
Social Control in the Face of Digital Propaganda

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Abstract:

Purpose: The subject of research presented in this article is to analyze society in the face of digital propaganda, methods and instruments used, which ubiquity affects changes in the behavior of community members, which adversely affect social cohesion. Disrupting internal controlling processes pose a threat to state security.

Design/Methodology/Approach: The main research method is literature review due to the theoretical form of conducted research.

Conclusions: The result of the research is a conclusion distinguishing the most critical factors detrimental to the preservation of the autonomy of the system (state) due to the influence of external cyber propaganda.

Practical implications: The conducted research aims to provide the basis for working out strategic recommendations for strengthening the state's information security and creating assumptions for training the staff of the state administration, social organizations, and economic entities in this field. Because without rational shaping of the infosphere, the state, its economy, and armed forces cannot function.

Originality/Value: The article presents a systemic analysis of the phenomenon of social control in the face of external propaganda with its methods and instruments, fake news, manipulation formulating the recognition of the causes of influence, and susceptibility of users to fake news.

Keywords: Social control, propaganda, fake news, manipulation.

JEL: C53, C63.

Paper type: Research article.

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1. Introduction

The article is a synthetic information of conducted research on the topic, Polish raison d'être and cybersecurity. Recognition of threats and creation of response strategies carried out under a grant of the Ministry of National Defence of the Republic of Poland. The state's raison d'être sets the framework of exploration in the face of threats to the socio-sphere and info-sphere, which interact both in cyberspace (social media, portals, websites) and beyond. These threats are related to cyber-propaganda with its methods and tools.

Nowadays, all these phenomena are war or information warfare depending on the geopolitical context (Świeboda, 2019; Szpyra, 2020). The consequence of cyber-propaganda activities is the disruption of information processes, within which the control of internal social processes in the state occurs.

Controlling is based on information and knowledge needed to define and implement tasks to achieve the goals of any system (individuals, social groups, the state). The management of any entity, organization, or state without the proper circulation of information streams involves the risk of wasting the optimal use of the productive potential of employees, communities, etc., and the lack of cooperation. With the help of increasingly intelligent algorithms, the open platform - the Internet - used for the exchange of ideas, discussion and cooperation is transformed into a battlefield for political or economic power (Osolon, 2017), creates opportunities for the control of any communities by entities fighting for domination in cyberspace.

In political and economic manipulation, the rudimentary behavior of citizens of a given society is used to achieve desired social reactions. Which is formed by interpersonal relations based on cultural elements such as, for example, beliefs, customs, shared historical experiences characteristic of a given group. The evolution of advanced information environments creates a new category of cyber aggression, which includes attempts to manipulate or disrupt the information foundations of the effective functioning of economic and social systems.

From the perspective of state security, hazardous information activities aim to program human views with appropriately crafted information that makes it easier for an aggressor to control any social group. These actions may lead to misperception of phenomena by the society, to political chaos, and in extreme cases, they may disturb the country's stability, leading to dysfunctions of the state in various areas of activity.

This applies to those threats that affect the functioning of society in the socio-political dimension, such as, for example, electoral procedures, perception of governments and armies, social structures, behavioral changes in the area of social media, and other communication tools. The methods and tools used in propaganda campaigns disrupt the information processes that are the basis for controlling society and serving the efficient governance and management of the state.

2. Social Controlling in the Digital Revolution

Social controlling does not have a negative connotation, the roots of this process go back to antiquity, and the modern understanding derives directly from social socio-cybernetics (Wiener, 1961). The term means exerting pressure on an object to induce a specific behavior or action (Kossecki, 1996) "and thus the condition for the occurrence of certain control runs is the existence of a certain structure that can be changed in a certain way" (Mazur, 1996). If the object subjected to control is aware of the control processes, this fact does not pose a threat because it concerns, e.g., social, and economic control processes in which reliable information occurs. The system of social control in the state should be understood as the system of control processes occurring in this society, in which social control systems are a function of the organization of these social systems and determine the relationship between the system (anyone) and the environment (Wiener, 1961).

They then constitute the glue of societies and are considered the "third factor" next to matter and energy (Stonier, 1990; 1992; 1997) and next to matter and consciousness (Weizsäcker, 1974). Intentionally influencing social phenomena is always an attempt to intervene in overly complex systems with self-organizing (dissipative) structures (Foerster, 2003; Luhmann, 1968). These systems respond to regulation changes from their environment (surroundings) only based on their internal structure. Thus, regulation must deal with the phenomenon of determining structures of systems.

Forcing a specific behavior or social change takes place within the framework of social control with the use of forms and techniques of material (energy) and non-material (information) stimuli from the scope of direct and indirect influence of the information type of social control (steering) (Table 1). An example of informational stimuli is propaganda messages convincing about a particular action's ideological or ethical rightness, e.g., election campaigns, social campaigns promoting vaccination, and hygienic behavior. On the other hand, an example of energetic (material) stimuli is repressive influences forcing a specific action. This takes place through a system of penalties and rewards resulting from the law.

Table 1. Type of information control

Type of social control	Characteristics
Direct control	It consists in sending specific information control signals to society, such as: orders, regulations, commands, etc., which, thanks to the fact that appropriate systems of norms (cognitive, constitutive, vital, economic, decision-making) already exist in society, can immediately cause appropriate reactions and social actions.
Indirect control	It involves the formation of appropriate systems of norms in society. In cybernetic terms, social norms can be thought of as relationships between stimuli acting on members of society and the corresponding actions (behaviours) of those members.

Source: Own study.

Specific direct informational control involves inducing social actions through informational stimuli that affect social norms already formed in society. They produce direct and immediate effects in the form of social action. This is the most efficient method of social control, as it is possible with its help, using incommensurably small controlling power, to activate great social powers, especially when it is possible to obtain strong cooperation of the reflexive potential of the people controlled. On the other hand, indirect informational control consists of exerting influence through informational stimuli aimed at creating appropriate norms in society, which can be called normative programming of society. Thus, all education and social upbringing processes will be where education occurs when cognitive norms are produced in people and upbringing when constitutive norms are produced. This activity does not produce immediate effects; the expected effects appear in the long term.

Social control can be modulated using a relatively personalized apparatus; it takes place using the premises of social norms: cognitive, ideological, ethical (moral), legal, economic, and vital (Kossecki, 1996) based on social communication in the processes of information (Golka, 2008). The largest share of information stimuli occurs in activities related to cognitive norms; in second place are ideological norms, followed by ethical, legal, economic, and finally vital norms. The stimuli causing people's actions are called motivational stimuli, or shortly motivations. The primary means of controlling people are informational stimuli, sometimes, they take informational coercion, especially during political struggle or war, as propaganda stimuli with a whole arsenal of methods and tools affecting the subconscious.

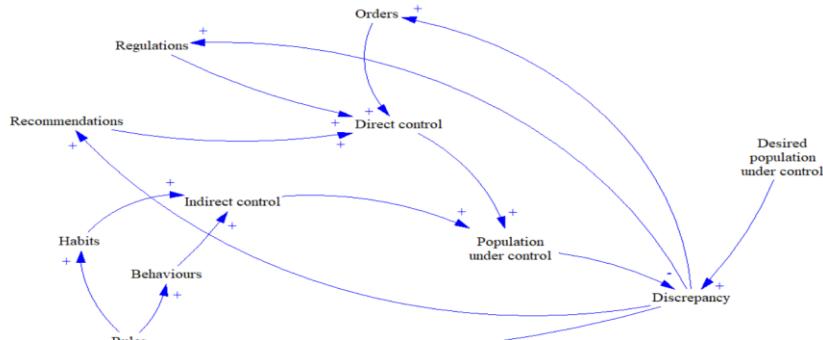
The human information environment is a functioning space of many institutional systems that emit normative messages - scientific, administrative, state, legal, social, and media institutions. The functioning of mass information institutions consists of collecting information in a certain way by the employees of these institutions, and then in a certain way their announcement (mainly in the form of relevant articles and broadcasts). The public recognizes them as genuine. To bring about the necessary (due to the new state of the environment) change in the organization of society, it is necessary to introduce enough information with a specific controlling value. In an organized society, such information is introduced by the authority in the form of a decision, under the influence of which a change in the structure of society takes place. Due to changes in the environment and its structure, society must change its activity.

3. The Causal Feedback Loop of Social Control

The control mentioned above techniques can be represented by a cause-effect loop diagram having its basis in modeling complex systems proposed by Forrester (1961; 1969; 1971). Such a diagram contains the direction of relationships between identified elements of the system and their nature, indicating how changes propagate. By convention, a "+" indicates a relationship in which the changes of connected elements have the same direction, while a "-" indicates the opposite direction.

However, the essential value of building this kind of diagram is discovering the feedback existing in the system that determines its operation. A cause-effect loop diagram illustrating social control is shown in Figure 1.

Figure 1 Social control causal feedback loop diagram



Source: Own creation.

According to the diagram above, the central element of the system is the current degree of control over the population (Population under control). The target population under control is represented by a predefined exogenous variable (Desired population under control). Using continuous measurements, e.g., surveys, polls, or observations, the difference between the Desired population under control and the current state is determined. Appropriate changes are introduced based on the measurement results, reflected in the Indirect control and Direct control scales. The smaller the identified difference between the current state and the target state is, the smaller the scale of direct and indirect measures is. Due to the opposite (marked with a "-") nature of the relationship between the population under control and the identified discrepancy, there are five corrective feedbacks in the system, which will bring the system into equilibrium when the desired level of control is achieved.

Table 2. Identified feedbacks in the social control system

Loop components	Nature of the loop
Population under control → Discrepancy → Regulations → Direct control → Population under control	balancing
Population under control → Discrepancy → Recommendations → Direct control → Population under control	balancing
Population under control → Discrepancy → Orders → Direct control → Population under control	balancing
Population under control → Discrepancy → Rules → Behaviours → Indirect control → Population under control	balancing
Population under control → Discrepancy → Rules → Habits → Indirect control → Population under control	balancing

Source: Own study.

4. Contemporary Information Environment and Propaganda

Information, information processes, information systems have always played an essential role in material social, political-military, economic, and cultural processes. Every society and economy form a particular social information order understood as a complex of social norms of information processes, systems, and resources based on which societies, states, and economies' function (Świeboda, 2013). The contemporary information environment, apart from classic elements of the information system such as libraries, archives, specialists with their accumulated unique knowledge, experts, contact networks, officials constituting the so-called institutional memory, has been enriched by ICT, which, consequently, thanks to the convergence process, has led to the creation of the so-called surface web (Surface web) and hidden web (deep web, hidden web, invisible web).

Nowadays, thanks to technology, information is recorded in the form of data and knowledge of a scientific or professional nature and everyday life. Looking at social media one gets the impression that personal and private information dominates the information space. On the Internet, "nothing is lost" means that once information appears on the medium, it remains there forever. (See, e.g., Internet Archive: Wayback Machine (<http://archive.org/web/>). Unfortunately, it is a sphere that is increasingly centralized, 'commodified,' and personalized, reflecting the actual operating environment of societies (Srinivasan and Fish, 2017). The contemporary information sphere is characterized by phenomena with a dual nature because, besides the undoubtedly advantages, there appears to be the risk of disrupting many social and information processes (Świeboda, 2019).

The rapid development of information and communication technologies, the convergence of media, and the creation of cyberspace have enabled the emergence of social networks: Facebook, Google+, YouTube, Twitter, Snapchat, and many others, which have become an essential source of information for users. The consequence was a change in the social communication model from the mass communication model to the mass self-communication model (individualized mass communication) (Castells, 2003). These changes led to an increase in the possibilities of influence of various entities using the new potential for impact on communities (Świeboda and Sienkiewicz, 2013), e.g., the personalization of the formulated political and ideological message and the use of artificial intelligence tools (Woolley and Howard, 2016).

A space for information control has been created, where propaganda activities, manipulation, fake news, trolling are resorted to, especially at the time of political struggle or during the war and significant changes when the authorities need social acceptance, e.g., to take over and maintain the rule. It is then defined as an ethical "neutral" tool in the hands of the authorities, as an intentional exertion of influence on public opinion using conveying ideas, concepts of values consciously formulated to realize the interests of the creators and sponsors of a given message. Propaganda in democratic countries includes political advertising, commercial advertising,

promotion of a pollution-free world. Examples in recent years indicate that propaganda is much more frequently used to induce people to behave in a certain way than before as part of social control, both by countries' governments and by entities competing for advantage in many spaces of international relations.

A particular case of a tool that rapidly spreads false information is the popular micro-blogging site Twitter, which allows disseminating short messages of up to 140 characters. The system allows you to subscribe to another person's "company" tweets by following them. It allows information to be spread quickly by retweeting tweets. The ability to publish tweets from mobile devices such as smartphones, tablets, and even via SMS has made Twitter a source of information for many users. It is these capabilities that also make Twitter a platform for quickly spreading disinformation.

Social control is an issue of extreme importance in the era of ubiquitous information and communication technologies (ICT), various types of media, including social networks. Modern information controlling processes no longer belong exclusively to the power of a given state. The universality and availability of information go beyond any state control (in democratic states). Societies are becoming societies of constant surveillance through the cybernetic regulation of space and time - they remain externally controlled according to the systems that 'manage' cyberspace. This is a reproduction of the industrial age, but amplified and extended by cyberspace, so dangerous for society and the state in sovereignty and culture. We are dealing with technologies and techniques that make society dependent within a framework of control based on user tracking and recognizing and exploiting the forms of social behavior with which it is correlated (Kuczabski, 2021). Control occurs in a system of continuous modulation at the micro level from the public sector, neuromarketing techniques, and social networks.

5. Propaganda and Disinformation as a Tool of Media Manipulation of Social Awareness

Propaganda is a phenomenon that has accompanied societies for years, although it has never taken on such a dimension as it does today. During the First World War, the mass media were first used to promote hatred of the enemy while encouraging commitment to the war effort and patriotism in the population. Propaganda materials were distributed in messages on posters, leaflets, advertisements on billboards, films, phonograph records, speeches, books, and even sermons. Radio broadcasting was considered a new medium for shaping social attitudes; it was believed that radio propaganda could unite society through "hate, will and hope" (Lasswell, 1938). Propaganda was developed and used to establish cooperation between industrialized society and the fighting armed forces. Mainly in America and abroad, it proved, according to its recipients, to be very slick, highly coordinated, and quite powerful (Garth, Jowett, and O'Donnell, 1992). Even then, there was widespread concern about the power of the developing mass media. The effectiveness of wartime propaganda was recognized, and it was understood how much influence on changing public

attitudes and behavior could be exerted by extensive direct information messages adequately constructed.

Research into the nature and effects of propaganda flourished during the Second World War. After the war, researchers turned their attention to the effects of persuasion and communication. Research questions concerned the variables of communication interactions, especially about changing social attitudes. Later, attempts were made to predict behavior and change in social behavior, which, as we know from psychological research, are caused by individual differences and contexts that determine the nature of the effects. Here, it is also essential to pay attention to the historical and cultural contexts in which propaganda and persuasion occur, especially noting that people construct different meanings according to their social experiences (influence of culture, tradition) (Kuczabski, 2021).

The essence of propaganda is the manipulation carried out on its recipient's mind to gain power over its recipient. This is a direct consequence of the message and manipulative actions, which in the long term can result in social change of views, cultural patterns, ways of decision-making. It is effective when it is based on categories that are the basis for people's interpretation of reality, thus relating to linguistic and metaphorical concepts of human thinking (relevant to a given culture). Habitual, automatic cognitive activities and the influence of emotions, thinking, and cognitive activities themselves are not without significance here.

As a result of the mechanism based on individual profiling, users are deprived of access to information and comments that differ in context and content from the professed worldview and public figures observed (so far). This results in the disappearance of critical thinking, lack of exchange of views, and the user becomes a helpless puppet, living in an individualized information bubble (Garth, Jowett, O'Donnell, 1992), which can be 'improved' according to the assumed goals designed to subjugate people, which Castells calls 'electronic autism' (Castells, 2009). The problem also relates to intergroup relations and the formation of closed interpretive communities or digital ghettos (Dahlgren, 2010). This facilitates the identification of the group to which the message is addressed and ensures effective propaganda, which has the characteristics of mass and long-term action, as well as the "imperative" to provide the recipient with desired information that fits in with beliefs and stereotypes.

Currently, we are dealing with propaganda, indoctrination processes, counterpropaganda, manipulation, and above all, methods, and tools with broad ICT capabilities on the Internet and social media, popularly referred to as "new media" (Levinson, 2010). From a theoretical and scientific point of view, all these processes are included in propaganda. Each of the identified processes is studied separately, as it is too complex, and analyses do not provide a picture of the whole. The observation of recent socio-political events around the world confirms a sufficiently large influence on people's decision-making. In the 2016 US presidential election,

according to a Stanford University study, fake news websites and social media were visited by 159 million users in election month.

Further examples of this are the case of Cambridge Analytica and the so-called 'yellow waistcoats,' as well as the presidential election in Poland (Wałecki, 2021). Messages are directed to so-called 'information bubbles,' influencing worldview while deepening social divisions. A phenomenon related to filter bubbles is the formation of virtual echo chambers, where users' own beliefs are reinforced by repeated messages in a closed system of content flow, devoid of other points of view (Siudyk, 2020). The analyzed cases justify the conclusion that the influence of messages in the media causes increasingly clear social divisions in many fields of previous cooperation, coherence, and social cohesion.

Fake news has become part of propaganda, which distorts public perception most strongly. They are a type of transmitted information, considered false, introduced into the media environment, including the Internet, to disinform or improve humor (Lalik, 2017). The aim of propagating Fake news is to bring about a change in the perception of a selected situation, e.g., through over-interpretation or introducing additional false information. To remain objective, it should be pointed out that each of the parties on the political scene, both internal and external to the system, has its share in creating false information. This information is prepared in such a way as to have the most significant possible impact on society. This information is primarily aimed at changing people's world view. When analyzing fake news in social media, it was shown that they coincide with Cialdini's rules of influence (Cialdini, 2001) (Table 3).

Fake news is also based on conformism. It can result in a dramatic change of behavior or a change of opinion of an individual due to natural or imagined pressure from another person or group (Aronson, 2000). Influencing public opinion, the proliferation of fake news in social media is due to automated systems of so-called "Bots" algorithms designed to manipulate public opinion. They are used to artificially increase the number of followers and feed content that is published further. They imitate actual user behavior can enter relationships reinforce messages based on stereotypes. The aim is to convince the recipient that the views presented are characteristic of the group they identify or aspire to. Bots are used to discredit opponents; they create information noise by changing the conceptual or factual apparatus. Effectiveness is based on the coordination of bot activities.

Propaganda reinforces cultural stereotypes and myths that are deeply rooted in societies. It is a long-term activity, hence examining its impact in the short term is difficult but possible, nonetheless. Understanding it requires analysis of the long-term effects of previous (historical) cases. Research is complex, and with technological development, propaganda techniques and instruments change. They require historical research, analysis of propaganda messages and media, the study of social sensitivity to the message, and critical analysis of the entire propaganda process.

Table 3. Influencing techniques

Rules of influence	Description
Rule of reciprocity	A given medium, e.g., gazeta.pl, helps a selected part of the population to promote their activities and views, so that individuals in return accept and propagate the information that the medium provides in the future
Rule of social equality	False information may inform in content that, for example, ten thousand people took part in demonstrations. What does this raise in the minds of the recipient? Acceptance as proof that it is worth going and demonstrating for a just cause with your brothers and sisters
Rule of like and affection	Showing the politician in a good light, e.g. in charitable or community work
Rule of authority	Attributing the authorship of the content of false information to an authority, e.g., a person with a scientific degree or who is an "expert in a given field". As a result, the level of trust in the given information is increased

Source: Study by J.Kuczabski, *Wpływ społeczny i manipulacja (Social influence and manipulation)* in *Psychologia zagrożeń i bezpieczeństwa*, red. M.J.Kuczabski, ASzWoj, Warszawa 2021.

6. Summary

The development of the Internet and social media has made it possible for the information to spread exceptionally quickly and, at the same time, to reach a wide range of people, thus expanding the information space that covers the entire world. We are dealing with a dynamically changing nature of the research subject, namely the phenomenon of propaganda and its instruments and tools. The development of technology leads to constant changes in media, social, political, and cultural, and their dynamics indicate that generalizations formulated today may soon become outdated. We have analyzed the phenomenon of the influence of propaganda on the processes of social control, comparing it with other publications in the field of research, we can state that:

1. The effects of propaganda and manipulation are most significant when the message is consistent with the recipients' current opinions, beliefs, and dispositions.
2. Selectivity in the perception of news, information is made through the lens of the recipients' interests and ingrained behavioral patterns. As a result, most messages are more likely to support existing views than to deviate from them. Moreover, the effects of mass communication take the form of reinforcement rather than change.
3. Changing perceptions are influenced by several factors, including mass media, social context conditions, group interactions, the presence and influence of opinion leaders, and the perceived credibility of the media source(s).

4. Influencing a change in attitudes in public and private contexts is achieved using almost imperceptible persuasion, addressing secondary issues that are of little importance or relevance to the predispositions of the recipients.
5. Issues that are deeply rooted and based on values and past behavior patterns do not change that often.
6. Ideas related to political loyalty, race, and religion tend to remain stable and resistant to influence. This corresponds with John Naisbitt's statement in Megatrends: "When people care about an issue, it does not matter how much you spend to influence their vote, they will follow their beliefs. When the issue is irrelevant to voters buying their votes is quite easy" (Naisbitt, 1982).
7. The consistency of people's attitudes and behavior is rooted in the economic aspect (concern for self and others, reward, and punishment system). This gives propaganda an advantage. As Karlins and Abelson (1970) point out, the propagandist does not have to convince people on every issue to gain their support.
8. If a propagandist manages to get people to agree with the views, he presents on one or two issues, their opinion of him may become favorable. Then the mere mention of his name will evoke a favorable reaction in people, and consequently, they may find reasons to agree with the views of others for which he advocates.
9. In a situation of disharmony between opinion and public acceptance, when people seem to accept an idea publicly, despite a lack of personal acceptance. Behavior can be managed through a system of rewards and punishments that do not require a change in attitude. Furthermore, public compliance will continue under conditions of supervision by the authorities, but not necessarily under conditions of no supervision.
10. Wherever the definition of a situation is dominant, accompanied by a consistent, repetitive, and unambiguous message, its impact is more significant. The greater the monopoly of the source of communication over the recipients, the greater the effect in the direction preferred by that source.
11. The dissemination of information or disinformation in online social networks is context specific. The research revealed that topics such as health, politics, finance, and technological trends are the primary source of general misinformation and disinformation in different contexts, including business processes, government policy processes, and everyday life issues.

Based on the investigations presented above, it seems entirely reasonable to conclude that the analysis should now be oriented towards the information processes taking place in social media since fake news has become part of propaganda, distorting public perception most strongly. Fake news on social media is not just a post that has been liked, shared, or followed, but a powerful technique for multiplying cyber propaganda that has a dominant effect on a large area of social media users (Goswami, 2018). Finally, it is essential in the study of the phenomenon of propaganda to analyze such issues (Jowett and O'Donnell, 2005) as the ideology and purpose of the propaganda campaign, the context in which propaganda takes place, identification of propaganda, the structure of the propaganda organization, target recipients, media use

techniques, special techniques for maximizing effect, the reaction of public (public) opinion to different techniques, counter-propaganda, if any, effects and evaluation (impact).

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