

# SPLINTERNET: INTERNET FRAGMENTATION AND ITS IMPACTS ON DEMOCRACY

SPLINTERNET: A FRAGMENTAÇÃO DA INTERNET E OS IMPACTOS NA DEMOCRACIA

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### RESUMO

O texto é uma reflexão sobre a fragmentação da internet e como isso pode impactar os ideais democráticos. Esse fenômeno, denominado "splinternet", tem se verificado a partir das ações de segmentação estrutural e restrição ao acesso da internet, o que tem gerado impactos sobre os direitos humanos de livre acesso à informação e à comunicação. O objetivo da pesquisa é analisar as restrições sobre a internet, quando realizadas por autoridades governamentais e como isso afeta a manutenção dos ideais democráticos e os direitos humanos. Adota-se o método hipotético-dedutivo, com a utilização de livros, artigos científicos e relatórios de entidades não governamentais. Considerando uma crescente onda de intervenções estatais para o fim de estabelecer restrições ao uso da internet nos últimos anos (suposto autoritarismo digital), o artigo aponta para as assimetrias entre o uso da tecnologia e a realização e manutenção da democracia, bem como para as implicações decorrentes de situações nas quais o direito ao livre acesso à rede da internet foi restringido parcial ou totalmente em razão de fatores políticos, econômicos, restrições geográficas e até censura.

**Palavras-Chave:** Democracia. Direitos Humanos. Fragmentação da Internet. Livre Acesso. Splinternet.

### ABSTRACT

The text is a reflection on the fragmentation of the internet and how this may represent a challenge to democracy. This phenomenon, called "splinternet," has been observed through actions that structurally segment the global communication network and restrict access to the internet. In this sense, the impacts on human rights to information and communication are considered. The goal of the research is to analyze the actions of control over the internet carried out by governmental authorities and how this reflects on the implementation of democratic ideals and human rights. The hypothetico-deductive method is adopted, using books, scientific articles, and reports from non-governmental organizations. Considering a growing wave of state interventions aimed at establishing restrictions on internet use in recent years (alleged digital authoritarianism), the article points to asymmetries between the use of technology and democratic realization, as well as the implications arising from situations in which full access to the internet network has been partially or completely restricted due to political, economic, geographical restrictions and censorship.

**KEYWORDS**: Democracy. Human Rights. Internet Fragmentation. Full Access. Splinternet.

### **1 INTRODUCTION**

The subject of the research is the fragmentation of the internet, a phenomenon known as "splinternet", and its impact on democracy and human rights. The aim is to verify the relationship between state control and the restriction of right of the users to free access to the world wide web.

In this context, the underlying causes of the "splinternet" phenomenon have been verified, which have been revealed to go far beyond technical aspects, i.e. they often encompass factors of a political and ideological nature and, to a lesser extent, geographical ones. Thus, the study of this issue is so relevant, since in the last decade there has been a consecutive increase in the decline of global freedom of access to the internet. Thus, freedom of access to information, one of the foundations of democratic life, has been the target of impacts and disruptions caused by the imposition of recriminatory control by government leaders. In these cases, the manipulation of technologies and tools in the virtual environment has been reduced to the exclusive interests of those in power and/or privileges. Such a situation amounts to usurpation of the position of authority of those in power.

From a general point of view, the evaluation of the negative and/or positive bias of the impacts of new technologies and their use on the improvement of social democratic life deserves care and caution.

From this, the research problem was established: is the fragmentation of the internet, achieved through government control of networks, harmful to democracy?

The general objective of the research is to analyze the phenomenon of internet fragmentation and its consequences for society from a democratic perspective. The specific objective is to gather data from studies and concrete realities related to the subject of the research, taking into account the points made in the report prepared by the Research Service of the European Parliament, published in July of 2002, and the facts and occurrences denounced in the study by the non-governmental organization "Access Now", published in April of 2022.

The research adopted the hypothetical-deductive method and the investigative procedures were the survey and analysis of studies, reports and data presented by organizations and classified, governmental entities. It also considered a bibliographical review of books, scientific articles and normative texts on the subject.

Two premises motivated the purpose of answering the problem formulated, namely the protection of freedom of access to the network, enshrined in the human right of free access to information, and the principle of preserving and guaranteeing net neutrality.

The paper is divided into three sections. The first deals with the asymmetries between the use of technologies and the realization of the democratic ideal, together with the principle of net neutrality. The second presents elementary and conceptual bases for the phenomenon of internet fragmentation, known as "splinternet". Finally, it addresses the limitation of the right to free access to the internet promoted by states and government leaders, with the presentation of factual examples from around the world.

# 2 THE ASYMMETRIES BETWEEN TECHNOLOGICAL PROGRESS AND THE DEMOCRATIC IDEAL

It is no simple task to establish the relationship and link between contemporary technologies (internet and AI) and democracy. On the contrary, it is a link of considerable complexity due to its countless applications and effects. As part of the natural social transformation of a democratic regime, there is an inseparable need to maintain freedom of access to information, which, in turn, occupies an elementary position in the list of basic purposes of democracy.

The democratic dynamics installed in nations around the planet occur in an orderly manner when their promoting agents, especially the powers that be, guard, call for, cultivate, respect and realize human rights.

In this context, offenses against freedom of access to information, especially perpetrated on the virtual network, obviously constitute ruptures in the forms of democratic experience.

Not infrequently, in the context of implementing democratic ideals, there are tensions between those who seek a change in the state of affairs, to make it more inclusive, and those who are unwilling to give up control and power.

That said, information and communication technologies, in their rapid advance, have had a profound impact on democracy around the world. They have provided new platforms for civic mobilization, the emergence and consolidation of a virtual public sphere associated with citizen participation and social action. On the other hand, this structure has also become an environment for surveillance and exploitation, scenes of censorship, perpetrated by antidemocratic forces.

On the positive side, it is possible to point out that the internet has brought significant transparency to life in society, such as: public consultations on government or public entities, verification of the political history of the candidates, polls and voting through virtual mechanisms linked to networks, as well as algorithms for directing reports and related virtual news.

In this context, therefore, free access to information is a fundamental element, since citizens can only fully exercise their right to choose as long as they are guaranteed, in a transparent and fair manner, free communication and access to facts and information, obviously considering access to what is relevant.

Furthermore, it should not be forgotten that in a society in which freedom is one of its supreme values, as seen in the Brazilian constitutional preamble, the suppression or deprivation of the free process for citizens to express their choices poses a potential risk to the health and maintenance of democracy.

As we have already considered, among the natural constructs of legitimate democratic citizenship is free access to information, which serves as a basic basis for the development and expression of individual choice, aimed at its consecrated full exercise.

Professor Ana Frazão (2021, p. 740) points out that "the ability to shape the human mind and the way we feel and think is the factor that determines how we act individually and collectively". Today, information is not only an element of our agency, but also an attribute of control, domination and a form of power.

Thus, when manipulated, access to information serves social control, which is what happens when agents of power restrict access to the internet, control its content, fragment its flow, treat and manipulate data for authoritarian purposes, a situation that represents manipulation of human rights.

In this sense, Gomes (2022, p. 13) mentions:

Atualmente os direitos humanos em si encontram-se em uma posição de extrema divergência e questionamentos, já que a sua denominação conceitual está mascarada por interesses governamentais, ofuscando o que de fato representam para a toda a coletividade.

This is a biased manipulation of technology systems in order to serve the interests of specific groups, a situation in which inequalities are established and human rights are weakened. In this sense, technological instruments do not serve democratic ideals; on the contrary, existing technologies end up enhancing new events of sectarianism and oppression.

This can be seen in cases where algorithms are used with the capacity to convert the sense of reality, quality and justice present in a political discourse, in order to reflect only the interests and objectives of its creators.

In this sense, Fornasier teaches us:

Há diversas evidências, na literatura científica, de que bots — contas autônomas programadas para espalhar mensagens para criar a ilusão de apoio público — têm sido usados em eleições nos EUA, Alemanha, Reino Unido, França e Brasil. Esses dispositivos empregam tecnologias baseadas em IA para manipular cidadãos durante as campanhas eleitorais, moldar o discurso público e distorcer o sentimento político. (FORNASIER, 2021, p. 14).

These practices, when not properly regulated and supervised, whether in the private or public sphere, can lead to the creation of an environment of social control and authoritarianism.

It is important to note that innovations and technological mechanisms that affect people's daily lives sometimes end up being transformed into instruments at the service of political leaders, governments and elite minorities. In these cases, they are used as tools of manoeuvre, repression, standardization and social control.

Norberto Bobbio (1996, p. 152) already warned about this situation:

A introdução de novas tecnologias da informação e comunicação, por um lado, pode aumentar as possibilidades de participação dos cidadãos e aumentar a transparência dos procedimentos administrativos, mas, por outro lado, pode ter o efeito oposto, tornando o controle político mais difícil e permitindo novas formas de exclusão social.

It should not be forgotten that the "form of use" and "performance" of technological mechanisms are in the interests of their owners and/or controllers, i.e. in the form and degree of use of the devices that the user makes use of, the conditions available to them and what they (their person) have available to them primarily serve the interests of the managers of these mechanisms, whether in the private or public sphere.

In this scenario, in order to safeguard human rights, it is necessary to pay attention to the principle of preserving and guaranteeing net neutrality, which is provided for in most legal systems of the countries, and it is no different in Brazil, which established it through its Federal Law No. 12.965 of 2014, known as the Civil Mark of the Internet, precisely in its article 3, item IV.

The principle of preserving and guaranteeing net neutrality determines that traffic filtering or privileges must respect only technical and ethical criteria, and that political, commercial, religious, cultural or any other form of discrimination or favoritism is not admissible. The ideal contained in this principle must be pursued and maintained.

Among the premises of the principle of net neutrality are the protection of the fundamental rights and guarantees of the users, especially the right to information.

The terminological origin of this principle is attributed to Tim Wu (2003), who was the first to use the term "net neutrality". The basic concept of the term was

established according to the idea that no service, feature or content circulating on the net should be favored or restricted, because users know what they are looking for on the internet and what they want to be made available, in the same way that applications and services are made available according to their respective characteristics.

The above concept is corroborated by the Article 10 of the Brazilian Decree No. 8,771 of 2016, issued to regulate the Civil Mark of the Internet, which states that the internet is unique and open, plural and diverse in nature, and should promote human, economic, social and cultural development, contributing to the construction of an inclusive and non-discriminatory society.

Another asymmetry between technology and democracy concerns the disproportionate processing of personal data taken from the private sphere of internet users, including voice recognition, identity lines and facial tracking, refined behavioral patterns such as breathing, syntactic analysis of speech, frequency and even nuances of voice volume.

The extraction and mining of data in this depth raises severe debates as to its ethical nature, especially in nations whose adopted political regime is democracy, whose ideals, in the words of Fornasier (2021, p. 18) "are characterized by, among other factors, defending the commitment to a set of fundamental principles, such as the rule of law, equality, civil and political liberties, due process", rights that are, not infrequently, vilified in several ways by technological systems.

The exorbitant processing of personal data, for hidden purposes and for purposes other than those originally established and reported, can constitute a perpetual state of violence against fundamental rights, and consequently a clear attack on human dignity. Such practices, when not properly regulated and supervised, whether in the private or public sphere, can lead to the creation of an environment of authoritarian social control.

In order to induce the path that users must take through the networks, remaining connected for as long as possible, the mechanisms can be operated on the fringes of good ethics, spreading patterns of prejudiced and/or abusive behavior.

In this sense, Nelson Rosenvald (2020, p. 5) states:

Considerando que se caminha cada vez mais e com maior intensidade para uma sociedade governada por dados, [...] o ambiente social no qual se concretiza a ideia de privacidade informacional passa a ser qualificada pela proteção dos direitos da pessoa de manter o controle sobre seus dados, por meio de sua autodeterminação informativa (liberdade), visando a não discriminação (desigualdade).

Therefore, the manipulation of technological instruments, whatever they may be, with the aim of modifying and shaping human behavior, demands attention and concern.

This is the case with affect computing, which uses mechanisms installed in badges to obtain a map of the user's profile with elements of their personality. In this case, collection takes place in real time, subtracting emotional aspects of the person expressed by their tone of voice, the aim of which is to provide more efficient and incisive marketing operations based on the pre-conscious behavior of the user.

The impacts of such a state of affairs "would be detrimental to democracy, as we would become a kind of hive or flock run by digital technology companies and shepherded by the priests of IT knowledge". (KOERNER, 2021, p. 2).

This biased targeting of the web and its users sometimes takes place in order to meet market demand and sometimes in order to serve the specific political ideologies of groups that hold power. This situation affects the individual in such a way that, by limiting and obstructing free access, they are increasingly immersed in a universe of biased information selected exclusively from predefined sources.

According to Fornasier (2021, p. 21), "due to the loss of contact with the different in the digital sphere, social media can challenge the status quo in democratic societies, including extremists with great power to reach on a scale that was previously marginalized".

It is also worth adding that

A atual esfera pública online é ambígua, sendo concomitantemente mediada por algoritmos e controlada de modo centralizado. Os proprietários de plataformas de mídias sociais possuem enorme poder sobre o que é possível dizer, e os algoritmos por eles implantados controlam a (in) visibilidade de perspectivas possíveis. A moderação, seja para impedir, para promover ou para rebaixar a publicação de um conteúdo, é o mecanismo de afirmação de controle sobre a esfera pública em rede. (FORNASIER, 2021, p. 21).

The use of technological tools, in order to manipulate information or selectively limit it, hinders the user's ability to fully access information, becoming the cause of the well-known "social bubbles".

However, in order to achieve a democratic experience, the ideal of cohesion cannot be divorced. It is no secret that although a democratic system is essentially a setting for opportunities for debate, differences, pluralities and diversities, it cannot do without cohesion.

The possibility of fair coexistence is a result that is sought and hoped for; however, it is not a question of a single consensus, but of a connection between diversities that preserves their identities.

However, this social cohesion, as an inalienable and expressive factor of a qualitative democracy, is mitigated by what is now known as the "resonance effect", which is nothing more than the action of the technological mechanism operated and programmed by algorithms, which repeatedly reiterate information and advertisements of content idelogically personalized to the user, resulting in what we know as "ideological bubbles".

As a result, there is a potential increase in social polarization which, taken to extremes by some groups, has repercussions in the form of violent and discriminatory attitudes, which begin to take root in everyday human life. This scenario is sagaciously used by leaders with oppressive ideological tendencies.

It is important to bear in mind that the internet is a modifiable, flexible and changeable mechanism that can be politically and commercially driven, which can aggravate existing social problems.

# 3 THE FRAGMENTATION OF THE INTERNET AND THE "SPLINTERNET" PHENOMENON

The framework and functioning of a nation-state structurally includes its geographical delimitation and sovereignty, which affect a space circumscribed as a territory where the competencies of the institutions are limitedly subdivided.

This physical state configuration clashes with the functional and structural mould of the internet, as it is substantially decentralized and open, operating through constant trans-territorial flows, i.e. via the world wide web and communication. It is from this ambiguity, i.e. diametrically opposed natures, that the complexities and tensions between the internet and nation states emerge.

On the one hand, the State is made up of an internal order that affects its area and its inhabitants, i.e. customs, laws, institutions and its constitutions, which are limited to its own geographical boundaries (FACHIN; SAMPAR, 2023). On the other hand, the internet and its users (inhabitants) subsist through connections with a universal computer language, sometimes interconnected by cables, satellites and also by non-visible structures, signals, waves and immaterial frequencies(wireless) that operate without geographical objections.

One has its genesis inherent in national borders, and its functional aspect has a reserved effect and scope. The other has its genesis linked to the nonexistence of borders, and its operation is not restricted to delimited spaces.

In times gone by, information and communication flowed predominantly within a geographically delimited space; now, the flow is predominantly transnational. Two worlds coexist, one online and the other offline. Transterritorial conflicts have arisen from this reality, which is no longer new. The development of tools in the online world has enabled individuals to position themselves in a network as if they were located in another territorial unit in the real world.

From this point on, the opposite movement is worthy of attention, i.e. when technologies are used to simulate geographical borders (walls) with the clear aim of restricting freedom of access to information, suspending or even subtracting user access altogether. These limitations are a form of violation of the right to free access to information and communication.

This leads to the reproduction in the virtual environment of the authoritarianism and political sectarianism of the real world, which is obviously opposed to the maintenance and realization of a democratic experience, what is known as "internet fragmentation", also known as "splinternet".

The phenomenon of internet fragmentation or "splinternet" refers to the process by which the internet is intentionally divided into several smaller networks that are disconnected from each other, due to factors of a political (governmental) nature, censorship, geographical restrictions and, to a lesser extent, technological differences. This phenomenon is considered to be one of the most significant causes of the decline in global cooperation, the exchange of information between nations and worldwide technological development.

Getschko (2014) presented an idea about the fragmentation of the internet, as well as studying its impacts on society. According to the author, internet fragmentation refers to the tendency for the global network to split into several smaller networks, separated by political, economic, cultural and technical factors.

Fragmentation is a phenomenon that occurs when the internet is divided, due to political, geographical, economic and even technological factors, into several disconnected 'islands', ultimately becoming a tangle of local and regional networks without the same capacity for interconnection and data sharing that characterizes the current global network.

As mentioned above, to designate this fragmentation of the network and the consequent limitation of the right to free access, a term was coined that is now recognized as 'splinternet'.

In addition, a report of July of 2022 published by the European Parliamentary Research Service presented the conceptual idea of the term 'splinternet' (EUROPEAN PARLIAMENTARY RESEARCH SERVICE, 2022).

The study deals with the effects of the current policies of the European Union in this area, and also from the perspective of the member States, their institutions and entities, which need to implement measures to deal with the challenges presented by the fragmentation of the internet:

Muitos conceitos são usados para ilustrar a noção de fragmentação da internet e suas implicações, como o termo 'splinternet', que designa uma parte da internet que se separaria e se tornaria inacessível aos outros nós, devido a razões tecnológicas ou políticas. Da mesma forma, 'balcanização da internet' é uma expressão com conotação negativa, usada para caracterizar padrões de divisões que levam a unidades menores e incompatíveis. O processo de fragmentação pode ser aplicado tanto à internet como infraestrutura quanto à internet como espaço público<sup>1</sup>. (EUROPEAN PARLIAMENTARY RESEARCH SERVICE, 2022, tradução nossa).

The report points out that the process of fragmentation can be applied both to the internet as an infrastructure and to the internet as a public space.

In addition to fragmentation as presented so far, i.e. in terms of content, it also occurs in terms of connectivity. In this case, the connection is maintained at a technical level, but users are reprimanded for restricting their practical access to content.

By way of example, when a website can still be accessed via its IP address, but has had its corresponding entry deleted from the Domain Name System (DNS) servers used by the Internet Service Provider of the user (ISP), the user is required to take specific measures to restore access.

<sup>&</sup>lt;sup>1</sup> No original: Many concepts are used to illustrate the notion of Internet fragmentation and its implications, such as the term 'splinternet', which designates a part of the internet that would secede and become inaccessible to the other nodes, due to either technological or political reasons. Similarly, 'balkanisation of the internet' is an expression with negative connotation, used to characterize patterns of divisions leading to smaller, incompatible units. The process of fragmentation can apply both to the internet as infrastructure, and to the internet as public space.



The study shows the various ways of defining Internet fragmentation, which can consist of a total or partial lack of connectivity, occurring both in access to the network and to content located at specific points (addresses) on the network, or even specific material inserted into certain virtual domains.

The underlying causes of fragmentation range from technical and commercial aspects to political and ideological reasons. From a democratic perspective, the consequences are harmful, as they affect the internet as a public space, as well as its right of the user (citizen) to free access.

It should not be forgotten that the internet is a collection of fragmented networks; however, the way in which services are made available and the network itself are capable of providing the experience of an integrated, open, united and interconnected online public sphere, which occurs due to the interoperability and interconnection properties adopted by open formats and standards.

It is an exquisite technological system that operates on the basis of a delicate balance between divergence and convergence of the internet, arranged as a network of networks, a comprehensive system that is widely available all over the planet, but which has a remarkable and unique unity.

Highlighting the link between this unity, as a peculiarity of the internet, and human rights, the European Parliament report (2022) mentions:

A unidade da internet pode ser conceituada como estando relacionada à liberdade de expressão. Tomando emprestado de Isaiah Berlin (1969), há um forte elemento de "liberdade negativa" que restringe a capacidade do Estado de restringir a liberdade de expressão, o acesso à informação e, por extensão, restringir o acesso a (certas porções da) internet. Importa ter presente que, de acordo com o artigo 11.º da Carta dos Direitos Fundamentais da UE, a liberdade de expressão inclui o direito de «ter opiniões», «transmiti-las» sem interferência das autoridades públicas, mas também de «receber informações [...] e ideias [...] independentemente das fronteiras». O artigo 19 da Declaração Universal dos Direitos Humanos acrescenta outro elemento importante, que é essa comunicação de opiniões, informações e ideias pode ser feito 'através de qualquer mídia'. Qualquer tentativa direta de cortar o acesso a partes da internet parece, portanto, ser uma limitação da liberdade de expressão. (EUROPEAN PARLIAMENTARY RESEARCH SERVICE, 2022, tradução nossa)

From this, it becomes clearer that objections at any level to user access to the world wide web are a potential breach of freedom, which as a human right is listed as the basis of most democratic regimes in the world.

Added to this is another right laid down in the legal systems of nations, namely the principle of preservation and net neutrality already mentioned. One of

the meanings of net neutrality is the United Nations resolution that highlights access to the internet as a human right.

The International Pact on Civil and Political Rights, adopted by Brazil in 1992, establishes in the second paragraph of the article 19 that "everyone shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally or in writing".

In this sense, the UN believes that any restriction or blocking of the internet constitutes a violation of the article 19, since the internet, in its essence, was designed to function as a flow of information and communication beyond the reach of interference, without distinction of origin or destination. This is how neutrality is constituted as and for the guarantee of equal treatment (equality) of network users, in terms of access to information.

Therefore, the fragmentation of the internet, with the intention of avoiding it, must surely be the subject of a debate around which geopolitical structures and forms of governance, whether in the field or other fields, will be reconfigured in the near future.

## 4 LIMITING THE RIGHT TO FREE ACCESS TO THE INTERNET

The inexorable relationship between the internet, new technologies, democracy and the right to free access to information and communication can be identified today. By way of illustration, it is worth mentioning the curious attitude of some nations in refusing to make their national laws and decrees available on the World Wide Web (Internet).

This attitude of restricting access to information jeopardizes the full exercise of citizenship, which is based on free access to information:

Os detentores do poder, atuam alienando as pessoas com relação à realidade, quando cada um acaba tendo acesso apenas a parte do todo. Sendo assim, a criação de uma ideologia política realmente autêntica, se revela uma tarefa muito difícil, pois, para que seja autêntico, é necessário que o indivíduo tenha acesso irrestrito à informação, além do que, após o acesso irrestrito, é necessário que haja capacidade de decodificação da informação acessada. Verifica-se que, no ambiente virtual, altamente manipulado, o acesso irrestrito à informação não acontece efetivamente e a capacidade de decodificação também não se mostra efetiva, pois restou atrofiada no homem pós-moderno. Esta situação demonstra um risco acentuado ao pleno exercício da cidadania

e da expressão de opiniões próprias, inclusive na hora do voto. (CASSIANO, RAMIRO, FACHIN, 2022, p. 12)

In addition, the possibility of access to information, as well as consultation and verification of the rights provision of a nation (order) in the virtual environment, among other situations, gives citizens the ability to formulate their opinion and political position, to establish dialogue and participate in debates.

Free access to the laws of a nation, when granted to citizens, makes it possible to compare them with the provision of rights in other nations, a fact that can generate demonstrations, demands and, in some cases, even evasion (refuge) from their own people. For these reasons, some authorities prefer to deny their patriots full access to information. This is the case of states such as Iran and Egypt, which have chosen not to officially post their national legislation on the Internet.

The situation is mentioned and explained by Fornasier (2021, p. 5):

Mas outros países, como Egito ou Irã, não expõem suas leis online (embora seus cidadãos possam usar a internet e pesquisar em sites sobre leis de outros países (supondo que não seja bloqueado pelo governo), eles e o resto do mundo não teriam acesso a suas próprias leis. Esta é a colina de Aquiles do sistema de regulação global, pois ela só pode fazer upload de leis disponibilizadas on-line pelos governos respeitados.

Another example that illustrates this problem is the massive surveillance carried out by governments and private companies which, under the pretext of guaranteeing national security or optimizing business processes, end up violating their rights of the citizens to privacy and personal data protection.

It should be noted that at no time in our history have there been so many governments ostensibly exercising control over the content that their citizens can or cannot access and/or share online. Specifically, this occurs by suspending and/or blocking websites from other countries, restricting access internally through technical fragmentation of the network infrastructure.

In this sense, as a consequence of this authoritarian behavior by certain government leaders around the world, the decline in global Internet freedom has been recorded for the 12th consecutive year.

Digital repression is on the rise across the nations of the world, representing a growing and more severe repression of human rights. Online repression has reached an all-time high, with a record number of governments restricting content that is political, social or religious in nature.

It has been found that more than three quarters of the internet users of the world now live in countries where the authorities punish people for exercising their rights to free access, demonstration and expression on networks (ACCESS NOW, 2021). In these cases, what has come to be known as the fragmentation of the internet is taking place.

Nations have acted more incisively to control access to the network, and they do so by taking such actions in order to impose their interests, which serve to maintain power. This involves direct interference by governments in the flow of the network, which, in theory, should be neutral (the principle of network neutrality).

With the increase in state intervention, there has been a growing fragmentation of the internet(splinternet), which has had a considerable impact on human rights, most commonly freedom of expression, privacy and, especially, the right to free access to information and communication.

In a way, any form of abuse is alarming, among which we can observe this chilling of freedom of access in the virtual environment originating from state power (ACCESS NOW, 2021). Actions to limit the domestic digital space, combined with the excessive cultivation of narratives endorsed by the state structure and corroborated by independent media, have become a repeated scene in civil society, which favors an environment in which voices are more easily marginalized and suppressed.

This is the finding of a study carried out by the NGO "Access Now", published in April of 2022, which points out that, in 2021, more than 30 countries intentionally prevented and/or suspended the access of the population to the internet on their territory more than 180 times. The report recognizes the phenomenon as digital authoritarianism: "the authorities shut down the internet to shut down democracy. That's 182 times that a leader has deliberately decided to silence a people instead of enabling them to speak." (ACESS NOW, 2021).

The mentioned study before highlights the case of Pakistan, the country where the most severe network suspension took place, in which 4.5 million people spent almost four years without internet access. This occurred between the years 2016 and 2021, during which time approximately more than four million residents of the Federally Administered Tribal Area of Pakistan had to endure an internet shutdown for almost four years. The Pakistan Telecommunication Authority restricted full mobile networks after the conflict on its border with Afghanistan in June of 2016. The internet was not fully restored until December of 2021.

This almost destroyed education, health and business opportunities for already isolated local groups, especially during the Covid-19 pandemic. (ACCESS NOW, 2021, p.14).

The report also points to India as the nation that has violated free access the most, with 84 internet cuts last year. According to the study, as early as the first day of 2021, the Indian authorities cut off internet access in the Districts of Jammu and Kashmir, the place that would see more shutdowns than any other on Earth that year. Also at the end of January, India imposed additional shutdowns to quell protests around India's Republic Day. The shutdowns of network access and the internet itself were already underway in a context of fear, violence and conflict. In this case, there was a direct link between internet blockades and human rights violations, which was explained by the relationship between internet blockades and factual scenarios of impunity, since in these situations there was a lack of accountability for crimes committed against people, as well as the aim of keeping the rest of the world in the dark about the scale and intensity of the situation. There was considerable difficulty for journalists and human rights defenders in accessing the affected areas to report on the events, especially when they related to government actions taken at the time (ACCESS NOW, 2021).

In this context, Sofia Miguel Rosa (2022), based on a survey carried out between 2011 and 2022, presented a ranking of the worst countries in terms of internet freedom: 1st China, 2nd Myanmar, 3rd Iran, 4th Cuba, 5th Vietnam and 6th Russia.

China appears in the ranking for the eighth consecutive year. The report points out that the country is still considered one of the worst because of the imposition of the use of government algorithms, as well as the control it exercises over information and communication platforms.

The mentioned study before considers three main forms of intervention that cause the fragmentation of the internet and disrespect for human rights online: a) restrictions on the flow of news and information; b) centralized state control over internet infrastructure; and c) barriers to cross-border transfers of user data.

Access space was limited only to sites and domains that reflect the position and interests of those in leadership in the national government. The report describes that "entrenched authoritarian leaders and aspirants sought to contain online dissent by preventing residents from reaching global sources of information." (SHAHBAZ; FUNK; VESTEINSSON, 2022, online).

All of the above are cases in which the relationship between the fragmentation of the internet and the consequent violation of the human right to free access to information is evident. From a democratic perspective, in these cases, state action is subverted, since the protection of human rights is a corollary of government power and the use of new technologies must serve this purpose.

It is no wonder that the right to free access is enshrined in the Brazilian law, namely the Article 3 of the European Union Regulation 2.015 of 2120, which establishes that all end users must have the right to access and distribute information and content, use and provide applications and services and use end equipment of their choice, regardless of location or where and from where the information, content, application or service is provided. Brazil, in turn, has established the principles, guarantees, rights and duties for the use of the internet in the country via Law No. 12.965 of 2014 – Civil Mark of the Internet. Article 4, item I, of the Civil Mark establishes the guarantee of the right to the internet as a requirement for the full exercise of citizenship.

Norberto Bobbio (1996, p. 155), when dealing with this issue, refers assertively to the danger that new technologies pose to the democratic system when they are not designed to protect freedom. He mentions that "to the extent that technology is used as an instrument of power and not as an instrument of participation, it can become a source of authoritarianism and oppression".

It is therefore essential to highlight the importance of legal frameworks with regard to information and communication technologies, in order to guarantee the safeguarding of human rights and the fundamental freedoms of individuals.

In addition, digital education and public awareness of the risks and potential of information and communication technologies also play a crucial role in preventing the abuse of power, control and social oppression.

### 5 CONCLUSION

The rapid advance of information and communication technologies has had a profound impact on democracy around the world. The creation of new virtual platforms for civic mobilization, for transmitting news and sharing it, and even for users to express themselves through comments, is a benefit to society. However, this virtual access is subject to censorship, surveillance and exploitation by anti-democratic forces.

Ostentatious and restrictive control over content and access to the virtual network by those in power, both in the public and private spheres, puts the implementation of democratic ideals at risk.

In the context of the social transformation that the democratic system seeks to implement, it is inseparable that freedom and non-discrimination are part of its basic purpose and objectives. However, these rights have been ostensibly attacked due to the imposition of recriminatory control of the internet by government leaders around the world.

The "form of use" and "performance" of technological mechanisms are in the interests of their controllers, serving their interests. As a result, the idea of technological neutrality suffers somewhat from stealth intrusion, although it should remain an ideal to be pursued.

This manipulation of the internet is carried out with the intention of inducing the path that the user must take through the networks, controlling the content available for access. This constitutes the operation of the network on the fringes of good ethics, as it disseminates a pattern of prejudiced action. In this sense, the use of technology has not served to reduce inequalities; on the contrary, it has increased them, generating new events of intolerance, prejudice and discrimination.

Not long ago, information and communication flowed predominantly within a geographically delimited space(offline); today, however, the flow is predominantly transnational(online). But this flow has been restricted in some regions of the world.

New technologies have simulated geographical borders in the online environment in order to relocate the user. This is done by restricting access to communication and information, reproducing in the virtual environment the political sectarianism of the real world. This phenomenon has been called "internet fragmentation".

Internet fragmentation consists of the process by which the Internet is divided into several smaller, disconnected networks, in response to criteria of a political and governmental nature, but also due to censorship, geographical restrictions and technological differences.

The underlying causes of fragmentation range from technical and commercial aspects to political and ideological reasons. From a democratic point of view, the

consequences are disastrous, as they affect the internet as a public space, as well as its right to free access of the users (citizens).

A growing number of governments around the world are ostensibly exercising control over the content available to their citizens and establishing restrictions on online access and sharing. This also occurs through suspensions and/or blockages of websites from other countries.

It has been observed that some governments limit the domestic digital space where they cultivate narratives endorsed by the state structure and the independent media. Nations have acted more incisively to control access to the web, taking such actions depending on their line of interest in maintaining their own power.

As a result, civil society and already marginalized voices are more easily suppressed. Governments are interfering with the freedom of their compatriots of access to the web.

The three main forms of internet fragmentation and consequent disrespect for online human rights identified are: restrictions on the flow of news and information, centralized state control over internet infrastructure and the creation of barriers to the transfer of information and data to other countries.

Regardless of the reasons for such state control and intervention, it is necessary to pay attention to this growing fragmentation of the internet(splinternet), as it brings serious impacts and risks to fundamental human rights exercised in the online environment, especially freedom of access to information and communication.

Civil society, together with public authorities and the private sector, must promote initiatives that foster the ethical and responsible use of technologies, encouraging citizen participation and the empowerment of individuals in the digital environment.

In any case, technological progress and its instruments can both contribute to the expansion of fundamental rights and put their effectiveness in risk, so that technology ends up becoming an ambivalent instrument, capable of generating positive and negative effects, depending on how it is used in society.

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