

# Reasoning and Representation in “Visual Argumentation”: Some Methodological Problems<sup>1</sup>

Igor Ž. Žagar

Educational Research Institute

Department of Slovenian Studies, Faculty of Humanities, University of Primorska, Slovenia

igor.zzagar@gmail.com

---

## Introduction

*In 1996, *Argumentation and Advocacy* published a groundbreaking issue devoted to visual argument. It was the first collection of essays on the subject. Twenty years later, we consider some of the doubts about the possibility of visual argument that were discussed in that first issue. We argue that these doubts have been answered by the last 20 years of research on visual argument, and we look at some of the key theoretical and applied issues that characterize this burgeoning subfield in the study of argument*

This is how Leo Groarke, Catherine Palczewski and David Godden introduce a special, double issue of the journal *Argumentation and Advocacy*, dedicated to twenty years of “visual argumentation” (from now on abbreviated as VA).<sup>2</sup> In fact, in these past twenty years the research on visual argumentation started to burgeon with authors like Groarke, Gilbert, Kjeldsen, Roque, Dove, Godden and others,<sup>3</sup> who mostly took “visual argumentation”

1 Parts of this article were presented at the European Conferences on Argumentation in Lisbon (2015) and Fribourg (2017), and in parts appeared in the proceedings of these conferences (Žagar 2016; 2018).

2 Groarke, Palczewski and Godden 2016.

3 Groarke (1996; 2002; 2009; 2013a; 2013b; 2015), Gilbert (1994; 1997), Kjeldsen (1999; 2007; 2012; 2013; 2015), Roque (2010; 2012; 2015), Dove (2002; 2011; 2012), Godden (2013; 2015).

and “visual arguments” for granted, never really doubted their position about visuals having argumentative potential or even force, and never asked any serious methodological, let alone epistemological questions about VA. All the papers mentioned above are basically concerned with showing - using different visuals from different sources - that visuals can convey arguments; the question, what in the visual under examination can serve as a premise/argument, and what as a conclusion/claim, or how we extract premises/arguments and conclusions/claims from a visual are rarely addressed with any systematic methodological rigour. It is only in his 2015 paper (i.e. almost twenty years after the “discovery” of visual argumentation!), “The Study of Visual and Multimodal Argumentation”, serving as an introduction to the thematic issue of the journal *Argumentation* on visual argumentation, that Kjeldsen announces an attempt “to take visual argumentation a step further in order to examine what visual and multimodal argumentation is and how it may work” (Kjeldsen 2015, 116). One of the rare exceptions in this line of reasoning is David Godden’s paper “On the Norms of Visual Argument: A Case for Normative Non-revisionism”, where he discusses the possible necessity of setting up different normative frameworks for verbal and visual arguments (Godden 2017). But then the overall conclusion of his paper, namely that every argument containing a visual should count as visual argument, is rather controversial and a step back in the discussion, while from an epistemological and methodological point of view, it should be scrutinized in its very essence. Which is not the aim of this paper.

On the other hand, there was some criticism of visual argumentation from more “traditional” scholars in the field of argumentation (Johnson 2003; 2010; Patterson 2010) that were never seriously debated by the proponents of VA, and their objections (mostly that different norms and different criteria should indeed be established in order to evaluate visual arguments as arguments) were never systematically discussed, let alone rebutted.

In this paper, I want to concentrate on two “milestones” in the development of VA: 1) in the first part of the paper, I am analysing the very first example of visual argument (“smoking fish”), showing that doubts about the possibility of visual argumentation have solid empirical, not only epistemological and methodological basis, 2) in the second part of the paper I am showing that claims about visual argumentation are becoming more and more bold and radical with time from the “possibility of visual meaning” in 1996 (the “smoking fish” example), some proponents of visual argumentation (Groarke in particular) have come a long way to baldly cla-

im that "seeing is reasoning" in 2013. In order to expose and analyse the conceptual underpinnings of this radical position ("seeing is reasoning"), I will be concentrating on Leo Groarke's 2013 programmatic paper "The Elements of Argument: Six Steps to a Thick Theory".

On the way, I will be also mentioning (not analysing in detail) some basic concepts VA is - in my view - lacking, but should be incorporated in their conceptual framework in order to better explain the basic problems (not just epistemological and methodological, but also rhetorical and hermeneutical) concerning visual argumentation: how visuals function, i.e. how they get or catch the viewers, how the viewers break down the presented visuals, and how they reconstruct their meaning. In discussing all these problems, central attention will be devoted to the (rather new) concept of *enchrony* (Enfield 2009).

And since the stereotypes such as "knowing is seeing" and "seeing is knowing" are deeply rooted and widely used metaphors in (not just) Western culture, culminating in the ubiquitous cliché "A Picture Tells a Thousand Words", critical rhetorical analysis I'll be performing, borrowing the tools mostly from the interaction of multimodal analysis and anthropological linguistics (Enfield), may significantly contribute to the somehow neglected methodological questions about how meaning and knowledge are extracted from the visuals, and, consequently, how visuals may generate meaning and knowledge.

### 1. Twenty Years as a Dichotomy

Let us, therefore, start in 1996. The introduction to this double issue of *Argumentation and Advocacy* (A&A) on VA, written by Birdsell and Groarke, is (understandably) still pretty cautious as to what visuals can do (all emphases throughout the text are mine):

- *the first step toward a theory of visual argument must be a better appreciation of both the possibility (!) of visual meaning and the limits of verbal meaning;*
- *we often clarify the latter (i.e., spoken or written words) with visual cues;*
- *Words can establish a context of meaning into which images can enter with a high degree of specificity while achieving a meaning different from the words alone;*
- *diagrams can forward arguments;*

- *The implicit verbal backdrop that allows us to derive arguments from images is clearly different from the immediate context created by the placement of a caption beside an image* (Birdsell and Groarke 1996, 2, 6).

If we sum up: in 1996, visuals may have some argumentative or persuasive potential (there is a possibility of visual meaning, visuals can forward arguments, and arguments can be derived from visuals), but they are usually (always?) still coupled with the verbal, and can achieve these argumentative effects (only?) in combination with the verbal.

The *pièce de resistance*, the very first “visual argument” Birdsell and Groarke are offering to illustrate the claims above (i.e. the possibility of visual argumentation), is an anti-smoking poster, published by the U.S. Department of Health, Education and Welfare in 1976, I would like to analyze in more detail (see Figure 1.1).

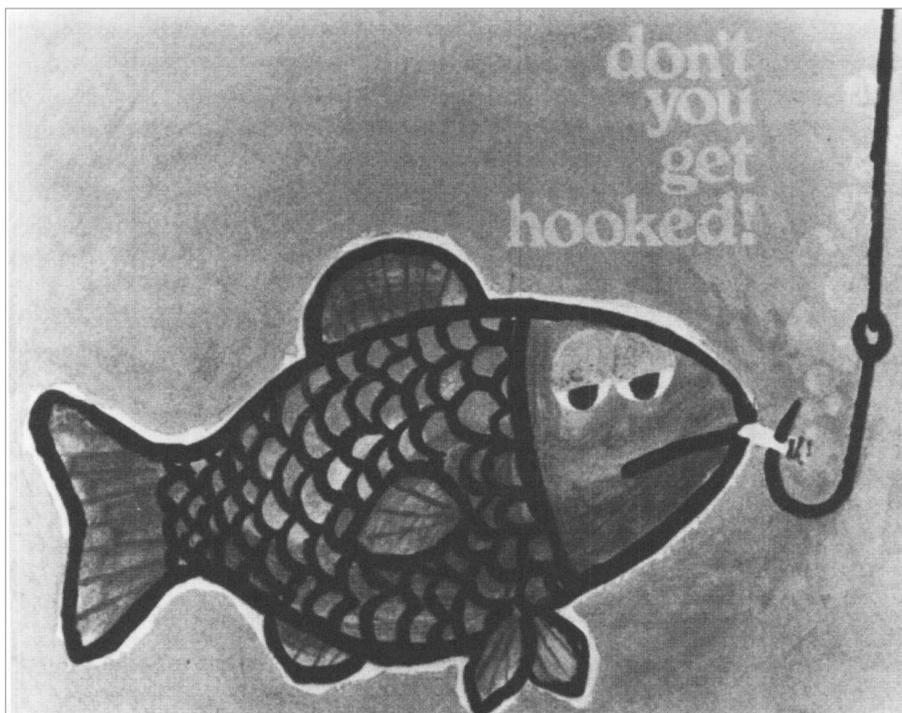


Figure 1.1 Smoking fish (Birdsell and Groarke 1996)

In analysing the poster, the authors (Birdsell and Groarke) first admit that "visual images can, of course, be vague and ambiguous. But this alone does not distinguish them from words and sentences, which can also be vague and ambiguous". And we can agree with that. Then they qualify this poster as "an amalgam of the verbal and the visual", which, again, sounds quite acceptable. But then they unexpectedly conclude: "Here the argument that you should be wary of cigarettes because they can hook you and endanger your health is forwarded by means of visual images" (Birdsell and Groarke 1996, 2-3). Which is obviously not the case. Without the verbal part, "don't you get hooked!", the poster could be understood (framed) as a joke, as a cartoon, where, for example, smoking is presented as such a ubiquitous activity that even anglers use cigarettes to catch fish. Only when we add the verbal part "don't you get hooked!" - where "hooked" activates an associative chain or semantic frame of knowledge relating to this specific concept, which includes "get addicted", and is, at the same time, juxtaposed with a visual representation of a hook with a cigarette on it - is the appropriate (intended) frame<sup>4</sup> set: the poster is now, and only now, understood as an anti-smoking add, belonging to an anti-smoking campaign.

Every argument is, of course, open to criticism and counter-arguments. I wanted to empirically (and experimentally) test both lines of reasoning and argumentation - Groarke and Birdsell's argument(ation) and my counter-argument(ation) -, therefore I designed a pilot questionnaire, titled "A Short Questionnaire on Understanding the Visuals (Drawings,

4 The concept of frames, I am using here, are frames that help us organize our everyday experience, frames as developed by sociologist Erving Goffman in his influential book *Frame Analysis* (1974). What are Goffman's frames? In his own words: "When the individual in our Western society recognizes a particular event, he tends, whatever else he does, to imply in this response (and in effect employ) one or more frameworks or schemata of interpretation of a kind that can be called primary. I say primary because application of such a framework or perspective is seen by those who apply it as not depending on or harking back to some prior or "original" interpretation; indeed a primary framework is one that is seen as rendering what would otherwise be a meaningless aspect of the scene into something that is meaningful." Goffman distinguishes between natural and social frameworks. Natural frameworks "identify occurrences seen as undirected, unoriented, unanimated, unguided, purely physical". Social frameworks, on the other hand, "provide background understanding for events that incorporate the will, aim, and controlling effort of an intelligence. [...] Motive and intent are involved, and their imputation helps select which of the various social frameworks of understandings is to be applied" (Goffman 1974, 21-22, 24).

Pictures, Photographs ...)", that comprised three well-known visuals from Leo Groarke's work on VA, namely:

- 1) The smoking fish (where - a very important point! - the text "Don't you get hooked" was removed from the picture: see Figure 1.1):

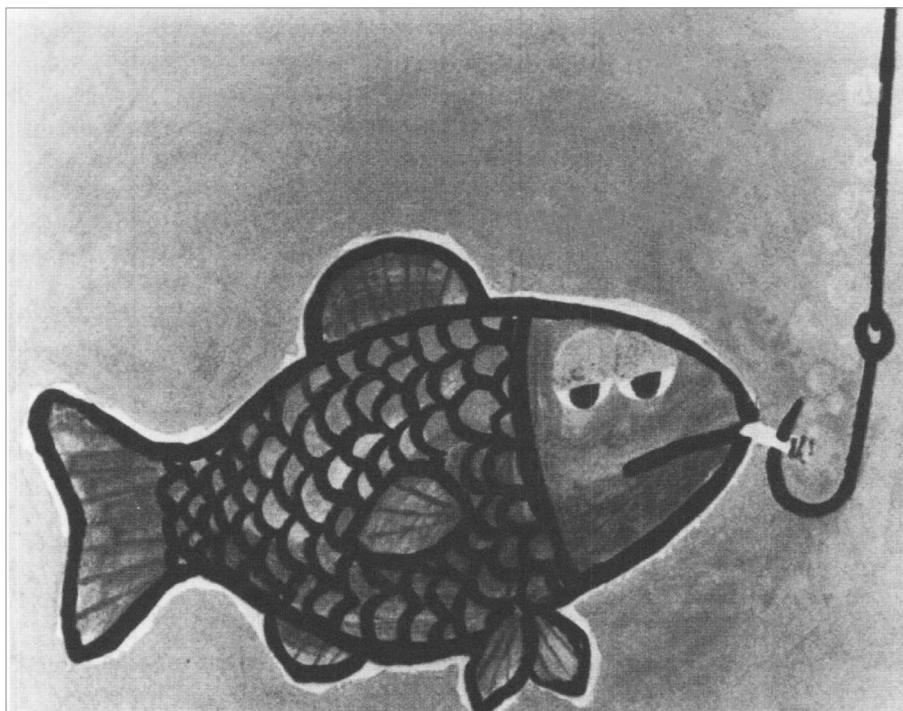


Figure 1.1. Smoking fish (Birdsell and Groarke 1996)

- 2) The poster "UvA for Women", and
- 3) Jean Luis David's painting «La Mort de Marat» (The Death of Marat).

Each visual was preceded by a short necessary introduction, framing the visual (but not explaining the exact context), while below the visual two questions were asked. In the case of the smoking fish (the analysis of the other two visuals can be found in Žagar 2017), both parts read as follows:

*Introduction: The drawing below dates back to the seventies of the previous century. Please, take a good look at it, and then answer the two questions below.*

*Question 1: What do you see on the drawing (how would you describe the "content" or "what is going on" in the drawing in the most correct and objective way)?*

*Question 2: In your opinion, what could be the goal/purpose/meaning of the drawing? In other words, how would you interpret it (e.g. a joke, advertisement against smoking/cigarettes, advertisement in favour of smoking/cigarettes, advertisement in anglers' bulletin, caricature, other). Please, give reasons for your opinion.*

This questionnaire was distributed to three different age groups, with different educational background, all European, with Slovenian citizenship. I planned a fourth one, a group of refugees living in Slovenia (mostly from Syria, Iraq and Afghanistan, some of them from North Africa), in order to show how cultural differences may influence the interpretation, but the refugee coordinator refused to participate because of "ethical reasons".

Here are some of the characteristics of these groups:

Group 1: STUDENTS (number: 26, age: 20–24, sex: 25 female, 1 male, education: completed high school, 2nd year of Educational Studies at the University of Primorska, Slovenia).

Group 2: RESEARCHERS (number: 7/30, age: 28–68, sex: 6 female, 1 male, education: PhD in Philosophy, Sociology, Psychology, Education Sciences, two PhD candidates, Educational Research Institute, Slovenia).

Group 3: SENIORS (number: 3/12, age: 69–86, sex: 2 female, 1 male, education: high school to university education, attendants of the University of the Third Age, Slovenia).

Of course, from the methodological point of view and strictly statistically speaking, samples vary too much and can-not be compared in an orderly quantitative fashion. But at this point, I was interested in qualitative data, and as a pilot study, even such disparate groups can do. More elaborate and varied testing is being planned, though.

What did our pilot study show?

Group 1: 9 students out of 26 thought that the drawing "could have been/ might have been/probably was/likely was" an anti-smoking ad (none of them straightforwardly answered that the ad was an anti-smoking ad).

There were another three answers that the visual was probably an ad against smoking, but two of them argued further that the anti-smoking intention was just an intermediate stage, while the main point of the ad was probably that by smoking, we are polluting the environment. One of the respondents opted for an anti-smoking ad because “the hook pulls the cigarette out of the fish’s mouth, thus preventing it to smoke”.

Interestingly, three students thought that the drawing was a representation of society in the seventies. One of them commented that “the society realized that smoking was bad, but has already surrendered to destiny”, the other one that the drawing “represents people dissatisfied with the system”.

What is even more interesting is the fact that most of the respondents substantiated their claims not with the maggot on the hook in fish’s mouths, but by the expression on the fish’s “face”. Here are some qualifiers they used for the expression of the fish’s face in relation to the maggot on the hook (and further, social situation at large):

- sad expression
- indifferent eyes
- bored and apathetic fish
- bored and indifferent gaze
- dead face
- sad gaze
- angry gaze
- unsatisfied expression
- boredom and discontent
- not in good mood
- reluctant and angry
- without emotions
- sad eyes.

This shifting of the focus from 1) the maggot on the hook to the 2) “facial expression” of the fish, while 3) keeping in mind the info from the instructions that the drawing is from the seventies represents a perfect proof that the decision about the meaning of the drawing was reached/constructed through enchronic analysis, a concept I will be explaining in much more detail later in the paper. At this point, just a short quote about what enchronic analysis is:

*Enchronic analysis is concerned with relations between data from neighbouring moments, adjacent units of behaviour in locally coherent communicative sequences* (Enfield 2009, 10).

In short, if we have a line of events A, B, C: what happens in B and how B is seen, depends on A, on what happened in A and on how A was framed or conceptualized. And, consequently, the interpretation of C, how it is seen, understood and conceptualized narrowly depends on A and B. But as C happens, B and A may be understood and (re)conceptualized differently.

Back to the other answers from Group 1. Two of the respondents thought it was (a kind of) a joke, meaning/implying that smoking is so widespread nowadays that even fish started to smoke.

Another two thought the drawing was an ad in an angler's newsletter, its purpose being alerting the readers against the pollution of waters.

One of the respondents thought it was a joke at the expense of non-smokers, another one that it was a teaser, a challenge to non-smokers (pleading in favour of cigarettes). Yet another one thought the drawing was a protest from the vegetarian viewpoint (emphasizing the feelings of a fish when it gets caught), somebody took it as a kind of allegory (in her own words): you can get hooked or you can-not (the choice is yours).

The remaining three of couldn't decide about the message.

Group 2 had much less to say about the appearance of the fish, for most of them it looked "sad and bored".

As for the message, three of them answered it could have been an anti-smoking ad, two of them emphasized it could be either a funny ad, a joke, or an anti-smoking ad, while one of them was reminded of the famous Rat Park Experiment, and one of the respondents thought the drawing looked like an illustration from a children's book.

From the Group 3, we got the following three answers: 1) advertisement of the tobacco industry, 2) could be anything, and 3) I really don't know.

The conclusion we can draw from all these answers is pretty obvious, I think: Birdsell's and Groarke's claim that the argument that you should be wary of cigarettes because they can hook you and endanger your health is forwarded by means of visual images, *is clearly refuted*. It seems that, unless there is a clear verbal supplement, e.g. "don't you get hooked", interacting with the visual part, the interpretators' inference about the (intended) meaning of the drawing (let alone its possible argumentativity, which may

not be inferred at all), obviously depends on their historical, social, cultural and/or individual background, on the specifics of their education and/or their values.

But the smoking fish example dates back to the 1996. As I explained in the beginning of the paper, in the last ten years or so, there is a tendency to interpret visuals as directly and unambiguously offering arguments by themselves, without any intervention or help from the verbal (or any other code), and not being conditioned or in any other way dependent on the verbal at all. Such an approach could be epitomized as “reasoning is seeing” or/and “seeing is reasoning”.

As a case in point - exposing possible caveats as well as cul-de-sacs of visual argumentation in general - I will be, for the rest of the paper, concentrating on one of VA’s main proponent’s (Leo Groarke) radical proposal (“reasoning is seeing”) of how to reconstruct and interpret possible visual arguments. This radical proposal was presented and conceptualized in his 2013 programmatic paper “The Elements of Argument: Six Steps to a Thick Theory” (Kišiček and Žagar 2013, chapter 1).

## 2. The Reasoning is the Seeing. Is it?

Here is the photo Groarke is taking as a starting point of his reasoning:



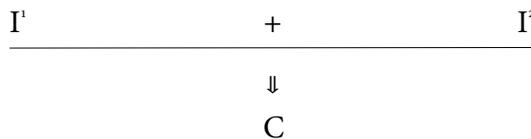
Figure 2.1 Fruit found on the Detroit river I (photo by Leo Groarke, Groarke 2013)

And this is how he frames it (again, all emphases throughout the text that will follow are mine):

*Consider a debate spurred by an unusual fruit I discovered during a kayak ride on the Detroit River. When my description ("nothing I recognize; a bumpy, yellow skin") initiated a debate and competing hypotheses on the identity of the fruit, I went back and took the photographs reproduced below. On the basis of these photographs, the fruit was quickly identified as breadfruit (Groarke 2013, 34–5).*

And this is how Groarke reconstructs the argument (actually the process of arriving from argument(s) to conclusion) in question (please, pay special attention to the part that is emphasized):

*The argument that established this conclusion compared my photographs to similar photographs found in encyclopaedia accounts of breadfruit. One might summarize the reasoning as: "The fruit is breadfruit, for these photographs are like standard photographs of breadfruit." But this is just a verbal paraphrase. The actual reasoning – what convinces one of the conclusion – is the seeing of the sets of photographs in question. Using a variant of standard diagram techniques for argument analysis, we might map the structure of the argument as:*



*where C is the conclusion that the fruit is a piece of breadfruit, I<sup>1</sup> is the set of photographs I took, and I<sup>2</sup> is the iconic photographs of breadfruit to which they were compared (Groarke 2013, 36).*

Let me expose and emphasize the main part of the quote, the part we will be concentrating on, once more: "The actual reasoning ... is the seeing of the sets of photographs in question".

### *2.1 Argumentation as comparing the visuals*

But, and this is a crucial question: could reasoning really be just seeing? Should (and does) the reasoning really consist just of "the seeing of the sets of photographs in question"? Is just seeing and visually comparing photographs from different sources really enough for a reasoned, justified conclusion (in question)? And last but not least, let us not overlook Groarke's remark that "on the basis of these photographs, the fruit was *quickly* iden-

tified as breadfruit”. Is the velocity of (visual or any other kind of) reasoning to be considered a virtue, a necessary and sufficient criterion for good argumentation?

In order to answer these questions, we will try to replicate Groarke’s procedure, and compare his photos of what he identified as breadfruit to the encyclopaedic photos of breadfruit.

Here are some photos of breadfruit I found in different encyclopaedias:



Figure 2.2. Breadfruit at Tortuguero (Wikipedia, Breadfruit)



Figure 2.3. The fruit of the breadfruit tree - whole, sliced lengthwise and in cross-section (Wikipedia, Breadfruit)



Figure 2.4. Breadfruit (Healthy Benefits, Breadfruit)

And here, again, are Groarke's two photos (for the sake of the replicating procedure, as well as from the point of view of *enchronic* intertwining of perception, processing and meaning construction, it is important for the ("argumentative") viewer that Groarke's photos are incorporated/

mixed with the newly found, encyclopaedic photos (of breadfruit), and not just referred to by numbers (e.g. Figure 2.1): the one we have already seen:



Figure 2.1. Fruit found on the Detroit river I (photo by Leo Groarke, Groarke 2013)

and the one we haven't seen yet:



Figure 2.5. Fruit found on the Detroit river II (photo by Leo Groarke, Groarke 2013)

Please inspect these photos carefully. Is there really such a resemblance between the two represented sets of fruits (Groarke's two photos and the encyclopaedical photos of breadfruit from the internet) that we can quickly identify the fruit from the Detroit river as breadfruit?

Breadfruit, as we have seen from the encyclopaedic photos, has a kind of rough, knobbly skin with some kind of spines or hard hairs, patterned with irregular, 4, 5 to 6-sided faces, while in the center there seems to be a kind of a cylindrical core. On the other hand, the skin of the fruit found in the Detroit River seems rather smooth, without spines or hairs, covered with smooth irregular bumps, not 4, 5 or 6-sided faces, and there seems to be no cylindrical core in the center.

### 2.2 *The necessity of the verbal*

In such a case (where some entities look alike, but don't quite the same), just "seeing" is obviously not enough, and it is wise if not necessary to consult other reliable sources, like *verbal descriptions*.

Why verbal descriptions? Because in such cases (checking the photos in different encyclopaedias) there is not much else one can consult. On the other hand, language is still the only communicative "medium" that is (rather) linear, straightforward, and unambiguous enough; in combination with pertinent visuals almost error-proof. And if, when consulting encyclopaedias or other relevant sources, we don't just check the photos, but the text as well, we find the following description of breadfruit:

*Breadfruit (Artocarpus altilis) is one of the highest-yielding food plants, with a single tree producing up to 200 or more fruits per season. In the South Pacific, the trees yield 50 to 150 fruits per year. In southern India, normal production is 150 to 200 fruits annually. Productivity varies between wet and dry areas. In the Caribbean, a conservative estimate is 25 fruits per tree. Studies in Barbados indicate a reasonable potential of 6.7 to 13.4 tons per acre (16–32 tons/ha).*

[...]

*Breadfruit, an equatorial lowland species, grows best below elevations of 650 meters (2,130 ft), but is found at elevations of 1,550 meters (5,090 ft). Its preferred rainfall is 1,500–3,000 millimeters (59–118 in) per year.*

[...]

*Breadfruit is a staple food in many tropical regions. The trees were propagated far outside their native range by Polynesian voyagers who transported root cuttings and air-layered plants over long ocean distances (Wikipedia: Breadfruit).*

If we sum up, breadfruit is a tropical plant, usually found (and used) in tropical areas. It is, therefore, not very probable to find it in Ontario, in the Detroit river (though it is not completely impossible, of course, that a specimen of a breadfruit could find its way into the Detroit river from one of the local Caribbean restaurants or stores).

But, if relevant sources (encyclopaedias) were indeed amply consulted (or at least browsed through), and the point of departure in investigating the nature of the Detroit river fruit was not based on some kind of pre-conceived idea or an intuition that the found fruit looked very much like breadfruit, a neutral, objective and meticulous investigator should have easily found the following photos as well:



Figure 2.6. *Maclura pomifera* (Commons, *Maclura 1*)



Figure 2.7. *Maclura pomifera* (Plants for a Future, Maclura)



Figure 2.8. *Maclura pomifera* (Acta Plantarum, 463)



Figure 2.9. *Maclura pomifera* (Commons, Maclura 2)

And once more, here are the two photos of a fruit found in the Detroit River (for the sake of the argument, let me reiterate: it is necessary for the replicating procedure of comparing the photos, to put the two sets of photos side by side, one after another, even if they have been already shown a few pages earlier):



Figure 2.1. Fruit found on the Detroit river I



Figure 2.10. Fruit found on the Detroit river II

A close comparative observation between encyclopaedical photos of this second fruit and the encyclopaedical photos of breadfruit reveals that this second fruit looks (!) much more like the fruit found in the Detroit river: its skin seems smooth, without spines or hairs, and it is covered with smooth irregular bumps, not faces as in the bread fruit.

And if we consult the verbal part of the encyclopaedia, describing this fruit, we find the following (once more, please, pay attention to emphases):

*Maclura pomifera, commonly called Osage orange, hedge apple, horse apple, bois d'arc, bodark, or bodock is a small deciduous tree or large shrub, typically growing to 8-15 meters (26.49 ft) tall. It is dioecious, with male and female flowers on different plants. The fruit, a multiple fruit, is roughly spherical, but bumpy, and 7.6–15 centimeters (3–6 in) in diameter. It is filled with sticky white latex. In fall, its color turns a bright yellow-green.*

[...]

*Osage orange occurred historically in the Red River drainage of Oklahoma, Texas and Arkansas and in the Blackland Prairies, Post Oak Savannas, and Chisos Mountains of Texas. It has been widely naturalized in the United States and Ontario. (Wikipedia, Maclura:)*

As you can see for yourself, the verbal description of *Maclura pomifera* actually fits the Detroit river fruit much more accurately than the description of breadfruit. And since we also learn that the Osage orange “has been widely naturalized in the United States and Ontario” it is much more probable to conclude that the fruit found in the Detroit river was an osage orange (*Maclura pomifera*), and not a breadfruit (*Artocarpus altilis*)

### 3. Thousands of Words and a Single Picture

What can we learn from this? Above all that sayings like: “A picture tells a thousand words” should be indeed taken seriously. But, to be (absolutely) sure which of those thousand words refer to that particular picture we have in front of us in these particular circumstances, we have to cut down (on) those words considerably. On the other hand, without any words at all, we can hardly identify the exact content of the picture, as our Detroit fruit example clearly showed.

In other words, this reconstruction shows that there is no pure visual argumentation, relying on the epistemology of “reasoning is seeing” (as there are, probably, very few purely verbal arguments; if any at all). Instead of visual argumentation (or purely verbal argumentation, for that matter), we should be (always) talk about multimodal argumentation and multimodal meaning (combining, in our case, primarily visual and verbal, but other semiotic modes are involved as well, such as gesture and gaze).

But multimodal meaning and multimodal argumentation require different (expanded, at least) analytical framework, let us call it multimodal analysis, more particularly and with an important emphasis: interactive-recursive multimodal analysis. And in relation to this very important distinction (multimodal analysis vs. interactive-recursive multimodal analysis), I would like to emphasize a few points.

In cases where just "seeing" is not enough, and we have to rely on verbal (or other) sources (and incorporate other types of signs, like gestures, gazes and others), we should be talking of "enchronic analysis" (Enfield 2009). What is enchronic analysis (of which our analysis of the Detroit river fruit is a rather exemplary case, as we shall see a few paragraphs later)? Here is a short definition, we have already encountered on the page 2:

*Enchronic analysis is concerned with relations between data from neighbouring moments, adjacent units of behaviour in locally coherent communicative sequences* (Enfield 2009, 10).

As we well know, mostly from linguistics, synchronic analysis gives us a horizontal cross section of investigated phenomena, it somehow freezes the actual state of things (in a certain domain). Diachronic analysis, on the other hand, gives us a vertical cross section of the investigated phenomena, it looks at how state of things (in a certain domain) has changed through time and history.

Enchronic analysis, on the contrary, is looking at (Enfield 2009) sequences of social interaction in which the moves that constitute social actions occur as responses to other such moves, and in turn these moves give rise to further moves. We could say that enchrony dynamically, interactively and recursively combines synchrony and diachrony, that it opens synchrony to diachrony, that it injects diachronicity into synchronicity on a micro level.

The Detroit river fruit example is exactly a case in point: from observation of the photos of the fruit taken on the river, we have to move to the observation of the photos in encyclopedias and compare the two. And to get more complete and accurate information (since the photos do not tell the whole story), we have to switch from the photos to the text and incorporate the textual information as well. And since the text opens new questions/problems about the photos, we have to look for yet other photos, and from those switch back to yet another text. And finally, we (have to) compare all these again with the initial photo (of the fruit taken on the river).

When consulting encyclopaedias, we don't just check the photos, but the text as well, and then go and (re)check other available texts and photos, and compare them with the initial photo(s). The final result we arrive at after this dynamic interaction should be described as composite meaning, resulting in composite utterances, conceptualized as: "a communicative move that incorporates multiple signs of multiple types". (Enfield 2009, 15)

For further illustration, here is a visual example of a composite sign (with composite meaning), Enfield is using himself:



Figure 4.1 Willy Brandt in Warsaw Ghetto (Enfield 2009, 3)

And this is his analysis:

*While the kneeling posture may have an intrinsic, ethological basis for interpretation, this particular token of the behaviour has had a deeply enriched meaning for many who have seen it, because it was performed by this particular man, at this time and place. The man is Willy Brandt, chancellor of West Germany. Once you know this, the act already begins to take on enriched meaning. It is not just a man kneeling, but a man whose actions will be taken to stand for those of a nation's people. It is 7 December 1970, a state visit to Warsaw, Poland. These new layers of information should yet further enrich your interpretation. To add another layer: the occasion is a commemoration of Jewish victims of the Warsaw Ghetto uprising of 1943. [...] The body posture [...] is a composite sign in so far as its meaning is partly a function of its co-occurrence with other signs: in particular, the role being played by its producer, given the circumstances of its time and place of production. The behaviour derives its meaning as much from its position on these co-ordinates as from its intrinsic significance (Enfield 2009, 3–4).*

#### 4. In Place of Conclusion

We are dealing with several layers of meaning here, resulting in a complex amalgam of signs as a process and product of a sequence of meaning-making moves. Let us break this amalgam down, step by step (following Enfield's analysis in the previous quote):

- first layer, there is a kneeling posture as such, with its prototypical meaning;
- second layer, there is the presence of Willy Brandt, at that time the chancellor of Germany, with a variety of different meanings being attached to him or his function;
- third layer, the chancellor of Germany is taking the kneeling position;
- fourth layer is provided by the information that this act of kneeling was part of Brandt's state visit to Warsaw;
- fifth layer is provided by the information that Brandt's kneeling act was part of the commemoration of Jewish victims of the Warsaw Ghetto.

Speaking of the photo as such, it is these five layers of meaning that form an amalgam of signs. But, even more layers of meaning could be added, depending on the 1) background knowledge of the observer and interpreter, as well as 2) the context in which the photo is interpreted.

In view of all that has been said, let us return to the fruit found in Detroit river. If after checking and re-checking different photos, different texts, and the two photos of a strange fruit that was found in Detroit river, we finally point (and very probably gaze) at it, declaring: “This fruit is not a bread fruit!”, we have produced a composite utterance, enchronically (i.e. dynamically, interactively and recursively) embracing several, at least nine, layers of meaning-making moves:

1. checking the photos of the Detroit river fruit,
2. checking the photos of breadfruit in different encyclopaedias,
3. checking the text that comments on those photos,
4. checking the Detroit river fruit again,
5. looking for more photos of similar fruits,
6. checking the text that comments on those fruits,
7. rechecking the Detroit river fruit again,
8. finding out that the Detroit river fruit is not a breadfruit,
9. making clear (voice, gesture, gaze) that the Detroit river fruit is not a breadfruit.

These nine layers belong to and are expressed by three types of signs that are enchronically combined in almost every of the nine steps (conventional signs: words/text; non-conventional signs: photos, gesture, gaze; symbolic indexical: demonstrative pronoun “this”, linking the conventional and non-conventional signs).

Put in other words and more explicitly. As it, hopefully, became clear analyzing the Detroit fruit example, reasoning is not and cannot be just seeing, and just seeing is not and cannot be reasoning. Consequently, there could be no “pure” visual, but only multimodal argumentation: at least verbal and probably other codes should be taken into consideration in order to reach sufficient, satisfying and complete meaning interpretation. But this is not all: all these codes should be taken into consideration dynamically, not statically: in their recursive interaction, i.e. switching from one code to the other and back. Therefore, in order to gain analytic credibility and interpretive force, scholars working on visual argumentation would be much better off if they included enchrony in their conceptual framework, and

considered incorporating all these intermediate recursive steps, as well as all these interactively dependent codes and concepts into their framework. The final result they enchronically arrive at should thus be described as composite meaning, resulting in composite utterances.

But this final result, speaking of visual argumentation, really only opens the Pandora's box of argumentation, namely: what about the "traditional", verbal argumentation? In the light of enchrony, this dynamic, interactive and recursive multimodality, shouldn't we reconsider it as well?

## Bibliography

### *Literature*

- Birdsell, D. S., and L. Groarke. 1996. "Toward a Theory of Visual Argumentation." *Argumentation and Advocacy* 33 (1): 1–10.
- Dove, I. J. 2002. "Can Pictures Prove?" *Logique et Analyse* 179–180: 309–340.
- Dove, I. J. 2011. "Visual Analogies and Arguments." In *Argumentation: Cognition and Community. Proceedings of the 9<sup>th</sup> International Conference of the Ontario Society for the Study of Argumentation (OSSA)*, edited by F. Zenker, 1–16. Windsor, Ontario: OSSA.
- Dove, I. J. 2012. "Image, Evidence, Argument." In *Topical Themes in Argumentation Theory*, edited by F. H. van Eemeren and B. Garssen, 223–38. Amsterdam: Springer.
- Enfield, N. J. 2009. *The Anatomy of Meaning*. Cambridge; New York: Cambridge University Press.
- Gilbert, M. A. 1994. "Multi-Modal Argumentation." *Philosophy of the Social Sciences* 24 (2): 159–77.
- Gilbert, M. A. 1997. *Coalescent Argumentation*. Mahwah, NJ: Lawrence Erlbaum.
- Godden, D. 2013. "On the Norms of Visual Argument." In *Virtues of Argumentation: Proceedings of the 10<sup>th</sup> International Conference of the Ontario Society for the Study of Argumentation (OSSA), 22–26 May 2013*, edited by D. Mohammed and M. Lewiński, 1–13. Windsor, ON: OSSA.
- Godden, D. 2015. "Images as Arguments: Progress and Problems: A Brief Commentary." *Argumentation* 29(2):235–38.
- Godden, D. 2017. "On the Norms of Visual Argument: A Case for Normative Non-Revisionism." *Argumentation* 31 (2): 395–431.
- Goffman, E. 1974. *Frame Analysis: An Essay on the Organization of Experience*. London: Harper and Row.

- Groarke, L. 1996. "Logic, Art and Argument." *Informal logic* 18: 105–29.
- Groarke, L. 2002. "Towards a Pragma-Dialectics of Visual Argument." In *Advances in Pragma-Dialectics*, edited by F. H. van Eemeren, 137–51. Amsterdam; Newport News, VA: Sic Sat and Vale Press.
- Groarke, L. 2009. "Five Theses on Toulmin and Visual Argument." In *Pondering on Problems of Argumentation*, edited by F. H. van Eemeren and B. Garssen, 229–39. Amsterdam: Springer.
- Groarke, L. 2013a. "On Dove, Visual Evidence and Verbal Repackaging." In *Virtues of Argumentation: Proceedings of the 10<sup>th</sup> International Conference of the Ontario Society for the Study of Argumentation (OSSA), 22–26 May 2013*, edited by D. Mohammed and M. Lewiński, 1–8. Windsor, ON: OSSA.
- Groarke, L. 2013b. "The Elements of Argument: Six Steps to a Thick Theory." In *What Do We Know about the World? Rhetorical and Argumentative Perspectives*, edited by G. Kišiček and I. Ž. Žagar, 25–43. Ljubljana: Educational Research Institute
- Groarke, L. 2015. "Going Multimodal: What is a Mode of Arguing and Why Does It Matter?" *Argumentation* 29 (2): 133–55.
- Groarke L., C. H. Palczewski, and D. Godden 2016. "Navigating the Visual Turn in Argument." *Argumentation and Advocacy* 52 (4): 217–35.
- Johnson, R. H. 2003. "Why 'Visual Arguments' Aren't Arguments." In *Informal Logic at 25: Proceedings of the Windsor Conference*, edited by H. V. Hansen, Ch. W. Tindale, A. Blair, and R. H. Johnson, 1–13. Windsor, ON: University of Windsor.
- Johnson, R. H. 2010. "On the Evaluation of Visual Arguments: Roque and the Autonomy Thesis." Paper, presented at Persuasion et argumentation: Colloque international organisé par le CRAL à l'École des Hautes Etudes en Sciences Sociales, Paris, 7–9 September 2010.
- Kjeldsen, J. E. 1999. "Visual Rhetoric – From Elocutio to Convention." In *Proceedings of the Fourth International Conference of the International Society for the Study of Argumentation*, edited by F. H. van Eemeren, R. Grootendorst, J. A. Blair and C. A. Willard, 455–60. Amsterdam: Sic Sat.
- Kjeldsen, J. E. 2007. "Visual Argumentation in Scandinavian Political Advertising: A Cognitive, Contextual, and Reception-Oriented Approach." *Argumentation and Advocacy* 43 (3–4): 124–32.
- Kjeldsen, J. E. 2012. "Pictorial Argumentation in Advertising: Visual Tropes and Figures as a Way of Creating Visual Argumentation." In *Topical Themes in Argumentation Theory*, edited by F. H. van Eemeren and B. Garssen, 239–56. Amsterdam: Springer.

- Kjeldsen, J. E. 2013. "Strategies of Visual Argumentation in Slideshow Presentations: The Role of Visuals in an AI Gore Presentation on Climate Change." *Argumentation* 27 (4): 425–43.
- Kjeldsen, J. E. 2015a. "The Rhetoric of Thick Representation: How Pictures Render the Importance and Strength of an Argument Salient." *Argumentation* 29 (2): 197–215.
- Kjeldsen, J. E. 2015b. "The Study of Visual and Multimodal Argumentation." *Argumentation* 29 (2): 115–32.
- Kišiček, G., and I. Ž. Žagar, eds. 2013. *What Do We Know about the World? Rhetorical and Argumentative Perspectives*. Ljubljana: Educational Research Institute
- Patterson, S. W. 2010. "A Picture Held Us Captive: The Later Wittgenstein on Visual Argumentation." *Cogency* 2 (2): 105–34.
- Roque, G. 2010. "What Is Visual in Visual Argumentation?" In *Argument Cultures: Proceedings of OSSA 09*, edited by J. Ritola et al., 1–9. Windsor, ON: OSSA.
- Roque, G. 2012. "Visual Argumentation: A Further Reappraisal." In *Topical Themes in Argumentation Theory*, edited by F. H. van Eemeren and B. Garssen, 273–88. Amsterdam: Springer.
- Roque, G. 2015. "Should Visual Arguments Be Propositional in Order to Be Arguments?" *Argumentation* 29 (2): 177–95.
- Žagar, I. Ž. 2016. "Against Visual Argumentation: Multimodality as Composite Meaning and Composite Utterances." In *Argumentation and Reasoned Action. Volume I: Proceedings of the 1<sup>st</sup> European Conference on Argumentation, Lisbon 2015*, Studies in Logic, vol. 62, edited by D. Mohammed and M. Lewiński, 829–52. London: College Publications.
- Žagar, I. Ž. 2018. "Perception, Inference, and Understanding in Visual Argumentation (and Beyond)." In *Argumentation and Inference. Volume I: Proceedings of the 1<sup>st</sup> European Conference on Argumentation, Fribourg 2017*, Studies in Logic and Argumentation, vol. 77, edited by S. Oswald and D. Maillat, 439–69. London: College Publications.

#### *Web sources*

- Acta Plantarum. 463. <http://www.actaplantarum.org/acta/galleria1.php?aid=463>.
- Commons. Maclura 1. [https://commons.wikimedia.org/wiki/File:Maclura\\_pomifera\\_Inermis\\_BotGardBln1105Fruits.jpg](https://commons.wikimedia.org/wiki/File:Maclura_pomifera_Inermis_BotGardBln1105Fruits.jpg).

Commons. Maclura 2. [https://commons.wikimedia.org/wiki/File:Maclura\\_pomifera\\_FrJPG.jpg](https://commons.wikimedia.org/wiki/File:Maclura_pomifera_FrJPG.jpg).

Healthy Benefits. Breadfruit. <http://healthybenefits.info/the-health-benefits-of-consuming-bread-fruit%E2%80%8F/>.

Plants for a Future. Maclura. <http://www.pfaf.org/user/Plant.aspx?LatinName=Maclura+pomifera>.

Wikipedia. Breadfruit. <https://en.wikipedia.org/wiki/Breadfruit>.

Wikipedia. Maclura. [http://en.wikipedia.org/wiki/Maclura\\_pomifera](http://en.wikipedia.org/wiki/Maclura_pomifera).

## **Povzetek**

*Sklepanje in reprezentacija v »vizualni argumentaciji«:  
nekaj metodoloških problemov*

V zadnjih dvajsetih letih (ali nekaj več) postaja področje argumentacije bolj »fleksibilno« in odprto za nove pristope, pristope, ki ne temeljijo le na logiki (takšni in drugačni), in ne le na jeziku.

Vizualna argumentacija se je pričela razvijati v devetdesetih letih prejšnjega stoletja in je dobesedno vzcvetela v začetku novega tisočletja (Groarke, Birdsell, Kjeldsen, Roque, Tseronis ...). Leta 1997 je Michael Gilbert (Coalescent Argumentation) predlagal štiri načine argumentacije: logičnega, emocionalnega, visceralnega (»fizičnega«) in kisceralnega (»metafizičnega«, »intuitivnega«), pred približno desetimi leti pa je Christian Plantin objavil obsežno delo o vlogi emocij v argumentaciji, *Les bonnes raisons des émotions - Principes et méthode pour l'analyse de la parole émotionnée* (2011).

Pričujoči članek se posveča predvsem (tako imenovani) vizualni argumentaciji, natančneje nemožnosti (čiste) vizualne argumentacije, njeni nejasni metodologiji in epistemologiji. Sledeč prelomnemu delu N. J. Enfielda o enhroniji (*The Anatomy of Meaning*, 2009) bom pokazal, da je »vizualni« pomen vedno sestavljen (composite) in utemeljen s kontekstom; da bi moral biti vedno (re)konstruiran skozi interaktivno-rekurzivni multimodalni proces (enhronija); in da bi morala sleherni analiza pomena potekati v terminih enhrone analize in biti rekonstruirana na način sestavljenih izjav.