The Fake News Impact on the Public Policy Cycle: A Systemic Analysis through Documentary Survey

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Abstract—In the present article, it is observed that the constant advancement of issues related to misinformation impacts the guarantee of the public policy cycle. Thus, it is found that the dissemination of false information has a direct influence on each of the component stages of this cycle. Therefore, in order to maintain scientific and theoretical credibility in the qualitative analysis process, it was necessary to logically interpose the concepts of firehosing of falsehood, fake news, public policy cycle, as well as using the epistemological and pragmatic mechanism at the intersection of such academic concepts, such as the scientific method. It was found, through the analysis of official documents and public notes, how the multiple theoretical perspectives evidence the commitment of the provision and elaboration of public policies, verifying the way in which the fake news impact each part of the process in this atmosphere.

Keywords—Firehosing of falsehood, governance, misinformation, post-truth.

I. Introduction

IN 2016, a group of political scientists, through think-tank Rand Corporation, evaluated the growth of the Russian propaganda machine, from the raid on Georgia to the Crimean annexation process.

The studies pointed to the dissemination of messages and information without fate link or concern about the truth of the media and how this action impacted campaign progress and public policy support, defining this factor as "Firehosing of Falsehood" [1]. In addition, other governments have taken advantage of such a strategy and model in consolidating their propaganda machine.

Several studies have already addressed the impact of fake news on electoral and narrative disputes, such as the US presidential election in 2016 [2], or even the Brazilian presidential election in 2018 [3]; however, the damage generated by misinformation has influenced sectors directly related to the provision of services, as well as government agencies and social entities. Furthermore, new data [4] about public worries on digital news reveal that more than a half of the global sample analyzed declares concern or strong concern on factual properties of information, thus once the public opinion indicates the existence of a belief in which fake news propagation interferes in some extent in the quality of life, it is this paper main preoccupation character: inquiring if there is a general impingement of fake news, and in which degree of

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impact, through the public policies cycle, a basic instrument for accomplishing governmental actions.

There are numerous cases reported worldwide that highlight this problem. In Singapore, for example, the Government listed situations where the spreading of fake news directly affected population security by creating alarmism for incidents that did not exist [5]. At the same time, the UK felt the impact of misinformation against the annual childhood vaccination campaign by having reduced the total number of children vaccinated and relatives' concerns about vaccination [6]. In Brazil, the fake news network hindered searches after the Brumadinho's dam collapse [7] and even the flu vaccine immunization campaign, prompting the Ministry of Health (MS) to produce booklets and publications to disprove the rumors [8].

II. LITERATURE REVIEW

Initially, it is necessary to reiterate the meaning of fake news in the modern political environment. This term refers to misleading or fake information in order to act as factual data and influence an audience or gain monetary advertising [9].

Fake news is further strengthened by its being in the socalled "post-truth" era that can be described as a scenario in which facts are treated with disregard, reason is replaced by emotion, and there is a corrosion of language in order to diminish the value of truth.

In addition to the defense of alternative facts, even "false science" remains to be produced by those who attempt to revise and sometimes rewrite already documented historical facts, as well as to deny scientifically proven current events such as global warming [10]. This phenomenon is seen as a result of postmodernism, which has as its characteristic the consecration of the principle of subjectivity, in which language is treated as unreliable and unstable. Thus, the posttruth coupled with the speed with which the digital medium is capable of transmitting and creating content through social networks and mobile phone apps is a sure recipe for the spread of fake news. It is possible to identify in this scenario the possibility of intensifying the damage that already arises from defamatory allegations about something or someone, the violation of the right to image, honor, as well as the rights to privacy and privacy. At the same time, in order to elucidate the object of study, we sought to understand Firehosing, a political strategy that, according to Paul and Matthews [1] involves a process of disseminating a large flow of fake news in order to affirm specific government policy positions. Therefore, it has four stages as its characteristic: "High volume of content; Fast, continuous and repetitive production;

No commitment to reality; Inconsistency between speeches". In addition, dissemination through various information channels tends to validate fake news, stating public opinion about the news. Still, it is noteworthy that not only is this strategy used by governments, but also by groups that can take advantage of such a tool for disseminating ideas [9] by inferring the power of misinformation to spread propaganda for monetary purposes.

Raeder [11] reminds us, the perception of authors such as Dias [11] and even Jenkins-Smith and Sabatier [12] contributes to the understanding about the role of the public policy cycle as an approach of outstanding qualities to the analysis of institutional instruments in relation to governmental changes. Therefore, the present study understands five stages involved in the public policy cycle, as follows: (1) Agenda building; (2) Policy formulation; (3) decision making; (4) Implementation; and (5) Evaluation.

The enormous diversity of instruments of analysis of the stages of the public policy cycle is acknowledged, configuring the complexity of the conjunctural and systemic factors that involve government actions. However, the present study takes as its central element the analysis of the public policy cycle as it understands it as a basis for other instruments and, being the cycle affected in such a way that the study identifies in its stages, consequently instruments that demand deeper and more complex analysis are also affected by the spread of fake news.

III. METHODOLOGY

Based on public policy cycle theory and elucidated concepts, the scientific method is used, which begins with observation, starting with the questioning and hypothesis elaboration, so that, through experimentation and analysis, the conclusion is reached.

Using the performance measurement model and indicator construction of the Management Secretariat of the Ministry of Planning of the Federative Republic of Brazil [13], impacts linked to the result dimensions and effort caused by the spread of fake news, which are sensitive to variations and narratives put to society, as evidenced by government publications and articles already mentioned. Therefore, public reports and official notes linked to governmental colleges were analyzed in order to qualitatively measure variations and trends of the psycho-social phenomenon involved in the study.

IV. RESULTS

Based on studies by Sjöblom [14], Secchi [15] highlights the relationship of intersubjectivity in the process of identifying the public problem and building the agenda - the first part of the cycle - being motivated by the delimitation of the problem or even by the perspective of solution. It turns out that all factors related to the perception of the problem are subject to the narrative surrounding it. In the other words, a problem identified and the result of social discussion, when overridden by the misinformation and propagation of fake news, empties itself of content and its incorporation damaged

in the agenda early on. At the same time, the same may occur with the identification of a problem already contaminated by the spread of misinformation, leading to an initiative devoid of impact purpose to be incorporated into the agenda, taking space for other actions.

Viana [16] reinforces the need to transform a data set into relevant information, resulting in empirical and normative knowledge, to be translated into public actions. Therefore, the distortion of information caused by fake news dissemination directly impacts this step, weakening the process of public policy formulation and even altering the correlation of forces in the competent body of its formulation by confusing scattered elements with factual information.

As a result of a public policy whose perception has been contaminated and the narrative dispute for its formulation has been hampered by elements lacking factual information, the decision-making process becomes limited; increasing the risk that such public policy will not achieve expected objectives. In other lines, by submitting the definition of deadlines, resources or effort involved within the spectrum of possibilities resulting from misinformation contamination, a gap opens up for not contemplating determinant factors for the fulfillment of the stages or even the effectiveness of such a public effort. In this sense, another element is the perception of public opinion regarding public policies and their impact on the decision-making process of political agents, as evidenced in Brexit, where the distortion of information generated, according to studies, alteration in the referendum vote and consequently of the collegiate [16].

Understood as a complex set of political elements that may not materialize [17], the implementation stage materially highlights the damage caused by the spread of misinformation. As observed in the reduction in the number of vaccinations due to the spread of rumors in the British and Brazilian cases, the implementation of a public policy is at the mercy of the narrative superimposed on it, that is, its implementation becomes more complex in risk dimensions.

Two elements stand out as a reference and example to perception, one being the demobilization of agents involved in the implementation stages, such as patients who refuse vaccination and the impaired orientation to the street level bureaucrat responsible for the implementation of such policy, as the effort made by the nurse or health agent related to the vaccination program.

The evaluation stage, responsible for gathering elements that qualitatively measure the cycle, ensures the continuity, adaptation or termination of a policy. Raeder [13] points out that, based on diagnostics that verify the impacts of the actions taken, the evaluation stage provides valuable information resources for the formation of tables or route adjustments in projects. Thus, when cumulatively contaminated by misinformation, the stages of the public policy cycle are distorted and do not provide accurate elements for the holistic evaluation of the process. For this reason, fake news are the challenges for research institutes. Olinto [18], as the large proliferation of general information in this scenario would be adverse and hinder the Institute's credibility, as much

information suggests that IBGE would be involved in the informational confusion. As a result, in addition to the damage caused in previous steps, the measurement of such losses becomes difficult.

In order to impact on the stages of the public policy cycle, it is also worth highlighting transversal elements of the effort and result dimensions [16]. Regarding dimensions of effort, it is understood the execution while the fulfillment of previously established actions, the excellence as compliance with criteria and standards agreed by the set of actors involved and the economically aligned to obtain the usage of resources with the lowest possible burden.

It turns out that with the spread of fake news, execution commits itself to greater commitment of human resources and capital to the point of damaging the economy and, consequently, the excellence of a public policy.

Regarding the result dimension, effectiveness is understood as the quantity and quality of products delivered to the user, efficiency by the relationship between products and services generated by inputs used and effectiveness by the impacts generated by the products and services provided.

To these, we can see more concretely through already detailed references, the burden generated by the dissemination of misinformation that impairs the fulfillment of goals set by effectiveness, demanding more inputs and compromising efficiency, where an unmatched amount weakens the effectiveness.

V.DISCUSSION

When analyzing the phenomenon of the fake news, it can be observed that its characteristics are not so unknown to humanity that, since the most past years, it has been living with the spread of untrue news in the social media. However, with the advancement of information and communication technologies, the scale of disinformation propagation is expanded to the point of transforming what was previously harming locally to global impacts.

The dissemination of misinformation compromises the good execution of the public policy cycle stages in multiple theoretical perspectives, which is impaired since the identification of the problem, until the process of building alternatives and decision making for implementation. Still, it is worth mentioning the accumulation generated throughout the stages that result in a programmatic and systemic distortion of the set of actions necessary to solve latent and structuring social problems.

On an increasing scale, the spread of fake news increasingly demands government mobilization to not only contain the spread of misinformation, but to protect public policy and population well-being, as such spread can become a driver of social destabilization. Some international experiences already use the technology itself to combat the spread of misinformation, being Artificial Intelligence, especially the Machine Learning feature, responsible for identifying patterns of reality distortion and lack of checks on platforms listed as reliable references.

It is also possible to point out the image of consumers on

government regulation of content [4], once it impacts directly the general public policy execution. In this context, countries that express biggest desire of government combat on misinformation are Spain (72%), UK (61%), France (61%) and Germany (59%), meanwhile the opinion of the US portion express less interest (41%) than Europe. Also, it was observed that 75% of the correspondents believe that media companies and journalist have the major part of the responsibility, taken that they think fake news is generated by them. Hence, it reflects on a more specific governmental role, which are the action on the scenario preparation for policy making and implementation

There is still a lack about the legal element of fake news in the world, demanding that the debate deepens in these countries in order to guarantee real instruments to confront misinformation as a tactic of domination. As much as fake news is arguably damaging, exerting control over its spread is delicate, a process that goes from the first moment in which the news is identified as untrue, until the decision about its withdrawal or not, and as already flagged.

It can be observed that in the digital age the information has an enormous speed of propagation, and that in face of the power that untrue facts have to form badly founded opinions and sometimes detrimental to the subject's image, one has to wonder if the method of judicializing the problem for the purpose of making the contested content unavailable is really effective when it becomes viral, as well as whether the tools at the disposal of the law are able to remedy the damage caused to fake news subjects in an era when information can remain on the web permanently.

Technological advancement also provides new reality distortion tools such as deepfake, manipulations made using artificial intelligence software such as Keras and TensorFlow, which have open programming code and were used by a Reddit social network user to create an algorithm for training a neural network to map a subject's face to another person's body [19].

In general, several dimensions are hindered by the spread of disinformation, demanding even more resources for the quality of the public policy cycle. These resources, besides being financial, permeate the human capital involved in the process, which is subjected to an expanded effort to ensure the necessary steps to fulfill public planning. The whole set still demands increased runtime against the wear and tear orchestrated by fake news. It is therefore necessary to use state capacity to boost scientific research through partnerships with organizations and the private initiative to use technological tools to combat the spread of fake news, as well as being a limitation due to the technological conditions of the country, but a government decision and the responsibility of public agents.

It turns out that the absence of a preventive policy capable of counteracting the spread of misinformation results in optical rearrangement regarding the continuity or otherwise of an existing policy, placing its implementation at the mercy of the adulterated narrative of reality.

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