

THE FOURTH GENERATION OF INFORMATION WARFARE

Iulian CHIFU*

Abstract

Information warfare has developed as a component of hybrid operations and as a type of aggression. The purpose is to project an alternative reality to a designated target population in order to create a perception which could enable it to put pressure on the decision makers and to alter the well assessed, evaluated and planned strategic decision on a very narrow and clear subject or theme. It is done by using a combination of sequences of truth, deprived of their context, lies, innuendo, sophism, and predetermined reflections, secret sources and some pieces of conspiracy theories.

So far, we have identified three generations of information warfare: the first one includes disinformation and propaganda operations, troll wars, lobbying, psychological operations, recruiting and conditioning; the second one uses the so-called sociological groups objectivized in the virtual space; the third generation is that of micro-targeting at the level of the entire groups of the population, Cambridge Analytica type of access. As a result of this, we have reached between 82-95% probability of impact using big data and high number of targets. The fourth generation makes the jump to targeting the differences, meaning personalities, highly educated targets, high value targets, targets which are protected due to their jobs and level of influence, who cannot be reached or influenced at a statistic level of impact.

For these complex components, news methods are involved in obtaining the same result. Offensive and defensive weapons are put in place, tailored attacks are planned, and individual instruments used for each of the high value difficult to reach target. Character assassination, labelling, change or doubling the identity, individual programs that exploit weaknesses and obtain a "genuine response" which meets the goal of projecting the alternative needed reality and "convincing" the unbeliever on a certain needed interpretation, idea or reality, are put in place. Our work presents some of those instruments that do not use criminal approaches like bribery, blackmail or forced decisions of any kind, and instead focus on informational instruments and "the genuine conviction of the subject".

Keywords: *information warfare, fourth generation, hybrid, impact.*

* Associate professor at the National School for Political and Administrative Studies, Bucharest and professor at the National Defence University.

Three generations of information warfare. The public aspect of the field

The first generation: information warfare. What we know. A component of the hybrid war and a standalone instrument also is the information warfare. Information warfare is the creation of alternative realities by perverting the objective truth – using data, facts, and concrete arguments. At the same time it is about the misinterpretation by using a combination of elements, facts and fragments of the selected truth, interpreted, combined with reasoning altered by the use of syllogisms, sophisms, propaganda, forced interpretations, everything mixed with a multitude of lies (Chifu and Nantoi, 2016)

The battle of alternative narratives, of “alternative truths” has become the most insidious way of constructing beliefs. It is based on the groups and targeted audience for each operation, on a vast fabric of knowledge of the training, the inclinations and expectations of the target audience, its propensities, and frustrations. Obviously, the instruments do not only concern information as such but also refer to other more subtle components of fundamental emotions (Moisi, 2009), context and seizing opportunities offered by ongoing events and the mood created inside a particular target population in order to inoculate a certain type of opinion on the subject.

Alternative reality perverts the perception of a target population using a combination of psychological operations – *psyops* (Air Force Doctrine Document, 27 August 1999), along with misinformation and propaganda (Wierzbicki, 1996; Ficeac, 2014; Volkoff, 2009), using fundamental beliefs, sentiments and impact images, aiming to lead the audience towards a pre-defined perception. And finally, as the audience already has an opinion, its perception has replaced reality (Stern, 1999) and, no matter what argument or proof of truth they have been presented, it will clash with the perception.

In a world where information travels quickly and reaches many people in real time, through television, the Internet and the social media, the perception of a certain event is easy to form, derail, alter, and enforce. Subsequent presentation of the truth will lead to a minimal change of opinion on a large scale, due to the lack of critical thinking in most of the population. The conservative approach to assuming

recognition of one's own mistake in the large population, and the ease of use of the explanation already internalized by an ordinary person, especially in a community that has developed a conformism and has its own description, perception and its own "truth".

The general, main purpose of the information war is to determine, control or even alter the **strategic decisions** in foreign policy, security and defence, to corrupt or hinder the instruments destined for the military component of a state, and impede, if not block, the functioning of the elements of state security.

The instrument and mechanism to achieve this goal is to determine the audience, citizens, pressure groups prepared and organized, and guided, to pressure the authority to move it away from the objectively identified solution for the decision at a given moment on the basis of lack of support, or worse, the opposition of the population (Chifu and Nantoi, 2016).

The main features, principles and values of the open, democratic society are used against the states and its institutions. In other words, by building up groups of enemies inside the fortress, the society is undermined from within. Moreover, the approach is unitary, integrated, and often a fact or component of the information warfare. Taken separately, only appears as a strange, singularity, chance, not a planned aggressive act alongside a set of other elements. The insidious mode of action and this integrated approach create the advantageous elements of plausible deniability of such an act of informational aggression on a target population (Chifu, 2015).

The information warfare uses the three distinct levels of action, with different relevance and different degree of legal and moral significance. Together, the integrated and tacit approach to the target audience increases the effectiveness of information warfare (Simons and Chifu, 2017).

The first component is visible, evident, it involves altering the public space of an intended target through the Internet, media and social media but also at other subtle levels, an injection of ideas and information that uses the fundamental principles and values of democracy and human rights, including freedom of expression, freedom of speech, free movement of ideas, elements that are not only legal and

moral, but are also among the fundamental values that democratic societies defend. Underneath we are dealing with an open injection of propaganda, manipulation and misinformation that is hard to prove. Moreover, this type of action requires constant responses, investigations and public debunking of false voices and false interpretations of facts, alternative narratives behind these ideas, and using the way of interpreting facts to support the truth package alternatively proposed by the author.

Actions often exploit **vulnerabilities of the system** (Chifu, 2016), habits in breaching or circumventing penalties under the law or vulnerabilities of control institutions, legal limits or the absence of professional institutions able to sanction moral use of these excesses in promoting an approach or on a subject or proposed version of events, without proper context, lack of expertise to clarify the information released, the speed and poor training of employees in the field of media and broadcasting. False information, coming from obscure sources entering the mainstream, verified information and interpretation, to a predetermined conclusion (Chifu and Nantoi, 2016), the absence of alternative independent media, which strictly observes the rules of narrative events, of proper reporting to provide at the same time alternative approaches, polemic or the pros and cons; all these help to build this element of information warfare.

In developed, mature societies, with well-established rich media and with many alternatives, the component of **seizing, guiding, or controlling the public space** is significantly reduced. Education also matters and the democratic culture of the people, of course. But there are societies where public space is controlled by third-party actors, such as the case of the Republic of Moldova, where a news-impact report shows that 80% of the audience consumes news produced by Moscow (Chifu and Nantoi, 2016; CCA Report, 2016). And when they are packed up in highly productive and attractive entertainment programs, these genuine “injections” of news stories in the space of a preconceived narrative make the impact of the proposed alternative truths major.

Propaganda has its limits. It is therefore necessary to use an integrated set of tools developed and used together, to reach the target

audiences, and a distinct approach. Here we arrive at the second element, *the lobby, Public Relations* - if it is a company or a personality, or public diplomacy, when we talk about a state. It is a perfectly legal approach in states where there is a law of lobby or an equivalent.

The tool works like this: it must influence decision-makers using ideas spread within the public space by legitimate and credible message bearers with an impact on their own population and decision-makers who lead a state at a certain time. Money is paid to credible people, analysts, and experts, current and former politicians known by the target population, or foreigners, but then again credible and legitimate in the eyes of the target population, in exchange for their support of the thesis proposed by the payer.

The media institution, expert or analysts are paid to create a certain image, to defend a certain actor, to carry a message, a vision, a previously prepared narrative. So a credible, otherwise rational, impactful character suddenly presents itself in the public space, conveying ideas that are not the result of his analysis, of his thinking, but the result is delivered for the purpose of being disseminated, for some money, by a limited partner.

The public is not warned and does not know that the person in front of it does not speak in its own name, but that he expresses ideas coming from somebody else. Therefore, the assessment is made in the context of the credibility and legitimacy of the person in question (in fact, this is what the lobbyist sells). (Lobbying Reform, 2006-03-23; Simons and Chifu, 2017) Moreover, after completing the mission, the person returns to his legitimate, correct analysis, which is the result of his own thinking knowledge and ideas. The person re-establishes or preserves his credibility further and can later be used on another project of the information warfare, or on another subject.

While the US has a lobby law, requiring the public exposure of the paid positions, and a transparency formula for the amounts of money received to convey certain themes, this tool is missing in Europe. It is a legal instrument, somewhat immoral, but used in combination with propaganda and taking control or altering the media in the information warfare.

The third level is also the most insidious, profoundly illegal, targeting more subtle components of the information warfare. It is tied to psyops – elaborated psychological operations. The level of access to this component is much deeper, in the body of the society, in common beliefs, in the psychological state, and in deep fears. Here matters not only the widespread information, but above all, the effect created by information on the target audience, namely the birth or accentuation of fears, the creation of collective emotions (Moisi, 2009), preparing the public to react to future events in a previously guided, prepared, pre-formulated way.

The objectives are achieved by using fake news, personalities and experts with moral references known in society, directed to certain positions, but the target is not immediate information but the creation of the context for a certain emotional public reaction triggered by a subsequent event. Controlling the subsequent reaction is done by accessing subtle levels of the subconscious and creating patterns of thinking by repeating sequences of this type at predetermined intervals, teaching the brain and the consciousness to react in a certain way to predetermined informational and emotional stimuli (Chifu and Nantoi, 2016). And the purpose is to determine a certain public response, collectively, when it is needed to press and alter the action of a decision-maker in moments of crisis.

The tools used are a combination of narratives, alternative ideas, planting doubts, the promotion and the most credible validation of subconscious lies as perceptions of truth, exaggerated and guided interpretations, exaggerations, manipulation, misinformation, with all the components, trolls (paid commentators in the virtual space). It is here where the components of conditioning the target audience reside, actions at the subliminal level of the subconscious, the inoculation of the built perception, the access to the fundamental emotions and their orientation – fear, humility, hope (Moisi, 2009).

The functioning of the information warfare is integrated, in all three dimensions, with thought-based steps and vast instruments built over time. Major resources are used for such actions and the component is most often moved to the military space. It is a tool whose

relevance is barely discovered, and the impact can be extremely powerful.

The clearest examples in the case of Romania were two impactful pieces of fake news:

i) Romanian traffickers of Ukrainian weapons sold to terrorists attacking the West on Skynews (Chifu, 14 August 2016). Here the reaction was immediate, DIICOT intervened, and the misinformation broadcast to 1.2 million viewers was stopped abruptly, proving the falsification of a news story through the usage of “actors” playing in the gun trafficking scenario through the mountains of Romania, with the author standing up in front of the alleged smugglers;

ii) American Nuclear Weapons in Turkey moved to Romania on Euractiv (Andreescu, 18 August 2016), an absolutely false story that destroyed the credibility of the European Union website (*one time show*) but also demonstrated the vulnerability of the Romanian press that worked on the principle of “why ruin good news by telling the truth”, instead go for the sensational and visibility. The best article published the next day, as the Romanian MFA vehemently denied the fact, was: “US nuclear weapons are moving to Romania. Romanian MFA denies”. (Andreescu, 18 August 2016)

The second Generation: Objectification of the social construct in the virtual space. Good news and bad news. To address the second generation of information warfare, we need a warning first. It is not always that an instrument in the usable space (or used) by the information war is wrong, illegal or bad. But we must also note this evolution and an instrument that comes from the organic development of society, in the face of scientific evolution, and the result of which can be an instrument that can be used against a state.

Besides, the discussion is old, from the emergence of social networks, to the unlimited and free access to information, as well as to the emergence of social networks in which each person can be a journalist who has been widely quoted by mainstream media, and crisis management complicated for decision-makers, communication in crisis has acquired new valences (as I pointed out in the previous numbers

from Infosfera), but also the instrument of participation, persuasion and convocation in the protest actions has expanded.

From the Twitter Revolution in the Republic of Moldova (April 9, 2009) (Barry, 7 April 2009) which I have already encountered in the US during my visit to this country in 2010 in the IVLP Conflict Resolution program (someone taught us for two hours about these developments, and the impact of the Twitter revolution) followed the Arab Spring with the use of instruments mainly in Egypt, then on a large scale, and then encountered the perspective of “preparing colourful revolutions” including through this new technique provided by social media in strategies and doctrines Security and Defence of the Russian Federation (*The Military Doctrine of the Russian Federation*, 25 December 2014 and the *Concept of the Foreign Policy of the Russian Federation*) (Chifu and Țuțuianu, 2016).

It is certain that the evolution of the domain went to “Leaderless Revolutions” where the *Occupy Wall Street* case was an example and a catalyst (Chifu and Ivan, 2013). Finally, the phenomenon has developed in Romania and I have theorized and analysed what we call the phenomenon of “objectivity of the social construct in the virtual space” (Chifu and Ivan, 2013). It is the phenomenon of coagulation of groups in the virtual space, from real people and unknown avatars, who beyond a certain point acquire self-consciousness independent of the members and the components of the group.

This composite collective consciousness begins to reject individual gestures or opinions, refuses to assume the responsibility or leadership of any member of the group, including the founders, and makes difficult to communicate with the group. There would be nothing out of the ordinary if such groups did not trigger actions in the real-world that fundamentally disturbed the decision-makers. It is the case in Romania of the phenomenon „Uniți Salvăm România” (www.youtube.com and www.totb.ro), and the failure of the Parliament/ Government negotiations with representatives of the group that did not want to speak in the name of the group, not even one. In addition, those who claimed to be representatives were rejected by the group or their agenda in bargaining was rejected by the collective

conscience. As a result, Gold Corporation's investment (about \$ 1 billion) has been halted with little regard to consequences.

It is also the case of Collective, the street demonstrations following the accident from a nightclub that killed more than 60 people, on the grounds that the authorities did not correctly manage the anti-fire clearance of the location through the city halls sector, which led to the fall of a government (under special conditions, it is true) (stirileprotv.ro; Sandru, 4 November 2015). In the third case, the so-called „OUG 13”, in January 2017, a newly-elected government, with an impressive majority, retracted its actions after less than a week of protests because it wanted, through a surprise emergency ordinance given at night, to absolve criminal charges brought against the leaders of the winning coalition (Digi24, #Ro-mânia, ziua a şasea; Zachmann, 5 February 2017; Diacu, February 2017).

The action generated massive protest movements which started in the virtual space, with 600,000 people in the street, which triggered the withdrawal of the emergency ordinance after four days, its final definitive cancellation in Parliament, a 10% drop in polls of the majority (although the opposition was not directly involved, licking its wounds after the elections) and the loss of moratorium and natural growth after a victory. And the government fell less than five months later, after a rather unique no-confidence vote where the majority voted against its own prime minister, after the withdrawal of political support, in special circumstances.

In all three examples, taking place in a context, participating in the public debate only when certain red lines were crossed has contributed to the development of a vibrant and solid civil society. Their coagulation in virtual space was achieved through social networks, and the movement quickly acquired a purpose and self-awareness (Hardt and Negri, 2005), becoming a revolution without leaders. We excluded the case of the second round of the 2014 presidential election, because here we were in an electoral process, there was a beneficiary, the future President of Romania, Klaus Johannis, and there was a party / electoral apparatus that managed the process, even though the essence the movement was similar.

The specificity of the aforementioned examples resides in the existence of an important part both within and outside society (diaspora) which does not usually participate in the component of the electoral debates because it is not interested – we are talking about young people, with high education and employability, with sufficient resources, not dependent on the Government, who have no one to choose from because of strict criteria and high aspiration (except Johannis's election which was more a vote against Victor Ponta). Such massive grouping is driven by the emergence of anti-moral illegality / access or massive anti-logical turnarounds that go beyond the red lines that lead to massive participation, the activation of groups and individuals, and the mobilization effect in the revolution without leaders (Hale and Slaughter, 2005).

Objection of the social construct in the abstract has, as a tool, negative effects because if it is general or directed from the origins on relevant topics of national interest, such a movement can cause major effects in reality without classical political approaches, dialogue, negotiation, used as tools to respond to or clarify the protesters' demands. The group objected to by collective consciousness in virtual space only stops when its claims are fully satisfied, and participation is no longer generated by expectations and excitement. But it can come back, even if it has quieted for a while, and it's going to reach the next phase. There are, of course, formulas to manage this case through the "isolation and forgetting" of the group, in a reactive form over time, and by inserting and controlling these types of groups with potential for objectivity over time in the preventive phase of their construction (Chifu and Ivan, 2013).

The third generation: Cambridge Analytica, like-ography and contemporary developments of individual targeting of electoral subjects. Brexit and President Donald Trump. The problem of the reaction to the information war is the fine line between legitimate, legal things and immoral, illegal ones and the related instruments. We have even seen it from the definition of the concept, where the first dimension, disinformation, propaganda and active measures has a legal, legitimate composition that most often employs

the freedom of speech or the right of association and the free circulation of ideas, principles and values which we fully defend (but which are speculated in this confrontation of societies precisely because some consider these principles and values to be the vulnerabilities of the democratic system that are worth speculating and used as opportunities to undermine this system).

Then the lobby is legal but immoral, because an opinion-maker is always supposed to be the bearer of his independent ideas and opinions, not of pre-paid messages for his audience and credibility. Finally, the third component, psychological operations, troll warfare, profound emotional approaches and catalysis of emotions – which are deeply illegal, and part of the arsenal directly related to active military and psychological operations (Chifu, 2016).

Another issue is that part of the information warfare instrumentation is used by parties in electoral campaigns. Moreover, this third generation of the information warfare, which initially uses a targeted and individually based marketing tool based on preferences, has been developed and used in campaigns for Brexit and the election of President Trump. An instrumentation owned by Cambridge Analytica, whose work, on this area, was banned in the UK.

The OCEAN psychometric model is the basis for the classification of personalities and behaviours and has been introduced to differentiate each individual. A model that seeks to evaluate people based on five personality traits, known as “Big Five”. These are Openness (how open are you to new experiences?), Conscientiousness (how much of a perfectionist are you?), Extravert (how sociable are you?), Acceptability (how preventive and cooperative are you?) and Neuroticism (are you easily irritable?). Based on these five features – also known as OCEAN, after the initials of the term’s openness, conscientiousness, extroversion, agreeability, neuroticism – we can make a relatively accurate assessment of the person who is in front of us. This includes his needs and fears, and how he will likely react (The Guardian, 2015, Das Magazin, 2016 apud Pădure, EVZ.ro).

Cambridge University has developed the second part of the research project that underpins the identification of every person's tastes and options and how to get to it. From Michael Kosinski's

Psychometrics (Cambridge University, 2014) - with the relevance in individual and customized sales and marketing, led to like-orthography, identification of personality, personality and character – Big Five – OCEAN based on Facebook likes. Electronic preference information at this level has led to the identification of personality and, therefore, of the approach to selling something, depending on the appetite. It was a pure matter of approach, technique using psychology.

Kosinski and his team have continuously improved their model. In 2012, they showed that based on an average of 68 user-like styles, it was possible to guess their skin colour (95% accuracy), sexual orientation (88% accuracy), or sympathy for the Democratic or Republican Party (85%). They did not stop here. The coefficient of intelligence, religious beliefs, as well as the consumption of alcohol, tobacco or drugs etc. could also be determined. From the data it was possible to deduce even if someone's parents were divorced.

The effectiveness of their simulation was illustrated by how well they could predict the answers of a subject. Kosinski continued to work on perfecting simulations: in a short time, he was able to evaluate a person better than his colleagues, based on ten Facebook likes. Seventy likes were enough to go beyond what a friend know about him/her, 150 – what the parents know, and 300 – what his/her partner knows about a person. Several likes could surpass even what a person believed to know about herself (The Guardian, 2015, Das Magazin, 2016 apud Pădure, EVZ.ro).

Alexandr Kogan, from Cambridge, moved the whole business into the space of political communication. The level that was reached was to map all voting-age US citizens, establish the OCEAN, and create an application to address them based on voting options and influencing short-term behaviour. This is how it worked during Brexit. Methodology works on dichotomous choices, divides the spectrum of choices between determined, undecided but inclining towards the same decision and the other two opposite categories, with the aim of influencing the behaviour of those favourable to the desired option and the spreading doubt or keeping undecided ones from voting, but choosing instead the opposite option, avoiding wasting of resources for those already decided for the opposite option.

The result is a major influence formula, short and medium term, – 10 – 14 days – but with a very high impact and increased likelihood. It was used in two cases for the US campaign, the Cambridge Analytica director being Steve Bannon, until recently President Trump’s strategy adviser. But the instrumental, with a major psychological effect, has other levels of alteration and alteration of will and options, being able to identify not only OCEAN and its psychological, character, but also behaviour at a given time. The likes have been abandoned since the invention of smart phones and the method identifies these features with a high probability (85-90-95%) only from having of the mobile phone and the actions performed on it.

In order to understand the sophistication level of this tool, if you go to a commercial negotiation, the user of such a tool determines how you will approach the negotiations based only on the actions taken on the phone from the morning until you have arrived at the business meeting. One can only guess what happens when we extend the use of such technology from business decisions and choices to electoral and much more. It is true that the instrument has its limitations and errors, but it has proven to be extremely effective as an element of influence in the short term.

This is where the Third Generation third-person information warfare toolkit has been developed, with a large adult population. These tools need to undergo an important study to block the harmful effects and unwanted influences, access to such subtle data and interpretations of this nature. Until the full disclosure of the effects of these instruments, the necessary regulations, the Information Warfare, without being a panacea, creates effects of the most important, major impact. The entry of these elements into the commercial, business space, where they can be virtually purchased by anyone, creates fear and negative reactions similar to any extremely powerful and major impact techniques that can be widely applied to the population, with easy-to-use distortive scenarios.

Character Assassination - An offensive weapon of the information warfare

Information warfare comes with multiple instruments, tools and techniques complementary to the general attitudes and mechanisms specific to the field of alternative narratives, to take advantage of the perception of people, on one side, and to take advantage of the vulnerabilities of a targeted society, on the other (Chifu and Nantoi, 2016). And that comes from the fact that conflicts and wars moved from the situation of the confrontation of two armies, to the confrontation of two states/two actors and even to a confrontation of two whole societies (Simons and Chifu, 2017). Discussing about offensive and defensive weapons in information warfare, things evolved in the direction where the draft of plans for each operation begins with identifying the vulnerabilities of the society that represents the target in such an information warfare. In the democratic societies, the democratic principles and values, human rights and the rule of law, including **freedom of speech**, free flow of ideas, debates in the public space, mediating between opposite narratives and even free gathering for expressing protest, are instrumentalised as vulnerabilities of a society (Chifu and Țuțuianu, 2016) and are subject to planning for using instruments and weapons in an informational operation, for some actors (Chifu and Nantoi, 2016).

One of the most important information warfare weapons is character assassination. It is the most effective because it targets the personality situated in the critical point of a network in the decision-making system of a country. Character assassination is both old and new, appeared together with the humanity and language, via gossips and the first lies, and has evolved until it was first theorised in 1950 (Davis, 1950), during the Cold War. It is used not only in information wars but also in political campaigns, the source of a multitude of such instruments. At the same time, social media has relaunched the impact and capacity of action of such a weapon that harms at a high rate than before, reaching a very well-chosen public.

So, character assassination is targeting the personality in a decision-making system. The attack using character assassination relates both to the individual at stake and to the public targeted by the

attack, and this duality makes the weapon difficult to build and calibrate, extremely nuanced and sophisticated and with high level of effectiveness when being used (Simons and Chifu, 2017). Moreover, prevention and defence against such a weapon are even more complicated to identify, build and deploy. The current analysis is aimed at identifying what is and what is not character assassination and to establish the characteristics and typologies of such a weapon used in information warfare.

The offensive weapons in information warfare depend equally on the target and audience. Information warfare is the creation of alternative realities by perverting the objective truth – made on the basis of facts, facts, and concrete arguments – its misinterpretation by using a combination of elements, facts and songs of truth selected, interpreted, combined with reasoning altered by the use of syllogisms, sophisms, propaganda, forced interpretations, all embedded with a multitude of lies.

The general, main purpose of the information war is to determine, to control or even to alter strategic decision, foreign policy, security and defence, perversion or hindrance to instruments destined to the military component of a state and to impede to the functioning, even blocking elements related to the security of a state. The instrument and mechanism to achieve this goal is used to determine the public, the citizens, the prepared and organized pressure groups, organized and guided pressure groups to pressure the authority to remove it from the objectively identified solution for the decision at a given moment, based on the lack of support, and even opposition of the population.

The battle of alternative narratives, of “alternative truths” has become the most insidious way of constructing beliefs. But it is based on the groups and publications targeted for each operation, on a vast fabric of knowledge of the training, the inclinations and expectations of the target audience, the propensities, the frustrations of the target audience. Obviously, the tools do not only concern information as such, but also refer to other more subtle components, which are related to fundamental emotions, context and the value of the opportunities

offered by ongoing events and the mood created at the level of a target population, inoculate a certain type of reporting on the subject.

Alternative reality perverts the perception of a target population in a combination of psychological operations – PSYOPS, along with misinformation and propaganda, using fundamental beliefs, feelings and impact images to bring the target audience into a pre-defined perception. And finally, as the audience already has an opinion, its perception has replaced reality (Stern, 1999) and, no matter what argument or proof of truth they have been presented, they would face this barrier of already formed perception.

One of the most important weapons in the early information war is character attack (the attack on character, reputation), respectively, character assassination (destruction of reputation). As we have seen above, the attack must not necessarily rely on real data (Samoilenko, 2016) and is dependent, at the same time, the target person (may be a group of people or an institution, even a country) (Icks and Shiraev, 2014) and also by an audience targeted to change their mind about the person. The goal is to remove the opponent from the public spectrum, eliminate it from the competition or at least make a fundamental mark with an engram, or with a psychological vulnerability to make him/her react to a particular topic in a way that will alter its decision-making capacity, its ability to compete or fight even if it resists an attack on its prestige and reputation.

What are *character attack* / *character assassination*? The character's characterization is based on the impact power of the perceptions created by words and images (Icks and Shiraev, 2014) in injuring, devastating, or even destroying status, character, reputation, prestige someone. In the first two levels with a different degree of impact, we are talking about the *character attack*, while complete destruction or elimination of someone from the competition space means *character assassination*. The non-elimination from combat of a combatant, for reasons of stubbornness or terribleness, does not mean that a character-type action has failed. As long as the target audience reacts and shapes its opinion, the opinion, based on the results of the attack, withdrawing its support for the target person, means that the

attack is successful, i.e. the competitive ability is completely ruined, even if the person remains in the competition of office. The only difference is the possibility of the victim to rehabilitate it.

There are cases (reduced in number and impact) of personalities who have survived a successful action of *character assassination* and who, while remaining in office in the context of a major impact that occurred when they came out of any competition, have managed to capitalize such an opportunity for visibility and to perform so much that the former action of *character assassination* no longer counts, the effects being wiped off with the sponge, and its individual qualities and opportunity exploited with force and common sense, without bragging or focusing solely on the image, but obviously appreciated professionally, to reverse the trend generated by the original attempt at *character assassination*.

The classical case is that of the former mayor of New York on 11 September 2001, Rudolph Giuliani, who was associated with the Mafia, involved in corruption cases investigated by the tax authorities, while going through a divorce on top of which managed to handle the tragic events of September 11 with great professional accuracy, to make the right decisions of the city's societal rebuilding in the face of the terrorist attack, through mass crowd gathering in Times Square to mourn the dead and rebuild hope – a political gesture with a massive risk if a new attack occurred - that this gesture turned him into the Mayor of America, gave him a solid political base, he ran for the US Presidency, and today he is in the Trump team. But the conditions for such a jump are exceptional, and even some would say that Giuliani was not the subject of an informational operation of *character assassination*, but only a subject of his own acts and deeds before September 11. For such a characteristic of characterization, the intention, the planning, the existence of the attacker (not only somebody who takes advantage of the operation) is necessary (Sigelman and Kugler, 2003).

We can, therefore, say what character assassination is NOT: the natural, mass media reaction, the media, the facts, the results of investigations, the actions of state institutions that prove actions and deeds in the courts of a public or political character. It is not *character assassination* or *character attack* the authentic action related to current

developments, real facts, even if these accounts are accompanied by subjective interpretations, forced, or political options and opinions are involved in the legitimate press reports.

Character assassination is about intention, planning, pursuit of this plan, and its application with various, not always real, elements of false and *fake news*, with insinuations, with rumours and anonymous artificial constructions, all meant to be in the conjunctive to target the ordered, from the spectrum of the above. And above all, it refers not to arguments, facts, and to the combating of the ideas displayed by the target person, but to the attack on the person who issues the ideas, to the elements that define it and validates its ideas, which are not even discussed in such a process.

A concept that unites multiple fields: The character, in the sense that it is used in character assassination, refers to the moral aspects of the experience and behaviour of an individual (Danzinger, 1997). If temperament has a psychological relevance and is rather native, it is biased, biology, personality is the sum of the stable characteristics, reactions and behaviour of an individual and the character has to do specifically in this definition and understanding of character assassination, ethical and moral aspects, those that give substance to the credibility and legitimacy of a personality.

As far as moral issues are concerned, their impact is obvious to the public and to the actual standards or the ability to absorb such news. For example, in France, the news about Francois Hollande's "parallel families" did not affect his election, while the same information in the US would have led him definitively to exclusion from the political life. It is here generally accepted appearances and rules, the expectations of the public, not even the habits of the community, its standards – with the hint of hypocrisy and snobbery that they can contain (we are told "to do what the pope says, not what the pop does"). It is about respecting appearances, doing "what is appropriate", avoiding gestures and actions that "shouldn't be done" because "it's shame", "your neighbours know you", "the good world knows us and we will be in an embarrassing situation". And for a leader, for an aspirant to public confidence, the standards required and society's exigencies are

higher than those of ordinary people who may be wrong, but they do not want to lead the people and have no claims to be loved, believed, and followed.

Public figures occupying important positions of authority, representation and visibility – emperors, kings, presidents, generals, bishops, opinion leaders, teachers, moralists themselves – must “adhere with utmost ostentatiousness and obstinacy to general morality and standard behavioural norms and to the expectations of the public” (Shirayev, 2010) about the personality of the person in a particular position. An actor or a creative person has greater freedoms than a metropolitan, a judge, or a member of a party ethics committee. They must maintain their good reputation for a long time, in any case as long as they are in office. That is the only way they maintain the support of the relevant public for the function and, especially, of relevance to themselves.

So, character assassination does not just refer to the target person, it does not just refer to a type of audience, but to more. First of all, those who ensure that the person in question, the public or the decision-makers depend on maintaining and effectively exercising the function, but perhaps more important here, on the offensive weapon in the information war represented by character assassination, the public who counts for the person concerned, the reference public, whose loss causes loss of self-esteem, support in the professional caste and the elite to which it belongs.

So, the concept itself is in many fields of study, from psychology, psycho-sociology, and political science, political and public communication. From each of these areas, relevant elements are detached to know the springs of offensive weapon construction in the information war called character assassination. In addition, from each one come elements of nuances, dosage, subtleties and sophistication needed to plan an attack to avoid victimization of the target or to avoid indolence or indulgence of the public, or even support for the target personality of the attack, once the attack is ostentatious and creates major side effects. Here are the sources of mistakes in the use of character assassination as a weapon in the information warfare, but

also the elements that give survival formulas to such an operation and the lessons learned to counteract such a destructive attack.

From our point of view, we can consider a successful operation of *character assassination* when the facts and the attack are not public, but the prospect of the attack is used to constrain the target to act in a certain manner. Conditioning or blackmail, or the exposure of important elements, may result in the folding of the targeted person into the expectations and directions suggested / imposed by the attacking group. In addition, the target's resignation achieves the same result, and has the same relevance, that is, the character assassination attack has reached its target even if it is not visible to public space. This perspective also requires careful research and evaluation of these events in a person's professional life in his or her past that creates vulnerabilities and makes it unacceptable later in another public function.

The concept of *character assassination*: *Character assassination* is the deliberate destruction of the reputation of an individual, institution, group or country (Samoilenko, 2016; Icks and Shiraev, 2014; Shiraev, 2010). Targets of actions that fit the typology of character assassinations are political leaders, officials, celebrities, scientists, public figures, athletes. In operations, they are targeted at actions that relate to individual elements such as personal life, behaviour, values, identity, self-confidence and others, close, their beliefs and aspirations are shaken by such attacks. The tools used are: bibliographic details are altered, interpreted or manufactured; intimate elements and personal moments are made public; their professional and personal achievements, family context, ethnicity, sexual behaviour; their good will is being questioned as well as their good faith and good intentions behind action, using exaggerations, gambling and irony, allegations, insinuations and lies. The purpose is to affect (in the case of *attacks*) and to destroy (in the *character assassination*) the moral position of the person (group, institution, state) in the eyes of the public and generate a negative emotional response of the public to the target of such an attack.

A nuance deserves to be highlighted here between the process of *character assassination* against a group, movements, ethnicities, institutions, countries and the process of creating the image of the enemy (Keen, 1988; Bruckner, 1996), element used in the conflict polarization phase. The instrument could be sensibly identical, but the intention, purpose and planning are different. In the first case we are in the classical case of destroying reputation, in the second we want to polarize society, coagulate public support for an emerging conflict, use the image of the existing enemy to blur the internal failures and divert attention from other subjects and stringent themes to target the attacker.

Defamation associated with the attack on the person aims at undermining the credibility of the opponent, based on a rhetorical strategy (Walton, *n.a.*; Walton, 1985) and targets its own public and its mobilization for the coming conflict, as in the case of *character assassination*. On the contrary, in the second case, there may be an interest in maintaining the image of a fierce, fierce enemy that threatens me, in order to be able to mobilize, which is not in the category as destroying the reputation in the first case, when the objective is different, the complete deterioration of the target's image.

Character assassination, in terms of essence and content, was introduced into political communication in the United States in the mid-20s¹. The concept as such was introduced in the book with the same title by sociologist Jerome Davis (1950). Based on deconstructed fundamental emotions (Moisi, 2009) such as fear, ignorance, envy / jealousy used to propagate rumours and lies about a targeted person.

The major point of rupture and jump in the 1960s was the emergence of television, moreover, the use of television in political debates and electoral competitions, with all the helplessness of public communication tools, attacks and defence formulas in electoral strategies and the preparation of public debates of candidates which included negative propaganda and attack of the person, then even attacks on the character (morals) of the candidates. Sociology and

¹Although the notion of Character Assassination appeared in the US, there are equivalents on the European continent, Rufmord in Germany and Karaktermoord in the Netherlands. There are studies in Russia about attacks on the reputation of a person.

psychology have brought new elements about persuasion mechanisms in politics, using emotions and perceptions (Graber, 2009). Negative campaigns have prompted the creation of many instruments and tactics (Flower, 2007) used in *character assassination*.

Character assassination – a weapon of contemporary information warfare: As in the case of hybrid war or information warfare, a whole conceptual dispute between military and security theorists and strategic studies or international relations creates differences by looking at things using the new and old instruments. Some believe that all are old types of tools that have been encountered since antiquity, used in military action or have known military purposes. On the other hand, there are voices saying that that these are all conflicts, tools and methods of the 21st century (Simons and Chifu, 2017).

The mere fact that any potential attacker has access, as a result of the emergence of the Internet and social media, to anyone who is online or has a social media portal is a qualitative difference that exceeds the jump from the radio and cinema to television in the 1960s. Indeed, the jump to the Internet and massive connection has allowed social media to emerge, and with this tool, communication borders no longer exist, globalization is achieved, and anyone who intends to target the public space and connected citizens of a state or any other group aim. We have seen how sophisticated the information wars (Chifu and Nantoi, 2016) are and how fast the successive generations of informational warfare develop (Chifu, 2017).

And in the case of *character assassination* operations, this reality of the 21st century information warfare allows the use of social media tools with the measure. Thus, in closed societies, the rumour, insinuation, banquet and gossip played a major role in *character assassination* formulas (Wierzbicki, 1996; Volkov, 2009; Ficeac, 1996) (as well as a way to reduce tension within the society), in the contemporary era, the existence of social media gives major freedoms to anonymous sources to launch and multiply, through third parties, *character assassination* attacks. During the communist era, someone who was gossiping rarely knew or heard about gossip until it had not directly affected his family, reputation, position. Today, using

established social media formulas, closed groups, but also through anonymity formulas determined by avatars and false accounts, all categories of attacks in the *character assassination* sphere can be promoted and distributed without the knowledge of the target, but with greater impact, and especially from a distance.

Moreover, the psychological operations of the information warfare can determine the maximum effectiveness in character assassination attacks, once the aim is to destroy the target person by threatening the campaign or using similar tools. Removing the competitor without the attack being public is a successful assassination operation with impact, even if the general public only sees the result of this operation, not the content of the attack (credible threat of attack).

The International Society for the Study of *character assassination* (ISSCA – <https://characterattack.wordpress.com>): In July 2011, researchers and teachers from nine countries – a group of historians, social science specialists, and psychosocial and political psychology experts – gathered at the University of Heidelberg to discuss the art of defamation in the past and today. The result was the creation of the International Society for the Study of Character Assassination. The fundamental elements and lessons learned in this area are: the interdisciplinary character – the difficulty of detecting and counteracting *character assassination* operations; varied instruments and the ability to reach different audiences and audiences on the basis of their own aspirations, values, and options – freely disclosed by them on social networks.

Moreover, the third generation of information war (Chifu, 2017) allows for individual targeting on a large scale – all voters in Britain, Brexit, or all voters in the United States, for example – with messages of interest to them and which directly affects them, for which they have empathy, elements that allow the *character assassination* operation to exponentially multiply its target impact, after individual calibration on a targeted audience.

However, it should not be forgotten that public referencing for *character assassination* operations target the groups and decision makers who determine the perspective of choosing and maintaining the

target public person and especially the public that counts for the target person, his personal and individual, professional and emotional references. Targeting this component may have a greater impact than targeting the general public.

However, the degree of sophistication must be high and the attack must be properly calibrated, because we are talking about referential individuals for the target personality and a reference public who knows the person, has lasting emotional ties and has perceptions, beliefs and convictions regarding the person – well rooted and difficult to shake. Seeding some incipient doubts or mistrust is a sufficiently ambitious objective, because any exaggeration can have, in this type of attack, the disastrous side effects for the attacker, can create for the target personality a trampoline of visibility and a supportive emotion through victimization which can decide the fate of personality, of its reputation, in a direction completely opposite to that pursued by the attacker.

How do we alter reality in information warfare: Post-truth, post-factual, post-humanity?

The fourth and fifth generations of information warfare are directly linked to the evolution of perception and a journey leading us from post-truth via post-factual approaches to post-humanity. If the post-truth² is about emotions that are influencing the perceptions and the attempt to alter perceptions at a large scale, especially due to interpretations of the reality, post-factual (Chifu, 25 September 2018) approach already deals with altering the facts and changing the past, so that the very reality is at stake. Moreover, if we move further, in the use of artificial intelligence³, we reach a moment where our mind is at stake

² Post truth – Relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief. ‘in this era of post-truth politics, it’s easy to cherry-pick data and come to whatever conclusion you desire’, ‘some commentators have observed that we are living in a post-truth age’ in Oxford Dictionaries, at <https://en.oxforddictionaries.com/definition/post-truth>.

³Artificial intelligence (AI) is a term for simulated intelligence in machines. These machines are programmed to “think” like a human and mimic the way a person acts.

and the very processes of thinking, perceiving, understanding and knowing the reality are altered via the direct impact to our minds, when facing an intelligence that plays with enormous groups of big data⁴, that know each of us in detail and are playing with all of us, individually, in real time, with effective psychological tools, in order to twist everything that we know. It is no longer about perception or even facts, but about our own minds. And yes, we can protect us from the future, to protect our sanity of mind. We need to adapt, but costs are going to be heavy for a bigger share of our population. Sustainability (Jones, n.a.) and resilience (Chifu, 2018) of humankind, at the whole level, is going to be tested, as well as other characteristics of adaptation to the reality in a post-human challenge about the reality. And we need to adapt more and more to this life in between worlds, the real one, and the virtual one and even several alternative worlds that we are confronted with at the same time, in the very near future.

Welcome to the post-human world!

Information warfare (Chifu and Nantoi, 2016): The fourth generation and the thesis of a fifth generation that is approaching fast. *The theme of the information warfare shows us the developments that are taking place these days about the perspectives and pressures faced by the human mind, in our everyday internal world in the near and predictable future. The information war has already passed to the fourth generation and intensive technological studies are being conducted towards the fifth generation of the mind games, with what a person*

The ideal characteristic of artificial intelligence is its ability to rationalize and take actions that have the best chance of achieving a specific goal, although the term can be applied to any machine that exhibits traits associated with a human mind, such as learning and solving problems. At <https://www.investopedia.com/terms/a/artificial-intelligence-ai.asp>. A.I. research is defined as the study of “intelligent agents”: any device that perceives its environment and takes actions that maximize its chance of successfully achieving its goals in Poole et.al., 1998.

⁴Big data is a term used to refer to the study and applications of data sets that are so big and complex that traditional data processing application software are inadequate to deal with them. Big data challenges include capturing data, data storage, data analysis, search, sharing, transfer, visualization, querying, updating, information privacy and data source. (Laney, 2001; Reichman et.al. 2011)

perceives, with what he understands, with what he knows and how can be these stages be altered to impact his opinions, convictions and choices.

If the first generation explicitly refers to misinformation, propaganda, active measures and elements of psychological operations (Chifu, 2015; Chifu, 2016), the second one aims at objectification of the abstract construct in the virtual space (Chifu and Ivan, 2013) and the communication between the real space and the virtual space, the third refers to the individual access but based on models – social masses, based on big data, to target it to alter or direct options.

The fourth generation directly targets the unpredictable personalities of the third-generation Cambridge Analytica instrument, the 3-15% for which the likelihood of influencing is null, depending on the subject, through specific instrumentation tailored especially defined for the individual concerned after a thorough study of him/her, the clearest method being *character assassination* (Chifu, 2017).

Finally, the outlook of a fifth generation, which will occur in about two years, is already being drawn, when technology will allow „real images” to be assigned to every public figure that can transmit any pre-set audio or audio message. Imagine the confusion created when Donald Trump declares war in an alleged video, his image being manipulated instead of using an actor or a look-alike, or Emmanuel Macron resigns live (Green, 2018). Vision, our richest sense and 87% of the information that reaches the human brain, becomes relative and without the prospect of selection, to discern the fake from the real, the prefabricated from the reality. And when there is not only one such enormity present in the public space, but seven distinct and nuanced messages on a theme, confusion is perfect and playing with the human mind reaches the apogee.

In this manner we reached post-truth, post-factual, and, further down the road, post-humanity.

Post truth: its theorized origins and the tools that led to the validation of modern information wars. The *Post Truth* is a term used since 1992 by Steve Tesich in “A Government of Lies” appearing in *The Nation*. This is according to the Oxford Dictionaries, which also notes that it is the most sought-after word in 2016, when most of the

post-truth and information warfare appeared in various forms. Tesich (1992) then maintained that the history revealed by the opening of the archives related to Watergate, the Iran-Contras scandal and the first Gulf War demonstrates that “we, as free men, have accepted and voluntarily decided to live in a kind of post-truth”(Tesich, 1992). His references discuss how little ordinary people are familiar with the great dossiers and themes of contemporary operations – special, classified, military – and how great is the distance between what is publicly presented and what we absorb and understand from a more complexly sensitive reality which is denied in all its details.

The subsequent definition of the term / notion / concept of post-factual, post-factual, or post-reality policy refers rather to a political culture in which the debate calls for emotions rather (Oxford Dictionaries), unrelated to the details of concrete policies, in which the propaganda summed up in talking points (the general ideas established by the communication strategy, repeated unanimously by the group in question) that completely ignores the facts and the surrounding reality. Post-truth does not mean challenging or falsifying the facts and expert opinions but putting everything in full subordination to public emotions that ignore the truths and facts presented objectively, being blinded by emotions.

There is a whole debate about how old or new the information war is, as well as the populist policies that use emotions. Some say that elements of it date back to when there were debates in the Agora of Ancient Greece, but the explosion of post-truth is inseparably linked to the Internet and social media, to anyone's ability to convey, to a broad, uncontrollable but connected public network, ideas and deep emotions that affect his views. And it is deeply related to the social changes produced by technology, especially social media.

The origins of post-truth: classical philosophy, technology, populism. Bernard-Henri Lévy was the one who tried to explain the paradigm of post-truth, with all its components. The French philosopher speaks about the three components of this development of human reality that we will have to get used to it: there is “a

philosophical suspect, a technological culprit and a very responsible politician” (Levy, 2018) of today life and this hideous post-truth.

Therefore, everything started from modern philosophy. All those who question the Truth have their origins in Friedrich Nietzsche’s philosophical thinking, which questions the Truth as an absolute, considers it relative, and furthermore, places it as an equal to the Lie. Nietzsche wondered why Truth had greater value than Lie. This is a great sign of a question that still exists today, and the effects of this philosophical syllogism exclude ethical, moral, or complex axiological reporting, and lead to the crazy world today.

But, in a way, there is a return to the cycle of a classical idea of Greek philosophy. It is the renaissance of the oldest idea of philosophy – the school of thinking of the sophists (Braunstein and Pepin, 1997) – and to perpetuate fights of ideas between the Philosophers and the Sophists. The Sophists questioned the owner, the absolute Truth holder. Their doctrine speaks of the fact that Socrates and Plato are not entitled, cannot claim to have the Truth. So, we are all, with social media, the reincarnation of the sophists in the modern world.

Technological interference, with the advent of the Internet and social networks, has led to absolute democratization in a virtual space but directly attacking the mind and perception of the real man connected to this space. Democratization has led to an explosion with enormous consequences by promoting a generous idea, every truth, and every idea to have equal value. And confront the competition of other ideas, to see what is most listened to, more prized.

It’s not a question of verification of human nature, I say, an absolute check of the way in which man really looks on the average, and which is the nature of the human spirit, how individuality and the spirit of the flock matter. It has education, habits, traditions, characteristic features, but also society, relationship, community spirit and its natural hierarchy.

So, the Internet and the social media have made each sentence and every opinion equal. I have come to an absolute democratization of the Truth, which has pushed far beyond Nietzsche the relativization of the Truth. It is no longer about giving an ethical value superior to Truth in relation to the Lying, here is the equation of all nuances – which have

similar value in the competition of sentences on the Internet – between the extreme lie and the Absolute Truth. Moreover, it equalizes the source of these defended ideas, the idiot put together with the genius, the connoisseur, the expert, the professional. It is a disaster. Not necessarily a total one. Levy claims to be part of human nature and becoming, that man is forced, in his becoming, to confront and adapt to this stage of evolution in order to resist the future.

Finally, populist politicians are the third source of guilty for the problem being discussed. Here we are already entering approaches that remind Kafka or Eugen Ionescu, a theatre of the absurd. Populists resort to emotions, but their main idea is that “Truth is not the Reality, Truth is what I say.” This is how Nazism, Modern Absolutism, Authoritarianism emerged. It is the new idea that pushes, through consequences, to the absurd and to the destruction of freedom, and to the absolute control of the centre, whatever it may be, on peoples, societies, nations, the world.

From post-truth to post-factual and post-humanity: While post-truth means relativizing the value of Truth, questioning the owner of the truth (sophists), equalizing as value of Lying with Truth (Nietzsche), democratizing Truth (social media, all sentences are equal, regardless of the issuer and the connection with Truth) about the connection of human perception, human understanding with the Truth. With the reality. (Chifu, 2015; Chifu, 2016) We talk about interpretations, emotions that alter the understanding of truth, or obstruct and guide our individual Truth. But it does not affect the facts. The post-factual begins from where we speak of the paradigm. *What you see is not True, what you perceive with the senses is, in fact, not True*, namely, the alteration of the facts through the perception of altering perception. It is no longer about the interpretation, but about the fundamental alteration of the facts. The populist approach is *Truth is what I say is the Truth* (Giuliani, 23 August 2018; Koonz 2004, p. 13) which turns the fact into non-fact or it's opposite.

This type of approach, combined with media censorship, blocking press freedom, free circulation of ideas, freedom of expression, pushes the targeted society towards authoritarianism, dictatorship. If

we look today at the official presentation of the Kremlin, its spokespersons, Russia's aggression in Ukraine, the demolition of the MH17 flight over Donbas, poisoning with Novichok by Sergei Skripal, interference in the US and other elections states, we see the meaning of the movement. Manipulating the Truth, with the construction of alternatives to reality, simply alters the simple facts for the Russian and captive audiences. Or, as Bernard Henry Levy said, "You cannot refrain from thinking that Putin is the commander of his country, he is historian chief, journalist chief, and wants to erase, rewrite, and reinvent the history of the past" (Levy, 2018).

Here the reference is transparent to Francoise Sagan, the one saying "No one ever knows what the past has in store for us" – with a direct reference to the alteration and re-writing of history in the future (Sagan, 1965). This is about populist and post-factual regimes. The facts are rewritten, not reinterpreted, but dramatically changed. We also know the history of Ceausescu's heroism, rewritten after his power in 1965. It is also rewriting history in present Poland, with the role of the opposition Solidarity. It destroys the image and role of Lech Valensa and puts Geremek in the foreground. That's what populist politicians are doing.

Post-factual (Levy, 2018): Post-humanity is even more tragic, and it links directly to another human creation, artificial intelligence – A.I. An automatic, independent machine learning mechanism capable of infinitely manipulating more data than the human being, with infinitely more efficient, safe fractions of a second, and capable of reproducing the reality of any human sense, how they can alter the human mind in a scheduled manner.

Everything started from the over-use of the A.I. in detecting *fake news*. I taught cars to corroborate language elements, taught them to translate, to read, to write lyrics (not poems!!!), to understand grammars and syntaxes, to create correct sentences in any language, more correct than real people's speech. Moreover, I taught them to recognize faces, to interpret gestures, to create grimaces, and today the program by which a text and an image of anyone, together with his voice, can create "authentic" factual statements that are transmitted on it will take up to two years for improvement (Buterin, 2018; David, n.a.). Then we should watch out for informational warfare!

As I was saying above, what will be like to wake up with an artificial intelligence engine that creates from algorithms and mega-data, the life-like image of a leader who holds a speech, starting from only the text? With an image, voice and behaviour tics more authentic than the original. Well, from this point, forecasted over two years as a technological achievement, we have a clear case of a mechanism superior to humans in terms of memory, speed and access to information that affects the personal internal universe of each individual and psychologically alters us. This is post-humanity.

And this is not an isolated case, it is not about connoisseurs, but about a whole human population that will have to confront and adapt to the stress of this post-human reality, which affects us deeply on an individual level. Here important is human resilience and the possibility of existence and consolidation of adaptability to these developments of a near future matter. And it will also show the content and capacity of humanity in its entirety to adapt, we will know how the average man, humanity in its entirety, struggles with these real mental illnesses of the future of living in parallel virtual spaces, concurrently a schizophrenia caused by the constant shift between computer generated realities and everyday life, factuality, truth and humanity.

How do we adapt to post-truth, post-factual and especially post-humanity? Of course, there are forms of reacting to post-reality, now and in the future. Every human construct also has its antidote, even if it is already used as a weapon against humanity itself. We see today the reactions to generations of past information warfare, we see today the constant antidote accompanying the responsible construction of new technical discoveries, including artificial intelligence in action.

Niall Ferguson, the well-known historian at the Hoover Institution, Stanford University, is the one who makes the most important pleading of Kondratiev's historical cycles and the repeating history of interpretation. It is the task of an applied historian, he argues, to choose from the multiple futures the relevant, condemning and stating that it is shocked how often politicians and journalists are going to wrong mistakes for the future. Ferguson argues that "Technology is important, but less important, in fact, in the future; it changes very

quickly and creates frequent ruptures, so the life of a technology is much smaller than it used to be. Computers and social media have a major impact, but they are eliminated more quickly than the 50's" (Ferguson, 2018).

What's new is the decentralization of communications. It happened with print media already and social media has brought about changes in impact, but fairly limited in time, that we learn. It is an analogy not sufficiently relevant today, even if it invites democracy and blocks the authoritarianism of that time. The difference is not only access to virtually infinite databases, at practically no cost to anyone in the world who is connected to the Internet, but also means anyone's access to large masses of people within any society, controllable, influential, known in their data personal and intimate experiences reflected by the social networks (Chifu, *n.a*).

Ferguson argues that the impact of decentralization of information and the strengthening of capacity and impact on people's opinion, however, leads to the recent upgrading of power. Even artificial intelligence can mean over time an instrument that leads to increased state control over the individual.

However, I do not believe in this hypothesis. Well, the difference is creativity, and the clearest model, the example and argument in this regard comes from China, where enormous data bases copied from all Internet traffic create knowledge that is offered on a silver platter to the Communist Party. Political control leads to fundamental consequences, I believe, and we find it in every centralized society and in politicized institutions that lose use of the capacity to act once the rule is the political truth, imposed top down, not the professionalism and knowledge that comes from the base of social organizations and professional institutions.

Likewise, in post-humanity, the fundamental consequence of control over Chinese society is repeated: Chinese control over networks leads to implosion by blocking freedom of thought and freedom of opinion, free experimentation and creativity. The technological difference, to paraphrase, again, applying to the reality of our analysis, Niall Ferguson, the fantastic ability of artificial intelligence, of post-humanity as a stage, **is that chess is best played by machines. But**

can they interpret and create a better game than chess? More useful for applications in life of all kinds and all the circumstances? No! (Ferguson, 2018)

No matter how powerful the computers will be, the greatest determinist is the human mind and the human condition. This is decisive, regardless of technology. There are some human constants. And I still believe that the post-humanism era, as we have defined above, cannot destroy people, human society, human condition, and the human mind. Even if it creates a major impact, it fundamentally changes what we know today about our way of life, learning, knowledge and adaptation. And indeed, it is a major challenge for the future, which will make many collateral victims among contemporary people who will no longer understand anything and will isolate themselves in comfy bubbles, incapable of adapting to the shock of the future.

References:

1. Air Force Doctrine Document, 2-5.3 *Psychological Operations* (27 August 1999).
2. Andreescu, Crişan, (18 August 2016), „EurActiv.com: SUA îşi mută armele nucleare din Turcia în România”, DCnews, https://www.dcnews.ro/euractiv-com-sua-i-i-muta-arme-nucleare-din-turcia-in-romania_513671.html
3. Barry, Ellen, (7 April 2009), *Protests in Moldova Explode, With Help of Twitter*, The New York Times, accessible at <http://www.nytimes.com/2009/04/08/world/europe/08moldova.html?mcubz=3>
4. Braunstein, Florence, Pepin, Jean-Francois, (1997), *Marile Doctrine Politice, Economice, Filosofice*, Antet.
5. Bruckner, Pascal, (1996), „Melancolia democraţiei: Cum să trăieşti fără duşmani”, Antet Publishing, Bucharest.
6. Buterin, Vitalik, (2018), “Will Blockchain Change the World?”, at 15-th Yalta European Strategy, Annual Meeting, September 13-15 2018, Kiev, “The Next Generation of Everything”, available at <https://yes-ukraine.org/en/photo-and-video/video/15-a-shchorichna-zustrich-yes/chi-zminit-blokcheyn-svit>
7. CCA Report 2016, Chisinau.

8. Chifu, Iulian, (n.a.), „După populism, altă căpastă: Adhocrația”, in *Adevărul*, available at https://adevarul.ro/news/politica/dupa-populism-noua-napasta-adhocratia-improvizatie-bunul-plac-ignorarea-profesionistilor-ratiunii-1_5acdc1dfdf52022f75b1eb7a/index.html
9. Chifu, Iulian, (2015), „Război hibrid, lawfare, război informațional. Războaiele viitorului”, în Universitatea Națională de Apărare, *Strategii XXI. Complexitatea și dinamismul mediului internațional de securitate*, UNAP “Carol I”, Bucharest.
10. Chifu, Iulian, (2016), „Războiul informațional: componentă a războiului hibrid și instrument de acțiune agresivă cu relevanță strategică”, *Infosfera Magazine*.
11. Chifu, Iulian, Țuțuianu, Simona, (2016a), „Torn Between East and West: Europe’s Border States”, Routledge.
12. Chifu, Iulian, (14 August 2016), *Război informațional împotriva României și “Traficanți români de arme din Ucraina pentru teroriști”*, available at <http://evz.ro/razboi-informational-impotriva-romaniei-traficanti-romani-de-arme-din-ucraina-pentru-teroristi.html>
13. Chifu, Iulian, (2017), „Trei generații de război informațional. Nivelul dezvoltării domeniului în partea sa publică”, în *Infosfera*, no.3/2017, pp. 20-27.
14. Chifu, Iulian, (2017a), “Character Assassination, Armă ofensivă în războiul informațional”, in *Infosfera*, no. 4/2017, pp. 11-17.
15. Chifu, Iulian, (25 September 2018), „Cum alterăm realitatea în războiul informațional: Post-adevăr, post-factual, post-umanitate”, available at <https://deschide.md/ro/stiri/editorial/37041/Iulian-CHIFU--Cum-alterăm-realitatea-în-războiul-informațional-Post-adevăr-post-factual-post-umanitate.htm>
16. Chifu, Iulian, (2018a), „Războiul hibrid și reziliența societală. Planificarea apărării hibride”, in *Infosfera*, no. 1/ 2018, pp. 23-30.
17. Chifu, Iulian, Ivan, Cristina, (2013), „Rolul democrației participative, al meta-narațiunilor și autorului colectiv în secolul XXI. Mesaj din viitor”, în *Revista Română de Studii de Intelligence*, RRSI no.10/December, Bucharest.
18. Chifu, Iulian, Nantoi, Oazu, (2016), „Război informațional: tipizarea agresiunii informaționale a Federației Ruse”, ISPRI, Bucharest.
19. „Corupția Ucide: Peste 35.000 de oameni au ocupat strazile Capitalei. Proteste de amploare au avut loc în toată țara”, available at <http://stirileprotv.ro/stiri/actualitate/noi-proteste-sunt-anuntate->

- si-pentru-miercuri-seara-ce-vor-manifestantii-sa-se-intample-dupa-caderea-guvernului.html
20. Danzinger, K., (1997), *Narning the Mind: How Psychology Found Its Language*, London, Sage, 1997.
 21. David, Mario, (n.a.), *Artificial Intelligence and Deep Fake*, available at <https://yes-ukraine.org/en/photo-and-video/video/15-a-shchorichna-zustrich-yes/shtuchniy-intelekt-ta-deep-fake>
 22. Davis, Jerome, (1950), „Character Assassination”, New York, The Philosophical Library.
 23. Diacu, Loredana, (n.a.), „Noaptea, ca hoții!”- peste 300.000 de români, în stradă împotriva mutilării Codurilor penale, Epoch Times, available at <http://epochtimes-romania.com/news/nevedem-la-guvern-ziua-a-patra-de-proteste-impotriva-mutilarii-codului-penal---257156>
 24. Digi24, „#Ro-mânia, ziua a șasea | Protest istoric: 600.000 de oameni au fost în stradă Referință Ordonanța 13”, available at <http://www.digi24.ro/stiri/actualitate/justitie/legea-gratierii/cel-mai-mare-protest-fata-de-oug-13-anuntat-pentru-duminica-in-capitala-663703>
 25. „EurActiv: SUA isi muta armele nucleare din Turcia in baza militara de la Deveselu. MAE neaga informatiile”, Știrile PROTV, 18 August 2016, available at <http://stirileprotv.ro/stiri/actualitate/euractiv-sua-isi-muta-armele-nucleare-din-turcia-in-baza-militara-de-la-deveselu.html>.
 26. „EurActiv.com: SUA mută arme nucleare din Turcia în România / MAE și MApN neagă”, (18 August 2016), available at <http://www.euractiv.ro/extern/sua-muta-arme-nucleare-din-turcia-in-romania-5170>
 27. Ferguson, Nial, (2018), “The Next Generation of Everything. A Historian View”, at 15-th Yalta European Strategy, Annual Meeting, September 13-15 2018, Kiev, “The Next Generation of Everything”, available at <https://yes-ukraine.org/en/photo-and-video/video/15-a-shchorichna-zustrich-yes/maybutnye-pokolinnya-vsogopoglyadi-istorika-ta-investora>
 28. Ficeac, Bogdan, (2014), „Tehnici de manipulare”, C.H.Beck, Bucharest.
 29. Flower, H. I., (2007), “The Art of Forgetting: Disgrace and Oblivion in Roman Political Culture”, Chapel Hill, University of North Carolina Press.

30. Giuliani, Rudy, (23 August 2018), "Truth isn't Truth": So is that True?, in *The Guardian*, available at <https://www.theguardian.com/books/2018/aug/23/truth-isnt-truth-so-should-we-expect-lies-from-donald-trump>
31. Graber, Doris, (2009), "Mass Media and American Politics", Washington DC, CQ Press.
32. Green, Yasmin, (September 13-15, 2018), "Demonstration. Hacking an online conversation", at 15-th Yalta European Strategy, Annual Meeting, Kiev, „The Next Generation of Everything”, available at <https://yes-ukraine.org/en/photo-and-video/video/15-a-shchorichna-zustrich-yes/demonstratsiya-nezakonne-vtruchannya-u-besidi-v-merezhi>
33. Hale, Thomas N., Slaughter, Anne-Marie, (2005), "Hardt & Negri's Multitude: The Worst of Both Worlds", in *Occasional Paper*, Woodrow Wilson School of Public and International Affairs at Princeton University.
34. Hardt, Michael, Negri, Antonio, (2005), "Multitude: War and Democracy in the Age of Empire".
35. Icks, Martijn, Shiraev, Eric, (2014), *Character Assassination throughout the ages*, Basingstoke, UK, Palgrave Mcmillan.
36. Jula, Camelia, (n.a.), „Uniți salvăm Roșia Montană: un an de la "toamna românească", Think Outside the Box, available at <https://www.totb.ro/uniti-salvam-rosia-montana-un-an-de-la-toamna-romaneasca/>
37. Jones, Robert G., "An Applied Approach to Psychology of Sustainability" available at <http://psychology.oxfordre.com/view/10.1093/acrefore/9780190236557.001.0001/acrefore-9780190236557-e-76?print=pdf>
38. Keen, S., (1988), "Faces of the Enemy: Reflections of the Hostile Imagination", San Francisco, Harper.
39. Koonz, Claudia, (2004), *The Nazi Conscience*, London and Cambridge, MA: Belknap Press of Harvard University, p. 13.
40. Laney, Doug, (2001), "3D data management: Controlling data volume, velocity and variety". *META Group Research Note*. 6(70).
41. Levy, Bernard Henri, (2018), "Who killed MrTruth?", at 15-th Yalta European Strategy, Annual Meeting, September 13-15, 2018, Kiev, "The Next Generation of Everything", available at <https://yes-ukraine.org/en/photo-and-video/video/15-a-shchorichna-zustrich-yes/hto-vbiv-mis-istinu>

42. "Lobbying Reform: Background and Legislative Proposals, 109th Congress" (PDF). *The Library of Congress, Congressional Research Service. 2006-03-23.*
43. Moisi, Dominique, (2009), *The Geopolitics of Emotion*, Anchor Books, New York.
44. Nietzsche, Friedrich, (n.a.), "On Truth and Lie in an Extra-Moral Sense", available at http://oregonstate.edu/instruct/phl201/modules/Philosophers/Nietzsche/Truth_and_Lie_in_an_Extra-Moral_Sense.htm
45. Oxford Dictionaries, "A Government of Lies", available at <https://en.oxforddictionaries.com/definition/post-truth>
46. Pădure, Radu, (n.a.), „*Marele SECRET din spatele Victoriei lui Trump Insectarul DIGITAL de Oameni. O uluitoare OPERAȚIUNE de Penetrare a CREIERELOR americanilor*”, available at <http://evz.ro/marele-secret-din-spatele-victoriei-lui-trump-i.html>, <http://evz.ro/marele-secret-din-spatele-victoriei-lui-trump-ii-1.html>
47. Poole, David, Mackworth, Alan, Goebel, Randy, (1998), "Computational Intelligence: A Logical Approach". *New York: Oxford University Press.* ISBN 0-19-510270-3
48. *Post truth*, in Oxford Dictionaries, available at <https://en.oxforddictionaries.com/definition/post-truth>
49. Reichman, O.J., Jones, M.B., Schildhauer, M.P., (2011), "Challenges and Opportunities of Open Data in Ecology", in *Science*, no. 331 (6018), p. 703–5.
50. Sagan, Françoise, (1965), "Chamade", Julliard.
51. Samoilenko, Sergei A., (2016), "Character Assassination", in Craig E. Carroll, *The SAGE Encyclopedia of Corporate Reputation*, Sage Publication.
52. Sandru, Alexandra, (4 November 2015), „Ponta si-a dat demisia. Klaus Iohannis, asteptat sa numeasca un premier interimar”, available at <http://www.ziare.com/victor-ponta/demisie/romania-in-strada-ponta-demisioneaza-live-1391492>
53. Sigelman, L., Kugler, M., (2003), „Why the research of the Effects of Negative Campaigning So Inconclusive? Understanding Citizens' Perceptions of Negativity”, in *The Journal of Politics* 65(1), pp. 45-62.
54. Simons, Greg, Chifu, Iulian, (2017), „The Changing Face of Warfare in the 21st Century”, Routledge, London.
55. Shiraev, Eric, (2010), „Character Assassination: An interdisciplinary approach”, George Mason University, USA,

- available at <https://characterattack.files.wordpress.com/2010/10/character-assassination-an-interdisciplinary-approach.pdf>
56. Stern, Eric, (1999), "Crisis decision making. A cognitive institutional approach", Dept. of Political Science, University of Stockholm.
 57. Tesich, Steve, (1992), "A Government of Lies", *The Nation*.
 58. "The Propagation and Power of Communist Security Services Dezinformatsiya", *International Journal of Intelligence and Counter Intelligence*, Volume 19, Issue 1, 2006.
 59. The International Society for the Study of Character Assassination (ISSCA), available at <https://characterattack.wordpress.com>.
 60. „Uniți Salvăm Roșia Montana! Prima lună de proteste”. Available at <https://www.youtube.com/watch?v=obPcorM2wuM> și <https://www.rosiamontana.org/>
 61. Volkoff, Vladimir, (2009), „Tratat de Dezinformare”, Antet, Bucharest.
 62. Walton, D. N., (n.a), "Media Argumentation: Dialectic, Persuasion, and Rhetoric". Cambridge: Cambridge University Press.
 63. Walton, D. N., (1985), "Arguer's Position: A Pragmatic Study of Ad Hominem Attack, Criticism, Refutation, and Fallacy", Westport, CT, Greenwood Press.
 64. Wierzbicki, Piotr, (1996), „Structura minciunii”, Ed. Nemira.
 65. Zachmann, Sebastian, (5 February 2017), „Ședința de Guvern s-a încheiat: ordonanța de urgență a fost abrogată”. În *Adevărul*, available at http://adevarul.ro/news/politica/ora-1400-guvernul-reuneste-retrage-ordonanta-urgenta-modifica-legislatia-penala-abrogare-prorogareo-1_5896e8585ab6550cb825d49e/index.html