

DOCTORAL DISSERTATION

THESIS BOOKLET

VISUAL ARGUMENTATION: FROM A DUAL
MODEL OF UNDERSTANDING TO PRAGMA-
DIALECTICS

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2023

EÖTVÖS LORÁND UNIVERSITY
Faculty of Economics
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Doctoral Dissertation

Thesis Booklet

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Budapest, 2022

Theses

After presenting the relevance, structure and objectives of the paper, I will explain the main theses thereof. As presented below, theses 1 and 2 integrate the relevant findings of the dual inference model of cognitive psychology into the definition of visual reasoning, while theses 3 and 4 apply to the reconstruction of visual arguments. Theses 7 to 10 pertain to the implicit visual debate of commercial communication. These theses contain general findings on visual argumentation and informal logic, including pragma-dialectics and strategic maneuvering, but my thesis is also based on the analysis of an elected case study, on which further theses can be formulated (see points 5 and 8).

1. The methodology of visual argumentation as an autonomous disciplinary field can be derived from verbal informal logic, but the dual inference system of cognitive psychology enriches this framework.
2. The message of the picture is understood through the processing mechanism of System 1, if the picture contains a visual argument marker, then this system also draws a kind of conclusion, however, the reconstruction of the precise visual premise-conclusion structures is carried out by the processes of System 2.
3. The reconstruction of visual and multimodal arguments should follow the same pattern as the reconstruction of verbal arguments.
4. The Key Component Table developed by Leo Groarke for the assessment of multimodal arguments cannot be used to handle implicit visual arguments.
5. The Waltonian schemes (argument from analogy and argument from consequences) are suitable for the evaluation of visual arguments, because the implicit content of the images can be fully integrated into the reconstruction.
6. In the competition proceedings brought by the Hungarian Competition Authority (hereinafter referred to as “Authority”) in the case of Dove versus Nivea against prohibited comparative advertising, the Authority could have demonstrated that the “tulip advertisement” is likely to mislead the consumer by using the method of reconstruction of the visual argument and incorporating in the analysis the implicit premise that “human skin has similar characteristics to tulips”.
7. Advertisements can be analyzed not only as arguments (argument2: pre-mise-conclusion structures), but also as implicit debates, which can be analyzed using the toolkit of pragma-dialectics and strategic maneuvering.

8. Awareness of the confrontation phase of advertising communication as a type of dispute is not necessary because the difference of opinion arises from the market situation of the parties. The final stage of the advertisements is usually missing, because the advertiser does not summarize his argument, while it is the buyer who typically resolves the difference of opinion at the moment of purchase.
9. In the implicit disputes of advertising communication, six of the ten rules of pragma-dialectics (the freedom rule, the burden of proof rule, the unexpressed premise rule, the starting point rule, the conclusion rule, and the standpoint rule) cannot be interpreted due to the limitations of the genre.
10. Unilever Magyarország Kft. has shaped its strategy in such a way that it maximized its effectiveness without weakening its strength, keeping this in mind both in the media environment and during the trial in the selection of arguments (topical potential), during framing for the audience (audience expectations) and in the way the argument is presented (presentation tools).

Detailed explanation of the theses

In Chapter 2 of my dissertation, I argued that (**Thesis 1**) The methodology of visual argumentation as an independent disciplinary field can be derived from verbal informal logic, but the dual inference system of cognitive psychology enriches this framework. I further supported that (**Thesis 2**) the message of the picture is understood through the processing mechanism of System 1, if the picture contains a visual argument marker, then this system also draws a kind of conclusion, however, the reconstruction of the precise visual premise-conclusion structures is carried out by the processes of System 2.

To prove my thesis, I adapted the theories of Kahneman, Sperber and Mercier from the field of cognitive sciences. The former developed the dual theory of thinking (Kahneman 2003), and the latter pair of authors laid the foundations for argumentation theory to define inference as a social activity (Sperber-Mercier 2015). In my dissertation, I argued that while understanding the message of the images is the result of an immediate and spontaneous inference process, identifying visual arguments is a longer, contemplative operation, which allows us to create premise-conclusion structures. If we find a visual argument marker in the image, then system 1 also draws a kind of conclusion, but the exact reconstruction is carried out by the processes of system 2.

Processing is a cognitive process that is not accessible to consciousness and is implemented by a number of independent mental mechanisms (modules). As a result of this

process, we go from input A to output B. Accordingly, I have defined the task of System 1 in such a way that, through its operation, we can create quick, intuitive conclusions and respond to impressions of events that System 2 is not aware of (Kahneman 2013, p. 82). The processes of System 2 require effort and self-control, as without them we cannot overcome the impressions and impulses of System 1 (Kahneman 2013, p. 40). Argumentation technique uses the analytical, slow, systematic inference method of System 2, in which case, through inference, we create premise-conclusion structures.

The process of visual understanding is similar to the operation of the two systems, since the message of visual content is generally understood associatively, automatically, relatively quickly, within the context. It is important that System 2 is activated if the recipient is interested in a deeper understanding of the content of the images. In this case, processing is facilitated and guided by the visual argument marker identified in the image. In summary, we can say that understanding the message of images (*argument1*) takes place automatically, without analyzing the elements. However, if a visual argument marker, demonstration, metaphor, symbol, or archetype is identified, then System 2 processes the argument, but System 1 also draws a kind of conclusion. The analytical, systematic apparatus takes into account the results of the previous conclusions and uses them to create premise-conclusion structures (*argument2*).

In my view, the adaptation of the System 1 and 2 inference scheme of cognitive psychology enriches the theory of visual reasoning and allowed me to refute one of the typical accusations against visual reasoning, namely that images are not capable of expressing propositions (Fleming 1996 and Johnson 2003). It is my view that visual arguments do not lose their significance if they are translated into verbal content. For the analysis of images in terms of argumentation technique, we need to transform the visual information into a statement. The steps of the process are described by first *understanding* the message of the image through intuitive inference, and secondly by *verbalizing* the understood information and *organizing it into a statement*. Finally, these statements can be put into *arguments* by the reflective inference as they carry truth value, so they can express *propositions*.

The thesis of Chapter 3 of my dissertation is that (**Thesis 3**) *the reconstruction of visual and multimodal arguments should follow the same pattern as the reconstruction of verbal arguments*. I have demonstrated (**Thesis 4**) that *the Key-Component Table developed by Leo Groarke for evaluating multimodal arguments cannot be used to handle implicit visual arguments*; instead, (**Thesis 5**) *the Waltonian schemes (argument from analogy and argument from consequence) are suitable for evaluating visual arguments because the implicit content of the images can be fully incorporated into the reconstruction*. The importance of the reasoning

analysis of the images and the importance of implicit premises was demonstrated in the analysis of the case study of the dissertation: (**Thesis 6**) *in the competition proceedings brought by the Hungarian Competition Authority in the case of Dove versus Nivea against prohibited comparative advertising, the Authority could have demonstrated that the “tulip advertisement” is likely to mislead the consumer by using the method of reconstruction of the visual argument and incorporating in the analysis the implicit premise that “human skin has similar characteristics to tulips”*.

My research was aimed at presenting the premise-conclusion structures produced from the pictures. My analysis did not focus on when a visual reconstruction is considered correct in terms of content, but on which format the premise-conclusion structures should be presented. I argued that the reconstruction of visual and multimodal arguments should follow the same pattern as the reconstruction of verbal arguments. In my view, we cannot avoid having to verbally formulate the elements of argumentation presented visually or in other ways. This is not only for convenience, since in the case of legally disputed comparative advertisements, verbalisation is of decisive importance, in the absence of which the characteristics strictly necessary for the examination of the argument are overlooked.

Leo Groarke's Key-Component Table for assessing multimodal arguments is based on the view that some visual (or multimodal) units form a complete argument without being expressed in a propositional way (Blair 2004, pp. 48-49). Groarke does not explicitly use the term “reconstruction”, but speaks instead of “dressing up” an argument that covers the identification of premises and conclusions, the discovery of implicit premises, the trimming of purely rhetorical devices, and the clarification of the structure of the argument (Groarke 2015, p. 135). The Key-Component Table lets us illustrate many types of visual and multimodal arguments; the premises and conclusions in the table do not need to be verbal propositions, therefore it is a more authentic representation of what is happening in reality. The method identifies the argumentative acts and the elements of the argument with neutral concepts and then determines how the arguer expresses them. The essence of the method is that it “eliminates a number of errors arising from interpretation” (Groarke 2015, p. 139). Unlike Groarke, I argued that interpretation plays an important role in the identification of unexpressed premises in his method. This act is indispensable for the visual reconstruction, as in its absence, the conclusion would not follow from the premise, and thus it would be difficult to interpret the text as an argument. However, with the involvement of implication, interpretation problems may arise, which the method of key component tables is trying to avoid.

The key-component table reconstruction of the Dove versus Nivea tulip comparative advertisement does not show what is wrong with the visual argument, compared to the official justification of the Competition Board of the Authority. The indisputable advantage of the key component table is that its use does not require the verbalization of visual information and does not deprive the images of their natural, visual nature, but its application does not allow us to proceed with the legally problematic tulip test, because the Authority's decision can only be defended if the implicit premise is included in the reconstruction.

In contrast to key component tables, the argumentation scheme method can handle the implicit content of visual arguments. Argumentation schemes are abstract structures that can be filled with different linguistic elements. The argument in the advertisement takes advantage of the similarity between tulips and the skin, which makes it an argument based on analogy. The Authority's decision would have been supported by the assumption that the tulip has similar properties to the skin, because both need water. The proof was made more difficult by the fact that the visual presentation of the advertisement left both the "better" and the "much better" interpretations open, although the difference between the two interpretations really matters. The Authority's decision is only valid if the wording "much better" is included in the conclusion – and consequently in the second premise. However, since the visual presentation is not clear, the ambiguity can only be resolved by verbal means. The Authority rightly established that the advertisement was misleading, but it did not substantiate its decision well, and the visual elements of the advertisement should necessarily have been verbalized for a well-founded verdict. This showed that the method of reconstruction of key component tables striving to avoid verbalisation was not able to reveal all the relevant elements necessary for the investigation.

In Chapter 4 of the dissertation, I proposed that (**Thesis 7**) *advertisements can be analyzed not only as arguments (argument2: premise-conclusion structures), but also as implicit debates, for which the toolbox of pragma-dialectics and strategic maneuvering can be used.*

According to pragma-dialecticians, not all arguments appear in the form of dialogue, but they have a strong view that they can be analyzed as dialogues (van Eemeren 2002, p. 28). Advertisements generally do not engage in dialogue with each other, but they do argue and can be analysed as disputes, where the active (disputing) party is the provider of the product or service, while the passive party is the recipient of the advertisement. This type of argumentation is called an "implicit debate" (van Eemeren 2002, p. 28). In a debate without an opponent, the

arguer performs the same operations as if someone were opposed to him: dispels doubts, responds to objections and refutes statements contrary to his statement. The only difference is that the doubts, objections, and counter-statements are not formulated by a real opponent, but by the arguer himself constructing a virtual opponent and explaining his arguments in response to the actions of this virtual opponent. In the light of this, we can maintain that it is possible to argue with advertisements, where “the difference of opinion to be resolved consists in whether or not the customer purchases the advertised product” (van Eemeren 2010, p. 235). I argued that the fact that advertisements do not fully comply with pragma-dialectic rules does not indicate that the norms of critical debate are inadequate, but that real debate situations may differ from the normative ideal embodied in the concept of critical debate. The strategic maneuvering toolkit can address this problem (Chapter 4.3), so we can say that the norms for the assessment of arguments can legitimately be applied to the multimodal arguments in advertisements.

In my dissertation, I dealt with the differences arising from the genre characteristics of advertisements. My most important findings concerned the confrontation, opening, argumentation, and closing stages of advertising communication as a type of debate, and the ten rules that moderate the implicit debate. In my view, **(Thesis 8)** *awareness of the confrontation stage of advertising communication as a type of dispute is not necessary because the difference of opinion arises from the market situation of the parties. The final stage of the advertisements is usually missing, because the advertiser does not summarize his argument, while it is the customer who typically resolves the difference of opinion at the moment of the purchase.*

According to Van Eemeren, all four stages are fully relevant in the implicit debate, but in my opinion this is not the case due to the genre characteristics of advertisements. In the *confrontation section* of implicit debates, the only party to the debate reveals the difference of opinion, but this is not necessary in the case of advertisements, since, given the market situation of the parties, raising awareness is not necessary. In the *opening phase*, the parties do not agree on the subject matter of the dispute and the common starting points, do not settle on which premises and arguments are acceptable during the discourse, and do not agree on the rules and the conditions governing the procedure. In an implicit dispute, the protagonist role arises spontaneously, arguing in favour of the product/service of the advertiser, while the potential customer who is not directly involved in the dispute does not necessarily become an antagonist, but plays the role of the sceptical party. In the *argumentation section* of the advertising communication, the advertiser sets out the arguments in favour of his position. In the case of an

implicit dispute, the potential customer does not participate in the dispute and does not necessarily engage in argumentative activities, and if he were to make any counter-arguments, the advertiser would not be informed of them. In the *closing stage* of the critical debate, the parties jointly evaluate the debate, summarise which positions they have defended or rebutted, draw conclusions and, where appropriate, recognise the other party's superiority. The conditions of the final stage of implicit debates are only partially met, as only one party participates in the discourse, so no lesson can be drawn from the outcome of the debate without an argument on the other side. The difference of opinion to be resolved in the advertisement is whether the advertised product is purchased by consumers or not (van Eemeren 2010, p. 235, footnote 41). The resolution of the difference of opinion arising in the course of advertising communication can only take place if we consider it as a series of events over a course of time. On the other hand, the identification of the closing section is problematic because we do not have access to the thoughts of the customer, and it is not certain that he will buy the product/service as a result of the arguments stated in the advertisement.

In Chapter 4 of my dissertation, I examined the extent to which advertisements as debates comply with the ten rules of PD. I argued that (**Thesis 9**) *in the implicit disputes of advertising communication, six of the ten rules of pragma-dialectics (the freedom rule, the burden of proof rule, the unexpressed premise rule, the starting point rule, the conclusion rule, and the standpoint rule) cannot be interpreted due to the limitations of the genre.*

My analysis was based on the finding of J. Anthony Blair that the rules can always be interpreted in an explicit debate, but the conditions of interpretability are not fully met in an implicit debate. According to Blair, in five cases the PD rules (the freedom rule, the burden of proof rule, the unexpressed premise rule, the starting point rule, the conclusion rule) cannot be interpreted (Blair 1998, page 335), but unlike him, I considered another rule, the standpoint rule, to be problematic. In the implicit debate, only the position of the advertiser appears, and we cannot know the position and arguments of the customer. The statements made in the advertisements are one-sided, the counter-arguments cannot be returned directly to the advertiser, and therefore the *freedom rule* cannot be interpreted. Due to the implicit nature of advertising communication, neither party may request evidence from the other. Even if someone in the audience disputed the arguments of the arguer, they would not be able to raise their concerns directly due to the characteristics of implicit argumentation, or if their objections are unlikely, the arguer may ignore them, and therefore the *burden of proof rule* loses its meaning (Blair 1998, p. 335). The interpretation of the *unexpressed premise rule* is compromised because in the implicit debate the arguer argues alone and is not directly related

to his audience, so he cannot be held accountable for the rejection of implicit premises undertaken in his argument (Blair 1998, p. 335). The *starting point rule* also loses its function, as the audience of the implicit debate is not available, so they cannot reconcile the starting points and the starting premise, and therefore cannot point out any changes in them (Blair 1998, p. 335). In the case of advertising communication, it is unlikely that any change will occur in the starting points and the starting premises, since the advertisement will be prepared before the audience has any concerns. Finally, the role of the *conclusion rule* should be reassessed, as the implicit debater, in the absence of a direct reaction from the public, tends not to withdraw his statements and not to accept that he has failed to defend his position. In my view, the five rules should be supplemented by the *standpoint rule*, which also does not apply to implicit disputes. In explicit disputes, the arguer envisages the possible counter-arguments of the other party and makes statements against them, so the attack on the position will be an attack on the other party's position. However, the characteristic feature of implicit disputes is that the antagonist party cannot respond directly to the argument, so it cannot be inspected whether it has indeed responded to the original position.

In Chapter 4 of my dissertation, I also undertook to define the communication genre of advertising communication, which is a non-personal, paid communication, information or display method aimed at presenting and promoting a certain idea, merchandise or service, and increasing revenue through advertising. The communication genre of advertising communication is promotion, which is an implicit dispute between the seller and the buyer, the main function of which is to help with arguments in a given case, to guide the audience to make a purchase decision in favour of the interest of the company. Finally, I determined the type of communication activity of advertising communication, in which I included informative, persuasive, reminder, and confirmatory advertisements.

In Chapter 5 of the dissertation, I applied the theory of pragma-dialectic framework and strategic maneuvering to the analysis of the Dove versus Nivea comparative advertisement. I have shown the argumentation theory connections by which we can understand the mechanisms that advertisements successfully or unsuccessfully use to persuade the buyer, and the arguments by which manufacturers can neutralise any legal objections to their advertisements.

In this chapter, I demonstrated the practical implementation of my claims regarding the debate stages of advertising communication. The confrontation stage, the opening stage and the argumentation stage of the tulip test actually appeared in the thirty-second advertisement with the restrictions of the implicit debate. The special feature of the case study is that although we

can identify an end within the advertisement, the actual closing stage does not appear in the advertisement, taking the requirements of PD into account. The Hungarian Competition Authority initiated proceedings against the advertisement for unfairly influencing the consumer, and I have presented this procedure in detail. The company under scrutiny had to provide scientific, verifiable results to support its claim in the advertisement that its product “is more hydrating and is absorbed more quickly”. I argued that (**Thesis 10**) *Unilever Magyarország Kft. has shaped its strategy in such a way that it maximized its effectiveness without weakening its strength, keeping this in mind both in the media environment and during the trial in the selection of arguments (topical potential), during framing for the audience (audience expectations) and in the way the argument is presented (presentation tools)*. The position to be supported (that its product has better characteristics than the competitor Nivea's moisturiser) remained unchanged on both platforms, but the company supported its argument in different ways. In the advertisement, Unilever chose the tulip test as the central argument, but in the course of the procedure it could have demonstrated the superiority of its product over the competitor Nivea in a different way. However, other types of arguments (e.g. graphs, tables, instrumental laboratory tests) would have been less convincing (topical potential). In the media arena, Unilever spoke to the customers, who expect convincing arguments from advertisers. For example, in the tulip test they could see with their own eyes the overwhelming superiority of the new cream over the other (audience expectations). The presentation method of the selected argument is also an important strategic step: if the company had used a purely visual argument, they would have had to face the risk of ambiguity, so the visual arguments were supplemented with verbal content, that is, a multimodal visual argument was used (presentation tools). The preliminary examination results of the Authority, according to which the advertising statements made in the tulip test are capable of deceiving the consumers, were rejected and a hearing was requested on the grounds that laboratory scientific results justify the truth of the company's claim. In order to reduce the penalty, Unilever Magyarország Kft. decided to support its position with other arguments instead of the tulip test. In the end, they opted for scientifically accepted corneometric testing, questionnaire surveys and on-site demonstration, which supported the verbal statements “better hydration, faster absorption”. However, the above evidence did not support what was seen in the tulip test, but the contested verbal content (topical potential). The selection of the evidence presented at the hearing was also determined by the audience expectations, as the Authority only accepted results complying with objective, certified standards, and the tulip test would probably not have met these standards (audience

expectations). The presentation of the on-site rice paper test was clearly intended to attract the attention of those present at the hearing and to have a dramatic effect (presentation tools).

In my dissertation, I fulfilled the initial goal of integrating the dual inference model of cognitive psychology into the theory of visual argumentation. I distinguished between two levels of visual understanding, the fast and automatic processing of images, which is aimed at understanding their message, and the slow, systematic process of analyzing images, as a result of which we can create premise-conclusion structures. The dissertation dealt in detail with the methods of reconstruction of visual arguments and supported the claim that the method of key component tables cannot handle implicit premises, whereas schematic reconstruction can. The discussion of advertising communication as a debate has expanded the framework of pragma dialectics and strategic manoeuvring. The PD and SM analysis of the Dove versus Nivea case study showed that companies have different argumentation strategies in the media sphere and in legal proceedings. Furthermore, I proved that the reconstruction of visual arguments has a decisive role in the Competition Authority proceedings, as the charge of objectionable commercial conduct cannot be substantiated without a thorough analysis of the images. The narrow target group of the dissertation includes researchers dealing with theories of reasoning and visual argumentation, while in a broader sense, it can be of interest to those working in the field of cognitive psychology and lawyers involved in competition law issues.

Relevant publications

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About the author

Hédi Virág Csordás has been an assistant professor at the Department of Philosophy and History of Science, Budapest University of Technology and Economics since 2017. She pursued her doctoral studies at the Doctoral School of Philosophy and History of Science of the Budapest University of Technology and Economics (BME) between 2014 - 2017. Her research interests are in the field of visual reasoning and rhetorics, as well as the extended theory of pragma-dialectics and strategic manoeuvring in marketing communication. She was awarded the New National Excellence Scholarship 2016 (ÚNKP 2016-3), in the framework of which she developed the argumentation theory aspects of her dissertation case study and worked on the topic of advertising debate. Her achievements are not only in the field of research, but also in her teaching at the University of Technology, as evidenced by her repeated top 100 ranking in the Student Feedback on Teaching lists and the 2018 BME Faculty Student Award, which is the student award for the best lecturer of the academic year. Her teaching portfolio consists of the courses Negotiation and Presentation Techniques; Reasoning, Negotiation, Persuasion; Argumentation Technique Logic and Business Communication, Public Communication, and Campaign Planning. She has been a thesis supervisor for nearly 100 students in bachelor and master courses, and has also supervised several Student Conference entries. Currently, she is an active member of the research group Measures of Rationality at the Department of Philosophy and History of Science under the supervision of Dr. István Danka. She received her Master's degree with honours in 2014 from the Budapest University of Technology and Economics, specialising in Visual Communication. The first recognition in her academic career was the national first place in the Online Communication Section I of the 15th Social Sciences Section of the XXXI National Scientific Student Conference. Her publications are available at the link below:

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