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571.01 – JOURNALISM AND MEDIA PROCESSES

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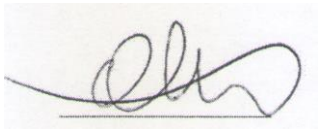

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POLITICI PUBLICE EUROPENE DE COMBATERE A DEZINFORMĂRII

571.01 – JURNALISM ȘI PROCESE MEDIATICE

TEZĂ DE DOCTORAT ÎN ȘTIINȚE ALE COMUNICĂRII

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Chisinau, 2026

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ANNOTATION

Theofilos Marousis. **Public European policies to counter disinformation.** PhD thesis in communication sciences, specialty 571.01 – Journalism and media processes, Doctoral School of Social Sciences, Moldova State University. Chișinău, 2026.

Thesis structure. The thesis contains 147 pages of basic text, an annotation in Romanian, English, and Russian, a list of abbreviations, an introduction, three main chapters with subchapters including conclusions for each one, as also general conclusions and recommendations and bibliography consisting of 504 sources (printed sources, electronic sources and official documents), 6 tables and 7 figures.
Key words: disinformation, misinformation, malinformation, democracy, elections, fake news, public policies, governance, public security, propaganda, information warfare, social media.
Research area: Communication Sciences.
The purpose of the research: to explore and clarify the theoretical framework of disinformation, its impact to public opinion and its potential threat posing to democracy. Also, its aim is to research and detect if and how States (or the community of the states – the European Uniuon), public officials and authorities respond to the problem addressed, what is the official reaction, meaning what are the public policies implemented to counter disinformation. Ultimately, it is appropriate to draw useful conclusions and suggestions to help overcome it. To achieve this, we highlight several **objectives**: a historiographical analysis of the phenomenon of disinformation; examination of the modern concept of informational falsehood and its division into ramifications; an overview of the different types and transformations of disinformation in the current public sphere; systematization of some disinformation tactics; highlighting the influence of a conspiracy theory on the public agenda and its impact on public opinion; analysis of the issue and relevance of the disinformation phenomenon in recent political life in several countries; study of public policies to combat disinformation in the European Union, but also in various countries.
The scientific novelty and originality of the work resides in the conceptualization of disinformation as a perceptible public problem with the potential to undermine and threaten public security and the smooth functioning of democratic polity. Furthermore, it is oriented to contribute to the limitation process of the spread of disinformation within the public sphere, under the perspective of the response authorized by the official law and subjected to careful examination of public responses against the disinformation phenomenon.
The important scientific problem solved in the thesis, resides in elucidating the phenomenon of disinformation, especially in public affairs sphere, offering the possibility to conceptualize it more distinctly as a public problem and to present an updated picture of the state of fact of its spread and dangerous and negative effects on public interests and identified potential solutions to remedy the problem which derives from carefully examining the public policies of several States (and European Union as a whole) to counter information falseness.
The theoretical significance of the thesis stem from the investigation and conceptualization of disinformation phenomenon, mainly focusing on its impacts to the decision-making process of socio-political life. In addition, results of the study support the concentration of public governance tactics that serve the task of answering against information falseness.
The applicative value of the thesis based on the knowledge-action sequence, consists on conclusions of research regarding the issue of disinformation nowadays, as also proposals about actions that could be taken in order to further limit the problem.
Implementation of scientific results was accomplished through examination and communications of them at National and International Conferences (including held at State University of Moldova) Promoting socio-economic values in the context of European integration (Chisinau, USEM), Strengthening resilience in society by capitalizing on human capital in the context of the accession of the Republic of Moldova and Ukraine to the European Union (Chisinau, ICJPS), Perspectives and problems of integration into the European space of research and education (Cahul, USC), Republic of Moldova and Ukraine: candidate states of the European Union (Chisinau, ICJPS), Integration through Research and Innovation (Chisinau, USM), Fenomena and tendences in journalism and communication (Chisinau, FJSC, USM), Conference of the Academy of Scientists of Romania (Bucharest, AOȘR), etc.
Approval also was achieved through publication of 7 scientific articles in academic journals.

ADNOTARE

Theofilos Marousis. **Politici publice europene de combatere a dezinformarii.** Teză de doctor în științe ale comunicării, specialitatea 571.01 – Jurnalism și procese mediatice. Școala doctorală Științe sociale, Universitatea de Stat din Moldova, Chișinău, 2026.

Structura tezei. Teza conține adnotare, introducere, trei capitole principale cu subcapitole care includ concluzii pentru fiecare, precum și concluzii generale și recomandări în 148 de pagini de text de bază și bibliografie din 504 surse (surse tipărite, surse electronice și documente oficiale), 6 tabele și 7 figuri.

Cuvinte cheie: dezinformare, democrație, alegeri, știri false, politici publice, guvernanță publică, securitate publică. propaganda, influență, media sociale.

Domeniul de cercetare: Științe ale comunicării.

Scopul cercetării: explorarea și clarificarea cadrului teoretic și practic al dezinformării, a impactului acesteia asupra opiniei publice și potențiala amenințare la adresa democrației. De asemenea, scopul cercetării este de a cerceta și detecta dacă și cum statele (sau comunitatea statelor - Uniunea Europeană), oficialii publici și autoritățile răspund la problema abordată, care este reacția oficială, adică, în ce anume constau politicile publice implementate pentru a combate dezinformarea. În cele din urmă, este oportun să se tragă concluzii și sugestii utile care să ajute la depășirea acesteia. Pentru a realiza acest lucru, a fost necesară urmărirea câtorva **obiective**: generalizarea istoriografiei despre dezinformarea în treburile publice; examinarea conceptului modern de falsitate informațională și a divizării acestuia în ramuri; evidențierea diferitelor tipuri de dezinformare în sfera publică actuală; sistematizarea unor tactici de dezinformare; evaluarea gradului de influență a teoriilor conspiraționiste asupra agendei publice și impactul asupra opiniei publice; analiza problematicii și a ponderii fenomenului de dezinformare în viața politică recentă din mai multe țări; studiul politicilor publice de combatere a dezinformarii în Uniunea Europeană și în diverse state ale lumii.

Noutatea și originalitatea științifică a lucrării rezidă în conceptualizarea și consolidarea dezinformarii ca o problemă publică perceptibilă, cu potențialul de a submina și a amenința securitatea publică și buna funcționare a politicii democratice. Teza este orientată la căutarea căilor pentru a limita răspândirea dezinformării în sfera publică, din perspectiva răspunsului autorizat de legea oficială și supunerea unei examinări atente a răspunsurilor publice împotriva fenomenului dezinformării.

Problema științifică importantă rezolvată în teză, rezidă în elucidarea fenomenului dezinformării, în special în sfera afacerilor publice, oferind posibilitatea de a-l conceptualiza mai distinct ca problemă publică și de a prezenta o imagine actualizată a stării de fapt a răspândirii și amplificării acestuia în contextul circumstanțelor recente. Cercetarea urmărește să demonstreze că dezinformarea are efecte periculoase și negative asupra intereselor publice. Ca parte a cercetării pentru potențiale soluții este examinarea politicilor publice ale Uniunii Europene și ale mai multor state pentru a contracara falsul informațional.

Semnificația teoretică a tezei derivă din investigarea și conceptualizarea fenomenului de dezinformare, concentrându-se în principal pe impactul acestuia asupra procesului decizional al vieții socio-politice. În plus, rezultatele studiului susțin concentrarea tacticilor de guvernare publică care ar servi sarcinii de răspuns împotriva falsității informației.

Valoarea aplicativă a tezei bazată pe secvența cunoaștere-acțiune, constă în concluziile cercetării privind problematica dezinformarii în zilele noastre, precum și în propuneri despre acțiuni care ar putea fi întreprinse în vederea combaterii acestui pericol.

Implementarea rezultatelor cercetării s-a produs prin prezentarea și discutarea în cadrul mai multor conferințe naționale și internaționale (inclusiv, organizate de Universitatea de Stat din Moldova): „Promovarea valorilor social-economice în contextul integrării europene" (Chișinău, USEM), „Consolidarea rezilienței în societate prin valorificarea capitalului uman în contextul aderării Republicii Moldova și a Ucrainei la Uniunea Europeană" (Chișinău, ICJPS), „Perspectiviele și problemele integrării în spațiul european al cercetării și educației" (Cahul, USC), **„**Republica Moldova și Ucraina: state candidat ale Uniunii Europene" (Chișinău, ICJPS), „Integrare prin Cercetare și Inovare" (Chișinău, USM), „Fenomene și tendințe în jurnalism și comunicare" (Chișinău, FJȘC, USM), „Conferința Științifică a Academiei Oamenilor de Știință din România" (București, AOȘR) ș. a.

Aprobarea a fost obținută și prin publicarea a 7 articole științifice în reviste academice.

АННОТАЦИЯ

Теофилос МАРУСИС. Европейская государственная политика по борьбе с дезинформацией. Докторская диссертация по наукам о коммуникации по специальности 571.01 – Журналистика и медиа процессы. Кишинэу, 2026.

Структура диссертации. Диссертация содержит аннотации, введение, три основные главы с подразделами, выводы и рекомендации. Содержание работы представлено на 148 страницах основного текста. Текст диссертации дополнен шестью таблицами и 7 рисунками. Библиография содержит 504 наименований источников (печатных источников, электронных источников и официальных документов).

Ключевые слова: дезинформация, демократия, выборы, фейковые новости, государственная политика, управление, общественная безопасность, пропаганда, влияние, социальные сети.

Область исследования: Науки о коммуникации.

Цель исследования: изучить и прояснить теоретические и практические основы дезинформации, ее влияние на общественное мнение и потенциальную угрозу которую она представляет для демократии. Важной компонентой исследования также является изучение и выявление того, реагируют ли и как государства (или сообщество государств - Европейский союз), государственные служащие и органы власти на рассматриваемую проблему, какова официальная реакция, то есть каковы меры государственной политики, реализуемые для борьбы с дезинформацией. Наконец, целесообразно сделать выводы и полезные предложения, которые помогут ее преодолеть. Для достижения этой цели необходимо было решить следующие задачи: обобщение историографии дезинформации; рассмотрение современной концепции информационной лжи и установление ее главных направлений; выделение различных типов дезинформации в современной публичной сфере; систематизация некоторых тактик дезинформации; оценка степени влияния теорий заговора на общественную повестку дня и воздействия на общественное мнение; анализ проблемы и пропорций явления дезинформации в политической жизни Европейского Союза и ряда стран; изучение государственной политики по борьбе с дезинформацией в Европейском Союзе и различных странах мира.

Научная новизна и оригинальность работы заключаются в концептуализации дезинформации как ощутимой общественной проблемы, способной подорвать общественную безопасность и поставить под угрозу надлежащее функционирование демократической политики. Диссертация направлена на содействие ограничению распространения дезинформации в публичной сфере с точки зрения реагирования, предусмотренного официальным законодательством, и тщательного анализа общественной реакции на явление дезинформации.

Важная научная проблема, решаемая в диссертации, заключается в объяснении феномена дезинформации, особенно в сфере общественных отношений, что позволяет более чётко концептуализировать её как общественную проблему и представить актуальную картину ситуации с её распространением и усилением в контексте последних событий. Цель исследования – выявить, что дезинформация оказывает опасное и негативное воздействие на общественные интересы. В рамках исследования потенциальных решений рассматривается государственная политика Европейского Союза и ряда государств по противодействию ложной информации.

Теоретическая значимость диссертации проистекает из исследования и концептуализации феномена дезинформации, с упором на её влияние на процесс принятия решений в социально-политической жизни. Кроме того, результаты исследования подтверждают необходимость дальнейшей разработки тактик государственного управления, направленных на противодействие ложной информации.

Прикладная ценность диссертации, основанной на последовательности знание-действие, состоит в выводах исследования, касающихся проблемы дезинформации в наши дни, а также в предложениях о действиях, которые можно предпринять для дальнейшего ограничения дезинформации.

Внедрение научных результатов осуществлялось путем их представления и рассмотрения на национальных и международных конференциях (в том числе в Государственном университете Молдовы): «Продвижение социально-экономических ценностей в контексте европейской интеграции» (Кишинев, USEM), «Укрепление устойчивости общества путем капитализации человеческого капитала в контексте вступления Республики Молдова и Украины в Европейский Союз» (Кишинев, ICJPS), «Перспективы и проблемы интеграции в европейское научно-образовательное пространство» (Кагул, USC), «Республика Молдова и Украина: государства-кандидаты в Европейский Союз» (Кишинев, ICJPS), «Интеграция посредством исследований и инноваций» (Кишинев, USM), «Феномены и тенденции в журналистике и коммуникации» (Кишинев, ФЖНК, USM), Конференция Румынской академии деятелей науки (Бухарест, AOȘR) и др.

Результаты данного исследования нашли свое отражение в 7 научных работах, которые были опубликованы в специализированных изданиях в Республике Молдова и за рубежом.

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LIST OF ABBREVIATIONS

EU – European Union

ICT - Information and Communications Technology

UK – United Kingdom

USA – United States of America

GNP – gross national product

IS – Information Society

FCC – Federal Communications Commission

AI – Artificial intelligence

ML – media literacy

HLEG – high level group of experts

WFA – World Federation of Advertisers

ERGA - European Regulators Group for Audiovisual Media Services

WHO – World Health Organization

OGP – Open Government Partnership

INTRODUCTION

The relevance of the issue. In the present work we will deal with the phenomenon of misinformation, which in recent years, with the development of Information and Communications Technology (ICT's) is created and spreads more easily and faster than in the past. Misinformation creates various problems on a massive scale, for various groups of citizens in society, preventing proper information and fomenting democracy. For this reason, it is treated as a public problem and efforts are being made by various states of the planet to restrict it or disappear it. By nature, man strongly wishes to know what is happening in the immediate and wider environment. In the past, this knowledge was limited, since it was formed based on information that was transmitted by word -of -mouth and mainly concerned the events of local communities. However, this situation has changed radically in our time. The development of ICTs offers the modern man the ability to access knowledge and information coming from all parts of the world. Education, science and the production process have been significantly affected by the development of the Internet, which offers increased access to a large amount of information, and daily life incorporates new cultural elements at a fast pace. New sources of information are constantly developing in all scientific fields. Information as mentioned by Luciano Floridi [49] is a basic component of the human cognitive process and its use as a concept varies from the everyday language, meaning news/message/situation update/fact, to its scientific use which concerns the collection and processing of data. The concept is associated with the transmission of a message, meaning, the acquisition of knowledge, teaching, etc. The raw material of the information is data [357], which after being processed are eventually converted into knowledge. Information, then, is the composition of data elements, which is distinguished by semantic relevance and organization, so that the receiver can interpret it. Similarly, Tefko Saracevic [135] explains that for something to be considered information, it must include three properties: subject matter, processed data, and relevance to the user's environment. Thus we can say that information is essentially knowledge. So by the term information, we refer to the form of communication, in which the transmitter (holder of the media) communicates to the receiver (public, citizens) facts, situations, knowledge and ideas, also providing him with a set of relevant parameters that allow the receiver to understand their deeper meaning. Information is of great importance for a person's life, as man needs information to use it as a means of social interaction or work, thus meeting his other basic needs. This human need for information as Gobinda Chowdhury &

Sudatta Chowdhury write [30] of course depends on various socio-political factors and can be differentiated during his life, depending on the circumstances:

- The need for information varies from person to person, from job to job, from the type of information required on a topic. It is affected by the environment in which one moves. The information one needs in an academic environment is different from that in a work or business environment.
- The need for information is sometimes expressed less than it should or not at all. For example, the library user often fails to locate the book he is looking for because he does not have the knowledge to properly search a database.
- The need for information changes during search and retrieval. For example when someone finds a useful piece of information about the topic they are interested in, they may feel that it is not sufficient and that more knowledge is needed to understand a topic.

Information spreads faster and has a stronger impact on social relations and modes of production, using the new possibilities of communication channels. The speed of dissemination of information makes it a product that offers faster information updating, it is composed with the knowledge of its researcher and affects his environment and his culture. Burrhus F. Skyttner [143] states that the information can be measured on the basis of the degree of surprise, the lack of predictability or the new values it conveys to the recipient. So it is obvious that the information contains some values. After all, the concept of value, as written by Tefko Saracevic & Paul Kantor [134], is demonstrated when it guides actions, relationships, priorities and exchanges (financial exchanges). In the same article, the authors mention both terms used by Aristotle and Adam Smith and which distinguish the two uses of information: value in use and value in exchange. So in the literature, we find the value of information in two forms: a) the use value and b) the commodity value.

- The use value of the information is recognized in relation to the content and the context in which it will be used. It is an intangible quantity and depends entirely on the relevance of the information and the efficiency in its use, according to Ken Herold [58]. The more relevant a piece of information is to the subject at hand, the more useful it becomes. That is, it has a use value. According to Karl Sveiby [367], information is synonymous with the term knowledge. The use value of information exists as long as it supports the development of knowledge. When its role in the composition of new knowledge is reduced or eliminated then the value of using the information is reduced at the same time. The value of using an information is therefore not stable and absolute. It changes, because it depends on whether it is

true, whether it corresponds to reality and whether it is relevant to the subject under consideration.

- The commodity value of information, on the contrary, is measurable and includes the cost of its production, the resources spent, the funds allocated and the surplus value, determined by the market demand. The commodity value of information, in other words, transforms information from immaterial to material good. The information is essentially a commodity, has a production cycle, is available, distributed, used and has a purchase cost as Oppenheim, Stenson, Wilson [105] write. In fact, in some cases it can be reused, as it's done with various other goods according to Bogdanowicz & Bailey [13]. That is, it can be reprocessed and redistributed.

Information, in the researchers' opinion, has two uses: a) the cognitive use, which is identified with its use value and b) commercial use, corresponding to its commercial value. In this thesis, we do not act as economists, we do not examine the financial terms, the profit or loss margins of a Media as a business. In other words, we are not so interested in the commodity value of information. We focus on *protecting the use value* of information. The value of information is examined from the point of view of its socio-political role. According to his public sphere theory, Habermas [57], only well and comprehensively informed citizens can exercise control over power. Under this light, information is a necessary condition for the proper and valid information of public opinion and the smooth functioning of democracy. We are thus referring to the value of using information, to whether an information is valid, corresponds to reality and is relevant to issues related to the community. Otherwise, when there is misinformation, the informational value degenerates. Then, a problem arises and that problem must be addressed.

The actuality of the researched problem. According to the literature review, when a problem receives massive dimensions in society or affects the common good, then it is considered as a public problem. Erik Neveu [102] states that a public problem is nothing more than the conversion of any social event to public confrontation and / or state intervention. Sebastiaan Princen [123] attributes to the concept of conflict, thus describing its conflict character. This, therefore, the conflict nature of the public problem is the feature that makes it News, as supporters and opponents of opinions are opposed to a common public arena, which in modern societies make up mass media as said by James Dearing & Everett Rogers [35]. Katrin Voltmer & Sigrid Koch-Baumgarten [166] add that the basic Media contribution to political themes lies more at the stage of emergence and the stage of definition of public problems.

The value and usefulness of information to citizens sometimes comes to be degraded by misinformation in order to serve some purposes. European Commission [491] defines misinformation as the verifiable false or misleading information created, presented and disseminated for economic benefit, or to deliberately deceive the public or in general for public damage. It also adds that misinformation is a powerful, cheap and often economically beneficial influence tool. We could say that someone investing in misinformation is intentionally made to make political or economic and business profits. According to Castells [23] the media on their own do not possess the power to change things, but they are largely the stadium, where it is determined who has the power to push his agenda. For Miliband [92] the media are the tools through which a system of sovereignty is expressed, but also the means of reinforcing this sovereignty. Many times show views in an appropriate way, from a specific perspective and contribute to promoting a climate of compliance in public opinion. Adorno [1] writes that commercial media constitute a tool for economic elites to divide, disorient and weaken citizens.

False information is largely the result of the strategic service of strong business, political and geopolitical interests. They make use of natural persons (professional politicians, opinion leaders, journalists, etc.), media, communications companies and other techniques to make and spread easily crafted news that ensures their hegemony or neutralizing their opponents. So at the same time, the democratic function of the public sphere is undermined. Based on these approaches, the term of misinformation comes very close to term propaganda. Propaganda according to Pratkanis & Aronson [121], is a form of communication, aiming to influence the public through the diffusion of information from the media. As a key component of all modern Western democratic societies, it is a means of shaping social reality, as well as the maintenance and reproduction of the power structures of modern political mechanisms. There is, of course, a significant difference. The misinformation contains and promotes fraudulent, incorrect or false information, while propaganda contains true information, which it promotes strongly to public opinion and tries to make it well known.

This is done in a deliberate effort to persuade people to think in the desired way, for Taylor [157]. Both of course are fed by servicing some interest. But there is still another distinction we encounter, this of black propaganda. According to Jowett & O'Donell [66] the black propaganda is the big lie, the source of information is transferred or credited to a false authority and spreads lies and manufactured information and aims to mislead. A similar definition is also given for Gray Propaganda by Gelders & Ihlen [52], in which the source is unclear and the correctness of information is uncertain. At the same wavelength, Bernays

[188] had wrote that propaganda becomes bad when the producers of consciously and with feasibility disseminate something they know that it's a lie or when they aim at results that they know that they are harmful to the common good.

We are observing that these propaganda versions are essentially identified in the general concept of misinformation. In both cases, we have alteration of information or fully false information, while at the same time this is done intentionally to make a benefit. In addition, this benefit (political, economic, etc.) does not result from an interpersonal relationship, but it requires massivity, as it includes the general public. So, as tools for the implementation of disinformation and propaganda, the Media are used (in many cases), so as to spread the information The media is the tools for disseminating information to the general public.

Beyond the fact that we have a public speech that sows misinformation and lie to society, there is something more also. It changes what in the Media theory we call Agenda Setting. As Agenda Setting in political communication, we consider the effort to establish in the public debate of a particular theme, which at the same time marks the conditions of genesis of Public Action, according to Muller & Surel [100]. For Bryant & Zillman [18] it is also the ability of media to influence citizens' priorities as to which problems are more important in public life. Agenda Setting according to Dearing & Rogers [35] is defined by the themes/agenda of Media, which affects public themes and finally, affects political themes. They also report that the Media themes/agenda are very strong in its effects, managing a problem on the public agenda, which can lead to a change in public policies. For Sauer [137], media have the ability to pose, under certain conditions, issues and frameworks, to be converted to Agenda-Setters and Framers in political agenda. When the agenda setting is made on the base of fake news and rumors, that do not actually reflect the reality, then we have a problem in public debate. According to Al-Rodhan [176] we have the use of arguments that look correct, but are not based on real evidence. So, we have the establishment of an agenda in public life, which does not finally separate what is true and what is a lie. Right on this logic, people from the UK wanted to sue Boris Johnson for the lies of his pre-election campaign, about the cost of staying in the EU, as referred by Sheridan [356]. The rationale for this decision was that large political lies about public policies can harm democracy, not just by destroying the lives of citizens, but also by reducing the credibility of a democratic state. Van Aelst et al. [162], write that fake news potentially leads to misperceptions and contributes to growing inequalities in political knowledge, one of the most pressing challenges for democracy today. In addition, according to US National Intelligence Council [412], false news

is used by various actors to undermine the faith of the society in democratic processes and to distract its attention from important issues. Based on these, we can say that misinformation is considered a public problem, so public actions and policies are needed to deal with this as far as possible.

Against this context, the issue of information as an essential resource for the implementation of European public policies takes on particular significance, constituting a major concern for governments, in particular, for countries in the process of integrating into the European Union and firmly assimilating its values [97; 156].

At the forefront of these public policies is currently the problem of countering risks related, especially to the danger of disinformation. Is widely recognized: „the exposure of citizens to large scale Disinformation, including misleading or outright false information, is a major challenge for Europe," and that „our open democratic societies depend on public debates that allow well-informed citizens to express their will through free and fair political processes", result, ad[v]ancing before society the major task of the fight against Disinformation [489]. The topicality of the subject is also determined by the real existence of contradictions in the interpretation of the phenomenon, for example, between the widespread prevalence of fake news and the scientific community's insufficient attention to identifying it in the media environment; between society's desire for reliable, high-quality information and its reliance on emotional, sensational, and manipulative stories, „fakes" and hoaxes.

The degree of approach to the subject is characterized by *neutrality*. The author in this work does not take sides in political, social or economical debates and does not adopt ideological colorings. Through the literature reviews and published news sources we appose statements and opinions of scientists, researchers, state officials, politicians, journalists, et al. in our try to analyze the problematic of information falseness in the public sphere. We do that by staying neutral and we do not have certain (positive or negative) attitude or intentions towards public actors examined in the research. Also, our point of view could be described as *constructive observer*, because firstly, we are trying to observe (not criticize) the current situation in the domain of the researched issue and secondly, we aim to make useful conclusions based on our findings.

In the last decade (at least) the phenomenon of *disinformation* rises to surface of public life, especially with the mainstream term of *fake news*. Of course in the research we examine *information falseness* (as a term that includes disinformation and fake news) and its subcategories in order to make a deeper and more spherical analysis of the subject.

In the first place, at the historiography part of the topic, we meet researchers as Cass Sunstein & Adrian Vermeule [153], Lee McIntyre [91], Chris Bolman [191], Eve MacDonald [292], Julie Posetti & Alice Matthews [333], Joanna M. Burkhardt [19], Steven Poole [331], who contributed in portraying the presence and some motives of disinformation in different historical eras.

Among other prominent researchers we read from are Claire Wardle & Hossein Derakhshan [389], Caroline Jack [275], Alice Marwick & Rebecca Lewis [295],Mihai Pacepa & Ronald J. Rychlak [108], Luciano Floridi [50], Robert McNamara [298], Brian G. Southwell, Emiliy A. Thorson, Laura Sheble [145], Don Fallis [233], Brian Skyrms [142], Srihan Kumar et al. [289], Jon Bateman et al. [184], Samantha Bradshaw [194], Bogoan Kim et al. [71], Jennifer Jerit & Yangzi Zhao [64], Jennifer Hochschild & Katherine Einstein [59], Camille Ryan et al. [132], Tim Hwang [270], Judit Szakacs [368], Rareș Obada [103], who influence the literature review with their work on defining the different forms of information falseness as also the inner motives that lead to this phenomenon.

In the field of modern style, digital space propaganda and its examination, as also its impact to public opinion, several authors contribute to the process such as Yazan Boshmaf et al. [15], Chengcheng Shao et al. [355], Massimo Stella et al. [148], Sandra Gonzalez-Bailon & Manlio De Domenico [254], Clodagh O'Brien [317], Anjana Susarla et al. [154], Jeannette Paschen [110], Xiao Liu et al. [83], Priscilla Borges & Renira Gambarato [14], Shoshana Zuboff [174], Daniel Arnaudo et al. [181], Samuel Woolley & Philip Howard [169], Renée DiResta [38], Alessandro Bessi & Emilio Ferrara [189], Fabian Schafer [138].

Researchers from the Republic of Moldova have also made their own contribution to researching issues related to the phenomenon of disinformation, among them – Georgeta Stepanov [150], Victor Moraru [97], Natalia Beregoi [12], Aurelia Peru-Balan [117], Mariana Tacu [155], Laura Tugarev [160], Boris Ghencea [53], Svetlana Cebotari [24], Vlad Saran [136], Viorica Zaharia [172], Natalia Putina [125], Marian Butuc [171] etc.

In addition, we should highlight the work of researchers who were busy recording the recent political routine and portrayed the existence of election disinformation in some cases in countries such as the USA, France and Nigeria, as well as some of the side effects it causes in the public life of these societies. Among them are Hunt Allcott & Matthew Gentzkow [4], Jayeon Lee & Weiai Xu [80], Stephan Lewandowsky et al. [82], Richard Gunther et al. [259], Robert S. Mueller [468], Richard Rogers and James W. Dearing, [343], Everette Bengani [186], Yochai Benkler et al. [187], Charles Homans [266], Gordon Pennycook & Davide G. Rand [116], Ferrara [236], Jean-Baptiste Vilmer [165], Gérald Bronner [440], Umaru A. Pate

& Adamcolo M. Ibrahim [112], Koblowe Obono & Kariman Diyo [104], Wisdom Madu et al. [84]

The purpose and the objectives of the thesis. The leading purpose of the present PhD work is to explore the theoretical and practical framework of disinformation, understand how it disseminates in practical level inside the public sphere, if it impacts public opinion, what its existence situation is today (mainly in political level – is disinformation existent and impactful to political life?), what are the public policies implemented to combat this problem by some developed countries around the world and based on the conclusions, what suggestions we can make to help the process of overcoming it, protecting individual liberties and maintaining a healthy democratic regime.

In order to reach this goal of the research, the following *objectives* were drafted:

- Historiography review about disinformation on public affairs.
- Analysis of the modern concept of information falseness and its subdivision into branches.
- Overview of different types and transformations of disinformation in today's public sphere, as well as the disinformation tactics aimed to influence behavior.
- In depth and comprehensive analysis of the role of digital technology on the contemporary dissemination of disinformation.
- Ascertainment of existence of disinformation through a looming conspiracy theory in the public agenda and its impact on public opinion.
- Identification of motives behind the diffusion of disinformation.
- Analysis of the problematic and the relevance of disinformation phenomenon in recent political life in multiple countries of the globe, in order to underline its universal characteristic.
- Examination of public policies to counter disinformation in various States of the European Union.
- Form an aggregation and perform also a quantitative approach of those policies, in order to extract some additional conclusions through a statistical format.

The specific hypothesis of the dissertation is that information falseness (including disinformation, misinformation, malinformation as different forms) carries an impact on public life, because it has a potential to affect public opinion (in many cases against the common good). This constitutes the phenomenon a public problem and emerges the need of State intervention as lawful protector of its citizens. The Public Policies recruited against

disinformation act as a systemic tool to counter and limit the problem, thus further studying, development and deployment of such official practices should be prompted.

Methodology of scientific research. In order to materialize our work, we will mainly focus on the use value of information, that is, the fact that various actors within the public sphere try to possibly exploit information and use it with the aim of having an effect on public opinion. We will examine public policies related to combating disinformation. We will mainly focus on events and government actions that have taken place in the last decade, so that they are recent, contemporary and not in the distant past. Our research methodology includes a systematic desk-review of the existing literature on disinformation, fake news, democracy and human rights, relying on types of sources: official documents, communication from stakeholders, scholarly literature and press articles. The bibliography will come from both books, studies, articles and online sources, which are very useful, because we will need government documents with decisions of states that are posted on their official websites. The bibliography will be in English, which will also be the language in which the paper will be written, while there will also be some sources from French, as also from Greek, in the chapter that will analyze the policies of Greece and some sources in the romanian, in the chapter of policies of Republic of Moldova. The work is divided into three parts. In the first part, based on the literature review, we will deal with the analysis of the misinformation phenomenon. We will first see disinformation's timelessness in history and then we will proceed to analyze its concept today. We will distinguish the three forms of misinformation, dis-information, mis-information and mal-information. These three categories include fake news, content bubbles and echo chambers, deepfakes, framing and priming, false connection, et. al. that we will see next in the second chapter. We will also look at the causes/incentives that lead to misinformation and its spread mechanisms. In addition, we will use case studies and we will list some political events that were characterized by a strong presence of fake news, such as the election of President Trump in 2016 or the Nigerian elections in 2019. The third part of the work comes as an answer to the previous parts, in order to bring balance to our study. In the third part of the paper we will investigate the policies at the level of states and at the level of the European Union, which deal with the limitation of disinformation and the fight against the phenomenon. We will not limit ourselves to fake news. We will examine policies that include each type of information falseness (mis-, dis-, mal-information) by doing a case study in each chosen country separately. Among the countries to be examined are the European Union (as a wider administrative formation), USA, Greece and Moldova. Finally, the conclusions that will

arise from our findings and the proposals of the author of the paper will be presented, regarding what more can be done to limit the phenomenon.

Essentially, the methodological support for the research is aligned with the established general scientific principles of understanding socio-political phenomena, applied in an investigation, summarized in the scientific principle, the interdisciplinary principle, the principle of objectivity, the systemic principle, etc., and focuses on the scientific methodology specific to the social sciences. The basic approaches used in the paper are traditional in this type of investigation: historical-institutional, comparative, logical, etc. The descriptive method, content analysis, and the use of sociological elements were also used. Induction and deduction, analysis and synthesis formed the basis for the evaluation of disinformation processes. Basically, the research methodology was mainly limited to all the appropriate methods and techniques used for collecting and processing empirical data and information, namely observation, sorting, correlation, classification, comparison, and analysis of data, so that the theoretical elements addressed could be substantiated. The theoretical and scientific basis for this research was provided by investigations carried out by Western scholars, particularly in the United Kingdom, the United States, France and elsewhere.

We hope that the work will be a tool for the reader to get to know misinformation in depth and how to protect himself as much as possible from it, to guide future studies, as well as a tool to enrich the public debate at the state level, regarding the policies applied in other states of the world. An extended methodology analysis of the paper is held in the first chapter, in dedicated subchapter „The Dissertation's Methodology of Researching Information Falseness and Public Policies to counter it".

The scientific novelty of the work resides in the conceptualization of disinformation as a perceptible problem with the potential to undermine and threaten public security and the smooth functioning of democratic polity. Moreover, it tries to contribute to the limitation process of this problem within the public sphere, under the perspective of the response authorized by the official law. Thus, the paper deals exclusively with State responses against disinformation (including the various forms of information falseness), under the scope that the state is the official and lawful protector of the safety and the rights of its citizens.

The important scientific problem, solved in the thesis, resides in elucidating the phenomenon of disinformation, especially in public affairs sphere, offering the possibility to conceptualize it more distinctly as a public problem and to present an updated picture of the state of fact of its spread and amplification in the context of recent circumstances.

The research aims to demonstrate that disinformation has dangerous and negative effects on public interests. As a part of the process of this research for potential solutions, is the scrutiny of public policies of several States to counter information falseness. Solving the scientific problem was also achieved by revealing the features of the transformations produced in the in-depth approach to disinformation by highlighting the particularities of journalistic and communication activity in the current context of the problems generated by the development of the Internet, by identifying the specificity of new means of communication in the contemporary media field, as well as by: characterizing the way of adapting to the demands imposed by the emergence of new information technologies, generalizing and highlighting some essential aspects of contemporary media communication, especially in European Union and in the Republic of Moldova, highlighting the trends that are manifested in the sphere of communication, analyzing the challenges posed by the Internet for modern communication. The achieved results also consist in the systematization and generalization of existing approaches to tackling the phenomenon of disinformation.

The theoretical significance and practical value of the dissertation yields the conceptualization of disinformation phenomenon, mainly focusing on its impacts to the decision-making process of socio-political life. In addition, results of the study support the concentration of public governance tactics that serve the task of answer against information falseness. We make conclusions regarding the issue of disinformation nowadays, as also proposals about actions that can be taken in order to further limit the phenomenon. So, through our research, we record public policies and we are able to gather and aggregate practices from around the world so that then everyone, either as a citizen or as a state, can be informed, select or even combine policies for optimal dealing with disinformation and false news. With the studying of government innovations and legislation from different regions of the globe, we explore how officials approach the subject, we create a marquetry of initiatives, a pool of ideas that could benefit other States, civil society or public sphere conversation.

Implementation of scientific results was accomplished through examination and communications of them at Conferences of USM and other International Scientific Conferences organized by collaborations of several Universities. Approval also was achieved through publications of scientific articles.

Work structure summary. This PhD thesis consists of the introductory part, the three chapters (with each one including subchapters and conclusions), the closing fourth part with general conclusions and recommendations, bibliography.

The Introduction as we are seeing familiarizes the reader with the relevance and the actuality of the researched issue, clarifies the degree of approach to our subject, presents the purpose and the objectives of the thesis, the specific hypothesis of the dissertation, the methodology of research. Also, this compartment notions the scientific novelty of the research, the theoretical significance and practical value of the thesis and the implementation of results.

The first chapter of the thesis entitled – **Historiography, theoretical categorization and contemporary approach of information falseness** – serves the role of introducing, understanding and analyzing the researched issue, regarding its presence among historical time, its contemporary status in society and approaching it under the distinction of disinformation into different theoretical branches. scope of an active or potential threat to democratic values and public security. For this reason, after the methodology analysis of the paper in the first subchapter, the second subchapter does a recursion to history of misinformation in public life and then follows with the analysis of the phenomenon in modern times and its distinction to categories: misinformation, disinformation, malinformation. Then it proceeds to answer to the question of why disinformation is produced or disseminated, so there is a review of political, financial and social motives behind the existence of information falseness.

The second chapter of the thesis entitled – **Disinformation and opinion influence. An issue for democracy** – examines modern schemes of information falseness and its dissemination, such as digital propaganda, the potential power of disinformation to affect opinion making and its constant presence in political life, especially in pre election periods as a new normality. The first subchapter apposes some distinguished forms of disinformation we meet in everyday life and discusses their power to affect public opinion or citizens' opinion making. These types include fake news, deepfakes, echo chambers. In addition, we examine the practice of *media priming* under conditions of relation to fake news and we make a case study of a possible conspiracy theory and its impacts to public opinion. The second subchapter studies computational propaganda as a contemporary tool for influence and power games, as also the role of ICTs and AI in service of disinformation deliverance. In the third subchapter we examine the existence of the researched problem in recent political life, covering countries from three different world regions: America, Europe, Africa. Thus, we peruse the events around presidential elections of recent past in USA, France, Moldova and Nigeria. The chapter finishes with conclusions.

The third chapter of the thesis brings the title – **Public Policies aimed at combating information falseness**– and focuses on the state responses against the researched

problem from several selected countries and performs a case study in each one of them. The first subchapter analyzes some important policies of the European Union, such as the foundation of East Stratcom Task Force as a strategic communication action, the creation of Code of Practice on Disinformation in the effort for greater transparency, media information literacy, empowerment of users, diversity and sustainability of media ecosystem, evaluation. We also record EU's protective strategy against infodemic during covid-19 crisis, the extension of Rapid Alert System, the European Democracy Action Plan as a framework to support democratic functions and values or the Digital Services Act to set rules in the digital environment. The second subchapter deals with the policies of USA and divides them into three sections: a) the Federal bodies that work against disinformation (CISA, FBI, CBP et al.), b) the law enforcement measures and c) the actions in the field of media literacy. In the third subchapter we meet policies of the Greek state which focuses on the modernization of systems and the digitization of public sector. Also, the legislation against fake news is discussed. The fourth subchapter contains policies of the Republic of Moldova mainly legislative actions aiming to provide stability. The chapter finishes with case study, which also comprise a quantitative analysis approach of the legislation examined.

The last part of the thesis contains the **General Conclusions** of the research, as well as **Recommendations** regarding possible solutions in the process of limiting the disinformation phenomenon.

1. HISTORIOGRAPHY, THEORETICAL CATEGORIZATION AND CONTEMPORARY APPROACH OF INFORMATION FALSENESS

The chapter carries out a historiographical study, defines the theoretical and methodological benchmarks, delimits the varieties of the phenomenon examined in the thesis: disinformation, the exercise being opportune to contribute to the achievement of the determined purpose and objectives. The presentation of the results of the investigation is initiated with the analysis of the works, signed by the contemporary authors. The necessary clarifications are made to establish the definitions of the analyzed concepts – disinformation, misinformation, disformation, the essential characteristics of such disinformation methods as fake news, deepfakes echo chambers, media priming are exposed, the motivation of disinformation is highlighted. A special place belongs to the role of the Internet which amplifies the avalanche of informational falsehood in the public space and the need for a deeper understanding to effectively combat its spread and influence on society is argued. This theoretical and methodological support allows the benchmarks to be established to analyze the forms and degree of magnitude of the examined phenomena.

1.1. The Dissertation's Methodology of Researching Information Falseness and Public Policies to counter it

Clearance and elucidation of research methods used in our dissertation is requisite, in order to be distinct about our way of performing the work and extracting possible outcomes and conclusions. In the methodology of the paper we use multiple scientific principles and methods.

We use a combination of *macrotheory* (a theory to understand social interactions in wide frame) and *microtheory* (a theory to understand social life in the level of individuals or small groups). In the one hand, the impact of disinformation comes of course in individual level through his smart-phone, tv, newspaper etc and may change his behavior, but in the other hand, when many individual's behavior is concentrated in large numbers we talk about change in social behavior (f. e. voting influence). So, indeed there is a mix of those two theories, but we could say that we engage macrotheory a bit more because we focus on the big picture of public life.

A critical aspect of the thesis is *operationalization*. To examine a topic, we should first make its terms operational, meaning to clearly define them so then we can proceed to context analysis. Thus, we are supported by the literature review, which serves the role of defining important examined terms (f. e. misinformation, fake news, computational

propaganda) and approach them more spherically. As we will see later, disinformation and malinformation are two different terms. Both belong under the general concept of information falseness, but they have different meaning. Through literature review, we determine their operational definition, we better understand the concept of information falseness and we can expand to further analysis.

Observation is another principle of importance. Having the clarity of conceptual terms, we can shape useful conclusions through our observations of sources, measurements and data. Again, the examination of sources and surveys presents us a quantity of theoretical or empirical data to observe and build up research inferences. So, we use the *traditional model* with the elements of operationalization and observation.

We apply the *real world theory*. The paper includes sources from the real world of everyday life, from political life of various countries around the world, from events that concerned the public life. It does not deal with hypothetical scenarios from the imaginary. Although purely from lexicological point of view this sounds oxymoron (dealing with information falseness in public agenda, f. e. fake news in real life) because we have two antonym words (fake versus real), this fits our objective, as we analyze the reality/existence of fakeness, or (to better express it) the reality/existence of information falseness.

The paper follows the *research ethics* of *neutrality* and aims to keep distance from biased conclusions. Making a specific research hypothesis does not presuppose a specific research conclusion. Ethically, we try to construct conclusions, based on multiple opinions from multiple sources, we use the collective feature, the collective nature of conducting research for spherical view of the issue (at least as much as we possibly could). We are not bonded to predetermined deductions, theoretical orientations or biases. As mentioned earlier, the author in this work does not take sides in political, social or economical debates and does not adopt ideological colorings. Our point of view could be described as constructive observer, because firstly, we are trying to observe (not criticize) the current situation in the domain of the researched issue and secondly, we aim to make useful conclusions based on our findings. To wit, we aim to keep distance from *subjectivity and ideology*. Objectivity and neutrality is the paper's intended characteristic. We recognize that many public policies have a political dimension. We admit that many apposed sources are subjective, there are opinions and statements of scientists, researchers, state officials, politicians, journalists et. al, but this happens in the process of gathering points of view. Indeed also, in the recommendations part, we may express some proposals considered personal, but again this happens as a final extract of all the examined data and as a constructive objective conclusion (in the meter of possible).

The paper has *public policies in perspective.* It does not wish the politicization of science, but the science in politics and in extent, the science in public policies.

The research covers the methodological purposes of *exploration*, *description* and *explanation*. In chapters one and two we explore the issue of information falseness and familiarize the reader with its history and its components for better understanding. We observe and describe our subject throughout the paper (f. e. the distinctions of disinformation, the modern environments of digital propaganda, the political horizon of disinformation) answering questions of what, where, when or how. Almost constantly we try to fulfill the descriptive purpose of our topic analysis. In addition, we also include some explanatory parts, in which we try to explain the reasons of a certain situation. In these parts we work on answering at question of why. For example in chapter one, we examine the motives that lead to disinformation (political, economic, social), i.e. certain reasons behind the creation of deceptive information.

The *time dimension* should not also be neglected. The exact historical time of observing an event about information falseness is an important aspect. The paper can be archived as a *longitudinal study* as we observe the disinformation phenomenon over an extended period of time (f. e. the 2020 pre-election period in USA until the events of Capitol riots) or over multiple time periods (f. e. the events on French elections 2017-2020, in US 2020 or the events in Moldova). Disinformation may change through time, take different forms (newspaper fake news, digital deepfakes), have different way of spreading (via radio, social media). Also, the public policies change and have different targeting in countering disinformation. For example, in chapter three the European Union policies examined extend for a period longer than the last five years. So, we are trying to make observations in a process over time and notice possible similarities or changes over time. That is, we are talking about a longitudinal study by nature. Data from over an extended period of time are under perspective.

The principle of *conceptualization* is included in the paper to give clearer definitions in imprecise concepts. The term information falseness, or the term information disorder, or disinformation (which may hold many meanings), are relatively vague concepts. In order to approach the topic, we conceptualize it by specifying what we mean in the research by using those terms. We shrink the focus circle of a vague term and appose certain definitions of the subject for the purpose of the work. For example we try to present definitions of what is information falseness, what is its most common comprehension, what are its distinctions (disinformation, misinformation, malinformation), analyze them. Of course, the conceptualization process contains the elements of *research indicators* and *dimensions*. An

indicator is a characteristic variable of our topic. For example, as we will see in chapter one, disinformation is described as false information deliberately created to harm. Misinformation is described as false information, but not created with the intention of causing harm. We can distinguish two variables here, the first is if information is real or fake and the second is if this information is created deliberately in order to harm/deceive or not. So, we understand that our two main research indicators are information *fakeness* and *intention* of deceive. Now, the dimension of engagement of our work is located mainly in social and political sphere. We examine in chapter three the political life concerning disinformation in three different countries and also some notable impacts in public opinion. In addition, in chapter three we examine the public policies of various States against the phenomenon. Our content focuses on the social dimension of information falseness (derivatives and impacts in society) and on political dimension (public policies to counter the problem, authorized by their countries' parliaments and governments).

The *conceptual order* of the thesis consists of two main research schemes with four subcategories. The first step is operationalization, we familiarize with meanings and terms in order to use them as tools for operational purposes (in chapter one and two). The second step is conceptualization, we use operational terms to conceptualize our topic, to explore the problem and the impacts in public life (mostly in 2nd chapter). The third step involves the State reactions against the issue of disinformation, the public policies employed in service of common good (in 3rd chapter). The fourth step holds the final conclusions and recommendations on the subject. We can appose that in the wide frame, the first parts of the paper comprise the conceptualization of the researched issue, the cognitive establishment of the problem. The last parts of the paper stand as a potential solution, as a response to the established public problem. Below follows a graph that pictures what we described and shows the progression of steps on the complete structure of the study.

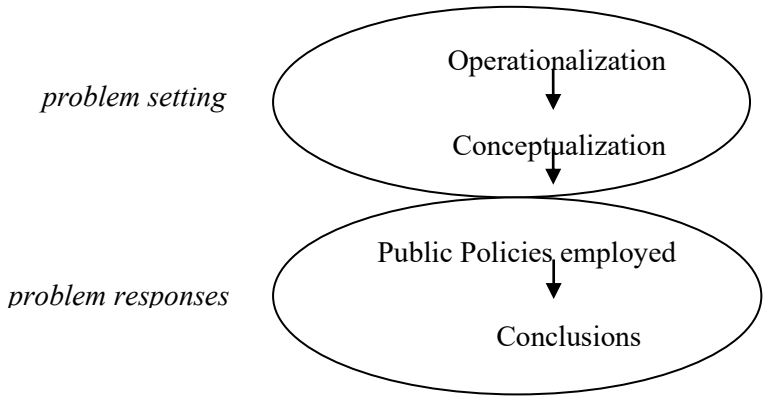

Figure 1.1. The progression of steps on the complete structure of the study

Basic *criterion of measurement research quality* in the thesis is content *reliability*. The 3rd chapter of the thesis, which includes the public policies against disinformation, is the executive part of the work, the part that operates as a response to the research problem. The bibliography of public policies derives from official public state entities (governments, parliaments, ministries, municipalities, public services, statesmen). The source of the paper's research content is objective, because if we repeatedly researched public policies against disinformation, the same data would have been collected (or almost the same, in case we included some extra policy). A public policy in a given point of time remains the same and it can change only if it is reworked and rewritten in the future. So, if we made the same research again we would yield the same results. In addition, the State laws, Acts and Bills are considered the ultimate form of official statement, thus the operational material of our work is considered as reliable as it could be.

Another method used in the work is *secondary analysis* of already collected data from other researchers. The literature review contains several sources from surveys and polls, which we utilize and reanalyze for our research purposes.

The *case study* method is of fundamental importance in our work, in fact, there is practice of multiple case studies. The method is used both in 3rd chapter (subchapter Disinformation in recent political life) and in 4th chapter (Public policies aimed at combating information falseness), so we can say that we utilize it both in the "problem setting" phase and the "problem responses" phase. We examine in depth a given situation of the information falseness phenomenon. The word "case" includes a limitation of attention of a phenomenon, under certain characteristics. Explanatory, the case studies performed in the paper have the level of time limitation (disinformation in recent years) and space limitation (countries examined, areas of legal sovereignty and responsibility).

As a combination method and extension to case study, we utilize the *cross-case analysis*. We analyze information falseness and employed public policies, observing patterns that appear across multiple case studies. Those patterns concern features such as the frequency and magnitude (how often or intense is disinformation spreading nowadays), the structure and process (what type of information falseness we observe, how we deal with), the causes and consequences (what are the motives or the impacts of disinformation).

The paper follows the acquaintance of *unobtrusive research*, as we study public behavior in relation to disinformation, without affecting it or change it. The research is performed through content analysis (printed sources, digital sources, official laws), analysis of existing data and statistics (polls, surveys) and historical research.

A clarification would be precisian to be done in the matter of agenda. The paper considers fitting under examination anything that could concern public life and could have an impact for public opinion, as a form of public issue (related to information falseness). Thus, the field and source of our research problematic is the *public agenda*. Inside this general framework are included the *media agenda* (media thematology) and the *policy agenda* (policies). Under the scope of theoretical categorization, any matter from media agenda to policy agenda, belongs also to public agenda. That is why we are accounting public agenda as a more general framework of source and examination. Of course, under a different perspective, we recognize the agenda influence, the influence between agendas and the potential impact that they can have with one another. There can exist cases when media agenda influences public and policy agenda or vice versa. Here follows a graphical representation of the above.

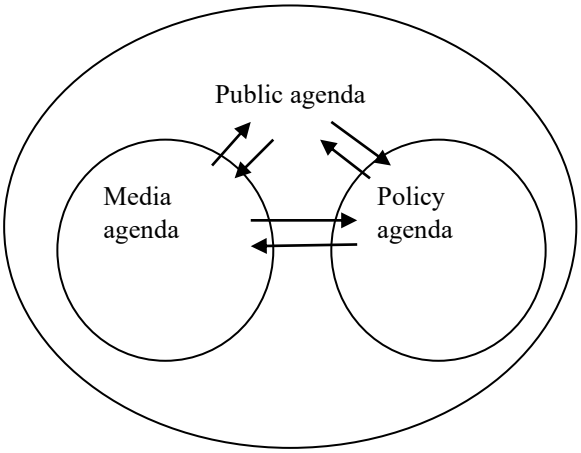

Figure 1.2. Interaction between public, media and policy agenda

Comparative analysis is another research method applied in the second and third compartments of this PhD thesis. This specific kind of analysis is more often than not, appreciated and used because of the options it offers in the case of discovering truths and gaining new knowledge. The procedure in question is specific to social sciences, where we have several examples of comparative studies. For the researcher, at the first stage of applying this method, it is important to select the cases, which are to be compared. The number of entities subject to analysis differs from one research to another: some limit it to two-three, others - to several. In all cases the final goal is the same: to serve the realization of concrete objectives of conducting the investigation.

The principle of *quantitative analysis* will be also utilized in the paper. Acquired qualitative data from our research will be accumulated and converted into a numerical format.

Through this process we will draw useful conclusions by making a numerical representation and examining the results of statistical analysis, i.e. the truth of numbers. Specifically, at the end of the third part of the study (public policies to counter disinformation) we will use the content findings out of the enactments examined and perform a statistical approach. *Univariate analysis* will be implemented, meaning that we will examine a single variable at a time, in each percentage table we will construct. Through the results of the percentage pie we will be able to extract the *average* (central tendency), make observations and describe the current situation regarding our topic. For example, there will be a table questioning if the enactments examined concerning information falseness, included a word reference to "freedom of expression". The answers will be „yes" or „no" for each enactment. This is a single variable and the results of the percentage would be a clue for us to approach and to mark if the legislation gives emphasis in respecting the fundamental human right to freedom of expression.

The parameters of the investigation were related to methodological guidelines, drawn from a number of research studies in the field. The study was based on the postulates and reasoned findings contained in the works of such well-known authors as Manuel Castells, Edward Bernays, Shanto Iyengar, Lucian Floridi, John B. Thompson, Ken Herold, Miroslav Tudjman, Carlos Diaz Ruiz, Cailin O'Connor and others. The research used the scientific methodology specific to the social sciences.

Analysis and synthesis were the two research methods categorized under general methods. Understood as opposing mental operations of decomposing the whole into its component parts and vice versa, of studying the structure of objects or processes, phenomena, analysis and synthesis were applied in the given thesis to present the situation and the latest research in the field. In another vein, the theoretical approach to the notion of misinformation was accompanied by the method of analysis to investigate the complex processes and the changes caused by the presentation of elements necessary to understand them in essence.

From this situation stems the innovative character of research in the field of communication sciences. We believe that our research, which started from the need to verify the formulated working hypotheses, as well as to achieve the concrete goals and objectives, oriented towards systematization of the studies undertaken in the field, the identification of certain trends, the analysis of particular media forms and the identification of the main features of the development of modern communication, including its reprehensible forms, is also part of the same investigative approach. In this connection, we note the importance of such basic

research methods as historical analysis, comparative analysis and the use of case study elements.

1.2 The timelessness, the modern scheme of the phenomenon and the contemporary motives that lead to disinformation. Concept and analysis

Fake news, various forms of propaganda and misinformation in general, can be found almost throughout human history, from antiquity to the present day. Rumors, conspiracy theories, and fabricated information are not new, as say Sunstein & Vermeule [153]. Politicians have made unrealistic promises during their election campaign. Many companies often prevented people from thinking a certain way and the media fabricated misleading stories for their shock value. Fake news is but one symptom of that shift back to historical norms, and recent hyperventilating mimics reactions from eras past, according to Uberti [386]. The use of propaganda is ancient, just then there was no technology to spread it, with the breadth and speed of today, as said Nougayrede [315]. McIntyre [91] phenomena of fake news are also found in other periods, that is, there are many historical precedents.

Thucydides [380] writes that people's determination is proportional to what they hear. The ancient Athenian state in order to persuade on an issue, shape behaviors or change attitudes and opinions successfully developed the art of false news and propaganda. Deliberately transmitted true or false messages aimed to influence the thinking and feelings of the crowd or opponent. A typical example is the fake news/disinformation used by Themistocles to bolster the Persian forces not only with hope for victory, but with supreme arrogance. At the naval battle of Salamis, the Athenians misled Xerxes and forced him to change his plans and fight in a field unsuitable for him. Themistocles sent letters, which were supposedly written by his spies and contained information about the movements of the Greek forces. This disinformation convinced Xerxes to change his strategy and attack Greek ships at a geographical point that did not favor him. The Persians were defeated and one of the reasons was that the Athenian general fabricated false news, which he made appear true and thus deceived the opponent and changed the outcome of the war according to Bolman [191] and Herodotus [262].

Another typical example, from an era full of conspiracies, misinformation and propaganda, is found during the period of the Roman Empire. In claiming to rule the empire, Octavian carried out a propaganda campaign against Mark Antony, portraying him as a drunkard, unstable character and a puppet of Queen Cleopatra. He also leaked a document to the Senate (historians are divided on its authenticity) according to which Antony bequeathed

lands of the Roman empire to his descendants with Cleopatra. Truth or not, this eventually proved to be a propaganda victory for Octavian, as he persuaded the Senate to remove Antony's imperium from the Roman legions and issue a proclamation informing public opinion of the document's contents. The people sided with Octavian, Antony was considered a traitor and Rome declared war on him. When the two sides met at the naval battle of Actium, Octavian's victory made him the first emperor of Rome, taking the name Augustus, as writes MacDonald [292].

False news as a tool for psychological warfare was also used by Julius Caesar himself during his administration. Specifically, he made sure to spread that the German tribes regarded as an element of bravery to expel neighboring peoples from their homes so that no one would settle near their territory. The Scottish tribes were portrayed as primitive, where people dwelt on wild and muddy plains, naked and barefoot, and traded women among themselves. These rumors functioned as intimidation tactics for the Roman people, educating them in anti-immigration views and cultural segregation. Thus, the narrative of military interventions against barbarian peoples was legitimized in public opinion, according to Bolman [191].

In 1440, with the invention of printing by Gutenberg, a new era for misinformation began, as there were now the means for the faster and wider transmission of information, as say Posetti & Matthews [333]. The Italian writer Pietro Aretino published in 1552 his correspondence with various aristocrats of Italy. He used their letters to blackmail powerful men of the day and if they did not meet his financial demands, then they were published. He adopted the Roman style of "pasquinos" (anonymous letters), to which he gave a satirical character. Although the letters were satirical, they planted doubt in the minds of readers about Italy's ruling class and helped to outline the political reality of the time. Similar to pasquinos were “canards”, which meant unfounded rumors and stories and were widely used in the 17th century by the French. A canard stated that a dragon-like monster had been captured in Chile and was to be taken to France. During the French revolution, Marie Antoinette's face was depicted on the dragon's head. This image was used to damage the queen's popularity and contributed to her harsh treatment by the people of Paris, as describes Burkhardt [19]. In 1646 we find the first handbook on the reliability of information. The author was the philosopher Thomas Browne, the book was titled "Pseudodoxia Epidemica" which in modern translation means "An epidemic of fake news" and talked about vulgar errors and superstitions of the time, as mentioned by Poole [331].

Later, since the era of the printed press and the development of mass media, the examples of disinformation and the circulation of fake news are increasing. In 1835, The New York Sun (newspaper) published a series of six articles, which talked about the discovery of an alien civilization on the moon, citing the alleged findings of astrophysicists [175]. The series went down in history as "The great moon hoax" and in the long term damaged the newspaper's credibility, but in the short term boosted its profits from increased sales [191; 362]. In the early 20th century, New York newspaper publishers competed for circulation and public acceptance, thus leading to the publication of unsubstantiated news stories with questionable sources, often aimed at damaging the rival paper. Thus, as described by Campbell [20], we had the appearance of yellow journalism. As we approach the present day, examples of misinformation in public life and the press become more numerous. As we observe, history is full of cases of propaganda and fake news, which proves that this is a timeless phenomenon. To deal with it we will have to fully understand it and adapt to modern requirements.

Misinformation today. In the 20th century the term disinformation comes from the translation of Russian Dezinformatsiya [108; 212; 220]. The Soviet secret services initially used the word Maskirovka, which had the meaning of Military Deception, as referred by Rothstein & Whaley [130]. Pacepa was a former Romanian intelligence officer, and in his book he explains that the word dezinformatsiya was invented by Stalin, who chose a French-Sounding Title, to make world public opinion believe that it comes from the Western world [108]. He says Disinformation was used as Warfare Tactic by the Stalinist government during World War II and later by the Soviet Union during the Cold War. The GPU, a precursor to the KGB, was the first organization to use the term misinformation for Intelligence Tactics [85]. A crucial part of these tactics is the decision influence, as Vladimir Putin said in Larry King, „they have the purpose of gathering information, synthesizing it and presenting it for the consumption of decision makers" [320]. Carey [21] reports that we are not just talking about communication and information, but „a portrayal of the contending forces in the world". We thus realize that the media can be manipulated or, in general, used by various powerful interests because they are the means of accessing power to public opinion and popular sentiment. But there is a significant feature of the media today that is about the transmission of the news. In the last fifty years, with the appearance and dissemination of television and especially after 2000 with the expansion of World Wide Web, people have much easier access to information. An informative environment supported by ICT's (Information and Communication Technology) has been formed, which offers rapid transmission of information and news. The user with new technologies can produce their own quality content in a cheap way and publish it, while

information can be transmitted in real time through social media. Filloux [235] reports that "what we see unfolding right before our eyes is nothing less than Moore's Law applied to the distribution of mis-information: an exponential growth of available technology coupled with a rapid collapse of costs". So, just like information, misinformation can penetrate the social masses at great speed and in a wide range. Taking advantage of the opportunity the internet presents for collaboration, communication, and peer production, these groups target vulnerabilities in the news media ecosystem to increase the visibility and audience for their messages, according to Marwick & Lewis [295]. Kumar et al. [289] say that apart from its positive side, the internet has become a breeding ground for false information. The immediacy of information transmission and the interactivity provided by the internet and ICTs, make us today approach disinformation and fake news in a slightly different way. Wardle & Derakhshan [389] and UNESCO [65] distinguish three dimensions of Harm and Falseness, describe the phenomenon of misinformation as Informational Disorder and divide the misinformation in total, into three categories:

- Mal-information: Genuine/true/reality-based information is shared to cause harm, often by moving information designed to stay private into the public sphere.
- Mis-information: Information that is false, but not created with the intention of causing harm.
- Dis-information: Information that is false and deliberately created to harm a person, social group, organization or country.

Levent [81] tried to describe it with the term Information Pollution, but referring only to the storm of useless information that the media offers to the individual daily. That is, he focused on the usability of information. As we have seen above, however, there is a wider distinction and misinformation is divided into three categories, depending on whether the news is true and what are the intentions of the news transmitter. Jack [275] reports:

„Recent controversies over „fake news," and concerns over entering a „post-fact" era, reflect a burgeoning crisis: problematically inaccurate information, it seems, is circulating in ways that disrupt politics, business, and culture. Journalists, commentators, policymakers, and scholars have a variety of words at their disposal — propaganda, disinformation, misinformation, and so on — to describe the accuracy and relevance of media content. These terms can carry a lot of baggage. They have each accrued different cultural associations and historical meanings, and they can take on different shades of meaning in different contexts. These differences may seem small, but they matter. The words we choose to describe media manipulation can lead to assumptions about how information spreads, who spreads it, and who

receives it. These assumptions can shape what kinds of interventions or solutions seem desirable, appropriate, or even possible."

In this way, we describe characteristically the variety of misinformation definitions and how much value it has to understand it, in order to face it and deal with it.

Malinformation. We are talking about malinformation when genuine/true/reality-based information is shared to cause harm to a person, organization, social group or country, often by moving information designed to stay private into the public sphere [393; 65]. A document that should stay away from public dialogue, for example, is a secret report by the anti -terrorist service. The content of this report should be kept secret, so that the Anti –terrorist Service will operate more effectively. It is important to emphasize the existence of intent. Malinformation is a kind of information that causes or has the intention of causing damage and hurting the public interest. It can also turn against persons, without public interest, that is, talking about personal harm. As we can see, Malinformation is based on real facts, as opposed to the Misinformation that contains untrue information. Also, malinformation is malicious information, as there is an intention of damage, while the Misinformation does not have that intention. Malinformation is a little different from disinformation, as we are dealing with the authenticity of the news. Malinformation as we said, contains true information/news, while Disinformation is false. Nevertheless, both have the intention of causing damage. Therefore, malinformation and disinformation have a form of affinity, as we are talking about malicious content. To better understand Malinformation, let's look at a more detailed example. In March 2017, Wikileaks released secret CIA documents. This series of documents was named "Vault 7" and described the CIA's operational capabilities for electronic espionage and electronic warfare, and also reported how they monitored the 2012 French Presidential Election [353; 400; 334; 204]. Among other things, they revealed the ability to hack web browsers (Google Chrome, Mozilla, Microsoft Edge), smartphones (iOS, Android), cars and smart tv's [258; 308].

All of these documents or at least a big part of them are considered authentic, as CIA officials themselves and the US government acknowledged it in their statements [385; 352; 400]. In addition, Donald Trump himself said that "The CIA was hacked, and a lot of things taken" [203] and the director of the service described Wikileaks as a threat to national security. People who released Vault 7 maybe had some financial/personal/professional/political/social incentive to do it and probably wanted to cause damage/problem to either, the US government, the state mechanism or some persons, publicizing confidential documents referring to real facts. That is, we have a classic case of Malinformation.

Misinformation. Southwell, Thorson, Sheble [145] describe Misinformation as contentious information reflecting disagreement among people, but also as false information that can mislead people even if unintentionally promoted or mistakenly endorsed as being true. Floridi [50] in a more general definition, reports that misinformation is well-formed and meaningful data (semantic content) that is false. Misinformation does not arise through the intention to deceive the users. Misinformation is subsequently adding inadequate information to knowledge communication, which, in turn leads to wrong idea and knowledge construction among people, according to Cartelli [199]. Karlova & Fisher [68] characterize it as "inaccurate information", but they do not mention the issue of intent, so the definition is incomplete. Misinformation is conveyed in the honest but mistaken belief that the relayed incorrect facts are true [289]. Someone can spread misinformation innocently by saying or writing things that are untrue while believing them to be true [298]. Inaccurate and misleading information is misinformation when the source has made an honest mistake, according to Fallis [233]. For Jack [275], Misinformation is information whose inaccuracy is unintentional and can spread when journalists misinterpret or fail to independently verify a source's claims. According to the most complete definition, Misinformation is false information, but not created with the intention of causing harm to a person, social group, organization or country [393; 65] as also for the European Council [498]. As we observe, Misinformation is not malicious information. The news transmitter does not know that this is wrong or false and thus he distributes it to the receivers, believing that he is rightly informing them. Also, it is particularly worrying that in the first phase, the person tends to believe any information/news he encounters and this contributes to his rapid dissemination. We mean the rapid dissemination of false news. According to Southwell, Thorson, Sheble [145]:

i. People who encounter misinformation tend to believe it, at least initially.

ii. Many media systems often do not block or censor many types of misinformation before it appears in content available to large audiences.

iii. Countering misinformation once it has enjoyed wide exposure can be a resource-intensive effort.

A classic example of misinformation was a satellite photo, with forest fires in Australia. On January 5, 2020 a photo was uploaded to social media depicting a huge part of Australia burning [339]. The photo went immediately viral and was republished by thousands of users of social networks [243] (including celebrities with millions of followers), who of course did not want to damage someone, but to inform people and raise awareness of the tragic event. The next day, however, the truth began to become known. As it turned out, it was a composition

image of satellite data purporting to show fire-affected areas for the past four weeks, with the 3D render of the image giving an exaggerated effect (and also includes routine dry season burn offs in the north). However, many have shared it believing it shows the scale of fires from space [379; 399]. Thus, false part of news spread on a global scale, but without bad intention.

Disinformation. Disinformation is simply misinformation purposefully conveyed to mislead the receiver into believing that it is information [50]. Also Fallis [233] reports that disinformation is misleading information that is intended to be (or at least foreseen to be) misleading. In extent, he says that the standard dictionary definition of disinformation is "deliberately misleading information announced publicly or leaked by a government or especially by an intelligence agency". He thus pays particular attention to the misinformation that hides political motives, as it comes mainly from state agencies (government, secret services). Skyrms [142] uses the term "deceptive signal" and reports that "if it benefits the sender at the expense of the receiver, we will not shrink from following the biological literature in calling it deception". The term deception contains the intention of an action at the expense of another, so we have an intentional deception, which means disinformation. Tudjman & Mikelic [384] write that disinformations intentionally want to misdirect, deceive or delude and add that it is not clear who the actual author is, there is no actual reference to the information source. The term is generally used to describe an organized campaign to deceptively distribute untrue material intended to influence public opinion, according to McNamara [298]. Fetzer [45] defines disinformation as distribution, assertion, or dissemination of false, mistaken, or misleading information in an intentional, deliberate, or purposeful effort to mislead, deceive, or confuse. It might therefore be described as „misinformation with an attitude". Disinformation denotes false facts that are conceived in order to deliberately deceive or betray an audience [289]. By analyzing disinformation themselves, they also report the term „bullshit", where the agent's primary purpose is not to mislead an audience into believing false facts, but rather to convey a certain impression of himself. Cebotari [24] writes that "disinformation is provided to intentionally mislead a selected audience and to cause them to follow the sender's expected assumptions". Karlova & Fisher [68] report that disinformation could possibly be more informative than misinformation, perhaps because any reveal or implication may be deliberate and they give the following example:

„Consider an instance in which a speaker provides partially distorted information to the receiver (e.g., "The new phone comes out next year," when, in fact, the new phone comes out this year). In this case, the receiver is partially informed about the fact that a new phone is

coming out. Disinformation may reveal the malicious intent of the speaker. If the receiver happens to know that the new phone comes out this year, she might suspect that the speaker is intending to deceive her. Here, the receiver is informed about the potential intent of the speaker, which is external to the message actually being delivered".

With this example they want to show that there are cases where misinformation or what we call false news can contain some true/genuine information on trying to deceive the receiver (of course this rarely happens). According to the most complete definition, disinformation is false information and deliberately created to harm a person, social group, organization or country [393; 65; 498; 298; 108]. As we can see, Disinformation and Malinformation have an affinity, in terms that in both cases there is the intention of the transmitter to damage or deceive someone. On the other hand, if we look at it from the perspective of information quality, disinformation and misinformation are similar, because they both contain false or incorrect information. Regardless of all, we can say that Disinformation is the worst and most toxic category of information, as it includes all the negatives of the other two categories. On the one hand, the transmitter shares false or incorrect news, on the other hand he does it deliberately and with malicious motives, in order to deceive the public for his own benefit.

An example of Disinformation is Saddam Hussein's attempt during the Gulf War to use television as a means to show that foreigners held in Iraq were treated with courtesy and hospitality. Thompson [158] writes that in August 1990, Saddam Hussein directed a press conference with a group of British hostages with their children. Dressed in political clothing, he caressed the children and asked them if they were given enough food, if they had toys and praised the role of the children in defending peace. While apparently he intended to reassure the Western viewers and push Western governments to abstain from military actions, the press conference was treated by many in the Western world as a shameful use of hostages, held despite their will. Probably Hussein was using the media to make black propaganda in his favor, many described him as "predator of press freedom" and report that the Iraqi regime used every means to control the press and silence dissenting voices [369]. Uday Hussein, Saddam's oldest son, controlled about a dozen newspapers in the country as well as Iraq's most influential television and radio stations. It is characteristic that after the fall of Saddam, instead of a few, tightly-controlled media outlets, Iraqis had a choice of hundreds of printed publications and dozens of radio stations and television channels, broadcasting from both inside and outside the country [300]. We thus observe the manipulation of some media by public actors and their use to produce stretched and false news, deliberately. The purpose in

the case that we just saw is the personal interest and the harm/deception of another (the public opinion of foreign states). In this situation, we have a classic case of disinformation.

The motives that lead to disinformation. As we see through a variety of examples we examine in the paper, the motivations of actors who produce or spread disinformation are varied. Speaking of false news and malicious news in this part of the work, we include all three types of information disorder, namely misinformation, disinformation, malinformation. We comprise all the types because the adversary's infringement in the communication part can be done either with real but malicious news (malinformation), or with fake news that aims to deceive (disinformation), or with false news that did not aim to harm anyone (misinformation). Therefore now we are not examining the type of information disorder. We examine the incentive behind a public actor to create information manipulation. We examine his motivation to influence the recipient of the information, whether we are talking about national or international level.

Political. A very important motivation for someone to produce disinformation is political. Disinformation has a strong basis in politics, as it can give a communicative advantage to the one who exploits it. Interesting is a study by Bateman et al. [184] in 2021 for the Carnegie Endowment for International Peace, regarding the success of influence operations to affect the beliefs or behavior of targeted populations. In the study it is stated that long-term influence operations (via television, newspapers etc) can be successful at causing voters to support a particular political party or can lead to increased political violence in settings of conflict or civil unrest. They also report that short-term influence operations (via social media) caused shifts in political beliefs and behavior, increased xenophobic sentiments, and increased skepticism around vaccines and medical information. Bradshaw [194] writes that state and non-state actors use social media to spread disinformation and propaganda, as a tool of geopolitical influence. She also adds that what has changed from the Cold War-era information warfare to contemporary influence operations is the information and media landscape through which disinformation can be circulated. That is, we observe that the incentives for disinformation and political influence have not changed, only the tools may have changed. By the tools we mean the mediums. Malzac [294] says that influence operations specifically target the human mind and seek to promote changes in the target audience's behavior to support political goals. Some excerpts from the words of the Senator of Virginia Mark Warner [503] at the Committee on Intelligence of the Senate on the subject of Russian influence campaigns help us to understand the important role of disinformation in politics, through the attempt to deconstruct the opponent:

“Today's public hearing will help, I hope, the American public writ large understand how the Kremlin made effective use of its hacking skills to steal and weaponize information and engage in a coordinated effort to damage a particular candidate and to undermine public confidence in our democratic process…; Some of our close allies in Europe are experiencing exactly the same kind of interference in their political process. Germany has said that its parliament has been hacked. French presidential candidates right now have been the subject of Russian propaganda and disinformation. In the Netherlands, their recent election, the Dutch hand-counted their ballots because they feared Russian interference in their electoral process.”

At this point, let's make a parenthesis. We want to underline that we quote statements, information, news, from politicians, scientists, writers, etc. This does not mean that we endorse these statements, we neither take the side of anyone, nor the United States, nor Russia, nor any other country or political party or company or individual. We are simply doing research for academic purposes, sometimes coming to some possible conclusions. This applies to all the paper.

Returning to our topic, in a statement of The White House [452] in 2021 on the interim national security strategic guidance it is said that: “Anti-democratic forces use misinformation, disinformation, and weaponized corruption to exploit perceived weaknesses and sow division within and among free nations, erode existing international rules, and promote alternative models of authoritarian governance. Reversing these trends is essential to our national security.”

Kim et al. [71] say that in some cases disinformation is used for political purposes in favor of political parties, or against parties and have negative impact on people and society. Del Vicario et al. [36] say that social media, misinformation and the echo chambers phenomenon had effects on voting communities for the Brexit referendum. Respectively, Howard & Kollanyi [269] say that political automation plays important role on political communication today and that bots have become a means of managing citizens. Jerit & Zhao [64] write that even more worrisome is the prospect that misinformed people take political action on the basis of incorrect information. They become “active misinformed” as said by Hochschild & Einstein [59]. Even if the person is politically active, when misinformed, they take actions without the hallmark of clear judgment. In other words, the disinformation transmitter creates the conditions to direct the misinformed people towards his own views and thus lure him towards his own ideological field. Butcher [197] adds that “when it requires too much effort or expertise to tell the difference between fact and fiction, a common response is

to turn away from politics altogether. Such disillusioned citizens may even come to lose faith in democracy itself".

Financial. Another important motivation for spreading fake news or other forms of disinformation is financial gain. Simon [359] said that information consumes the attention of its recipients. From this phrase, we understand that attracting attention is very important in a super market of information. The person will likely spend more time on a news story that piques their interest. Especially today, in the age of the internet anyone can do post online and make a profit from it. Misinformation and fake news could not be an exception and they are also part of the attention economy. Ryan et al. [132] writes that disinformation attracts the masses, it can be weaponized to undermine or target products, people, ideas and ultimately, used for monetary gain. Hwang [270] writing for the Atlantic Council of Eurasia Center, says that monetization of the Internet through advertising has also produced a financial motive for creating disinformation, which is shared through the Internet and drives traffic to a website. As Miller [303] reports, there are websites almost dedicated to posting fake news, in order to gain economical profit. He presents an interview about fake news industry in Kosovo saying that site administrators profit significant amount of money from it, characterizing them as "clickbait merchants". Szakacs [368] conducted a research for the Center for Media, Data and Society, presenting the operation of disinformation websites in six countries of Central and Eastern Europe: Bosnia & Herzegovina, Hungary, Moldova, Romania, Serbia and Slovakia. The research reflects financial gains for the owners, in various ways, such as through advertising, e-commerce, crowdfunding, tax designations and in some cases even state budget (public money). An interesting example is that one of these sites had more than €150,000 annual ad revenue, while some other sites had connections even with politicians. But beyond the isolated profits of individuals, fake news seems to have an effect on a larger economic scale, that of the Stock Exchange. Clarke et al. [31] examine the effect of fake news on investor attention and reports that they have possible impact on some stock prices. Relatively, Kogan et al. [285] examine stock market manipulation in correlation with fraudulent news in financial markets. In their research, report some false articles increased abnormal retail trading volume and that a fraudulent media campaign was effective at price manipulation. According to Obada [103], in terms of marketing communication, fake news can lead to brand crisis. Fake news probably also plays its role in competition between companies. Atkinson [182], reporting for NBC, writes that fake news that can hurt a company, by pushing the stock price down and setting off a public relations nightmare. In the article, it refers to a possible fake news distribution involving a well-known car manufacturing company. It is assumed that this was

done by "foreign actors", who wanted to damage the reputation of the company and drop its stock. That is, perhaps we have a dirty competition between industries. Essentially, deception, as the main feature of disinformation, thrives in various ways in the economic field as well. Bakir & McStay [9] write that the fake news problem echoes the economics of emotion, meaning that emotions are leveraged to generate attention and viewing time, which converts to advertising revenue. Now, we could say that we are talking about fake news industry, since it seems to be a lucrative field of action. As reported by Global Disinformation Index [376], disinformation domains have more than 250 million US dollars estimated advertising revenues each year.

Social. Sometimes the spread of disinformation may be due to social motives. Marwick & Lewis [295] argue that some individuals or communities are gaining status and acceptance in other social communities by invoking likes, shares, comments in online platforms. Having a lot of friends or followers on social media creates the conditions for social interaction, their opinions reach the ears of more people, and perhaps there is a feeling that their word acquires weighty importance. But this is sometimes done through the sharing of disinformation or misinformation. Courchesne et al. [210] conducted a research on influence operations through mass media and their behavioral impacts to citizens. Among others, some of the effects were: propensity towards violence, increased xenophobia and social discrimination, skepticism and uncertainty around vaccines and medical information. In other words, misinformation can be one of the causes of social unrest. Jackson [276] writes about news consumers who have "motivated reasoning" in sociopolitical level, meaning the selected interpretation of information to justify one's preexisting beliefs, stances, or desires. That is, some people do not use critical thinking, fact-checking, confirming information and surrender to the illusion of echo chambers, so that they are surrounded by views that support their own ideology. This pattern possibly leads to an ideological polarization and to the adoption of extremist behaviors, due to the absence of democratic dialogue and logical argument exchange. A typical example was the riots [288] inflamed in India, which started from fake news shared through messaging apps. The disinformation shared invoked discriminatory sentiments and social violence against "outsiders" [347]. Chadwick & Vaccari [201] see fake news as a threat to civic culture, as they can cause misunderstanding, ignorance, conflict and division. They also add that due to those negative impacts of disinformation, other positive social characteristics could be undermined, like tolerance and trust. Apuke & Omar [7], in their research, say that fake news sharing can be motivated by altruism, socialization, information seeking and pass time. On the same wavelength, Chen & Sin [28] write that some of the main motives of individuals sharing

misinformation are socializing, self expression and status seeking. Kahan [281] talks about cognitive factors that are connected to disinformation sharing and in particular, about "identity protective cognition". In his article, identity protective cognition stands for beliefs similar to someone's political identity, even if there are false or inaccurate. This is similar to the "motivated reasoning" we saw earlier. Thus, some people judge the news based on emotion and ideological prejudice, instead of looking at the real facts. Therefore, we end up with opinion polarization and dogmatism. Basically, we could say that disinformation at a social level can function as a form of socialization, but nevertheless it is also an open wound, because it can cause civil disorder and social pathogens.

1.3. Fake news, deepfakes, echo chambers and media priming as forms or multipliers of information falseness with potential affect to opinion making.

Fake news. The broad concept of falsehood has given fake news a blurry image of their definition to the general public. The term has become mainstream and often receives a variety of definitions, making it more difficult to imprint. According to the Cambridge dictionary [232], fake news are false stories that appear to be news, spread on the internet or using other media, usually created to influence political views or as a joke. At the same time, it is mentioned that fake news can play a role and influence an election result. Holan [263] reports that fake news is made-up stuff, masterfully manipulated to look like credible journalistic reports that are easily spread online to large audiences willing to believe the fictions and spread the word. Rochlin [128] defines fake news as false headlines and narratives that are written and published on an online website, designed to appear newsworthy and with the goal of spreading that fake news further on Social Media. In short, it defines fake news as impressive headlines that appear to be true and shared without further research. Egelhofer & Lecheler [41] say that fake news is a two-dimensional phenomenon: there is the fake news genre, relating to the intentional creation of pseudojournalistic disinformation, and there is the fake news label, describing the political instrumentalization of the term by political actors to delegitimize journalism and news media. That is to say, on the one hand, can be distinguished the intention on the part of political actors, to achieve their own goals and on the other hand the reduced credibility that some media have in the public due to the reproduction of misinformation. Allcott & Gentzkow [4] report that false news stories are not factual and have no basis in reality, and thus, are unable to be verified. Fake news and yellow journalism have some similarities, they use news report formats to spread information and gain public trust.

However, while yellow journalism has a formal organization and characteristics of a press, such as news reporters and editors, fake news is spread based on the information fabricated by an individual or organization unrelated to the press, whereby the format of news report is disguised with the characteristics of conventional press, according to Jang, Park & Seo [277]. A corresponding approach to fake news is also done by Molina et al. [95] when he says that what makes fabricated news unique is the information environment we currently live in, where social media are key to dissemination of information and we no longer receive information solely from traditional gatekeepers. In other words, social media give a privileged space for the development of disinformation, which in the digital age is usually called fake news. Accordingly, Edson et al. [40] observe how fake news appropriates the look and feel of real news from how websites look, to how articles are written, to how photos include attributions. Fake news hide under a veneer of legitimacy as it takes on some form of credibility by trying to appear like real news. On the same wavelength, Java et al. [278] report that people tend to accept only what they want to believe, and if they repeatedly exposed to the wrong information, they are very likely to accept it. This is a clear recognition of news place in society, but by misappropriating news' credibility, fake news might also undermine journalism's legitimacy, for Kang et al. [67]. Jaster & Lanius [63] write that fake news is characterized by two shortcomings: it lacks truth and truthfulness. More specifically, fake news is either false or misleading (lack of truth) and it is propagated with either the intention to deceive or an utter disregard for the truth (lack of truthfulness). That is, we see that fake news can belong either to the category of *mis*-information (false/no intention) or to the category of *dis*-information (false/with intention). A little different definition is reported by Desai, Mooney & Oehrli [216] saying that we are defining "fake news" as those news stories that are false: the story itself is fabricated, with no verifiable facts, sources or quotes and sometimes these stories may be propaganda that is intentionally designed to mislead the reader, or may be designed as "clickbait" written for economic incentives. So we notice that beyond the usual definitions, fake news has another dangerous dimension. Besides not corresponding to reality, they also create an environment of questioning the real news. The prestige of journalism is affected. People start questioning sometimes even the news that corresponds to reality and thus a toxic environment is created. Fernandez [44] writes something similar saying that the term "fake news" encompasses many meanings for its user, it also can contain many tensions within a society. It can be used to talk about anxiety over the ever more obvious role of technology in mediating our news consumption. It also serves to give name to a general mistrust in elite information sources, which have proven themselves fallible and disconnected from the lived

experiences of many. Popescu & Repez [119] distinguish types of security in economic security, food, health, environment, personal, community and political security. They conclude so, that using fake news and disinformation in social media on an extremely often base represents threats to social stability, to economic development and democracy.

Deepfakes. Next to false information and news, in modern times we also have fake videos. As in the 90's or 00's we had photoshop and fake photos could be created, today with the development of technology and systems that use artificial intelligence we meet fake videos or deepfakes. Kietzmann et al. [70] report that deepfakes leverage powerful techniques from machine learning (ML) and artificial intelligence (AI) to manipulate or generate visual and audio content with a high potential to deceive, while the phenomenon gained its name from an anonymous user of the platform Reddit, who went by the name 'deepfakes' (deep learning + fakes). Westerlund [168] says that deepfakes are synthetic media generated using sophisticated algorithms which reflect things that did not happen for real, but computer-generated for manipulation purposes. Popescu & Repez [119] say that deepfake is the concept that relates to any fake, audio or video, created through the use of neural network techniques inside machine learning as well as through generative adversarial networks. Tacu [370] describes that "this transition from fake news to reality vertigo (RV) is characterized by another level of falsification of news content in video and audio form, the deepfake" and also mentions that fake news have been reinforced by artificial intelligence and can work as a tool of influence towards an individual or the masses. Chesney & Citron [29] say that Deepfakes matters by raising the stakes for the fake news phenomenon in dramatic fashion (quite literally), many actors will have sufficient interest to exploit the capacity of deep fakes to skew information and thus manipulate beliefs.

This is a worrying application of new technologies to the public sphere, as it could affect public opinion. Westerlund [168] reports that deepfakes are a major threat to our society, political system, and business because they 1) put pressure on journalists struggling to filter real from fake news, 2) threaten national security by disseminating propaganda and interfering in elections, 3) hamper citizen trust toward information by authorities, and, 4) raise cybersecurity issues for people and organizations. Veerasamy & Pieterse [164] report that the creators/source of Deepfakes mainly seek to achieve misconstruction of truth, spread of fake news, mislead, creation of shock, discredit high profile individuals, entertainment, fraud, manipulation of events like elections, intimidation/blackmail or damage to stability. Passos & Jodas et al. [322] emphasize that the constant advances on fake content generation fostered the

ill use of multimedia for illegal and public opinion manipulation, an ever-growing concern of several legislative and regulatory authorities worldwide.

Filter bubbles and echo chambers. When we are talking about filter bubbles, we are talking about digital echo chambers where users see content and posts that agree only with their preexisting beliefs, according to Pariser [109]. According to Cambridge Dictionary [234] filter bubble is a situation in which someone only hears or sees news and information that supports what they already believe and like, especially a situation created on the internet as a result of algorithms (sets of rules) that choose the results of someone's searches. Of course, the creation of these filter bubbles is not done in some magical way, but is directly connected to the choices (and clicks) of the user on the internet. The algorithms used by social media "read" the user's preferences and automatically show him similar news/events/products for purchase, etc. Regarding this, DiFranzo & Gloria-Garcia [217] say that the related filter-bubble effect is due to the user's network and past engagement behavior (such as clicking only on certain news stories), that is, it is not the fault of the news-feed algorithm but the choices of users themselves. In other words, users, based on their browsing on the internet, show the stamp of their preferences, and perhaps even their political opinions, as they click or like on websites and news of a specific content. Jamieson & Cappella [62] describe it as a bounded, enclosed media space that has the potential to both magnify the messages delivered within it and insulate them from rebuttal. On this, Arguedas, Robertson et al. [180] explain that the magnification part is typically taken to be a preponderance of attitude-consistent information (e.g., people on the left seeking out information that reinforces their pre-existing views) and the insulation part about the absence of cross-cutting exposure (e.g., people on the right not coming across centrist or left- wing perspectives that challenge their pre-existing views). For example, people who are ideologically owned in the progressive area seek and find news and opinions that belong to the progressive area. Correspondingly, people who are ideologically belonging to the conservative area seek and find opinions that belong to the same ideological spectrum. That is, they rarely encounter opinions that contradict their own. This is the situation today that prevails in the operation of echo chambers. Therefore, there is not what we call a healthy confrontation of opinions, in the context of the democratic tradition, but an idiosyncratic one-sided reproduction of opinions from the same side. In other words, there is a vicious circle with arguments that belong to the same rationale. This is how we are led to the phenomenon of political polarization. According to Fiorina & Abrams [46], polarization emphasizes the simultaneous presence of opposing or conflicting principles, tendencies, or points of view. In our experience, most scholars hold an intuitive notion of polarization as a

bimodal distribution of observations. Polarization creates alternative realities in the groups of citizens, as citizens lead to the adoption of extreme views and move away from a balanced critical view of things. They create their own reality, because they are almost exclusively surrounded by views that match their own. However, this reality is often false, as there are many facts and arguments that contradict their own. DiMaggio et al. [37] state that polarization militates against social and political stability by reducing the probability of group formation at the center of the opinion distribution and by increasing the likelihood of the formation of groups with distinctive, irreconcilable policy preferences. Sirbu, Pedreschi et al. [141] report that the flow of news in the new media is not selected by the information value but rather by popularity, by “likes”. They also add that: as people tend to identify themselves with views similar to their own and will like corresponding news with higher probability, it is in the interest of the service providers to channel the information already in a targeted way and this means users do not even get confronted with narratives different from their favorite ones. Gromping [55] in one of the conclusions of his research, he says that the segmentation into polarized discussion spheres is especially strong in divided societies and it speaks to the danger of social media possibly exacerbating existing divisions. Gossart [54] describes exactly this danger that new technologies hide by stating that these technologies might impoverish democratic debates and reduce exchanges amongst the stakeholders of a given political arena while radicalizing their points of views.

Media Priming as a multiplier of disinformation. The paradigm of Pizzagate theory at the public agenda. With the term "priming" we are trying to describe the phenomenon in which the media excessively promotes a topic, to the extent that citizens automatically associate it with a person/persons, even if subconsciously. For example, many people when they see George W. Bush may think of 9/11 or the war in Afghanistan, events that occurred during his time in office. Scheufele & Tewksbury [139] report that by making some issues more salient in people’s mind (agenda setting), mass media can also shape the considerations that people take into account when making judgments about political candidates or issues (priming).

Collins & Loftus [32] talking about priming, said that information processing involves the development of the “activation tags” that are the basis for connection between concepts. Molden [94] reports that the primary questions pursued by social psychologists studying priming have involved the activation of social representations (e.g., traits, stereotypes, or goals) by exposure to different types of information, and the application of these activated representations in social judgments and behaviors. Moreover, Van Duyn & Collier [163] say that as media emphasize certain issues more frequently, these issues are primed in the minds of

the public and are more accessible when forming judgments about policies or candidates. Of course, the more the media deal with a specific issue and the more vividly they represent it, the more strongly they imprint it on the viewer's mind. There are elements that help this process and strengthen priming. Some important such elements are news a) frequency, b) duration and c) vividness. On this, Roskos-Ewoldsen & Rhodes [129] say that the strength or intensity of a prime is manipulated either through the frequency of the priming event (e.g., a single exposure to a gun vs. five exposures to a gun in quick succession) or the duration of the priming event (e.g., 15 minutes of exposure versus 1 minute). That is, if a channel often deals with a news or if a news program devotes a lot of television time to this news, then it increases the importance of this event in the eyes of the TV viewer. The viewer then identifies the news with the persons involved in it. Moreover, Riddle [126] says that highly vivid portrayals resulting in stronger priming effects. Therefore, the more impressively an event is presented, the greater effect it has on the cognitive process of citizens. Something similar is reported by Brashier & Marsh [16] when they say that people judge whether a news story is true by three factors: base rates, emotional feelings, consistency. Base rates mean that people believe that the news they see for the first time is likely to be true. Emotional feelings mean that people interpret their own subjective experiences as evidence of truth. Consistency has to do with the repetition of a news story by the media, as with the frequency we saw earlier, the more times someone sees a news story, the more likely they are to consider it true. So far we have observed the phenomenon of priming, but the main problem arises when it meets misinformation. What happens when priming is done with a fake news? A typical example is the "Pizzagate" scandal. In 2016 shortly before the US presidential election, John Podesta's emails were found on Wikileaks [283]. Podesta was Hillary Clinton's campaign chairman in her presidential campaign and a prominent member of the Democratic Party, serving as a political adviser [330] during the presidency of Bill Clinton and Barack Obama. One of the emails was between Podesta and the owner of the Comet Ping Pong pizzeria in Washington and they were discussing the restaurant as a possible host for a Clinton campaign fundraiser [245]. Some internet users overanalyzed these emails and came to a more different conclusion, that there was a deeper connection between Comet Ping Pong and politicians from the Democratic Party. According to BBC [377], people trawled Alefantis' Instagram feed (owner of the pizzeria) for pictures of children and the modern art which lines his restaurant's walls, and dreamt up a pedophile sex ring involving prominent politicians and political donors of the Democrats. Continuing, it is reported that thousands of people were convinced that a pedophilia ring involving people at the highest levels of the Democratic Party is operating out of a Washington pizza restaurant. The

influence of the news on public opinion was so intense that in some cases some citizens took extreme measures, wanting to take the law into their own hands. Alefantis and his staff, according to Time [348], have received hundreds of death threats on social media and also a direct message telling him his pizzeria should be “burned to the ground”. A man even reached the point of visiting the pizzeria carrying an assault rifle, fired one or more shots and later he told the police that he had come to the restaurant to “self-investigate” the rumors about the scandal [358].

The case of Pizzagate was widely covered by the media and especially by social media. Major TV channels such as Fox News [268], CNN [328], CBS [402], NBC [329], made reportage and covered the issue. D. Trump, being a competitor for the position of president in the American elections, made an indirect reference to the issue and used it as an argument against H. Clinton in the final presidential Debate [382] that was broadcast live across the country. Large newspapers and sites also picked up on the issue of Podesta's emails, such as Washington Post [237], Guardian [360], Politico [375], USA Today [207]. Radio was another medium that raised the issue high on the agenda, to t28he extent that Alex Jones, who is a radio producer and owner of the website Infowars, after the episodes in the Washington pizzeria, made statements of repentance for promoting pizzagate scandal [221]. A. Jones broadcast his radio show on over 160 stations and had over 1.8 million followers on Youtube [238]. Notification of the scandal was also made by Donald Trump's party camp as Michael Flynn Jr. posted on Twitter that „until pizzagate proven to be false, it will remain a story” [381], according to BBC. Michael Flynn Jr. is the son of Michael Flynn, who was Trump's National Security Advisor. The sharing of the scandal on social media was also important. In Twitter, the hashtag of “pizzagate” was shared almost 1.4 million times by more than a quarter of a million accounts in its first five weeks of life and among these were dozens of users who tweet so frequently (up to 900 times a day) that experts believe they were likely highly automated [342]. In another example, there was a twitter account that clearly stated that there was a pedophilia ring with Hillary Clinton being at the center and the rumor was retweeted more than 6,000 times [237].

As it turns out, the reality is different. The accusations were categorized as false and the "pizzagate" scandal was based on fake news. As reported on Yahoo [403], the FBI intelligence bulletin from the bureau’s Phoenix field office, among others, mentions Pizzagate and talks about “conspiracy theory-driven domestic extremists”, “motivated by fringe beliefs” and adds that “these conspiracy theories very likely will emerge, spread, and evolve in the modern information marketplace”. Barakat & Gresko [183] report on CBC that there is no physical

evidence of this trafficking ring and no victims have come forward. LaCapria [290] writing on a fact-checking and fake news investigation website, cited some examples of pizzagate being a conspiracy theory. One of these examples was that the pictures of children who were supposed to be the victims, came from Facebook or other random sites and were the children of the pizzeria workers or family and friends. Another example is that photos were released with underground facilities of the pizzeria, but the truth is that the photos were not from the pizzeria but taken from other random buildings. In addition, many journalistic organizations such as the BBC [377], the New York Times [283], the CNN [287], dealt with the issue and after research debunked it, classifying it as fake news. European Parliament [413] states that conspiracy theories can be used as a tool for spreading disinformation and propaganda with destabilizing effects, as they have the potential to incite hatred and violence against a perceived enemy. The pizzagate scandal, although it turned out to be fake, as it seems, nevertheless left its mark on public life and influenced public opinion to some extent. Following a Public Policy Polling survey, Jensen [279] lists the results by writing that 14% of Trump supporters think Hillary Clinton is connected to a child sex ring run out of a Washington DC pizzeria. Another 32% aren't sure one way or another, much as the North Carolinian who went to Washington to check it out said was the case for him. Only 54% of Trump voters expressly say they don't think Pizzagate is real. In short, 46% of Trump's supporters do not think that pizzagate is a conspiracy theory, but they believe it is true, or it is not sure exactly what is true. In another poll by YouGov America and the Economist, Frankovic [239] states that 17% of Clinton voters and 46% of Trump voters believe that leaked emails from the Clinton campaign talking about pedophilia and human trafficking were true. In other words, in addition to Trump's supporters, the conspiracy theory was also believed by Hillary Clinton's supporters, albeit in a smaller percentage. Based on the evidence, we observe that even after the debunking of Pizzagate scandal by local officer of Federal Bureau of Investigation and by major journalistic organizations, a group of voters still think that the scandal is real. The storm of fake news poisoned public opinion and "stained" the pre-election campaign of the Democratic party and the political profile of Hillary Clinton. The rest is history. According to Federal Election Commission [492], the Democrats lost the elections receiving 48.18% and Donald Trump was elected president with 46.09%. Although Trump collected fewer votes (62,984,828) than Clinton (65,853,514), he was the winner of the elections because he won in key states and gathered more Electors. Certainly no one can say that Clinton's election loss was due to the Pizzagate scandal. But we can see based on the evidence that fake news and the Priming, done by the Media and social media create a jumble of misinformation and stigmatize the morals or

beliefs of a political person or even an entire Party. Everything matters and plays a role in public life, especially when we are talking about serious issues, not lifestyle, but issues concerning the political life of a country, which in turn determines the daily life of its citizens. One could say that a conspiracy theory has been the subject of political exploitation to hurt the opponent. Withal, an interesting fact is that the scandal returned to the news in 2020 coincidentally once more, again in the year there were presidential elections in the United States. The singer Justin Bieber posted a video on Instagram during which he touched his cap [282]. One of the comments on the video suggested he grab his hat, in case he was a victim of the child trafficking ring (pizzagate). Thus, the video was misunderstood and interpreted by many as a hidden message, rekindling rumors of the scandal. As mentioned in the same article in the New York Times, during that period the shares, likes and comments that mentioned Pizzagate or had its hashtag, reached 800,000 on Facebook, 600,000 on Instagram and over 82 million views on Tik Tok. Even D. Trump himself was not missing from a cloud of disinformation, who, either without intention or intentionally, published on social media posts that had to do with conspiracy theories. Holoyda [265] writes in Britannica that Trump retweeted scores of posts from QAnon believers and other conspiracy theorists and some of these posts came from accounts which were later determined to have been run by Russian intelligence agents. Based on what we examine, we see that disinformation has become part of the political game and the agenda of public life. Some actors use all available means to achieve their goal and may sometimes succeed and sometimes not. The media initially deal with a topic (even if it is fake news and they still don't know about it), project it and make it known to the public. Priming is amplified even more in the internet age, through social media, and acquires whirlwind characteristics, as individuals participate in the process, rebroadcast the news, and all this creates a proliferation of misinformation.

Other forms of fake news. Can satire be connected with misinformation? Fake news as a joke.

There are also some other forms of information that do not correspond to reality or do not reflect real situations or are a misunderstood form of information because they are translated in the wrong way. One such form is satire and parody. Gottlieb [255] defines that satire is the art of making someone or something look ridiculous, raising laughter in order to embarrass, humble, or discredit its targets. The overall purpose of satire is usually to make some kind of moral or political change in society through the use of critical humor, according to Queen [337]. Nevertheless, satire in its exaggeration to highlight flaws and provide laughter, reaches the point of being misunderstood by some who do not realize the transition from reality to satire. Thus it ends up creating a wrong impression of the subject it portrays and deceiving the

audience (albeit unintentionally). But deception, as we have seen, is the main characteristic of fake news. So sometimes we have satire that gets involved in misinformation and converted into fake news. Wardle [390] writes that satire or parody has no intention to cause harm but has potential to fool. Sinclair [140] writes that satirists are able to critique their targets through exaggeration and by pointing out inconsistencies in what they are saying; indeed, satire does not work if the viewer does not 'get' the connection. Hagey-Mackay who is editor of a satirical news website reports in an interview [177] that „satire uses fiction or humor to point to a larger social or political truth and it only works if you know it's made up. Fake news operates under the guise of credible journalism to convince you of a falsehood, usually for political or monetary gain". The power of satire and its possible misinterpretation with fake news has been recognized by organizations and researchers around the world. It has also caused misunderstandings to newsrooms and fact-checkers. In 2018 the site Babylon Bee published a satirical article [205] about CNN and a „washing machine to spin news". Many people believed it and then the fact-checking site Snopes published a debunk [302] of this article. As it is reported, Facebook flagged the article and warned the page's administrator that they would have reduced ability of monetizing and advertising [271]. After Babylon Bee protested and clarified that it was a humorous article, Facebook reviewed and characterized its action as a mistake. Facebook's spokeswoman Lauren Svensson stated that "there's a difference between false news and satire - this was a mistake and should not have been rated false in our system" [244]. As we observe, sometimes humor, which is a product of imagination, is mistranslated and turned into a true event in the minds of some individuals, creating misinformation. This is perhaps also a lesson that we must look every news with critical thinking, without considering everything as de facto. Tiruneh, Verburgh & Elen [159] write that critical thinking is the ability to analyze and evaluate arguments according to their soundness and credibility, respond to arguments and reach conclusions through deduction from given information. With critical thinking we can be more flexible in certain situations and more easily perceive satire without being misinformed. On this, a study from Colorado State University is also interesting, in which it is shown that the ability of fake news to deceive depends on the people's demographics. In this research, Bedard & Schoenthaler [185] asked participants if they could distinguish whether a news story was fake or satirical. The respondents with higher education level were correlated with higher score in identification categories and also young people (Millennials and Generation X) scored better than older people. The fact that people with a higher level of education recognized more fake news perhaps supports the theory that critical thinking helps us recognize misinformation. Since

critical thinking is cultivated through education, then education proves to be a valuable tool in the whole process. Also, the higher success rates for young people may support the theory of Exposure Increasing Awareness, that is, the more time we spend on something, the more familiar we become with it and we can more easily judge if it is true. Probably, young people, because they traditionally have more contact with ICT than older people, recognized satire from fake easier.

1.4. Conclusions for Chapter 1

This compartment of the study helps us understand the theoretical framework of information falseness. The analysis of bibliographic sources allows us to reach the following conclusions:

1. Disinformation is a perennial phenomenon, it has the acquaintance of timelessness, as we meet it repetitively throughout history in public affairs at military events (Salamis), political events (Octavian), public administration-social nature affairs (Julius Caesar). Fake news already from the past had a transformative character, as they took different forms in order to perform, thus we see the example of "pasquinos" in Italy of 16th century, or the "canards" in France close to that period. Gradually, there was the appearance of disinformation in printed press (newspapers) until we reach today's era and the plethora of mediums.

2. We meet information falseness with different designations such as Informational Disorder, dimensions of Harm and Falseness, Information Pollution. In order to distinguish, understand and approach the issue more effectively, it is divided into three categories: Disinformation (information that is false and deliberately created to harm a person, social group, organization or country), misinformation (information that is false, but not created with the intention of causing harm) and malinformation (true/reality-based information is shared to cause harm, often by moving information designed to stay private into the public sphere).

3. We are realizing the incentive behind a public actor to create information manipulation. We examine his motivation to influence the recipient of the information, thus three categories are distinguished: a) political motives, which seek to gain communicative advantage regarding the success of influence operations to affect the beliefs or behavior of targeted populations, b) financial motives, to utilize misinformation for monetary gain, c)

social motives, when including misinformation in social interactions could cause behavioral impacts to citizens that lead to cases of social unrest.

4. Important types of disinformation and misinformation are fake news, deep fakes and filter bubbles-echo chambers. Among their results is a) the influential effect on citizens and b) the reduced credibility of information sources.

5. Media priming is not considered a form of disinformation, but it could be recorded as a media function that works as a multiplier of information falseness. When disinformation is multiplied and widely disseminated could increase its influential effect and its impacts to public opinion. We case studied the Pizzagate theory and its projection by the media. We observed that it became part of the public agenda in the political life of US, it had effects in the opinion making and the image of certain politicians or political parties (polls conducted), caused protests and even a situation of armed threat.

2. DISINFORMATION AND OPINION INFLUENCE. AN ISSUE FOR DEMOCRACY

The chapter examines modern schemes of information falseness and its dissemination, such as digital propaganda, the potential power of disinformation to affect opinion making and its constant presence in political life, especially in pre-election periods as a new normality. Disinformation tactics are highlighted. These tactics are systematically designed to enhance the credibility of disinformation and manipulate audiences to achieve specific goals, often causing confusion and disrupting communication channels, particularly during crises or politically charged environments. Anti-communication strategies aim to disrupt the flow of information, often through methods like cyberattacks or bombing key media outlets to hinder opposing narratives. The astroturfing, the sleeper effect, a computational propaganda are current forms of disinformation that are subject to examination, as well as the influence of technology and automation on the internet and social media which has become increasingly significant, particularly regarding misinformation. The concrete illustration of disinformation is resorted to. These cases reflect a broader pattern where misinformation undermines democratic institutions and societal cohesion, highlighting the urgent need for comprehensive strategies to combat disinformation and restore public trust in electoral processes worldwide.

2.1. Disinformation tactics for behavior influence

Until this point of our work, we examined the distinctions of information falseness, i.e. disinformation, misinformation and malinformation. We also approached some versions of disinformation and misinformation, such as fake news, deepfakes, filter bubbles and echo chambers and the role of algorithms, bots and cookies. Apart from these distinctions and versions it is suitable to understand the tactics used by various actors to disseminate disinformation or to increase its penetration and absorbability to the masses. By disinformation tactics we mean the set of tools, the method or the style of operating in order to spread false information and achieve an impact on receptor's behavior. CISA [492] describes these tactics as "techniques to execute information operations and spread disinformation narratives that pose risk to critical infrastructure.

Each of these tactics is designed to make disinformation actors' messages more credible, or to manipulate their audience to a specific end". In an even more extended point of view, the US Office of the Director of National Intelligence (DNI) [483] talks about influence

operations between nations (in global level) where tactics are used “in a coordinated manner to advance a strategic influence goal” and “their efforts can use a mixture of overt and covert methods to spread information, engage with key groups, or sow division”.

Table 2.1. Some disinformation tactics in the public sphere

	Definition	Comments
Anti-communication strategy	A deliberate approach that uses silence or selective communication in order to achieve a strategic goal	Examples include deciding not to comment on every trending topic, using strategic silence to convey a message, or refraining from an immediate reply during a crisis.
Astroturfing	The deceptive practice of hiding the sponsors of a message or orchestrated organization to make it appear as if it originated from and is supported by unsolicited participants	a practice intended to lend credibility to statements or organizations by concealing information about the source's financial backers, by giving the appearance of "fake" or "artificial" support, by camouflaging or imitating support, actions that facilitate information disruption
Sleeper effect	A sleeper effect is a psychological phenomenon related to message and It is a delayed increase in the influence of a message that is followed by a devaluing stimulus.	a sleeper effect in persuasion is a delayed increase in the impact of a persuasive message. The effect occurs when a communication shows no immediate persuasive effects, but, after some time, the recipient of the communication becomes more favorable toward the position advocated by the message.

Sourse: *Systematized by the author*

One of the methods used in the public sphere by disinformation actors is the *anti-communication strategy*. Speaking in military terms, information warfare „consists of the use of hacking in a broad sense - network attack tools, computer viruses, and so on - in conflict between states or substate groups, in order to deny critical military and other services, whether for operational or propaganda purposes” and also “it extends the electronic warfare doctrine of controlling the electromagnetic spectrum to control of all information relevant to the conflict. It thus extends traditional e-war techniques…; by adding assorted hacking techniques, but also incorporates propaganda and news management” [6]. A main characteristic of the strategy is the interruption of communication, thus it is not fully accurate or it could be even false or the message fully blocked and not communicated at all. With anti-communication we have a situation where actors reduce the effectiveness of enemy communications. The target in many

cases is not only to disrupt the communications itself, but also the communication campaign of the opposite side. An example is the bombing of a state-owned broadcasting corporation, the Serbian TV and Radio Station in Belgrade, during the conflicts in Balkans in 1990's. As referred in the Report by the United Nations [446], „the bombing of the TV studio was part of a planned attack aimed at disrupting and degrading the C3 (Command, Control and Communications) network" but also against propaganda purposes, because according to statements presented in the same Report:

„[We need to] directly strike at the very central nerve system of Milosevic's regime. This of course are those assets which are used to plan and direct and to create the political environment of tolerance in Yugoslavia in which these brutalities can not only be accepted but even condoned. [….] Strikes against TV transmitters and broadcast facilities are part of our campaign to dismantle the FRY propaganda machinery which is a vital part of President Milosevic's control mechanism".

A similar case of information disruption is the *Denial of Service Attacks* (Dos) in the digital space, which "are an attempt to exhaust network, server or application resources so that they are no longer available to intended users" [219]. As described by experts [289], a Dos attack is called a distributed denial of service (DDoS) attack if it gets originated from multiple distributed sources. In DDoS attacks, a large number of controlled bots (also referred as zombies) are used from distributed locations to initiate a huge amount of traffic against the victim(s) often causing the entire system to crash. So here metaphorically, there is a bombing of the digital space. Systems are besieged with huge amounts of data, resulting the overloading and paralysis of the servers. In the first phase we have an enormous number of information, which is hardly manageable. In the second phase we have the crashing of the system and that means the total absence of any information. Thus, it is created a harsh communication environment or no communication at all. The purpose of an anti-communication strategy is to create chaos and confusion to the information environment. This chaos averts people from proper news update and makes it difficult for them to keep in touch with accurate information. As a result, they get misinformed and are dissociated from discussing public matters. Discouraging citizens to be involved with public issues, as we observe in this tactic, includes two main characteristics: *interruption* and *information management*. Through interruption of certain news sources, an actor excludes the opinions, the ideas or the communication campaign of the opposite side from reaching public space. Consequently, this means that an actor has the management of what kind of information would be mostly available and reachable publicly, he has the control of information traffic. Essentially, we are talking about a situation of

propaganda wars. There is a power game between opposite sides about who will make his storytelling most effective. Basic element of being effective is being reachable (existent, relatable, digestible). Being reachable means no interruptions or ideological obstacles in the communicational horizon. We could imagine the metaphor of two different radio devices broadcasting news from different radio stations. If someone lowers the volume in one device and increases the volume in the other device, then only one news station would be heard in the audience. Thus, he would choose the news source and content (information management) and block the other (interruption).

Another tactic of promoting a certain agenda and disinformation in many cases is *astroturfing*. The method is used particularly in digital space (because more favorable conditions are provided there), where a large number of fake personas and accounts is created and operate through comments, likes, posts, retweets, in order to support a certain narrative, practice, opinion in a coordinated way, trying to present a false impression to public opinion that a sizeable group of people cherish those narratives. Lazarotto [78] mentions that "AstroTurf" was a company that sold artificial grass in US and "and just like the fake grass, Astroturfing practices aim to produce fake opinions", primarily used by businesses and public relations firms "that would hire groups of people to express fabricated opinions about a certain subject. The goal would be to influence the real opinions of real individuals". Today with the expansion of internet it is way easier to perform such tactic, because there are cheaper tools available (bots f.e.) that can disseminate information in the digital space with wider range and with improved effectiveness. Chagas [25] notes that "digital astroturfing takes advantage of these characteristics of computer-mediated interaction to generate a bandwagon effect" adding that "these online campaigns typically emulate public adhesion". Thus, the "digital astroturfing is a form of manufactured, deceptive and strategic top-down activity on the Internet initiated by political actors that mimics bottom-up activity by autonomous individuals", as approached by Kovic et al. [74] This tactic tries to create a hype and trend situation, to present a theoretical background of support to a common cause. Key element is the impressions. It aims to create a false impression of consensus. Chan [27] writes that "it wants to create the impression that a certain opinion or message is highly credible, by pretending that it comes from a large number of unconnected independent individuals, when in reality it is all the result of a coordinated effort brought about by a centralized source". The effort of influencing behavior in this case is organized and orchestrated. That is why Schoch et al. [350] talk about online activity and "centralized coordination patterns among groups of accounts". In their research about patterns of political astroturfing in Tweeter, distinguish the *principals*, who are the organizers of the

campaign who “try to pursue political goals” and the *agents*, who “create and share messages congruent with the campaign’s goals”. Both work towards behavior influence of regular users, using re-tweeting and co-tweeting (multiple accounts posting the same content within a short time frame) in co-retweeting networks, as they conclude. King et al. [72] in their research, talk about the “50c party” in China “devoted primarily to cheerleading for the state” and analyze the volume bursts of their online activity. They conclude that 50c party is “an enormous workforce that, we estimate, produces 448 million 50c posts per year. Their effectiveness appears maximized by the effort we found of them concentrating the posts into spikes at appropriate times” and explain it as an effort for “strategic distraction from collective action, grievances, or general negativity”.

We can observe that astroturfing method is based on the logic of quantity and repetition. A large number of accounts (bots, professional spammers etc) posts or reproduce certain opinions and narratives in social media, in a repetitive way, over and over again, with the purpose of building a consensus, which of course it’s staged. This staged consensus has a potential impact on a part of public opinion, because it transmits the impression of acceptance of those boosted narratives. The tactic follows the pattern of a flood. Let us make a hypothesis that we have two available opinions: narrative A and narrative B. There is an orchestrated and manipulated cataclysm in social networks of posts, comments, reactions, retweets etc supporting narrative A, while narrative B is not astroturfed. We have the phenomenon of flooding the informational space with certain content. As a result, the regular user is surrounded and overwhelmed by narrative A. At the same time, this produces a silence effect for narrative B which is drowned by the absence of supporting activity. By this way some viewpoints are promoted more in the public, some other viewpoints are not heard as much or not heard at all. This practice decreases the diversity of opinions and hurts democratic dialogue. Political strategists understand this concept and believe that the contemporary political arena is the media, thus they note that “the real opposition is the media” and a good way to dominate this arena is to “flood the zone” [364]. Anderau [5] talks about “epistemic flooding” which in combination with fake news “leaves us vulnerable to believing misinformation because it lowers our ability to diligently screen new information”, thus creates a dual threat. As we can notice, flooding comprises the characteristics of disorientation and deception. Information flooding has the potential to disorient people from other important topics, but when it includes falsehoods it could also deceive.

A very interesting tactic arises from the field of social psychology regarding the work of researchers on persuasion dynamics. At first, when a human comes across a story, he

may doubt the credibility of the source or the validity of the content and not believe this information. However, when this story is met repeatedly over a period of time and its origin is lost or forgotten, then its persuasive dynamic is increased and there are better chances to be believed by the individual. This phenomenon is described as the *sleeper effect*. An introductory definition is that "the term sleeper effect refers to the finding that a persuasive message has a greater delayed than initial impact on subjects' attitudes" according to Gruder et al [56]. Essentially, the effect supports that a message beholds an increased persuasion over time, the recipients of an otherwise influential message may recall the message but not the non-credible source and thus become more persuaded by the message at that time than they were immediately following the communication [76]. The concept is that as time passes, in the mind of an individual happens dissociation between the (untrustworthy) source and a catchy story. Thus, as the catchy story diverges from untrustworthiness, it gains credibility and becomes more persuasive. Pratkanis et al. [122] note that "the sleeper effect became identified with the dissociation hypothesis and was defined as a delayed increase in persuasive impact that occurs as a result of a persuasive message accompanied by a discounting cue". In other words, the persuasive message (catchy/viral story) dissociates from the discounting cue (low-credibility source) and increases its believability value in the long term. In their research about sleeper effect and negative political advertising, Lariscy & Tinkham [77] present some conclusions about its use and persuasiveness in political campaigns. They separate the political actors between attacker (person who launches negative political ads) and defender (person targeted by negative ads). They state that:

a) "If an attack stands alone, unanswered, it is effective
b) If an attack is refuted, the attack will, ultimately, still be effective
c) If an attacker damages his or her own credibility, the attack message itself will still have positive impact over time
d) If attacked, therefore, the best defense for the victim seems to be a strong, swift offense".

Ruggieri et al. [131] discuss the integration of fake news and sleeper effect, due to automatic memory processes such as a) familiarity, meaning that repetitive statements give "the illusion that information is valid, generating what is known as the illusory truth effect" and b) "the path associated with automatic retrieval from memory that occurs without any accompanying contextual detail". Today, in the Internet era, the media terrain favors the sleeper effect even more to occur, because: a) there is a dramatic increase of media sources (information transmitters – tv, radio, websites, social media users, comments, podcasts etc.), which means a potential larger number of stories to be disseminated in the public and b) this

increased number of sources creates information traffic and facilitates the process of forgetting the primary origin of a story. Kleinnijenhuis [73] writes that "the number of possible sleeper effects in the digital age has increased as a result of the necessity for news consumers to integrate messages obtained from a larger variety of different media than ever before".

Quite similar tactic of astroturfing and flooding the information space is *social spam*. Markines et al. [86] emphasize the user's ability of tagging in social networks, they name this tagging/annotating system as "folksonomy" and they note that "since every user can easily add to the folksonomy, the structure of the graph is entirely user-driven and a malicious user can exploit this control to make some content more prominent", thus they "refer to these kind of exploitations of collaborative annotation systems as social spam". Of course, social spamming in many cases includes disinformation, phishing and fraud in online social networks (OSN). Gao et al. [51] in their research write that „existing evidence shows malicious entities are already attempting to compromise OSN account credentials to support these „high-return" spam campaigns". In their study, they examined „over 200.000 malicious wall posts" and determined that their "results clearly show that online social networks are now a major delivery platform targeted for spam and malware delivery". Among the dangerous effects of spam are the "organization of stuffing of information flows" and the "creation of false news feeds and fake votes" [111]. Except from automated tools (i.e. bots), spam is user-driven and generated, so it can adapt better against defensive strategies of detection. "There are still a large number of spams on social networks. And the spammer that manufactures and sends spam will disguise spam by observing the platform filtering strategies" [407]. Yadav et al. note that „as the volume of spam increases, the internet becomes more polluted and less useful" [170]. Social spam can impact the digital space in many different forms, which we meet in literature:

a) *Social anomalies* are described as „deviations from the normal or expected behavior" as certain people "surge in their interactions or communicating in a way that extraordinarily contrasts them from their peers". Due to spamming, there are "patterns in observed data that do not match the definition normal behavior" and specifically in "social networks, anomalies mean interactive patterns that have significant differences from the whole network" [144].

b) *Spam-bombs* usually are performed via email and are described as a "phenomenon that a specific user email account receives a huge number of emails, most of which are junk or phishing emails" [291] which cause confusion and inconvenience to the users and also serve as a form a denial of service attack (DoS attack).

c) *Fake/spam accounts* are used as a mask to disguise the true identity of the message transmitter, usually to achieve malicious purposes. „False profiles are frequently made under fictitious identities, and they spread defamatory and abusive posts and images to influence society", also most of them "are made with spamming, phishing, and gaining more followers in mind" [26]. Various types of false accounts are met. *Social bots* are "malicious programs, fake accounts capable of imitating human behavior" which produce "an increase in mistrust of interlocutors, doubts about their reality" [111]. *Alter ego* account "is a condition of someone who creates a new character with a conscious state" in order to operate in social media, to interact with people and "the purpose of creating an alter-ego character is to show another personality they cannot express using his real identity" [167]. *Sibyl attacks* are described when "a malicious user creates multiple fake identities called Sybils to unfairly increase their power and influence within a target community" [42].

d) *Malicious links* are a common form of cybercrime. "Spam allows malware to reach high-volume, low-value targets which are less likely to have effective antivirus or other countermeasures in place" and this happens through deception, possibly by an "email containing content that entices the recipient to click on a URL link to a malicious website, or to download a malicious attachment" [3].

e) *Opinion spam* also known with the form of *fake reviews* are the untruthful reviews often having a two-way function: the first use is to give "undeserving positive reviews" in order to promote (hyper spam), the second use is to give "unjust or malicious negative reviews to some other objects in order to damage their reputation" (defaming spam) [280].

In the same logic of tricking and deception is met the *clickbait* technique. Otto et al. [107] talk about *tabloidization* as a situation of softening the political communication in media and describe it as the adoption "of features and characteristics of tabloid newspapers" by quality media. Clickbait "is spread on social media in the form of short teaser messages" and is "a certain kind of web content advertisement that is designed to entice its readers into clicking an accompanying link" [120]. The clickbait titles may be enticing and fancy for the reader however, they do not deliver the knowledge that they promise. Actually, in many cases they include disinformation and low-quality content. Pengnate et al. [115] note that just as tabloid news, "a clickbait headline provides soft-news content that generally provokes readers' curiosity and then postpones revealing the content of the story" and they continue adding that "since the true goal is to generate web page views, instead of providing verifiable information, clickbait headlines usually don't live up to the expectation of the readers". Coste & Bufnea

[33] write that “types of articles that are shared the most through clickbait links include, but are not limited to: gossip, unfounded rumours, fake news or, any other type of thin content”. Clickbait is an attention-based technique, which also contains the element of deception. Privalova et al. [124] present two different views about this technique, the ones who see clickbait as an effective tool “of attracting the attention of the audience in the vast information space” and the ones who “treat it as manipulation”. Either way, it is a concerning issue for the trustworthiness of certain media. The research of Kaushal & Vemuri [69] concludes that “clickbait headlines significantly reduce the credibility of news items, when controlled for the articles’ content”. An important reason why clickbait tactic is effective is the exploitation of absence of knowledge in a certain topic. This absence of knowledge of an individual spikes his curiosity and the need to obtain new information. The rationale why clickbait works is widely attributed to teaser messages opening a so-called “curiosity gap”, increasing the likelihood of readers to click the target link to satisfy their curiosity [120]. Researchers [95; 99] observe clickbait as a way to “virality” (a way to go media viral) and note that „a clickbait headline highlights a critical piece of missing information that the readers could unveil only by clicking on the link and reading more”. Those crucial missing pieces of information, called *gaps* create the urge to be filled, thus the creation of *curiosity gaps*. Clickbait technique constructs artificial curiosity gaps in order to exploit user responses and manipulate behavior. Venneti & Alam [388] write that „the most tangible expression of curiosity is exploratory behavior, by which one tires to satisfy ones curiosity”.

Essentially, we are talking about the *exploitation of information gaps*. It’s not only a matter of curiosity. An individual’s absence of knowledge on a topic could be an opportunity situation for disinformation actors, because the recipient is in vulnerable state and cannot easily judge the quality of information he is consuming. Hence, his opinion-making could be affected, because it could be possibly constructed by false information pieces. Shane & Noel [354] approach the subject using the economic terms of demand and supply: “situations where there are high levels of demand for information about a topic, but credible information is in low supply”, which creates a “data deficit”. Data deficit in other words is information deficit, low credibility information that in many cases conceals “misleading, confusing, false or otherwise harmful” content. That could also be a good explanation why during crisis periods it is a fertile ground for the rise of disinformation. The lack of preexisting knowledge in a certain ongoing topic (information gap) in combination with incoming data deficit (high demand-low supply/low credibility information from various sources), results in one’s higher vulnerability in disinformation. Especially in cases of emergency like crises, when there are many unknown

aspects of the new situation and at the same time there is increased need for related news consumption. In contrast, when an individual is highly knowledgeable about a subject and also beholds credible incoming information from sources, then he is less vulnerable to disinformation, meaning lower possibility of being affected by falsehoods. Here follows a descriptive diagram:

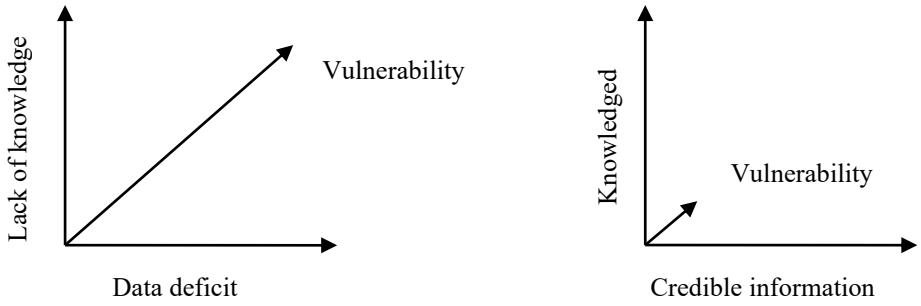

Figure 2.1. Relation of data deficit and vulnerability to disinformation

Regarding the search engines on internet, the term is also known as *data voids*. In cases of a public emergency situation (for example the consequences of a new financial crisis), search engines may not have much relevant information available (quantity) or may not have credible information available (quality content). This could expose users to dubious content results. According to Golebiewski & Boyd, data voids "occur when obscure search queries have few results associated with them, making them ripe for exploitation by media manipulators with ideological, economic, or political agendas" [253, p. 2]. They also underline the malicious use of voids, adding that "media manipulators have learned to capitalize on missing data, the logics of search engines, and the practices of searchers to help drive attention to a range of problematic content" [253, p. 6]. Sometimes low-quality news stories are reproduced by other sites or media, creating a recycling of information falseness. Benkler et al. [11] call it "propaganda feedback loop" describing how false narratives survive through a network of partisan media that host them. Aslett et al. in their research about data voids find that "when individuals search online about misinformation, they are more likely to be exposed to lower-quality information than when individuals search about true news" [8, p. 550] adding that "those who are exposed to low-quality information are more likely to believe false/misleading news stories to be true relative to those who are not". In other words, there is a user's misconception of believability concerning certain news stories. As we observe it's a matter of search and exposure. As an individual searches misinformation narrative products,

they get more exposed to it. As an individual gets more exposed to misinformation, there is increased possibility to believe such narratives. So, we are talking about a situation quite similar with the falsehoods feedback loop pattern, which in that case is user-generated, because the user enters the active process of searching. More searching brings more exposure. More exposure to falseness may bring more influence, according to the above, because as we saw mentioned previously, there are manipulators with private agendas.

Another technique is the ignition and dissemination of *conspiracy theories*. Douglas et al. write that „conspiracy theories are attempts to explain the ultimate causes of significant social and political events and circumstances with claims of secret plots by two or more powerful actors" [39, p. 4]. Cassam notes that one way to describe conspiracy theories "is to think of them as forms of political propaganda" [22, p. 190], adding that the function of conspiracy theories is to express and promote an ideology. Those theories are considered to be promoted by „powerful groups of individuals or organizations that act secretly for their benefit and against the common good" and among their main effects are "to discourage engagement in mainstream political processes", the controversy on "the acceptance of scientific findings", the propelling to a "general tendency toward risky decision making" [274]. Some political actors could capitalize from conspiracy theories and extract ideological profits. Exploiting information falseness, hence promoting a conspiracy theory to push a political agenda or to damage a political opponent, could be considered as a servitude to *chaos* theory. "Need for Chaos is thus a mindset to gain status by disrupting the established order" according to Petersen et al. [118, p. 1486], who describe it as a dominance strategy to preserve status through destruction. They explain that "individuals who are high in Need for Chaos share hostile rumors as a way to destabilize the established political system" and that "sharing hostile rumors mobilizes like-minded others and creates confusion". The ideological attack on a political rival through the dissemination of a conspiracy theory is a form of destruction, a form of opponent's ideological deconstruction. Dominating the opponent is a way to gain (or preserve) the status of power, thus chaos is used as a dominance tactic. Kubin & von Sikorski in their study, found that "pro-attitudinal news content is a driving force in political polarization" and discussed that "social media can further ideologically polarize people" [75, p. 195]. Fisher [47] argues that polarization increases user engagement and propels financial revenues, thus he talks about "chaos machine" regarding the impact of social media. According to Zelenkauskaite, „disinformation and conspiracy theories benefit from the unverifiability of the claims where rhetorical moves use affect or *pathos* rules over reason or *logos*" and later she continues that „as a result, affect-instilled arguments used in public

deliberation in times of uncertainty, along with whataboutism, constitute a playbook for chaos online". [173, pp. 233, 255] To further elucidate, in Greek the word pathos portrays the intense emotion (positive or negative) and the word logos represents the logical argumentation. Thus, in a case of conspiracy theory, there is a presence of stories that lack evidence and moreover, a prevalence of emotion (pathos) over logic (logos). Judgement and opinion making in some individuals is formulated by impulsiveness than by fact-based critical thinking. The impact of conspiracy theories in public opinion is not negligible. Withal, we can observe it through quantitative data too. According to a survey [319; 387] in United States, for all of the proposed conspiracy theories referred in the published questionnaire, the percentage of belief was over 10% and in most of them the percentage of belief was over 20%. In another survey [305], among those adults who have heard about the conspiracy theory that the coronavirus outbreak was intentionally planned by powerful people, 8% of the respondents think it was definitely true and 28% think it was probably true. All those percentages are quite considerable and reveal the affect and absorbability of such theories in a number of citizens.

2.2 Examining computational propaganda and the role of technology and artificial intelligence as a "playmaker" at disinformation dissemination today. Profit and control?

Technology and automation plays an important role today in supporting and operating the internet and social media. But if used in a suitable way, it can also work beneficially for misinformation to spread. As we saw earlier, bots are a useful link in the computational propaganda process. The company Norton [394], which deals with cyber security and the creation of antivirus systems, provides some useful information about bots (or web crawlers) and explains that there are two kinds: the good bots, that gather information or make automatic interactions and secondly, the bad bots, that contain malware and infect its host, sending information back to a central server (gather passwords, log keystrokes, launch DoS attacks etc). But here is a differentiation. In social media it is possible to meet a good bot (gathers info and interacts with others) but with bad intentions (spread propaganda). So, in terms of political communication we could say that we have a bad bot. It depends from the intentions of the administrator of bots and the purposes he wants to use them. Accordingly, Roth (Head of Safety and Integrity of Twitter / X) [344] talk about manipulative tactics and describe what they are trying to prevent in their platform:

- Malicious use of automation to undermine and disrupt the public conversation, like trying to get something to trend

- Artificial amplification of conversations on Twitter, including through creating multiple or overlapping accounts
- Generating, soliciting, or purchasing fake engagements
- Engaging in bulk or aggressive tweeting, engaging, or following
- Using hashtags in a spammy way

Boshmaf et al. [15] calls them “social bots”, because they mimic human behavior in social platforms by interacting with other users (through comments, likes etc), using Artificial Intelligence (AI). Their aim is to disguise as real people and to reach “influencial position” in the platforms, thus have an effect on public opinion. Salge & Berente [133] characterize social bots in terms of deceitfulness and unethicality, because they violate the prima facie duty of fidelity, spread fake news, spamming and limit free speech. Shao et al. [355] list some strategies that bots use to spread fake news. They say that firstly, bots promote fake news in the early stage, before it goes viral, secondly, they aim to direct them to influencers, using replies and mentions and thirdly, they try to conceal their geographic location. Suarez-Serrato et al. [151] in their research about online protests, talk about “cyborg” accounts that combine automation and human intervention and may play a role in suppression of communication. Stella et al. [148] report that the presence of robots in a social system can have impacts on human perception of social reality. In their research about the Catalonia Referendum of 2017, they found that bots (on twitter) targeted human influencers, mainly Independentists and provoked negative and inflammatory sentiments to some users (violence, shame against government and police) and inflamed social conflict online. Another interesting fact is that Gonzalez-Bailon & De Domenico [254] in their research examined two events, the Yellow Vests movement in 2018 in France and the Catalonia Referendum of 2017. They found that unverified bots, by being more numerous, generated more content, interacted with more humans and gathered more attention that human accounts. Stella et al. [148] similarly with the term “cyborgs”, talk about “augmented humans” during elections, meaning the exploitation of bots by humans, in order to gain impact online. From this we understand that today, even a single person has the ability to create a fake "cloud" of followers (bots), who will be able to spread their opinions or any information they want, they will press like, they will interact with others users, always according to the administrator's intentions and for his benefit. So we can imagine what possibilities are offered for an organization or company or political party or country that wants to use this digital "army" to propagate their positions. Bots are also a tool for financial fraud. The emergence of blockchain technology was accompanied with the emergence of cryptocurrencies. Mirtaheri et al. [93] describe how bots are used by scammers

in social media campaigns, in order to manipulate cryptocurrency prices. They create hype for certain brands. They are the so-called “pump” (when prices rise artificially) and “dump” (when prices fall) operations.

Another technological element that plays crucial role on the disinformation spreading process is algorithms. When a person searches for something by typing in a search engine, then some search results related to the topic will appear, which will have been gathered through an algorithm. In essence, algorithms act as navigators for users on their journey through the digital world, so that they don't get bogged down in a jungle of information. Rainie & Anderson [338] say that algorithms are instructions for solving a problem, artificial intelligence is literally algorithms and that in the future we may have self learning and self programming algorithms. Social media platforms also use algorithms. O’Brien [317] says that social media algorithms make classification, assist in ranking search results, advertisements and sort content in a user’s feed. The problem that arises is that users can sometimes see in their feed what the algorithm decides to show them, even if it is disinformation, misleading content, hate speech etc. The same can be done with the recommended videos or advertising messages. Margrethe Vestager, the European Commissioner for Competition and Executive Vice President of the European Commission for A Europe Fit for the Digital Age stated that:

“When recommender systems choose which information to promote, and what to hide, they profoundly affect what we know about the world…; those results might be manipulated by so-called “bot farms”, to make content look more popular than it really is. Or the things that we see might not really be the most useful news stories, but the ones that are likely to get a response – and earn more advertising…; they affect the ideas and arguments we hear – and the political choices we believe we can make” [502].

Susarla et al. [154] write that content which provokes powerful emotions and sentimental response, has increased probabilities to get viral. They add that platforms encourage propagation of popular content, in order to increase user engagement. Paschen [110] writes that fake news titles provoke strong and more negative emotions than real news (e.g. anger). Liu et al. [83] in their research about medical information on social media found that misleading content might inflame more engagement than high degree information. From this we understand that platforms may promote popular content, even if it is of low credibility or even if it belongs to the zone of falseness. Borges & Gambarato say that “the logic of algorithms to personalize content on search engines, news aggregators, and social networks therefore potentially creates filter bubbles and echo chambers that can lead to ideological segregation, perpetuation of misinformation, and confirmation biases” [14, p. 610]. A research

conducted by Mozilla Foundation [273] in 2021, reports that the AI-driven algorithm of an examined famous platform, in many cases, recommended videos of political misinformation, Covid misinformation, inappropriate content and hate speech. They also add that this algorithm supports an estimated 700 million hours of watch time every day. From these we understand the penetration dynamic that a platform can have in public opinion and that it can be "contaminated" with misinformation. Essentially, in some cases, social media can possibly be a "Trojan Horse" of misinformation for public life. Given the importance of the problem, Tutt [161] proposes the creation of an "FDA for algorithms", i.e. a government organization (corresponding to the Food and Drug Administration) that will aim to regulate algorithms in terms of safety and effectiveness.

Cookies are also an interesting aspect of the digital world and of how it contributes to the function of companies through advertising. According to Google Company [267], cookies are small pieces of text sent to your browser by a website you visit and they help both the user and the websites because:

- They are used for functionality, by maintaining your preferences in a website
- for security, by user authentication (for example prevention of scam)
- for analytics, by collecting data and using statistics to understand how a user interacts with a specific service
- for advertising, by personalizing ads
- for personalization (relevant results, recommendations, ads etc)

According to the company Kaspersky [395], which provides Internet Security services, cookies are personalized, as their data are labeled with a unique ID of the user and his computer and most of them are safe, but some can be used to track you without your consent. The tracking cookies are used to store preferences and marketing data (activity on websites, browsing and purchase history, location etc.) [397]. Tracking cookies are used by marketers to target the users with advertisements that may interest them based on their browsing history [396]. Essentially through cookies, the platforms and sites outline the user's online behavior and create an advertising profile for each one, so that they can direct advertisements to them, related to their preferences, with greater accuracy and effectiveness. The problem is that there is a possibility that the platforms will use cookies (as well as the algorithms we saw earlier) and through disinformation, increase the user's attention and engagement in order to harvest advertising profits. Something similar happens in the case of television, where the increase in viewership also provides advertising revenue, even if it is so-called trash TV. Paudel et al. [114] write that false information can be a profitable business, producing large sums of

advertising revenue from viral content, while social media are a fantastic environment for this. As reported by CBS [190], in 2021, lawmakers in US demand stricter regulations for social media platforms regarding the problem of misinformation, with both Democrats and Republicans expressing similar sentiments and Congressman Pallone Jr. saying that "your business model itself has become the problem and the time for self-regulation is over". Pelosi [323], Speaker of the United States House of Representatives, in her statement says that "again and again, social media platforms have sold out the public interest to pad their corporate profits. Their business model is to make money at the expense of the truth". Also, a very important issue is how these data from users could be used for behavioral targeting in political campaigns and voting events. Information Commissioner's Office [272] launched an investigation about the use of data-analytics. In their report to Parliament, they talk about companies and organizations that used data analytics and demographics to create psychographic profiles, to micro-target voters, in order to conduct persuasive data-driven campaigns. Based on the above, we could say that concepts such as advertising/marketing, political ideology, privacy, democratic transparency and fair competition are beginning to be questioned, as they try to coexist together in a situation that is not fully regulated and one affects the other, to a small or large extent. Zuboff [174] talks about surveillance capitalism and describes it as a phenomenon that produces the possibility of modifying the behaviors of persons and things for profit and control. Data is a key element in all of this, as the raw material of the whole process.

Computational propaganda. A style of our age. As we talk about propaganda (in its negative sense) we couldn't ignore a modern phenomenon of the internet age. It is, that is, the circumstances in which propaganda and fake news, facilitated by the Internet, become attributes of a confrontation / information war. These notions must bee specified and delimited. Their equivalence, even if it still happens [29], cannot bedenied. Unlike information confrontation, the goal of information warfare is to achieve a radical result—complete sociocultural, and consequently, political, dominance over the enemy, who, having been defeated, will now be forced to act on the basis of new behavioral imperatives and social relations regulators, typically unconscious and not perceived as imposed from the outside.

As Von Clausewitz remark in Howard & Paret [60], war is thus „an act of force to compel our enemy to do our will". Information warfare is an important aspect of any conflict on many levels, especially if these are military, political or economic. Experts explain: "The war, after the second world conflict, evolved, turning into a total war, we could say in a type of war which, supported by the armed forces, systematically engages the civilian populations,

urban territories, production areas and, in general, the entire economic process, propaganda, the psychic and moral energies of people who do not participates in armed confrontations, thus bringing with it an intensification of hostilities" [48, p. 53]. Stupples [366] writes in World Economic Forum that today instead of military forces, states are increasingly launching non-lethal attacks against an enemy's information systems, thus we have Information Warfare. The general Gerasimov [249] writes that Information Warfare is the use of political, diplomatic, economic and other nonmilitary measures in combination with the use of military forces. It is known as "Gerasimov's Doctrine" and underlines the important role of nonmilitary means to achieve political and strategic goals. Part of informational warfare nowadays is cyber warfare. NATO [271] states that cyberwarfare may also involve so-called social cyber-attacks, by creating in people's minds a specific image of the world, consistent with the goals of the information warfare conducted by a given country. As we understand, we may sometimes refer to information warfare in terms of military operations however it does not mean that we are talking only about military targets. Stein [146] writes that information warfare, in its essence, is about ideas and epistemology, meaning that information warfare is about the way humans think and, more important, the way humans make decisions. We realize that one cannot plan military operations without knowing what the adversary is planning. Military tactics were transferred to the political arena. The political opponent is treated as an enemy. They try to learn what the opponent is doing, and then it's up to the staff to plan their offense and wear them down. Conflict and information warfare can be at the level of states, but it can also be at the level of political parties within the same state. Each adversary may try to direct the flow of information to his advantage. We are essentially talking about influence operations. Arnaudo & Bradshaw et al. [181] write that Information Manipulation is a set of tactics involving the collection and dissemination of information in order to influence or disrupt democratic decision-making. Propaganda has adapted to the new digital environment, uses new technologies and has evolved into what we meet as computational propaganda. Woolley & Howard [169] in 2018 define that computational propaganda involves the use of algorithms, automation, and human curation to purposefully distribute misleading information over social media networks. DiResta [38] says that computational propaganda is a suite of tools or tactics used in modern disinformation campaigns that take place online and these include automated social media accounts that spread the message and the algorithmic gaming of social media platforms to disseminate it. Those automated social media accounts are known as "bots". Those bots serve exactly the purpose of mimicking human behavior and spreading misinformation across real-human social media interactions. Woolley & Howard [404] say that

political bots are also used for more malicious activities, like political manipulation, they are effective tools for strengthening online propaganda and hate campaigns and are associated with spamming and harassment. The penetration of bots, i.e. automation-human mimicking robots in social media is so great that it has an influence on public opinion and forces technological giants (Facebook, Twitter) to take measures to limit them. According to European Parliament [426], responding to growing concern about the impact of disinformation bots, Twitter suspended up to 70 million accounts between May and June 2018 and Facebook removed 583 million fake accounts in the first quarter of 2018 in an attempt to combat false news. The existence of bots in social media is so massive they now make up a respectable part of the percentage of posts. A typical example is the fact that in the 2016 presidential election in the United States, 20% of all political tweets originated from accounts that were likely to be bots, according to Bessi & Ferrara [189]. In vision of Shao, Ciampaglia et. al., bots are characterized as "super spreaders" of misinformation, because they act in different ways. According to their research, bots may play a critical role in driving the viral spread of content from low-credibility sources [355, p. 3], they can mention influential users in tweets that link to low-credibility content, they can retweet articles within seconds and if anything of that is reposted from other verified users, then it increases its credibility and seems real news. Bessi & Ferrara report that social bots in online political discussion can create three tangible issues: a) influence can be redistributed across suspicious accounts that may be operated with malicious purposes, b) the political conversation can become further polarized, c) the spreading of misinformation and unverified information can be enhanced [189, p. 10]. The main role of bots is to reproduce specific news or words that serve their own ideological side. They try to "trend" these news or keywords so that more people will see them through their social media feed and thus increase the chances of influencing public opinion. Schafer [138] writes that the aim of computational propaganda strategy is to manipulate public opinion by creating trending topics through pushing certain hashtags or highjacking existing ones. Of course, computational propaganda is not done only by bots and the algorithms they use. It is also done by real persons who use either their own or fake profiles on social media, in order to publish memes against their ideological opponents, use hate speech, threaten, accuse or do character assassination. These are the so-called internet trolls. Marwick & Lewis state that the concept of troll described those who deliberately baited people to elicit an emotional response [295, p. 4], but in recent years the term is characterized by the use of deliberately offensive speech, antipathy toward sensationalism in the mainstream media, the desire to create emotional impact in targets and the preservation of ambiguity. European Parliament [426] refers trolls as human

online agents, sometimes sponsored by state actors to harass other users or post divisive content to spark controversies. Bradshaw & Howard also refer to them as “cyber troops” because they function like an online party army whose goal is to destroy the opponent through negative propaganda. They also report that government-based cyber troops are public servants tasked with influencing public opinion [193, p. 15]. In other cases they may also operate as private contractors or volunteers. Monaco & Nyst say that state-sponsored trolling attacks represent an innovative manipulation of new technologies [307, p. 12] and they try to seed distrust in mainstream media and turn public opinion against journalists and activists. In any case, trolls along with bots use social media posts, likes, retweets, reports, comments, memes etc. and create internet trends with the aim of influencing public opinion. To what extent they succeed in this we cannot say with precision. However, the massivity with which they "shoot" social media certainly plays more or less a role in their success rate.

2.3. Disinformation in recent political life. An established normality?

US American elections of 2016, of 2020 and the Capitol riots. The events on misinformation in the 2016 American elections made it a landmark year for fake news. That is why, one year later, the term "fake news" became a Word of the Year for 2017 [349], as, according to Collins Dictionary, at that time its use increased by 365%. Donald Trump himself in an interview in TBN [242] said that “the media is fake” and “one of the greatest of all terms i have come up with is *fake*” and “they really hurt the country, because they take away the spirit of the country” and “the stock market today hit an all time high, unemployment is the lowest it’s been in almost 17 years – car companies are moving plans back to Michigan, so many things are happening and the media doesn’t want to talk about it”. From the words of the President, we understand that misinformation was a subject of discussion and it was treated as an important part of the public agenda and political confrontation. Allcott & Gentzkow [4] in their research, estimate that an average adult in US read at least one fake news article in the pre-election period, with higher exposure to pro-Trump than pro-Clinton articles. Someone could say that Trump played efficiently the attention-game. Lee & Xu [80] write that in the “Twitterverse”, Trump was more successful getting his issue agenda across to voters and lead voter engagement. Lewandowsky et al. [82] assume that, intentionally or not, Trump exploited social media to divert the attention of mainstream media. Various false news stories were launched that period, like, for example the fact that Hillary Clinton sold weapons to ISIS, that she had health problems [231], or that Pope Francis endorsed D. Trump [332]. Those stories were used in a post- survey and Gunther et al. [259] in this research report that the exposure of

citizens to fake news had a significant impact on voting decisions. Of course they are not talking about winning elections and this is not our point of view too. They are talking about the function of fake news to influence the public and the possibility that it gives an advantage to a candidate. The elections of 2016 were also the landmark of official investigations.

In spring of 2019, the U.S. Department of Justice and Special Counsel launched the Report on the Investigation into Russian Interference in the 2016 Presidential Election (Mueller report). The report says that there was "a social media campaign designed to provoke and amplify political and social discord in the United States" with the form we saw earlier as information warfare and also "to undermine the U.S. electoral system, to a targeted operation that by early 2016 favored candidate Trump and disparaged candidate Clinton" [467, p. 4]. They write that they came across with cyber intrusions (hacking) and the dissemination of hacked materials, such as DCLeaks, Guccifer 2.0 and the use of Wikileaks. They conclude that "although the investigation established that the Russian government perceived it would benefit from a Trump presidency and worked to secure that outcome…; the investigation did not establish that members of the Trump Campaign conspired or coordinated with the Russian government in its election interference activities". Albeit the "Trump Campaign showed interest in certain releases of documents and welcomed their potential to damage candidate Clinton". According to another report, made by the Senate Intelligence Committee [479] in 2020, there were some findings, among them was the Russian aggressive, multi-faced effort to influence the outcome of 2016 presidential elections, the intent to help the Trump Campaign and undermine the US democratic process. The Department of Homeland Security [456] in 2016 made a statement, saying that these cyber-operations were intended to interfere with the US election process and that similar tactics have been used across Europe and Eurasia to influence public opinion. The Intelligence Community Assessment of 2017 [412] notes that:

"Since the Cold War, Russian intelligence efforts related to US elections have primarily focused on foreign intelligence collection. For decades, Russian and Soviet intelligence services have sought to collect insider information from US political parties that could help Russian leaders understand a new US administration's plans and priorities".

The Assessment also writes about "new normal" in influence operations and about possible "future influence efforts in the United States and worldwide" because of "their perceived ability to impact public discussion". This fits very much our point. We don't focus on the dispute between countries or nations (USA, Russia or other). We focus on the ability of disinformation to affect public sphere and we examine this repeatedly in the research.

The disinformation rampage doesn't end there. Rogers says that in the early months in 2020 the proportion of user engagement with fake news to mainstream news stories is 1:3.5, compared to 1:4 during the same period in 2016 [343, p. 2]. Also, Bengani [186] writes that there were discovered hundreds of websites forming a network of news organizations, distributing thousands of algorithmically generated articles and she reports that, in a later research, this network had "received funding from multiple dark money groups, as well as collaborated with advocacy groups to cover prior to the 2020 election". We observe a continuity of false news during several election events. Thus, we meet a quite similar situation in presidential elections of 2020, as they were conducted in the shadow of election fraud. There were false narratives about fraud during the 2020 presidential race, with some posts noting that Republicans won big in Florida after the state enacted new voting restrictions and claimed that the lack of similar laws in other States resulted in fraud [214]. In a research for Berkman Klein Center for Internet and Society at Harvard, Benkler et al. [187] analyzed more than 55.000 online media stories, 5 million tweets and 75.000 posts on public Facebook pages. They examined Trump's claim that mail-voting during the pandemic of 2020 was a subject of mass election fraud and his campaign against the expansion of the phenomenon. They concluded that "the disinformation campaign was elite-driven and waged primarily through mass media responding to false assertions from President Trump, his campaign and the RNC (Republican National Committee)" with social media playing only a supportive role. The Election Integrity Partnership [499], an ensemble of organizations (Center for an Informed Public, Digital Forensic Research Lab, Graphika, & Stanford Internet Observatory) added that there were also bottom-up false and misleading narratives started with individual identifying real-world or one-off incidents and posting them to social media. Among other things, from the above we understand that mass media still plays an important role in the dispersion of misinformation and in some cases prove to be more "valuable" than social media. Of course, social media also play a prominent role and are the second head of "Lerna Hydra" in the problem of False News. Characteristic was the "stop the count" [200] phrase of D. Trump's post on Twitter with uppercase letters, as part of the "stop the steal" campaign and in the context of the rudiments of a new strain of Republican politics: history, faith, crime, retribution, as referred by Homans [266]. It seems that the information falseness about the reliability of the electoral result had a great deal of appeal to a number of citizens who reacted and made protests, which ended up in Capitol siege [211]. Election fraud misinformation was a reason for the Capitol riots, but there was also misinformation about the riots itself, as reported by Nawaz et al. [309]. According to Washington Post [374], the President's election lies

radicalized his supporters in real time and mobilized them to plot violent acts, with discussions that researchers watched unfold online. An Ipsos/NPR survey [311] found that even two months after the elections, 39% of Americans agree there is a "deep state" working to undermine Trump, with the percentage rising to 49% for white men and rural residents. Pape [321], in another several surveys, found that 47 million American adults agree with the statement that "the 2020 election was stolen from Donald Trump and Joe Biden is an illegitimate president" and 21 million of those, also agree that "use of force is justified to restore Donald J. Trump to the presidency". Pennycook & Rand [116] say that despite a lack of any meaningful evidence, a majority of Trump voters believed that fraud is common in U.S. elections (>77%), and that Trump won the 2020 election (>65%). So, we have citizens saying that the elections were affected by shady factors. Maybe, someone could agree with this, but the question is: the elections were affected by an uneven electoral system or by disinformation? The arguments and speculations about electoral fraud and unreliable election system have proved to be unfounded by official lips of US government agencies. The National Intelligence Council [447] in 2021 gave to the public an unclassified Assessment, drafted also by CIA, FBI, Department of Homeland Security, Department of State and National Security Agency, making notable conclusions about the recent events and some of them are:

Judgement 1: they report that "no indications that any foreign actor attempted to alter any technical aspect of the voting process in the 2020 US elections, including voter registration, casting ballots, vote tabulation, or reporting results".

Judgement 2: they "assess that a range of Russian government organizations conducted, influence operations aimed at denigrating President Biden's candidacy and the Democratic Party, supporting former President Trump, undermining public confidence in the electoral process, and exacerbating sociopolitical divisions in the US. Unlike in 2016, we did not see persistent Russian cyber efforts to gain access to election infrastructure".

Judgement 3: they "assess that Iran carried out a multi-pronged covert influence campaign intended to undercut former President Trump's reelection prospects, undermine public confidence in the electoral process and US institutions, and sow division and exacerbate societal tensions in the US".

Judgement 4: they write that "China did not deploy interference efforts"

So, according to the Assessment, there were foreign actors trying to support Trump, there were foreign actors trying to undermine Trump (supporting Joe Biden) and there were no foreign actors intervening in the voting system at technical level (no issue of fraud). The main motives were to cultivate public political mistrust and social unrest. The Election Integrity

Partnership [499] in 2021 also concluded in their report, that both foreign and domestic actors weaponized false and misleading narratives to undermine confidence in the US electoral system and erode faith in democracy. The US House of Representatives [443] in 2022 characterizes disinformation as a "exhausting and dangerous" and makes a Majority Staff Report talking about disinformation campaigns carried out by malicious domestic actors that try to undermine elections and about the federal failure to counter lies due to lack of sufficient resources and funding. They also conclude that:

"The risk of subversion of future elections remains high. Local election officials are on the frontlines of this crisis. Now more than ever, they need the resources and support that only the federal government can provide. A federal whole-of-government response to this growing crisis is an urgent necessity".

French Elections of 2017 – 2022. At the elections of 2017 in France we saw, in many cases, fake news targeting Emmanuel Macron, including mainly character assassination and leak of financial documents with offshore bank accounts. As New York Times reports [351], extremists in the United States started posting on social media sites in France in support of Marine Le Pen, using tactics that they deployed during 2016 American presidential elections. Though, those tactics didn't seem to have much impact in France because they were "lost in translation" due to cultural gap between American and French electorate public. Ferrara [234] in his study, talks about the "presence of bots that existed during the 2016 US Presidential election period to support alt-right narratives" that "went dark after November 8 and came back into use in the run up days to the 2017 French presidential election". He also explains that most of the audience in the general conversation about Macron Leaks was American alt-right community, a fact that brought more French voters in the defence of E. Macron and favored his candidacy. It was reported that Facebook has cracked down almost 30.000 fake accounts spreading disinformation during the pre-election period [286] and almost 40% of #MacronGate tweets came from automated accounts [293]. Vilmer [165] writes a report for the Atlantic Council and the Institut de Recherche Stratégique de l'Ecole Militaire (IRSEM), describing a 3-dimension information operation, including: "1) a disinformation campaign consisting of rumors, fake news, and even forged documents; 2) a hack targeting the computers of his campaign staff; 3) a leak—15 GB of stolen data,10 including 21,075 emails" known as "Macron Leaks", which was hyped by bots and trolls in social media. He also says that the disinformation operation was conducted by both American and Russian actors, referring to the "Kremlin media and the American alt-right". We see here that opinion influence operations or efforts can come from various actors worldwide and that referring to only one country could be

incorrect. The tendency of western media referring to Russia is a possible scenario but it would be more precise if we try to see the whole picture. We saw the same thing above earlier, in the US elections, where according to Assessment of the National Intelligence Council, a country of the Middle East had a possible involvement in the influence campaign at the US Elections of 2020. The actors involved could be multiple and the motives of each one could be even harder to find and to explain. We also notice, according to the references, that the alt-right community has targeted Macron, a politician considered as centrist [297], so we also talk about a battle of political ideologies (right, center, left etc).

A similar pattern of false news scaffold was encountered also in elections of 2022 at France. There were narratives about voting machines being used to help ensure a Macron victory and others saying that if there is not enough participation, the elections could be invalidated [206]. There was fake news claiming that Le Pen wants to withdraw France from the Paris Agreement, concerning the climate change [241]. There were claims about a massive election fraud, including the QR codes of "cartes électorales" being used to favor Macron or to discount votes of citizens who are not vaccinated [346]. As we saw before, according to the literature, among the main objectives of misinformation and influence operations are to undermine democratic institutions, to lead citizens to political mistrust, to reduce the credibility of political figures and to erode democracy in general. Here, it would be useful to do a correlation. According to a survey of Fondation pour l' Innovation Politique, Reynié [341] presents that in the question about the reasons for voting abstention and blank voting at France, the most popular answers were: "the different candidates do not appeal to me" and "the same policies are put in place regardless of the political party in power" and "I want to protest against the current political system". Also, in the question about the high level of mistrust among citizens in political institutions, the three first answers were 1) political parties, 2) religious authorities, 3) unions, furthermore, most citizens recognized themselves in no political party. Of course, we cannot say that this is due to misinformation, but it is an interesting reference. We make a correlation, not causation. Bronner [439] and his team, made a report on account of the Presidence of the French Republic, with the purpose to inform general public and civil society about the impact of disinformation on citizens nowadays. The report indicates several possible domestic and foreign actors conducting influence operations with strategic context, suggests the creation of a crisis management mechanism on European Union level and asks for "coordinated responses, strategies and public policies with regard to defence, security and diplomacy" in order to enlighten the grey area of fake news cloud, which

is „characterized by notions of competition, contestation and confrontation" and the "growing diversity of stakeholders".

Moldova's disinformation polarization. Hwang [270] writes that monetization of the Internet through advertising has also produced a financial motive for creating disinformation, which is shared through the Internet and drives traffic to a website. Also Miller [303] reports, there are websites almost dedicated to posting fake news, in order to gain economical profit. He presents an interview about fake news industry in Kosovo saying that site administrators profit significant amount of money from it, characterizing them as "clickbait merchants". Holdis [264] in her study about misinformation sites in Moldova, explains that "misinformation websites rely on a mass clickbait economy, which is simply non-existent in Moldova" because the advertising market "is very small and cannot support a large number of online media outlets". In this situation, the country holds an inherent advantage. The relatively small population of Moldova (less than three million) translates also to a small market pool and limited expected advertising revenues, so there is not so much excessive space for "misinformation as a business". Thus, we mean that the financial motives behind misinformation dissemination maybe are not as intense as in other countries with bigger market pools. However, this does not exclude financial motives from other possible sources (power games and economic influence) or of course, the socio-political motives of misinformation. Holdis adds that "misinformation in Moldova is spread by mainstream media, who tend to be politically partisan" so by this we can distinguish the political dimension of the phenomenon in the country. As we examined before in the paper (in the subchapter 2.1 – disinformation tactics for behavior influence), we found that during crises, an individual's vulnerability to disinformation increases due to the lack of preexisting knowledge in a certain ongoing topic (information gap) in combination with incoming data deficit (high demand-low supply/low credibility information from various sources). The infodemic crisis was not an exception for Moldova, as disinformation was observed between political opponents. According to Stepanov [150, p. 53], during the covid period, fake news „flooded both social networks and media space in the Republic of Moldova" and there was a classification into two categories, „the first category targeting the governors, and the second their political opponents". Some of the techniques targeting the governors were:

a) "Replacing facts with interpretations and assumptions

b) Spreading rumors and truncated information, which became credible after inducing the feeling of privileged access to their content

c) Distribution of negative labels and unfounded accusations".

In contrast, some of the techniques targeting the opposition were:

a) “Distribution of images favorable to persons involved in crisis management to demonstrate their actions and success.

b) Ignoring the criticism

c) Distributing clichés in order to approach the beliefs of the masses”.

The element of vulnerability to falsehoods is apparent also from public discussions statements. Viorica Zaharia [172] (President of the Press Council) talking about the situation in Moldova during pandemic mentioned that “the crises we've navigated through have revealed that a segment of the population is vulnerable to disinformation” and UNICEF Moldova collaborated with Association of Independent Press in 2023, creating online courses and interactive digital tools for students and journalists in order to build resilience against disinformation. Damian & Șubernițchi [213] in their report for CRPE about propaganda management during covid crisis, write that “Chisinau remains a testing ground for Russian influence in Eastern Europe” and that “although the population of the Republic of Moldova has been relatively equally split in recent years between pro-European and pro-Eastern, Russian language broadcasts predominate, which is also a result of the lack of alternatives”. Thus, we observe that external players are an important issue for the country. According to Tacu [155], the Moldovan Information and Security Service have blocked during the first year of the crisis “more than 55 sites that promoted fake news regarding covid-19” as a part of the „Stop Fals” campaign. Some fake news and conspiracy theories disseminated in Moldova during the pandemic, as mentioned by Putina [125], was the “forced vaccination and injection of nano-chips”, or that covid was “a revenge action of the Anglo-Saxons for the bureaucrats from Brussels”, or that “it was an invention of the mass media”, however the result was that those rumors “created confusion/panic among citizens and institutions as they spread information with contradictory content”. Moraru & Stepanov [96, p. 139] write that “on the one hand, mass media creates a new and true public space. On the other hand, it can create, at the same time, a false public space that, even in the case of well-intentioned manifestation, it can be far from reality”. We may say that disinformation can play the technical role of creating this illusive public space, in other words, an alteration of reality-based opinions through fakeness, a pollution of fact-based public dialogue with information falseness.

In general, Moldova seems to have the exposure and be bisected into pro-western and pro-eastern narratives. More than a decade before this was apparent. Moraru [97] writes in 2013 that “even though, in the last parliamentary elections, the coalition of pro-European political forces, entitled "Alliance for European Integration", came to power, the nostalgia for

past times, characteristic of certain segments of the population, still remains quite pronounced". According to Reporters Without Borders (RSF) [340] „Moldova's media are divided into pro-Russian and pro-Western camps. Oligarchs and political leaders strongly influence their editorial stances". However, the eastern originated disinformation which supports the pro-eastern narratives seems to be more apparent in the Moldovan media landscape, as we meet in the available space of research sources. Interesting case in the country's political sphere was the 2024 Presidential elections as well as the European Union membership Referendum which resulted in a razor-thin margin in favor of "yes" (50.35%), regarding the European trajectory of the country [372]. Saran [136] states that "countries with a Soviet past are today considered victims of disinformation, as they are often categorized as being in the "Russian zone of influence" and adds that "today, Russian disinformation is not concerned with spreading an ideology, but rather spreads insecurity, discouragement, and social division". Teruel-Rodriguez [373] describes that disinformation can be used as a tool in order to create and feed opinion polarization and divide public opinion, writing that "disinformation is a contemporary weapon, used by states and political leaders to destabilize western democracies…; taking advantage of the isolation between groups generated due to affective polarization– and in this way divide international public opinion". The almost balanced and close margin result of the Moldovan elections (referendum and presidential elections) in 2024 indicates a divided public opinion. Domestic disinformation is an extra promoting factor, due to its polarizing effects towards pro-EU and pro-Russian points of view. The elections weren't held without predicaments. As reported by De La Baume & Vasques [215], the win of pro-western incumbent Maia Sandu "was marred by claims of Russian interference, voter fraud and intimidation". Especially the issue of voter fraud and foreign influence is a common matter that we meet in all country cases examined in the paper. Similar claims were observed in US presidential elections and the French too. For the Moldovan elections in 2024, there was an official statement of the US Embassy [455] about electoral interference targeting Moldova, writing that "Russian actors are actively using disinformation and propaganda online, on the air, and on the streets to further their objectives" and that "part of these operations would include spreading lies about the incumbent president's character and intentions, and about supposed electoral irregularities". For example, Le Monde [306] reports that "Moldovan police said they had «reasonable evidence» of organized transportation of voters – illegal under the country's electoral code – to polling stations from within the country and from overseas" and moreover that "Moldova's foreign ministry said on Sunday afternoon that polling stations in Frankfurt, Germany, and Liverpool and Northampton in the UK had

been targeted by false bomb threats, which «intended only to stop the voting process»". According to Calus [198], Russian tv channels were quite popular in Moldova "due to the attractiveness of the content, which has better technical quality and is more interesting for the viewer", but after the parliaments' decision in 2022 of ban on retransmitting Russian originated programs in Moldovan television, "Russian propaganda continues to reach a significant proportion of the Moldovan population, primarily through social media" as also with "the creation and dissemination of fake news, and so-called deepfakes". Particularly deepfakes seem to have a notable presence in Moldova's political life in recent years. Tugarev [160] cites several cases of deepfakes circulated in media, involving the President Maia Sandu with content that didn't correspond to reality, probably for purposes of character assassination, as deepfakes "can be a tool in the strategies of denigrating and defaming the image a public person or a state". Also, still in 2024, as Zadorozna & Butuc [171] write, "TV stations that rebroadcast Russian media products remain the preference of Moldovans", thus one could say that Russian narratives have a popular reach in the Moldovan audience. They explain that a main objective of fake news circulated in the area (for example a possible military mobilization in the Republic of Moldova) serve the purpose of stirring social emotions, "destabilise public opinion using absurd narratives" and forward internal divisions such as "promoting separatism". Wesslau [393] tries to analyze Russia's strategy for Moldova and notes that "Russia's ultimate objective is to topple the reformist government in Chișinau, take political control of Moldova and prevent it from moving closer to the West, most notably by joining the EU". He explains that the disinformation campaigns are associated around some crucial motifs, such as the institutions and state official's credibility or issues of economic nature. Some of these motifs referred are:

a) "President Sandu has been a primary target of these attacks. They seek to discredit her ahead of the presidential elections with the use of deep fakes and forged «kompromat», or compromising material, involving allegations of hidden wealth and bribery

b) pushing the narrative that her government's western orientation will lead to war…; aims to scare off even pro-European voters

c) The Central Electoral Commission is also coming under increased attack. This is a deliberate effort to undermine the Commission's credibility" [393].

Ghencea [53] explains that in comparison with other member States of the European Union, due to Moldova's "reduced capacity of resilience of institutions and community, we can also find a stronger impact of disinformation on socio-political and electoral processes". Samorukov [346] writes that „Moscow believes that Moldova's lingering vulnerabilities, if

manipulated properly, will constitute a sufficient obstacle to the country's Euro-Atlantic integration" as also that with "the combination of the weak Moldovan state, polarized society, and the Transnistrian dispute will drag Moldova back into Moscow's orbit". Nevertheless, the potential public problems that can be caused by information falseness can be seen as a stimulus for growth and development. Peru-Balan [117] writes that "through a coordinated and sustained approach, the country can transform the challenges of disinformation into an opportunity to strengthen democracy and social cohesion, thus ensuring a more stable and informed future for all citizens".

Disinformation seems to be a serious issue also in other countries of the planet as well. Disinformation is also a worrying problem in other parts of the world, for example, in Africa. Fake news and propaganda in 2019 presidential election in Nigeria „has been on steroids" [196] and was used, as it is reported, by people who were close to both major political parties (President Buhari and opposition leader Abubakar). For example, there were claims that M. Buhari, of the All Progressives Congress (APC), was dead or clone, or unpatriotic by favoring foreigners and other claims that A. Abubakar, of the People's Democratic Party (PDP), was giving handouts of money and food in political gatherings, or that he was negotiating a deal with Boko Haram Islamists in exchange for land and oil [312; 314]. It was noted also the presence of ethnic hate speech at the service of disinformation, due to the country's fertile ground to do so (over 250 ethnic groups and 500 languages) [222]. There was high level bot activity in social media platforms, which called for elections boycott and also high level of satire misconception with reality, thus misinformation, due to the deficit in media and information literacy [313]. Moreover, the country had its local edition of "spin doctors". False information was spread through the "sojojin baci" (soldiers of the mouth), who are political consultants spreading information, in order to make political marketing and increase a politicians popularity, according to Hassan & Hitchen [261]. There were also people as social media entrepreneurs, the "propaganda secretaries" who shape political narratives and spread falsehoods, with earnings less than 14 dollars a month [260]. Pate & Ibrahim [113] say that if fake news and hate speech are weapons of "mass democratic destruction", then Nigeria's democratic order is already under siege. Commonwealth Security [202] adds that disinformation is a direct threat to country's national security, because it ignites intracommunal violence, ethnic and sectarian animosity, mainly between Nigerian communities in areas of ethnic, linguistic and religious diversities. Obono & Diyo [104] in their study examined the impacts of digital disinformation on voting decisions in the elections of 2019. Among the findings was that the voter's decrease in interest was "high/great extent"

by 47.5% and the degree of influence was “high” by 30.5%. We can say that this is an appreciable percentage and they state that it “still affected voter decisions”. Madu et al. [84] in their research, talk about the consequences of fake news in the African country and count a) electoral violence fueled by the instrumentation of fabricated content, b) ethno/religious conflicts by poisoning ethnic groups with emotions like fear, anxiety, suspicion, c) public mistrust by character assassination to muddle public perception of politicians, d) jungle justice, when citizens take the law in their own hands and proceed to hasty decisions. Pate et al. [113] in their study, talk about “post-truth era” in Nigeria, like the tip of the iceberg in a country plagued by poverty, weak institutions, marginalization, populism politics, extremism that threaten the democratic state. They appose local reasons of fake news dissemination and some of them are “the general distrust of elites, leaders and politicians by majority of Nigerians”, the “desperate politicians, ethnic and religious jingoists, foreign interests and mischief makers” who “generate fake news for influence or to persuade the audience” and the “absence or most often late arrival of official information on issues” that “creates vacuum conveniently filled in by rumors and disinformation”. The Collaboration on International ICT Policy for East and Southern Africa (CIPESA) made a case study about disinformation in five African countries including Cameroon, Ethiopia, Kenya, Nigeria and Uganda, concluding that “authoritarianism remains the primary driver of disinformation in the region”, that some governments have utilized false information to hold in their position, shrink civic space and target rivals (including critic voices) and that political discourse is undermined “by limiting access to credible, factual and pluralistic information about candidates parties and issues, in order to make informed choices” [218]. In addition, Wilson & Umar [402] in their study, conclude that fake news affect decision making in the country and that “democracy thrive well with peace and reliable and vibrant communication system”. Kofi Annan [179], in his speech at the National Electoral Institute of Mexico, poses disinformation as a serious problem for the public sovereignty, saluting policies to counter false information and stating that:

“People around the world aspire to greater freedom and demand a greater say in politics…; political systems have not kept up with economic developments, creating high levels of inequality and a growing sense of economic disenfranchisement…; as wealth is concentrated, so too is political power and influence. History teaches us that such an imbalance between the economic, social and political realms cannot be sustained for long…; We must make democratic systems more effective, and more responsive to the needs of average citizens”.

2.4. Conclusions for Chapter 2

This compartment of the study helps us understand the practical application of information falseness and some of its effects to modern public sphere as also the concerning issues that poses to democracy. The analysis of bibliographic sources allows us to reach the following conclusions:

1. Disinformation tactics are employed to increase the penetration and absorbability of false information to the public, in order to achieve an impact on receptor's (citizens) behavior. Those schemes can vary. Yet, all the different patterns and elaborated methods of disseminating information falseness prove that disinformation is utilized by public actors as a tool of power with purposes of achieving the goal of strategic influence.

2. Automation and artificial intelligence may hide some drawbacks, depending on how someone is utilizing them. Bots, cookies and algorithms play their role in supporting the creation or dissemination of information falseness when used with malicious incentives and create "digital armies" or "cyborgs" that can lead to ideological segregation, fake news storms and confirmation biases. This situation creates space for computational propaganda to develop. Information Warfare is a part of modern domestic and international conflict and power games as influence operations. Employing modern technologies to interfere how people make decisions is a tactic of this warfare. Thus, someone may say that in many cases disinformation is employed for profit (political, financial or social) and opinion management.

3. We observe that disinformation has presence in the contemporary political life of countries. We examined events around presidential elections in three different countries (USA, France and Nigeria) and we were familiarized with the effects of information falseness in opinion influence and the impactfulness to public opinion, as also the potential of disinformation to inflate social unrest such as the Capitol riots. It seems that this problem is characterized by permanence and perpetuation in public sphere. This repetitive situation simulates a status of normality, so someone could say that we have disinformation as an established normality in recent public agenda with all what that entails.

4. Based on the above, disinformation is a concerning problem that should be limited in order to protect a healthy public dialogue, public security and preserve democratic values away from opinion polarization, violence, discrimination, decision-making interference, social unrest, degradation of national credibility. Thus, possible solutions and answers to the problem in official/state level should be examined.

3. PUBLIC POLICIES AIMED AT COMBATING INFORMATION FALSENESS

Having examined the information disorder and in particular the concept of false information (with the types it includes), we have seen serious aspects of the problem and the effects that are caused in the public sphere. In the third chapter we will try to examine possible solutions, namely possible ways of dealing with disinformation, misinformation or malinformation at the level of public policies, through the research of government innovations and legislation from different regions of the globe. Our goal is to explore how officials approach the subject, to create a marquetry of initiatives, a pool of ideas that could benefit other States, civil society or public sphere conversation. In addition, we aim to make useful conclusions regarding the issue of disinformation nowadays, as also proposals about actions that can be taken in order to further limit the phenomenon.

3.1 European Union policies

The foundation of East Stratcom Task force. In the framework of the European Union's strategy, the main objective is the creation of the Energy Union, which can produce multiple benefits for the member states, neighboring states and their citizens. So according to European Council [442], the Union emphasizes its energy policy and describes the directions in which it will move in the future. Some of these directions that outline this policy are the „accelerating of infrastructure projects, including interconnections in particular to peripheral regions; enforcing existing energy legislation; reinforcing the legislative framework for the security of supply for electricity and gas; emissions reduction; energy efficiency contributing to moderation of demand; more effective, flexible market design which should go together with enhanced regional cooperation, including with neighbouring countries; research, innovation and competitiveness". In the context of the Energy Union, EU builds her external relations through the European Neighbourhood Policy with eastern countries, including Georgia, Moldova and Ukraine, as also African countries such as Libya. EU has formed the East Stratcom Task Force [228], as a part of these external actions, in order to "respond to the Russian Federation's ongoing disinformation campaigns affecting the European Union, its Member States, and countries in the shared neighbourhood". Among others, there is also a weekly Disinformation Review in the website. The task force focuses on strategic communication [472] and its main pursuit is the "promotion of EU policies towards the

Eastern Neighbourhood" and the „capacity to forecast, address and respond to disinformation activities by external actors". It's an effort to create friendly bonds between the EU and its close countries, to exchange values and products, to improve media environment and to explain the benefits of European financial and technical support in the process of democratic reforms. We are talking about a combination of public relations and anti-disinformation campaigns, trying to cover countries beyond today's EU borders. The Eastern Partnership includes Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine and for the period 2020-2023 received a funding of 11€ million, as part of the independent media program. In fact, following the standards of the East task force, a Division [490] of task forces was created in 2019. The Western Balkans Task Force covers the respective geographical area, as well as the Task Force South tries to counter disinformation activity in Libya and Syria. The Division works as a response "to the threat foreign disinformation, information manipulation and interference poses to the functioning of the EU's democracies, security and the implementation of its policies". Except Russia, European Commission [441] addresses to China and faces her not as a developing country but as a "key global actor and leading technological power", as "an economic competitor in the pursuit of technological leadership, and a systemic rival promoting alternative models of governance". As a result, the EU seeks a diplomatic approach for economic growth with China, in order to promote common interests, but also tries to create defences to protect the European neighbourhood from foreign interference and calls for "safeguard against potential serious security implications for critical digital infrastructure" and "security of 5G networks".

The proposals of High Level Expert Group. For the EU, 2018 was a landmark year for disinformation, as it began to tackle the problem more systematically and try to devise protection plans. In this context, the European Commission formed a high level group of experts (HLEG) to outline the problem and create counter proposals, a road map against disinformation. The HLEG concluded in a Report at the service of European Commission [409], which had the role of consultant, as an advisor for the Commission at the direction of targeted actions against the phenomenon. At the spectrum of definition of the issue, the report *does not* examine illegal content, nor satire and parody, thus excludes them from the work. For the HLEG, illegal content (defamation, hate speech, incitement to violence) are under European and national laws spectrum and satire-parody is not considered misleading distortion of facts. Hence, the Report covers and works specifically on disinformation as "all forms of false, inaccurate, or misleading information designed, presented and promoted to intentionally

cause public harm or for profit". It composes a policy framework for responses, addressing both public and private stakeholders and focusing on five different areas of operation.

a. Transparency

The more the media transparency, the better the user's ability to judge the information source and employ critical thinking across news they encounter. Transparency concerning the funding sources of media is a first step towards this direction. The *ownership* of media should be known to public, because it helps users to identify possible motives behind certain news information and possibly understand the intentions of the producer. Also, the "sponsored content has to be clearly identifiable" especially when we are talking about political advertising, because there is a possible opinion influence in situations such as elections. Moreover, they propose to amplify the "follow the money" approach, to make sure that advertising-funding goes to trustworthy sites and not to disinformation spreaders.

Of course, here the cooperation of private sector companies is also needed for success, and one such example is Facebook (Meta), which in May 2022 announced the creation of Ad Library [284]. Through the Ad Library, users can search for ads about social issues, elections, or political issues and find details like who paid for those ads or who the advertiser was targeting. Another step proposed by HLEG is "information on payments to human influencers and use of robots", so that users can understand whether the popularity of an influencer, news or product is based on bots or real users, as well as whether it is sponsored or not. The development of "source transparency indicators" from media companies is also very important. Organizations should train journalists to fact-check and confirm information before publishing, thus eliminating falseness. By this way, media companies increase their credibility and trustworthiness. Furthermore, platforms should provide information on the *functioning of algorithms*, so everyone could understand why they are seeing an ad, a video, an information etc and also *access to data,* so disinformation actors could be identified. Once such an actor is identified, we could have "debunking strategies, study of disinformation dynamics" and also avoidance of "unintended funding". An example of practice in this direction is Google's Youtube Trusted Flagger program [383], which provides "robust tools to government agencies and non-governmental organizations; effective at telling Youtube about content that violates our Community Guidelines". The program includes flagging and possible removal of content from Youtube, if misleading or sensitive content is observed.

b. Media and information literacy

According to HLEG, acquiring a good level of media and information literacy, both youngsters and adults cultivate critical readership and also "give incentive to media companies

to continuously improve their products and services". Thus, they talk about "key competencies and school rankings" for life-long learning and pose that "European institutions and national governments should recognize media and information literacy as core literacy, adding it into school curricula", including *training for teachers*. They give much importance on the need of covering all ages and demographic groups and promoting the elections integrity through fact-based public debates. They also encourage *regional approaches* on informational literacy programs that are designed and focused on targeted sub-regions (for example Baltic or Eastern Europe).

c. Empowerment of users and journalists

Giving the users a certain level of control over the content they come across with when surfing to platforms would be also a useful tool. They suggest the development of *client-based interfaces,* so users could have the opportunity to have content displayed at their feed, according to their search. But, in order to avoid the phenomenon of content bubbles, "content recommendation systems that expose different sources and different viewpoints around trending topics should be made available to users in online platforms". In addition, journalists and professionals should be equipped with *automatic verification tools,* to work intensively with fact-checking and increase trustworthiness. Innovative projects, modern technologies, artificial intelligence, augmented newsrooms, conversation journalism, and big data for media would play a crucial role in this direction.

d. Diversity and sustainability of the news media ecosystem

Given the fact that pluralism and journalistic independence from private interests is a key for democratic opinion exchange and high quality content, actions should be taken to support those, especially in the area of funding. So, is considered European funding on both private sector and public service media for "de facto and de jure protection of basic rights to free expression and diverse information". Supporting quality journalism that includes data-driven techniques and has cross-border cooperation with other media organizations is a factor that could increase user engagement and media credibility. Of course, actions should be taken in national level also, by public support. „No interference by public authorities with editorial independence" is a popular issue that raises debates in many countries and the HLEG highlights the need of protecting regulations equality and funding between media organizations, in order for governments not to favor some at the expense of another. This has a special importance, because of the need to keep away political interference and agenda setting by "parties in power". *Protection of fundamental rights* such as freedom of expression play a

key role and they specifically note that legal approaches to censorship are inefficient for disinformation and sometimes maybe considered as governmental manipulation.

e. Process and evaluation

In order to reach results, it should be a structured implementation framework of measures, a Code of Practices against disinformation in clear timeframes, so the process can be evaluated and with multi-stakeholder collaborations. HLEG proposes to implement the aforementioned measures on the one hand, but also the creation of a European mechanism for continuous supervision of the process and study of misinformation. Thus, are proposed European Centers for Research on Disinformation across countries, working both on national level and coordinating between them, forming a European center of Excellence.

The creation of Code of Practice on Disinformation. Having addressed and analyzed the dangers to democracy arising from disinformation, the EU is beginning to take more methodical action on the practice against the phenomenon. So in 2018 it introduces a set of proposed measures, which it calls the Code of Practice on Disinformation [440]. For the record, the Code does not include all types of information falseness such as misleading advertising, satire/parody or partisan news and commentary, thus it refers only to disinformation as "verifiably false or misleading information" that "is created, presented and disseminated for economic gain or to intentionally deceive the public" and with hostile intentions against the democratic institutions of European Union members which "may cause public harm". Furthermore, the suggestions of the HLEG were taken into account and are a key pillar of support, as the Code includes measures related to transparency, media information literacy, empowerment of users, diversity and sustainability of media ecosystem, evaluation, as we will see below. Of course according to the Commission, the Code does not insult the existing legal framework of the EU and its Member States and respects frameworks such as the EU Charter of Fundamental Rights, the European Convention on Human Rights and others. When we are talking about policies, the Code is a self-regulatory piece of legislation across EU that calls stakeholders of the private sector to interplay and cooperate with European and national administrations in a climate of good faith, in order to counter the phenomenon and protect public interest. By doing so, the companies could also increase their trust and credibility. The associations and companies that willingly sign in the Code of Practice are the „Signatories" and agree also with the spirit of the Code, concerning the threats of false information. The Signatories undertake to implement certain commitments that of course „correspond to the product and/or service they offer, their role in the value chain, their technical capabilities and their liability regimes as provided under EU Law". Signatories that

sign only certain commitments of the Code (not all commitments) are the "Relevant Signatories". In addition, we are talking about European legal framework and "the application of this Code is limited for each Signatory to services provided in the States that are Contracting Parties to the European Economic Area". Signatories can sign out from the Code and new Signatories can apply and participate to the Code at any time they want, by presenting a strategic plan of actions that they aim to implement. The main purpose of the Code is to give the Signatories the directions that will focus their efforts, so that they can move more effectively towards the common goal, which is none other than the one demonstrated through their reports and analyses by the European Commission, the European Council and the High Level Group of Experts. The first direction is given regarding the *scrutiny of ad placements*, to wit the thorough control, evaluation and limitation of advertisements that include disinformation and take place on online platforms or other online Media-related companies. The logic is that through the restriction of disinformation-ads, is automatically reduced the percentage of revenue of advertisement-distributors, that is, those who reap financial profits from this type of advertising by exploiting misinformation. In other words, it is an economic approach to dealing with the problem. Also, one could translate it as an approach from an ethical point of view, because we are talking about transparency and trustworthiness. Online media platforms gain points of credibility by blocking disinformation. So the commitment of the Code in this area, states (paragraph II.A.):

- „Relevant Signatories commit to deploy policies and processes to disrupt advertising and monetization incentives for relevant behaviours, such as misrepresenting material information about oneself or the purpose of one's properties. These policies and processes can include, for example, the restriction of advertising services or limiting paid placements, and could potentially take place in partnership with fact-checking organizations. Such policies and processes may, as appropriate:

a) Promote and/or include the use of brand safety and verification tools;

b) Enable engagement with third party verification companies;

c) Assist and/or allow advertisers to assess media buying strategies and online reputational risks;

d) Provide advertisers with necessary access to client-specific accounts to help enable them to monitor the placement of ads and make choices regarding where ads are placed".

The second direction is given regarding *political advertising and issue-based advertising* in order to protect elections integrity and cybersecurity as much. When citizens can

understand *why* they are seeing an advertisement, or *who* is funding an advertisement or how much he pays for it, then they could distinguish better the purpose of the advertisement and criticize better about the intentions of the financier. Thus, we could have improved critical thinking on public affairs and we could also see it as a step forward from the scope of media literacy. That is important, especially when we talk about political matters or other social issues. Someone could also say that it is a "follow the money" approach, which reveals to the public the source of certain political targeting advertising campaigns. Also, the Code, as we see below, is available for any media company to join (television channel, newspaper etc), because it includes all news mediums. The Code in this area states (paragraph II.B.):

- „Signatories commit to keep complying with the requirement set by EU and national laws, and outlined in self-regulatory Codes, that all advertisements should be clearly distinguishable from editorial content, including news, whatever their form and whatever the medium used. When an advertisement appears in a medium containing news or editorial matter, it should be presented in such a way as to be readily recognisable as a paid-for communication or labelled as such.
- Relevant Signatories commit to enable public disclosure of political advertising (defined as advertisements advocating for or against the election of a candidate or passage of referenda in national and European elections), which could include actual sponsor identity and amounts spent.
- Relevant Signatories commit to use reasonable efforts towards devising approaches to publicly disclose "issue-based advertising". Such efforts will include the development of a working definition of "issue-based advertising" which does not limit reporting on political discussion and the publishing of political opinion and excludes commercial advertising. Given the implications related to freedom of expression, Signatories encourage engagement with expert stakeholders to explore approaches that both achieve transparency but also uphold fundamental rights. The work to develop this definition shall not interfere with the areas covered by advertising self-regulatory organizations."

The third direction has to do with the *integrity of services* through the removal of bots and fake accounts from online environment. As we already examined in the research, sometimes bots can impose malfunctions on online human communications and work at the service of disinformation. Preventing artificial intelligence or fake accounts form disseminating disinformation on online platforms could be another step to a more transparent digital space where human interaction and public debate would be more authentic. Ensuring that, actions have to be taken by media platforms and the Code mentions (paragraph II.C.):

- „Relevant Signatories commit to put in place clear policies regarding identity and the misuse of automated bots on their services and to enforce these policies within the EU. Such measures could include some of the measures in the Annex 2 to this Code.
- Relevant Signatories commit to put in place policies on what constitutes impermissible use of automated systems and to make this policy publicly available on the platform and accessible to EU users."

Following similar steps with paragraph II.B regarding media literacy, the Code urges the companies to work on *empowering consumers* and giving them the ability to search and evaluate information. Facilitating citizens with digital tools, fact-checking tools and giving them the chance to cross-check news and hear opinions from different sources and persons works in the just direction, because they take technology in their own hands and use it to personally judge what is „true" or „false". By this way, users gain a level of independence, because they don't expect only from media companies or public officials to label what news is disinformation and what is not. To wit, we are talking about reinforcing the user's access and capabilities to search, evaluate information and be self-protected from disinformation. Concerning this area, the Code calls for (paragraph II.D.):

- „Relevant Signatories commit to invest in products, technologies and programs such as those referred to in Annex 2 to help people make informed decisions when they encounter online news that may be false, including by supporting efforts to develop and implement effective indicators of trustworthiness in collaboration with the news ecosystem.
- Relevant Signatories commit to invest in technological means to prioritize relevant, authentic and authoritative information where appropriate in search, feeds, or other automatically ranked distribution channels.
- Relevant Signatories commit to invest in features and tools that make it easier for people to find diverse perspectives about topics of public interest.
- Signatories commit to partner with civil society, governments, edtional institutions, and other stakeholders to support efforts aimed at improving critical thinking and digital media literacy.
- Signatories commit to encourage market uptake of tools that help consumers understand why they are seeing particular advertisements."

Respectively with users, they should also be efforts in the direction of *empowering the research community*. Giving access to certain types of data and enabling academics and scholars to examine disinformation, could provide additional value and help society to better understand the phenomenon, in order to face it. Let us not forget that a key pillar for the

creation of the Code itself, were the proposals of the HLEG, which consisted of scientists, researchers, journalists whose contribution was the result of research work. Expanding the spectrum of research on disinformation on academic level serves multiple purposes. Firstly, as we already told, it empowers users, journalists and researchers, secondly, it empowers their media literacy and education, thirdly, it plays important role on "process and evaluation" strategy against the problem (remember the prompts of HLEG). To wit, according to the Code regarding this area (paragraph II.E.):

- „Relevant Signatories commit to support good faith independent efforts to track Disinformation and understand its impact, including the independent network of fact-checkers facilitated by the European Commission upon its establishment. This will include sharing privacy protected datasets, undertaking joint research, or otherwise partnering with academics and civil society organizations if relevant and possible.
- Relevant Signatories commit not to prohibit or discourage good faith research into Disinformation and political advertising on their platforms.
- Relevant Signatories commit to encourage research into Disinformation and political advertising.
- Relevant Signatories commit to convene an annual event to foster discussions within academia, the fact-checking community and members of the value chain".

Of course, regarding the application of the Code, a supervision mechanism is foreseen. For example, detailed information reports about companies activities would be provided by the World Federation of Advertisers (WFA). Frequent updates and brand reports about the progress of implemented methods against disinformation will be reviewed by a third party and given to European Commission. The cooperation between the Commission, the Signatories and other involved stakeholders in order to confirm the respect of both the Code and fundamental rights, has a continual character and it is aimed at strengthening the integration of the Code of Practice on Disinformation into the DSA. The adoption, in 2025, of a Code of Conduct under the DSA [488; 494; 495] marked the firm continuation of European policies to combat disinformation and a relevant benchmark for determining compliance with the DSA with regard to disinformation risks for digital service providers.

Anti-infodemic protective strategy during covid-19 crisis. The presence of covid-19 disinformation during the pandemic has been a concern for the EU and national governments, as it has created fear and social anxiety. T. Ghebreyesus, the Director-General of World Health Organization (WHO) in his statements [250] mentioned that epidemics "have the potential to cause severe political, economic and social instability and insecurity" and that we are now also

facing an infodemic. To wit, in that period we had a combination of health-related issues and information falseness that threatened national security. Vice-president of European Commission J. Borrell in his speech [415] pointed out that: „disinformation in times of the coronavirus can kill. Misleading health information, consumer fraud, cybercrime or targeted disinformation campaigns by foreign actors pose several potential risks to our citizens, their health and their trust in public institutions. We have, for example, seen disinformation saying that drinking bleach can cure the coronavirus or that washing hands does not help. It can also have a very direct material impact. Take, for instance, the vandalism against 5G infrastructures in some Member States".

During the pandemic period a paradox was observed. Some citizens, believing that certain disinformation theories or conspiracy theories are true information, essentially undermine their fundamental right to health. According to the Article 12 of International Covenant on Economic, Social and Cultural Rights [453] as noted by United Nations, there is "the right of everyone to the enjoyment of the highest attainable standard of physical and mental health". However, some people, ignoring the recommendations of official government health agencies or the WHO, may have exposed themselves to danger. Ahmad et al. [2] reports that fake news can influence people to make bad decisions in the healthcare domain" and that "the most popular misleading claims are unproven and unverifiable". Rocha et al. [127] note several health-dangerous conspiracy theories that were disseminated during the pandemic such as that water with lemon or coconut oil could kill the virus, types of drugs that could cure the illness or that the virus was a product of biological warfare of China. They also refer to cases of hydroxychloroquine overdoses, alcohol consumption and panic over supplies and fuel. Davidson [34] talks about myths around vaccination autism and writes that „the anti-vaccine movement appears to be part of a larger trend of discontent and distrust in the established preeminence of scientific evidence over impressions and opinions". In continuation of article 12 of International Rights of United Nations [453] that we saw above, reference is also made to "the prevention, treatment and control of epidemic, endemic, occupational and other diseases", as well as article 9 regarding social security. The European Commission having analyzed the dangers of information falseness around covid-19 crisis and wanting to guard public security, resilience and health of citizens against "infodemic" moved in this direction by implementing policies to prevent disinformation. Thus, the Commission, in June of 2020, published the Joint Communication [489], which included sets of actions regarding covid pandemic disinformation. The Joint Communication is essentially a European strategic plan of policies, spreading in multiple fields of activity and trying to maintain economical, social,

political and health balance across the States, by limiting the problem examined. A first step taken by the Commission is in the direction of *strengthening strategic communication* across the EU and its neighborhood, by sharing and exchanging valuable and relevant information around covid at international level. For example, there is the website of European Center of Disease Prevention and Control [398], which provides citizens with scientific fact-based and technical data and informs about infectious diseases cooperates with national health protection bodies and helps in developing continent-wide disease surveillance. The philosophy of the approach is the cooperation of EU with all involved stakeholders and organizations that can provide help in their own way according to their domain of practice. As noted in the Joint Communication [489], some of the most important EU actions planned, regarding strengthening strategic communication, are:

- „The Commission and the High Representative will: step up the use of existing mechanisms, to facilitate concrete cooperation with Member States and international partners on strategic communication, including through the Commission's cooperation channels with the Member States and the EEAS Strategic Communications Task Forces.
- a special section in the Rapid Alert System will be created to facilitate the exchange of COVID-19 relevant communication material between the EU Member States and relevant EU institution.
- The Commission Representations in Member States will play a more active role in national debates with fact-based information, tailored to the local situation, in particular by using social media."

Another similar field of activity is *cooperating better within the EU*, both at the level of Member States and at the level of organizations. The coordination and exchange of information from organization to organization or from organization to an official state body or European body increase the cohesion of the Union and its effectiveness. One such example is the Rapid Alert System that we will see below, with the adaptation of its operation against crisis disinformation. An important goal is also the practices to raise awareness, to inform Member States about the available mechanisms of crisis management, simply by regular contact groups and videoconferences, thus communicating more and more inside the Union. As noted in the Joint Communication, some of the actions concerning this area are:

- "Member States should more extensively use the Rapid Alert System and other appropriate means to strengthen cooperation with EU institutions and amongst themselves, in particular on information environment assessment and situational awareness.

- The Commission will propose to the other institutions to set up and test mechanisms to improve coordination on COVID-19-related disinformation within existing structures and to share assessments and analyses."

Additionally with internal efforts, the Commission makes efforts on external level on *cooperation with third countries and international partners*. The actions try to extend in broader points of interest beyond European borders as also in the European neighborhood. The Union aims to improve its bonds with Eastern Europe countries, the Western Balkans and its interplay with sensitive crisis-affected areas such as the Sahel, the Great Lakes region, the Horn of Africa, the Middle East and Latin America. Those efforts include efforts include financial support packages to governments and public diplomacy programs. Respectable funding, adjusted facing disinformation, comes from project Horizon 2020 [450], supporting research and innovation programs. For example, the project Co-Inform [418] is one of these funded programs, which empowers citizens, journalists and policymakers with socio-technical solutions to increase resilience to misinformation, media literacy, to infiltrate echo chambers on social media or provide advanced misinformation analysis to support policy making process. The Joint Communication poses several actions concerning third countries and international partnership and some of the most important are that the Commission will:

- "support cooperation and sharing of best practice in fighting disinformation and foreign influence operations globally, with concrete cooperation activities and support programmes, building on existing public diplomacy programmes and awareness-raising activities;
- intensify the exchange of information with relevant partners from civil society and the private sector in third countries on situational awareness and threat development, *inter alia*, by organizing consultations, conferences and public events;
- as part of the 'Team Europe' package of efforts to support partners in tackling the impact of the pandemic, promote the access to reliable information, fight disinformation, work with journalists and media and support initiatives to address disinformation and misinformation in third countries through EU Delegations and Member States diplomatic missions on the ground."

Additionally, the EU officials having recognized the impact of online platforms to users' beliefs and behavior are constructing policies for the social media environment. Actions are planned towards *greater transparency of online platforms about disinformation and influence operations,* compatible with the Code of Practice that we already saw, but also adding points on focusing the epidemic crisis. The European Regulators Group for

Audiovisual Media Services (ERGA) [227] assists the Commission's work on the implementation of related regulations, on cooperation between regulatory bodies in the EU and on exchanging of experience and good practices. ERGA also publishes reports and opinions from experts and through an Action Group makes recommendations to European policy makers about the media sector, trying to maintain stable democracies and safety nets for the economy [500]. The Commission, trying to evaluate and improve the digital environment of the safety of the citizens, calls for regular corporate reports analyzing the progress of the measures taken by the stakeholders. Some of the actions noted by the Joint in that area are:

- "Initiatives to promote authoritative content at EU and at Member State level. Platforms should provide data on the actions taken to promote information from national and international health agencies, national and EU authorities, as well as professional media.
- Initiatives and tools to improve users' awareness. Platforms should provide data about implementation of their policies to inform users when they interact with disinformation.
- Manipulative behaviour. Platforms should report all instances of social media manipulation and malign influence operations or coordinated inauthentic behaviour detected on their services. Platforms should also cooperate with EU Member States and institutions in order to facilitate the assessment and attribution of disinformation campaigns and influence operations."

Corresponding importance is given to the development and provision of tools for *fact-checkers and researchers.* Recommendations are given to online platforms to intensify their cooperation with information verifiers as well as efforts to upgrade infrastructures for the detection and examination of disinformation and influence operations within European borders. The European Digital Media Observatory (EDMO) plays energetic role in this process, by supporting the fact-checking community. Some of the actions noted in the Joint are:

- "The Commission calls on the platforms to broaden and intensify their cooperation with fact-checkers and actively offer access to their fact-checking programmes to organisations in all EU Member States – as well as in its neighbourhood – for all languages.
- The Commission invites platforms to agree with EDMO upon a framework providing academic researchers privacy-protected access to relevant platforms' data to enhance the detection and analysis of disinformation."

Also, protecting *freedom of expression and pluralistic debate* is a main aim of the Commission and efforts are taken towards the direction. The existence of institutionalization against misinformation on a subject, as in this case with covid-disinformation, is legitimate,

but at the same time it can also be dangerous. There is a probability where a country's legislation violates fundamental rights such as freedom of expression or freedom of speech, as protected by Article 19 [501] of Human Rights. There is also a probability that this is done deliberately and some government takes advantage of the crisis to pass laws that favor it and silence voices that criticize it, thus simulating authoritarian tactics. Amnesty International [240] has raised concerns about the issue and notes that many governments "abuse their authority to silence peaceful dissent by passing laws criminalizing freedom of expression. This is often done in the name of counterterrorism, national security or religion". According to the Joint Communication, some of the most important actions regarding this area are:

- "The Commission invites the Parliament and the Council to urgently adopt the comprehensive recovery package that would help repair and strengthen resilience of the media sector to fight COVID-related disinformation. Member States should make the most of this package as well as of the EU's COVID-19 economic response to support media which are heavily hit by the crisis while respecting their independence. All EU actors should strive to support media as part of the recovery.
- To accompany these efforts, the Commission will continue co-funding independent projects in the area of journalism, media freedom and pluralism and facilitating access to finance and funding opportunities for the media sector.
- Support will be stepped up in monitoring violations of press freedom, supporting advocacy for a safer media environment and protection of journalists, including by providing assistance via the EU Human Rights Defenders Protection Mechanism and through closer cooperation with the European Endowment for Democracy."

As it was counseled also by the HLEG, *raising citizen awareness* against disinformation is another measure of protection and this happens with the cultivation of critical thinking and media literacy. Many fraudulent websites operate in the short term, for economical profit or influence purposes, by taking advantage of the lack of knowledge of some citizens on a complex subject. Consequently, empowering users with verification tools, supporting digital educational programs and civil society initiatives could prove a valuable asset. A good example is the EU – Western Balkans Media Literacy Conference [229] in Brussels, Sarajevo and Banja Luka, that started in 2020 and which, among others, discussed media literacy practices for youngsters and adults and the role of education against disinformation. The Conference published a glossary too, in order to inform people about the content discussed and which also provided them with links for fact-checking organizations. As noted in the Joint Communication, an action concerning this area:

"Awareness-raising materials on the nature of disinformation, its dangers to the democratic nature of our society and the tools available to detect and respond to disinformation should be produced by the EU institutions in a coordinated manner, shared through the relevant networks and citizens engagement tools and aimed at reaching a variety of groups in all Member States and in partner countries."

Some other actions are focused on economic criteria, for the protection of public health and consumers rights, by obstructing malicious advertisements, especially in online platforms. There are possible ads that promote deceptive marketing, scams, possibly dangerous products, false claims etc and try to extort financial profit. The Commission also funds national authorities, in order to decentralize the efforts and be more immediate and effective. One of the actions noted in the Joint is:

- "The support to national consumer protection authorities within the Consumer Protection Cooperation Network will include financing their capacity to do agile monitoring of markets. In the longer term, the Commission will look at providing a common toolbox, such as a forensic observatory for digital markets with specific tools to carry out online investigations and screen problematic practices linked to COVID-19."

Of course, the field of evaluation of the progress made by the contracting parties against misinformation is also of interest. We can say, as also noted by the HLEG, it is the stage of process and evaluation. As we saw earlier, stakeholders should provide regular reports to the Commission about their actions taken and their progress. Signatories of the Code, which include digital giants among them, also participated in the monitoring program against covid-19 disinformation and they shared monthly reports to the EU. In those reports there is an overview of their implemented policies and they also present some quantitative data of their actions. For example, we will examine some Signatories reports of 2020, a period during the first year of the epidemic and the first year of quarantines worldwide. According to a monthly report of Facebook [230], the company's "COVID-19 Information Center" was visited by more than 133 million people globally, it expanded the network of independent fact-checking partners, it displayed misinformation warning screens (as a result of fact-checking) on over 3.6 million pieces of content in the EU Member States, it removed more than 1100 accounts and more than 7000 Pages that violated their Coordinated Inauthentic Behavior Policy. Google's [223] report notes, among others, that the company provided $50 million in ad grants to the EU governments and public authorities to promote authoritative content, which generated 300 million impressions and 51 million clicks, they created a "COVID-19 medical misinformation policy" on YouTube to increase user awareness that included reducing recommendations of

borderline content in cases of violating content and they took action on over 3000 URLs with covid related content under their “Dangerous or derogatory content policy”. Microsoft [316] notes that points users to special covid-19 “Information Hubs” through the search engine Bing, which had more than 4 million European visitors, it developed their “Misleading Content Policy” and prevented more than 1.4 million advertiser submissions related to covid-19 which were intended to display in European markets. Twitter [362], among others, took actions introducing the “COVID-19 Guidance Enforcement” and since then removed over 20.000 tweets and challenged 8.5 million accounts, as also, they launched several campaigns concerning media literacy, like #ThinkBeforeSharing in which users were asked if they would like to open an article before sharing it. This tool, according to the platform, increased the percentage of people opening articles before Retweeting by 33%.

The extention of Rapid Alert System. Back in 1979, the European Union created the Rapid Alert System for Food [497], which in 2002 formed is legal basis with the regulation on food laws [474] (in article 50) and later became known as the Rapid Alert System for Food and Feed (RASFF). This Alert System was established in the spirit of crisis management, concerning of course health threats deriving from food and feed. The Commission uses RASFF as a notification system, to exchange information around Member States, even in cases of emergency and helps them to act with coordination in order to face a certain health hazard. The main synergy of the system comes through notifications [226]. National authorities carry out inspections and checks on products and if they meet a case of non-compliance, they inform other members of the Alert Network through the online platform iRASFF. Then, after evaluating, they categorize and label the type of potential threat. In the last few years, there was an aim of the European Commission to expand the use of the Alert System and include it to the tools against disinformation. From 2018, concerning the branch of countering disinformation, the Rapid Alert System (RAS) is a digital platform dedicated against the issue, where the Member States and EU institutions share insights and coordinate responses [475]. An example of the RAS usage was spotting fake news around covid-19 and sharing knowledge between member states and G7 partners [365]. Nevertheless, as it seems, Rapid Alert activation is not often observed. At least, during the course of our study, we didn’t encounter more reports or official announcements of RAS activation against a certain case of disinformation. On the one hand, the realization of the problem on the part of the European Union and the creation of an emergency notification mechanism, dedicated to countering disinformation, is a sign of good reflexes. But, on the other hand, one could say that more work is needed on increasing the frequency of activation of the system, perhaps also on further

communication and cooperation of the parties involved, so that the implemented policy will have more effectiveness and the shared knowledge will be further communicated, especially in cases of emergency situation. After all, as we saw earlier (for example in the Joint Communication against epidemic disinformation), the European Commission itself urges the Member States to use RAS more.

Forming a framework to support democracies. The European Democracy Action Plan. Among other things, in the first part of our research we saw some obstacles that misinformation poses to democracy and its smooth functioning. In particular, we have observed in several cases the provoking of social unrest during election periods, mainly through questioning the credibility of the electoral system. This was partly done via the internet and social media (bots, algorithms, ads, computational propaganda etc) as citizens have been increasingly using them in their daily lives in recent years. In other words, one could say that we have a digitization of disinformation, as well as a digitization of democracy, since a part of the exchange of opinions and social dialogue takes place online. The European Union, realizing the new challenges, mobilized in the direction of protecting the democratic state of its member states, creating conditions for a healthier political competition and dialogue and protecting national security from influence operations. Thus, the European Commission at the end of 2020 introduced the European Democracy Action Plan [424], a set of measures targeting goals in three different branches: a) promote fair elections and democratic participation, b) support free and independent media c) counter disinformation. Of course, one does not exclude the other, on the contrary, one helps the other. If, for example, misinformation is limited, then citizens will have a clearer picture of the political positions of the candidates, their deeds, the tactics of the parties, etc., so we will have a more fair and independent electoral process. Vice versa, free and independent media are probably more likely to withstand to a foreign interference, so influence operations and disinformation are limited. To wit, we understand that the European Democracy Action Plan concerns a multidimensional issue, but the measures it includes are aimed at a common goal. Of course, we will not list them all, as this is a long text. We will appose some of the actions of the Plan, that we consider the most important. One of them is the "stronger enforcement and compliance with the General Data Protection Regulation (GDPR)". According to GDPR regulation [475], among others, in paragraph 39 it is noted that GDPR "should be transparent to natural persons that personal data concerning them are collected, used, consulted or otherwise processed and to what extent the personal data are or will be processed" and also that "should be processed in a manner that ensures appropriate security and confidentiality of the personal data, including for preventing unauthorised access to or use

of personal data and the equipment used for the processing". Establishing rules and restrictions on the handling, processing or even the sale of personal data (for example from online platforms), can be a safeguard against political advertisement micro-targeting. In other words, certain advertisements will not be able to exploit information easily and make a display by choosing targeted citizens who belong to specific social groups (for example according to age, economic class, geographic county or other demographic factors) in order to increase their effect. Thus, one could say that the transparency of political advertising and healthy competition is increasing.

Furthermore, according to the European Democracy Action Plan, the EU aims to make a synergy between the European Cooperation Network on Elections, the Network and Information Systems Cooperation Group, the Rapid Alert System and the authorities of Member States in order to create a mechanism that ensures elections integrity and resistibility to domestic or foreign influence operations. Also, the Compendium on Cyber Security of Election Technology [425] is a sum of practices to ensure legitimate elections processes and the EU intends to update it in the future. Other contiguous preparations noted in the Democracy Action Plan [424] are:

- "Strengthen cooperation on parity of treatment and balanced media coverage during elections
- Prepare a compendium of e-voting practices".

In terms of strengthening media freedom and pluralism, the Action Plan places great emphasis on the protection of journalists. Since it considers journalism as a function in society and since independent "media are key to hold power to account and to help citizens make informed decisions", that is why the Commission develops a series of good practices that facilitate journalistic research and protect the journalists physically and legally. One of them is the Safety of Journalists Platform [327], a platform created by the European Council and posts alerts when certain criteria are fulfilled, such as when information is a serious concern to media freedom, when it violates regulation in one of the Council's Member States, when is based on facts and when is already in the public domain. Another tactic is the stable funding of press pluralism and freedom initiatives, particularly the Creative Europe programme 2021-2027 [429] which among other aims to enhance free, diverse and pluralistic media environment, quality journalism and media literacy. The programme has € 2.44 billion budget and provides funds for culture, creativity and audiovisual sector, not only in Member States but also in the Neighborhood. Concerning this field, the European Democracy Action Plan [424] foretells:

- "Sustainable funding for projects with a focus on legal and practical assistance to journalists in the EU and elsewhere, including safety and cybersecurity training for journalists and diplomatic support."

Furthering the fight for freedom of speech and protection of healthy journalism, the Commission mobilizes for the issue of Strategic lawsuits against public participation (SLAPPs). The Action Plan notes that there are cases of "lawsuits initiated by state organs, business corporations or powerful individuals against weaker parties who express criticism or communicate messages that are uncomfortable to the litigants, on a matter of public interest". In other words, SLAPPs are a form of pressure exerted by some public or private actors on some journalists, with the aim of preventing the publication of news or information that they believe may harm their interests. For example, when a journalist is facing the revelation of a political scandal, he may hesitate to make it public because of the fear of being confronted with possible legal persecutions. Thus, the Commission aims to form an expert group providing legal support for journalist and other actors confronted with SLAPP cases. Also, in 2022 the Commission introduced a Recommendation [421] to Member States, with guidance for state measures against SLAPPs, specifically "on protecting journalists and human rights defenders who engage in public participation from manifestly unfounded or abusive court proceedings". Furthermore, the Commission co-funds the Euromedia Ownership Monitor [225], a network of researchers in EU Higher Education Institutions that builds a database with information about media ownership across several EU participant countries. They refer to the legal ownership of the media, with at least 5% of natural persons' participation in an outlet. As we discussed earlier, the transparency in the ownership of a media comes to answer *who* is behind certain information that is published in the public space.

Consequently, knowing who the transmitter of news is, could fairly help in understanding *why* they see it. As we also examined in the first part of the research, there are several possible motives of state or private actors transmitting news that could hypothetically contain disinformation (political, economical, social motives). So, when citizens have intelligence on the ownership factor, they could also have perspicacity on the motives of the transmitter and the purposes that he would want to achieve through publishing certain information/news. It's a form of media literacy which increases awareness, but also demands critical thinking and knowledge of current affairs in the public space. Humorously speaking, we could say that in many cases if a citizen wants to be well-informed, he should seek to be well-informed. We are talking about a model of active citizen. As we understand, initiatives in this direction could provide significant increase in the transparency factor.

Another measure mainly regarding the protection of Member States against influence operations from foreign actors, specifically in the digital space, is sanctions. The Democracy Action Plan notes the action:

- "Develop the EU's toolbox for countering foreign interference and influence operations, including new instruments that allow imposing costs on perpetrators, as well as strengthening the EEAS strategic communication activities and taskforces."

Thus, EU wanting to increase cybersecurity and respond to cyber-attacks, established a new *sanctions* regime. In 2019, the European Council published the Council Decision [428] concerning policies against cyber-attacks and characterizing them as a threat to socio-economical life, State functions and infrastructures (article 1). The Decision foretells sanctions of financial character, as a diplomatic tool of malicious foreign interference prevention. Specifically, article 5 notes freezing of "funds and economic resources belonging to, owned, held or controlled by natural or legal persons, entities or bodies that are responsible for cyber-attacks or attempted cyber-attacks" and this includes "planning, preparing, participating in, directing, assisting or encouraging" these kind of attacks. Also, the Council tries to expand the policy beyond European borders and in article 9 encourages third States to adopt similar measures, in order to maximize their effectiveness. As well, North Macedonia, Montenegro, Serbia, Albania and Turkey (as candidate countries), Iceland and Norway (EFTA countries), Moldova and Georgia (members of the European Economic Area) align themselves with the Declaration [433] of High Representative of EU that international cooperation should be strengthened and actions need to be pursued in order to neutralize malicious cyber activities.

A legal framework for the digital environment. The Digital Services Act. In June of 2000, the European Parliament and the Council published the Directive 2000/31/EC [437] on electronic commerce. The Directive introduces a legal framework for the internal market in Europe and foresees it as "an area without internal frontiers in which the free movements of goods, services and the freedom of establishment are ensured". The rise of information society favored the development of e-commerce and the Union aimed for riddance of obstacles in economic and social growth of its citizens. It tries to abolish the online commercial borders inside the Union and sets legal rules for the internal market such as the information provided, the commercial communication, the contracts and the liability of intermediary service providers. However, the explosive rhythm that people uses digital media nowadays, the appearance of social media and the use of online services on a daily basis has led to new challenges. Consequently, two decades later, in October 2022, the EU published the Digital Services Act [476] (DSA), as a response to the evolved digital landscape and also as a

response to disinformation. It is about updating the rules (or setting new) of “intermediary services in the internal market” like social networks, online trading platforms or search engines, in order to “tackle illegal content, online disinformation or other societal risks”. We are talking that the regulation affects the providers of information society services operating within the EU area. The Act makes steps to ensure the liability of the digital service providers and the safety of the citizens using them. For example, according to the DSA, there are three types of intermediary services: a) “mere conduit” (the transmission in a communication network of information provided by a recipient of the service, or the provision of access to a communication network), b) “caching” (the automatic, intermediate and temporary storage of information, performed for the sole purpose of making more efficient the information's onward transmission to other recipients upon their request), c) “hosting” (the storage of information provided by, and at the request of, a recipient of the service). So, in articles 4, 5, 6 respectively, is noted among others, that “the provider does not select or modify the information contained in the transmission”, “does not interfere with the lawful use of technology, widely recognised and used by industry, to obtain data on the use of the information” and that once illegal activity is spotted “acts expeditiously to remove or to disable access to the illegal content”. To wit, services providers become more responsible in countering information falseness or even any possible illegal content and by doing so, they increase credibility and safety of use for people.

An interesting measure is the mechanism of “trusted flaggers”, which are entities of high value, independent from online platforms, with expertise in detecting and notifying illegal content. A practical example, is YouTube’s Trusted Flagger program that we saw earlier. According to article 22, their role is also to publish yearly reports with “the identity of the provider of hosting services, the type of allegedly illegal content notified, the action taken by the provider”. So, there is a double function here, in the one hand, flaggers assist the providers in spotting the illegal content and in the other hand, they inform the Commission about the actions and efforts taken by the platforms. However, if the platforms receive a significant number of inaccurate notices, then the flagger status is suspended or even lost. Thus, there is no permanent character in trusted flagger quality and they should constantly prove their value through honest notifications. There is a circular process of vigilance in spotting information falseness. Furthermore, a greatly demanded regulation, as we saw earlier in the research, is the transparency in advertising. According to article 26 of the DSA, platforms should make clear for the recipients “the natural or legal person on whose behalf the advertisement is presented” as also “who paid for the advertisement if that person is different from the natural or legal person” and “not present advertisements to recipients of the service based on profiling”. So

here we have a policy that tries to provide information to users regarding *who* is behind an ad and tries to prevent micro-targeting advertising practices. In article 48, there is also a provision of crisis protocols concerning the very large platforms and search engines (services with number equal or higher than 45 million recipients). In cases of crisis situations "affecting public security and public health" the Commission encourages providers in the application of those emergency protocols including "prominently displaying information on the crisis situation provided by Member States' authorities or at Union level or, depending on the context of the crisis, by other relevant reliable bodies". This brings platforms as a communication tool that could be used by officials in case of a crisis, in order to multiply their reach in masses, like a communicational expansion of public authorities, for the sake of public security.

The Regulation also comprises *penalties* for intermediary services in case they deviate from the provisions and rules agreed. Article 52 notes, among others, that "Member States shall ensure that the maximum amount of fines that may be imposed for a failure to comply with an obligation laid down in this Regulation shall be 6 % of the annual worldwide turnover of the provider of intermediary services concerned in the preceding financial year". When we are talking about Big Tech companies, we understand that 6% of their annual worldwide turnover would be an adequately sizeable amount of money. To speak with quantitative elements by bringing an example, according to Statista [219], Meta Platforms (parent company of Facebook) generated a revenue of over 116 billion U.S. dollars in 2022. So, in a hypothetical scenario, if the company was fined, we would talk about a huge price of payment. To understand the economical staggering, there are some countries with lower GDP (gross domestic product) than the total revenues of the company we saw before. For example, the GDP of Iceland [248] in 2021 was 25.6 $ billion or the GDP of Cameroon [247] was 45.34 $billion. Thus, the companies in order to avoid such penalties, they should comply with the EU regulation. For now, there are companies that show their promptness to follow the implementations. For example, EU Commissioner for the internal market T. Breton, after a meeting with Twitter's new owner Elon Musk, noted among others "I welcome Elon Musk's intent to get Twitter 2.0 ready for the DSA - Huge work ahead still" [195]. By this, we understand that a good first step has been done, but also that many modifications have to be done by the platforms in order to satisfy the regulation. What will happen, it is something that remains to be seen in the future. So, the EU penalty policy aims in the direction of economic measures of compliance with the implemented regulations. It is supposed to work as a deterrent measure, taking advantage of Big Tech companies' economical potential. Moreover,

the Commission establishes the European Board for Digital Services, an independent advisory group of high level officials. The role of the Board, according to article 61 [476], is to support "the consistent application of this Regulation and effective cooperation of the Digital Services Coordinators and the Commission" regarding the DSA regulation, to provide guidelines and analyses "on emerging issues across the internal market" and to assist in the supervision of very large online platforms, thus practicalizing the evaluation process and the scrutiny of the implementations. In plus, the DSA includes the element of continuity, as regarding to article 91, by "November 2027, and every five years thereafter, the Commission shall evaluate this Regulation" and report about its compliance with the respect to the right to freedom of expression, its contribution and effectiveness in the "efficient functioning of the internal market for intermediary services" and its "impact on small and micro enterprises". To wit, the regulation will be regularly evaluated and updated (if necessary) every five years, due to the need of new responses to new challenges from the constant developments of technology, the emergence of artificial intelligence and the changes in interface of online platforms.

Advancing the policies. The Strengthened Code of Practice 2022. Concerning the process of policies evaluation, reevaluation and updating by the competent European authorities that we also talked earlier, the same procedure happened with the Code of Practice on disinformation of 2018. The Code has evolved, became more analytic and precise in its requested measures of implementation and included a wider range of improvements. Thus, the Commission introduced the Strengthened Code of Practice on Disinformation 2022 [488], which has also an increased number of Signatories who joined. The Signatories come from various fields like software companies, online platforms, civil society or third-party organizations and others. There is notable presence of Big Tech companies, fact-checkers and actors of the digital ecosystem, such as Adobe, Meta, Twitter, Twitch or Pagella Politica. Relatively with the preciseness, the Strengthened Code has a little bit different structure and encompasses sectors with commitments which include certain measures that have to be taken, in order to satisfy the commitment. For example, we will see the Commitment 13 of the Strengthened Code [488], regarding the political advertising. According to the commitment:

"Relevant Signatories agree to engage in ongoing monitoring and research to understand and respond to risks related to Disinformation in political or issue advertising.

In order to satisfy Commitment 13:

- Measure 13.1. Relevant Signatories agree to work individually and together through the Task-force to identify novel and evolving disinformation risks in the uses of political or issue advertising and discuss options for addressing those risks.

- Measure 13.2. Relevant Signatories will consult with the Task-force and other relevant stakeholders to assess the opportunity and impact of short election "blackout periods" for political or issue advertising on their services in all Member States.
- Measure 13.3. Relevant Signatories agree to evaluate, together with the Task-force, whether there is sufficient independent scrutiny of political or issue advertising in Member States".

Table 3.1. UE Documents on Problem of Disinformation

Adopted documents	Institution	Year
Resolution on the situation in Ukraine	European Parliament (EP)	2014
Resolution on the Annual Report from the High Representative of the European Union for Foreign Affairs and Security Policy to the European Parliament	The European External Action Service (EEAS)	2015
The foundation of East Stratcom Task force	European Council	2015
The EU Code of conduct on countering illegal hate speech online	European Comission (EC)	2016
Resolution on EU strategic communication to counteract propaganda against it by third parties	European Parliament (EP)	2016
The proposals of High Level Expert Group	European Commission (EC)	2018
Code of Practice on Disinformation	European Commission (EC)	2018
Communication Tackling Online Disinformation: A European Approach	European Commission (EC)	2018
Joint Communication Action Plan Against Disinformation	European Commission (EC)	2018
EU-China – A Strategic Outlook. Joint Communication to the European Parliament, the European Council and Council	European Comission (EC)	2019
Communication on the EU Security Union Strategy	European Commission (EC)	2020
Communication on the European Democracy Action Plan	European Commission (EC)	2020
Communication Shaping Europe's Digital Future	European Commission (EC)	2020
Digital Education Action Plan 2021–2027	European Commission (EC)	2020
Joint Communication Tackling Covid-19 Disinformation	European Commission (EC)	2020
Joint Communication The EU's Cybersecurity Strategy for the Digital Decade	European Commission (EC)	2020
Proposal for a Regulation on a Single Market for Digital Services (Digital Services Act)	European Commission (EC)	2020
Proposal for a Regulation on contestable and fair markets in the digital sector (Digital Markets Act)	European Commission (EC)	2020
Special Report: Disinformation affecting the EU: tackled but not tamed	European Court of Auditors (ECA)	2021
The strengthened Code of Practice on Disinformation	European Commission (EC)	2022
Digital Markets Act	European Parliament, European Council (EP, Council)	2022
Digital Services Act	European Parliament, European Council (EP, Council)	2022
The Code of Conduct on Disinformation	European Commission (EC)	2025

The new Code gives more guidance to Signatories, in more structured and detailed way. In each Commitment, we see technical explanations about the measures, which clarify the actions to be taken, so we talk about more targeted policies and a clearer framework of applications. The new Code includes significant and quite innovative measures, which deepen the process of intercepting disinformation (and misinformation), such as that Signatories have to provide users explanation about why they are seeing an advertisement (commitment 9). This gives users more information about the reason of ad display and contributes in increasing their awareness. There is a provision of limiting manipulative behaviors by malicious actors on online platforms, such as fake accounts, bot-driven activities, hack-and-leak operations, coordinated inauthentic behavior (commitment 14). There is also the creation of a permanent Task-Force to constantly monitor the effectiveness and methodologically improve the Code, having as members the Signatories, representatives of Stratcom task forces and other European relevant organizations (commitment 37). This brings online platforms (as Signatories) in the table of cooperation with EU entities, in research level, not only as executive bodies of measures. In the same logic, we see commitment 28, in which the "Signatories commit to support good faith research into Disinformation that involves their services", by dedicating appropriate human resources and funds on the research field (teams, tools, help centers, programs).

3.2. United States of America policies

Federal bodies against disinformation. For the needs of national defence in digital space, US created the Cybersecurity and Infrastructure Security Agency (CISA) [431]. As a federal operational body, its role is to protect infrastructure and provides support in cybersecurity through collaboration with stakeholders and citizens. CISA implements online campaigns such as Shields Up [485], which gives guidance to organizations and proposed measures for protective steps, such as validating that all remote access to network requires multi-factor authentication, confirming antivirus protection, designating crisis-response teams, testing backup procedures for critical data. Similar instructions are given to families and corporate leaders for avoiding phishing scams and checking privacy settings. This is often not done through general advices, but links are provided to users with detailed information on the issue under consideration. CISA's media literacy utility focuses also on younger populations. In 2023 they published a report [471] with recommendations for mitigating cyber threats in the

K-12 school system and included insights from policymakers and members of the education community. This aims to create a safe cyber-behavior culture and increase awareness in wider range of ages. Literacy through entertainment is another implemented action, by publishing the Resilience Series, which are graphic novels picturing the dangers of information falseness and give guidance for anti-disinformation behavior to citizens. “Real Fake” [504] is one of these novels, a fictional story inspired by real-world events, which aims “to highlight tactics used by foreign government-backed disinformation campaigns” around sociopolitical matters, to infect the views of citizens and division public debate. CISA also proposes the development of Rumor Control [478] web pages, which is public resource of authoritative information responding to falsehoods. Although “a rumor control page should not be considered the sole source of truth, rather it should drive people to seek more information about a complex subject”, it can also establish a pattern of approaching information/news, in order to explain citizens why each disinformation propagation is misleading. Thus, according to the Agency, the rumor control page should:

i. Begin with the facts, debunking falsehoods by presenting factual information

ii. Use plain language, that is easily understood by the average person and encompassing visual elements such as animations and diagrams

iii. Provide links of other reliable sources

Furthermore, the Agency includes safety warnings through cyber alerts about current issues and keeps system vulnerabilities catalog. As many actors engage in the digital space, CISA is actually involved with various partners from different fields, federal, local, non-profit organizations, academia etc, so it is about a multi-branched collaboration regime. Although the Agency is not a legislative body, its role in countering disinformation is of supportive nature. By giving security points on digital space and infrastructures, it could make safer public interest processes (elections for example), increase election system integrity and create a stability climate in public opinion.

The Federal Bureau of Investigation (FBI) is also a supporting entity against information falseness and has a division dedicated to counterintelligence [496]. According to the Bureau, in the last few years, some of the common foreign influence operations include targeting US officials through fabricated stories, illegal campaign financing or cyber attacks against voting infrastructure. A branch of the FBI is the Foreign Influence Task Force (FITF) and focuses on protecting United States from these issues. As we observe, the creation of task forces is a quite common policy, especially when we talk about tactics around communication, as we also saw met in European Union’s task forces. According to a statement [468] of C.

Wray, director of FBI, at the Committee on the Judiciary US House of Representatives, “this better enables us to frame the threat, to identify connections across programs, to aggressively investigate as appropriate, and importantly to be more agile”. Speaking at a hearing [482] before the same Committee, N. Floris (deputy assistant director of FBI) stated that the Bureau has a “three-pronged approach” against the threat. Firstly, it works as “a hub with FBI field offices and its personnel as the spokes” and the collaboration with the Cyber Division creates an operational cyber nexus. Secondly, it’s about intra-sharing information “with our fellow intelligence community agencies as well as with State and local law enforcement partners and election officials”. Thirdly, it’s the cooperation with private sector stakeholders, such as helping the technology companies, “by providing actionable intelligence to better enable them to address abuse of their platform by foreign actors”. In addition, the Bureau has made the initiative of Protected Voices [470], as a campaign for public guidance through videos, with tips on how to protect from cyber attacks, including information about various topics such as cloud-based services, foreign influence, ransomware or social media literacy. As the name indicates, it aims to protect the voice of people, officials, organizations, by providing tools to protect themselves from foreign actors who will possibly try to divert their message.

The U.S. Customs and Border Protection (CBP) has made efforts to counter disinformation, too. One of its main operations is border patrol and to facilitate lawful trade and travel. In order to do so, in 2022 it launched a digital advertising campaign [416] “Say no to the coyote” to caution migrants about the lies of smugglers (known as coyotes) in south borders. Many migrants, in their try to enter the country without authorization are facing various life dangers (for example kidnapping, robbery) and even those who manage to cross the borders, are facing removal proceedings from the country. The campaign tries to inform them that “smugglers are lying to you, the fact is that entering the United States illegally is a crime” in order to protect them from being exploited by cartels.

Another entity is the Federal Emergency Management Agency (FEMA) and provides assistance to citizens who are affected or victims of natural disasters. One of its important roles is to service the coordination of federal response efforts to stabilize communities after a disaster and to protect their property by supporting the rebuilding process. FEMA has built a menu [423] to counter rumors related to common disasters, such as wildfires, floods, tornadoes. Users can find answers to related questions by searching categories like “apply for assistance”, “lodging” or “flood insurance” and the Agency presents facts in response of those questions, in order to help them recover. They also facilitate the reporting of scams and frauds from criminals who might attempt to take advantage of disaster victims.

Law enforcement measures. Although actions and public policies have increased in recent years in the US, especially after the 2016 presidential elections, Americans now demand extra governmental measures. According to a survey [304] for Pew Research Center in 2021, 48% "say the government should take steps to restrict false information, even if it means losing some freedom to access and publish content". In 2018 this percentage was 39%, so there is a rise on further measures demand, even with the toll of sacrificing some freedoms. Also, very interesting is the differentiation of opinions on this issue between the political parties. The Republicans by 70% prioritize freedom of information even if this means that some misinformation is published. On the contrary, 65% of Democrats prioritize further governmental steps against false information, even if it limits this freedom. Nevertheless, the wheels of State are not stopping and legislative action is happening.

The Congress introduced the Honest Ads Act [449] (latest version in 2022), a bill "to enhance transparency and accountability for online political advertisements by requiring those who purchase and publish such ads to disclose information about the advertisements to the public". Following the events of 2016 elections and the public debate it was caused around political information dissemination, the state tries to create a clearer horizon of the source of political marketing funding, "in order to uphold the United States Supreme Court's well-established standard that the electorate bears the right to be fully informed". First of all, the bill expands former legislations statements and redefines the term public communication, for example by striking the description "on broadcasting stations, or in newspapers, magazines, or similar types of general public political advertising" and inserting "in any public communication". This reveals the need to adapt legal wording in today's environment, as the emergence of internet expands public debate to digital public debate, thus there is an expansion of public space as a whole. Also, at another point we see the replacement of "radio" and the placement of term "audio format", for example in case we are talking about another audio format such as podcast. It is interesting how the new media impact and change the writing of enactments. As the title signifies, the bill aims for honesty from the side of platforms, to build trust between citizens and media and support voters in decision-making through transparency. To do so, the Act includes that: „an online platform shall maintain, and make available for online public inspection in machine readable format, a complete record of any request to purchase on such online platform a qualified political advertisement which is made by a person whose aggregate requests to purchase qualified political advertisements on such online platform during the calendar year exceeds $500."

Even if the ad is sold by a third-party advertising vendor, then the vendor should provide links with accessible such information, so that the platform can satisfy the requirement. The platform's ad record should contain, among others, information such as the total cost of the advertisement, description of the audience targeted, the name of the candidate of ad reference and should be retained accessible by the platform for at least four years. Another requirement is that online platforms should display notices identifying sponsors of political advertisements. Moreover, the sense of Congress by this legislation is also to prevent foreign influence operations, intercept foreign financing of political advertisements and keep the sources of advertising funding of political debate inside the country. Thus, it foretells that media (television, radio, online platforms) should make efforts to ensure that political ads "are not purchased by a foreign national, directly or indirectly".

In advance, in the last years several States in US have passed privacy laws to protect residents' personal data from malicious uses. The State of Colorado is one of them and in 2021 enacted the Colorado Privacy Act [420] (CPA), which on the one hand, makes steps in users' data privacy rights and on the other hand, imposes measures to be taken by online platforms. The Act refers to users as "consumers" of a certain platform's service. Among others, it includes "controllers", meaning "a person that, alone or jointly with others, determines the purposes for and means of processing personal data". "Processors" are the persons doing the data processing, meaning "the collection, use, storage, disclosure, analysis, deletion or modification of personal data and includes the actions of a controller directing a processor to process personal data". Consumers have, according to the enactment:

a) "The right to opt out of the processing of personal data concerning the consumer", in cases of targeted advertising, selling personal data or profiling (processing personal data to analyze sensitive personal matters, for example economic situation, health, address).

b) "The right to access" their personal data along with the right "to confirm whether a controller is processing personal data concerning the consumer" as also, if necessary, the "right to correct inaccuracies" of their data, or the "right to delete" their personal data.

c) "The right to data portability" so they can obtain a copy of their data in a "usable format that allows the consumer to transmit the data to another entity without hindrance".

d) The right of consumers to receive a response, meaning that "a controller shall inform a consumer of any action taken on a request" regarding their personal data.

As for the businesses, they have some obligations and according to the Act, controllers should “provide consumers with a reasonably accessible, clear and meaningful privacy notice” such as the categories of personal data collected or the purposes of their procession (duty of transparency and purpose specification). A controller should collect personal data “relevant and limited to what is reasonably necessary in relation to the specified purposes for which the data are processed” and not use them for other incompatible purposes (duty of data minimization and duty to avoid secondary use). Also, controllers should take measures to secure personal data and protect them from unauthorized acquisition (duty of care). They have the duty to avoid unlawful discrimination, by respecting state or federal laws regarding the issue and the duty of not processing sensitive personal data “without first obtaining the consumer’s consent”. Furthermore, the tactic of penalties, as a form of enforcement, is not absent from the legislation. The CPA is enforced by the State’s Attorney General and District Attorneys, who operate as “parens patriae” for the Colorado residents and supervise the application of the Act. When the Attorney spots a violation, he issues a notice to the controller. The controller has a sixty day period to cure the violation, after receiving the notification. The violation of CPA is considered “a deceptive trade practice” and if the controller fails to cure it, there are civil penalties.

The US as we see, pay a lot of attention in the protection of commerce and trading. In the Federal Trade Commission Act [445] which incorporates the Safe Web Act, we also find provisions aiming to protect consumers and commerce from “deceptive act or practice” and corporations from unfair competition. According to this Act, the dissemination of false advertisements “by any means, for the purpose of inducing, or which is likely to induce, directly or indirectly, the purchase in or having an effect upon commerce, of food, drugs, devices, services, or cosmetics” falls in the sphere of unlawfulness and is considered as an unfair or deceptive act (paragraph 52). It’s about an economic approach of counter misleading advertising “in a material respect”, a market-defending approach that aims to ensure that consumers purchase commodities which correspond to their proclaimed quality. A violation of this provision brings fines up to $5,000 or imprisonment up to six months or both.

Of course, talking about services, we couldn’t overlook online services, such as social media companies. In 2022 the State of California published the Assembly Bill 587 [411], aiming to regulate the way social media interact with users (and users between each other), given the impact they pose in public discourse. The bill includes requirements for social media companies, regarding their terms of service (meaning the policies of the social media company that specify the user behavior and activities permitted on the internet-based service).

According to the enactment, “a social media company shall post terms of service for each social media platform owned or operated by the company in a manner reasonably designed to inform all users of the social media platform of the existence and contents of the terms of service”. Among others, these terms should include contact information so the users will be able to make questions, a process description so the users can flag content and a list of potential actions that the company is planning to take in case of terms violation, such as content removal, demonetization, banning. Furthermore, the company shall submit reports about the issue to the Attorney General, twice a year, apposing their measures taken, as also the progress and the results of their implementations. The method of regular reporting to authorities supports the process of monitoring the corresponding actors and the evaluation of policies. In addition, the platforms shall provide definitions in their terms of service, about certain categories such as hate speech, extremism, disinformation, harassment and foreign political interference. The bill notes fines up to $15,000 per violation per day for companies who don’t comply, but this legislation applies only to companies that generated more than $100 million dollars in gross revenue during the preceding calendar year. Understanding the value of social media in today’s public sphere and regulating them, seems to be a common goal for the States. A similar law is met in an eastern State of the country. In 2022, after the mass shooting in Buffalo, the State of New York introduced a series of legislation to prevent gun violence and one of these laws “addresses the proliferation of hate on social media” in order to prevent the radicalization of domestic terrorism [457]. This is bill S4511A [484], which was voted during 2021-2022 legislative session and is used as one more measure to counter misinformation spreading in online social platforms and public hate crime. It provisions that “each social media network shall have a clear and concise policy readily available and accessible on their website and application which includes how such social media network will respond and address the reports of incidents of hateful conduct on their platform”. Making discriminations and attacking a group of persons based on race, religion, color, disability, sexual orientation (and others) is considered hateful conduct, according to the bill. Thus, a possible explanation of the spirit of the legislation is that preventing such conduct from digital space, is a step for social rest and public order.

A form of intercepting false news is presenting fact-based information and a productive way of doing this is through scientific research. This was one tactic to counter the epidemic disinformation of covid. The Congress introduced the Covid-19 Disinformation Research and Reporting Act of 2021 [481], to support scientific research, among others, on the roles of disinformation and misinformation in public acceptance of vaccines, the incentives

and potential financial profits of its distributors, other potential response strategies such as improved disclosures or information literacy or how response strategies could be activated without violating constitutional rights. The Act funded the National Academies of Sciences, Engineering, and Medicine with $1 million to conduct the study. We observe a policy that brings researchers and academia in the service of supporting State research and enriching public debate with scientific fact-based information with increased credibility.

In addition, there is legislation that perhaps one could say it was more aggressive and later was obstructed by federal judge. In 2022, the Assembly Bill 2098 [410] was published by the State of California. Among other terms, it defined misinformation as "false information that is contradicted by contemporary scientific consensus contrary to the standard of care". The bill, trying to prevent covid-related disinformation, noted that:

"It shall constitute unprofessional conduct for a physician and surgeon to disseminate misinformation or disinformation related to COVID-19, including false or misleading information regarding the nature and risks of the virus, its prevention and treatment; and the development, safety, and effectiveness of COVID-19 vaccines."

The bill was later blocked by U.S District Judge [246], who wrote that "covid-19 is a quickly evolving area of science that in many aspects eludes consensus" [324], so doctors can't be sure about what scientific information tomorrow brings, in a rapidly evolving and complex issue such as the pandemic. Someone could ask: what we define as covid-disinformation? There is a possible scenario something that today is considered as correct scientific information tomorrow might be considered as debatable (or vice versa), because new information arrive, new scientific data emerge and consensus might change. Thus, doctors would be at risk of being judged for "unprofessional conduct" (as the bill characterizes). We observe that penalizing information falseness can be quite difficult, because there must be very clear definition of meanings and because generally enactments have to be drafted without insulting fundamental rights, such as the freedom of speech. According to the First Amendment of the U.S. Constitution [427], "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances".

Media literacy actions. In 2022, the Senate introduced the Digital Citizenship and Media Literacy Act [480]. Through it, the Assistant Secretary of Commerce for Communications and Information plans to fund eligible state and local educational agencies as also the media literacy advisory council (includes experts in the issue, academics, teachers etc) and qualified

non-profit organizations to perform certain activities. Those activities, among others, shall include the identification of “best practices and effective models for media literacy education” and incorporation of “digital citizenship and media literacy into the existing curriculum”. Digital citizenship is an interesting term that we meet in the Act, meaning that citizens “safely, responsibly, and ethically use communication technologies and digital information technology tools and platforms”, including the awareness on legal aspects of media content creation and sharing. As we observe, today a citizen is considered also digital citizen, thus education practices should apply to that and cover the gap of educational needs on media literacy. Earlier, we talked about expansion of public space. Now, we see the expansion of citizenship to digital citizenship.

The Department of State published an advisory report [464], analyzing potential methods to implement media literacy (ML) programs on population, as a first line defense, trying to effect society positively. We can say that ML is an indirect way to counter disinformation, as it does not directly attacks to falseness, but builds the skills to understand media landscape and improve critical thinking. ML does not penalize disinformation, it creates the conditions for citizens to be aware of fakeness. According to State Department, media literacy strategies are more effective when implemented via formal education, because there is “oven-ready” delivery infrastructure and because young people (5-18 years of age) respond very well to education. It is noted that “once ML learning is embedded into national curricula, high-quality, sustainable training with a strong multiplier effect can be expected to deliver long-term results”. They also distinguish benefits and challenges about ML strategies in the educational system. Some of benefits are that this is the “best way to promote population-level competencies”, there is “significant spillover potential (peer-to-peer, student-parent)” and as we saw earlier there is oven-ready operation-ground, meaning that “the education system provides an ideal structure for the introduction and reinforcement of ML messaging across subject matters and as students progress through the system”. As for the challenges posed, among others, there is “enormous investment of time with unknown returns on investment”, there is a possible politicization of critical thinking and the modification of curricula is a quite complex process because digital technologies are constantly evolving.

In the same year, there was legislation published related to ML, focusing specifically on countering information disorder. The Congress introduced the Educating Against Misinformation and Disinformation Act [438] and through it, establishes a “Commission to Support Information and Media Literacy and Prevent Misinformation and Disinformation” to

work on the issue, following two directions. The first direction is to serve certain duties. Some of the main duties where emphasis given, is that Commission shall endeavor to:

- "Increase public awareness of and education on how to find and identify if information is from a trustworthy source;
- how to craft arguments, when claims are supported by evidence, and how to analyze the validity of claims and strength of arguments being made;
- methods to understand the difference between fact or opinion or a mixture thereof;
- how influencers and various organizations target and manipulate audiences through digital platforms."

Of course there would be a consultation of experts, composing from various federal authorities and after a period of months the Commission shall develop and coordinate "a national strategy to promote information and media literacy and resilience to misinformation and disinformation among the American public". The second direction is the provision of funding (with competitive character) non-profit educational organizations, through grants. The competitive-basis grants, aim to make educational entities push their innovation and research efforts on creating educational materials and ML campaigns against information falseness.

Furthermore, there are initiatives taken at state level. One year earlier, in 2021, the State of Delaware published the Digital Citizenship Education Act [414], which includes quite similar aims with the federal provisions. Here, we also meet a definition of digital citizenship, defined a little bit differently as "the diverse set of skills related to current technology and social media including norms of appropriate, responsible and healthy behavior". The Act requires from the Department of Education to build a media literacy program for school use. The program shall "adopt evidence-based, media literacy standards for use by each school district and charter school serving students in 1 or more of the grades kindergarten through 12". We see that policy focuses on K-12 students, as the pre-school and elementary age range is considered quite receptive to new information. As noted, those ML standards, first of all, should be age-appropriate and help youngsters in understanding the negative effect of concepts, such as online bullying, harassment or invasion of privacy. At the same time, among others, they should promote cyberethics, identification of hate speech and support them in "understanding how media messages shape culture and society" or "recognizing bias and misinformation by discovering parts of the story that are not being told". A handful of States across the US start to push for media literacy implementation on the educational system. We see initiatives such as the Illinois Media Literacy Coalition [378], where ars built a framework

to help educators practice ML in classrooms in Illinois. We see the framework for Teaching Literacy in Tennessee [493], which is the State's approach to literacy instruction and integrates Tennessee Academic Standards, with combination of skills-based and knowledge-based competencies. We observe that ML is an issue of importance in learning to intercept information falseness and cultivating the skill from young age is an aim of many States. We could say that these States (and many others) try to satisfy the social need for adoption of media literacy in curricula in order to match the skills of the citizens with the demands of technological digital improvements.

3.3 Greece policies

Efforts against information falseness through public sector digitization. In Greece, as an extension of the European Union, the problem of misinformation is existent and citizens' trust in the reliability of the media seems shaken. According to a survey of Eurobarometer [487] at winter of 2020-21, 94% of Greek respondents agree that the existence of news or information that misrepresent reality or is even false is a problem for the country and 90% believe that they often come across such information. At another survey of Statista [391] in 2022 about the percentage of people who trust news media most of the time in their country, Greece placed among the lowest positions with 27%, while United States and Slovakia had the lowest percentage with 26%. The Hellenic Foundation for European and Foreign Policy [178] organized two citizen's forums in Greece, discussing their views on false narratives. Among the findings of researchers through the dialogue with the participants was that exist "high degree of mistrust towards the more conventional channels of information (TV, radio and newspapers)" which are often described as manipulative or misinformative, in contrast with internet sources which are considered more independent and pluralistic, especially the non-Greek internet sources. Greece seems quite vulnerable to fake news, as it ranked 30th in Media Literacy Index 2022 [291], at a total of 41 countries examined around the European region, which took under consideration the aspects of education, media freedom, interpersonal trust and e-participation. In addition, it is in the 108th place of the World Press Freedom Index 2022 [301], according to Reporters Sans Frontieres (RSF), who define press freedom as "the the ability of journalists as individuals and collectives to select, produce, and disseminate news in the public interest independent of political, economic, legal, and social interference and in the absence of threats to their physical and mental safety" [335]. One could say that this indicates

there is a level of interference in media from powerful actors in the greek public sphere, thus cases of information disorder or agenda setting or biased information filtering inside the Greek media ecosystem. Having those in mind, Greek authorities are making efforts to create conditions in society for digital maturity and to drive it in the 4th Industrial Revolution. The Ministry of Digital Governance posted the Digital Transformation Bible 2020-2025 [435] which is a national strategic plan with actions and guidelines towards modernization of Public Administration, governance and citizen service. Among others, it includes measures that support the process of countering the negative impact of information falseness, particularly around the field of cybersecurity and media literacy. Quite helpful provision of the plan is the element of interoperability between public services and the function of Interoperability Center [454] which is an information system for the use of web services through the exchange of operational data among Public Sector authorities. The Center strengthens information security and transparency through the Public Sector, as it contributes to "valid, immediate and up-to-date provision of information between public bodies" and to "achieving economies of scale through the honest processing of information by the Agency that has the responsibility of managing it". Part of the plan for achieving a level of digital literacy meaning also media literacy is the creation of National Academy of Digital Skills, an initiative for free online educational content for all levels of digital competencies, according to the European framework DigiComp. The Academy [434] includes the program "Digital Citizen" for developing digital skills of everyday life, a series of five courses in areas: navigation and information searching in worldwide web, digital content management, personal data protection-privacy, creation of digital identity, acting as a digital citizen. The program Digital Citizen corresponds to term of digital citizenship. The Digital Transformation Bible [435, p. 115] defines digital citizenship as "the citizen's ability to use information and communications technology (ICT) with the purpose of his active and without exclusions participation in the social, economic and political sphere". Interesting note is that we also met the reference of digital citizenship in United States enactments, so we could say that the term starts to become more universal, as countries use it in their public dialogue and incorporate it in their legislation. We could also say that it shows the importance and impact of digital sphere in modern life, thus policies provisions target it often. Another action of the national plan is fostering practices of open governance, with propelling citizens to be well-informed on public affairs and their active, regular participation on decision making. On this basis, Greece has entered the global initiative Open Government Partnership (OGP) [408], a coalition of people from civil society, non-profit organizations, government, researchers and others, who join

forces and work together to improve citizen's engagement in shaping and overseeing governmental policies. The OGP counts more than 70 member countries and 100 local governments worldwide and they co-create commitments, in order to accomplish them and make steps forward. Greece's commitments were published through the 5th National Action Plan 2023-2025 [408] and its main focus is making achievements on:" transparency and accountability, combating corruption, access to information – Open Data, public participation, services to citizens and businesses". One example of these commitments is the actions to activate citizens' participation in the decision-making of the Municipality of Moschato-Tavros in the capital of the country. The case is that the Municipality was equipped with a Public Participation Platform, but has held only few consultations and the citizens' participation wasn't satisfactory. In order to overcome the issue, the Municipality would cooperate with a company of the private sector, a) to be provided with technical and operational support to improve the know-how of its executives on how to use the Platform and b) to disseminate information on public about upcoming consultations, increase citizens awareness about the existence of such participatory governance tool and cultivate public participatory decision-making culture. One could say that achieving those, is an important step at local level for citizens to get first-hand information and avoid rumors or fake news concerning their city (through the public communication with other co-citizens and officials), increase transparency in issues of public interest and enhance democratic values through dialogue and open governance engagement. It could also be deduced that we see the importance of small-scale countering of information falseness, meaning the role of local government in preventing from its further potential expansion to public sphere. Furthermore, we see consistent efforts in the field of digital security, as in 2018 the Greek Parliament with the law 4577 [459] incorporated into the Greek legislation the Directive 2016/1148 [436] of European Union regarding measures for a high common level of security of network and information systems across the Union. According to the enactment, the National Cybersecurity Authority is the country's competent authority to monitor and preserve digital information security in the national region by cooperating with other European or national authorities on the issue (article 7), as also cooperating with the Computer Security Incident Response Team (CSIRT), which belongs to the National Defence General Staff (article 8). In addition, the National Cybersecurity Authority published in 2021 a handbook [432] of cybersecurity excellence management framework, to inform public sector organizations, private enterprises and individuals about best practices in technical and organizational risk management measures against cyber threats. Moreover, the Information Society, a public company of public utility which conducts

informatics and telecommunications works, has introduced the Government Cloud (G-Cloud) [486], a quite innovative initiative for the European standards. G-Cloud is a cloud computing and virtualization infrastructure that would be used by Agencies across the public sector, providing them with several digital powers (computing, network, storage). Thus, it brings Public Administration on a new level of functionality and productiveness, because a) it lowers the costs "of acquisition, maintenance and operation for the infrastructures that require a data center", b) it gives "flexibility and speed in downloading and using computing resources", c) it increases the security of digital services for citizens. G-Cloud is now under the management of General Secretariat of Information Systems for Public Administration in the context of "data consolidation policy" and some other services it provides are the protection from DDoS attacks and the data Backup of Agencies' information system [486]. Other than that, one could say it's not only a matter of digital security-information security, but upgrading the infrastructure and improving the quality and speed of digital services provided is an important move to cultivate public trust among citizens – Public Authorities and build State integrity regarding possible malicious external actors.

The legislation against fake news that raised debate. In the context of limiting misinformation, legislative moves were made in the country on the subject, with provisions at the criminal level. To replace article 191 of law 4619 [460] of the Criminal Code of 2019, the Greek Parliament after the start of the pandemic and the first lockdowns voted at the end of 2021 the law 4855 [461], which, through article 36, modified the older one. This new legislation contained certain provisions and amendments to the Criminal Code. So, as we told, among these amendments we find Article 36, which concerns the dispersion of fake news and notes that:

"Whoever publicly or via the internet spreads or disperses in any way false news that is capable of causing concerns or fear to citizens or shaking the public's confidence in the national economy, the country's defense capacity or in public health is punishable by imprisonment of three (3) months and a fine. If the act was repeatedly committed through the press or through internet, the perpetrator shall be punished by imprisonment of at least six (6) months and a fine. The same penalty applies to the actual owner or publisher of the medium by which the acts of the previous subparagraphs were committed."

However, the enactment caused various reactions and raised discussion about its possible potential on violating fundamental freedoms, due to the penalization element on the basis of "causing concerns or fear". Speaking about this Greek legislation, the Human Rights Watch noted that "the criminal sanctions risk making journalists and virtually anyone else

afraid to report on or to debate important issues such as the handling of Covid-19 or migration or government economic policy", thus there is a possibility of producing "a chilling effect on free speech and media freedom" [256]. The Reporters Sans Frontieres wrote that "while it is legitimate to combat false information, especially during the Covid-19 pandemic, prison sentences have no role to play in the quest for the truth" and called "for this offence to be decriminalized and for the fight against disinformation to focus instead on systematic support for reliable news and information in the media and on social networks" [310]. The Media Freedom Rapid Response, which is a European-wide mechanism and is also supported by the European Commission, noted that "heavy-handed legislation by governments which grants regulators or prosecutors the power to decide true from false and levy punitive fines on the press is not the correct response" and added that "subjective interpretation of such vaguely worded laws can open the door to censorship of legitimate reporting" [257]. The Journalists' Union of Athens Daily Newspapers published a press release calling for the withdrawal of the enactment and noting that "in this specific provision it is clearly stated that the risk of causing concern or fear is punished, and indeed preventively, without the need for the result to occur" [392]. They explain that the causation of fear to citizens is enough for the law to be activated, but it is not clearly specified what we consider as information that is capable of bringing fear or concern, so they characterize the bill as vague. What is defined here as false news "capable" of causing fear or capable of undermining the trust to the national economy and who would tell if this news is indeed fake news and with what criteria of judgment? In other words, we are talking about penalization of possible risk/danger (due to fake news)? Does it mean that we penalize the possibility? One could say that some clarifications should be made because there is penalization of something indefinite. However, after this debate, the officials rewrote the law. Almost one year later, at the end of 2022 the Greek Parliament voted the law 5005 [462]. The article 41 of this legislation is a new amendment that replaces the old one and notes that:

"Anyone who publicly or via the internet disseminates or disperses in any way false news with the result of causing fear in an indefinite number of people or in a certain circle or category of persons who are thus forced to carry out unplanned acts or to cancel them, with the risk of causing damage to the economy, the country's defense capability or public health is punished by imprisonment of up to three (3) years or by a fine. The actual owner or publisher of the medium by which the acts hereof were committed shall be punished with the same penalty."

Among others, there is a main change here. The new amendment in order to make a false news punishable, demands that it has "the result of causing fear" that forces people to

"carry out unplanned acts" combined with having a "risk of causing damage to the economy" etc. Thus, it demands a result of actions due to fear causation, not only a capability of fear causation. That is to say, inducing fear must produce a result, so that it can be established as a crime. One could conclude that the new amendment is more lenient. Yet, it still includes the element of criminalizing disinformation. We cannot judge the intentions of this legislation. However, we should not forget the Article 11 of Charter of Fundamental Rights of the European Union [417]:

"1. Everyone has the right to freedom of expression. This right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of frontiers. 2. The freedom and pluralism of the media shall be respected."

3.4. Policies in the Republic of Moldova

Moldova makes its own effort in facing disinformation and especially in the latest years is creating bonds with the European Union, on both technical and financial level. As we already saw, the country has the Union's attention in external actions policies regarding strategic communications in Eastern Europe. The East Stratcom task force is busy in this area and works for a European-friendly environment. In 2022, EU decided to provide a macro-financial assistance of up to 150 € millions through the Memorandum of Understanding [465], in order to support Moldova on economic stability, due to the difficulties of energy crisis and pandemic crisis. To satisfy the agreement, the country has to make structural reforms in public, financial and energy sector, especially in fighting and prevention of corruption and money laundering. Among others, it has to align national legislation with European legislation in financial governance matters, increase international cooperation and exchange of information with relevant authorities, adopt a new Public Procurement Program, establish a strategic gas reserve and a mechanism of freezing and capitalization of criminal assets (a policy similar with Article 5 of the Council Decision against cyber-attacks that we saw earlier). On January 2023, the EU revised the assistance package and adopted a new decision [469] of sourcing Moldova with up to 295 € millions, providing increased legislative guidance for macroeconomic management, strengthening transparency and improving conditions for sustainable growth, following the Commission's multiannual strategic objective "an economy that works for people". As we also saw earlier, one motive of spreading disinformation is for economic gains. Nevertheless, according to a research of Holdis [264] for the Center for Media, Data and

Society, Moldova due to its relatively small population of almost three million, has a limited audience and market space, thus misinformation is not a very profitable business in the country. So, someone could assume that information falseness in the country mainly serves other purposes, such as political or social. Holdis notes that misinformation is spread in the country by media who tend to be politically partisan and also cites a survey in which the majority of Moldovans „believed that the news they read are politically influenced and published in order to manipulate the public". From those, we understand that this is a political matter and that's why political actions are needed in order to counter it. The country is making progress in legislation reforms, in order to modernize its public policies and possibly to reach the potential ambition of its foreign policy to become a Member State of European Union. Beregoi [12] writes that "the evolution of community media policy within integrationist processes reflects their adaptable nature. Member states, as well as candidate states, have the capacity to influence this policy". Moraru [98] mentions that "the democratization of society goes through the democratization and pluralization of communication, the media constituting a fundamental source of public opinion". Tacu [156] states that the long term context against information falseness phenomenon in the country should be a) "to improve the Information Technology (IT) infrastructure, starting with the implementation and maintenance of information monitoring and analysis systems to identify and counteract disinformation" and b) "to promote a legal framework that ensures free access to information and the protection of journalistic sources".

An important framework regarding the fight against disinformation is the Code of Audiovisual Media Services [419] of the Republic of Moldova, which was introduced by the country's parliament in 2018 and had some modifications reaching the 2023 version. The Code includes provisions about the protection of journalism and particularly the protection of journalists from external pressures, threats or intimidation (article 10). In fact, if there is a serious case, then there is the provision of criminal charges. We are talking about a protective measure that tries to support the service of journalism to society and respects the right to freedom of speech. There is a ban on audiovisual programs that are likely to propagate or incite forms of hatred or discrimination based on sex, race, religion (article 11). Efforts are also made to ensure correct information (article 13), since it is a serious condition that the programs make a clear distinction between facts - opinions, verify a fact and if it is information on matters of public interest (political, social, economic) then it should be done with impartiality and the main opposing views should be presented. In addition, there is a ban on broadcasting audiovisual programs that contain speech that incites hatred, disinformation, propaganda for

military aggression, extremism, terrorism or threatens national security (article 17). In the same Article it is stated that radio and television programs of informative-analytical, political, military or political content produced in other states shall not be broadcast or rebroadcast, with the exception of the member states of the European Union, the United States of America, Canada and states that have sign the European Convention on Transfrontier Television. This means that information content originating from other countries is prohibited. One could say that this provision also indicates Moldova's intentions regarding the direction it wants to take in its foreign policy. Furthermore, measures are taken for the independence of public media services, which is why the intervention of public authorities, parties or organizations and interest groups is prohibited in them (article 34). The legislation also includes sanctions for the actors who don't comply and notes that Media service providers who broadcast content classified as disinformation are fined between 40,000 lei and 70,000 lei (article 84).

A few years earlier, the Moldovan Parliament introduced the Law 64/2010 [463] about the freedom of expression, which also had some modifications over the years. First of all, it is a good first step for granting its citizens with a universal fundamental right, secondly it includes provisions about media freedom of expression and also admits a certain degree of exaggeration and even provocation, provided that the essence of the facts is not distorted (article 4). There is a ban on media censorship, interference in the editorial activity of the mass media is prohibited, as also the creation of public authorities to control information that is going to be published in media (article 5).

In the context of upgrading systems, infrastructure and citizen services, the country's government published the „Digital Transformation Strategy 2023-2030" [477] in the fall of 2023, similar to the European Union Association Agreement and the United Nations' 2030 Agenda for Sustainable Development, in order to "align the national strategic measures with European and global trends and implement new policies based on the latest cross-cutting priorities". This published strategy is more objective-oriented as it refers to strategic goals of the country and not so much to the exact policies that are going to be implemented. Its core mission is to "achieve effective public governance, competitiveness in all spheres of life and the well-being of people, enabling Moldova to become a European Union Member State". To accomplish that, it focuses on six objective guidelines: "a) Develop a digital society, b) Grow a robust and competitive ICT environment, c) create an innovative and resilient digital economy, d) establish an efficient, smart, and transparent digital state, e) Create a secure digital accessible and inclusive environment, f) Make Moldova a trusted and reliable digital nation". The three main principles that the strategy intents to emphasize are:

1) "*Human development over technology*" with properly trained and educated citizens in relation with the ICT's.

2) "*Shared implementation responsibility* between central and local government, private sector, development partners and the entire society".

3) "*Compliance with European Union standards and regulations*" in order to harmonize the country policies with the European Union standards and accelerate its European integration.

It is not a coincidence that we saw a very similar national strategy in the case of Greece with the Digital Transformation Bible and the digitization of the public sector. The European member States and Candidate member States are methodically following the EU requirements to modernize their policies and to upgrade their arsenal as to be more capable in facing issues regarding information security, digital literacy, financial exchanges and social inequities. Thus, we observe different countries sharing common strategies because there is a common purpose. Of course the implementation progress is not synchronized and not in the same completion status, but the work is ongoing.

Furthermore, concerning the adaptation to digital space, the country's parliament published the Law 124/2022 [458] regarding electronic identification and trust services, which is broadly aligned with the European legislation. The aim of the enactment is "to ensure the functioning of the national market at an adequate level in the field of security of electronic identification means and trust services" and also to settle the legal "framework for the use of electronic signatures, electronic seals, electronic time stamps, documents electronic services, registered electronic distribution services and certification services for authentication of web pages". The authentication and validity of these digital tools and the monitoring of the process by the Intelligence and Security Service of the Republic of Moldova bestow integrity and correctness on the data transferred. Thus, are created conditions that can promote the use of electronic services. Also, it facilitates upgraded and more secure information exchange between public institutions, businesses and individuals.

Another quite impressive tool in countering false narratives is the creation of "First Source" [336] (Prima Sursa) channel in Telegram. First Source is the official channel of the Government of the Republic of Moldova in the online platform and provides information from official high level authority about public actions and policies. Through this, are presented government bills or government news, statements by officials, program plans, etc. In other words, it is a first-hand information to citizens, provided straight from the source (public policies authorities), which aims to skip other actor's secondary information

filtering/reshaping/framing or priming and to support people in a more independent opinion-making. The parliament also voted the framework for the Information Security Strategy [451] for the period 2019-2024 and among others, it concerns legislation about security in the digital space. It includes the provision for the review of the existing legal framework regarding the definition and prevention of the dissemination of disinformation through media platforms, the definition of the responsibilities of state bodies to deal with manipulative behaviors online, as well as the exclusion of information that threatens national security (paragraph n. 96). Nevertheless, the planned actions in the legislation are not revealed in detail and there is a more general reference. We cannot know if this is done legitimately for security reasons, however, even at the level of internal cooperation of the competent state bodies, perhaps someone could say that there should be a more thorough analysis of the proposed policies, so as to increase efficiency. Also, another question arises. One could ask: will the indicated supervisory authority be responsible for judging the quality of the information and whether the information is harmful to national security? If it judges that national security is threatened, then it will be able to uncontrollably exclude information and news from the public debate? In other words, there are technical issues that should be clarified, in order to strengthen citizens' access to information and to increase transparency even more.

In the same framework of security strategy, the Moldovan cabinet in 2022 approved a decision [430] concerning the establishment of a Coordinating Council to ensure information security. As referred in paragraph 1, the Council will not have a legal personality but will have consultative and operational attributes. “The basic function of the Council is to promote and coordinate measures of implementing information and cyber security policies in a democratic society depending on the development of technology, legal and other relations in the information sector, both at national and international level” (paragraph 2). The Council’s activity will be focused on four levels (paragraphs 11-15):

1) Cybernetic – to present and examine risk factors who have generated or may generate cybernetic dangers, as also to submit proposals for solution and recovery for those incidents.

2) Operational – to identify subversive news that could affect the country’s information security

3) Media – to evaluate various types of factors who could harm the institutional, functional, structural integrity of media in the country, for example to investigate situations of corruption, propaganda, misinformation, manipulation of national information space.

4) Civic-private – with different responsibilities such as to stimulate technological innovations in the field of information society development, to promote public authorities

cooperation protocols regarding information security and compliance with legislation, to cooperate with research institutions or higher education and experts from within the public entities in the field of defense and public order etc.

Interesting fact is the provision that each level, especially the media and civic-private levels, will create a network of information security experts with the objective to identify information threats and vulnerabilities or to manage with information security problems (paragraph 25). One could say this is a provision resembling the European HLEG which utilizes experts from various domains in order to analyze a public problem and propose solutions, working under a consultative character.

Concerning the accession negotiations between European Union and Moldova about the progress of reforms, in the framework of EU enlargement policy, the European Commission published a report [422] on the country's alignment with the EU acquis. In the field of digital transformation and media, the Commission recognizes the honest efforts of the country and reports that "some level of preparation" was achieved and „good progress was made". However, it suggests that extra steps have to be taken and that "Moldova should in particular:

1. align with and implement the EU Roaming Regulation and other relevant EU acquis in the field of telecoms;
2. adopt the Digital Transformation Strategy 2023–2030 and ensure the institutional capacity to implement it;
3. adopt and implement market instruments to ensure anti-cartel measures and the deoligarchisation of the media market".

As we observe, there is room for improvement and enrichment of the legislative framework to deal with information falseness, especially in the digital space of the internet or media literacy and this could perhaps be done according to the standards of the European DSA or the Code of Practice. However, there is a vivid activity in terms of legislation and a clear change of dynamics in positive direction in the country the last years. One can ascertain it by looking at three different indicators: the Press Freedom Index, the Global Peace Index and the Corruption Perceptions Index. In 2020, Moldova was ranked 91st in the Press Freedom Index, while in 2023 it was ranked 28th [405; 406]. In 2020, the country ranked 71 in Global Peace Index and moved to 57 in 2023 [251; 252]. In Corruption Perceptions Index, from ranking 115 in 2020, Moldova moved to 76 in 2023 [208; 209]. Here follows a graph that aggregates the above.

Table 3.2. Moldova's Indexes rankings

Moldova rankings	2020	2023	Ranking change
Press Freedom Index	91/180	28/180	+63
Global Peace Index	71/163	57/163	+14
Corruption Perceptions Index	115/180	76/180	+39

We observe a significant improvement in all three Indexes that can be translated as a result of improvements in public reforms and application of legislation. Especially in account of Press Freedom ranking, there is an advance of 63 positions (2023 in relation with 2020), which can be expressed as part of general progress due to the implementation of the respective policies. Moldova's dialogue with the European Union has not stopped and discussions are taking place, among others, on issues of know-how in dealing with disinformation and improving public policies. In March 2023, there was another meeting between EU and Moldovan high-level officials, in which they discussed security issues, Moldova's upgrade to candidate Member State status and the willing to increasing international cooperation to counter hybrid threats, disinformation and crisis management [466]. What decisions will be made exactly and what actions will be taken is something that will probably be seen in the future.

3.5. Case study. Accumulation of quantitative results regarding the enactments examined.

*Accumulation of **quantitative** results*: Apart from content research and analysis we will also make some quantitative data observations, based on the policies examined. Here, our subjects of study are not policies in general, but are focused solely on legislation units, meaning we strictly focus on enactments and joint communications.

a) Realization as a public threat

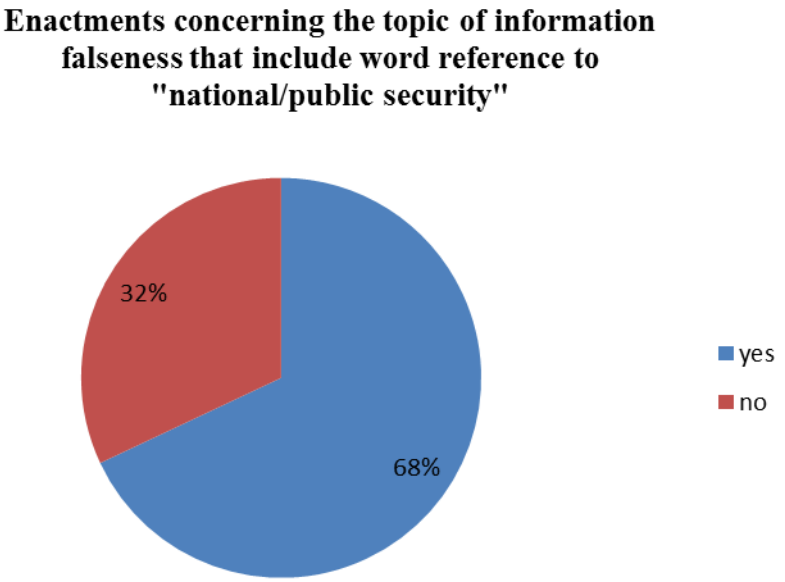

Figure 3.1. Aggregate of enactments concerning the topic of information falseness that include word reference to "national/public security".

Clarification:

Table 3.3. Details from enactments that don't include a direct word reference to "national public security", but count as "yes" because they describe and are quite similar with the concept of national or public security.

"which threaten the integrity and security of the EU, its member states and citizens" [441]	Count as ***"yes"*** because they describe and are quite similar with the concept of national or public security
"threats to democratic political and policymaking processes as well as public goods such as the protection of EU citizens' health, the environment or security" [440]	
"may endanger human health, harm the cohesion of our societies and may lead to public violence and create social unrest" [489]	
"to protect the integrity and security of the Union, its Member States and their citizens" and also "measures within the common foreign and security policy" [428]	
"Accurate and reliable information is imperative for health and safety during a national emergency" [481]	
"declared health misinformation to be a public health crisis" and also "the spread of falsehoods that threaten the health and safety of Californians" [410]	
"in building national resilience to foreign disinformation campaigns" [480]	
"to make informed civic decisions that affect them, their families, their communities, and the world" and also "misinformation poses a clear risk to democracy" [414]	

"spreads or disperses in any way false news that is capable of causing concerns or fear to citizens or shaking the public's confidence in the national economy, the country's defense capacity or in public health is punishable by" [461]	
"disseminates or disperses in any way false news with the result of causing fear in an indefinite number of people or in a certain circle or category of persons who are thus forced to carry out unplanned acts or to cancel them, with the risk of causing damage to the economy, the country's defense capability or public health is punished by" [462]	

In total, we examined 25 *enactments* and *joint communications* from European Union, United States, Greece and Moldova that concerned policies to deal with information falseness. Out of those subjects, 68% (17/25) included a word reference to *national* or *public security* and 32% (8/25) did not include a mention to it. We can see that the majority of the enactments consider information falseness as a national or public security issue, thus they mention it in their corpus. Indeed, according to official policies, there is a realization of information falseness as a public threat, so the legislation is oriented to protect against this threat. However, 32% of the legislation does not refer to such kind of security, which is not a negligible percentage. It seems that there is still time needed and efforts to be done for public authorities, in order to comprehend the importance of such problem and treat it as a matter of public security.

b) The human right aspect

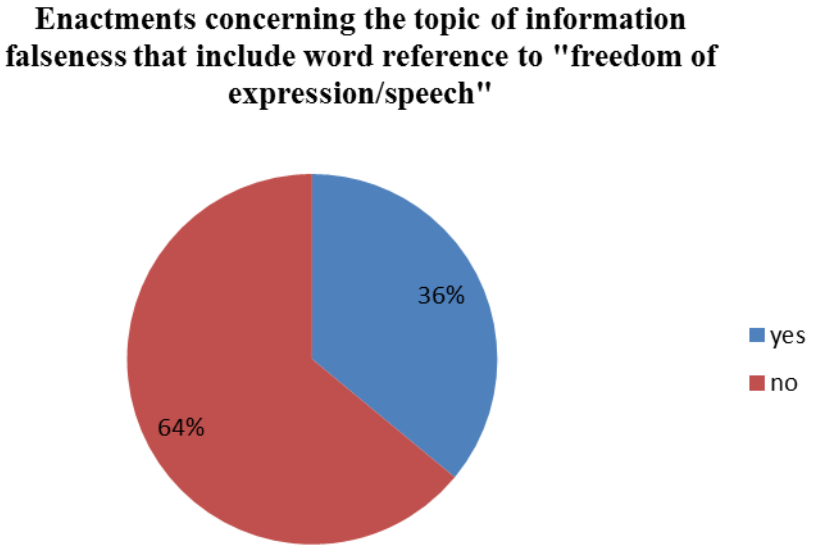

Figure 3.2. Aggregate of enactments concerning the topic of information falseness that include word reference to "freedom of expression/speech"

Clarification:

Table 1.4. Enactments concerning the topic of information falseness that do not include word reference to "freedom of expression/speech", but count as "yes" because they refer to fundamental human rights where freedom of expression is included.

"This Directive respects the fundamental rights, and observes the principles, recognised by the Charter of Fundamental Rights of the European Union, in particular the right to respect for private life and communications" [436]	Count as ***"yes"*** because they refer to fundamental human rights where freedom of expression is included
"protecting fundamental human rights and freedoms and promoting democracy and the rule of law" [451]	

Out of the same 25 enactments and joint communications examined, 64% (16/25) did not include a word reference to freedom of expression or speech, while 36% (9/25) mentioned it. As we observe the majority of the subjects under examination do not have an explicit word reference to freedom of expression/speech which is a fundamental human right declared by the United Nations. Of course this fact does not mean that they do not respect this specific human right, but it is sign which indicates that the orientation of the legislation is not primarily focused on securing freedom of expression. The main goal/orientation of the legislation is to protect against information falseness and this often requires to silence disinformation sources or to impose penalties. As we saw earlier in our analysis, in some cases those tactics may insult the right to this specific freedom. As a result of this strategy, freedom of speech is not treated as a priority and is put into a secondary frame. If the policies' formula to counter disinformation is by primarily promoting facts and debunking false information and simultaneously ensuring citizens' right to freely expressing their opinions, then the legislation should at least include a reference to securing the right to freedom of expression.

Table 3.5. Countries/Union that incorporate criminalization of disinformation in their legislation.

c) The similarity

Countries/Union that incorporate criminalization of disinformation in their legislation	**Yes**	**No**
European Union *Example*: "funds and economic resources belonging to, owned, held or controlled by natural or legal persons, entities or bodies that are responsible for cyber-attacks or	√	–

attempted cyber-attacks" (article 5) [428]		
United States *Example*: "deceptive act or practice", a violation of this provision brings fines up to $5,000 or imprisonment up to six months or both [445]	√	–
Greece *Example*: "punished by imprisonment of up to three (3) years or by a fine" [462]	√	–
Moldova *Example*: Media service providers who broadcast content classified as disinformation are fined between 40,000 lei and 70,000 lei (article 84) [419]	√	–

Out of four regions-legislative entities examined we found that all (4/4) had provision of criminalization of information falseness in their policies. European Union, Unites States of America, Greece and Republic of Moldova all include penalties against disinformation, such as fines or other criminal charges.

d) Penalty distribution

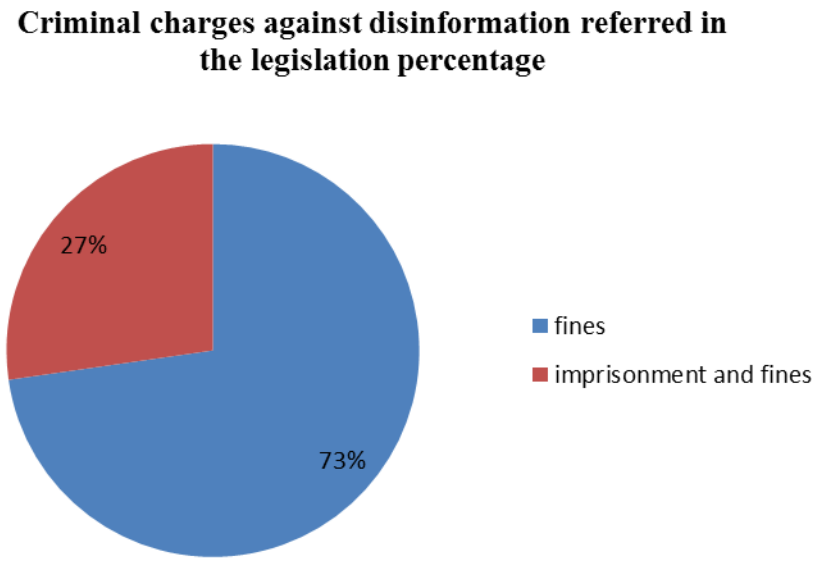

Figure 3.3. Criminal charges against disinformation referred in the legislation percentage

Among all the enactments examined, we found 11 that incorporated penalization of disinformation. We separate the penalties into two types: fines and imprisonment. We do not

take in account other types of penalties such as suspension of publication for example. So, in 73% (8/11) of them, financial penalties were referred (fines). Except penalties of economic nature, 27% (3/11) of them were also including imprisonment. As mentioned earlier, penalizing disinformation may work as a deterrent against disinformation spreaders, however, it may work as a means of imposing fear to citizens and journalists, regarding their opinion statement in public. Let alone, if we take in mind the imprisonment aspect, which is considered a more severe form of punishment.

e) The final decision

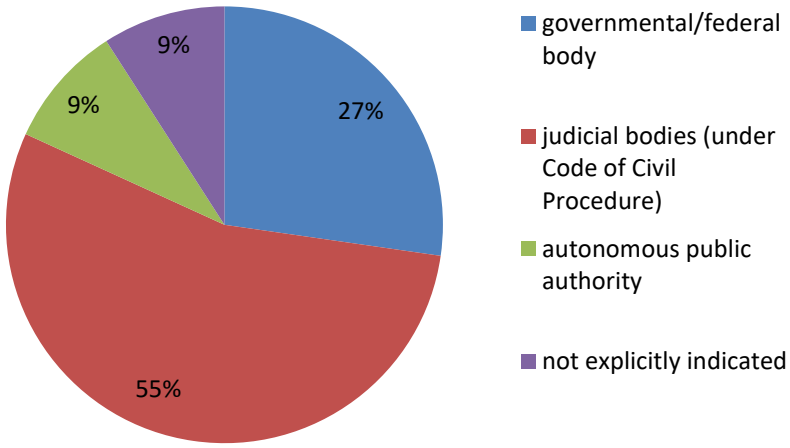

Figure 3.4. Supervisory authority indicated in the enactments that include penalization of disinformation

Out of 11 enactments examined that included penalization of disinformation, we found that 55% (6/11) of them indicated judicial bodies as an authority to decide about disinformation cases (perform under the Code of Civil Procedure of each State). In 27% (3/11) of them, a governmental or federal body is indicated as supervisory authority, while 9% (1/11) indicates an autonomous public authority and also 9% (1/11) does not clearly indicates an official entitled supervisor. The governmental/federal and judicial bodies percentage combined aggregate the number of 82% (more than three quarters). This means that in the wide majority of disinformation cases under examination, judges (perform under the Code of Civil Procedure) or government formations (governmental branches) will decide in the final stage if an information product is a false or not. This fact begets some queries. Is the judicial personnel

specialized and practiced on various forms of information falseness, in order to judge about various cases of disinformation and decide if an information product is false or not? Is the government personnel specialized and practiced in the same topic? If yes, which procedure will ensure that a governmental body will decide impartially, neutrally and not in favor of each government? What is the possible optimum solution that could mitigate those uncertainties? A probable answer to those questions could be the autonomous public authority to monitor information space. However, if we take into account the small percentage (9%) on the chart, there is still work to be done in the direction of officially choosing this kind of public policy for implementation.

3.6 Conclusions for Chapter 3

In this compartment of the study we examine official responses, possible solutions, namely possible ways of dealing with disinformation, misinformation or malinformation at the level of public policies, through the research of government innovations and legislation from different regions of the globe. We perused public policies of European Union, USA, Greece and the Republic of Moldova. Our main objective was to explore how officials approach the subject, to create a marquetry of initiatives, a pool of ideas that could benefit other States, civil society or public sphere conversation. According to the analysis of the sources we were allowed to reach the following conclusions:

1. The importance of responding to information falseness is consolidated in Union level as also in national level. The States studied in our research are conducting efforts in practice to limit the phenomenon, so we are observing the existence of countering policies against a certain public problem.
2. European Union has invested in strategic communications as a form of soft diplomacy and trading by creating the Task Forces and expanding them in the broader European neighbourhood. The EU endorsing the proposals of High Level Expert Group tries to build and follow a strategic plan against disinformation based on five pillars: a) transparency, b) media and information literacy, c) empowerment of users and journalists, d) diversity and sustainability of the news media ecosystem, e) process and evaluation.
3. In accordance with these pillars certain policies were formulated. The Code of Practice on Disinformation was created as a self-regulatory piece of legislation across EU that calls stakeholders of the private sector to interplay and cooperate with European and national administrations. Also during the pandemic crisis, a quick response strategy was developed and

with the Joint Communication there were steps for greater transparency of online platforms about disinformation and influence operations, for better cooperation between countries and organizations internally and externally of EU, for pluralistic debate and raising citizens awareness. We observe the extension of RASFF to RAS which focuses on disinformation, but it seems that it needs to be activated more often, in order to have greater contribution to the limiting process. Quite notable efforts are the forming of the European Democracy Action Plan as a framework to a) promote fair elections and democratic participation, b) support free and independent media c) counter disinformation, as also the creation of DSA to regulate the digital landscape and protect citizens from types of malicious information.

4. In United States of America we distinguish three directions of limiting the problem. Firstly, there are federal bodies against disinformation, such as CISA, FBI, CBP and FEMA. Secondly, we see law enforcement measures, to wit the Honest Ads Act, the Federal Trade Commission Act or the Covid-19 Disinformation Research and Reporting Act of 2021 and other state bills. Thirdly, there are actions in the field of education and media literacy, with the appreciation of the term digital citizenship and the incorporation of ML programs into the existing curriculum.

5. Greece as we observe, has invested in new technologies, by digitizing the systems in the public sector in order to increase the communications security and the smooth information exchange between organizations and citizens. We also saw a case with facilitation of direct democracy, meaning the direct participation of citizens in open online discussions about public affairs, as a form of open governance. Furthermore, we examined the legislation against fake news, which raised debate between public actors, because the penalization of disinformation brought to the surface the consideration of threat against the right to freedom of expression.

6. The Republic of Moldova is making efforts for structural reforms in order to modernize its public administration. A part of this process is the actions against disinformation, such as the recent modifications on the Code of Audiovisual Media Services or the Law 64/2010 about the freedom of expression. We meet quite innovative practices against false narratives, to wit the operation of Prima Sursa as a direct information channel from official high level authority. Also, there is national strategy of digitization through the Digital Transformation Strategy 2023-2030 and legislation about security in the digital space, with the framework for the Information Security Strategy.

GENERAL CONCLUSIONS AND RECOMMENDATIONS

We could say that we meet some conclusions in our thesis that satisfy the *objectives* of the research. In the thesis we made a little journey on the phenomenon of information falseness by seeing examples of disinformation through history (objective: *historiography overview in relation with public affairs),* such as the character assassination campaign of Octavian Augustus against Mark Antony in ancient Rome or the "canards" (baseless rumors) in France of 17th century. The main aim of the study is to portray current public policies countering the problem, so, first of all, we had to portray the value role of information to society and that's why we talked about the importance of reliable information with its two uses, a) the usage value of information, meaning the cognitive use of information (effectiveness, usability etc) and b) the commercial use, meaning the commercial value of info. Under the scope that well-informed citizens contribute to smooth functioning of democracy, we focused on the first one, the usage value of information, how people reclaim facts and proceed on a more healthy decision making. Thus, we had a literature review and examined the bibliography that supports the opinion that disinformation is considered a public problem (f.e. manipulating public discourse through agenda-setting). In order to address a problem, we have to understand it better (objective: *analysis of the modern concept of information falseness and its subdivision into branches*), so to analyze disinformation in full scale, we examined its three branches: a) disinformation, false information deliberately created to harm (the pure falseness as we like to call it), b) misinformation, false information but not created to harm, c) malinformation, reality-based information shared to cause harm. Except those branches, we examined elements, forms of information falseness and its dissemination tactics, such as fake news, echo chambers, computational propaganda, bots and algorithms (objective: *analysis of the role of digital technology on the contemporary dissemination of disinformation*). We analyzed disinformation tactics directed to impact opinion-making, we observed the role of media priming in expanding rumors or conspiracy theories inside public sphere (in the case of Pizzagate events) and how information manipulation is used by domestic or external actors to make influence operations and capitalize profits from impacting public opinion (objective*: overview of different types and transformations of disinformation in today's public sphere, as well as the disinformation tactics aimed to influence behavior* and also *study the existence of disinformation through a looming conspiracy theory in the public agenda and its impact on public opinion*). Furthermore, we met *the motives* of producing "fakeness", meaning the political, financial and social motivations *behind the dissemination of disinformation*. We

stuck more on political motives, because as we saw in the study, political level disinformation tries to give a communicative advantage against an opponent and to affect beliefs or behavior which is later interpreted in votes and election influence.

Of course political or geopolitical power can produce economical profits and vice versa, but we chose to focus more on the field of politics because in our opinion it's a genesis field of other powers such as social, economical etc. That's why we examined information falseness in recent political life in multiple regions (America, Europe, Africa), observing major events in US, French and Nigerian presidential elections in the last few years starting from 2016 and beyond (objective: *analysis of the problematic and the relevance of disinformation phenomenon in recent political life in multiple countries of the globe*). In order to answer the basic question of our research, we had to find what are the State policies implemented or planned to be implemented, aiming to counter disinformation and limit its negative impacts on public sphere (objective: *study of public policies to counter disinformation in various States of the world*). In the same time, we converted our findings into a numerical report and made a quantitative analysis approach (objective: *form an aggregation and perform also a quantitative approach of those policies, in order to extract some additional conclusions through a statistical format*). We examined policies in European Union level as long as policies of United States, Greece and Moldova. Thus, we covered areas from Southern Europe, Eastern Europe, Europe as a whole and America. The main emphasis was placed on public european policies to counter disinformation. In EU we met important actions such as the strategy of communication task forces or the Code of Practice against disinformation, a set of measures that was monitored and later reworked to the new Strengthened Code of Practice of 2022. Another interesting part was the protective strategy against infodemic during the covid-19 crisis, which also revealed the extension of impact of disinformation to public health and the need to protect public security.

The EU provision of asking online platforms Signatories to make progress reports gave quantitative results on the case of countering disinformation and showed at least that the measures have a certain level of effectiveness. Furthermore, we saw the formation of a framework to support democracies, through the European Democracy Action Plan, as also the DSA to make digital world regulations. In United States we separated the policies into three categories: a) the federal bodies that are employed also to counter disinformation, b) the law enforcement enactments, c) the actions focused on media literacy. In Greece we saw efforts to digitize services of the Public Sector in order to be bulletproof from disinformation, as also the legislation that penalized fake news and caused discussion and criticism. Moldova, in the

process of coming closer to EU, makes legislation against disinformation and we saw enactments regarding the freedom of expression, the ban on media censorship, the distinction between presenting facts and opinions. Thus the **important scientific problem** was solved, which consisted in elucidating the phenomenon of disinformation, especially in public affairs sphere, offering the possibility to conceptualize it more distinctly as a public problem and to present an updated picture of the state of fact of its spread and amplification in the context of recent circumstances.

Outcomes

The researcher also meets some extra conclusions of outcomes related to the objectives of the thesis. As we observe:

1. One could characterize disinformation as perennial, contemporary, ever-changing, universal and impactful phenomenon. We say perennial because it appears in several ages throughout history, with persistent presence from antiquity to the present day. We say contemporary because of this present presence and because modern technology is employed for its dissemination. We call it ever-changing because except the element of continuity, it is adaptive to the social and technological conditions of each era, for example it could be spread through mouth or script in ancient times, could be spread through typography after 15th century or in digitized form today. We call it universal because it's met in several countries around the world, no matter differential characteristics (region, race, language etc).

Finally, we call it impactful because it can produce a plethora of negative effects in the public sphere and it can be considered as a threat to society (public influence, financial frauds, social unrest et al). (Chapter 1, [1.2] & Chapter 2, [2.1, 2.3]). The essential aspects of the phenomenon were also revealed through publication: [90; 88].

2. In addition, in the first two parts of the study, one could say that we can see a underlying sequence which simplifies, describes and outlines the phenomenon in the public life:

Disinformation→ communicative advantage (f.e. downgrading opponents, domestic or international)→ influence (opinion, behavior etc)→ voting/election influence→ election result→ political power through election results → fulfilling private interests (social, financial, political) and not public interests (satisfying needs of the few/minority and not the many/majority)→ democracy pathogenesis and undermine/degradation. (Chapter 1, [1.2, 1.3] & Chapter 2, [2.2, 2.3]).

We can see that information falseness can work as a source of effects. It interprets and transforms into something else and then into something else, it starts to get a snowball

effect and produces a line of sequence of impacts and eventually in the big picture, a final negative result. Of course we also met cases where disinformation does not directly relate with elections, but still relates to cases of social unrest, thus it produces negative effects (f.e. riots, demonstrations). (Chapter 1, pp. 46-50 & Chapter 2, [2.3]. Unfortunately, misinformation and fake news are used by various actors in the public sphere who seek to distort reality in the struggle for their own dominance, requiring the mobilization of society and the development of appropriate public policies to counter them [88].

3. In the third part of the study, we could say that we see a reversed sequence, a context that aims to face the threat, which is expressed by:

public policies to counter disinformation→decreasing disinformation→limiting malicious influence→ protecting public interests→assisting democratic values or protecting public security (Chapter 3) [87].

4. We concentrate an aggregate of public policies of different countries and we get a clearer picture of how States try to respond. Several State and governments' reflexes are activated and take measures in order to fight the problem. So, States are considering disinformation indeed as a threat. We met and examined policies trying to set barriers and limit disinformation, plus its various negative effects. This is happening in the general State context of preserving democratic polity norms and protecting public security and public interests. Furthermore, except State level, this is happening also in EU level, as an ultra-regional response, as a strategic pursuit of the Union. The European Commission's tactic to policy monitoring and to ask for progress reports from Signatories, revealed that there are positive results in countering disinformation. We understand that the measures have indeed effectiveness, up to an extent. We say up to an extent because the problem is not yet overcame. (Chapter 3, [3.1]. [89].

5. As we examined the implemented policies in some States, we realized another emerging problem. Among others, a form of countering disinformation is penalization (through criminal charges). The element of penalization on this issue raises concerns regarding the *compatibility* with the fundamental right to freedom of expression and information. (Chapter 3, [3.2, 3.3]).

6. Nevertheless, now let's combine two main facts of the study. The first fact is that disinformation is an *ongoing phenomenon*, it still exists (we saw very recent examples) (Chapter 1, [1.3] & Chapter 2, [2.3]). The second fact is the existence of countering policies on State, Federal and Union level (Chapter 3). Consequently, we can extract that no matter the

effectiveness of the measures taken, there are still steps to be made, still action field available, there is still the need for extra measures and new policies.

7. Maybe disinformation is intercepted up to an extent, in some places in the world of today, but we are not going to enter in a discussion of quantification. Its negative impacts are present, as we saw in the research. Thus, it is essential to keep producing sentinel measures against it. The battle against disinformation seems to be a procedure that has the character of *continuity*, so it demands from society, citizens, officials, legislators, governments to be in constant vigilance. (Chapter 1, [1.2] & Chapter 2, [2.1, 2.2]).

8. Through the completion of the study we can mark the realization of disinformation as a *threat.* This realization of threat derives both from the side of public problem (part one and two of the thesis) and the side of responses-public polices to counter it (part three of the thesis). Consequently, according to the contents of the study, disinformation can be considered as a threat:

a) To national security: we saw examples of potential foreign influence operations and in other countries as also national security reports regarding foreign interference, as a try of these States to organize and be protected from possible actions of third parties. (Chapter 2, p. 74-80)

b) To public security: disinformation can be hazardous for public safety, we saw cases of social unrest and public dangers due to fake news or conspiracy theories, such as the infodemic (covid-related disinformation), the gunfires due to Pizzagate rumors or the Capitol attack in 2021. (Chapter 3, pp. 93-100; Chapter 2, pp. 71-74).

c) To democracy: the influential potential of disinformation in opinion-making can also be translated as influence in decision-making and voting. Thus, we are talking about a danger to democracy, because public decisions are partially taken based on false narratives. Furthermore, the threat can be also turned against the electoral system itself and harm the credibility of democratic procedures such as elections. We observed events where the integrity of elections was questioned due to accusations for election fraud, intervention of shady factors and unreliable election system. (Chapter 1, [1.3], Chapter 2, [2.3]).

d) To financial security: disinformation is also exploited for economic purposes and can be proved a danger for citizens and a country's economy. As a result, there are enactments examined that concern the building of resilience and security in the digital space against financial frauds, misleading advertising, the protection against the manipulation of financial market, the integrity of capital movements in order to safeguard public, corporate and personal finance. (Chapter 1, p.39-40; Chapter 3, pp. 88-93; 98-100; 104-107; 111-116).

9. In relation with the quantitative results of the study, we are observing that States seem to understand that preserving national security means also protecting against information falseness, as the majority of enactments (68%) include a reference to that matter. However, the situation is not the same regarding the direction of freedom of expression, as only 36% of the examined enactments include a reference to it. Of course, we are not concluding that enactments do not respect this particular human right but the fact of absence of a single reference could be accounted as a sign of the direction that public policies aim to follow and as an indicator of legislative priorities. This direction is visible by the fact that all countries (and Union) examined incorporate disinformation penalization in their legislative arsenal. Moreover, some of these bills combine the provision of imprisonment, which is even more severe form of punishment. This tactic may raise concerns about the potential fear effect to citizens in their free opinion stating in the public debate. As for the authority that will monitor information space against disinformation and decide what is false, the enactments in more than three quarters (82%) indicate either a judicial body or a governmental entity. This could raise some concerns regarding the specialization of those authorities in communication science and disinformation matters and also the impartiality and neutrality of some of those entities in taking decisions. (Chapter 3, [3.5]).

Proposals for future research

The fact is that disinformation is a quite wide issue and can be examined from many different aspects. Our main focus in this research is to examine it by the aspect of public policies trying to counter it. It would be interesting if someone approached disinformation in combination with clearly legal aspect, concerning the level of interfering of legislation to fundamental rights. In our thesis we saw examples of enactments raising discussion about if they are close to violating civil rights, but it is not our purpose to do law analysis to this extent and we cannot make such conclusions. It would be nice to read a research examining if penalizing disinformation crosses the line and impacts freedom of speech or press freedom. Of course, this better have to be done from Law School department, because this is a matter of legal nature.

Also, another project that would seem to have promising potential on providing crucial understanding about information falseness has to do with gathering removed content from online platforms or debunked stories from media outlets. Studying such content could maybe enrich our knowledge about disinformation dissemination tactics, about the sources (transmitters) of false news, what issues or political parties or social groups they prefer to

target and to what percentage, what medium they prefer to use in order to perform, what amount of funding is dispended, as also other useful findings. We saw in our research that providing information about the ownership of a media, the identification of sponsored content, what money are spent on a political advertisement or information about malicious bots and algorithms are a step to increase transparency in media. So, if given, why not to make the best use of such information, study them and make helpful conclusions.

Recommendations

Along with the findings and deductions in our study, it would be fair to make some proposals, which perhaps could contribute in assisting the process of countering disinformation and enriching the toolbox against the phenomenon. The following are about subjective suggestions that have consultative character and in our opinion could be added up to a constructive dialogue in public discussion, regarding potential policies application.

1. **Governmental actions – Ministry (or Authority) of Digital Governance** (passing from government to state independence): It's interesting to consider the establishment of an Independent Authority against Disinformation. As its name indicates, it would focus solely on the issue and would search, examine, analyze and debunk disinformation. We say *Independent* because there is the purpose to be institutionally shielded from interventions of government at any given time. We mean that there is alternation, political parties take turns in government from time to time. So, the authority should be Independent in order to be objective and neutral and in order to be detached (as much as possible) from the will of different political powers that could possibly want to counter only fake news that affect their storytelling. We say *Authority* because it should have public character and defend public interests. Thus, its aims should be to counter information falseness that affects public interest such as public security or election credibility and not private financial interests (for example a case of corporation branding fake news).

2. It would be quite useful to establish an Independent Authority for Polls. Again, it would be *Independent Authority* for the reasons we explained above. It could counter disinformation in an indirect way. Its field of action would be to conduct and publish polls which measure and express public opinion about sociopolitical and economy issues. By doing that, it would be revealed the pulse of citizens' opinion on serious matters and we would have a circular process that feedbacks public opinion without any sideway interventions. In the study we witnessed the snowball effect of disinformation, so a way to prevent it, is by regularly hearing the majority and by making known the public will and public opinion on certain issues. Of course, this presupposes polls of high credibility and preciseness. To do that,

we propose that these polls should be conducted with modern scientific methodology and high number of participants. In addition, the methodology, the research sample and the primary data of each poll would be also available in public, certainly respecting and applying all the laws and rules of GDPR. In plus, the polls would include digital technologies and face to face questionnaires. All these could increase transparency, preciseness and credibility.

3. To combine two of the above proposals, we suggest that the Independent Authority against Disinformation could debunk and present fake news to the public, regularly, in a way that is easy to digest, explanatory, fact-based and not tiring for the most people. The competent authority could make daily news broadcast, a news bulletin of short duration, not more than five minutes, presenting fake news of common interest in the public sphere. This could be launched on State television or on online platforms through videos in its channels (for example on YouTube and social media) or with a column on newspapers.

4. **Law-making philosophy approach – Ministry of Justice**: Having seen that penalization of disinformation is debatable and raises concerns about legal aspects, such as the freedom of expression, we propose not to even reach that point of discussion. We suggest staying away from penalizing disinformation in order to avoid the above discussion or possible insults to fundamental rights and instead focus on other measures. In our opinion, it would be smart to hit disinformation from the inside, by targeting its credibility and its believability. This could happen with debunking fake news and narratives, regularly and methodically. We should highlight and cultivate a culture of fact-based storytelling on public matters. Thus, we should focus on the promotion of facts and not on the punishment of lies.

5. **Educational aspect – Ministry of Education**: Finally, in the logic of fact-basing and debunking disinformation, we should also utilize fact-checking and debunking by a citizen himself. Therefore, we should invest in media literacy to safeguard the younger generations from information falseness and at the same time, raise better educated mid and older generations of the future. For this reason, information and media literacy courses could be added in the curriculum throughout the educational system, especially from secondary to high-school level, as also in the universities.

For the topic examined, it would be beneficial if youngsters and adults have basic knowledge of Communication Theory, such as the Lasswell's communication model for example, become familiar with the glossary of disinformation terms, specially developed for this cause. These could lead to increased awareness and improved information judgement ability.

For closure we would like to farewell with the hope that our study contributes to scientific research in good will in the field of Communication and Public Administration and with the hope that the examined phenomenon would be significantly limited in the future with the result that public dialogue conducts under healthier terms in the public sphere, leading to citizens' democratic prosperity.

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STATEMENT OF RESPONSIBILITY

I, the undersigned, declare on my own responsibility that the materials presented in the doctoral thesis are the result of personal scientific research and development. I understand that if otherwise, I will be held responsible in accordance with applicable law.

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Phenomena and trends in journalism and communication. Faculty of Journalism and Communication Sciences. Chisinau, USM, December 4, 2025. – Public policies to counter disinformation in Greece and Moldova: comparative analysis.

Integration through Research and Innovation, dedicated to the International Day of Science for Peace and Development. - Scientific conference with international participation. Chisinau, USM, November 10-11, 2024. – Exploring the intersection of misinformation and public agenda: a closer look to a looming political scandal.

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