associ-

⁷ Members’ Research Service, “Fake news” and the EU’s Response”, European Parliamentary Research Service Blog, 2.04.2017, <https://epthinktank.eu/2017/04/02/fake-news-and-the-eus-response/>

⁸ [https://www.europarl.europa.eu/RegData/etudes/STUD/2021/653635/EXPO_STU\(2021\)653635_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2021/653635/EXPO_STU(2021)653635_EN.pdf)

ated with processes of selectivity and hyper-selectivity, have effects that are added to and exacerbate those of confirmation bias. Third, a number of studies have pointed out that there is a gap between the amount of fake news that is shared and the number of fact-checking articles (Vargo *et al.* 2017). Fourth, studies of social network echo chambers have found little interaction in terms of user engagement with posts containing “corrective” content (Quattrociocchi, Vicini 2016): such interactions are not only few in number, but their tone and the statements they make reflect negative feelings that indicate a resistance to accepting checks or denials of content in line with the user’s ideological stance and values.

In addition to these limitations, fact-checking practices have a number of strong points: first, fact-checking (mostly of articles or politicians’ statements) is more effective if it is considered not as an end in itself, but as the starting point for the kind of research typical of investigative journalism. Second, these practices are also more effective if they are combined with network dynamics and collaboration among multiple actors. As the report by the Poynter Institute’s International Fact-Checking Network (IFCN)⁹ indicates, networks of debunking and fact-checking groups tend to organize around specific issues in the public interest: from monitoring political communication during national or European electoral campaigns (*e.g.*, CrossCheck for the 2017 French presidential elections, which was then extended to the continental scale as CrossCheck Europe in 2018), up to the Covid health emergency. In the latter case, the IFCN’s efforts were particularly significant: in response to the infodemic, the group set up the #CoronaVirusFacts /#DatosCoronaVirus Alliance¹⁰, a database that unites fact-checkers in more than 70 countries in a single network and includes articles published in at least 40 languages.

In conclusion, fact-checking and debunking practices must become part of the information and communication flows, and their content should be circulated outside their websites and digital platforms, leveraging the potential of the Hybrid Media System in the fight against disinformation. This means ensuring that the agenda-setting power of debunked content is greater than that of fake news so that it can reach different types of audience. Given disinformation’s pervasiveness, moreover, and its impact on many levels and many systems—politics, the media, and the public sphere—it seems clear that the phenomenon calls for a multilevel approach that focuses equally on fact-checking processes, the public actors, and the policy lines to be adopted. We thus choose to analyze the approach taken by the European Union, which is now implementing a line of action which, in institutional and procedural terms, is the world’s most advanced to date.

3. The EU’s multilevel strategy for countering disinformation

The Brexit referendum and the US elections (both in 2016) demonstrated the power of “information disorder” and exposed Europe’s vulnerability. Accordingly, as early as

⁹ <https://www.poynter.org/ifcn/>

¹⁰ <https://www.poynter.org/coronavirusfactsalliance/> (last access February 2022).

2016 the European Commission took steps to protect the 2019 European Parliament elections and subsequent electoral cycles with a complex political and strategic plan for fighting disinformation. When the pandemic crisis broke out in 2020 and began to disrupt European information flows, the EU strategy was thus able to deploy an established governance model for countering disinformation (Lovari, Belluati 2022).

The theoretical and empirical debate outlined in the previous section, together with the fact that a majority of the public is now concerned about the danger that disinformation poses to democracy¹¹ has led the European institutions to adopt a multi-pronged strategy. In the following pages, we will use official data and reports to illustrate the steps taken in this European policy strategy, from its introduction in 2015 to its present-day implementation.

3.1 Multilevel governance as a counter-tactic

In the age of interdependence and globalization, governance processes are increasingly complex and multidimensional: here, the areas of information and the efforts to fight its antithesis, disinformation, are no exception. The circulation of fake news is often orchestrated by parties outside the media system — pursuing interests that are as much economic as they are propagandistic — who take advantage of the fact that fake news' effect is amplified when it goes viral on social media. Without coordinated action on a broad scale and on multiple levels of governance, all efforts to counter fake news are likely to be in vain.

The structural changes now taking place in the European public space must be addressed multidimensionally. For this reason, multilevel governance is now a well-established part of the European policy-making process (Piattoni 2010; Volkmer 2014), which involves ever-denser networks of public and private actors and must thus make increasingly complex decisions if its outcomes are to be effective. The debate on multilevel governance has been going on for over twenty years, ever since Gary Marks (1992) proposed it as a concept that could shed light on the nature of the European Union's decision-making dynamics. Though a purely regulatory approach, it now characterizes the European decision-making process and its innovative features. The European institutional architecture centers as much on balancing sovereignties as it does on constructing a European citizenship¹². Hence, the technocratic response to European questions must be flanked by the pursuit of a common *demos* (Habermas 2001). It is essential that there be a formal and substantive link between all policy levels, where the local level must be able to interact with the national and supranational levels, the public sector must cooperate with the private sector, and civil society must be included in the decision-making process.

The principles of multilevel governance were first applied in the European cohesion and environmental policies and are also at the basis of the communication

¹¹ Flash Eurobarometer 464/2018 <https://europa.eu/eurobarometer/surveys/detail/2183>

¹² European Parliament, 2020, Europeanising European Public Spheres, [https://www.europarl.europa.eu/RegData/etudes/STUD/2020/654628/IPOL_STU\(2020\)654628_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/654628/IPOL_STU(2020)654628_EN.pdf) (last access July 25, 2022).

policy. The 2006 White Paper on a European Communication Policy¹³ and the subsequent efforts to keep pace with changing times¹⁴ emphasized not only the need to integrate all geographical levels, but also that of giving a plurality of actors a say in process governance. More than any other area, the fight against fake news — which by its very nature impacts multiple levels and multiple systems — calls for deploying multilevel public policies for co-regulation, media accountability and building digital competences. In addition, the technological competences that are currently available in data handling and IT security must be put into play. While the United States was the first to deploy its forces on the fake news front with approaches that were widely imitated, the European strategy described below is now showing itself to be the most effective worldwide, precisely because it encompasses all these aspects.

3.2 Europe in action! Retracing the European policy

As early as 2013, the World Economic Forum's Global Risks Report¹⁵ numbered "digital wildfires" — the rapid spread of massive digital misinformation — among the greatest threats to political systems, the economy and democracy in general. Accordingly, in 2015 the European Council tasked the Commission with responding to the Russian Federation's disinformation campaigns with the *EUvsDisinfo*¹⁶ project managed by the European External Action Service. From the outset, the fight against disinformation drew on an approach involving multiple levels of governance and a network of actors, public authorities, platforms, media outlets, independent fact-checking groups, academic research and civil society organizations.

In January 2018, after an initial exploratory period, the HLEG on Fake News and Disinformation was set up, and immediately addressed the need to adopt a multi-level, multi-stakeholder strategy with four macro-objectives, *i.e.*, improving the transparency of online news, providing an enabling environment for media pluralism, ensuring media system accountability, and the full involvement of civil society.

After an intensive, two-year process of public consultation and discussions with strategic stakeholders, the HLEG drafted the *Action Plan against Disinformation*¹⁷ which identified four priority areas for intervention: a) improving technological tools for analyzing online disinformation; b) improving cooperation in EU debunking activities to provide joint responses to threats; c) improving cooperation with online platforms; d) raising awareness and improving educational skills in recognizing and combating disinformation. Five areas were singled out for immediate regulatory action: disrupting the advertising revenues of accounts and websites that spread disinformation; improving the transparency of web advertising policies; addressing the

¹³ https://europa.eu/documents/comm/white_papers/pdf/com2006_35_en.pdf (last access February 2022).

¹⁴ https://ec.europa.eu/info/sites/default/files/communication-shaping-europes-digital-future-feb2020_en_4.pdf (last access 2022).

¹⁵ https://www3.weforum.org/docs/WEF_GlobalRisks_Report_2013.pdf (last access July 2022)

¹⁶ <https://euvsdisinfo.eu/> (last access February 2022).

¹⁷ https://ec.europa.eu/info/publications/action-plan-disinformation-commission-contribution-european-council-13-14-december-2018_en (last access February 2022).

issue of fake profiles and online chatbots; empowering consumers to report untrustworthy content by accessing different web sources while improving the visibility and availability of verified content; and empowering the research community to monitor online misinformation by accessing data from platforms while respecting privacy.

This first stage in the EU's fight against disinformation concluded in 2019, when the HLEG recommended that all stakeholders be involved in a multilateral process including the public sector, online platforms, online and offline news outlets (the press and broadcasters), journalists, fact-checkers, independent content creators and the advertising industry. The *Action Plan against Disinformation* with its multidimensional approach became the centerpiece of European policy in the runup to the 2019 parliamentary elections. In 2020, spurred by the effects of the Covid-19 crisis, the Commission's European Democracy Action Plan¹⁸ strengthened the response to disinformation by proposing the Digital Services Act, which set out new obligations for online platforms. The European Parliament approved the Act in January.

The first Code of Practice on Disinformation¹⁹, issued in 2018, was also a key policy measure. For the first time, the Code put limits on online platforms' actions, as it called on their ownership structure to sign an agreement on the rules for using the European public space, and established sanctions for violations. The first signatories were Facebook, Google, Twitter and Mozilla, who were joined over time by many other digital players²⁰. In 2022, the Strengthened Code of Practice on Disinformation²¹ entered into force, reflecting the May 2021 Commission Guidance and the lessons learnt from the Covid-19 crisis.

A second major thrust got under way in 2019 when, pursuant to set policy, tools were identified for recognizing and checking fake news. Consequently, the HLEG asked the European public authorities and those in each member state to develop a network of disinformation research centers, and supported the creation of a debunking consortium, the European Digital Media Observatory (EDMO)²². Through public and private research networks, EDMO has launched a pilot project for identifying technological solutions and building granular fact-checking services. The consortium is governed by an Advisory Board and an Executive Board that are entirely independent of the public authorities—including the European Commission, though it was set up by the

¹⁸ https://ec.europa.eu/info/strategy/priorities-2019-2024/new-push-european-democracy/european-democracy-action-plan_en

¹⁹ <https://digital-strategy.ec.europa.eu/en/policies/code-practice-disinformation>

²⁰ Microsoft signed in 2019, followed in TikTok in 2020, during the pandemic. In October 2021 they were joined by the online video platform Vimeo and social networks such as Clubhouse. Also in 2021, the Code was signed by advertising platforms such as *DoubleVerify*, and by *Avaaz*, *Globsec*, *Logically*, *NewsGuard* and *Who Targets Me*, all of which are organizations providing tools for fighting disinformation. In November 2021, the Commission welcomed another 16 potential signatories who participated in drafting the *Strengthened Code of Practice: Twitch, Adobe, Havas, The Bright App, Neeva, Reporters Without Borders, VOST Europe, the Netherlands Organisation for applied scientific research (TNO), Maldita, PagellaPolitica, Demagog, MediaMath, Integral Ad Science*, the GARM initiative, *Crisp Thinking* and *Newsback*. All signatories are asked to submit monthly reports on how they are implementing their commitments to fight disinformation about Covid-19 and other matters, and in line with the EU's belief in transparency, all reports are publicly accessible.

²¹ <https://digital-strategy.ec.europa.eu/en/policies/code-practice-disinformation> (last access July 2022).

²² <https://edmo.eu/>

latter—and is coordinated by the European University Institute in Florence, Italy. Operationally, EDMO's activities are based on five strands reflecting its multilevel approach: 1) Mapping fact-checking organizations in Europe and supporting them by fostering joint and cross-border activities and dedicated training modules; 2) Mapping, supporting and coordinating research activities on disinformation at European level; 3) Setting up a public portal providing media practitioners, teachers and citizens with information and materials aimed at increasing awareness, building resilience to online disinformation and supporting media literacy campaigns; 4) Design of a framework to ensure secure and privacy-protected access to platforms' data for academic researchers working to better understand disinformation; 5) Support to public authorities in monitoring policies to limit the spread and impact of disinformation.

After the Observatory's core service infrastructure was deployed, EDMO's work began officially in 2020 when eight regional hubs located throughout Europe were chosen via an open selection process. In 2021, a certified community of fact-checkers was established, and public calls for proposals were opened for organizations specializing in the question of fake news, media outlets, independent information projects, civil society associations and research groups in order to build debunking skills and certify them for the public in a spirit of transparency. EDMO's activities are intended to help journalists and fact-checkers in their work. Accordingly, one of the platform's key missions is to assist the fact-checking community by facilitating cooperation and sharing best practices. Through access to the EDMO platform, the objective is to create a dense network of relationships at multiple levels throughout Europe.

To assess the effects of the EU's multilevel strategy, we took the EDMO fact-checking community and its structure as the empirical case study²³.

4. The multilevel strategy in action. The EDMO community of fact-checkers

We need cooperation among fact-checkers. First, because we can better understand and address cross-national disinformation. Second, because politicians often exploit the lack of knowledge in their national audiences about what is happening in other countries. Moreover, because only an ecosystem of fact-checking organizations has all the means necessary to fight such a big enemy as disinformation. Together we are stronger²⁴.

The EDMO project's community of fact-checkers provides a vantage point for exploring the multilevel effort underlying the European strategy for countering disinformation, whose principles are reflected in the EDMO admission criteria. To join the community of fact-checkers, applicants must meet specific structural requirements: they must be non-profit or for-profit public or private sector organizations established in the EU with a demonstrable focus on fact-checking, having participated in projects at one or more of the local, national and international levels. In addition, applicants must demonstrate that they are active and employ a consistent debunking

²³ The European strategy for countering misinformation has also included massive investments in applied research from 2018 to 2021 through the Horizon 2020 program and ERC grants.

²⁴ <https://edmo.eu/fact-checking-community/>

strategy and a clear methodology; being signatories of the IFCN is considered sufficient demonstration in this respect. Applicants' organizational and proprietary structure must be transparent in order to avoid any potential conflict of interest and ensure they are free of political or economic influence over them. For this reason, they must disclose any work, consulting activities, share-owning or funding from any company operating offline and online. Lastly, applicants to join the community must comply with the applicable rules of ethics in their area of expertise.

The community has 94 initiatives that interact with exchanges of experience. The EDMO project also provides training services which in view of the community's highly diverse membership, seek to create a common working framework.

4.1 Research Design

Bearing in mind the year each project began (variable 1), the 94²⁵ initiatives were analyzed in terms of the 12 dimensions making up the quali-quantitative content analysis codebook²⁶ (Losito 1993), which can be grouped into three broad categories: two that refer to the multilevel perspective, and a third linked to fact-checking's nature as a specific application of the multilevel approach to disinformation.

The first category groups together the variables associated with the multi-territorial dimension: (2) the number of initiatives in each country; (3) translation of fact-checked content into other languages (primarily English); (4) the level of news coverage: micro (local) meso (national) and macro (international). The second category consists of the variables associated with the multi-actor dimension, respectively: (5) sector: public or private; (6) nature of the organization: for-profit / non-profit; (7) whether the initiative is dependent on or independent of existing media; (8) whether different professional skills are involved; (9) greater or lesser level of integration between multiple actors and their organizational structures (and, consequently, the complexity of the initiative's network); (10) involvement of civil society and network users in the fact-checking process. Lastly, the third category sheds light on the variables associated with fact-checking practices: (11) the thematic focus of fact-checking, and (12) fact-checking methods.

4.2. Findings

This section summarizes the main findings of the empirical investigation²⁷. Findings are presented and discussed according to each of the categories into which the codebook's twelve dimensions are grouped.

²⁵ For a complete list of the 94 initiatives (as of February 2022), see <https://edmo.eu/fact-checking-activities/>

²⁶ The codebook was compiled manually by the authors after discussing each individual variable between January and February 2022. The EDMO website and each initiative's website were consulted during the compilation process.

²⁷ The findings were discussed informally with two officials from DG CONNECT and DG COMM who asked to remain anonymous.

Fact-checking initiatives and their increase over time

Looking at the year each initiative began indicates that there were three key periods in the rise of online disinformation and efforts to counter it in Europe: prior to 2015; from 2015 to 2017, and from 2018 to the time of the survey in February 2022.

Thus, 24% of the initiatives date to before 2015, when the issue of fake news had already attracted attention in the public debate but was not yet considered a structural problem requiring action on the part of the institutions. Nevertheless, as early as 2013 the World Economic Forum called it a global risk, warning of a “fake news crisis”.

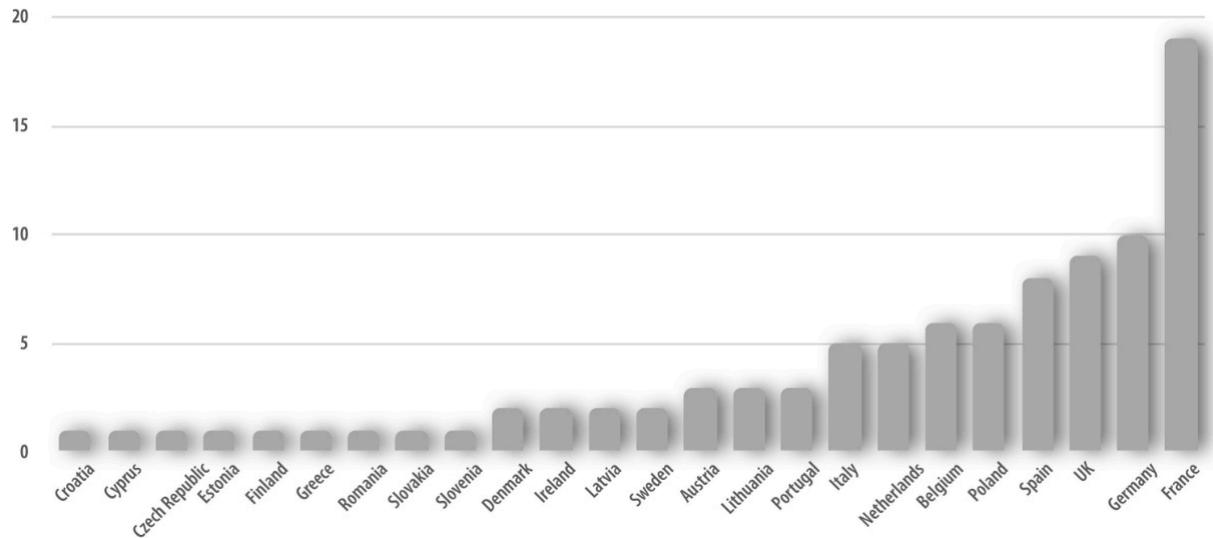
But as we have seen, it was only in 2015 that the problem was put on the European institutions’ docket. From 2015 to 2018, fact-checking activity grew both internationally (IFCN was launched in 2015) and in Europe, where the European Commission began exploring solutions to the problem and the number of fact-checking initiatives increased significantly (+39%).

While the pervasive effects of fake news had begun to be abundantly clear with Brexit and Donald Trump’s win in the 2016 US presidential elections, the real surge came in 2018, when the problem exploded—rising by 37%—and the European public response was put on a formal basis. This was the period when the HLEG embarked on its preliminary work, and the European institutions started to channel massive amounts of funding into research on the topic. Further impetus to the EDMO community’s work then came from the Covid-19 crisis, followed by the onset of the conflict in Ukraine.

The multi-territorial dimension

The first variable in this dimension of the European strategy is the number of initiatives in each country. In the EDMO community, each country is represented with at least one initiative with the exception of four out of 27 member states (there are no projects from Bulgaria, Luxembourg, Malta and Hungary). The number of initiatives is largest in those countries that were the first to become aware of the risks of disinformation and to take action to counter it. With 19 projects, France is the country with the most fact-checking initiatives, and with the greatest diversity among the groups involved. In addition, France, Germany, the UK (which still belongs to the network despite the country’s exit from the EU) and Spain account for almost 50% of the initiatives, a percentage that reaches nearly 75% if we include the efforts fielded in Poland, Belgium, the Netherlands and Italy. As can be seen, action centers on the countries that are economically strongest and have long belonged to the Union. At the same time, they are also the countries that are most exposed to the negative effects of disinformation. All the other Member States have fewer initiatives. They include smaller countries that have recently joined and are thus less well integrated in the European space, such as Lithuania, Croatia, Estonia and Romania, as well as the Northern European countries, where the fact that less action is taken against disinformation can be explained by the high level of trust in the countries’ media systems (Eurobarometer 464/2018; Digital News Report 2018).

Figure 1 – Number of initiatives by Member State



The second variable refers to multi-territoriality is the translation of fact-checked content into other languages (primarily English as an official language of the EU). In most cases, each initiative’s first language is its country’s national language (given that the fact-checked content is in the national languages). However, 12 initiatives in non-Anglophone countries use English directly as their primary language, and another 14 initiatives use multiple languages. In the latter case, most of these fact-checking groups are press agencies such as France’s *AFP Factuel*, or initiatives under the European Union’s aegis, such as *EUvsDisinfo* (Belgium). This confirms that using a plurality of languages is one of the dimensions characterizing the multilevel approach.

The final variable refers to the multi-territorial dimension is the level of news coverage. This variable distinguishes between initiatives that chiefly fact-check local news (micro), national news (meso) or international news (macro)²⁸. The data indicates that 65% of the initiatives fact-check at the national level. Only 18% are open to the European and international levels. These initiatives are located in Belgium, which is closest to the headquarters of the European institutions, the UK—facilitated by the fact that English is the Union’s working language—and France, whose press agencies and international media can boast a tradition of fact-checking. Examples of the latter country’s projects include *AFP Factuel*, a fact-checking service developed by Agence France-Presse which takes its inspiration from an outward facing international approach, or *CrossCheck*, which was launched for the 2017 presidential elections. The 17% of initiatives whose target is more specifically local—Scotland’s *The Ferret*, for example—are equally interesting. Though the main work of the EDMO community’s fact-checkers is heavily focused on domestic news, the interweaving of the local and supranational levels confirms their intention of constructing a glocalized public space (Castells 1996, 2008; Robertson 2014) which strives to integrate flows from different territorial perspectives.

²⁸ The classification is based on the fact-checked content appearing on the organizations’ homepages.

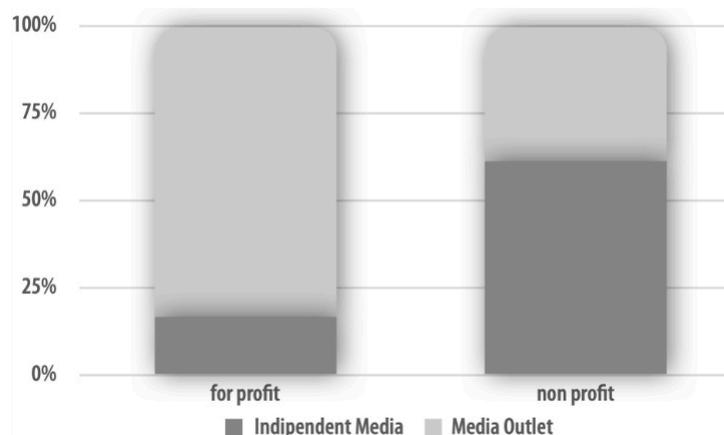
The multi-actor dimension

The multi-actor dimension is also central to the overall process: first, because fighting disinformation does not involve only the information sector; second—as emerges repeatedly from the policy documents—because it is increasingly necessary to bring together an array of different skills. The first variable concerns the initiatives' sector: the EDMO community consists chiefly of private sector groups, who account for 72% of the total, as against 28% for the public sector groups. The private sector seems to be more open to collaborative forms of fact-checking work than the public information service. There may be several reasons for this, starting from the fact that since not all national public services perform the same function in their national media systems (Hallin, Mancini 2004), their complexity makes it more difficult to operate in networks such as EDMO. The Italian public broadcaster RAI, for example, does not participate in the community, unlike its counterparts the BBC in the UK, France TV and Germany's ARD. Deep down, there is also the reluctance to relinquish sovereignty, which in the field of information as elsewhere — and especially for the more institutional media groups — stands in the way of cooperating in a more hybrid setting, even though the very nature of the problem demands it.

Looking at the nature of the organizations reveals an interesting point: over 70% of the EDMO fact-checking initiatives are fielded by non-profit groups (74%), as against 26% by groups in the for-profit sector. This confirms that the community spirit can provide a welcoming environment for civil society as a third force which is independent of the traditional parties involved in the fight against disinformation.

A further variable that enables us to reach a better understanding of the EDMO community's nature is linked to the process whereby individual initiatives are developed: we distinguished between projects originating with established media and journalism groups, and projects outside such groups, which are thus more independent and unconstrained by the media's usual outlooks and routines. Initiatives were evenly divided between the two categories, indicating that there is a significant degree of independence from the mainstream media, and a growing trend towards hybrid and increasingly disintermediated journalism that involves a variety of skills not necessarily associated with journalists.

Figure 2 – Comparing traditional media outlets and independent media: for-profit vs non-profit



As Figure 2 shows, most of the mainstream media's response is driven by for-profit journalism. Many of these initiatives consist of newspaper sections devoted entirely to fact-checking and appearing alongside the traditional sections for news, commentary, politics, etc.; in other cases they are televi-

sion or radio programs that fact-check and debunk current news. The remaining initiatives originate outside of the mainstream media, and only a small minority are run by for-profit organizations. This category includes grassroots projects bringing together a range of different actors. Here, examples include Finland's *FaktaBaari*, which has been active since 2014 and has earned plaudits for its accurate fact-checks of electoral debates, and Ireland's *iHealthFacts*, operated by a scientific community consisting of physicians and experts. By contrast, some of the for-profit initiatives are notable for their high-tech component: the UK's *Fact-checking Observatory* and Spain's *NEWTRAL Fact Checks*, have developed advanced monitoring tools based on artificial intelligence and machine learning to fight disinformation.

Whether an initiative involves different professional skills is another indicator of the multi-actor dimension. The European strategy makes frequent reference to five broad categories of actors and their associated skill-sets: journalists, communication experts, platform and high-tech experts, civil society, and academics and other specialists. In eight out of the 94 projects, at least five different skills are represented on the staff, while 70 have two at most. The initiatives include "paradigmatic" cases of the integration of knowledge and skills: France's *Open Facto*, Spain's *Maldita*, *Debunk.eu* in Lithuania, and *codetekt* in Germany, where professionals from the worlds of open-source journalism and research, academia, IT security, geopolitical analysis, NGOs and investigative journalism work together. A total of 85% of the initiatives were founded by or involve actors belonging to the world of information and/or experts in the sector, and are thus the most widely represented category. Fourteen out of the 94 initiatives are an exception, as no information professionals are involved: most are grass-roots civil society initiatives that have formed spontaneously around specific issues such as the environment, politics, and health. One noteworthy example is *Ellenika Hoaxes* in Greece, an entirely bottom-up initiative that fact-checks news content. *Factcheck.vlaanderen* in the Netherlands and the UK's *Logically Fact Checks*, on the other hand, concentrate on high-tech skills and the use of artificial intelligence techniques. Other projects are staffed almost entirely by academics, like *LAVOCE.INFO* in Italy, *LEI Nieuwscheckers* in the Netherlands, *Les Surligneurs* and the *Fact-checking Observatory* in the United Kingdom. Though the multi-actor aspect is an added value for all network activity, it has still not been fully achieved in the EDMO community.

Whether initiatives involve actors with different skills is not the only factor that helps us understand the multi-actor dimension. The initiatives' organizational structure and consequently, the complexity of their internal networks is also a useful indicator. The data show that 51% of the projects have a highly complex structure that brings together a variety of organizations: editorial boards, universities, high-tech companies and third sector associations that in many cases can count on outside funding. The most notable projects include *EURECOM Corona Check* (France), an example of research in a markedly academic setting. An even more ambitiously organized case is that of the *EU Disinfo Lab* (Belgium), which in addition to being part of the European fact-checking project is trying to replicate the EDMO model at the national level. Italy's *Pagella Politica* is also interesting: initially an independent non-profit

whose operations were restricted to the national level, it now interacts with other international actors and is a member of the EDMO organizing committee.

In 38% of the cases, the initiatives are less complex: these are recently formed organizations, often still at the start-up stage, or third sector associations that are trying less institutional, bottom-up practices for countering disinformation, but are still keenly interested in working collaboratively. Examples include Austria's *Fakt Ist Fakt*, an informal fact-checking blog, or the Baltic Center for Investigative Journalism *Re:Baltica*, based in Latvia but working across all three Baltic states. The remaining 11% feature a level of complexity midway between that of the other two groups, and include *Bellingcat* in the Netherlands, a collective journalism project that produces international investigations by freelancers in 20 countries.

Another important aspect that enables us to assess the scope of the EDMO community's multi-actor dimension is the extent to which it involves civil society and network users in the fact-checking process. The basic principle is well stated by the HLEG and reiterated in the Code of Practice, which emphasizes efforts to engage civil society. In practice, this translates into a variety of calls to action. Many projects seek to involve members of the public — students, activists, volunteers and web designers — in reporting fake content and raising awareness about the problem (32 initiatives out of 94). Such involvement can range from merely enabling users to report content that should be fact-checked via email services or chatbots, to more active forms of collaboration with sophisticated tools that the public can use independently. In some cases, the initiatives encourage users to become fact-checkers themselves. Other projects (24 in all) such as *FaktaBaari* in Finland and *Infox.fr* in France propose media literacy activities or include civil society on their editorial staff. Other exemplary cases are the French initiative *Notre-planète* that engages users with a classic forum approach, Germany's collaborative investigative journalism project *CORRECTIV.Faktencheck*, and Italy's *FACTA*, which collects reader input on a daily basis. Also worthy of note are the *Les Observateurs* project (France), which deals almost entirely with user-supplied content, and *Health Feedback*, which launches an explicit call to action by the scientific community. On another level, *CaptainFact* is the only entirely bottom-up fact-checking initiative. Though there are a number of commendable initiatives that see the public as an essential resource, the EDMO community's level of engagement with civil society is still low.

Fact-checking practices

The third and last category of variables considered in the analysis, in parallel with the multi-territorial and multi-actor dimensions, explores the concrete fact-checking practices as regards both their choice of topic and whether initiatives adopt an explicit fact-checking methodology.

In analyzing the thematic focus of fact-checking, it was found that science and politics are the areas that generate the most fake news. In addition, the pandemic's outbreak in 2020 brought extensive fact-checking efforts to bear in this topic as well,

and the European institutions launched a specific action entitled “Tackling coronavirus disinformation”²⁹. Unsurprisingly, 61% of the initiatives focus on health: though their debunking work the initiatives also cover specific contents that deal with Covid-19 and vaccines, thus reaching 74%. A number of projects were set up specifically for this purpose. Ireland’s *iHealthFacts*, for instance, enables the public to quickly and easily check the reliability of health claims circulated on social media. Other interesting initiatives include France’s *Science Feedback*, where a worldwide network of scientists checks the content of science- and health-based media coverage, and *Science Hoaxes* in Cyprus, which as its name implies unmasks hoaxes purporting to be scientifically grounded.

As the Covid-19 pandemic became a central concern, political issues were shunted into the background: according to the data collected, they were addressed by only 16% of the initiatives, including *Demagog* in Slovakia, *Poletika* in Spain, *Pagella Politica* in Italy and Austria’s *Fakt Ist Fakt*, which since 2016 has fact-checked the statements of public figures and politicians. As for climate change and the green transition, though both are very much at the center of the public debate, they do not receive equal attention in the fact-checking community. Only 9% of the initiatives have devoted space to these issues, though one, France’s *Notre-planète* project, is entirely dedicated to them.

As regards fact-checking methods, the EDMO network is moving in the direction of more uniform working practices. A sizable number of initiatives (34%) already belong to Poynter’s International Fact-Checking Network (IFCN), founded in the United States in 2015 and now the world’s largest community of fact-checkers. This important alignment is supported by the European strategy, though the Union is seeking to develop its own working method that, without departing from the IFCN principles, is more consonant with the European spirit. Other initiatives present details of their own fact-checking method (17%), aware of the need to employ a transparent, replicable approach to their work and thus embrace best practices. On the negative side, 49% of the EDMO community’s initiatives do not state their methodology. This is chiefly true of the mainstream media, probably because fact-checking is an intrinsic part of journalists’ work, but they do not follow a codified method. The investigative journalism by Germany’s *CORRECTIV* is an example: this initiative deals with cases of corruption, inviting the public to submit anonymous tips about abuses which the staff then investigates. How these investigations proceed, however, is not stated, probably so as not to jeopardize relationships with the project’s sources of information. A few country-by-country comparisons can shed light on the fact-checking methods and their levels of disclosure. Italy has five EDMO initiatives, each of which specifies the fact-checking method it employs. In 20% of these cases, however, the method is generic, while the remaining 80% follow the IFCN guidelines. This is in sharp contrast to the situation in Germany (10 initiatives) and Spain (8 initiatives). In the former country, 60% of the projects do not state their methodology. The remain-

²⁹ https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/fighting-disinformation/tackling-coronavirus-disinformation_en (last access February 2022).

ing 40% do, but only 10% of them use the IFCN approach. In Spain, 38% of the initiatives do not indicate the method, while 50% follow IFCN as against 12% that adopt an in-house method. Consequently, the community's working practices still vary widely, even if the EDMO strategy aims to arrive gradually at a shared European method.

5. Conclusions

The problem of disinformation is a priority for media systems and the institutions that regulate them. For several years, the European institutions have implemented a process based on multilevel governance principles for countering disinformation and building resilience. Paradoxically, the Covid-19 pandemic made it possible to increase this process's impact, as it made the assumptions underlying the European policy more vital than ever before. After placing the EDMO strategy in a specific policy line and theoretical framework, this paper has explored the extent to which Europe's largest fact-checking community is multidimensional and multi-territorial.

As regards the first multilevel dimension — that of multi-territoriality — EDMO's strategy is almost entirely successful in representing Europe's territorial complexity. There is at least one active initiative in each Member State, except for Bulgaria, Luxembourg, Malta, and Hungary. Moreover, the network detects fake news on the local, national and supranational level. However, although we have observed that the network includes and integrates the different territorial levels, it remains predominantly focused on the national dimension.

In the second multilevel dimension of the policy action — the multi-actor dimension — the EDMO fact-checkers community is making progress, but some aspects should be strengthened. First, the relationship between public and private is still highly unbalanced in favor of the latter, as institutional action still struggles to become part of the process. Nevertheless, the majority of the initiatives are non-profit, and in many cases are run by independent groups. Second, debunking projects linked to traditional or independent media organizations continue to predominate, though there is a growing number of initiatives involving the civil society and the world of high-tech and applied research. Lastly, progress is also being made in involving a range of different skills, integrating multiple actors and increasing civil society's engagement in the network, but there is room for improvement.

As for fact-checking practices, though it must be acknowledged that although there have been significant steps forward in methodological terms, around one half of the initiatives do not state their working methods. The initiatives that do adopt their own in-house methods or follow those of the worldwide IFCN fact-checkers network, reflecting the debunking community's efforts to achieve accreditation. As regards the initiatives' choice of thematic focus, our survey was conducted in a rather unique period—that of Covid-19—when fact-checking activities concentrated on content dealing with the pandemic and the vaccination campaign, where disinformation reached critical levels. Accordingly, a far lower percentage of fact-checks focused on politics, the area first addressed by the EU's regulatory action, although sev-

eral initiatives have a special section devoted to debunking political statements. There has also been relatively little coverage of scientific and environment topics with a high likelihood of being targeted by fake news.

In conclusion, through the analysis of the EDMO fact-checkers community, this research was able to highlight that since disinformation reaches a systemic complexity that impacts geographical areas and collective subjects with different goals, efforts to counter it must take an equally complex and variegated form. The EDMO network, which brings together public and private, non-profit and for-profit, mainstream media outlets and independents, large projects and small, enables all its members to interact within the same space, exchanging practices and socializing their aims. Media systems are undeniably crucial to the overall strategy for countering disinformation, but initiatives that combine different skills are no less important. It must be acknowledged, however, that efforts to fight disinformation have met with resistance in several quarters. Member States have sometimes balked at transposing EU directives into national law or at participating in the processes, certain professional categories — journalists, for example — have not always been fully cooperative, and online platforms have been reluctant to ensure the transparency needed for fact-checking. But the European Union is moving ahead, and now that the surge in disinformation brought by the Covid-19 pandemic has made the need for decisive action more impelling than ever, has implemented its multilevel strategy thanks in no small measure to its growing network of fact-checkers.

References

- Amazeen Michelle A. (2020). "Journalistic interventions: The structural factors affecting the global emergence of fact-checking". *Journalism*, Vol. 21, Issue 1, 95-111.
- Bounegru Liliana, Gray Jonathan, Venturini Tommaso, Mauri Michele (2018). *A Field Guide to "Fake News" and Other Information Disorders: A Collection of Recipes for Those Who Love to Cook with Digital Methods*. Amsterdam: Public Data Lab.
- Castells Manuel (1996). *The rise of the network society*. Oxford: Blackwell Publishers.
- Castells Manuel (2008), "The New Public Sphere: Global Civil Society, Communication Networks, and Global Governance". In *The ANNALS of the American Academy of Political and Social Science*, Vol. 616, Issue 1: 78-93.
- Chadwick Andrew (2013). *The hybrid media system: politics and power. Oxford studies in digital politics*. Oxford: Oxford University Press.
- Chan Man-Pui Sally, Jones Cristopher R., Jamieson Katleen H. and Albarracín Dolores (2017). "Debunking: A Meta-Analysis of the Psychological Efficacy of Messages Countering Misinformation". *Psychological Science*, Vol. 28, Issue 11, 1531-46.
- Cinelli Matteo, Quattrociocchi Walter, Galeazzi Alessandro, Valensise Carlo Michele, Brugnoli Emanuele, Schmidt Ana Lucia, Zola Paola, Zollo Fabiana and Scala Antonio, (2020). "The COVID-19 social media infodemic". *Sci Rep* 10, 16598.
- Cotter Kelly, DeCook Julia R., Kanthawala Shaheen. (2022). "Fact-Checking the Crisis: COVID-19, Infodemics, and the Platformization of Truth". *Social Media + Society*, Vol. 8, No. 1.
- Egelhofer Jana Laura, Lecheler, Sophie. (2019). "Fake news as a two-dimensional phenomenon: a framework and research agenda". *Annals of the International Communication Association*, Vol. 43, Issue 2, 97-116.
- Fallis Don (2015). "What Is Disinformation?". *Library Trends*, Vol. 63, Issue 3, 401 – 426.
- Farkas Johan, Schou Jannick (2018). "Fake News as a Floating Signifier: Hegemony, Antagonism and the Politics of Falsehood". *Javnost - The Public*, Vol. 25, Issue 3, 298-314.
- Fubini Alice (2018). "Fake news: aperie di un concetto debole". *Comunicazione Politica*, Vol. 3, 433-438.
- Giglietto Fabio, Iannelli Laura, Rossi Luca, Valeriani Augusto (2016). *Fakes, News and the Election: A New Taxonomy for the Study of Misleading Information within the Hybrid Media System (November 30, 2016)*. Giglietto, F., Iannelli, L., Valeriani, A., & Rossi, L. (2019). "'Fake news' is the invention of a liar: How false information circulates within the hybrid news system". *Current Sociology*. DOI: 10.1177/0011392119837536, Convegno AssoComPol 2016 (Urbino, 15-17 Dicembre 2016), Available at SSRN: <https://ssrn.com/abstract=2878774>
- Gillespie Tarleton (2010). "The politics of 'platforms'". *New Media & Society*, Vol. 12, Issue 3, 347-364.
- Graves Lucas (2016). *Deciding What's True: The Fact-Checking Movement in American Journalism*. New York: Columbia University Press.
- Guess Andrew, Nyhan Brendan, Reifler Jason (2018). "Selective Exposure to Misinformation: Evidence from the consumption of fake news during the 2016 U.S. presidential campaign". *European Research Council*, 9(3), 4.
- Habermas Jurgen (2001), "Why Europe Needs a Constitution". *New Left Review*, Vol. 11, 5- 26.

- Hallin Daniel C., Mancini Paolo (2004). *Comparing media systems: Three models of media and politics*. Cambridge: Cambridge University Press.
- Helmond Anne (2015). "The platformization of the web: making web data platform ready". *Social Media + Society*, Vol. 1, No. 2: 1–11.
- Jamieson Kelly H., Cappella, Joseph N. (2010). *Echo Chamber: Rush Limbaugh and the Conservative Media Establishment*. Oxford: Oxford University Press.
- Lee Terry (2019). "The global rise of 'fake news' and the threat to democratic elections in the USA". *Public Administration and Policy: An Asia-Pacific Journal*, Vol. 22, No. 1, 15-24.
- Lewandowsky Stephan, Cook John, Ecker Ullrich, Albarracín Dolores, Amazeen Michelle A., Kendeou Panayiota, Lombardi Doug, Newman Eryn J., Pennycook Gordon, Porter Ethan, Rand David G., Rapp David N., Reifler Jason, Roozenbeek Jon, Schmid Philipp, Seifert Colleen M., Sinatra Gale M., Swire-Thompson Briony, van der Linden Sander, Vraga Emily K., Wood Thomas J., Zaragoza Maria (2020). *The Debunking Handbook 2020*. Available at <https://sks.to/db2020>. DOI:10.17910/b7.1182
- Losito Gianni, (1993). *L'analisi del contenuto nella ricerca sociale*, Milano: Franco Angeli.
- Lovari Alessandro, Belluati Marinella. (2022). *We are all Europeans. EU Institutions facing Covid-19 pandemic and information crises*. London: Palgrave Macmillan (forthcoming)
- Marini, Rolando (2017). "Potere dei media, interdipendenza tra poteri e pluralismo dell'informazione". *Problemi dell'informazione*, Vol. 1, 3-30.
- Marks, Gary (1992). "Structural Policy in the European Community," in Sbragia, Alberta, *European politics: Institutions and Policymaking in the "New" European Community*. Washington: Brookings Institute, 191–225.
- Mayer-Schönberger Viktor, Cukier Kenneth (2013). *Big data: A revolution that will transform how we live, work, and think*. Canada: Houghton Mifflin Harcourt.
- McCombs Maxwell, Shaw Donald L., Weaver David (2014). "New Directions in Agenda-Setting Theory and Research". *Mass Communication and Society*, Vol. 17, 781-802.
- Nelson Jacob L., Taneja Harsh (2018). "The small, disloyal fake news audience: The role of audience availability in fake news consumption". *New Media & Society*, Vol. 20, Issue10, 3720–3737.
- Pariser Eli (2012). *The Filter Bubble: What the Internet Is Hiding from You*. London: Penguin.
- Piattoni Simona, (2010). *The theory of multi-level governance: Conceptual, empirical, and normative challenges*. Oxford: Oxford University Press.
- Quattrociocchi Walter, Vicini Antonella (2016). *Misinformation: guida alla società dell'informazione e della credulità*. Milano: Franco Angeli.
- Robertson Roland. (Ed.) (2014). *European Glocalization in Global Context*. London: Palgrave Macmillan UK.
- Robertson Craig T., Mourão Rachel R., Thorson Esther. (2020). "Who Uses Fact-Checking Sites? The Impact of Demographics, Political Antecedents, and Media Use on Fact-Checking Site Awareness, Attitudes, and Behavior". *The International Journal of Press/Politics*, Vol. 25, Issue 2, 217-237.
- Sunstein Cass R. (2002). "The Law of Group Polarization". *Journal of Political Philosophy*, Vol. 10, No. 2, 175-195.

- Tambuscio Marcella, Ruffo Giancarlo, Flammini Alessandro, Menczer Filippo (2015). "Fact-checking effect on viral hoaxes: A model of misinformation spread in social networks". In: *Proceedings of the 24th International Conference on World Wide Web Companion*. International World Wide Web Conferences Steering Committee, New York, 977–982.
- Trappel Josef and Tomaz Tales (eds.) (2022). *Success and Failure in News Media Performance: Comparative Analysis in The Media for Democracy Monitor 2021*. Göteborg: Nordicom.
- Tsfati Yariv, Boomgaarden, Hajo. G., Strömbäck Jesper, Vliegenthart Rens., Damstra Alyt. Lindgren Elina. (2020). "Causes and consequences of mainstream media dissemination of fake news: literature review and synthesis". *Annals of the International Communication Association*, Vol. 44, Issue. 2, 157-173.
- van Dijck Jose (2014). "Datafication, dataism and dataveillance: Big data between scientific paradigm and ideology". *Surveillance and Society*, Vol. 12, No.2, 197–208.
- van Dijck Jose, Poell Thomas, and de Waal Martijn (2018). *The Platform Society*. New York: Oxford University Press.
- Vargo Chris J., Guo Lei, Amazeen Michelle A. (2017). "The Agenda-setting Power of Fake News: A Big Data Analysis of the Online Media Landscape from 2014 to 2016". *New Media & Society*, Vol. 20, Issue 5.
- Volkmer Ingrid (2014). *The Global Public Sphere. Public Communication in the Age of Reflective Interdependence*. Cambridge: Polity Press.
- Wardle Claire, Derakhshan Hossein (2017). *Information Disorder: Toward an Interdisciplinary Framework for Research and Policy Making*. Strasbourg: Council of Europe.
- Zarocostas John (2020). "How to fight an infodemic". *The Lancet*, Vol. 395, Issue 10225, 676.