DEPARTMENT OF POLITICAL SCIENCE

IS DELIBERATION THE DESTINATION?

Analysing the effects of internet access on deliberative democracy

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Abstract

The extant literature on the connection between the internet and democracy has so far been limited to liberal and electoral democracy. Studying how it affects deliberative democracy is crucial to understand public and government deliberation in the modern age, and also for broadening the debate about the internet and democracy to include other types of democracy. Deliberative democracy is defined in this paper as the interaction between government officials and regular people, and involves a process of public decision-making, where decisions are made using rationality. I argue that this type of deliberation should be boosted by internet access, but only in democracies, because autocracies are not interested in listening to public opinion, and will therefore not implement institutional changes in favor of deliberation, including changes involving digital technology. Utilizing data from the QoG Basic Dataset, I performed a series of regression analyses in order to determine the relationship between internet access and deliberative democracy. The results confirmed the hypothesis, that increased internet access has the strongest positive effect in democracies, a weak effect in democratizing states and a weaker effect in autocracies. I introduced control variables, but only one was statistically significant, that being Control of Corruption. Future research should focus on analysing different types of democracy, apart from only liberal and electoral, as well as studying the development of deliberative democracy and internet access over the long term.

Keywords: Democracy, internet, deliberation, digital, autocracy.

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Introduction

The benefits of democracy are supported by an extensive social sciences literature. Democratic states are less likely to engage in armed conflict with other democratic states (Oneal & Russett, 1999) are more effective at fighting corruption, and spend more money on health and education (Drury et al., 2006). The presence of democracy boosts population health (Wang et al., 2018). Other benefits include lower child mortality, longer life expentancy, more economic growth and more ambitious climate action, in addition to increased protection of human rights and civil liberties and increased opportunities for citizens within democracies (Nazifa et al., 2022). Therefore, democracy might be seen as a more preferable political system than autocracy, which entails furthering democratization.

Factors which increase the likelihood of democratization include socioeconomic modernization, influx of new media sources (Teorell, 2010, 68, 76) economic and political crises (Houle & Kayser, 2019) and pressure from domestic protest movements (Sato & Wahman, 2019). All of these have been the subject of a large share of the current research. But one important factor which is relatively understudied considering its influence on the world is the internet. Despite billions of people coming online in the 21st century, the emergence of new digital technologies has received comparatively little scholarly attention, especially regarding democracy. Considering the large impact the internet has had on society, it seems important to study its effect on democracy, especially different types of democracy.

The internet/democracy literature is insufficient, though. It has focused mostly on liberal and electoral democracy, which comprise only part of what we call “democracy”. In particular, deliberative democracy is understudied. Deliberation is an important part of democracy, whether we make decisions on a rational basis and consider all arguments for and against a certain position. Studies which have analysed deliberation have concerned themselves with theoretical arguments, instead of empirical studies (Buchstein, 1997; Bohman, 1998). Therefore, this study wants to answer the question: How does internet access affect change in deliberative democracy?

To answer this question, the study will develop arguments for how the internet could affect deliberative democracy. Primarily, the internet creates attitudinal changes in people, since they have access to a much larger quantity of information and can communicate with each other more easily.

These attitudinal changes could lead to larger, institutional changes in society. Online deliberation changes both how people think about and participate in politics currently, but also how politics could be conducted in the future. However, any potential institutional change would be limited to democracies, since autocratic rulers are not interested in actual deliberation. Any institutional change appearing to be an increase in deliberation is only for propaganda purposes and would not actually boost deliberation. Studying deliberation is important because it is how citizens in democracies make political decisions most of the time.

To investigate whether these proposed mechanisms have any empirical basis, I will utilize the Varieties of Democracy dataset (V-Dem Institute, *The V-Dem Project*, 2022). Deliberative democracy is measured through the ”Deliberative Component Index”. The index has five components: Elites base their political decisions on openly stated justifications, base their justifications on considerations for the common good, respect the counterarguments raised against their decisions and how widespread consultation is between elites at the political level (V-Dem, 2015). The fifth component, engaged society, is not mentioned in descriptions of the index, but it is included as a component (V-Dem, 2022).

With the V-Dem data, I expect to ascertain whether there is a relationship between deliberation and internet access and prove or disprove any hypotheses I have. While I cannot prove causation between the independent and dependent variable, I can show whether the observed relationship is statistically significant. My findings will show how deliberation is affected by internet access, but that the effect may differ between autocratic and democratic states, being much stronger for democratic states.

It becomes even more important to study this topic when considering democratic backsliding, where more states in the world are autocratizing rather than democratizing (Boese et al., 2022). Research shows that democratic backsliding is occurring in more covert ways, via the usage of legislation and executive overreach, rather than overt coups and military takeovers (Lührmann & Lindberg, 2019). That means that deliberation plays a large role in autocratization, or perhaps lack of deliberation. Indeed, a decrease in deliberation is one of the larger changes accompanying autocratization around the world (Hellmeier et al., 2021). While this paper is unlikely to affect major change on its own, it is still important to talk about democratic backsliding, since it is affecting so many countries. Expanding that discussion to include different types of democracy, such as deliberative democracy, could increase our understanding of the processes behind autocratization.

I will first review the extant literature about how the internet affects democracy. I follow on by developing theoretical arguments regarding how the internet should affect deliberative democracy, elaborate on a suitable design and methodology, present and discuss my results, before finishing the study with concluding remarks.

Literature Review

During the early years of the internet, optimistic assertations were prevalent regarding its role in society. Some prognosticators expected new digital technologies to boost democracy all over the world. This is the ”techno-utopian” (Kim, 2021), or ”liberation technology” perspective (Tucker et al., 2017). Techno-utopians think that the internet will have a range of positive effects, such as boosting democracy globally, by giving everyone access to much more information. This is assumed to undermine centralized, authoritarian control of information in non-democratic states. (Alexander, 2004; Chang & Lin, 2020; Choi & Jee, 2021).

With the internet seemingly not having had its intended democratic effect, a new perspective has emerged, the ”autocratic reactive” (Chang & Lin, 2020) or ”repression technology” perspective (Tucker et al., 2017). They do not believe that the internet will bring about more democracy. Instead, autocratic regimes will adapt and use it for more efficient surveillance and control. It could even result in less democracy and further erode rights and freedoms. (Choi & Jee, 2021; Chang & Lin, 2020; Best & Wade, 2009).

One way in which the debate was expressed was through ”the dictator's dilemma”, which is based on the assumption that the internet can bring both increased economic growth, but also strengthen pro-democracy forces at the same time. Dictators wishing to boost their countries´s economies have to either allow the internet into the country, and risk undermining the regime, or prevent the population from accessing the internet, and risk having an underperforming economy (Gunitsky, 2015).

I now move on to a review of the literature, to elucidate the different arguments that have been used in the debate about the democratic potential of the internet.

Negative/weak effects of the internet on democracy

Russia formulated its state-led internet policy at an early stage, focusing both on extending internet access to the population and, at the same time, allowing the government to exert increased influence over content on the internet. Increased control was not achieved through routine censorship, but instead via websites who were sponsored by the government and which spread pro-regime propaganda, thereby preventing independent voices from being allowed to express themselves (Alexander, 2004). China followed a similar path, utilizing pro-government propaganda online, alongside heavy use of censorship. But any possible pro-democracy effect for the internet in China also seems to be dependent on the country´s specific socio-political context (Huhe et al., 2018). A similar conclusion apparently applies for several non-democratic states (Kim, 2021).

The examples of China and Russia demonstrate a pattern that is emblematic of many autocratic states trying to control the internet for their own ends. They do not simply censor and block digital content which is critical towards the regime. They also create their own pro-government content,,to sway public opinion (Gunitsky, 2015). In fact, some research suggests that regimes that intend to limit and control freedom of expression are more likely to allow the internet within their borders (Rød & Weidmann, 2015). The internet can make it easier for autocratic regimes to keep local officials in check and to reveal the true political preferences of their citizens (Xu, 2020).

In doing this, the internet helps ameliorate the ”principal-agent”-problem for autocratic regimes, which arises when power is delegated from a higher office to a lower office, such as from the central government to a provincial governor. The higher office wishes to monitor the lower office and keep them in line, but since they lack perfect information about the intentions and behavior of the lower office, they are forced to use second-hand sources of information to accomplish this. Usually, they allow some measure of freedom of speech, meaning that regular citizens keep local officials in check as part of their ordinary political behavior. With the internet, that information is much larger in quantity, allowing more stringent control over lower offices (Gunitsky, 2015; Xu, 2020).

Proliferation of internet access may make autocratic regimes less likely to hold elections, since digital technology makes it easier to achieve the same goals rigged elections are used for, such as gathering information on the real political preferences of the citizenry (Gunitsky, 2015). Transitions from autocracy to democracy seem more likely in countries with low internet penetration,

suggesting an inverse causal relationship between internet access and democratization (Rød & Weidmann, 2015). Digital surveillance makes it easier for autocratic regimes to control the behavior of their citizens and organize their rule, since they have access to much more information (Xu, 2020). High internet penetration within an autocratic state might also cause less political mobilisation for democracy, possibly because of more efficient pro-regime propaganda online (Keremoğlu & Weidmann, 2020).

The emergence of the internet has created a new kind of autocratic rule, which is ”softer” than older types of autocracy. Instead of regurlarly murdering, imprisoning and torturing their political opponents, these ”informational authoritarians” use other, more discrete methods for strengthening their rule. Foremost of these is the manipulation of information, where the autocrats portray themselves as competent and as upholding democracy (Guriev & Treisman, 2019). This can mean that they are more responsive towards the economic and social needs of their citizens, in order to build trust and loyalty (Chen et al., 2015), but also that they utilize increased surveillance and monitoring to control public opinion (Deibert, 2015). If they cannot exercise centralized control of the internet and social media, unlike earlier mass media, such as radio or TV, they instead resort to blocking these services completely (Edmond, 2013). One prominent example of this is China, where YouTube, Twitter and Wikipedia are completely banned (Hobbs & Roberts, 2018). These methods can be categorised according to ”the three F:s”: Fear, friction and flooding. Fear makes people afraid to criticize the regime, friction slows down the expression of attitudes critical of the government and hinders potential anti-government resistance, and flooding distracts political opponents of the regime and makes it harder for them to organize (Tucker et al., 2017).

Autocratic regimes are increasingly trying to divide the internet into smaller chunks, corresponding to the online traffic of singular countries. The goal is to prevent the emergence of a true global internet, which would plausibly make it more difficult to control the creation of online content (Gunitsky, 2015). A variety of different methods are used to prevent the internet and social media from being used to criticize the regime and organize opposition, both on- and offline. Online, the regime can spread propaganda and misinformation through social media and filter the internet in order to prevent people from accessing certain content (Hellmeier, 2016), carry out cyberattacks towards political enemies, block certain content and surveil particular individuals (Deibert & Rohozinski, 2010).

Offline, judicial means are often employed, usually by imprisoning people based on spurious

charges. They are accused of having violated laws such as slander, copyright infringement, blasphemy and threats towards national security, in an attempt to grant legitimacy to the rulings and an appearance of rule of law. Sometimes the regime can even turn off electricity to households inhabited by political opponents (Deibert & Rohozinski, 2010) or shut down the internet in certain parts of the country (Gohdes, 2015).

It is plausible that a regime with less technical competence regarding the internet would use more offline-methods, such as shutting down the internet (or not allowing it in the first place). Technologically advanced regimes, such as China, can control and filter the internet as they so desire. For them, there is no need to disable basic infrastructure, like internet services or electrical power.

The internet might not have any significant democratic effect on its own and could require positive attitudes towards and large popular mobilisations for democracy, to positively affect democratization (Choi & Jee, 2021). Strong commitments to transparency might already be needed from the government, in order for the internet to exert a positive democratic effect. Nevertheless, there does exist a weak democratic effect, even when controlling for other factors (Best & Wade, 2009). Overall, censoring the internet appears to be a viable, and sometimes highly effective, strategy for limiting any democratic effect induced by the internet (Chang & Lin, 2020).

Positive effects of the internet on democracy

Increased internet penetration has a clear, positive effect on democracy (Zang et al., 2018; Kim, 2021), but the effect is stronger in less developed democracies (Zang et al., 2018). How well it works might be dependent on conscious choices made by actors within the political system (Kim, 2021). Social media and the internet can positively affect democracy, by creating stronger social connections between regular people and making it easier to organize large, anti-government protests (Tarman & Yigit, 2013) and by enabling a much larger flow of information (Rujjgrok, 2016). Internet access might also lead to more engagement for democracy among the common people, by citizens learning more about the workings of democracy and thereby developing more positive sentiments about democratic political systems (Placek, 2020). China is once more a useful example here. Despite attempts by the Chinese government to censor content, the internet has still had a significant democratic effect among the Chinese people. Access to the internet positively influences both sentiment towards democracy, making it more positive, and public attitudes regarding the

government, which become more critical (Huhe et al., 2018).

One mechanism through which censorship can have an opposite effect to what the censors intended is via a ”Streissand effect”, where the act of censorship in itself backfires and leads to increased interest in the subject matter being censored (Hobbs & Roberts, 2018). When Instagram was blocked in China, a large increase in the number of people using VPN:s (Virtual Private Networks) could be seen. VPN:s allow users to access content which may be blocked or censored in their country, and thereby bypass digital filters, such as China´s ”Great Firewall”. Even though these new VPN-users only wanted to access recently blocked sites like Instagram, they also gained access to other websites that had been blocked in China for longer periods, such as Twitter and Wikipedia. Through the minor act of blocking a single website, the Chinese government unintentionally created new holes in the Great Firewall and undermined the Chinese Communist Party´s (CCP) control over the online behavior of the Chinese people (Hobbs & Roberts, 2018).

Other autocratic states, like Saudi Arabia, have made similar mistakes to China. When activists who were critical of the Saudi regime were imprisoned, that ignited an outpouring of anti-regime sentiment on Twitter, which became noticeably larger after the activists´ imprisonment. Even though the activists themselves displayed less anti-regime sentiment after being imprisoned, their supporters expressed more critical attitudes towards the government through Twitter (Pan & Siegel, 2019). Propaganda can have a similar effect. This applies especially to ”hard propaganda”, propaganda with a very clear and obvious purpose as propaganda. When people are exposed to hard propaganda, they express more attitudes which are critical of the current regime. This effect can be observed directly after the exposure, indicating a plausible causal effect (Huang, 2018).

Earlier, I explained how the internet could play a part in ameliorating the principal-agent-problem for autocratic regimes and thereby strengthen their position of power. But the internet can also solve problems for pro-democratic forces, such as the ”collective-action-problem”. The problem revolves around the issue of trying to organize a large amount of people and make them work towards a common goal. While it is plausible that an autocratic regime could hijack social media to create stronger bonds of loyalty and trust between the regime and the people, it would seem more likely that solving the collective-action-problem would boost democracy instead. Given that large protest movements can be organized more easily via social media and the internet, large pro-democracy movements, and movements that are critical of the regime for other reasons, digital technology can boost democracy by boosting the ability of the people to hold their government accountable

(Gunitsky, 2015).

A prominent and recent example of this is the 2019 protest movement in Hong Kong, against a new proposed extradition law. Defining traits of the movement included increased use of social media and digital technologies to organize protests comprising a large proportion of the city´s population, their repurposing of certain symbols and rhetoric in order to create resistance against the central government and a decentralized, spontaneous organisation of different protest networks (Holbig, 2020). Solidarity was built within the protest movement, despite the presence of strong political differences and infighting among different factions. This solidarity was dependent on several factors, one of which was communication of common experiences through digital media platforms (Lee, 2019). The Hong Kong protest movement demonstrates how spontaneous, decentralized political movements can organize with the help of 21st century technology.

Another recent example of social media and the internet being used for political change comes from Tunisia. During the Arab Spring, a new protest movement arose in response to the government´s inability to respond to environmental issues, such as cleaning up large piles of garbage in inhabited areas. The movement was connected with the democracy movement in Tunisia and saw the environmental issues as being part of the same problem, namely a corrupt and ineffective government. This demonstrates how social networks and decentralized organisation can play an important role in organizing protest movements. Protest movements, like the one in Tunisia, are sometimes seen as an alternative method to organize politics, distinct from interaction with the government and elections (Loschi, 2018).

Despite numerous examples of successful autocratic control of online content, social media are more difficult to control than traditional media, such as TV and radio, since they are more decentraliserad by design (Edmond, 2013). Research has also shown that proliferation of media sources displays a significant causal effect for increasing likelihood of democratization (Teorell, 2010, 68).

Common themes

Several authors tend to divide the democracy/internet debate into two opposing camps. On one side, there is the ”techno-utopian” (Kim, 2021), or ”liberation technology” perspective (Tucker et al., 2017), which sees new digital technologies in a very optimistic light. This is contrasted with an

opposite, more pessimistic, view, known as the ”autocratic reactive” (Chang & Lin, 2020) or ”repression technology” perspective (Tucker et al., 2017).

While the studies differ based on their results and their interpretation of said results, it is possible to discern roughly in what direction the literature is headed. The ”liberation technology” perspective is weakened by the fact that democratic backsliding is occurring and accelerating (Nazifa et al, 2022; Boese et al., 2022). Since several studies demonstrate how autocratic regimes can control the internet and use it for their own ends, the most automatic, most optimistic, varieties of the techno-utopian mindset do not seem to be true. Thus far in the story of the internet, it would seem that ”repression technology” has been adopted as one of the more common positions among researchers analysing the internet.

However, since many of the studies reject any automatic view of technological change as well, it might be more reasonable to assume that the internet is a neutral force, one which can be used and abused for many different ends. Some studies emphasise that the internet as a technology is affected by social and political forces in whichever country it happens to be located in (Kim, 2021; Huhe et al., 2018). Certain circumstances would probably be fortuitous for democracy and spur increased democratization. Likewise, in other circumstances, the regime will make the first move and develop the needed competence to censor and control the internet (Best & Wade, 2009; Choi & Jee, 2021).

One factor that complicates any analysis of common themes in the literature is the conception of democracy used in these studies. The specific operationalisations matter for determining what their conception of democracy is and also for demonstrating how this study will contribute to the existing literature. The word ”democracy” has no universal definition, and therefore many different indices and measurements exist, which all claim to measure democracy. The Varieties of Democracy dataset, which I am using, measures five types of democracy: Liberal, egalitarian, electoral, deliberative and participatory.

As previously stated, much of the literature has analysed electoral and liberal democracy. Electoral democracy can be defined as a political system that achieves “a sufficient level of institutional guarantees such as freedom of association, suffrage, clean elections, an elected executive, and freedom of expression” (Lührmann et al., 2018, 2). This is in addition to the main criteria, holding free and fair multiparty elections. Liberal democracy requires the same criteria as electoral democracy, but also needs to have “effective legislative and judicial oversight of the executive as

well as protection of individual liberties and the rule of law.” (Ibid, 2018, 2). Analysing the datasets they have used can help me understand which conception of democracy they use.

Polity IV is a commonly used dataset for measuring democracy and was used by several sources (Chang & Lin, 2020; Choi & Jee, 2021; Hellmeier, 2016). It is the fourth edition of the Polity Project, a research project by the Center for Systemic Peace. The purpose is to categorize the regime type or ”authority characteristics” of all ”polities” in the world. Polity IV defines a polity as ”a political or governmental organization; a society or institution with an organized government; state; body politic”. The dataset uses a scale from 0-10 to categorize democracies, with higher scores being more democratic. The same applies for autocracies, which are also graded on an eleven-point scale. Afterwards, both the democracy and autocracy scores are combined to create the Polity score, which consists of a scale from -10 to +10. Scores closer to +10 are more democratic. The main variables used to determine democracy are: Competitiveness of political participation, constraints on the chief executive and openness and competitiveness of executive recruitment. Autocracy is classified according to the same variables, but also contains an additional variable: Regulation of participation. (Marshall et al., 2017). Polity IV mainly categorizes countries according to political participation, whether the chief executive is elected in a democratic manner and how much power said chief executive has. These criteria do not relate to deliberative democracy.

Another operationalisation that is used quite frequently is Freedom House (Hellmeier, 2016; Placek, 2020; Rujjgrok, 2016). Freedom House is an American Non-Governmental Organisation (NGO) working to promote democracy, rule of law and human rights around the world. Every year, they produce a new edition of *Freedom in the World*, a report looking at the state of democracy globally. When measuring democracy, the report looks at: ”the electoral process, political pluralism and participation, the functioning of the government, freedom of expression and of belief, associational and organizational rights, the rule of law, and personal autonomy and individual rights.” (Freedom House, *Freedom in the World*, 2022).

Freedom House separate countries into three categories: Free, Partly Free and Not Free. These ratings are based on two separate categories: Civil liberties and political rights. Civil liberties are measured on a scale from 0-60 and political rights on a scale from 0 to 40, with higher scores being more democratic. The two categories are together composed of 25 indicators, with each indicator being graded on a scale from 0 to 4. 25 times 4 is equal to 100, so all countries are in the end graded

on a scale from 0 to 100, with 100 being fully democratic. In the 2022 edition of the report, Freedom House use a very expansive definition of democracy, associating it with a multitude of different phenomena. Examples include accountable public institutions, the rule of law, respect for human rights, political competition, equal opportunities for all, an independent judiciary and civil society etc. etc. (Freedom House, *FREEDOM IN THE WORLD 2022*, 2022). The definition of democracy used here is very expansive, but since the main criteria revolve around human rights and civil liberties, as well as constraints on the power of the chief executive, Freedom House seems to define democracy according to notions of liberal democracy. (Freedom House, *FREEDOM IN THE WORLD 2022*, 2022). Since Freedom House use categorical variables, it becomes more difficult to distinguish the main criteria being measured.

Usage of the Varieties of Democracy and Regimes of the World (RoW) variables from the V-Dem dataset were more limited. RoW is somewhat difficult to classify according to any typology of democracy, but seems to lean towards classifying regimes on a spectrum from liberal to illiberal democracies. In fact, their most democratic category is named Liberal Democracy. In the original paper that introduced the RoW dataset, the categories are defined according to the presence of free and fair multiparty elections, the rule of law, whether or not liberal principles are satisfied and adherence to Dahl´s institutional prerequisites for polyarchy. Polyarchy has six requirements: Associational autonomy, alternative sources of information, inclusive citizenship, free and fair elections, elected officials and freedom of expression (Lührmann et al., 2018). Thus it appears fair to say that RoW classifies democracy according to notions of liberal and electoral democracy.

Varieties of Democracy (V-Dem) is different, though. V-Dem measures democracy according to a larger selection of different types. Five types of democracy are measured: Electoral, liberal, deliberative, egalitarian and participatory. They are each measured with their own index, which makes it possible to study the development of certain parts of democracy on their own. Every index contains several components. (V-Dem Institute, *The V-Dem Project*, 2022). Varieties of Democracy is the only democracy index utilized within the literature that analyses more types of democracy than just liberal and electoral. However, given it was rarely used, it is not certain that the expanded conception of democracy affected the authors´ idea of democracy in any significant way.

Some of the literature did not utilize any of the commonly used indices for measuring democracy, such as Polity IV or Freedom House (Gunitsky, 2015; Huang, 2018; Huhe et al., 2018; Keremoğlu & Weidmann, 2020). Instead they seem to use certain definitions they themselves thought were

suitable, or simply did not operationalise democracy explicitly. The latter case mostly applies to papers studying a single country, and appear to assume that the reader will already be familiar with the non-democratic political status of the country being studied.

To elucidate what definitions they use, we can look at some examples. Gunitsky (2015) associates autocracy with ”rigged elections...negative control of the internet...internet censorship” (Ibid, 1, 2015). Deibert (2015) define authoritarianism as ”state constraints on legitimate democratic political expression, rule by emotion and fear, repression of civil society and the concentration of executive power in the hands of an unaccountable elite.” (Ibid, 1, 2015). Pan & Siegel (2019), using Saudi Arabia as an example, provide a de-facto definition of authoritarianism: ”traditional media is tightly controlled. Political dissent is criminalized. Political parties, trade unions, political demonstrations and strikes are banned. All types of organized opposition are suppressed.” (Ibid, 1, 2019). Huhe et al. (2018) instead provides a definition of democracy: ”elections with multiparty competition and rights of free speech, demonstration and assembly.” (Ibid, 4, 2018).

Mostly, their definitions still align with liberal and electoral democracy. Overall, it would seem that the literature primarily adheres to definitions of democracy corresponding with liberal and electoral democracy. This makes it easier to analyse and categorize the extant literature, and also to make a suitable contribution to the current field.

Literature summary

So far, there does not seem to be any strong conclusion regarding how the internet affects democracy. Access to and usage of the internet does not automatically lead to more democratization. Non-democratic regimes do sometimes possess enough resources to censor and control the internet to a large enough degree that increased political discussion among the populace does not manifest as increased mobilisation for democracy (Chang & Lin, 2020). Despite this, there do exist some opportunities for political discussions to continue unmonitored online. Government censors are apparently not completely in control of the internet, regardless of how much competence they have displayed in censoring content (Huhe et al., 2018). Censorship and propaganda can in some cases lead to strong backlash by anti-government forces (Huang, 2018; Pan & Siegel, 2019; Hobbs & Roberts, 2018). The internet can solve problems both for an autocratic regime, such as the principal-agent-problem, but also for pro-democracy forces, such as the collective-action-problem, and therefore boost democracy to a certain extent (Gunitsky, 2015;

Tucker et al., 2017).

Flaws in the literature

One potential flaw concerns when the studies were carried out. Some of them are from the early 21st century or late 20th century, when the internet was still a relatively new technology and wasn´t available to as many people as it is now. 15 or 20 years is a long time in digital history, and represents billions of people who were not yet online. Certain online services which could potentially affect democracy, such as social media, did not yet exist or were not as popular as they would eventually become.

It is important to be wary of studying singular cases, such as only looking at the impact of Twitter on democracy or whether internet censorship was effective in a particular country. Since the purpose of the study is to analyse the impact of the internet on a global scale, these more qualitative studies are only partly helpful for this study. They might reveal interesting and important patterns, but their generalisability is limited by the fact that they do not analyse a larger amount of cases. Quantitative studies, looking at many *n*, are better suited to the purposes of this study.

The way the extant literature analyses democracy is insufficient regarding what this study aims to accomplish, but not generally. They usually use democracy indices such as Polity IV or Freedom House, which are commonly used in academia. Since I am interested in analysing the effects of the internet on deliberative democracy, as measured by V-Dem:s Varieties of Democracy dataset, I do not gain as much by using studies which utilize indices that do not measure deliberative democracy. While inconvenient for researchers interested in deliberative democracy, it does allow me to contribute to the extant literature.

Theory

How does the internet affect deliberative democracy?

Multiple different definitions of deliberative democracy exist, and to determine whether the internet can help or hinder deliberative democracy, I need to know which definition I am using. Therefore, I will now discuss the conceptual origins of deliberative democracy.

Discussions around deliberative democracy began with Joseph M. Bessette in 1980, as an essay in

the anthology work *How Democratic is the Constitution?*. Bessette coined the term ”deliberative democracy”, but not as a proposed form of democratic decision-making. He was analysing the American Constitution and argued that the Founding Fathers intended for a certain kind of democracy to be part of it, one especially focused on deliberation (Martí & Besson, 13, 2006). Later on, Bessette analysed how deliberation was carried out in Congress in the present day. The main purpose of this deliberation was to act as a ”counterweight” to popular opinion, which was seen as being driven more by emotion and passion rather than rational considerations (Bohman, 420, 1998).

Bessette´s main contribution to deliberative democracy is substantial, having coined the term and in practice given birth to the field (Martí & Besson, 13, 2006). While he has focused more on analysing existing political institutions and their procedures for deliberation, he still galvanized interest in deliberative democracy as a way to reform democracy (Martí & Besson, 13, 2006). However, his conception of deliberation is narrow. It only encompasses deliberation within government and almost appears antagonistic towards the public, seeing government deliberation as necessary in order to counteract a public led by raw passion rather than rational arguments (Bohman, 1998).

One well-known theorist of deliberative democracy is the philosopher Jürgen Habermas. In his work *Inclusion of the Other*, he elaborates his position on deliberative democracy by sketching out ”three normative models” of democracy: Liberal, republican and deliberative (Habermas, 224, 1998). He uses ”discourse theory”, where the formation of political opinions is the central task of deliberation. It is a procedural form of democracy, where processes of deliberation are embedded in institutions and are central to them. In contrast to both liberal and republican varieties of deliberation, Habermas conceives of the deliberating public as not being a part of the state or a liberal society, and thus forming an alternative political system alongside the liberal state. Perhaps most importantly, Habermas conceives of deliberation more broadly than either the liberal or republican tradition. He writes: ”...when we take into account the multiplicity of forms of communication in which a common will is produced...”. Thus, there are multiple different ways in which issues can be deliberated and opinions formed about those issues. True, rational deliberation occurs when all of those methods are active at the same time and incorporated into the process of political decision-making (Habermas, 229-234, 1998).

Central to Habermas´ concept of deliberative democracy are discourses, through which deliberation is carried out, which can be described thusly: ”The exercise of autonomy takes place instead within

”discourses...and negotiations whose procedure are discursively grounded”” (Oquendo, 8, 2002). Habermas seemingly deviates from the common view of the individual and the collective, as homogenous, independent actors possessing the ability to freely choose. Instead he embraces the ”higher-level intersubjectivity of communication processes”, where there are several dialogues occurring at the same time, both within government institutions and the informal public sphere. As Habermas describes it: ”...these subjectless modes of communication form arenas in which a more or less rational opinion- and will-formation concerning issues and problems facing society as a whole can take place.” (Habermas, 231, 1998). Based on this, his prescription for increasing deliberative democracy is to expand existing democratic institutions to incorporate more deliberative forms of decision-making, as well as developing ”widely expanded autonomous public spheres” (Habermas, 231, 1998).

Habermas´ contribution to deliberative democracy consists of broadening the concept of deliberation to include several different forms of communication, not simply government as it is constituted now, but also including a strong public sphere alongside the state. He emphasizes that deliberation does not only occur within the seats of government, but everywhere and involving different forms of politics (Habermas, 231, 1998).

In the book *Why Deliberative Democracy?*, Gutmann & Thompson (2009) provide a definition of deliberative democracy that bears some similarities to the one used by Habermas. They do not conceive of it as a separate political institution. Instead, they argue that deliberation is a central tenet of a democratic society, constantly occurring at all levels and involving everyone, or more simply a dialogue between citizens and rulers. Good deliberative democracy then involves good deliberation and argumentation, in a democratic fashion (Gutmann & Thompson, 2009).

They identify four crucial components of deliberative democracy: Reason-giving, accessibility, binding decisions and a dynamic process. Reason-giving refers to political decisions that are justified with publicly given reasons that make sense to people seeking broad agreement on issues. Second, the reasons should be accessible to all, meaning that everyone can understand them and is not forced to accept them without understanding them. Third, decisions made should be binding for a certain period of time. Fourth and finally, decisions which have been made are not final. They can always be discussed in the future as part of a dynamic process, meaning old decisions could potentially be overturned at some point (Gutmann & Thompson, 2009).

To conclude, the definition of deliberative democracy I will use is derived from Gutmann & Thompson (2009), but it is possible to trace a path back to earlier literature about deliberative democracy. Thus, deliberative democracy can be defined as: A process through which political decisions are made, whereby decisions are justified on the basis of public, rational reasons, involving deliberation across all levels of society. The definition is useful, because it manages to be inclusive of deliberation in all its forms, while retaining rationality (Gutmann & Thompson, 2009).

Proponents of the internet have argued that new digital technologies would lead to a flourishing of deliberative democracy, using terms such as ”tele-democracy” and an ”electronic town hall”. Their argument is that the internet will strengthen democracy by connecting people with each other and enabling a much larger exchange of information and ideas (Buchstein, 1997). The online world is not solely conceived of as another arena for democratic institutions to take residence in. It is considered to represent a fundamental transformation of democracy. Over the years, a large literature has developed within the social sciences, based on the assumption that increased access to information and more proliferation of media from other countries is good for democracy. Credit is largely given to new technical innovations for enabling this change, and it is argued that said change makes citizens in non-democratic states more aware of the outside world and allows them to break through any obstacles put up by government censorship (Chang & Lin, 2020; Alexander, 2004).

While the internet has historically been seen as a place for citizens to discuss politics, digital tools can also allow citizens to interact with their chosen representatives and affect public policy. For democratic governments, internet deliberation could have benefits for both rulers and citizens. With more citizen input, they can improve their public policies. Options include allowing citizens to vote directly on political decisions, a form of direct democracy, or simply gathering more information about their political preferences. As these deliberative tools are utilized more and more, deliberation should increase, and democratic institutions will be transformed to accommodate more deliberative forums. Indeed, there is some evidence which suggests that democracies are better at adopting new technologies for e-government and e-participation (Kneuer & Harnisch, 2016). In democracies, politicians have to win elections to gain political power, which requires that they listen to voters and enhance voter input into public policy.

One real-life example of this is the EU´s system for citizen consultation, where ordinary people are invited by governments to express their opinions about politics. After consultations are complete, a final report is compiled of the results. However, these consultations only seem to have had a minor

effect on policy, as their stated purpose is only to inspire further dialogue (Butcher & Pronckuté, 2019). Similar digital initiatives have been implemented by national governments. In Germany, an online participation mechanism named “Mitreden-U” was used to carry out a “sustainability dialogue”. The purpose was to allow citizens to contribute to the government´s environmental policy, and the consultation was considered a part of the overall government strategy. Mitreden-U was largely seen as a success. This did not merely have to do with how many people participated. Rather, consultation was of a high quality, and several important issues that had not been considered by the government, such as light pollution, were brought forward and discussed (Schulz & Newig, 2014). E-participation mechanisms have also been tried in the UK, but with less success. The UK government has tried to use online forums to boost online deliberation, with mixed results, possibly having to do with the forums not being structured enough. When deliberation has had a certain purpose and rules, results have been more positive. Overall, the government´s strategy not succeeding was attributed to a lack of direction in implementing e-participation and e-deliberation (Moss & Coleman, 2013).

While more evidence is needed, so far it would appear that digital deliberative democracy is a viable method of making decisions regarding public policy. It is crucial for governments to expand the use of e-participation and e-deliberation mechanisms, in order for the merits of the idea to present themselves. Most importantly, citizens must have a clear and active role in deliberation, for decisions based on consensus to be reached.

Since the internet can better connect citizens with politicians and allow them to share ideas, it can improve deliberation. However, institutional changes can only occur if politicians want them to occur. Therefore, more democratic deliberation requires more democracy in the first place, that the rulers are genuinely willing to listen to the common people. It seems highly unlikely that an autocratic ruler would listen to the people, since it contradicts the main purpose of being a dictator. While the same benefits for deliberation can still affect citizens, they will be limited increased discussion among regular people, not with the rulers. Since the rulers in an autocratic country are not interested in listening to the people, they will not allow any institutional change that brings about more democratic deliberation.

It is unclear exactly whether the internet has a democratic effect on non-democratic countries. Regarding deliberation, there are two possible ways this could change in non-democratic countries. As Guriev & Treisman (2019) and Lührmann & Lindberg (2019) have argued, dictators no longer

rely upon overt force to achieve their aims. Instead, they use a rhetoric of providing public goods and promoting democracy in order to gain legitimacy. This might boost deliberation, but only in a superficial sense. They are only pretending to listen to the will of the people. This could be connected to internet access, in the sense that digital technologies allow for a more information-based rule, rather than one based on force. However, the internet could also decrease deliberation, by making it easier for rulers to censor content they do not like and making it easier for them to spread their own propaganda content online.

Based on the theoretical arguments, I can now formulate a hypothesis:
Hypothesis (H): The effect of access to the internet is weaker in autocracies and democratizing states than in democracies.

Methodology

In order to analyse democratic change in a multitude of countries, it becomes necessary to utilize a quantitative methodology, analysing a large number of cases with varied attributes. I will perform a regression analysis, looking at as many countries in the world as possible during a certain year. Because of the scope of the study, carrying out a time-series analysis would not have been possible. Therefore, I have decided to only conduct an OLS-regression analysis, OLS being Ordinary Least Square.

I will use the software program Stata for the regression analysis. In Stata, the regression coefficient is indicated with a sliding scale that goes from negative infinity to positive infinity. There is no limit on how high or low the regression coefficient may be, since it measures how much the dependent variable changes in response to the independent variable changing. Proving causation is not possible with a regression analysis, but I can confirm or disprove the hypothesis. The regression coefficient measures how much the independent variable changes if the dependent variable changes one step, and it is the main factor used to determine the relationship between the two variables.

Several key terms need to be operationalised: Deliberative democracy, internet access, regime type and some control variables. All data will be retrieved from the Basic Dataset by the Quality of Government Institute, which contains a variety of different data sources. Since some of the data sources only have data for the year 2018, I will use that year for my analysis.

The dependent variable, deliberative democracy, will be measured with the Varieties of Democracy dataset, which measures five types of democracy. They are liberal democracy, electoral democracy, egalitarian democracy, participatory democracy and deliberative democracy. Each of these is measured with their own index in the V-Dem Institute´s annual Democracy Reports and given a numerical score. Since I am trying to measure deliberative democracy, I will use the Deliberative Democracy Index, which measures five components: Reasoned justification, common good, respect for counterarguments, wide range of consultation and engaged society. The index spans from 0 to 1, with higher scores indicating better deliberation. Thus, if a country is closer to 1, that implies that deliberation in that country is better (Boese et al., 2022).

The definition of deliberative democracy used by V-Dem is a good definition to use, because it overlaps to a large degree with the one used by Gutmann & Thompson (2009), and parts of it can be traced back to earlier definitions of deliberative democracy used by thinkers like Bessette and Habermas. I will use V-Dem data from 2018, alongside data for internet access from that same year, for the regression analysis.

Data for the independent variable, internet access, is available from the World Bank and is measured as the percentage of the population with access to the internet. According to the World Bank website, the source of the information is the International Telecommunications Union (ITU). The title of the indicator is: ”Individuals using the internet (% of population)”. This description of the data is given: ”internet users are individuals who have used the internet (from any location) in the last 3 months. The internet can be used via a computer, mobile phone, personal digital assistant, games machine, digital TV etc”. In the QoG dataset, the World Bank data is available for a large number of countries for the year 2018 (World Bank, *Individuals using the Internet,* 2022; Dahlberg et al., 2022).

The Freedom in the World dataset from Freedom House will be used to categorize countries as either democratic or autocratic, corresponding to regime type. The dataset classifies countries into three categories: Free, Partly Free and Not Free, using two main indicators, Political Rights and Civil Liberties. I chose Freedom House instead of Regimes of the World (RoW) because RoW already measures deliberative democracy as part of the dataset. As such, using RoW would mean that I am regressing the outcome unto itself, an unusable result (Freedom House, 2022). For the study, it would appear reasonable to classify Free as being democratic, Partly Free as being democratizing and Not Free as being autocratic.

I will use control variables, which in this case are variables that could plausibly affect both deliberative democracy and internet access. For this study, I have chosen to use three control variables: Real GDP per capita, primary school enrollment gross percentage and the Control of Corruption Index. I tried to choose variables related primarily to economic development, education and level of corruption.

Economic development affects internet access by making countries richer, and thereby making it possible for them to introduce the internet to more people, by building the necessary infrastructure. It affects deliberative democracy by making it easier for people to communicate with each other, through the proliferation of digital technology, and by increasing democracy in general (Teorell, 2010, 68). I chose GDP per capita because it better captures the living standards of individual citizens than national GDP does. The adjective Real denotes that the numbers have been adjusted for inflation, to make sure they better capture actual purchasing power. To make it easier to analyse, the variable for GDP per capita has been recoded to its logarithm.

Education affects internet access by increasing digital literacy among the population and by raising living standards, which enable more people to afford digital technology. It has a pronounced effect on deliberative democracy, by making people more knowledgeable about the structure of society and thereby more interested and engaged in actually having a dialogue with politicians. This leads to action for increased deliberation. Since I want to measure how educated people are, using spending on education would not have been suitable. I chose the gross percentage of primary school enrollment instead of net rate due to lacking coverage for variables measuring the net rate.

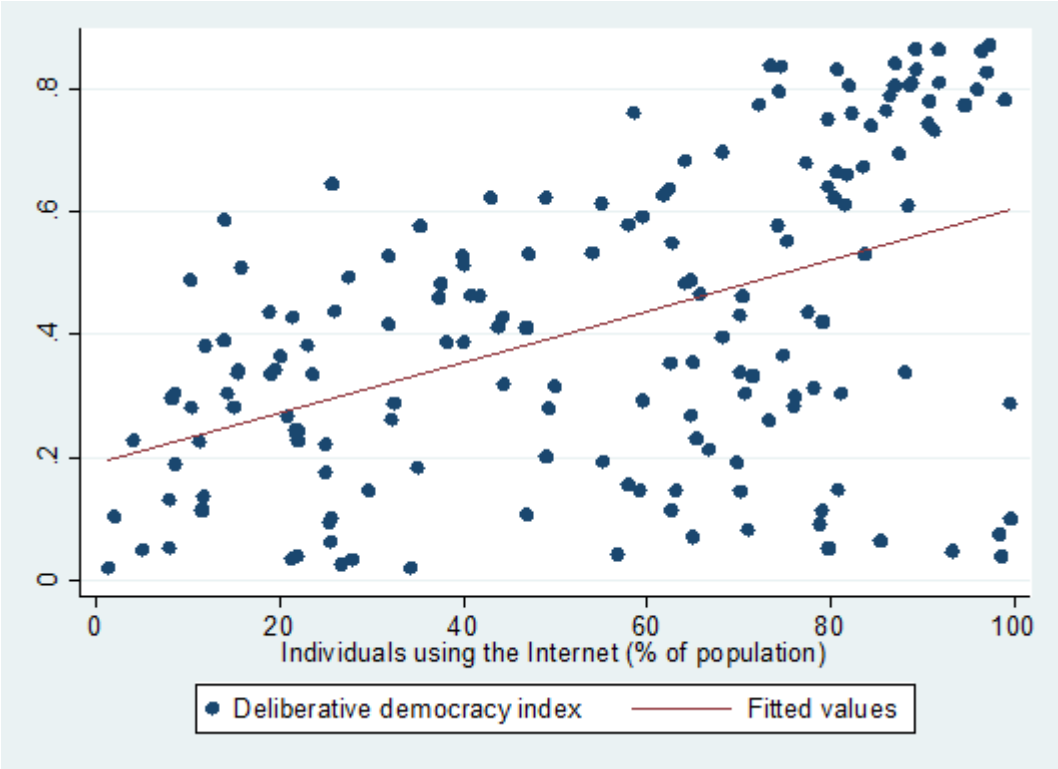
Level of corruption is different, in that internet access and deliberative democracy should be boosted by less corruption, not more. If corruption is high, public servants might steal resources that would otherwise have gone into improving infrastructure and public services, such as technology needed for internet access. A corrupt government does not need to listen to the demands of the people and can live off of stolen money, which worsens deliberative democracy. Therefore, both internet access and deliberative democracy increase when corruption decreases. The Control of Corruption data from the World Bank Group was chosen primarily because of better coverage than other variables related to corruption. It codes higher values as representing better Control of Corruption, which translates to higher values being less corrupt. (Dahlberg et al., 2022; The World Bank, *Databank | World Governance Indicators*, 2022).

Potential problems with the material include a lack of specificity from the World Bank/ITU regarding the methods used to collect their data. Since the data does not measure the usage of certain technologies, such as cellphones or computers, it is difficult to ascertain exactly what the data measures. However, the credibility of the data is not questioned. Since it is retrieved from a credible source, a major global institution, I will use it as it is. This also applies to the V-Dem Institute, which is an official academic institute with a credible reputation among scholars within the social sciences.

Variables	Observations	Mean	Standard deviation	Min.	Max.
Deliberative democracy	173	.4098786	.2521174	.01	.872
Internet access	188	55.32842	28.22643	1.308907	99.65285
Freedom in the World	194	1.814433	.8185656	1	3
Log GDP per capita	163	4.018641	.5196854	2.794829	5.186855
Primary school enrollment, gross percentage	172	102.3735	12.05435	61.77515	142.5343
Control of Corruption	192	-.0769434	.9909855	-1.788003	2.211138

Table 1: Summary statistics for V-Dem, internet access, Freedom in the World and the control variables.

Results



This is a scatterplot diagram, showing a bivariate regression between internet usage and V-Dem´s Deliberative Democracy Index. The blue dots in the image are countries. The red line shows a linear regression fitted to the data. The dots are scattered throughout the graph, but there still seems to be a positive relationship between the dependent and independent variable.

I now move on to the regression analysis, in order to investigate the strength and statistical significance of the observed relationship, as well as the interaction effect.

	(1) b/se b/se	(2) b/se b/se	(3) b/se b/se	(4) b/se b/se
Individuals using the Internet (% of population)	0.004***	0.001**	0.005***	0.004***
	(0.00)	(0.00)	(0.00)	(0.00)
Partly Free		-0.281***	0.027	0.034
		(0.02)	(0.05)	(0.06)
Not Free		-0.513***	-0.193***	-0.159**
		(0.02)	(0.05)	(0.06)
Partly Free # Individuals using the Internet (% of population)			-0.005***	-0.004***
			(0.00)	(0.00)
Not Free # Individuals using the Internet (% of population)			-0.005***	-0.005***
			(0.00)	(0.00)
Log GDP per capita				-0.054
				(0.03)
School enrollment, primary (% gross)				0.000
				(0.00)
Control of Corruption, Estimate				0.052***
				(0.02)
Constant	0.189***	0.588***	0.336***	0.530***
	(0.04)	(0.03)	(0.04)	(0.14)
R^2	0.229	0.802	0.854	0.882
N	168	168	168	140

Table 2: Linear Regression Results .

Notes: * p < 0,05, ** p < 0,01, *** p < 0,001

Table 1 shows the results of all four regressions. Model 1 shows the bivariate relationship between deliberative democracy and internet access. Model 2 adds Freedom in the World (FitW), the level of democracy as measured by Freedom House as a control variable, while Model 3 includes FitW as an interaction variable. Model 4 includes the entire model, but adds the logarithm of GDP per

capita, Control of Corruption and gross percentage of primary school enrollment as control variables.

The regression coefficient for internet access in Model 1 is 0.004, which means that if internet access increases by one step, the score on the Deliberative Democracy Index increases by 0.004 points. The coefficient is significant at a significance level of $\alpha = 0.01$. The amount of observations is large, at 168. Including as many observations as possible is important to guarantee a large effect size. The R-squared has a value of around 0.22. The R-squared measures how much the variance in the dependent variable can be explained by the variance in the independent variable/s. While the hypothesis cannot be confirmed at this point, the initial results suggest that internet access does have a positive effect on deliberative democracy. The reason why the hypothesis cannot be confirmed is that it predicts different results for deliberative democracy depending on how democratic the country is. The first model includes all countries in the world without separating them by level of democracy, which prevents me from confirming or disproving the hypothesis.

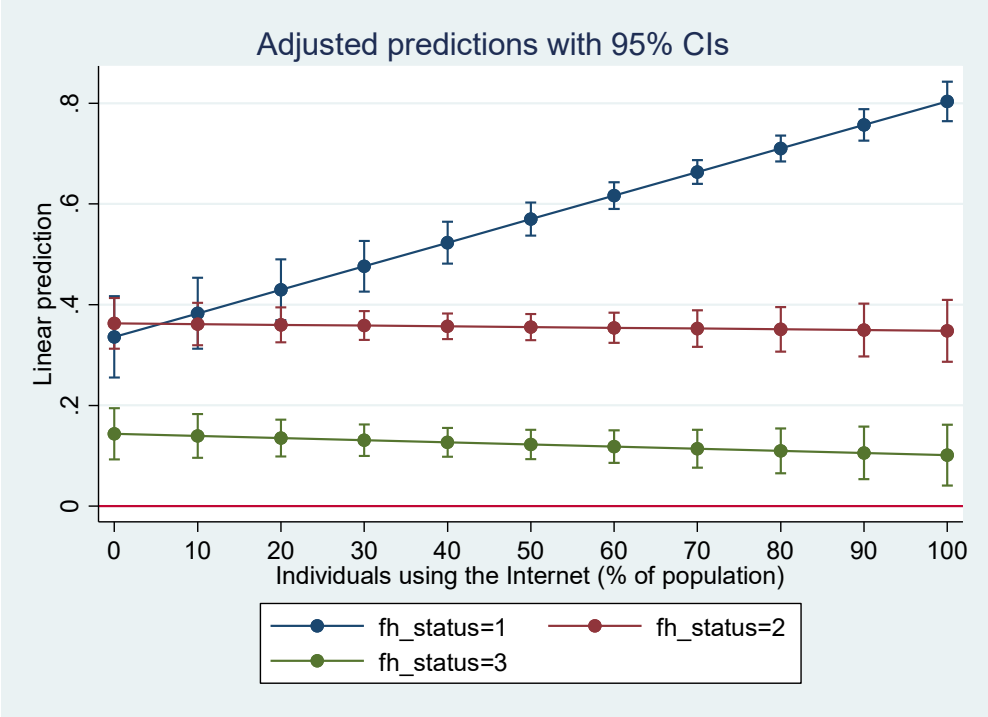
In Model 2 the Freedom in the World rankings is included as a control variable. Higher values in the index represent less democracy. The coefficient between internet access and deliberative democracy changes from 0.004 to 0.001, which is still statistically significant. The coefficient between Partly Free and deliberative democracy indicates that a change from Free to Partly Free represents a decline of 0.28 points on the Deliberative Democracy Index on average. Not Free countries are on average 0.51 points lower on the Deliberative Democracy Index than Free countries. All coefficients are still significant. The sample size is the same in this model, at 168, despite the addition of FitW as a control variable. The R-squared has changed. In the first model the R-squared value was around 0.22, but in this model it jumps to 0.8. It still appears that internet access could positively affect deliberative democracy, but further variables are required to confirm or disprove the hypothesis.

Despite the fact that I have now included level of democracy, I cannot prove or disprove the hypothesis yet. This is because level of democracy acts as an interaction variable on the original connection, making it stronger or weaker depending on how democratic the country is. Since politicians in democracies are more motivated to listen to the people, they are more likely to implement new digital tools for deliberation, and therefore democracies should experience increases in deliberative democracy alongside increasing internet access. Conversely, democratizing countries should experience weaker effects than democracies, and autocracies even weaker effects than that,

since politicians in autocracies are not interested in listening to the people, and would therefore not be willing to implement reforms in favor of deliberation.

In Model 3, FitW is included as an interaction variable. The coefficient between internet access and deliberative democracy increases to 0.005, still statistically significant. This means that in a democratic country, a one percent increase in internet access will result in an average increase of 0.005 points for deliberative democracy. The main coefficient for FitW as an interacting variable continues to be negative for Not Free countries, and is statistically significant. When including FitW as an interaction effect, the coefficient for Partly Free countries is no longer significant. Since I have not added any new variables, the sample size is the same at 168. The R-squared has increased to 0.85. The hypothesis seems to be confirmed, with the coefficient between internet access and deliberative democracy still being positive and the coefficient between the interacting variable and deliberative democracy being close to a null result. Since the hypothesis predicts different results depending on the level of democracy, it is necessary to analyse how it affects deliberative democracy as an interaction effect. The confirmation that democracies experience increasing deliberation with increased internet access corresponds with the results in Kneuer & Harnisch (2016), suggesting that the theory could be correct.

In Model 4, the sample size is now smaller, at 140, with the addition of control variables. The coefficient for internet access has a similar value as the last model, confirming that internet access positively affects deliberative democracy. The coefficient for Partly Free as an independent effect is still not significant, while the coefficient for Not Free is still negative and significant. The coefficients for the interaction variable also have similar values, confirming the hypothesis. None of the new control variables is statistically significant, except Control of Corruption, which has a positive coefficient. Control of Corruption runs on a scale from -2.5 to +2.5, with higher values representing better control of corruption and therefore less corruption. As expected, decreasing corruption is associated with increased internet access and deliberative democracy. The R-squared changes, from around 0.85 to 0.77. Since the coefficients for internet access and the interaction variable still have similar values, the hypothesis appears to be confirmed. No further controls or variables will be introduced at this point, which provides evidence that the level of democracy affects how internet access changes deliberative democracy, and that the hypothesis, and thereby the underlying theory, are correct.



In order to better interpret the interaction effect, Figure 2 presents a marginal effect plot, which is based on Model 4 in Table 2. The green line represents Not Free countries, the red line Partly Free countries and the blue line Free countries. The plot does not represent effect sizes. It is a series of linear predictions, meaning that it predicts the outcome for deliberative democracy, based on the model. With that in mind, it is still possible to interpret the results as confirming the hypothesis. Free countries are predicted to experience large increases in deliberation alongside increased access to the internet, while Partly Free and Not Free countries experience very small changes, analogous to a null effect. For Free countries, going from zero percent of the population having access to the internet to 100 percent having access corresponds to a change in deliberative democracy from around 0.3 to 0.8 in the graph. Partly Free countries do not change noticeably, while Not Free countries decline slightly, from around 0.175 to 0.15.

As predicted from the hypothesis, democracies, in this case Free countries, experience increases in deliberative democracy with increasing internet access, while democratizing states and autocracies, which would be Partly Free and Not Free countries, experience null or slightly negative effects.

Hypothesis (H): The effect of access to the internet is weaker in autocracies and democratizing states than in democracies.

Conclusion

This study was motivated by the lack of research into how deliberative democracy is affected by internet access. Since most of the research into the connection between internet access and democracy has been focused on liberal and electoral democracy, it was thought necessary to broaden the discussion about how democracy is affected by digital technology, by including deliberative democracy.

The extant literature has not found any consistent pattern regarding how the internet affects democracy. It appears that internet access will not automatically boost democracy within autocratic countries, but sometimes digital technology and social media can play an important role in undermining government propaganda and censorship.

After reviewing the theoretical origins of deliberative democracy, I arrived at a definition which focuses on the interplay between the government and regular people, where the core of deliberation is the use of rational, understandable arguments to justify political decisions, in a continually evolving political process. Since deliberation at the government level is required to satisfy this definition, a hypothesis was formulated, predicting different results for deliberative democracy based on regime type:

Hypothesis (H): The effect of access to the internet is weaker in autocracies and democratizing states than in democracies.

This hypothesis was motivated by the expectation that democratic governments would be more willing to carry out institutional reforms in favour of deliberation, since they listen more to the people, and autocracies would not. Since level of democratic rule is important, democratizing states would experience weaker effects than democracies and autocracies would experience weaker effects than democratizing states.

Using data from the World Bank and V-Dem, retrieved from the QoG Basic Dataset, multiple regression analyses were carried out to test the hypothesis. The results showed that the hypothesis was correct, that deliberative democracy increased much more in democracies than in either democratizing states and autocracies.

There were some limitations with the study which prevented a more definitive answer to the question of how internet access affects deliberative democracy. I only utilized data for a single year and did not carry out a time-series analysis. While this study should still be informative, analysing change over several years could increase our understanding of how deliberative democracy changes in response to increased use of the internet and other digital technologies. Unlike the sample size of countries, which was large, looking at trends over several years could be a more fruitful way forward for researchers interested in the internet and deliberative democracy.

It would have been interesting to use different measures of access to the internet/digital technology, such as per capita broadband connections or smartphones per capita, to see if results differ between different technologies. The difficulty seems to revolve around whether to focus on the particular or general. Analysing the internet as a whole is beneficial because it allows us to see the aggregate affect of everything, how the very experience of being online affects politics, regardless of which specific services are used. But those services can still be important, which is why we should also study the impact of certain websites and platforms, in order to guide the internet´s development in a more positive direction.

Future research is needed about differing internet use in autocracies and democracies, how the ways in which the internet is used affect the prospects for digital democracy, and democracy in general, within non-democratic countries. Overall, more research is needed about forms of democracy other than liberal and electoral, to better understand the multidimensional impacts of digital technology on democracy. This includes not only deliberative democracy, but also participatory and egalitarian democracy. The great thing about the internet is its versatility, how it can be used for so many different purposes and functions. Democracy, in all its many forms, should definitely be part of that versatility.

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