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**LINGUISTIC PERSUASION IN THE MEDIATION OF SCIENCE
ON THE EXAMPLE OF *CORONA, FALSE ALARM?: FACTS AND
FIGURES***

BA thesis

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ABSTRACT

During the COVID-19 pandemic, difficulties communicating new medical and scientific information have emerged especially clearly. The lack of a unified message has divided many families, turned many people to conspiracy theories; a distrust towards governments, media, and science is spreading. As language is the main means of communication, it is important to research how the public may be influenced by different uses of language. In the most researched fields on persuasion such as politics, advertisements and journalism, the most used persuasive factors that can be connected to language are the utilization of emotions, authority, and references to crises and wars.

This thesis aims to study which methods are most used in the communication of medical science during the time of the pandemic in a pseudoscientific international bestseller *Corona, False Alarm? Facts and Figures* by Karina Reiss and Sucharit Bhakdi. Discourse analysis as a method of evaluating the language and context of the text is used. The results suggest that in the analyzed text, authority, emotion, references to wars but also punctuation are used to persuade the reader into supporting ideas that often go against the guidelines given by the government.

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LIST OF ABBREVIATIONS

CF?FF – Corona, False Alarm?: Facts and Figures

INTRODUCTION

During the last couple of years, especially since the beginning of the COVID-19 outbreak in 2019, scientific information has been one of the principal topics in all kinds of media. With more people gaining access to the internet, TV, and online books, the manner of presenting information is of utmost importance. As the disease was new, there was not always enough information to report, complicating the performance of twenty-four-seven news. Due to the disease being actively communicated and the public requiring information while it was still being researched, the disclosure of new knowledge was fragmented. This in turn resulted in complicated communication as the constant new information could contradict the old which, in some people, created distrust in the credibility of the media. As each media source, such as a news program, caters to a distinct audience with its own unique interests and preferences the message may be influenced linguistically, i.e. use the vocabulary, grammar, and other characteristics of language. Language affects the thoughts of the viewers and readers in a certain direction, be it intentionally or inadvertently. The difference in presentation has brought about opposing views among the consumers who tend to take the information at face value. Due to the abundancy of available information and the puzzling ways of mediating the knowledge on the COVID-19 pandemic has assisted in an increase of a split in society.

According to Ball (2021: 2) the development of vaccines for the virus has added to the confusion as besides making some countries more equal than others in terms of distribution, it presents another specific scientific topic to the discourse that needs to be communicated to the general public. Ball (2021: 4) exemplifies the general disorientation by the example of the United

Kingdom where in the initial stages of the virus, certain measures needed to be implemented to protect the public health, but there was mixed information on how the disease spreads and how to prevent it. When people are already facing difficult times in terms of livelihood and health, the disagreements between different news sources might lead a person to distrust the official sources and find something or someone that gives them certainty. However, this fragile state can be used to drastically change the way a person thinks and acts, as is the case with conspiracy theories, for example. Ferreira et al (2021) say that psychotic perpetual anomalies, being concerned with one's health and lacking knowledge on any topic is a factor in increasing people's beliefs in conspiracy theories. Ball (2021: 3) adds that in addition to the message itself being confusing, at times, the knowledge shared with the public came from unknown sources and did not rely on scientific evidence. For example, 'behavioral fatigue' was posed as a concerning health problem caused by lockdown, but the government scientists never confirmed it. (Ball 2021: 3) Ball (2021: 4) also describes the impact of the difficult nature of the work of governmental scientific advisers, as they are expected to produce objective scientific information while still supporting the views of politicians. With the amounts of deaths increasing, it became apparent that the efforts made by the government were not compatible with the stronger measures advised by the scientists. According to Ferreira et al (2021: 7), the lack of effective measures against the pandemic and the confusing information received can add to the amount of uncertainty which in turn may cause people to turn away from the government. Ball (2021: 4-5) suggests that the consequences of the delayed and hesitant nature of implementing public health measures should be taken as a reason to give scientific advisors more freedom to decide on what to broadcast to the public.

Therefore, it has become easier to take advantage of people due to the difficulties that have emerged during the COVID-19 pandemic. In addition to and maybe because of difficulties in media communication, the pandemic has encouraged the rise of a new wave of dystopian literature,

especially on the topic of health. To understand how the differences in opinions have arisen and to prevent this distrust between society and science in the future, it is important to be aware of the ways a writer can influence the beliefs of the reader.

The present thesis focuses on a book titled *Corona, False Alarm? Facts and Figures (CFA?FF)* by Karina Reiss and Sucharit Bhakdi which, according to Chelsea Green Publishing, is an analysis written by award-winning researchers on whether the protective measures during the virus have been justified. In the preview, dates, facts, background information, and the encouragement of the readers to form their own opinions on the crisis, are said to be the components of the content of the book. (Chelsea Green 2020) The original text was written in German, in addition to English, it has been translated into languages such as Estonian, Korean, and Japanese. The book has received conflicting reviews, with the top positive review on Amazon describing it as an “amazing view on how the principles of epidemiology were thrown out of the window on this epidemic” and the top critical review calling the book a “great gift for the knuckle-dragging, flat earthers in your family”, out of 2,447 raters on Amazon, 82 percent have given it five stars out of five (Amazon 2022). However, 67% of the ratings for the book on the website of an Estonian bookstore, Apollo, are one-star ratings, with the majority of the reviews being negative. Some Estonian reviews on Apollo call it “the best book ever^{*}” and say that “the truth is finally beginning to show^{**}” while others call it biased, “total gibberish^{**}”, or “total bullshit even for pseudoscience^{**}” (Apollo 2021). An article in an Estonian daily newspaper Eesti Ekspress has described *CF?FF* as a “book presenting a multitude of false claims^{**}” and “the handbook of corona deniers^{**}” (Raudsik 2020). As the reviewers of books on the websites tend to be customers with different occupations and attitudes, rather than experts in the relevant fields, the discrepancy in opinions is expected. As

* Translation mine

mentioned before, it was possible to witness a division in society due to the Covid-19 pandemic related issues, and such opinions reflect the context through which the book was read. Such conflict in opinions among the general public presents an additional reason for examining the methods used to communicate the message to readers of *CF?FF* as it has elicited strong sentiments in both the supporters and adversaries of the book. Therefore, the aim of the present thesis is to identify the main methods of linguistic persuasion in the book *Corona, False Alarm?: Facts and Figures* by Karina Reiss and Sucharit Bhakdi (2020).

1. LITERATURE REVIEW

1.1. Persuasion defined

Persuasion as a single term is often difficult to define. In linguistics, persuasion is often used as a term to describe the way writers can influence the thoughts of their readers in a certain direction. In the current thesis, the term persuasion will be used to represent the act of using language to change the recipient's direction of thought or to encourage the recipient to consolidate their already existing ideas if they conform to the ideas presented in the analyzed text.

Persuasion in language can be characterized by different practices of implementing it. Dillard (2014) divides persuasive language into *granular* and *thematic* features, *granular* being the differences on the level of words, phrases or sentences, *thematic* encompassing choices made on a higher level of abstraction. He suggests that *granular* language is comprised of features such as self-referencing, rhetorical questions, and conclusion explicitness. *Thematic* features are vividness, gain and loss framing, powerful and powerless language, and domineering language. (Dillard 2014: 178-184) Although powerless language is most often used in spoken language as it includes hesitations such as *well*, *uh*, hedges such as *I guess*, *kinda*, certain features of powerless language can also be hidden in a written text. For example, hedges *seem* and *appear* can commonly be found in numerous written works, although the reader cannot hear the writer hesitate, such words let them know of the unwillingness to claim something assertively. Hedges such as *kinda* and *I guess* also appear in informal styles of written language, such as messages or letters.

Blankenship & Craig (2011) add to the discussion by explaining that linguistic style, meaning one's personal and characteristic ways of speaking, writing, and choosing the

vocabulary, is something that might not change the content of information, but may influence the impression and message that the communicator is sending out. The authors find features such as linguistic intensity and, similarly to Dillard (2014), powerless language to be the influencers of the success of persuasion. (Blankenship & Craig 2011: 195) Blankenship and Craig elaborate on the psychological factors of linguistic persuasion and highlight the importance of the motivation of the recipient of the information (Blankenship & Craig 2011: 197). They explain that in written form, powerless language, such as tag questions, hesitations, and hedges, may hinder the persuasion in both cases, when the recipient is motivated and not motivated as it shows the speaker to have limited power. Powerless language may also lead the recipients' thoughts to be more speaker-related rather than message-related, therefore distracting recipients from the content of the message provided. (Blankenship & Craig 2011: 198-199) To an uninterested recipient, linguistic intensity (phrases like *extremely good*, *wonderful*) may have a persuasive effect by making a *proattitudinal* (supporting one's existing attitude) message seem more likeable, if the message is *counterattitudinal* (goes against one's attitude), intense language can make the recipient distrust the speaker even more (Blankenship & Craig 2011: 199) In addition to intense words, Van den Steen (2009: 448) introduces the factor of authority. In a face-to-face organizational setting, to influence the actions of their subordinates, a manager has to make a choice between persuasion through information and the presentation of their personal authority. However, authority and persuasion are not always opposing alternatives, since authority alone does not always suffice but is made more effective by the presence of informational persuasion and vice versa (Van den Steen 2009: 449).

1.2. Previous research on persuasion in other areas

Research on the topic of persuasion has previously mainly been carried out in fields which often directly depend on influencing the public such as politics, journalism, and advertisement. However, compared to each other and linguistics in a wider sense, persuasion carries a different role in each of these areas. The persuasion in politics is most often directed at the current and future voters whereas advertisements are generally addressed at people with the intention of gaining them as customers or prompting them to buy a product. Although quality journalism calls for balance and an unbiased style of presentation, it may still unintentionally persuade the reader already due to the fact of containing information that may possess influence in itself.

What concerns political persuasion, Crawford (2009: 107) says that the glue of politics is making an argument; the act of giving reasons for someone to believe and act in ways that are implied by the content of the presented argument. Arguments influence people through making them believe that they voluntarily find the reasons given in the argument to be valid. The reasons themselves, among others, may range from abstract claims to feelings. (Crawford 2009: 107) However, Crawford (2009: 107-108) draws a line between simple persuasion and coercion by claiming that coercion involves getting the other to act as one desires but denying that other the possibility to analyze their options; for example, a sanctioned country is expected to comply with a given solution, at this point, it is not possible for them to offer additional options. The author suggests that persuasion instead of coercion is chosen in politics for reasons such as wanting to maintain democratic peace, having reached a stalemate not possible to be solved by coercion, when there is a change in the parties to a dispute, or the emotional relationship between parties changes. In the last example, persuasion and argument are used towards current and potential supporters to influence them to change their attitudes towards the situation and the other party according to the new relationship. (Crawford 2009: 113) Speaking of democracy

and persuasion, Brader (2005) offers a method of influence which is often used in politics but which subverts the “rational decision making on which democratic processes properly rest” - using appeal to emotion in political ads. Brader (2005: 390) suggests that the emotions most often elicited in political ads are enthusiasm and fear. In addition to changing the voters’ feelings, emotional political ads can alter the way they vote. Elicited excitement consolidates the voter’s already existing beliefs and stimulates participation; on the other hand, fear helps create belief in new ideas, promotes persuasion and alertness. (Brader 2005: 388, 390)

Nordlund (2003: 1) analyzes influence in news reporting and explains that in journalism, by using manipulative language, the writer can portray a message in a concealed manner, the reader not being aware of constantly repeating information. (Nordlund 2003: 1) The author uses the term *linguistic manipulation* explaining that language is rarely completely value free as words themselves carry certain conceptions. Although most of the time, manipulative language is not conveyed on purpose as people tend to use the Grice’s maxims (quality, quantity, relevance, manner) as the standard of communication, the fact of using these maxims can in turn make people more susceptible to being manipulated themselves. (Nordlund 2003: 7) Thus, however impartial they try to be, journalists still present information to the public from their own viewpoint, therefore complete objectiveness should be seen only as the absolute ideal of journalism (Nordlund 2003: 6). The author suggests that the main persuasive techniques specific to journalism are sharpening, concretization, simplification, polarization, intensification, personification, and stereotyping. More general tactics are concealment, distortion, and falsification. (Nordlund 2003: 8) Among other methods of persuasion, the author brings out the use of metaphors. Newspapers mainly use metaphors, in case of political journalism mostly connected to war and sports, to add color to the text but in some cases, they are used with the intention of evoking certain feelings in the reader. (Nordlund 2003: 13-14)

Inflicting feelings as means to persuade is also used in advertisements. In a corpus-based analysis, Labrador et al (2013) analyze the persuasive language used in online advertisements. In terms of advertising electronics, the authors found that emphatic enumeratives, such as *not only... but*; and *additionally*, were used the most. Multiple modification, quantifying expressions, -ing clauses, verbless clauses, -ed clauses, and references to familiar objects were also used to persuade people to buy products. (Labrador et al 2013: 44) To make the customer feel as if the writer of the advertisement is close to them and trustable, informal style is used. Elements used to convey that closeness are, for example, the second person *you*, contradictions, exclamation marks, ampersand, puns/catchphrases, alliteration, clipping, lack of auxiliaries in questions, and subject omission. (Labrador et al 2013: 45) As jokes and familiarity are often used, it can be said that the success of persuasion in advertisements relies on the positive and comforting emotions the language conveys in the recipients. According to Hasford et al (2015: 836), in order to change the attitudes of consumers, stimuli that induce emotions are often used in a technique called emotional appeal, also touched upon in the section on politics. Through this method, fear, guilt, sadness, anger, or any other emotion is evoked in the customer to cause them to support the advertiser's ideas. Taute et al (2011) propose that the way one responds to emotional advertising depends on their overall personal ability to process emotional information.

As science and medicine are often seen as the fields of sharing unbiased and objective information, there has been less research on the topic of persuasive language there. Still, some studies are emerging. For example, Meng et al (2017) have researched the relation of point of view to competence regarding the persuasiveness of a health narrative on diabetes. They found that first

person point of view in the narrative was slightly more effective than third person point of view, since point of view and competence influence identification which in turn also influences the effect of competence. (Meng et al 2017: 8)

In addition to point of view, punctuation is a part of language that can persuade the reader. Bleske-Rechek et al (2019) carried out research with hypothetical job application cover letters by giving people three letters that had the same content but different rates of grammar errors in them (no errors, 2 mistakes in 100 words and 4 mistakes in 100 words). All the letters were written by the experimenters, but the participants were informed that the authors were students. They discovered that the presence of grammar usage errors in written text may cause readers to negatively judge the application writer's competence and even personality. Opinions of the writer's unfavorable traits also expanded to attributes that had no direct connection to grammar, such as how team oriented the writer is (Bleske-Rechek et al 2019: 48). Readers on a higher level of education tend to be more critical of how capable, hard-working, and team-oriented the writer is based on their use of grammar (Bleske-Rechek et al 2019: 49). Subtleties of meaning are important in fiction, but they may carry even more importance in texts used to influence the general public. As stated by Sun and Wang (2018), the use of punctuation, for example, is often regarded as a matter of tradition, the style of the writer or merely just a way to convey intonation in a written text. However, punctuation can have two larger functions: *grammatical* and *rhetorical*. The *grammatical* function conveys the structural boundaries between parts of texts and helps connect them to each other. The *rhetorical* function, however, emerges when the writer wants to emphasize a certain message. (Sun & Wang 2018)

An example of punctuation being used as an amplifier or modifier of different meanings is the use of quotation marks. Predelli (2003) discloses that quotation marks used with such purpose are called scare quotes, the use of which, according to many scholars, is unacceptable in formal

writing as it usually conveys a thought through an apologetic, concealed manner. It is considered more appropriate for writers to express their thoughts and ideas in an uncomplicated and unapologetic way. (Predelli 2003: 2) It is possible to divide the use of quotation marks as scare quotes into smaller categories based on the writer's reasoning for their use. The author may use scare quotes when the correct term for the context cannot be found, to present their regretfulness, they use an incorrect one in quotation marks. (Predelli 2003: 2) The same applies to using informal or slang words in formal settings and other cases of using a word inconsistent with the remainder of the style of the written text. (Predelli 2003: 2) Additionally, quotation marks may be used by the author to distance themselves from the quoted words and to inform the reader that the author is, in fact, opposed to the word in its literal or commonly used meaning. This kind of quoting often presents sarcasm and hostility toward the terms and words in question. (Predelli 2003: 2-3) Quotation marks may also be used to simply highlight or single out a word or term to refer to a general background or other authors. In this case, the author expects the reader to be familiar with the background that is hinted at, such as "myths of 'paradise lost' are common in folklore". (Predelli 2003: 3-4) In all the aforementioned scenarios, the use of scare quotes has the purpose of directing the reader's attention to the quoted word, no matter the context or implications of the act of quoting itself (Predelli 2003: 4).

Although differing in the exact topics and fields of research, previous works have provided an outline of the main methods of persuasion which prove to be useful in mapping the methods identified in *CF?FF*. The methods prevalent among earlier works, which will be used in the current thesis, are as follows: polarization (Nordlund 2003), *concealment* (concealing opinions as facts) (Nordlund 2003), *authority* (Van den Steen 2009), *metaphors* and *references* to serious catastrophes such as wars (Nordlund 2003), *emotional appeal* (Brader 2005; Hasford et al 2015), and using certain aspects of *punctuation* to strengthen the message (Predelli 2003; Labrador et al

2013). As previous research has mostly concentrated on the psychological effects of the mediation of science and medicine, there is room for research on the specific ways that language can be used to drive these narratives towards a certain desired direction. Therefore, the current thesis tries to add to the research of linguistic persuasion in the mediation of science by exploring a narrative on the COVID-19 pandemic by looking at it from a linguistic viewpoint.

Due to the public being confused and divided on the topic of Covid-19, methods otherwise used in politics, such as *eliciting emotion*, *posing certain arguments*, and in extreme cases, *coercion* can be used by conspiracy theorists, supporters of dangerous alternative medicine or simply authors who aim at sales profit. Persuasion mostly seen in journalism, such as *polarization* or *personification* can be used in pandemic literature to further assure the supporters of one side that the other is unfavorable whereas *personification* can help make different pandemic-related life events more real and imaginable for the reader. *Concealment* can aid in making sure that the readership is mostly only aware of the preferred information, hiding therefore the facts that may otherwise push them to support the opposing side. Although in most pandemic-related books, the authors are not directly trying to sell items to the reader, in times of confusion and miscommunication, the book and the information it contains also become products. Therefore, using persuasive tactics from advertising such as *punctuation*, *informal language*, and, *once again*, *emotional appeal*, the book has a better chance to gain the readers' support.

1.3. Methodology

To identify the methods of persuasion used in *CF?FF*, text analysis and discourse analysis will be used. This method allows for the text to be studied in the context in which it appears, taking into

account the fact that information is impacted by the society and culture surrounding it and vice versa. In the case of *CF?FF*, it is important to remember that at the time of writing, the authors were surrounded by a world in turbulence, be it in the field of politics, healthcare, or social wellbeing. Due to these uncertainties, readers' opinions had also been divided. These and many more factors have the capability of giving seemingly simple thoughts new meanings and explanations. Therefore, discourse analysis helps to see the relations between the persuasive use of language and divisions of opinions in society regarding issues surrounding Covid-19.

2. LINGUISTIC PERSUASION IN *CORONA, FALSE ALARM? FACTS AND FIGURES*

2.1. Facts and figures: the title

According to Rakusan (2016) the title is the most important part of a publication of any kind, be it a scientific article or a book. The title should be short, but it should contain the main message of the text that it represents. Moreover, it should include all the key words necessary for it to be retrievable through text search, therefore, based on its findability and level of captivation, the title can prove to be the deciding factor of the success of a text. (Rakusan 2016) The authors of *CF?FF* have provided a title formulated to provide comfort for their readers as the title contains the words *facts* and *figures*. The *facts* imply freedom for the reader to separate the truth from the distractions and opinions, and *figures* provide the reader with statistics from trustable sources. If a potential reader has searched for books containing only facts on the virus, the title is likely to appear. For some readers, the knowledge that the book contains only unbiased details may be enough to reduce their alertness and readiness to critically conceptualize the received information, making it an example of a proattitudinal effect of persuasion. On the other hand, the presence of the word pair *false alarm* helps attract both kinds of readers; the ones who believe in the pandemic being a hoax and the ones interested in seeing if the book really considers COVID-19 as a false alarm. Evidently, in accordance with Rakusan (2016), *CF?FF* has been given a successful title; it contains key words attractive to many audiences, it is concise but in addition to that, leaves some room for imagination. As the title is short but conveys a large thought, it seems to follow Grice's maxims of quality and quantity (meaning that the message is not too long nor too short and contains truthful information, in this case *facts* and *figures*). Therefore, the construction of the title plays a

role in its believability; people often use the maxims in their communication and therefore trust others to do the same (Nordlund 2003).

2.2. Appeal to emotion

The book analyzed in this thesis, *CF?FF* is not strictly a work of advertisement, per se, but in an event characterized by global disagreements, information has become a marketable product. To win that disagreement, one side needs more supporters than the other and the authors of the book in question have often chosen to use tactics of emotional appeal, usually seen in journalism and politics. Even though the title of the book promises facts and figures, the information it contains is presented through emotional descriptive vocabulary which mostly aim at and function as eliciting fear or anger.

In *CF?FF*, emotional reactions are mostly evoked through describing people with illnesses other than covid, such as “Care of tumor patients was catastrophic. ...patients waited in agony for the next appointment – alone with their fears and the single remaining question: how much time was still left to them.” (pg. 54) In this example, the descriptive word *catastrophic* demonstrates the severity of the situation perceived by the writers. *Agony* describes a patient in need of immediate medical aid, pairing it with *alone with their fears* suggests that the necessary aid is not available. The sentence is written as if being a part of a real person’s end of life story, the described fear and hopelessness can evoke emotions like sadness and anger, in a proattitudinal message, this can further distance the reader from science and medicine (Blankenship & Craig 2011). To the previous story, “the consequences must be profound” (pg. 55) is added to consolidate the influential message, likely demonstrating intentional persuasion.

In addition to cancer, senior citizens are used in *CF?FF* to persuade through emotion,

mostly to support the idea that the measures against covid are harmful to elders, removing their possibilities of speaking to other people. For instance: “But what happens when, all of a sudden, the café and everything else is closed? No more visits to old friends, no more social events. And no visitors either:” (pg. 55) The description of lonely elders are also paired with terminal illnesses, describing them as “people who have not been able to leave their beds for days weeks” (pg. 56) and whose “tumors have spread throughout their bodies and are in constant pain” (pg. 56). In addition to the sadness these descriptions bring, guilt is added: “Most no longer care whether their loved ones bring the coronavirus to them, as long as someone is there to hold their hand, to talk about the past and to whisper I love you and farewell.” (pg. 56) As such descriptions of sadness, pain and loneliness are often used repeatedly, the appeal to emotion through the elderly seems intentional as well.

Another topic important to the general population, children, is used to inflict the feelings of anger and unjust: “Separation from key people like grandma and grandpa, auntie and uncle, their best friends – the closed schools, inaccessible playgrounds and barred sports fields disrupt their lives.” (pg. 57) Individual family members are described, which helps the reader associate the situation with their own life. *Barred sports fields* illustrates children being forcefully kept out of physical activity, therefore hinting at the harmful physical consequences for children. “Teachers who normally play important roles in safeguarding endangered children are gone” (g. 57) implies that due to the closing of schools, some children will be facing physical assault. The following sentence “Who then should notify the youth welfare office should the need arise?” (pg. 57) is posed in the form of a rhetorical question, again inflicting feelings of guilt. To readers with children, such use of emotional appeal may have an influential effect against the safety measures used in schools (Blankenship & Craig 2011).

Sadness and unjust are also evoked by describing the situations of the less well off,

for example: “In India, there are hundreds of millions of day-labourers, many of whom led a hand-to-mouth existence before... They are “protected” against the coronavirus and are in turn left to starve” (pg. 58) In this case, the image of poor workers is created to present the already existing unfairness. Additionally, starvation is used to further inflict sadness and anger towards the ones responsible for the measures that have caused the situation. In an already emotional message, scare quotes are used with the word *protected* to imply that the situation is causing people to starve with no beneficial effects against COVID-19.

After the descriptions of children, elders, the terminally ill and the poor, the authors ask a rhetorical question: “Were many lives saved through these measures?” (pg. 59) Having put the reader in a negative emotional state, in a proattitudinal case, encourages the opposition towards the government and science (Blankenship & Craig 2011). Accordingly to previous examples, the topic is concluded with “One thing is certain. The immeasurable grief that these measures have inflicted cannot possibly be put into words or numbers.” (pg. 59) *Immeasurable grief* implies that in the authors’ opinion, the situation is tragic. The confidence in this opinion is expressed with “one thing is certain”, implying that the following is a fact. The tragic nature of the descriptions is repeated by claiming that the consequences “cannot possibly be put into words or numbers”, possibly indicating a disbelief towards the statistics covered in media. In all the examples, a reader who already agrees with the negativity of the measures will find the inflicted emotions as proof of something being wrong. However, such stories can make the message more unacceptable in counterattitudinal cases, as using strong emotions in science communication is not standard practice. (Blankenship & Craig 2011)

2.4. Persuasion and authority

As *CF?FF*, already going by the title, promises to deliver facts and figures. However, this particular book is not aimed at scientists or researchers [in the preface, the authors explain that the book was written for the German public (pg. 10)] and the average reader does not usually look up or really analyze the quoted sources. Therefore, many readers will be evaluating their trustworthiness from the way the authors describe the sources.

In *CFA?FF*, it is implied that information is confirmed by trustable, authoritative figures.

In the *About the Authors* section, Karina Reiss is described as follows:

...studied biology at the University of Kiel... She became assistant professor in 2006 and associate professor in 2008... She has published over sixty articles in the fields of cell biology, biochemistry, inflammation, and infection, which have gained international recognition and received prestigious honours and awards. (pg. 108)

Sucharit Bhakdi is introduced in the following passage:

...educated at schools in Switzerland, Egypt, and Thailand. ...studied medicine at the University of Bonn... He was a post-doctoral researcher at the Max Planck Institute of Immunobiology and Epigenetics... He was named chair of Medical Microbiology... Dr. Bhakdi has published over three hundred articles in the fields of immunology, bacteriology, virology, and parasitology, for which he has received numerous awards... (pg. 109)

In these excerpts, both writers are described as educated people, using the terms *dr* and *professor*.

They are portrayed as valued scientists in fields such as biology, infectiology, immunology, virology, and biochemistry which adds to their authority as *CF?FF* is a book on the topic of COVID-19, a viral illness. However, they are also said to be husband and wife living with “their three year old son, Jonathan Atsadjan, in a small village near the city of Kiel.” (pg. 109) To readers who support the general message of the book, this may have a comforting effect. To those who are apprehensive, the personal information may take away from the authors’ credibility as professionals.

The authors do not only highlight their own personal power, but they also present information through their own assessments of the prestige, competence, or authority of the source of said information. In *CF?FF*, there is a tendency to describe the sources that support the authors' ideas in a concrete, meticulous manner, stating the source's name and title, highlighting the facts relevant to the book, such as "the immunologist and toxicologist Professor Stefan Hockertz" (pg. 80), "Nobel laureate Professor Michael Levitt"(pg. 63), or "Epidemiologist Professor Anders Tegnell, who obviously learned from mistakes he had made during the swine-flu epidemic" (pg. 60). The words *immunologist*, *epidemiologist* give the sources credibility as these are the topics most closely connected to the pandemic.

The opponents are often generalized and represented as some larger, more diffuse entity embodying the biased, uninformed, and blindsided part of the society. This conflicting group is often called the media, politicians, the World Health Organization (WHO) or it is referred to in a more ambiguous manner such as *they* or *the situation*. Furthermore, the authors attempt to reinforce the source's authority by directly contrasting their work and bravery to the laziness and fearfulness of the opponents. This comparison highlights the importance of the idea that the supporters of the authors' viewpoints are real, knowledgeable people, but they are in the minority compared to the all-encompassing opposing entity. In many cases, the references to authority are paired with scare quotes and rhetorical questions, the former used to convey sarcasm using quotation marks and the latter are often used to make a derogatory point against the opponents. References to the acumen of the supporting authority and the overwhelming ignorance of the opposing entity can be seen in the following excerpt:

...we do bear witness to the absurd situation where the elderly seek to protect themselves by obeying the chant that sounds around the world: "Stay at home". Physical inactivity is pre-programmed, thromboses included? Swedish epidemiologist Professor Johann Giesecke recommended exactly the opposite: As much fresh air and activity as possible. The man knows his job! (pg. 19)

In this case, there is no direct reference to who the opposing side is, it is described as a *chant that sounds around the world*, the word *chant* implying that the opponents are in unison, repeating each other's ideas. The emphasis on the auxiliary *do* in "we do bear witness" affirms the fact that the issues on the other side are visible to the authors and therefore should be visible to the reader as well, *we* unites the authors with the supportive readers. The phrase *absurd situation* is used, indicating the high prevalence of the opposing opinion, but also irritation. *Absurd* is a strong descriptive of the authors' opinions, opposing the idea of its title that declares facts.

The notion of everyone and everything acting against the skilled minority may bear the intention of inducing a sense of injustice, inequality, or even oppression. In addition to the mere number of opponents, the authors exacerbate the severity of the situation by equalizing staying at home with the occurrence of thromboses, therefore implying that the guidelines for staying healthy during the pandemic are, instead, announced to worsen the health of the elderly part of the public. After confirming to the reader that the views of the opponents are overwhelming and even dangerous, the opinion of a supporter is presented. "Professor Johann Giesecke recommended exactly the opposite... The man knows his job!" is presented in a positive way, it contains praise with an exclamation mark along with the word *professor* being spelled out entirely, instead of substituting it with *Prof.* (pg. 19) The complete spelling of the authoritative position *professor* may just be the question of the authors' personal style, but in the present case it also functions as a marker of authority and trustworthiness.

2.5. References to war and catastrophes

Comparatively to persuasion techniques in politics and journalism which often include metaphors of violence, *CF?FF* presents references to war and other catastrophic occurrences to

stress the negative nature of a relevant event, time, or topic. References and comparisons to wars and extreme political conditions in the past are used here as a way to encourage the reader to see the severity of the situation and persuade. In the preface, the authors use the phrase *draconian quarantine measures* (pg. 10) to describe the restrictions applied in the beginning of the COVID-19 pandemic. By referring to the Draconian constitution, known for including unnecessarily brutal punishments, the authors notify the readers that they find the rules of quarantine to be unfair and possibly even cruel. The preface also contains the following sentence: “Civil rights were restricted as never before since the end of the Second World War” (pg. 10). In this case, the authors directly compare the pandemic to a war, *never before since the end of...* equates measures taken to combat the pandemic, such as staying home and wearing masks, to the aftermath of the largest war in the world. However, this method has a potential to have the opposite effect depending on the reader. Confirmation bias helps people find peace; if a reader already believes that they are facing discrimination, finding others who think the same way will confirm that belief, resulting in a feeling of belonging. As the reasons for the comparisons are explained, using such comparisons to tragic events in history can be considered intentional persuasion. Therefore, statements equating one’s suffering to conditions in war, such as “the government embarked on a crusade of fear-mongering that defied description” (pg. 30) may increase the amount of people distrusting their government, media, and scientists. In the case of the latter example, the government is said to be on a *crusade*, implying the forceful imposition of something otherwise not accepted by the general public. *Fear-mongering* describes the act of creating more fear than necessary, possibly aimed at the portrayal of the pandemic in media. *Defied description* suggests that in the authors’ opinion, the measures were unnecessary and scientifically or logically unexplainable. However, for people that really are in a situation of war or still have memories of it, this comparison may make them distrust the writers as they lose accountability.

On the contrary, references to catastrophes were used to ridicule the other side, for example: “There was talk of a “tsunami” in the wake of which countless lives would be claimed unless we managed to “flatten the curve.” (pg. 32) In this instance, the word *tsunami* is put in scare quotes, indicating its indirect and disapproving use, the same occurs with *flatten the curve*. Unlike the previously mentioned references to war, here *tsunami* is portrayed as a word too harsh to be used in the context of a pandemic. Against a comparison to the death rate of the Spanish flu, in *CF?FF*, the following is said: “But at the time of the Spanish flu, antibiotics were not available to treat secondary bacterial infections that were the main cause of death. Consequently, people of all ages died.” (pg. 41) Here, the authors find the comparison of COVID-19 to the Spanish flu irrelevant as over time, the medical situation has changed. This, however, contradicts the comparisons of wars with the preferred ideas as since the Second World War, politics, media, and medicine have developed, bringing the comparisons to the same level as the comparison to the Spanish flu.

2.6. Persuasive punctuation

In written language, grammar as a set of certain rules plays a great role in the construction and moderation of meaning. In the book of interest, *CF?FF*, scare quotes are often used. The authors of the book have mostly utilized quotation marks as a tool to present sarcasm or disbelief towards certain words or concepts. An example of using scare quotes is present in the title of the second chapter of *CF?FF*: “How dangerous is the new ‘killer’ virus?” (pg. 13) In this particular example, the use of a word such as *killer*, which already has strong connotations by itself, would be enough to catch the reader’s attention. By pairing the already alarming word with scare quotes, the authors use both grammar and meaning to highlight their message. However, according to Predelli (2003), the nonstandard use of quotation marks may have varying objectives, depending

on the context and situation. As the title is introduced in the form of a question, there is not much information surrounding the quoted word. Therefore, to find out what exact idea the quotation marks are supposed to highlight, the reader is obliged to keep reading. For that reason, the title of the second chapter seems to be functioning in a similar manner to those found in newspapers and magazines; the more confusing and thought-provoking the title, the more interested the reader is in finding out what happens in the following text. Nordlund (2003: 30) explains that sometimes words are used exclusively with the intention of inducing and intensifying emotions. In the case of the title “How dangerous is the new ‘killer’ virus?”, with the use of the quotation marks, the readers cannot be completely sure if the word killed is a direct quotation from a source, a metaphor, a sarcastic remark or even a joke. It first evokes confusion and, according to the reader’s speculation on the thought behind the word, it may then elicit fear, anger, relief, or even more confusion. By grasping the reader’s attention and generating disorientation, the authors make sure of the reader’s need for explanation, therefore preparing the reader to be more willing to accept the ideas presented in the following chapter itself.

The use of scare quotes continues in the chapter following the aforementioned title although the message. In the text, the quoted words are accompanied by context and there is more for the reader to base their opinion on. The authors present their distrust in the media, politicians, the World Health Organization, and the classification of the virus in the laboratory and finish the first paragraph of the chapter by saying, “...the number of ‘cases’ surged and the virus vaulted to the top of the list of existential threats to the world” (pg. 13). In this case, as the reader has already been provided with information against the competency of people responsible for reporting the virus, the quoted word acquires a sarcastic undertone as in the context of the text, a case is something that cannot be taken seriously in its literal meaning. The same tone persists through the first part of the chapter and towards the end of the section, a sentence ends with “...the conclusion

followed that the danger of ‘COVID-19’ was probably overestimated.” (pg. 14) Here, the quoted word was preceded by thoughts on the fatality rates of the COVID-19 virus compared to other coronaviruses. As it was expressed that the particular virus is not more fatal than others, placing COVID-19, the main topic of the sentence, between quotation marks, gives it attention and undermines it at the same time. Similarly to *cases*, the use of *COVID-19* in scare quotes helps the author distance themselves from the literal meaning of the word while dismissing it in a concealed manner (Predelli 2003). The disapproving tone and emphasis on the inadequacy of certain terms continues through the whole book. Examples of words and terms placed in sarcastic scare quotes in the book include *coronavirus deaths*, *high risk*, *epidemic of national concern*, *valid*, *vital importance*, and *coronavirus patients*, the first of the terms being used the most and sometimes preceded with *so-called* (pg. 2020). The phrase *so-called* presents the opinions of the authors which is usually not present in scientific texts. Therefore, it gives the text a colloquial, informal tone which in a proattitudinal context may make the reader feel that the writer is passionate and therefore trustable. However, for readers whose attitudes differ from the authors’, such expressions of opinion may reduce the credibility of the information.

In addition to scare quotes, *CF?FF* presents question marks and exclamations, used both to highlight an idea or to ridicule the opposing side. The authors speak of the lack of a complete lockdown in Hong Kong and end their argument with “And what a surprise: Here, too, it worked!” (pg. 62) In this case, an exclamation mark is paired with the sarcastic “what a surprise”, as if signaling to the reader that the idea stems from common sense. Exclamation marks are often also paired with words written in all capitals: “They were NOT recommended IN ANY CIRCUMSTANCES!” (pg. 63) By doing so, it is possible to stress selected words, making sure the reader is aware of the most important parts of the sentence. In some instances, strong emotional words, all-capitalization and exclamations are used in one-word comments such as “HORRIBLE!”

(pg. 46) The use of capitalization firstly attracts attention to the stressed words, emotional appeal in this context elicits anger or fear towards the opposing side, and the exclamation marks provide some informality, giving the feeling of a personal, encouraging relationship between the readers and authors.

Questions are used throughout the text to give ground to discussion, for example “How many people die of COVID-19 compared with influenza?” (pg. 22) Mostly, the answers to such questions disagree with the opposing side on the topic: “Is there a difference with the flu? No.” (pg. 24) Questions also appear in the form of a sarcastic citation of the information in media such as this sentence satirizing the possible consequences of COVID-19, “It may even find its way to our central nervous system?!” (pg. 24) Rhetorical questions are also used in a persuasive manner, indicating that there is only one answer to the question, for example “Is this the right way to fight a disease with relative low fatality rate?” (pg. 68) Dillard (2014) groups rhetorical questions with self-referencing and conclusion explicitness into *granular* persuasive language, encompassing influential decisions made on a lower level of abstraction, such as words. A subchapter titled “What did the government do right?” includes a single question mark followed by “The authors have no answer to this question, they look forward to receiving yours.” (pg. 50) In this example, the title itself contains a rhetorical question which traditionally is not part of scientific literature. The individual ? emphasizes the fact that the authors find there to be no answer to the question before explicitly saying so. In counterattitudinal cases, the single ? may give the impression of provocation from the authors. The following *they look forward to receiving yours* can cause an already agreeing recipient to further consolidate their beliefs but if the persuasion has not been successful, the remark may come off as sarcastic and criticizing.

CONCLUSION

With the beginning of the COVID-19 pandemic in 2019, scientific information in the news has become a common occurrence. Due to the novel nature of the virus, communicating the information was difficult and new messages were reported in fragments, creating some confusion in the general public. Due to the confusion, belief in the government, media, and science decreased, a split between the supporters and advocates emerged. One aspect of communication is language which can intentionally or unintentionally change the way a message is received. Therefore, it is important to discover how language could have played a role in the rise of a societal disunion. Most research on persuasion, the ways in which one can influence the other, has been carried out in fields such as politics, journalism, and advertising as these fields often rely on persuading their clients. The current thesis therefore helped fill the gap in research on linguistic persuasion by concentrating on the aspects concerned with language. To gain support or clients, in politics, references and metaphors of war are common, in advertising, emotional appeal is used to either consolidate or change the potential client's thoughts and informal language is used. In journalism, techniques such as concealment and polarization are common. In this thesis, discourse analysis was used to identify the methods of linguistic manipulation used in communicating science and medicine on the example of *Corona, False Alarm? Facts and Figures*. Despite the title, the analyzed book contained persuasion techniques such as emphasizing the authority of the authors and sources, emotional appeal, references to war and other tragic events, and different kinds of persuasive punctuation such as scare quotes, exclamations and questions. As the book is one of many pandemic-related

works relevant in regular households, further research on the topic would be valuable. Being aware of persuasive language is helpful, especially in times of complicated communication.

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RESÜMEE

TARTU ÜLIKOOL
ANGLISTIKA OSAKOND

Kertu Paas

Linguistic Persuasion in the Mediation of Science on the Example of *Corona, False Alarm?: Facts and Figures*

Lingvistiline veenmine teaduse vahendamisel “Corona, False Alarm?: Facts And Figures” näitel

Bakalaureusetöö

2022

Lehekülgede arv: 33

Annotatsioon:

Seoses COVID-19 pandeemiaga on nii meedias, valitsuses kui ka inimestevahelises suhtuses tekkinud ebakõlasid, mis on osati mõjutatud keelekasutusest. Bakalaureusetöö eesmärgiks on lingvistilise veenmise võtete tuvastamine ja analüüsimine raamatus ”Corona, False Alarm?: Facts and Figures.

Bakalaureusetöö koosneb sissejuhatuses, kirjanduse ülevaatest, raamatuanalüüsist ja kokkuvõttest. Sissejuhatuses seletatakse kommunikatsiooniprobleemi olemasolu ja arvatavaid põhjuseid. Kirjanduse ülevaate esimeses osas on defineeritud mõiste ”veenmine” ning kirjeldatud selle esinemisviise ja -kontekste. Teises osas on teoreetiline taust tööd poliitikast, ajakirjandusest ja reklaamindusest. Seejärel seostatakse neil aladel esinevad veenmisviisid antud töö valdkonnaga. Raamatuanalüüs on jagatud viieks leitud veenmisviiside järgi: pealkirja analüüs, emotsioonide kasutus, veenmine ja autoriteet, viited sõjale ja katastroofidele, ning veenev kirjavihemärgistus. Meetodina on kasutatud diskursusanalüüsi.

Leiti, et lugejapoolset toetust emotsioonide kaudu tahetakse kõige tihemini saavutada kurbuse ja viha tekitamisega. Nii autorid kui raamatu ideed pooldavad allikad on kirjeldatud autoriteetsematena, kui vastasargumendi esindajad. Viirusevastaseid meetmeid võrreldakse sõdade ja traagiliste sündmustega, kuid vastasargumendi esitaja poolseid võrdlusi kritiseeritakse. Veenmiseks kasutatakse sarkasmi ja distantsi näitavaid jutumärke, hüüumärke ja küsimärke retooriliste küsimuste esitamiseks.

Märksõnad: Inglise keel ja keeleteadus, pandeemiakirjandus, veenmine, diskursusanalüüs

Lihtlitsents lõputöö reprodutseerimiseks ja lõputöö üldsusele kättesaadavaks tegemiseks

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Autorsuse kinnitus

Kinnitan, et olen koostanud käesoleva bakalaureusetöö ise ning toonud korrektselt välja teiste autorite panuse. Töö on koostatud lähtudes Tartu Ülikooli maailma keelte ja kultuuride kolledži anglistika osakonna bakalaureusetöö nõuetest ning on kooskõlas heade akadeemiliste tavadega.

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Lõputöö on lubatud kaitsmisele.

Katiliina Gielen

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