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1. The purposes of the paper

This paper pertains to a research project1 which aims at focusing on the constitution of arguments by taking into account, beside the debate on this theme developed by contemporary argumentation theorists, the important contribution given by the Topical tradition. My first objective here is to bring to light the role played by semantic analysis of inferential rules in an adequate approach to argument schemes.

In this regard, I start by considering a relevant methodological suggestion offered by van Eemeren and Grootendorst in their article “The fallacy from composition and division” (van Eemeren & Grootendorst 1999) that is largely devoted to the whole-parts argument scheme. Here, a deep semantic analysis of the whole-parts relation, which specifies the categories of properties that are transferable or non-transferable from the whole to the parts and vice-versa, allows to define the proper interpretation in which the concerned argument scheme is valid. A strict connection between the argument schemes and the semantic-ontological level of discourse emerges.

Interestingly, the Topics tradition, especially in its Medieval phase, shows to have acquired a clear awareness of this connection. In fact, in the debate about locus, a relevant distinction emerged between *locus maxima*, then simply named *maxima*, a notion very close to the current notion of argumentative principle, and *locus differentia maximae*, later named *locus*, understood as the semantic-ontological relation (*habitudo*), like causality, alternativity, analogy, implication etc., linking the class of states of affairs to which the standpoint belongs to another class of state of affairs in the same or in another possible world. It emerges that one locus may produce one or more maxims; in other words, the same ontological relation creates different implications (inferential rules). However, no systematic semantic-ontological analysis is proposed by the Topics tradition for loci; in other words the mechanism through which each locus “generates” the maxims that are related to it was not brought to light by the Topics tradition.

In this paper, I will sketch such an analysis for the *locus a causa finali*, developing an ontology of action from which various maxims may be derived. I will try to specify the con-
ditions of semantic applicability for one of the maxims that are generated by this locus: “if
the goal is good, the means are too”, or, to quote a proverb, “The end justifies the means”.

The validity of maxims is a necessary, but not a sufficient condition for the constitu-
tion of arguments; the Aristotelian notion of *endoxon*, which was substantially neglected by
the Medieval scholars\(^2\), proves to identify an essential component (bound to the context
and its culture) of the constituency of arguments, which conditions their soundness and
effectiveness. The reintegration of this notion in the analysis of arguments is all the more re-
quired for the study of how argumentation works in the different contexts of its application
(Rigotti 2006).

2. A relevant methodological suggestion

In their paper, “The fallacies of composition and division”, Frans van Eemeren and Rob
Grootendorst have analyzed in depth the whole-parts argument scheme. Their analysis
shows that not all properties (predicates) can be transferred from the parts to the whole
and vice-versa. The transferability of predicates depends on their semantic nature: struc-
ture-dependent properties are not transferable and, among the structure-independent prop-
erties, only the absolute – non-relative – properties\(^3\) can be transferred.

In fact, all structure-dependent properties characterize the whole from various points
of view in its wholeness: for its form (*round* or *rectangular*) or for its “functional” qualities
(*edible, poisonous, expansive, tasty, strong, coherent*).

As regards the relative structure-independent properties like *heavy*, *light*, *fat*, *big*, their
non-transferability depends on the fact that they involve the whole not focusing on its struc-
ture, but implicitly comparing it with other entities considered under the same point of
view; thus their scope involves the concerned reality in its wholeness: a big heap of light
things (say of hay) may be intolerably heavy.

I reproduce, in order to sum up the analysis made by van Eemeren and Grootendorst,
the scheme they offer in the paper mentioned above.

<table>
<thead>
<tr>
<th>Transferable (+) and nontransferable (−) properties</th>
<th>structure-independent properties (2a)</th>
<th>structure-dependent properties (2b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute properties (1a)</td>
<td>red, white, blue, glass, iron, wooden (+)</td>
<td>round, rectangular, edible, poisonous (−)</td>
</tr>
<tr>
<td>Relative properties (1b)</td>
<td>heavy, small, light, big, fat, slim (−)</td>
<td>good, expansive, strong, poor (−)</td>
</tr>
</tbody>
</table>

\(^2\) The Medieval Topics tradition refers to Aristotle through Boethius, who exclusively focused on the dialecti-
cal component of arguments.

\(^3\) Structure-dependency presupposes a distinction between structured and unstructured wholes. Hamblin (1970)
introduces an analogous distinction between physical and functional collections. Peter of Spain (*Summulae
Logicales* 5.7; 5.14-5.23; in particular 5.14-5.18) analogously distinguishes between *totum universale* and *totum
integrale*. Interesting remarks are put fore by Buridan (*Summulae de dialectica* 6.4.2 ss.).
Though I am concerned with another class of arguments, pertaining to the domain of finality, I have briefly recalled van Eemeren & Grootendorst 1999 for its methodological relevance: an in-depth semantic analysis enabled the authors to make explicit the conditions under which a certain argument scheme is validly or fallaciously applied.

They show that precise semantic conditions must be met in order to ensure the validity of this argument scheme. In fact, I am convinced that the fallacious or sound use of argument schemes is often not determined by their presumptive or probabilistic nature, but by an uncertain definition of their semantic applicability conditions.

In section 5, I shall try to specify the semantic conditions of validity for a particular argument scheme – or a particular maxim, if we follow the topical tradition to which I shall largely refer in this paper – that is generated by the locus from final cause: “if the goal is good, the means are too”. I shall try to show how an adequate representation of the ontology of action that is presupposed by the concerned locus from final cause can explain its fallacious interpretations and establish the limits of its applicability.

3. The conceptual and theoretical framework of Topics

In order to properly lay out the subject we want to face, it is certainly useful, and maybe also necessary, to recall in its essential features the conceptual and theoretical framework on which my discourse will be based.

I shall prevailingly refer to the doctrine of topics set out by Aristotle, elaborated by Cicero and systematized by Boethius, Abelard, Peter of Spain, Buridan and others. Topics was thought of by Aristotle as a method for finding out an appropriate argument in relation to any standpoint (problema)⁴.

This method works with rules named topoi (translated into Latin with loci). It is well known that there is not a universally accepted interpretation of this Aristotelian notion, for which, by the way, no satisfactory definition is given by Aristotle.

Braet (2005) offers an important contribution to a convincing interpretation of the Aristotelian perspective. Starting from the lacunose presentations of loci given by Aristotle in Rhetoric (2.23), Braet reconstructs an ideal systematic model of an Aristotelian locus bringing to light four components:

1. the name (e.g. ek ton enantion = from the contraries);
2. advice suggesting a fair procedure for establishing the concerned type of argument;
3. a topical principle that shows to be a rule establishing an inferential implication between general statements, like “if the cause exists, then the effect does”;
4. an actual example of argumentation applying this rule (Braet 2005: 69).

⁴ See Aristotle’s Topica, Book I, Chapter 1.
In Braet’s view the topical principle, “while occasionally quite abstract, always contains enough substantial thought-guiding terms” (Braet 2005: 79) and can be interpreted “as the generalized ‘if-then’ statement in a modern argumentation scheme”.

This interpretation suggestively opens the way to an understanding of the rhetorical enthymemes “as combinations of a logical argumentation form (which can generally be reconstructed as *modus ponens*) and an argumentation scheme” (*ibidem*). This interpretation of Aristotle’s conception of topics, which brings to light a certain contrast between the logical orientation of the doctrine of topics and the prevailing syllogistic – non propositional – orientation of Aristotle’s logic, is interestingly aligned with the following developments of the topical tradition. In my opinion, it also shows the possibility of a fruitful dialogue between this tradition and the current theoretical approaches, which, under the label of “argument schemes”, substantially focus on the same problematic domain of argumentation theory.

We start by reconsidering a particular point of Braet’s reconstruction of the Rhetoric version of topics, which he identifies as “the name” of *topos*.

Indeed, Aristotle seems to attribute to this component a mere function of label, even though it represents, as Braet remarks, the main component of the “if-part” of the “if-then”-structured topical principle (e.g. “if the cause exists...”). In the following tradition the role of this apparent label – as Braet foreshadows in a note (Braet 2005: 81 n. 15) of his paper – becomes decisively more substantial. An important signal is already given in Cicero’s *Topica* which emphasizes this notion identifying it with the proper place of arguments – *sedes argumenti* – and, more importantly, with the source from which arguments are drawn: *unde argumenta ducuntur*. This emphasis on locus as the source and basis of an argumentative move is interestingly mirrored by the typical preposition *from* introducing any class of arguments (e.g. argument *from* expert opinion) throughout the tradition of argumentation studies until the current argumentation theory.

In the following topical tradition, Boethius, who critically synthesized the two interpretations of Aristotelian topics offered by Cicero and Themistius, designates this component as *topica differentia*, which is to be understood as the particular ontological domain to which certain inferential principles (named *maximae propositiones*) are bound.

A certain terminological complexity, which indeed causes some obscurity, is introduced by Boethius, who adopts the term “locus” both for the *maxima propositio* – later renamed *locus maxima* – and for the ontological domain on which the maxim depends – named *locus differentia maximae*. We shall use “loci” for *loci-differentiae* and “maxims” for *loci-maximae*.

Independently from this terminological complexity, a more substantial problem is represented by the nature of loci and their connection with maxims: Boethius remarks that

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5 See Garssen 2001 for an informative review of the literature on argument schemes; for the comparison of different contemporary approaches to argument schemes with topics tradition see Rigotti & Greco Morasso (forthcoming).
the maxims outnumber the loci, because the specific differences constituting the types or classes of maxims are less numerous than maxims themselves.

Peter of Spain tries to justify the definition of loci as differences of maxims:

Locus differentia maximae est id per quod una maxima differt ab altera, ut istae duae maximae: 'omne totum est maius sua parte', 'de quocumque praedicatur definitio et definitum', differunt tantum per terminos ex quibus constituuntur" (Summulae Logicales 5.07) [the locus – difference of maxims – is that for which a maxim differs from another; thus the following two maxims ‘every whole is bigger than anyone of its parts’ and ‘to whatever the definition holds, the defined holds too’ differ only for the terms they consist of].

In other words, loci are differences of maxims because they are implementations in different ontological domains of the same logical connections. The awareness that maxims are more numerous than loci is anyway implicitly acknowledged by all authors through the list of loci and maxims they offer. Indeed, between the set of maxims and the set of loci, an injective function is established: to each maxim corresponds exactly one locus, while to each locus may correspond one or more maxims. For instance, several maxims are bound to the *Locus a causa materiali* by the Topical tradition:

If the material lacks, the thing is impossible;  
If the material is there the thing can exist too;  
If the thing is there the material is there or was there.

4. Loci as semantic-ontological relationships

The proper nature of loci emerges, gradually, through the Medieval tradition, where, at a certain moment, locus-difference is presented as one extreme of a relation (in Latin *habitudo*), whose other extreme coincides with the standpoint itself.

For example, the locus from cause is the extreme of a cause-to-effect relation whose other extreme – the effect – is the standpoint. Peter of Spain wrote:

Locus a causa efficiente est habitudo ipsius ad suum effectum [The locus from efficient cause is the relation of the efficient cause to its effect]

In the locus from definition, the relation concerned ties together the definition (i.e. the defining phrase) and the defined object. In Peter of Spain’s words,

definitio est oratio quae est esse rei significans. Locus a definitione est habitudo definitionis ad definitum (5.10) [a definition is an utterance which is

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6 See Boethius, *De differentiis topicis* 1186: “atque ideo pauciores deprehenduntur hi loci qui in differentiis positi sunt, quam propositiones ipsae quorum sunt differentiae”.

7 In the formulation of this maxim I take into account the distinction between permanent matters (coexisting with the thing, like iron vs. knife) and transient matters (disappearing at the arising of the thing, like flour vs. bread). Cf. in particular Peter of Spain, *Summulae logicales* 5.25 and Buridan, *Summulae de dialectica* 6.4.11.
meaning the mode of being of a thing. The locus from definition is the relation of the definition to the defined.

Analogously, we could define the Aristotelian "locus from all the more and all the less" as the relation between an entity for which a state of affairs, though being more likely to be the case, is not indeed the case ("even gods do not know everything") and an entity for which this state of affairs is much more likely not to be the case: this relation entails, as one of its maxims, that it is surely false that this state of affairs is the case for this latter entity ("if even gods do not know everything, all the less will humans know everything": Rhetorica 1397 b 16-17).

Let us consider some passages by Abelard and Buridan in which some relevant consequences of the interpretation of locus as extreme(s) of a habitudo are brought to light. Abelard connects with the habitudo the solidity of inference:

> Est autem locus differentiae ea res in cuius habitudine ad aliam firmitas consolationis consistit (De dialectica, 263) [locus difference is that thing on whose relation to another thing the solidity of the inference is based].

In his sharp commentary to Peter of Spain’s Summulae, Buridan makes this connection even more explicit, identifying the locus with the terms of which the maxim consists:

> Locus differentia maximae est termini ex quibus constitutur maxima et ex quorum habitudine ad invicem maxima habet notitiam et veritatem. Verbi gratia, cum haec propositio ‘quidquid vere affirmatur de specie, vere affirmatur de genere’ sit locus-maxima, isti termini ‘species’ et ‘genus’ sunt locus-differentia maximae; ex habitudine enim speciei ad suum genus maxima habet veritatem et efficaciam (Summulae de dialectica 6.2.2).

Starting from this fundamental comment by Buridan, I suggest the following updated interpretation of locus in its connection with maxims:

> The locus is a specific relation connecting different states of affairs that generates one or more maxims, providing them with semantic transparency (notitia) and with a specific degree of analytical truth (veritas) and persuasiveness (efficacia).

The interpretation of loci as ontological relations (habituidines) generating argument schemes entails the task of deriving each argument scheme from the respective topical relation. In the mentioned authors this derivation shows to work as an implication of the ontology of the locus. For example, the species-to-genus relation entails that "if something is truly stated of an individual of a species, it is truly stated of an individual of the genus too" and this is so because any individual of a species is an individual of the corresponding genus too (e.g. “if a man runs, then it is true that an animal runs” or “if someone corrupted a policeman, he corrupted a public officer”). The same locus generates also other maxims, like "if the genus is truly negated of something, the species is too", because the set of properties required for belonging to a genus are presupposed by belonging to all its species (“an angel
cannot be a human, as it is not an animal”; “he cannot be an ophthalmologist because he is not a doctor”).

All argument schemes, or maxims, related to a locus are validly applied only if the conceptual domain actually involved by the argument really exhibits the logical properties of the locus. Very often, as we saw at the beginning of this paper for the locus from the whole and its parts, a similar linguistic shape hides substantial differences.

Let us compare a sound application of the maxim “whatever is truly said of the genus is truly said of the species” (which is generated by the locus from genus to species), “Italian citizens may migrate in any European country because European citizens can migrate in all European countries”, with an unsound one, “In the last year European economy strongly reacted to the financial crisis; therefore, in the last year French economy strongly reacted to the financial crisis”. Indeed French economy is not a species, but a part of European economy, which is in turn a whole to which the structure-dependent property of having strongly reacted... is attributed: transferring this property to one of the parts represents a typical fallacy of division.

5. The locus from final cause

The locus from final cause belongs to the ontological area of action (see Figure 1), which may be defined in terms of its essential factors (ideally) as an event intentionally caused by a human subject who,

– being aware of the present situation 
– and of a new possible comparatively more convenient state of affairs,
  • which is realizable through a causal chain available to her,
– is attracted by this new, possible, state of affairs and,
– taking the decision of applying the causal chain,
– activates it
– thus realizing her purpose.

Often, many different, not strictly constitutive factors become relevant: given the situated nature of decision making, different competitive desires and different costs of the causal chain may induce the agent to abandon or substantially change the purpose; the degree of adequacy of the causal chain may show to be insufficient and transform the action in an unhappy attempt; the possible positive or negative side effects, including the informative and relational implications of action, the possible presence in the causal chain of subservient instrumental actions and the quality of their ends and of their possible side effects turn the action into a complex and hardly manageable process, in which the human subject intensively "negotiates" the realization of its purposes with the surrounding context.
Within the ontology of action, our locus from the final cause focuses on the relation connecting the end (goal, purpose) of an action with the action itself. Several maxims are generated by this locus. For example, as the end is a constitutive component of any action, we can derive the maxim "if a behavior has no end, it is not an action", which is very often employed in the juridical domain in establishing the degree of responsibility. The following two maxims could analogously be derived from the notion of action: "if the pursued end is impossible, the decision of achieving the action is irrational" and "if the pursued end is evidently harmful for the agent, the action is unreasonable". Another maxim is close to the basic argument scheme of practical reasoning that has been investigated by Walton in particular in relation to the development of artificial intelligence systems: "if an action is strictly required in order to reach a desired goal, this action should be undertaken". More in general, the same logical principle, bound to the desirability of a certain action which is established in accordance with the desirability of its results, is identified by Garssen (1997: 21,

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Figure 1: The ontology of action (revised and adapted from Rigotti 2003)

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1 Walton’s account of practical reasoning focuses on the significant implication that this kind of reasoning may have for setting up artificial intelligent agents. Indeed, artificial intelligence appears to be at the basis of a renewed interest for practical (teleological) reasoning in philosophy (Walton 1990: 3). Walton identifies two basic argument schemes of practical reasoning (Walton 1990: 48 and 2007: 216): the necessary condition and the sufficient condition schemes. Such schemes allow identifying important elements of practical reasoning, such as the notion of goal, and intriguing problems deriving from the agent’s relation with reality (practicality and side effects). Moreover, the author points out that there are some problems to be elaborated in the form of critical questions (Walton 2007: 224), such as the presence of multiple goals (hierarchy of goals) or of conflicting goals and the evaluation of possible future implications of one’s action (effects and side effects).
q.t.d in van Eemeren, Houtlosser & Snoeck Henkemans (2007: 166) as a subtype of the causal argument scheme. Garssen (2001: 92) names this logical principle “means-end argumentation” or “pragmatic argumentation”. Already Boethius, who indeed represents the beginning of the medieval tradition of topics, introduced the maxim “cuius finis bonus est, ipsum quoque bonum est” (De differentiis topicis, P.L. 64, 1189 D), “if the end is good, the thing is good too”. This maxim is confirmed by Abelard (Dialectica 416, 436) and by Peter of Spain (Summulae logicales 5.2.7), but is questioned by Buridan (Summulae de dialectica 6.4.13), who, assuming that no property can inhere to what does not exist (whatever does not exist can neither be good nor bad), excludes for the end the possibility of being good or bad as the end does not yet exist before the fulfillment of the action. In fact, in this approach, the understanding of action seems to be compromised, and, more relevantly, this approach does not consider that possible properties do inhere to possible things.

Now, I want to focus on a certain fuzziness and even a certain ambiguity that characterizes the statement of Boethius’s maxim. First of all, the second extreme of the concerned relation, being referred to by ipsum, is not explicitly identified. It could refer both to the action and to the means. However, a specific maxim, which will be tackled later, is devoted to means in relation to their use (“cuius usus bonus est ipsum bonum est”): consequently, we start by focusing on the interpretation where ipsum means the action.

Moreover, and more relevantly, the term end and the analogous Latin term finis cover two distinct meanings – outcome and purpose – and, consequently, each of these meanings generates a different interpretation of the maxim. Two apparent maxims, which we might call paramaxims, emerge:

1) if the outcome is good, the action is too
2) if the purpose is good, the action is too

Unfortunately, the ambiguity of our traditional principle is far from being exhausted as it touches also the third remaining term our maxim consists of: the prothetical notion of good. Indeed, the goodness of a chicken does not coincide with the goodness of a cook nor with the goodness of a gourmet nor… However, even though these meanings are different, their difference is not irreducible, since goodness is, in general, attributed to some entity or state of affairs insofar as it discharges a certain function in the due way (see Vendler 1963: 465). Consequently, we could think the polisemy of good is solved once we have identified the functions expected from the concerned entities or states of affairs. In paramaxim (1), the goodness of an outcome might be defined as the positive nature or the responding to due expectations of the state of affairs resulting from an action. Now, expectations may be iden-

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9 Van Eemeren, Houtlosser & Snoeck Henkemans (2007: 174 and ff.) identifies a list of linguistic indicators for the pragmatic argument scheme.
10 In the example brought by Boethius “si beatum esse bonum est, et iustitia bona est, hic enim est iustitiae finis, ut si quis secundum iustitiam uiuat, ad beatitudinem perducatur”, happiness represents the end of justice which is a conduct (as type of life) through which happiness is reached.
tified within a particular perspective or absolutely. The perspective in turn may be more or less wide and refer to a subject (both individual and social) or to a purpose:

For me (or for Europe), it is now a good thing to devaluate the Euro
For the recovery of the European economy, it is now a good thing to devaluate the Euro

The constituents introduced by for, which define the perspectives, should be referred to as beneficiaries. The absence of any beneficiary corresponds to the above mentioned notion of absolute expectation where each entity is per se conceived of as destined (created in order) to realize a peculiar perfection. In the Western Medieval tradition this type of expectation was identified in relation to a totality-governing order, created by God, possibly mediated by nature. The Greek verb ἐγκυνεῖν (translated into Latin through natus sum), which represents the perfect of γεννάω “to generate” – whence φύσις “nature” – was often used to expound this type of absolute expectation that is by nature inherent to any entity and generates an ontology-based moral system. In the present day strongly differentiated culture, the moral judgment may refer to other totality-governing principles or simply mirror each person’s spontaneous sensibility.

All in all, it is not evident that paramaxim (1) does represent a proper maxim, as even bad actions may cause good outcomes. Let us consider the following, perhaps extravagant, example:

Action: X tries to kill Y by shooting her
Outcome: X misses Y and hits a tire of her car, thus preventing her from reaching the airport and from leaving with a plane which then crashed.

Indeed, this paramaxim is, in general, an evident non-sequitur as it claims that, if two constituents of an event have opposite properties, the one does have the property of the other.

Of course, goodness is very differently attributed to the action in X’s and Y’s perspectives or in other more specified perspectives (like X’s juridical position or Y’s physical safety), but in spite of these differences the validity of our paramaxim is excluded: the evident goodness of the outcome does not entail the goodness of the action, neither absolutely (it is not good for anybody to kill other people) nor in Y’s perspective. Also another reading of paramaxim (1) that we find in the Shakespearian saying “All’s well that ends well” could hardly be accounted for as a proper maxim: it is rather a sort of advice suggesting, on the basis of

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11 In the world view largely adopted in Medieval culture, nature is conceived of as an order subservient to a Divine plan to which all beings are expected to conform; this expectation is often expounded by natus sum: “caecitas non dicitur nisi de his quae sunt nata videre” [blindness is not said but of things that are born to see] (cf. Sancti Thomae Aquinatis De principiis naturae II, 8). In Dante’s Divine Comedy (Inf. XXVI), Ulysses persuades his companions to follow him in the last adventure beyond Pillars of Hercules by arguing that they had been made in order to pursue virtue and knowledge: “Considerate la vostra semenza/ fatti non foste a viver come bruti/ ma per seguir virtute e canoscenza” [Consider how your souls were sown:/ you were not made to live like brutes or beasts,/ but to pursue virtue and knowledge].
a proper maxim, the irrelevance of bad actions or events if they do not “succeed” in producing the predictable bad outcomes. The proper maxim onto which this recommendation is based would be “if an event does not cause any relevant effect on me, it should be considered as irrelevant for me”, which relies on a largely accepted definition of relevance.

Paramaxim (2), namely “If the purpose is good, the action is too” is likely to be a fair interpretation of the proverb “The end justifies the means”, that is in itself ambiguous. In it, in relation to the purpose (understood as the state of affairs at which an action is aimed), goodness denotes a positive nature both as correspondence to the actor’s expectations and absolutely. Now, like paramaxim (1), also paramaxim (2) is, in general, a non-sequitur as it claims that, if two constituents of an event have opposite properties, one has the property of the other. However, if considered in detail, this latter paramaxim might also have reasonable readings when the conditions of three particular scenarios are met:

i. The quality of the possible side effects is considered: following this paramaxim, if an action is aimed at a good effect, it is said to be good even if some non-intended side effects of the causal chain are bad. In this very frequent situation the action may be taken for good in its wholeness if the negative side effects it brings about are, in themselves or compared with the good effects, tolerable or irrelevant. The maxim from the lesser evil is here properly invoked: “if the undesirable side effects are less harmful than the lack of the pursued effects, the action is justified”. Of course, in this case, the goodness of the whole action is intended and not the goodness of the side effects, which nevertheless retain their negativity.

ii. The fulfillment of the action requires within its causal chain an instrumental action, i.e. a complex causal chain which is in itself an action: if the final purpose of the global action is good, but the provisional purpose of the instrumental action is bad, this principle, claiming that the provisional purpose of the instrumental action also “becomes” good, is evidently invalid. If there is no reasonable alternative, it might “recover” validity applying once again the maxim from the lesser evil, provided that we are able to show that the realization of the previous action is less harmful than the lack of the results of the final action.

iii. The causal chain entails the adoption of instruments, resources or procedures that are in themselves morally indifferent or exempt from moral evaluation. This is the only version of our principle (paramaxim) for which it represents a proper maxim.

It is noteworthy that, in this case, the maxim substantially coincides with the above mentioned traditional maxim “cuius usus bonus est ipsum bonum est”; e.g. “if cutting is good the knife is too”. The last scenario we have considered represents the only interpretation for which the very popular proverb “The end justifies the means”\textsuperscript{12} may function as a valid

\textsuperscript{12} This proverb occurs in various European languages and cultures with little variations: in Italian, “Il fine giustifica i mezzi”; in Dutch, “Het doel heiligt de middelen”; in French, “Le but justifie les moyens”; in German, “Der
maxim (indeed, the other valid interpretations we have identified properly owe their validity to the maxim from the lesser evil). This maxim presupposes the existence of a class of morally neutral resources (tools, activities, procedures, abilities) having a mere instrumental nature, which are good or bad depending on the goodness or badness of their uses. Let us consider the two following examples:

- *X saves her friend Y from failure with her money*, where money plays a clearly positive role;
- *X corrupts the judge with his money*, where the role of money is clearly negative.

In his *Rhetoric*, Aristotle (1355b 5-8) introduces the notion of instrumental goods (including all goods, but virtue) that are *per se* neutral and may be considered as goods insofar they represent resources necessary to realize truly good ends. Rhetoric is included in this class integrating a small collection of other examples: strength, health, wealth and strategy. Interestingly Aristotle includes rhetoric, which largely coincides for him and the other ancient scholars with the argumentative discourse. In fact, the ancient theoreticians frequently focus on the ambivalence of rhetorical ability, noticing however that, though often being exploited to ignite conflicts and seditions and to perpetrate frauds, it is nevertheless necessary to create the healthy consent generating and preserving all human cultures and institutions (this remark is present in Aristotle, Cicero, Quintilian). Especially Cicero engages in bringing to light an evidently positive balance between good and bad uses of communication and argumentation (see his introduction to the first book of *De inventione*).

## 6. Endoxa as complementary soundness conditions of arguments and as clues of cultural belonging

Considering both the locus from totality (to which the whole-parts argument scheme refers) and the locus from the final cause, two significant considerations emerge:

1. In both cases traditional maxims show to contain ambiguities and, as their validity is restricted to very specific semantic values of the terms that make them up, accurate semantic analyses are needed to ensure their validity; in particular regarding the whole-parts argument scheme, only absolute structure-independent predicates are considered as transferable; regarding our maxim deriving from the locus from final cause (*The end justifies the means*), only an interpretation of *end*...
as “purpose” and of means as “morally neutral means” transforms the proverb in
an authentic maxim.

2. Invalid principles sometimes seem to recover their validity, as different, valid,
maxims are actually invoked. In a particular interpretation of our proverb, an ac-
tion aiming at a good effect may be considered in its wholeness as good even if
some side effects (non-intended effects) are bad, if these side effects are tolerable
or irrelevant. Indeed the maxim from the lesser evil, generated by the locus from
alternatives, is here properly invoked.\textsuperscript{14}

In general, it should be emphasized that valid maxims (argument schemes) do not acquire
or lose their validity intermittently, depending on their different applications: indeed their
argumentative effectiveness, their applicability, is restricted to the scenarios that meet the
semantic-ontological conditions required by their right interpretation. The maxim from
totality should not be invoked if the properties concerned are structure-dependent; analog-
gously, the maxim of the locus from final cause we considered cannot be applied if the means
concerned are not properly neutral.\textsuperscript{15} However, in such cases we are not legitimated to state
that the considered maxim becomes invalid, but we have to take cognizance that, in the ac-
tual context, our valid maxim does not meet the required conditions, i.e. is not applied to
the appropriate situation. In fact, the validity of the maxim does not guarantee the sound-
ness of the argument; more precisely, the validity of the maxim is a necessary, not a sufficient
condition of the soundness of an argument: another level of premises must be taken into ac-
count (Rigotti & Greco 2006; Rigotti 2006; Rigotti 2009). Interestingly, in the theoretical
frame of pragma-dialectics, in the opening stage, beyond the procedural starting point, to
which argument schemes (maxims) naturally belong, the notion of material starting point
is also introduced (see van Eemeren & Houtlosser 2002: 20).\textsuperscript{16}

At this point, the question about what other conditions, beyond the validity of the
maxim, must be satisfied in order to have a sound argument might be translated as how ma-
terial starting point should be defined and analysed or what components of an argumenta-
tive move are to be identified with the material starting point. In this connection I propose
to reconsider the Aristotelian notion of endoxon as it is defined in the first Book of Topics
(100b.21):

\textsuperscript{14} In the considered situation, invoking our maxim of the locus from final cause would represent either a bad in-
terpretation of a maxim, violating rule 8 of critical discussion by the use of an invalid reasoning procedure, or
the use of an inappropriate, but in itself valid argument scheme, violating rule 7 of critical discussion (cf. van

\textsuperscript{15} In both cases there would be an incorrect use of a valid argument scheme: rule 7 of critical discussion would
be violated (cf. \textit{ibidem}).

\textsuperscript{16} This subject is analyzed in greater detail in Rigotti & Greco Morasso (forthcoming).
Endoxa are opinions that are accepted by everyone or by the majority, or by the wise men (all of them or the majority, or by the most notable and illustrious of them).

An endoxon is thus an opinion that is accepted by the relevant audience or by the opinion leaders of the relevant audience. It seems that the tradition of topics indeed neglected this notion, merging it with the notion of maxim (originally, in Boethius, *propositio maxima*) often referred to by Aristotle with *topos*. But it is hard to imagine that Aristotle attributed to all people or to the majority of them or to the wisest ones etc. the shared knowledge (or belief) of topical rules, even though these rules may become part of the acquired outfit of some of them. The cognitive status of the abstract, general inference rules discovered by argumentation theorists cannot be interpreted in terms of the prevalently shared opinion.

The ignorance of this fundamental component of Aristotelian topics is probably due to the fact that Aristotle did not explicitly give any example of what he understood by *endoxon*. Numerous endoxa can, however, be reconstructed if we consider the examples often given by the author when listing his *topoi*. Not coincidentally, in my opinion, Braet (see above), aiming to reconstruct an ideal model of an Aristotelian locus, lists as fourth component, beyond the name, the suggestion of a fair procedure for establishing the concerned type of argument and the topical principle involved, an actual example to which Aristotle often applies this principle (Braet 2005: 69).

In relation to one of the maxims of the locus from all the more and all the less “if something is not the case for an entity for which it should be more (plausibly) the case, it is evident that it is not the case for an entity for which it should be less (plausibly) the case”, Aristotle gives two interesting examples in *Rhetoric*:

1. “If not even the gods know everything, all the less do humans”;
2. “He who even beats his father may well (will all the more) beat his neighbors”.

In both examples the same maxim is at work, but it gets hold of a different endoxon (of a different shared opinion); this opinion can be brought to light by singling out the presuppositions – the premises – enabling us to activate the maxim. In (1) the gods are presupposed to know more than humans; in (2) it is presupposed that people are less likely to beat their father than their neighbors.

However, in order to activate the maxim, another premise (recalling for its epistemic structure Toulmin’s notion of *datum*) is required for satisfying the condition established

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57 The lack of distinction between topos and maxim is particularly evident in Aristotle’s *Topica*, where he frequently, in his long undifferentiated list of topoi, starts referring to an ontological domain (for example, in *Topica* 114b.37 Aristotle lists and illustrates four different *topoi* of the *topos* from all the more and all the less) apparently presenting it as the topos in point, and then introduces, often naming them topoi, two or several inferential rules (maxims) entailed by this domain.

58 This endoxon is explicitly expounded by Aristotle (1397b 16-17).
in the *if*-part of the maxim: “something is not the case for an entity for which it should be more (plausibly) the case”. Indeed, both examples provide this further premise, which coincides in (1) with the fact that not even the gods know everything and in (2) with the fact that someone has been beating his father. In the first argument, a syllogistic procedure based on the conjunction of the *endoxon* and this second premise (see Rigotti 2006),

- the gods know more than humans
- the gods do not know everything

generates, through the third figure of syllogism (more specifically, the mode Darapti), a provisional conclusion:

- some entities knowing more than humans do not know everything,

through which, satisfying the *if*-part of the maxim, we activate a *modus ponens* and derive the definitive conclusion:

- humans do not know everything.

Analogously, in the second argument, combining the *endoxon* with the second premise,

- people (all humans) are more likely to beat their neighbors than their father
- someone (some human) has been beating his father

we obtain, through the mode Datisi of the third figure, the provisional conclusion:

- someone has beaten a person that one might far less likely beat than one’s neighbors,

which is applied to the maxim to derive the final conclusion:

- he may well (all the more will he) beat his neighbors.

The two *endoxa* invoked by Aristotle to support so many arguments show different degrees of culture-dependence, which are worth to be focused on. Starting with the second argument, we indeed perceive in it a certain strangeness: it seems that at those times beating one’s neighbors was rather usual, even though we are comforted by the fact that people should only rarely beat their fathers. The present day reader perceives in this *endoxon* a certain cultural distance that can however be filled. On the other hand, the cultural distance of the *endoxon* presupposed by the first argument could neither be easily recovered by an audience of monotheistic believers (because of the polytheism it presupposes and because of the denial of divine omniscience it asserts), nor by an audience of non-believers as it presupposes the existence of the gods.

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19 Toulmin (1958: 90): “We already have, therefore, one distinction to start with: between the claim or conclusion whose merits we are seeking to establish (C) and the facts we appeal to as a foundation for the claim – what I shall refer to as our data (D)”.

20 The difference in the modal status of the two premises is mirrored by an analogous difference in the respective standpoints: in (1) the standpoint claims that humans cannot know everything; in (2) the standpoint claims that such a person *might* well beat his neighbours (cf. Rocci 2008).

31 See also Vanni Rovighi (1962: 88-92).
The presuppositional nature of *endoxa* make them unquestionable by definition within the concerned argumentative move, but it does not exclude that they are questioned in other argumentative moves either within the same culture or in an intercultural interaction22. The cases in which cultural presuppositions are discussed within the same culture are particularly interesting as they show the capacity of this culture of evolving by means of argumentation. Aristotle’s *Rhetoric* gives a fitting example. Illustrating the locus “from the implications” (the fact that “if the implication is the same, the same must be said of the things from which this implication follows”; more explicitly: if an implication of a state of affairs justifies the attribution to it of a certain predicate, this attribution is justified also for the other states of affairs having the same implication) (*Rhetoric* 1399 b 5-9), he mentions a saying of Xenophanes remarking that “people who affirm that the gods are born are as ungodly as people who affirm that the gods die”. Both statements, he comments, indeed entail that there is a time in which the gods do not exist. In this argumentation, a vision, that in another argumentation was presupposed as an *endoxon* (the Greek Olympus theogony), becomes a standpoint, that is not only questioned, but also refuted, thus showing a phase of evolution of the Greek culture of the time.

References


22 See also Rocci 2006: 425 ff.


Rigotti, Eddo & Sara Greco Morasso (forthcoming). Comparing the Argumentum-Model of Topics with other contemporary approaches to argument schemes; the procedural and the material components.


