

Scientific Journal of Applied Social and Clinical Science

DIGITAL FREEDOM: FROM THE DISCONFIGURATION OF THE ANALOG WORLD TO (DIS)SUBSTANTIAL DIGITAL INCLUSION

Gabriel Arruda de Abreu

Mestre em ciências criminológico-forenses pela UDE/Uruguai, com título reconhecido pela UNESA no Brasil. Doutorando em função social do Direito pela FADISP São Paulo-SP

<http://lattes.cnpq.br/6642387571095379>

All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).



Abstract: Based on statistical data about digital inclusion in Brazil and supported by bibliographic references, this quantitative and qualitative research aims to illustrate the current state of the art. It seeks to provide foundational knowledge to later exemplify the model that has been clumsily applied in the migration of basic public services from analog to digital formats and how this situation has increased the abstraction of the State, particularly in the eyes of the most vulnerable populations—completely disregarding fundamental rights. The article argues that, to the clear detriment of the digitally underprivileged, and through an informal system of geographical and digital castes, there is an entrenchment in the analog world, which itself is in a state of fragmentation. As a result, basic services—starting with access to justice and extending to other essential public services—are being distorted. Finally, the article addresses several barriers to digital inclusion, such as e-crime and the challenges of linguistic interpretation. In the current context, debates about Digital Constitutionalism—based on abstract concepts—are intensifying, seeking parameters for a new constitutional architecture in the digital age. However, the text concludes that it is necessary to propose a rescue of constitutional foundations, through a topographical engineering approach, particularly from the perspective of the global south—the world’s technological periphery. Establishing digital inclusion, substantially considered, as an urgent public policy is crucial to preventing a dangerous trajectory toward “enslavement” 4.0.

Keywords: Fragmentation of the analog world. Digital exclusion. Digital castes. “Enslavement” 4.0.

INTRODUCTION

Various studies debating digital constitutionalism, from its conceptual foundations to its desired premises; as well as the implementation of digital governance, under the aegis of a whirlwind of (proto)constitutional regulations, have been taking shape in recent decades. It must be admitted that this situation is the inevitable result of contemporary technological disruption, following in the footsteps of innovations in this area and seeking a normative adaptation that accommodates the new scenario imposed.

Although various proposals have proved to be very interesting, there is a deep concentration by scholars on abstracting norms, especially when the (still analogical) difficulties of the technological periphery of the global south are disregarded. In practice, in search of OECD standards, technicians - with good will, but disconnected from reality- implement the architecture of digitalization, without the necessary topographical study of the soil on which they are working and without taking the end user into account.

Disregarding the basics, alongside a digitalization to be praised, there is a total (early) distortion of the analogue. In other words, digital is not emerging as a new way forward, but is being paved over old tracks as the only possible way forward. In view of this situation, the aim of this research is to discuss, by means of a list of examples, how, as a substitute for forced digitalization, the bridges between the state and its citizens have been fragmented, making the state even more abstract in the eyes of its citizens.

Aiming to demonstrate some of the direct consequences of this unbridled overflow, the article (first presented for the conclusion of a course in the doctoral program at FADISP) tackles the issue of digital inclusion in Brazil, using statistical data from renowned institutions, in order to position the reader

in the current context. Observing how the implementation of the third industrial revolution is still lethargic at the local level and glimpsing the way in which this terrain is being poorly paved for the implementation of the disruptive fourth revolution that lies ahead.

Once we are minimally familiar with the bases on which we are working, we move on to address some of the fragmentations that have been taking place in the links between the state and citizens. Firstly, we turn the spotlight on the unavoidable access to justice, discussing the cascading effects of the (welcome) digitization of processes, such as the closure of courts - taking into account how market logic has made it more precarious to serve those most in need. Later, other basic services will be discussed, such as the supply of water, energy and the banking network, and how digitalization has affected the relationship between these providers (of public services, it should be stressed) and citizens - digitally and geographically vulnerable.

Next, also without the intention of exhausting the subject, a necessary digression is made to mention how these citizens who are placed on the margins end up being more exposed to crime that migrates to digital, as well as to born-digital criminals. This generates fears and is yet another barrier to the longed-for substantial digital inclusion. Finally, an even more fundamental obstacle is the language barrier and the difficulties of implementing clear language, in compliance with Federal Law No. 14.129, of March 29, 2021, which now provides for principles, rules and instruments for Digital Government and for increasing public efficiency, with linguistic clarity as one of its bulwarks.

Methodologically, a quantitative and qualitative study is proposed, based on the verification of data obtained from recognized bodies and organizations, revealing the current

scenario of digital (dis)inclusion in Brazil. Thus, with the support of a bibliographical analysis, it offers material to support a re-reading of some contemporary digitalization phenomena, demonstrating how the fragmentation of analogue takes place along the lines of a digitalization with colonizing premises - which disregard the nuances of the technological periphery -, affecting citizens, particularly those who are underprivileged.

In conclusion, before delving into a new constitutional architecture in the cyber age, or even abstract conceptual debates about Digital Constitutionalism, it is imperative that factual and structurally sound constitutional bases are put in place, in (re)foundational engineering, with constitutional support. This establishes inclusion in this scenario, which is minimally substantial and integrative for the population, as an urgent public policy, under penalty of imprisonment in the (fragmented) analog, on the road to authentic 4.0 enslavement.

DIGITAL INCLUSION IN BRAZIL

There is a constant (and growing) influence of information and communication technologies - ICTs - in everyday life. From the social aspect to the job market, and even permeating relations between citizens and the (digital) government. Digital knowledge has become fundamental, no longer as a tool for inclusion in a new context, but as an inseparable instrument for relating to the world - considered in a unified way, since the barriers between the physical and the virtual are increasingly blurred. On this basis:

“It is important to consider that technological development cannot imply a form of distinction between citizens who are users of public services and, therefore, holders of the social rights provided for in the 1988 Constitution. If this is the case, in a country that claims to be democratic like Brazil, in addition to the already recurring distinction between citizens with and without access

to the Judiciary for the protection of basic rights, there will also be a distinction between citizens who do or do not have access to the internet and technological devices” (Cristóvam et al., 2022, p.192).

According to data from the Continuous National Household Sampling Survey (PNADC), the number of Brazilian households with internet access has increased in recent years¹. However, as Vinhaes (2022), an analyst for the survey by the Brazilian Institute of Geography and Statistics (IBGE), points out, cell phones are the main access device, being used in 99.5% of households with a connection, and sometimes with only one mobile phone shared by the family. In addition, it points out that since 2016 there has been a slight increase in access via cell phone, and a significant drop in the use of computers, from 57.2 to 42.2%, as well as tablets, from 17.8% to 9.9%.

From this perspective, it can be seen that the equipment usually used for more complex activities, such as computers², has been losing ground compared to cell phones. The effects of this decline become even clearer if we look at other interesting findings from the survey, such as the purpose of access. Along these lines, more people connected for voice or video calls (95.7%); then to send or receive text, voice or image messages via applications (94.9%); while 89.1% used the network to watch videos (including programs, series and films); and, in turn, only 62% used the network for the purpose of sending or receiving e-mail.

Although it's possible to point out that the latter is in disuse, it's worth noting that while 84.2% of private school students had this objective, among public school students the

percentage was only 55.0%. In addition, the main purpose of Internet use for public school students was to watch videos (including programs, series and films), accounting for around 94.1%, while among private school students, the top uses were voice or video calls- 97.2%.

Alongside social disparity, another notable point is age exclusion. Although there was an increase in the data compared to previous years, only 57.5% of those considered elderly (people over 60 years old) used the internet, while for those aged between 50 and 59 this percentage was 83.3%. In symmetry, another clear inequality was observed in rural areas, with around 74.7% of households connected, while in urban areas there were 92.3%.

Finally, it is essential to point out that among the 183.9 million people over the age of 10 in Brazil, 84.7% used the Internet in the reference period. However, the percentage was higher among students: 90.3%, and the social disparity is once again brought to the fore, since while 98.2% of private school students had access, only 87.0% of public school students³ were able to count on this basic (public, it must be said) service.

THE THIRD LATE INDUSTRIAL REVOLUTION

Following this path, there is a profound lethargy in the universalized implementation of the third great human revolution⁴. As a result, connection to the web (and more recently to networks) is still selective, particularly on the periphery of the world⁵. Likewise, mastery of basic technological concepts, albeit *offline*, which are essential for

1 More information available at: <https://painel.ibge.gov.br/pnadc/>. Last accessed on 20 Apr 2024.

2 It's worth noting that many websites are designed to be used exclusively or preferably on computers, with use on other devices being difficult or even unfeasible.

3 The situation is further aggravated by the fact that, according to Nery and Cabral (2023), in 2022 Brazil had 1.9 million children and adolescents aged 5 to 17 (or 4.9% of this age group) in child labor. This figure had fallen from 2.1 million (or 5.2%) in 2016 to 1.8 million (or 4.5%) in 2019, but rose again in 2022.

4 Positioning Brazil on the “periphery of technological development” (CRISTÓVAM et al., 2022, p.184).

5 It is clear that the basket of problems to be faced by the global south is gigantic, with the sad highlight being hunger, which

full inclusion in the workplace, socially and, ultimately, as citizens in the broad *sense of the word*, is still a privilege.

In this way, with only part of society included in the new context, the actors of the global south⁶, to a large extent, end up being left out of the wave of development, receiving late repercussions from these developments, in bundles for which they are often unprepared - in a clear example of glocalization⁷, at its worst.

At the same time, strangely, in the digital world, a territory theoretically without borders, geographical castes are not only maintained, but maximized to colonial levels, in a crystal clear example of neo-colonialism, so highlighted, among others, by Boaventura de Souza Santos, in which: "(...) the countries of the South have less and less internal autonomy and are subject to external impositions of all kinds, sometimes indicative of the beginning of a new cycle of colonialism or, at least, neocolonialism" (Santos, 2018, p. 167). Along these lines, in addition to a *soft power* colonialism, there is a barren terrain that is conducive to the sprouting of virtual frontiers for knowledge and, consequently, integration.

DISRUPTIVENESS 4.0

However, while the third revolution has yet to be universalized, a new, even more uncertain context is already emerging, in line with the transition between the interregnum of postmodernity (liquid modernity or hypermodernity) and post-society. A transposition accelerated by the pandemic,

which catalyzed the dematerialization of work and capital, highlighted the affirmation of new technologies and established, recalling the teachings of Bauman and David Lyon, a new panopticon, in which: "We have moved from undesirable and oppressive control to a voluntary and even desirable one. Something that, of course, has already surpassed modernity" (Bordoni, 2021, p.33) - illustrating (in a small way) the disruptiveness envisioned for the coming decades.

In the meantime:

"The legal rules in force ignore all these disruptive effects produced by the new technologies that are now consolidated. And legal operators continue to try to capture the digital phenomenon with legal instruments and categories that were, to a large extent, thought up and created in the 19th and 20th centuries, unable, in practice, to offer satisfactory answers to society and its constant challenges" (Tavares, 2022, p.58).

Furthermore, while the agricultural and industrial revolutions spanned millennia, the time between the latter and the third great human revolution was only a few centuries. In line with this exponential advance, the fourth industrial revolution is being predicted (a few decades apart and already in a largely subjectivist post-society), signaling that the increase in the speed of machines - proposed by Gordon Earle Moore⁸ - may not concern machines themselves, but human knowledge. Under these premises:

in Brazil: in the fourth quarter of 2023, with reference to the three months prior to the date of the survey, 21.6 million households (27.6%) were affected by some degree of food insecurity. Available at: <https://agenciadenoticias.ibge.gov.br/agencia-noticias/2012-agencia-de-noticias/noticias/39838-seguranca-alimentar-nos-domicilios-brasileiros-volta-a-crescer-em-2023>. Last accessed on: May 08, 2024. Nevertheless, it must be understood that failure to address digital disenfranchisement urgently could aggravate all the other dilemmas, including hunger, in the medium term.

6 Cf. SANTOS, Boaventura de Souza. *Epistemologies of the South: Justice Against Epistemicide*. Boulder: Paradigm Publishers, 2014.

7 Cf. BAUMAN, Zygmunt. *Globalization: the human consequences*. translated by Marcus Penchel. Rio de Janeiro: Jorge Zahar Ed., 1999.

8 For more information: <https://blog.singularitybrazil.com/blog/lei-de-moore/>

“The fourth industrial revolution, however, is not just about intelligent, connected systems and machines. Its scope is much broader. Waves of new discoveries are occurring simultaneously in areas ranging from genetic sequencing to nanotechnology, from renewable energies to quantum computing. What makes the fourth industrial revolution fundamentally different from previous ones is the fusion of these technologies and the interaction between the physical, digital and biological domains.

In this revolution, emerging technologies and widespread innovations are disseminated much faster and more widely than in previous ones, which are still unfolding in some parts of the world. The second industrial revolution has yet to be fully experienced by 17% of the world's population, as almost 1.3 billion people still don't have access to electricity. This also applies to the third industrial revolution, since more than half of the world's population, 4 billion people, live in developing countries without access to the internet. The mechanized loom (the hallmark of the first industrial revolution) took almost 120 years to spread outside Europe. In contrast, the internet has spread across the globe in less than a decade.” (Schwab, 2016, p.16)

In this way, since: “[...] beginnings and endings are not knowable by contemporaries” (Bauman; Bordoni, 2016, p. 91), the time frame between revolutions becomes increasingly imperceptible. However, particularly from the point of view of the excluded (virtual or physical), the transition has little practical effect. In fact, without proper treatment, the new only strengthens the uncertainties about these changes, the lurking threats (disruptive in their cradle), with consequences that are concretely immeasurable, even to the most specialized eyes.

ACCESS TO JUSTICE

From this perspective (and in the light of effective access to justice), there is a necessary and highly pertinent debate on the subject, particularly in the face of the digitalization of basic services. This is because

“In addition to the operational barriers, the virtual service for parties and attorneys suffers from the intellectual barrier: the target audience, for the most part, has never had contact with the proposed tools. This causes delays in answering and resolving demands. It is hoped that, once the pandemic is over, there will be room for virtual assistance to continue and the practice can be better disseminated among the population, so that they begin to use the tools routinely and not as an emergency” (Oliveira, 2023, p.52).

Nevertheless, the practical consequences of implementing these technological resources are felt gradually, but at a speed that is clearly greater than the capacity for universal inclusion in these resources. It is crucial, however, to always ratify that what we are trying to defend is not a ludist view⁹ of innovations. On the contrary, it is a proposal for (re)reading, under the aegis of a foundation for a Digital Constitutionalism, with digital inclusion no longer as an end in itself, but as a means to contemplate this new bundle of freedom of movement that is required. Bearing in mind the practical effects of these innovations, which are commonly harmful to the marginalized, particularly with regard to the effects of these changes on access to justice. Now relocated in a new (digital) universe and with promises of a new reality, in which the barriers between the virtual and the physical are becoming less and less perceptible - leading to an abstraction that is difficult to understand.

⁹ “A movement that opposed industrialization and the mechanization of work and originated in England at the beginning of the 19th century, believing that technology was the reason for unemployment and misery.” Available at: <https://www.dicio.com.br/ludismo/>. Last accessed on: September 30, 2023.

In theory, still in line with the third great revolution, digitalization (not only of processes, but also of internal court procedures) should be beneficial to everyone. However, this is not the case for a large part of society, which already saw justice as another world, and now feels it is even more distant, in a virtual parallel reality (unfortunately) foreign to so many, given their unfamiliarity with such devices. This feeling is strengthened by the empty buildings. In other words, justice is becoming even more distant from the people, reaffirming a historical trend:

“The judiciary has gone through various political regimes, whether dictatorships or democracies, without being structured along democratic lines. No matter how many times authoritarian regimes ended and democratic regimes began, as happened in Brazil, judicial professionals remained in office, reproducing the logic of a power that is almost untouchable and distant from the people” (Leonel jr., 2017, P.169).

In symmetry, but even more uncertain than mere digitization, are its developments and the repercussions of the most recent improvements, i.e. those related to the most contemporary digital transformations. This can be illustrated by the closure of court offices, the establishment of access codes for cases and 4.0 innovations, such as the implementation of artificial intelligence in the legal environment, the latter initially for organizational and cataloguing purposes, but with an even more dubious future in terms of its practical applicability.¹⁰

CASCADING EFFECTS OF DIGITALIZATION

Even before the recent pandemic, the quest to digitize judicial proceedings was already present, coupled with an attitude of improving management and various basic principles such as economy, efficiency and procedural speed.

Like this:

“The digitization and automation of processes and service provision reduces the demand for personnel for a considerable number of bureaucratic activities, while at the same time reducing the time needed to carry out tasks. In times of fiscal tightening and the pension crisis, the savings generated can serve as an incentive for local governments to speed up policy implementation.

Remember that in Estonia, a country that is a leader in digital government, only marriage, divorce and the transfer of property require the physical presence of the citizen at a government office” (Baptista; Antoun, 2022, p.26).

Catalyzing this desire, along with pressure from foreign bodies such as the OECD, the health catastrophe suffered in recent years has accelerated these measures to an unimaginable degree. Along these lines, several courts in the country have already digitized their entire dockets, one of the most recent examples being the State of Maranhão¹¹, which achieved full digitization of all its cases on April 29, 2023.¹²

Milestones like this are undoubtedly an achievement to be celebrated. It illustrates the efficient and proficient management of public resources, in favor of a necessary modernization and in search of a longed-for speed, without renouncing legal certainty. However, we must never forget the central

10 Cf. TAVARES, André Ramos. O juiz digital: Da atuação em rede à justiça algorítmica. São Paulo: Expressa, 2022.

11 It is worth noting that, according to UNICEF data, in 2022 more than 90% of children and adolescents in the state of Maranhão lived in “multidimensional poverty”. Available at: https://www.unicef.org/brazil/media/26726/file/unicef_pobreza-multidimensional-na-infancia-e-adolescencia_2022.pdf. Last accessed on: May 9, 2024.

12 More information available at: <https://www.cnj.jus.br/judiciario-atinge-100-de-processos-digitalizados-e-migrados-ao-pje/>. Last accessed on: April 29, 2024.

figure in a process, who must be given total attention and who sometimes ends up relegated to a second level of importance, that is, the court.

In this vein, it is crucial to point out that, equally imbued with the spirit of efficiency in management (at least in theory), just as numerous as the examples of digitalization of judicial processes, in an electronic government¹³, are the deinstallations of courts all over the country. To illustrate this, the Court of Justice of the State of Acre, one of the states with the smallest number of courts, recently proposed the closure of three of the installed courts, which would become “service stations”¹⁴.

On this subject, we must bring up the precious words of a lawyer from Bahia about a similar case in his state. The famous lawyer said:

“After all,” said the Bahia Court of Justice, “the town is small and doesn’t have enough income to maintain a judicial structure - and what a structure! - cannot be the seat of a district court, forcing citizens to travel 100, 200 or more kilometers to claim their rights.

This reasoning is intended to undo everything that was imagined about justice: a safe haven for the weak? But what is this anchorage that can only exist where there is money to pay the judge’s salary, the servants, the facilities and the machines?

No, this equation cannot be correct. The men got the concept wrong, but the mistake will prevail until new magistrates fix the imperfection of the syllogism. The worst thing is that this logic has been repeated since 2012.

13 It is worth noting that this is only an electronic judiciary, because in digital governance: “one can speak of a real disruption, insofar as the instrumentalist and merely incremental vision of the application of technologies in Public Administration is abandoned in order to increase administrative action, consisting of the provision of public services as such, in order to guarantee social rights and stimulate access, participation and citizen control over management and public policies” (TAVARES et al., 2021, p.795). It is useful to add that any digitalization ends up being innocuous if it is not inclusive and participatory.

14 More information available at: <https://g1.globo.com/ac/acre/noticia/2022/06/02/apos-tj-anunciar-fechamento-de-comarcas-em-tres-cidades-do-acre-sindicato-entra-com-liminar-para-suspender-mudanca.ghtml>. Last accessed on: April 29, 2024.

15 “Kant (Foundations of the Metaphysics of Morals - 1785): defended the existence of the intrinsic dignity of every rational being, which has no price or equivalent. Precisely because of this dignity, human beings cannot be treated as a means, but rather as an end in themselves.” (Ramos, 2022, p.26)

16 Full text available at: 2024.https://www.al.to.leg.br/arquivos/lei_126-2019_50801.PDF. Last accessed on: 30 Apr.

17 More information available at: <https://www.fenassojaf.org.br/noticias/cnj-suspende-tramitacao-de-anteprojeto-de-lei>

What expensive bread is that, sung by Bertold Brecht, when he said that “justice is the bread of the people” (Cardoso, 2017, online)

Along the same lines, Mello points out that: “In Brazil, access to justice is enshrined as a fundamental guarantee in item XXXV of art. 5 [...]. It is precisely this right of a guarantee nature that validates all other rights” (Mello, 2023, p.32). However, the spirit of good public management, which for so many must follow the “primors of private initiative”, forgets its most valuable core, the provision of public service, in its north of providing, serving the people, which has at its core the hard core¹⁵ of the Citizen Constitution - the dignity of the human person.

On the contrary, there have been huge steps in the opposite direction. With a greater emphasis on budget cuts (in a very selective way, let’s not forget), than on what should be the state’s prestational compass. The result is a serious curtailment of access to justice, yet another barrier to digital freedom, the geographical distancing of those who still live an analog daily life - usually the most disadvantaged, replicating classic selectivity.

In a similar vein, several courts are dealing with their staffing levels, most notably the Tocantins Court of Justice, which, by means of State Complementary Law No. 126, on December 17, 2019¹⁶, abolished the positions of Court Clerk, creating the “gratified function of Diligence Officer”. This was after the CNJ had suspended a previous similar proposal¹⁷.

This is not an isolated case, as the state court of Paraná had already followed the same unfortunate path, and was even the subject of ADI 4317¹⁸ regarding the criteria for choosing the position, and more recently the state of Amazonas¹⁹.

In all cases, the main reason given was financial. Thus, once again, the ultimate object of public service is neglected. This is because, although occasional cuts are necessary, the position of bailiff, once a bailiff, is an age-old one, and often represents the most direct and intimate link between the court and the courts. From the first contact with the case on the part of the defendant, to the gratifying news of the satisfaction of the dispute to the defendant, this is the professional who deals with the complaints and clarifies the doubts of those involved. This is where the remains of the loves and disappointments of life - so bitter for so many - are deposited. It is unacceptable to turn them into (yet another member of the galloping list) a position of trust.

This is just another example, since most courts have already removed doormen, custodians, night security guards (among many other positions), as well as outsourcing much of the rest of the staff. They have mitigated costs and reduced contact, and now, illustrating a sad geographical caste²⁰, they are removing justice from the eyes of those statistically irrelevant cities, with direct repercussions on the courts, particularly the less fortunate.

It is true that Digital Law should be seen as “a new door to be considered” (Silva, 2022, online). However, the opening of this new entrance cannot represent the closing of the old access routes, at least not while the volume of digitally excluded people is still so blatant, resulting in a flagrant offense against the structuring objectives of the Federative Republic of Brazil²¹.

ACCESS TO OTHER BASIC SERVICES

Since this is the logic imposed on justice, it couldn't be any different in other sectors, even in the most essential (public, it should always be remembered) services. Thus, with justice itself following market logic, equally fundamental services are not following a different path. This trend can be illustrated by basic sanitation and the supply of water and electricity - with economic aspirations relegating the social bases of public services to abandonment.

This situation contradicts the late Arendt, according to whom:

“Whatever the French Revolution may or may not have achieved - and it did not achieve human equality - **it freed the poor from obscurity, from non-visibility**. What seems irrevocable since then is that those who were dedicated to freedom could never remain reconciled to a state of affairs in which freedom from want - freedom to be free - was the privilege of the few.” (Arendt, 2018, p.24, emphasis added)

que-pretendia-extinguir-cargo-de-oficial-de-justica-no-tocantins. Last accessed on: May 07, 2024.

18 More information available at: https://www.al.to.leg.br/arquivos/lei_126-2019_50801.PDF. Last accessed on: May 09, 2024.

19 More information available at: <https://g1.globo.com/am/amazonas/noticia/2024/04/30/tribunal-de-justica-do-am-extingue-cargo-de-oficial-de-justica-resolucao-segUE-para-aleam.ghtml>. Last accessed on: May 09, 2024.

20 At the end of the last century, Cass Sunstein (1994) was already talking about the need to implement an anti-caste principle. The renowned Harvard professor looked at the problem from two main angles: gender and race. However, other factors stand out as fostering these abominable castes, including the geographical delimiter. In this sense, although the internet is (theoretically) a world without borders, the level of access itself (the first wave of integration) is not universally equal.

21 Art. 3 of the 1988 Federal Constitution: The fundamental objectives of the Federative Republic of Brazil are: I - to build a free society [...]; III - [...] to reduce social and regional inequalities; IV - to promote the good of all, without prejudice to origin, race, sex, color, age or any other form of discrimination.

In this vein, it is crucial to contextualize his brilliant thoughts (mid-1960s), particularly as they represent the perspective of the global north, inserted in the period, as Bauman pointed out, of the glorious thirty post-war years: “[...]marked by the growing expectation that all the distressing social problems would be solved and left behind, and that the recurring memories of poverty and mass unemployment would be buried once and for all” (Bauman; Bordoni, 2016 p.15).

However, contemporaneity does not seem (unfortunately) to reverberate Arendt's thoughts, with poverty receiving the veil of invisibility in different contexts. For example, according to data from the United Nations (2022), 733 million people around the world currently have no access to electricity. It is also estimated that, at the current rate, 670 million people will still be without electricity in 2030. This unfortunate reality is experienced by many Brazilians, as reported on the G1 website: “According to the Minister of Mines and Energy, Alexandre Silveira, in Brazil, 500,000 families still live without electricity, adding up to around 1.7 million people in darkness” (G1, 2023, online). These citizens are positioned not in the (vaunted) fourth industrial revolution, but without fully experiencing the second revolution, centuries behind schedule. An even more alarming scenario is that observed in the provision of other basic services, such as public sanitation²².

However, the absence of the service itself is not the only problem. Following the same ideology, with financial gains as their main goal, many distributors have sought to cut costs in any way they can and this policy (among many other problems) has led to the

22 According to data from the Brazilian Institute of Geography and Statistics (IBGE), the latest National Basic Sanitation Survey (2017) showed that of Brazil's 5,570 municipalities, only 3,359 had sewage collection, and only 2,013 of these had functioning treatment plants. It's worth adding that even in these, a large part of what was collected was not fully treated. Available at: <https://cidades.ibge.gov.br/brasil/pesquisa/30/84366?ano=2017>. Last accessed on: Nov. 10, 2023.

23 The National Council of Justice (CNJ) is concerned about access to justice for the “digitally excluded”. For example, Recommendations 101/2021 and 130/2022 can be cited, but the mitigation observed does not seem to be reflected in the practical reality.

closure of many service points, particularly in small towns. As Gomes (2023, online) found, CEMIG alone (the electricity distributor in the state of Minas Gerais) planned to close around 54 service stations in 2023 alone.

On this subject, it is worth mentioning the outburst of a resident of one of the affected towns:

“José Márcio Damasceno, a resident of Guanhães, in the Rio Doce Valley, explains that with the end of service in the city, consumers will have to travel to Itabira or Governador Valadares to get service. “It will be a huge loss and disrespect to the entire population. In addition to the distance, the cost of travel is high and access is impossible for those on low incomes. This is regrettable and a total lack of respect for the consumer”, the resident revolts” (Gomes, 2023, online).

As an alternative to the unfeasible commute, electronic/digital service has been established, not just as one of the possible routes, but as the only one on offer. Leaving aside a national reality, that of the digitally excluded²³, who are deprived of many basic services, of a minimally dignified service, in clear violation of various contractual, legal and constitutional mandates, it is worth highlighting art. 175 of the Federal Constitution, which prescribes that:

“Public authorities are responsible for providing public services, in accordance with the law, directly or under a concession or permission system, always through a bidding process. Sole paragraph. The law shall provide for: I - the regime of concessionaires and permissionaires of public services, the special character of their contract and its extension, as well as the conditions of expiry, supervision and termination of the concession or permission; II - the rights of

users; III - tariff policy; IV - **the obligation to maintain adequate service.**" (emphasis added)

In the opposite direction, the lack of the possibility of a physical service, merely electronic appointments and the monitoring of procedures solely by virtual means take away from many consumers the right to the service itself, the possibility of clarifying doubts, complaining and having undue charges corrected administratively, which can lead them to the courts as the last (only) option - but now also removed from so many, as mentioned above.

BANKING NETWORK

With such a context observed in the provision of such fundamental public services, a different reality could not be seen in a primarily financial activity (but equally inescapable in the daily lives of citizens since the advent of modern society), which is the banking service. In this area, along with the closure of countless branches of traditional banks, a novelty has emerged: born-digital banks, which don't even have physical branches and are becoming increasingly popular, especially among the most economically vulnerable sections of society.

According to Ripardo (2022, online): in the first two years of the recent pandemic alone, more than 2,300 bank branches were closed in the country, which represents around 12% of those existing in the pre-pandemic period. The data is even more alarming for those directly involved, as CONTEC - the National Confederation of Workers in Credit Companies - (2023, online) points out that between 2020 and 2022, this meant the loss of more than 14,000 direct jobs in the sector.

24 "By the year 2050, a new class of people may emerge - the class of the unemployable. People who are not just unemployed, but unemployable." (Harari, 2017, online)

25 In disregard of various laws, such as Paraná State Law No. 21.529/2023. Available at: <https://www.assembleia.pr.leg.br/comunicacao/noticias/agora-e-lei-projeto-de-lei-do-deputado-marcio-pacheco-rep-garante-o-cumprimento-ao-tempo>. Last accessed on May 9, 2024.

Notwithstanding the hardship suffered by these thousands of unemployed families²⁴, the fundamentality of the activity seems to be disregarded in favor of increasing profits, since the mass of citizens who now have (fundamental) access to the banking network has been made even more difficult. Thus, the closure of branches in small towns or in regions of the largest metropolises ends up making it difficult to have direct contact with the manager, resulting in a concentration of customers in the remaining units. In this way, the rights of the digitally non-integrated citizen are once again disregarded, leading to repeated non-compliance with the time limit for queuing²⁵.

E-CRIME AS A BARRIER TO INCLUSION

In addition to the fragmentation of the analogue, without minimally structured digital bases, this situation of digitization of many daily activities is accompanied by an unwanted parallel migration of crimes. In other words, alongside the virtualization of a large part of citizens' lives, many criminals take advantage of loopholes in this new world to reissue the most varied forms of crime, pushing a considerable portion of the population even further away from the feeling of belonging to this new world. As a result, many turn to traditional means, even when they have the material means to access digital media.

Although everyone is a potential target, the digitally marginalized are the main victims. Criminals tend to be more successful against these people because of their lack of knowledge of basic precepts. It is crucial to reiterate that, when cataloguing this marginalization, there

is not only an economic focus (although this is evident), but also other characteristics, such as age and geography. In fact, it is these strands that are reflected in the characteristic inclusive selectivity that is present in so many other spheres and which can be seen in the virtual world.

In this vein, Internacional IT (2023, online) points out that: according to the Brazilian Public Security Yearbook, victims of digital crime scams registered exceeded 200,000 in 2022, an increase of 65.2% compared to 2021. However, the figures seem to be even more remarkable:

“Last year, there were around 360 billion attempted cyber attacks on the systems of companies and organizations in Latin America and the Caribbean, according to a survey by cyber security solutions company Fortinet, based on data from FortiGuard Labs.

In the ranking for Latin America and the Caribbean, **Brazil is the country with the second highest number of cyberattacks, with 103.1 billion attempts,** an increase of 16% compared to 2021. In Mexico, the country at the top of the ranking, there were 187 billion attempts in 2022 (Infomoney, 2023, online, emphasis added).

The data is truly appalling, but the successful scams are certainly masked by the black cipher²⁶, which obscures many of the incidents. These are not brought to the attention of the responsible authorities, either because of the shame of exposing them, an aversion to bureaucracy (which often leads to re-victimization), or because of a lack of belief in the possibility of clarifying the facts.

One of the main difficulties faced by the

26 “The so-called black cipher is widely used by various criminologists [...] It means the obscure or unknown number of crimes committed every day in various places, which do not even come to the attention of the police authorities. It means the obscure or unknown number of crimes committed every day in various places, which do not even come to the attention of the police authorities; sometimes, those that do, may be registered, but the investigations do not find the culprit; even if the suspect is found, he may not be prosecuted due to insufficient evidence; if he is brought to court, it is also possible that he will not be convicted, for various reasons; in short, of the countless criminal offenses committed every day, only a minimum percentage end in conviction and the serving of a sentence. This approach is not specific to a single region or country; the murky band of crimes covers the entire world (Nucci, 2021, p.291).

authorities in this area is geographical. In other words, in a digital world that is theoretically borderless (but with clear and selective barriers), attacks generally come from other parts of the world, orchestrated by groups that always try to anticipate countering techniques and legislation and that use the real holders of power in the post-society, the so-called “online intermediaries” (Mendes; Fernandes, 2021, p.4), as shields for anonymity.

From this angle, the lack of homogeneity between global legislations is a clear reflection of the separation between power and politics, as Bordoni explained to Bauman:

“The separation between power and politics is one of the decisive reasons for the state’s inability to make appropriate choices. According to Étienne Balibar, the irreparable rift between the local and the global has produced a kind of “statism without a state”, which takes place through “governance”. This produces the paralyzing effect you described, of a political system (representative of the people and therefore democratic) at the local level, reduced to the management of routine administration, incapable of taking on and solving the problems that global power (without political representation and therefore fundamentally undemocratic) imposes with increasing frequency” (Bauman; Bordoni, 2016, p. 20).

Along these lines, we see the: “multiplication and fragmentation of transnational autonomous social systems and sub-systems that naturally escape the traditional nation-state model” (Mendes, Fernandes, 2021, p. 20). This is one of the consequences of digitalization, from the perspective of what can be called the new globalization, fostering impunity.

Nevertheless, power at the local level still represents an opportunity for states, especially those on the technological periphery, to integrate into this new world and, even more emphatically, to treat the digital demarginalization of their populations as an essential and urgent public policy. This is because it already seems clear that the entry of these nations into the fourth revolution is delayed, just as it was in the previous ones. However, the speed of technological development is unfolding into exponentially destructive challenges.

THE LANGUAGE BARRIER

On the other hand, following the national normative tradition, Federal Law No. 14.129, of March 29, 2021, now provides for principles, rules and instruments for Digital Government and for increasing public efficiency. It establishes among its guidelines: art. 3º VII - “the use of clear language that can be understood by any citizen”. Although it doesn’t lay down more precise and objective guidelines on what this clear and understandable language is for any citizen, it sheds light on a barrier felt by a huge range of people.

This is because, whether from the point of view of access to services or even in honor of public transparency. According to Tavares, Bitencourt and Cristóvam (2021), beyond mere access to information, whether active

or passive, the intention to communicate in an understandable, objective and responsible way is unavoidable. In a qualitative dimension, with the “possibility of true understanding.” (Homercher, 2011, p. 377). However, it should be noted that various studies have shown that this aspect has been neglected.

While there has been real disruption in e-government, especially with regard to the provision of public services themselves, the implementation of a two-way digital government is still lacking, particularly given the regional discrepancies, and this is not just a national obstacle.²⁷ However, one drawback experienced by many citizens (from all regions of the country) is the difficulty in understanding the language²⁸, particularly in the face of the reality experienced - of profound functional illiteracy.

In this vein, Silva²⁹ cites as an example the commonly used term “filiation”, which may seem usual to the more accustomed, but which represents a series of difficulties for many. He wonders if it wouldn’t be possible to use: “parents’ names”; or, even more clearly: “put your father’s name here”, “put your mother’s name here”³⁰. However, the systems are often designed taking into account the usability of the projectors themselves, specialists in information technology. It is therefore possible that in some cases, even literate people, exponents in their fields, may have difficulties with certain nuances.

27 An example of this is Germany, which, although it has a much smaller territory than Brazil, has more than 11,000 municipalities and has therefore opted to integrate only the federal and state levels into its system. In: BAPTISTA, Patrícia; ANTOUN, Leonardo. Governo Digital: Política pública, norma e arranjos institucionais no regime federativo brasileiro: a edição da lei federal n. 14.129/2021 e o desenvolvimento da política nacional de governo digital. RFD - Revista da Faculdade de Direito da UERJ, [S. l.], n. 41, p. 1-34, 2022. DOI: 10.12957/rfd.2022.70724. Available at: <https://www.e-publicacoes.uerj.br/rfduerj/article/view/70724>. Accessed on: Mar. 25, 2024.

28 In the same vein, the president of the STF, Justice Luís Roberto Barroso, launched the National Pact of the Judiciary for Simple Language on December 4, 2023, during the 17th National Meeting of the Judiciary. The document involves five axes: simplifying the language of documents; brevity and objectivity in communications; education and training of technical staff; use of technological tools and institutional partnerships. Available at: <https://www.tjmg.jus.br/portal-tjmg/noticias/presidente-do-stf-lanca-o-pacto-nacional-do-judiciario-pela-linguagem-simples.htm>

29 An example mentioned in a lecture by Professor Dr. Guilherme Amorim Campos da Silva, in the doctoral course on the social function of law at FADISP, on April 6, 2024.

30 Anticipating criticism based on a possible “loss of language”, perhaps one solution would be the idiomatic option: making

FINAL CONSIDERATIONS

This article has addressed a number of issues that at first glance may seem disconnected, but which seek to exemplify a phenomenon that has been overlooked in most studies of a new constitutional architecture in the digital age: the distortion of the analog world without proper preparation for the digital one, placing many in limbo.

For this reason, prior to the architectural discussions, topics from practical life are addressed, in order to shed light on the topography of the soil in use, in other words, seeking to demonstrate that, in addition to the fundamental debate about a new Digital Constitutionalism, it is crucial to delve deeper into the foundations, making it possible to (re) engineer the structuring of the Constitution to fit the digital world.

Bearing in mind that, with technological advances in recent decades, digitalization has become a demand of many digital citizens. They are experiencing immersion in other areas of social life. Nonetheless, the implementation of digital governance, based on solid constitutional foundations, must not undermine the fundamental rights of minorities, increasing the marginalization of disconnected citizens.

It should be noted, however, that talking about connection goes beyond mere access, particularly in a technologically peripheral country, given the data mentioned on the subject. What is needed is substantial inclusion, as a fundamental (and founding) public policy for any basis of support for a Digital Constitutionalism, in line with the Citizen Constitution itself. No longer as a means of inclusion in the “new world”, but as an irradiating beam of the classic freedom of movement, of the right to come and go, in this new facet, no longer towards another environment, but towards an appendage of the

physical world, often more real than this one.

It is crucial to reiterate that this is not a Luddite view, admitting that many of these innovations are unavoidable and potentially beneficial. The aim of this work is to shed light on a large part of the population that seems even more invisible in the face of these changes. The much-vaunted “existential minimum” is being disregarded, not because of the “reserve of the possible”, as is usually the case, but because of the application of market logic to public services. A garment, the helmet of Hades, is being thrown over part of the population, still in the throes of the third great human revolution, and only as a prelude to the disruptive and deleterious effects of the fourth revolution that is being announced.

This is an imprisonment in the analog world, which has been distorted from its old ways. The meteor of innovation has hit this world, fragmenting it and demanding the use of new tools, without any preparation for the most vulnerable. In a system that tends to worsen, the informal caste system in force is growing, and could lead to “enslavement” 4.0, since the liquefaction observed by Bauman, in a new era of post-society, as described by Bordoni, is unfolding in a sublimation of existence itself in the peripheral centers.

It is therefore impossible to draw up a new constitutional architecture based on digital premises, given the lack of a rigid enough physical foundation for a minimally equal materialization. On the contrary, there is a disintegration of the analog, which may be satisfactory in the eyes of bodies such as the OECD, but which leaves a significant portion of the population behind (again). In this way, it is possible to talk about digitalization, but there is nothing constitutional about it.

it possible to choose between a more formal Portuguese and a more colloquial one, especially in the most basic services.

REFERENCES

ARENDDT, Hannah. Liberdade para ser livre. São Paulo: Bazar do Tempo, 2018.

BAPTISTA, Patrícia; ANTOUN, Leonardo. Governo Digital: Política pública, norma e arranjos institucionais no regime federativo brasileiro: a edição da lei federal n. 14.129/2021 e o desenvolvimento da política nacional de governo digital. RFD - Revista da Faculdade de Direito da UERJ, [S. l.], n. 41, p. 1-34, 2022. DOI: 10.12957/rfd.2022.70724. Disponível em: <https://www.e-publicacoes.uerj.br/rfd/uerj/article/view/70724>. Acesso em: 25 mar. 2024.

BAUMAN, Zygmunt. Globalização: as conseqüências humanas. tradução Marcus Penchel. Rio de Janeiro: Jorge Zahar Ed., 1999.

BAUMAN, Zygmunt; BORDONI, Carlo. Estado de crise. Rio de Janeiro: Zahar. 2016

BORDONI, Carlo. Post-società: Il mondo dopo la fine della modernità. Roma: Luiss University Press. 2021.

CARDOSO. Antônio Pessoa. Fechar comarcas é dificultar o acesso à Justiça. Disponível em: <https://www.migalhas.com.br/depeso/262063/fechar-comarcas-e-dificultar-o-acesso-a-justica>. Último acesso em: 03 mai. 2024

CRISTÓVAM, José Sérgio da Silva; MACHADO, Raquel Cavalcanti Ramos; SOUSA, Thanderson Pereira de. Constitucionalismo e Administração Pública digitais: inovação tecnológica e políticas públicas para o desenvolvimento no Brasil. Revista Brasileira de Políticas Públicas, Brasília, v. 12, n. 2, p. 178-196, 2022.

G1. Sem energia elétrica, agricultora diz que há 10 anos está com geladeira 'parada' em Paulistana, no PI. Disponível em: <https://g1.globo.com/pi/piaui/noticia/2023/08/06/sem-energia-eletrica-agricultora-diz-que-ha-10-anos-esta-com-geladeira-parada-em-paulistana-no-pi.ghtml>. Último acesso em: 01 mai. 2024

GOMES, Amélia. Cemig prevê fechamento de 54 agências e mineiros terão que viajar até 200 km para atendimento. Disponível em: <https://www.brasildefato.com.br/2023/06/14/cemig-preve-fechamento-de-54-agencias-e-mineiros-terao-que-viajar-ate-200-km-para-atendimento>. Último acesso em: 09 mai. 2024

HARARI, Yuval Noah. The meaning of life in a world without work. Disponível em: <https://www.theguardian.com/technology/2017/may/08/virtual-reality-religion-robots-sapiens-book>. Último acesso em: 21 set. 2023.

HOMERCHER, Evandro. O princípio da transparência e a compreensão da informação. Revista Jurídica da Presidência, Brasília, v. 13, n. 100, 2011, p. 386-387.

IBGE, Coordenação de Pesquisas por Amostra de Domicílios. Acesso à internet e à televisão e posse de telefone móvel celular para uso pessoal 2022. IBGE: Rio de Janeiro. 2023. ISBN 9788524045851

INFOMONEY. Brasil aparece em 2º em ranking de ataques cibernéticos; como se proteger. Disponível em: <https://www.infomoney.com.br/negocios/brasil-aparece-em-2o-em-ranking-de-ataques-ciberneticos-como-se-proteger/>. Último acesso em 24 abr. 2024.

INTERNACIONAL IT. Anuário de Segurança Pública 2023: Crimes Digitais Aumentam 65,2%. Disponível em: <https://www.internationalit.com/post/anuario-de-seguranca-publica-2023-crimes-digitais-aumentam-65-2-#:~:text=Anuario%20de%20Seguranca%20P%C3%ABlica%202023%3A%20Crimes%20Digitais%20Aumentam%2065%2C2%25,-Atualizado%3A%20de&text=Segundo%20o%20Anuario%20Brasileiro%20de,em%20rela%C3%A7%C3%A3o%20ao%20ano%20anterior>. Último acesso em: 23 abr. 2024.

LEONEL JR., Gladstone. Constituição às favas, o autoritarismo togado chegou: o caso de uma sentença viciada. In: Comentários a uma sentença anunciada: O processo Lula. (Orgs. Proner, C. et. al) pp.349-354. Bauru: Praxis, 2017.

LÉVY, Pierre. A conexão planetária: o mercado, o ciberespaço, a consciência. São Paulo: Editora 34, 2001.

MELLO, Elza Vitória de Sá Peixoto Pereira. O direito de acesso à Justiça como garantidor da dignidade da mulher amazônica vítima de violência doméstica sob a ótica dos direitos humanos. In: MATSUSHITA, Thiago L.; ISHIKAWA, Lauro; THAMAY, Rennan. Justiça Digital: Reflexos da Pandemia da Covid-19 na Evolução do Acesso ao Judiciário. Grupo Almedina (Portugal), 2023. E-book. ISBN 9786556279299. Disponível em: <https://integrada.minhabiblioteca.com.br/#/books/9786556279299/>. Acesso em: 05 fev. 2024.

- MENDES, Gilmar Ferreira; FERNANDES, Victor Oliveira. Constitucionalismo digital e jurisdição constitucional: uma agenda de pesquisa para o caso brasileiro. *Revista Brasileira de Direito, Passo Fundo*, v. 16, n. 1, p. 1-33, out. 2020. Disponível em: <https://seer.imed.edu.br/index.php/revistadedireito/article/view/4103>. Acesso em: 13 abr. 2021.
- NERY, Carmen; CABRAL, Umberlândia. De 2019 para 2022, trabalho infantil aumentou no país. Disponível em: <https://agenciadenoticias.ibge.gov.br/agencia-noticias/2012-agencia-de-noticias/noticias/38700-de-2019-para-2022-trabalho-infantil-aumentou-no-pais>. Último acesso em 04 mai. 2024.
- NUCCI, Guilherme de Souza. *Criminologia*. Rio de Janeiro: Grupo GEN, 2021. E-book. ISBN 9786559641437. Disponível em: <https://integrada.minhabiblioteca.com.br/#/books/9786559641437/>. Acesso em: 09 mai. 2024.
- OLIVEIRA, Helton Braga de. O acesso à Justiça e exclusão digital: O atendimento virtual à população carente do interior do Amazonas durante a crise sanitária do novo coronavírus. In: MATSUSHITA, Thiago L.; ISHIKAWA, Lauro; THAMAY, Rennan. *Justiça Digital: Reflexos da Pandemia da Covid-19 na Evolução do Acesso ao Judiciário*. Grupo Almedina (Portugal), 2023. E-book. ISBN 9786556279299. Disponível em: <https://integrada.minhabiblioteca.com.br/#/books/9786556279299/>. Acesso em: 15 fev. 2024.
- ONU. Relatório estima que 8% da população não terá acesso à energia em 2030. Disponível em: <https://brasil.un.org/pt-br/184580-relat%C3%B3rio-estima-que-8-da-popula%C3%A7%C3%A3o-n%C3%A3o-ter%C3%A1-acesso-%C3%A0-energia-em-2030>. Último acesso em: 01 mai. 2024.
- RAMOS, André de C. *Curso de Direitos Humanos*. São Paulo: SRV Editora LTDA, 2022. E-book. ISBN 9786553622456. Disponível em: <https://integrada.minhabiblioteca.com.br/#/books/9786553622456/>. Acesso em: 09 mai. 2024.
- RIPARDO, Sergio. Brasil perde mais de 2.300 agências bancárias em 2 anos de pandemia. Disponível em: <https://www.bloomberglines.com.br/2022/01/14/brasil-perde-mais-de-2300-agencias-bancarias-em-2-anos-de-pandemia/>. Último acesso em: 07 mai. 2024
- SANTOS, Boaventura de Souza. *Epistemologies of the South: Justice Against Epistemicide*. Boulder: Paradigm Publishers, 2014.
- SCHWAB, Klaus. *A Quarta Revolução Industrial*. Tradução de Daniel Moreira Miranda. São Paulo: Edipro, 2016.
- SILVA, Guilherme Amorim Campos da. Justiça multiportas e as oportunidades do direito digital. *Boletim Revista dos Tribunais Online*. São Paulo: Ed. RT, vol. 27, mai. 2022. Disponível em: <https://www.revistadostribunais.com.br/maf/app/resultList/document?&src=rl&sruid=i0ad6adc60000018ec5066d630b45c979&docguid=I33a33580cadd11ecad50b10b219447d2&hitguid=I33a33580cadd11ecad50b10b219447d2&spos=1&td=1&context=101&crumb-action=append&crumb-label=-Documento&isDocFG=false&isFromMultiSumm=&startChunk=1&endChunk=1#DTR.2022.6243-n1>. Acesso em: 09 abr. 2024.
- SUNSTEIN, Cass. The Anticaste Principle. *Michigan Law Review*. v. 92, n. 8, 1994. Disponível em: <https://repository.law.umich.edu/cgi/viewcontent.cgi?article=3289&context=mlr>. Último acesso em: 29 set. 2023
- TAVARES, André Afonso; BITENCOURT, Caroline Müller; CRISTÓVAM, José Sérgio da Silva. A Lei do Governo Digital no Brasil: análise das contribuições à transparência pública e à concretização do exercício do controle social. *Revista Novos Estudos Jurídicos, Itajaí*, v. 26, n. 3, p. 788-814, set./dez. 2021. Disponível em: <https://siaiap32.univali.br/seer/index.php/nej/article/view/18326/10511>. Acesso em: 29 mar. 2024
- TAVARES, André Ramos. Constituição em rede. *Revista Brasileira de Estudos Constitucionais. RBEC*, Belo Horizonte, ano 16, n. 50, p. 53-70, jul./dez. 2022.
- TAVARES, André Ramos. *O juiz digital: Da atuação em rede à justiça algorítmica*. São Paulo: Expressa, 2022.
- VINHAES, Flávia. Internet já é acessível em 90,0% dos domicílios do país em 2021. Disponível em: <https://agenciadenoticias.ibge.gov.br/agencia-noticias/2012-agencia-de-noticias/noticias/34954-internet-ja-e-acessivel-em-90-0-dos-domicilios-do-pais-em-2021>. Último acesso em: 07 mai. 2024.