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Internet Control and Disinformation Across Regime Types During and After the Covid-19 Crisis

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Abstract

The unprecedented scale of mitigation measures taken by governments during the Covid-19 pandemic raised concerns about if and to what extent democracy would be affected. Empirical accounts show that media freedom was the most vulnerable. This article concentrates on interference in digital media, as attacks on the digital realm during the pandemic were particularly harmful given that media activity moved from print to online all over the world. This large-n study makes various important contributions. Firstly, it uncovers whether regime types differ in their reactions to the Covid-19 pandemic regarding the digital media sector. Secondly, it takes a diachronic approach and examines the period before 2020, during the pandemic in 2020 and 2021, and after the pandemic (2022–2023). This longitudinal exploration enables us to make nuanced statements about the post-Covid-19 developments in digital media. Thirdly, the analyses take into account different degrees of measures: less and more repressive as well as disinformation strategies. The results add value to the debate because they demonstrate that all regime types, including democracies, resorted to control mechanisms during the Covid-19 pandemic. Equally relevant is the behavior of these regimes after the pandemic: While democracies by no means cut back on all measures, autocracies did not strengthen all measures. Most remarkably, full democracies are the only regime type where governments increasingly engaged in disinformation after the pandemic. Thus, an important finding is that the pandemic did not constitute a catalyzing event for all regime types to the same extent. But the most worrisome effects are associated with the democracies.

Keywords

autocracy; Covid-19 pandemic; democracy; digital repression; hybrid regimes; media freedom; social media

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1. Introduction

The Covid-19 pandemic caused exceptionally strong reactions by governments, which were associated with the most severe restrictions worldwide since World War II. The issue of democratic health has gained research interest as a result of the pandemic's global situation. The massive mitigation measures introduced by governments, including the declaration of states of emergency (see Hale et al., 2020 for details), soon generated concern among democracy scholars that the short-term—and possibly medium-term—consequence of these measures could be a deterioration of democratic quality and standards. Even if "the worst fears about Covid-19's contaminating effects on democracy have not materialized" (Kolvani et al., 2021, p. 5), what the long-term impact would be remains an open question.

This question has drawn particular attention to restrictions in the media landscape and on freedom of expression, with several studies agreeing that the most severe violations of democratic standards occurred in the media sector. With such violations observed in over 60% of the countries under study, this was by far the most affected area according to the Pandemic Backsliding Project (PanDem; Edgell et al., 2022). Freedom House counted 91 countries (47% of all countries) that suffered new or increased measures of restrictions on media freedom in the context of the pandemic (Repucci & Slipowitz, 2020). This spotlights the media as the most vulnerable sector during the pandemic, resulting in shrinking civic spaces (Bethke & Wolff, 2020; Edgell et al., 2021; Lewkowicz et al., 2022).

In fact, the temporal distance between the years 2020–2021, which represented the peak of the pandemic and the mitigation measures, lends them to a systematic investigation that has so far been lacking. Current assessments suggest that the pandemic did not lead to further autocratization in 2020 and had a limited effect on the general downward trend of democracy globally in 2021 (Alizada et al., 2021; Boese et al., 2022; Hellmeier et al., 2021). However, several studies also point to the fact that the pandemic intensified already existing democratic deficits or already existing struggles between democratic and anti-democratic forces (Kneuer & Wurster, 2023; Youngs & Panchulidze, 2020). Therefore, it is important to study the long-term effects on democratic quality, especially in those aspects where governments massively interfere, such as media freedom. Concerns about the long-term effects are not limited to institutions (Kneuer, 2023; Kneuer & Wurster, 2023). How governments managed communication and information during the Covid-19 pandemic influenced the openness, rationality, and quality of public debate. Many governments used the pandemic as a pretext to limit the public sphere. Another detrimental effect of the pandemic refers to attacks on accurate and fact-based information—essential in democratic public spheres—in the form of deliberate disinformation by governments. In situations of post-truth and increased polarization, the pandemic intensified an epistemic crisis with fundamental uncertainty in access to accurate information and confusion over trustworthiness (Chambers, 2021; Dahlgren, 2018; Kneuer, 2023). Hence, even if visible symptoms such as the postponement of elections or other deteriorations in institutional interactions have diminished, less visibly problematic developments, such as the narrowing of the media landscape and the civic space as well as established practices of disinformation, may have persisted. This underscores the need for specifically targeting the post-Covid-19 impact on media freedom and control.

The immediate interest here is on how the massive violations of media freedom developed after 2020/2021, and whether the reins placed on the public space were loosened or even tightened in the aftermath of these acute pandemic years. This article concentrates on interference in digital communication media—also called digital repression—and is guided by two theoretical questions.

Firstly, we want to uncover the extent to which there is a variance in the approach of regime types to media freedom, i.e., whether regime types differ in their reactions to the Covid-19 pandemic regarding the digital media sector. To be able to make a statement on this, we take a diachronic approach and examine the periods before 2020, during the pandemic in 2020 and 2021, and after the pandemic (2022–2023). We claim that it is important to examine not only democracies and autocracies but also the so-called intermediate or hybrid regimes.

Secondly, we examine the thesis of convergence between autocracies and democracies, which has emerged in recent research on the internet. While internet control has long been perceived as an exclusive domain of autocratic regimes (Boas, 2006; Deibert & Rohozinski, 2010; Greitens, 2013; Rød & Weidmann, 2015), the research focus has shifted to liberal democratic states. Empirical evidence shows that digital repression has increased over time for all regime types, not only autocracies (Frantz et al., 2020, p. 8). Moreover, convergence theory (Busch, 2017; Wright & Breindl, 2013) assumes that democracies might "normalize" their regulatory attitudes towards digital communication and even be oriented towards autocratic regimes, a notion that has been referred to as "learning from autocracies" (Busch et al., 2018). The pandemic may have opened a window of opportunity for democracies to more strongly exercise internet control. A third empirically driven question focuses on disinformation and its development during and after the pandemic: Are there empirical proofs of an increase in disinformation triggered by the Covid-19 pandemic beyond anecdotal evidence?

Based on various quantitative analyses, we provide a large-n descriptive account of a broad range of internet control variables that show the linear relationships between different regime types (democracy, autocracy, and hybrid regimes) and the degrees of internet control. Moreover, we distinguish less repressive measures, such as internet content regulation, government requests for Twitter removals, and government censorship efforts, from more repressive measures, such as censorship and social media shutdowns. This gives us a more fine-grained picture of which regime type resorts to which kind and degree of measure. For these analyses, we have relied on different datasets on internet control, including Freedom on the Net (FOTN), Varieties of Democracy (V-Dem), Twitter Transparency Reports Data, and the PanDem. Our period of investigation covers the time period from 2006 until 2023, that is, before, during, and after the acute phase of the Covid-19 pandemic (2020/2021).

The results of our study demonstrate that all regime types, including democracies, resorted to control mechanisms during the Covid-19 pandemic. Regarding the behavior of different regime types after the pandemic, our findings are rather counter-intuitive: While democracies by no means cut back on all measures, autocracies did not strengthen all measures either. The result regarding disinformation is also quite unexpected, as full democracies are the only regime type where governments increasingly engaged in disinformation after the pandemic.

These findings are important contributions to several research debates, including the ongoing one on Covid-19-related implications on democratic processes and the debate on digital repression about when and how governments engage in limiting digital communication. Finally, our study also relates to the more general and growing research that advances knowledge on regime types as an explanatory factor for policy decisions and implementation.

The remainder of this article is structured as follows. After elaborating on the theoretical background (Section 2), we present our research design (Section 3), and then our analyses (Section 4). The last section

(Section 5) discusses the results and concludes by highlighting the contribution of this article to the ongoing debates previously mentioned and suggesting further research avenues.

2. Digital Repression During the Covid-19 Pandemic: Theoretical Background

In the wake of the Covid-19 pandemic, governments around the world took mitigating measures against the spread of the virus, most of which represented far-reaching interventions in public life (see Hale et al., 2020). This menu of restrictions was practically in effect globally and reached a high degree of diffusion within the international community. Given the unprecedented scale of mitigation measures taken by governments, the restrictions on democratic rights were prone to raise concerns among scholars and pundits regarding if and to what extent democracy would also be quarantined, placed in lockdown, or infected by authoritarian measures and practices. Three main scenarios have been highlighted by scholars: the pandemic as an opportunity for autocrats to intensify repression and control; the pandemic as an opportunity for illiberal incumbents to accelerate and intensify democratic erosion processes that were already underway; and the decline in democratic quality and the rise in executive and majoritarian domination even in democracies where governments had no intention to exploit the pandemic for non-democratic purposes (Bolleyer & Salát, 2021; Edgell et al., 2021; Kneuer & Wurster, 2023).

One early and systematic account, namely the PanDem (Edgell et al., 2021; PanDem, n.d.), followed the evolution of democratic violations during the pandemic years. This project shows that most countries have engaged in at least some violations of democratic standards since the beginning of the pandemic. While, unsurprisingly, the authors found that such violations were more common in autocracies, democracies were far from immune (Edgell et al., 2021, p. 9). One important finding of the PanDem project was that media freedom was the most vulnerable, with most infringements (over 60%) taking place in this domain. This resonates with studies by Freedom House, which counted 91 countries (47%) that suffered new or increased measures of restrictions on media freedom in the context of the pandemic (Repucci & Slipowitz, 2020), and the World Press Freedom Index 2020 ranking (Reporters Without Borders, 2020). After analyzing three worldwide monitoring platforms, a study found that most threats to the media during the pandemic were specifically aimed at the digital media (Papadopoulou & Maniou, 2021, p. 1361). This finding bears great importance because, during the pandemic, journalism moved online all over the world, so attacks on the digital realm were particularly harmful. Interestingly, the authors note that, besides autocracies, even long-standing Western democracies deployed restrictions on digital media (Papadopoulou & Maniou, 2021, p. 1361).

While there is a wide array of case studies and country reports on the topic of media and digital repression during the pandemic, a systematic account of the development of media repression after the acute pandemic years (2020/2021) is lacking. Such a systematic account is important to assess whether there have been further encroachments on (digital) media freedom and the extent of these encroachments. Furthermore, a systematic analysis of how restrictions on (digital) media play out in the different regimes (democracies, autocracies, and intermediate regimes) is needed. There is abundant research on digital repression in autocracies (see Gunitsky, 2015; Guriev & Treisman, 2019; Hellmeier, 2016; for an overview see Keremoğlu & Weidmann, 2020) that provides information about a repertoire of strategies, tools, and practices of interference in digital communication as well as about its growing sophistication. However, many of these studies mostly focus on one repressive measure, e.g., either censorship or shutdown.

Kawerau et al. (2022) rightly point out that studies on digital repression by autocracies need to cover a greater variety of repressive instruments since autocratic governments rely on a repertoire of techniques to control the internet, which they use selectively and depend on the level of contention at home. Therefore, it is pertinent for empirical reasons to rely on different measures with different degrees of repression. For example, if only strongly repressive measures are considered, such as complete internet shutdowns, then liberal democracies are less likely to apply them. However, this picture can change if less repressive measures are included in the research design.

While internet control has long been perceived as an exclusive domain of autocratic regimes (Boas, 2006; Deibert & Rohozinski, 2010; Greitens, 2013; Rød & Weidmann, 2015), more recent literature has highlighted two different developments that might indicate a convergence. One development refers to autocracies that resort less frequently to overt violent repression "because they can better anticipate and prevent potential dissent" (Keremoğlu & Weidmann, 2020, p. 1699), which is the biggest fear of autocrats. The other development observed is that democracies have stepped up their regulatory efforts regarding the digital space (see, for example, the German Network Enforcement Act, which has been replicated in several countries). Beyond legal regulation, scholars have also noted a growing trend of convergence "in how democratic and autocratic governments are using surveillance and disinformation to shape political life" (Gunitsky, 2020). This convergence thesis assumes that democracies might "normalize" regulatory attitudes towards digital communication and even be oriented towards autocratic regimes, a notion that has been referred to as "learning from autocracies" (Busch, 2017; Busch et al., 2018; Wright & Breindl, 2013). Gunitsky (2020) cautions that immense incentives for disinformation are being introduced into democratic institutions. Even if this trend of convergence does not make democracies and autocracies indistinguishable, it calls for analyses that take both types of regimes into account and thus produce a more realistic picture of digital control and disinformation practices.

On this theoretical basis, we formulate the following expectations: Firstly, we assume that both democracies and autocracies intensified internet control activities during the pandemic but relied on different measures. We expect democracies and hybrid regimes to step up their activities, especially regarding less repressive measures, such as online content regulation, but autocracies to deploy a wide variety of measures, including more repressive ones, such as censorship and shutdowns. For democracies, and ultimately also hybrid regimes, interference in the (digital) media means a precarious balancing act (Vick, 2001), which is why they might be more reluctant to adopt restrictive measures.

Secondly, we expect democracies to engage less in disinformation but hybrid and autocratic regimes to resort more to this practice. On the one hand, it can be assumed that democratic governments are interested in the dissemination of accurate information per se. On the other hand, democratic governments operate in an open communicative space where the domestic audience (opposition parties, interest groups, media, and civil society) monitors decision-making but also the dissemination of accurate information.

3. Research Design and Strategy

The central research interest of this study is guided by a regime-sensitive approach to the impact of the Covid-19 pandemic on the media landscape, particularly the digital media. Our descriptive account follows a longitudinal perspective and traces if and to what degree different regime types adopted different measures

during the Covid-19 pandemic that influenced digital media freedom, and if this influence persisted beyond the pandemic.

3.1. The Independent Variable

The independent variable is the type of political regime. Different concepts exist on how to classify political regimes. The most common ones are the dichotomous approach distinguishing democracy and autocracy, on the one hand, and the understanding of regimes reflected as a continuum, on the other. The latter approach implies the differentiation of both root concepts and their diminished subtypes (Collier & Levitsky, 1997). This is a meaningful way to capture the intermediate subregime types (often labeled as a grey zone), that is those cases that are neither fully consolidated democracies nor autocracies (Mainwaring et al., 2001). Different proposals for such classifications have been developed (Levitsky & Way, 2010; Lührmann et al., 2018; Merkel, 2004; Schedler, 2006). Moreover, several scholars have conceptualized a third regime type, namely a hybrid regime, as a regime type representing properties of democracies and autocracies alike (Bogaards, 2009; Diamond, 2002; Karl, 1995; Morlino, 2009).

Studies that undertake regime-sensitive explorations refer mainly to classifications that enable differentiated perspectives, taking into account not only democracy and autocracy but other regime (sub)types. Thus, it is pertinent to use a democracy index that offers such differentiation of regime types. We follow this approach and base our analysis on the Democracy Index produced by the Economist Intelligence Unit (EIU), which distinguishes between full and flawed democracies, hybrid regimes, and authoritarian regimes (EIU, 2008, p. 64). The hybrid regime category captures the grey zone of intermediate regimes between democracy and autocracy.

Democracy is a highly contentious concept, mostly reflected in the tension between thin and thick approaches. The thin approach relates to Dahl's (1971) referential understanding of democracy, e.g., as conceptualized in the Electoral Democracy Index by V-Dem. Other indices are based on thicker approaches that include the protection of liberties and the rule of law and assess constraints on the executive and legislative powers (see Bertelsmann Transformation Index, Liberal Democracy Index by V-Dem, and EIU). Only very few concepts of democracy and democracy measurement refer to maximalist concepts that include output aspects such as economic or social rights (Campbell, 2019). By using the Democracy Index of the EIU for our analysis, we adopt a mid-range understanding of democracy that goes beyond the minimum of electoral aspects by including the liberal component of democracy.

3.2. Dependent Variable

The dependent variable of our study is the kind and degree of government interference in the digital landscape and digital freedom. Unlike other studies, we cover a wide array of instruments to get a more nuanced picture of the deployment of different measures of digital repression. Even if all measures are not compliant with the rules of media freedom, there are nuances in the *degrees* and *strength* of their interventions that we want to uncover. Therefore, we distinguish between less repressive measures, such as content regulation, content removal requests, and censorship efforts, and more repressive measures, such as censorship in practice and shutdowns.

3.3. Data and Method

For our analyses, we use different datasets that give us a broad perspective of measures taken by governments to interfere in internet and social media activities. We use the Democracy Index of the EIU to classify regime types (EIU, 2007, 2008, 2010, 2011, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024). The EIU's Democracy Index is composed of five core dimensions and sixty subcomponents combined in a single index. The five core dimensions are electoral process and pluralism, civil liberties, functioning of the government, political participation, and political culture (EIU, 2008, p. 63). The index provides data on a biannual basis for 167 sovereign and semi-sovereign countries since 2006. Based on it, we obtain a fine-grained picture of two different democracy types (full and flawed) and capture the intermediate and authoritarian regimes.

Obtaining data on how governments restrict internet and social media usage is challenging. Earlier data collected by the Freedom House is the FOTN Index (Freedom House, 2024a, 2024b). However, the FOTN only covers 70 countries. Therefore, we mainly draw on indicators retrieved from the V-Dem dataset, which provides a global perspective (Coppedge et al., 2024a, 2024b). We use the indicators internet legal content regulation, internet censorship effort, government social media censorship in practice, and government social media shutdown in practice.

To capture disinformation, we also refer to V-Dem data, namely the two indicators of government dissemination of false information domestically and abroad. V-Dem scales for these indicators range from 0 (worst) to 4 (best). We complement these disinformation indicators with data from the PanDem, which is coordinated by the V-Dem team (Edgell et al., 2020, 2021, 2022). PanDem includes data from March 2020 to June 2021 on violations of democratic standards. One category assesses official disinformation campaigns and another refers to restrictions on media freedom. The first measures government disinformation while the latter comprises five different indicators (see Appendix for details). The PanDem dataset is useful because it captures government measures specifically implemented in the context of the pandemic. This means that the period of data collection is quite limited, spanning until mid-2021. Therefore, this data can only be complementary for our purpose, because our interest lies in a longitudinal comparison that includes both the levels of interventions before the Covid-19 pandemic and the further developments after the pandemic.

Finally, we run robustness checks, replacing the EIU regime measurement by an alternative index with a thin democracy concept, namely the V-Dem EDI (see above; Coppedge et al., 2024a). We find the correlation consistently confirmed in its trend, although in all regressions the significance is higher for the EDI data (see Appendix).

In our analysis, we a) provide descriptive accounts of developments over time, as well as b) linear correlations of the regime type—full democracy, flawed democracy, hybrid regime and autocracy—and the different indicators over time, that is before the Covid-19 pandemic, during the pandemic years of 2020 and 2021, and during the post-Covid-19 years of 2022–2023 (all regressions and tables are included in the Appendix).

4. The Pandemic: A Trigger for Greater Digital Repression?

As a first step, we provide descriptive accounts of how the different regime types evolve in relation to the indicators. Figure 1 shows that none of the regime types reacted strongly to the pandemic regarding the internet and social media control and that only autocracies intensified control in the aftermath of the pandemic. However, these findings, have to be taken with caution, as the FOTN only covers 70 countries.

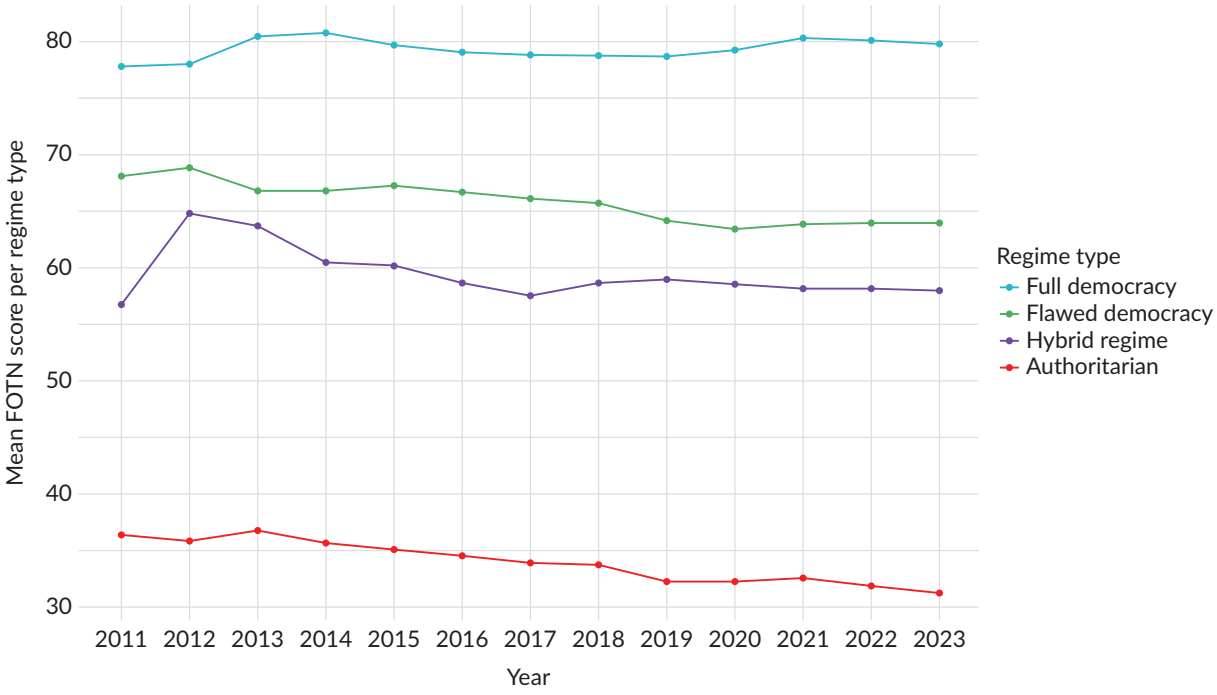

Figure 1. Mean FOTN scores per regime type over time.

4.1. The Less Repressive Measures

We now turn to the different indicators based on the broader country sample offered by V-Dem, starting with the less repressive measure of content regulation (Figure 2). Remarkably, the strongest increase in content regulation during the pandemic occurred in full democracies, while autocracies showed no such trend. Hybrid regimes showed a slight increase. After the pandemic, democracies regained (full democracies) or maintained (flawed democracies) their pre-Covid levels, while hybrid regimes and, more strongly, autocracies further intensified content regulation.

Regarding internet censorship efforts, Figure 3 offers a completely different picture, as all regime types stepped up their efforts, with democracies showing the strongest dip in the first pandemic year and autocracies responding with a delay.

Figure 4 complements these findings. Although there has been a sharp increase in removal requests to Twitter by democratic governments since 2018, this skyrocketing trend was reinforced during the pandemic years. While there was a generally smoother increase in removal requests by autocracies, the pandemic year 2020 witnessed an intensification of such requests (X Transparency Center, 2024).

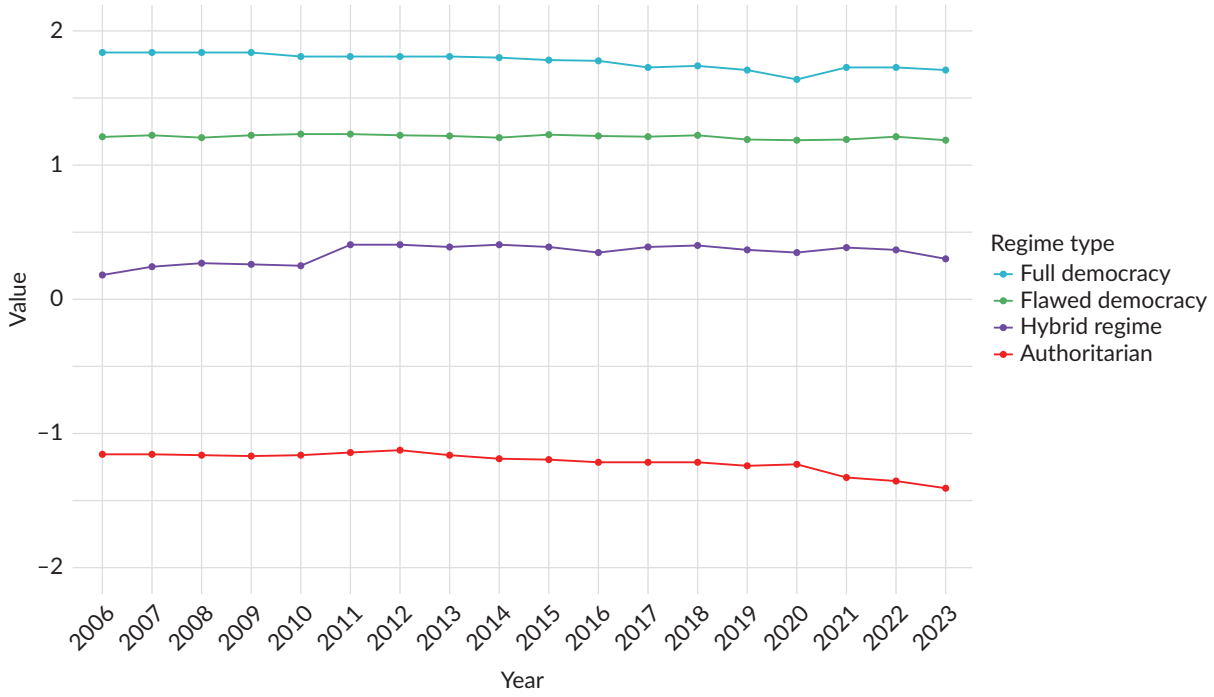

Figure 2. Evolution of mean values of V-Dem internet legal content (v2smregcon) per regime type for the period 2006–2023 according to the EIU democracy status. Note: See also Figure 6.1 in the Supplementary File.

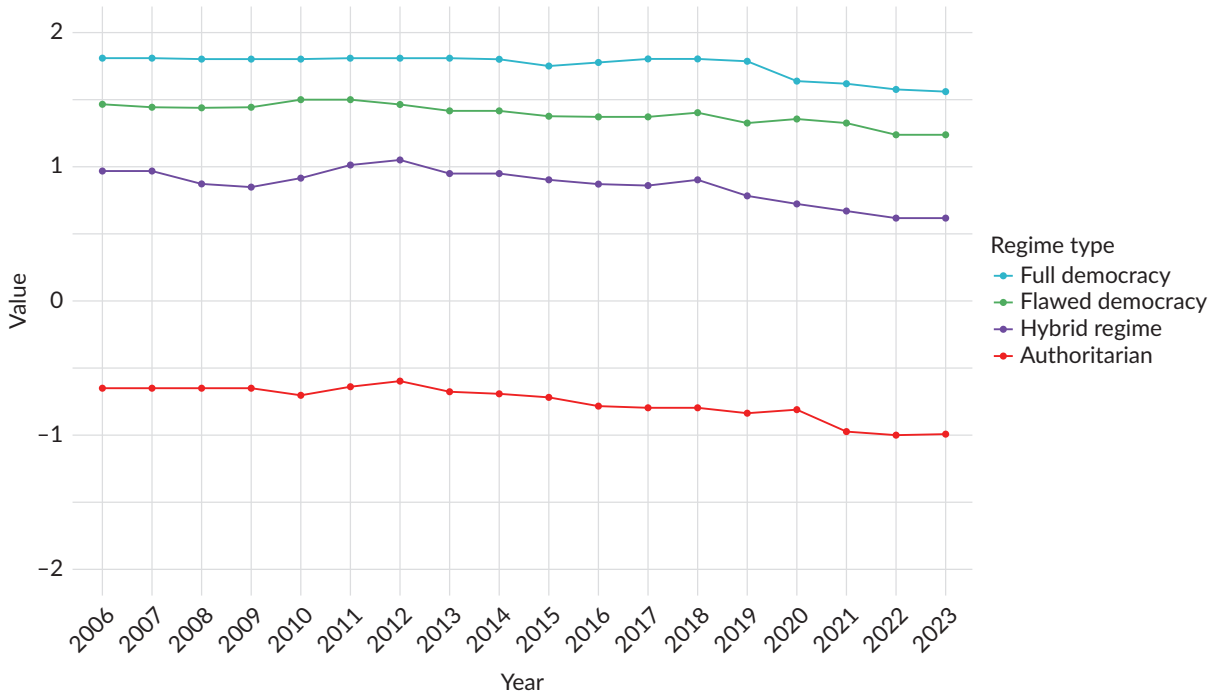

Figure 3. Evolution of mean values of V-Dem internet censorship effort (v2mecenefi) per regime type for the period 2006–2023 according to the EIU democracy status. Note: See Figure 6.2 in the Supplementary File.

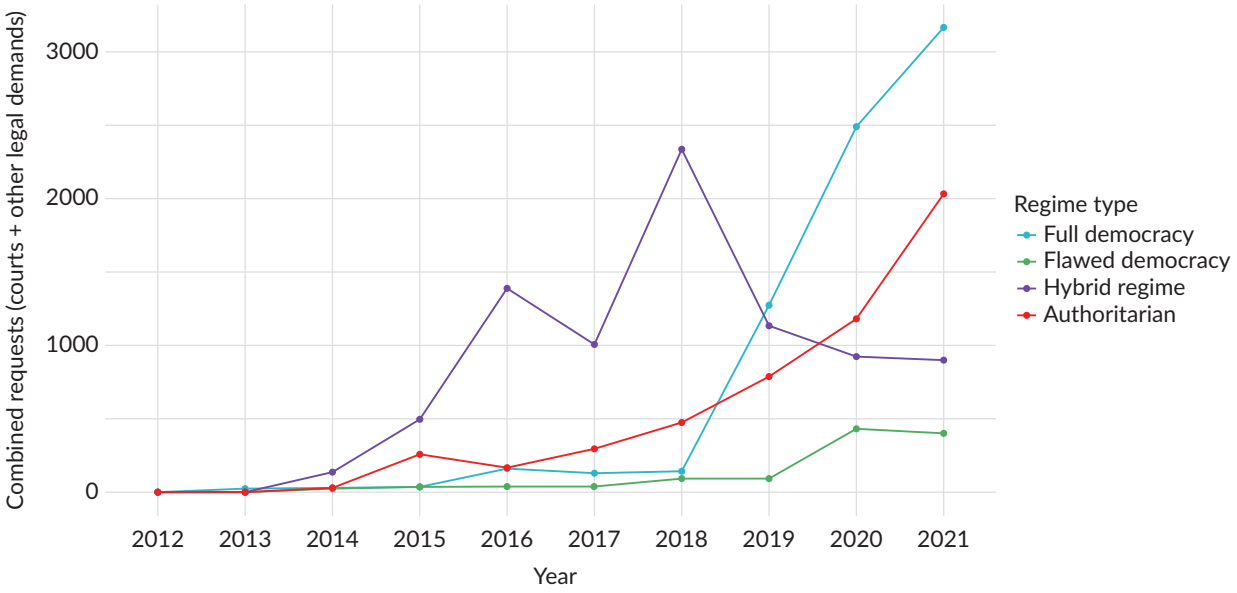

Figure 4. Evolution of Twitter removal requests per regime type for the years 2012–2021. Note: See also Figure 8 in the Supplementary File.

4.2. The More Repressive Measures

Turning to the more repressive measures, we trace how censorship efforts have been implemented (Figure 5). The remarkably evident censorship efforts of full democracies during the pandemic, only translated to "real" censorship practices in the aftermath of the pandemic. Flawed democracies showed a

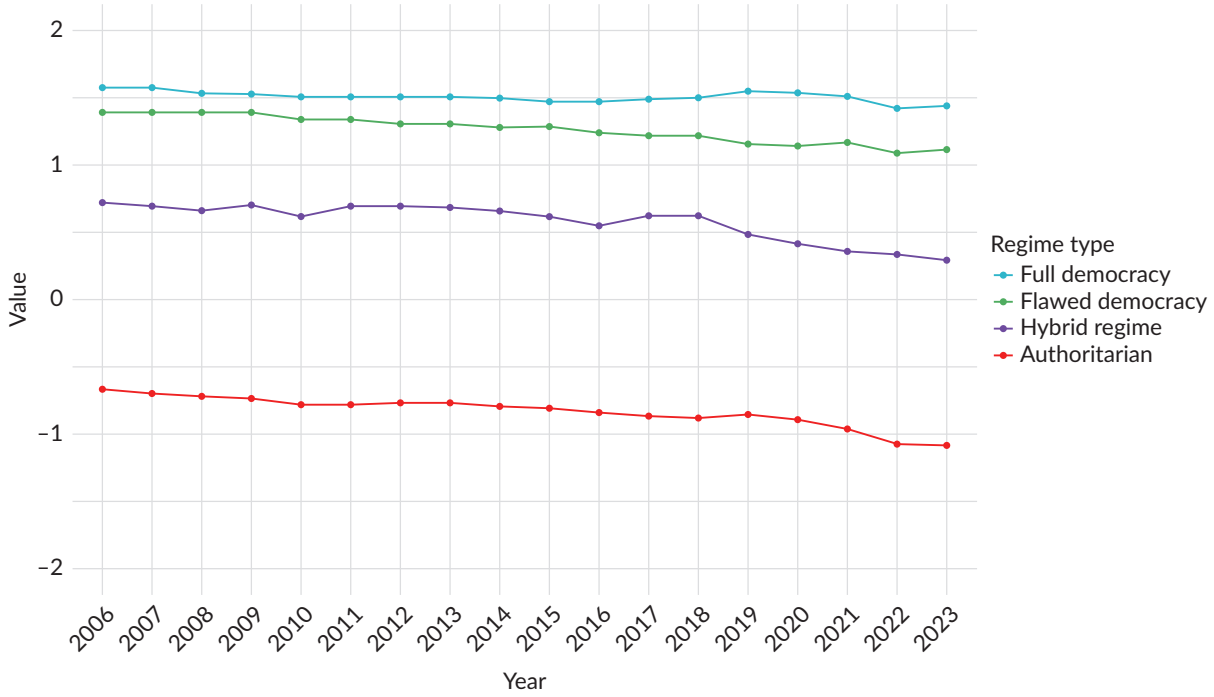

Figure 5. Evolution of mean values of V-Dem government social media censorship (v2smgovsmcenprc) per regime type for the years 2006–2023 according to the EIU democracy status. Note: See Figure 6.3 in the Supplementary File.

similar trend during the post-pandemic years. However, for both democratic regime groups, these were slight increases in censorship efforts, while for autocracies the efforts had been accompanied since 2020 by the incremental implementation of censorship measures. This also applies to hybrid regimes, although an increased implementation of censorship already started in 2019, continuing during and after the pandemic.

Regarding social media shutdowns, Figure 6 shows a wider gap between democracies (full and flawed) and autocracies on the one hand, and hybrid regimes and autocracies on the other. This confirms the results of studies that found autocracies more repressive than democracies (see, e.g., Frantz et al., 2020). Shutdowns were the preferred means of internet control by autocracies during the Covid-19 pandemic, but other regime types did not adopt this measure. Figure 6 confirms that autocracies stepped up social media restrictions during the pandemic. Unlike we saw for the less repressive measures, hybrid regimes did not employ more repressive measures. While flawed democracies did not use social media shutdowns during the pandemic, they increased them after 2021. Interestingly, full democracies also shut down social media during the pandemic but reversed this in 2023. Thus, besides autocracies, the group that is potentially susceptible to social media shutdowns appears to be flawed democracies.

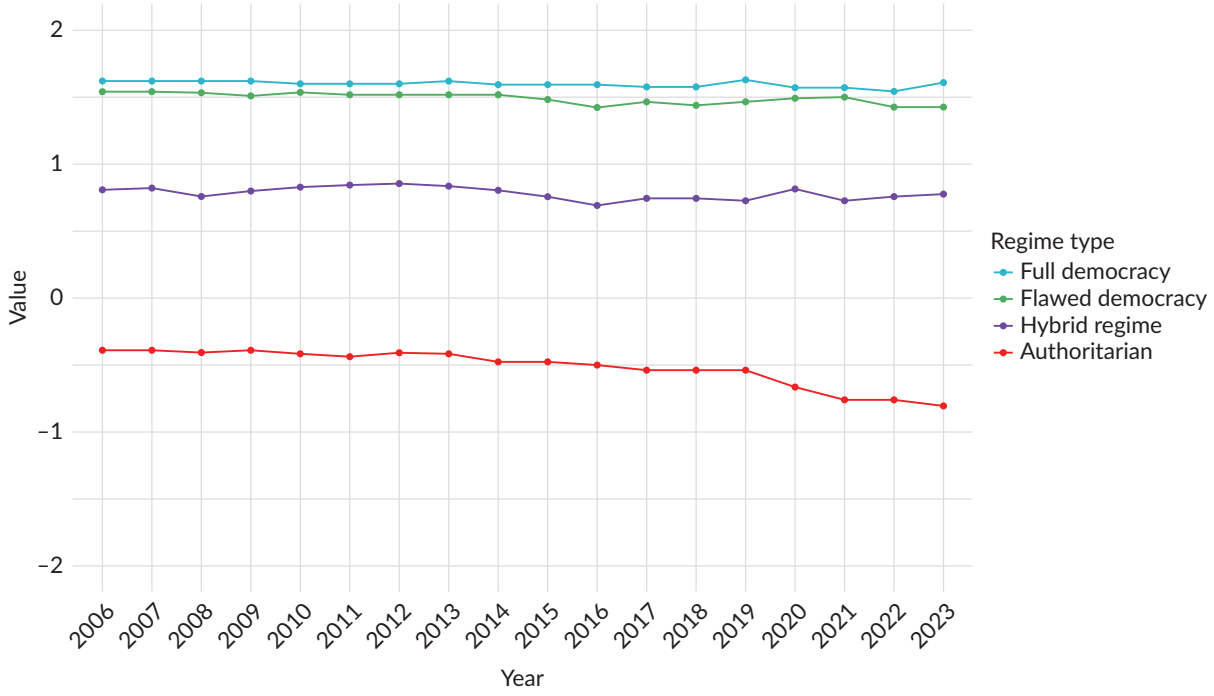

Figure 6. Evolution of mean values of V-Dem government social media shutdown (v2smgovsm) per regime type in the years 2006–2023 according to the EIU democracy status. Note: See Figure 6.5 in the Supplementary File.

4.3. Disseminating Disinformation

It is widely known that the Covid-19 pandemic generated a particular form of conspiracy narrative in societies, which in several cases developed into state-skeptical and illiberal forms or even degenerated into violent protests. What is of interest here, however, are strategies of disinformation deliberately employed by governments during the pandemic. The V-Dem indicators provide information about how often

"government and its agents use social media to disseminate misleading viewpoints or false information to influence its own population" and "citizens of other countries" (Coppedge et al., 2024b, 331). The different responses include *extremely often* (0 and lower values), *often* (1), *half the time* (2), *rarely* (3), and *never* (4).

Figure 7 depicts a dire situation for all regime types, with even full democracies shown to operate at a level where practically half of the time there was deliberate dissemination of false information. A look at the pre-pandemic period indicates that flawed democracies experienced a steady increase in disinformation from their governments in the 2010s. Interestingly, this trend did not continue during the pandemic; in fact, there has been a remarkable reversal since 2021, i.e., a clear decrease in disinformation. Against this backdrop, the developments in the full democracies are particularly striking: While there was consistently little disinformation from governments before the pandemic, there has been an increase in government disinformation since the pandemic. Thus, regarding government disinformation, full and flawed democracies behave differently, even going in opposite directions.

Regarding the hybrid regimes, the curve starts at a level of frequent dissemination of false information and gradually deteriorates. However, 2021 represents a slowdown rather than a worsening. No further deterioration is seen after the pandemic. This is very similar to the autocracies, which show a sharp increase in disinformation from 2020 to 2021, but then the rate of disinformation reduced slightly in the following years. Overall, the figures over time clearly confirm that autocracies are disinformation machines and that the pandemic represents a low point in the development of authoritarian disinformation since 2006.

We also analyzed disinformation abroad (see Figure 6.7 in the Supplementary File) and found that governments are less involved in this for all regime types, which indicates that they consider their domestic audience a more

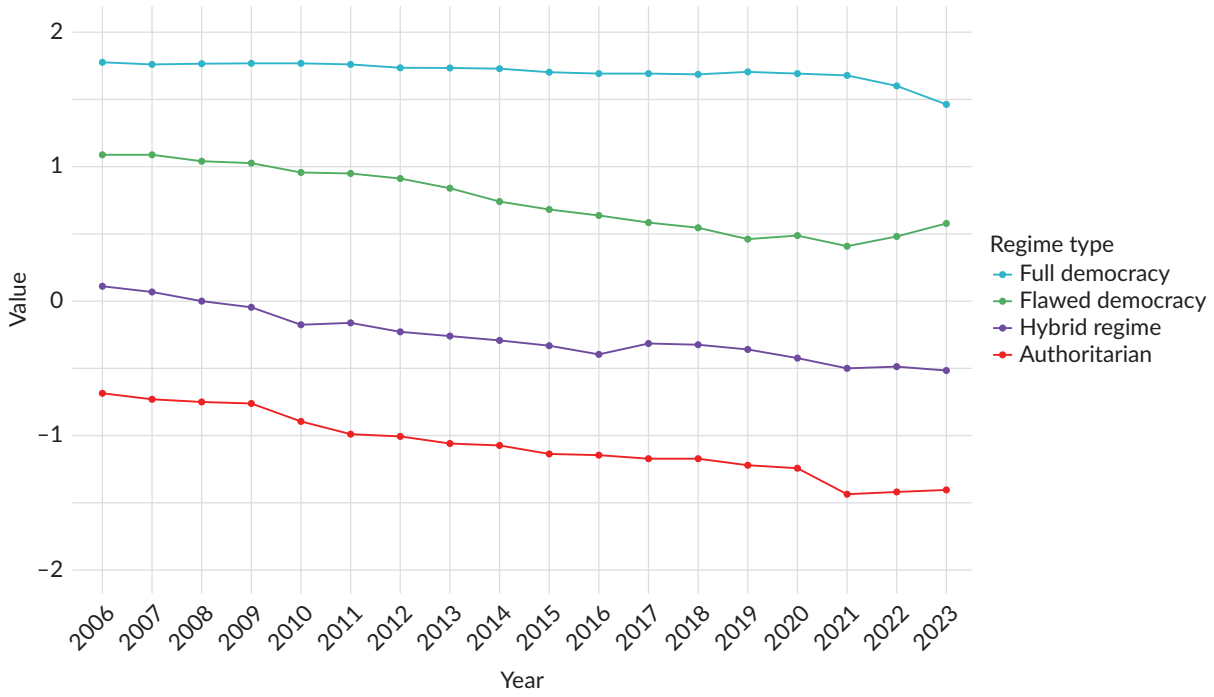

Figure 7. Evolution of mean values of V-Dem government dissemination of false information domestic (v2smgovdom) per regime type for the years 2006–2023 according to the EIU democracy status. Note: See Figure 6.6 in the Supplementary File.

important target group. Full democracies even reduced cross-border disinformation during the pandemic years. For flawed democracies and hybrid regimes, no strong effect of the pandemic is observed. This is very different for autocracies, which experienced a sharp increase in cross-border disinformation during the pandemic years (from 2020 to 2021), a trend that has persisted since 2021.

The PanDem data gives us a closer look at the acute phase of the pandemic (March 2020 to June 2021). Our analyses show a strong correlation between democratic quality with media restrictions in general (see Supplementary File, appendix C, 12.3). However, as far as official disinformation is concerned, we observe only a weak correlation (see Supplementary File, appendix C, 12.2 and 12.4). The PanDem data also provides information on restrictions on media coverage of Covid-19 imposed by governments, as well as on measures taken by governments to contain the virus. Our results show a strongly significant correlation between regime type and interference in media coverage of pandemic-related news, while the correlation with media coverage that does not concern Covid-19-related news is only slightly significant (see Supplementary File, appendix C). While this data relates to the media in general, it stands to reason that this may apply specifically to social media.

These findings prove that governments have paid particular attention to the coverage of the pandemic and mitigation measures. While this applies equally to all regimes, the difference in measures used may lie in the fact that while democratic governments may be more concerned with preventing disinformation, autocracies are often preoccupied with suppressing accurate information. It should be recalled, however, that our study only looks at the disinformation practices of governments, not how governments counter disinformation from Covid-19 deniers. This is a topic that might be covered in other studies.

5. Discussion and Conclusions

The points of departure for our analyses are twofold: (a) whether different regime types vary in their reactions to the Covid-19 pandemic with regards to online media and how these reactions evolved after the pandemic; and (b) how different regime types vary regarding disinformation dissemination during and after the pandemic.

Our first expectation regarding democracies during the pandemic is confirmed, especially from 2019 to 2020. Insofar as for all measures we defined as less repressive, democracies showed a clear increase. Interestingly, this development cannot be proved for hybrid regimes. Although autocracies stepped up the less repressive measures, there was some decline in the use of such measures from 2020 to 2021. The fact that democracies intervened more strongly during the pandemic, especially in the regulation of online content, as abundantly underscored by the Twitter removal requests, can also be attributed to the intention to respond to disinformation and conspiracy narratives against mitigation measures, such as wearing of masks, vaccination, etc. It is noteworthy that flawed democracies intervened the least in internet and social media freedom.

Concerning the more repressive moves, democracies did not fully behave as we assumed: While, during the pandemic, there was no censorship of online media, there was a tendency to resort to social media shutdowns, surprisingly by full democracies more than flawed ones. An equally remarkable result is that hybrid regimes increased censorship but not shutdowns, while autocracies stepped up shutdowns but not censorship. Democracies reacted more repressively during the pandemic than expected, but this is not

entirely the case for hybrid regimes. Autocracies increased both the less and more repressive measures, with shutdowns being their most preferred strategy. If one assumes that autocracies already enforce a high level of digital repression, then it stands to reason that the use of drastic measures would greatly increase during a crisis.

Our expectations regarding the repressive measures and their evolution after the pandemic are not fully and consistently met. Full democracies did cut back on legal content regulation and social media shutdown but did not on the other measures. Flawed democracies did not return to their pre-Covid levels of repression, especially regarding social media shutdown. Hybrid regimes, which did not resort to social media shutdowns in the same way as the democracies, continued to use censorship. Also, unlike what we expected, autocracies did not intensify all repressive measures: They strengthened the more repressive tools but not the less repressive ones. One interpretation for this could be that autocracies introduced more repressive measures, such as shutdowns, because the pandemic established a context to deviate from the "softer" measures they had taken in previous years. Apparently, censorship and shutdowns turned out to be functional for autocratic governments during the pandemic so they kept on using them.

Unsurprisingly, autocracies strengthened their disinformation practices during the pandemic more than the other regime types. Remarkably, this trend was only slight in hybrid regimes, whereas democracies did not deploy disinformation during the pandemic. It is striking that the only regime type that resorted to disinformation during the post-Covid period was full democracies. This result confirms Gunitsky's (2020) warning that democracies should not be underestimated in their potential to influence the digital public sphere. A comparative view of the regime types further highlights the dramatic nature of this finding, because not even autocracies took this route. This might be because autocratic governments rely on other and more repressive means and directly censor or shut down social media.

It is most worrisome that for democratic governments, the pandemic apparently constituted a catalyzing event for information manipulation, an evolution that needs to be observed and further analyzed. To do this, we first need to consider that the erosion of democratic institutions, processes, and norms goes hand in hand with the curtailing of media activities and the spreading of disinformation (Bennett & Kneuer, 2024; Bennett & Livingston, 2018). Take the USA under Trump, for instance, where government engagement in disinformation reached its highest point since 2000 in 2020/2021 (with a value of 0,37; 0 indicating that the government *extremely often* disseminates false information on all key political issues). Similar situations were observed in Brazil under Bolsonaro and in India under Modi. These cases, which show a specific trajectory of erosion of democratic ideals, might require a separate examination.

Secondly, controlled comparisons with small-n samples (Slater & Ziblatt, 2013) may be carried out to trace processes within democracies more profoundly. Thirdly, in such an investigation, government disinformation could then be highlighted more precisely, both conceptually and practically. Under what conditions does a democratic government resort to disinformation? How does the domestic audience counter such efforts? How much do governments succeed with disinformation? As there is an emerging research debate on disinformation, it would be useful to link these aspects.

The results on cross-border disinformation are also quite informative. That democracies did not use this measure during the pandemic suggests that they were keen to foster cooperation, which includes adopting a

policy of transparency and correct information when dealing with partners and the international community. Obviously, the domestic–international nexus for disinformation is stronger in authoritarian regimes that are keen to influence the international audience, e.g., by building a better image from their crisis performance, by covering up possible unsuccessful crisis responses, or by casting them in a different light, etc. This kind of image management seems more important for authoritarian than for other regimes.

Our study makes important contributions to the available literature. Theoretically, our findings speak to the convergence theory and corroborate its assumption that democracies are becoming similar to autocracies in their practices. While this could be attributed to the special conditions during the pandemic, the fact that full democracies did not cut back all the restrictive measures after the pandemic needs further examination. This particularly applies to the most striking finding, namely the strengthening of disinformation by full democracies after the pandemic.

Furthermore, our study relates to the research on digital media restrictions, a topic that is likely to remain relevant. We have provided insights into the behavior of governments during crises with regard to the maintenance of an open public space and free exchange of information. Although the Covid-19 pandemic was an unprecedented crisis, it can nevertheless be used to draw conclusions about other crises. The question, particularly for democracies, is whether they would ensure that communication spaces do not shrink even in crises. Since there have been other crises since the Covid-19 pandemic (e.g., the Russian invasion of Ukraine or the energy crisis), our results can provide a useful reference for the exploration of these situations.

Our study emphasizes the relevance of cross-regime type analysis of internet control measures. This way, full democracies could be identified as capable of media restrictions and even repression as well as disinformation. At the same time, flawed democracies and hybrid regimes can be taken as cases that do not follow the logic of digital repression per se. Thus, these regime types appear less vulnerable to restricting digital communication in crises than expected. This differentiated perspective on how different regime types react in crises by restricting the digital media sphere provides important information for policymakers, practitioners, and policy programs targeting media support.

Methodologically, our study innovates in several aspects: It achieves a greater breadth by adopting a longitudinal perspective, by differentiating between regime types, and by differentiating between different measures of internet control. This way, we can determine very precisely which regime type resorts to which measures in which period. This approach allows for much more nuanced statements about the nature of the changes after the pandemic.

Finally, this article opens up avenues for further studies. One puzzle that derives from our results is how different regimes legitimize their internet control policies. We assume that democracies and autocracies, even if they both intensified their internet control activities, rely on different legitimation strategies. This resonates with anecdotical evidence that autocracies' justifications refer to the protection of public order or national interests while democracies legitimize based on preventing disinformation (Feldstein, 2022, p. 6). Still, even if all regimes are under pressure of legitimization, democracies are certainly under the greatest pressure, which means that this specific balancing act (Vick, 2001) that democracies have to perform when they use regulatory or repressive measures needs more attention. Therefore, it is important to examine more

profoundly the motivations behind government measures and how these measures are publicly justified. Thus, even if democracies, hybrid regimes, and autocracies may take similar actions, their motivations certainly differ.

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Conflict of Interests

The authors declare no conflict of interests.

Supplementary Material

Supplementary material for this article is available online in the format provided by the authors (unedited).

References

Alizada, N., Cole, R., Gastaldi, L., Grahn, S., Hellmeier, S., Kolvani, P., Lachapelle, J., Lührmann, A., Maerz, S. F., Pillai, S., & Lindberg, S. I. (2021). *Autocratization turns viral. Democracy report 2021*. V-Dem Institute. https://v-dem.net/documents/12/dr_2021.pdf

Bennett, W. L., & Kneuer, M. (2024). Communication and democratic erosion: The rise of illiberal public spheres. *European Journal of Communication*, *39*(2), 177–196. https://doi.org/10.1177/02673231231217378

Bennett, W. L., & Livingston, S. (2018). The disinformation order: Disruptive communication and the decline of democratic institutions. *European Journal of Communication*, *33*(2), 122–139. https://doi.org/10.1177/0267323118760317

Bethke, F. S., & Wolff, J. (2020). COVID-19 and shrinking civic spaces: Patterns and consequences. *Zeitschrift Für Friedens—und Konfliktforschung*, *9*(2), 363–374. https://doi.org/10.1007/s42597-020-00038-w

Boas, T. (2006). Weaving the authoritarian web: The control of internet use in nondemocratic regimes. In J. Zysman, & A. Newman (Eds.), *Innovation and technology in the world economy. How revolutionary was the digital revolution?: National responses, market transitions, and global technology* (pp. 361–378). Stanford University Press. https://doi.org/10.1515/9781503625730-021

Boese, V. A., Alizada, N., Lundstedt, M., Morrison, K., Natsika, N., Sato, Y., Tai, H., & Lindberg, S. I. (2022). *Autocratization changing nature? Democracy report 2022*. Varieties of Democracy Institute. https://v-dem.net/documents/19/dr_2022_ipyOpLP.pdf

Bogaards, M. (2009). How to classify hybrid regimes? Defective democracy and electoral authoritarianism. *Democratization*, *16*(2), 399–423. https://doi.org/10.1080/13510340902777800

Bolleyer, N., & Salát, O. (2021). Parliaments in times of crisis: COVID-19, populism and executive dominance. *West European Politics*, *44*(5/6), 1103–1128. https://doi.org/10.1080/01402382.2021.1930733

Busch, A. (2017). Netzzensur in liberalen Demokratien. In A. Croissant, S. Kneip, & A. Petring (Eds.), *Demokratie, Diktatur, Gerechtigkeit. Festschrift für Wolfgang Merkel* (pp. 331–352). Springer. https://doi.org/10.1007/978-3-658-16090-6_16

Busch, A., Theiner, P., & Breindl, Y. (2018). Internet censorship in liberal democracies: Learning from

autocracies? In J. Schwanholz, T. Graham, & P.-T. Stoll (Eds.), *Managing democracy in the digital age* (pp. 11–28). Springer. https://doi.org/10.1007/978-3-319-61708-4_2

Campbell, D. F. J. (2019). *Global quality of democracy as innovation enabler. Measuring democracy for success*. Palgrave Macmillan. https://doi.org/10.1007/978-3-319-72529-1

Chambers, S. (2021). Truth, deliberative democracy, and the virtues of accuracy: Is fake news destroying the public sphere? *Political Studies*, *69*(1), 147–163. https://doi.org/10.1177/0032321719890811

Collier, D., & Levitsky, S. (1997). Democracy with adjectives: Conceptual innovation in comparative research. *World Politics*, *49*(3), 430–451. https://doi.org/10.1353/wp.1997.0009

Coppedge, M., Gerring, J., Knutsen, C. H., Lindberg, S. I., Teorell, J., Altman, D., Angiolilo, F., Bernhard, M., Borella, C., Cornell, A., Fish, M. S., Fox, L., Gastaldi, L., Gjerlow, H., Glynn, A., God, A. G., Grahn, S., Hicken, A., Kinzelbach, K., . . . Ziblatt, D. (2024a). *V-Dem (Country-Year/Country-Date) Dataset v14* [Data set]. Varieties of Democracy (V-Dem) Project. https://www.v-dem.net/data/the-v-dem-dataset

Coppedge, M., Gerring, J., Knutsen, C. H., Lindberg, S. I., Teorell, J., Altman, D., Angiolillo, F., Bernhard, M., Borella, C., Cornell, A., Fish, M. S., Fox, L., Gastaldi, L., Gjerløw, H., Glynn, A., God, A. G., Grahn, S., Hicken, A., Kinzelbach, K., . . . Ziblatt, D. (2024b). *"V-Dem Codebook v14" Varieties of Democracy (V-Dem) Project*. https://v-dem.net/documents/38/V-Dem_Codebook_v14.pdf

Dahl, R. A. (1971). *Polyarchy: Participation and opposition*. Yale University Press.

Dahlgren, P. (2018). Media, knowledge and trust: The deepening epistemic crisis of democracy. *Javnost—The Public*, *25*(1/2), 20–27. https://doi.org/10.1080/13183222.2018.1418819

Deibert, R., & Rohozinski, R. (2010). Liberation vs. control: The future of cyberspace. *Journal of Democracy*, *21*(4), 43–57. https://doi.org/10.1353/jod.2010.0010

Diamond, L. (2002). Elections without democracy: Thinking about hybrid regimes. *Journal of Democracy*, *13*(2), 21–35. https://doi.org/10.1353/jod.2002.0025

Economist Intelligence Unit. (2007). *The Economist Intelligence Unit's index of democracy: The world in 2007 Democracy Index*. https://www.economist.com/media/pdf/democracy_index_2007_v3.pdf

Economist Intelligence Unit. (2008). *The Economist Intelligence Unit's index of democracy 2008*. https://graphics.eiu.com/PDF/Democracy%20Index%202008.pdf

Economist Intelligence Unit. (2010). *Democracy index 2010. Democracy in retreat*. https://graphics.eiu.com/PDF/Democracy_Index_2010_web.pdf

Economist Intelligence Unit. (2011). *Democracy index 2011. Democracy under stress*. https://thecubaneconomy.com/wp-content/uploads/2012/01/Democracy_Index_Final_Dec_2011.pdf

Economist Intelligence Unit. (2013). *Democracy index 2012. Democracy at a standstill*. https://web.archive.org/web/20170320185156/http://pages.eiu.com/rs/eiu2/images/Democracy-Index-2012.pdf

Economist Intelligence Unit. (2014). *Democracy index 2013. Democracy in limbo*. https://siyosat.wordpress.com/wp-content/uploads/2014/10/democracy_index_2013_web-2.pdf

Economist Intelligence Unit. (2015). *Democracy index 2014. Democracy and its discontents*. https://www.sudestada.com.uy/Content/Articles/421a313a-d58f-462e-9b24-2504a37f6b56/Democracy-index-2014.pdf

Economist Intelligence Unit. (2016). *Democracy index 2015. Democracy in an age of anxiety*. https://www.yabiladi.com/img/content/EIU-Democracy-Index-2015.pdf

Economist Intelligence Unit. (2017). *Democracy index 2016. Revenge of the "deplorables."* https://impact.economist.com/perspectives/sites/default/files/The%20EIU%27s%202016%20Democracy%20Index_0.pdf

Economist Intelligence Unit. (2018). *Democracy index 2017. Free speech under attack*. https://pages.eiu.

com/rs/753-RIQ-438/images/Democracy_Index_2017.pdf?mkt_tok=NzUzLVJJUS00MzgAAAGVpNI08s0G6hkOFT–rm_wZOKn9R8wRlaKYauB1SSdkU4p70Wyn27ldORTqgGwIFsP38axbr2f0CaYg92VVeEDjRv6VKAzQlF7pQaPJQz3C7edwA

Economist Intelligence Unit. (2019). *Democracy index 2018: Me too? Political participation, protest and democracy*. https://pages.eiu.com/rs/753-RIQ-438/images/Democracy_Index_2018.pdf?mkt_tok=NzUzLVJJUS00MzgAAAGVpNChyTQRV4XahurgCu0jEopRFjYOLM0HtLRsUl8q3Cs4NGBNiMDJ-_bXv1kQOJNWOpfjy39KUb4LSNQ8xo-se57e6UsaKsh2YuRQU9VkpYsCBA

Economist Intelligence Unit. (2020). *Democracy index 2019. A year of democratic setbacks and popular protest*. https://pages.eiu.com/rs/753-RIQ-438/images/Democracy%20Index%202019.pdf?mkt_tok=NzUzLVJJUS00MzgAAAGVpM4xl48b5ti738P4bPR7dfXbo6ZjFuryCGdrgMQJU4Zt3fHEHvl0v2fAmprK0d0NShe6wCurRJy0podGV4tib80v8bzeVGwW3cWOO7xRtDwVQ

Economist Intelligence Unit. (2021). *Democracy index 2020. In sickness and in health?* https://pages.eiu.com/rs/753-RIQ-438/images/democracy-index-2020.pdf?mkt_tok=NzUzLVJJUS00MzgAAAGSuIeOrlF4ZtapNCM34LggBguiFHWMNOIoIx11GMnjrRzRyfObJ_BmRX-klY8y1wcqgUUWkAgm7HsO7FchWxkc6buXYcAy4hw-B_lL0ZulLKVc7w

Economist Intelligence Unit. (2022). *Democracy index 2021. The China challenge*. https://pages.eiu.com/rs/753-RIQ-438/images/eiu-democracy-index-2021.pdf?mkt_tok=NzUzLVJJUS00MzgAAAGVpNudMSPhrTLa0Bms-WSW1RkI22E5oxzI-GBEXpPFj4VMf4nc_YRHYwdoIk_bCd9BXHj8GAayPWdu94DMsznMfU6W3eio3tcibVUChrQjML71KA

Economist Intelligence Unit. (2023). *Democracy index 2022. Frontline democracy and the battle for Ukraine*. https://pages.eiu.com/rs/753-RIQ-438/images/DI-final-version-report.pdf?mkt_tok=NzUzLVJJUS00MzgAAAGVpOf0vyDviebDCPTG-TdLVpaeL61OLJzECUbNRgUXrOc1Yt3G8FbuF1yeFBsL38ZtvAa5JTe7kxlz7rYP3zwSPAbIT7gNnrYr3KCz-_LaOx4C_g

Economist Intelligence Unit. (2024). *Democracy index 2023. Age of conflict*. https://pages.eiu.com/rs/753-RIQ-438/images/Democracy-Index-2023-Final-report.pdf?version=0&mkt_tok=NzUzLVJJUS00MzgAAAGSuJEuXjiHh9g8-gVtq4O63qD3lx6Gscor1oGAC-F8VpFtAatj19whhSX_J-A_YcJw0KYhqzzSt04jTU-JLIGXO-zufFXnvRioM7W1JF0KVA0JmQ

Edgell, A. B., Lachapelle, J., Lührmann, A., & Maerz, S. F. (2021). Pandemic backsliding: Violations of democratic standards during Covid-19. *Social Science & Medicine*, *1982*(285), Article 114244. https://doi.org/10.1016/j.socscimed.2021.114244

Edgell, A. B., Lachapelle, J., Lührmann, A., Maerz, S. F., Grahn, S., Kolvani, P., God, A. F. G., Lundstedt, M., Natsika, N., Pillai, S., Bederke, P., Bruhn, M., Kaiser, S., Schaver, C., Alijla, A., Fernandes, T., Tung, H., Wilson, M., & Lindberg, S. I. (2020). *Pandemic backsliding: Democracy during Covid-19 (PanDem), Version 6* [Data set]. Varieties of Democracy (V-Dem) Institute. https://github.com/vdeminstitute/pandem, https://github.com/vdeminstitute/pandem/blob/master/older%20versions/PanDem%20v6/codebook/pandem_codebook.pdf

Edgell, A. B., Lachapelle, J., Lührmann, A., Maerz, S. F., Grahn, S., Kolvani, P., God, A. F. G., Lundstedt, M., Natsika, N., Pillai, S., Bederke, P., Bruhn, M., Kaiser, S., Schaver, C., Alijla, A., Fernandes, T., Tung, H., Wilson, M., & Lindberg, S. I. (2022). *Pandemic backsliding: Democracy during Covid-19 (PanDem), Version 6.1* [Data set]. Varieties of Democracy (V-Dem) Institute. https://github.com/vdeminstitute/pandem/blob/master/codebook/pandem_codebook.pdf

Feldstein, S. (2022). *Government internet shutdowns are changing. How should citizens and democracies respond?* Carnegie Endowment for International Peace. https://carnegie-production-assets.s3.amazonaws.com/static/files/Feldstein_Internet_shutdowns_final.pdf

Frantz, E., Kendall-Taylor, A., & Wright, J. (2020). *Digital repression in autocracies* (Series 2020:27). The Varieties of Democracy Institute. https://www.v-dem.net/media/publications/digital-repression17mar.pdf

Freedom House. (2024a). *Freedom on the net 2023. The repressive power of artificial intelligence* [Data set]. https://freedomhouse.org/report/freedom-net/2023/repressive-power-artificial-intelligence

Freedom House. (2024b). *Freedom on the net (2011-2023)* [Data set]. https://freedomhouse.org/report/freedom-net

Greitens, S. C. (2013). Authoritarianism online: What can we learn from internet data in nondemocracies? *Political Science & Politics*, *46*(2), 262–270. https://doi.org/10.1017/S1049096513000346

Gunitsky, S. (2015). Corrupting the cyber-commons: Social media as a tool of autocratic stability. *Perspectives on Politics*, *13*(1), 42–54. https://doi.org/10.1017/S1537592714003120

Gunitsky, S. (2020). *The great online convergence: Digital authoritarianism comes to democracies*. War on the rocks. https://warontherocks.com/2020/02/the-great-online-convergence-digital-authoritarianism-comes-to-democracies

Guriev, S., & Treisman, D. (2019). Informational autocrats. *Journal of Economic Perspectives*, *33*(4), 100–127. https://doi.org/10.1257/jep.33.4.100

Hale, T., Petherick, A., Phillips, T., & Webster, S. (2020). *Variation in government responses to COVID-19* (Working Paper No. 31). Blavatnik School of Government. https://www.bsg.ox.ac.uk/sites/default/files/2020-03/BSG-WP-2020-031-v3.0.pdf

Hellmeier, S. (2016). The dictator's digital toolkit: Explaining variation in internet filtering in authoritarian regimes. *Politics & Policy*, *44*(6), 1158–1191. https://doi.org/10.1111/polp.12189

Hellmeier, S., Cole, R., Grahn, S., Kolvani, P., Lachapelle, J., Lührmann, A., Maerz, S. F., Pillai, S., & Lindberg, S. I. (2021). State of the world 2020: Autocratization turns viral. *Democratization*, *28*(6), 1053–1074. https://doi.org/10.1080/13510347.2021.1922390

Karl, T. L. (1995). The hybrid regimes of Central America. *Journal of Democracy*, *6*(3), 72–86. https://doi.org/10.1353/jod.1995.0049

Kawerau, L., Weidmann, N. B., & Dainotti, A. (2022). Attack or block? Repertoires of digital censorship in autocracies. *Journal of Information Technology & Politics*, *20*(1), 60–73. https://doi.org/10.1080/19331681.2022.2037118

Keremoğlu, E., & Weidmann, N. B. (2020). How dictators control the internet: A review essay. *Comparative Political Studies*, *53*(10/11), 1690–1703. https://doi.org/10.1177/0010414020912278

Kneuer, M. (2023). Crises and political change: Covid-19, autocratization, and democratic resilience. In G. Davies, J. de Alba-Ulloa, F. Ghosn, K. S. Gleditsch, M. Kneuer, H. Milner, & E. Solingen, Forum: Challenges to scholarship and policy during crises. *International Studies Review*, *25*(2), Article viad017, 7–11. https://doi.org/10.1093/isr/viad017

Kneuer, M., & Wurster, S. (2023). Democratic health in the corona pandemic. The corona pandemic as a trigger or amplifier of democratic erosion or autocratization? *Zeitschrift für Vergleichende Politikwissenschaft*, *16*(4), 615–634. https://doi.org/10.1007/s12286-023-00558-8

Kolvani, P., Lundstedt, M., Edgell, A. B., & Lachapelle, J. (2021). *Pandemic backsliding: A year of violations and advances in response to Covid-19* (Policy brief 32). V-Dem Institute. https://www.v-dem.net/media/publications/pb_32.pdf

Levitsky, S., & Way, L. A. (2010). *Competitive authoritarianism: Hybrid regimes after the Cold War*. Cambridge University Press. https://doi.org/10.1017/CBO9780511781353

Lewkowicz, J., Woźniak, M., & Wrzesiński, M. (2022). COVID-19 and erosion of democracy. *Economic Modelling*, *106*, Article 105682. https://doi.org/10.1016/j.econmod.2021.105682

Lührmann, A., Tannenberg, M., & Lindberg, S. I. (2018). Regimes of the world (RoW): Opening new avenues for the comparative study of political regimes. *Politics and Governance*, *6*(1), 60–77. https://doi.org/10.17645/pag.v6i1.1214

Mainwaring, S., Brinks, D., & Perez-Lifian, A. (2001). Classifying political regimes in Latin America, 1945–1999. *Studies in Comparative International Development*, *36*(1), 37–65. https://doi.org/10.1007/BF02687584

Merkel, W. (2004). Embedded and defective democracies. *Democratization*, *11*(5), 33–58. https://doi.org/10.1080/13510340412331304598

Morlino, L. (2009). Are there hybrid regimes? Or are they just an optical illusion? *European Political Science Review*, *1*(2), 273–296. https://doi.org/10.1017/S1755773909000198

PanDem. (n.d.). *Pandemic backsliding: Democracy during COVID-19 (March 2020 to June 2021)*. Varieties of Democracy. https://www.v-dem.net/pandem.html

Papadopoulou, L., & Maniou, T. A. (2021). Lockdown on digital journalism? Mapping threats to press freedom during the COVID-19 pandemic crisis. *Digital Journalism*, *9*(9), 1344–1366. https://doi.org/10.1080/21670811.2021.1945472

Reporters Without Borders. (2020). *World Press freedom index: "Entering a decisive decade for journalism, exacerbated by coronavirus."* https://rsf.org/en/2020-world-press-freedom-index-entering-decisive-decade-journalism-exacerbated-coronavirus

Repucci, S., & Slipowitz, A. (2020). *Democracy under lockdown: Special report 2020. The impact of COVID-19 on the global struggle for freedom*. Freedom House. https://freedomhouse.org/report/special-report/2020/democracy-under-lockdown

Rød, E. G., & Weidmann, N. B. (2015). Empowering activists or autocrats? The internet in authoritarian regimes. *Journal of Peace Research*, *52*(3), 338–351. https://doi.org/10.1177/0022343314555782

Schedler, A. (2006). The logic of electoral authoritarianism. In A. Schedler (Ed.), *Electoral authoritarianism: The dynamics of unfree competition* (pp. 1–24). Lynne Rienner Publishers. https://doi.org/10.1515/9781685857479-003

Slater, D., & Ziblatt, D. (2013). The enduring indispensability of the controlled comparison. *Comparative Political Studies*, *46*(10), 1301–1327. https://doi.org/10.1177/0010414012472469

Vick, D. W. (2001). Exporting the first amendment to cyberspace: The internet and state sovereignty. In N. Morris, S. R. Waisbord, & K. Nordenstreng (Eds.), *Media and globalization. Why the state matters* (pp. 3–19). Rowman & Littlefield.

Wright, J., & Breindl, Y. (2013). Internet filtering trends in liberal democracies: French and German regulatory debates. *Internet Policy Review*, *2*(2), 1–10. https://doi.org/10.14763/2013.2.122

X Transparency Center. (2024). *Removal requests*. https://transparency.x.com/en/reports/removal-requests.html#2021-jul-dec

Youngs, R., & Panchulidze, E. (2020). *Global democracy and COVID-19*. European Endowment for Democracy. https://carnegieendowment.org/posts/2020/07/global-democracy-and-covid-19-upgrading-international-support?lang=en

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