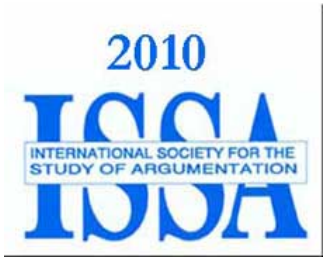
ISSA Proceedings 2010 – Should "Argument" Be Defined Without Reference To Use?



In his 2005 Ontario Society for the Study of Argumentation keynote address, *"Argument and Its Uses"* (Blair 2005), J. Anthony Blair contends that arguments need not involve any attempt at persuasion, and in fact, that "argument" should be defined without reference to any particular use at all. Roughly speaking, a set of propositions counts as an argument, on his view, "just when all but one of them constitute a reason for the remaining one," that is, support the remaining proposition to some degree.

I shall argue that Blair is correct in thinking that arguments need not be intended to persuade, but that his definition of "argument" is faulty. Contra Blair, I argue that "argument" cannot be defined independently of use – specifically, the intentional use of reasons to support a conclusion.

1. Must All Arguments Be Intended to Persuade?

It is widely agreed that arguments typically or paradigmatically are aimed at persuasion – that is, at convincing readers or listeners to accept a claim. Some theorists have gone further, claiming that all arguments, by definition or conceptual necessity, are intended to persuade. Blair believes this is a mistake and offers seven examples of what he takes to be non-persuasive argumentative discourse. These include:

1. Quasi-persuasion: offering reasons in order to strengthen or weaken adherence to a claim, or to show that a claim is possibly true, rather than to convince someone to adopt or abandon the claim.
2. Inquiry/investigation and deliberation: considering and weighing arguments, not to defend some pre-existing view, but to determine what to believe or what to do.
3. Justification: defending one's acceptance of a particular claim, without any intention or expectation of persuading others to accept that claim.
4. Collaboration: attempting, through dialogue, to find and build on common ground, rather than to convince one discussant to accept a claim defended by

another.
5. Rationale-giving: explaining the basis for a particular decision or judgment (e.g., the awarding of a prize or a legal decision), with no intent to persuade.
6. Edification/instruction: weighing arguments pro and con, either for one's own edification or as a means of instructing others.
7. Evaluation: using arguments (as a teacher, for example) to provide practice and/or to assess performance in critical analysis.

It is not clear that all of these counterexamples work. Three of the examples –dification/instruction, inquiry/deliberation, and evaluation – appear to trade on an ambiguity in the notion of "using" an argument. To "use" an argument might mean (1) to utilize it for some secondary purpose (e.g., as an example in a logic class or as a means of impressing one's boss) or (2) to assert it for some argumentative purpose (e.g., defending a claim). Clearly, arguments may be utilized for all sorts of purposes (as a translation exercise, to illustrate an author's prose style, to browbeat an opponent, stall for time, etc.), including purposes wholly unrelated to the argumentative nature of the discourse. But when we are asking whether arguments are necessarily aimed at persuasion only the second sense of "use" is relevant. No one would deny that arguments can be utilized as translation exercises or for any number of other non-argumentative and non-persuasive purposes. Thus the pertinent question is not, "Can arguments be utilized for purposes other than persuasion?" but "Can one offer or assert an argument with no intention to persuade?"

Another example offered by Blair depends on an equivocal use of "argument." As many commentators have noted, in argumentation studies "argument" can mean (roughly) either (a) a claim defended with reasons (i.e., a set of propositions structured to provide evidence or support) or (b) an argumentative discussion aimed at resolving disagreements, creating justified belief, finding common ground, etc. One of Blair's putative counterexamples – collaboration – seems to presuppose (b) while the others presuppose (a). Only (a), I suggest, is relevant to the issue of whether arguments are necessarily aimed at persuasion. It is widely agreed that multi-party argumentative dialogues can be aimed at outcomes such as decision-making, inquiry, or finding shared commitments, rather than persuasion (Walton 1989, pp. 3-9).

What Blair calls "quasi-persuasion" also fails as a counterexample. To attempt to strengthen S's belief in p clearly is a form of persuasion. It is an attempt to

persuade S to accept p with (say) 90% certainty rather than with 60% certainty. Likewise, to argue that p is possibly true (as opposed to actually true) will also normally be an act of persuasion, at least in cases where the arguer's goal is to convince skeptical readers or listeners that p is indeed possibly true.

That leaves only two of Blair's alleged counterexamples standing – justification and rationale-giving. These, however, are enough to do the job. It is certainly possible to defend a belief or offer reasons in support of a decision without any hope, expectation, or intention of persuading anyone to accept one's conclusion(s). Here are three additional examples, none of which fall neatly into any of Blair's categories:

Case 1: The Reluctant Advocate Lawyers often have a professional obligation to defend claims that, personally, they reject and may even find deeply repugnant. A defense attorney who vigorously defends an obviously guilty client knows perfectly well that he won't persuade the jury. Very likely he hopes his arguments won't persuade them. But clearly the attorney is giving an argument. He's offering reasons in defense of a conclusion, and that's sufficient to make it an argument.

Case 2: The Preacher to the Converted As Samuel Johnson usefully reminds us, people need to be reminded more often than they need to be instructed. Consider a Christian homilist who exhorts his flock to "love one another," backing up his admonition with Scriptural proof-texts or other reasons. Presumably the homilist isn't trying to persuade; no one in his flock has the slightest doubt that Christians should love one another. His purpose in giving the argument is not to instruct by inducing or strengthening belief but to remind and thereby sway attitudes, motivate actions, solidify dispositions, refresh awareness of the grounds of belief, and so forth.

Case 3: The Unconvinced Debaters Forensic debaters (e.g., on college debating teams) advance many arguments, but their intention typically is not to persuade – at least not directly. Their goal isn't to convince either their opponents or the judges to accept the conclusions they are defending. Often, the debaters don't accept those conclusions themselves. Their goal, rather, is to win the debate by outpointing their opponents. The only "persuasion" they ordinarily hope to achieve is to convince the judges that they have argued more effectively than their opponents. Yet the debaters have not merely "utilized" arguments for the

sake of some secondary purpose, such as winning the debate. They have offered (advanced, proposed) arguments and attempted to defend them as cogently as possible. This is analogous to lawyers defending views that they may or may not personally accept and is similarly an example of non-persuasive argumentation.

2. Blair's Definition of "Argument"

Blair is correct, then, in thinking that arguments need not be intended to persuade. But is he also right in claiming that "argument" can be defined without reference to any kind of use at all?

Blair offers what he calls a "slightly rethought" (Blair 2005, p. 138) definition of argument. The kernel of his definition is contained in the following passage:

> I propose that we conceive a set of one [sic] or more propositions to be an argument (understanding "proposition" in the broadest sense) just when all but one of them constitute a reason for the remaining one. And a set of propositions are a reason for an [sic] belief, attitude, or decision, just when the former support the latter to some degree. . . .To take something to be an argument is to take a consideration to supply some amount of support for a proposition. So the identification of a set of propositions as an argument is a judgement, and individual people make judgments. It follows that whether some set of propositions is an argument is a judgement that someone makes (Blair 2005, p. 142).

I take it that Blair is proposing that a set of propositions constitutes an argument when two conditions are met: (1) all but one of the propositions provides some degree of support for the remaining proposition, and (2) some intelligent agent intends or recognizes that relation of support.

The first condition is fairly standard. Blair notes that he speaks of "propositions," rather than "claims," because a "claim," he thinks, implies an assertion aimed at persuasion, and as we've seen he wants to define "argument" independently of the notion of persuasion. It is not clear to me that a "claim" really does imply an attempt at persuasion, but even if we speak of "propositions" rather than "claims," there's nothing strikingly new in Blair's first condition. Many logic texts define "argument" in terms of "propositions" or "statements" rather than "claims." As we shall see, however, it is unusual to include in arguments only propositions that actually, rather than merely putatively, support the conclusion.

It is the second condition that is more interesting. The standard view is that an

argument exists only when there is an arguer, that is, some person (or persons) who "affirms" or "sets forth" a "claim" or "proposition" and defends it with reasons. In other words, there has to be a certain sort of intent – an intent to support a proposition with evidence or reasons. What Blair seems to be suggesting is that no such intent is really needed. All that is necessary is: (a) a group of inferentially related propositions such that one proposition is supported by all the others and (b) some individual who recognizes – or as Blair says "judges" – that such a support relation exists.

I think Blair is here falling prey to a common confusion. Consider two cases:

Case A: A roomful of monkeys are handed strips of paper. Each strip of paper contains a single categorical statement related to fruits – "No apples are pears," "Some bananas are not plums," and so forth. A researcher enters the room and notices that one monkey has put in a row three strips of paper that read as follows: "All apples are fruits; No vegetables are fruits; No apples are vegetables." "Aha!" the researcher exclaims. "The monkey has created an argument – a valid categorical syllogism, in fact!"

Case B: A logic instructor writes the following sentences on the board: "If the moon is made of green cheese, then I'm a monkey's uncle; the moon is made of green cheese; so I'm a monkey's uncle." This is an example, the instructor says, of a "valid deductive argument."

In both cases, I suggest, there is no actual argument. Why? Because there is no arguer. No one has "offered" or "given" or "made" an argument. No claim has been "set forth" or "affirmed" and "defended with reasons." There is a difference between (a) recognizing that a certain sequence of propositions is inferentially related and (b) offering an argument. The crucial difference is one of intent. No intent to support or defend, no argument.

This is not to deny that sets of inferentially related propositions exist as abstract objects, and that such sets are properly studied by logicians. My claim is simply that such propositional sets are merely possible arguments rather than actual ones. They become actual arguments only when some intelligent agent offers or affirms them.

Blair's failure to recognize that arguments require an arguer poses problems for his proposed redefinition of "argument." I note three difficulties in particular.

First, Blair's definition makes it harder than it is on standard accounts to distinguish arguments from illustrations and explanations. An illustration such as
(1) The Cascades has many majestic peaks. For instance, Mt. Hood and Mt. Rainier are both over 11,000 feet tall could become an argument on Blair's view, because some individual (either the author or a recipient of the utterance) could easily recognize that the second statement provides some support for the first. The same is true of explanations such as
(2) The streets are wet because it rained.
Because the explananda clearly provides some reason to believe the explanandum, the passage might count as an argument on Blair's analysis, even though no argument was intended.
Illustrations and explanations are not arguments because they have no conclusions. And they have no conclusions because the the relevant argumentative intentions are lacking.

Second, as Blair himself remarks, his definition of argument implies that no arguments can contain irrelevant (or inadvertently countervailing) premises. Thus a standard test of argument analysis and evaluation – Are the premises relevant to the conclusion? – becomes otiose on his account, and formal and informal fallacies of relevance presumably turn out not to be fallacies at all, because they are not even arguments. Even many straightforward examples of invalid arguments, such as denying the antecedent and invalid categorical syllogisms, would often turn out not to be arguments, since the premises, though claimed to support the conclusion, in fact provide no relevant support.

This exclusion of irrelevant premises from arguments has bizarre consequences. Consider a racist detective who reasons as follows:

1. Six eyewitnesses say they saw Sturdley rob the bank.
2. A bank surveillance camera videotaped Sturdley in the act of robbing the bank.
3. The loot was found in Sturdley's apartment, and his fingerprints were found on the bag that contained the loot.
4. Sturdley is a South Pedran, and South Pedrans are nothing but lazy, ignorant slobs.
5. So, Sturdley very likely robbed the bank.

Since (4) (we can stipulate) is based purely on irrational prejudice and provides no relevant support for the conclusion, and it is not the case that all but one of the

proferred statements “constitute a reason for the remaining one,” it follows that this entire passage is not an argument on Blair’s definition. Yet clearly it is.

Determining relevance is often a tricky matter, particularly in cases of invalid reasoning. Consider this argument:
(3). If God exists, there are objective moral values; God does not exist; So, there are no objective moral values.

Do the premises in this invalid argument provide any relevant support for the conclusion? It is not easy to say. Some philosophers claim that objective moral values are metaphysically possible (or epistemically likely) only if God exists. Others deny any connection between God and objective morality. As examples like these suggest, Blair’s definition of “argument” will often make it difficult to determine – even with standard textbook examples of arguments – whether a genuine argument is or is not being offered.

Finally, Blair’s proposed definition runs into problems with arguments that contain mutually supporting propositions. Consider this argument:
(4) Obama is President, so he’s commander-in-chief of the U.S. Armed Forces.

On the standard conception of “argument” this is clearly an argument, and the conclusion (signified by the conclusion indicator “so”) is the second statement.

On Blair’s proposed definition, things are more complicated. That Obama is President implies (given the U.S. Constitution) that he is commander-in-chief. Conversely, however, the fact that Obama is commander-in-chief implies that he is President. (In U.S. law, the two terms are co-extensive.) Suppose a beginning logic student mistakenly thinks that “so” is a premise indicator rather than a conclusion indicator. He recognizes, correctly, that Obama’s being commander-in-chief entails that Obama is President, and “judges” that the passage is an argument in which the first statement is the conclusion and the second statement is the premise. Another student, recognizing that “so” is actually a conclusion indicator, judges that the conclusion is the second statement. Blair’s definition seems to imply that both students are right. An argument exists any time an individual correctly judges that one proposition provides some degree of support for another.

For all these reasons, I think we are better off sticking with standard textbook definition of “argument” (in the informal logic sense) as a set of propositions, one

or more of which are claimed or intended (explicitly or implicitly) to prove or support another proposition. If so, "argument" cannot be defined wholly independently of use. For a passage counts as an argument only if the constitutive propositions are used for a particular purpose: to provide evidence or support for a conclusion. Arguments need not be used to persuade (although this is certainly their most common and important use). But they must be intentionally used to justify or support.

REFERENCES
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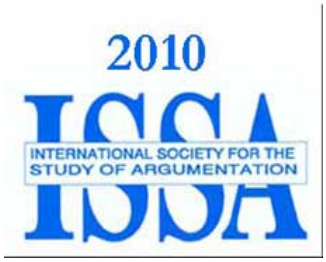
ISSA Proceedings 2010 – Critical Inquiry: Considering The Context



1.Introduction

The significance of considering the context surrounding an issue is underestimated and often overlooked in approaches to critical thinking theory and instruction based on informal logic. For example, fallacies of relevance such as ad hominem are seen as fallacious precisely because they appeal to the context rather than to the argument itself. In this paper we challenge this view, demonstrating how and under what circumstances considering context is relevant and even vital to critical thinking.

We begin by arguing that the downplaying of the relevance of context stems from the view of critical thinking as essentially the evaluation of individual arguments. This view, which betrays the vestiges of the deductivist heritage of informal logic, still underpins much critical thinking instruction.

We have argued, on the contrary, that critical thinking is better viewed in terms of what we refer to as critical inquiry in which argumentation is seen as a way of

arriving at judgments on complex issues. This is a dialectical process involving the comparative weighing of a variety of contending positions and arguments in order to come to a reasoned judgment on the issue (Bailin & Battersby 2009; Battersby & Bailin 2010). Further, we argue that critical thinking instruction should focus on this inquiry process (Bailin & Battersby, 2010).

In the model we have developed for teaching critical thinking as critical inquiry, considering the context of the issue is an important component. We consider the following aspects of context:
(1) Dialectical context
(2) Current state of belief or practice
(3) Intellectual, political, historical, social
(4) Disciplinary context
(5) Sources
(6) Self

2. The Role of Various Contexts
(1) Dialectical context
The dialectical context includes the debate around an issue, both current and historical. A knowledge of the dialectical context is centrally important because reaching a reasoned judgment involves more than simply evaluating a particular argument. Rather, it involves making a comparative assessment of the relative strengths and weaknesses of the competing views.

To see the importance of considering the history of an arguments, consider the following example. This is a standardization of an argument written by a "lifer" in the Michigan prison system (from Johnson & Blair 2006):
Conclusion: We should not reinstate capital punishment in Michigan.
P1. We have capital punishment in 38 states and their statistics show no significant decrease in capital crimes.

P2. The 1st degree murderer is least likely to repeat.

P3. The 1st degree murderer is most likely to repent.
P4. Nationwide, corrections officials report that lifers are the best prisoners and stabilizers in their prisons.

Some individuals, upon seeing this argument, may initially judge many or even all the premises as irrelevant because they are unaware of the history of the debate

about capital punishment. Whereas they usually seem to know the retribution argument, they often do not have the background knowledge of the argument about the alleged deterrent effect of capital punishment or the argument that lifers will produce mayhem in the prisons since there is no further punishment they can suffer. As a result, they fail to see the relevance of the statistics in premise P1 or the relevance of the remark in premise P4 about the contribution that lifers make to prison stability. More sophisticated readers will know about these debates and bring that knowledge to bear on understanding and evaluating the argument.

In addition, the question of premise acceptability is dependent on the reader's awareness of the debate. The fact that capital punishment fails to deter murder has been quite widely accepted for many years. This means that people who know the history of the debate would be inclined to accept premise P1. But for those unaware of the history of this argument, premise P1 may seem counter intuitive and unacceptable.

Sophisticated readers use their awareness of the history of the debate all the time, but this awareness needs to be made self conscious to enhance reasoning and to teach it. The tendency of critical thinking instruction to extract arguments from their context ignores the methods that sophisticated reasoners use to evaluate arguments. In addition, such an ahistorical approach often results in arguments and insights being underappreciated. If you are unaware of the dialectical context of Newton's, Darwin's, or Descartes' theories, you will probably not appreciate the depth of the insights contained in their arguments. Appreciating philosophical arguments involves understanding the dialogue that has transpired between historical interlocutors, sometimes over millennia.

Perhaps under the influence of the paradigm of the natural sciences as ahistorical disciplines, 20th century analytical philosophy tended to minimize the importance of the historical embedding of arguments and an account of their history. While the validity of an argument cannot depend on the history of the debate in which it arose, the understanding of and credibility of the argument (and conclusion) can. The first questions given any argument that passes *prima facie* evaluation should be, "What is the history of this debate? What are the counter arguments?"

This is as true for scientific inquiry as it is for philosophical or public policy debate. In science, the current standing of a theory or claim determines the initial

burden of proof of a new or counter claim. Without knowing the history of a scientific inquiry, one cannot make a reasonable assessment of the new claim.

(2) Current state of practice or belief
An understanding of the current state of belief or practice surrounding an issue may reveal what is significant or contentious about the issue. It may also help to establish where the burden of proof resides and thus how strong alternative views and opposing reasons need to be in order to seriously challenge the prevailing consensus or practice.

To see the relevance of current states of belief or practice, consider what Canadians discussing the legalization of marijuana need to know. They need first to understand the current legal situation, including the fact that drug laws are not under provincial but rather federal jurisdiction. Without realizing this, one of our students made the unjustified argument that if marijuana were legalized, then "dopers" from the rest of Canada would flock to Vancouver. To make a reasonable evaluation of the consequences of not de-criminalizing, it is also important to know the number of people convicted of possession every year in relation to the number of users. In addition, one should be aware of the popular belief, widely promoted by governments, that marijuana is a "gateway drug." Knowing that governments generally oppose legalization means that government websites, normally more or less reliable sources of information, should be viewed with a critical eye.

Consider also the case of individuals evaluating the strength of the argument for raising the minimum wage. In order to make a reasoned judgment, they would need to know the wage in other jurisdictions, when the minimum wage was last raised in their location and by how much, the effect of inflation on wages, costs of living, etc.

As another example, in discussions regarding the provincial imposition of a carbon tax in the province of British Columbia last fall, most citizens did not know anything about the idea of pricing externalities (costs that are not charged through the market system). For most, it was just another tax grab. Some individuals, although they supported the idea of a carbon tax to reduce car usage, found it unintelligible that the tax was not used to support public transport. One could agree with them that the tax should have been used for this purpose, but to actually understand the pros and cons of the tax, they had to understand the

political logic of pricing externalities and revenue neutral tax shifts. Without these concepts, they could not make a truly reasoned judgment about the tax.

(3) Intellectual, political, historical and social contexts
Understanding the intellectual, political, historical and social contexts surrounding an issue can aid us in understanding and interpreting arguments and can reveal assumptions underlying arguments and positions. In addition, in the case of practical judgments, factors relating to the political, historical and social contexts (such as social consequences) play a crucial role in the evaluation of positions.

As an example of the way the larger social context is relevant to argument evaluation, consider the debates about separatism in Canada. One cannot understand or appreciate the debates without knowing the historical origins of the issues (i.e., that there were two founding countries, Britain and France and that Canada was created as a negotiated country which would respect its two different cultural and national bases). People who naively wonder why Quebec should have special status fail to understand this history. Of course, one cannot argue that because a particular political arrangement has a history, it must be accepted. But to argue against such arrangements is to bear the burden of proof (often a very significant one). Even if one supports a more egalitarian idea of citizenship, the challenges of getting to such a state, given the history, is relevant to the deliberation on the issue. When former Canadian Prime Minister Pierre Elliott Trudeau argued for ending the Indian Act based on a typically liberal stance that ethnicity should not influence one's citizenship status, he was forced to quickly reverse his position in light of the historical basis of native relations and the reality of native living conditions. Arguments for the equal treatment of all sound morally and politically plausible until one comes up against the social realities to which this principle is to apply. Interestingly, the Canadian Charter of Rights and Freedoms, which is similar in many ways to the U.S. Bill of Rights, specifically allows for equality rights to be overridden for the purpose of social improvement.

We might compare our political and cultural world to a natural landscape. Every natural landscape is a product of historical processes, both geological and biological. But the current landscape also needs to be understood in terms of ecology – the current relationships among the various biological components.

The social/political world in which we live also has a formative history and a sustaining social ecology. This world has been shaped by historical processes and is maintained by a web of social relations. Why is marijuana illegal and not alcohol? Besides the beliefs adumbrated above, the history of marijuana prohibition is linked to the prohibition of serious addictive drugs. It is also connected to the fact that when criminalization began, marijuana's dominant use in the U.S. was by new Mexican immigrants (Bonnie & Whitehead, 1970). A relevant social fact is that at this point in time there is an enormous governmental and police investment in drug prohibition. It is also relevant that the primary users are a somewhat marginalized group – young people. Such facts help account for the drug's current legal status and should not be ignored in any debate on the issue.

Any debate about social policy must also take into account the likely consequences of policy implementation. To return to the marijuana debate, one of the likely consequences of legalization is that marijuana use would increase. Another likely consequence is that the sale of marijuana could generate tax revenue. A third likely consequence is that the deployment of police forces could shift to more clearly harmful crimes or could perhaps be reduced. And finally, the market in this illicit drug would be ended and the power of organized crime possibly reduced. No *a priori* liberal argument (that the laws prohibiting marijuana use are an unjustified infringement of individual rights) can be taken as sufficient because these consequences cannot be ignored.

(4) Disciplinary context

Disciplinary context is part of the intellectual and dialectical contexts referred to above. But because disciplines are such a crucial source of claims and arguments, they deserve special attention. Most academic evaluation occurs within a disciplinary context. The criteria of evaluation vary in important ways from discipline to discipline: claims from sociology cannot be evaluated in the same manner as claims from physics. The disciplinary context can also include the dialectical history of the argument within the discipline. Arguments and claims that are novel within the history of the discipline bear a different burden of proof than less novel claims.

Knowledge production depends heavily on disciplines which apply varying criteria to assess claims and do so with varying degrees of rigour. There are important epistemic differences among disciplines. For example, appeals to authority have

varying relevance, credibility and weight depending on the discipline involved. Anyone conducting a critical inquiry needs to understand the difference between those disciplines that tend to consensus and those that do not. The inquirer also needs to understand the inherent difficulty and uncertainty presented by certain forms of inquiry. Observationally based claims that are common in disciplines such as epidemiology and sociology are by their nature more uncertain than claims about particles in physics. Moreover, much of academic economics is based on highly questionable psychological assumptions (built into the concept of *homo economicus*) about human rationality. One only has to watch the gyrations of the stock market to see that other factors than rational assessment of information influence buying and selling.

Support from a consensus among experts is one of the primary bases for crediting a claim. A layperson assessing the credibility of a claim in a discipline needs to inquire whether the claim is supported by a disciplinary consensus. Disciplines characterized by "schools" notoriously do not develop the kind of disciplinary consensus that provides evidence for the reliability of their epistemic processes and the credibility of their claims. Consensual views emerging from disciplines which have a tradition of achieving consensus based on well established epistemic criteria deserve our confidence. Nevertheless we can never ignore the possibility of "bandwagoning," i.e., the tendency of individuals to support currently popular views in their discipline for social rather than rational reasons.

A possible example of the bandwagon phenomenon in the disciplines of epidemiology and nutrition studies is argued for in a recent book by Gary Taubes (2007). Taubes makes an extended case against the view that fat consumption is a primary cause of heart disease and obesity. His position is surprising since this view has been supported by hundreds of epidemiological studies (largely observational). Taubes provides his own analysis of many of these studies and reviews considerable alternative biological and epidemiological literature to support his critique. But he also makes the case that the widespread acceptance of this view was not the result of overwhelming scientific evidence, but rather the result of the intense efforts by leaders in the nutrition research community to promote their view. Taubes argues that adoption of an anti-fat position by governments was premature given the state of research, but once governments became committed, there was little interest in questioning the fat reduction research. As Taubes documents, the science supporting the benefits of reducing

fat consumption is actually quite inconclusive. He adds to his argument an account of the political process by which reducing fat consumption became government policy and a health shibboleth, including intolerance toward objectors and the manipulation of funding opportunities by key players. In this part of his argument, he is attempting to explain why the theory that he is challenging could have such widespread acceptance. This is a relevant argumentative strategy since the existence of apparent consensus provides considerable support for the "anti-fat" point of view. To the extent that he is successful, his socio/political analysis enhances his critique of this widely accepted position.

We are not trying to judge his argument, but we do think that he is justified in using this additional non-scientific evidence about the dynamics of the relevant disciplines when making his case against the "fat theory." Public acceptance of the "fat theory" depends on the assumption that the views of the experts are based on an appropriate evaluation of the evidence. Evidence of social and political processes inconsistent with an evidence based approach creates a justified suspicion of the consensus.

(5) Sources

Contrary to the view that arguments should be evaluated independently of their authorship to avoid the fallacy of *ad hominem*, we argue that information about who is making an argument is frequently relevant to evaluation (although not determinative) because the credibility of an argument often involves trust that the author of the argument is appropriately knowledgeable and fair minded. Knowledge of the point of view of a source can inform the process by which arguments and claims are checked. In addition, while explanations of why a person holds a view cannot be used to dismiss a view, such evidence can be used to explain why a view which is lacking sufficient rational support is nevertheless held.

It is well established that information about the source of a claim or argument is justified in cases where trust in the source is the primary basis for accepting the argument or claim. The acceptance of observational claims (testimony) and of claims by experts to special knowledge depend on these sources being both trustworthy and appropriately knowledgeable. Evidence that the sources do not meet these standards is always relevant and sometimes sufficient to dismiss their views. On the other hand, the evaluation of testimony and appeal to authority is

usually cited as an exception to the general rule that the strength of an argument and the credibility of its conclusion are independent of the source of the argument. In all other cases, citing circumstantial facts about the author of an argument (such as who she works for or the fact that she does not follow her own environmental dictums) is treated as an irrelevant and fallacious basis for rejecting an argument or conclusion.

In our view, what makes *ad hominem* arguments fallacious is not that they use irrelevant information about the author, but that they are usually too persuasive. For example, if someone of a left-leaning political orientation hears that an argument against raising the minimum wage is coming from a right-wing policy institute, there is a powerful temptation to just dismiss the view. Arguably to do so would be to commit the *ad hominem* fallacy. But surely the source of the argument is not irrelevant. The problem is that knowledge of the source is often too persuasive. Many fallacies are argument patterns whose persuasive power greatly exceeds their evidential worth.

Ad hominem information can "lead us into fallacious temptation" but that does not mean that *ad hominem* considerations do not have some rational worth. The credibility of an argument is based in part on accepting the premises. In many cases, part of the basis for this acceptance is the trustworthiness of the author of the argument. In scientific papers we trust that the anonymous author is at least not lying about the data. In newspaper editorials, references to facts of the news are usually accepted to the extent that the newspaper is a trustworthy source.

Although one can challenge any premise, for argumentation to proceed most premises will need to be accepted provided that they are plausible and that the author is a trustworthy source. This acceptance is not based on the author's expertise, but rather on a judgment that the author is a trustworthy source of information. In addition, the extent to which we credit the conclusion is not simply determined by the apparent support that the premises give the conclusion. Recognizing the dialectical nature of argument evaluation means that argument evaluation must involve assessment of an argument against its countervailing arguments and consideration. Whoever presents an argument has a dialogical duty to acknowledge counter arguments and to indicate why the supported argument is stronger than these. Trusting an argument's author to be both candid and knowledgeable about alternative views is part of the basis for a rational acceptance of the argument. If we have reasons to believe that the source of the

argument is either not trustworthy (e.g., is not someone who would tell us about key counter arguments or evidence) or is not reliably competent (e.g., is not likely to have done due diligence on the relevant objections to the view), then these characteristics provide a good basis for not accepting the argument or conclusion.

In addition, knowing that a source is coming from a particular point of view can and should inform a more detailed investigation of their argument. One should not dismiss an argument because of the political bias of its source, but such information may give rise to an appropriate skepticism about the view. In the climate change debate, it is striking that almost all opponents of the anthropogenic view appear to have financial and other bases for their opposition. But is this observation an instance of the *ad hominem* fallacy? We think not. While their views should not be dismissed on this basis, this observation can be used against the critics along with other arguments such as their lack of alternative explanations for global warming.

The standard view, with which we disagree, also treats reference to psychological explanations of a person's argument as fallacious. On this view, how one comes to a position, including whatever psychological motivation may be behind it, is not relevant to the assessment of the argument for the position. While understanding a person's motivation is certainly not sufficient for dismissing an argument, we would argue that it is not irrelevant.

The relevance of these considerations is nicely illustrated in a recent column in *Scientific American* by Michael Shermer. Shermer argues against the widely held view that people experience grief in the stages "denial, anger, bargaining, depression, acceptance," citing evidence from a variety of relevant experts that rejects this reigning view. These include current experts in the field who claim that there are no studies that support this view and that in their counseling work, they do not see any standard pattern. But Shermer does not end his case against the view by merely citing counter evidence from current authorities. He goes on to ask why it is that such a theory is attractive.

Why stages? We are pattern-seeking, storytelling primates trying to make sense of an often chaotic and unpredictable world. A stage theory works in a manner similar to a species-classification heuristic or an evolutionary-sequence schema. Stages also fit well into a chronological sequence where stories have set narrative patterns. Stage theories "impose order on chaos, offer predictability over

uncertainty, and optimism over despair," explained social psychologist Carol Tavris, author of *The Mismeasure of Woman* (Shermer 1997).

The well known errors in the perceptions of correlation and coincidence clearly support this view. Of particular interest to us is Shermer's argumentative use of this information. Shermer uses the fact that there is a non-rational explanation for the view that grief comes in well structured stages as further evidence against the view. We believe that this form of argument, which involves first providing a rational basis for rejecting a view and then adding a plausible non-rational explanation for why the view is held, is a legitimate use of genetic information and is not fallacious.

(6) Self

At least since Socrates' famous "know thyself" injunction, self awareness has been advocated as a key to reasonableness. No one escapes the historical context in which he or she lives. Everyone can, however, become much more self-aware about this context and its influence on their point of view. We reject the idea that all views are biases in the derogatory sense, but acknowledge that while there is no "view from nowhere," striving for the regulative ideal of objectivity is one that can be facilitated by personal, intellectual and cultural self awareness. It can also be facilitated by a number of intellectual strategies such as always seeking alternative views and considering and developing counter examples to reduce the problem of confirmation bias.

While argument evaluation obviously focuses on the argument, the person doing the evaluation is a crucial component of the process. One's initial views on an issue such as legalizing marijuana, or even one's fundamental world view on such questions as free will, justice, or God can influence a person's assessment of an argument. When trying to come to a reasoned judgment on a topic, one should be aware of one's own biases, point of view, and assumptions. Admittedly this is a limitless task, but it is part of the regulative ideal of being reasonable. "My grandchildren are all wonderful" reflects a harmless bias; "The Irish are genetically criminal" (as was sometimes said in New York at the turn of the 20th century) reflects a sinister bias.

Students often have definite points of view on many issues by the time they reach the post-secondary level. This is problematic only when they are unaware that they are adopting a point of view (e.g., a laissez faire economic view) but think it

is just common sense (e.g., the poor are poor because they are lazy). Clearly the insidious form of bias is unselfconscious bias. A point of view is a bias only if it influences our judgment in an unreflective and unwarranted manner.

Let us take the nurture/nature debate as an example. Within our intellectual lifetime, the relative weight given to these two factors has shifted from nurture to nature. The supposed political implications of this shift, along with the evidential basis for it, continue to be debated. The early reaction against sociobiology was clearly motivated by a suspicion that a renewal of the nature hypothesis had sinister implications, from racism to support for a laissez faire economic system built on human selfishness.

We do not wish to enter this debate, but we do wish to note that as argument assessors, we are much more willing to view explanations of human behavior through a lens of biological influences than was true forty years ago This different lens reflects an objective shift of burden of proof. We are much more open to biological/genetic explanations of behavior. The new climate of fascination with genetic and biological explanation also doubtless carries its own collections of blinders and prejudices such as the presumption of a one characteristic – one gene explanation, or the ignoring of the role of biological context in determining gene expression.

Reflective people understand that they evaluate arguments and claims in a particular personal and cultural climate. To ensure that they are making a fair evaluation, they should give special care to the consideration of those views with which they have initial disagreement. Given the well documented phenomenon of confirmation bias, reflective assessors should also be skeptical of their own enthusiasm for evidence supporting their view. One strategy for ensuring that one is taking a fallibilist position is to try to state what kind of evidence would lead one to change one’s opinion.

In addition, there is growing body of literature from behavioral economics that documents the pervasive influence of a variety of social conditions that can undermine our ability to be rational (Ariely 2010). The antidote to these influences is self awareness and a commitment to fair-mindedly consider alternative views. We are not simply arguing that an evaluator of an argument should be a fallibilist, prepared to admit error and willing to consider other views. Rather we are arguing that reasonable assessors should attempt to be cognizant

of their own assumptions and intellectual leanings and should make special efforts during an inquiry to seek alternative views and counter arguments. Students need to become aware that they are embedded in a context and need to reflect on their own judgments in light of this.

3. Summary

A reasonable assessment of an argument with the goal of reaching a reasoned judgment must take into account not only the content of the argument itself, but also a much wider context. This context includes:

(1) Dialectical context

Evaluating arguments requires a knowledge of the history of the debate surrounding the issue, especially counter arguments to the current position or argument being evaluated.

(2) Current state of belief or practice

An understanding of the current practice and beliefs in an area is important for evaluation, especially to the extent that this determines burden of proof.

(3) Intellectual, political, historical and social contexts

No issue exists in a social vacuum. Understanding an argument, understanding the significance of a claim, and appropriately conducting an inquiry into an issue, all require knowledge of the historical and social contexts.

(4) Disciplinary context

An assessor should be sensitive to both the particular discipline and the state of consensus in that discipline.

(5) Sources

All arguments depend for their acceptance in part on trust. Evaluating the trustworthiness of the source of the argument is almost always relevant.

(6) Self

The argument assessor or a person conducting an inquiry must be aware that they too are part of the context of evaluation. Self awareness and a commitment to seeking counter evidence is crucial to reasonable evaluation.

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ISSA Proceedings 2010 – Rhetorical Figures And Their Chances In Hybrid Media

1. Visual and verbal communication

The study of rhetoric is generally restricted to verbal communication. The art of rhetoric found its origin in the oratory, evidently so, and it is assumed that treatises on rhetoric mainly presented advice on the writing of appealing speeches that convince their audiences. However, those assumptions tend to neglect the fact that rhetoric treatises did not only handle the inventing and writing of speeches, but also the delivery. The attention for speech delivery brings into play elements of voice and body language and the audio-visual aspects of presentation. Actually, also more outspoken non-verbal elements used to be considered: the showing of a scar or a bloody weapon could be an important feature of a successful speech (Hobbs 2004,

p. 58).
However, the relative neglect of the visual in the field of rhetoric does not mean that it received no scholarly attention at all. For instance: writing and speaking instruction often handled the translation of visual images into verbal text – and the other way around. There were numerous ekphrasis advices on the composition of vivid descriptions, on 'bringing before the eyes' (Hobbs 2004, p. 56). Quintilian e.g., saw visualisation as the most powerful means of arousing emotion, possibly the best way to convince an audience.
It is far beyond the scope of this paper to outline the history of verbal versus pictorial rhetoric or communication. Basically, I assume that, although the verbal and the visual probably do have a 'wild zone' to themselves, they have a lot in common. The study of rhetoric may have its roots in oral discourse, and may have focused upon verbal communication too easily, yet there are no clear reasons why it should explicitly exclude visual communication and persuasion. A clash between verbal and visual communication does not seem to be constitutive for the discipline of rhetoric (Goggin 2004). Rather, the interrelation between the two can be assumed in many ways.

In our times, different modes are merging more and more into hybrid texts. This increasing multimodality does include the reshuffling of historical and intellectual status cards. Some experts in visual communication react against the supremacy of written words in the western intellectual tradition, claiming that images do not deserve to be banned to categories of illiteracy, delusion, subjectivity, irrationality and emotion, but are at least as basic to human communication and intelligence as verbal language. How difficult it may be, it is important to work in a tradition that does not put both fields in opposition, and to find out, without denying the distinctions, how the different perspectives can enrich analysis and interpretation. I will examine how a rhetorical figure can originate in both a verbal and a visual mode, and what we can learn about the figure by looking at it from this double perspective. First, I will focus on the verbal and visual aspects in the construction of meaning and argument (§ 2). Then, I will go into research on figuration that tries to restore the link between the form and the function of style figures (§ 3). From that point, I will assess some cases of the figure antithesis within their specific context and point out the different functions of the verbal and the visual (§ 4).

2. Understanding images

The ways in which the verbal and the visual work together in the production of meaning is the basic research question for Kress and Van Leeuwen, who study the similarities and interdependence between the verbal and the visual. Initially, they both were engaged in the analysis of verbal texts, but gradually, they expanded their work and added elements that go with the verbal, like facial expressions, gestures, images, music, etc. Yet, this background does not mean that Kress and Van Leeuwen, by adding the visual to their field of study, only aim at offering a more complete analysis of verbal texts; they also want to come to a better understanding of language: 'just as the knowledge of other languages can open new perspectives on one's own language, so a knowledge of other semiotic modes can open new perspectives on language' (Kress and Van Leeuwen 2006, p. ix).
Both words and images take part in the production of meaning. This is what connects them, and this is what Kress and Van Leeuwen want to explore. 'Meanings belong to culture rather than to specific semiotic modes. And the way meanings are mapped across different semiotic modes, the way some things can, for instance, be 'said', either visually or verbally, others only visually, again others only verbally, is also culturally and historically specific.' (Kress and Van Leeuwen 2006, p. 2) Of course, this does not mean that semiotic modes don't make any difference in the production of meaning. Language is constructed by elements like words and sentences, images by color and composition. Kress and Van Leeuwen explore the interrelation between the two, as we can see in claims like: 'All texts are multimodal. Language always has to be realized through, and comes in the company of, other semiotic modes' (Kress and Van Leeuwen 1998, p. 186). This goes for speaking (sounds, facial expression, etc), and for writing (words, lay out, etc.). According to them, the traditional insistence on the monomodal – that favors e.g. written text on a densely printed page – only reveals that this once was the most highly valued kind of writing. Indeed, this status of the verbal is possibly one of the reasons why verbal texts are still very much considered to be standing on their own, and studied apart from other modalities, while most work on visual communication does not exclude the verbal at all.
As for the status for the verbal, Kress and Van Leeuwen claim that the situation is now being reversed. Written text is less structured by linguistic means, and more by visual means, through layout, spatial arrangement, and other graphic elements on the page. Texts are no longer 'written', but 'designed'.

'writing may remain dominant, with the visual fulfilling a 'prosodic' role of highlighting important points and emphasizing structural connections. But it may

also diminish in importance, with the message articulated primarily in the visual mode, and the words serving as commentary and elaboration. Visually and verbally expressed meanings may be each other's double and express the same meanings, or they may complement and extend each other, or even clash and conflict' (Kress and Van Leeuwen 1998, p. 187).

According to Kress and Van Leeuwen, the skills of visual literacy are no longer reserved for specialists anymore. By now, visual literacy has become a 'matter of survival' for anyone (Kress and Van Leeuwen 2006, p.3). The shift away from the so-called purely verbal ideal towards the more hybrid modes actually revealed the fact that most communication is hybrid, and that the existence of either a purely verbal or purely visual mode is probably more an interesting but abstract possibility than a daily human experience. Clearly, the changing practices force us to develop new modes of text analysis, where the visual and particularly the interplay between the verbal and the visual can adequately be described.

Although Kress and Van Leeuwen don't position themselves within the rhetorical tradition, some aspects of their research do show similarities to it. Their focus on the combination of the different elements into a 'text' shows how meaning is constructed and complex: 'Just as grammars of language describe how words combine in clauses, sentences and texts, so our visual 'grammar' will describe the way in which depicted elements – people, places and things – combine in visual 'statements' of greater or lesser complexity and extension' (Kress and Van Leeuwen 2006, p.1). This focus on the text as a whole, made up from complex and interacting elements, is compatible with the rhetorician's overall attention towards the many aspects that contribute to the creation and interpretation of a meaningful text.

Also, they take into account the functional aspects of both visual and verbal communication. Their grammar is not normative or formal or operating in isolation from interpretation, meaning or social function. The way we put things in grammatical structures does show ideological positions, they claim. For example, a newspaper that writes A political clash has lead to death and injury reveals an ideological position that differs from a paper that writes Rhodesia's white suprematist police … opened fire and killed thirteen unarmed Africans (Kress and Van Leeuwen 2006, p. 2). This shows how they work with the rhetorical assumption that meaning lies within the presentation or the form of the message, and not on another, more abstract, level.

Kress and Van Leeuwen explicitly mention the critical aspect of their work; they

encourage us to ‘read between the lines’, in order to discover how apparently neutral, informative texts articulate and disseminate ideological positions, and how possible alternative views can be detected. Yet, in the first place, their work focuses on the regularities of visual communication, rather than on its uses. They take into account that power and social interaction play an important role in communication, but they focus on the construction of meaning in general and not on the rhetorical construction of specific arguments or style elements, nor on the dynamic aspects of rhetorical interaction. All things considered, their assumption that both the verbal and the visual take part in the production of meaning is an important first step in research on the possibility of style figures in hybrid media. The visual can do more than add some extra information to a verbally expressed message. Now we can proceed to the next question: is it possible for the visual to function in the production of argument? Tony Blair focuses on one aspect of this topic and examines how we can understand visual argumentation (Blair 2004). Following O’Keefe’s definition of argument1, he relies upon the verbal paradigm of argumentation and considers the propositional aspect of argument as essential. Visual arguments are arguments transferrable into language, so we can speak of visual arguments as propositional arguments that are expressed visually. Looked at this way, there seems to be no essential difference between visual and verbal argument. Blair also notices that visual arguments are often more powerful and suggestive, but that they’re not always clear, and easy employable for psychological manipulation. As a whole, visual communication seems to offer statements or conclusions easily enough, but it often lacks premises. Blair’s way out of the verbal ‘propositional’ paradigm relies upon a notion of translation of the visual into the verbal. David Birdsell and Leo Groarke go even further in refuting the ‘visual skepticism’ by showing for instance how both words and images can be clear or vague, and how context plays an important role in the interpretation of verbal and visual communication alike (Birdsell and Groarke 2004). In short, we can assume that words and images can and do function together not only in the construction of meaning, but also in the construction of argument.

3. Visual Figuration

Meaning and argument construction are possible both in verbal and in visual communication, and often they come about in combined or hybrid forms, where both verbal and visual aspects take part in the construction. One special element in the construction of meaning and argument, is the element of style. Meaning

and argument are no abstract ideas; they exist within a certain form. It is generally assumed that form by itself plays a role in communication, but as to the exact impact of style, opinions differ widely. For our purpose, it is important once more to focus upon functionality. From this perspective, the question is not: what is a style figure, but rather: how does a style figure work?

Theories of figuration in the first place try to explain and categorize individual figures. Over the centuries, this has resulted in a wide variety of categories. The only thing they have in common is their struggle with the matching of verbal forms on the one hand and discourse functions or speech acts on the other (Fahnestock 1999, p. 14). When it comes to figuration in general and the notion that figures form a departure from normal language, we find a long history of theories. Indeed, what could that norm be? As a whole, value-added theories of the figures have dominated in the rhetorical tradition. The figures are considered to be sources of emotion, charm, vividness, force, vivacy or elegance. Until recently, this supposed difference between unmarked and marked language has pushed the figures to the exclusive field of markers of the literary text. (Fahnestock 1999, p. 20). Whenever the function of figures is exclusively reduced to the adding of charm, beauty, emotion, or whatever, they are reduced to epiphenomenal and superficial phenomena and they end up in a museum of curiosities. The only way to see figures in their full power is by restoring their link with interpretation and argumentation.

Aristotle sees figures as normal, in the sense that they are accepted, not abnormal language. Rhetorical style should never attract attention, and figures should function in the process of learning and rendering insight. Aristotle nowhere claims the figures to be emotional, ornamental, or epiphenomenal in any other way. ‘Ornatus’, the fourth style device, is nowhere introduced by him; (probably) his pupil Theophrastus first mentioned it. Thus, Fahnestock claims, Aristotle develops an implicit figuration theory that is not based on the problematic substitution principle but more interestingly on a combination of form and function.

When we look exclusively from a formal perspective according to what syntactic or semantic substitutions have presumably been made, there is no clear answer to the question of figuration. A more interesting perspective is the functional side of the connection, so we should ask what speakers or writers try to accomplish by using figures, and what effect figures apparently have on an audience (Fahnestock 1999, p. 17).

In trying to trace back the functionality of the figures, Jeanne Fahnestock claims that they can also be understood as epitomes, or verbal summaries, of lines of reasoning, as the formal embodiments of certain ideational or persuasive functions (Fahnestock 1999, p. 24). This way, she tries to re-establish the link between topical lines of reasoning and the figures. 'Associating certain verbal figures with general lines of reasoning, called 'topics' in the rhetorical tradition, also assumes that it is possible to define these lines or arguments in the first place, a notion that for contemporary readers with no exposure to rhetoric may seem as odd as the figures themselves' (Fahnestock 1999, p. 23). Indeed, in our times, we are convinced that creativity or spontaneity of invention are based on complicated cognitive processes, and linked to specific disciplines or professions. According to Fahnestock, the popularity of the metaphor as a figure that generates analogical reasoning could be a starting point for the assumption that human reasoning can follow many more lines than analogy alone.

Also Chaïm Perelman and Lucie Olbrechts-Tyteca claimed the argumentative role of figures and re-established the link between the figures and argumentation by dispersing the figures among the techniques of argumentation (Perelman and Olbrechts – Tyteca 1969, p. 179), thus confirming a view of the figures as the epitomes of certain durable lines of argument (Fahnestock 1999, p. 36).

This focus on function is an element to consider in our next question: if it is possible to consider figures in their argumentative function rather than in their ornamental function, is it possible to understand visual aspects as constitutive elements of those figures? Is there a way to assess a hybrid style figure by its argumentative function?

An interesting figure, where the interplay of form and function is obvious, is the figure of antithesis, an important figure in Fahnestock's work. In Aristotelian stylistics, dialectic, and rhetoric, 'antithesis is a consistent, and consistently important, concept, at once a verbal, analytical, and persuasive device', Fahnestock claims (Fahnestock 1999, p. 53). Aristotle's antithesis is 'a verbal structure that places contrasted or opposed terms in parallel or balanced cola or phrases. Parallel phrasing without opposed terms does not produce an antithesis, nor do opposed terms alone without strategic positioning in symmetrical phrasing. Instead, the figure antithesis, according to Aristotle, must meet both syntactic and semantic requirements' (Fahnestock 1999, p. 46-47).

The semantic base of the figure is formed by 'natural' pairs. These are commonly used pairs of opposites, and as such easily conceivable by the public. The use of one in the first half of the figure creates the expectation of its verbal partner in

the second half. Fahnestock finds evidence in Aristotle's work that shows how the verbal form, the figure antithesis, can be recognized as the epitome of an underlying topical reasoning. To her, it is important to realize that a line of argument actually can be invented through stylistic choices. Fahnestock stresses the double nature of antithesis as the verbal phrasing of a topical device. Yet, over time, the syntactic and semantic components of the figure fell apart, as it was split up into stylistic aspects, where it is a figure of diction, and probative aspects, where it forms a figure of thought (Fahnestock 1999, p. 58).

4. Cases

Kress and Van Leeuwen, Blair, and many others noticed that purely visual communication / argumentation – i.e. without any form of verbal support or context – is often vague and suggestive. As such it is more interesting from an aesthetic point of view, since ambiguity and lack of closure are easily accepted within a work of art. In this analysis, I will rather concentrate on hybrid forms in the media and in our everyday life. I understand figures as functional elements and not as ornament, so I will look for the argument value they may have, and I will try to describe a few hybrid texts from the perspective of the antithesis figure.

An analysis that tries to reconstruct the dynamism and evolution of contrast and opposition within one artefact can show how graphic and verbal lines of argument can work together, interfere, or contradict; how words can generate images and vice versa. Both the form and the function are considered in this analysis. This means that I will look for the way(s) the antithesis works. I will try to assess each example separately, taking into consideration the specific context that makes the figure work or not, as well as the question whether it functions as an argument or not. I will also describe how the mixing of media functions and whether it is appropriate. As a whole, the analysis is meant as a starting point for further research on hybrid style figures.

A first finding: the figure antithesis is nót abundantly present in our news media and everyday life. Striking antitheses, either verbal or visual or mixed, are rare. Here are some examples of verbal antithesis: Tom Boonen needs help, not punishment. This is a single antithesis, because one element is combined with a contrasting pair (TB needs help / no punishment). Here are some double verbal antitheses: Man failed, not market, and The world is doing badly, yet Dutch literature is thriving. (man / market versus failed / failed not, and The world / Dutch literature versus doing badly / thriving). The figure seems to be popular in

movie comments like these: ‘Sex’ adds sheiks, loses chic and ‘Prince of Persia’: pretty to look at, a pain to watch.
Another preliminary remark: the typical elliptic and concise style of newspaper headlines often does not really allow for the explicit formal and extensive repetition of grammatical elements that enhance the contrast between the antithetical pairs. This can turn the figure into too vague a message or too formal a word play. As a consequence, the possible antithesis loses power because it needs too many contextual elements in order to reach its full meaning.

(1) Macbeth

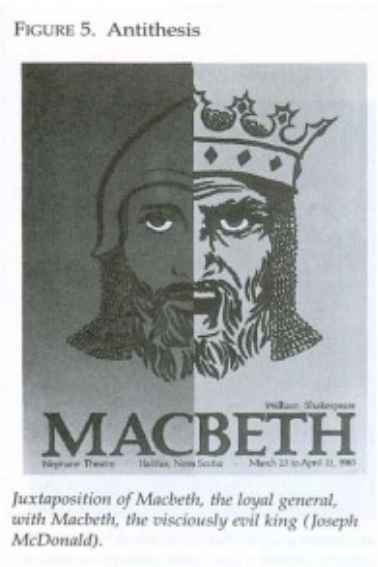

Figure 1

This Macbeth poster shows one verbal term in combination with two contrasting images. It is a result of an experiment by Hanno H.J. Ehses in which the heuristic possibilities of ten style figures are tried out. Students in a design class were asked to find graphic encodings for a poster that announces this Shakespearian tragedy, using the formal construction principle of a specific rhetorical figure as a guideline (Ehses 2004, p. 173).
The Macbeth poster uses shape and shade differences at either side of the vertical line to reveal two Macbeths, evoking two moments in the life of the main character in this drama. The two halves of the same face form the parallel construction, or the syntactical element the antithesis is based upon. The two sides of this poster show the younger loyal general and the older evil king he has become, introducing both a time element and the driving force of this character.

The lines at the left side are in soft shades of grey, leaving one white element to stand out: the little white crescent in Macbeth's eyes, repeated at the right side, suggesting the one element that holds this character together: the fatal ambition to become king. The picture should be read from the left to the right, the right side representing the older king in sharply contrasting black and white lines, suggesting his cruelty.

This is a single antithesis: the word Macbeth is yoked with two visual opposites. The verbal element Macbeth is supported visually by the image of the face, and the contrast is expressed only visually. The two white crescent forms in Macbeth's eyes form a nice repetitive element within the visual antithesis. As suggested by Aristotle (and interpreted by Fahnestock), single antitheses are not suitable for building a new argument, but they can serve as a refutation (Fahnestock 2000, p. 177). Indeed, this antithesis reveals the dramatic value of the play, and shows Macbeth as a tragic hero, driven to death by his ambition. The function of this poster is to give information about the play and to invite the reader to come and see it. The antithesis works nicely: by opposing the younger and the older Macbeth, it raises the general question: how could this one man have two completely different personalities? A certain incompatibility, some kind of contrast is revealed, suggesting the tragic events in the play. The line of argument can be reconstructed as such: Come and see the play Macbeth / because it is interesting to see the dramatic evolution from the young and eager general Macbeth to the old and desperate king Macbeth.

This technique is applied in many commercials as well. The brand name is the unifying factor, the contrast is shown visually, and the underlying reasoning is something like If you drink Danone, you'll lose weight; if you don't, you'll stay fat. / If you don't drink Coca Cola, you'll stay lonely; if you do, you'll become popular. Those combinations are interesting for advertising, since such antitheses have a simplifying effect and make the consumer forget all about the grey middle zone of intermediate processes and positions. The combination of one word with a pair of contrasting pictures often creates a striking or funny effect: a question, a joke, a surprise, a riddle, a problem. Sometimes, the line of argument created can serve as a refutation, eg. in cartoons where the impossible combinations in the lives or characters of celebrities are dealt with and condemned. My suggestion is that the argument line of those antitheses often comes close to what Perelman and Olbrechts-Tyteca called quasi-logical arguments, where incompatibilities are presented as if they were logical contradictions. But this is definitely not always the case. In all of these examples, the conclusion is presented verbally, and the

reasons visually – within the antithesis.

(2) Less ado, more done.

Figure 2

Another technique that is very widespread as well goes the other way around: in this example, the image of the politician forms the visual element, while the verbal antithesis is showing her message. Here, the repetition of the verb 'to do' results in a somewhat stronger effect. A similar example is a picture of a flashy car accompanied by the words: More car for less money *(Figure 2)*. The line of argument is similar to examples one and two: the surprise effect prevails. Another example is a bit more complicated, as it shows the visual conclusion of a sad message Last year flowers, this year nothing. In this secretary's day drama, we see the picture of a sad looking secretary, presenting the reasons of her sorrow in a verbal antithesis. In these examples, the conclusion is presented visually (vote for me / buy this car / I'm sad), and the reasons verbally – within the antithesis.

(3) Johannesburg public transport police

Een veiligheidsagent op het openbaar vervoer in Johannesburg. Zuid-Afrika doet er alles aan om zijn onveilige imago van zich af te schudden.

Figure 3

This image *(Figure 3)* shows a strong visual contrast with the two (white) boys and the yellow bars separating them from the aisle in the middle, where a (black) man in uniform is prominently present, keeping law and order. The verbal message at the bottom of the picture goes as such: Security officer on the public transportation in Johannesburg. South Africa is doing its utmost best to get rid of its unsafe image.
The formal contrast is visual, not verbal. One can easily understand the paradigmatic visual message of the policeman doing his job and taking the middle position between two boys. The antithesis is visual, and possibly suggests a fight that could start between the two boys. The line of argument presents a solution, visually shown by the police officer in the middle. Conclusion: The boys will not get caught in a fight. Reason 1: There is a police officer that will prevent this.
In the verbal message, two sub-arguments are added to the first reason. Reason 1.1.: South Africa has put policemen on public transport. Reason 1.1.1.: South Africa wants to get rid of its bad image. The verbal sub-arguments are used to add the actual circumstances to this paradigmatic picture. As a whole, this is a nice example of a functional visual antithesis, because it adds something to the verbal message without changing it.

(4) Chat with politicians

Figure 4

In this text *(Figure 4)*, the verbal message that invites us to challenge both politicians is imperative, but the visual presentation suggests contrast rather than comradeship between these politicians, as it pushes them apart to the far sides of the message. The visual separation of the two politicians widens the gap between them, while in the verbal message there is no contrast between them whatsoever. Is this a functional antithesis? No, it is only a visual suggestion of opposition, a very popular technique in the media – and not only there.

(5) Lake levels sink, state fears rise. (The Detroit News, June 12, 2007)

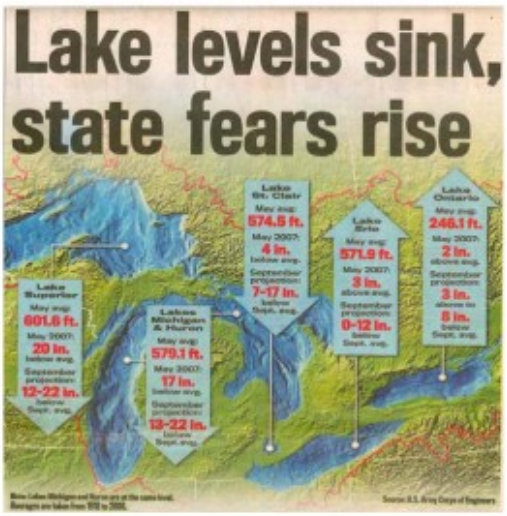

Figure 5

The verbal antithesis *(Figure 5)* is constructed from two pairs: sink / rise, and lake level / state fears. The two parts of the antithesis show a causal relationship. The picture is complex: it shows a photographic air view of the lake region, filled in with five up or down vectors that in their turn show data about the water level of the five lakes. The very dominant vectors suggest a repetition of the verbal sink / rise contrast, yet two out of the five vectors point upwards, which downplays the effect. After some close scrutiny, it becomes clear that the situation is not as

dramatic as the title suggests. Two lakes are still above the average water level, and other low water level extremes are nowhere mentioned – only the averages.
In this case, the verbal antithesis clearly inspired its visual counterpart, but the vectors in the picture are about a different rise / sink – contrast, which results in a rather vague and confusing line of reasoning as a whole. By extending the verbal contrast to the picture without following the line of reasoning, the 'antithesis' has become a purely formal play and hence has lost a great deal of its function.

(6) Science versus Ait Oud


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Vezels spreken, Ait Oud zwijgt

PROCES AIT OUD

Figure 6

The next example *(Figure 6)* shows a catchy antithesis in the title and a vibrant and fascinating illustration. Speaking scientific evidence is put against the silence of the accused, who by this silence keeps denying the facts. Vezels spreken, Ait Oud zwijgt (Fibres talk, Ait Oud keeps silent). The double pair the antithesis is built upon consists of the obvious speaking versus keeping silent contraries on the one hand, and the fibres versus their previous owner – Ait Oud wore the clothes – on the other hand. Although the fibres talk, AO keeps silent. This clash makes the antithesis function like a paradox, stressing the frightful mystery of the accused stubbornly denying the murders. It expresses the questions the public is confronted with. As such, it does what it has to do here: it creates an opposition, a paradox, and it leaves open the question. In this case, the overwhelming scientific evidence is revealed, but the boundaries of science in the domain of jurisdiction are not being denied. This antithesis, within this context, is an example of a style

choice that epitomizes an important question and stimulates public debate. Conclusion: It is unclear which source we are to believe in the case of AO. Reason: Science proves AO guilty, while AO denies his guilt.

The illustration shows a picture both of the (silent) AO, and of his clothing, with the abundantly 'talking' fibres. Some 20 vectors leave his garments and head for the clothes of the two raped and murdered children, at the right side of the picture. The visual effect is strong, as well as the title message of the picture: The strongest evidence against Ait Oud. This picture clearly backs the overwhelming scientific evidence of the fibre examinations: the fibres speak. The left – right opposition and the little pictures showing the faces of the three parties add to the narrative aspect of the illustration, suggesting the cruel rape and murder act of the accused (left). The illustration creates a new pair: it is the opposition between the accused AO (left side) and the two victims (right side). It can easily be considered a sub-argument for the first part of the antithesis: the fibres prove his guilt and the picture as a whole evokes his cruel deeds.

(7) The safest side in a train crash

Figure 7 – Which is the safest side in a train crash? / That depends entirely on the direction of the train.

This cartoon *(figure 7)* starts from a (verbal) question, provides us with an enigmatic verbal answer, while the final explanation of the answer is to be found in the picture. This picture provokes a very clear and convincing antithetical line of reasoning: if the train goes to the right, the safest side is on the left (with a soft

landing promised to the two gentleman, and no great injuries to the pink lady), if the train goes to the left, the safest side is on the right (with dramatic consequences for the gentlemen). Here, the visual contrast between the two tiny men on the one side of the train compartment and the big pink lady on the other side is enhanced by the line of hypothetical reasoning that is generated by the verbal message. Conclusion: The safest side in a train depends on the direction of the train (verbal) and the weight of the victims (visual). Reason: if the train goes into the direction of weighty people, it is safe; if the train goes into the direction of small people, it is unsafe. The visual adds the element of body weight to the verbal element of direction, and that is what creates the pun.

5. Conclusion

Perelman and Olbrechts Tyteca claimed that an effective figure can only be recognized as such after an analysis of its context and function. In the cases analysed, we can see that some contrasts are in the verbal, others in the visual, sometimes they repeat one another; often they need one another to reveal the full meaning. Some cases, like Macbeth (1) and Less ado, more done (2) are quite simple. Their visual impact is strong, but their functional value is often limited to a suggestion of surprise. In those cases, the reasoning is in the antithesis, no matter whether these premises are verbal or visual; and the conclusion is within the single term yoked to the contrasting pair, no matter whether this term is visual (picture of politician) or verbal (Macbeth). Sometimes, the picture can stand on its own while the verbal element adds actual information to narrow the meaning down (3 – Johannesburg)), and sometimes the visual creates an opposition that is not present in the words (4 – Chat with politicians). Example 5 (Lake levels sink, state fears rise) shows how a verbal antithesis is reduced to a formal game by an ill-chosen illustration, and in example 6 (Fibres talk, Ait Oud keeps silent) we see how one side of the verbal antithesis is supported by the illustration. Example 7 (train crash) shows quite a complex and dynamic visual antithesis embedded in verbal elements that present the conclusion.

Work on antithesis shows how form and function support and create one another, how different kinds of contrasts are made to work in argumentative moves. Both verbal and visual elements can help to construct antitheses and play their roles in it. Adding the visual to rhetorical analysis provides us more insight into the way visual and hybrid communication work, but also into rhetorical aspects of communication in general and the function of the figures in particular.

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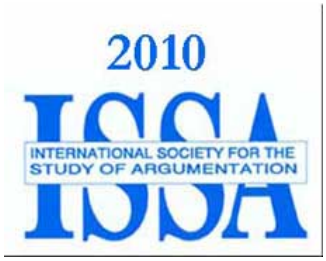
ISSA Proceedings 2010 – Arguments, Stories And Evidence: Critical Questions For Fact-Finding



1. Introduction

In this paper, we look at critical questions for the process of reasoning about the *facts* and the *evidence* in criminal cases **[i]**. In the literature, essentially two approaches to this reasoning can be can be distinguished: the argumentative and the narrative approach. In the argumentative (or argument-based) approach, the facts should be supported by reasons based on evidence. Key questions for argumentative approaches include which reasons can support which conclusions under which circumstances (the search for warrants and argumentation schemes, cf. Toulmin 1958, Walton et al. 2008) and how to handle conflicts of reasons and exceptions (the defeasibility of argumentation, cf. Loui 1995). The argumentative approach in legal fact-finding is based on Wigmore (1931), whose hand-drawn evidence charts predate many later developments in legal theory (Anderson et al. 2005). The approach has been explored in the field of argumentation by Walton (2002) and Bex et al. (2003), who propose and analyse numerous argumentation schemes that can be used to reason from the evidence to the facts.

The second approach to the rational establishment of the facts involves presenting these facts as narratives or *stories* – coherent descriptions of what might have happened – that causally explain as much of the evidence in the case as possible. In a criminal case the narrative typically includes the events of the crime (e.g. the victim being shot) information about the intentions of the criminal (e.g. vengeance) and the consequences of the crime (e.g. a dead body). Key questions in a narrative approach include how to establish the coherence and quality of stories (the search for plausibility criteria), when to believe a story (the

issue of justification of the belief in a story) and how to choose between alternative stories (the issue of story comparison). The narrative approach has been studied as a model of cognitive decision-making in the psychology of law (Pennington and Hastie 1993, Wagenaar et al. 1993) and as a more analytical model for inference to the best explanation in (legal) philosophy (Josephson 2002, Thagard 2004, Pardo and Allen 2007). The narrative approach is less well represented in the literature on argumentation. In this paper we will show that a strong analogy can be drawn between reasoning patterns in argumentation, the familiar argumentation schemes (Walton et al. 2008), and patterns in the narrative approach, which we call *story schemes* (Bex 2009). These story schemes act as a background for particular instantiated stories in the same way as argumentation schemes act as a background for particular instantiated arguments. Furthermore, story schemes give rise to relevant critical questions in the same way as argumentation schemes.

In our opinion, neither the purely argument-based nor the purely story-based perspective can do justice to all relevant mechanisms as they are recognized and used by decision makers and investigators. Instead a *hybrid* argumentative-narrative approach, in which arguments and narratives can be used in conjunction as well as interchangeably, is to be preferred (Bex et al. 2007, Bex et al. 2010, Bex 2011). In this paper, we will review this hybrid approach in a semi-formal way (as opposed to the formal logical presentation of Bex et al. 2010), focusing on the types of schemes used in both argumentative and narrative reasoning. Furthermore, we present the list of critical questions from (Bex and Verheij 2009)**[ii]**, which point to typical sources of doubt in a hybrid argumentative-narrative case in the same way as critical questions for argumentation schemes point to typical sources of doubt regarding a single inference. These critical questions are then used to analyse the verdicts in the Nadia van der V. Case **[iii]**. The case concerns Nadia, who has been killed in her home by several gunshots. Her landlord, Pascal F., is regarded as the prime suspect. He has been seen fleeing town in Nadia's car and is not to be found until well into the next year. When Pascal is finally apprehended, he is charged with murder and found guilty by the lower courts as well as on appeal.

2. A hybrid argumentative-narrative theory

In this section, we will discuss the argumentative and narrative approaches before proposing our hybrid combination. Additionally, the discussion below will

also focus on the use of various types of commonsense knowledge expressed as schemes. Reasoning with evidence involves a large amount of commonsense knowledge about the world around us, which allows us to assume or infer new information in a way that is as safe as is needed in the context. In this paper, we show that in the argumentative approach commonsense knowledge often takes the form of *argumentation schemes* (Walton et al. 2008), general patterns of argument that act as a background for particular instantiated arguments, and that in the narrative approach such knowledge takes the form of general scenarios that can be seen as *story schemes* (Bex 2009), standard general event-patterns that act as a background for particular instantiated stories.

2.1. Argumentative Approach

In the argumentative approach, arguments are constructed by performing consecutive reasoning steps, starting with one or more items of evidence and reasoning towards a conclusion, a fact at issue in the case. The reasoning steps in these arguments have associated generalizations that justify the inferences (cf. Toulmin's warrants and Walton's schemes). For example, the evidence 'a witness testified that a man who looked like Pascal was in the car' and the generalization 'witnesses usually speak the truth' allows us to infer that 'a man who looked like Pascal was in the car'. This intermediate conclusion can then be used to infer that it was indeed Pascal who was in the car. Thus lines of reasoning can be combined to construct argument trees, which can be rendered as diagrams (Freeman 1991; Reed et al. 2007). Take, for example, Figure 1.

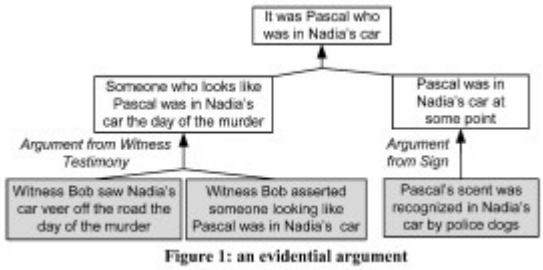


Figure 1: an evidential argument

The argument in Figure 1 uses typical generalizations, such as the above-mentioned generalization about witnesses, to justify the inferences. These generalizations can be rendered as argumentation schemes; for example, consider the scheme for Argument from Witness Testimony (Walton et al. 2008, Bex et al. 2003):

Witness *w* is in a position to know whether *a* is true or not.

Witness *w* asserts that *a* is true (false).
Therefore, *a* may plausibly be taken to be true (false).

Now, Bob asserted that someone looking like Pascal was in Nadia's and Bob was in a position to know this, as he saw Nadia's car. Similarly, the evidence that Pascal's scent was in the car is a sign for the fact that Pascal was in the car at some point (Argument from Sign, see Walton et al. 2008). In addition to these general schemes, more (case-) specific generalizations are also used as inference licences in Figure 1. For example, the top inference is justified by the generalization 'if person *x* was in a car at some time and someone looking like *x* has been seen in that car at time *t*, then it is likely that the person in the car at time *t* was *x*'.

In the argumentative approach, the individual facts at issue are supported by the evidence in the case through arguments. The argument-based approach is inherently *dialectical*: not only evidence supporting the probanda but also evidence against them should be considered, and any sources of doubt in the arguments should be made explicit. The critical questions associated with the argumentation schemes in the arguments are a useful aid here, as they point to ways in which an argument based on a scheme can be attacked (Bex et al. 2003; Verheij 2003). Take, for example, the critical questions for the Witness Testimony scheme:
1. Was *w* is a position to know *a*?
2. Is *w* truthful??
3. Is *w* biased?
4. Is *w*'s statement that *a* internally consistent?
5. How plausible is *w*'s statement that *a*?
6. Is *a* consistent with what other witnesses say?

These critical questions give pointers on how and where an Argument from Witness Testimony might be attacked. For example, the third question asks if there is an exception to the general scheme (i.e. normally, if a witness says something this is true but in Bob's case we have reason to believe this is not so because Bob is biased); the sixth question asks for other arguments (e.g. from another witness testimony that the man in the car did not look like Pascal). Question 5 is interesting in that it asks for the inherent plausibility (i.e. irrespective of evidence) of the statement that someone who looks like Pascal was in Nadia's car. We will return to this inherent plausibility when we discuss stories

and story coherence below.

The argumentative approach is a dialectical way of reasoning with and about the evidence in a case. Argumentative reasoning has been called *atomistic* because the various elements of a case (i.e. facts, evidence) are considered separately and the case is not considered 'as a whole'. The approach builds on a significant academic tradition of research on informal and formal argumentation and is well suited for a thorough analysis of the individual pieces of evidence and the inferences that can be drawn from them, using critical questions to probe the arguments for possible weak spots. However, the atomistic nature of arguments makes them less suitable for giving an overview of the various hypothetical scenarios about what happened in the case.

2.2. The Narrative Approach

In the narrative approach, the facts of the case are organised into one or more stories: coherent chronological sequences of events about what (might have) happened in the case. In this approach, the evidential data in the case should be causally *explained* by such hypothetical stories through abductive inference. The basic idea of abductive inference (see e.g. Walton 2001) is that if we have a general rule '*c* is a cause for *e*' and we observe *e*, we are allowed to infer *c* as a possible hypothetical explanation of the effect *e*. This cause *c* which is used to explain the effect can be a single state or event, but it can also be a sequence of events, a story. Take, as an example, the observation that Nadia is dead. According to the prosecution's story, Nadia's death was caused by Pascal shooting her:

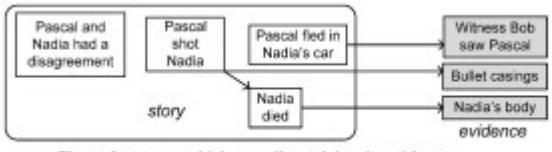


Figure 2: A story which causally explains the evidence

The arrows in the story-diagram in Figure 2 represent causal relations (whereas the arrows in the argument diagram in Figure 1 represent inferential relations) and thus the events in the story causally explain the evidence in the case.

Abductive inference is a creative process, in which we use patterns of commonsense knowledge combined with observed evidence to form a number of hypothetical scenarios. One aid in the abductive process is so-called *story*

schemes, general patterns of events that can serve as a background to particular stories. For example, Pennington and Hastie (1993) present a scheme for intentional actions, a causal pattern of the form *motive goal action consequences*. More specific schemes were given by Schank (1986), who defines a number of explanation patterns which may help in explaining events (or states) by connecting an event to an explanation that has been used to explain similar events before. For example, the story scheme for 'murder' is of the form *person x has a motive m to kill person y person x kills person y (at time t) (at place p) (with weapon w) person y is dead*. In the Nadia example, the murder scheme may be used to abduce a possible story from the observation that Nadia is dead. The motive *m* would then be the disagreement and the weapon *w* a gun.

Taken by itself, abductive reasoning can seem to take the form of the fallacy of affirming the consequent. However, the apparent fallaciousness disappears if we consider abductive reasoning in the broader context of inference to the best explanation (IBE): not just a single hypothetical story but also alternative scenarios are considered and the best one is chosen. The choice between these alternative stories depends on how well the individual stories explain the evidence and how *coherent* (Thagard 2004) each of them is. The coherence of a story largely depends on whether the story conforms to our general commonsense knowledge of the world, that is, whether we deem the story to be inherently plausible (i.e. without considering the evidence in the case). Here, story schemes play an important role (see Bex 2009). For example, a story is not sufficiently coherent if there are parts missing; the murder story scheme mentions motives *m* and a weapon *w* and any murder story that does not explicitly mention a motive or a weapon will be incomplete and hence less plausible. Furthermore, the causal relations in the story scheme can be used to draw out the (implicit) causal relations in the story based on the scheme; in the murder scheme, the motive causes the action (i.e. the killing), so in a murder story there will also need to be such a causal link. Thus, the causal links can then be further examined and questioned.

The narrative approach is a causal, dialectical way of reasoning with hypothetical stories that explain the evidence in a case. Clearly, this reasoning is defeasible, since additional evidence might give rise to new explanations. Furthermore, the narrative approach has been characterized as *holistic* (as opposed to atomistic), because the stories allow the elements in a case (i.e. events, evidence) to be

considered as a whole. An important advantage of the narrative approach is that it is close to how legal decision makers actually think about a case. Experiments by Pennington and Hastie (1993) suggest that when reasoning with a mass of evidence, people compare the different stories that explain the evidence instead of constructing arguments based on evidence for and against the facts at issue (as is done in the argumentative approach). However, a disadvantage of the more holistic narrative approach is that the individual pieces of evidence do not always have a clear place and the evidence's relevance with regards to the facts at issue cannot be checked easily. Furthermore, it is not always clear how one should reason about the coherence of a story and how stories should be compared.

2.3. The Hybrid Approach

Both the argumentative and the narrative approach concern reasoning about the facts and the evidence: in the argumentative approach, the facts may be proven by justifying them with arguments based on evidence, whilst in the narrative approach the facts are justified by being part of a larger story that explains the evidence Bex (2011) shows that when dealing with complex reasoning in criminal cases both the argumentative and the narrative approach have their own advantages and disadvantages. The argumentative approach, which builds on the philosophical tradition of argumentation, is well-suited for an analysis of the individual pieces of evidence, whilst the empirically-tested narrative approach is appreciated for its natural account of crime scenarios and causal reasoning. Conversely, the atomistic nature of arguments makes them unsuitable for giving an overview of the various hypotheses about what happened in the case and not all aspects of causal reasoning can be found in the argumentative approach. In the story-based approach, the individual evidence does not have a clear place and its credibility and relevance cannot be checked easily. Arguments and stories therefore need to be combined into one *hybrid theory*, where facts are organised into stories and arguments based on evidence are used to support these stories. In other words, a story such as the one in Figure 2 should be *anchored* in evidence using arguments such as the one in Figure 1, viz. Figure 3.

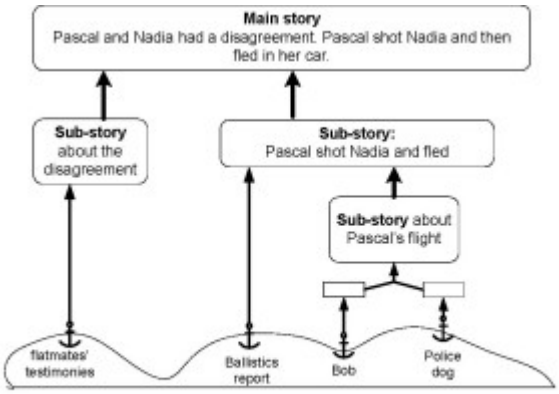


Figure 3: A story anchored in evidence using arguments

In Figure 3 (adapted from Wagenaar et al. 1993)**[iv]**, the main story is anchored in a ground of evidence using arguments, which are based on argument schemes. Note how the main story, which matches a general "kill and flee" scheme, is made up out of sub-stories that match more specific story schemes lower in the hierarchy (e.g. a story scheme about what happens when two people disagree, a "fight" story scheme about what (may) happen when someone flees after committing a crime). Thus, both arguments and stories and their respective schemes have a clear place in the hybrid theory.

The hybrid approach solves one of the most important issues with the narrative approach as, for example, described by Wagenaar and colleagues (1993), namely that often the connection between the evidence and the stories is not made clear. In the hybrid approach, stories can be firmly anchored or, in other terms, *evidentially supported*. Arguments can be attacked, which may break the "anchor's chain", causing the story to be no longer connected to the ground. Note that stories can also be *evidentially contradicted* using arguments. For example, an argument based on a witness statement saying that Pascal was in Poland when the shooting took place contradicts the above story. Aside from anchoring stories in evidence, the hybrid approach also makes it possible to reason about the coherence of a story in a dialectical way, as arguments can be given for the (in)coherence of a particular story or one of its sub-stories. For example, if we take the story in Figure 2, where a relatively harmless disagreement is given as a motive for Pascal shooting Nadia, we could argue against the causal link between the motive and the action by saying that 'normally, people do not shoot other people when they have a disagreement'. This argument can itself be attacked by saying, for example, that 'Pascal is an aggressive person who does not react to stress in the same way other people do'.

In the hybrid theory, stories can be used for constructing intelligible hypotheses about what happened in an intuitive way and arguments can be used to connect the evidence to these stories and to reason about the stories and the evidence in greater detail. In the next section, we will discuss how an anchored story (i.e. a combination of story and arguments) such as the one in Figure 3 can be analysed using a series of critical questions.

3. Critical questions for the hybrid theory: the Nadia van der V. case

Our hybrid argumentative-narrative approach to reasoning about the facts and the evidence gives rise to a number of critical questions that can be asked. These critical questions can be used to unearth sources of doubt in a total case (i.e. the combination of arguments, stories and evidence) in the same way as critical questions for arguments point to sources of doubt regarding a single inference. In this section, we will list these critical questions and give some examples.

(CQ1) Are the facts of the case made sufficiently explicit in a story?

A case should contain a clearly phrased, sufficiently specified and coherent story detailing "what happened".

The starting point of a well-supported opinion about the facts is a concrete story about what happened, that is, a clear and sufficiently specific chronological account of what (might have) happened in a criminal case. By presenting the story separately from any arguments about its plausibility and the evidence, the coherence of the story can be best appreciated and investigated. In a sense, one can say that this story is the *conclusion* of the argument about the case-as-a-whole (cf. the analysis by Verheij and Bex 2009). Which stories can be the conclusion of a legal verdict is often restricted by formal constraints; for instance, in the Netherlands the factual account of a conviction should match the indictment presented by the prosecution. In the Nadia case, the prosecution's main story was roughly as follows:

Nadia and Pascal had a disagreement about a washing machine and Pascal decided to kill Nadia. He called his work to report in sick and grabbed his Uzi, a small machine gun he had in his room. Pascal then shot Nadia twice, dragged her to the kitchen and killed her by shooting again at close range. Pascal then left the house and fled in Nadia's car.

For now, we regard this (simple) story as a sufficient answer to CQ1 and turn to

CQ2.

(CQ2) Does the story conform to the evidence?
a. Is the story sufficiently supported by the evidence in the case?
b. Is the story contradicted by evidence in the case?

One's belief in the truth of a story about what happened must be supported by evidence. A key step is the identification of the *evidential support* that can be given for the elements of a story, that is, identifying the sources of evidence that support the story. In the Nadia case, many events in the story are explicitly supported by evidence: Pascal's colleague testified that Pascal called in sick; there were bloodstains, bullet parts and shells in the corridor and an Uzi's sawn-off barrel, cartridges and cartridge clip were found in Pascal's room; a telephone conversation between Pascal and his father was intercepted, in which Pascal said that he killed Nadia; a statement by Pascal's father, who claimed that Pascal had told him about a disagreement between Nadia and Pascal and that Pascal went crazy because he had been drinking; witnesses stated they saw someone looking like Pascal drive Nadia's car and scent tests showed Pascal had been in the car (Figure 1). This list of evidence is taken directly from the verdicts, where they are largely listed in chronological story order **[v]**.

In general, not all elements of a story can be supported by evidence. This does not need to be a problem, and is in fact unavoidable as certain story elements must by their nature be indirectly justified. When an element of a story is not supported by a piece of evidence (in a given argument), we speak of an 'evidential gap'. In the verdicts on Nadia's murder, the main evidential gaps seem to be not the events in the story but rather some of the causal relations in the story. For example, exactly why the (seemingly trivial) disagreement caused Pascal to shoot Nadia is at first left unexplained and no evidence is mentioned for the fact that the shooting caused Nadia's death. In some cases, such as Pascal's motives for the murder, these causal relations are dealt with separately below (e.g. when looking at the plausibility of the story, see CQ4). Other causal relations, such as the cause of death, can probably be supported on the basis of autopsy report on Nadia's body, but this is not mentioned in the verdicts because it was no issue in the case. In sum, CQ2 has been satisfactorily answered.

The existence of evidential gaps, here conceived of as parts of a story for which no direct evidence **[vi]** is available, is one reason why a mixed-argumentative

narrative perspective can be useful. The analytical argumentative perspective makes the evidential gaps visible, the narrative perspective shows why the evidential gaps can still be believed in conjunction with other facts. In general, it is a matter of good judgment which elements of a story must be directly supported by evidence and which can be inferred from other facts. This depends in part on the quality of the evidence (a story supported by weak evidence can become stronger by providing evidence for more facts), but also on the nature of the crime and the law.

In addition to looking at how much of the story is supported, one should also consider how much of the total evidence in the case supports the story. If, for example, a story is completely supported by 2 witness testimonies but there are 20 more witnesses who state another (incompatible) story, the story does not sufficiently conform to the evidence in the case even though there are no gaps in it. Furthermore, one should also take into account the amount of evidence that directly contradicts a story; instead of giving an alternative story (see CQ5 below), the opposing party may simply deny elements of the main story. For example, in the Nadia case the defence might have witnesses that state that there was never a disagreement and that Pascal and Nadia were good friends. In this case, however, such arguments were not made and we turn to the next critical question.

(CQ3) Is the support that the evidence gives to the story sufficiently relevant and strong?
a. Are the reasoning steps from evidence to events in the story justified by warranting generalizations and argument schemes that are sufficiently strong and grounded?
b. Are there exceptions to the use of the generalizations and schemes that undermine the connection between evidence and fact?

In order to determine relevance and probative force of a piece of evidence, the generalizations and schemes warranting the inference steps should be made explicit. Thus it can, for example, become clear that the generalization is false and cannot be the basis for a good reasoning step. In general it will therefore be important to determine whether and, if so, on which grounds a generalization is considered to be valid (i.e. provide the *backing* to the *warrant*, Toulmin 1958). For example, the witness testimony scheme can be grounded in the law (e.g. article 339, Dutch code of Criminal Proceedings says that a witness' testimony is a valid

source of evidence). Schemes or generalizations can have other sources than the law**[vii]**: we often make inferences warranted by generalizations which are based on general knowledge (Cohen 1977). Such generalizations are necessary but also dangerous (Twining 1999), as they might express implicit biases or prejudices we hold (e.g. "a confession is often true", cf. Wagenaar et al. 1993). In the example of the murder of Nadia, we see that most reasoning steps are based on plausible generalizations and schemes. Perhaps the use of scent tests as a basis for drawing conclusions is the most controversial**[viii]**. If we consider criticism concerning scent tests as a forensic investigative procedure as well founded, then we must conclude that scent tests cannot be used to support conclusions (CQ3a).

With respect to most of the listed pieces of evidence, we need not assume that there are exceptions to the underlying generalizations or schemes (CQ3b) and we can infer the events of the story supported by the evidence. One exception here is Pascal's father's testimony: it might very well be possible that the father is biased when testifying about his own son (critical question 3 for the Witness Testimony Scheme). However, in this case there was also other evidence pointing in the same direction (the intercepted telephone conversations) so it seems that Pascal's father told the truth in this case.

Now that we have considered critical questions 1, 2 and 3, we are in the following position: there is a sufficiently clearly delineated account of the facts (the story), of which as many events as possible have evidence supporting them, and of which the relevance and strength has been established as well as possible. The argument about the case as-a-whole can be further improved by showing that the story is plausible in itself.

(CQ4) Has the story itself been sufficiently critically assessed?
a. Is the story sufficiently coherent? Are there required elements missing? Are there implausible events or causal relations? Is the story inconsistent?
b. Have story consequences been used to test the story?

First, the story's *coherence* must be examined (CQ4a). Here coherence has a specific meaning, namely that the story fits our knowledge and expectations about the world we live in. In other words, a story should be *complete* (i.e. have all its essential parts) and *plausible* (i.e. have plausible causal relations). In section 2.2 it was already argued that story schemes play an important role in determining a story's coherence; completeness, for example, is relative to a particular scheme. A

story should also be *consistent*; for instance, when the story implies that the suspect was simultaneously at two different places it is incoherent.

Something that at first sight is implausible in the story about Nadia's murder is the assumption that disagreements over the washing machine led Pascal to murder Nadia. In other words, the relationship between the motive (the disagreement) and Pascal's action (murdering Nadia) is implausible. No reasonable person would assume that disagreement over washers and driers commonly leads to an intention to murder someone. However, in its decision, the court of appeal inadvertently elaborates on Pascal's tendency to react rather violently in response to what most consider to be futile causes. In the decision, a psychiatric report is discussed; it is used to provide support for the decision to keep Pascal under psychiatric surveillance. The report explains that Pascal has a disorder by which ordinary events make him feel seriously threatened and react with disproportionate violence, which makes the events surrounding the death of Nadia and its cause more credible. This shows that a seemingly incoherent story can still be believed when supported by evidence.**[ix]**

A further way of testing a story is to look for possible reasons against facts that follow from the story (*story consequences*, CQ4b). For example, if we assume that the perpetrator, whoever it may be, has shot Nadia at close range and that he has subsequently dragged her body to another place, it is highly likely that he has blood on his hands, clothes and shoes. If the offender then stepped into her car, there should be traces of Nadia's blood in or on the car. The ruling of the court stated that there was blood on the door lock and the floor mat on the driver's side of the car; a comparative DNA analysis showed that the profiles of the blood found in and on the car matched Nadia's profile.

In sum, the prosecution's main story seems sufficiently coherent and CQ4 gives no problems. However, besides the critical assessment of the main story, the conclusion of the argument in the case as-a-whole, sufficient attention should also be paid to possible alternative scenarios of what has happened.

(CQ5) Have alternative stories been sufficiently taken into account?
a. Has a sufficient search for alternative explanations been performed, not only in the investigative phase, but also in court?
b. Are there good reasons to choose one story over the alternatives? Have the alternatives been sufficiently refuted?

First a serious search for alternative scenarios is needed. In part, the opposing party in the process will provide alternatives, but a decision maker will also have to actively consider different accounts of what may have happened. These alternatives should not only be actively sought, they should also be adequately refuted: essentially, all the critical questions that can be asked for the main story also have to be asked for the alternatives.

In the Nadia case, Pascal told the alternative story that he was suffering from amnesia and could not remember what happened the day Nadia died. He claimed to have been kidnapped and taken to Poland, although by unknown persons and for unknown reasons. This can hardly be considered a story (cf. CQ1 that requires a sufficiently specific account of the facts), but as an argument against the prosecution's story that is not necessary: such a refutation can take the form of a simple claim (supported by evidence) that the suspect was somewhere else than at the scene of the crime. However, it makes the suspect's case stronger when he can present a well-supported and coherent story. In the present case, Pascal's story is not nearly as coherent and well-supported as that of the prosecution. Several crucial elements are missing (*completeness*, CQ4a), such as the identity and motive of the kidnappers. Furthermore, there was no evidence of the kidnapping having taken place (CQ2). Also, the court explicitly addresses the amnesia defence: it states it does not believe Pascal, because Pascal has never sought medical help for his alleged amnesia. Thus, the court explicitly refutes Pascal's alternative (CQ5b).

Finally, a general caveat is in place: any conflicting reasons must be weighed.

(CQ6) Have all opposing reasons been weighed?
Have all considerations that are used to weigh opposing reasons been made explicit? Has this been done both at the level of individual facts and events and at the level of stories?

For example, if two witnesses make opposite statements about the presence of the suspect, both statements provide a reason, one supporting the suspect's presence, the other against. When there are explicit grounds that can decide the weighing of such opposing reasons, they should be given. The stronger and more relevant the reasons are, the more important it is to decide explicitly how they are weighed against each other. Conflicting reasons do not only exist at the level of individual events, but also at the level of stories. For example, there might be

reasons for and against a story as a whole. It can occur that significant elements of a particular story are supported by evidence, while the story itself is rather incoherent. The weighing of reasons then takes the form of deciding whether the story is sufficiently justified by the evidence and how it measures up to the alternatives.

In the Nadia case, there was no difficulty in the balancing of reasons at the level of stories. Pascal's "story" was so implausible and badly supported that it could be considered as refuted by itself, even without considering the plausible and well-supported story of the prosecution. There was no need to weigh any reasons on the level of individual events, as no arguments were given that directly refuted any of the arguments of the prosecution.

4. Conclusion

In this paper, we have proposed a series of critical questions for the hybrid argumentative-narrative theory of reasoning about the facts and the evidence in legal cases. Some of the critical questions correspond closely to argumentative approaches to reasoning with evidence (in particular critical question 2 about the sufficient support of the events, and question 3 concerning the relevance and strength of the support). There are also questions that are strongly connected to a narrative style of analysis (in particular question 4 about the coherence of the supported story, and question 5 about the consideration of alternative stories). But there are also questions that have a more hybrid position between argumentation and narrative. For instance, critical question 1 requires that an argument about the facts has a specific story as a conclusion, and question 6 considers the weighing of the pros and cons for individual events and for complete stories.

We have used the analytic tool of the critical questions associated with argumentation schemes as studied in argumentation theory (recently by Walton et al 2008, building on work by Perelman and Olbrechts-Tyteca 1958, Hastings 1963 and Kienpointner 1992). We have extended the use of critical questions to questions for stories and the schemes on which they are based, and for hybrid structures of arguments, stories and evidence.

One of the lessons learned from the work on the hybrid theory is that stories and arguments are essentially "communicating vessels": when dealing with the complex reasoning involved in large criminal cases, a narrative approach works

best for some points of a case, while in other instances an argumentative approach is most natural. However, for a deeper understanding of the connection between argumentation and narrative, it seems to be required to develop a genuine integration of both. Meanwhile, our hybrid approach allows for the flexibility of the separate argumentative and narrative approaches whilst at the same time it uses arguments and stories as complementary tools for complex reasoning. The case studies in this text and another one by Bex (2011) accentuate the value of a hybrid, argumentative-narrative analysis of reasoning about the facts in criminal cases.

NOTES

[i] We use the term "fact" in its juridical sense, that is, descriptions of states or events the truth of which is currently unknown and has to be proven (cf. *facta probanda* or *facts at issue*, Anderson et al. 2005). Thus, reasoning about the facts is essentially determining "what happened" in the case. With "evidence" we mean the *evidential data*, the primary sources of evidence the existence of which cannot be sensibly denied (e.g. witness statements made in court, forensic expert reports handed to the jury). Evidence and facts should not be confused: the existence of the evidential data does not guarantee the truth of the fact evidenced. For example, that there is a testimony by a witness who saw the suspect jump into a car does not guarantee that the suspect jumped into a car (the witness might lie or he might confuse the suspect with someone else).

[ii] Bex and Verheij 2009 was written in Dutch and specifically aimed at legal professionals. In this paper, we have adapted the critical questions and example case for an academic audience.

[iii] In the Netherlands the judges are required to provide a written verdict in which their considerations are summarized. Many of these verdicts are available to the public on Http://www.rechtspraak.nl. The verdicts in the Nadia van der V. case are available (in Dutch): LJN AO3150 (court of Utrecht) and LJN AT5190 (court of appeals Arnhem).

[iv] Wagenaar, van Koppen and Crombag (1993) propose the theory of anchored narratives and use it to explain 'dubious cases', i.e. possible miscarriages of justice. Verheij (2000) draws analogies between this approach and argumentative approaches and Verheij and Bex (2009) have reconstructed the theory in terms of argumentation schemes. Our Figure 3 is similar to the one by Wagenaar, van Koppen and Crombag (1993, p. 39), but there is a crucial difference between our figure and that of Wagenaar et al.: we use the evidence as

the firm ground to anchor onto, whereas in anchored narratives theory commonsense generalizations provide the anchors.

[v] Pennington and Hastie (1993) have shown that the chronological ordering is more convincing than an arbitrary ordering.

[vi] There is theoretical discussion about the nature and existence of direct evidence, see for instance Anderson, Schum and Twining (2005), pp. 62-63. For our purposes, it suffices to note that we consider an event to be directly supported when there is a direct, argumentative (evidential) chain of reasoning from evidence to the event.

[vii] Freeman (2006) has provided a classification of types of warrants based on epistemic considerations. He distinguishes *a priori*, empirical, institutional and evaluative warrants.

[viii] The tests raised controversy in another well-publicised Dutch case, namely the socalled Deventer Moordzaak.

[ix] It is important to emphasize that the decision about the belief in a story must first and foremost depend on the evidence available and not the story's coherence, that is, a "good" story should never be preferred to a "true" story (Bennett. and Feldman 1981).

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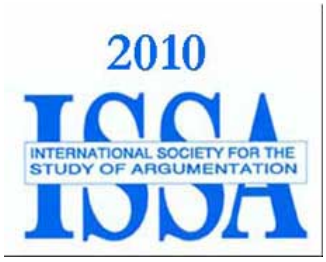
ISSA Proceedings 2010 – Institutional Constraints On The (Un)Sound Use Of The Argument From Expert Opinion In The

Medical Context



1. Introduction

The present paper stems from a larger research project **[i]** aimed at describing the most relevant features of the institutional context that constrain interactions between doctors and patients during medical consultations within the framework of the Italian National Health Care Service. The project takes into consideration the persuasive moves within the consultations in order to identify the most effective arguments and possible unsound persuasive strategies. Particular attention is placed on the institutional features of the context within which the analyzed consultations are set. This choice is justified by the crucial role that the context plays in any kind of verbal interaction; for the analysis of medical consultations this is doubly important as the institutional context they occur in is highly regulated and conventionalized, and also the roles of doctor and patient have some context- and culture-dependent features, which can have a certain import on the development of the consultation (see Bigi 2010). Building also on previous research (Bigi submitted), the present paper aims to identify the contextual features that may lead to unsound uses of the argument from expert opinion.

The paper is structured as follows: paragraph 2 presents a brief review of the relevant literature on the argument scheme from authority or from expert opinion. This will show the general agreement on the validity of this argument scheme along with its main limitations. In paragraph 3, the contextual constraints on the medical consultation are described. The Italian health care system is described from the point of view of its overall structure in order to highlight the main institutional features that can constrain the development of the consultation, the structure of which is then described. In paragraph 4, two main conditions that favor unsound uses of the argument from expert opinion are described. The final paragraph is devoted to some concluding remarks.

2. The inferential validity of the argument from expert opinion

Appealing to the speaker's character, skills, knowledge, or social authority (*ethos*) has been acknowledged since Aristotle's time as a valid means of persuasion, but after Locke's inclusion of the argument *ad verecundiam* in the list of fallacies, appeals to authority have sometimes been regarded with suspicion. There came to

be disagreement about whether appeals of such kind had rational force or were unsound means of persuasion (Goodwin 1998: 267). It is necessary to distinguish between different kinds of authority and scholars agree at least on the distinction between the authority of the witness and the one of the expert. In less institutionalized contexts it is also possible to find the authority of a 'wise person' who offers advice and the one of a friend who offers suggestions which are taken to be trustworthy because of the benevolence the friend is supposed to have towards the one who is asking for advice. Recent studies on the argument from expert opinion grant it legitimacy as a sound strategy given certain contextual conditions (van Eemeren & Houtlosser 2003; Jovičić 2004; Walton 2006; Godden & Walton 2006; Rigotti & Palmieri 2008). As for the structure of this argument, two main approaches will be considered, the one presented in Walton (2006) and Godden & Walton (2006), and the one outlined in Rigotti & Palmieri (2008).

In Walton (2006: 750), the argument from expert opinion is described in the following way:
Source Premise: Source *E* is an expert in the subject domain *S* containing proposition *A*.
Assertion Premise: *E* asserts that proposition *A* (in domain *S*) is true (false).
Warrant Premise: If source *E* is an expert in subject domain *S* containing proposition *A*, and *E* asserts that proposition *A* (in domain *S*) is true (false), then *A* may plausibly be taken to be true (false).
Conclusion: *A* may plausibly be taken to be true (false).

Here the warrant premise is defined as "a defeasible conditional. It has the form of a Toulmin warrant, meaning that it does not hold universally, but only subject to exceptions or countervailing instances that may arise". (Walton 2006: 750) An analogous description is given in Godden & Walton (2006: 277):
Major Premise: Source *E* is an expert in subject domain *S* containing proposition *A*.
Minor Premise: *E* asserts that proposition *A* is true (false).
Conclusion: *A* is true (false).

Both descriptions are accompanied by a list of six critical questions, which need to be answered satisfactorily in order for the appeal to expert opinion to be admissible (Walton 2006: 750):
1. Expertise Question: How credible is *E* as an expert source?
2. Field Question: Is *E* an expert in the field that *A* is in?

3. Opinion Question: What did *E* assert that implies *A*?
4. Trustworthiness Question: Is *E* personally reliable as a source?
5. Consistency Question: Is *A* consistent with what other experts assert?
6. Backup Evidence Question: Is *E*'s assertion based on evidence?

Rigotti & Palmieri (2008) base their description of the argument from authority on the model for the description of *loci* presented in Rigotti (2006) and Rigotti & Greco Morasso (2010). By referring to the moral or professional quality of the speaker, the *locus* from authority is considered as a subtype of the *locus* from efficient cause. The *speaker* corresponds to the efficient cause, the *statement* corresponds to the product, and the logical maxim from which the reasoning develops is of the kind: 'if the efficient cause of a product is valid, the product is valid'; the validity of a statement as a particular kind of product is its truth. The *locus* from authority also shows some additional components belonging to the communicative situation in which the standpoint is being discussed. (Rigotti 2006: 528-529). These additional components are basically the *source of the authority* and the *assessment of the authority*. In the argument from expert opinion, the source of the authority depends on the different types of statements expressing the standpoint, but also on the process of constitution of the authority. As for the assessment of the authority, it is obtained by posing certain critical questions, by a process of analogy in which past judgments on the expert are considered, and by questioning the *endoxon* founding the expertise of the expert. Additional *loci* could be involved depending on the critical questions (for example, the *locus* from the final cause can be involved in the case of a conflict of interests) (Rigotti & Palmieri 2008).

Though different in many respects, the two descriptions share some basic elements. The first is the fact that the soundness of this argument rests largely on the source of the authority, which needs to be clear and acknowledged as reliable by all participants in the discussion. Also other scholars agree on this point. Van Eemeren & Houtlosser (2003) posit this as one of the conditions that determine the (un)soundness of the argument from expert opinion: the expertise of the expert must be agreed upon. To this, they also add the necessity for an agreement on the need itself for an appeal to authority. The authors describe this argument as a 'symptomatic argument scheme, in which the argument provides a sign that the standpoint is acceptable'. The sign consists precisely in the reference to an external source of expertise (van Eemeren & Houtlosser 2003: 296). If there is no

agreement on the authority or on the need for an appeal to authority, then the argument derails and turns into an *ad verecundiam* fallacy. A similar position is found in Jovičić (2004), where particular stress is placed on the fact that the invoked authority must have been ratified by the arguers. Trying to find a method to distinguish between different kinds of authority, Goodwin (1998) proposes the following principle: different kinds of authority should be distinguished relying on the reaction that a failure to follow them ordinarily evokes. Goodwin identifies three main types of authority: expertise, command and dignity. Failure to follow them results, correspondingly, in imprudence, punishment and impudence.

Regarding the source of the authority, it can also be observed that there are different ways in which the authority of the expert is acknowledged: in the example proposed by Jovičić (2004) the authority of the experts is agreed upon by a group of non experts, who go through a process of assessment and in the end decide not to rely on those who in the beginning they had considered as trustworthy. In this case the authority of the experts is proposed as legitimate by the experts themselves, initially accepted by the group of non experts, and eventually rejected because unable to meet the critical requirements of the non experts. There is also the case of the experts whose expertise is initially ratified by their peers, and only afterwards needs to be acknowledged by the non-experts. In this case the process of assessment is somewhat different from the previous one, as part of it is left to the expert's peers, whose criteria for the evaluation depend on the particular field of expertise. The second basic element playing an important role for the argument from authority is the assessment of the authority. Both Walton and Rigotti refer to critical questions that should be posed in order to evaluate the soundness of the argument. It is particularly Walton who discusses at length the conditions for the validity of the argument from expert opinion. His focus is mainly on the assessment of the admissibility of expert opinions in legal trials; therefore the context he refers to has very specific constraints. Nevertheless certain observations have a general validity. Regarding the dialogue in which an expert is questioned on his/her area of expertise, Walton (1997; 2006) observes that, in spite of its being mainly an information-seeking kind of dialogue, it may and should present intervals or shifts that are argumentative in nature. This happens when the questioner tries to probe into what the expert is saying, both to understand it and to test it out. Therefore, a fallacious use of the argument from authority does not only consist in failure to address critical questions that need to be asked, but also in limiting or shutting down the

possibility for the questioner to shift to this argumentative interval in which he tries to assess the credibility of the expert and to understand what he is being told. Walton identifies the three main forms of this interval: clarification of meaning; making logical sense of what the expert said; searching justification for a claim.

As for the fallacious uses of the argument from expert opinion, Walton observes that very often these uses occur when the boundary between cognitive (deriving from knowledge) and administrative (deriving from social role) authority is not clear (1997: 76). He also proposes to consider the *ad verecundiam* fallacy only as the case of the dogmatic use of the argument from expert opinion, i.e. a use of such argument that blocks the non expert from posing any of the six critical questions the answers to which allow to assess the valid use of the argument from expert opinion.

Walton puts forward a typology of fallacious uses of this argument scheme. When the *Expertise Question* ("how credible is E as an expert source?") is blocked, there is the *fallacy of nonauthority*. Subfallacies under this fallacy are the *fallacy of appeal to celebrity* and the *fallacy of unidentified authority*. Under the *Field Question* ("is E an expert in the field that A is in?") the *fallacy of misplaced authority* may occur when the field is definitely wrong. Under the *Opinion Question* ("what did E assert that implies A?"), the *fallacy of misrepresented authority* occurs if what E said is being misrepresented in a deceptive way. In this case, it is possible to have also the subfallacies of *misquoting an authority* and *wrenching what an authority said out of context*. Regarding the *Trustworthiness Question* ("is E personally reliable as a source?"), the subfallacies of *concealing the dishonesty of an authority, concealing the bias of an authority* and *concealing the lack of conscientiousness of an authority* may be used to block this critical question. The *Consistency Question* ("is A consistent with what other experts assert?") may be blocked by *DeMorgan's subfallacy* of putting together two propositions belonging to two different experts and deriving by them a third proposition, putting it forward as a conclusion supported by the experts. In this domain the *subfallacy of concealing deviance of an expert opinion* may occur, where the opinion is presented as though it were generally accepted in the field of expertise when in fact this is not true. (Walton 1997: 254-255)

Scholars therefore seem to agree on the fact that the argument from authority in general and from expert opinion in particular is valid from an inferential point of

view; the risk for it to be fallacious does not derive from its inferential structure but from *how* it is used in a specific context. The medical context, in particular, displays certain typical constraints and touches on specific issues that can play crucial roles in the development of the interaction between doctors and patients during the consultation. These will be dealt with in the following paragraph. The Italian National Health Care Service has been chosen due to the fact that the project relies on video-recordings of real life consultations recorded in an Italian hospital.

3. The contextual constraints on the medical consultation.

Italy's health care system as we know it today was officially born in 1978, in an effort to make health care widely accessible and rationally organized through large-scale planning (Centro di ricerca sulle amministrazioni pubbliche "V. Bachelet", 2008: 4-12). The system is organized in three basic levels: the national, the regional and the local one. At the national level, the National Health Care Service (*Servizio Sanitario Nazionale, SSN*) provides the institutional structure within which to organize more specific actions. It has a function of planning and coordination. Every three years it provides a National Health Care Plan (*Piano Sanitario Nazionale*) in which the distribution of resources is decided, along with the national goals to be met. At the regional level, we find the Regional Health Care Service (*Servizio Sanitario Regionale, SSR*). Each Region receives resources from the government according to what has been budgeted in the National Health Care Plan, and is required to draw up an analogous Regional Health Care Plan, which will allow to contribute to the attainment of the national goals respecting the specific characteristics of each single region. Regions are completely autonomous in the allocation of resources and in devising the strategies needed to meet the goals set at the national level. At the local level, units of health care provision are called Local Health Care Units (*Aziende Sanitarie Locali*). The citizens relate to this complex structure potentially at any level, actually at the highest and at the lowest point: at the highest level indirectly, because through elections citizens choose the politicians who will work in the Ministry; at the lowest directly, when they need health care and they engage in interactions with health care providers. The law grants citizens/patients ample margin for action and protects them in various ways, but surely it cannot eliminate the complexity of a system that at times 'looms' over the patient, humbling him more often than not. The practical difficulty of accessing the health care system is the first contextual factor that plays a significant role in the perception of authority within

the interaction. Another problematic side of this bureaucratic system is the fact that it is closely interwoven with offices that are part of the government. In the Italian culture this creates the premises for a persistent Trustworthiness Question, which is very difficult to answer. Moreover a relevant factor that comes into play in the decisions made by doctors is the financial one. In the Italian health care system, clear instructions are given as to which drugs are covered by the national health care system and which aren't, which exams should be kept to a minimum and which can be prescribed more frequently, etc. The "budgetary preoccupation" clearly plays a role when it comes to making therapeutic decisions, but patients may not be aware of it.

However, once the patient has finally managed an appointment with the physician, other contextual constraints come into play, which are related to the topic at issue in the consultation (i.e. the patient's health) and to the structure of the consultation itself. It is in particular in the past fifty years that a considerable amount of literature has been produced on the topic of the medical consultation, on its structure and on the best methods to assess its quality (Wasserman & Inui 1983; Ong et al. 1995; Boon & Steward 1998; Mead & Bower 2000; Rimal 2001; Beck et al. 2002; Borrell-Carrio et al. 2004; Hornberger & Robertus 2005; Wirtz et al. 2006). It has been observed that the consultation displays a rather fixed structure, in which both patients and physicians enter with expectations regarding the asymmetry of their roles, and where all their discursive moves tend to enact and confirm the asymmetry between them. (Pomerantz & Rintel 2004). The consultation is an activity type which is generally structured in a certain number of phases, determined by the communicative goal, which are: the opening, the history, the physical examination, patient education and counseling, and the closing (Roter & Hall 2006: 113-116). The structure itself of this activity type presupposes a leading figure in charge of naming the problem (diagnosis) and finding a solution (therapeutic suggestion), and a subordinate one (the patient) who embodies the problem and is the 'object' of observation. This asymmetry between the two roles, unavoidable as it may be, can carry the risk of blurring the boundary between cognitive and administrative authority and giving way to unsound uses of the argument from expert opinion. A nice example of this is found in the following extract from a real life consultation. Here the patient has been given a "light" treatment and goes to see the doctor for a routine check-up. Seeing that the physician doesn't seem to be willing to intensify her therapy, the patient expresses her perplexity **[ii]**:

Pa.: But, actually, when my blood pressure goes up so high, I am at risk, because they told me it's risky…
Ph.: Well, no, I wouldn't say so, I mean with these numbers, with your numbers, they are not so terrible.
Pa.: Because, also the other doctor…
Ph.: No, please, don't start panicking because the situation could really get worse. For sure these numbers are high, if they don't drop or if they should rise, we would surely need to treat them, this is for sure, but now, well, I would really say…

This is a typical example in which the patient is not allowed to shift to the argumentative subdialogue that would have allowed her to make sense of the conflicting opinions she had been given, thus yielding an unsound use of the argument from expert opinion.

The feature that most typically characterizes the interaction between a doctor and a patient is the fact that the interlocutors share a very limited common ground. This, together with the features of the institutional context we have described so far (structural complexity; asymmetry in the familiarity with the institution; asymmetry of social roles), may make it very difficult for doctors to involve patients in the process of decision-making. It is clear that in order to make a decision a subject must have data on which to base it. But if the context of the interaction makes it too difficult to provide all the relevant data, as is often the case in an asymmetric interaction (Ford 2002), what arguments can be used to motivate a certain decision? Given the topic in this specific field of interaction, the most relevant arguments would appear to be the effects, the causes, the risks, or the expertise of the person who proposes the solution. Indeed it is very difficult for patients to base their own decision making on the same premises on which the doctor bases it. Thus we are led to the problem of unshared premises: doctors are likely to base their decisions on premises that belong to the specialized domain they are experts of. These are difficult to explain to a non-expert in the limited time of a consultation. Therefore the common ground for the shared decision-making has to be found elsewhere. The expertise of the expert can be considered part of the shared common ground, on the condition that the patient trusts the doctor. However a systematic study should be conducted on which are the most effective arguments and emotions that contribute to the goal of persuading a non-expert in a context such as the one described so far.

The next paragraph will be devoted to the discussion of two conditions that can favor the occurrence of unsound uses of the argument from expert opinion: the 'structural' difficulty of assessing the expertise of the expert, and the problem of unshared goals.

4. Possible unsound uses of the argument from expert opinion in the medical context.

The complexity of the health care system, which has been described in the previous paragraph, is at the heart of a fundamental problem, i.e. the difficulty of assessing the expertise of the expert. In the medical context, above and before the direct interaction between the expert and the non-expert, the expertise of the former has been acknowledged and ratified by the scientific community the expert belongs to. Assuming that the scientific community has applied the relevant criteria and has acknowledged someone as an expert in a certain field, an institution then employs the expert where he/she will serve as a professional. This second step is also very important, and it presents one advantage and one disadvantage for the patient who is in need of the opinion of a doctor. The advantage consists in the fact that the system operates a selection among the potential experts applying criteria that are relevant to the field of expertise and to the needs of the system itself. In other words, when a scientist is acknowledged as trustworthy by its peers, it is expected that they will have used scientific criteria to recognize him/her as trustworthy, and not, for example, criteria related to the person's character, wealth, etc. Also, when selecting the experts to employ, a hospital or a research center is expected to take into consideration the needs of the population living in the area and the resources available: a hospital in a highly industrialized area of northern Italy is less likely to need an expert in tropical diseases and will probably avoid spending all its money on someone whose performances cannot be sustained by a limited budget. This is an advantage for the non-expert, because it is more likely that the expert can be acknowledged as such if the assessment of his/her expertise has been performed by applying relevant criteria, which the non-expert generally does not know. The disadvantage in this situation is that it becomes extremely difficult for the non-expert to personally verify the reliability of the expert. Indeed the non-expert comes into play at the end of a long process of selection, the workings of which he ignores. For this reason, before entering an interaction with an expert, the patient often looks for information from alternative sources, such as friends, family, the Internet, the press (Forum per la Ricerca Biomedica [Forum for Biomedical

Research] 2007). Such a patient is the most likely to ask frequent questions to the physician, but also the one more apt to be suspicious when the expert's suggestions are not in agreement with the information previously retrieved. A situation of conflicting authorities may arise, a case in which doctors' argumentative abilities are very important if they do not want to lose their patients' trust. The following is another extract from a real life consultation, which shows an interesting solution to a case of conflicting authorities. The consultation is a follow-up from a previous one. The physician is going over the patient's treatment and at a certain point asks:

Ph.: I suppose you are regularly taking your low dose aspirin, right?

Pa.: Aspirin… I totally forgot.

Ph.: You remember we decided that…

Pa.: Yes, yes

Ph.: […]

Pa.: No, I really just totally forgot, I have to go buy it.

Ph.: This is something that can help us, low dose aspirin […]

Pa.: Yes, right, by the way, I wanted to ask you something. I read on the leaflet inside the Adalat Crono box, actually also in the Lacirex **[iii]** one, that it says something about not taking acetylsalicylic acid…

Ph.: No, no, no, on the contrary. There are studies based on controlled trials showing that low dose aspirin associated with anti-hypertension therapy has a protective effect.

Pa.: I took it for a couple of days, and then…

Ph.: Do take it, trust me. Unless there are serious contraindications like ulcer, hemorrhagic gastritis…, then it's a different thing. But you don't have anything like that so, aspirin is useful in those dosages.

The physician refers to a higher authority, the one of evidence-based medicine, which heavily relies on the system of controlled trials. The use of the argument from expert opinion here is not fallacious, as the system of controlled trials actually is reliable and acknowledged as such by the scientific community; this use could be persuasively weak though because the patient may not be aware of the authority of controlled trials. Indeed this case is exemplary of a frequent 'solution' doctors find to the problem of conflicting authority, i.e. shifting the burden of proof to the researchers who have produced the results the doctors themselves rely on to formulate their suggestions. This of course contributes to the making the assessment of the expertise of the expert even more difficult.

Another feature characterizing the interaction between doctors and patients, which could indirectly favor a fallacious use of the argument from expert opinion, is the existence of unshared goals. Sometimes patients see their doctor because they think they can recover completely when in fact this is not possible (e.g. elderly patients; chronic patients). It often happens that the goals of the actions suggested by the physician remain implicit, because the doctor simply does not say what he has in mind when he suggests a certain course of action. This may create possible conflicts, which could also remain implicit and escalate to the point of destruction of the whole relationship between doctor and patient. In this case the process of presuppositional accommodation may play a relevant role **[iv]**. The fact that doctors frequently introduce presupposed content in the common ground together with the asserted content, taking for granted that their patients are aware of this and agree both with the process and with the truth of the presupposed content can create a problematic situation. The fact that the patient accommodates does not imply that he accepts or believes everything the doctor is saying. In this context therefore, the process of presuppositional accommodation becomes something to consider very carefully: it cannot be avoided, but it is more likely to bear positive outcomes if the relationship between doctor and patient is based on trust and understanding. Indeed, forcing the acceptance of a certain course of action grounding the argumentation on presupposed (specialized) content actually amounts to one of the cases of fallacious use of the argument from expert opinion, as it is a process that may prevent the non-expert from discussing the decision in order to understand it.

Moreover, the issue of unshared goals in this context could be reframed also as an agency problem. The relationship between doctor and patient can be construed as a kind of agency relationship, in which a principal (the patient) delegates a task to an agent (the doctor) (Goodwin 2010). The Italian National Health Service is structured in this way, having the patient at its center (Bigi 2008), as is also reflected in its name, ‘service’. When fallacious cases of the argument from expert opinion occur, they are not only argumentative fallacies, but also instances of shirking on the part of the doctor. Is it possible to reduce this risk? Are there cultural perceptions of authority that could encourage doctors to abuse of their position? Perhaps further research could inquire into the cultural perception of the concepts of ‘authority’, ‘public institutions’, ‘public service’.

5. Concluding remarks.

The argument from expert opinion has been shown to be inferentially valid, but heavily dependent on certain contextual factors for its soundness and persuasive strength. The main contextual factors it depends on are the *source* of the authority invoked and the possibility to *assess* the expertise of the authority. We set out at the beginning of this article with the aim of observing the argument from expert opinion within the context of the medical consultation in order identify the contextual constraints that may favor an unsound use of this argument. The article has examined the institutional structure of the Italian health system, and the development and structure of the consultation, along with some key issues related to it.

It is possible now to draw a few conclusions. First of all, the institutional structure of the Italian health care system, in spite of its being designed around the patient and with the aim of achieving patients' well being and public health, appears to be rather complex and difficult to relate to. This favors a feeling of uneasiness and inferiority in the patient, and conversely a feeling of superiority in the professional who works within the structure and knows its inner workings very well. This creates an asymmetry not only in the specialized knowledge of the two interagents, but also in what we could call the 'systemic' knowledge of the two, which could easily favor fallacious uses of the argument from expert opinion. Considering the way the health care system is constructed, fallacious uses of the argument from authority can be said to amount to shirking on the part of the doctor (agent), who is supposed to pass on relevant information to the patient (principal) and to work for the preservation of public health. Therefore, when the argument from expert opinion is based on the doctor's administrative authority rather than on the cognitive one, it can be considered invalid. The system being constructed as it is, doctors should be particularly careful in the way they use this argument scheme. With regard to this point, a deeper inquiry into the perception of authority and the function of institutions in the Italian culture is likely to yield very interesting insights.

NOTES

[i] The project is funded by a Research Fellowship awarded by the Faculty of Foreign Languages at the Catholic University of Milan (Italy).

[ii] This extract and the one that follows are taken from longer interactions, videorecorded between 2004 and 2005 at the Hypertension Division of the San Paolo Hospital in Milan (Italy). Both consultations are taken from the Archive of

Videorecordings of Medical Consultations at the Institute of Medical Psychology of the San Paolo Hospital in Milan.

[iii] Adalat Crono and Lacirex are drugs the patient has been taking for his anti-hypertension therapy.

[iv] On the role of presuppositional accommodation in dialogue and its manipulative uses, see Greco (2003).

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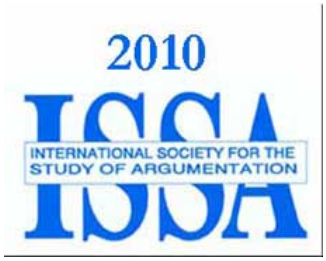

1. Introduction

Argumentation in the sphere of politics can be very complex. Several origins of this complexity can be distinguished. First, the argumentation often does not fit straightforward schemes of deduction or induction; it is conductive, that is, it is nonconclusive, with multiple premises (Govier, 1987). Second, the number of premises can be considerable (as the case in this paper will show). Third, a political argument may rest on a cluster of connected assumptions that tend to be taken as a whole, rather than be

critically examined individually.

Sometimes this connectedness has to do with a particular normative framing, such as clusters in risk perception as described by cultural bias theory (Thompson et al., 1990, based on the work of Mary Douglas; for an example in the field of argumentation, see Birrer, Pranger 1994), which suggests that risks are naturally framed in the context of a political perspective on how society should deal with such risks.

Connectedness also arises when radical policy innovations or 'transitions' are discussed which involve multiple changes at various levels at the same time. Such radical innovations are sometimes considered the only effective way to deal with a certain policy problem, or a set of policy problems. Only the entire package of measures (and their expected effects) are supposed to establish the desired result; and not only is each individual measure assumed to be a necessary condition for the realisation of the end result, the effects of the individual changes may also interact, adding yet more complexity. It is this latter kind of connectedness problem that we will figure in this paper.

Argumentation with many connected arguments is necessarily complicated. And as a result of this complexity, it offers plenty of opportunities for discussants to commit outright fallacies, or, less perceptibly, to be drawn into a process 'argumentative drift' that makes the discussion less and less productive because the discussants are not adequately responding anymore without being aware of it. Particularly in the case of proposals for radical innovation, proponents may get stuck in euphoric expectations of how the proposal will work out, without serious consideration of actually expressed of potential criticisms. They indulge in a cluster of arguments closely connected and referring to each other through the common goal, and taken together than examined individually, and the proposal becomes a kind of 'virtual reality', a fantasy out of touch with reality, up to outright utopianism when combined with equally unjustified assumptions about socio-political reality. Arguers may become less sensitive to opposition pointing at arguments individually Another possible result can be in-group vs. out-group behaviour: either you belong to the believers or to the non-believers (or those of another, competing, belief), the group-belonging is strengthened by exaggerating the differences, and critical arguments from outside are not really addressed anymore but answered by repeating the group's dogmas.

In the present paper, we will discuss a case where two competitive clusters of argumentation appear, each with a very different vision on the future of the Dutch Electronic Health Record. We will describe these two visions, and how the issue of connectedness is dealt with. It will also turn out that the discussion as it can be found in parliamentary discussions is incomplete. This we will show by extending the debate with what can be found in the scientific literature on the subject, official policy documents limiting the discussion. This suggests that it is important in discussions like these to look at a broader context in which the discussion takes place, both in terms of arguments and of process. Since we want to show the relevance of the broad context of argumentation, our emphasis here will not be on an extensive analysis of arguments in all their formal details. Rather, we examine the broader connections in the debate as a whole, and the relevance of this context for understanding what goes on in the debate (and what is missing).

2. General background

What does the term EHR stand for?

Put in general terms, the term EHR refers to systems for handling healthcare information that go beyond registrations by individual healthcare providers. EHRs are both considered at the micro-level of the care processes that surround a particular patient and at the macro-level of public health policy. Even though a macro-political view of health informatics often evokes the idea of a central database, this is not the only way of looking at this issue. It could also be a distributed, virtual system, i.e. an access route to many different databases at various locations. From the outset, the Dutch approach has been to opt for a system with decentral storage of data, combined with a secure "switchboard" that would process queries. But the term can also be used for a system that merely facilitates exchange of information, with no central access, or switchboard at all.

This implies that the EHR can be conceptualised in two very different ways. One refers to a system for the *exchange* of information. Whenever medical professionals such as doctors, pharmacists etc. need to exchange information, this may be facilitated by the EHR system. When accumulated, this results in a longitudinal information track on a patient, but confined to the specific treatment context in which the exchanges take place. Only in this exchange context the meaning of the information needs to be clearly defined.

A very different conception refers to the EHR as a system for *storing* information, i.e., as a *database*. The information not necessarily stands in the context of a

specific form of exchange; its range of users can be more general, other professionals, or even the patient.

Though the two conceptions of the EHR are not mutually exclusive (one could exchange information by putting it in and taking it from a central database), their practical implications are very different. The exchange system may benefit from some standardization of the information format, to secure quick and accurate interpretation, but such standardization can be limited to frequent exchange relations, and the scope of the system can be gradually expanded as far as desired. The database view, on the other hand, is much more ambitious. Information will be made available for different uses, in principle in different medical contexts, or even for medical statistics and scientific research. This requires massive, and extremely well-thought-out standardisation that needs to be set out from the very beginning.

A crucial implicit assumption is involved here. Information that is stored by a medical professional, or exchanged between two medical professionals to coordinate a specific treatment, is not necessarily clear and unambiguous to a third person. What is understood by the originator, or within a particular communicative relationship, may not be understood or may be misunderstood by outsiders. The database view presumes that information is made interpretable beyond the context in which it arises, by a broader range of possible addressees, or even by anyone. Information must be decontextualised. This requires rigorous standardisation of the information format.

Policy objectives for the EHR

The general objectives for the EHR, as stated by successive ministers from 1995 on, are lowering the costs and improving the quality of healthcare. This is most clearly expressed in recent goal formulations, such as ‘quality, efficiency and combating fraud’ (Ministerie van VWS, 2004a) and the much-repeated slogan ‘affordability, accessibility and quality of healthcare services’ (e.g. Ministerie van VWS, 2006). These objectives are more or less the same as for current Dutch health care policy in general (as in many other countries). Given the steady rise of health care costs up to the present day, controlling the costs is bound to be the most important drive here, even though earlier motivations were sometimes embedded in more noble-sounding terms like ‘patient-oriented’, ‘the healthcare consumer rather than the healthcare provider is central’ (RVZ, 1996).

The role of IT in achieving the policy objectives

In policy statements and documents on the EHR, IT is presumed to offer ways to achieve the policy objectives mentioned above. Availability of information at any time to any medical professional who needs it might save needlessly unfortunate medical decisions (TNS NIPO, 2003). The standardization of information required by IT is also supposed to reduce inaccuracies and errors (e.g. RVZ, 1996; Tweede Kamer, 2005).

At the same time, IT is supposed to increase transparency. The information available can be used for controlling quality and costs by government (RVZ, 1996), but also by the patient (Ministerie van VWS, 2004b; RVZ, 2007). The latter scenario fits in a general healthcare policy trend: current supply-driven healthcare, with healthcare providers to a great extent determining what is provided in return for what, is to be transformed into demand-driven healthcare, with much more influence of the patient (RVZ, 1998; 2003; 2007). On the basis of the information available, the patient is supposed to make a well-considered choice for particular healthcare services and providers, and thus assist in controlling the quality and costs of healthcare. The information available could also be used to construct statistics to assist government in more general healthcare policy, such as dealing with epidemics.

There are also references to the assumption that ICT in general contributes to improved quality (RVZ, 1996; Tweede Kamer, 2001b). On top of earlier comments on quality-improvements in the sense of reduced human errors, different discussants have pointed at broader effects, such as reducing scarcity on the labour market (Scheepbouwer, 2006), automating routine tasks that are currently performed by medical staff (RVZ, 2002b) in order to make more time for inter-human contact (Ministerie van VWS, 2007) and stimulating patient empowerment by allowing patients to perform more medical tasks themselves (RVZ, 2002a).

Standardisation

The differences between the database view and the exchange view translate into different standardisation approaches. As already became clear, the database view calls for a more encompassing, more rigorous form of standardization. In relation to the EHR in the Netherlands, two main visions can be discerned that correspond to the database view and the exchange view respectively. One vision, more strongly technically oriented, favours the database view, and supports more encompassing and rigorous standards (‘ENV 13606’), that aim at a comprehensive

database (De Clercq et al., 2004). The Dutch Health Council (RVZ) is the main institutional exponent of this view in the Netherlands. Another group favours the exchange view, and supports more modest standardization ('HL7'), with the National IT Institute for Healthcare (NICTIZ) as a main exponent.

Policy statements tend to be somewhat ambiguous on this point. On the one hand, when choices have to be made, they seem to favour the HL7 option (NICTIZ, 2003; Tweede Kamer, 2009). The Public Health Council, however, remains on the side of the more comprehensive European standard (RVZ, 2005b; Ottes & Van Rijen, 2008). At the same time, the reader will already have observed that much of the role envisioned for IT in achieving the policy objectives goes far beyond the exchange view; it presumes information to be usable in sometimes very different contexts, and necessarily seems to imply the database view.

3. Examination of the main assumptions by the Ministry

Presuppositions

The preceding section already suggests a number of presumptions that formed a common trend in the policy statements by the responsible Ministry under successive ministers with respect to the aimed consequences of the EHR:

(1) improved quality of healthcare
(2) lowering the costs of healthcare
(2a) IT generally increases efficiency
(3) transition from supply orientation to demand orientation
(4) decontextualisation of information
(5) ideal users (not explicitly discussed so far, will appear in the analysis later)

Even if one of the presumptions mentioned above would fail to hold, the negative consequences for the EHR project would be considerable. So an obvious step is to see what is known about these presumptions. We will examine them one by one. Since the last two are instrumental to the first three, and the third is instrumental to the first two, we will treat them almost in reverse order.

What the scientific literature has to say on these presumptions.

There is a considerable body of literature that puts serious question marks with respect to the issue of decontextualisation. Particularly significant in the Dutch context is a report from 1998 by the national technology assessment agency that extensively elaborates the problem of decontextualisation (Berg et al., 1998). Medical treatment involves complex acts and communications that can be

properly understood by those directly involved in that particular treatment, but not necessarily by others (Pantazi et al., 2006; Son et al., 2008; Berg & Goorman, 1999). Communication involves clues that are clear to the professionals directly involved, but that are often hard to standardise to such an extent that they are also correctly grasped by others. Or perhaps such standardisation is possible in principle, but at the price that the development of appropriate standards, and the effort to translate any communication into their format, presents a burden that is hard to accept (Berg, 1999; Tully & Cantrill, 2005; Vikkelsø, 2005; Pinelle & Gutwin, 2006; Goodyear-Smith et al., 2008). This is particularly pressing if the benefits that are to be expected fall outside the primary process of healthcare delivery, where the additional investments usually have to be made. Experiences elsewhere with attempts to construct overarching medical information categories, even in cases such as integrating only specific information systems within one hospital, show the enormous difficulties of such undertakings.

The transition from supply orientation to demand orientation is a topic of its own, extending to health policy in general. Here we will be brief, and limit ourselves to what is specifically relevant to the EHR. The basic idea is that the health care consumer, i.e., the patient, should play a crucial role in valuating health care services. The patient, being the primary subject who undergoes and experiences the services provided, gets a more active role as a 'market player', by making his/her own choices for certain health care providers, so that healthcare providers have to compete for his/her favour with better services, thus both improving quality and reducing costs. Information is of course crucial for the patient to be able to effectively play this role, which is where the EHR comes in. Nevertheless, even if the relevant information could be made available, it is by no means clear that the average patient is capable (or willing) to fulfil this task (Berg, 2002). Medical quality is hard to assess, and comparing and negotiating offers from service providers may be difficult and time-consuming. For common chronic diseases such tasks could be taken over by specialised patient organisations, but even they may not be able to effectively counter the health care professionals (the fact that, despite desperate efforts, government has not succeeded in managing the costs, does not add to the credibility to such a view either). Certain academics note that, even for patients with a chronic illness, such representation is likely to serve only a minority (Lyon, 2005). On top of that, different actors in the Dutch political debate have acknowledged that their expectations concerning the accumulated countervailing power of patients are perhaps not entirely realistic

(Tweede Kamer, 2001a; RVZ, 2005a).

This means that, given what is known on these issues, the basis for the far-reaching claims of quality improvement and cost reduction is equally shallow. As for the more general assumption that IT naturally increases efficiency, the evidence shows that this is by no means the case. Sometimes it does, but there are many cases where it didn't, it all depends on how it is done. Benefits often do not outweigh the required investments (Berg, 2002).

The assumption of ideal users does not have any explicit prominence in the statements by the ministry, but it is an issue that is to be considered. Information technology design is necessarily based on assumptions on how the user will use the system. When these assumptions are unrealistic, unexpected things can happen. It may be that the designer, being a technician, assumes too much technical knowledge of the user, in which case the user will experience unforeseen problems. Less straightforward, but equally important, is that the user may have or develop motivations to use the system in a way that is different from what the designer envisioned. Such different use may have unforeseen and undesirable consequences. This possibility is, of course, not limited to IT design; it applies also to any government regulation measure: actors may use the new system or rule in an unforeseen strategic way such that the anticipated positive effect is annihilated, or making the situation even worse than it was.

Literature on EHR development indeed indicates that physicians may go around the original intentions of the system (Pinelle & Gutwin, 2006; Winthereik et al., 2007), that they start using "shadow" records (Saleem et al., 2009), or to boycott EHRs altogether (Kaplan, 2001). In the Dutch case, it is important to note that many Dutch physicians have objected to the use of their own personal data in the future EHR (Katzenbauer, 2009). Also with respect to patients, it is questionable whether expectations concerning their use of the system are realistic. Berg (2002) points out, for instance, that patients are likely to experience information overload from certain deployments of an EHR. In such cases, family doctors are expected to experience an increase in their workload, as to have to operate as "information brokers".

4. Treatment of the main assumptions in parliamentary debates

We now come to the actual discussions in Dutch parliament that took place at various occasions from 1994 till now. As we have seen, the scientific literature

suggests that none of the main assumptions treated above provides unquestionably safe ground. One would expect, therefore, that these assumptions were extensively scrutinized in parliamentary debate. However, this was not the case.

The issue of decontextualisability remained untouched upon. This was all the more remarkable, given the earlier-mentioned publication by the Dutch technology assessment office (Berg et al., 1998). The only occasion when the issue was raised, with reference to the report from 1998, was in 2005(!), when a member of parliament (who was not in parliament when the report appeared) put questions to the minister. The Minister's answer shows one way to put aside an issue like that:
'The report [..] concludes that gathered information should remain in its original context for supporting the primary process. I subscribe to that thought. However, the developments in the field of chain-integrated and multidisciplinary care place high demands on record-creation. After all, also other care providers than the concerned record-keeper need to be able to understand the context and be able to deal with this information. The need for care information to be able to circulate has an impact on the design of healthcare records. Agreements, and international guidelines and standards in the field of records have become necessary. However, there will be space for free text for personal use, or for sharing this with others' (Tweede Kamer, 2005, p. 8)

That is, after first confirming the issue, the minister then declares decontextualisation as a necessity, thereby sidestepping to what extent this 'necessity' is possible.

The contention that the EHR will reduce the number of medical errors (as part of its quality-enhancing effect) is stated several times (TNS NIPO, 2004; Tweede Kamer, 2008). A Dutch investigation made into the causes of medical errors is used by the Minister as support for this assumption. However, as is pointed out by a member of parliament the investigation report does in fact not support not this assumption (Tweede Kamer, 2009a). Many avoidable medical errors are caused by negligence and inaccuracy, and these can also occur with the EHR.

The shift from supply to demand, and its positive impact on quality and cost control, is simply assumed. One of our main observations here was that while such an extensive transition requires a whole package of assumptions, each time

one assumption is questioned, the discussion immediately leads to another assumption, and to the next etc., with the net effect that no assumption is effectively questioned.

The general cost-effectiveness of IT is simply stated (see earlier reference) and apparently assumed.
When the Minister put forward a new law introducing some aspects of the EHR, the Dutch Parliament had some comments on privacy and security matters, and on some other issues that were supposed not to be clear, but in the end the Parliament approved of the law (February 9, 2009). However, the law had also to pass the Dutch senate ('Eerste Kamer'). Here the criticism was more severe. Again privacy and security were dominant issues, but there were also questions on the rights of patients and their consequences. The common thread of the discussion was a growing belief in the Senate that important parts of the plans simply had not been adequately thought through. In July 2010, the Minister of Health (by then formally resigned, because new elections had taken place in the meantime) had to indefinitely poatpone the introduction of a law on the EHR.

5. Understanding the debate
In the previous sections we confronted the actual debate with what is known from the scientific literature, that is, we extended the actual debates that took place in parliament with input from outside that debate, by actors that did not actually take part in that debate. Investigating the debate in pragma-dialectic model within the confinement of the debate as it actually took place would have left many of the above invisible. As was observed by Birrer (2007), the pragma-dialectical model in neither of its discussion phases actually enforces that relevant aspects will always be brought up by one of the participants in the debate. In the case discussed above, the reasons for not doing so may have been in part strategic. It should be realised, however, that the subject has strongly technical aspects, and that anyone who is not very familiar with it may easily hold it for inaccessible without extensive technical knowledge. In this paper, we have not attempted to investigate the issue of motivations of actors involved.

Such a strategy of including relevant issues that nevertheless do not figure in the actual debate can be justified by pointing to the responsibility and accountability that the debaters can be held to have: responsibility because the political decisions at stake will have consequences for citizens and society, accountability because a democratic society requires that the reasons for such decisions are

publicly accounted for.

Apparently, clusters of assumptions can lead to less scrutiny towards the assumptions individually. Instead, the tempting perspective of the cluster of assumptions as a whole takes over. The urge of solving the issue sometimes also leads to the solution being pictured as a ‘necessity’, without clear analysis of alternatives.

How does the notion of two conflicting clusters play a part in the analysis of argumentation? First of all, it is clear that there is a certain rivalry between the groups that oppose the two opposing EHR views. As we noted in the introduction already, the clustering of argumentation is likely to generate in-group/out-group dynamics. What we have attempted to show, is how this effect is strengthened when two clusters are apparent in a particular discussion. A debate on giving shape to an effective EHR can easily turn into a debate on conflicting world views.

When the scientific literature is included as a “virtual” participant in the debate, as we have done, the various ministers’ statements definitely go beyond what is called strategic manoeuvring. This is particularly clear when the virtual participants are momentarily invited to take part in actual discussions, as we have seen in the case of the report of the Dutch technology assessment agency (Berg et al., 1998). Strategic manoeuvring presumes a balance between effectiveness (persuasion) and reasonableness (Van Eemeren, 2010). Although what counts as reasonable and what not may sometimes itself be open to discussion, in the present case it is hard to maintain that it is reasonable that so many aspects are simply left entirely or almost undiscussed. It seems more appropriate to speak here, again in Van Eemeren’s terms, of derailment of strategic manoeuvring (referring to an imbalance between the objective of effectiveness and that of reasonableness).

At the same time, leaving the matter at such a disqualification is not particularly helpful. The question that we think our analysis raises is how these argumentative phenomena can be understood. It looks like they can only be understood with reference to the social context in which the discussion takes place. Multiple instances of such broad analysis of debates in context could lead to a better understanding of debates like the one described, and perhaps also to new insights in how such derailments of strategic manoeuvring can be countered or curbed.

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A FEW ABBREVIATIONS AND TERMS

Ministerie VWS Volksgezondheid, Welzijn en Sport (Ministery of Health, Wellfare and Sports)

NICTIZ Nationaal ICT Instituut in de Zorg (National ICT Institute in Care)

RVZ Raad voor de Volksgezondheid en Zorg (Council for Health and Care)

TNS NIPO Taylor Nelson Solfres / Nederlands Instituut voor Publieke Opinie (Dutch Institute for Public Opinion)

Eerste Kamer (First Chamber, i.e., Parliament)

Tweede Kamer (Second Chamber, i.e., Senate)

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