Digital Deliberative Democracy and its Moderator

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Abstract

This paper discusses Digital Deliberative Democracy (DDD) and the influence moderators have on the deliberation process. Governments are choosing more often for digital platforms for citizen participation (Van der Woude, 2019). Moderators can ensure a more inclusive and just process on these platforms. This paper focuses on the practices of DDD and the challenge of moderation that comes along with it. It splits up DDD into "Deliberative Democracy" (DD) and "Digital Democracy" (DiD). DD is a form of political decision-making that enables communication among citizens to find the best common solutions, whilst offering ownership, encouraging commitment to the process, and increasing civil participation (Mansbridge et al., 2010). DiD is the practice of democracy in whatever view using digital media in online or offline political communication (Van Dijk, 2012). DDD takes place in a context of equality, respect, reciprocity, and enough equal power of the participants to communicate influence. However, due to the self-selection of participants in a DDD, the participants need to be randomly selected (Fung, 2003). Additionally, we need to be mindful of how to least negatively impact the deliberative process, as there are a variety of ways to impact the outcomes of a DDD. The biases of a human or artificial moderato play a role in this. In order to mitigate the negative impact of the moderators on DDD, human moderators need to be combined with artificial moderators. To add to this, feedback sessions for the participants and moderators after a DDD process need to be implemented. This paper is written from a Western perspective, with a relatively well-functioning, democratic, modern society.

Keywords: Deliberation, Democracy, Deliberative Democracy, Digital Democracy, Digital Deliberative Democracy, Moderation, Moderators, Framing, Democratic processes, Human Moderators, Artificial Moderators

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Digital Deliberative Democracy and its Moderator

The school of thought where one is deliberating with one's peers on the best course of action as a way of conducting politics stems from a range of philosophers including Aristotle, Kant, and Rousseau (Chambers, 2018). However, with the rise of digital technology, the deliberation process has taken on new forms. Numerous online democratic deliberation platforms came into existence over the past few years, with municipalities opting more often for digital platforms for their inhabitants (Van der Woude, 2019). One example of this can be the “Voice of Groningen” in which inhabitants have the opportunity to voice their opinions on various projects in different stages. However, online democratic deliberation is not without its challenges as these processes are prone to be idealistic and include inherent power imbalances, as well as misattribute human motives and are too rational according to critics (Gutmann & Thomson, 2004). Moderators have the capability to ensure a more deliberative and inclusive process.

In this paper, I focus on the practices of Digital Deliberative Democracy (DDD) and the challenge of moderation that comes with it. As there is no set definition of DDD, I define this by combining two relevant concepts which I will elaborate more on in chapter one “Digital Deliberative Democracy”, with the subheadings “Deliberative Democracy” and “Digital Democracy”. Deliberative democracy is a form of political decision-making that enables communication among citizens to find the best common solutions (Mansbridge et al., 2010). Digital democracy can be defined as the aid of technological enhancements, or digital media in governmental processes (Van Dijk, 2012). It is of importance that when considering the following definition, we consider a digital environment as a space that is displayed on a digital device that is able to communicate with other digital devices (IGI Global, 2023). When we

combine both definitions, the following definition of digital deliberative democracy, which will be used throughout the research paper, can be shaped:

> "*A digital environment which allows citizens to deliberate with one another to discover the best solution on societal and political issues with the goal of enhancing governmental decision making*"

When it comes to the moderation of DDD, moderators are crucial to ensure the inclusion of different perspectives and voices, as the voices of low-states groups are often tend to be overlooked. These measures of equality are a necessity for deliberative democracy to work well (Pierce, Neeley, & Budziak, 2007). During deliberation, the presence of a trained moderator can help to eliminate the inequalities of authority and to ensure results that reflect the participants' viewpoints (Pierce, Neeley, & Budziak, 2007). A more widely known form of a moderator is used in social media, especially used by Meta or Reddit. These content moderators can be employed or volunteer for the position and are assessing the content to ensure that the platform is a safe space and toxic materials are deleted (Schöpke-Gonzalez, et. al., 2022). When considering democratic moderators, their responsibility is to ensure a safe deliberation space and to frame the questions to be deliberated upon. There are two possible types of moderators in DDD, namely human moderators and artificial moderators. Both types of moderators have their benefits and downsides. On the one hand, human moderators are perceptible to a number of biases, such as political, racial, or implicit biases (Chae, Nuru-Jeter, & Adler, 2012; Jiang, Robertson, & Wilson, 2020). The moderators who are responsible for framing digital democratic platforms might participate in forms of persuasion, consciously or subconsciously, and thus potentially affect

deliberation outcomes. There are also several strengths of having a human moderator of such deliberation platforms. On the other hand, since online deliberative platforms often include free-flowing discussions (Ruckenstein & Turunen, 2020), human moderators have the benefit of being able to adapt to the conversation and to pick up on the nuances of the messages.

Another way of moderating DDD platforms is the usage of Artificial Intelligence (AI). The downsides of artificial moderators are that they are often seen as a "black box", as the connection between input and results is not directly linked in democratic platforms. This can create distrust in the process, which can be perceived as a problem considering trust is essential in any democratic system. Trust is an important factor in the interaction between humans and artificial intelligence, and the workings of such a system should be communicated well (Kim & Song, 2023). Moderators also need to be careful about the pitfall of biased systems, as these instruments can have the tendency to be racist, as their coding is based on biased data (Vincent & Viljoen, 2020). This pitfall is similar to the human moderator weakness, however, if properly designed, the AI moderator could be less biased depending on the function of the AI. Another strength of applying AI in digital democracy can be that it significantly impacts the usability of these systems.

In this paper, I investigate the influence that these two types of moderation have on Digital Deliberation. I do this by answering the following research question:

"*How can we ensure that digital deliberative democracy is not negatively influenced by the moderator of the process?"*

I argue that we need to take into account the factor of power of the moderators and initiators of a DDD environment, to ensure that the deliberation process reflects the views of the public in an inclusive and fair manner. This is not without challenges, as the area of the technologies of DDD is fastly changing with new developments which need to be taken into account. I demonstrate that AI can be a helpful tool to limit some of the flaws of a human moderator, and both kinds of moderators combined should be the desired option when designing and choosing a DDD platform. By critically engaging with the role of a moderator in DDD, this paper provides an opportunity for policymakers to contemplate the implementation of digital deliberation platforms, and the role that the moderators play in these processes.

The paper is structured as follows: in the first chapter, I am contemplating the concepts of Digital Democracy and Deliberative Democracy, building up to an understanding of the concept of DDD. In the second chapter, I discuss the moderators of DDD platforms, and how these can have an impact on DDD. This is divided into the sub-parts “Framing of Deliberative Processes”, “Human Moderators” and “Artificial Moderators”. In the latter two subsections, I discuss the strengths and weaknesses of each approach to moderation. In the last section, I bring my findings together and make some recommendations for DDD designs and moderation. Finally, in my conclusion, I will summarize my findings and reflect on some limitations of the paper.

Chapter 1 Digital Deliberative Democracy

1.1 Deliberative Democracy

Having a disagreement is a fundamental part of our daily political lives (Gutmann & Thompson, 2009). Most Western societies integrated these agreements in the form of a democracy. The first democratic system was recorded in Greek times and translates to “Rule by the People” (Dahl, 2023). Nowadays the people vote for representatives to govern in a typical Western democratic system. There are multiple forms of democracy, each with its benefits and shortcomings. Deliberative democracy is offering ownership of the democratic process, and that is why I am talking about deliberative democracy in this section. Gutmann and Thompson (2009) discuss two types of democracy that are the basis of current democratic practices: procedural democracy and constitutional democracy. Both forms of democracy protect the individual against the tyranny of the majority. The tyranny of the majority occurs when decisions are made based on what is best for the majority of people, disregarding the needs of an individual, often resulting in the oppression of minorities (Tocqueville, 2003). Procedural democracy prioritizes the fairness of a democratic process, while constitutional democracy focuses on producing justified outcomes by protecting the rights of citizens. Either form of democracy has its limitations. Procedural democracy is criticized for its neglect of the value of protecting the rights of citizens, whereas constitutional democracy limits the capability of self-reflection (Tulis & Macedo, 2010).

Deliberative Democracy (DD) provides some solutions for the limitations of the previously discussed democracies. DD allows inhabitants to take a broader perspective, and are able to step away from their inherent self-interests and clarifies the nature of a moral conflict (Gutmann & Thompson, 2009). DD utilizes deliberation to understand the conflicts in politics.

An example of this is the study conducted by Cole in 2013. This study found that after utilizing DD, the students in the study felt more knowledgeable and informed about the democratic process of the ballot measure on which students deliberated (Cole, 2013). However, there are critical voices in the field of DD who are arguing that an increasing number of scholars call themselves deliberative democrats without clearly understanding the notion of deliberation (Kies, 2010). They argue that the origin of DD needs to be understood before as it is still a blurry and polemical concept. Estlund and Landemore (2018) define deliberation as: "Deliberation, roughly the weighing of reasons, is something individuals do for themselves, but it also has an interpersonal (or "intersubjective") form—the collective weighing of reasons with others, by communicating, arguing, debating, and persuading. Democratic deliberation is not only interpersonal but also public and structured in ways necessary to count as democratic, a matter handled differently by different theories of democracy". This dissertation uses this definition of deliberation as a basis for further contemplation of DD and is used in the formation of the definition of DDD.

A deliberative process often contains three features, namely reciprocity, publicity, and accountability (Gutmann & Thompson, 2006). DD is not inherently fair, or just, yet if the process is aiming to meet the previously named three features, the process becomes less unjust. Gutmann and Thomson argue that rather in the absence of robust deliberation in democracy, citizens cannot even provisionally justify many controversial procedures and constitutional rights to one another. Their main argument highlights the need for DD, and due to the inherent unfairness of the process, a moderator is necessary to mitigate the unjustness.

Not all deliberation is considered DD, as there is a minimal requirement for mutual communication that involves the weighing and reflecting of preferences, values, and interests in

regard to a common concern (Bächtiger, et al., 2018). This needs to take place in a context of equal recognition, respect, reciprocity, and enough equal power to communicate influence. The deliberative action in DD should include asking questions to enhance one understanding of others' experiences and interpretations. Even when an individual or group is dominant in a conversation, the understanding of the positions of all groups is central in the process. A moderator plays a key role in ensuring a respectful conversation. An example of this is a political debate, even when a certain candidate is more present in a debate, it is the role of a moderator to ensure that all candidates have the platform to express their views on a public issue.

In a respectful conversation, emotion plays an important role. In her book “The Intelligence of Emotions”, Nussbaum (2001) argues that these kinds of interactions include a form of appraisal and evaluation. It requires a commitment to the process and it requires oneself to deliberate on the emotions which arise in a deliberative process. This is key to understanding the fundamentals of ones reasoning behind certain viewpoints. Nussbaum (2001) highlights the importance of empathy and compassion in good deliberation. The requirement for compassion and empathy would flourish more in a consensual system. The deliberative quality is higher with no such strict disciplines, and the divisions between actors should be less clear (Bächtiger, Spörndli, Steiner, & Steenbergen, 2004).

The quality of DD is hard to define, as DD does not need to result in consensus to be successful (Gutmann & Thompson, 2004). Often in the process of deliberation, policy disputes, criminal injustices, and settlements are negotiated, resulting in a more justified outcome. However, the public who is participating in DD has a tendency to self-select, as the deliberation in DD is open to all who want to attend (Fung, 2003). This creates an over-representation of a certain group of citizens from mostly higher socio-economic status, even though there is no

evidence that socioeconomic status influences the quality of deliberation (Dutwin, 2003). One recommendation against this self-selection bias in a deliberative democracy is to randomly select a public to attend a deliberation (Fung, 2003). When one does randomly select citizens for DD, their civic engagement increases (Fishkin, 2009). Additionally, not only does the participants' engagement rises, the surrounding communities' civic engagement rises alongside the participants' engagement due to the information spread. This engagement can for example take the form of voluntary work, and participation in electoral politics and is thus very valuable for a well-functioning democratic system (Fishkin, 2009).

This section on Deliberative Democracy discussed the definition of DD, and why it is discussed in the context of this deliberation. Additionally, some key aspects and pitfalls of DD are elaborated on. In the following section, Digital Democracy is discussed, as the deliberative platforms are moving more towards digital platforms.

1.2 Digital Democracy

Today's society has undergone much change since the times of the Greeks. Nowadays we have technologies that provide us with the tools for easier communication, such as the smartphone and the world wide web. However, the democracy which is in place in most Western countries has not kept up with the times. For example, the Dutch government has been a parliamentary democracy since 1848 (Staten-Generaal, 2016). This is one of the many examples in which governments have not adapted to the many changes and possibilities of technology. This is why I am discussing the role of Digital democracy in society in this section of the dissertation.

Nowadays, we have more access to information due to the internet compared to when most democratic governmental systems were designed. In order to keep up with these fastly

changing times, Digital Democracy can provide an outcome. Digital Democracy (DiD) can be defined as “the pursuit and practice of democracy in whatever view using digital media in online or offline political communication” (Van Dijk, 2012). This definition entails that every device on which political communication is practiced is considered DiD. Examples of DiD vary from social media platforms such as Facebook, Twitter, or WhatsApp where campaigns are conducted, or ideas are gathered (Sgueo, 2020), to Plebiscito Digital, an online voting platform utilized in the 2016 referendum on the peace treaty between the Colombian government and the Fuerzas Armadas Revolucionarias de Colombia (Sgueo, 2020). The latter example of a government-initiated platform is of more relevance to this paper. DiD provides a new space for community involvement in democratic life (Congge, et al., 2023). DiD is seen as a possible solution to some fundamental problems that democracy is facing, such as trust in the government and political activity (Van Dijk, 2012).. Through these digital platforms of citizen participation in the government, the public becomes more informed (Hagen, 2000). However, these platforms are not without flaws. Firstly, these platforms are of interest to be hacked when the outcomes are of extreme importance. Secondly, the current internet users are highly concentrated on a selection of outlets and often being presented with content that is already in line with their preexisting views (Hindman, 2008)

Due to these flaws, the safety or transparency of these platforms has been questioned. The topic of digital deliberative democracy has become a topic that is more and more discussed by individuals due to these concerns. Critics of Digital deliberative platforms often assume that these platforms are too idealistic, misconceive the relationship between reality and normality, fail to consider the de-personalizing effects of social media or similar (political) platforms, and fail to acknowledge that politics are often subjected to spontaneous and chaotic outburst and cannot be

fitted into a deliberative model (Kreide, 2016). However, as Kreide (2016) argues, these concerns can be addressed as deliberative democracy both in person or online can lower the tension between the different interest groups and connect decision-making with the needs of people if implemented correctly.

1.3 Digital Deliberative Democracy

As already mentioned in the introduction, there is no set definition of Digital Deliberative Democracy (DDD). For this paper, I am going to work with the definition which was also stated above, and combine the previously mentioned concepts of "Deliberative Democracy" and "Digitial Democracy". This definition reads as follows: "A digital environment which allows citizens to deliberate with one another to discover the best solution on societal and political issues with the goal of enhancing governmental decision making". By including the ability to communicate with other people who own devices, the ability to deliberate online is a possibility. Deliberating between individuals creates an open flow of conversations, and has been theorized to promote a revision of one's previously upheld views and increase the knowledge of participants (Barabas, 2004). This can be helpful for policymakers, as through these digital deliberative spaces, they gain insights into the views, opinions, and knowledge of their citizens. These political systems are empowering participants to enhance their self- and collective- rule through voting, representing, deliberating, and resisting (Beauvais, 2018). Beauvais (2018), also argues the close relationship between equality and democracy, as equality distributes the symmetrical empowerment of participants.

As previously mentioned, the participants of a deliberative process should be randomly selected (Fung, 2003). The rationale behind this is that "social groups are an expression of social relations, and structural equality between social groups denotes egalitarian social relations"

(Young 2011), meaning that participants are representing the inequalities of the real world in these processes. These inequalities limit the participation of disempowered social group members, even if the outcomes of deliberation have an effect on them. A moderator can ensure that these digital deliberative processes remain equal, based on the values of inclusiveness and equity, as it can adapt to social circumstances and recognize systematic differences between social groups (Beauvais, 2018). If we do not take into account the members who are prevented from participating in deliberative processes, it helps maintain a racist and patriarchal system of oppression, as the platforms of political discussions enforce these systems (Williams, Cheung, & Choi, 2000). However, these moderators are not without their flaws and are perceptible in framing the deliberative processes. Both human and artificial moderators might be susceptible to this, as both have their strengths and weaknesses, which are elaborated on in the following chapter.

Chapter 2 Moderator

As previously mentioned, moderators can help with some of the flaws of DDDs due to their ability to help ensure a just deliberation. This chapter elaborates upon two kinds of moderators, namely human and artificial moderators, and how they might negatively influence the deliberative processes by consciously, or subconsciously framing during or before the processes. Sunstein and Hastie, (2008) describe four additional failures of deliberating groups that moderators might help to alleviate. The first is cognitional errors which participants have before entering a deliberation, might be amplified. Secondly, the groups might fall victim to cascading effects, which entails that the opinions held by the first speaker are followed by the following speakers, who consequently do not fully share their views (Sunstein & Hastie, 2008). Thirdly, due to polarization, a more extreme position in line with their thoughts might be taken. Sometimes this polarization leads to a desired outcome, yet there is no confirmation of this effect (Sunstein & Hastie, 2008). The last flaw that Sunstein and Hastie describe is the tyranny of shared information. This information overwhelms the unshared information, ensuring that participants do not learn what other members know. These errors can be described as informational signals or reputational pressure (Sunstein & Hastie, 2018) which moderators can help relieve.

2.1 Framing of deliberative processes

The errors described above are part of group dynamics, however, a moderator can also influence the online deliberation process by engaging in the framing of deliberative processes. In psychology, there are a number of theories on how to influence the behavior of individuals. Moderators might engage in some of these practices as well. For example, when presented with

different options, one perceives the power of choice. However, the body of individuals who presented the options and corresponding questions went through a process to formulate what is presented. There is a range of psychological theories focussing on influencing an individual's choice. Examples of this can be “lowballing”, “door in the face” or “foot in the door” techniques. These are examples of persuading someone to make a certain choice and persuading them to make decisions, possibly against their best interests. The behaviors of large groups of individuals can be altered by adapting persuasive appeals to the public (Matz, et al., 2017).

Lowballing occurs when the moderator or initiator of the process attempts to find compliance with an option by following the initial option with a more costly and less beneficial version of the same request (Cialdini, et al., 1978). This technique is often used by car salesmen and utilizes cognitive dissonance. Cognitive dissonance is a psychological term where one's values do not align with their behavior. For example, a smoker who believes that smoking is bad for you does not have their values aligned with their behavior. They engage in cognitive dissonance to either lower their values, or lower the impact of their behavior (Hewstone, Stroebe, & Jonas, 2016). This strategy is effective due to the commitment which the individual makes to the request and feels a need to comply with some request, as they already declined one offer (Cialdini, et al., 1978).

Reciprocal concessions, also known as the “door in the face” technique, occur when the moderator begins with an extreme request. This request is often denied, and the moderator consequently offers a more moderate request, the original one, which then is accepted by the participants (Cialdini et al., 1975). According to Hewstone, Stroebe, and Jonas (2016), there are two explanations for this. The first is based on the principle of reciprocity. The participants have an inherent need to comply to some extent, which results in extending reciprocity to the first

request. The second explanation is that the participants have a need to build social relationships, resulting in establishing equity after denying the moderator's initial request as we wish to view ourselves as generous or consistent (Brown & Smart, 1991).

The third way to influence someone is called the “foot in the door” technique. This technique is the reverse of the reciprocal concession technique. The “foot in the door” technique first asks for a small request, to be then followed up with a larger request. Participants are more likely to agree with the larger item as they already agreed with the smaller request and like to be consistent to avoid cognitive dissonance.

Another way to frame a deliberative process is by utilizing omission. According to Buss (1987), there are three key mechanisms when omission is utilized. The first is selection, which is when an individual chooses to enter or avoid existing information (Buss, 1987). The second is evocation, which is described as the way in which individuals aim to provoke certain expected responses from individuals in their environment. The last, and arguably the most potentially harmful, is manipulation. Manipulation is when individuals intentionally alter, shape, exploit, or change the environment to change the outcome (Buss, 1987). This way of shaping the outcome of a process can be called choice architecture. Choice architecture is a class of behavioral interventions that focuses on designing the choice environments to ensure a desired outcome without restricting the perception of freedom of choice (Mertens, et al., 2022). However, their study found that the effectiveness of choice architecture depends strongly on the technique. When an organization and structure of choice alternatives are framed, it is much more effective when a choice in alternative or reinforcement of a choice is framed. Mertens, et al., (2022) stress the importance of the context of the process, and the implications of choice architecture for policymaking.

Another field in which the framing of messages occurs a lot is the field of health, and more specifically the framing of health messages in terms of for example gains or losses. When influencing the gain and loss-framed messages it influences the perception of risk or uncertainty of an outcome (Rothman, et al., 1999). Their findings especially signify the effectiveness of loss-framed messages when advertising for the screening of illnesses. Yet, the gain-framed messages are more effective when advertising for preventative behaviors.

The framing of risk is not only effective in promoting health behaviors but also in the decision-making of psychiatrists (Jefferies-Sewell, et al., 2015). Due to the biases within individuals, psychiatrists prefer to disclose risks when presented in numerical form, instead of a semantic label such as “high” or “low” (Jefferies-Sewell, et al., 2015). These reference points are coming back when we talk about the framing of a speaker's choice of words (McKenzie, & Nelson, 2003). A listener is perceptive to how a message is described to them. The experiment describes that when a speaker refers to a cup as “Half full”, the listeners infer that the cup used to be empty, whereas the cup only was filled halfway. The conclusions from this study suggest that the framing relies on a combination of implicit information, as well as explicit information (McKenzie, & Nelson, 2003).

Digital democracy is not free of this form of framing. The conditions of e-government deal with ethical problems such as a principle of conduct (Roman, 2013). Roman (2013) argues that such caution is necessary to deal with the complex system as it has inherent ambiguities and conflicting interests. He notes that the social incentives to deceit in such environments are powerful, and control about this is often weak. Change in such practices is thus not evident, as many individuals experience being caught up in these practices (Roman, 2013). In a deliberative

setting, it is of importance to neutralize the framing effects and avoid a biased deliberation outcome (Barisione, 2012).

The understanding of the contexts of words has expanded enormously since Foucault (Van Parijs, 2011). How we frame the context of words, and how we utilize language, do hold power over the outcome of deliberations. Next to the above-mentioned techniques, a more concrete example of creating biases via a choice of words is the usage of "mankind" to describe humanity (Lupia, & Norton, 2017). Feminist movements have ensured the wide adoption of humanity instead of mankind. The framing of deliberative processes takes place in every context, however, moderators need to be mindful of this and need to aim to remove this power from deliberative processes (Bächtiger, et al., 2018).

2.1.1 Power

Power returns in every deliberative process, whether this is among participants, between the moderator and participants, or between the process and policymakers. This power comes into play when talking about the framing of deliberative processes as if an initiator or moderator chooses to utilize its power to negatively influence the process, the outcomes are biased. That is why it is important to understand how power interacts with the digital deliberation process. In a deliberative practice, those who control, design, and democratically change practices hold the power (Kadlec, & Friedman, 2007). This does not mean that the participants are without power. Participation is viewed as containing much value and contested political concepts, not just a method or technique (Gaventa, 2006). When we look at participation from a bottom-up perspective, it often originates from the demands of the excluded in a process (Gaventa, 2006). Whereas if deliberation is structured by a top-down approach, it is viewed as a gift, but the participants are not going through the process of transformation and reflection (Freire, 1996).

Participation increases stakeholder involvement, as they are involved in the shared control over the decisions and resources which affect them (Usadolo, & Caldwel, 2016). It can be argued that participation, especially in a digital deliberative democracy is a right of citizenship as participation increases one feeling of commitment. To add to this, participation has the possibility to enable the poor and marginalized people to become aware of the structural reasons for their exclusion and how their own views of the world and thought processes can or cannot challenge these (Geventa, 2006)

2.1 Human moderators

When policymakers have decided upon using of a digital democratic forum for participating, the conversation has to be monitored and analyzed. One way of doing this is by having human moderators. Otherwise, we risk the tyranny of participation. Cooke and Kothraki (2001) describe three categories of tyranny, of which the first is the tyranny of decision-making and control. This occurs when a moderator overreaches in the process in a community. The second is the tyranny of a group, this is when the outcome reinforces the interests of the ones who are already in power, instead of voicing everyone's opinions. The last is the tyranny of the method, as when deliberative democracy is utilized, it might rule out other forms of improving democracy, as moderators or initiators of these processes see the digital deliberations as the way to improve the current processes, causing to be there no space for other methods to be ruled out (Cooke & Kothari, 2001).

In a deliberative democracy, human moderators might misunderstand the motivations of participants. The way a deliberation is designed plays a curial role in countering the biases human moderators are expected to have (Gutmann & Thomson, 2009). It is important to have a trained moderator, as a study by Strandber et al. (2017) showed. In this experiment, the

researchers varied a number of deliberations on attitudes towards migrants in Finland. When a moderator was present, the polarization in the group became less hostile, whereas the groups who were deliberating without a moderator became more polarized.

In an ideal digital deliberative world, we would have unbiased moderators to ensure smooth deliberation. Unfortunately, the moderators are not without flaws. When moderators are leading a deliberation, even in a limited or constrained matter, they are expressing their own views and have the possibility of significantly changing the preferences of participants (Spada, & Vreeland, 2013). One example of this is the self-editing that human moderators might engage in (Sunstein & Hastie, 2008). This is when moderators have information that does not align with their own views and tend not to share them, either by not including certain viewpoints of participants, or failing to highlight a contrasting view to the participants. When the majority view becomes more important than the truth, the moderator has to intervene, even if their views do not align with the role they have to play. Especially when including the views of members of minorities and other oppressed groups, such as less educated individuals, people with a different ethnicity compared to the majority, or women, as they tend to speak up less, or are viewed with less influence than their counterparts in the deliberation (Sunstein & Hastie, 2008). These lower-status members of the group are more reluctant to share their views or repeat themselves, they are nervous to share the information which would enrich the deliberative process. They experience difficulty in establishing credibility and relevance in such a deliberative process, even when randomly sampled. A moderator needs to be able to adapt to these group dynamics in order to intervene.

Another deliberative failure that human moderators need to be mindful of is the amplification of cognitive errors such as the availability heuristic and the representative

heuristic. The availability heuristic occurs when a moderator relies on the availability of their memory and uses it to confirm pre-existing biases (Sunstein & Hastie 2008). After a deliberation has taken place, and the moderator is converting the results for policymakers, it relies on the available instances of information to base the conclusions upon and possibly misses some key notions of the deliberation. The representative heuristic happens when a group amplifies its beliefs, rather than corrects its extreme views (Sunstein & Hastie, 2008). As mentioned above, the moderator is not without their own views, which could cause an amplification of views when the moderator is mostly agreeing with the participants. The representative heuristic could occur if the moderator is in agreement or disagreement with the popular view. When the moderator does not agree with the participants, they might engage in a reputational cascade, entailing that even if they know what is right, they do not disagree in order to maintain a good opinion (Sunstein & Hastie, 2008). This might also happen among participants in digital deliberative processes, as they do not want to face public disapproval. Many policymakers engage in a reputational cascade when they engage in vague statements in order to maintain “Politically correct”.

One task of a moderator is to explain certain concepts of the topic on which deliberated upon. However, they might overweight the common knowledge of the participants. The common knowledge effect is explained as the shared knowledge of all group members weighs stronger than the information held by a few of the participants (Gigone, & Hastie, 1993). One example of this effect is the Titanic. The boat Titanic which sailed across the Atlantic Ocean was widely thought to be unsinkable. Consequently, when multiple warnings of icebergs were given to the crew, nobody took them seriously, as they commonly thought the ship to be unsinkable. Unfortunately, the minority who gave the warning signals turned out to be true, and the common knowledge was less valuable than predicted.

However, the moderating of content could have a negative effect on the mental health of the moderators (Schöpke-Gonzalez, et al., 2022). The reason why most moderators end up resigning is linked to psychological distress, demographics, and community characteristics. The psychological distress that moderators are experiencing stems from struggling with leading against harmful behaviors and being restricted in the amount of available time (Schöpke-Gonzalez, et al., 2022). Their study also recommended social interventions for moderators to support them through the process in order to lower the burden on their mental health.

2.2 Artificial moderators

Another way of monitoring digital deliberation democratic platforms is the usage of Artificial Intelligence (AI's). Artificial moderators are based on such AI systems to ensure moderation in discussions, forums, or deliberative processes. The latter is especially of interest, as the usage of an artificial moderator can thus have an impact on the outcomes of a political decision-making process. Similar to a human moderator, the function of an artificial moderator is to facilitate and regulate these processes to ensure a respectful and inclusive environment (Beauvais, 2018).

The role of a moderator puts a strain on the mental health of human moderators, which is why artificial moderators can help relieve some of these complications. Whereas a human moderator relies on their training and capabilities, an artificial moderator utilizes algorithms, natural language processing (NLP), machine learning, or other AI techniques to moderate the content of a deliberative process (Doan, England, & Vitello, 2021). An artificial moderator has the capability to automatically filter and flag inappropriate content, or content that is in violation of the deliberative guidelines. Examples of these violations could be spamming, hate speech,

offensive language, or personal attacks. Artificial moderators use keywords, pattern recognition, or matchmaking algorithms to identify these violations (Doan, England, & Vitello, 2021). These same algorithms are utilized by artificial moderators when there is a need for real-time interventions in the discussion. Once they have flagged a violation, the artificial moderators might warn, guide or discourage the participants from engaging in these violations.

The usage of artificial moderators has another advantage besides the screening of violations, which is the large scale on which these moderators can operate upon. Whereas human moderators are limited in capacity and time, artificial moderators are able to handle a high amount of content in a short period of time. This is also necessary for a digital deliberative space, as in an online deliberation multiple participants can engage in a conversation at the same time, compared to deliberation in person, where only one participant talks at a time.

However, an artificial moderator is not without its limitations as well. They might struggle with the context of messages, understanding sarcasm, or cultural references, which can lead to a false interpretation of the content in a deliberative process. To add to this, some critics voice concerns in regard to the potentially biased basis of an algorithm or the lack of trust in such a system as AI's are designed by individuals (Kim & Song, 2023; Vincent & Viljoen, 2020).

There is a growing awareness of the inherent biases in these systems, however, correcting these biases requires extensive reverse engineering (Eslami, 2017). According to Verbeek (2011), technology is far from a neutral instrument, as it actively shapes our interactions, perspectives, decisions, moral values, and imagery. We rely more and more on these technological inventions in our governments on all organizational levels (Bovens, & Zouridis, 2002). Dunleavy, et al., (2006), argue that these technological systems have the potential to strongly influence a particular system of administrative capabilities, as the procedures are translated to algorithms

which consequently are expensive to change in the future. Yet, these algorithms do make choices that influence the outcomes of deliberations and questions such as who will check the developers/initiators of these systems, and the artificial moderators themselves? (Bovens, & Zouridis, 2002). However, Mullainathan (2019), argues that the biases in artificial systems are easier to correct compared to the inherent biases in humans. In their study, they describe two instances where a racial bias occurred, one in a recruitment process, and another in medical care. In the recruitment process, the applicant with a more black-sounding name got fewer job interviews. In the example of the bias in medical care, the black patient received worse care compared to their white counterpart (Mullainathan, 2019). The difference between both instances is that in the recruitment process, the decisions were made by a recruitment officer, whilst in the medical care an AI was the one who made the decision. Mullainathan (2019), researched what could be done against these biases when both a human and an AI made decisions and found that a direct bias was more difficult to lead back to one person, or one cooperation. To add to this, implicit bias training against such biases in humans has a modest effect (Atewologun, Cornish, & Tresh, 2018). In contrast to Dunleavy, et al., (2006), Mullainathan (2019), argues that an AI system is easy to update and ‘fix’ these biases.

Chapter 3 Recommendations

In chapter one I discussed the meaning of Deliberative Democracy, Digital Democracy, and Digital Deliberative Democracy and the complex questions which arise in these processes. The need for a moderator is explained, however, both a human and an artificial moderator are not without their flaws, as explained in chapter two. In this chapter, I am going to provide some recommendations on how a moderator can limit its negative influence on a Digital Deliberative Democracy process.

Due to the inherent biases of an individual, it is nearly impossible to have a deliberative process without some influence from the moderator. Examples of some of the techniques which a moderator could use to influence the processes were lowballing, foot in the door, reciprocal concessions, omission, amplification of cognitive errors, common knowledge effect, and self-editing by the moderators. However, this does not mean that there is nothing that we can do. Firstly, I argue that if we combine a human moderator with an artificial one, we can utilize the strengths of both kinds. The artificial moderator can work more efficiently, flagging the problematic content in DDD, relieving the human moderators, and preventing them from resigning due to the psychological distress of the moderation process. An artificial moderator is not affected by harmful behaviors or is restricted in the amount of available time. However, social interventions are necessary for the human moderators who are still overviewing their artificial counterparts, making final judgments, and interpreting the nuances of the content (Schöpke-Gonzalez, et al., 2022).

A second recommendation to minimalize the influence of a moderator on the process is to randomly sample the participants. As previously mentioned, the participants who are participating in DDD are often self-selected, creating an over-representation of a selection of the

public. To combat this self-selection bias is to randomly select participants to attend a deliberation (Fung, 2003), consequently rising the civic engagement of the participants (Fishkin, 2009). When the participants are randomly selected, preparation of the deliberation process is recommended. This ensures that ground rules are established and accepted by everyone involved in the deliberation. During this deliberation, participants are made aware of the range of framing possibilities that the moderators might utilize. Additionally, they are informed of the possibility that some members of the group are less likely to speak up, as they are viewed with less influence. Examples of these low-status members include less educated individuals, people with a different ethnicity compared to the majority, or women (Sunstein & Hastie, 2008). By making participants of DDD processes aware of the reluctance of these participants to speak up, more empathy, credibility, and relevance is created in the deliberation process.

A final recommendation that can be given is to have feedback sessions for both human and artificial moderators to improve performances (Kristoffersen, 2019). Due to these feedback sessions, human moderators become aware of the biases they had during the Digital Deliberative Democratic process. These sessions encourage moderators to admit and change biases (Goedderz, & Hahn, 2022). A similar way of providing feedback is applicable to artificial moderators. The algorithms which form the artificial moderators need frequent reviews and updates to ensure a lower frequency of bias occurrences (Mullainathan, 2019).

Conclusion

To conclude, DDD is becoming increasingly relevant for governments, as municipalities opt more often for digital platforms for their inhabitants (Van der Woude, 2019). Moderators can ensure a more inclusive and just process on these platforms. In this paper, I focused on the practices of DDD and the challenge of moderation that comes along with it. I split up DDD into "Deliberative Democracy" and "Digital Democracy". DD is a form of political decision-making that enables communication among citizens to find the best common solutions (Mansbridge et al., 2010). It is offering ownership of the democratic process, encourages commitment to the process, and increases the civic participation of citizens. DiD is the practice of democracy in whatever view using digital media in online or offline political communication (Van Dijk, 2012). When both concepts are combined, I was able to make a definition of DDD. A DDD needs to take place in a context of equality, respect, reciprocity, and enough equal power of the participants to communicate influence. However, due to the self-selection of participants in a DDD, the participants need to be randomly selected (Fung, 2003). Additionally, I discussed the role of a moderator and the framing of a DDD process. We need to be mindful of how to least negatively impact the deliberative process, as there are a variety of ways to impact the outcomes of a DDD. The biases of a human or artificial moderato play a role in this. These biases can be counteracted, however, this is no easy task. In order to mitigate the negative impact of the moderators on DDD, human moderators need to be combined with artificial moderators. To add to this, feedback sessions for the participants and moderators after a DDD process need to be implemented.

It is important to keep in mind that I am not an unbiased researcher. As in research, the opinions, values, beliefs, and social background of a researcher influence them in the research

process, shaping each methodological and analytical decision they make (Manohar, et al., 2017). This is why the reader needs to consider that this research paper is written from my perspective, as a Dutch individual who has lived their whole life in a relatively well-functioning, democratic, modern society. In the Netherlands, the government has been using a digital identification system, named DigID, which is used to access a number of governmental-related websites or apps (Rijksoverheid, 2023). Examples of these kinds of apps or websites can be the app "Brievenbus", where you can receive letters from the government, "MijnGegevens", where you can see what information the government has about you, or various amounts of tax websites such as "MijnBelastingdienst" or "Noordelijk belastingkantoor". This system has been so successful that researchers have been arguing for an extension of the DigID system, to the private sector (Moniava, Verheul, & Schoenmakers, 2008). Due to my position as a young researcher living in a society that has successfully implemented digital tools in a functioning democracy, it is important to keep the context in mind while reading this paper. This is especially important to note when inferring the results of this paper in contexts where the rate of digitalization is not as high, or a lack of trust in the government.

Another limitation of this dissertation is the scope of the level of governance. The conclusions made in this paper are mainly applicable to the local level of governance. However, this level of governance directly influences the living environment of most people, and governance on this level is involved in real-world decision-making (Melo & Baiocchi, 2006).

The findings of this dissertation are of importance due to the interdisciplinary view of democracy. Not only is DDD written from a political theory perspective, but a psychological perspective and technological perspective are also taken. Additionally, this paper contributes to the current literature on artificial moderators and digital democracy. On both topics, there is not a

large body of scientific literature yet. Due to the fast-changing developments of this topic, it is important to keep examining the topic of democracy through different lenses. In this case, the lens of a moderator, al-be-it artificial intelligence, or a human moderator. The initiators of DDD processes can utilize the findings of this paper by implying the recommendations I made in their future digital deliberative platforms. If these recommendations are followed, the flaws of DDD can be mitigated and the trust of citizens in these processes can increase significantly, improving the current state of democracy.

Compliance with Ethical Standards

For this paper, there is no ethics approval needed, However, the ethics statement form of Campus Fryslan is filled in to ensure that I did not look over anything that did need ethics approval.

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