University of Windsor

Scholarship at UWindsor

OSSA Conference Archive

OSSA 10

May 22nd, 9:00 AM - May 25th, 5:00 PM

Commentary on: Ian Dove's "Visual arguments and meta-arguments"

Jens E. Kjeldsen
University of Bergen, Department of Information Science and Media Studies

Follow this and additional works at: https://scholar.uwindsor.ca/ossaarchive

Part of the Philosophy Commons

Kjeldsen, Jens E., "Commentary on: Ian Dove's "Visual arguments and meta-arguments"" (2013). *OSSA Conference Archive*. 39.
https://scholar.uwindsor.ca/ossaarchive/OSSA10/papersandcommentaries/39

Commentary on: Ian Dove's "Visual arguments and meta-arguments"

JENS E. KJELDSEN

Department of Information Science and Media Studies
University of Bergen
Bergen, 5073
Norway
jens.kjeldsen@infomedia.uib.no

1. INTRODUCTION

The study of visual argumentation is dominated by pictorial representations such as photographs, paintings, drawings and cartoons. In this research landscape Ian Dove has become a specialist of a kind visual argumentation we should pay more attention to: argumentation and visual evidence in science.

His paper "Visual argumenta and meta-arguments" continue this line of important research. Even though we have had a rhetorical turn in the study of science, this has mostly been limited to verbal communication, which is why the study of visual rhetoric and argumentation is important.

In his paper Doves not only demonstrates vividly that visual argumentation, refutation and meta-argumentation is indeed possible. He also provides good examples and analyses of visual scientific argumentation, thereby showing us both how such visual scientific argumentation works, and giving us a sense of the ways in which this special kind of argumentation is different from other kinds.

2. LOGIC AND RHETORIC

In the beginning of his paper Dove mentions that the studies of visual rhetoric flourish, and expresses surprise that "the logical analysis of putative visual arguments has relatively fewer proponents" (p. 1). So he wants to make the case for the logical by showing that there are distinctive logical manoeuvres involving visuals in reasoning.

In order to show that there are such distinctive logical manoeuvres in visuals, Dove analyses two examples: firstly an example of visual Inference to the Best Explanation (IBE), involving visual fit, and secondly an example of visual meta-argumentation, providing a counterexample.

Now, I am not completely sure what Dove means with making a case for the "logical as opposed to the rhetorical analysis". I would consider all the examples Dove analyses as rhetorical, since they are clearly used in an attempt to persuade other people? However, I assume that Dove is thinking of the logical moves of inference offered by the visuals.

Despite their common rhetorical dimensions, it also seems obvious that there are significant differences between the logical moves and rhetoric in the Wegener maps, which Dove refers to as *fit arguments*, and the Kempe and Heawood colour maps, which he refers to as *visual meta arguments*. I therefore, I hope that professor Dove today, and in his future work will elaborate more on these differences in argumentation.

Dove begins to address this in the last part of his paper, when talking about the visual meta-arguments.

> in the cases of maps and photographs we needed some theory to explain the content of the visuals, we need no such theory for the present examples. The reason is that these visual examples don't represent other objects. Instead, they are themselves the objects that constitute the counter-models.

This is undoubtedly correct, but it also calls for at least two kinds of elaborations. Firstly, I would like to hear Dove elaborate more on the differences of the argumentative role of the visuals in these examples compared to the Wegener maps and in general to for instance photographs.

Secondly, I would like him to address what kinds of visual representations the insights from his analysis may be expected to apply to? Are these kinds of visual argumentation – or logic – so different from other kinds that analysing them only teaches us very much about most of the visual argumentation we encounter – even the scientific argumentation? What would be other examples of similar kinds of argumentation?

3. A SPECIAL KIND OF VISUAL ARGUMENTATION

Dove himself points to the special character of the meta-arguments, when dealing with the colour-maps. His writes that in the case of Heawood, "the picture is the counterexample", because Heawood's visual example "don't represent other objects," but are "themselves the objects that constitute the counter-models".

This, obviously, is very different from the way for instance a photograph generally function as the evidence that proofs something is – or is not – the case. A photographic representation never proofs anything in itself. Instead, photographic argumentation and proof is always based on the mechanical production method, the credibility of the sender, and the photographs semiotic ability to function as a signifier for a signified.

Let's say, for instance, that the traffic authorities send me a ticket and link to a movie showing my car not making a full stop where such a stop it is required. In that case I do not question the images showing my car doing an illegal turn, but take them as evidence, a semiotic sign, of my illegal action. I can see that this is my car. I trust the city of Chicago to not produce fake evidence to make me pay a ticket. I suspect that the producing of such fake evidence would be so difficult, time consuming, and risky, that the city would never proceed with such an endeavour. So, I pay the ticket.

Now, in such a case the evidence or the persuading argument, if you will, is never just the image itself, or rather the indexical character of photographic images. The argument is also, one could even say predominantly, based on rules of trust and credibility as well as on likelihood of faking.

So this kind of image would function as proof because 1: I can iconically recognize my car doing an illegal turn, 2. I accept the photographic representation as an indexical representation of the event, and 3: based on inferences of trust and likelihood I conclude that the image is not manipulated. So, I accept the claim that I did this (even if I may not remember it). In short, such a visual argument is fundamentally context-dependent.

This kind of context-dependency does not seem to apply in the same way to the Heawood-example, which appears to function more as a sort of self-enclosed visual riddle. While the Wegener maps are used to argue through an Inference to the Best Explanation in order to say something about the world only represented through the images, the argumentation in the Kempe/Haewood maps do not have to make an inference to the best explanation, because these maps functions as their own evidence.

So, even though the Wegener maps and the Kempe/Haewood colour maps in some ways seem to illustrate the same kind of visual argumentation, are they not fundamentally different?

The Wegner maps do not proof – or argue for – anything in themselves. The fact that these visual representations of land seem so fit together in the map does not mean that this necessarily was the case. Because the argument is not about what we see on the page, the drawings of the continents, but about what these drawings refer to: the continents themselves.

However, in the case of the colour theorem, the configurations on the page seem to be what is actually argued about. If we before us have a four-colour Kempe-map, then this in itself is an argument that four colours are enough. Until, of course we see a Haewood-map showing – and thereby functioning as proof – that there is at least one instance where re-colouration is not possible with only four colours.

4. CONCEPTS, PROCESS AND SEMIOTICS

Furthermore, even though we might not need any theory to explain the content of the visuals in the maps, we do need some sort of theory of communication, rhetoric or pragmatics, if we are to understand how these images are used to make arguments? Because they are obviously being used to argue. Wegener does not use the maps to argue about their own internal relations, but to gain support for his thesis about the movement of the continental shelves.

So, In the case of Wegener – like the example of the traffic offence, and photographs in general – we seem to have a traditional kind of signification process, with a present and material signifier representing an absent signified. With the case of the four-color theorem maps it seems to be fundamentally different. Even though Dove consciously has attempted to "avoid a technical foray into semiotics on the one hand or theories of depiction or representation on the other", I wonder if not such

theories would be very well suited for explaining this difference and the argumentation of the maps in general.

Instead Dove proposes in his conclusion that we use the word *extraction* when talking about appealing to visuals. He has coined this word because: "We extract information from a visual element as part of a process of reasoning."

This sounds sensible if we only think of visuals holding certain arguments or lines of reasoning as box holds content, which we then pull out. However, if we think of argumentation as a form of co-operation, with the viewer as an active co-constructor of the arguments, then extraction only describes half the process. Most visual argumentation, I would claim, especially pictorial rhetoric, does not primarily work through the viewers' extracting something from the images, but through the image's cuing or eliciting something already in the viewer. So, what do we gain from introducing *extraction* to the more commonly used concepts such as *cuing*, *evoking*, or *eliciting*?

Furthermore, it seems unwise to avoid theories of semiotics and depiction, which are developed to deal with exactly the kind of issues Dove is discussion. The use of Kendall Walton's article "Transparent pictures" and Wollheim's book *Painting as art* are surely relevant for the discussion. However, it seems that more seminal texts in the debate on depiction, resemblance, similarity, and semiotic conventionality could have beneficial. The debate between Nelson Goodman and Ernst Gombrich, for instance seem relevant for Doves examination of representation, convention and resemblance. And the semiotic notions of indexical, symbolic and iconic signs relying on causality, conventionality or similarity seem to me to be good tools to deal with the differences between the Wegener-maps, photographic representations of the continents and the representations of (abstract) relations we encounter in the Venn-diagrams or the four-colour diagrams.

Among the issues I have touched upon I would like Dove to elaborate on the differences between his examples, as well as to other forms of visual argumentation. I would like him to say more about how his analysis and insights could apply to such other forms. I would also like Dove to elaborate on the benefits and problems with the term extraction, as well as the use of – or choice not to use – theories of representation and semiotics.