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A unitary schema for arguments by analogy

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ABSTRACT: Following a Toulmian account of argument analysis and evaluation, I offer a unitary schema for, so called, deductive and inductive types of analogical arguments. This schema is able to explain why certain analogical arguments can be said to be deductive, and yet, also defeasible.

KEYWORDS: analogies, analogical argumentation, argument analysis, argument evaluation, deductive analogical argumentation, inductive analogical argumentation, linguistic-pragmatic normative models of argumentation, Toulmin's model of argument.

1. INTRODUCTION

In "Analyzing and classifying analogies" (1989), T. Govier said:

> The trick about analogies -and their charm as well, I think- is that we are often able to see or sense important resemblances between cases without being able to spell them out exhaustively in just so many words. (Govier, 1989: 148)

To this, Waller (2001) responded: "We should not, however, exaggerate either the charm or the persuasiveness."

The main goal of this paper is to provide a general framework for the study of analogical argumentation that is able to make full sense of that which is both tricky and charming in analogies, while retaining the possibility of determining, for each case, the value of analogies as argumentative resources.

This proposal should also shed light on another point of controversy between Govier and Waller. These authors have maintained a discrepancy on whether we can say of certain type of argumentation by analogy that it is deductive. They both agree that this type of analogical argumentation involves general claims—i.e., claims stating something like "things that share properties x, y, z also share property p", which Govier calls U-claims (Govier, 1989: 148). As they see it, in the last resort, such general claims would sanction the inference from adducing that A is like B to concluding something about A. However, Govier considers that general claims are not part of analogical arguments as actually stated by those who argue by analogy. Rather, in arguing by analogy, speakers would *imply* –not *adduce*- such general claims: in fact, Govier says, such general claims may be unknown to speakers themselves. This is why she considers that this type of analogical arguments cannot really be said to be deductive but, at best, *a priori*. For his part, Waller considers that such arguments are not only *a priori*, but also deductive, as their conclusions are meant to be established in a categorical way, as something that follows of necessity. In my view, the intuition that U-claims are not part of analogical argumentation

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and the intuition that certain type of analogical argumentation characteristically aims at establishing its conclusions categorically are both correct and one of my goals in this paper is to explain how is this possible.

Much of the discussion between Govier and Waller is, in the end, a discussion about the way we should deal with the analysis and formalization of this type of analogical argumentation. Govier's and Waller's proposals are based on their corresponding assumptions that U-claims are/are not part of what speakers say when they make inferences by analogy. Following such assumptions, they offer alternative schemas for the analysis and formalization of analogical argumentation that, effectively, make them result in non-deductive and deductive arguments, respectively.

For my part, I think that an adequate response to the question of whether certain type of analogical argumentation is deductive or not requires a model of argument analysis and formalization that does not beg the question in this sense. That is, we should be able to find a rationale for analyzing analogical argumentation that does not depend on potentially controversial assumptions regarding what is the "real" structure of argumentation by analogy.

This idea underlies my strategy for providing a unitary schema for analogical argumentation. Such schema is based on a general linguistic-pragmatic model for the interpretation of argumentation, that is, a model that, in characterizing, in general, the speech-act of arguing, provides guidelines to interpret real argumentative practices. In other words, this model is meant to determine the *meaning* of acts of arguing, not their alleged logical structure. This is why it makes no assumption regarding such logical structure –i.e., regarding whether U-claims are part of the "deep" logical structure of analogical argumentation or not.[1] The elements of this model of argumentation are meant to be constitutive of any communicative move that counts as argumentation. However, at the same time, these elements are the linguistic-pragmatic correlates of the elements of Toulmin's model of argument, as presented in *The Uses of Argument* (1958), and because of this, we will see, our model for interpreting argumentation also serves the purposes of analyzing and appraising it.

As I will try to show, according to this model, both inductive and *a priori* argumentation by analogy would have the same structure and normative conditions. In addition, as Govier maintained, we will see that, in general, U-claims are not part of what speakers adduce when they argue by analogy. As Govier pointed out, this fact explains part of their charm, of their rhetorical power.

Yet, following Toulmin's account of material inference and a Toulmian-inspired model for the semantic appraisal of argumentation, we will see that, contrary to what Govier seems to assume, we do not have to incorporate U-claims as part of the premises in order to regard certain analogical arguments as deductive, i.e., as arguments whose conclusions are meant to be established of necessity. However, we will see, the particular features of analogical argumentation will result in the paradoxical outcome that deductive analogical argumentation is, nevertheless, defeasible.

[1] Actually, Govier's criticism of Waller's proposal appeals to what speakers are supposed to be actually saying; that is, whether or not U-claims are part of what they actually state (Govier 2002: 156).

2. THE COGNITIVE POWER OF ANALOGIES. DISCURSIVE AND NON-DISCURSIVE USES OF ANALOGIES

One of the most interesting things about the use of analogies is their ability to make familiar to us new objects and phenomena: by thinking of a new cell phone as relevantly similar to an old one, we learn to use it much more easily; by thinking of umbilical cord cells storage as relevantly similar to blood storage, we understand better this phenomenon and the sanitary and legal questions associated with it, and we guide our expectations. This is why analogies have a widespread cognitive-exploratory use, especially in those fields in which novelties abound.

Analogical mapping is a very common cognitive process in which individuals make successive and, eventually, complementary comparisons in order to apprehend the particular intricacies of the novelty they try to deal with. Characteristically, this cognitive-exploratory use of analogies does not pursue finding that analogue that better suits the novelty; rather, it pursues checking the extent to which the novelty and the analogue are alike, and then finding new analogues able to capture other relevant properties of the novelty that do not perfectly fit former analogies. In this cognitive process, one single analogy is not meant to do all the work: after all, if a single analogy where enough to fully characterize the new object, it would not be a proper analogy, but an identity statement; and identity statements have a very different kind of utility as cognitive tools. In sum, analogical mapping is a gridded process in which, my means of more and less successful comparisons, we become familiar with novelties (Hofmann, Solbakk y Holm 2006).

On the other hand, analogies, like metaphors, have more of cognitive proposals than of mere ascertainment of similarities. In other words, at least in their cognitive uses, analogies do not stand for a definite list of the properties that two things would have in common. This indefinite character of the content of analogies is a necessary condition of its cognitive-exploratory power: after all, if, in order to formulate an analogy between A and B, we had to be clear about the set of properties that A and B have in common, analogies would not be so useful as tools for investigating novelties and making them familiar to us, for we had to already know that which is, in turn, what we want to know. As we are going to see, such indefinition of their content is idiosyncratic of analogies and explains not only their cognitive-exploratory potential but also their communicative-rhetorical power.

Now, apart from these non-discursive, cognitive-exploratory uses, analogies can be used discursively as powerful pedagogical and explanatory devices. By pointing out that A is like B, we usually make our explanations of A more clear and vivid than by merely stating a list of A's properties. Waller (2001: 200) calls this type of use of analogies *figurative*.

No doubt, merely pointing out that A is like B is, in principle, quite an uninformative move: we can say of almost any pair of things that one of them is like the other. In this sense, discursive analogies inherit at least part of the semantic indefinition of non-discursive analogies, which is part of their potential as cognitive tools. Thus, like cognitive analogies, explanatory analogies stand neither for identity statements nor for lists of properties that two things would have in common.[2]

[2] At the end, this is the reason why I think that Guarini's attempt to mediate between Govier and Waller's controversy does not work: his proposal for the analysis of analogical argumentation also requires to attribute to the speaker a specification of the set of properties that the two analogues would have in common (Guarini 2004: 161).

However, when we put forward an analogy, we do it within a certain context and with certain purposes. Such context and purposes point at the way or ways in which the two elements of the analogy are said to resemble each other. Waller, for example, cites Samuel Johnson's analogy between arguments as arrows shot from a crossbow and testimony as arrows shot from a long bow, whose power depends on who makes the shot. It is in the context of comparing argumentation and testimony that we understand the sense in which arguments and crossbows, on the one hand, and testimony and bows, on the other, are said to resemble each other.

Apart from these figurative, explanatory and pedagogical uses, analogies in discourse can be used as argumentative tools, i.e. as means to show further claims to be correct. And, with Waller, I think we have to distinguish between explanatory and argumentative analogies if we do not want to incur into mislead criticisms: explanatory analogies do not involve reasons and if we think of them as argumentative, we may take them to be question begging. As Waller says, "if you are not independently convinced that testimony depends for its reliability on its source, while argument must stand or fall on its own merits, then Johnson's analogy offers nothing to persuade you." (Waller 2002: 200).

3. THE RHETORICAL POWER OF ANALOGIES. EXPLANATORY AND ARGUMENTATIVE USES

As far as we use analogies with communicative purposes, that is, as part of processes where two subjects interact—i.e., a speaker that puts forward the analogy and an addressee that is put in a condition of either accepting or resisting the analogy thereof—both the explanatory and the argumentative uses of analogies involve rhetorical properties.

Actually, discursive analogies happen to be rhetorically powerful: as pointed out above, using analogies to explain the features of a certain object or phenomenon makes our explanations more vivid and efficient. And, regarding their argumentative role, given the fact that, by using analogies, we can show our claims to be correct, analogies are also valuable tools to make others to be persuaded of such claims. However, the rhetorical power of analogies goes further than this.

To begin with, it is important to keep in mind that, in principle, the persuasive effect of analogies is meant to be different when we use them with explanatory purposes than when we use them argumentatively. In the explanatory uses of analogies, persuasion is not achieved by means of reasons that would justify the views that we try to convey on our addressees, but by making more vivid the characteristics of that aspect of the target object or phenomenon that we try to illustrate by means of the analogy. As in the case of its exploratory uses, the fact that the analogy does not exhausts the ways in which the two analogues are supposed to be alike does not count as a problem, but as a virtue of explanatory analogies: by considering and pondering the analogy, the addressee my find new explanations and get knowledge by herself.

Contrastingly, when we use analogies argumentatively, persuasion is the expected effect of supporting a claim whose content exceeds the content of the analogy itself: in the-

se cases, speakers do not aim to persuade their addressees of the analogy itself but of a further claim whose acceptability is meant to depend on the acceptability of the analogy.[3]

When we succeed in *explaining* the features of a given object or phenomenon by means of an analogy, our addressees come to *see* this object or phenomenon as we suggest them to see it, in the direction that our analogy points at. Why is this so? In a few words, because the rhetorical power of analogies is a correlate of their power as exploratory mechanisms, and this power depends on the fact that analogies have an opened and indefinite content. Because of that, in order to understand a proposed analogy, the addressee has to supply the sense in which the two analogues are said to be alike. In doing so, the addressee herself works out the similarity between the two analogues. For example, in conveying that time is money, we convey an idea of time being as money in some relevant sense; a sense that, on the other hand, has not been made explicit. As far as the addressee fully understands the analogy, i.e., the sense in which time is like money, she cannot help being thinking of time as money. This is why understanding an analogy is, at the end, falling under its rhetorical spell.

This is, roughly, the view of metaphors that Lakoff & Johnson develop in their well-known *Metaphors We Live By* (1980). M. Black (1954) and D. Davidson (1978), among others, had already maintained similar views. On their perspective, it would be useless to try to find the truth-conditions of metaphorical propositions because "much of what we are caused to notice [in a metaphor] is not propositional in character" (Davidson 1978: 33). Certainly, there is a key difference between metaphors and analogies: literally, metaphorical sentences are always false (time is not money) whereas, literally, analogical sentences are always true (there is surely more than one aspect in which time is like money). But as long as, literally, analogies are trivially true, current literature tends to cancel the distinction between metaphors and analogies, at least regarding the cognitive processes involved in understanding their content.

Now, in principle, the persuasive effect that we pursue when we adduce an analogy as a reason for a target claim is different: in these cases, speakers are supposed to try to persuade their addressees, not of the analogy itself, but of a further claim whose acceptability allegedly depends on the acceptability of the analogy. However, an analogy is an analogy, and it does not loose its spell just because we are using it argumentatively. Certainly, when we use analogies for justifying our claims, we put at work their epistemic properties as means to support what we say. Contrastingly, when we use analogies for persuading of our claims, we put at work their rhetorical properties as means to induce beliefs and attitudes. But this distinction is merely conceptual: we normally use argumentative analogies with both purposes at the same time.

However, it is important to keep both functions conceptually distinct in order to be clear that that what makes an analogy good as a justificatory device is not necessarily the same as that what makes it good as a persuasive device. When we use analogies for persuading, certain comparisons, despite their justificatory power, may be inadequate because they provoke incomprehension, rejection, distaste, etc, so as to finally make it more difficult to get the persuasion of our addressees. And, conversely: analogies that result inadequate from an epistemological point of view may happen to be powerful from a rhe-

[3] As I see it, the fact that, contrary to explanatory analogies, argumentative analogies have a target content that exceeds the content of the very analogy explains why if we take explanatory analogies to be argumentative, they just seem question begging, as Waller pointed out.

torical perspective because of different reasons, like appealing to strong feelings or to institutions, rules, practices, etc. that we do not dare to criticise, etc. It is precisely this distance between the rhetorical quality and the epistemological quality of argumentative analogies what poses the main legitimacy problem of their use in argumentation. Specially, when we take into account that putting forward an analogy is already pressing our addressees to see things in a certain way. In other words, this legitimacy problem is not only a matter of the fact that, in general, *good* argumentation is not the same as *effective* argumentation. It is also a matter of the particular spell of analogies: to a great extent, understanding an analogy, like understanding a metaphor, is all the same as accepting it. When we understand what it means the claim that time is money, we feel inclined to agree that we should not waste it.

This is why it is important to be in a position to determine the acceptability of the argumentative uses analogies for each particular case. In the following sections, I am going to propose a model for the analysis and appraisal of analogical argumentation that deals with the question of the *content* of analogies and their functions within arguments.

4. SPEECH ACTS OF ARGUING. ONTOLOGICAL AND EPISTEMIC QUALIFIERS

In *Giving Reasons. A Linguistic-Pragmatic Approach to Argumentation Theory* (2011), I have proposed a characterization of argumentation as a second order speech-act complex, that is, a speech-act composed of a speech-act of adducing and a speech-act of concluding. On this account, acts of adducing and acts of concluding are constatives, but they are second order constatives because they can only be performed by means of first order speech-acts. Paradigmatically, such first order speech-acts are also constatives, but there are other possibilities. For example, in "I promise I'll take care, don't worry", two first order speech-acts, i.e. a promise and a request, turn into the constative speech-act of adducing that the arguer commits herself to take care and the constative speech-act of concluding that the addressee should not worry. Illocutionarily, acts of arguing, so characterized, count as attempts at showing a target-claim to be correct. Correspondingly, to the extent that they succeed, they can be said to be good argumentation.

In *Giving Reasons*, I followed an extension of Bach & Harnish's Speech Act Schema (SAS) –as presented in their *Linguistic Communication and Speech-Acts* (1979)- in order to provide guidelines to interpret and analyze particular acts of arguing. In principle, the extended SAS should be powerful enough to deal, among other things, with the interpretation and analysis of indirect and non-literal argumentation, and that includes argumentation using metaphors and analogies.[4]

In general, the idea behind this model is that when we argue, two constatives (whether directly or indirectly performed, literal or non-literal) become an act of adducing, R, and an act of concluding, C. This happens because of their relationship with an implicit inference-claim whose propositional content is "if *R*, then *C*." In a few words, it is because we can attribute to the speaker the implicit inference-claim "if I commit myself to take care, then you should not worry" that we can interpret her utterances of "I promise I'll take care" and "don't worry", as a single argumentative speech-act.

[4] However, a detailed analysis of the interpretation of metaphorical sentences within acts of arguing is beyond the scope of this paper; but I think we can assume that it is reachable as far as Bach & Harnish's SAS is, so far, a successful proposal on Linguistic Pragmatics and an alive research project.

According to this, inference-claims are constitutive of acts of arguing. And, as I have argued elsewhere, they are necessarily implicit in it.[5] At any rate, normally, it is the fact that the speaker has used some epistemic qualifier (like "probably," "necessarily," "evidently," etc.) or an expression like "so," "therefore," "since," "consequently," etc. what authorizes us to interpret the speaker's performance as an act of arguing. In this, I follow D. Hitchcock's (2007) view that inference-claims generally stand for the "so," the "therefore," the "consequently," etc., of ordinary acts of arguing.

Remarkably, just like any other claim of the act of arguing, the type and degree of constative force of the inference-claim may vary. In principle, we can make explicit the variety of ways in which we can put forward a certain semantic content *p* in constative speech-acts by saying things like "*p* is true," "*p* is (more or less) probable," "*p* is (more or less) acceptable," "*p* is (more or less) plausible," "*p* is necessary," "*p* is possible," etc. In doing so, we are turning the speech-acts having the constative forces that these qualifiers represent into explicitly qualified claims.

In my account, the qualifiers by means of which we put forward any of the claims constituting the act of arguing are *ontological qualifiers*: after all, claims are speech-acts meant to communicate *how the world is*. In making explicit the ontological qualifier of our first order constatives, we make plain, first order claims, such as the claim that *p* is true, or that *p* is probable, or possible, or plausible, or necessary, etc. In turn, when we put forward a propositional content with the qualifier that such propositional content actually deserves, we make first order claims that are (ontologically) *correct*.

Contrastingly, the qualifier that expresses the force with which we draw our conclusion is an *epistemic qualifier*: it is meant to communicate our credentials for concluding, i.e., the type and degree of support that our reasons are supposed to confer on our target-claims because of our inference-claims. In saying that a claim holds truly, necessarily, possibly, plausibly, probably, etc. (or alternatively, that likely *p*, that it might be the case that *p*, that certainly *p*, etc.), we are saying something about the status of this claim as knowledge, about the confidence we should put in this claim or our entitlement to it. Epistemic qualifiers are meant to communicate how good our reasons are for our claims; and, as we are going to see in section 6, they are a function of the ontological qualifiers that correspond to the implicit inference-claim and to the claim being the meaning of the speech-act of adducing.

Noticeably, in acknowledging different types of ontological qualifiers I am endorsing the view that propositional contents can have values other than true or false. And assuming probability values is not the only way to endorse this view. For example, we can also acknowledge ontological acceptability values. Thus, a claim like "John is bald" may also be a better or worse representation of John's amount of hair at the present time, and in case we cannot take it to be as plainly and simply true or false, we can take it to be just acceptable in this ontological sense. Notice that, on this account, the degree of acceptability of a representation is a measure of its value as such representation, not a measure of its fulfillment of epistemic standards. As we are going to see, this view has a bearing on the appraisal of analogical reasons.

[5] I have argued for the idea that inference-claims are necessarily implicit in Bermejo-Luque (2006)

At any rate, the distinction between ontological and epistemic qualifiers points out that, in putting forward a certain propositional content, we can consider either its representational value or our credentials for putting it forward.

5. THE MEANING, VALUE AND FUNCTIONS OF ANALOGIES IN ARGUMENTATION

The constitutive elements of acts of arguing, as defined so far are: 1) a second order speech-act of adducing, 2) a second order speech-act of concluding, 3) an implicit inference-claim, 4) the ontological qualifiers of each claim of the act of arguing and 5) the epistemic qualifier of the act of concluding. These elements correspond, roughly, to the following elements of Toulmin's model of argument: 1) the *data*, 2) the *target-claim*, 3) the *warrant* and (4 and) 5) the *qualifiers*.6 As far as arguments are representations of acts of arguing, these elements are also constitutive of any argument. In turn, as far as Toulmin's model of argument is adequate as a means to semantically appraise argumentation, our model for the interpretation of argumentation is also a model for its analysis and semantic appraisal.

Now, what is analogical argumentation, according to the above characterization of argumentation as a certain type of second order speech-act? It is generally agreed that analogical argumentation is argumentation in which an analogy is adduced in order to support a further claim. Paradigmatically, it is argumentation of the form: "A is like B, therefore A is W". In this type of argumentation, the analogy corresponds to the data in Toulmin's model. However, argumentation having the form "B is W, therefore A is W" can also be said to be analogical. In this latter type of argumentation, the analogy corresponds to the backing in Toulmin's model: such analogy is adduced as a reason for the inference claim "if B is W, then A is W". "—why?" "—because A is like B".

According to this, there are two ways in which analogies can be adduced in order to show a certain claim to be correct, i.e., they can be reasons for the target-claim or they can be reasons for the inference-claim.

But what does it mean to treat an analogy as a reason? As we have seen, analogies do not have a definite meaning; this is part of their rhetorical charm, as Govier would put it. However, according to our model, if we take an analogy as constituting an act of adducing, we have to be able to treat is as a full-fledged constative. This means being able to attribute to such analogical claim an ontological qualifier. And how can we do it? Certainly, in saying that A is like B, the speaker passes on the addressee the task of working out, in detail, which are the ways in which A and B are alike; as we have seen, this is part of their tricking power, as Govier would also put it. And yet, in order to take the speaker's analogical claim as an act of adducing, we have to be able to interpret it as a constative, as a propositional content ontologically qualified, either implicitly or explicitly. How can we make sense of both intuitions, namely, that analogies in analogical argumentation count as constatives while, at the same time, they involve an indefinition that explains their particular charm and rhetorical power?

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[6] Toulmin does not distinguish, at least explicitly, between ontological and epistemic qualifiers. In principle, he is particularly interested in what I name "epistemic qualifiers", i.e. the modal that qualifies the target-claim and expresses the force with which we put it forward. However, the idea that the value of an argument is a function of this qualifier appears here and there in *The Uses of Argument* (1958).

Let me offer this intriguing example from a pre-Han Confucian treatise, *The Works of Mencius*. In it, there is the following dialogue:

> The philosopher Gao said, "Man's nature is like water whirling round in a corner. Open a passage for it to the east, and it will flow to the east; open a passage for it to the west, and it will flow to the west. Man's nature is indifferent to good and evil, just as the water is indifferent to the east and west."
>
> Mencius replied, "Water indeed will flow indifferently to the east or west, but will it flow indifferently up or down? The tendency of man's nature to good is like the tendency of water to flow downwards. There are none but have this tendency to good, just as all water flows downwards. Now by striking water and causing it to leap up, you may make it go over your forehead, and, by damming and leading it you may force it up a hill - but are such movements according to the nature of water? It is the force applied which causes them. When men are made to do what is not good, their nature is dealt with in this way."[7]

In putting forward the analogy between men and water as a reason for the claim that men do not have an intrinsic tendency towards good or evil, the addressee is put in a condition to understand the way in which this comparison is made. Yet, if merely understanding the point of the comparison were the same as understanding that both men and water are alike in having no tendency in particular, then Mencius would not be in a condition to concede the analogy, as he does, but then resisting the conclusion. But this is exactly what he does. Actually, he even counter-argues that, effectively, men are like water; therefore, they have an intrinsic tendency toward goodness. Why is this so? Because conceding an analogy is conceding that, regarding a certain aspect of the two analogues, they ran the same fate. But it is not to concede which this fate is.[8] In my view, this is exactly how we should interpret the meaning of analogies when used as reasons –either for the target-claim or for the warrant.

Thus, the ontological qualifier that corresponds to a particular analogical reason will be a measure of the acceptability of representing the two analogues as running the same fate in some respect, in the ontological sense of the concept "acceptable" pointed out in the last section.

6. THE SEMANTIC EVALUATION OF ANALOGICAL ARGUMENTATION. INDUCTIVE AND DEDUCTIVE ARGUMENTS BY ANALOGY AND DEGREES OF SUPPORT

I think that Guarini is right in saying that "a reconstruction of analogical argument needs to allow for degrees of strength" (Guarini, 2004: 159). Yet, contrary to what Guarini seems to suggest, I do not think that the feature that matters in order to determine the value of an analogy is the degree of "similarity" between the two analogues. Rather, I think that when we assess an analogy that has been put forward as a reason for a claim, what we do is to take it to be (more or less) acceptable that the two analogues ran the same fate regarding a particular aspect, whether this aspect has to do with having a certain feature or foreseeable outcome (predictive argumentative analogies) or with deserving a certain

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[7] Works of Mencius. *Book VI: Gaozi*. Full text, bilingual edition in: http://ctext.org/mengzi/gaozi-i

[8] Regarding moral argumentation, as M. Guarini puts it: "The point is that the two types of cases should be treated in the same way" (Guarini, 2004: 158).

moral, legal, etc. evaluation (normative argumentative analogies). After all, even if the idea of determining the degree of "similarity" between two things made sense in every case, the truth is that two things may be very dissimilar and yet constituting quite an acceptable analogy –like in the case of the analogy between men and water mentioned above- and *vice versa*—like when we compare embryos and foetus regarding their legal status. However, I think that Guarini is also right in saying that the degrees of strength of argumentative analogies have to do, not only with the value of the analogy itself, but also with its value as a reason for a certain claim (Guarini, 2004: 160). Let me now explain how to articulate this idea within my proposal.

The general model for argument interpretation, analysis and evaluation that I have proposed in Bermejo-Luque (2011), also follows Toulmin's intuition that qualifiers are the key to argument evaluation, that is, to the semantic appraisal of argumentation. Correspondingly, I assume Toulmin's contention that the distinction between deductive and inductive arguments is a matter of the qualifier that corresponds to the warrant of the argument. That is, arguments whose warrants are necessary truths (ontological qualifier) entitle us to draw our conclusions with a "necessarily" (epistemic qualifier): they are deductive arguments. In turn, arguments whose warrants are just probable, plausible, acceptable, etc. (ontological qualifiers), entitle us to draw our conclusions only with a "probably", a "plausibly", a "likely", etc. (epistemic qualifiers): they are non-deductive arguments.

In Bermejo-Luque (2011), I have argued for an account of the warrant of an argument as a representation of the inference-claim, i.e., the associated conditional whose antecedent is the reason of the act of arguing, and whose consequence is its conclusion[9]. Therefore, warrants would represent implicit conditional statements that, in being sound, would authorize the inference from reason to conclusion. Because they represent claims, they can be qualified with as many types of ontological qualifiers as any other claim. And it would be, precisely, the ontological qualifier that correspond to the inference-claim of our act of arguing what would entitle us to draw our conclusions "necessarily", "probably", "tentatively", "possibly", etc. On this account, the validity of an argument would be a matter of the correctness of its warrant, i.e., of the fact that the warrant represents a claim that has been properly ontologically qualified.[10]

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[9] In that paper, I proposed an interpretation of this conditional as the material conditional, which is something that, as D. Hitchcock (2007) has criticized, is open to apparent paradoxes. I have defended myself from this criticism in Bermejo-Luque (2007), where I appealed to Grice's distinction between the semantics and the pragmatics of conditionals.

Remarkably, on this account, the evaluation of warrants would be on a pair with the evaluation of reasons: not only because, in certain cases, reasons may be conditional claims, but above all because, as Brandom (1994) insists, conceptual contents amount to inference licenses, and *vice versa*. That includes, for example, moral and aesthetic contents, so that, in principle, this account would be suitable for the appraisal of moral and aesthetic argumentation and reasoning.

[10] We must take into account that, in *The Uses of Argument*, Toulmin does not directly addresses the question of the evaluation of argumentation; he just offers the guidelines that can be derived from his ideas on probability and his conceptions of validity and justification. According to them, many authors have assumed that Toulmin would seem to propose two sorts of standards for the appraisal of argumentation: field-dependent and field-invariant standards. But this idea is just outlined in *The Uses of Argument*, and, as I have tried to show in Bermejo-Luque (2006) there are good reasons to be cautious with the view that field-dependent and field-invariant standards are standards for argumentation appraisal rather than criteria for the use of qualifiers.

Even though I think of inference-claims as material conditionals, I contend that, in the pragmatic conditions in which they are stated, their meaning is that there is a causal, legal, moral, or formal, etc. consequence relationship between reason and conclusion.[11] As Grice (1975) explained, such pragmatic conditions lay the "following" sense of this type of claims.[12]

As pointed out above, in arguments, the warrant represents the inference-claim of the corresponding act of arguing. As a consequence, having a warrant would not be an exclusive property of good arguments: every argument would have a warrant as far as it represents a speech-act of the form "reason, so claim." However, semantically good argumentation is argumentation whose inference-claim and reason are both correct, that is to say, that have been properly (ontologically) qualified, so that they sanction the epistemic qualifier of the conclusion.

Thus, what we evaluate from this logical-semantic point of view is whether the correction of the premise and the warrant would actually make the conclusion, as qualified in the act of arguing, in fact correct. Let me explain all this in more detail by considering the following examples:

(1) "It's late. You have to hurry up"
(2) "Being hooked against your will to a violinist is like being pregnant against your will; therefore, it is legitimate to abort when you are pregnant against your will"
(3) "The abolition of war is like the abolition of slavery. It can probably be achieved by citizen action and widespread reforms"

In act of arguing 1, the target-claim, "you have to hurry up," is apparently put forward, without further qualification. But it makes sense to interpret the speaker as saying that her claim holds "truly." Contrastingly, following Waller's (and also Govier's) intuition, 2 would seem to be epistemically qualified by an implicit "necessarily" (which would be signalled by the use of "therefore," which, in principle, seems like a stronger way of concluding). Finally, 3 has been epistemically qualified by a "probably." Thus, we can represent the above acts of arguing or of indirectly judging by means of the following arguments:

In Bermejo-Luque (2011), I develop this proposal of argument evaluation. I consider, for example, well-known empirical tests for mathematical famous conjectures as arguments whose conclusions are, in case of being true, necessary truths, and yet are advanced by qualifiers like "probably".

[11] The validity of traditional formally valid arguments is easy to determine: the conditional whose antecedent is the conjunction of the premises and whose consequent is the conclusion will turn out to be a formal truth (within the system according to which we say that the argument is formally valid). Moreover, the validity of conceptually valid arguments like "He is a bachelor, so he is unmarried" will be straightforward too: their inference-claim is a conceptual truth, so we will not have to consider the truth-value of the reason or the conclusion in order to determine that the conditional is true.

[12] Without a doubt, if there is no consequence relationship between reason and target-claim, we can still know that the (material) conditional is true by coming to know that the antecedent is false or that the consequent is true. However, in that case, we will have to say that, despite the fact that its inference-claim is correct, the corresponding argumentation is not good because its reason is worthless as a means to show that the conclusion is correct. In this case, the act of arguing will be valid from a semantic point of view, but it will be flawed from a pragmatic point of view; particularly, it will amount to a flaw of relevance.

Argument 1

- Premise: "it's late" is true
- Warrant: "if it is true that it's late, then you have to hurry up" is true
- Conclusion: truly, "you have to hurry up"

Argument 2

- Premise: "Being hooked against your will to a violinist is like being pregnant against your will (regarding the compulsoriness of staying in these states)[13]" is plausible
- Warrant: "if it is plausible that being hooked against your will to a violinist is like being pregnant against your will, then it is legitimate to abort when you are pregnant against your will" is necessary
- Conclusion: necessarily, "it is legitimate to abort when you are pregnant against your will"

Argument 3

- Premise: "The abolition of war is like the abolition of slavery (regarding its political prospects)[14]" is probable (to a degree x)
- Warrant: "if it is plausible (to a degree x) that the abolition of war is like the abolition of slavery, then it can be achieved by citizen action and widespread reforms" is probable (to a degree y)
- Conclusion: probably (to a degree y), "the abolition of war can be achieved by citizen action and widespread reforms"

When would the corresponding arguments be valid? As I said above, only when their warrants have been properly qualified from an ontological point of view, that is: in 1), if it is true that if (it is true that) it's late, then you have to hurry up; in 2), if it is necessary that if (it is plausible that) being hooked against your will to a violinist is like being pregnant against your will regarding the compulsoriness of staying in these states, then it is legitimate to abort when you are pregnant against your will; and in 3), if it is probable (to a degree y) that if (it is plausible (to a degree x) that) the abolition of war is like the abolition of slavery regarding its political prospects, then it can be achieved by citizen action and widespread reforms. In other words, for an argument to be valid, its conclusion has to be qualified with the epistemic qualifier that corresponds to the ontological qualifier that its warrant actually deserves. If, because of concluding that "necessarily *p*," we have to ontologically qualify our inference-claim as necessary, whereas, in fact, it is only true, then our act of arguing will be semantically flawed. This is the reason why, as Finocchiaro (1981) observed, we can turn any argument into a good one by adequately weakening its conclusive force, and *vice versa*.

[13] This would be the interpretation of the analogy in this case. Such interpretation would be prompted by the fact that the analogy has been used as a reason for this particular conclusion.

[14] Again, this would be the interpretation of the analogy in this case, provided that it has been used as a reason for this particular conclusion.

The warrant incorporates the condition that the reason has to be correctly qualified from an ontological point of view too, because the inference-claim that it represents is nothing but the conditional that would eventually sanction the inference from the reason, as claimed, to the target-claim, as claimed. In example 2, if we are not willing to say that it is plausible enough that being hooked against your will to a violinist is like being pregnant against your will, then we will criticize the argument by saying that its inference-claim is irrelevant for showing the conclusion to be correct: we could agree with the arguer that her inference-claim "if (it is plausible that) being hooked against your will to a violinist is like being pregnant against your will regarding the compulsoriness of staying in these states, then it is legitimate to abort when you are pregnant against your will" is necessary, and yet resist her argument by saying that being hooked against your will to a violinist is not like being pregnant against your will, and thus, her inference-claim does not apply: i.e., the argument is meant to be deductive, but is invalid.

Moreover, in the particular case of analogical reasons, we can even concede the analogy, i.e. that it is plausible that being hooked against your will to a violinist is like being pregnant against your will regarding the compulsoriness of staying in that state, and we can also concede that if the inference claim where true, it would be a necessary true,[15] and yet, resist the conclusion by saying that the inference-claim is false because, despite being hooked against your will to a violinist is like being pregnant against your will regarding the compulsoriness of staying in that state, it is compulsory both to stay pregnant (not to abort) and to keep yourself hooked to someone who needs you up to that point. This is why I contend that this type of analogical argumentation can be deductive (in the sense of its conclusion being meant to be established of necessity) and yet, defeasible.

On the other hand, we have seen, on this account predictive analogies and normative analogies would both have the same structure. The difference between them would be a matter of the ontological qualifier of their corresponding warrants. No doubt, as Govier insists, when we use analogies with predictive purposes, it is important to consider the actual features of both analogues. Certainly, these features have a bearing on our evaluation of the inference-claim. But, as argued so far, this dissimilarity between predictive and normative analogies does not grant different "reconstructions" of both types of analogical argumentation, as Govier, Waller and Guarini assumed.

At any rate, the first step to determine whether a claim has been correctly qualified from an epistemic point of view is to outline the argument that embodies the relevant semantic properties of the corresponding act of arguing, namely, the propositional contents actually involved and the ontological qualifiers that the arguer ascribes to each of them, either implicitly or explicitly. If the reason and the inference-claim have both been correctly qualified from an ontological point of view, then the conclusion will have been correctly qualified from an epistemic point of view. Thus, our second task as evaluators will be to determine what the *actual* ontological qualifiers of the reason and the inference-claim are. And we would have three resources with which to do so.

First of all, we can ascribe these qualifiers as a result of our own direct judgments on the reasons and inference-claims. As pointed out in section 3, in dealing with analogical argumentation, addressees are somehow more pressed to concede the analogical claims adduced.

[15] There are many propositions that, in case of being true would be necessary, even though we do not know yet whether they are true or false. Think, for example, of mathematical conjectures.

We can also evaluate possible further reasons put forward for the reason and the inference-claim in the very act of arguing. Thus, as we have seen, *backings* would be reasons for the warrant, i.e., general facts appealed to in order to justify the corresponding conditional claim. We will also have reasons for the reason if the argumentative discourse that we are evaluating contains *serial argumentation*, i.e., argumentation composed of acts of arguing in which the target-claim of an act is the reason of a subsequent one.[16] Alternatively, in appraising confrontation argumentative exchanges, we can take each party's argumentation against the other's reasons or inference-claims as a basis to determine their ontological values. We would thus appraise defeaters, rebutting reason-defeating defeaters, and the subsequent claims nested in the corresponding acts of arguing.

Finally, the evaluator may need to dialectically delve further into the act of arguing himself. Argumentation is a recursive process; because of that, in order to determine the qualifiers that we should ascribe to the propositional contents of reasons and inference-claims, we, the evaluators, may need to produce further argumentation for them. In any case, we must be clear that in the end, every evaluation rests on a particular ascription of qualifiers that may be further questioned

7. CONCLUSION

Govier, Waller and Guarini agree that there are two types of arguments by analogy. On the one hand, there are those whose conclusions are meant to be established in a tentative way (i.e., qualified by words like "likely", "probably", etc.). We can find this type of arguments in empirical reasoning and arguing, where they can justify predictions and expectations. On the other hand, there are analogical arguments whose conclusions are meant to be established in a conclusive way. They are arguments that come, paradigmatically, from ethical and juridical discourses, where they are meant to justify normative claims. The former type of arguments is usually called "inductive", but, as we have seen, T. Govier, B. Waller and M. Guarini have had a controversy on whether arguments of the latter type can be said to be "deductive".

Following a Toulmian account of argumentation interpretation, analysis and evaluation, I have tried to show that both types of analogical arguments share the same structure. This structure explains why certain analogical arguments can be said to be deductive, and yet, why they are also defeasible. A consequence of this account is to avoid the need of appealing to general principles non-stated by the speaker in order to justify normative claims by means of analogies. In addition, this approach enables us to explain part of the rhetorical power of analogical argumentation by showing that it does not involve explicit comparisons. Finally, the schema would enable us to deal with degrees of strength of analogical argumentation regarding not only the strength of analogies but also the strength of analogical inferences. In my view, these results integrate what I take to be the main insights of Waller's account on the one side, and of Govier and Guarini's, on the other.

[16] Remarkably, the meaning of the epistemic qualifier of a claim can itself enter into further argumentation. For example, to say that "it might be the case that p" is, in most contexts, like saying that p is an option that we should consider; thus, a piece of argumentation like "it might rain, so we would rather take a taxi" is semantically good if it is correct that it might rain, and it is correct that if it might rain (if rain is an option that we should consider), then we would rather take a taxi.

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REFERENCES

Bach, K., and M. Harnish (1979). *Linguistic Communication and Speech-acts*. Cambridge, MA: MIT Press.

Bermejo-Luque, L. (2006). Toulmin's model of argument and the question of relativism. In: Hitchcock, D. and Verheij, B. (eds). *Arguing on the Toulmin's Model: New Essays in Argument Analysis and Evaluation* (pp. 71-87). Dordrecht: Kluwer Academic Publishers.

Bermejo-Luque, L. (2007). Response to Hitchcock. In: *Dissensus & the Search for Common Ground: Proceedings of the 2007OSSA Conference on Argumentation*. CD-Rom, Windsor, Ontario.

Bermejo-Luque, L. (2011). *Giving Reasons. A Linguistic-Pragmatic Approach to Argumentation Theory*. Springer, Dordrecht.

Black, Max (1954). Metaphor. *Proceedings of the Aristotelian Society* 55, 273-294.

Brandom, R.B. (1994). *Making it Explicit. Reasoning, Representing and Discoursive Commitment.* Cambridge, MA: Harvard University Press.

Davidson, Donald (1978). What Metaphors Mean. *Critical Inquiry* 5, 31-47.

Finocchiaro, Maurice (1981). Fallacies and the Evaluation of Reasoning. *American Philosophical Quarterly* 18(1), 13-22.

Govier, T. (1989). Analogies and missing premises. *Informal Logic* 11 (3), 141-152.

Govier, T. (2002). Should *a priori* analogies be regarded as deductive arguments. *Informal Logic* 22(2), 155-157.

Grice, Paul (1975). Logic and Conversation. In: Cole, P. and Morgan, J.L. (eds). *Syntax and Semantics. Vol. 3, Speech-acts* (pp. 41-58). New York: Academic Press.

Guarini, Marcello (2004). A defence of non-deductive reconstructions of analogical arguments. *Informal Logic* 24(2), 153-168.

Hitchcock, David (2007). So. In: *Dissensus & the Search for Common Ground: Proceedings of the 2007 OSSA Conference on Argumentation*. CD-Rom, Windsor, Ontario.

Hofmann, Bjørn, Solbakk, Jan Helge, & Holm, Søren (2006). Teaching old dogs new tricks: the role of analogies in bioethical analysis and argumentation concerning new technologies. *Theoretical Medicine & Bioethics* 27(5), 397-413.

Lakoff, George and Mark Johnson (1980). *Metaphors We Live By*. Chicago: University of Chicago Press.

Mencius. *The Works of Mencius*, ed. and trans., James Legge (1970). New York: Dover.

Toulmin, Stephen (1958). *The Uses of Argument*. Cambridge, UK: Cambridge University Press.

Waller, Bruce (2001). Classifying and analyzing analogies. *Informal Logic* 21(3), 199-218.

Commentary on "A UNITARY SCHEMA FOR ARGUMENTS BY ANALOGY" by Lilian Bermejo-Luque

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1. PROFESSOR BERMEJO-LUQUE'S PROJECT

Professor Bermejo-Luque identifies her project at the outset as providing "a general framework for the study of analogical argumentation" with an aim to bridge the controversy between Trudy Govier (1989), who dismisses the existence of deductive analogical arguments, and Bruce Waller (2001), who embraces their existence (p. 1). A substance of this controversy hinges on whether an argumentative participant recognizes there to be a *universal principle* from which an analogical conclusion is necessarily drawn—both scholars recognize an *a priori* feature of such analogical arguments, but only Waller that they are additionally deductive, that is, in particular, that the universal principle is an element, or premise, of the argument. Perhaps one might suppose that there is something enthymematic of such reasoning. In any case, Bermejo-Luque, with Govier, dismisses universal principles as a constituent part of an argument by analogy but, with Waller, that drawing a conclusion is nevertheless done so categorically. The fact that the two scholars have contrary views on (putatively) deductive arguments by analogy rests, according to Bermejo-Luque, on their differing schemas for formalization and analysis. In this connection, she aims to provide

> a model of argument analysis and formalization that ... provides a rationale for analyzing analogical argumentation that does not depend on potentially controversial assumptions regarding what is the 'real' structure of argumentation by analogy. (p. 2)

Thus, she moves decidedly away from a formal deduction method of argument analysis.

The strategy employed by Bermejo-Luque to accomplish this project is to develop a unitary schema based on a linguistic-pragmatic model that provides guidelines to interpret real, or natural language, argumentative practices. Such a model, she maintains, locates the meaning of acts of arguing without attention to any deep logical structure—"the elements of this model of argumentation are meant to be constitutive of *any communicative move* that counts as argumentation" (p. 2; *emphasis added*).

Her ambitious promise, as summarized in the conclusion (p. 14), is to develop a unitary schema for argument interpretation that can:

Zenker, F. (ed.). *Argumentation: Cognition and Community. Proceedings of the 9th International Conference of the Ontario Society for the Study of Argumentation* (OSSA), May 18-21, 2011. Windsor, ON (CD ROM), pp. 1-11.

- account for why certain analogical arguments are deductive, and why also defeasible;
- avoid the need to appeal to general principles to justify normative claims by means of analogies;
- explain the rhetorical power of analogy in respect of its *indefinition*; and
- treat degrees of strength of analogical argumentation.

Her project, then, is to provide a model for argumentation analysis that bridges the differences between Govier and Waller by using a pragmatic, speech-act perspective of argumentation that tends to obviate the need for working with formal logical structures.

2. BERMEJO-LUQUE'S BACKGROUND CONCEPTS & CONSIDERATIONS

After briefly reviewing a cognitive-exploratory, or analogical mapping, use of analogy, a non-discursive kind of analogy, and then as briefly various discursive uses of analogy, namely, their use in pedagogic and explanatory discourse, what Waller calls figurative use, Bermejo-Luque highlights what she takes to be an important feature of analogy *per se*—that even discursive analogies possess "semantic indefinition". It is this indefinition (ambiguity? vagueness?) of an analogy that underpins her case to bridge Govier and Waller. Now, in addition, while figurative and explanatory analogies differ from argumentative use of analogy, especially in respect of not providing reasons in an argumentation, they equally possess certain rhetorical properties that make them effective in their respective communicative roles.

2.1. The notion of rhetorical power

At this juncture Bermejo-Luque introduces her notion of the *rhetorical power* of analogies in their explanatory and argumentative roles. Then, when persuasion becomes part of a communicative act, she points out that speakers are not concerned to persuade their addressees of the analogy itself but of the conclusion by means of an acceptable analogy. She further makes a conceptual distinction between an analogy's (i) epistemic function and (ii) its persuasive function, but she immediately indicates that both purposes are deployed simultaneously in a given argumentative situation. Bermejo-Luque inserts here concern about the legitimacy problem, namely, the problem caused by the distance between the rhetorical and epistemological qualities of argumentative analogies, and alerts her readers to an important distinction between a good argument and an effective argument (pp. 5 f.).

When we might wonder what constitutes the rhetorical power of an analogy, Bermejo-Luque presents the interesting perspective that combines (i) the indefinition of an analogy with (ii) a principle that an addressee is the *active participant* in an argumentative situation. The effectiveness of an analogy having an addressee come to see a given object or phenomenon from a speaker's point of view consists in the fact that

> the rhetorical power of analogies is a correlate of their power as exploratory mechanisms, and this power depends on the fact that analogies have an opened and indefinite content. In turn, this is the reason why the meaning of analogies is essentially indeterminate [a shift from 'indefinite']. Because of that, in order to understand a given analogy, the addressee has to supply the sense in which the two analogues are said to be alike. In doing so, *[it] is the addressee herself who works out the similarity between the two analogues.* (p. 5; *emphasis added*)

In using an analogy, a speaker presents a comparison between two objects "in some relevant sense; a sense that, on the other hand, has not been made explicit" (p.5). Accordingly, on Bermejo-Luque's account, the addressee *cannot help but to accept* the analogy—and then she adds: "this is why understanding an analogy is, at the end, falling under its rhetorical spell" (p. 5). Whether or not the indefinition of an analogy is sufficiently explanatory of its rhetorical power, Bermejo-Luque presents an intriguing consideration about the active role members of an audience have in an argumentative situation. The notion of *rhetorical power* needs considerable further examination among argumentation philosophers.

2.2. On the ontological and epistemic qualities of an argument

An act of arguing, as an illocutionary act, is a good argumentation to the degree that its target-claim is accepted by a given audience as being correct (true?). In this connection, Bermejo-Luque maintains that an argumentation can be characterized as a second order speech act consisting in (i) a speech-act of adducing and (ii) a speech-act of concluding, which she calls *constatives* and which she characterizes as having varying constative force. Accordingly, in the context of inference claims, an argumentative speaker uses certain *epistemic qualifiers*, such as, 'probably', 'necessarily', 'evidently', to communicate credentials for concluding, while certain *ontological qualifiers*, such as, 'true', 'false', 'plausible', 'necessary', are used to communicate how the world is.

Now, since "epistemic qualifiers are meant to communicate how good our reasons are for our claims", we come to see that "they are a function of the ontological qualifiers that correspond to the implicit inference-claim and to the claim being the meaning of the speech-act of adducing" (p. 7). Thus, it is possible, on the one hand, to examine the propositional content of an argument and its effectiveness in respect of its representation value (according to the ontological qualifiers) or, on the other hand, the credentials used to proffer the target claim. This overlapping of the two functions is crucial for Bermejo-Luque making her case. She credits an analogy's charm, or effectiveness, to this shifting between the two functions, which is emblematic of an analogy's indefinition. Just as important, it seems, is the implicit gratification an addressee experiences on 'getting' the analogy through her own efforts.

2.3. On defining an analogical argumentation

Finally, before launching into the principal part of her argumentation, Bermejo-Luque provides a working definition of an analogical argument according to her second order speech-act characterization. Working from Toulmin's model of argument, she proffers a model that also serves for argument analysis and semantic appraisal. In short, she aims to present a model that accounts for an analogy's (i) being adduced to show that a target claim is correct (true?) and (ii) being used as a reason for the inference-claim.

Bermejo-Luque identifies five constitutive elements of acts of arguing, generally following Toulmin as complemented with a speech-act, communicative orientation.

(1) a second order speech-act of adducing—information;
(2) a second order speech-act of concluding—the target-claim;
(3) an implicit inference-claim—a warrant;
(4) the ontological qualifiers of each claim of the act of arguing;
(5) the epistemic qualifier of the act of concluding.

In answer to a concern how an analogy might be used *as a reason* in an argument, Bermejo-Luque invokes her notion that an analogy has indefinition (indefiniteness; indeterminacy? or ambiguity? or vagueness?), constitutive of its rhetorical charm. Accordingly, used in this way, an analogy is "a full-fledged constative" with all its attendant powers. Thus, moreover, this means that an analogy can serve both epistemic and ontological purposes, indeed, we take it, that it *must* perform both functions in order to be effective. An analogy, then, can equally count as a constative and simultaneously possess indefinition, and in the process present *only* a cognitive tension between intuitions and *not* a genuine opposition. And here, by referencing the *inscrutable wisdom* of the East (not her expression), we find a subtle use of analogy in the course of her own discussion, by which she believes she has clinched the case that analogies can have 'deductive force' while preserving their indefiniteness-charm—"the ontological qualifier that corresponds to a particular analogical reason will be a measure of the acceptability of representing the two analogues as running the same fate in some respect" (p. 9). One might wonder whether every such argument with deductive force is simultaneously defeasible, or, that is, invalid.

We might take a moment to draw out this embedded use of analogy that serves more than an exemplar-role. The insertion of this analogy consists in neither its explanatory role nor is our attention drawn solely to the analogy itself. Rather, she uses the analogy obliquely as a reason within her discussion when she argues that analogies appear as reasons for drawing the target conclusion in a speaker's argumentation. She cites the following analogy provided by a student, which is then answered by the student's master.

> *Student*: Men are like water; unless something guides their destiny,
> they wander purposeless.
> *Master*: Yes, but water, of itself, tends to go down.

In explaining what has happened, she remarks that understanding (i) the point of the analogy *is not the same as* understanding (ii) the 'identity' of men and water, for, if this were so, then the master could not have both conceded the analogy and resisted it at the same time ... which he in fact did. This capacity, this inherence, of an analogy, or, rather, the capacity of an addressee to 'get it', consists in the fact that "conceding an analogy is conceding that, regarding a certain aspect of the two analogues, they ran the same fate. *But it is not to concede which this fate is*" (p. 9; *emphasis added*). Thus, working from this example, Bermejo-Luque concludes that "this is exactly how we should interpret the meaning of analogies when used as reasons—either for the target-claim *or* for the warrant" (p. 9). Does this mean that every argument by analogy suffers a fallacy of ambiguity?

3. BERMEJO-LUQUE'S ARGUMENTATION FOR A UNITARY MODEL

Bermejo-Luque begins the final stage of her discussion by distinguishing her thinking from Guarini (2004), accepting to allow for degrees of strength, but rejecting that the degree of similarity between two analogues is constitutive of the value of an analogy.

> Rather, I think that when we assess an analogy that has been put forward as a reason for a claim, what we do is to take it to be (more or less) acceptable that the two analogues ran the same fate regarding a particular aspect, whether this aspect has to do with having a certain feature or foreseeable outcome (predictive argumentative analogies) or with deserving a certain moral, legal, etc. evaluation (normative argumentative analogies). (9)

This is the case because many analogies work from dissimilarities and not only from similarities. And then, again with Guarini (2004), she affirms "that the degrees of strength of argumentative analogies have to do, not only with the value of the analogy itself, but also with its value as a reason for a certain claim" (p. 9). Immediately below we cite the core of her reasoning in full (pp. 9 f.; presented here in bullets, *emphases added*).

- The general model for argument interpretation, analysis and evaluation that I have proposed in Bermejo-Luque (2011), also follows Toulmin's intuition that qualifiers are the key to argument evaluation, that is, to the *semantic appraisal* of argumentation.
- Correspondingly, I assume Toulmin's contention that the distinction between deductive and inductive arguments is a matter of the qualifier that corresponds to the warrant of the argument. That is, arguments whose warrants are necessary truths (ontological qualifier) entitle us to draw our conclusions with a "necessarily" (epistemic qualifier): they are deductive arguments.
- In turn, arguments whose warrants are just probable, plausible, acceptable, etc. (ontological qualifier), entitle us to draw our conclusions only with a "probably", a "plausibly", a "likely", etc: they are non-deductive arguments.
- In Bermejo-Luque (2011), I have argued for an account of the warrant of an argument as the associated conditional whose antecedent is the reason of the argument, and whose consequence is its conclusion.
- Warrants would be implicit conditional statements that, in being sound, would authorize the inference from reason to conclusion. Because they are claims, they can be qualified with as many types of ontological qualifiers as any other claim. And it would be, precisely, the ontological qualifier that corresponds to the warrant of our argument what would entitle us to draw our conclusions "necessarily", "probably", "tentatively", "possibly", etc.
- On this account, the validity of an argument would be a matter of the *correctness* of its warrant, and a good argument would be an argument whose conclusion has been properly qualified, given the qualifiers that actually correspond to its reason and warrant.

Drawing out the principal movement of her reasoning a little further, Bermejo-Luque writes that the pragmatic context for stating warrants makes them material conditionals and thus contained in their meaning "is a causal, legal, moral, or formal, etc. consequence relationship between reason and conclusion" (pp. 10 f.). A warrant, then, represents an

inference-claim of a corresponding act of arguing within a pragma-communicative interpretation of argument.

> As a consequence, having a warrant would not be an exclusive property of good arguments: every argument would have a warrant as far as it represents a speech-act of the form "reason, so claim." However, semantically good argumentation is argumentation whose inference-claim and reason are both correct, that is to say, that have been properly (ontologically) qualified. (p. 11)

Evaluating an argument from a logical-semantic point of view devolves to assessing the 'correctness' (truth?; or pragmatic discussion rule?) of a premise proposition in relation to a warrant's actually making the conclusion proposition correct (true?) as it has been qualified during the course of arguing. The validity of an argument, then, is determined by a warrant's having been "properly qualified from an ontological point of view" (p. 11; *emphasis added*). She provides some examples to illustrate tersely the application of her model and then reaffirms her notion of validity from her interpretive perspective — "for an argument to be valid, its conclusion has to be qualified with the epistemic qualifier that corresponds to the ontological qualifier that its warrant actually deserves" (p. 12).

> The warrant incorporates the condition that the reason has also been correctly qualified from an epistemic point of view, because the inference-claim that it represents is nothing but the conditional that would eventually sanction the inference from the reason, as claimed, to the target-claim, as claimed. (p. 12)

Here she seems to make an epistemic-ontic fallacy by not distinguishing between the character of a conclusion proposition itself as possible or necessary and the character of the implication relationship from premise propositions to conclusion proposition as following necessarily—in the case of following necessarily the argument is valid, not so following invalid.

4. SOME CONSIDERATIONS FOR FURTHER INQUIRY

Here we treat a number of concerns, already suggested above in our reproducing Bermejo-Luque's argument, in the spirit of promoting further discussion of this important topic. In this connection, then, our remarks, while sometimes taking an opposing point of view, are meant to open further inquiry and not close discussion prematurely.

4.1 Does Bermejo-Luque succeed in presenting a unitary argument schema?

The short answer is 'yes'. However, this 'yes' must be qualified within the pragmatic communicative framework she provides at the outset of her discussion. If one finds this acceptable, then what remains is working out the details of this interpretation. She provides an imaginative way of threading the needle that steers between Govier's rejection of deductive arguments by analogy and Waller's embracing one kind of analogical argument as deductive.

In effect, Bermejo-Luque has embraced an argument schema that compasses every possible argument, whether inductive or deductive (under the scope of this discussion), that has the schema P-c, where 'P' holds the place of a set of propositions in the role of premises and 'c' holds the place of a single proposition in the role of conclusion or

target-claim. Her contribution moves away from a traditional logic's assessing the implicational relationship between premise propositions and a conclusion proposition to work with a pragma speech-act theory of argumentation. This might be satisfactory for those working within this tradition. However, to take every argument as having the schema *reason, so claim*, or as she says, as analyzed as *the associated conditional*, while surely the case, does not especially reveal the substance of an argument in respect of propositional content. This is an issue that concerns her and that ought to concern every logician.

Now, of course, taking such a tack does avoid having to deal with deep logical structures of arguments, and we have become abundantly clear about how messy modeling, or analyzing, natural (real) language arguments is. Nevertheless, we should not be dissuaded from assessing an argument, even analogical arguments, by using the apparatus of formal logic methodologically. This concern bears on the notion of a good argument, to which we turn below (§4.7). In any case, we wonder whether such a unitary schema as formulated by Bermejo-Luque is sufficiently useful for argumentation philosophers. Moreover, taking this tack seems to weaken the notion of validity (see below §4.6).

4.2 On the semantic appraisal of an argumentation

Bermejo-Luque affirms that evaluating an argumentation requires an assessment, or appraisal, of its semantic content. We take such appraisal to involve the propositional content of speech acts; in this connection, we might refer to such content as *information*. In any case, shifting away from identifying 'the deep logical structure' of an argument, or of an argumentation, toward a pragma-communicative method of argument assessment might well be done at the expense of recognizing the implicational relationships among propositions. And were we to consider, as Bermejo-Luque seems wont to do, such implicational relationships among propositions in respect of their truth-values, then we are concerned with the objective, ontological relationships among certain states of affairs independent of a participant *per se*. It is *not* that an argument, even for formal logicians (although many are not themselves clear about this), is valid in virtue of its form alone. Rather logicians have come to recognize that certain forms, sometimes patterns or schemas, are useful epistemically to determine that a given argument is valid or invalid. Validity is not determined by the form, or schema, of an argument, but by the relationships of states of affairs that make up our world. Perhaps, then, abandoning concern with the so-called 'deep structure' of argumentation disposes a useful, but not the only, instrument in argument assessment.

4.3 An instance of the epistemic/ontic fallacy?

In this connection, we are concerned that Bermejo-Luque might have fallen afoul of the epistemic/ontic fallacy. Again, her recognizing an intimate link between epistemic qualifiers and ontic qualifiers indicates her concern with the relationship between what human beings believe about the world and how that world really is (see pp. 6-7). However, she seems to shift between the ontic character of propositions, that is, their truth or falsity, and the epistemic disposition of a participant in moving, or making an inference, from premise propositions (or statements) to a conclusion proposition (or statement). It is one thing for a conclusion proposition itself to have the character, or modality, of being nec-

essary or possible and another thing for the conclusion proposition to follow necessarily from other propositions. Modal logicians have treated this matter at considerable length.

Bermejo-Luque's discussion in this connection is not altogether clear. An indication of this shifting is her use of 'correct', as in:

> ... when we put forward a propositional content with the qualifier that such propositional content actually deserves, we make first order claims that are (ontologically) *correct*. (p. 7; emphasis in original)

> However, semantically good argumentation is argumentation whose inference-claim and reason are both *correct*, that is to say, that have been properly (ontologically) qualified.
> Thus, what we evaluate from this logical-semantic point of view is whether the *correction* [sic; correctness?] of the premise and the warrant would actually make the conclusion, as qualified in the act of arguing, in fact *correct*. (p. 11; *emphases added*)

> The warrant incorporates the condition that the reason has also been *correctly* qualified from an epistemic point of view, because the inference-claim that it represents is nothing but the conditional that would eventually sanction the inference from the reason, as claimed, to the target-claim, as claimed. (p. 12; *emphasis added*)

On the one hand, 'correct' seems to denote 'true', and on the other hand having made some proper dialogic move, or drawing correctly a conclusion, or making a good inference. If our assessment of her discussion misses the point, then all we ask is that she make more patently evident how she uses 'correct' and that she further indicate how she avoids making the epistemic/ontic fallacy.

However, this matter spills over into her treatment of the relationship between epistemic and ontological qualifiers when she proffers a notion of *ontological acceptability* in the context of validity. If we accept (1) that what is epistemic (having to do with knowledge) is participant relative and what is ontic (having to do with being) is participant independent and (ii) that acceptability is participant dependent, then her linking what is ontological with what is acceptable to a participant is problematic. And since this is a crucial part of her discussion, much of her argumentation hinges on getting this right. She qualifies her thinking in the following way: "... the degree of acceptability of a representation is a measure of its value as such representation, not a measure of its fulfillment of epistemic standards" (p. 7; cf. p. 9). Her treatment of the relationship between epistemic and ontological qualifiers remains unsatisfactory to us.

4.4 On the notion of rhetorical power of an analogy

Bermejo-Luque writes about the 'charm', or 'trick' or 'power', of an analogy, and the 'spell' an analogy can cast "to make familiar to us new objects and phenomena" (p. 3). She then adds an interesting and provocative notion that the genuinely active participant in an argumentative situation is the addressee, the listener, the audience. She writes that "understanding an analogy is, at the end, falling under its rhetorical spell" (p. 5). However, she also very determinately remarks that it is the addressee who actively works out the analogy, notwithstanding the intention of the speaker in a given argumentative situation. In effect, this means that the power of an analogy does not lie strictly within the analogy itself but in the participant, that is, in the addressee or audience, who "suppl[ies] the sense in which the two analogues are said to be alike" (p. 5). Of course, surely she means to

indicate that the power exists *in the relationship* between the speaker and her use of analogy, on the one hand, and the addressee, on the other. Nevertheless, we must assume that, were a given audience astute in the use of analogies, in fact, in the use of specific analogies used by a given speaker, the power of an analogy might very well be voided. This outcome applies in cases where the speaker, wishing to persuade 'effectively', employs either sound or fallacious reasoning. This situation is similar in the case of fallacies when logicians take the persuasive power of a fallacy to lie within a participant. In this case, an astute audience would not be 'fooled' by a fallacy—in effect, in such a case, we would have to say that no fallacy exists, since its existence depends upon an audience not catching it and believing the argument to be sound or cogent.

Bermejo-Luque's imputing activity to an audience is an attractive feature of her discussion, albeit one we caution against taking too far. Still, she seems to vacillate between the putative charm of an analogy lying in its indefiniteness property, on the one hand, and the activity of a participant's working out the similarity between the two analogues, on the other hand. In any case, accepting the effectiveness of an analogy to be relational, we should expect further explication of this feature of communicative discourse.

4.5 Is every deductive analogical argument invalid?

If, as Bermejo-Luque maintains, (i) every analogical argument includes indefinition, that indeed, (ii) this indefinition constitutes an analogy's persuasive power as well as (ii) its functioning in both justificatory and persuasive roles, or (iv) adduced as reasons for the target-claim or for the inference-claim, and if (v) indefinition, or, as she states in the discussion, indeterminacy, is or amounts to ambiguity or vagueness, and further if (vi) some analogical arguments are deductive arguments, is it not the case, then, that not only are such deductive arguments defeasible but also that every such deductive argument suffers the fallacy of ambiguity? In other words, every such deductive analogical argument is invalid; or, perhaps, every such argument might contain at least one invalid argument. Perhaps there exists some special cases of two valid arguments. Whatever possible combinations here, does an analogy's inherent indefinition—whether appearing as ambiguity or vagueness—predispose deductive analogical argument to invalidity? Or at least to the problems encountered in argumentations containing equivocation and ambiguity?

4.6 On various concepts used in Bermejo-Luque's discussion

There is a cluster of technical concepts Bermejo-Luque uses that need more determinate specificity, at least as far as we believe. Her discussion appears to venture into new territory, and accordingly she ought more precisely establish her meanings. Here we only note some concepts without commentary to indicate their needing attention. We have indicated above our concerns about *semantic indefinition*, *correct*, and *rhetorical power*. While it is evident that she uses *epistemic* and *ontic* in their usual senses, her particular use in connection with qualifiers in communicative discourse would benefit with a fuller explication.

Since her notion of validity is linked to these argumentational qualifiers, her explication of *validity* suffers accordingly and would also benefit from their explication. In particular, we find troubling the simplistic categorization of arguments into deductive

and inductive according to their qualifiers (p. 10). However, this is almost superficial when cited against her treatment of a "semantically good argument", one in which

> [the] inference-claim and reason are both correct, that is to say, that [they] have been properly (ontologically) qualified.
>
> Thus, what we evaluate form this logical-semantic point of view is whether the correction [correctness] of the premise and the warrant would actually make the conclusion, as qualified in the act of arguing, in fact correct. (p. 11)

Taking 'correction' here to denote validity (cf. §4.3 above), validity, then, consists in an argument's warrants being properly qualified ontologically (p. 12). She writes: "... for an argument to be valid, its conclusion has to be qualified with the epistemic qualifier that corresponds to the ontological qualifier that its warrant actually deserves" (p. 12). If Bermejo-Luque has made a category mistake in shifting between what is epistemic and what is ontic, obscuring their distinction with a notion of acceptability (see §4.3), then validity cannot stand, as traditionally it has, as an ontic property of an argument. Traditionally, a given deductive argument is either valid or invalid and it lies with a human participant to perform a deduction to establish knowledge of its validity or to find a counterargument (or other means) to establish knowledge of invalidity. She has promised to keep distinct a good argument from an effective argument (p. 6), justificatory devices from persuasive devices (p. 5), but appears to collapse them with her treatment of validity.

4.7 On the notion of good argument

Finally, it appears that Bermejo-Luque's normative criteria of a good argument devolve to its effectiveness, that is, to its persuasive power. In this connection, her philosophical temperament aligns with contemporary trends in the modern argumentation movement finding their inspirations in new rhetoric where audience adherence grounds their principles of argument assessment. She writes, for example, that a principal purpose in acts of arguing is persuasion, and in this connection, she appropriates acceptability as a foundational normative criterion of a good argument. The use of analogies for persuading claims consists in putting to work "their rhetorical properties as means to induce beliefs and attitudes" (p. 5). We are happy to note her recognition of "the main legitimacy problem" posed by using analogies in persuasive argumentation by wishing to distance their rhetorical qualities from their epistemological qualifies. Nevertheless, we fear her collapsing the distinction, notwithstanding her caution.

> ... the legitimacy problem is not only a matter of the fact that, in general, *good* argumentation is not the same as *effective* argumentation. It is also a matter of the particular spell of analogies: to a great extent, understanding an analogy, like understanding a metaphor, is all the same as accepting it. When we understand [the claim in a given analogy] ... we feel inclined to agree [with that claim]. (p. 6; *emphasis in original*)

Thus, her caution about the importance of determining the acceptability of the argumentative uses of analogies does not mitigate her desire to distinguish a good argument from an effective argument, since a good argument, itself an illocutionary act of arguing attempting to show that a given target-claim is correct, consists in the degree that it has been suc-

cessful in this attempt. In this connection, we have expressed our concerns about acceptability more fully elsewhere (Boger 2005).

5. CONCLUDING REMARKS

Bermejo-Luque provides an imaginative resolution to a controversy among argumentation philosophers about the character of argument by analogy. Indeed, the discussion is an enjoyable read in this respect. And her subtle insertion of an analogy to develop her case makes the read intriguing by piquing a reader's sense of the author's intellectual acumen and perhaps her appreciation of wit in philosophic writing. We have aimed to reproduce the contours of her argumentation to highlight its movement and then to raise some concerns with the further aim to continue discussion. We find ourselves closer to Waller in making sense of analogies in argumentation, likely because of our predilection not to abandon the usefulness of formal logic in argument assessment. Nevertheless, we commend Professor Bermejo-Luque for explorations into the dynamics of human argumentative discourse.

REFERENCES

Bermejo-Luque, L. (2006). Toulmin's model of argument and the question of relativism. In: Hitchcock, D. and Verheij, B. (eds). *Arguing on the Toulmin Model: New Essays in Argument Analysis and Evaluation* (pp. 71-87). Dordrecht: Kluwer Academic Publishers.

Bermejo-Luque, L. (2007). Response to Hitchcock. *Dissensus & the Search for Common Ground: Proceedings of the 2007OSSA Conference on Argumentation*. CD-Rom, Windsor, Ontario

Bermejo-Luque, L. (2011). *Giving Reasons. A Linguistic-Pragmatic Approach to Argumentation Theory*. Dordrecht: Springer.

Boger, G. (2005). Subordinating truth—is acceptability acceptable? *Argumentation* 19, 187-238.

Govier, T. (1989). Analogies and missing premises. *Informal Logic* 11 (3), 141-152.

Govier, T. 2002). Should *a priori* analogies be regarded as deductive arguments. *Informal Logic* 22 (2), 155-157.

Guarini, M. (2004). A defence of non-deductive reconstructions of analogical arguments. *Informal Logic* 24 (2), 153-168

Toulmin, S. (1958). *The Uses of Argument*. Cambridge: Cambridge University Press.

Waller, B. (2001). Classifying and analyzing analogies. *Informal Logic* 21 (3), 199-218.