Chapter IV

Information, Disinformation, Cybersecurity

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Abstract Information has been and is an integral part of all human activity. For any state, it is a strategic commodity, where every plane of security depends on the information resource it possesses, which must be protected accordingly. It can be hypothesised a priori that the protection of important information resources is inextricably linked to the security interests of the state and its subjects. Without doubt, the most sought-after resource today is information. The introduction of information and computer technologies and their increasingly widespread use has led to a situation where there is an unfettered exchange of information between remote entities and logistical considerations do not matter. The turbulent and very dynamic development of information technology, as well as the rapidly increasing amount of data being processed, has necessitated the search for solutions to effectively manage information, taking into account the risks involved, especially in cyberspace.

Our technological capabilities are steadily advancing, but this is not always a reason to rejoice. It is important to be aware not only of the benefits of this, but also of the risks. In this case, we can speak of new phenomena such as disinformation, deepfake, fake news and trolling. Until recently, the pinnacle of disinformation was the dissemination of fake photos and texts. However, with the development of the digital age, the possibilities of artificial intelligence have also developed, which has reached a whole new level and is now also able to create fake videos. With the development of deepfake technology, a breeding ground has emerged for the spread of disinformation in the political sphere and for influencing public opinion regarding specific public office holders. Fake information can now

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be used to influence the electoral process, poor media reception, social tensions, acts of unfair competition and also other disinformation attacks that disrupt the normal functioning of the state and individuals. This now creates a whole new level of risks associated with the spread of false information.

Keywords: • cybersecurity • disinformation • fake news • information • information society • information warfare

1   General comments

The use of modern techniques has led to the emergence of a new type of society, which is called information society (Chałubińska-Jentkiewicz, Nowikowska 2020:34). Information society is a society that has the technical and legal instruments and the knowledge to use these instruments (Chałubińska-Jentkiewicz, Karpiuk, 2015:39). It is a society for which information is the most important value and commodity, which is sought, *inter alia*, through the Internet. Thanks to the Internet, people have gained the possibility to access unlimited sources of information. However, with the rapid spread of information, the possibility of manipulating messages or creating false ones has also emerged. A phenomenon often called "information warfare" has also emerged (Wasiuta, Wasiuta 2017: 71), referring to influencing the civilian and/or military population of another country by disseminating appropriately selected information. The object of information warfare is both collective and individual awareness while information influence can both against a background of information noise and in an information vacuum (Nowikowska, 2023: 64). The introduction of foreign objectives makes information warfare a war and distinguishes it from mere propaganda. The resources of information warfare are various communication tools – from the media to email and gossip. Information includes distorting facts or imposing on citizens an emotional perception that is convenient for the aggressor (Formicki, 2017: 319).

The definition of information refers to the concept of data (spatiotemporal events, states, procedures, numbers and descriptions) that relate to a model (a system, a slice of the world with real and unreal components, relationships) and, at the same time, perpetuate (describe, constitute, change) this model from the point of view of a person (data user) and for a specific purpose. Data become information only by relating them to exact situations in the model (reality) from the user's perspective and for a purpose. Information (Latin *informatio* – presentation, image; *informare* – to shape, present) is an interdisciplinary term, defined differently in various fields of science, the essence of which is the reduction of uncertainty (indeterminacy) (Chałubińska-Jentkiewicz, Nowikowska 2020: 22).

Key concepts in the communication process include manipulation (Latin *manipulatio* – manoeuvre, foray, trick; *manus* – arm, *manipulus* – hand), which is a form of influencing a person or group in such a way that they unconsciously and voluntarily pursue the goals of the manipulator. The ability to boss others around, the knowledge of how to be in charge, and how to conduct negotiations to get a partner to change their mind. It is often an inspired social interaction aimed at getting a person or a group of people to act contrary to their well-understood interests. Usually, the person or the group of people subjected to manipulation are unaware of how they are influenced. The author of the manipulation usually seeks personal, economic or political gain at the expense of those subjected to manipulation.

One can manipulate content (in the case of disinformation, it would be fake news) or how information is conveyed (in the case of disinformation, it would be manipulating the message so that genuine information is perceived falsely by building false opinions and positions, and drawing false conclusions). Linguistic manipulation is often used in propaganda. Although manipulation is perceived as unethical, it is often used in business relationships and negotiations. Manipulation is a modern technique of digital marketing communication.

By contrast, persuasion (Latin *persuasio*) is the skill of persuading someone that you are right about something. It differs from manipulation in that persuading someone to do something will not harm them, but the methods that are used when persuading are also employed when manipulating. Persuasion is also described as one of the methods of rhetoric or just as a reference to the "rhetorical tradition". It appeals to one's intellect, emotions and will. Considering the aims of persuasion, we can distinguish between:
-   persuasion aimed to convince – it is to prove that something is right or true; it is the "purest" type of persuasion; it assumes that the recipient is a communicatively active individual and that the sender's intentions are honest and reliable;
-   persuasion aimed to induce (propaganda) – it is to get as many supporters as possible for an idea or doctrine; it is a conscious effort to influence the recipient;
-   persuasion aimed to incite (agitation) – it is to win the recipient over to an idea, cause or view.

Manipulating polls, results, or opinions has become the standard. The editors of the programme *Strefa starcia* (the Clash Zone) asked their viewers on Twitter whether they accepted the possibility for homosexual couples to adopt children. The results were to be presented on TVP Info, and the poll's authors probably hoped that the viewers' answers would give them a strong argument to fight against LGBT communities. Unfortunately for the poll's originators, the result fell short of expectations, so instead of revealing the viewers' vote, they decided to remove the question from the network. Instead, the following laconic message appeared on Strefa starcia's Twitter account: "We respect the votes of VIEWERS. Therefore, it is essential to us that the result of the poll reflects THEIR point of view and not that of bought-off farms of anonymous trolls".

A team of experts from EU Member States developed the official EU definition of disinformation, according to which this term "includes all forms of false, inaccurate, or misleading information designed, presented, and promoted to intentionally cause public harm or for profit" (https://www.cyberdefence24.pl/ue-unijna-definicja-dezinformacji-i-nowy-kodeks-postepowania-dla-mediow [accessed on: 02/06/2022]).

According to the above definition, disinformation is a deliberate action to evoke a specific social, economic or political reaction. Disinformation undermines trust in public institutions and harms democracies by making it difficult for citizens to make informed decisions. False information sows uncertainty and contributes to social tensions, having

potentially serious implications, particularly for public security and order. The development of modern technologies has made it easy for such false information to spread globally using any of the techniques indicated above to influence the recipient of the information (KRRiT 2020: 7).

It should be emphasised that disinformation is a situation in which information, although true and adequately communicated to the public, is intended to elicit false opinions and conclusions. Fabricating such a message by creating various types of false documents, organisations, etc., is misleading (produces an image of the world that is inconsistent with reality) and produces certain effects such as making wrong decisions by the recipient, forming a view, action or inaction, according to the assumption of the disinformer.

According to disinformation model analyses, from the perspective of cognitive models, disinformation is the effect of the influence of an imposed cognitive environment (worldview). Therefore, it can also be produced using a message that is highly congruent with the facts and a message that is consistent with the facts but evokes a false opinion or position about them.

Another important phenomenon, in the context of the issues discussed, is the publication of false images and sounds in the media. Unreal, modified photographs, so-called fake photos, which convey a false story, do not surprise the public any more. So-called fake videos have also gained popularity. Researchers have developed software that makes it possible to reconstruct the facial expressions of any person and create an image that matches lip movement to any text so that video content can also carry a false message. One of the companies dealing with this is Storyful, whose activities include verifying the multimedia posted by users on social networking sites, which are then used by the media worldwide (Reconstructing facial movement in real-time with a webcam? Nothing simpler, all you need is a webcam, https://whatnext.pl/ rekonstrukcja-ruchu-twarzy-czasie-rzeczywistym-przy-pomocy-kamery-internetowej-nic-prostszego/ [accessed on: 02/06/2022]).

The general understanding of the term *disinformation* differs from that contained in the literature. Disinformation affects entire populations rather than individuals. The development of disinformation is linked to the development of social communication techniques, and thus the freedom that corresponds to access to information and the right to disseminate it. Disinformation is, therefore, a side-effect of the colonialism of the web.

2   Post-truth era in the media

A new phenomenon changing existing communication process rules is the so-called post-truth. One of the most significant global crises of our time, involving the spheres of political, social, and cultural relations and, later, the scope of mass communication, has been named post-truth. In 2016, the editors of the Oxford Dictionary declared post-truth

the "word of the year". Such interest in the neologism is understandable, given the phenomenon which this word denotes. According to the Oxford Dictionary, post-truth is defined as an adjective "relating to circumstances in which objective facts are less influential in shaping public opinion than emotional appeals". The neologism became particularly popular in Western (primarily American and British) journalism when, back in 2016, Donald Trump won the US presidential election, and the British people voted for an exit from the European Union. Leading columnists of the major mass media of both countries heralded the beginning of the "post-truth era". Awareness of the new problem plunged the Western media into profound pessimism. In an information world, where actual data cannot be relied upon, and where evidence and testimony are no longer the main means of social dialogue, journalism is losing its relevance and, with it, the entire hitherto traditional value system of the media.

"Facts held a sacred place in Western liberal economies. Whenever democracy seemed to be going awry, when voters were manipulated, or politicians were ducking questions, we turned to facts", wrote British political economy professor W. Davis (Chałubińska-Jentkiewicz, 2023: 265). Although the word *post-truth* has become topical in the media discourse and has found its way into everyday language, it originated much earlier. It was coined by the American playwright of Serbian origin, S. Tesich, who, back in 1992, in an essay published in *The Nation* magazine, wrote about the political atmosphere in the USA: "...we (meaning Americans), as free people, have freely decided that we want to live in some post-truth world" (Tesich, 1992: 12). The word came into academic circulation later, in 2004, with the study titled "The Post-Truth Era: Dishonesty and Deception in Contemporary Life" (Keyes, 2022: 23). The author of the work, American researcher and writer Ralph Keyes, made a significant attempt to explore the reasons that have led modern society to a situation where truth has lost its fundamental meaning. "When our behaviour conflicts with our values, what we're most likely to do is reconceive our values" (Keyes, 2022: 25). It is clear that R. Keyes considers post-truth in a much broader sense than the political sphere and mass communication; in his case, it begins with interpersonal relationships. He points out that contemporary man has an "alternative ethic" that allows him not to suffer psychological distress when he lies. To justify oneself in the modern language, there are "transitional" phases between truth and falsehood, i.e., "alternative truth", "my truth", "this is how I see it", and "an alternative version of reality" (Chałubińska-Jentkiewicz, 2023: 266). R. Keyes draws attention to the processes that have led the world to post-truth. The author points to the influence of the philosophy and aesthetics of postmodernism, which has spread in mass culture through works of art, literature, cinema, etc. Postmodernism, as it is known, basically contains relativism, indifference to the problem of separating truth from falsehood or even insists on the impossibility of such a separation. Another source of influence specific to US culture is the so-called new journalism that emerged in 1970 (Weingarten 2017: 20). The development of "new journalism" not only helped to enrich the texts of newspapers and magazines with novelistic techniques but also to directly incorporate non-existent, made-up events and situations into journalistic texts. In fact, reporters began to use conscious

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falsification of facts "to make stories beautiful". Obviously, this approach gradually erodes the reader's trust in the journalistic text. One more driver that leads Western culture towards post-truth is the film industry. R. Keyes points to the distortion of facts in films about real events and the mythologisation of the lives of film actors (Keyes, 2022: 25).

The problem of the "crisis of fact" is that, in the 21st century, we are faced with an overabundance of material that contains facts. Until then, fact was the basis for an objective description of the world. According to cultural historian Mary Poovey, this belief began to take shape in the Middle Ages when accounting emerged among traders, contributing to the development of science in subsequent years (Poovey 1998: 35). The 20th century introduced a new discipline – the use of numbers, which marketing companies and politicians quickly adopted. Today, an enormous number of sources, various forms of information transmission, and the inability to check the veracity of messages have resulted in a lack of confidence in the material that contains facts.

From a society based on facts, civilisation is entering the era of a society based on data. These are collected automatically through various devices and applications that determine user behaviour. The function of such data (big data) differs dramatically from the classic function of facts. If a fact served as proof in the public dialogue, in searching for an optimal solution, the data showed the public mood, making it possible to predict its behaviour and to adapt to its tastes and expectations. The fact as a testament to reality loses its value for the communicator: why prove something if you can count on recipients' preferences and offer them a narrative that will be accepted with great confidence? Textual modes of communication further facilitate the process of lying. Thus, a key factor in the spread of post-truth is technology, technical devices and their development (Chałubińska-Jentkiewicz 2023: 267).

Some researchers have highlighted the impact of biased online websites. Such media projects are not oriented towards adhering to the professional standards of journalism (balancing opinions, verifying facts, separating them from beliefs, etc.) (Nowikowska, 2020: 132). They have never been integrated into the system of professional journalism, ethical standards are unknown to them, and they aim to stay in power at all costs. The audience of any such site may be relatively small, but the information they produce can spread extremely quickly and widely through social networks. In addition, the actions of single sites with small audiences can have a cumulative effect and, as a result of the impact, have fairly significant audience support. It is no coincidence that social media has become a provider of disinformation and a "battlefield" for post-truth.

Firstly, the pattern of distribution of information – through subscriptions by "friends" – lowers the level of critical perception of news. The user sometimes does not even read the news to the end and presses the "share" button simply because of a pre-formed liking for the source of the information. Secondly, the administration of social networks itself is

not motivated to tackle such phenomena. As a result of the combined effect of old and new media, "fake" factories and social networks, a kind of "disinformation ecosystem" is created in the information space, in which the average reader cannot distinguish truth from falsehood. But it is vital to realise that, in the "disinformation ecosystem", the public is not a passive object of influence. Through emotions and manipulation by politicians and journalists, it is a participant in this system's processes, too. As a result of the spread of post-truth, the journalistic community has encountered the following problems: (a) the division of society based on the Self vs. Other principle, (b) the use of propaganda, manipulative techniques, emotional influence instead of a rationally balanced approach, (c) the emotional enlightenment of events, situations and problems, (d) the decline of the importance of information that contains facts, (e) the decline of the prestige of the media, journalists, experts and political activists, (f) the total distrust and at the same time the uncritical perception of information from sources that are recognised as the Self, and (g) the impossibility to have a full and constructive social dialogue (Chałubińska-Jentkiewicz, 2023: 268–269).

It should be noted that R. Keyes has warned of the danger of the emergence of a "suspicious society" in which the mechanisms of self-confidence will be destroyed – the more a person deceives himself, the more suspicious he becomes of others. This is a process of destroying public debate and democracy. However, R. Keyes also speaks of an existing "desire for righteousness", which can provide the basis for countering post-truth (Keyes 2022: 55). A situation of widespread threat that affects society as a whole and requires extraordinary countermeasures and focuses much of the attention and engagement of those in power is a circumstance conducive to disinformation. The problem with contemporary digital media is that we do not know how to define contemporaneity and what contemporary social media is anyway.

3 Fake news

Fake news is untrue or partly untrue information published, for example, on information services or social networking sites. Fake news aims to convince the recipient that it is information which describes the truth. However, it is important to distinguish false and misleading news from parody or satire, which is not intended to mislead the recipient. Fake news is also defined as false information, often of a sensationalist nature, published in the media to mislead the recipient for financial, political or prestige gain. Fake news can be an element of disinformation as part of measures described as active measures in the "black" hybrid technology group (Chałubińska-Jentkiewicz 2023: 269).

According to media expert Martina Chapman, all fake news consists of three elements or, in other words, its author intends to induce in its recipients a state of (1) suspicion, (2) so that they can be misled, and (3) manipulated (https://www.webwise.ie/teachers/what-is-fake-news [accessed on: 13/02/2024]).The following types of fake news can be distinguished:

1) clickbait – click lurkers and click baiters – websites that, using eye-catching thumbnails or sensational headlines, tempt people to visit them, taking advantage of people's natural curiosity and thus generating traffic to the website, increasing the number of clicks and revenue from the advertisements displayed on the pages;
2) biased/slanted news – on sites that present untrue news and which are visited by viewers seeking confirmation and reinforcement of their views, including prejudices;
3) satire and parody – found on sites that present untrue or exaggerated information for purely entertainment purposes;
4) sloppy journalism – information published by journalists without corroboration and without checking the credibility of sources (Chałubińska-Jentkiewicz 2023: 270).

The famous 18th-century Irish writer, essayist and satirist Jonathan Swift was to say: "Falsehood flies, and truth comes limping after it" (https://www.goodreads.com [accessed on 13/02/2024]. This well-known maxim from nearly three hundred years ago describes perfectly the effectiveness, speed and agility with which false information spreads in today's social media. At least this is the finding of the study titled "The spread of true and false news online" (Vosoughi, Roy, Aral 2018), conducted by researchers at the Massachusetts Institute of Technology, which was published in the *Science* magazine. In this study, researchers analysed the diffusion of true and false information spread on Twitter between 2006 and 2017. The dataset included nearly 126,000 pieces of information shared by 3–4.5 million site users. It turned out that fake news spread much faster, and reached further, deeper and more widely than true news, especially concerning information in the political sphere. It was also noted that the algorithms contributed equally to the diffusion of both factual and fake news, underpinning the conjecture that people, as social media users, are more likely to share negative information than positive information. The researchers also found that 1% of the most popular fake news reached between 1,000 and 100,000 recipients, with the figure rarely exceeding 1,000 recipients for 1% of the most popular true news. It is important to distinguish false and misleading fake news from satire or parody, which have a humorous function and are not intended to mislead the recipients (Nowikowska, 2020:88).

True news is also sometimes considered fake by individuals or institutions because of the negative content it carries for them. Recently, the use of this word has increased by 400%.

Fake news can be used in politics, e.g., during election campaigns. It is mainly aimed at eliminating the enemy and doing harm or discrediting the other side. One example of this is the US election. Between 2009 and 2013, Hilary Clinton was the Democratic Party's presidential candidate, and it was during this period that a vast amount of false information about her was created. One was Hilary Clinton's sale of weapons to terrorists (Palczewski, 2019: 144). This false information became the most popular at the time. It concerned the arms trade with ISIS, and the number of hits oscillated around 800,000 hits on Facebook.

Recently, NATO has also seen a huge influx of fake news and propaganda from Russia, especially after the annexation of Crimea. Fake news was created by Russian officials and distributed globally through media agencies. It could be located in popular and prestigious news services in the United States. In response, NATO developed an action strategy in 2019. The fight against disinformation continues to be an essential part of NATO's communication strategies and day-to-day operations, including media monitoring, information space analysis and proactive communication in a coordinated and fact-based manner. It aims to inoculate the media sphere instead of debunking every piece of false information (Chałubińska-Jentkiewicz 2023: 274).

"Response to Disinformation on COVID-19" was implemented in an action plan issued to allies by the Secretary-General. This document aimed to bring together multiple threads of work on countering hostile disinformation around COVID-19. In 2021, NATO's Toolbox for Countering Hostile Information Activities was created. It reflects a two-pronged response model through "understanding" and "engagement", supported by "coordination". NATO should also strengthen the mandate of existing bodies focusing on strategic communications to better coordinate national efforts. This could include sharing information on threats, incidents and best response practices, among other things. In 2021, the 2022 NATO Communications Strategy was produced. This document was presented to the North Atlantic Council on 14 December 2021. In the face of the war in Ukraine, the new 2022 Strategic Concept was adopted. At the summit held on 29–30 June 2022 in Madrid, NATO defined new objectives and directions for action, which also relate to activities in cyberspace and disinformation. The strategy envisages, among other things, digital transformation, adapting NATO's command structure to the information age and strengthening cyber defence, network and infrastructure. The strategy highlights that authoritarian actors challenge interests, values and the democratic way of life through disinformation campaigns.

In Poland, there is, *inter alia*, ISSA Poland – the Information Systems Security Association, which teaches network users how to counter disinformation (Jak-rozpoznawac-i-weryfikowac-faszywe-informacje-fake-news.png, https://pl.wikipedia.org/wiki/Plik:Jak-rozpoznawac-i-weryfikowac-faszywe-informacje- -fake-news.png [accessed on: 25/05/2022]).

In 2018, Kantar Public conducted studies on fake news. The study participants mostly indicated that they encountered false information shown in the media once a day, others once a week, a few times a month, rarely or never. Many people claimed to have the ability to recognise fake news and to distinguish it from reliable news (Fake news in Poland and Europe. The Kantar Public study, https://reporterzy. info/3634,fake-news-w-polsce-i-w-europie-badanie-kantar-public.html [accessed on: 25/05/2022]).

4   Trolling

Disinformation on the Internet can take the form of propaganda. This is a phenomenon commonly known as trolling. Internet trolls are a tool of disinformation. It is assumed that the Internet is an unbeatable power and information uploaded to the web will circulate. A troll is a person who knowingly posts thoughtful, mocking or provocative posts and comments on online forums. This action is intended to provoke discussion with other users. The main tasks of trolls include propaganda, manipulation, misrepresentation of facts, and introduction into popular awareness of short graphic information, so-called memes, which remain long in recipients' memories. Often, trolls act for money (they are paid to engage in this type of activity). Understood this way, trolling is an anti-social behaviour in the digital world (Chałubińska-Jentkiewicz, Nowikowska, 2022: 119).

Different types of trolls are distinguished in the literature. The first type is an advanced troll. These people write a certain number of daily comments on various forums and social networking sites. Such persons are characterised by a lack of profile. They have no photos, posts or information, and their accounts are created on the fly. The posts of an advanced troll are characterised by sharp wording and attack. The second, more complex type is the mole troll. Their profiles are filled out, and the comments are thoughtful and urge discussion. Such persons present themselves as thinking in an avant-garde manner, not being manipulated by generally imposed rules. Another type is the anti-troll, the most complex form of activity, which is difficult to decipher and easily draws people into discussion. Such persons mitigate the dispute of two different sides by polemicising with both sides. There is also a lamer troll. This user knows little about the subject but tries at all costs to prove otherwise. Such persons often discuss plenty and pretend to be professional, using obvious very obvious phrases. Consequently, when dealing with experienced users, they get exposed and are most often blocked by the site moderator (Nowikowska, 2021: 193).

In science, it is assumed that a troll is characterised by the following behaviours: 1) defending a view or an idea, regardless of the statement's veracity; 2) asking questions unrelated to a specific discussion group to make other discussants nervous; 3) repeatedly asking the same questions that have been answered to create forum confusion; 4) not admitting to being wrong; 5) contradicting one's own theses, incompetently leading the discussion, lacking coherent speech; and 6) using personal attacks (Nowikowska, 2021: 194).

These types of actions cannot be effective with sporadic postings. Hence, individual organisations, companies, and governments employ deliberate actions using Internet trolls. These people (i.e., trolls) are paid to place comments and posts on forums. They work 12 hours a day, create around150–200 comments and have several accounts. With 400 people making 200 comments per day, this adds up to about 80,000 daily posts. Such activities, which involve a large group of hired persons influencing public opinion by

multiplying information according to the client's guidelines, can be successful and demonstrate the effectiveness of disinformation. Knowing the characteristics of trolls, an Internet user can detect and defend against them by ignoring their comments and not responding to their taunts. The most important task falls on the administrator or moderator of the website, who should skilfully filter statements and block trolled content (Chałubińska-Jentkiewicz, Nowikowska, 2022: 120).

There is a specific phrase that has been coined in the online community, i.e., "Do not feed the troll", warning against interacting with a trolling person. Hence, the information conveyed by so-called trolls represents a form of disinformation. Contrasting the phenomenon of trolling with "reliable information", it should be noted that information is *"a set of figures describing objects of any nature, contained in a specific message and expressed in such a form that it allows a specific object, to which it has reached, to take a stance on the situation created by it and to take appropriate actions"* (Chałubińska-Jentkiewicz, Nowikowska, 2022: 120). In this aspect, it is possible to demonstrate the primary role of information in shaping national security. In 2002, Osama bin Laden wrote in a letter to the Taliban leader that "Obviously communication in war in this century is one of the most powerful methods of combat. In fact, its ratio may reach 90% of the total preparation for battle" (Paczuszka, 2018: 92). Nowadays, information is seen as an effective tool of warfare, supporting or even replacing existing forms of military confrontation, and a decisive factor for achieving success in future armed conflicts (Batorowska, 2017: 9). The above means that a developmental feature of modern civilisations that has come to the fore is the increasing role of information, as well as disinformation. This is the result of the information revolution, which has brought the world into the era of the information society, where information is the primary product and knowledge the essential wealth (Fehler, 2016: 25). Consequently, the importance of information security needs to be systematically raised.

5   Deepfake

Just a few years ago, the pinnacle of disinformation was disseminating false images and texts. However, the development of modern technology has led to new forms of disseminating false information being created. Nowadays, with the aid of artificial intelligence, it is possible to create a fake video, the so-called deepfake. The video involves replacing the face or body of a specific person with any other character. Consequently, it is possible to change their speech and body movements. The term *deepfake* first appeared in 2017. It was the pseudonym of a user who, with the aid of artificial intelligence, created and published pornographic videos using images of celebrities (Chałubińska-Jentkiewicz 2023: 279). New technologies make us all smarter – should we then worry about combining existing values and the pervasive dominance of technology? It becomes important to ask questions related to the security of development and exploitation of this area. These questions are mainly related to the transformation of citizens into e-citizens, the divergence of interests between market and political

stakeholders and the political scene. The most important issue to be resolved is who decides what is good and what is bad, i.e., what is legal and why (Kerikma, Rull 2016: 13–14).

The concept of deepfake was only coined in 2017, originating from the pseudonym of a Reddit user who published pornographic videos with the faces of porn actresses/actresses swapped for those of celebrities (https://www.vice.com/en_us/article/bjye8a/reddit-fake-porn-app-daisy-ridley [accessed on: 10/01/2020]). It is hard to come up with a uniform definition of the word. .The phenomenon is so new that there is no uniform definition. The most accurate yet careful discussion of the meaning of "deepfake" is provided by Merriam-Webster, also known as the Encyclopaedia Britannica. The authors of the article "Words We're Watching: Deepfake" point to several definitions of the word *deepfake* that have appeared in such media as: *The Independent*, *The Guardian* and *The Washington Post*, and present their own definition based on these examples. The term *deepfake* is usually used to describe a video that has been edited using an algorithm (machine learning) to substitute a person in the original video for someone else (in particular, a public figure) in such a way as to make the video appear authentic.

Based on the above definitions, it may be questionable what exactly the difference between deepfake and fake news is. The purpose of both is to mislead the viewer about the facts. Fake news is a false article in which the author claims that Barack Obama is a Muslim ("Barack Obama is a secret Muslim" https://www.newsweek.com/guide-conspiracy-theories-75003 [accessed on: 10.01.2020]) while deepfake describes a video that someone has modified in such a way as to have Barack Obama praying on it turned towards Mecca.

The key difference between deepfake and fake news is the *de facto* level of "fakeness". Fake news is, after all, the work of a third party, which at best describes some untrue event or distorted statement by a person in a public position. Whereas deepfake directly depicts a non-existent situation/statement. In many texts, you can read that deepfake is a stronger version of fake news. Deepfake does not only involve the substitution of an image but may also include an audio substituted to imitate the voice of a specific person (https://miroslawmamczur.pl/deepfake-co-to-takiego-i-jak-go-zrobic/ [accessed on:02/06/2022]).

In 2018, experts created an exemplary political video in which Barack Obama called President Donald Trump "stupid". Actually, these words were spoken by director Jordan Peele, and the Obama character was generated from other existing footage. The experiment was aimed to show how artificial intelligence can mess up politics. Deepfake technology carries many risks, as it can be used to manipulate public opinion. As this technology develops, fake videos are becoming increasingly difficult to detect. As defined by techtarget.com33, the term *deepfake* refers to an AI-based way of creating or

altering audiovisual content so that it shows a reality that did not or does not exist (https://whatis.techtarget.com/definition/deepfake [accessed on: 08/01/2022]).

The term also refers to audiovisual material created in this way and comes from a combination of the term *deep learning*, which denotes a subcategory of machine learning used by artificial intelligence to improve voice recognition and natural language processing techniques, and the word *fake*, which as an adjective means "false, artificial, forged, counterfeit", and as a noun has the following meanings in Polish: "podróbka" (imitation), "trik" (trick), "hochsztapler" (fraud), "falsyfikat" (afalsification) or "fałszywka" (forgery) (Chałubińska-Jentkiewicz, 2023: 282).

Deepfake audiovisual material is created by two counteracting artificial intelligence algorithms. The first creates the deepfake videos, and the second decides whether the video is real or fake. Each time the video is deemed fake by the second algorithm, the first algorithm learns how to improve the next video to prevent it from being classified as a deepfake. In this way, the algorithms continually improve the quality of the videos they create, which means that they become increasingly difficult to recognise with the naked eye by viewers of audiovisual content, who are largely unaware that such processes are taking place. In fact, until recently, altering video content in an unnoticeable way was difficult and required specialised skills, making it mainly the domain of secret services. Nowadays, anyone can download deepfake software and create a realistic video. According to Andrea Hickerson, director of the School of Journalism and Mass Communications at the University of South Carolina: "Deepfakes are lies disguised to look like truth. If we take them as truth or evidence, we can easily make false conclusions with potentially disastrous consequences. What happens if a deepfake video portrays a political leader inciting violence or panic? Might other countries be forced to act if the threat was immediate?" (https://www.popularmechanics.com/technology/security/a28691128/deepfake-technology [accessed on: 08/01/2020]).

Marco Rubio, a candidate in the 2016 US presidential election, said in turn, "In the old days, if you wanted to threaten the United States, you needed aircraft carriers, nuclear weapons, and long-range missiles. Today, you just need access to our Internet system, our banking system, and our electrical grid and infrastructure, and increasingly, all you need is the ability to produce a very realistic fake video that could undermine our elections that could throw our country into tremendous crisis internally and weaken us deeply" (https://www.csoonline.com/article/3293002/deepfake-videos-how-and-why-   -they-work.html [accessed on: 08/01/2020]).

The problem of deepfakes is growing. Forbes magazine reported that the number of such videos on the Internet reached almost 15,000 in 2019, i.e., an increase of 84% compared to 2018 (https://www.forbes.com/sites/johnbbrandon/2019/10/08/there-are-now15000-deepfake-videos-on-social-media-yes-you-should-worry/#2793aa6a3750 [accessed on:

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08/01/2022]). Moreover, progress has a significant impact on other areas of human activity. This includes the perception of the surrounding reality, the justice system and the application of the law. Indeed, according to the study titled "Deepfakes and Cheap Fakes", the relationship between media and truth has never been stable. Approaches to how truth is evidenced and perceived have been changed by its existence in cultural, social, and political structures. The authors of the study also point out that the treatment of visual media as an objective documentation of truth is a 19th-century legal construct (Paris, Donovan, 2019: 34).

Deepfake appears to be a younger, more perfect, more effective, more elaborate and more complex version of fake news. Furthermore, while fake news can emerge from basically any human activity, e.g., as an article, a graphic, a video, a song, a rumour, a book, a brochure, an organised event, a meeting, a happening, etc., deepfake most often takes the form of an audio-visual recording created by competing artificial intelligence algorithms that apply machine learning principles and techniques. Deep fake, as a much more technologically advanced product, with the development of artificial intelligence and the information sector in general, has many more perspectives for development and may evolve into more sophisticated and technologically advanced forms of influencing people's behaviour and attitudes (Chałubińska-Jentkiewicz, 2023: 284).

6   Image manipulation

The greatest emotions are triggered by the visual experience. The manipulation of photography is nowadays a widespread phenomenon. Fake news in the form of photographs or graphics has a much stronger effect on the viewer than plain text. The "power of credibility" contained in the image makes the lie more effective and thus more dangerous (Santori, 2009: 49). A commentator in England presented two lists of his favourite films separately on radio, press and television – one was true, and the other evidently untrue. Forty-thousand people were asked which list they thought was true. Radio listeners fared much better in this survey (over 73% answered correctly) than TV viewers (52% correct answers). The conclusion drawn was that viewers are far less critical of false content presented to them and have much less developed symbolic thinking (Santori, 2009: 49).

The more audio-visual stimuli, the more difficult it is to distinguish truth from falsehood – not a very edifying conclusion since we live in an age of dominance of audiovisual messages. Photographs are often used deliberately in the wrong context. The whole setting – the description of the photograph or the article – is incompatible with what the image actually shows. An example is a 2009 picture of a wedding ceremony of Muslims. It shows several-year-old girls who were cousins of the brides getting married at the time and were recognised as brides by everyone. The website Fronda.pl decided to use the photograph as an illustration for an interview with Rev. Prof Paweł Bortkiewicz to illustrate the problem of very young people getting married in Islam. The photo circulated

for a long time in Facebook discussion groups and also repeatedly displayed by right-wing media to prove that Islam has a bigger problem with paedophilia than the Catholic Church (https://konkret24.tvn24.pl/swiat,109/znany-fejk-wyk-used-w-dyskusji-o-filmie-braci-sekielskich,936465.html [accessed on: 08/01/2020]).

Another type of graphic fake news can also be a graphic made using pre-existing photographs. Graphics nowadays is a very rapidly developing area. It is sometimes difficult to distinguish a real photo from an image glued together by the hand of a graphic designer. To sum up, with a wealth of ready-made photographs, it is possible to "conjure up" the image of reality we need. The 2017 Gazeta Polska cover story purported to confirm Jarosław Kaczyński's words about refugees being carriers of dangerous diseases which would lead to an epidemic in Poland. The cover was linked to an article about an alleged epidemiological crisis in EU countries caused by providing aid to immigrants from Africa and the Middle East. This photomontage used two 2016 photos by Rafał Wojczal from his stay at the Al Khazer refugee camp. The third photo was taken by another photojournalist in 2007 in Afghanistan during humanitarian aid organised by Polish soldiers. None of the subjects in this photo were refugees (https://wyborcza.pl/7,75398,22154511,-jak-gazeta-polska-uzyla-ludzi-fotomontaz-o-uchodzcach-w.html [accessed on: 08/01/2020]).

Another fake news photograph involved a complete colour change. The image was "constructed" in 2016 from a 2013 photo showing Pope Francis holding the flag of Argentina in front of St Sebastián's Cathedral in Rio de Janeiro. More colours were added to the flag to make it look like a symbol of the LGBT community (https://konkret24.tvn24.pl/swiat,109/czy-papiez-machal-teczowa-flaga-lgbt,933477.html [accessed on: 08/01/2020]).

To summarise, it can be said that creating fake news through videos is rare. The production of such content is dependent on the financial resources at hand. It is more labour-intensive and often requires expertise. It is also much more difficult than simply posting on Facebook or Twitter. An initiative to combat the scourge of fake news has been introduced by the news service BBC, which has established its internal department to check the veracity of information found on the Internet, and Google has donated £150,000 to fact-checking organisations (Chałubińska-Jentkiewicz, 2023: 287).

7   Fact-checking

According to Eurostat surveys, in 2021, 47% of all people aged 16–74 in the EU saw untrue or doubtful information on news websites or social media during the three months before the survey. However, only around a quarter (23%) verified the truthfulness of the information or content. This information comes from data on ICT usage in households and by individuals published by Eurostat. The idea of fact-checking was born in the United States in 1995 with the creation of Snopes.com, a website dedicated to exposing

fake news. It is the oldest fact-checking site of this kind and is highly valued by journalists. The activities of fact-checking centres can be considered one of the attempts to counter disinformation and information warfare globally (http://demagog.org.pl/krotka-historia-fact-checking/ [accessed on: 10/06/2018]). Their main objective is to tackle false content disseminated through the mass media, mainly online. To this end, using their algorithms, these centres verify and thus control the media content published to present unmasked fake news to the public. The share of people aged 16–74 who verified information found on online news sites or social media in the previous three months was the largest in the Netherlands (45%), followed by Luxembourg (41%) and Ireland (39%). However, the smallest share was recorded in Lithuania (11%), followed by Romania (12%) and Poland (16%) (source: EUROSTAT, ec.europa.eu.). In the EU, people aged 16–74 predominantly checked if the information was truthful by verifying its sources or finding other information online (20%). People also checked information by discussing it with other persons offline or using sources not found on the Internet (12%). The least popular method was checking by following or participating in an online discussion regarding the information (7%).

Undoubtedly, the popularity of fact-checking centres globally increased during the Russian-Ukrainian conflict and after the annexation of Crimea. An example is the already mentioned Ukrainian project, StopFake.org (https://www.stopfake.org/pl/strona-glowna/ [accessed on: 10/06/2022]). It was started by lecturers, graduates, and students of the Mohyla School of Journalism, and attendees in the course for journalists and editors of the Digital Future of Journalism. In 2017, thanks to funding from the Ministry of Foreign Affairs, the Polish version of StopFake.org became fully functional (as the eleventh language version). The StopFake.org project is regularly active on social media such as X (Twitter), Facebook, Vkontakte, Google+, and YouTube. The project's activities focus on publicising a ranking of fake news, e.g., Top 10 absurd fake news, Top 10 fake news about Crimea, etc.

Among the best-known foreign fact-checkers is another Ukrainian non-governmental project called "Information Resistance" [Ukrainian «Інформаційнийспротив», abbreviated – «ІС», Russian. «ИнформационноеСопротивление», abbreviated – «ИС», English. «Information Resistance», abbreviated – «IR»]. It was set up to tackle external threats occurring in the information space, mostly in military, economic, and energy areas, as well as in Ukraine's information security. The project was launched on 2 March 2014, the day of Russia's incursion into Crimea. "Information Resistance" was initiated by the Ukrainian NGO Centre for Military-Political Research (Kyiv) ("Центрвоеннополитическихисследований" г. Киев) (http://cmps.org.ua/ru [accessed on: 10/06/2022]). The Centre for Military-Political Research on its official website states that: "it functions as an independent social organisation that began its activities in September 2008, immediately after the end of the war waged by Russia against Georgia". The authors of the project emphasise that "already then, a group of Ukrainian activists was the first to draw public attention to the influence of Russian propaganda,

manipulation of information in the broad media: radio, press, Internet, leaflets, seeing this as a planned information operation against Ukraine" (http://cmps.org.ua/ru [accessed on: 10/06/2022]). According to the declaration of the founders of this organisation, the credibility of their fact-checking activities lies "in reliable verification of emerging information based on at least two, usually three independent sources. If the information is highly controversial, specialists cite the opinions of witnesses and participants in the events. Any analysis or report is the work of many people". The authors of "Information Resistance" also declare that "information comes not only from their verified sources (personal contacts, people they know) but also from external sources and if new, unverified content is received, analysts apply their own verification algorithm". The creators of the project assure that "only verified information and proven facts are published on the site and that they cooperate with Ukrainian and foreign experts of non-governmental and state structures, as well as experts of international organisations" (http://sprotyv.info [accessed: 10/06/2022]).

In addition to a general section on news from the country, the site contains three area-oriented sections: Kharkiv Information Resistance, Donbas Information Resistance, and South Information Resistance (http://sprotyv.info [accessed on: 10/06/2022]). The Ukrainian fact-checking project is divided into analytical sections. They comprise:

- The Alpha Section (Секция Alpha) which deals with the analysis of information received from sources of Ukrainian state structures;
- The Bravo Section which deals with collecting information on terrorist groups, news on corruption, and state power ministries, and observes the process of purchasing ammunition;
- The Delta Section which analyses external threats to Ukraine, including the Russian Federation;
- The Echo Section which analyses what economic effects military actions have in Ukraine and Russia;
- The Whiskey Section which obtains information from sources in diplomatic circles, including Brussels, the seat of the European Union;
- The Foxtrot Section which analyses information received from so-called emissaries in the combat zone; and
- The Charlie Section which brought together local intelligence (composition only concerned Crimean nationals).

After the Federal Security Service of the Russian Federation began to operate vigorously on the peninsula in mid-March 2014, this Section was closed for the sake of the safety of these people. "Information Resistance" publishes the Top 10 fake news stories of Russian propaganda weekly. For instance, on 22 February 2018, they purged from fiction an article posted on the "Антифашист" ("Anti-Fascist") website about the visit of German MP, representative of the Die Linke party, Andreas Maurer, to the conflict zone of the DRL (Donetsk People's Republic). According to the information provided by the website, the German politician stated that no Russians were stationed on the spot – he did not see

Russian troops (neither Russian soldiers nor Russian military equipment) there. In the opinion of the analysts of "Information Resistance", it is a fact that, firstly, the German party Die Linke is known worldwide for its pro-Russian position, and, secondly, evidence of Russian military involvement in the occupation of Crimea and the conflict in the Donbas is widely available through the websites of analytical groups such as Груз 200, Информнапалм and many others (http://sprotyv.info/ru/search/node/Andreas%20Maurer [accessed on: 14/05/2022]).

The above fake news was disseminated simultaneously through websites, video and TV. Namely, the visit to the conflict zone of the aforementioned Maurer was reported at around the same time by one of the so-called propaganda tubes actively operating in Poland, the Sputnik Polska portal. The portal posted a video of the German MP visiting the A. Norkin's show entitled The Meeting Place. After Maurer's statement, there was a fight during the show's broadcast. More specifically, he stated that the Ukrainian army was responsible for the fighting in eastern Ukraine and the deaths of hundreds of children. This sparked an outcry from Ukrainian political scientist Dmitry Suvorov, who saw Maurer's words as another slander against Ukraine.

In addition, as part of its global cooperation with the media, the International Fact-Checking Network (IFCN) has developed an EU fact-checking website, FactCheckEU.info, bringing together European signatories to the IFCN Code of Principles to counter disinformation in the European Union on a continental scale ahead of the European Parliament elections in May 2019. The European Commission co-finances (with the European Parliament) independent projects in media freedom and pluralism. These projects, among other activities, monitor threats to media pluralism across Europe, create maps of media freedom violations, provide funding for cross-border investigative journalism and support journalists at risk. According to the European Commission, around €40 million (approx. US$44 million) has been invested in such projects since January 2019. In addition, the European Commission has proposed a budget of €61 million (approx. US$68 million) from 2021 to 2027 for the Creative Europe programme, which also supports the audiovisual sectors in Europe in tackling disinformation.

In the 20th century, after the end of the Second World War, communication developed intensively. Since then, the media, or mass media, have significantly influenced the functioning and shaping of society in democratic states. It is commonly believed that the media are the guardians of democracy and the rule of law, thus exercising a monitoring function. It should be added, however, that the influence of the media on the shaping of society and its members can be both positive and negative. Nowadays, new media is the central source of information for mass audiences. We use the Internet to find information and all kinds of communication. Both young and mature recipients use the Internet for entertainment purposes, thus significantly reducing or abandoning the use of print and electronic media. The growing popularity of multimedia should make us reflect. In an era

without social media such as X (Twitter) and Facebook, without Internet sites, the traditional media were responsible for filtering news and describing reality. The responsibility for the information published rested with the journalist or a specific editorial office. The issue of so-called alternative facts, post-truth and fake news did not exist. Today, anyone can post content on the Internet. As a result of unrestricted access to information, haste and anonymity, these messages are often of low quality and lack credibility. Moreover, due to the dominant role of the new media and the occurrence of the aforementioned phenomena, the media have started to construct reality rather than reflect it, as was their original purpose. All the phenomena described above introduce chaos, which may threaten democracy. The threat may concern the sense of security of individual people and, very realistically, the security of the state (Chałubińska-Jentkiewicz, Nowikowska, 2022: 133).

References:

Aral, S., Roy, D. & Vosoughi, S. (2018) *The spread of true and false news online* (Massachusetts: Institute of Technology).

Batorowska, H. (2017) Bezpieczeństwo informacyjne w dyskursie naukowym – kierunki badań, In: Batorowska, H. & Musiał, E. (eds.) *Bezpieczeństwo informacyjne w dyskursie naukowym* (Kraków: Uniwersytet Pedagogiczny w Krakowie, Instytut Bezpieczeństwa i Edukacji Obywatelskiej Katedra Kultury Informacyjnej i Zarządzania Informacją), pp. 9-28.

Chałubińska-Jentkiewicz, K. (2023) *Prawne granice dezinformacji w środkach społecznego przekazu. Między wolnością a bezpieczeństwem* (Toruń: Wydawnictwo Adam Marszałek).

Chałubińska-Jentkiewicz, K. & Karpiuk, M. (2015) *Prawo nowych technologii* (Warszawa: WoltersKluwer Polska).

Chałubińska-Jentkiewicz, K. & Nowikowska, M. (2020) *Ochrona informacji w cyberprzestrzeni* (Warszawa: Akademia Sztuki Wojennej).

Chałubińska-Jentkiewicz, K. & Nowikowska, M. (2022) *Prawo mediów* (Warszawa: C.H. Beck).

Fehler, W. (2016) O pojęciu bezpieczeństwa informacyjnego, In: Kubiak, M. & Topolewski, S. (eds.) *Bezpieczeństwo informacyjne w XXI w.* (Siedlce: Pracownia Wydawnicza Wydziału Humanistycznego Uniwersytetu Przyrodniczo-Humanistycznego w Siedlcach), pp. 25-32.

Formicki, T. (2017) *Walka informacyjna i zarządzanie przekazem informacyjnym. Antologia wybranych analiz i artykułów z lat 2008-2017* (Warszawa: Fundacja Instytut Informacji).

Jachyra, D. (2011) Trollowanie – antyspołeczne zachowania w Internecie, sposoby wykrywania i obrony, *Zeszyty Naukowe Uniwersytetu Szczecińskiego,* (28), pp. 253-261.

Kerikma, T. & Rull, A. (2016) *The Future of Law and eTechnologies* (Switzerland: Springer International Publishing).

Keyes, R. (2022) *Czas postprawdy Nieszczerość i oszustwa w codziennym życiu* (Warszawa: Wydawnictwo Naukowe PWN).

Krajowa Rada Radiofonii i Telewizji (2020) F*ake news – dezinformacja online. Próby przeciwdziałania tym zjawiskom z perspektywy instytucji międzynarodowych oraz wybranych państw UE, w tym Polski* (Warszawa), available at: htpps:// www.gov.pl/web/krrit/fake-news--dezinformacja-online (February 27, 2024).

Nowikowska, M. (2020) *Granice dozwolonej krytyki działalności prasowej osób pełniących funkcje publiczne* (Warszawa: Wydawnictwo C.H. Beck).

Nowikowska, M. (2021) Zjawisko „trollingu" w Internecie, In: Chałubińska-Jentkiewicz, K.,
    Nowikowska, M. & Wąskowski, K. (eds.) *Media w erze cyfrowej. Wyzwania zagrożenia*
    (Warszawa: Wydawnictwo Wolters Kluwer), pp. 189-203.

Nowikowska, M. (2023) SYOPS as an element of information warfare, In: Chałubińska-
    Jentkiewicz, K. & Evsyukowa, O. (eds.) *Information disinformation cybersecurity* (Toruń:
    Wydawnictwo Adam Marszałek), pp. 163-170.

Paczuszka, A. (2019) *Rosyjskie służby specjalne. Czyli jak rozbroić państwo* (Warszawa: Fundacja
    Wyszechradzka).

Palczewski, M. (2019) Fake news w polityce. Studia przypadków, *Mediatization Studies*, 3, pp.
    137-150.

Paris, B. & Donovan, J. (2019) Deepfakes and Cheap Fakes. The Manipulation of Audio and Visual
    Evidence, *Data & Society*, available at: https://datasociety.net /library/deepfakes-and-cheap-
    fakes (February 17, 2024).

Poovey, M. (1998) *A History of the Modern Fact: Problems of Knowledge in the Sciences of Wealth
    and Society* (Chicago: University of Chicago Press).

Sartori, G. (2009) *Homo videns. Telewizja i postmyślenie* (Warszawa: Wydawnictwa Uniwersytetu
    Warszawskiego).

Tesich, S. (1992) A Government of Lies, *The Nation*, No. 12, pp. 12-15.

Wasiuta, O. & Wasiuta, S. (2017) Wojna informacyjna zagrożeniem dla bezpieczeństwa ludzkości,
    In: Batorowska, H. (ed.) *Walka informacyjna Uwarunkowania – Incydenty – Wyzwania.
    Monografia poświecona Profesorowi Zbigniewowi Kwiasowskiemu z okazji Jubileuszu 50-lecia
    pracy zawodowej* (Kraków: Uniwersytet Pedagogiczny w Krakowie Instytut Bezpieczeństwa i
    Edukacji Obywatelskiej Katedra Kultury Informacyjnej i Zarządzania Informacją), pp. 71-90.

Weingarten, M. (2005) *The Gang That Wouldn't Write Straight - Wolfe, Thompson, Didion, and
    the New Journalism Revolution* (New York: Crown Publishers).