Bots, fake news, fake faces and deepfakes: automation, under the bias of dromology, as a sophisticated form of biopower to influence the democratic election process

Abstract

This article intends to examine, under the influx of technological advances, new forms of fake news, fake faces, and deepfakes that have been disseminated by social bots, among others, with the purpose to interfere in the electoral process. The methodology used was bibliographic and documentary research, consisting of the collection and analysis of information extracted from texts, books, and articles, in addition to other scientific data, such as reports, research, laws, and bills/draft laws. Both biopower and biopolitics were used as theoretical references to contrast the collected data, whose approach is based on Michel Foucault and Antonio Negri’s studies, and also dromology, supported by Paulo Virilio’s studies. We concluded, using the deductive method, that the fake news massive dissemination by robots (bots), now humanized through fake faces and the dissemination of videos (deepfakes), can influence, modify the result of the election through the public opinion manipulation in the formation of its voting intention, which represents a serious violation of democracy and, therefore, urgent legal regulation and combat strategies are required.

Keywords: Biopower; Bots; Democracy; Fake news; Manipulation.
Introduction

The internet and social networks represent an important advance in the scope of social relations, as they allow the interface among people or groups of people, without geographical limitation, increasing the speed in the dissemination of information. Aware of this important phenomenon, in the electoral scope, the focus of this research, political actors have made common use of social networks to express political manifestations, expose political platforms or projects, interact with their voters, publicize their claims and express criticism to their opponents.

Thus, social networks have become strong allies of democracy, but in recent years, a new way of influencing the outcome of the democratic electoral process has emerged worldwide: the spread of fake news. As of 2014, the harmful power of fake news was amplified by the use of robots - the social bots - which now use fake faces (ROMANI, 2020) and deepfakes (altered videos with overlapping faces of someone who wants to harm themselves) (LOPES, 2019).

The importance of the subject investigated now emerges from three justifications: (i) on the national scene, the use of robots to disseminate false news has been determined through the Joint Parliamentary Inquiry Commission (CPMI) of fake news, as well as being the subject of two bills in progress in the National Congress; (ii) the elections for President of the Republic in 2022 will certainly cause more action by bots on social networks; (iii) social isolation, caused by the decree of a public health calamity situation, due to the COVID-19 pandemic, has caused an increase in active users on social networks, thus increasing the level of interactions, including bots. For these reasons, it is essential to analyze the use of bots to spread fake news in more modern ways.

In order to investigate this legal issue, the work is divided into five parts. The first and second parts will be devoted to contextualizing the reader, especially those who are not familiar with the theme. In this sense, the first part will be dedicated to the examination of bots, presenting their origin, meaning, functions and definition; the second, in turn, will be dedicated to examining fake news, fake faces and deepfakes with the same objective as the initial part. The third part will be aimed at presenting the theoretical framework: biopower and biopolitics, with an approach based on the studies of Michel Foucault and Antonio Negri, and dromology, supported by the studies of Paul Virilio, which exposes technological speed as a form of power. The fourth part will advance the study of fake news, fake faces and deepfakes propagated by bots in the context of the electoral process, analyzing data, reports and other scientific documents. In the final part, the article will deepen the analysis of the challenges of Electoral Justice in facing this legal issue, and will do so through the analysis of the current legislation, regulation of the Superior Electoral Court (TSE) and the examination of parliamentary discussions around it, including bills that aim to make this social reality positive.

Based on the deductive method, the article will analyze, as a problem, the role of robots in the dissemination of fake news, fake faces and deepfakes on social networks in order to interfere in the electoral process by manipulating the electorate, as well as investigating the means by which Electoral Justice currently faces this problem and if it is sufficient, suggesting in the end, if possible, alternative means of combating the use of bots on virtual networks to manipulate the democratic electoral process.

1 Social bots: definition and general aspects

Mankind has been fascinated by the ideas of artificial intelligence, the android, the bionic man for some time and demonstrates this in literature and cinema, but he also pursues him in real life, through science.

It is noted that in the 1960s, Joseph Weizenbaum, a professor at the Massachusetts Institute of Technology, developed a computer program called “Eliza”, with which people could communicate through language. However, the first programs were limited and worked in the form of chat, hence why they were called chatbots (CRUZ; ALENCAR; SCHMITZ, 2018). They were simple because they used “less elaborate natural language processing resources and did not integrate with other systems and programs. Therefore, the ability to provide adequate responses to the situations presented to them was limited” (CRUZ; ALENCAR and SCHMITZ, 2018, I. 47).

Time and technological evolution were the main factors for the improvement of these programs because currently “these chatbots use sophisticated artificial intelligence resources and integrate easily with legacy systems and applications”, which provided them with greater “ability to provide answers to the questions they are asked”, and are now known as virtual assistants (CRUZ; ALENCAR; SCHMITZ, 2018, I. 58-67).

With the improvement of technology and the emergence of social networks, it evolved from simple virtual assistants to highly intelligent social bots capable of learning content online, studying the digital language of
individuals and copying their way of interact. Ruediger (2018, p. 05) explains the meaning of the expression bot and exposes the two meanings that characterize it:

The word bot (short for robot in English) is used in different contexts to refer to different technologies - from mechanical robots, which interact with the physical world, to computer programs that produce and reproduce content on social networks.

In this work, the bot is being investigated in its second meaning, that is, a computer program capable of producing or reproducing online content on social networks, in which case it is called social bot, social bot or robot. Social. In order to facilitate the understanding of the reader, it is possible to summarize the operation of bots:

These software perform interactions in various ways, such as advanced natural language generation systems, which have machine learning techniques to process and respond to messages, and simple systems that send messages previously determined or selected from keywords found in the text as (sic.) which the interaction will occur (RUEDIGER, 2018, p. 07)

The concern with the irregular use of such software is such that one of the modern challenges, resulting from the speed of advances, is the creation of technology capable of identifying or, still, controlling its irregular propagation. Currently, the software is capable of undergoing a humanization process to hinder the user’s perception, so that he does not know if he is interacting with another user or with a robot.

In order to combat the electronic performance of robots on the internet, online bot filters were implemented, which require the user to click on the message “I am not a robot” and, next, choose, among the figures presented, “all traffic lights”, “All pedestrian crossings”, “all cars”. This procedure has the function of diverting the action of a bot because, although these programs are able to interact and even fill fields in an automated way, they are hardly able to choose similar images. It is the use of machine learning technology, whose examples are the well-known captchas designed to stop the malicious use of bots and, at the same time, test and improve forms of protection (AFINAL, 2018; ANGELS; BRANDÃO; POLIDO, 2019).

The relevance of social networks for the expression of thought is indisputable, as it is a democratic environment, which allows the dissemination of opinions, however the automation of instruments necessary for the use of social networks provides, on the other hand, the dissemination of false profiles, controlled by robots, posing as human beings, ordinary people in order to dominate political discussions or events of great repercussion (RUEDIGER, 2017).

Two current realities reinforce the importance of this theme: the 2022 elections and the situation of public calamity decreed due to the COVID-19 pandemic. Both situations will promote an increase in the number of electronic interactions on social networks by robots. The elections of 2022, due to the political propaganda and the electoral use of this software. The pandemic, due to the social isolation that, undoubtedly, causes greater virtual interaction of people, who spend more time in homes due to the impossibility of dedicating themselves to other forms of entertainment.

From this context, the importance of studying bots in the electoral field emerges, especially now that, in addition to fake news, they make use of fake faces and deepfakes in order to interfere in the electoral process, according to the approach to be exposed in the following chapter.

2 Fake news, fake faces and deepfakes: generalities

The globalization process, accelerated by the use of the world wide web, has undeniably transformed the virtual environment into an instrument of socialization. In this environment, everyone equally has the right, the power to express their opinion.

However, the possibility of manifestation in the dark is pointed out as a negative factor of social networks, that is, its use by someone with malicious intent, hidden behind a false profile, to spread untruths, distribute hatred, commit crimes, among others possible negativities. Among the possibilities of misuse of social networks are fake news, which are characterized as the “expansion of the viral phenomenon of malicious, false or malicious information over the internet” (ANJOS; BRANDÃO; POLIDO, 2019, p. 162).

Although, there are those who make a distinction between fake words, which is genre, and fake news, identified as a species, this essay is not dedicated to deepening this differentiation, so that the term fake news, when used, should be understood as any news false, malicious, that causes misinformation. In this sense, fake
news can be better defined, as “false news in which artifices are used that give it the appearance of truth. They are generated by the mass media, published with the intention of deceiving, obtaining financial or political gains” (SOBRAL, 2018, n. p).

The damaging potential resulting from the massive dissemination of false news is often irremediable, given that after being released on a social network, its propagation on the internet is instantaneous, its removal being almost impossible after being published and shared. In addition, fake news tends to have greater repercussions:

Falsehood diffused significantly farther, faster, deeper, and more broadly than the truth in all categories of information, and the effects were more pronounced for false political news than for false news about terrorism, natural disasters, science, urban legends, or financial information. We found that false news was more novel than true news, which suggests that people were more likely to share novel information (SOROUSH; ROY; ARAL, 2018, p. 1146).

Because of this, robots are increasingly used to create automated social profiles. Not only that. Fake news took new forms: fake faces and deepfakes. The former are exactly what the translation of the term means, fake faces. This new modality consists of using artificial intelligence algorithms to create computerized faces with such perfection that it becomes increasingly difficult, if not impossible, to identify a robotic profile.

In an article entitled “Using artificial intelligence to create ‘fake faces’ is a new risk on the internet”, he warned of the risk of this technology:

Another new technological wave promises to further cloud the notion of true or false in the digital world: artificial intelligence (AI) algorithms are being used to create very realistic photos and videos of human faces. There is a detail: they are faces of people who do not exist. Thus, after fake news, the internet is moving towards the era of fake faces (ROMANI, 2020, n. p).

The article describes the technological production process of the fake faces, which is composed of two networks of algorithms, A and B, which fight a dispute between each other, whose game starts after being fed with thousands of real photographs of what is planned to be reproduced. Then, network A is in charge of processing the images and creating a new one, while network B is in charge of checking the created image. If the image is rejected by network B, it returns to network A to be improved until it is evaluated as true (ROMANI, 2020, n. p).

The second practice - deepfake - consists of editing a video. Through the practice of face overlay and the addition of voice simulation, it is possible to confuse and manipulate the viewer, making them believe that a certain person is inserted in the context of the video presented, generally disparaging for their image and honor. This practice was reported in the article “Deepfake, the new and terrible level of fake news”, which warns that “fake videos, which simulate the face and voice of people, but in productions of fallacious content, are the next step of manipulation virtual”. The reality of deepfakes can be explained as follows:

The technique makes use of artificial intelligence (AI) to insert real faces in fake scenes in order to create a video with someone saying something they didn’t say [or doing something they didn’t]. It is a new and terrible step in fake news. [...] There is no exact date of birth of deepfakes - a term that combines the word fake with the expression deep learning (deep learning; an AI technique) (LOPES, 2019, n. p).

Therefore, fake news has been modernized and, now, is not only in the context of graphic signs, as they are also disseminated by images and videos, making them much more real and convincing, inducing an increasing number of users due to shares without checking the source.

Actually, all the three modalities presented above are condemnable practices of misrepresenting a reality in order to confuse, attract confidence, deceive the voter to interfere in forming his conviction and direct the vote in a predetermined direction.

3 Biopower, biopolitics and dromology

Foucault is one of the most important philosophers of modernity and most of his works are dedicated to the study of power and knowledge, which are used as a form of social control. To discuss biopolitics and biopower in Foucault is, therefore, to talk about power relations.
It is in this perspective that the aforementioned author points out that from the 17th century onwards, a new form of governance of life emerged, which he called biopower. This power over life, according to him, developed in two aspects: one centered in the body as a machine, on which discipline is inflicted in order to make it trained, useful and docile, what he called anatomo-politics of the human body; the other, developed in the middle of the 18th century, centered on the body-species, supporting biological processes, that is, on the group of individuals whose intervention and control processes are called the population’s bio-politics (FOUCAULT, 1988).

It should be noted, however, that it is at the end of the 19th century that Foucault “detects the emergence of another great political technology, which he calls biopower, which is characteristic of contemporary politics and which, because of that, can be characterized as biopolitics”, which it can be understood as being “a policy whose field of incidence is human life, both in terms of individual bodies and in the generic record of the lives of populations” (GIACOIA JUNIOR, 2015, p. 09).

In fact, “if before power was only exercised over bios, that is, the life of the politically qualified population, with biopolitics it also began to affect zoé, the natural life that is common to all animals, including humans” (DIAS; FERRER; MACHADO, 2018, p. 31).

In this sense, power procedures are applied to the body that are qualified by an ordination (discipline) and on the population, these procedures take the form of a series of interventions and regulatory controls (biopolitics). This is because “the disciplines of the body and the regulations of the population constitute the two poles around which the organization of power over life was developed” (FOUCAULT, 1988, p. 131).

It is necessary to emphasize, therefore, that from this new way of governing life, the focus of the law, until then in effect, undergoes a paradoxical change. If before the sovereign had in his hands the power to “make him die” and “let him live”, from biopower he acquires the duty to “make him live” and “let him die”, which means to say that “the old right to cause death or letting live was replaced by a power to cause life or return to death” (FOUCAULT, 1988, p. 131).

Although Foucault did not differentiate between biopower and biopolitics, the diversity of meanings prevails, not being synonyms, as biopolitics is defined as “a set of biopowers that are exercised over people in order to convince them to adopt this or that social practice, without concern for the emancipation of society or the development of people’s potential” (DIAS; SERVA, 2016, p. 426).

Negri (2015, p. 121-122), in turn, warns that the “dichotomy of biopolitics and biopower, who live together (as work and capital live together), takes place in open and chaotic terms in Deleuze and it is built in genealogical terms in Foucault”. Along the same lines as Foucault, Negri highlights the importance of the government of life in the direction of capitalism and for its entrenchment in society, defending biocapitalism, which invests in the promotion of life. For him, “the world of work explores as bios, that is, not only as a work force, but as a living form, not only with biopolitics it also began to affect zoé, the natural life that is common to all animals, including humans” (NEGRI, 2015, p. 61).

Biopolitics is a very important reference because it is able to move from the historical context in which it was thought and to project itself in contemporary times. It is adopted in view of the ineffectiveness of other mechanisms of power, requiring the adoption of other mechanisms of control over people’s lives so that they are encompassed by the bundles of biopowers. In the theme now proposed, the use of technology, in the context of modernity, presents itself as a potent form of biopower, which can also be analyzed from the perspective of dromology, by Paul Virilio.

Based on the volatility of contemporary social relations, which is consistent with the research on the effects of speed on social relations, especially politics - the object of study in dromology - it is possible to permeate the intricacies of such a complex subject as the manipulation of the electoral process by bots through the spread of fake news on social networks. This reality adapts to the context of the dromology that means the “empire of speed and technological vehicles” (VIRILIO, 1996, p. 95), that is, “it refers to the logic of speed as a dynamic vector of societies” (BARBOSA, 2008, p. 29), whose perspective justifies the “contextualization of today’s democratic regime, also built on speed” (BARBOSA, 2008, p. 11), as well as the context of “dromocracy” (power arising from speed) explained as the speed regime in the digital age, that is, the combination of organized society and speed (BARBOSA, 2008).

Therefore, the use of fake news, fake faces and deepfakes constitutes a control mechanism used by a given individual or group of individuals who, within the scope of biopowers, seek to create mental states in the users of social networks influencing their judgment of value about a certain candidate or political party, adopting this or that political opinion. When studying the work “Velocity and Politics”, by Paul Virilio, Amâncio (2006) thus talks about cybernetics and the speed imposed by technological evolution:
Cyberspace is a new continent, it is a supplementary reality, which should reflect the society of individuals. Cybernetics is universal, without a boss and without a leader. [...] at a time when, if threatened by social cybernetics, telecommunications, the internet and the automation of interactivity, there must be a political economy of speed as there is a political economy of wealth and accumulation (AMÂNCIO, 2006, p. 72).

In this work, it remains exposed by Virilio that one of the consequences of dromological progress is the “empire of speed and technological vehicles” (VIRILIO, 1996, p. 95), even though “the violence of speed has simultaneously become the place and the law, the destiny and destiny of the world” (VIRILIO, 1996, p. 137). Castro Júnior (2013) highlights that the exponential speed of technological development has more effect on the way of living and thinking than politics, and it is not for another reason that social networks are an important source for political discussions. Social networks have become political platforms that are sometimes used expressly and often veiled. This last form, in large part, by robots, a worrying situation that explains the “emotional power of the seducing speed” (MORAIS, 2002, p. 46) related to the dromological power studied by Paul Virilio’s sociodromology (BARBOSA, 2008).

For this strategist-philosopher, power is linked, not to wealth, but, above all, to speed, because the one who controls speed is endowed with power, precisely because, with power, the means are acquired, including money:

> It is commonly said that power is linked to wealth. In my opinion, it is, above all, linked to speed; wealth comes later. Of course, it is true that power needs means, that it acquires those means through hoarding, exploitation or both, but people forget the dromological dimension of power. [...] Every society is founded on a relationship of speed. Every society is dromocratic. [...] He who has the speed has the power. And it has the power because it is able to acquire the means, the money (VIRILIO, 1984, p. 49-50)

However, he warns that one cannot be deceived about technology, because “we do not control what we produce. Knowing how to do it does not mean that we know what we are doing. We are going to try to be a little more modest, and we are going to try to understand the enigma of what we produce” because, in his opinion, “when you go too fast, you are completely stripped of yourself, you become totally alienated” (VIRILIO, 1984, p. 65).

When interpreting this quote by Virilio (1984), Morais (2002, p. 46) states that the important thing “is not to know what men have been doing with technology, but rather, what technology has been doing with men. Men produce technology, but it would be antidialectic to deny that this same technology also produces men who are deprived of their humanity”.

In this context, such practices are expressions of biopower and aim, through mass manipulation, political control and the exercise of a hegemony of governance, which violates directly the desires of the Democratic State of Law, requiring urgent reflection, which proposes in the following lines.

4 Social bots at the service of fake news, fake faces and deepfakes with a view to influencing the electoral process: an attack on democracy

The dynamism of society, caused by the fluidity of the technological tools offered, contributed to modify the political scenario and, consequently, the means of becoming political and the way to debate the economic, political and social agendas. This stems from the dromological era, in which haste (dromos) dictates the direction of society, in this case, the rhythm of social media, when “politics loses its classic function as arbitrator of conflicts”, emerging the “transpolitics”, Which marks “the end of a political conception based on dialogue, dialectics, time for reflection” (VIRILIO, 1984, p. 35).

In this sense, social networks are an important mechanism for political debate, since everyone has, in this field, voice and time, reason why they are an instrument in favor of democracy, but it is necessary, for that, to rescue the centralization of legitimate and stimulate reflection to contain the effects of speed. It should be remembered that the term democracy comes etymologically from “demos”, which means people, and from “kratos”, power. Therefore, it means the “government in which the people exercise, in fact and in law, popular sovereignty, dignifying a free society, where the predominant factor is the popular influence in the government of a State” (RAMAYANA, 2009, p. 11).

Popular sovereignty, under the terms of article 14 of the Federal Constitution (BRASIL, 1988), is exercised through universal suffrage and by the right and secret vote, so that it is these political rights that attribute “powers to citizens to interfere in the conduct of the public, whether direct or indirect” (LENZ, 2010, p. 869).

With these parameters, the Supreme Federal Court, in ADPF 541, recognized that “the exercise of the right to vote is an essential component of representative democracy” (BRASIL, 1988) and, therefore, it is essential that
the formation of voter conviction is free, exempt from manipulation. Consequently, it has to be taken into account that social networks will only be an instrument in favor of democracy when they allow popular participation through a legitimate, reflected dialogue, free from the effects of dromological power resulting from the speed of technological innovations.

The protests that took place in Brazil in 2013, against the increase in bus fares, demonstrate the power of virtual discussions in the democratic field, as citizens “have transformed social networks into a recognized space for the expression of democracy, since they have assumed protagonism as a place for organization and dissemination of information” (RUEDIGER, 2017, p. 05).

These protests are pointed out as the starting point for the massive use of strategies of defamation and manipulation of political discussions through social networks in Brazil, giving a new guise to the old policy, because, now, “they occur in a medium that allows a rapid massification of speeches in such a way as to jeopardize the credibility of the space and the information that circulates in it” (RUEDIGER, 2017, p. 05), a situation that echoes in Virilio’s dromology, since “the impact of speed in bodies it is deterrence, that is, we have no more time for reflection, this is the dromological power” (MORAIS, 2002, p. 46).

Thus, if, on the one hand, social networks provide an important space for legitimate democratic discussions, on the other, they enable the use of illegitimate speeches and the spread of untruths, fake news, in order to interfere in the electoral election and dominate the political scenario in the face of the denial of reflection caused by the rush to obtain information, a fact that deserves due concern and requires study of means of combat, which is proposed in this work, of an interdisciplinary character and focused on the reference systems previously presented.

The practice of spreading false news became even more serious when the use of robots was discovered, which maintain false profiles on social networks for political purposes, in order to violate the electoral process. The electoral process here must be understood in the legal sense of the term. According to Gomes (2008, p. 171), the complex “relationship that is established between candidates, political parties, coalitions, Electoral Justice, Public Prosecutors and citizens with a view to achieving the sacrosanct right of suffrage and choice of occupants of public-elective positions in dispute”.

It is necessary to emphasize that “the rights related to democracy are not limited, however, to voting. Without full freedom of expression, association, demonstration, creation of parties, exercise of opposition, the right to vote can become innocuous (VIEIRA, 2018, p. 106). In other lines, it can be said that the electoral process is not to be confused with a judicial process, and means the set of acts that begins through voter registration and ends with the candidates’ diplomacy, that is, it concerns all acts necessary to choose the representatives responsible for exercising, on behalf of the people, holder of sovereignty, power (GONÇALVES, 2010), so that the manipulation of the electorate through the dissemination of fake news in any of its modalities must be investigated and combated at all stages of the electoral process.

Ruediger warns of this reality and explains, in detail, that in political debates “robots have been used across the party spectrum not only to win followers, but also to conduct attacks on opponents and forge artificial discussions”, so that “they manipulate debates, create and disseminate false news and influence public opinion by posting and replicating messages on a large scale”, such as the dissemination of “hashtags that gain prominence with the massification of automated posts in order to stifle any spontaneous debate on any topic” (RUEDIGER, 2017, p. 06).

Based on such observations, it appears that bots are able, through automated profiles, to promote the massive triggering of false information by any means of communication (SMS, e-mail, postings on networks, hashtags, voice messages, videos, messages in chat apps), are able to learn content online, improving their communication skills, have the ability to self-humanize using fake faces, that is, fake faces / photos created by algorithms and even to create videos using deepfake technology.

For this reason, it is indisputable that this reality shows itself as a modern view of biopower, able to strangle the democratic debate of ideas, insofar as it represents a way of “governing human life, based on the adoption of control mechanisms that, focusing on the individual and also on the population as a whole, induce the adoption of certain attitudes to achieve previously defined objectives” (DIAS; FERRER; MACHADO, 2018, p. 31) which, in this case, is the success in elections through influence on the popular vote.

It is essential to highlight that this form of biopower, constituted through social networks, does not necessarily operate through internal forces, because the interest in the success of the victory of this or that candidate is linked to the dispute for global hegemony, hence the internal influences through the dissemination of biopower mechanisms that tend to influence the electoral election, they sometimes come from abroad:
Several interest groups may be using this type of information dissemination resource. In fact, *lato sensu*, there are even robots operating from abroad. This even leads to the reflection of manipulation not only internally, but also beyond the national political fields, suggesting the hypothesis of the possibility of even other actors, foreign to the national framework, operating these mechanisms in the networks (RUEDIGER, 2017, p. 07).

Indeed, it is important to emphasize that it is during the electoral period, during political advertisements, that the use of bots can put in check the soundness of the democratic process of choosing political candidates because it is at this time that the massification of the use of fake news acquires contours of political propaganda for or against candidates, increasing the influence on the voting results.

The Superior Electoral Court decided that political propaganda is “the act that leads to general knowledge, albeit in a simulated way, the candidacy, even if only postulated, the political action that is intended to be developed or the reasons that lead to conclude that the beneficiary is the most apt to exercise the public function” (BRASIL, 1999). It is fundamental to the democratic electoral process, as it provides the voter with elements that will allow him to choose this or that candidate, this or that government platform or political party with which he has more affinity.

However, the use of bots to spread fake news, using fake faces and deepfakes can destroy an application because:

> [...] voting usually involves two fundamental aspects of weighting: voters vote for candidates for agreeing with their projects and for making positive assessments of their background and party, and / or voting due to their charisma, honesty, and other traits values that are transmitted by the image of the candidates themselves. The problem of the spread of fake news impacts both motivations of the democratic vote (RUEDIGER, 2018, p. 04).

That is why the electoral legislation gives a strict treatment to political propaganda, but “critics maintain that this rule is repressive and that shows distrust in the electorate’s ability to make its own distinctions” (GONÇALVES, 2010, p. 80). In spite of the criticism, it cannot be overlooked that there are electoral circumstances created, premeditated, with a view to personal promotion or the practice of attacks on third parties, demonstrating abuse of economic power and the media to corrupt the electorate, tainting their free and conscious voting capacity, as occurred in Japan (2014), USA (2016), France (2017) and the United Kingdom, in the vote on the Brexit referendum (RUEDIGER, 2018).

From this perspective, the use of bots has an electoral purpose, in order to privilege someone at the expense of someone else’s reputation or political platform, contrary to what it simulates, because, as they become increasingly humanized, their manifestation tends to be interpreted as political opinion of a real user, in the free exercise of expression of thought or freedom of expression, confusing voters and achieving success in locating supporters who share the same thought.

It is not overly emphasized that “what differentiates the current phenomenon of fake news from older forms of disinformation is precisely its massive scale and its online delivery” (RUEDIGER, 2018, p. 04). This, then, is why the use of automated profiles is a powerful weapon against the political electoral process and, as a consequence, democracy. And, in this aspect, is the disruptive character of this technology, which, according to research, can influence not only the electoral election but also several other sectors:

> This type of action shows another disruptive potential of automated profiles, this time for the economy, which can generate impacts that also spill over into political debates [...]. This type of action suggests that social networks, used by so many people for information purposes, may actually be contributing to a less informed society, manipulating the public debate and consistently determining the direction of the country (RUEDIGER, 2018, p. 11-15).

For all these serious impacts that bots can have on democracy and the economy, global political actors have turned their concerns to the subject, because the “technical peculiarities of the functioning of this mechanism, the difficulty in identifying certain more sophisticated bots and the real impact of these mechanisms on electoral results still represent - and will continue to represent - constant challenges to the law” (RUEDIGER, 2018, p. 15). In the case of Brazil, despite the lack of specific legislation on the subject, “recent changes in electoral legislation indicate, however, that this practice was not well received by the legislator, especially when it involves the registration of false profiles on social networks” (RUEDIGER, 2018, p. 11).
The use of bots as a type of disruptive technology to influence the electoral process, altering the means of political propaganda, can be controversial with regard to the concept of disruptive technology, but the need for its regulation is not questioned because “in a scenario where software has the ability to influence and modify the way people act in a society, it becomes necessary to rethink the role of traditional legal norms and the way in which behaviors are regulated” (DIAS, 2019, p. 65).

Evidently, therefore, the use of social bots in an attempt to influence the electoral process represents an affront to the democratic process that should guide political choices, demanding an urgent position from political actors, especially from Electoral Justice, the subject of the next lines.

5 Challenges of electoral legislation in facing fake news disseminated by bots: the defense of pl 413/2017

The use of social bots in order to influence the outcome of the elections is a reality in Brazil, as explained in the previous lines. However, there is no specific law that regulates the use of bots for the propagation of fake news, as it is a dangerous omission, since:

With this type of manipulation, robots create the false sense of broad political support for a certain proposal, idea or public figure, change the course of public policies, interfere in the stock market, disseminate rumors, false news and conspiracy theories, generate misinformation and content pollution, in addition to attracting users to malicious links that steal personal data, among other risks (RUEDIGER, 2017, p. 08-09).

Consequently, the Electoral Justice cannot remain inert, on the contrary, it must combat such practice with the means at its disposal, since, by Article 126 of the Civil Procedure Code, the judge does not exempt himself from sentencing or dispatching alleging a gap or obscurity in the law (BRASIL, 2015), especially when “these bots mislead, exploit, and manipulate social media discourse with rumors, spam, malware, misinformation, slander, or even just noise” (FERRARA et al, 2016, p. 98).

Indeed, even in the face of legal omission, it is necessary to use some legislative parameter to face this practice, for example, articles 242 and 323, both of the Electoral Code (Law n. 4,737 / 65). These legal provisions determine that electoral advertisements must be mandatorily identified, and their use is prohibited with the purpose of artificially imbuing public, mental, emotional or passionate states, capable of influencing the electoral election.

While there is no specific law on the use of robots in the propagation of political news, such articles may represent an instrument available to the Electoral Justice, as occurred in the 2018 elections, when several publications with “untrue information and offenses to the honor of the candidates for the position as president of the Republic, they were removed from the world wide web, by judicial decision” (SEMINÁRIO INTERNACIONAL FAKE NEWS E ELEIÇÕES, 2019, p. 8).

It is true that Law No. 13,834, of June 4th, 2019, included article 326-A in the Electoral Code to typify the “slanderous election complaint” in the caput and the “disclosure of fake news” in the third paragraph, however despite representing an advance in the fight against fake news in the electoral field, the legislator sinned by failing to take advantage of the moment to promote the debate and the approval of Bill no. 413/2017, which deals with the practice of fake news by robots. This practice, as a reflection of the speed of technologies, requires its own regulation in order to broaden the debates and stimulate the performance of political actors in search of biopolitics because “any discourse that suggests catastrophe or salvation through electronic means must be viewed with suspicion” (RENA, 2009, p. 127).

It is not unknown that the TSE has made efforts in an attempt to combat fake news, which, in recent years, has occurred on three fronts: i) created the Consultative Council on Internet and Elections, through Ordinance No. 949, of 07 December 2017, with the objective of “developing research and studies on electoral rules and the influence of the Internet in elections, especially the risk of fake news and the use of robots in the dissemination of information” (art. 2, I) (BRASIL, 2017b); ii) held, in June 2018, in partnership with the European Union delegation in Brazil, the “International Fake News Seminar: Experiences and Challenges”, also held in 2019 (INTERNACIONAL SEMINAR FAKE NEWS E ELEIÇÕES, 2019); started using bots since 2018 “to help answer questions from voters”, working as virtual assistants (VALENTE, 2018, n. p).
Another way to face the problem of using bots to harm the electoral election is the combination of Resolution TSE n. 23,551 / 17, which provides for election propaganda, with Law no. 13,488 / 17 (BRASIL, 2017a), which amended provisions of the Election Law and the Electoral Code with the aim of promoting reform in the political-electoral order. In essence, the aforementioned Resolution presents a specific chapter on “electoral propaganda on the internet” and, in article 22, §1, enshrines the free expression of the thought of the identified or identifiable voter on the internet, which can only be restricted in case of “Offense to the honor of third parties or disclosure of facts known to be untrue” (BRASIL, 2017c).

It cannot be forgotten that electoral propaganda is only allowed as of August 16 of the election year, under the terms of article 22 of Resolution 23.551 / 2017 (BRASIL, 2017c), however, such time limitation does not apply to the manifestations made by identified voters, whether in support or criticism of a political party or candidate, situations “proper to the political and democratic debate”. For this reason, the use of automated profiles represents a powerful violation of democracy, since, given the humanization of social network profiles by robots, including the use of fake faces, created by algorithms, it becomes increasingly difficult to separate the real voter from robotic profiles.

Political advertising, among other forms, was authorized “through blogs, social networks, instant messaging sites and similar internet applications” (art. 23, IV, Resolution 23.551 / 2017, of TSE c / c article 57-B, of Law No. 9.504 / 1997), however, “the transmission of electoral content through registration of an Internet application user with the intention of falsifying identity” is not allowed (art. 23, §2nd, of Resolution 23.551 / 2017, of the TSE c / c article 57-B, §2, of Law No. 9.504 / 1997).

Although such devices can be used to guide the judgment of eventual electoral processes in which the role of bots to disseminate false news is discussed, using identities and faces created by algorithms, it is necessary to clarify that the factual situation has peculiarities, because it is about the use of a robot, a machine to achieve the shameful end of distorting the elections, hence the need for a specific law, which contemplates all these vicissitudes.

Both the Law of Elections (Law No. 9504/1997) and the Resolution under analysis (Resolution 23,551 / 2017, of the TSE) regulated two advertising situations authorized on social networks: the promotion and use of sponsored links.

The first refers to the process of increasing the visibility of content produced on the social network. According to the dictates of article 57-C of the Law on Elections, “it is forbidden to broadcast any type of paid advertising on the internet, except for the promotion of content”. However, for this to be possible, the publication must be identified, unequivocally, as political propaganda so as not to confuse the user, as well as requiring the service to be contracted “exclusively by parties, coalitions and candidates and their representatives” (BRASIL, 1997).

In the second case - sponsored links -, political advertising is disseminated to users of social networks in the form of advertisements, banners, notices and the like. The problem is that this regulation had been thought of in the conduct of users of social networks, natural people, omitting in relation to bots, which have unique relevance in both forms of political advertising.

They are able to boost information in a massive, agile and efficient way, causing the spread of rumors, untruths and other strategies tending to manipulate the electorate’s conviction, influencing the final result, a situation that requires investigation, in order to develop a technological mechanism that allows filtering, separating false, robotic profiles, from real profiles, as well as identifying its creators. Just as the TSE has used robots to answer voters’ doubts, it is necessary to have electoral investigation bodies with the same technology, the bots, to face the use of fake news, fake faces and deepfakes.

Although the electoral devices analyzed may be adapted to be applied to bots, it is necessary to support the need to create specific laws that contemplate this social reality to ensure greater legal security and impose compatible punishment, as the effects are harmful to democracy and laws existing policies do not take into account the vicissitudes of the. In this way, the survival of democracy, under the political bias, is linked “at the disposal of opponents and those who operate the institutions created by the constitution itself, to cooperate to maintain the rules of democratic competition, as well as to behave in accordance with the rules that structure the rule of law” (VIEIRA, 2018, p. 65).

While it is not possible to count on the willingness of the political actors involved in the electoral process to face the defense of democracy, there remains the attachment to the need to affirm the social reality regarding the use of bots to propagate fake news, in any modality, with a view to direct voter intent to vote. It is defended, with this objective, the need for accelerated movement of PL nº 413/2017, which intends to criminalize the conduct of
those who offer, hire or even use any instrument or “automated tool that simulates or can be confused with a natural person to generate messages or other interactions, through the internet or other communication networks, with the objective of influencing the political debate or interfering in the electoral process” (BRASIL, 2017d).

It is important to mention that the justification presented with the bill is based on research conducted by the Getúlio Vargas Foundation that demonstrated a high percentage of robot interactions, in order to manipulate the elections:

According to the study, false messages, which simulate opinions of real people, would represent more than 20% (twenty percent) of the total interactions that occurred on topics of political-electoral relevance. [...] This is undoubtedly an illegitimate intervention in the public space of the internet, with the criminal purpose of interfering in the democratic process (BRASIL, 2017c).

It should be noted that the Fake News CPMI’s performance led to the proposition of Bill No. 437, of March 3, 2020, with the objective of making “the posting of content on social networks on the internet subject to the prior provision, by the user, of a number telephone or e-mail address” (BRASIL, 2020), whose justification is based on statements collected in the sense that “robot networks were widely used in the 2018 elections with the aim of manipulating the political debate, through the spread of false news” (BRASIL, 2020).

In this sense, in addition to the installation of a CPMI in Brazil, the international electoral reality of recent years and the successive reports issued by national and international organizations prove the use of robot networks to automate social profiles to influence democratic exercise through voting, which demands severe combat.

However, it is necessary to clarify that the legislation will represent a dead letter if there is no adhesion by all the actors involved in the political electoral process, inasmuch as the constitutional political system is not endowed with an external instrument capable of imposing its rules “impartially” on various actors who participate in constitutional life, [so that] their performance depends, above all, on the adhesion and self-commitment of society and political and institutional actors to the constitutional pact” (VIEIRA, 2018, p. 69).

The challenge, therefore, is to understand that, due to the evolution of technologies, social speed and the risks to which the constitutional electoral values are exposed due to the use of bots to spread fake news, the integrity of democracy is associated “To a robust functioning of the system of checks and balances and the willingness of the various political and institutional leaders to act in defense of the rules of the democratic game” (VIEIRA, 2018, p. 68).

Conclusion

The use of social bots, profiles or automated accounts, has allowed manipulation of political disputes, distorting the electoral process, as well as allowing the spread of false news to damage the political scene or control political agendas. The present study, citing research, pointed out that such mechanisms of biopower, social robots, have been successfully used to manipulate and influence political discussions, decision-making in sensitive moments of politics and the economy and, also, to interfere in the electoral process.

Indeed, the research carried out and the data analyzed, lead to the conclusion that it is necessary to protect social networks as true democratic public spaces that they are, and this must occur through two mechanisms: (i) development of detection technologies, understanding and combating the use of social bots, including by the Electoral Justice, as they have harmful potential for both political disputes and public debate; (ii) the approval of a specific law that addresses this social reality, especially due to the 2022 elections and the context of the new coronavirus pandemic (COVID-19).

While the use, regulation and long-term consequences of using bots are uncertain, especially in the electoral field, it is necessary to engage all actors involved in the political process - citizens, candidates, political parties and the Electoral Justice - in facing this situation potentially damaging to democracy, which can be done through biopolitical techniques, exactly to the extent that it is recognized that life can use control mechanisms to soften or cancel the effects of biopower - the use of bots in the political process.

The use of bots on social networks to disseminate fake news, fake faces and deepfakes in order to taint the elections requires retaliation by society in general, which can be done through the development of equal technology that allows the identification of these automated profiles and their real ones creators to be severely punished for an act that undermines democracy, constitutional primacy, which requires, first, specific legal regulation.
The objective here was, without pretending to exhaust the material, to contribute to the state of the art, bringing light to the theme of the use of social robots to influence elections, to debate the imperative need to create mechanisms that allow their identification, to suggest the acceleration of bills on the subject and make social network users, voters aware, about the existence of such a biopower mechanism so that, when they become aware of a given political news, they can combat the dromological dimension of power in order to neutralize its effects, allowing the exercise of reflection before absorbing information as true.

References

AFINAL, o que são bots? Macroware. [S.I.], 14 mar. 2018. Youtube (9min05s). Available at: https://www.youtube.com/watch?v=8Q1AA-s6fVo. Access in: 03 mar. 2020.

AMÂNCIO, Verseles. Velocidade e política de Paul Virilio. Em Debat: Rev. Dig., Florianópolis, n. 2, p. 71-89, 2006. Available at: https://periodicos.ufsc.br/index.php/erdebate/article/download/21718/19712. Access in: 10 mar. 2020.

ANJOS, Lucas Costa dos; BRANDÃO, Luiza Couto Chaves; POLIDO, Fabrício Bertini Pasquot (org.). Politicas, internet e sociedade. Belo Horizonte: Iris, 2019. E-book. Available at: http://irisbh.com.br/wp-content/uploads/2019/07/Livro-III-Seminario.pdf. Access in: 06 mar. 2020.

BARBOSA, Bárbara Conceição de Oliveira. Ciberespaço e dependência: uma análise dos vínculos do humano com o glocal interativo como habitus. 2008. Dissertação (Mestrado em Comunicação e Semiótica) – Pontifícia Universidade Católica de São Paulo, São Paulo, 2008. Available at: https://tede2.pucsp.br/handle/handle/5130. Access in: 15 mar. 2020.

BRASIL. Lei n. 4.737, de 15 de julho de 1965. Institui o Código Eleitoral. Brasília: Presidência da República, [2020]. Available at: http://www.planalto.gov.br/ccivil_03/LEIS/L4737.htm. Access in: 03 mar. 2020.

BRASIL. [Constituição (1988)]. Constituição Federal da República Federativa do Brasil de 1988. Brasília, DF: Presidência da República, [2020]. Available at: http://www.planalto.gov.br/ccivil_03/constituciao/constituciao.htm. Access in: 02 mar. 2020.

BRASIL. Lei nº 9.504, de 30 de setembro de 1997. Estabelece normas para as eleições. Brasília, DF: Presidência da República, [2020]. Available at: http://www.planalto.gov.br/ccivil_03/leis/l9504.htm. Access in: 15 feb. 2020.

BRASIL. Tribunal Superior Eleitoral. Resp. n. 15.732, Acórdão n. 15.732. Rel. Min. Eduardo Alckmin, 15 de fevereiro de 1999. Jurisprudência do Tribunal Superior Eleitoral, Brasília, v. 14, n. 3, p. 117-125, jul./set. 2003. Available at: http://www.tse.jus.br/hotsites/catalogo-publicacoes/pdf/revista_jurisprudencia/rj14_3.pdf. Access in: 15 mar. 2020.

BRASIL. Lei nº 13.105, de 16 de março de 2015. Código de Processo Civil. Brasília, DF: Presidência da República, [2020]. Available at: http://www.planalto.gov.br/ccivil_03/leis/l13105.htm. Access in: 15 feb. 2020.

BRASIL. Lei nº 13.488, de 6 de outubro de 2017. Altera as Leis nº 9.504, de 30 de setembro de 1997 (Lei das Eleições), 9.096, de 19 de setembro de 1995, e 4.737, de 15 de julho de 1965 (Código Eleitoral), e revoga dispositivos da Lei nº 13.165, de 29 de setembro de 2015 (Minirreforma Eleitoral de 2015), com o fim de promover reforma no ordenamento político-eleitoral. Brasília, DF: Presidência da República, [2017a]. Available at: http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2015/Lei/L13488.htm. Access in: 03 mar. 2020.

BRASIL. Tribunal Superior Eleitoral. Portaria TSE nº 949, de 07 de dezembro de 2017. Institui o Conselho Consultivo sobre Internet e Eleições. Brasília, DF: TSE, [2017b]. Available at: http://www.tse.jus.br/legislacao/compilada/prt/2017/portaria-no-949-de-7-de-dezembro-de-2017/. Access in: 01 may 2020.

BRASIL. Tribunal Superior Eleitoral. Resolução nº 23.551, de 18 de dezembro de 2017. Dispõe sobre propaganda eleitoral, utilização e geração do horário gratuito e condutas ilícitas em campanha eleitoral.
nas eleições. Brasília, DF: TSE, [2017c]. Available at: https://www.tse.jus.br/legislacao/compilada/res/2017/resolucao-no-23-551-de-18-de-dezembro-de-2017. Access in: 03 mar. 2020.

BRASIL. Senado Federal. Projeto de Lei n. 413, de 26 de dezembro de 2017. Altera a Lei nº 9.504, de 30 de setembro de 1997, que estabelece normas para as eleições, para definir como crime a oferta, a contratação ou a utilização de ferramenta automatizada que simule ou possa ser confundida com pessoa natural para gerar mensagens ou outras interações, pela internet ou por outras redes de comunicação, com o objetivo de influenciar o debate político ou de interferir no processo eleitoral. Brasília, DF: Senado Federal, 2017d. Available at: https://www25.senado.leg.br/web/atividade/materias/-/materia/131368. Access in: 03 mar. 2020.

BRASIL. Supremo Tribunal Federal. Arguição de Descumprimento de Preceito Fundamental 541 Distrito Federal. Direito constitucional eleitoral. Cancelamento de título decorrente da sua não apresentação ao procedimento de revisão eleitoral. Violação ao princípio democrático e ao direito de voto. Inocorrência. Relator: Min. Roberto Barroso, 26 de setembro de 2018. Available at: https://redir.stf.jus.br/paginadorpub/paginador.jsp?docTP=TP&docID=749828733. Access in: 03 mar. 2020.

BRASIL. Câmara dos Deputados. Projeto de Lei n. 437, de 03 de março de 2020. Altera a Lei nº 12.965, de 23 de abril de 2014, condicionando a postagem de conteúdos nas redes sociais na internet ao fornecimento prévio, pelo usuário, de número telefônico ou endereço de correio eletrônico. Brasília, DF: Câmara dos Deputados, 2020. Available at: https://www.camara.leg.br/proposicoesWeb/fichadetramitacao?idProposicao=2238121. Access in: 03 mar. 2020.

CASTRO JÚNIOR, Marco Aurélio de. Direito e pós-humanidade: quando os robôs serão sujeitos de direito. Curitiba: Juruá, 2013.

CRUZ, Leôncio Teixeira; ALENCAR, Antônio Juarez; SCHMITZ, Eber Assis. Assistentes virtuais inteligentes e chatbots: um guia prático e teórico sobre como criar experiências e recordações encantadoras para os clientes de sua empresa. Rio de Janeiro: Brasport, 2018. E-book Kindle.

DIAS, Jefferson Aparecido; SERVA, Fernanda Mesquita. Responsabilidade social nas Instituições de Ensino Superior: entre o biopoder e a biopolítica. Revista Argumentum, Marília, v. 17, p. 413-433, jan./dez. 2016. Available at: http://ojs.unimar.br/index.php/revistaargumentum/article/view/319. Access in: 10 mar. 2020.

DIAS, Jefferson Aparecido; FERRER, Walkiria Martinez Heinrich; MACHADO, Vinicius Rocha Pinedo. Biopolítica e novas tecnologias: o discurso do ódio na internet como mecanismo de controle social. RIL, Brasília, ano 55, n. 220, p. 29-51, out./dez. 2018. Available at: https://www12.senado.leg.br/ril/edicoes/55/220/ril_v55_n220_p29.pdf. Access in: 09 mar. 2020.

DIAS, Garrido Rodrigo. Regulação estatal, autorregulação privada e novas tecnologias disruptivas. In: SADDY, André; CHAUVET, Rodrigo da Fonseca; SILVA, Priscilla Menezes da (coord.). Aspectos jurídicos das novas tecnologias (inovações) disruptivas. Rio de Janeiro: Lumen Juris, 2019. p. 51-67.

FERRARA, Emilio et al. The rise of social bots. Communications of the ACM, New York, v. 59, n. 7, p. 96-104, July 2016. Available at: http://twixar.me/jmNT. Access in: 05 mar. 2020.

FOUCAULT, Michel. História da sexualidade I: a vontade de saber. Tradução: Maria Thereza da Costa Albuquerque, J. A. Guilhon Albuquerque. Rio de Janeiro: Graal, 1988. Available at: https://farofafilosofica.com/2016/11/14/michel-foucault-26-livros-em-pdf-para-download-livros-ensaios-artigos-conferencias-e-cursos/. Access in: 09 mar. 2020.

GIACOIA JUNIOR, Oswaldo. Ética, direito e política em tempos de biopoder. In: GIACOIA JUNIOR, Oswaldo; RAMIRO, Caio Henrique Lopes; RICCI, Luiz Antonio Lopes (org.). Responsabilidade e futuro: bioética, biopolítica, biopoder e os desafios para reflexão e ação. São Paulo: LiberArs, 2015. p. 9-15.

GOMES, José Jairo. Direito eleitoral. 2. ed. Belo Horizonte: Del Rey, 2008.

GONÇALVES, Luiz Carlos dos Santos. Direito eleitoral. São Paulo: Atlas, 2010.
LENZA, Pedro. **Direito constitucional esquematizado.** 14. ed. São Paulo: Saraiva, 2010.

LOPES, André. ‘Deepfake’, o novo e terrível patamar das ‘fake news’. **Revista Veja,** São Paulo, 18 out. 2019. Available at: [https://veja.abril.com.br/tecnologia/deepfake-o-novo-e-terrivel-patamar-das-fake-news/](https://veja.abril.com.br/tecnologia/deepfake-o-novo-e-terrivel-patamar-das-fake-news/). Access in: 10 mar. 2020.

MORAIS, Ronaldo Queiroz de. Paul Virilio: o pensador do instante contemporâneo. **Contexto e Educação,** Ijuí, ano 17, n. 65, p. 37-54, jan./mar. 2002. Available at: [https://www.revistas.unijui.edu.br/index.php/contextoeducacao/article/view/1181](https://www.revistas.unijui.edu.br/index.php/contextoeducacao/article/view/1181). Access in: 15 mar. 2020.

NEGRI, Antonio. **Biocapitalismo:** entre Spinoza e a constituição política do presente. Tradução: Maria Paula Gurgel Ribeiro. São Paulo: Iluminuras, 2015.

RAMAYANA, Marcos. **Resumo de direito eleitoral.** Niterói: Impetus, 2009.

RENA, Alemar Silva Araújo. **Do autor tradicional ao agenciador cibernético:** do biopoder à biopotência. São Paulo: Annablume, 2009.

ROMANI, Bruno. Uso de inteligência artificial para criar ‘rostos falsos’ é novo risco na internet. **O Estado de S. Paulo,** São Paulo, 08 mar. 2020. Available at: [https://link.estadao.com.br/noticias/cultura-digital,uso-de-inteligencia-artificial-para-criar-rostos-falsos-e-novo-risco-na-internet,70003224128](https://link.estadao.com.br/noticias/cultura-digital,uso-de-inteligencia-artificial-para-criar-rostos-falsos-e-novo-risco-na-internet,70003224128). Access in: 10 mar. 2020.

RUEDIGER, Marco Aurélio (coord.). **Robôs, redes sociais e política no Brasil:** estudo sobre interferências ilegítimas no debate público na web, riscos à democracia e processo eleitoral de 2018. Rio de Janeiro: FGV DAPP, 2017. Available at: [http://twixar.me/FmNT](http://twixar.me/FmNT). Access in: 03 mar. 2020.

RUEDIGER, Marco Aurélio (coord.). **BOTS e o direito eleitoral brasileiro nas eleições de 2018.** Rio de Janeiro: FGV DAPP, 2018. (Policy Paper 3). Available at: [http://twixar.me/DmNT](http://twixar.me/DmNT). Access in: 03 mar. 2020.

SEMINÁRIO INTERNACIONAL FAKE NEWS E ELEIÇÕES, 2019. **Anais [...]** Brasília: Tribunal Superior Eleitoral, 2019. 153 p.

SOBRAL, Cristiano. A responsabilidade civil dos provedores e de terceiros pelas fake news. **Conjur,** São Paulo, 27 out. 2018. Available at: [https://www.conjur.com.br/2018-out-27/cristiano-sobral-responsabilidade-civil-provedores-fake-news](https://www.conjur.com.br/2018-out-27/cristiano-sobral-responsabilidade-civil-provedores-fake-news). Access: 06 mar. 2020.

VOSOUGHI, Soroush; ROY, Deb; ARAL, Sinan. The spread of true and false news on line. **Science,** Washington DC, v. 359, issue 6380, p. 1146-1151, 09 mar. 2018. DOI: 10.1126/science.aap9559. Available at: [https://science.sciencemag.org/content/359/6380/1146](https://science.sciencemag.org/content/359/6380/1146). Access in: 12 mar. 2020.

VALENTÉ, Jonas. TSE usa robôs para ajudar a tirar dúvidas de eleitores. **Agência Brasil,** Brasília, 19 set. 2018. Available at: [https://agenciabrasil.ebc.com.br/politica/noticia/2018-09/tse-usa-robos-para-ajudar-tirar-duvidas-de-eleitores](https://agenciabrasil.ebc.com.br/politica/noticia/2018-09/tse-usa-robos-para-ajudar-tirar-duvidas-de-eleitores). Access in: 01 may 2020.

VIEIRA, Oscar Vilhena. **A batalha dos poderes:** da transição democrática ao mal-estar constitucional. São Paulo: Companhia das Letras, 2018.

VIRILIO, Paul. **Guerra pura:** a militarização do cotidiano. Tradução: Elza Miné, Laymert Garcia dos Santos. São Paulo: Brasiliense, 1984.

VIRILIO, Paul. **Velocidade e política.** Tradução: Celso Mauro Paciornick. São Paulo: Estação Liberdade, 1996.

**Recebido em:** 13.11.2020  
**Aceito em:** 09.08.2021