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AN ALGORITHM FOR ANALYSING MESSAGES IN THE CONTEXT OF ONE-WAY PERSUASIVE COMMUNICATION

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Abstract: *The report presents an algorithm by which everybody (not only researchers, scientists or experts) could analyse any messages in the context of different types of one-way persuasive communication. Basic concepts such as "one-way communication", "informational disorder", "fact-checking process", "critical thinking", "constructivist decoding", are defined. The main theoretical base for the elaboration of the proposed algorithm are ideas and principals that are developed in the scope of the theories of persuasion.*

Keywords: *one-way persuasive communication, critical thinking, constructivist decoding*

In the contemporary world we are overloaded with huge amount of information about different social objects and topics. We ask ourselves constantly "What is and where is the truth?" "What is good, what is fallacy?" "Are they trying to manipulate us causing harm to us?" That's why, more than ever we need either of useful tools or method to assess our perceptions of information from different sources and agents of influence. In this point of view, proposed report might would be helpful.

What does it mean "one-way communication"?
This happens when the flow of communication runs in one direction: from a sources to recipients (i.e. the recipient does not have the opportunity either to express and defend his point of view or to respond to the message by considering and discussing the argumentation of the sources). Sometimes this communication may be reasoned (the message contains reasons or arguments that confirm the stated opinion). In another cases it might be based on peripheral forms of influence – such as images, symbols, graphics, sounds, smells, colours, architecture etc. Moreover, the group discussion situations and those where the respondent is only informed about the opinion of one or more persons (groups) aren't of this kind. This distinguishes the effects of social influence (obedience, conformity, etc.) from the effects of the persuasive one-way communication. Certainly, in the real life situations the process is variable and more complicated (Prodanov, 2014; Moscovici, 2006).

The structure of one-way communication
The process of one-way communication (the structure) consists of four basic components: **source (agent), message, recipient** and the **channel**. The source is the subject who presents the message (he may have work out the message or just present it). The message is the component which is made up to persuade and to form the opinions. The recipient is receiver of the message – he (or they) is target persona or audience either. The channel is related to the means, tools and forms of

communication: How (which way, which means or forms by) the **message** gets to the **recipient?**

Commonly the content of the *message of the source* consists of two main things: FACTS (they are checkable) or/and OPINIONS (attitudes, beliefs – which are uncheckable). For example, if certain politic claims that there are 80 thousand immigrants in Bulgaria from Ukraine – this is a fact; but if he says that there are too many immigrants in Bulgaria from Ukraine – this is an opinion.

The Recipient is supposed to assess three things: *truth* (related to **facts**), *information* (related to **information disorder**) and *trust* (related to the **sources and agents – their competence and trustfulness**).

How should we relate to the "one-way communication" focusing the messages?

Some principal propositions which highlight the approach toward one-way communication process are:

• There are no such thing as neutral message;
• All messages are "constructed"(from the sources or agents) to persuade ;
• Each message has different characteristics, strengths, and a unique "language" of construction;
• The messages contain embedded values and points of view;
• The message reception quality varies depending on culture, individual skills, beliefs and experiences, therefore at a certain level everyone constructs their own meaning from media messages;
• The messages can influence beliefs, attitudes, values, behaviours, and the democratic process as well.

What could we say about the informational disorders?

The seven basic forms of information disorders (see Table 1) can be categorized in three groups: MISINFORMATION, DISINFORMATION and MALINFORMATION. The *misinformation* happens when the message contains unintentional mistakes such as inaccurate photo captions, dates, statistics, translations, or when satire is taken seriously. Despite this is kind of FALSENESS, but there isn't intention to harm – the likely negative consequences aren't deliberate. The *disinformation* happens when the agent of influence fabricates or deliberately manipulates audio/visual content - one example is intentionally created conspiracy theory or rumours. Here we find intention to harm. The *malinformation* is a case when the message consists of deliberate publication of private information for personal or corporative rather than public interest, such as "revenge porn"; deliberate change of context, date or time of genuine content either.

*Table 1
Seven common forms of information disorder

SATIRE or PARODY	No intention to cause harm but has potential to fool (it's about attitudes)
MISLEADING CONTENT	Misleading use of information to frame an issue or individual
IMPOSTER CONTENT	When genuine sources are impersonated

FABRICATED CONTENT	New content is 100% false, designed to deceive and do harm
FALSE CONNECTION	When headlines, visuals or captions don't support the content
FALSE CONTEXT	When genuine content is shared with false contextual information
MANIPULATED CONTENT	When genuine information or imagery is manipulated to deceive

Theories in terms of persuasion

1. One of the theories that is related to the issue of persuasion is *Elaboration Likelihood Model (ELM)* developed by Petty and J.Cacciopo (Petty, R. E., & Cacciopo,J., 1986). According to these authors there are two ways (routes) of persuasion: 1) **central route** - when people try to think deeply about the information, "weigh" the alternatives and perceive the topic as close and important to them; 2) the second one is **peripheral route** to persuasion - instead of carefully weighing and assessing the strength of arguments, people respond to simple, often irrelevant cues that define an argument as right, wrong, and/or attractive without the involvement of thought. May infer that when people get on the second route then they could be fooled by manipulators.

2. One another theory of this scope of research is Cialdini's conception about the principals of persuasion based on "Behavioural stereotypes" (Cialdini, R., 2006; Goldstein,N., Martin, St., Cialdini, R., 2008). The main idea here is that more often human beings tend to use several fixed automatic, reflexive and predominantly unconscious behaviours to react in certain situations consistently. Pragmatically, this has an aim to minimise the efforts and save the resources for more important activities or to facilitate the process of decision making. However, the problems turn up when experienced manipulators take advantage of this human propensity.

An Algorithm to analyse message

First Step: FACT-CHECKING

The process of fact-checking is composed of three phases:

1. Finding fact-checkable claims by consulting legislative records, media outlets (newspapers, magazines, radio, TV, web sites) and social media. This means also determining which major public claims (a) can be fact-checked and (b) ought to be fact-checked;

2. Looking for the best available evidence regarding the claim at hand;

3. Correcting the record by evaluating the claim in light of the evidence;

We have to keep in mind that trustworthy fact-checking organisations explain their process in public methodologies!

Second Step: Detection of STATISTICAL FALLACIES or Breaking the MAGIC of NUMBERS

Daniel J. Levitin warns us that when we are presented with numbers, we tend to assume that they represent facts given to us by nature and it's just a matter of finding them (Levitin, 2016). Let's examine numbers: sometimes, they are simply wrong, and it's often easier to start out by conducting some quick plausibility checks; if the

numbers pass plausibility, three kinds of errors can lead you to believe things that aren't so:

✓ How the numbers were collected (here we should examine sampling: some possible mistakes may stem either from the Participants Bias or Measurement errors or both of them)?

✓ How they were interpreted (here is important to explore the Plotting Things That Are Unrelated; sometime we forget that the correlation does not imply causation; in another cases we can see irrelevant comparison between "Apples and Oranges"; sometimes the Control Group is missed)?

✓ How the numbers are presented graphically? How to spot misleading graphs? To answer these questions we must be aware whether the data are correctly distributed on horizontal and vertical axes of the graphs.

Third Step: USING CRITICAL THINKING

According to Paul and Elder CRITICAL THINKING IS THAT MODE OF THINKING - ABOUT ANY SUBJECT, CONTENT, OR PROBLEM - IN WHICH THE THINKER IMPROVES THE QUALITY OF HIS OR HER THINKING BY SKILFULLY TAKING CHARGE OF THE STRUCTURES INHERENT IN THINKING AND IMPOSING INTELLECTUAL STANDARDS UPON THEM (Paul, Elder, 2010). EVALUATING AN ARGUMENT is one of the main skills deriving from the Critical Thinking method. An **argument** can be defined as a statement or set of statements, used in order to try to convince people that an opinion about something is correct. Below we can see some main types of fallacies that critical thinking can detect:

• AD HOMINEM FALLACY: attacks a person or a person's background, instead of the person's ideas (this is an attack on the character of a person rather than his or her opinions or arguments);

• SLIPPERY SLOPE REASONING: this is a conclusion based on the premise that if A happens, then eventually through a series of small steps, through B, C... X, Y, Z will happen, too, basically equating A and Z. So, if we don't want Z to occur, A must not be allowed to occur either. Example: if we ban a specific type of car because it is bad for the environment eventually the government will ban all cars, so we should not ban that particular type;

• REFLECTS A SEARCH FOR PERFECT SOLUTIONS: Falsely assuming that because part of a problem would remain after a solution is tried, the solution should not be adopted. In other words, that a course of action should be rejected because it is not perfect, even though it is the best option available (Example: there is no point in taking any anti-corruption action because we can never overcome corruption completely). But we know that nothing is perfect or 100% effective;

• AD POPULUM FALLACY - inappropriately appeals to common opinion: It uses an appeal to the beliefs, tastes, or values of a group of people, stating that because a certain opinion or attitude is held by a majority, it is therefore correct (based on the effect of conformity);

• APPEALS TO QUESTIONABLE AUTHORITY: Supporting a conclusion by citing an authority who lacks special expertise on the issue at hand;

• Engages in WISHFUL THINKING: making the faulty assumption that because we wish X were true or false, then X is indeed true or false;

• APPEALS TO EMOTIONS: appeal to emotion or argumentum ad passiones ("argument from passion") is a logical fallacy characterized by the manipulation of

the recipient's emotions in order to win an argument, especially in the absence of factual evidence; evidence is not presented, which means the audience isn't given a chance to think logically. Emotions are therefore used as the only basis for their argument;

- ATTACKS A "STRAW PERSON": the basic structure of the argument consists of Person A making a claim, Person B creating a distorted version of the claim (the "straw man"), and then Person B attacking this distorted version in order to refute Person A's original assertion;

- PRESENTS A FAULTY DILEMMA: a choice between two mutually exclusive options, implying that there are no other options. ... Also known as the either/or fallacy ("Either Russia will win the war with Ukraine or Russia won't keep existing any more");

- EXPLAINS BY NAMING: falsely assuming that because you have provided a name for some event or behaviour that you have also adequately explained the event or behaviour. One example of the nominal fallacy is the use of the word "instinct" to explain a given behaviour ("Critical thinking is instinct for the truth");

- DISTRACTS WITH GLITTERING GENERALITIES: the use of vague, emotionally appealing words that dispose us to approve something without closely examining the reasons (coach said to possible supporters: "We have the greatest team ever and it deserves your support.");

- BEGS THE QUESTION: the reason supporting the conclusion restates the conclusion in different words (tautology; example: "Programmed learning texts are clearly superior to traditional texts in learning effectiveness because it is highly advantageous for learning to have materials presented in a step-by-step fashion". Notice that by definition, "programmed learning" is a step-by-step procedure);

- DIVERTS ATTENTION FROM THE ISSUE BY INTRODUCING A RED HERRING: Red herring is a kind of fallacy that is an irrelevant topic introduced in an argument to divert the attention of listeners or readers from the original issue. In literature, this fallacy is often used in detective or suspense novels to mislead readers or characters, or to induce them to make false conclusions.

Fourth Step: THE DIALOGICAL APPROACH OF CONSTRUCTIVIST DECODING (ITHACA COLLEGE)

This approach includes two stages: first, **ANALYSING** messages, namely *deconstructing* them, in order to understand their functioning, purpose and target group; and second, **CONSTRUCTING** our own meaning from the interaction between the document (video clip, web page, print article, etc.) and our identity (age, experience, views, etc.). Therefore, the process is always partially unpredictable and improvised and we have to consider the route of persuasion participant has gone on. The phase before analysis should be focused on giving individuals insight into **their own IDENTITY – who they are, and who they are becoming, and how this affects their engagement with the message and other kinds of communication. Before diving into the practical aspects of fact-checking, subjects need to be aware of their biases, values and beliefs.**

According to this approach, **DECONSTRUCTION (ANALYSIS) FOCUSES ON:**

SOURCE: all messages are created. The key point is: Whose message is this? Who has control over the content?

AUDIENCE: messages are intended to reach audiences. Most messages are designed to reach specific groups of people – who are they? Why?

TEXT: what do you actually see and/or hear?

SUBTEXT: the "subtext" is an individual interpretation of a message. It is not actually heard or seen; it is the meaning we create from the text in our own minds;

PERSUASION TECHNIQUES: messages use a number of techniques to try to persuade us to believe or do something;

POINT OF VIEW: no one tells the whole story. Everyone tells part of the story from their point of view. Deconstructing a message can expose the values and biases of the maker, and uncover powerful ideological and value messages.

In Table 2, all the necessary questions that the recipients should ask themselves in order to analyse (decode) a given message are highlighted. After answering these questions, the recipients will be able to make a reasoned and objective conclusion about: first, the credibility (trustworthiness)) of the **source** of information; secondly, to assess whether the **information** is believable or it is a type of "information disorder" either this is a trial of using certain forms of fallacy or deception; thirdly, to elaborate an **opinion** or become aware why their opinion is like this, taking into account their own identity and their role in this process

Table 2

Key questions to ask when ANALYSING messages (Ithaca College: https://www.projectlooksharp.org/Resources%202/12BasicWaysBooklet.pdf):

Authorship	*Who made this?*
Content	*What is the message about?*
	What ideas, values, and information are overt? Implied?
	What is left out that might be important to know?
	How does this compare/contrast to other messages on this topic?
Purposes	*Why was this made?*
	Who is their target audience?
	What do they want me to do?
	What do they want me to think (or think about)?
Context	*When was this created?*
	Where and how was it shared with the public?
	What aspects of cultural context are relevant to consider?
Techniques	*What techniques are used to communicate the message?*
	How effective are those techniques (What are their strengths and weaknesses)?
	Why might they have chosen to use those techniques?
Economics	*Who paid for this?*
	Who might make money from this?
Effects	*Who might benefit from this message?*
	Who might be harmed by it?
	Whose voices are represented or privileged?
	Whose voices are omitted or silenced?
Credibility	*Is this fact, opinion, or something else?*
	How credible is the information?
	What are the sources of the ideas or assertions?
	Is this a trustworthy source about this particular topic?

Interpretation	*What is my interpretation of this?* *How do prior experiences and beliefs shape my interpretation?* *What do I learn about myself from my interpretation or reaction?*
Responses	*How does this make me feel?* *What kinds of actions might I take in response to this?*
And…	*What's my evidence?* *Why might that matter?* *Why do I think that?* *What else do I want (or need) to know?* *How could I find that out?*

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