

Uncorrected pre-print version from:

Rigotti, E., & Greco, S. (2019). Inference in argumentation: A topics-based approach to argument schemes. Cham: Springer (Springer Argumentation Library). This should be used for any reference to this work.

6 The inferential configuration of arguments: the Argumentum Model of Topics

6.1 Introduction¹

Only some parts of the rich tradition of the study of inference in argumentation can still be found in current studies on argumentation (see the discussion in chapter 5). When we started working on the Argumentum Model of Topics (AMT) in 2004, we were partly motivated by a feeling of dissatisfaction with this state of affairs. A relatively large portion of the rich concepts and accurate analyses elaborated in the tradition, which could help explain how arguments support standpoints, was seemingly lost in modern approaches. In our view, for the evaluation of the logical hold of arguments, as well as their grounding in communication, the concepts elaborated on in the tradition of topics need to be taken into account more. At the same time, however, we realized that the tradition was neither unitary nor homogeneous; different concepts had been introduced without elucidating a clear connection between them, as in the case of *endoxon* and *maxim*; some concepts had been abandoned without a clear reason, or became foggy over time.

Therefore, when we developed the AMT, we wanted it to profit from the tradition. However, at the same time, we designed an innovative model that could go beyond the tradition. The novelty, specifically, lies in the fact that we provide a new semantic network of previously developed concepts, which allows us to look at the inferential configuration of arguments in a different way. In addition, we wanted this model to be situated within the current dialogue in Argumentation theory; we think of it as a contribution to the analysis of the inferential configuration of arguments – and not as a historical reconstruction of the past.

Before moving on to illustrating the main features of the AMT, we will delineate what this model *is not*. First, the AMT is not a purely logical model of reasoning, as it intends to explain argumentation as it happens in communicative interactions, which take place within social relationships. Second, because it delves into inference in argumentation, the AMT does not cover the whole process of argumentative dialogic interaction. Its province is what we call the *inferential configuration of single arguments* (and combinations thereof).

This micro-analytical focus of the AMT explains why, in the Preface to this volume, we explained that our model could be integrated into a framework that takes into account processes of dialogical argumentation, such as the pragma-dialectical approach to argumentation (see the discussion on this integration in Greco Morasso 2011, Palmieri 2014).

¹ Sections 6.2-6.4 of this chapter are largely based on a revised and expanded version of the following publication: Rigotti, E., and Greco Morasso, S. (2010). Comparing the Argumentum Model of Topics to other contemporary approaches to argument schemes: The procedural and material components. *Argumentation* 24(4): 489-512. We are grateful to Springer for having allowed us to reuse these contents.

In what follows, we will focus on how the AMT provides argumentation analysts with a perspective for the analysis and evaluation of single arguments. The same model may also be used by communication experts to reflect on their own arguments whilst designing them. Explaining the main features of the AMT is the main goal of section 6.3. In section 6.3, we will go through some of the contemporary approaches to argument schemes and explicate how the AMT differs from those approaches and why. This introductory part is concluded with a discussion (6.4) in which we summarize the main advantages of the AMT for the reconstruction of the inferential configuration of arguments. In the second part of this chapter (section 6.5), we will talk about how arguments are combined into complex argumentative structures and how the AMT supports the analysis of complex argumentation.

Chapters 7 and 8 ideally complete the overview of the AMT. In fact, chapter 7 presents a typology of loci and discusses some critical aspects. Chapter 8 presents four case studies, which are based on examples of contextualized argumentation that are analyzed by means of the AMT. The intention of this final chapter is to provide readers with concrete examples that show how the AMT might be used and what aspects are best explained through this model.

6.2 The Argumentum Model of Topics

Contemporary argumentation scholars tend to consider argument(ation) schemes as the structures that connect the premises to the standpoint or conclusion in a piece of real argumentation (see chapter 5). In Garssen's (2001: 81) words:

The link between the argument and the standpoint is appropriate if the acceptability of the premise is "transferred" to the standpoint by means of the "argument scheme" that is being used.

The distinction between locus (as *habitus*) and maxims (as premises of argumentation) we discussed in chapters 2 and 3 of this volume defines what the concept of "inferential principle of support" means. A locus from cause to effect, for example, can be the principle of support for a number of different arguments in different contexts. It can be employed with different maxims, for example: "if the cause is present, the effect will be present". The maxims work as premises of argumentation.

However, in real life argumentation, the acceptability of the standpoint does not exclusively depend on the locus and on the maxims. A basic tenet of the AMT is that the acceptability of the standpoint depends not only on an inferential principle but also on how the argument is anchored in the context and, in particular, to the premises shared by the interlocutors. In other words, we must consider whether maxims are, in reality, correctly applied in specific domains. For example, a maxim like "if the cause is present, the effect will be present" is not enough to make an invalid argument, such as the following, valid:

"*It will be cold and windy tomorrow; because my car is green".

In fact, “my car is green” is not a cause that can support the standpoint “it will be cold and windy tomorrow”. The cause-effect relation is acceptable *in abstracto*; but its implementation in this example is not. This simple example shows that we need a careful consideration of the manner in which loci and maxims are applied when constructing arguments. As previously pointed out by other authors (see for example Ennis, 1982; Freeman, 1995; see also section 6.3 in this chapter), some premises that are necessary in argumentation represent the arguer’s *common knowledge* or shared value or perception of reality.

Therefore, the AMT neatly distinguishes between premises, as maxims, which represent the logical principles of support of arguments, and premises that reflect the arguers’ knowledge, worldviews and cultural expectations. For this reason, this model revisits the distinction proposed by the pragma-dialectical approach between procedural and material starting points in the opening stage of an argumentative discussion.² The AMT distinguishes between a *procedural-inferential* component of the inferential configuration of an argument, which includes the inferential connection (maxim) that is activated; and a *material-contextual* component, which guarantees the applicability of the maxim to the actual situation considered in the argument³.

Inferential-procedural and material-contextual components are then combined within the inferential configuration of a single argumentation (Rigotti 2006, Rigotti and Greco Morasso 2010), as we will show in the following sections. We will first discuss the type of premises that constitute the inferential-procedural starting point; then we will focus on the types of premises that constitute the material-contextual starting point. As we proceed, we will make clear what concepts we adopt and reformulate from the preceding tradition and how the AMT is different from this tradition.

6.2.1 The Procedural Component

With regards to the procedural component, the AMT distinguishes three levels in the reconstruction of the inferential configuration of each single argument.

First level. The first level is the *locus*, as the source from which arguments are taken: “unde argumenta ducuntur”, following Cicero (see chapter 2), or, according to the medieval tradition (see chapter 3), the *habitus*. The *habitus* is seen as an “ontological”⁴ relation on

² In this work, we consider “starting point” as a synonym of “premise”.

³ Both the procedural-inferential and the material-contextual component contribute to the inferential configuration. However, the procedural-inferential component specifies the *habitus* and maxim that activates inference in argumentation; this is why we call it procedural-*inferential*.

⁴ We have discussed the use of the term *ontology* in the AMT in Rigotti and Greco Morasso (2010). For the present purposes, it is worth recalling some aspects of that discussion. In philosophy, the concept of *ontology* was originally used to approach questions concerning what entities exist or at what conditions they can be said to exist, and how such entities can be regrouped and organized hierarchically. When we use this term within the AMT, we build on the following three notions. First, the concept of ontology of *social reality*, as defined by John Searle (1995), meaning a network of (institutionalized) commitments that create specific interaction

which a given argument is based. Consider the relationship between definiendum and definitum, the cause-effect relationship, the analogy (comparability) relationship, and so on. The loci-habitudines are evoked by the names of the loci themselves: one speaks for example of the *locus ex auctoritate*, or of the *locus ab oppositis*, and so on, nowadays translated into the expression “argument from” (from authority, from opposition) in English. As shown in chapter 3 (figures 3-1 and 3-2), seeing loci as *habitudines* simplifies the conceptual system of loci considerably. In fact, *habitudines* have two poles (for example, cause and effect), whereby each locus-habitus can be read from two directions (for example: from cause to effect and from effect to cause). In the AMT, we adopt the notion of *habitus* to substantiate the concept of locus.

Second level. The locus is not sufficient to explain how arguments work at the level of their inferential configuration. For this reason, the AMT also adopts the notion of *maxim* (introduced by Boethius, see chapter 2) from the tradition. Each locus has a series of corresponding maxims; each of them create a subclass of possible arguments. For example, the locus from the final cause (see Rigotti 2008) presents a series of possible maxims. We will only mention three of them as an example:

1. If a certain goal is to be achieved, it is reasonable to act in order to reach it.
2. If no means are available, the goal cannot be achieved.
3. If a certain behaviour is not oriented towards a goal, properties that are normally attributed to human actions (such as responsibility, merit, guilt and so on) cannot be attributed.

To give a different example, in chapter 1 we considered Aristotle’s *topos* (locus) based on *time*, and, more specifically, *duration*. The same locus is then illustrated by Boethius, who reformulates Aristotle’s interpretation and specifies a maxim of this locus: “The more permanent a good is, the more it is worthy of choice”. Therefore, according to Boethius, “Rule by a king lasts longer than rule by a consul, in case both are good; but a good that lasts longer is better than one which lasts a short time; therefore, rule by a king is better than rule by a consul” (see the discussion in chapter 2, section 2.2.3.2). This argumentation contains its maximal proposition, that is, its Topic, which is ‘Goods that last a longer time are of more worth than those which last a short time’” (translation adapted from Stump

fields (see Rigotti and Rocci 2006). Second, ontology as it is understood in computer sciences, i.e. a formal representation of a set of concepts and their relationships. Third, the notion of ontology entailed by linguistic semantics (Jackendoff 1983, 1990), which we deem particularly relevant for the study of argumentation. In fact, when dealing, for instance, with the problem of reference, natural language semantics needs to postulate an ontology of some sort. The study of referential expressions shows that language(s) seem to require very specific “ontological presuppositions” (Jackendoff 1983) or “metaphysical assumptions” (Bach 1981:79). For instance, natural languages force us to recognize things such as events, to set them apart from states, and cut even finer distinctions between different types of events (Vendler 1957; Bach 1981). Early linguistic contributions such as Whorf (1997 [1956]) had seen this basic common-sense ontology as eminently culture-specific, but most contemporary semanticists would maintain with Bach (1981) that at the level of the most basic ‘world furnishing’ we are interested in a common-sense ontology that is inter-culturally shared and is primarily bound to our common experience of the world.

1978: 46-47). We could recognize that we can reason from time and duration – when we establish, for example, that a job position should be preferred over another because the former is more stable (more durable); or, give an example from a different domain, that one should not choose laminate but solid hardwood flooring when refurbishing your house, because the latter maintains its value over time.⁵

Third level. In every inferential configuration, the maxim activates a *logical form*⁶, such as the modus ponens, the modus tollens or the logical disjunction. For example, the maxim “if the cause is present, the effect will be present” activates the logical form of modus ponens:⁷ “if the cause is present, the effect will be present; and the cause is present; therefore, the effect will be present”.

If we now read the locus from cause to effect in the opposite direction of the *habitus* (i.e. from effect to cause), we will obtain a questionable maxim “if the effect is present, the cause will be present”. This activates the logical form of false modus ponens, which is usual in symptomatic argumentation: “if the effect is present, the cause will be present; and the effect is present; therefore, the cause will be present”. Symptomatic arguments, which are very common in all forms of explanation (for example, in the formulation of medical diagnoses), start from the connection between an effect and its (possible) cause. The relation between effect and cause is normally not necessary, since the same effect might be produced by different causes. Yet, ideally, what a good symptomatic argument should do is to identify the most probable (ideally the unique) cause for a given effect (see the discussion on Whately in chapter 5, section 5.1.3).⁸

Another maxim pertaining to the same locus, “if the effect is not present, the cause will not be present” activates the logical form of modus tollens: “if the effect is not present, the cause will not be present; and the effect is not present; therefore, the cause will not be present”. Moreover, if the locus from immediate opposites is instantiated and p and q are

⁵ A different example based on the locus from time and related to frequency, has been discussed in Cigada and Greco Morasso (2014).

⁶ The terms adopted by logicians to define the concept of logical form vary considerably; Layman (2002: 20 ff.) uses the term “argument form”, Haack (1978: 201), Barth and Krabbe (1982: 156), as well as Hughes and Cresswell (1996: 25) and Epstein (2001: 196) use the term “rule” (e.g.: rule of modus ponens).

⁷ Cf. Braet (2005: 66): “The topical principles from the *Rhetoric* [by Aristotle] will be regarded as the core of a modern argumentation scheme”.

⁸ In the typology proposed by pragma-dialecticians, symptomatic argumentation is considered one of the argument schemes. Instead, we prefer to reserve this label for the logical form of an argument scheme and not to the name of a locus. In fact, not just one locus, but many loci could be used symptomatically – i.e., establishing a false modus ponens. For example, the locus from the *material cause* could be used with the logical form of a modus ponens if we reason as follows: “This scarf is very warm and soft *because* it is cashmere”. In this case, we have the following valid syllogism: “Garments made of cashmere are very warm and soft; this scarf is made of cashmere; therefore, this scarf is very warm and soft”. Yet the same locus could be used symptomatically if we say: “This scarf is very warm and soft. It *must be* cashmere”. Speaking of logical forms, this latter case is a false modus ponens, because we know that “Garments made of cashmere are very warm and soft; this scarf is very warm and soft”; and, logically, we cannot validly conclude that “this scarf is made of cashmere”. In fact, it could be a synthetic scarf made of a very innovative hi-tech soft and warm material. Note that the ability to infer the cause from the effect also depends on the level of experience a person has in a given domain – by which he or she can exclude other possible causes for the same effect.

immediate opposites, the following maxim arises: “if one opposite is the case, the other opposite is not”. This maxim activates the logical form of an exclusive disjunction.

6.2.2 The Material Component and its Intertwining with the Procedural Component

The three levels described in section 6.2.1 represent the procedural component of the inferential configuration of an argument. Yet, according to the AMT, the procedural component is not sufficient for a complete reconstruction of argument schemes. In fact, argument schemes account for the relation between arguments used in real-life discussions and the standpoints they support; therefore, beyond the procedural starting point now reconstructed, we also have to shed some light on what we call the *contextual-material* starting points or premises (Rigotti and Greco 2006; Rigotti and Greco Morasso 2009, 2010). These are necessary to give a full picture of the inferential process.⁹

We will consider an example based on the argument scheme from analogy (based on the locus from analogy, in AMT terms), as analyzed by van Eemeren and Grootendorst (1992), van Eemeren, Grootendorst and Snoeck Henkemans (2002: 99) and van Eemeren, Houtlosser and Snoeck Henkemans (2007: 138). The argument scheme goes as follows:

1. Y is true of X
2. Because Y is true of Z
3. And Z is comparable to X

This argument scheme builds on the analogy of two comparable entities (X and Z), which is assumed as a premise. This allows us to draw the conclusion that a property (Y) inhering in one of the two comparable entities (Z) should also inhere in the other one (X). The whole inference from the premises to the conclusion is comprised by this representation of the argument scheme. An argument scheme, in fact, is expected to make the whole mechanism explicit that connects the premises to the standpoint. We claim that this type of analysis is helpful but not completely satisfactory as a means to understand what the real force of the argument is based on. Let us apply this analysis to an actual argument in order to show how an AMT-based analysis would account for all levels of the inferential configuration of the scheme while, at the same time, allowing us to focus on the connection to its material starting points. Consider the following very ordinary argumentation:

A: Should we travel by train or by car?

B: Remember the traffic jams on New Year’s Eve? And today is our national holiday!

⁹ On this point, one might refer to the discussion on Aristotle’s notion of “argumentatively relevant fact” in chapter 1, section 1.2.1; and the assignment of a locus in Abelard’s conception, chapter 3 of this volume.

Following the abovementioned pragma-dialectical characterization of the argument scheme, we have a standpoint supported by two coordinate arguments (more on this aspect can be found in section 6.6):

1 It might be true of this evening (our national holiday) that there will be traffic jams.

1.1a Because the fact that there were traffic jams was true for New Year's Eve.

1.1b And the national holiday is comparable to New Year's Eve

Now, it will emerge from our presentation that all elements put forward in the pragma-dialectical approach are considered within the AMT; moreover, the AMT explicitly includes further information that allows us to identify how the argument supports that specific standpoint. To start with the procedural starting point, the three levels concerned may be summarized as follows:

- First level: Locus from analogy
- Second level - maxim: If something has been true for a case of the same *functional genus* (Walton and Macagno 2009: 158) as X, it may be true for X;
- Third level - logical form of modus ponens: If something was true for a case of the same functional genus as X, this may be true for X; now, the presence of traffic jams was true for a case that belongs to the same functional genus as the national holiday; therefore it may also be true for the national holiday (i.e. for tonight).

The logical form that we just sketched at the first level is inferentially valid if all premises are true. However, the truth of the second (minor) premise in the logical form is not derivable from the maxim; it must be derived from outside. This is why we claim that a complete reconstruction of the inferential configuration of an argument must also include material-contextual starting points. In other words, for the truth of the minor premise to be ascertained, some backing is necessary taken from the interlocutors' common ground. This backing is necessary in order to exhaustively represent the inferential configuration of a real argument, since the maxim, in order to actually work, needs to be applied to an appropriate situation (Rigotti and Greco Morasso 2010).

The pragma-dialectical account, as shown above, identifies a necessary requirement that must be met in order to arrive at a complete description of an argument scheme: the national holiday and New Year's Eve must actually be considered comparable circumstances. However, the comparability needs further backing. Following Walton and Macagno (2009: 158), we might say that, in our case, both celebrations are part of "a common functional genus"—that of "great celebrations", in which people treat themselves with day off and

go on a trip somewhere.¹⁰ This functional genus must be present as a premise of the argument; this premise is an assumption based on the discussants' shared knowledge of the two considered celebrations. In terms of Walton (2001), we could speak of a *plausible* premise, whereby plausibility is defined as “a body of knowledge shared by language users concerning what typically happens in certain kinds of stereotypical situations” (Walton, 2001: 93). Generally speaking, plausible premises are typically part of the material starting point. In this connection, we propose to reconsider the Aristotelian notion of *endoxon* (Rigotti 2006, 2008; Tardini 1997, plur. *endoxa*):

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) (*Topics* 100b21).

In the AMT interpretation, an endoxon is a general premise that is accepted by the relevant public in a specific argumentative situation. Although *endoxon* is an argumentative notion introduced by Aristotle, the preceding tradition of topics *de facto* did not include it in the analysis of loci¹¹: this is one of the aspects in which the AMT model, although relying on concepts elaborated in the previous tradition, proposes a new conceptual system to analyze arguments. The endoxon is also a major premise in the material-contextual component, but it differs from the abstract principle expressed by the maxim.

Participants to an argumentative discussion must agree upon the material starting points in order to resolve their difference of opinion. In the case proposed above, it is up to them to accept the two celebrations as equivalents. As for material starting points, one must add to the general premise represented by the endoxon also a factual premise: “there were traffic jams on New Year’s Eve”. Following Toulmin, we call this premise of factual nature *datum*. From the logical point of view, the conjunction of the endoxon with the datum (in a categorial syllogism) leads us to the conclusion that “the fact that there were traffic jams holds for a circumstance that belongs to the same functional genus as the national holiday”.

Material-contextual component	Inferential-procedural component
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¹⁰ In relation to analogy, semantic analysis (see chapter 7, section 7.4) is of use for defining the connected notions of *comparability* and *functional genus*. That two entities are comparable, in fact, cannot be mechanically established. The property of comparability holds only if it focuses on a *relevant* dimension of the concerned property. For example, in this case, the two celebrations are not claimed to have the same meaning; they are comparable as to the behaviours they provoke. Or, to draw an example from a different domain, we might say that a Federal State could be compared to a family only because member States, like family members, are expected to help each other; yet we would not expect that, in a family-like manner, member States grow old and die.

¹¹ As discussed in chapter 3 (section 3.5.4), Abelard’s notion of *assignatio loci* (assignment of the locus) could be read as a hint towards a close consideration of the material-contextual component of real-life argumentation. However, Abelard does not develop his intuition enough to interpret it univocally.

The national holiday and New Year’s Eve belong to the same functional genus of “big celebrations”, in which people take a day off, and more people go on a trip somewhere than on a regular day.	
There were traffic jams on New Year’s Eve.	If something was the case for a circumstance of the same functional genus as X, this might be the case for X
<i>Therefore</i> , the fact that there were traffic jams holds for a circumstance of the same functional genus as the national holiday	The fact that there were traffic jams holds for a circumstance of the same functional genus as the national holiday
	<i>Therefore</i> , there may be traffic jams tonight (on the national holiday)

Table 6-1: Material-contextual and inferential-procedural component of the New Year’s Eve-national holiday analogy argument

Table 6-1 wraps up the material-contextual and the inferential-procedural components illustrated so far. It is evident that the two components have one premise in common: the conclusion in the material-contextual component is “used” as a minor premise in the inferential-procedural component. This is where the two component intersect. Figure 6-1 (taken from Rigotti and Greco Morasso 2010) better visualizes this intersection.

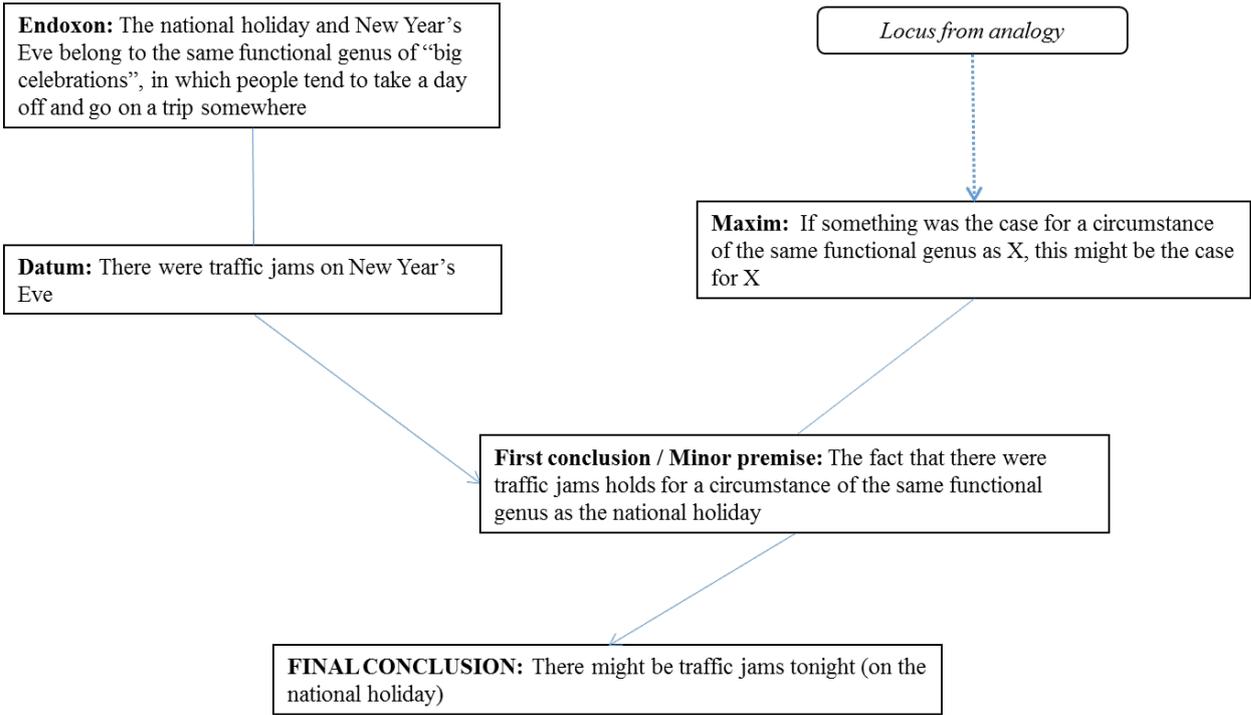


Figure 6-1: AMT’s synergic representation of the New Year’s Eve-national holiday analogy argument¹²

¹² This is the representation that we propose for the complete reconstruction of argument schemes. With respect to Rigotti and Greco Morasso (2010) and other earlier publications, the representation has been simplified from a graphical viewpoint, though it maintains all the same core concepts that the AMT has introduced.

Some graphical notes might be of use to understand this representation. First, as stated earlier, the Y structure graphically represents the intersection of the two syllogistic structures; as based, respectively, on the material-contextual and on the procedural-inferential components. This point of intersection is crucial in the perspective of the AMT: in fact, it represents the junction between the material and the procedural starting points and shows how different types of premises are combined in real argumentation. The locus is presented, in a separate box, although it is the source of the argument and it is not directly part of the inferential configuration of it. The dotted arrow connecting locus and maxim means that this specific maxim is one among the possible maxims associated to the locus (see figure 6-1).

As for the other connections between the different boxes, note that maxim and minor premise are connected by a line (not an arrow); this line means logical conjunction (*and*), namely, that these two premises should be taken together – as in a syllogistic structure of reasoning. Together, they lead to the final conclusion. The arrow pointing at the final conclusion means “therefore” and is meant to signal inference.

The same applies to the left-hand part of the diagram, i.e. to the syllogistic structure that starts from the material-contextual premises. Endoxon and datum are associated by a plain line meaning that they need to be taken together to infer the “first conclusion”; the arrow pointing at the first conclusion means “therefore” and is meant to signal inference.

6.2.3 The AMT reconstruction and the evaluation of argument schemes

In the perspective of an analyst who wants to reconstruct the inferential configuration of a standpoint + argument, we suggest to first proceed by eliciting the locus. The first question to be asked would thus be: “what is the basis on which the argument supports the standpoint”? is it analogy, final cause, material cause, or something else? (see chapter 7 for a list of loci). Once the locus has been identified, the analyst will reconstruct the specific maxim that specifically works as *Schlussregel* (to use the term introduced by Kienpointner 1992, see chapter 5 section 5.3) in that concrete case. Because different maxims are associated to one and the same locus, it is possible that the analyst will find a recurrent maxim namely one that is widely used; or that the analyst will find a maxim that is very rare.¹³ The analyst will also place the standpoint in the box named “final conclusion”: the standpoint, in fact, by definition, is the endpoint of the inference, because it is the dubious statement that must be proven through argumentation.

Once this is done, the analyst will reconstruct the minor premise as the missing link between the maxim (major premise in the syllogistic structure) and the final conclusion. Having

¹³ As we will further argue in chapter 7, by distinguishing loci and maxims, the AMT allows us to keep in mind a non-excessive number of loci, whilst at the same time allowing for a nuanced reconstruction of specific maxims, which outnumber the loci. The reconstruction of maxims is left to the analyst and depends on concrete examples.

reconstructed the right-hand part of the diagram, the analyst will now turn to the material-contextual premises. He or she will reconstruct the endoxon and datum that are necessary to bring to the first conclusion (which coincides with the minor premise on the right-hand side, see figure 6-1). The endoxon is a general premise (major premise), whilst the datum is a piece of specific evidence¹⁴.

The quasi-Y structure diagram of the inferential configuration of an argument scheme as proposed by the AMT is analytical but not evaluative. This means that an argument is analysed as it is, including its possible faults. However, an evaluative phase should always follow the analysis of inferential configurations. Christopher Guerra (2008) has shown that each node of the inferential configuration as represented in the AMT is possibly subject to specific critical questions¹⁵. An analyst might discuss the validity of a maxim (see Rigotti 2008 for an example; more on this in chapter 7); or discuss how much an endoxon is shared by the relevant audience; or evaluate whether what is presented as a “datum” actually is a piece of evidence in the relevant context. Thanks to the explicit distinction between the material and the procedural component, we may also establish whether the possible faults of an argumentative move depend on the use of an invalid maxim or on a false, incorrect or partial anchoring to the arguers’ material starting points (endoxon and datum).¹⁶

6.3 The AMT and other reconstructions of the inferential configuration of arguments

We will now compare the theoretical proposal represented by the AMT to other existing approaches to argument schemes. The approaches discussed in this section have been already presented in chapter 5, as concerns their general features. In this chapter, we will only discuss how other proposals for a reconstruction of the inferential configuration of arguments compare to the AMT. In general, our claim is that the AMT is both more explicit and more complete in identifying the inferential configuration of arguments (see Rigotti and Greco Morasso 2010) and in the reconstruction of implicit premises (see the discussion in Bigi and Greco Morasso 2012).

¹⁴ This practical procedure for reconstructing the inferential configuration of arguments should only be taken as a heuristic suggestion, as other procedures are possible.

¹⁵ In the examples presented in chapter 8, we will complement the inferential analysis with an evaluation of the inferential configuration. This kind of evaluation does not cover a whole argumentative discussion, as argument schemes and loci are relative to the argumentation stage/opening stage of an argumentative discussion only.

¹⁶ Greco Morasso and Morasso (2014) have shown that attaching critical questions to the different nodes of the AMT representation can, in their view, give a more systematic and complete account of what critical questions need to be asked for each argument scheme.

6.3.1 Toulmin's model

The well-known “Toulmin model” is open to different interpretations, as it may be interpreted either as a tool to describe the argumentation structure of a speech/text or as a means to analyze the *internal structure* of a single argumentation (see chapter 5). However, the latter interpretation seems more appropriate (Hitchcock 2003: 69); in fact, Toulmin sets out to propose a model that explains how “one’s assertion in response to a challenge” may be justified (ibid., see the discussion in chapter 5, section 5.2.1).

If this interpretation is correct, what aspects of the Toulmin’s model can be considered equivalent to the concepts elaborated within the AMT? First, we have assumed the concept of *datum* as a factual premise of argumentation. The datum in the AMT is a factual and specific premise; in this sense, it is interpreted in the same way as Toulmin’s model. However, the AMT interprets data as part of a whole syllogistic structure related to the material starting points of argumentation; in this perspective, a datum is a minor premise that, if associated with an endoxon, permits us to get to a first conclusion that will then be exploited in the inferential-procedural component of argumentation (see section 6.2.2). This way of looking at and inserting data into a syllogistic structure is more than a minor revision of Toulmin’s proposal. In fact, by shedding light on the material component of arguments, the AMT gives a more comprehensive interpretation of how data contribute to support standpoints (claims).

Second, one might want to draw an equivalence between Toulmin’s warrant and the concept of *maxim*, or inferential rule, which comes from the tradition and which we have discussed in the previous section as an important component of the AMT reconstruction of the inferential configuration of arguments. In fact, Toulmin, declares that warrants are general patterns, “certifying the soundness of all arguments of the appropriate type” (Toulmin 1958: 100), while Toulmin et al. (1984: 199) use warrants as the defining criterion for the classification of arguments. Also, Toulmin clearly distinguishes warrants and backing, as noted by Pinto (2006: 129), attributing a “*normative and action-guiding force or function*” to warrants (ibid., emphasis in the original), which would bring them close to the abstract nature of inferential rules, as maxims are. However, the analysis proposed by Hitchcock (2003) shows that the concept of warrant by Toulmin is not to be interpreted as an (implicit) premise of argumentation but as an *inference-licence*. Inference-licences are not necessarily premises of argumentation; but they can potentially be retrieved from the mind of the arguer (ibid.). The interpretation of warrants, anyways, is the subject of an open debate in contemporary argumentation theory (see for example the contributions on this topic in Hitchcock and Verheij 2006; see also the interpretation by Kienpointner of warrants as *Schlussregeln*, as discussed in chapter 5, section 5.3). As a consequence, the equivalence between warrant and maxim is controversial at best.¹⁷

¹⁷ For this reason, we avoid the use of the term *warrant* in the AMT model and keep the ancient *maxim*, which more directly indicates the meaning that we intend to convey. In Rigotti and Greco Morasso (2010), our interpretation of warrants followed Kienpointner’s (1992) analysis more closely; therefore, we said that it was

Finally, the dialogical dimension, which is so important in the Toulmin model, is not absent from the AMT: in fact, an endoxon and a datum will be effective as far as they are *shared by the addressees* (i.e. what may be called the audience of argumentation). In other words, endoxon and datum derive their appropriateness from a dialogical principle, as they are effective insofar as they are accepted by the addressees (see Bigi and Greco Morasso 2012; see also the discussion in Greco 2016). At the same time, however, as announced in the Preface to this volume, the AMT deliberately renounces to explain the dialogic dynamics of argumentation – for example, the fact that arguments might have rebuttals. This is because, as said, the AMT focuses on single arguments and does not cover the whole argumentative interaction.

6.3.2 Kienpointner’s *Alltagslogik*

As discussed in chapter 5, Manfred Kienpointner (1992) highlights and reinterprets the relation between loci and argument schemes; in this sense, his contribution is one of the most closely comparable to the AMT. In particular, Kienpointner (1997, but see also the discussion in chapter 5) focuses on a heuristic reading of topics and proposes its integration not only in the ancient status theory, but also in several modern techniques of argument invention (debate theory, encyclopedic systems, creativity techniques). We will take an example of Kienpointner’s analysis, considering his reconstruction of the inferential configuration of the argument scheme from the whole to the parts (Kienpointner 1992: 274).

In table 6-2, we reproduce Kienpointner’s interpretation.¹⁸ The left column includes the argument scheme; the right column provides an example.

Scheme from the whole to the parts	
<i>What is asserted of the whole, is asserted of the parts too</i>	<i>If the countries of the third world¹⁹ are generally very poor, their inhabitants are generally very poor too</i>
X [poverty] is asserted of the whole	[These countries are generally very poor]
Therefore: X is asserted of the parts	Therefore: their inhabitants are generally very poor

Table 6-2: Reconstruction of Kienpointner’s account of the inferential configuration of arguments

As clearly emerges from this example, Kienpointner explicitly formulates rules (*Schlussregeln*), which can be considered as equivalent to maxims; in this case, we have “What is asserted of the whole, is asserted of the parts too” (see table 6-2). However, in our view, this reconstruction lacks a focus on what we call the material component. How do maxim inferentially support real arguments? If we take the example in table 6-2, we notice

possible to understand warrants as maxims. After careful review, we now feel that it is more adequate to highlight that there is a vivid debate on this topic in argumentation theory and informal logic. Such debate shows that the interpretation of the concept of warrant is not an easy task and that, probably, some ambiguity will remain. We would like to thank an anonymous reviewer for raising this point.

¹⁸ See Kienpointner (1992: 274) for the original table, which we have translated from German into English and adapted. This is the scheme that Kienpointner (ibid.) calls “descriptive”, as opposed to “normative”.

¹⁹ We keep this example as it is in the original even though the phrase “third world” has a negative connotation and should be avoided.

that this example is formulated hypothetically: “*If* the countries of the third world are generally very poor...” (our emphasis). In order to know whether countries of the third world are generally very poor or not, we need some extra-backing, which can only be provided by material-contextual premises: it is our knowledge of the economic and social situation in the so-called third world that permits us to get to the conclusion that “their inhabitants are generally very poor” (table 6-2). Without material-contextual premises (endoxon and datum), this argument would remain at a hypothetical level. This is why, in our view, a reconstruction of the inferential configuration of arguments cannot do without a careful reconstruction of the material-contextual premises and an explanation of how these are connected to the more abstract *Schlussregeln*.

6.3.3 Walton’s studies on argument schemes

As noted in chapter 5, Walton’s approach to argument schemes²⁰ has been systematized in Walton, Reed and Macagno (2008), including the integration of the graphical representation allowed by the argument visualization software Araucaria.²¹ Walton has also widely contributed to the study of different argument schemes through a series of publications that highlight the structure and use of such schemes in different domains, from science, to ethics, to juridical argumentation, and so on. In order to highlight the components that Walton and colleagues consider relevant to describe the inferential configuration of arguments, we will consider an example first discussed in Walton (1997: 210), then rephrased in Walton (2005: 54) and in Walton, Reed and Macagno (2008: 310); this example concerns appeals to expert opinion.

Argument(ation) scheme from expert opinion	
Major premise	E is an expert in subject domain S containing proposition A
Minor premise	E asserts that proposition A (in subject domain S) is true/false
Conclusion	A may be plausibly taken to be true/false

Table 6-3: Reconstruction of the argument(ation) scheme from expert opinion according to D. Walton (this version is taken from Walton (2005: 54).

Strictly speaking, the conclusion “A may be plausibly taken to be true/false” (table 6-3) does not logically follow from the premises explicitly indicated.²² On the basis of such premises, we can only conclude that “A, belonging to subject domain S, is asserted by an expert in this subject domain”. In order to get to the conclusion, one needs a more complex

²⁰ For reasons of uniformity, here we adopt the phrase “argument scheme”; Walton and colleagues, however, prefer “argumentation scheme”.

²¹ At the time of writing this book, Araucaria has been replaced by updated software applications (see the website of the Center for Argument Technology at the University of Dundee, UK: <http://www.arg-tech.org>, last visited November 2017); the main function of these applications being the reconstruction of argumentation schemes.

²² Note that the two premises presented in this reconstruction, i.e. major premise and minor premise, would correspond to endoxon and datum in AMT terms. It seems as if Walton’s (and colleagues’) approach privileges the material starting points of argument schemes. However, it does not explain how these premises are inferentially connected to the conclusion or standpoint.

inferential structure. In fact, the present reconstruction does not include an inferential connection (*maxim*, in our terminology) that can justify the whole reasoning: ‘‘If a proposition A is asserted to be true by an expert of the field to which A belongs, then A may plausibly be taken to be true’’. In general, in the Araucaria representations of the inferential configuration of real-life arguments provided in Walton, Reed and Macagno (2008), the material starting points tend to be present, while the maxim is often left unstated (see for example the argument scheme from verbal classification in Walton, Reed and Macagno 2008: 77; or the argument scheme from expert opinion in Walton, Reed and Macagno 2008: 262).

A different reconstruction, as discussed in Walton (2006: 285), presents a more complex situation. An argument is reproduced in table 6-4; this analysis, as presented in Walton (*ibid.*), might be considered a formulation of an argument; but it is not the analysis of its inferential configuration.

Argumentation scheme for the direct ad hominem argument
The respondent is a person of bad (defective) character
Therefore the respondent’s argument should not be accepted

Table 6-4: Walton’s representation of the argument(ation) scheme for the direct ad hominem argument (taken from Walton 2006: 285)

In fact, the representation in Table 6-4 only states the datum, whilst ignoring the maxim. The latter could be reconstructed as: ‘‘If an argument is used by a person of bad character, it should not be accepted’’. As a side note; this is a fallacious principle—a paramaxim, in Rigotti’s (2008) terms, or anyway a maxim that has some limitations. In fact, even a person with a defective character can advance a good (valid) argument. Within the AMT, the same move would be reconstructed as in Table 6-5.

	(PARA)MAXIM: If an argument is advanced by a person of bad (defective) character, it should not be accepted
PREMISE 1: X is a person of bad (defective) character	
PREMISE 2: Argument A has been advanced by X	
PROVISIONAL CONCLUSION: Argument A has been advanced by a person of bad (defective) character	
CONCLUSION: Argument A should not be accepted	

Table 6-5: Interpretation of Walton’s account of the argumentation scheme from expert opinion

The representation in table 6-5 is based on an ATM-like reconstruction, which allows making explicit all the components of the argument scheme. It also allows showing how the unacceptability of this argument depends on clear limits of the maxim (see section 6.2.3).

6.3.4 The Pragma-Dialectical approach to Argument Schemes

We have already considered some specific aspects of the AMT in relation to the pragma-dialectical view of argument schemes in chapter 5. However, it is worth briefly elaborating on the specific approach to the elicitation and representation of the inferential configuration of arguments. In previous works, in fact, we have already proved that the AMT can be profitably integrated into a pragma-dialectical framework of analysis (Rigotti and Palmieri 2010; Greco Morasso 2009, 2011). In particular we take into account van Eemeren and Grootendorst (1984), van Eemeren, Grootendorst and Snoeck Henkemans. (2002), Garssen (2001, 2009), and Van Eemeren, Houtlosser and Snoeck Henkemans (2007).

Going back to the example presented in section 6.2, concerning argumentation by analogy, we will now consider how the different components of argument schemes are treated in the pragma-dialectical account. In the pragma-dialectical perspective, the first level of the procedural component (or *locus*) in the AMT could be seen as associated with the *name* of the argument scheme itself. Pragma-dialecticians speak of symptomatic, analogical and causal relationships or relations (Garssen 2001: 92 ff, see chapter 5, section 5.7). Van Eemeren, Houtlosser and Snoeck Henkemans (2007: 138 ff.) focus on a series of sub-types of argument schemes, thereby suggesting that more specific loci can be identified within these three generic categories (see the discussion in chapter 5).

What we have called *maxim* in the AMT is not explicitly formulated in the general representation of the argument scheme in pragma-dialectics, albeit some maxims are discussed in the discursive description of the different subtypes of argument schemes (see for example van Eemeren, Houtlosser and Snoeck Henkemans 2007: 137 ff; Garssen 2009). As a matter of fact, maxims are specific argumentative principles at work in specific applications of argument schemes and, therefore, can only be identified within specific sub-types. For example, Garssen (2001: 92) states that there is a specific sub-type of argumentation from analogy based on the “principle of justice” (also called *normative analogy*, see the discussion in van Eemeren and Garssen 2014). Normative analogy includes cases such as the following:

“The employees in the administration department should get a salary raise because the sales persons in our team also got a salary raise” (van Eemeren & Garssen 2014: 50).

The principle at the basis of normative analogy is that “people who are in similar situations should be treated similarly” (Garssen 2001: 92); this principle corresponds to a maxim in the AMT account. However, the distinction between locus and maxim, which is clearly pushed to the forefront in the AMT, is not put in the foreground in pragma-dialectics. In our view, this blurs the possibility for a systematic and pragmatically usable categorization of argument schemes. In fact, it is the one-to-many relation of a locus to its maxims that makes the classification manageable in terms of number of loci and still flexible in terms of adding new maxims, insofar as these emerge in the analysis of argument schemes (see chapter 7, section 7.1 in particular).

Moreover, pragma-dialectics does not systematically distinguish the procedural-inferential and the material-contextual components. If we stay with the case of analogy, van Eemeren, Grootendorst and Snoeck Henkemans (2002: 99, see section 3) identify both a statement about the actual comparability of two entities “Z is comparable to X” (which is to be interpreted as an endoxon in AMT’s terms) and the attribution of a certain characteristic to the entity that is assumed as a comparison term “Because Y is true of Z” (a Datum in the AMT) as premises of the argument scheme. In pragma-dialectics, some of the premises that are included into argument schemes are sometimes of a material nature; but the fact that material-contextual premises are different in nature from those pertaining to the procedural component is not explicitly theorized. To put it in more general terms, we might say that the AMT can provide an exhaustive representation of the argument scheme that is partially kept implicit in the pragma-dialectical approach. In particular, the representation offered by the AMT has the advantage of requiring a precise identification of the maxim at work, as well as the advantage of making the intersection between the procedural and the material starting points explicit.

A further example might help understand how the AMT makes some aspects more explicit (and therefore easier to discuss and evaluate) within the inferential configuration of single arguments. In the example (inspired by ancient history) “Mauritanians cannot have arms. They do not have iron”, a pragma-dialectical reconstruction could be: “If there is no iron, there cannot be arms” (and the Mauritanians lack iron; therefore they cannot have arms)”. Now, the premise (“If there is no iron, there cannot be arms”) reconstructs a class that includes all cases in which the lack of iron hinders the production of arms (at any time, when iron is lacking, arms are lacking). However, this reconstruction does not specify the *reason* why the lack of iron should hinder the production of arms. Therefore, the argument-standpoint relation remains opaque. To solve to this problem, the AMT reconstructs the inferential configuration of the argument on the basis of the relation between the product and its material cause. This is evoked in all actual instances of this locus-habitus (iron/arms, milk/butter, chocolate/Sachertorte, flour/bread, etc.) where specific endoxa can be activated: “Arms are made of iron”, “Butter is a dairy product”, “Sachertorte is basically a chocolate cake”, “Bread is a product of flour”, etc.). More specifically, the AMT would split the premise “If there is no iron, there cannot be arms” into three parts: (1) a maxim, founded on the locus from the material cause: “if the material cause is not present, the product cannot be present”; and (2) a material starting point, stating that “Iron is necessary to make arms” (endoxon) and “The Mauritanians lack iron” (datum). This reconstruction explains what the force of the argument relies on more clearly. In fact, it is precisely from the lack of the necessary material cause (iron) that the argumentation supporting the Mauritanians’ lack of arms derives its force.

6.4 Discussion: Reasons for Adopting the AMT perspective

The overview of different contributions offered in section 6.3 as well as in chapter 5 has shown that, while many relevant aspects of argument schemes were considered in depth within argumentation theory research, the inner inferential structure of arguments still needed to be clarified and systematized. In fact, we have shown that other approaches propose representations that, in order to be consistent, need to be thoroughly integrated by including further premises – or making these premises explicit. However, including these integrations ultimately brings us to “translate” other authors’ approaches into representations that become very similar to the AMT.

We might say that the Y-shaped structure proposed by the AMT allows for making explicit and connecting some elements that had previously been indicated as relevant in the study of argument schemes. As figure 6-2 shows, some areas of conceptual overlapping can be identified but no previous models put all the elements together in such an interconnected and explicit way. There are also elements that are specific to the AMT (e.g. the endoxon and the first conclusion).

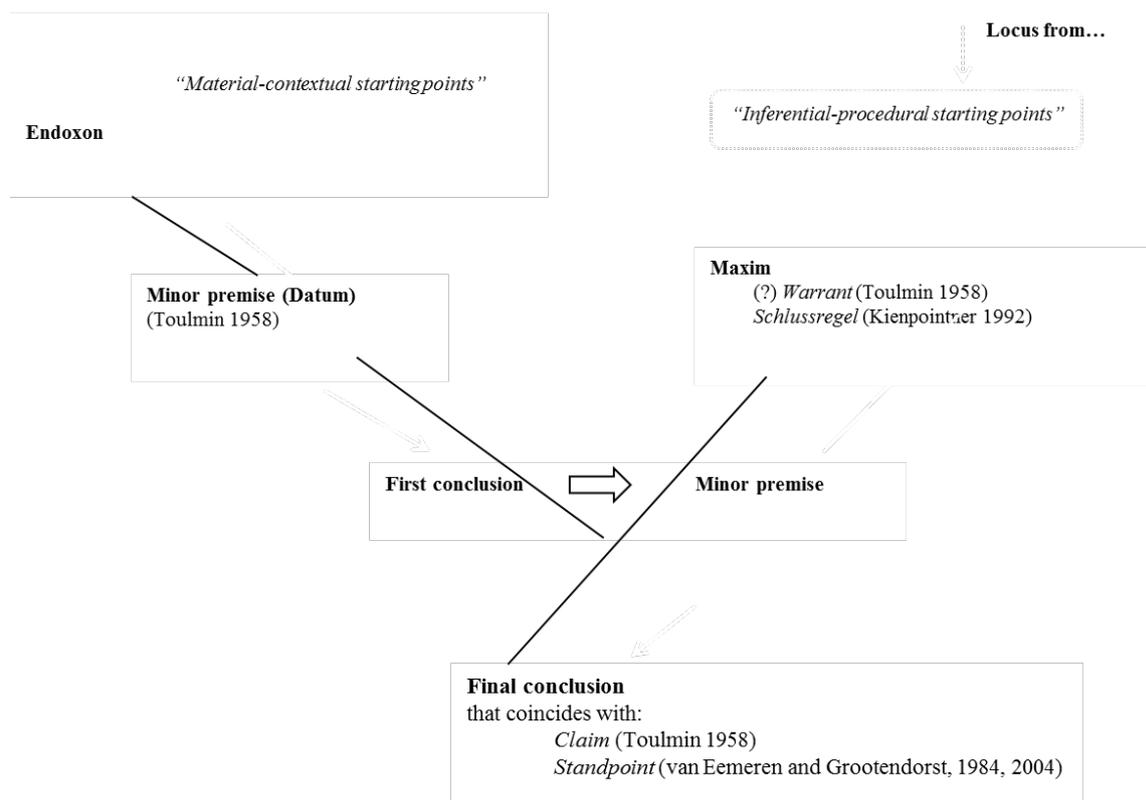


Figure 6-2: How the AMT allows to interconnect essential components of argument schemes (revised and adapted from Rigotti and Greco Morasso 2010: 508).

Now, it is the fact that the AMT offers a more explicit, systematic and complete way to represent the different components of the inferential configuration of single arguments (in comparison to other models) enough to argue for the adoption of this model? We believe that it is. In fact, any model that intends to show how arguments support a standpoint should account for the vital elements of these arguments; and show how they are interconnected from a logical viewpoint. Explicitness, systematicity, and consistency from a logical point of view and completeness are, therefore, important characteristics of a model for the inferential configuration of arguments.

In terms of the main specific advantages that the AMT offers in relation to other models of argument schemes, a defining trait of the model is the possibility to distinguish material-contextual and inferential-procedural starting points within the same argument scheme. The connection between procedural and material premises allows us to understand how premises of a different nature might work together, i.e. how they are interrelatedly present within the inferential configuration of an argument (a single argument-standpoint connection).

So far, the distinction and interrelation between inferential-procedural and material-contextual component was not so systematically accounted for. This distinction also paves the way for an understanding of how cognitive operations work in the context of a social interaction, such as an argumentative discussion is.²³ In this sense, the fact that the AMT makes two different lines of reasoning within one and the same inferential configuration explicit is not an unnecessary “duplication” or complication of the inferential configuration of a single argument. As shown in section 6.3, when the double nature of premises is not taken into account, there is always some missing link that does not allow us to fully understand how the standpoint is supported. The two lines within the inferential configuration of arguments are certainly interrelated but they are also distinguished. The opposition maxim-endoxon as general premises (“major premises”) of a single argument serves the purpose of explaining that, in order to accept an argument, an arguer will on the one hand recognize a general inferential principle, as something that can virtually be applied to all contexts. On the other hand, he or she will then connect this abstract principle to knowledge of a specific domain. Rigotti (2006) discusses a simple but interesting example that might be functional for this aspect. In a context of advertising, declaring “this butter is very good, because it is made of fresh Alpine milk” grounds the acceptability of the standpoint (“this butter is very good”) on its ingredient (fresh Alpine milk). To use the categories of Aristotle and the medieval scholars (chapters 1 and 3), this argument is based on the locus from material cause; in particular, the maxim at work is “if the material cause of a product has a certain quality, the product will have that quality”.²⁴ As such, this inferential-procedural principle can be applied to different domains (a piece of furniture can be said to be of good quality because it is made of oak wood; a blazer can be said to be of

²³ We owe this annotation to Anne-Nelly Perret-Clermont and Michèle Grossen.

²⁴ This maxim has some limitations because, of course, the material is not the only aspects that bears an influence on the product. This said, however, this principle can be accepted and is normally accepted in a variety of settings.

good quality because it is 100% wool, and so on). In order to accept the argument about the butter, however, the arguers also need to accept an endoxon that can be formulated as: “fresh Alpine milk is very good”. If this is not accepted, or if the arguers simply do not know why Alpine milk should be very good (for example, because they are not familiar with the Alps and their micro-climate), the acceptability of the standpoint is jeopardized. This does not depend on an inferential problem but on a problem of anchoring of the argument to the arguers’ shared premises and perceptions. To conclude, the distinction between procedural-inferential and material-contextual premises does not put the two branches of the Y structure at the same level. In fact, the procedural-inferential component is directly deriving from the locus and, in this sense, it is the overarching structure within the inferential configuration of an argument. However, the maxim in the inferential-procedural component needs to be instantiated in specific contextual-material starting points in order for it to work as a real-life argument.

Moreover, the elicitation of material-contextual premises also accounts for the context-dependence of arguments in argumentation (Rigotti 2006). In this sense, it offers a specific contribution to the study of contextualised argumentation in different domains. Endoxa and data are dialogic and contextual. For example, in their case-study analysis of a juridical text, Greco, Palmieri and Rigotti (2016) observe that the endoxon is the text of the law, while the datum is represented by the concrete case that a person is considering. In a different domain, Zampa (2017) notes how endoxa reveal news values shared by journalists in newsrooms. These are only two examples that show how an accurate reconstruction of arguments via the AMT allows us to enrich the study of argumentation in context. It shows how the same inferential principles (loci and maxims) are applied in different domains of communicative practice.

As pointed out by Bigi and Greco Morasso (2012), the distinction between procedural-inferential and material-contextual also helps in the reconstruction of implicit premises in argumentation. In fact, if an analyst starts from the inferential-procedural component (locus and maxim), he or she anticipates what is needed to “fill in the slots” of implicit premises of a material-contextual nature.²⁵ To put it in pragma-dialectical terms, as Bigi and Greco Morasso (2012) show, the quasi-Y structure that is typical of an AMT reconstruction guides the reconstruction of the *logical minimum* and the *pragmatic optimum* (van Eemeren and Grootendorst 1992) in argumentation. According to van Eemeren and Grootendorst (1992), the logical minimum “consists of the “if--then” sentence that has as its antecedent the explicit premise and as its consequent the conclusion of the explicit argument” (van Eemeren and Grootendorst, 1992: 64). The logical minimum is necessary but often not sufficient for the reconstruction of argumentation, because as such it is not informative.

²⁵ In a recent study, Andone and Greco (2018) have discussed the integration of an analysis based on the AMT in research on the pragma-dialectical concept of *argumentative patterns* (van Eemeren 2016), taking the example of European soft law (in particular, recommendations) as a case in point. Whilst this type of research has only just started, it is important to observe that an AMT perspective appears to be particularly important as concerns the reconstruction of implicit premises in argumentation.

Therefore, it is often necessary to add other premises that complement the logical minimum, though without attributing implicit premises to the arguers that they are not accountable for (cf. van Eemeren and Grootendorst 1992: 64-65). The material-contextual component – and especially the endoxon, which is often left implicit because it is supposedly shared by the interlocutors, can be used as a guide to understand the pragmatic optimum that is necessary to complement the if-then structure of the maxim.

In terms of evaluation, the AMT offers an added value in comparison to other models as well. As Garssen (2001: 91) remarks, argument schemes can be distinguished “because each scheme comes with different critical questions”. Walton, Reed and Macagno (2008: 3 and passim) also highlight the significance of critical questions to evaluate argument schemes. In this regard, the AMT can support the elicitation of the possible critical questions that are relevant for each node of the Y-structure (see Christopher Guerra 2008), specifying exactly to which node the validity problems of an argument are connected. For example, Greco Morasso and Morasso (2014) have shown that considering the AMT as a basis for the analysis permits to identify a new critical question for the argument scheme (locus) from expert opinion, which had not been considered in the previous literature. Also in this context, the distinction between procedural-inferential and material-contextual starting points might offer an important tool for the evaluation of arguments. In the case of a misunderstanding, or in the presence of a “mistake” by one of the contributors to a dialogue, an AMT reconstruction might help explain whether the problem that interlocutors are experiencing depends on an inferential (logical) aspect or on the fact that they do not share the same material-contextual premises. For example, Greco, Mehmeti and Perret-Clermont (2017) discuss a case of misunderstanding and disagreement between a teacher and her pupils within a pedagogical context; the analysis reveals that the difference of opinion could be solved if the endoxa implicitly adopted by the teacher and the students respectively would be made explicit. Similar results are discussed in Schär (2018) in relation to the analysis of misalignments in family conversations. Therefore, the AMT might offer a tool for the evaluation of arguments, both for an analysts who is interested in understanding why disagreement has emerged; and for parties within the discussion (for example, teachers, mediators and other professional facilitators of dialogue) who wish to solve disagreement in a reasonable fashion.

6.5 From arguments to argumentative discourse: the interaction of AMT analysis and argument structures

The fact that the AMT proposes the analysis of the inferential configuration of single arguments does not mean that the AMT cannot be applied as a more fine-grained tool to analyze complex argumentative structures, i.e. cases in which more than one argument is presented to support a standpoint. The different AMT reconstructions, in such cases, will be interconnected. In what follows, we will discuss how an AMT analysis is combined with argumentation structures.

In order to do so, we will need to briefly recall the notion of *argumentation structure* in the pragma-dialectical perspective. Pragma-dialectics is not the only approach that has considered argumentation structures (see Freeman 2011; see also the discussion in Snoeck Henkemans 2000, 2001). However, because in this book we primarily discuss the integration of the AMT within a general pragma-dialectical framework, we will discuss how the AMT analysis of the inferential configuration of arguments fits in this framework²⁶. In some parts of our reconstruction, we will refer to Palmieri (2014) for some of the considerations regarding how to interpret the combination of pragma-dialectics and the AMT. In fact, Palmieri (2014) has extensively dealt with the combination of the pragma-dialectical notion of argumentation structure and the AMT reconstructions of the inferential configuration of arguments²⁷.

6.5.1 Combination of the analysis of argument structures and AMT analysis of argument schemes

Four main types of argumentation structure have been distinguished in the pragma-dialectical account: *single argumentation* (composed by one single argument), *multiple argumentation*, *coordinative* (or *compound*), and *subordinative* (see van Eemeren et al 2002; van Eemeren and Snoeck Henkemans 2017).

To start with the simplest structure, *single argumentation* means that there is just one proposition expressed in support of the standpoint. In order to represent the argumentation structure of this single argument, we take inspiration from van Eemeren, Grootendorst and Snoeck Henkemans (2002: 63-73). A single argumentation is presented in figure 6-3:

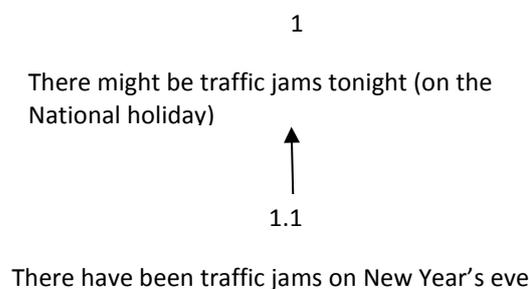


Figure 6-3: Argumentation structure in the case of a single dispute (adapted from Rigotti and Greco Morasso 2010)

²⁶ A complete discussion of the different approaches to argumentation structures is beyond the scope of the present chapter.

²⁷ Although Palmieri (2014) is the first important work that has dealt with the integration of argumentation structures and the AMT, we have finally taken a slightly different position on this topic, in specific as concerns coordinative argumentation. We are indebted to Corina Andone, Andrea Rocci and Rudi Palmieri for precious critical comments and discussion on this matter.

The standard representation in pragma-dialectics foresees that a standpoint is indicated on the top and is assigned a number. The argument supporting it is numbered by adding a decimal (1.1) and it is connected to the standpoint by an arrow. The arrow points to the standpoint because it is the argument that supports the standpoint; verbally, the meaning of this arrow might be “therefore”. However, argumentation is often *complex*, i.e. the protagonist expresses more than one proposition to defend his or her standpoint. Depending on how these propositions are related to each other, a complex argumentation can be *multiple*, *coordinative* or *subordinative*.

The principle regulating how to move from the argumentation structure to the Y-structure is that each arrow of the argumentation structure tends to correspond to a Y-structure diagram (see Rigotti and Palmieri 2010). Thus, as Palmieri (2014: 40) observes, “the single argumentation coincides with a Y-structure in which the explicit premise indicated in the analytic overview typically²⁸ assumes the function of *datum*”.

Multiple argumentation “consists of alternative defenses of the same standpoint, presented one after the other” (van Eemeren and Snoeck Henkemans 2017: 58). In other words, each argument put forward by an arguer constitutes an independent reason for the standpoint to be accepted, which means that each argument is potentially capable of justifying the standpoint independently from the other premises. Palmieri (2014: 38) makes the example of Mr. George, who puts forward two separate arguments to persuade his colleague that it is impossible to expand their pizza delivery business: “we lack capital” and “we will never obtain the legal permission from the local authorities”. Both 1.1 and 1.2 would, independently, provide a sufficient reason to prove that the business cannot be improved. In pragma-dialectics, each argument within multiple argumentation is independently linked to the standpoint (thus, there is one arrow for each argument). Arguments are numbered as follows: 1.1, 1.2, 1.3, and so on.

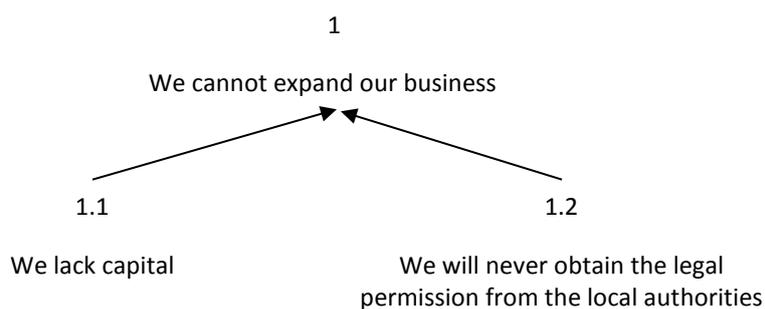


Figure 6-4: Argumentation structure of a multiple argumentation (example taken from Palmieri 2014: 38).

In *coordinative (compound) argumentation*, the propositions expressed by the arguer are, instead, interdependent, i.e. they justify the standpoint only if taken together. In van

²⁸ Note that “typically” does not mean “always”. In what follows, we will discuss the complex case of coordinative argumentation, to which this rule does not apply.

Eemeren and Snoeck Henkemans (2017: 59), coordinative argumentation is defined as “one single attempt at defending the standpoint that consists of a combination of arguments that must be taken together to constitute a conclusive defense”. A classic example of coordinative argumentation given by pragma-dialecticians (van Eemeren and Grootendorst 1992; Snoeck Henkemans 1997; van Eemeren, Grootendorst and Snoeck Henkemans 2002) could be represented as follows:

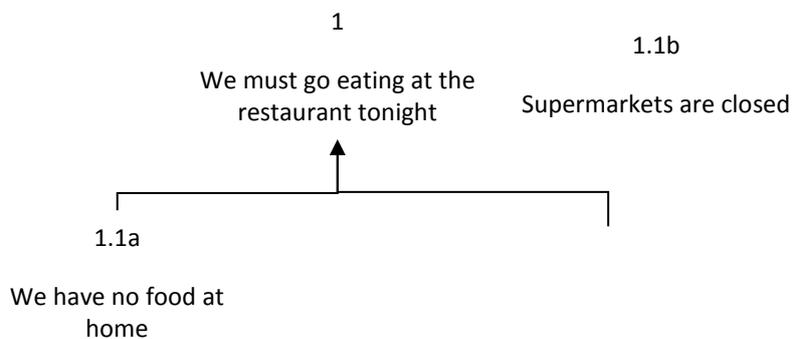


Figure 6-5: Compound argumentation (as presented in Palmieri 2014: 39, cf. also van Eemeren and Snoeck Henkemans 2017: 61 for the a recent pragma-dialectical presentation of this example).

The arguments that form a compound argumentation are linked by one arrow and are annotated by the adding a letter to the same number (1.1a, 1.1b, 1.1c and so on). This is meant to signal their interdependency.

Because of this emphasis on the fact that arguments in compound argumentation are “dependent on each other for the defense of the standpoint” (van Eemeren and Snoeck Henkemans 2017: 59), Palmieri (2014) proposes to consider compound argumentation as a special case of single argumentation in which more than one premise is made explicit. In his interpretation, 1.1a and 1.1b would represent *different premises within the same inferential configuration*; they would both be included within one AMT reconstruction.

In what follows, we will discuss and extend Palmieri’s interpretation. In a number of cases, his interpretation allows for a clarification of how arguments are “interdependent”: two compound arguments (1.1a and 1.1b) could be endoxon and datum within the same argument. For example, Palmieri (2014: 41) proposes a representation of the example in figure 6-5 in AMT terms that helps clarify how 1.1a and 1.1b are endoxon and datum of a *locus from alternatives*²⁹. This locus requires the inclusion of *all* alternatives to action A in order to justify the necessity of undertaking A (see figure 6-8):

²⁹ The locus from alternatives is described in chapter 7 of this volume, alongside with other loci in the AMT interpretation; see in particular section 7.2.2.2.

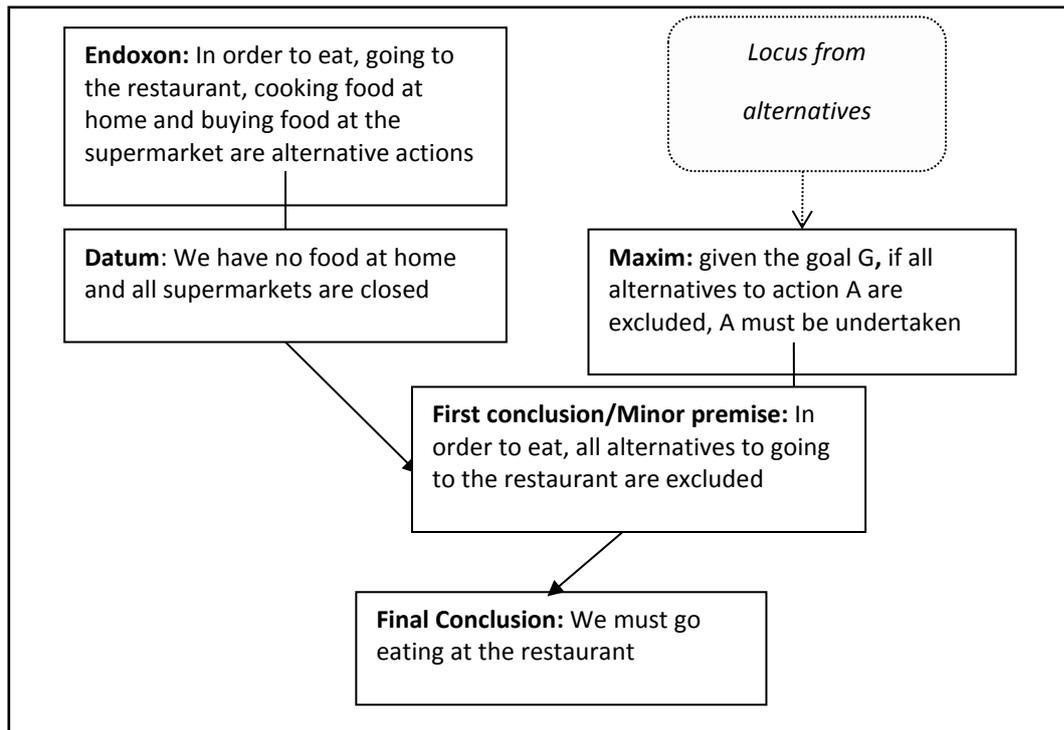


Figure 6-6: AMT analysis of an example of coordinative argumentation – the “restaurant” example (taken from Palmieri 2014: 41).

When it is the case that the different premises in coordinative argumentation are part of one argument scheme (based on one locus), the AMT reconstruction has explanatory potential in relation to the pragma-dialectical account, because it gives a more precise definition of the “interdependency of arguments” at an inferential level.

In other cases, different arguments seem to be different “cumulated” data to be used under one and the same locus and maxim (Palmieri 2014: 40). An example that would fall into the category of “cumulated data” in the AMT has been illustrated by van Eemeren and Snoeck Henkemans (2017: 59). The example is the following:

The dinner was organized perfectly, for the room was exactly the right size for the number of guests, the arrangement of tables was well thought out, and the service was excellent (van Eemeren and Snoeck Henkemans (2017: 59).

According to van Eemeren and Snoeck Henkemans (2017: 59), in such a case, the different arguments “complement each other [...], because each separate argument by itself is too weak to conclusively support the standpoint”. An AMT interpretation of this case would consider that:

- a. This argument is based on a *locus from definition* (see the typology of loci in chapter 7), because it intends to prove what it means for a dinner to be “organized perfectly”.

- b. The different components of coordinative argumentation (“the room was exactly the right size for the number of guests”, “the arrangement of the tables was well thought out”, and “the service was excellent”) represent different parts of the datum;
- c. This datum is associated with an endoxon that considers: “For a dinner to be organized perfectly, one needs a room that is exactly the right size for the number of guests, tables need to be arranged in a well thought out fashion, and the service must be excellent”.

Also in this case, thus, the interpretation proposed by Palmieri (2014) holds: the different components of coordinative argumentation are interdependent because they are actually premises that work under the same locus.

However, this is not always the case. Van Eemeren and Snoeck Henkemans (2017: 59) clearly say that “the arguments in coordinative argumentation can be dependent on each other *in several ways*” (our emphasis). This means that “interdependency” is a polysemous word in pragma-dialectics. We might distinguish two cases: an *inferential interpretation* and a *pragmatic interpretation* of coordinative argumentation. The inferential interpretation coincides with Palmieri’s (2014) proposal. The pragmatic interpretation takes into account that coordinative argumentation might also refer to the fact that different arguments, albeit independent from a point of view of the loci, are interrelated in the sense that they are all necessary for a successful defense of a standpoint. In fact, in this specific sense, coordinative arguments are interrelated not because they are part of one and the same argument scheme; but because, even though they might be based on completely different loci and maxims, *they all need to be used in a specific text or speech*. Andone and Greco (2018) discuss cases of recommendations written by the European Commission to persuade Member States of possible courses of action. In these cases, a frequently occurring argumentative pattern shows that the EU commission employs more than one argument to support Member States. These arguments are different in AMT terms (they are based on different loci, so obviously also on different maxims) but they are all pragmatically expected and necessary in that situation to successfully defend the standpoint, because the EU Commission needs to prove that they are not going against several different fundamental principles within the European treaties. This type of interdependency would not fit in Palmieri’s (2014) interpretation of coordinative argumentation, because it is a pragmatic and not an inferential interdependency.

To sum up, we might conclude that the notion of coordinative argumentation in pragma-dialectics covers two different interpretations and three sub-cases:

1. Inferential interpretation of coordinative argumentation.
 - a. Components of coordinative argumentation are an endoxon and datum of one and the same inferential configuration under the same locus (as in the example discussed by Greco, Palmieri and Rigotti 2016).

- b. Components of coordinative argumentation are part of a complex datum within one inferential configuration under the same locus (as in the example taken by van Eemeren and Snoeck Henkemans 2017: 59 and discussed above).
2. Pragmatic interpretation of coordinative argumentation.³⁰ Components of coordinative argumentation are actually different arguments, based on different loci and, thus, independent from an inferential viewpoint; and yet they work together pragmatically to defend a specific standpoint in a specific argumentative interaction (as in the example discussed by Andone and Greco 2018).

Finally, as the name suggests, *subordinative argumentation* occurs when the proposition supporting the standpoint is in turn supported by another proposition, in which “arguments are given for arguments” (van Eemeren and Snoeck Henkemans 2017: 59). In other words, the argument supporting the standpoint becomes a sub-standpoint that is justified by another argument. As Palmieri (2014: 39) puts it, “subordinative argumentation is typically adopted when the argument justifying the standpoint does not constitute a shared premise”; thus one needs to provide further arguments to support that premise.³¹ The representation of subordinative argumentation, thus, amounts to a chain of single argumentation structures for which a decimal is added at each level. In the example below (introduced by Palmieri 2014: 39-40), subordinative argumentation is the relation between sub-argument 1.2.1 and argument 1.2.

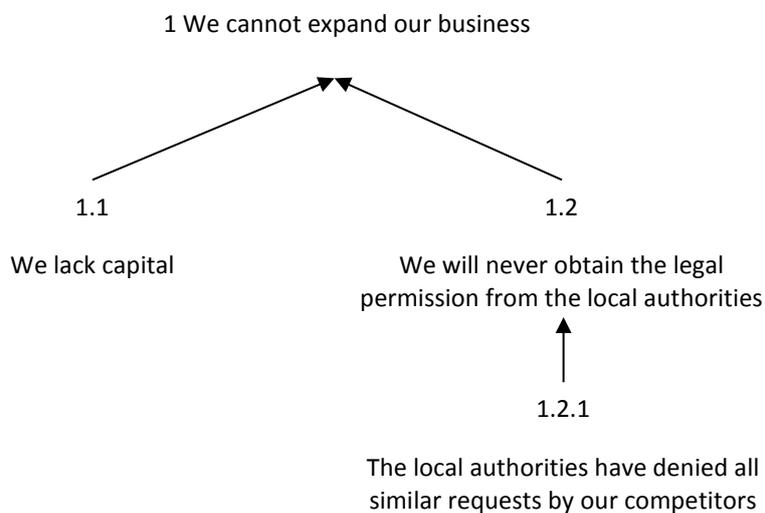


Figure 6-7: Subordinative argumentation (both example and representation are taken from Palmieri 2014: 40).

³⁰ We observe that, whilst the inferential interpretation of coordinative argumentation gives a clear-cut criterion to identify coordinative arguments, the pragmatic interpretation leaves the door open for a possible overlapping between coordinative and multiple argumentation.

³¹ Chains of subordinative argumentation are not endless. Ultimately, they must reach a shared premise if argumentation needs to be persuasive. Our view (see Rigotti and Greco 2005) is that some extreme or ultimate level of common evidence is guaranteed by the common nature of human interlocutors.

In practice, this final example also shows that different structures might be combined; in this case, for example, we have both multiple argumentation (1.1 and 1.2) and subordinative argumentation (1.2.1 to 1.2, see Palmieri 2014: 40).

From an AMT perspective, “in subordinative argumentation, the Y-structure of the sub-argument produces a conclusion which coincides with the datum or the endoxon of the “main” Y-structure” (Palmieri 2014: 41).³² When an endoxon or a datum is supported by further argumentation, strictly speaking, one cannot say that they are shared among the interlocutors. For this reason, Rigotti and Palmieri (2010) and Palmieri (2014) have introduced the labels “Justified Endoxon (JE)” and “Justified Datum (JD)”, to speak of endoxon and datum in case they are supported by subordinative argumentation. In this book, for reasons of clarity in the representation, we will not use these labels. However, in principle, it is correct to note that the supported endoxa and data are supported precisely because the arguer feels that they cannot be taken for granted.

6.5.2 From argument structures to argument schemes: a case in point

We are now going to illustrate the combination of AMT and argumentative structures by means of an example of reconstruction. The purpose of this example is illustrative, as we aim to show how this combination works and what the AMT adds to the analysis of complex argumentation.

The case is taken from an initiative in public communication, which has to do with the labor domain and, in particular, with the work-life balance as a measure for employees’ satisfaction, productivity and prevention of health problems. We concentrate on an initiative in Switzerland but, obviously, the relevance of this kind of initiative goes well beyond the Swiss national boundaries,³³ because it touches upon innovation (information technologies and how they impact on the organization of work), social and health issues (employees’ motivation, health, work-life balance), and sustainability (reduction of carbon footprints, traffic, etc.).

On 9 June 2015, a group of Swiss companies signed a programmatic document on the Work Smart initiative³⁴ during their first meeting in Bern. The objectives of the Work Smart initiative were promoting flexible and mobile working and exchanging on these practices

³² It is possible, at a speculative level, that the maxim is also supported by subordinative argumentation; but in practice, this will not be a frequent case.

³³ To mention but a case for comparison, see the document about smart working in the UK government as part of the Civil Service reform programme: <http://www.flexibility.co.uk/downloads/TW3-Guide-to-SmartWorking-summary3mb.pdf> (last visited November 2017).

³⁴ Their website in German and French is available here: <http://work-smart-initiative.ch> (last visited August 2018). A brief story of the foundation of this initiative has been published on the website of the SRG SSR, i.e. the Swiss public radio and television, which was one of the founding companies: <http://www.srgssr.ch/fr/srg-ssr/emploi-et-formation/work-smart/>. This is the press release announcing the initiative, dating back to 9th June 2015: http://work-smart-initiative.ch/media/36139/150609_work_smart_medienmitteilung_fr.pdf (last visited November 2017).

with other companies. The founding companies were both public (CFF, Swisscom, La Poste and SSR) and private (La Mobilière, Microsoft Suisse and Witzig The Office Company). At the moment of writing this book, 138 Swiss companies have co-signed this document.

Work Smart is characterized by a goal that typically requires complex argumentation: the companies are trying to reach different groups of addressees at the same time and persuade them that mobility and flexibility of work is an important and advantageous practice. In particular, the website is mainly aimed at company managers and meant to encourage them to sign the document. Because mobility and flexibility are objectives of Work Smart, we can assume that it is not a state of affairs that is already present in Switzerland; at least, not at the level that the companies promoting the initiative would like to implement.

Argumentation in this case is best described as a complex (multiple) argumentation structure, as it involves different arguments. We will now turn to the main arguments, presented on the following page of the website: <http://work-smart-initiative.ch/fr/travailler-de-fa%C3%A7on-flexible/fonctionnement-de-work-smart/>. Because this is the official webpage of the promoters of the Work Smart initiative, their standpoint is prominent; the difference of opinion with potential adversaries is left implicit and the voices of the adversaries (their standpoint and arguments) are not represented.

This page is organized as a hypertext; which, as we will show, is important because both the introduction page and the linked pages contribute to the argumentation structure. On the entry page, “Profiter du changement en tant qu'employeur”,³⁵ i.e. “profit from this change as an employer”, is written as a title, in large characters. Six boxes (which vary every time the page is refreshed) are positioned on the right, as in figure 6-8; most of them represent advantages of smart working³⁶ and most of them can be interpreted as arguments supporting the standpoint “employers can profit from smart working”. Clicking on each of the boxes, the user is redirected to an in-depth page. Each in-depth page has a long title, which more often than not includes further subordinative argumentation; it also includes further discussion on the specific advantage mentioned in the title.³⁷

³⁵ We have been looking primarily at the French version of the website; the translation into English is ours.

³⁶ Each box is also associated with a stylized graphical symbol. In our analysis, however, we only consider verbal argumentation and exclude multimodal elements. In this case, though important, these graphical elements do not seem indispensable for reconstructing the main line of argumentation. They support arguments but they are not necessary to complete the verbal component.

³⁷ In this reconstruction, we consider the title of the in-depth linked pages but we skip the text that contains further subordinative argumentation. Our goal is not to analyse all the aspects of the Work Smart initiative but to illustrate how the AMT helps in the reconstruction of complex argumentation.

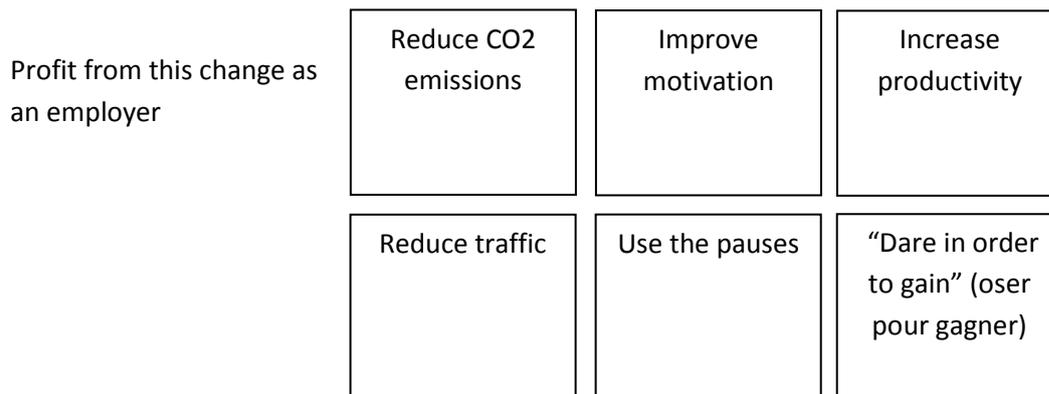


Figure 6-8: Sketched graphical representation of a possible configuration of the entry page discussing the advantages of the Work Smart initiative. This representation does not faithfully reproduce *all* the contents and graphics of the website but it shows how contents are structured.

In our analysis, we will consider “employers can profit from smart working” as the main standpoint. In table 6-6, we reconstruct the main arguments including both the short advantages mentioned on the entry pages and the long titles mentioned in the in-depth pages.

Not all the contents in the boxes are to be reconstructed as arguments in support of standpoint 1. In fact, some of them (such as “use the pauses”) are rather instructions for managers about how to best organize smart working. Therefore, our reconstruction is based on van Eemeren and Grootendorst (2004) principles of transformation. Only argumentative parts are included, i.e. those parts of the discourse or text “that play a role in the process of resolving a difference of opinion” (van Eemeren and Grootendorst 2004: 107). In this sense, we have *deleted* information that was unimportant in view of our argumentative analysis. Besides, we have adopted a *substitution transformation*, replacing formulation that were “disturbingly imprecise” into formulations with a clear meaning in relation to the argumentative function of utterances (van Eemeren and Grootendorst 2004: 109); also, consider that we have translated the original French text into English. Finally, we have used *permutation*, because the text has been “rearranged in such a way that an optimal picture is given of the resolution process” (van Eemeren and Grootendorst 2004: 109). Specifically, sometimes subordinative arguments were found on the entry page and the arguments they supported were found on the in-depth linked page. However, sometimes it was the other way round. In table 6-6, we have permuted the order of arguments where necessary in order to make the argumentative structure as visible as possible.

1 Employers can profit from smart working

1.1 Flexible work in general and a home office in particular help save the environment

1.1.1 they permit the reduction of CO2 emissions

1.2 More flexibility and collaboration increase employees’ motivation

- 1.2.1 Because increasing productivity in everyday work and family life increases satisfaction and employees' involvement
 - 1.2.1.1 because the work-life balance (in normal working conditions) is becoming more difficult over time
- 1.3 Increase productivity with 12%
 - 1.3.1 because employees can work according to their biorhythm
 - 1.3.2 12% has been proved by studies
- 1.4 Obtain advantages from the reduction of traffic at peak hours
 - 1.4.1 because employees will be more relaxed at work
 - 1.4.2 Because a transportation system that is efficient and not surcharged is important for the Swiss economic place
 - 1.4.3 Because we will not need to spend extra money to extend public service
 - 1.4.3.1 Because its use will be more homogeneous
- 1.5 Because in this way you take a risk in order to gain
 - 1.5.1 because you actively participate in making a new job world emerge

Table 6-6: Reconstruction of the argumentative structure of the Work Smart initiative webpage

The reconstruction in table 6-6 shows that the Work Smart initiative website is a case of multiple argumentation.³⁸ As the website is a public form of communication by definition, this multiple structure is at least partly explained by the fact that employers (managers) are not really the only addressees, despite the fact that they are explicitly mentioned in the standpoint. This website can also be read by employees who want to learn about smart working; it can also be read by policy-makers. Whilst some arguments might appeal to employees (e.g. 1.2.1), others (e.g. 1.1.1 and 1.4) might be more appealing to policy makers. Finally, some arguments such as 1.3 (increase in productivity) or 1.5 (personal “gain”) are clearly aimed at employers and managers.

In what follows, we will provide some examples selected from table 6-6 of how the same structure can be reconstructed with the help of the AMT and what this adds. To start with, we concentrate on arguments 1.1 and 1.1.1.

³⁸ Even though the different arguments certainly have a cumulative effect and the presence of different arguments helps better support the standpoint, we believe that in this case they are to be seen as independent arguments rather than as a coordinative structure; the reasons being that the different arguments probably have different addressees and that they are completely independent at an inferential level. Also, the graphical structure of the webpage – different boxes that appear in different combinations every time the webpage is refreshed – seems to indicate that the authors of the webpage think of the different boxes as independent arguments that can be combined in different ways and that can be read as a whole or taking into account only different partial sub-sets.

In AMT terms, argument 1.1 is connected to the standpoint based on a locus from final cause (means-end argumentation); in fact, smart working is seen as an instrument that allows employers to help save the environment (figure 6-9).

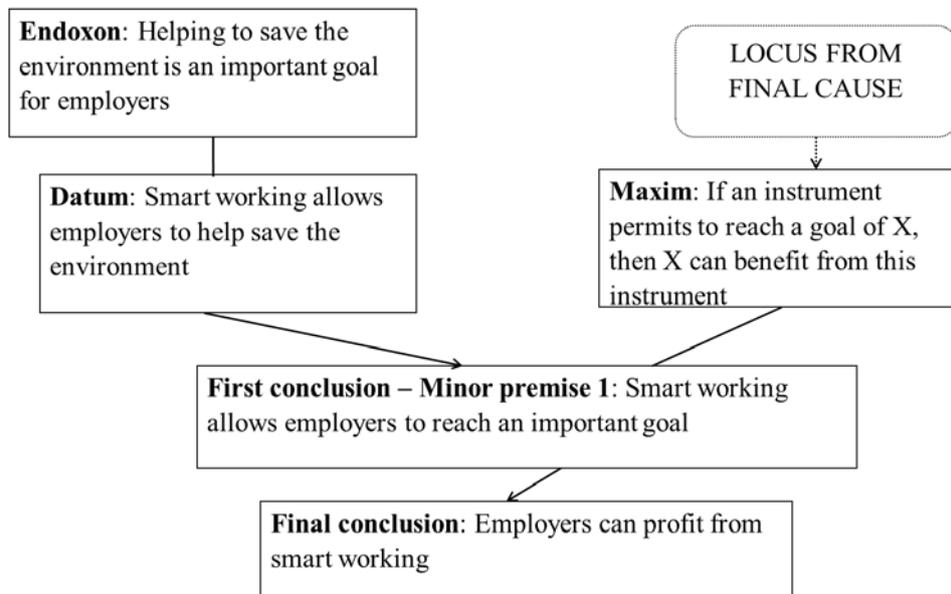


Figure 6-9: AMT reconstruction of argument 1.1

The inferential configuration shows that helping to save the environment is a goal of employers that is taken from granted: perhaps, this is because it is considered a goal that any employer should have. Argument 1.1.1, subordinate to 1.1, supports the datum instead (see figure 6-10): the fact that smart working and home office allow to reduce CO2 emissions” is presented as factual evidence, which supports the datum “smart working allows employers to help save the environment”. Figure 6-10 represents the AMT reconstruction of argument 1.1.1, which is based on a locus from cause to effect.

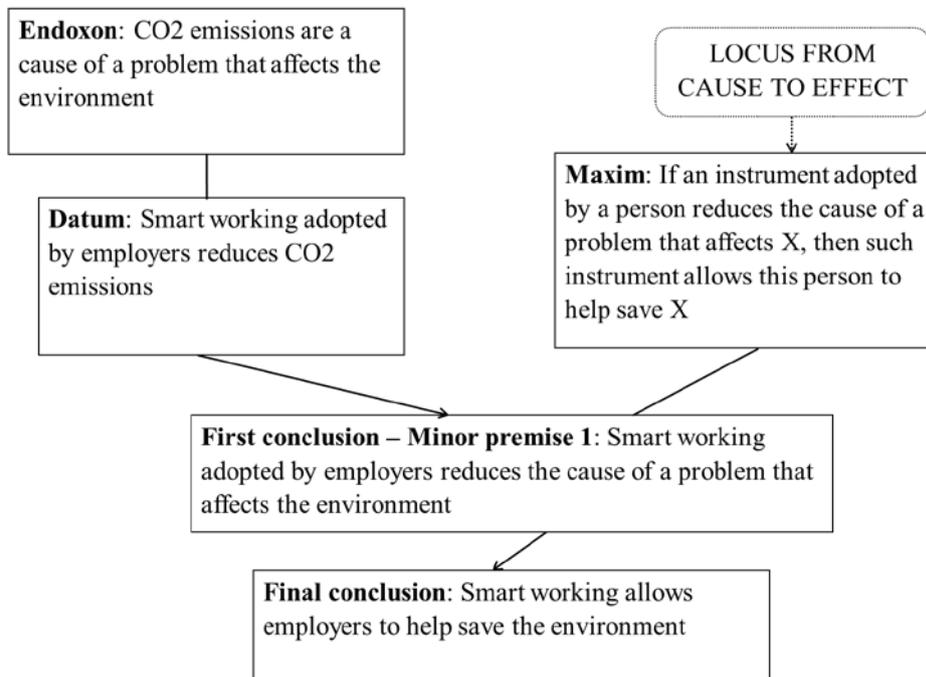


Figure 6-10: AMT reconstruction of argument 1.1.1

In order to show how the two inferential configurations are connected, we present them together in figure 6-11. The graphical representation reveals that the subordinative argument supports the datum.

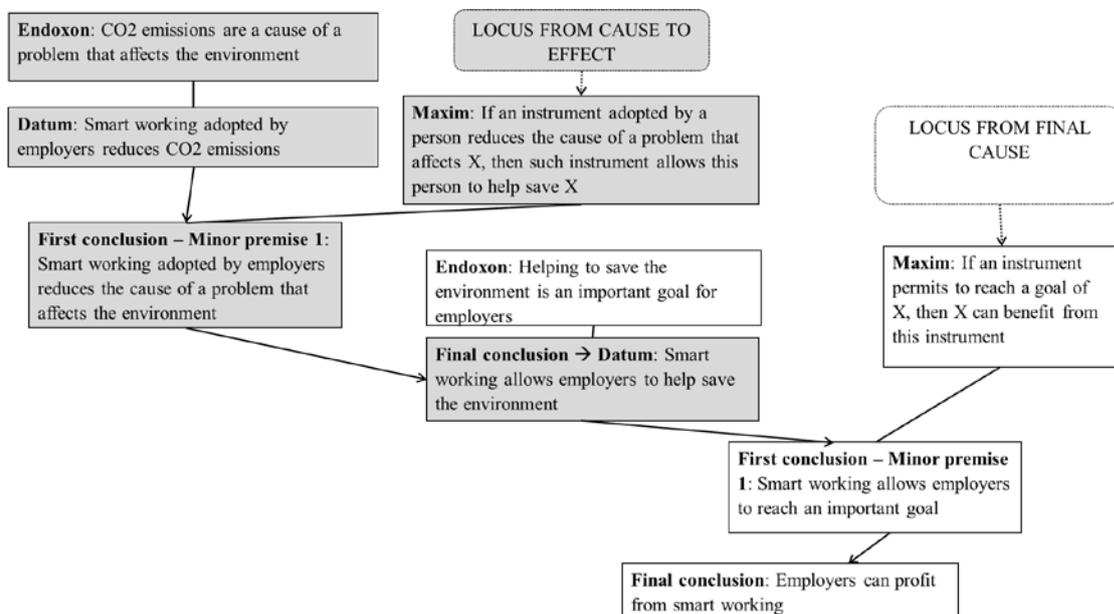


Figure 6-11: AMT reconstruction and combination of arguments 1.1 and 1.1.1. The use of white and grey background colors is meant to highlight how the two inferential configurations are combined.

For reasons of space, we will not go through all the AMT reconstructions of the different arguments. We note, however, that in this example it is often the case that the different multiple arguments are based on loci from the final cause. This can be explained by using

the concept of *stock issues* (see for example Ziegelmüller and Kay 1997: 172ff): when a new policy is introduced (in this case, smart working), the first problem to be tackled is why the policy is important, i.e. what “ill” it cures. The locus from final cause responds to the “ill” as well as to the “cure” stock issues (Ziegelmüller and Kay 1997), because it shows how smart working is a cure to reach an important goal, thus solving existing problems (too much traffic at peak hours, employees who are stressed out and not so much productive, etc.).

To mention but a couple of examples, argument 1.3 is identical to 1.1 as for the inferential-procedural component; what is different is only the material-contextual component (endoxon and datum, see figure 6-12). The same holds for argument 1.4 (see figure 6-13).

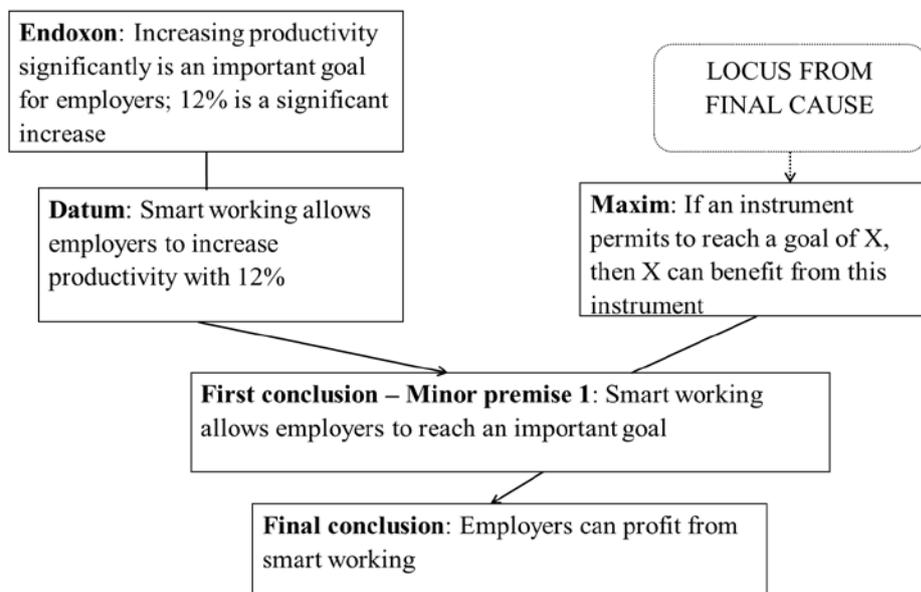


Figure 6-12: AMT reconstruction of argument 1.3

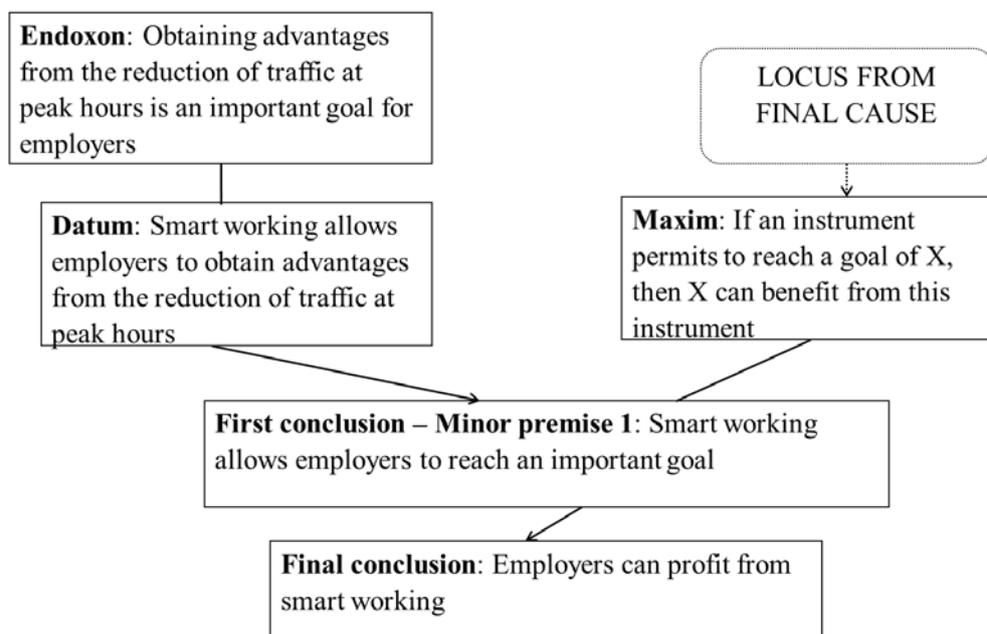


Figure 6-13: AMT reconstruction of argument 1.4

Note that in both 1.3 and 1.4, as in 1.1 above, it is the datum that is further supported by subordinative argumentation (see table 6-6; the graphical representations of the inferential configurations are omitted for reasons of space).

In the case of argument 1.3, we note that subordinative arguments 1.3.1 and 1.3.2 target different aspects of the datum. 1.3.1 further supports the reason why productivity can be increased by giving the cause (locus from cause to effect): “because employees can work according to their biorhythm” and, therefore, they are more productive. Argument 1.3.2 provides some backing for the figure of a 12% increase in productivity by means of an argument based on the locus from authority: “12% has been proved by studies”.³⁹ In this case, thus, the linguistic proposition that represents the datum, i.e. “smart working allows to increase productivity with 12%” is split: argument 1.3.1 gives a cause of the increase in productivity, whilst argument 1.3.2 gives backing to the 12% figure.

The analysis of the Work Smart initiative in this section is an example of how the AMT helps reconstruct the inferential configuration of single argumentations and interconnect them. It shows that the locus from final cause is used, regularly repeating the procedural-inferential component; arguments based on final cause are different because of the material-contextual component. In the next section, we will discuss the implications of our analysis.

³⁹ Note that the word “studies” is vague here and therefore it potentially includes manipulation. In fact, readers cannot check the validity of this argument from authority, not knowing what studies the authors of the website are referring to. For a more detailed discussion on vagueness in argumentation from expert opinion, see Greco Morasso and Morasso (2014).

6.5.3 Final remarks

To conclude, the AMT analysis in this case has shown some regularities. First, an emphasis on smart working as a cure for a problem, i.e. as an instrument to reach an important goal; therefore, the locus from final cause is often used. Second, it is often the data and not the endoxa that are supported in the argumentation on the Work Smart website. This is important because it tells us about what the speaker assume the burden of proof (and what they avoid to assume, see the discussion in Andone and Greco 2018). In the case of the Work Smart website, the endoxa, i.e. the employers' goals, are always taken for granted; it is to be noted, here, that the Work Smart initiative has been initiated by a group of employers – not of employees – and perhaps they do not feel an urge to further discuss employers' goals because they consider them common knowledge.

Third, and no less important, the AMT reconstruction shows that sometimes subordinative arguments point at different aspects of the proposition that constitutes the datum, if the datum is complex or needs further backing (as in the case of argument 1.3).

This reconstruction has the purposes of illustrating how the AMT is used in complex argumentation. With this example, we have focused on multiple and subordinative argumentation. The case of coordinative argumentation was not found in this example but has been discussed in section 6.5.1. In conclusion, we have shown how the AMT analysis, although it is focused on the inferential configuration of each single argument, can be inserted into the analysis of argumentation structures. This has different functions:

- 1 It permits the identification of the locus and the specific maxim, i.e. to specify what is the principle of support of the different arguments that are included into the argumentation structure.
- 2 As discussed in Greco (2016), reconstructing endoxa allows for the identification of the specific addressees to which the arguments appeal. Some of the goals identified in the endoxa in this illustrative case, for example, may have a hold on policy makers as well as on employers.
- 3 In the case of a coordinative argumentation, in some cases (see section 6.5.1), it shows how the different arguments in coordinative argumentation might be part of one reconstruction of the inferential configuration of an argument. In these cases, the AMT specifies if the different arguments in coordinative argumentation are endoxa or data and how they are connected.
- 4 In the case of subordinative argumentation, the AMT level of analysis better illuminates the structure of inference in argumentation. In fact, instead of just speaking of “subordinative argumentation, in which “arguments are given for arguments” (van Eemeren and Snoeck-Henkemans 2017: 59), the AMT permits the identification of *what exactly* a subordinative argument is supporting: for example, it allows us to say whether a subordinative argument is supporting an endoxon or a datum (or part of them, as in

the case of argument 1.3 discussed above).⁴⁰ In this sense, the connection between subordinative arguments is identified in a more precise way; this makes it possible to understand what aspects arguers feel need further backing.

References

- Andone, C., and Greco, S. (2018). Evading the burden of proof in European Union soft law instruments: the case of Commission recommendations. *International Journal for the Semiotics of Law* 31 (1): 79–99.
- Bach, E. (1981). On time, tense and aspects: An essay in English metaphysics. In P. Cole (Ed.), *Radical pragmatics* (pp. 63-81). New York: Academic Press.
- Barth, E.M., and Krabbe, E.C.W. (1982). *From axiom to dialogue. A philosophical study of logics and argumentation*. Berlin/New York: De Gruyter.
- Bigi, S., and Greco Morasso, S. (2012). Keywords, frames and the reconstruction of material starting points in argumentation. *Journal of Pragmatics* 44 (10): 1135-1149.
- Braet, A. C. (2005). The common topic in Aristotle's Rhetoric: Precursor of the argumentation scheme. *Argumentation* 2005 (19): 65-83.
- Christopher Guerra, S. (2008). Themen, Thesen und Argumente zur Position des Italienischen in der viersprachigen Schweiz. *Studies in Communication Sciences* 8 (1): 135-159.
- Cigada, S., and Greco Morasso, S. (2014). Good reasons for good manners. An argumentative foundation of courtesy in Giovanni Della Casa's Galateo. In G. Gobber and A. Rocci (Eds.), *Language, reason and education. Studies in honor of Eddo Rigotti* (pp. 51-70). Bern: Peter Lang.
- Eemeren, F.H., van (2016). Identifying argumentative patterns: A vital step in the development of pragma-dialectics. *Argumentation* 30 (1):1-23.
- Eemeren, F. H, van, and Grootendorst, R. (1984). *Speech acts in argumentative discussions*. Dordrecht: Foris.
- Eemeren, F. H, van, and Grootendorst, R. (1992). *Argumentation, communication and fallacies: A pragma-dialectical perspective*. Hillsdale, NJ: Lawrence Erlbaum.
- Eemeren, F. H, van, and Grootendorst, R. (2004). *A systematic theory of argumentation: The pragma-dialectical approach*. Cambridge: Cambridge University Press.
- Eemeren, F.H., van, and Garssen, B. (2009). Problems of argumentation: An introduction. In van Eemeren, F. H., and Garssen. B. (Eds.). *Pondering on problems of argumentation. Twenty essays on theoretical issues* (pp. xi–xxi). New York: Springer.
- Eemeren, F. H., van, and Garssen, B. (2014). Argumentation by analogy in stereotypical argumentative patterns. In H. J. Ribero (Ed.), *Systematic approaches to argument by analogy*, pp. 41-56. Cham: Springer.

⁴⁰ At a theoretical level, it is also possible that a maxim is supported by subordinative argumentation. In our experience of analysing real-life argumentation, this happens less frequently.

- Eemeren, F. H. van, Grootendorst, R., and Snoeck-Henkemans, A. F. (2002). *Argumentation: Analysis, Evaluation, Presentation*. Mahwah (NJ)/London: Erlbaum.
- Eemeren, F.H., van, and P. Houtlosser. (2002). Strategic maneuvering in argumentative discourse: Maintaining a delicate balance. In F. H. van Eemeren, and P. Houtlosser (Eds.), *Dialectic and Rhetoric: The warp and woof of argumentation analysis*, pp. 131–159. Dordrecht: Kluwer Academic.
- Eemeren, F. H. van, Houtlosser, P., and Snoeck-Henkemans, A. F. (2007). *Argumentative indicators in discourse: A pragma-dialectical study*. New York: Springer.
- Eemeren, F. H. van, and Snoeck-Henkemans, A. F. (2017). *Argumentation: Analysis and evaluation (2nd edition)*. New York: Routledge.
- Ennis, R. H., (1982). Identifying implicit assumptions. *Synthese* 51: 61-86.
- Epstein, R.L. (2001). *Predicate logic*. Belmont, CA: Wadsworth Thomson Learning.
- Freeman, J. B. (1995). The appeal to popularity and presumption by common knowledge. In: Hansen, V.H., Pinto, R.C. (Eds.), *Fallacies: Classical and Contemporary Readings*. pp. 263—273. University Park: The Pennsylvania State University Press.
- Freeman, J. B. (2011). *Argument structure: Representation and theory*. New York: Springer.
- Garsen, B. (2001). Argument schemes. In F. H. Van Eemeren (Ed.), *Crucial concepts in argumentation theory* (pp. 81-99). Amsterdam: Sic Sat.
- Garsen, B. (2009). Comparing the incomparable: Figurative analogies in a dialectical testing procedure. In: F. H. van Eemeren and B. Garssen (Eds.), *Pondering on problems of argumentation: Twenty essays on theoretical issues* (pp. 133-140). New York: Springer.
- Greco Morasso, S. (2009). *Argumentative and other communicative strategies of the mediation practice*. PhD Dissertation, Università della Svizzera italiana, Lugano, Switzerland.
- Greco Morasso, S. (2011). *Argumentation in dispute mediation: A reasonable way to handle conflict*. Amsterdam/Philadelphia: John Benjamins.
- Greco, S. (2016). Analysing multiple addressivity in research interviews: A methodological suggestion from argumentation theory. *Learning, Culture, and Social Interaction* 8: 61-74.
- Greco Morasso, S., and Morasso, C. (2014). Argumentation from expert opinion in science journalism: The case of Eureka's Fight Club. In T. Herman and S. Oswald (Eds.), *Rhétorique et cognition/ Rhetoric and cognition* (pp. 185-213). Bern: Peter Lang.
- Greco, S., Mehmeti, T., and Perret-Clermont, A.-N. (2017). Do adult-children dialogical interactions leave space for a full development of argumentation? *Journal of Argumentation in Context* 6 (2): 193–219.
- Greco, S., Palmieri, R., and Rigotti, E. (2016). Institutional argumentation and conflict prevention: The case of the Swiss Federal Data Protection and Information Commissioner. *Journal of Pragmatics* 105: 39-53.
- Haack, S. (1978). *Philosophy of logics*. Cambridge: Cambridge University Press.
- Hitchcock, D. (2003). Toulmin's warrants. In F. H. van Eemeren, J. Anthony Blair, C. A. Willard and A. F. Snoeck Henkemans (Eds.), *Anyone who has a view: Theoretical contributions to the study of argumentation* (pp. 69-82). Dordrecht: Kluwer.

- Hitchcock, D., and Verheij, B. (2006) (Eds.). *Arguing on the Toulmin model: New essays in argument analysis and evaluation*. Dordrecht: Springer.
- Hughes, G.E., and Cresswell, M.J. (1996). *A new introduction to modal logic*. London/ New York: Routledge.
- Jackendoff, R. (1983). *Semantics and cognition*. Cambridge: MIT Press.
- Jackendoff, R. (1990). *Semantic structures*. Cambridge: MIT Press.
- Kienpointner, M. (1992). *Alltagslogik: Struktur Und Funktion von Argumentationsmustern*. Stuttgart-Bad Cannstatt: Frommann-Holzboog.
- Kienpointer, M. (1997). On the art of finding arguments. What ancient and modern masters of invention have to tell us about the “ars inveniendi”. *Argumentation* 11 (2): 225-236.
- Layman, C.S. (2002). *The power of logic, 2nd ed*. Boston: McGraw-Hill.
- Palmieri, R. (2014). *Corporate argumentation in takeover bids*. Amsterdam/Philadelphia: John Benjamins.
- Perelman, Ch., and Olbrechts-Tyteca, L. (1958). *La nouvelle Rhétorique. Traité de l'Argumentation*. Paris: Presses Universitaires de France.
- Perret-Clermont, A.-N., Arcidiacono, F., Breux, S., Greco, S., and Miserez-Caperos, C. (2015). Knowledge-oriented argumentation in children. In F. H. van Eemeren and B. Garssen (Eds), *Scrutinizing argumentation in practice* (pp. 135-149). Amsterdam/Philadelphia: John Benjamins.
- Pinto, R. C. (2006). Evaluating inferences: The nature and role of warrants. In D. Hitchcock and B. Verheij (Eds.), *Arguing on the Toulmin Model: New essays in argument analysis and evaluation* (pp. 115-143). Dordrecht: Springer.
- Rigotti, E. (2006). Relevance of Context-bound loci to Topical Potential in the Argumentation Stage. *Argumentation* 20: 519-540.
- Rigotti, E. (2008). Locus a causa finali. In G. Gobber et al. (Eds.), *Proceedings of the IADA workshop “Word meaning in argumentative dialogue. Homage to Sorin Stati”*. Special issue of *L'analisi linguistica e letteraria* 16 (2): 559-576.
- Rigotti, E., and Greco, S. (2005). Introducing argumentation. Argumentum eLearning module, www.argumentum.ch (restricted access).
- Rigotti, E., and Greco, S. (2006). Topics: The argument generator. Argumentum eLearning module, www.argumentum.ch (restricted access).
- Rigotti, E., and Greco Morasso, S. (2009). Argumentation as object of interest and as social and cultural resource. In N. Muller-Mirza and A.N. Perret-Clermont (Eds.), *Argumentation and education: theoretical foundations and practices* (pp. 9-66). New York: Springer.
- Rigotti, E., and Greco Morasso, S. (2010). Comparing the Argumentum Model of Topics to other contemporary approaches to argument schemes: The procedural and material components. *Argumentation* 24 (4): 489-512.
- Rigotti, E., and Palmieri, R. (2010). Analyzing and evaluating complex argumentation in an economic-financial context. In C. Reed and C. Tindale (Eds.), *Dialectics, dialogue and*

- argumentation. *An examination of Douglas Walton's theories of reasoning and argument* (pp. 85-99). London: College Publications.
- Rigotti, E., and Rocci, A. (2006). Towards a definition of communication context. *Studies in Communication Sciences* 6 (2): 155-180.
- Rocci, A. (2006). Pragmatic inference and argumentation in intercultural communication. *Intercultural Pragmatics* 3 (4): 409–442.
- Ross, W. D. (1958) (Ed.) *Aristotelis Topica et Sophistici Elenchi*. Oxford: Oxford University Press.
- Ross, W. D. (1959) (Ed.). *Aristotelis Ars Rhetorica*. Oxford: Oxford University Press.
- Schär, R. (2018). *Argumentative analysis of the emergence of issues in adult-children discussions*. PhD Dissertation, USI-Università della Svizzera italiana.
- Schwarz, B., and Baker, M. (2016). *Dialogue, argumentation and education. History, theory and practice*. Cambridge: Cambridge University Press.
- Searle, J. (1995). *The construction of social reality*. New York: Free Press.
- Snoeck Henkemans, A. F. (1997). Analyzing complex argumentation. *The reconstruction of multiple and coordinatively compound argumentation in a critical discussion*. Amsterdam: Sic Sat.
- Snoeck Henkemans, A. F. (2000). State-of-the-art. The structure of argumentation. *Argumentation* 14 (4): 447-473.
- Snoeck Henkemans, A. F. (2001). Argumentation structures. In F. H. van Eemeren (Ed.), *Crucial concepts in argumentation theory* (pp. 101-134). Amsterdam: Sic Sat.
- Stump, E. (1978) (Ed.). *Boethius's De topicis differentiis*. New York: Cornell University Press.
- Tardini, S. (1997). L'entimema nella struttura logica del linguaggio. *L'analisi linguistica e letteraria* 2: 419–440.
- Toulmin, S. (1958). *The uses of argument*. Cambridge: Cambridge University Press.
- Toulmin, S., R. Rieke, and A. Janik. (1984). *An introduction to reasoning*. New York: Macmillan.
- Vendler, Z. (1957). Verbs and times. *The philosophical review* LXVI: 143-160.
- Walton, D. (1997). *Appeal to expert opinion: Arguments from authority*. University Park: The Pennsylvania State University Press.
- Walton, D. (2001). Enthymemes, common knowledge, and plausible inference. *Philosophy and Rhetoric* 34: 93-112.
- Walton, D. (2005). How to evaluate argumentation using schemes, diagrams, critical questions and dialogues. In M. Dascal, F. H. van Eemeren, E. Rigotti, S. Stati, and A. Rocci (Eds.), *Argumentation in dialogic interaction*. Special issue of *Studies in Communication Sciences* 5: 51–74.
- Walton, D. (2006). Poisoning the well. *Argumentation* 20 (3): 273–307.
- Walton, D., and F. Macagno. (2009). Argument from analogy in law, the classical tradition, and recent theories. *Philosophy and Rhetoric* 42 (2): 154–182.
- Walton, D., and Reed, C. (2005). Argumentation schemes and enthymemes. *Synthese* 145: 339-370

- Walton, D., Reed, C., and Macagno, F. (2008). *Argumentation schemes*. Cambridge: Cambridge University Press.
- Whorf, C. (1997[1956]). *Language, thought, and reality: Selected writings of Benjamin Lee Whorf*, ed. J. B. Carrol. Cambridge: Technology Press of MIT.
- Jackendoff, R. (1990). *Semantic structures*. Cambridge: MIT Press.
- Zampa, M. (2017). *Argumentation in the newsroom*. Amsterdam/Philadelphia: John Benjamins.
- Ziegelmüller, G. W., and Kay, J. (1997). *Argumentation: Inquiry and advocacy*. Boston: Allyn and Bacon.

8 Analysis and evaluation of arguments in context

8.1 Introduction

Having introduced the AMT in chapters 6 and 7, and examined its historical roots, we now wish to present a small anthology of examples of actual argumentative texts that have been analysed using this model. Several publications have now appeared that make use of the AMT to analyse argument schemes in a variety of contexts of real argumentative practice (see Appendix 1).

We will make use of four case studies to illustrate how this model is applied in practice. The choice of these four examples has been made in such a way as to represent at least some of the most important domains that are central to scholars working with the AMT to date. This selection has also been made with a practical aim in mind, as it might be used to learn how to make an AMT-based analysis. The four selected contexts represent, respectively, cases from financial communications, dispute mediation, children's argumentation and, finally, public policy making in the context of Switzerland. We have adopted a common textual structure for all four case-studies: we start with a brief description of the argumentation context from which examples are taken; we then present the examples, which might be oral or written texts, ranging from newspaper articles or other public documents to family conversations. We give an analytical overview (van Eemeren and Grootendorst 2004) of these texts and, finally, we move on to the AMT analysis. As the aim of this chapter is to present applications of an AMT-based analysis, particular emphasis is given to this stream of research; we do not present an exhaustive discussion of alternative approaches to the loci (argument schemes) that we encounter in our analyses.

In section 8.2, we start with an example of argumentation from analogy, including counter-argumentation. This example, based on Palmieri (2012), concerns the context of financial communications and, in particular, the 2008 automobile crisis in Detroit, US. This case study is a significant one to open our collection, because it deals with argumentation from analogy, one of the most common and universally recognized loci or argument schemes, which belongs to the category of extrinsic loci (see chapter 7). Section 8.3 considers the *locus from termination and setting up* in the context of dispute mediation. The choice of this locus to approach the context of conflict resolution is no accident, as it has been shown that it constitutes a fundamental tool for dispute mediators in the setup of argumentative discussions (Greco Morasso 2011). Section 8.4 concerns the reconstruction of implicit premises in children's argumentation. This type of analysis shows the relevance of the AMT model as a tool for understanding children's cognitive processes in interaction.⁴¹ Section 8.5 presents recent studies of the AMT model, applied to the context of public communication and administrative rhetoric (for a definition of this domain, see Savard and Melançon 2013). In particular, we will present an analysis of a locus that, in a pilot study conducted in 2015, was found to be recurrent in political argumentation concerning Swiss popular initiatives at the federal level. Although this case concerns a type of context and a textual genre that is specific

⁴¹ This type of approach complements existing research in psychology on cognitive processes in interactional settings (see Perret-Clermont 1979).

to Switzerland – perhaps almost exclusively – we believe that the locus we are presenting is interesting for other applications of political argumentation and public discourse concerning policy making. The debate, in fact, has to do with the advantages and disadvantages of the introduction of a new policy, a topic that is typically addressed in public debate (see chapter 5, section 5.4).

8.2 Argumentation from analogy at a time of financial crisis

The analysis in this section is largely based on the results discussed in Palmieri (2012), which we re-elaborate and comment upon.⁴² We do not include the whole content of the paper here. Rather, we have focused on a specific line of argument, which presents an interesting case of argumentation from analogy.⁴³

8.2.1 Context

What is a financial crisis? Is it a natural catastrophe or a failure caused by human error? These questions had an enormous impact on the decisions concerning public aid to the automobile industry in Detroit, US, in 2008, as part of the economic-financial crisis. We will focus on the decision which the US government had to make about whether to financially support three automobile industries in Detroit or not: General Motors (GM), Chrysler and Ford, also called “the Big Three” (for a more detailed reconstruction, see Palmieri 2012). For a public administration, the decision to give financial support to a private company is always delicate, because the public administration is subject to rules of accountability and transparency. Unsurprisingly, thus, this kind of decision sparks debate during the decision-making phase as well as after the decision has been taken.

Immediately after the fall of Lehman Brothers in September 2008, GM, Chrysler and Ford asked for financial support from the US government. The government had created the TARP (Troubled Assets Recovery Plan) fund in order to help the economy. On 19th November 2008, Congress, in a special session, invited the three managers of these industries: Rick Wagoner (GM), Robert Nardelly

⁴² We are very grateful to Rudi Palmieri, who has allowed us to re-use some parts of his paper: Palmieri, R. 2012. « Acte de Dieu » ou « Erreur humaine » ? – Analyse argumentative du débat relative à la crise de l’automobile de Détroit (2008). *ILCEA* 15: 1-15, Université Grenoble Alpes Editions. We are also very grateful to the Editors of *ILCEA* for their kind permission to reproduce these contents. We are only considering parts of the original text; we have largely revised the analysis and rediscussed it; the translation from French to English is ours. In the process of revising the original analysis, we have also taken the comments of an anonymous reviewer into account.

⁴³ For more details on the field of argumentation in financial communications, see Appendix 1. Concerning argumentation from analogy, a basic example analysed using the AMT can be found in Rigotti and Greco Morasso (2010); see also chapter 7 for a brief discussion of this locus under the *extrinsic* loci in the AMT taxonomy.

(Chrysler) and Alan Mulally (Ford), to hear their arguments in favor of state support for their companies. The final decision was postponed until the month of December. On the point of leaving the White House, President George W. Bush decided to satisfy the request made by these companies, at least to some extent: he granted them a loan corresponding to 13.4 billion dollars. When President Barack Obama took office, GM and Chrysler got supplementary funding, albeit under stricter conditions. In particular, the general director of GM had to resign his position. Moreover, it was decided that Chrysler would only receive funding after having signed a preliminary agreement with the Italian company Fiat; according to this deal, Fiat would acquire a significant proportion of the capital of Chrysler. These waves of financial support notwithstanding, in June 2009, GM, one of the most important industries in the United States, filed for bankruptcy.

8.2.2 The economic crisis as a natural hurricane?

The analysis we are proposing is focused on a limited timeframe, concluding with the special session of Congress held in November 2008; in this special session, the government had to decide about the bailout. Up until this moment, there had been a lively debate revolving around an issue that can be formulated as: should the US government support the three Detroit industries? This type of issue clearly pertains to practical argumentation, given the nature of the decision that the US government needed to make: whether to grant a bailout or not. Two parties play a role in this debate. On the one hand, there is the standpoint presented by the protagonists, i.e. the three industries represented by their managers; these, in line with their request for support presented to the government, defend a standpoint that contains a positive answer to the question formulated above: “yes, the government should finance our three companies”. On the other hand, there are several antagonists proposing either the opposite standpoint (“the government should *not* finance these three companies”) or a partially different standpoint (“the government should finance these three companies, but with the following conditions...”). A detailed reconstruction of this debate has been presented in Palmieri (2012).

To start with, we shall focus on the protagonists’ standpoint. In spite of minor differences which could be found between the argumentation of each individual company, the general argument common to all three could be summarised using words taken from an article that appeared in the Wall Street Journal (11th November 2008): “The executives defended the management of their companies, *saying the need for emergency government support stems from the economic crisis, not poor decision-making*” (our emphasis). At a first level of analysis, this is an argument that justifies an emergency bailout by pointing to a cause of the auto makers’ situation that is independent of their past actions. This framing, as we will discuss, is not accepted by all those observing this situation. To a large extent, the discussion considering financial support for the Big Three de facto equals a discussion on the responsibility of the three companies. The companies deny responsibility for their financial situation; they ask for a short-term bailout in view of a moment of extraordinary financial turmoil. This is the standpoint maintained, for example, in an article written by CEO Wagoner on 19th November 2008, also in the Wall Street Journal. The opening lines of this article presuppose that GM’s problems have originated from outside the company and independently from its

responsibility: “Much has been said about the impact of the credit crisis on U.S. auto makers, and whether or not the government should assist the industry *during this extraordinary financial turmoil*” (our emphasis). According to this view, the automobile industry crisis is an event whose causes are beyond the province of the victims’ responsibility.

We now turn to consider the positions of some of the antagonists to the three companies’ standpoints and arguments. The three companies’ framing of their situation as a problem independent of their actions raised numerous critical voices, as is clearly shown in the following extracts taken from newspaper articles:

This situation doesn’t stem from the recent meltdown in banking and the markets. GM, Ford and Chrysler have been losing billions since 2005, when the U.S. economy was still healthy. (Ingrassia, WSJ, 25 October 2008)

In all this lies a tale of hubris, missed opportunities, disastrous decisions and flawed leadership of almost biblical proportions. In fact, for the last 30 years Detroit has gone astray, repented, gone astray and repented again in a cycle not unlike the Israelites in the Book of Exodus (ibid.)

This is Larry Sinclair. He lives in California and drives a Honda (HMC), and he doesn’t want Detroit to have a bailout. Here’s what he wrote to his Congressman : “They have been asleep for 30 years and have made their own problems. So why should I help bail them out?” (interview to R. Nardelli, Business Week, 18 November 2008)

But you know what the critics are saying. [...] They’re saying basically you failed to lead, and now you have your hand out saying, “Help us”. (interview to A. Mulally, CNN, 18 November 2008)

Amongst the numerous articles that more or less directly criticized the Big Three’s argumentation, we will focus on one specific contribution because of its clearly argumentative nature. This article, a comment piece titled “The auto makers are already bankrupt: Admitting the obvious is their best chance to restructure”, appeared in the Wall Street Journal on 21st November 2008 and was signed by Paul Ingrassia, a journalist well-known for his expertise in the American automobile industry. A complete analysis of this article has been presented in Palmieri (2012). Here, we only present the opening lines of Ingrassia’s text, in which this author criticizes the framing suggested by the auto makers:

“The moment of truth in the nation’s automotive bailout debate might have come this week. As the CEOs of GM, Ford and Chrysler begged Congress for federal aid, a Detroit radio talk-show host asked whether Michigan, as well as the car companies, should get assistance. The state is being hit by an economic hurricane, he said, just as New Orleans was hit by a natural hurricane.

Huh? Will the victimology myth never end? Hurricane Katrina was an act of God. The car crisis is an act of man. For the difference, consult the Bible. Any version will do.

In these six lines reporting their arguments, Ingrassia sets the stage for a mixed dispute with the “Big Three” protagonists; in pragma-dialectical terms, Ingrassia thereby assumes the role of an antagonist in relation to the three big automobile industries, who assume the role of protagonists in this dispute. However, because this is a newspaper editorial rather than a face-to-face discussion, both positions are presented by the editorialist; in fact, before advancing his own standpoint, Ingrassia reformulates the position that had been previously advanced. In other words, Ingrassia gives a representation of how the Big Three argue to support their request for a bailout that may be analytically reconstructed as follows:

1. The government bailout is justified for the Detroit crisis.
2. Because, in the case of Hurricane Katrina, the fact that it was an act of God justified the Government’s support.

As stated above, the analogy between the auto makers’ crisis and uncontrollable natural disasters had been one of the main arguments used by the auto makers to ask for federal support. Ingrassia attacks the validity of this argument directly. Now, even though Ingrassia never explicitly maintains that this support should not be given – not even in the continuation of his article – it is reasonable to assume that his ultimate position is that, because the auto makers’ argument is not valid, the conclusion they draw is not adequately supported. In other words, in this pragmatic context, it is reasonable to assume that Ingrassia is saying that the bailout is not adequately justified⁴⁴. If this interpretation is correct, we might propose the following analytical reconstruction of the argumentation that Ingrassia indirectly suggests when he refutes the Detroit-Katrina analogy:

1. Public support is not justified for the Detroit car crisis⁴⁵
 - 1.1. Katrina was an act of God, while the Detroit car crisis is an act of man.

⁴⁴ This is in line with other writings by Ingrassia, who has often criticized support being granted to auto makers and not to other industries; he has subsequently warned the US about the lessons learned in the Detroit case by famously asking: “America bailed out GM, but who will bail out America?” (Ingrassia 2011).

⁴⁵ Strictly speaking, this does not equate to “the bailout should not be given”; in our view, Ingrassia’s viewpoint is to criticize the framing of unavoidable necessity or, to use Ingrassia’s term, victimology, which the auto makers are presenting. We thank an anonymous reviewer for raising this point.

8.2.3 AMT analysis

We now turn to consider the Big Three’s argumentation according to Ingrassia’s reformulation using an AMT analysis. The inferential configuration of this argument, based on the locus from analogy, is presented in figure 8-1. The endoxon contains the functional genus of “act of God”, to which both events are said to belong.

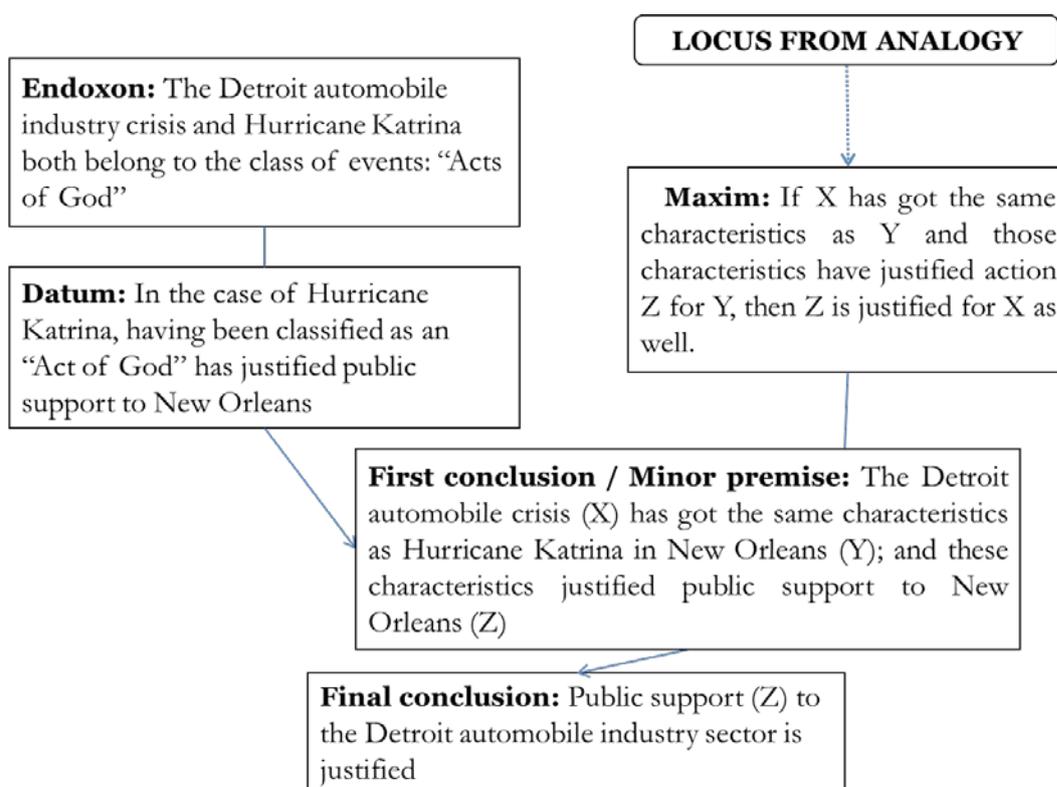


Figure 8-1: AMT analysis of the Big Three’s argumentation according to Ingrassia

As clearly emerges from figure 8-1, the critical point in this analogy is represented by the endoxon, which contains the *functional genus* “acts of God” (we take the phrase functional genus from Walton and Macagno 2009; see also our treatment of analogy in chapter 7, section 7.2.2.3). Note that the phrase “acts of God” has been introduced by Ingrassia to criticize his opponents; the functional genus including financial crisis and natural disasters, however, is not Ingrassia’s invention – as shown above, it was used by the auto makers to argue their case. “Acts of God” might be considered as a sub-class of events, over which humans have no control and, therefore, no responsibility. Now, the interpretation of an economic phenomenon as either an event or an action bears important consequences at the level of pragmatic decision-making: in this case, it is meant to justify the

allocation of public funds to the auto makers. Justification for this measure is based on the public support granted to the city of New Orleans, when it was hit by Hurricane Katrina. The fact that New Orleans received federal support is presented as a datum (see figure 8-1), because it is probably remembered by all the speakers in that situation in 2008; besides, it is a piece of evidence difficult to contest.

What is contested by Ingrassia, instead, is the functional genus contained in the endoxon. As noted in chapter 7, discussing a functional genus is a typical way of criticizing an argument based on the locus from analogy.⁴⁶ Ingrassia holds that there is no common functional genus to which crises and hurricanes belong: Katrina was a natural phenomenon, while the Detroit crisis is the result of human actions; in other words, the crisis is a state of affairs caused by human subjects who are responsible for it. Ingrassia explicitly targets what he believes is a manipulative discourse: he labels the phenomenon by which human failure is intentionally framed as a natural catastrophe “victimization” and, as a consequence, those who are responsible for the failure are deemed victims. Clearly, this criticism implies that support for the bailout has not been adequately justified by the auto makers.

8.3 The role of the locus from termination and setting up in dispute mediation

Dispute mediation is one of the first contexts – if not the first one – in which the AMT has been applied to the study of real-life argumentative discourse. In this section, we reconsider some of the findings from research on argumentation in dispute mediation discussed in the monograph: Greco Morasso, S. (2011). *Argumentation in dispute mediation: A reasonable way to handle conflict*. Amsterdam/Philadelphia: John Benjamins.

The locus from termination and setting up is prominent in dispute mediation as a means for the mediator to help the parties understand what is at stake in their dispute and what they will lose if the conflict is not resolved (Greco Morasso 2011). When applied in conflict resolution processes, this locus builds on the inferential principle of support that “if something is good, it should not be

⁴⁶ A case of the same type, in a different context, has been discussed in Xenitidou and Greco Morasso (2014). In this context, a group of Greek residents participating in a focus group are discussing the migration inflow from Albania and other countries. Some of the speakers draw an analogy between Greeks migrating to Germany and Albanians migrating to Greece, basing it on the functional genus of “economic migrants”, which is applied to both categories. If both Greeks and Albanians belong to the same category of economic migrants, then if Greeks were legitimated to migrate for economic reasons, so are Albanians. However, other participants are not in agreement and criticize this equivalence. They suggest differences between Greeks’ and Albanians’ behaviour, thus making the application of a common functional genus impossible.

terminated” (hence the name “termination”). The recurrent and salient presence of this locus (and of this specific maxim) might be considered a prototypical argumentative pattern (van Eemeren 2016) used by mediators in order to help parties in resolving their conflict.

As discussed in chapter 7, the locus from termination and setting up counts as one of the extrinsic loci. The label “from termination and setting up” is a quasi-literal translation from Aristotle; it indicates a relation between the termination or (conversely) the setting up of a possible state of affairs and the present state of affairs. For example, one might rely on this locus to argue that, if smoking (the present state of affairs) is bad, then quitting smoking (the termination of this state of affairs) is good. Conversely, if a state of affairs has proven good, it must not be terminated; therefore, a politician might argue that, because his government has done many good things for the country, he should be elected again. An argument such as “If childcare costs are too high in this country (the present state of affairs is bad), setting up free childcare for families in need is good” is also based on the locus from termination and setting up. Another possible maxim of this locus is as follows: “If something is good, it must be set up/activated”. For example, “If bike-sharing is good (sustainable, eco-friendly, etc.) for the population of our city, we must introduce this public service”.

8.3.1 Dispute mediation as an argumentative activity

Because in this section we are discussing the use of a locus that is widely employed in dispute mediation, we will first describe this activity type in general, and then detail some more aspects about the specific micro-setting of the selected examples.

Dispute mediation has been establishing since the sixties as a professional practice within the Alternative Dispute Resolution movement (Menkel-Meadow 2005). Before this time, dispute mediation existed in different forms and in different geographical and cultural settings; different types of unofficial mediation still exist. However, in this section, we refer to mediation as a professionalized and institutionalized practice that is taught with similar principles in different countries worldwide as part of the ADR practices. The institutionalization we refer to is also due to the institutional establishment of official titles guaranteeing that mediators have undertaken a certain number of hours of training and are affiliated to certain country-specific professional associations.

Nowadays, the institutionalized form of mediation that is part of ADR practices is widely used to resolve conflicts between individuals, small groups or organizations (e.g. companies).⁴⁷ Dispute mediation is broadly defined by the presence of a third neutral party who contributes to the parties’ discussion about their conflict, in order to help them resolve it. Mediators are neutral not only because they do not have a stake in the conflict, but also because they are neither imposing nor

⁴⁷ There are clear similarities between ADR mediation and international mediation as used in diplomatic relations; however, applying mediation between different countries in international conflicts often complicates the practice further and distinctions should be made. Because this is beyond the scope of this volume, we are now mainly concentrating on cases of interpersonal conflict.

proposing a solution; the parties remain responsible for their decision to take part in a mediation process,⁴⁸ to remain in that process and to eventually resolve their conflict.

Mediators can only achieve their goals through communication (Greco 2005). In this process, parties are empowered and potentially able to design a tailor-made solution to their problem. Such a solution, in fact, is not enforced upon them by an external authority; it is designed by them through open discussion, in which they are ideally free to express their concerns and deepest interests (Fisher, Ury and Patton 1991). It has been argued that, given this possibility for the parties to express their real interests, mediated solutions tend to be more durable than solutions enforced by external authorities (see for example Mitchell 2003; Kelman 2009).

Moreover, as *transformative* approaches to mediation have highlighted (Bush and Folger 1994; Folger and Bush 1994), mediation processes do not only produce a good solution for the one problem which has caused the parties to enter mediation. If correctly applied and if successful, mediation is transformative in the sense that parties learn to communicate openly and constructively about their relationship in general. As noted by Greco Morasso (2011), the parties' "transformation" includes the fact that they learn to become co-arguers and co-construct their solution through an argumentative discussion. Thus, mediation might involve a learning process that is potentially beneficial to the parties' continuing relationship.

Mediators are neutral but not inactive. As demonstrated by previous studies (see for example Aakhus 2003; Jacobs and Aakhus 2002; Greco Morasso 2011), mediators play an important role in the construction of the parties' argumentative discussion although they are non-canonical participants in it, because they are not allowed to have a standpoint or to present arguments on the main issue concerning the resolution of the conflict. This evokes the idea of a mediator as a designer or architect of the parties' argumentative interaction (Aakhus 2003, 2007; Vasilyeva 2017). Some of the typical communicative tools for mediators that have been described in the literature, such as for example *formulations*, *questions* (van Eemeren et al. 1993), or *reframing* (Putnam 2004; Shmueli 2008) refer to this ability to manage a discussion from an external perspective, without replacing the parties in their role of co-decisors and co-arguers. In this sense, mediators resemble other professional figures, such as for example teachers or facilitators, who play a similar role in other types of interactions (see the discussion in Greco, Mehmeti and Perret-Clermont 2017).

8.3.2 Will that friendship be lost? Uses of the locus from termination and setting up in mediation

⁴⁸ In cases in which mediation is made compulsory by law, parties are forced to try; in most cases, however, they are free to leave the process at any time.

In the following, we will briefly discuss four examples that typically illustrate the use of the locus from termination and setting up. These examples have been taken from a corpus of mediations that includes cases of interpersonal conflict in different domains, ranging from interpersonal issues, to business problems – or, more often than not, a combination of these.

The first example⁴⁹ concerns a conflict between Paul and his daughter Therese⁵⁰ in the context of a family real estate business. Paul is the founder of the business and “the boss”, as he puts it; Therese has joined him a few years before the mediation takes place to work as a director of one of the company’s sub-offices. Father and daughter end up in mediation because of disagreement about a human resources issue. Whilst Therese is away on a skiing holiday, Paul fires one of her employees or, as she puts it, one of her “best” employees (James), because he made a big mistake with an order. Paul did not consult Therese before making this decision and she is now resentful. At some point, it also emerges that Paul suspected that Therese had had an affair with James and did not like this. The excerpt selected here (excerpt 1) comes after a lengthy discussion, in which Paul has been asked to describe the role that he thinks Therese might have in his company in the future. Paul has revealed that he has made provisions, in the event of his death, for one of his friends and colleagues to lead the company – and not Therese, because she still has a lot to learn. For this reason, at turn 386⁵¹, Therese (T) accuses Paul (P) of not trusting her and threatens to resign. The mediator (M) does not let this go unnoticed. At turn 389, he interrupts the quarrel between the parties and asks a typically future-oriented question of the type often taught to mediators as part of their professional education: if things don’t get better, what will happen? (see the formulation in turn 389). To this question, Therese responds by restating that she will leave the company.

Excerpt 1

386 T =Well if something would happen to you (.) you wouldn’t trust me with the firm you’re giving it to your good friend and if (.) something happens to him well (.) you still don’t trust me so I might well resign [()

387 P [No certainly no↓ not not that I don’t trust you but you are not (.) CAPABLE [enough so I’m

⁴⁹ This case and those following are part of a series of training videos used to train mediators worldwide; this makes the results of this analysis more apt for generalization, as the cases included in this series are considered as “best practices” in the professional practice of mediation (see the discussion in Greco Morasso 2011). The cases in the first two examples have been mediated by Dr. Larry Fong, a Canadian mediator (www.fongmediate.com, last visited 21 December 2017) in the Netherlands in the early 2000s. The cases mentioned in the third and fourth examples were mediated by the late Dr. John Haynes in the 1990s in Canada. John Haynes is often considered one of the pioneers of dispute mediation (see Greco Morasso 2011).

⁵⁰ Names and all identifying information have been changed.

⁵¹ Numeration of talking turns is relative to the whole mediation session. This excerpt starts at turn 386, which means that it is situated after the discussion has been ongoing for some time.

- 388 T [Well do I will I be capable↑ (.) and I'll never be capable for
us
- 389 M [So (.) I wanna make sure I understand (.) if things (.) here (.) don't get
better (.) between the two of you (.) what does Therese (.) do next↑
- 390 T Therese resigns (.) Therese [leaves

The kind of question asked here is designed to allow the mediator to show the parties that they have some form of valuable relationship that they do not want to lose. If the conflict is not resolved, Therese will leave, and Paul wants to keep her as part of his company. This becomes a reason for him to want to solve the conflict via mediation rather than persisting in a position where he alone decides.

In the second example, we see the mediator asking a very similar question in a different situation. Tim, a banker, has asked his friend Polly to provide the catering at a very important reception for his bank's 100th jubilee. Polly has a small catering company. Despite her huge efforts to bring high quality food for the day, something goes wrong with the storage of the food delivered to the bank; thus, on the day of the party, the food is mostly rotten, which causes acute embarrassment to both parties. Tim does not want to pay for the food but this means that Polly's company will go bankrupt. Because the parties have been friends for a long time, they do not have a contract to regulate their agreement. They end up in mediation to try to solve their problem. The mediator's question at turn 302 is meant to provoke the same type of reasoning in the parties as in the case of Paul and Therese: they have a value (friendship) that will be destroyed if the conflict is not resolved. Therefore, it is better for them to resolve it.

Excerpt 2

- 302 M [But let me (.) ask a question here (3) you know I don't know what the value of your friendship
is (.) between each other (.) but (.) ah:: (.) if (.) things didn't work out (.) today (.) will that
friendship be lost↑
- 303 T (4) Well eh:: (.) there is only one reason why I'm sitting here (.) eh yes I think that if we don't
solve this eh:: (.) we we probably eh:: (.) at least we won't have business together=
- 304 P =No=
- 305 T =and (.) probably that we won't won't see one another (.) again eh
- 306 M Mmh
- 307 T And (.) well (1) that's not a disaster (.) but it's a pity

- 308 M Mmh (.) Mmh (.) (*Polly nods*) (2) So I don't know (1) what the value of your friendship would be (.) but (.) there would be a loss
- 309 T Yes↓
- 310 M Yes↑
- 311 P Yes (.) it would be:: ya.
- 312 M And sometimes it's hard to () your friendship anyways (.) would you agree↑
- 313 T Yes

In the two excerpts illustrated above, the locus from termination and setting up is evoked by the mediator, who explicitly asks a question to the parties about a valuable relationship that they could potentially lose, should the conflict not be resolved. The basic inference that the parties are required to make is that it is worth trying to solve their problem, if they do not want to lose (“terminate”) the relationship.

These arguments are more or less explicitly suggested by the mediator. They do not directly intervene in the parties' discussion, but work at a meta-level (see Greco Morasso 2011 on this point). In fact, the mediator is not arguing in favor of either one or other solution to the parties' conflict, as this would be forbidden by his neutral role in the conflict. Not only can mediators not make a decision about the parties' conflict, they are also not normally allowed to make suggestions.⁵² However, mediators can argue at a meta-level that it is worthwhile for the parties to solve their conflict, however this will be achieved concretely. This is generally permitted to mediators, as motivating the parties to find a mediated solution – as long as they are not forced to do so – is part of their job.

Whilst in the first two examples considered above, an argument based on the locus from termination and setting up is suggested by the mediator by means of a question, in some other cases, the same argument might be more or less directly introduced by the parties themselves and just “picked up” by the mediator. A similar case to the one described above has been discussed in Bigi and Greco Morasso (2012) and concerns two business partners who have a conflict about the division of labor in their company, which is an otherwise successful producer and seller of bagels. The two have been working together for a long time; David is in charge of production, whilst Robert takes care of the commercial activities related to their company. Over time, David has started to feel tired of his life spent in front of an oven, baking bagels; he feels that the burden of his job is too heavy and is resentful that, as he puts it, Robert spends his working hours playing golf with clients. For these

⁵² This is generally true for this kind of interpersonal conflict but we acknowledge that there might be variations depending on the legal systems and the type of field to which mediation is applied.

reasons, David would like to invest in mechanization in order to lighten his physical load. Not surprisingly, Robert does not agree with the description that David gives of his working time. Moreover, he does not want to invest in mechanization, as he does not wish to take out a mortgage at this point in his life and career.

At an early stage of their discussion, Robert and David admit that the problem has affected them socially as well; and they are most afraid of losing their friendship and the good social relationship that has always existed between their families. At this point, the mediator intervenes by noting that the parties have a “double issue”, which is affecting not only their professional but also their personal lives. He proposes that what they want is to “keep the social relationship as well as keep a good business relationship”, thus highlighting the positive value (“the good social relationship”) that the parties want to keep rather than the problems that they are experiencing (cf. Bigi and Greco Morasso 2012). The desire to remain friends becomes a motivator for the parties to find a mediated solution. In fact, the parties immediately reply that keeping their friendship is the reason why they have chosen mediation and that they were friends before becoming business partners.

Greco Morasso (2011: 225-227) presents a fourth case of a mediator explicitly arguing on the basis of the same inferential principle – “if something is good, it should not be terminated” – by using the metaphor of the golden goose, as applied to the parties’ successful business. The case considered here is the same as above of Robert and David struggling with the division of labor in their bakery business. As is clear from the extract below, the mediator is arguing very explicitly for the parties to find a mediated solution (turns 401, 406) on the basis of their healthy bottom line (turn 406), which is described as a golden goose (turns 401, 406).

Excerpt 3

- 401 M (...) eh: and all the time I think (.) keeping in mind (.) that (.) one of the things you really want to do is (.) you’ve got a golden goose here right↑ (.) and it would be crazy to kill the golden goose↓
- 402 R That’s what I’ve tried to tell him
- 403 M It’s laying the golden eggs you’ve got a [golden goose
- 404 D [I’m the GOOSE↓=
- 405 R =Ah: (.) [you’re not
- 406 M [You’ve got a good bottom line (.) you’d be CRAZY to kill it↓ (.) there’s got to be a solution↓ (.) there’s got to be a solution↓ (...)

In this case, the mediator is picking up on an aspect of the parties' situation, namely the fact that their business is doing well. He makes them reflect on this aspect by using the metaphor of the golden goose, which they would be "crazy to kill". In other words, he is suggesting that the parties need to find a mediated solution if they do not want to terminate a valuable aspect of their relationship. In the conflict between Robert and David, the locus from termination and setting up is used twice: the first time, the mediator leverages their friendship, whilst the second time he leverages their successful results as business partners.

8.3.3 AMT analysis

In all four examples considered in this section, it is always very clear that the mediator is making the parties aware of a valuable aspect of their relationship. This type of meta-argumentation is based on the locus from termination and setting up with the maxim "if something is of value, it should not be interrupted"; this motivates the parties to find a mediated solution. Greco Morasso (2011: 264-265) observes that this type of argument is closely connected to the purposes of mediation. For illustrative purposes, we will now show an AMT reconstruction of this argument as it is presented in excerpt 2, relating to Tim and Polly's discussion (figure 8-2). The reconstruction relates to the reasoning suggested by the mediator's question at turn 302 and then confirmed by the parties' reaction.

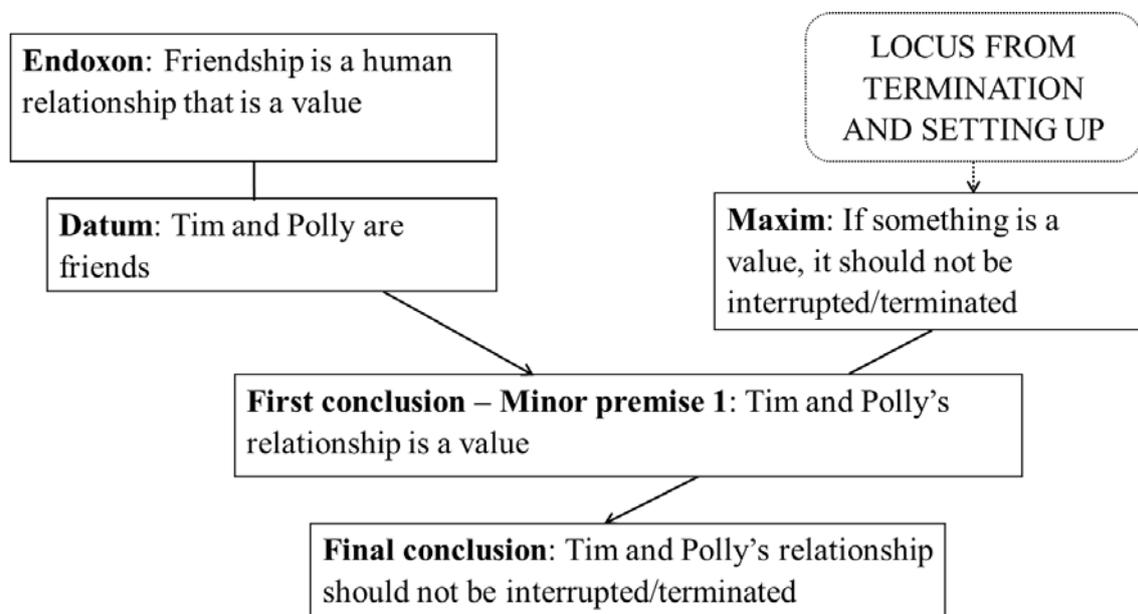


Figure 8-2: AMT reconstruction of extract (adapted from Greco Morasso 2011: 229)

This argument, as previously stated, is based on the locus from termination and setting up. Applying the maxim “if something is of value, it must not be interrupted”, parties can reason out that they should try and settle their conflict, otherwise their personal relationship will probably be terminated (destroyed or frozen forever). Arguably, this type of principle of support only holds if the parties actually consider their relationship as worthy – at least at some level. Here, it clearly emerges that the material component of the argument is important. In fact, in order for this argument to have a hold on the parties, they must share material starting points. Parties might be business partners or spouses; whatever their connection, they must recognize the fact that they have some form of “value” in their relationship – even if it is only functional or economic – and that this value could be lost if the mediation process is not successful. In this case, the material component relies on the importance of friendship (endoxon) and on the fact that Tim and Polly are – at least to some extent – friends (datum).

This raises two considerations about the role of mediators in this process. The first consideration is on a theoretical level. It is notable that mediators might suggest this kind of argument based on a locus from termination and setting up to the parties; but parties remain responsible for their conflict, therefore the material starting points must be considered valid *by them* (and not by the mediator). This is, therefore, a clear case in which an argument is co-constructed by two parties and a third neutral who, in Greco Morasso’s terms (2011), plays a non-canonical role in scaffolding an argumentative discussion.

A second consideration concerns the pragmatic level. It emerges here that it is important for a mediator to “scan” the parties’ discourse in search of material starting points that could indicate a value that they would like to keep despite their conflict. This suggests that, at a professional level, the awareness of how loci work in mediators’ discourse could be turned into a more profound awareness of how to manage the communicative process in mediation.

8.4 The reconstruction of implicit premises in children’s argumentation

8.4.1 Context

This case study is taken from the broader context of a collaboration concerning children’s argumentation viewed from an interdisciplinary perspective of argumentation, psychology and education. In the years 2015-2018, the development of this research project has been funded by a grant from the Swiss National Science Foundation titled: “Analysing children’s implicit

argumentation: Reconstruction of procedural and material premises” (henceforth: ArgImp project)⁵³.

In the years preceding the ArgImp project, we analysed different interactions between adults-children and child-child in a variety of settings, ranging from classroom interactions (Greco, Mehmeti and Perret-Clermont 2017), to unstructured interactions in family settings, to children’s responses in an interactive setting such as tests inspired by Piagetian interviews (Perret-Clermont 1979; Perret-Clermont, Breux, Greco Morasso and Miserez-Caperos 2014; Sinclair-Harding et al. 2013; Greco Morasso, Miserez-Caperos and Perret-Clermont 2015). We collected several examples of children’s argumentation, in which we observed that, in some cases, the unexpectedness – or even “weirdness” – of the children’s responses to adults’ questions could be explained, if one took the communicative situation and children’s inference into account (Greco et al. 2017). In other words, some of the children’s responses could be better understood if one adopted a dialogical view of argumentation, such as the model of a critical discussion elaborated in pragma-dialectics (van Eemeren and Grootendorst 1984; 2004). We shared this latter view with other colleagues who had made similar observations in different research groups (for example: Säljö and Pramling 2015; Anderson et al. 1997).

We had examples suggesting that this direction could be a promising one, such as for example a case of a young girl (collected by a student at the University of Neuchâtel) who argued that she loved having bangs because otherwise it was too cold and “this freezes your brain”. This case, amongst many others, made us consider the fact that a well-constructed pragmatic argument (based on the locus from the final cause) could be distinguished neatly, even though it might sound bizarre to imagine bangs as a means of protecting one’s brain (head) from the winter cold experienced north of the Alps. At the same time, we had many examples in which it seemed to us that if the adult had not stopped or prevented the child from explaining more about his or her “bizarre” reasoning, a mismatch in implicit premises would have emerged that could have explained why the adult could not understand the child. We also noticed that we, as adults, have implicit premises that are not always clear to the young children or students we are interviewing.

As a consequence of this broad reflection, we therefore considered that a tool like the AMT, which could be used to reconstruct implicit premises in argumentation (conceived of as an argumentative discussion), might be beneficial in introducing a fresh perspective into research on children’s argumentation. In particular, when we designed the ArgImp project, we had in mind that the distinction between “procedural” and “material” premises could help in showing that even very

⁵³ Sara Greco is grateful to the Swiss National Science Foundation for this support: contract No100019_156690, which has supported research in this field in the years 2015-2018. Applicants: Anne-Nelly Perret-Clermont, Sara Greco, Antonio Iannaccone, Andrea Rocci. PhD students involved: Rebecca Schär (USI) and Josephine Convertini (University of Neuchâtel). This collaboration has been ongoing for more than ten years and has involved the authors and a team of psychologists lead by Anne-Nelly Perret-Clermont at the University of Neuchâtel, also in Switzerland. More recently, Antonio Iannaccone (University of Neuchâtel) and Andrea Rocci (USI) have joined this research group.

young children do not lack skills in argumentation from an inferential viewpoint (this project focuses in particular on children aged between two and six); and that some of the alleged mistakes or misunderstandings occurring in interaction could be explained by taking into account misalignments in the material premises, such as data and endoxa. The preliminary findings of this project, which have only been partially published at the time of writing this book, seem to confirm this hypothesis and open interesting avenues for research (Greco 2016; Schär and Greco 2018; Iannaccone et al. 2016; Schär 2017; Greco et al. 2017).

8.4.2 The Toti submarine example

Within the broader context of the ArgImp research project, the example we have selected is taken and re-elaborated from Perret-Clermont, Breux, Greco Morasso and Miserez-Caperos (2014)⁵⁴.

In this particular conversation, a child aged six, whom we will call G, is talking to his mother in an informal family setting. Some days before this conversation, the child had visited a museum ship at the Museo Nazionale della Scienza e della Tecnologia “Leonardo da Vinci” in Milan, Italy. The museum ship is an old submarine, named Enrico Toti after an Italian war hero. The child’s mother did not go with him to this museum. The visit to the museum included a guided tour. Among other things, they were informed that the Toti left port in 1967, thus after the end of the Second World War; and that its primary function was surveillance of Italian territorial waters. These two aspects will be important for our example.

While describing the visit to the Toti to his mother, the child seemed puzzled about what he had heard from the lady giving the guided tour. He commented:

“But the lady said that the Toti had to go around and control enemies. But *what enemies* – if the war was over?”

The question “what enemies...?” seems to be a request for a supplementary explanation, supposedly needed after the child has reflected on what “the lady” said. On the face of it, the child’s question could even be interpreted as an accusation of inconsistency made to the tour guide. Despite the very mild tone of this sentence – after all, a small child is raising his voice against the authority of “the lady” on the guided tour – one can detect some criticism in this question, based on the assumption that one should expect to have enemies during an armed conflict but not after the conflict is over. If the phrase “accusation of inconsistency” is too strong for this case, we might say instead that the

⁵⁴ We are grateful to the publisher Peter Lang for having given us the rights to republish and rework on this example. We also wish to thank Sara Greco’s co-authors, namely Anne-Nelly Perret-Clermont, Stéphanie Breux and Céline Miserez-Caperos for having allowed us to reuse this example.

child is looking for a solution to what he had perceived as an inappropriate use of the term “enemies”. He might find it unusual, or even impossible, that an inconsistency should arise from a knowledgeable lady in charge of a guided tour at a museum. Perhaps the child senses that there might be something else behind this apparent contradiction; and so it is, because the Toti was active during the Cold War, which was actually still a war.

In terms of an analytic overview, we might reconstruct the short discourse above as follows:

1 There must be some explanation for the lady’s use of “enemies” on the guided tour (and it is reasonable to ask for it)

1.1 (because) the lady has not used “enemies” appropriately

1.1.1a Because she said that the Toti had to control enemies;

1.1.1b But she also said that the war was over

(1.1.1c And enemies only exist in wartime)

From this analytical overview, we can already say that the whole reasoning needs an implicit premise, namely 1.1.1.1, which is an important key to understanding the child’s evaluation of the situation. The AMT analysis that we are going to present in section 8.4.3 will explain how this implicit premise is at work within the complex reasoning that we are considering.

8.4.3 AMT analysis

Using an AMT perspective, two steps must be considered, which are represented in figures 8-3 and 8-4, respectively. These two steps are necessary because, as has been made explicit since chapter 6 in this volume, the AMT analyses the relationship between a standpoint and a supporting argument. Therefore, in a case of subordinative argumentation, more than one reconstruction is necessary. As already made clear in chapter 6, however, the AMT enables more than simply reconstructing the subordinative chain of arguments. It also allows the analyst to understand exactly how the different arguments are connected; it enables them to understand whether a subordinative argument supports an endoxon (that is not really shared) or whether a datum is not anchored in reality. As concerns this case, thus, we are not simply presenting the two reconstructions (or “y structures”) one after the other. We are also showing their connection in figure 8-5.

The first step (figure 8-3) connects 1.1 and its supporting coordinative arguments: 1.1a, 1.1b and 1.1c. In this specific case of coordinative argumentation, these arguments go together in an AMT

reconstruction (see the discussion on different types of coordinative arguments in chapter 6, section 6.5.1).

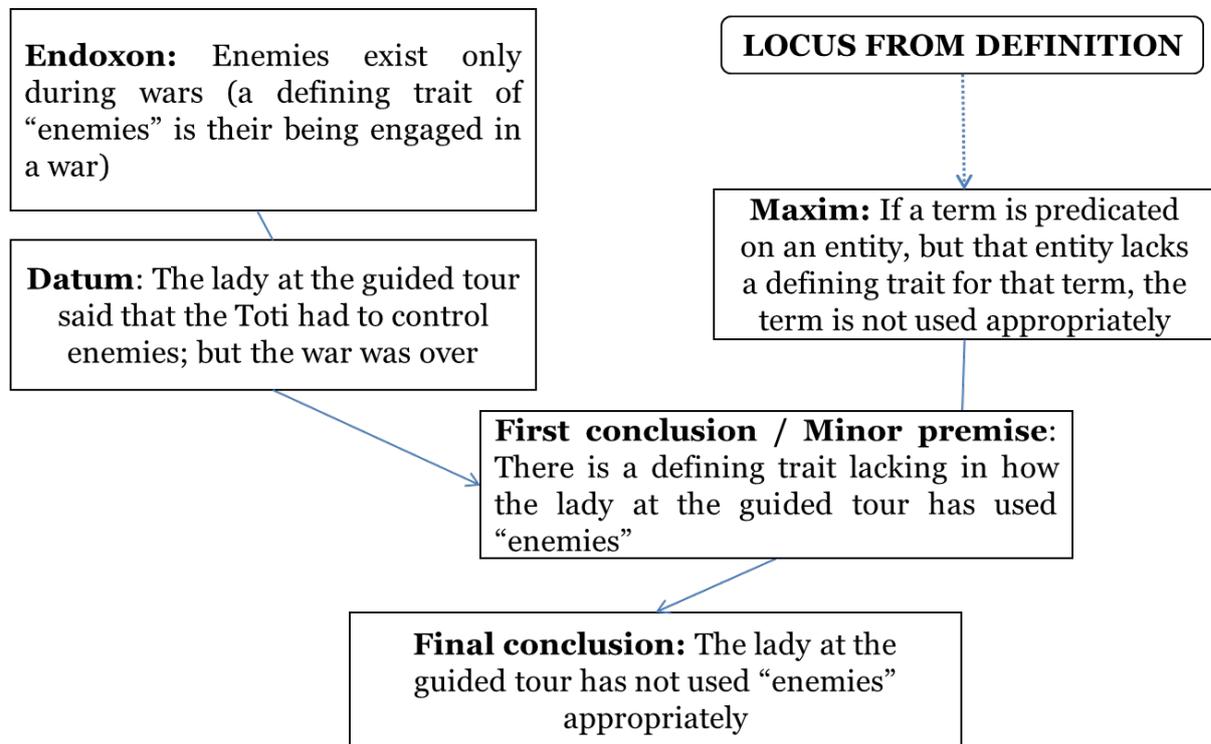


Figure 8-3: AMT representation of the child's argumentation, step 1

This first step is based on a locus from definition, regarding the connection between how a term (in this case, *enemies*) is used and the entity on which it is predicated. On the right side of the diagram in figure 8-3, procedural premises based on the inferential mechanism of the locus from definition bring us to the final conclusion that “the lady at the guided tour has not used “enemies” appropriately”. The *maxim* at play in this case might be formulated as follows: “If a term is predicated on an entity, but that entity lacks a defining trait for that term, then the term is not used appropriately”.⁵⁵ The minor premise in this syllogism is that “There is a defining trait lacking in how the lady at the guided tour has used enemies”. In order to back up this premise, we need to share a definition of “enemy”; and we need factual knowledge (information) about what the lady has actually said. This type of material premise is supplied in the left part of figure 1 in the form of an endoxon, which concerns a definition of enemies; as well as a datum, which concerns the seemingly contradictory factual information derived from the lady’s speech on the guided tour. Taken together, these two material premises are activated in a syllogism that brings us to the desired first conclusion, which is then connected to the procedural syllogism.

⁵⁵ This is one of those cases discussed in chapter 7, in which the formulation of the maxim has been made in accordance with the empirical data. This maxim is clearly connected to the locus from definition but it is not one of the classical maxims of definitions, described for example by Peter of Spain (chapter 3, section 3.5.2).

The second step in our child’s reasoning (figure 8-4) focuses on the reason why the child asks for an explanation; in other words, it connects the main standpoint (1) with argument 1.1. We believe this is based on *argumentation from authority*, as the child reasons that a knowledgeable person such as a museum lady cannot use inappropriate terms randomly; therefore she must have had some reason to speak of “enemies”. By means of an AMT reconstruction, one can elicit the child’s view of adults as sources of reliable knowledge. It is notable that the child did not immediately challenge the lady during the guided tour but talked to his mother some days later. Perhaps he did not feel like raising his voice against hers, or perhaps he had to think about the problem a bit further before asking. This simple note raises a question about the time required for argumentation when children are involved, which is inspired by the findings of the ArgImp project described above. It might be that, in some cases, children do not immediately react to teachers’ or other adults’ proposals to engage in argumentation in any situation. However, children might nevertheless express their views if they find themselves granted “thinking space” (Perret-Clermont 2004) in which they are free to discuss, advance issues, arguments and standpoints and even contradict authorities. A relevant question for educational domains – and other contexts in which children are involved – becomes, thus, how much adults are willing and able to provide children with thinking spaces and allow discussions in which the freedom rule of argumentation (van Eemeren and Grootendorst 2004) is not only theoretically but also practically implemented (cf. the reflection in Greco, Mehmeti and Perret-Clermont 2017; Greco 2016; Schär 2018).

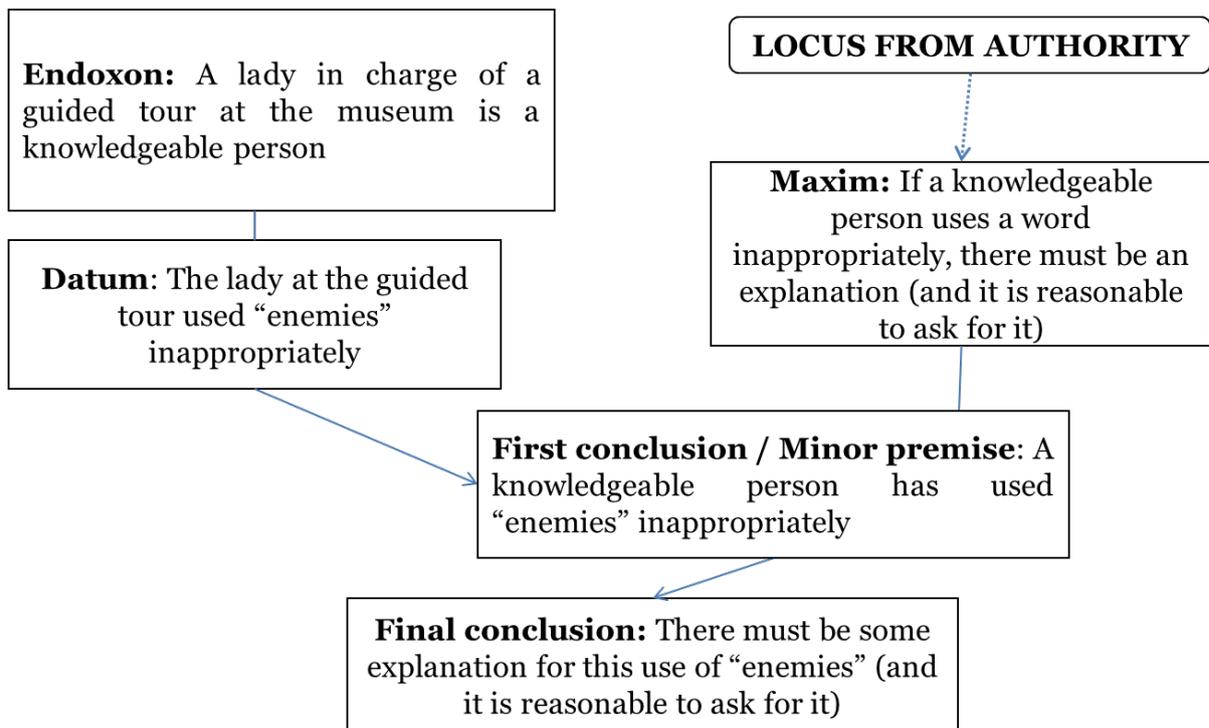


Figure 8-4: AMT representation of the child's argumentation, step 2

These two steps of the child's reasoning are interrelated, as shown in figure 8-5; namely, the conclusion of the first step (figure 8-3) is used as a *datum* in the second step (figure 8-4). In this case, in fact, it is the factual information that the lady had used the word "enemies" in an inappropriate way, i.e. the datum, which needed further backing. This backing is not necessary for the child himself, who was present at the guided tour, but it is necessary for his mother, who was not present. In this sense, subordinative argumentation in this example is particularly important as it is needed for the child to explain himself to his addressee, i.e. his mother.

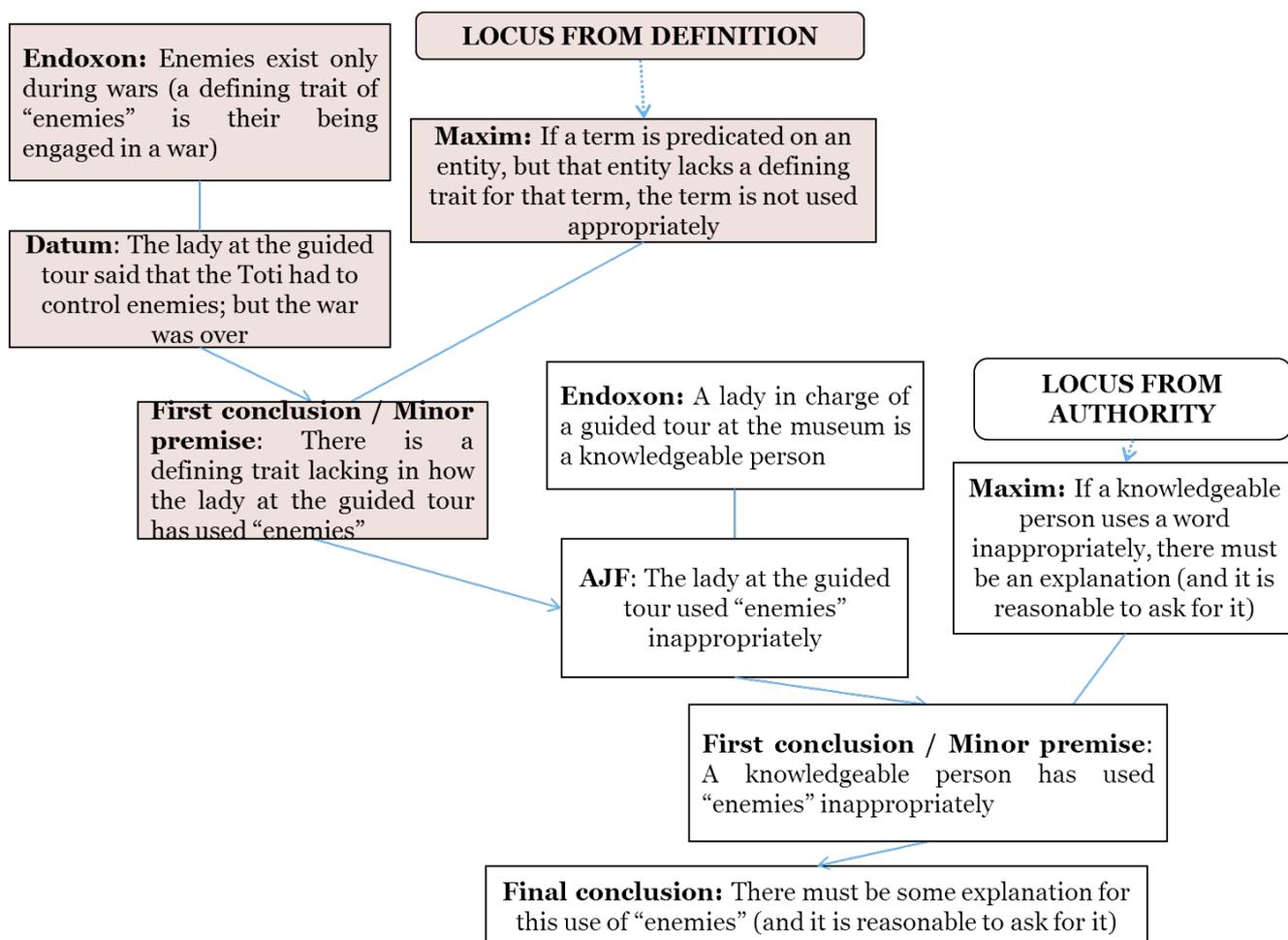


Figure 8-5: Intertwining of the two steps in figures 8-3 and 8-4

This example opens up two directions for our reflection. On the one hand, as discussed in chapter 6 (sections 6.5.1 and 6.5.2), the AMT representation of subordinative argumentation permits us to identify the target that subordinative argumentation is actually supporting; this is normally either the endoxon or the datum.

On the other hand, this represents a sophisticated example of a child's argumentation that shows the importance of reconstructing implicit premises in order to understand more of children's reasoning. Without going into detail of the general findings of the ArgImp project (for more information, see Schär 2017; Greco et al. 2017; Greco, Mehmeti and Perret-Clermont 2017), it is possible to use this example to make some remarks about small children's argumentative skills. In fact, on the face of it, this reasoning contains an obvious "mistake", if one wants to call it so, which derives from the child's restricted definition of the term "enemy". However, two points are important. First, the procedural component in this complex argument is based on maxims that might be considered as largely acceptable and would not differ from adults' maxims based on the same loci. This means that, at least in some instances, misunderstandings between adults and children are not due to logical mistakes but are caused by a difference in material-contextual premises (Greco et al. 2017). This brings us to the second point: what might be questionable here is an endoxon that includes a definition of "enemy" that, as previously said, is "incomplete" or, better, shows that the child is not fully aware of all the possible power relationships that exist between nations even at times when no violent conflicts are officially ongoing. It also shows – as is actually proven later in the conversation, which we have not reported here – that the child in question was not aware of the existence of such an event as the Cold War. Overall, this shows us that the child's endoxon could be modified and specified over time. This also paves the way for a profound discussion about how educators should treat children's mistakes: as the ArgImp scholars are arguing (see Perret-Clermont, Breux, Greco Morasso and Miserez-Caperos 2014), it would probably be more productive to see them as endoxa in development. We would also like to add that this process of progressive refinement and development of endoxa (and data) is not exclusive to children. As human beings, even we – as adults – are potentially subject to a process of continuous learning and adaptation of our view of the world.

8.5 “Don't throw the baby out with the bath water”: argumentation in the context of semi-direct democracy in Switzerland

This section draws on a hitherto-unpublished research project concerning public communication and argumentation in Swiss semi-direct democracy, in relation to popular initiatives at the federal level⁵⁶, i.e. at the level of the Swiss Confederation. We will concentrate on an AMT analysis of recurrent arguments⁵⁷ based on the locus from termination and setting up, which has already been discussed

⁵⁶ In Switzerland, the people have the right to request an amendment to the Federal Constitution. More details are available at: <https://www.ch.ch/en/demokratie/political-rights/popular-initiative/what-is-a-federal-popular-initiative/> (last visited 21 December 2017).

⁵⁷ This analysis was presented by one of the authors (Sara Greco) at the Amsterdam-Lugano colloquium on argumentation within a broader presentation designed with A. Rocci and R. Palmieri. We are grateful to

in section 8.3 (on dispute mediation). Examining the locus from termination and setting up in different contexts and applications gives us an opportunity to show the multivocal relation between loci and maxims in practice. In fact, different maxims used in these cases can be ascribed to one and the same locus.

8.5.1 Context

The analysis that we are going to present is based on a pilot study conducted on a small corpus of texts called “Explanations by the Federal Council”⁵⁸ (henceforth: Explanations). This text is a brochure produced by the Swiss Administration every time Swiss citizens need to vote.⁵⁹ In this section, we exclusively consider Explanations relating to popular initiatives at the *federal* level, thus excluding initiatives relating to single cantons. For every federal vote, the text is available in three languages: German, French and Italian, with the public administration responsible for the official translations. The Explanations are sent to citizens by regular mail; they are also made available online as PDF documents. In the various phases of negotiation and political campaigning before a vote, citizens also have access to other sources of information, such as the websites of the citizens’ committees that promote or oppose each initiative. They can also access information on the initiative through media coverage. The Explanations, however, stand out because they are written by members of the public administration, thus counting as an official public document.

The first part of the Explanations document has the function of informing citizens about the contents of the initiative, while the second part is explicitly argumentative, as it presents “arguments for” and “arguments against” the initiative. Arguments against the initiative are presented by the Federal Council; the arguments in favor of the initiative are presented by the initiative committee⁶⁰: the latter is given a page for arguments in favor of the initiative.

Because Switzerland has an almost unique political system, different studies in political sciences have examined its specific features (see for example research at the National Center of Competence in Research (NCCR) Democracy based at the University of Zurich)⁶¹. These studies have demonstrated the relevance of the *arguments* presented during political campaigns to Swiss citizens’ political choices (Kriesi 2005: 181-183). Therefore, it makes sense to unpick how these arguments are constructed. Up to now, to our knowledge, there have been only a few studies considering the

these colleagues for the suggestions that emerged at that presentation and for several later discussions on this topic.

⁵⁸ These texts are always available in three languages: “Explications du Conseil fédéral” (French), “Erläuterungen des Bundesrates” (German) and “Spiegazioni del Consiglio Federale” (Italian). An official text in English does not exist; we therefore propose our own translation of selected examples.

⁵⁹ “Three to four weeks before these [votes] are held, the Federal Council publishes a brochure which explains in simple terms the issues up for vote and the arguments for and against” (<https://www.admin.ch/gov/en/start/federal-council/tasks/information-and-communication.html>, last visited 21 December 2017).

⁶⁰ In this sense, the document has multiple authors because one page is left to the Committee to fill in.

⁶¹ See www.nccr-democracy.uzh.ch (last visited 27 January 2017). This research centre is not exclusively focused on the Swiss system of democracy but has included a focus on direct democracy in Switzerland.

Explanations from the viewpoint of language sciences and argumentation. In particular, Rossari (2013) and Bonhomme (2013) first pointed out the importance of these documents⁶² in argumentation terms and discussed their limits⁶³. Their analyses, however, do not include a specific focus on loci.

The participants in the argumentative discussion concerning the Explanations are the initiative committee, i.e. the proposers of the initiative, the Federal Council (and Parliament), which does not accept the initiative, and the Swiss citizens who will ultimately vote on it. In order to hold a vote on an initiative, disagreement between the initiative committee and the Federal Council (and Parliament) is necessary. In fact, if the Federal Council and Parliament agree on an initiative, they can implement it and change the constitution directly with no need for a popular vote. If they reject the initiative, then the official process for a popular initiative starts: at least 100,000 signatures must be collected for an initiative to obtain the right to be voted on⁶⁴. In pragma-dialectical terms (van Eemeren and Snoeck-Henkemans 2017), there is a mixed dispute between the Federal Council/Parliament and the initiative committee, as both have their own explicit standpoint. At the same time, there are two non-mixed disputes: one between Federal Council/Parliament and the citizens; and the other between the initiative committee and the citizens. Ultimately, in fact, it is the Swiss citizens who need to be persuaded to accept the initiative or not.

8.5.2 A legislation that has proven its worth

The analysis in this section is based on a pilot study of the Explanations relating to four different popular initiatives. In this pilot study, we were interested in understanding whether there are recurrent loci in the Explanations and how the AMT could help illuminate the parties' argumentation. The four selected initiatives were the following:

Title of the initiative	Date of the vote	Result
Against abusive remunerations (Minder)	3 March 2013	Accepted
1:12 for equitable salaries	24 November 2013	Rejected
Six weeks of holiday for everyone	11 March 2012	Rejected

⁶² Nonetheless, as this book is being completed, the interest in this field is growing, as witnessed by a project recently approved by the Swiss National Science Foundation ("Argumentation im politischen Diskurs in der Schweiz", Applicant: Juliane Schröter).

⁶³ Given the structure of the Explanations, the Federal Council finds itself in the double position of having to inform the citizens and of wanting to persuade them of their own standpoint. This creates competing demands in one and the same text, as has been discussed in Rossari (2013).

⁶⁴ In some cases, the Federal Council and Parliament can also advance a counter-proposal (technically called a "counter-project"); in these cases, citizens will have to decide whether they are (a) accepting or rejecting the initiative proposed by the Committee, and (b) accepting or rejecting the alternative "counter-project" proposed by the federal institutions.

Against mass immigration	9 February 2014	Accepted
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This represents a small sample of popular initiatives at the federal level, selected from the years 2012-2014. In this timespan, Swiss citizens were asked to vote (at the Federal level) four times a year and had to decide about three or four initiatives each time. Overall, from 1848 to January 2017, Swiss citizens have been called to vote 301 times. In the small selection on which this pilot study is based, we have decided to concentrate on recent initiatives; we have selected two initiatives that were accepted and two initiatives that were rejected. In all four initiatives, we found the presence of the locus from termination and setting up. This is obviously not the only locus that is present in these (often complex and relatively long) texts; however, its use is frequent. A more recent study (Cialini 2016) extended this sample, including a broader set of initiatives; this study confirmed the recurrent use of the locus from termination and setting up in the Explanations.

By way of example, we will now turn to the Federal Council's argumentation against the initiative "6 weeks of holiday", which was put to a vote on 11 March 2012 and rejected by the Swiss population. Broadly speaking, the initiative proposed to extend the minimum holidays for all Swiss citizens from four to six weeks. Because the minimum number of holiday days is established in the Swiss constitution, this proposal required a modification of the constitution; this can be obtained through a popular vote. The initiative committee motivated this proposal by appealing largely, though not exclusively, to the problem of stress and the consequent health problems that affect the population due to increasing pressure in the workplace. However, as the Federal Council immediately pointed out (see arguments 1.1a, 1.1b and 1.1c in table 8-1 below), the initiative committee failed to explain clearly how they would guarantee that the same standards of productivity would be maintained in the Swiss market, should the initiative be accepted.

Among the different arguments advanced by the Federal Council to persuade citizens to reject the initiative, this case study presents the following argument: if a regulation has proven its worth, it should not be changed (argument 1.2a); therefore, the initiative should be rejected. Similar formulations of this same argument have been found in all the other initiatives analysed. The analytical reconstruction proposed in table 8-1 is based on the final part of the Explanations, in which the Federal Council directly propose their arguments against the initiative. Our reconstruction has been translated into English after having carefully considered the original texts in German, French and Italian.

1. Federal Council (and Parliament) reject this initiative
 - 1.1a Prolonged absences will need to be compensated for by either employers or employees
 - 1.1.b If they are compensated for by employers, the Swiss economy will suffer
 - 1.1.c If they are compensated for by employees, their health will suffer
 - 1.2a. The current regulation concerning holidays has proven its worth

1.2.b This allows contracting parties and social partners the freedom to shape tailor-made solutions

1.2.b.1 For example, in many sectors, people aged 50 and above are granted additional holiday days

1.3 Switzerland compares favourably in this matter on the international stage

Table 8-1 Analytical reconstruction of the Federal Council’s argumentation in the “6 weeks of holidays” case.

8.5.3 AMT analysis

The analytic overview reported above (table 8-1) concerns a section of text relating to the Federal Council’s argumentation against the initiative. We will now concentrate on this example of refutational argumentation and propose a complete AMT analysis of the locus from termination and setting up, in the variant described above. We will therefore only focus on the relation between the main standpoint (1) and coordinative arguments 1.2a and 1.2b (see section 8.5.2 above). The AMT representation of these compound arguments, which in this case are part of one inferential configuration,⁶⁵ is represented in figure 8-6.

In this initiative, as in all the others, the Federal Council adopts the locus from termination and setting up with the following maxim: “If something is predominantly good it should not be terminated (despite its minor defects)”. We might reformulate this maxim in popular terms with the famous saying “Don’t throw the baby out with the bath water”.⁶⁶ In other words, the Federal Council often does not say that the initiative committee is completely wrong, or that the problems they have targeted do not exist. They tend to acknowledge that there may be some defects or problems in the current legislation; to continue with the metaphor, they agree that there is some “bath water” that should ideally be eliminated. However, they argue that the current legislation *has proven its worth* (a phrase literally recurring in all the initiatives) and that it should not be changed, for fear of losing its positive aspects.

⁶⁵ As discussed in chapter 6 (section 6.5.1), compound argumentation can ‘hide’ different situations at an inferential level. In this case, the two compound arguments work as premises within one and the same inferential configuration.

⁶⁶ This saying appears in the book *Narrenbeschwörung (Appeal to fools)* by Thomas Murner (1512) with an illustration depicting a woman who is literally throwing a child out with the bath water.

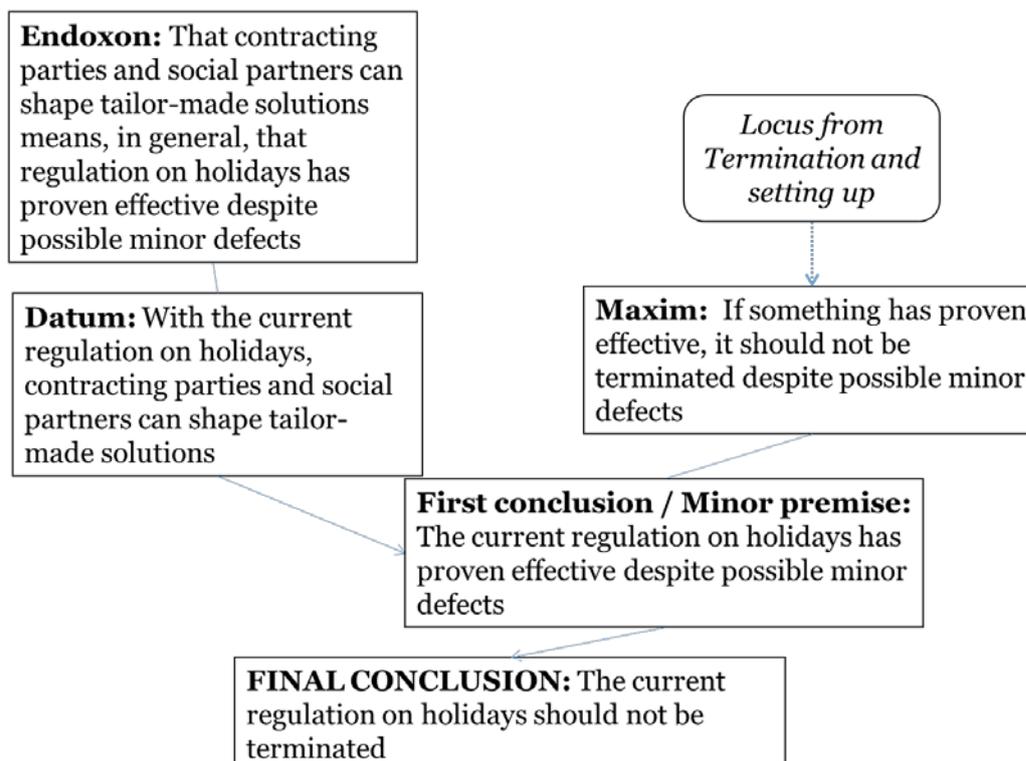


Figure 8-6: AMT representation of the Federal Council's argument 1.2a and 1.2b

As mentioned above, the maxim presupposed in the argument by the Federal Council is: “If something is predominantly good it should not be terminated (despite its minor defects)”. The inferential-procedural component allows us to reach the conclusion that “The current regulation on holidays should not be terminated”, which implies that Swiss citizens are invited to reject the initiative. The material component of this argument states what it means for a regulation on holidays to be effective. This is defined in terms of flexibility: the regulation on holidays is said to have been effective because it has allowed contracting parties and social partners the freedom to shape tailor-made solutions (see endoxon and datum in figure 8-6). In the original text, the fact that the current legislation is flexible enough to guarantee tailor-made solutions is supported through a single illustrative example (argument 1.2.b.1, based on the locus from parts to whole, see chapter 7): the current regulation on holidays allows organizations, in many cases in Switzerland, to grant longer holidays to workers who are aged over 50. Argument 1.2.b.1 is a subordinative argument that specifically supports the *datum* in figure 8.6.

We said that this use of the locus from termination and setting up is typical of the Federal Council in popular initiatives: thinking about the context of these popular votes, this is not surprising, because the Federal Council needs to convince citizens that the current form of the constitution does not need to be “thrown away with the bath water”. Interestingly, the locus from termination and setting up is largely used not only by the Federal Council, but also by the initiative committee, albeit

with a different maxim: “If something is bad, it should be terminated/modified”. This argument is functional to their goal of proposing that citizens partially modify the text of the constitution. When a committee launches an initiative, *de facto* they see the current state of the constitution as insufficient or no longer fitting the situation of the country.⁶⁷ In this sense, the locus from termination and setting up is useful to show that, when a situation is “bad”, it should be modified. The analysis of the Explanations shows that differentiating between locus and maxim allows an understanding of how different maxims can be derived from one and the same locus. Ultimately, the confrontation between the Federal Council and the initiative committee concerns an evaluation of the current state of affairs and an opportunity to modify it; in both cases, the *habitus* that underlies the locus from termination and setting up is centre stage, but the maxims read such *habitus* in two opposite directions.

8.6 Concluding remarks

In this chapter, we have provided four examples of how the AMT might be used to reconstruct and analyse argumentation in different contexts and communication practices. However, these contexts certainly do not represent an exhaustive list of all the existing applications of this model. In Appendix 1, we give a broader overview of other contexts and activity types in which the AMT has been used to reconstruct argumentation.

The following brief considerations stem from the four examples discussed above. First, the importance of the distinction between “locus” and “maxim”, which the AMT draws from the tradition of topics, emerges if we compare different cases in which the same locus is used with different maxims. In section 8.5, we have seen how political opposition in the context of Swiss semi-direct democracy (popular initiatives at the Federal level) might be based on arguments that make use of the same locus (locus from termination and setting up) but involve different maxims. Furthermore, as shown in section 8.3, the locus from termination and setting up also features in dispute mediation as a tool characteristically employed by mediators to help parties reflect on the opportunity to solve their conflict by means of a mediated discussion. Again, in this context a different maxim is employed: “if something is valuable, it should not be interrupted”. As discussed in chapter 7, the possibility of binding different maxims to a limited number of loci allows a clear conceptualisation of the inferential principles at the basis of argumentation, whilst at the same time guaranteeing adherence to the actual uses of loci in different contexts.

Another important aspect that can be derived from this brief overview is the topicality of the distinction between procedural-inferential and contextual-material premises. In different cases (see in particular sections 8.2 and 8.4), we observed that it is not the maxim (the procedural component)

⁶⁷ In terms of “stock issues” for the introduction of a new policy, this argument can be interpreted as clearly linked to the stock issue of harm/ill (see for example Ziegelmueller and Kay 1997). In fact, the committee argues that there is an important problem in the current situation and that this problem must be removed.

that is the object of a discussion; more often than not, differences of opinion ultimately derive from different endoxa or a different interpretation of the data. For example, in section 8.2, as we briefly reconstructed a public debate that appeared in the media, we noted that the functional genus in argumentation by analogy appears in the endoxon. This endoxon is then explicitly criticized by an antagonist, who does not go against the maxim of this type of reasoning but argues against the appropriateness of this functional genus. Similarly, in section 8.4 we have shown that distinguishing between an inferential-procedural and a material-contextual component helps to facilitate reflection on children's reasoning. In this sense, we feel that the distinction which operates within the AMT offers an important theoretical tool for the reconstruction of implicit premises and their evaluation.

References

- Aakhus, M. (2003). Neither naïve nor critical reconstruction: Dispute mediators, impasse, and the design of argumentation. *Argumentation* 17(3): 265-290.
- Aakhus, M. (2007). Communication as design. *Communication Monographs* 74: 112-117.
- Anderson, R. C., et al. (1997). On the logical integrity of children's arguments. *Cognition and Instruction*, 15 (2): 135-167.
- Bigi, S., and Greco Morasso, S. (2012). Keywords, frames and the reconstruction of material starting points in argumentation. *Journal of Pragmatics* 44 (10): 1135-1149.
- Bonhomme, M. (2013). Argumentation et interaction dans les brochures du Conseil federal Suisse sur les votations populaires. *Argumentation et Analyse du Discours* 10/2013, (available online at: <http://aad.revues.org/1454>, last visited September 2018).
- Bush, R. A. B., and Folger, J. P. (1994). *The promise of mediation: Responding to conflict through empowerment and recognition*. San Francisco: Jossey-Bass.
- Cialini, D. (2016). *Argomentazione nelle votazioni popolari federali: un'analisi comparativa tra gli opuscoli del Consiglio federale e di Easyvote*. Unpublished Masters dissertation, USI – Università della Svizzera italiana.
- Eemeren, F.H., van (2016). Identifying argumentative patterns: A vital step in the development of pragma-dialectics. *Argumentation* 30 (1):1-23.
- Eemeren, F. H., van, and Grootendorst, R. (1984). *Speech acts in argumentative discussions: A theoretical model for the analysis of discussions directed towards solving conflicts of opinion*. Dordrecht: Foris.
- Eemeren, F. H., van, and Grootendorst, R. (2004). *A systematic theory of argumentation: The pragma-dialectical approach*. Cambridge: Cambridge University Press.
- Eemeren, F. H, van, and Snoeck-Henkemans, A. F. (2017). *Argumentation: Analysis and evaluation (2nd edition)*. New York: Routledge.
- Fisher, R., Ury, W. L., and Patton, B. (1991). *Getting to Yes: Negotiating agreement without giving in*. London: Penguin Books.

- Folger, J. P., and Bush, R. A. B. (1994). Ideology, orientations to conflict, and mediation discourse. In J. P. Folger and T. S. Jones (Eds.), *New directions in mediation: Communication research and perspectives* (pp. 3-25). Thousand Oaks (Sage).
- Greco, S. (2005). Der kommunikative Bestandteil der mediatorischen Kompetenz. *Forum Mediation: Zeitschrift des Schweizerischen Vereins für Mediation* 8 (2): 4-15.
- Greco Morasso, S. (2011). *Argumentation in dispute mediation: A reasonable way to handle conflict*. Amsterdam/Philadelphia: John Benjamins.
- Greco, S. (2016). L'enfant dans la discussion: Questions de légitimité, de confiance et d'interprétation de sa parole. *FamPra – Die Praxis des Familienrechts* 2: 402-415.
- Greco, S., Mehmeti, T., and Perret-Clermont, A.-N. (2017). Do adult-children dialogical interactions leave space for a full development of argumentation? A case study. *Journal of Argumentation in Context* 6 (2): 193–219.
- Greco Morasso, S., Miserez-Caperos, C., and Perret-Clermont, A.-N. (2015). L'argumentation à visée cognitive chez les enfants. In N. Muller Mirza and C. Buty (Eds.), *L'argumentation dans les contextes de l'éducation* (pp. 39-82). Bern: Peter Lang.
- Greco, S., Perret-Clermont, A.-N., Iannaccone, A., Rocci, A., Convertini, J., and Schär, R. (2017). Analysing implicit premises within children's argumentative inferences. Paper presented at the 2nd European Conference on Argumentation, Fribourg, June 2017.
- Iannaccone, A., Convertini, J., Perret-Clermont, A.-N., and Rocci, A. (2016). Loss of meaning in trying to make the issue meaningful. Paper presented at the European Association for Research on Learning and Instruction, SIG 20-26. Ghent (Belgium), 22-24 August 2016.
- Ingrassia, P. (2011). *Crash course: The American Automobile Industry's road to bankruptcy and bailout – and beyond*. New York: Random House Trade Paperbacks.
- Jacobs, S., and Aakhus, M. (2002). What mediators do with words: implementing three models of rational discussion in dispute mediation. *Conflict resolution quarterly* 20 (2): 177-203.
- Kelman, H. C. (2009). Interactive problem solving: Informal mediation by the scholar-practitioner. *ZKM – Zeitschrift für Konfliktmanagement* 3: 74-79.
- Kriesi, H. (2005). *Direct democratic choice: The Swiss experience*. Lanham, MD: Lexington Books.
- Menkel-Meadow, C. (2005). Roots and inspirations. A brief history of the foundations of dispute resolution. In M. M. Moffitt and R. C. Bordone (Eds.), *The Handbook of Dispute resolution* (pp. 13-31). San Francisco: Jossey-Bass.
- Mitchell, C. (2003). Mediation and the ending of conflicts. In J. Darby and R. M. Ginty (Eds.), *Contemporary peacemaking* (pp. 77-86). London: Palgrave MacMillan.
- Murner, T. (1512). *Narrenbeschwörung*. Hamburg: Ex Bibliotheca Gymnasii Altonani.
- Palmieri, R. (2012). 'Acte de Dieu' ou 'Erreur humaine'? – Analyse argumentative du débat relative à la crise de l'automobile de Détroit (2008). *ILCEA [Online]*, 15.
- Perret-Clermont, A.-N. (1979). *La construction de l'intelligence dans l'interaction sociale*. Bern: Peter Lang.

- Perret-Clermont, A.-N. (2004). Thinking Spaces of the Young. In A.-N. Perret-Clermont, C. Pontecorvo, L. B. Resnick, T. Zittoun and B. Burge (Eds.), *Joining Society. Social Interaction and Learning in Adolescence and Youth* (pp. 3-10). Cambridge (UK): Cambridge University Press.
- Perret-Clermont, A.-N., Breux, S., Greco Morasso, S., and Miserez-Caperos, C. (2014). Children and knowledge-oriented argumentation. Some notes for future research. In G. Gobber and A. Rocci (Eds.), *Language, reason and education: Studies in honor of Eddo Rigotti* (pp. 259-277). Bern: Peter Lang.
- Putnam, L. (2004). Transformation as a critical moment in negotiations. *Negotiation Journal* 20 (2): 275-295.
- Rigotti, E., and Greco Morasso, S. (2010). Comparing the Argumentum Model of Topics to other contemporary approaches to argument schemes: The procedural and material components. *Argumentation* 24 (4): 489-512.
- Rossari, C. (2013). Phénomènes énonciatifs et argumentation dans les brochures du Conseil fédéral Suisse sur les votations populaires. *Argumentation et Analyse du Discours* 10/2013, (available online at: <http://aad.revues.org/1454>, last visited September 2018).
- Savard, J.-F., and Melançon, C. (2013). Governmental priorities and administrative rhetoric: The case of briefing notes. In C. Conteh and I. Roberge (Eds.), *Canadian Public Administration in the 21st Century* (pp. 157–172). Boca Raton (FL): CRC Press.
- Schär, R. (2017). Definitional arguments in children’s speech. *L’Analisi Linguistica e Letteraria* 25: 173-192.
- Schär R., Greco S. (2018). The emergence of issues in everyday discussions between adults and children. *International Journal of Semiotics and Visual Rhetoric* 2 (1): 29-43.
- Shmueli, D. F. (2008). Framing in geographical analysis of environmental conflicts: Theory, methodology and three case studies. *Geoforum* 39: 2048-2061.
- Säljö, R., and Pramling, N. (2015). The clinical interview: The child as a partner in conversations vs. the child as an object of research. In S. Robson and S. F. Quinn (Eds.), *International handbook of young children’s thinking and understanding* (pp. 87-95). London: Routledge.
- Sinclair-Harding, L., Miserez-Caperos, C., Arcidiacono, F., and Perret-Clermont, A.-N. (2013). Argumentation in the Piagetian clinical interview: a step further in dialogism. In B. Ligorio and M. César (Eds.) *The interplays between dialogical learning and dialogical self*. (pp. 53-82). Charlotte: Information Age Publisher.
- Vasilyeva, A. (2017). Strategic manoeuvring in dispute mediation. *Argumentation & Advocacy* 53 (3): 234-251.
- Walton, D., and Macagno, F. (2009). Argument from analogy in law, the classical tradition, and recent theories. *Philosophy and Rhetoric* 42 (2): 154–182.
- Xenitidou, M., and Greco Morasso, S. (2014). Parental discourse and identity management in the talk of indigenous and migrant speakers. *Discourse & Society* 25 (1): 100-121.
- Ziegelmüller, G. W., and Kay, J. (1997). *Argumentation: Inquiry and Advocacy* (3rd edition). Boston (etc): Allyn and Bacon.

