

DIGITAL DIVIDE AND PARTICIPATORY CITIZENSHIP IN THE NETWORK SOCIETY

A EXCLUSÃO DIGITAL E A CIDADANIA PARTICIPATIVA NA SOCIEDADE EM REDE

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ABSTRACT

Society is changing more and more with the innovations brought by new technologies, implying the rethinking of ways people act, interact, inform and transform the way they live on a local, regional, national, and global scale. Based on this reality, which Castells describes as a network society, it is essential to reflect on the new form of social exclusion inherent to it, that is, the digital divide. This paper's investigation problem revolves around how is the digital divide related to the exercise of participatory citizenship, especially in the electronic sphere, in the networked society. The deductive method was used in this investigation based on the technique of bibliographic research and indirect documentation. Throughout the investigation, it was possible to conclude that the aspects that involve the digital divide go beyond internet access or the matter of having computers or cell phones since this issue combines several technical, social, and geographical aspects. In this sense, overcoming the digital divide is fundamental for the use of digital citizenship as an instrument to strengthen political participation, especially in the scope of participatory citizenship. That may be possible through the expansion and creation of public policies to subvert social inequalities and technical, generational, ethnic, cultural, social, and geographical limitations, and also the development of electronic citizenship tools.

Keywords: Participatory citizenship. Electronic citizenship. Digital divide. Internet. Network society.

RESUMO

A sociedade se transforma cada vez com mais intensidade a partir das inovações trazidas pelo uso de novas tecnologias, que implicam no repensar as formas de agir, interagir e informar e transformar o modo como se vive em escala local, regional, nacional e mundial. A partir da formação dessa realidade, a qual Castells denomina sociedade em rede, há que se refletir acerca de uma nova forma de exclusão social a ela inerente, isto é, a exclusão digital ou, no termo mais conhecido em inglês, digital divide. Dessa forma, o presente trabalho

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girou em torno da seguinte problemática: de que forma a exclusão digital está relacionada com o exercício da cidadania participativa, sobretudo no âmbito eletrônico, na sociedade em rede? Para a realização da pesquisa, adotou-se o método dedutivo, a partir da técnica de pesquisa bibliográfica e documentação indireta. A partir da pesquisa realizada, foi possível concluir que os aspectos que envolvem a exclusão digital vão além do mero acesso à internet ou aos tradicionais mecanismos eletrônicos, tais como computador ou celular, visto que eles abarcam diversos fatores de ordem técnica, social e geográfica. Nesse sentido, superar a exclusão digital por meio da ampliação e criação de políticas públicas que combatam as desigualdades sociais e as limitações técnicas, geracionais, étnicas, culturais, sociais e geográficas, bem como a partir do desenvolvimento de ferramentas eletrônicas de cidadania, é fundamental para o aumento da utilização da cidadania digital como instrumento para o fortalecimento da participação política, em especial, no âmbito da cidadania participativa.

Palavras-chave: Cidadania participativa. Cidadania eletrônica. Exclusão digital. Internet. Sociedade em rede.

1. INTRODUCTION

Society transforms itself more and more with the innovations brought about by the use of new technologies, to enable different ways of thinking, acting, interacting, and informing, as well as transforming the way we live and live on a local, regional scale, national and worldwide.

These changes break with previous paradigmatic models, requiring the State and society to incorporate complexity (MORIN, 2011) which permeates the social fabric and which, due to the project (CAPELLA, 2002) or myth (GROSSI, 2007) of modernity bourgeois, was disregarded, to allow a broader and more efficient reproduction of the capitalist economic model (VIEIRA, 2013).

In this context, the information age, which emerged beyond the industrial period, incorporates these elements of complexity and also of a speed of data that were not known at any other time in the history of mankind, surpassing the barriers of State sovereignty traditional.

In this way, we are experiencing a context in which different paradigms cohabit the same social reality (KUHN, 1997; MORIN, 2011; PILATI, 2012), and this is a challenge that Law and other branches of knowledge need to face.

However, based on the formatting of this new society, which Castells (2005) calls a network society, it is necessary to reflect on the emergence of a form of social exclusion inherent to it, that is, the digital exclusion, or, in its term better known in English, digital divide, and not only from the point of view of immediate access to internet services or electronic devices, such as a computer or cell phone but also to the enjoyment and handling of these means to generate communication, participation, and interactivity, especially in the context of citizenship.

Citizenship here understood as participatory, which recognized a new paradigm arising from the Participative Republic instituted by the Constitution of the Federative Republic of Brazil of 1988, which incorporated the elements of complexity, diversity, multiculturalism/interculturality. This new landmark of citizenship in the constitutional text does not negate the assumptions of represented citizenship but coexists with them to complement each other in terms of the Social and Democratic State of Law (VIEIRA, 2013).

In this way, the present work will seek to reflect on the problem related to digital exclusion and its impact on participatory citizenship in the digital age, considering the use of new technologies and the new format of the network society.

Thus, the following question will be sought to elucidate the research: how is the digital divide related to the exercise of participatory citizenship, especially in the electronic sphere, in the networked society?

Based on the problem that leads to the reflections of this research, the study was guided mainly by the analysis of the use of new technologies for the exercise and the expansion of participatory citizenship within the scope of the relationship between State and society, without demeriting the initiatives carried out by organized civil society and private initiative, to break down barriers to technological access and expand the use of its tools.

In the development of the article, the deductive approach method is used, adopting the monographic procedure and the techniques of indirect bibliographic and documentary research.

As a general objective, it will be investigated how the digital divide is related to the exercise of electronic citizenship in the network society.

In the first moment, the aspects that involve the formation of the network society will be studied, especially from the advent of technologies, computers, and the internet.

Afterward, the concepts and elements that involve the digital exclusion, also known as *digital divides* in English, will be investigated. Finally, we will seek to detail the definition of participatory citizenship in the digital age and, thus, analyze the problem involving the impacts of the digital divide for its exercise in the context of the network society.

2. THE NETWORK SOCIETY AND DIGITAL DIVIDE IN BRAZIL

The transformations arising from technology and, in particular, from the invention of the internet have revolutionized the way of living in society, now called network society.

Society, previously disconnected and isolated, started to live globally and interconnected by network systems, the understanding of which will be better explored in the next topic.

It is important to emphasize, however, that the network society, although directly or indirectly intertwining all people, does not bring with it the complete resolution of social exclusion, but more clarity to the other form of exclusion, the digital one.

Social exclusion brings with it deeper roots that must be analyzed in more detail to understand them, while the digital divide, derived from digital life, although intertwined with social life, has its characteristics that deserve specific details.

2.1 THE EMERGENCE OF COMPUTERS, INTERNET AND NETWORK SOCIETY

Since the advent of information technology, society has been gradually transformed in several areas, such as communication, transportation, education, security, housing, health, relationships, government organization, etc.

Castells (2005) argues that although these technologies could already be observed years before the 1940s, such as in the invention of the telephone by Bell, in 1876; the radio by Marconi, in 1898; and the vacuum valve by De Forest, in 1906; it was in the Second World War and the following period, with the invention of the first programmable computer and the transistor, source of microelectronics, the real heart of the Information Technology Revolution in the 20th century and, still, only from the 1970s onwards, in fact, the wide diffusion of new information technologies.

Besides, another important historical event that deserves attention for the emergence of the so-called network society was, without a doubt, the creation and development of the Internet.

The invention of the Internet is attributed to the work of the US Department of Defense's Advanced Research Projects Agency (ARPA), from a unique fusion of military strategy, great scientific cooperation, technological initiative, and countercultural innovation, which, after launch from the first Sputnik, he decided to create a communication system invulnerable to nuclear attacks, which can be seen as a precedent for the arrival of the Information Age on a large scale (CASTELLS, 2005).

The first computer network was called ARPANET and came into operation on September 1st, 1969, and it was only during the 1980s that the network of networks was formed. Initially, it was called ARPA-INTERNET, then it was known only as INTERNET, a name still supported by the US Department of Defense and operated by the *National Science Foundation* (CASTELLS, 2005).

Only in 1990, in Europe, due to the difficulties in still using the Internet, the limited capacity to transmit graphics, the difficult location, and the setbacks in receiving information, which, after research carried out by a group of researchers headed by Tim Berners Lee and Robert Cailliau, at the *Centre Européen pour Recherche Nucleaire* (CERN), in Geneva, the well-known *World Wide Web* (WWW) was developed, which organized the content of Internet sites by information and not by location, offering users an easy search system to search for the desired information, with the creation of a format for the hypertext documents to which they named the hypertext markup language (HTML), added to the TCP-IP protocol and, also, with a configuration of a hypertext transfer protocol (HTTP) and the creation of a standardized format of addresses, the uniform locator of resources (URL) (CASTELLS, 2005).

The Information Age, therefore, can be considered, in a way, recent, with precedents that date back to the 1970s, with the creation of the operating system for computers, and the 1990s, with the emergence of the www network for internet access, which unimaginably revolutionized society.

Indeed, technology is not able to determine the direction of a society on its own nor can it dictate the paths of technological transformations in that many aspects, from creativity to entrepreneurial initiative, influence this technological-scientific process, of a novation and social applications, the result is the result of a complex interactive pattern (CASTELLS, 2005).

However, the complexity existing in the design of the modern state is undeniable, with factors that impede the participation of individuals in decision-making, due to the bureaucracy and hierarchy existing in its administrative structure. Besides, society also remains increasingly complex, to the point of being called the information or knowledge society, since information is revealed as the driving force of transformations and the most important fuel in modern production systems, as well as how the intense use of information technology in digital form has led to the overcoming of hierarchical and verticalized administrative structures towards horizontalized power relations, which was created by a network society (ROVER, 2009).

Thus, the emergence of information technologies has certainly influenced this new social format, now called network society. Name that is justified from the notion that networks constitute the new social morphology of our societies, and the diffusion of the logic of networks substantially transforms the operation and results of productive processes and experience, power, and culture, although, although the form of social organization in networks has existed in other times and spaces, we are faced with a new paradigm arising from the resources of information technology, which provided a material basis for its expansion throughout the social structure (CASTELLS, 2005).

2.2 THE DIGITAL DIVIDE IN BRAZIL

In this topic, based on the reflections previously made about the emergence of ICTs and the network society, we seek to bring up the issue of the digital divide in Brazil to reflect on the common complaint when dealing with the potentialities linked to the use of technologies information and communication on democracy and citizenship.

It is necessary to point out, initially, from the terminological point of view, the existence of different labels to denote the access and unequal use of digital resources, among which, the most common terms are digital exclusion, digital apartheid, digital fissure, digital fracture, or, more regularly in Anglo-Saxon literature, digital divides, or, in Portuguese, *digital division* (MARQUES, 2014).

For Elisabeth Gomes (2002), Brazil was wrong about the path to reach the digital age, as it prioritized computer manufacturers, which highlighted social exclusion in the country.

In fact, regarding the issue of the delay in digital and social development in the Brazilian context, it is worth mentioning the exhibition by Jessé Souza, in her well-known work "The elite of the delay" (2017), when she pointed out that capital played a deterministic role in our economy and historically conducted, even if indirectly, the country's social and political discussions, regarding the interests of the economic elite.

In this sense, digital divide or inequality adds to the existing inequality and social exclusion, in a more complex interaction, which leaves the impression of distancing the promise of the Information Age, in an obscure reality for many worldwide (CASTELLS, 2015).

In the Brazilian case, more broadly than in other countries, the digital divide is more strongly linked to the discussion of social exclusion, since it derives from socioeconomic and cultural inequalities, such as illiteracy, unemployment, low income, and education, in a relationship cause and effect. The factors that lead to social exclusion fall into the digital divide and this contributes to the deepening of that (ALMEIDA et al., 2005).

For Randolph and Lima (2012), the theme of digital exclusion involves reflecting on the diffusion and use of information management and transmission technologies, which allow mutual (interactive) communication between its different users.

The digital divide, in short, can be understood as “[...] unequal access to resources related to information and communication technology between or within continents, countries, regions or even neighborhoods” (ARAUJO, 2015, p. 16).

In this regard, according to a survey carried out by the Brazilian Institute of Geography and Statistics - IBGE (2020), during the National Household Sample Survey - Continuous PNAD, in 2017, the Internet was used in 74.9% of households in the country and this percentage rose to 79.1% in 2018.

Still, it was found that the main means of accessing the internet at home was the mobile cell phone, which, in 2018, reached 99.2% of the households where the internet was used, with the microcomputer being in second place, one since it was used to access the Internet by 48.1% of households where this network was used.

In a different survey carried out by the Internet Steering Committee in Brazil - CGI (2019), during the ICT Household survey, it was found, in 2018, that 67% of Brazilian households had internet access, 70% of which correspond to the urban area and 30 % to the rural area, as well as concentrating the highest percentage of access in the Southeast (73%) and South (69%) regions.

Castells (2015) tried to discuss this issue and argues that it is not surprising when, when proclaiming the potential of the internet as a means of freedom, productivity, and communication, there is a criticism regarding the digital divide caused by the inequality associated with it, since the centrality of the internet in many areas of social, economic and political activity is equivalent to marginality for those who do not have access to it, or have only limited access, or do not know how to use it effectively.

Social inequality in democratic practices, of course, is a common issue in discussions in political theory, whether from the perspective of participation or the perspective of liberal literature. However, in addition to social issues and inequality in opportunities linked to the absence or little political involvement of citizens, there are personal issues involved, related to personality, diverse experiences, preferences and motivations, and other factors that rule out the idea that perfect equality is a plausible political objective (MARQUES, 2014).

Well, similarly to inequality or social exclusion, we seek to reflect on the digital divide, not only from the perspective of personal characteristics of access but also about the lack of basic opportunities that enable the enjoyment of the services offered by the State or taking up space in consultations regularly offered at different government levels (MARQUES, 2014).

Roberto, Fidalgo, and Buckingham (2015, p. 51), in their conclusions of research carried out with university students in Portugal, claim that,

Concerning the social groups most affected by info-exclusion, digital natives show, in general, ease in identifying young people and the elderly as those who have greater and lesser access, respectively. They also refer to the importance of socioeconomic status and education as determining factors to ensure easy access to ICT. Considering the identification of these groups and the factors that enhance info-exclusion, digital natives show a stereotyped and reducing view of the elderly that supports the social devaluation of old age.

It is here that one of the reflections of this article is found, which intends to discuss whether the use of technologies makes society more efficient, or with more opportunities for participation in public decision-making, or whether social exclusion and inequality increases it already exists in its various meanings.

It is important to emphasize, first of all, that it is considered insufficient to analyze the digital divide only by the statistics considered in the possession or access to the means of communication, since, although necessary, there are other elements in this process, such as the individual peculiarities of who accesses or those associated with the geographical position (MARQUES, 2014).

On this point, the diagnosis made by Pippa Norris (2001) is relevant, which cataloged the problem in three faces: the first referring to the global division and the differences in access to digital technology and the infrastructure of telematic networks in different countries; the second, regarding the social division and the internal disparities of a society, cataloging as to the access to the equipment and the necessary skills for the handling of the information and communication technologies; and, finally, the existence of a digital exclusion in democracy (*democratic digital divide*), whose focus is on the use of digital resources and political mobilization.

Still, on the subject of digital exclusion, it is important to present the inventoried aspects that involve *digital divides* and collaborate for their understanding and proposition of solutions.

According to Marques (2014, p. 101-102), these aspects can be classified into three categories:

a) **technical aspects:**

- connection speed,
- hardware and software of the machines, which allow different experiences for users,
- backbone and backhaul structure in each location (technical devices that allow the physical connection between computer networks and, therefore, enable data exchange),
- IP numbers;

b) **individual and social aspects:**

- age,
- genre,
- income (to purchase communication devices, hire Internet connection services, or gain access to paid information),
- level of schooling
- ability to use the language (English as a universal language),
- ethnicity,
- cultural differences (between natives and immigrants, for example),
- skills to operate digital communication resources,
- motivation to employ the devices,
- external pressure to use digital communication networks (work, family or school),
- autonomy for consumption and content production,
- quality of the information to which they have access,

- stage of life in which digital communication technologies were accessed (having access to the Internet as a child or only after being an adult),
 - daily connection time,
 - behavioral aspects of each individual (degree of inhibition, for example);
- c) **geographical aspects:**
- countries (a greater influence capacity is said to depend on the user's place of origin),
 - regions of the same city or state (urban areas or rural areas),
 - usual place where the user accesses the Internet (home, work, lan house).

Sorj and Guedes (2005) write that addressing the issue of the digital divide must occur from a systemic view of the Brazilian reality, so that, alongside the promotion of policies for the universalization of internet access, we seek to promote universalization of other social assets, such as education, sanitation, security, health, and legal services.

In the same sense, Adriane Matos de Araujo (2016) points out that education is a fundamental role in combating the digital divide and, therefore, it is necessary to reflect on literacy and digital literacy as mechanisms of appropriation of digital technologies and, more broadly, of digital education, considering the collective social construction linked to digital cultures and social identities active in collective intelligence.

Therefore, it is clear that the aspects that involve the digital divide go beyond access to the internet or electronic components, such as computers or cell phones, since they encompass several factors, such as technical, individual or social, and geographic factors, which the expansion of its instrumental use in democratic participation can be seen as an obstacle.

3. TECHNOLOGICAL INNOVATIONS APPLIED TO PARTICIPATIVE CITIZENSHIP

3.1 PARTICIPATIVE CITIZENSHIP: THEORETICAL AND CONCEPTUAL NOTES

Initially, before the theoretical development regarding the application of ICTs to participatory citizenship, it is necessary to contextualize what the term citizenship means. Such an objective is not easy, given that citizenship does not have a uniform concept.

For Gohn (2005, p. 18), “[...] among the concepts used by intellectuals, politicians, public administrators, and the media, citizenship is probably the one that has had the greatest use (and abuse) of meanings and re-signified”.

Etymologically, it comes from Latin and had the meaning of the one who inhabited the city, having a correlation to the concept of people (GORCZEWSKI; MARTIN, 2011). It should be noted that while it has a sense of inclusion/belonging it also brings with it the exclusion of those who are not its holders (VIEIRA, 2013).

It manifests itself in various ways and receives the most diverse classifications: representative citizenship, semi-direct citizenship, electoral citizenship, participatory citizenship, electronic citizenship, liberal citizenship, social citizenship, republican citizenship, etc.

Concerning participatory citizenship, the 1988 Constitution of the Federative Republic of Brazil represented a milestone in its recognition in Brazil, since, in addition to the classic instruments of representative democracy, the need for citizen participation as holders of democracy was emphasized. popular sovereignty, which can also be brought as a new paradigm that presupposes the existence of citizenship that is not merely formal, but effectively participatory (VIEIRA, 2013).

As Vieira (2013) writes, the 1988 Constitution of the Federative Republic of Brazil represented a real turning point in terms of the recognition of rights and the inclusion of participatory citizenship alongside representative in a national constitutional text, since, before it, in terms of citizenship, there were no significant spaces for participation, as well as limitations for the exercise of representative democracy.

But what, in fact, is participatory citizenship? What kind of democracy does it best fit into?

It can be said that effectively participatory citizenship must encompass spaces in which citizens can collaborate to make decisions that involve the direction of society, through dialogue, opinion, consultation, voting and criticism.

In this line of reasoning, the Brazilian constitutional text tried to consecrate participatory spaces, such as public hearings, participatory public planning and budget, the forums of the State of the City, as well as the Conferences and Rights Councils (VIEIRA, 2013).

Such participation scenario is verified by the democratic logic of the well-called participatory democracy, which is intertwined with the meaning and existence of participatory citizenship worked on here.

There is a glimpse of a crisis in the liberal democratic paradigm based on the idea of representing citizenship and legal monism. A crisis that permeates all its institutions and that cannot be solved only with the instruments of bourgeois modernity, built from its mythologies and abstractions which removed the complexity of society, leaving the simplicity that the capitalist model needs for its development and reproduction (CAPELLA, 2002; GROSSI, 2007; PILATI, 2012; VIEIRA, 2013).

Thus, participatory democracy seems to occupy more attention, insofar as it tries to rescue the notion of the people as a true holder of sovereignty and protagonist of the public interest.

Participatory democracy has tried to find an answer to the promises not fulfilled by representative democracy, consisting in restoring “[...] subjects to a political initiative and an influence in the decision-making process that today seem to be compromised by the formalism of the representative system and elitism. of the parties” (COSTA, 2012, p. 300).

According to Pateman (1992, p. 60-61), participatory democracy

[...] it is built around the central statement that individuals and their institutions cannot be considered in isolation. The existence of representative institutions at the national level is not enough for democracy; because the maximum participation of all people, socialization or ‘social training’, needs to occur in other spheres so that the necessary psychological attitudes and

qualities can develop. [...] The main function of participation in the theory of participatory democracy is, therefore, educational; educational in the broadest sense of the word, both in the psychological aspect and in the acquisition of democratic skills and procedures. [...] Participation promotes and develops the very qualities that are necessary for it; the more individuals participate, the better able they become to do so.

Therefore, democracy participation was not intended to replace representative democracy entirely. Despite this, representative democracy has rejected the legitimacy of participatory democracy, which has caused a certain conflict, which will only be resolved insofar as this refusal is left aside to be absorbed as a form of complementarity between the two forms of democracy, of to contribute to the deepening of both (SANTOS, 2002).

In this context of complementarity, in Brazil, as from the 1988 Constitution, the paradigm of the need for society's participation as the holder of popular sovereignty was established, thus transcending the traditional representative democracy exercised through political parties, with mechanisms established semi-direct exercise of power: popular initiative, plebiscite, and referendum. However, despite their importance, their exercises are limited within the formalist and monist view of the legal system (VIEIRA, 2013).

Although there were such formal limits to the mechanisms of popular initiative, the plebiscite and the referendum, other spaces of citizenship were also recognized, such as the participation of the community in the area of health and other areas of public policies (rights councils or management councils of public policies), the right of assembly and association, the right to information in public bodies, the right to petition and obtain certificates in public bodies for the defense of rights, popular action, municipal popular initiative, holding hearings in the National Congress with the participation of society, the possibility for a citizen to file complaints before the Court of Auditors, the receipt of complaints from society against organs of the Judiciary before the Council of Justice, the receipt of complaints from society against bodies of the Ministry Público before the National Council of the Public Prosecution (VIEIRA, 2013).

Among the spaces of citizenship, social control (of society about the State) also stands out, which differs from social participation due to the way decisions interact in public matters. Control is the mechanism that allows the possibility of decisions to be replaced, while participation is reflected in the existence of channels, institutions of interaction between the government and society, with the presence of collective subjects in the decision-making processes in public choices (BITENCOURT, 2019).

And it is in the space of social control, in line with the exercise of participatory citizenship, that the use of ICTs and electronic citizenship is configured as a necessary element for the expansion of participation and the inspection of the public good.

3.2 THE DIGITAL DIVIDE PROBLEM AND THE SEARCH FOR EFFECTIVELY PARTICIPATORY CITIZENSHIP

Electronic or digital democracy can be understood “[...] as the set of resources, tools, projects, experiments, experiences and initiatives in which technologies are used to produce more democracy and better democracies” (GOMES, 2018, p. 1832).

In this line, the notion of citizenship is also understood from the technological increase in its most varied forms of manifestation. This model is referred to by Perez Luño (2004) as a less formal process of citizenship, which he calls cyber citizenship or citizenship.com. It can be said, then, that the discussion of popular digital participation gains an additional element in relation to traditional forms of participation: the digital one.

Thus, in addition to the traditional difficulties for popular participation, which involve the citizen's ability to present, in a persuasive way, their own arguments or claims, it should be assessed, in the digital context, whether citizens have equal conditions of resources for the access to data and arguments under discussion (FERREIRA, 2011).

As Araujo (2015) well mentions, the debate about the digital divide, when related to the theme of citizenship, must consider access and critical use of information, since access is linked to the technological infrastructure for internet connection and availability information, while critical use involves how individuals use the internet.

It is important to highlight, in the same way, some criticisms listed by Wilson Gomes (2018) from scientific works published about the arrival of digital or electronic democracy, which will be the subject of reflection below.

The first says that digital democracy cannot, through the use of information and communication technologies, solve the problems of democracy (GOMES, 2018).

Such criticism does not seem to make much sense, since healthy, up-to-date, abundant and publicly available government data are fundamental for democracy, for improving people's lives, and even for the progress of society. Still, digital democracy aims to aggregate and not replace, with nothing being automatic in democracy, nor the existence of the best technological means available (GOMES, 2018).

The second states that the democracy that would emerge from electronic democracy would be a low and poor version, consisting of a mere device for registering preference (GOMES, 2018).

Again, such criticism is shallow and does not comprehend the totality of digital democracy, since it mixes a minimal function that a given technology can provide and a general judgment on democracy as a result only of fulfilling that function (GOMES, 2018).

Along these lines, Lévy (2003) points out that the use of the Internet, combined with democracy, constitutes one of the foundations of cyberdemocracy, and, unlike the media of media democracy in the second half of the 20th century, such as the press, radio, and television, all citizens navigators of the world wide web are allowed the opportunity to express their opinions and intentions without having to pass through the power of the journalist, to expand, diversify and even complicate the public sphere, that is, conferring greater freedom of speech.

A third criticism tries to maintain that electronic democracy can produce anti-democratic asymmetries since it would produce greater social exclusion in the face of technological exclusion (GOMES, 2018).

The development of technological resources aimed at digital democracy without observing the issues of digital inclusion can further deepen social exclusion. However, if we consider the issues of the digital divide, we have that digital inclusion can reduce social exclusion, contributing to the process of improving the ways of exercising democracy and citizenship.

Thus, the technology associated with participatory citizenship, in what can be called digital participatory citizenship, alongside the traditional mechanisms, when thought in conjunction with the factors of digital inclusion, provides expansion and not a reduction of spaces for participation and the exercise of citizenship.

Finally, a fourth critic tries to make it believe that digital democracy is not capable of producing better conditions for civil participation and public deliberation, so it cannot help to improve democracy (GOMES, 2018).

Along these lines, Ferreira (2011) points out that it is necessary to differentiate inequalities in offline and online participation, since it must be verified whether, if the barriers to access online participation are overcome, there will be an impact on factors of offline inequality, since recent studies demonstrated that the main obstacles to carrying out public deliberations stem from political apathy and not from obstacles to the possibility of expression or communication.

However, it should be noted that obstacles to the exercise of citizenship can increase this political apathy by making it difficult and indirectly to discourage democratic participation.

Furthermore, regarding the relationship between the use of the Internet and the exercise of citizenship, Lévy (2003) mentions that those who enjoy this technology tend to vote more, have more information, feel better ability to act on the world and have more confidence in the democratic process.

Digital democracy is not only about generating more civil participation and public deliberation, but also about providing information that promotes transparency, openness and accountability of government agencies at national and international level, as well as strengthening the channels of interactive communication between citizens and intermediate institutions (GOMES, 2018).

Sorj and Guedes (2005) emphasize the importance that schools assume as instruments to socialize new generations for the use of the Internet. The authors point out that one should seek to implement policies to encourage the use of software and electronic equipment by students to enable them to learn about basic programs and motivate them to use these different technological resources.

In this sense, with the gradual breaking of these obstacles to access and use of new technologies, it is possible, in the context of digital democracy, to allow a larger space for dialogue, interaction and citizen participation to be built in political decisions, eventually substantiating itself in an instrument that can, in a complementary way, contribute to a greater instrumentalization and the reach of participatory democracy (PICANYOL, 2008).

4. CONCLUSIONS

The present work sought to reflect on the impasse inherent in the *digital divide* and its impact on participatory citizenship in the context of the network society.

As seen, the transformations arising from technology and, in particular, from the invention of the internet have revolutionized the way of living in society, now called network society.

Society, previously disconnected and isolated, started to live globally and interconnected by network systems.

This new format of the network society, although intertwining, directly or indirectly, all people, did not bring with it the resolution of social exclusion (which would not be able to do so, given the complexity of factors that involve such exclusion), but more clearly to the other form of exclusion, the digital one, which must be faced by the State and by society.

Social exclusion has deeper roots, which impact people's lives with public goods and services, including access to the fundamental rights to information and knowledge.

The *digital divide* (digital exclusion), originating from digital life, which is also affected by social exclusion, with emphasis on Brazil, a country marked by social inequality, has its characteristics that were detailed in the development of this study.

Overcoming the digital divide is fundamental for the expansion of the use of digital citizenship or cyber-citizenship as an instrument for the expansion and strengthening of political participation, especially in the scope of participatory citizenship.

This participatory citizenship, inscribed in the body of the 1988 constitutional text, does not refute the importance of represented citizenship and parties but coexists with it to expand the exercise of democratic participation in the wake of the advocated by the Social and Democratic State of Law.

Therefore, real participatory citizenship must encompass spaces in which citizens can collaborate to make decisions that involve the direction of society, through dialogue, opinion, consultation, voting, and criticism.

Furthermore, the theoretical construction of this research publication that the aspects that involve the digital exclusion go beyond the access to the internet or electronic components, such as a computer or cell phone, since they encompass several factors, such as those of a technical, individual or individual social nature and geographic.

In this sense, it is worth emphasizing the role of education in this process from the schools, but not only through them, because of the need to think about the inclusion of those who are no longer in the school environment or who have had little contact with this environment, which also deserve attention regarding the theme of the digital divide, since they have a socializing role for new generations on the internet. Therefore, a challenge that arises is the need to create conditions for the implementation of digital education in Brazilian schools (which, in the case of public schools, can contribute to the reduction of social exclusion), aimed both at the labor market and economy, as well as for the exercise of citizenship.

Thus, for access to information and knowledge to occur through the use of ICTs and, consequently, the dissemination of digital participatory citizenship, it is necessary to expand/create public policies to combat social inequalities and create instruments that make it possible to include those excluded digitally, including for their cultural, ethnic, generational, technical or geographical aspects.

There is a need for public investment in the development of solutions aimed at citizenship, through *software* engineering techniques and the use of information and communication technologies.

Within the scope of popular participation, the development of electronic instruments, not only informative but with effective citizen interaction, regarding the discussions held in the Legislative Branch, through internet access, could contribute to the reduction of the digital divide and allow greater interaction society in the legislative process.

In terms of public transparency, the improvement of electronic portals to expand the information and documents available in addition to what the legislation proposes, in a concept of digital Public Administration, also has the power to contribute to the improvement of citizenship, at least in terms of access, as to the digital divide.

Finally, concerning participatory citizenship within the scope of public policies, the development of interactive digital channels for rights councils, especially municipal councils, would also represent a digitally inclusive measure, which would give more visibility and strengthen these spaces of participatory democracy, supported by the paradigm of the Social and Democratic State of Law, which was recognized in the text of the 1988 Constitution of the Federative Republic of Brazil.

The truth is that there is not only one solution for the elimination of the digital divide, such as social exclusion, but there are several bridges that can lead to the most inclusive scenario possible, and any measure of digital inclusion will contribute to social improvement and vice-versa.

In this context, a final reflection is necessary: one cannot blame technological resources as causing social inequality, as this is something that cannot be sustained. The problem associated with social exclusion is something more profound, rooted in historical elements of an exclusive political and economic process, which have marked and continue to deeply mark Brazilian society and the other countries of Latin America.

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