ARGUMENTS OF INTERPRETATION AND ARGUMENTATION SCHEMES

Fabrizio Macagno

1. Introduction

In everyday discourse we retrieve the meaning of verbal or written utterances by means of different processes of reasoning. The most common one is the presumptive, or rather heuristic mechanism (Hamblin 1970, pp. 294-295; Macagno 2012). Our interpretation of a word or a sentence is guided by the commonly shared definition and meaning attributed to it. However, sometimes the presumptive meaning is not a viable option. If we do not have any doubts in classifying an unlawful killing as a 'homicide', we have much greater problems when we need to categorize an abortion as such. There are cases in which we cannot presume a shared meaning, or the shared meaning itself is contested. Therefore, the possible definition of a word or the interpretation of a sentence becomes a standpoint that needs to be supported by arguments. In this sense, the actual or possible conflicts of opinion on meaning become a form of argumentative practice that needs to be analyzed through the analysis of the arguments used.

Theories on legal interpretation clearly highlight this argumentative dimension of meaning. According to McCormick (1995, p. 467), interpretation 'is a particular form of practical argumentation in law, in which one argues for a particular understanding of authoritative texts or materials as a special kind of (justifying) reason for legal decisions.' A statement of law (or source statement) can be used to support a specific conclusion only by retrieving its meaning. Sometimes this meaning can be reconstructed in a presumptive way, and in this sense we 'understand' it. However, when the understanding of the source is controversial, it turns into an interpretative process grounded on arguments (Patterson 2004, p. 247).

The analysis of legal interpretation as an argumentative activity involves two different domains and two different perspectives. On the one hand, interpretation is based on the use of arguments, whose logical and semantic structure and evaluation can be analyzed from within the field of argumentation studies (Walton 2006; van Eemeren & Grootendorst 2004). On the other hand, this activity is performed in a specific context, characterized by precise rules, roles and mechanisms. Such elements are taken into consideration in the field of philosophy of law. Thus, a study of legal interpretation needs to reconcile the two theoretical dimensions and approaches, so that the structure of a specific type of reasoning used in the specific context of law can be explained, examined and evaluated from a more abstract perspective.

The purpose of this study is to translate the argument analysis carried out in philosophy of law into the theoretical structures used in argumentation theory. The starting point is provided by the list of arguments of statutory interpretation set out by Tarello (Tarello 1980; see Feteris 1999). These arguments, comparable with the ones used in common law (McCormick 1995; Summers 1991; Greeanawalt 2002), can be shown to be specific applications of more generic schemes of reasoning, characterized by the combination of a semantic principle (called «local» or «material» connection between the terms, see Stump 1988, p. 6; Abelardi *Dialectica* 264) with a more abstract formal rule of inference. These structures that represent prototypical patterns of argument, called argumentation schemes (Walton, Reed & Macagno 2008; see also van Eemeren & Grootendorst 2004), can provide a link between legal interpretation and the instruments of argumentation.

2. Interpretation and presumptive meaning

In law the concept of interpretation has been analyzed both in a broader and in a more restrictive sense. According to the first position, advocated by Tarello (Tarello 1980; Guastini 2011) interpretation is the necessary step leading from a source statement (a linguistic element) to a rule (its meaning). On this perspective, there are no rules of law (obligations, prohibitions...) without interpretation. According to the nar-

rower approach, interpretation is regarded as the argumentative process that is aimed at solving a doubt concerning the meaning of a text (Patterson 2004). These two perspectives are not mutually exclusive. Rather, the second approach distinguishes between the defaultive reasoning, which is used to attribute a presumptive meaning to a statement (the 'understanding'), and the systematic one, which intervenes when the prima-facie understanding is not possible. The nature of the two types of interpretative activity is different from the point of view of the kind of reasoning involved. However, in both cases the relationship between text and meaning is always mediated by a reasoning process that can be described in argumentative terms.

The relationship between the source-statement, set out in legal sources, and its interpretation, namely the rule resulting therefrom, corresponds to the linguistic distinction between text and meaning (Rigotti & Cigada 2004; Rigotti & Rocci 2006), or between what is said (literal meaning) and what is meant (Carston 2002; Searle 1981, Chapter 5). This passage can be mediated by two different processes. The first is the prima-facie understanding, which is the attribution by default of a rule (or meaning) to the text (the source-statement). The other process consists in a more complex reasoning that Searle called «strategy for interpretation» (1981, p. 102), namely an explanation of meaning that is supported by different grounds, such as salience, definitional traits, prototypical features, and so on.

From an argumentative perspective, interpretation can be distinguished from prima-facie understanding. In prima-facie understanding, the passage from a source statement to the rule it expresses (Tarello 1980) is grounded on unchallenged presumptive meaning (Macagno 2011, 2012). If we consider the passage from text to meaning as a mediated process, understanding can be regarded as the default explanation of the meaning of a word or sentence according to shared linguistic-cultural conventions/practices. In interpretation, the explanation of meaning of a source-statement needs to be supported by arguments. Interpretative argumentation becomes an activity aimed at supporting a challenged or potentially challengeable interpretative statement. In other words, it bears out a possibly controversial statement affirming that a source-statement has a certain meaning (expresses a certain rule), and

thereby selecting a specific meaning among other possible ones of the same source.

This twofold route to meaning explanation can be more clearly explained by means of the analysis of an example. For instance, we can consider the famous source-statement written on a sign in from of Lincoln Park (Horn 1995, p. 1146):

All vehicles are prohibited from Lincoln Park.

The presumptive meaning is based on the commonly shared definition of 'vehicle', resulting in the following default explanation of meaning (or prima-facie understanding): 'entities having wheels and used for the transportation of people are prohibited from Lincoln Park.' In a prototypical context, characterized by specific background assumptions (Searle 1981, p. 135), this default passage can be accepted or considered as acceptable. However, sometimes the prototypical context allowing a 'literal' understanding does not occur in all its features. For this reason, the presumptive, defaultive meaning cannot be taken into consideration as the possible meaning explanation without any burden of proof.

Sometimes in legal interpretation the passage from the source statement to the corresponding rule is not merely a process of understanding. The statement may be vague or ambiguous (so that prima-facie understanding delivers alternative clues), or it needs to be applied to a specific case with regard to which there are reasons for *not* applying the presumptive meaning. In this case, the default explanation cannot be considered presumptive anymore, as possible contrary evidence is already there. The presumptive meaning becomes one of the possible interpretative statements that need to be grounded on arguments. For example 'vehicles' can be interpreted as 'unauthorized transportation means', or as 'transportation means with an engine', etc. We can represent the twofold process of interpretation as follows:

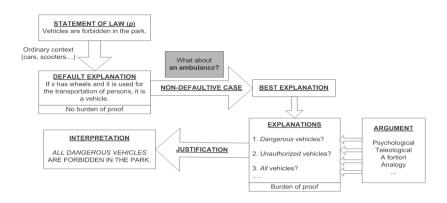


Figure 1: Interpretation and understanding

As shown in figure 1 above, understanding does not involve a burden of proof, as it is the default explanation that holds until contrary evidence (i.e. challenges or non-prototypical context) emerges. When these conditions do not apply, the default explanation ceases to be as such. It becomes one of the possible interpretations that are considered as potentially controversial and, therefore, need to be grounded on arguments. The various arguments advanced to support an interpretation need to defeat the other possible alternatives. They need to show that the advocated explanation of meaning is better (more adequate, more suitable) than the others. These interpretative arguments have been analyzed in philosophy of law and classified in general categories that will be described in the following section.

3. The categories of interpretative arguments

Tarello (1980) in his work on legal interpretation identified the structure and the uses of thirteen types of argument of interpretation. Two of these arguments (the argument from the coherence of the law and the argument from the completeness of the law) are called 'ancillary', as they do not support directly an interpretation, but instead act as

counter-arguments. They exclude a possible (presumptive or non-presumptive) explanation and provide a reason for the simple *need* for a different interpretation of a source statement.

Tarello's arguments can be examined from a different perspective. The picture of interpretative reasoning can be broadened, and such arguments can be considered in relation with more abstract categories of patterns of human argument. Instead of describing Tarello's arguments from a legal perspective, it is possible to show how they mirror some more abstract structures with which the human ordinary reasoning can be represented.

The patterns of natural arguments are called in argumentation theory 'argumentation schemes' or 'argument schemes'. They can be regarded as the modern re-elaboration of an ancient idea, namely the description of the principles that lead from two or more premises to a conclusion. On this perspective, the modern schemes can be considered as the continuation of the medieval theory of *loci*, or rather maxims of inference (Walton, Reed & Macagno 2008; Rigotti & Greco-Morasso 2010; Rigotti 2009). In the last fifty years different sets and classifications of schemes have been proposed (see Hastings 1963; Perelman & Olbrechts-Tyteca 1969; Kienpointner 1992a, 1992b; Walton 1996; Grennan 1997; Walton, Reed & Macagno 2008), abstracting general categories from the various arguments more commonly used. Van Eemeren and Grootendorst (2004), instead, proposed a top-down approach, where three generic types of schemes are distinguished, under which different subtypes are classified. Taking into consideration the schemes set out in (Walton, Reed & Macagno 2008) and comparing them with Tarello's arguments, it is possible to show how the first ones can be regarded as specific, contextual uses of more generic patterns.

The first type of argument of interpretation is the *a contrario*, which can be summarized by the Latin principle *Ubi lex voluit, dixit; ubi noluit, tacuit* (what the law wishes, it states, what the law does not want, it keeps silent upon). According to this argument, if a rule attributes any normative qualification (such as a power, an obligation or a status) to an individual or a category of individuals, in lack of any other explicit rules it shall be excluded that any additional rule is in force (exists, is valid) attributing the same quality to any other individual or cat-

egory of individuals. The structure of this argument can be represented as follows:

Major premise:	If x is P , then x has the right/is A .	
Closed world premise:	In lack of contrary provisions, if x is not P , then :	
	does not have the right/is not A .	
Minor premise:	Individual <i>a</i> is not <i>P</i> .	
Conclusion:	Therefore, individual a has not the right/is not A .	

We can notice that this reasoning is effective only in a closed-world scenario. The conclusion can be drawn only in conditions of lack of contrary evidence, that is, when no other laws setting out the attribution of the same predicate to other categories is known. For this reason, the crucial logical assumption behind this type of reasoning can be represented as a form of reasoning from ignorance (Walton, Reed & Macagno 2008, p. 327):

Argumentation scheme 1: Argument from ignorance

Major premise:	If A were true, then A would be known to be true.
Minor premise:	It is not the case that <i>A</i> is known to be true.
Conclusion:	Therefore <i>A</i> is not true.

The argument from similarity and the *a fortiori* argument both proceed from a comparison between two rules (Guastini 2011, p. 282-283). In both cases, the interpreter aims at supporting an unexpressed rule and presupposes a *ratio iuris*, which is applied to the case not expressly regulated yet. In case of analogy, if a rule attributes any normative qualification (such as a power, an obligation or a status) to an individual or a category of individuals, it can be concluded that there is an additional rule that attributes the same quality to another individual or category of individuals connected with the former class by a similarity or an analogy relation. The reasoning structure of this type of argument can be represented as follows (Walton, Reed & Macagno 2008, p. 315):

Argumentation scheme 2: Argument from analogy

Major premise:	Generally, case C_1 is similar to case C_2 .
Minor premise:	Proposition A is true (false) in case C_I .
Conclusion:	Proposition A is true (false) in case C_2 .

This scheme is defeasible, in the sense that it provides only a presumptive reason to accept the conclusion. The following critical questions highlight the potentially critical points of an analogical argument, which can be used at the same time as an instrument of invention (finding possible rebuttals or defeaters) and a method of evaluation (does the argument satisfactorily meets such conditions or provides reasons in support thereto?).

CQ1: Is A true (false) in C_I ?

CQ2: Are C_1 and C_2 similar, in the respects cited?

CQ3: Are there important differences (dissimilarities) between C_1 and C_2 ?

CQ3: Are there important?

CQ4: Is there some other case C_3 that is also similar to C_1 except that A is false (true) in C_3 ?

The *a fortiori* argument partially mirrors the aforesaid pattern. However, in this case there is an asymmetry in favor of the case not expressly regulated: if a rule attributes any normative qualification (such as a power, an obligation or a status) to an individual or a category of individuals, it can be concluded that there is a different rule (or a different rule exists, is valid) that attributes the same quality to another individual or category of individuals in a situation in which such a normative qualification shall be even more needed or justified (Tarello 1980, p. 355).

Four arguments are based on authority: the psychological, the historical, the naturalistic and the *ab exemplo* arguments. In these arguments, the acceptability of the interpretation depends on the authority of the legislator, previous interpreters or popular opinion. According to the psychological argument, to a source statement shall be attributed the meaning that corresponds to the intention of its drafter or author, that is,

the historical legislator. In the historical argument the authority is not the actual legislator but the traditional interpretation (the authority of previous interpreters) of a previous source statement that governed the same case in the same legal system. This type of argument, which can be called the *de jure* argument from authority, has the following argumentation scheme:

Argumentation scheme 3: Argument from authority	(de	iure`	١

Minor Premises:	L is an authority involved in (passing, drafting, amending) the source-statement A.	
Major Premise:	L (passed, drafted, amended) source-statement A intending M .	
Conditional Premise:	If L is an authority involved in (passing, drafting, amending) the source-statement A , and L intended the meaning (interpretation) M , then M may plausibly be taken to be right meaning (interpretation).	
Conclusion:	<i>M</i> may plausibly be taken to be the right meaning (interpretation).	

The defeasibility conditions can be specified by taking into consideration the critical questions of the argument from expert opinion and Tarello's analysis (1980, p. 366-367). They can be summarized in the following critical questions:

CQ1: *Role Question*: Whose opinion, in the case, effectively represents *L's* opinion (the majority, the most influential, the most representative)?

CQ2: Opinion Question: Did L intend to express M by asserting A?

CQ3: Consistency Question: Is M consistent with the intention of other Ls that passed the same law?

CQ4: *Coherence Question*: Does *M* lead to any antinomy or incoherence in the legal system?

The argument *ab exemplo* (or authoritative) is based on the authority of a previous interpretation, or rather the authority of the product of a previous interpretation. Finally, the naturalistic argument (or at least

one of its patterns) proceeds from the authority of popular opinion. As a matter of fact, it is grounded on the commonly accepted 'nature' of the things, namely the commonly shared values that characterize a specific culture.

The arguments from consequences are based on the acceptability or unacceptability of what follows from applying a rule. The judgment on the consequences of the application of a rule is transferred onto the reasonableness or unacceptability of the interpretation leading to that rule. Through the apagogic argument it is possible to reject the possible interpretations of a source statement leading to an unreasonable or 'absurd' rule. According to the teleological argument a source statement shall be given the interpretation that corresponds to the purpose which the legislator (or the law) aims to achieve through that statement. This type of reasoning can be represented with the argument from consequences (from Walton, Reed & Macagno 2008, p. 332):

Argumentation scheme 4: Argument from consequences

Major premise:	If A is brought about, good (bad) consequences will	
	plausibly occur.	
Minor premise:	What leads to good (bad) consequences shall be (not)	
	brought about.	
Conclusion:	Therefore A should be (not) brought about.	

The critical questions associated with this scheme are the following ones:

CQ1: How strong is the likelihood that the cited consequences will (may, must) occur?

CQ2: What evidence supports the claim that the cited consequences will (may, must) occur, and is it sufficient to support the strength of the claim adequately?

CQ3: Are there other opposite consequences (bad as opposed to good, for example) that should be taken into account?

Finally, abductive arguments lead from a fact to its best possible explanation. According to the economic argument, an interpretation of a source statement that corresponds to the meaning of another, older or hierarchically superior, source statement shall be excluded. The reason can be found in the fact that the best explanation for the existence of two identical statements of law is that the legislator intended them as having different meanings. The systematic argument is based on the authority of the legal system (the other provisions of law) and the explanatory principle that the legislator intended a unitary and coherent system of laws. Accordingly, the best explanation for the meaning of a source statement is the meaning corresponding to the one imposed (and not excluded) by the legal system. This type of reasoning can be mirrored by the reasoning from best explanation (Walton 2002, p. 44):

Argumentation scheme 5: Reasoning from best explanation

Premise 1:	F is a finding or given set of facts.
Premise 2:	E is a satisfactory explanation of F .
Premise 3:	No alternative explanation E' given so far is as satisfacto-
	ry as E.
Conclusion:	Therefore, <i>E</i> is plausible, as a hypothesis.

The defeasible points can be summarized in the following questions:

- CQ1: How satisfactory is E itself as an explanation of F, apart from the alternative explanations available so far in the dialogue?
- CQ2: How much better an explanation is E than the alternative explanation so far in the dialogue?
- CQ3: How far has the dialogue progressed? If the dialogue is an inquiry, how thorough has the search been in the investigation of the case?
- CQ4: Would it be better to continue the dialogue further, instead of drawing a conclusion at this point?

The different interpretation of a principle expressed in a different place, or redundant, is a satisfactory explanation of a fact. It is a possi-

ble way of explaining the superfluity of a source statement or a specific phrase therein.

The correlation between the arguments of interpretation and the argumentation schemes can be represented in the following scheme:

1. Argumentum a contrario	Argument in lack of evidence	
2. Argumentum a simili	Analogical argumento	
3. Argumentum a fortiori	Analogical arguments	
4. The psychological argument		
5. The historical argument	Arguments proceeding from	
6. The naturalistic argument	the authority of the source	
7. Argumentum ab exemplo		
8. The teleological argument		
9. The apagogical argument	Arguments proceeding from consequences	
10. Argumentum a coherentia		
11. The economic argument		
12. The systematic argument	Abductive arguments	
13. Argumentum a completitudine		

Figure 2: Arguments and schemes of interpretation

Clearly, this correspondence is not perfect. The authority of a piece of legislation is strictly connected with the authority of its source, or the authority of the system of laws. For this reason, arguments that in the Latin and medieval tradition would have been considered as intrinsic, namely directly dependent on the subject matter, are often supported by extrinsic ones. These latter arguments correspond to the topics that support the conclusion on the basis not of the characteristics of the subject

matter thereof (see the concept of 'reasons of substance' in McCormick 1995; Summers 1978), but rather on the relationship that it has with other propositions or with the authority of who advances it (Boethii *De Topicis Differentiis* 1194C 1-18; Stump 1988, p. 8, p. 9). This case is particularly clear with the abductive arguments, where the best explanation is considered as such because it does not conflict, or is in accordance with, the system of existing laws.

The following sections will take into consideration the translation into the categories of argumentation schemes of two arguments of legal interpretation, the arguments from analogy and the naturalistic argument.

4. Arguments from analogy

The interpretative function of the arguments from similarity (analogia legis; analogia iuris) can be understood starting from its opposite (from an interpretative perspective), the argument a contrario. As mentioned above, this latter type of reasoning is aimed at excluding the attribution of a legal predicate to the entities not belonging to the category mentioned in the law. On the contrary, the arguments from analogy extend the attribution of such a predicate to entities that are different from, but somehow sharing some crucial similarities with the ones falling within the legal categories. As Tarello put it, if a rule attributes any normative qualification (such as a power, an obligation or a status) to an individual or a category of individuals, it can be concluded that there is a different rule in force (or a different rule exists, is valid) that attributes the same quality to another individual or category of individuals connected with the former class by a similarity or an analogy relation. Such a relationship shall be relevant from the perspective of the applicable law, or the qualification to be attributed (Tarello 1980, p. 351).

The reasoning structure of this type of argument mentioned above (Walton, Reed & Macagno 2008, p. 315) is grounded on the premise 'Generally, case C_1 is similar to case C_2 ', which leads from a difference to a kind of identity. However, this pattern is ambiguous. The cases

compared can be instances of the same category governed by the legal qualification A, or two categories of which the second (C_2) is not governed by A. In other words, there is a crucial difference between a similarity of two cases (a and b) that can belong to the class P, and a similarity of two categories (P and Q).

At common law, this difference represents a distinction between two ways in which the use of the precedent operates. In civil law, where the written laws represent the primary authority, this difference is pointed out by the concepts of *analogia legis*, or the application of a *written* law to a different, similar case (Colombo 2003, p. 96-97; Cendon 2011, p. 236), and *analogia iuris*, or the application of an abstract and unexpressed principle of law from which the stated law is drawn (Guastini 2011, p. 281). While in the first case analogy is used to *apply* the law to borderline or controversial cases, in the second case this type of reasoning is used to draw and support *a new unexpressed law* covering a legal gap. For this reason, the difference results in a crucial distinction between a mere reasoning aimed at applying a law and a process intended to justify a systematic interpretation (a rule can be drawn from the statements of law already existing in the legal system).

4.1. Redefining a predicate – analogia legis

From a reasoning perspective, analogia legis can be conceived as a form of specification of the properties of the predicate. Since the definition does not allow a classification of borderline cases, through analogy the relevant, unstated factors are pointed out. This type of reasoning can be represented as follows (Ashley 1991, p. 758):

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Premise 1 (rule)	If x is P , then x has the right/is A .		
Premise 2 (borderline)	It is not clear whether a (a borderline case) is P .		
Similarity premise	a is similar to b .		
Premise 3 (principle of classification)	b was classified as P because of the factors $f_1, f_2,, f_n$.		
Redefinition premise	If x has the factors $f_1, f_2,, f_n$, then x is P.		
Premise 4 (factors)	a has $f_1, f_2,, f_n$.		
Conclusion	Therefore, a is P .		

The predicate is specified (or rather redefined, Sorensen 1991) by high-lighting the factors that are considered as essential for the legal qualification to apply.

The argument from *analogia legis* can be illustrated in the civil law by the following case from the Italian Corte costituzionale (Judgment no. 0280 of 2010). The article no. 180, 4th paragraph of the Legislative Decree no. 285 of 1992¹ allowed public transport (vehicles for the transportation of persons) and vehicles for rental (without driver) to keep on board only the photocopy of the registration document, authenticated by the owner. The case concerns a police officer stopping the driver of a vehicle owned by a company of waste management. The driver showed him the driving license and the photocopy of the registration documents, authenticated by the company. Was the legal provision applicable in this case, even though the purpose of the vehicle was

¹ Art. 180, 4th paragraph, of the aforementioned Legislative Decree no. 285 of 1992, amended by art. 3, 17th paragraph of the Law Decree no. 151 of 27 June 2003 ("Integrations and amendments to the highway code"), converted into the law no. 214 of 1 August 2003, with amendments to the section in which it forbids its extension to all vehicles of public companies providing essential services, as defined by art. 1 of the law no. 146 of 12 June 1990 (Rules on the enforcement of the right to strike in the sector providing essential public services, and on the protection of the rights of individuals under the constitution. Institution of the Guarantee committed for the implementation of the law).

not transportation of people, but of objects? The Italian Corte costituzionale advanced the following reasoning²:

The law that allowed the drivers of vehicles for public transport of persons to carry the photocopy of the registration document instead of the original copy was based on the need of promptly and systematically retrieving the original documents for purpose of renewal, updating and periodical service, in order to avoid the risk of their loss and the consequent custody of the vehicle [...]. These purposes concern also any other types of public services characterized by essentiality, – as specified in art. 1 of the law no. 146/1990 – and involving the management of a fleet of vehicles.

In this case, the category of 'vehicles for public transport of persons' was specified by setting out the features of 'being an essential public service' and 'managing a fleet of vehicles.' These two features bore out the extension of the category to the case considered as similar. We can represent the reasoning as follows:

Premise 1 (rule) If x is a "driver of vehicles for public transport of persons" (P) , that the right to "carry the photocopy of the registration document instead of the original copy" (A) .		
Premise 2 (borderline)	It is not clear whether a "driver of a waste management vehicle" is P.	
Similarity premise	A "driver of a waste management vehicle" is similar to a "driver of a vehicle for public transport of persons".	
Premise 3 (principle of classification)	A "driver of a vehicle for public transport of persons" was classified as P because of the "essentiality of the service proivided" (f_1) and the "management of a fleet of vehicles" (f_2) .	
Redefinition premise	If x has the factors f_1 and f_2 , then x is P .	
Premise 4 (factors)	A "driver of a waste management vehicle" has f_1 and f_2 .	
Conclusion	Therefore, a "driver of a waste management vehicle" is P.	

At common law, the *analogia legis*, considered as a type of reasoning used for extending a category governed by a legal provision, can be used both in statutory interpretation and case law. *Analogia legis* can be

² See http://www.dircost.unito.it/SentNet1.01/srch/sn_showArgs.asp?id_sentenza=20 100280#20100280_3.

used to interpret state or federal law, such as in the following case (*Dooley v. Parker-Hannifin Corp.*, 817 F. Supp. 245, at 248 1993).

Under Rhode Island Law, the 'sale' of a product may create a variety of warranties regarding that product. Thus, a warranty of merchantability is implied in a contract for the 'sale' of goods if the 'seller' is a merchant with respect to goods of that type. [...] Breach of those warranties exposes the 'seller' to liability for personal injury that proximately results from the breach. [...] Responsibility for personal injury caused by a defective product also may be imposed on one who 'sells' the product on the theory of strict liability in tort as set forth in Restatement (Second) of Torts § 402A (1965):

Are lessors of defective products liable? Are lessors of furnished apartment strictly liable for injuries suffered due to defect in furniture? In such cases the court found a similarity between leasing products and selling them, as 'suppliers placed the products in the stream of commerce by means of transactions very similar to sales'. The category of 'sale' is extended, or rather redefined through new factors ('being a supplier of a product'; 'supplying a product placed in the stream of commerce'; 'executing a transaction similar to sale'), so that borderline cases are included

In case law, the concept of *analogia legis* can be seen as an implicit contradiction, as such a source of law presupposes the absence of an explicit written code. Instead, at common law the judge both applies and defines the legal rules based on previously decided cases (Friesen 1996, pp. 12-13). In this system we can consider the principle underlying the concept of *analogia legis*, and conceive it as the specification or extension of an implicit category, by pointing out the essential or fundamental characteristics (or factors), already governed by a legal provision or a precedent to include a borderline case.

One of the most famous cases involving this use of analogy is *Popov v. Hayashi* (WL 31833731, Cal. Super. Ct. 2002). In this case the plaintiff (Popov), a baseball fan, stopped with his glove the ball hit by a famous player, who set a new record with it. However, in order to reach for the ball, Popov lost his balance and was forced to the ground by the crowd, leaving the ball loose on the ground. The defendant (*Hayashi*) was involuntarily forced to the ground too, and when he saw the loose

ball, he picked it up, rose to his feet and put it in his pocket. Popov, who intended to establish and maintain possession of the ball, could not prove that he secured it. An issue for both parties was the classification of Popov's act as 'possession', which would have resulted in Hayashi's charge of conversion. However, in the California case law, the concept of possession had never been clearly and univocally defined, and for this reason this borderline cases resulted in a discussion on its definition. The specifications of the concept were supported both by the defense and the plaintiff by means of analogical arguments. For instance, the plaintiff used the following argument (*Popov v. Hayashi*, WL 31833731, at 8, Cal. Super. Ct. 2002):

The hunting and fishing cases recognize that a mortally wounded animal may run for a distance before falling. The hunter acquires possession upon the act of wounding the animal not the eventual capture. Similarly, whalers acquire possession by landing a harpoon, not by subduing the animal.

The plaintiff compared the possession of the ball with the possession of an animal or a whale in hunting and fishing. In these latter cases, possession is established based on the criterion, or rather factor, of partial dominion and control over the possessed item, and more specifically on the following factors: 'The actor to be actively and ably engaged in efforts to establish complete control' (f_l) ; 'Such efforts must be significant and they must be reasonably calculated to result in unequivocal dominion and control at some point in the near future' (f_l) . According to the plaintiff, the calculated efforts made to establish complete control on the ball could classify his partial possession as possession.

The problem in this case was simply shifted onto the issue of whether the nature of a ball allowed a complete control or not, and whether partial control could be classified as full or no possession. For this reason, the court used a different analogy to establish the factors that could lead to a more viable classification. The analogy used by the court was the following (*Popov v. Hayashi*, WL 31833731, at 7, Cal. Super. Ct. 2002):

[...] five boys were walking home along a railroad track in the city of Elizabeth New Jersey. The youngest of the boys came upon an old sock that was tied shut and contained something heavy. He picked it up and swung it. The oldest boy took it away from him and beat the others with it. The sock passes from boy to boy. Each controlled it for a short time. At some point in the course of play, the sock broke open and out spilled \$775 as well as some rags, cloths and ribbons.

The court noted that possession requires both physical control and the intent to reduce the property to one's possession. Control and intent must be concurrent. None of the boys intended to take possession until it became apparent that the sock contained money. Each boy had physical control of the sock at some point before that discovery was made.

In this case, the relevant factors for determining possession were physical control and intent. Since both parties had physical control and intent, they were found equally entitled to the ball.

4.2. Analogia iuris (argument from general principles)

Analogia iuris represents the application of an implicit ratio of a law governing a different case. This argument can be represented as follows (Macagno & Walton 2009, p. 173; Guastini 2011, pp. 280-281):

C .C	1	C			
Specific	scheme	from	anai	logia	iuris

Premise 1 (target)	No law provides for the x 's that are Q .
Premise 2 (property)	If x is P , then x has the right/is A .
Similarity premise	P and Q belong to the same functional genus G .
Species – Genus premise	If x is G , then x has the right/is A .
Conclusion	If x is Q , then x has the right/is A .

This type of reasoning is grounded on two fundamental principles, expressed by Boethius in his De Differentiis Topicis. The first principle is the attribution of the property A of the species P to the functional genus G. This passage is supported by the maxim connecting the species

to the genus: What is predicated of the parts (in this case essential part, the species) is predicated also of the whole (in this case essential whole, the genus)³. In the case of analogy, the genus G is abstracted based on the property A predicated of the species. It is considered as an essential property of the species (or rather, the category P has been chosen because it is essentially similar to Q from the point of view of A) and for this reason is predicated of the possible essential parts of G. The other inferential step is presupposed by the requirements of the former. From the predication of the property A to the genus G, the attribution of A to the other species P is concluded. This inferential step is supported by the maxim stating that 'What is (not essentially) said of the genus is said of its species as well' Since P and Q are the two species of G, and A is attributed to G, then Q is G.

The aforementioned analysis mirrors the abstract and ideal reasoning structure of the use of analogy. Clearly, depending on the legal system the grounds, the effects and the conditions of its use can greatly vary. In civil law, it can be considered as a reason provided for the use of a systematic interpretation. In lack of a source statement governing a specific case, the enforceable rule needs to be found within the legal system, by interpreting one of the provisions already in force. Analogy in this case provides the 'surface reasoning structure' which actually draws its force from the authority of the completeness of the legal system. This mechanism represents the reasoning underlying the «construction of an unexpressed rule» (Guastini 2011, p. 278), which can be illustrated by the following case (Guastini 2011, p. 280):

According to art. 2038 of the Italian Civil code, anyone who has unduly received some goods and has transferred them in good faith, ignoring the obligation to return them, shall return the consideration thereof and not the very goods or their value. The ratio of the law is the principle of protecting good faith. On this view, the law provides only for the restitution of the consideration and not more burdensome obligations in order to protect the good faith of the individual. The undue receipt together with the transferal subsequent thereof is similar to the purchase

³ «Quod enim singulis partibus inest, id toti inesse necesse est» (Boethii *De Differentiis Topicis*, 1189A).

⁴ «[...] quae generi adsunt specie adsunt» (Boethii De Differentiis Topicis, 1188C).

and sale of stolen goods when their illicit provenience is unknown. Therefore, art. 2038, 1st paragraph, shall be interpreted as applicable also to the case of purchase in good faith of stolen goods.

In this case, an unexpressed principle is abstracted from a law and applied to a case not possibly falling thereunder, so that the scope of an existent provision is broadened.

A clear example of *analogia iuris*, or rather analogy aimed at introducing a new generic functional concept under which the cases fall can be found in the opinion rendered by the court in the aforementioned case *Popov v. Hayashi*. The court, with the last analogy mentioned in the subsection above, established that both parties had both possessed the ball. How to solve this issue? Who has title to the ball? The California case law had not previous cases providing a principle from which it was possible to draw a conclusion. The solution that was found was to draw a generic rule of equity implicit in previous similar cases. In particular, the following analogy was drawn (Popov v. Hayashi, WL 31833731, at 7, Cal. Super. Ct. 2002):

Although there is no California case directly on point, *Arnold v. Producers Fruit Company* (1900) 128 Cal. 637 provides some insight. There, a number of different rune growers contracted with Producer's Fruit Company to dry and market their product. Producers did a bad job. They mixed fruit from many different growers together in a single bin and much of the fruit rotted because it was improperly treated. When one of the plaintiffs offered proof that the fruit in general was rotten, Producers objected on the theory that the plaintiff could not prove that the prunes he contributed to the mix were the same prunes that rotted. The court concluded that it did not matter. After the mixing was done, each grower had an undivided interest in the whole, in proportion to the amount of fruit each had originally contributed. The principle at work here is that where more than one party has a valid claim to a single piece of property, the court will recognize an undivided interest in the property in proportion to the strength of the claim.

This argument can be reconstructed following the aforementioned more abstract pattern:

Premise 1 (rule)	If x is a "driver of vehicles for public transport of persons" (P), then x has the right to "carry the photocopy of the registration document instead of the original copy" (A).
Premise 2 (borderline)	It is not clear whether a "driver of a waste management vehicle" is P.
Similarity premise	A "driver of a waste management vehicle" is similar to a "driver of a vehicle for public transport of persons".
Premise 3 (principle of classification)	A "driver of a vehicle for public transport of persons" was classified as P because of the "essentiality of the service proivided" (f_1) and the "management of a fleet of vehicles" (f_2) .
Redefinition premise	If x has the factors f_1 and f_2 , then x is P.
Premise 4 (factors)	A "driver of a waste management vehicle" has f_1 and f_2 .
Conclusion	Therefore, a "driver of a waste management vehicle" is P.

The distinction between *analogia iuris* and *analogia legis* mirrors at a more conceptual level a crucial difference between two distinct patterns of reasoning from analogy. The first one is a form of (implicit or explicit) redefinition of a concept, while the second one consists in the introduction of a new generic property.

5. Naturalistic arguments

Among the arguments from authority of the source, the naturalistic argument is the most problematic one due to the ambiguity and vagueness of its grounds. The naturalistic argument is based on the so-called 'nature' of man, social relations, or things. Therefore, who uses this argument presents the law as directly drawn or taken from the 'nature', implying that the legislator cannot force it unless he wants to provide a law that is not 'real'.

An example of this argument, which is often left implicit and underlying other arguments is the following Italian case (Corte costituzionale, Sentenza n. 138/210) concerning the constitutionality of the civil law prohibiting same-sex marriage. Such a law was allegedly conflicting with article 3 of the Italian constitution (prohibiting any discrimination) and article 29, defining family. The Court found that the same-sex marriage ban was not unconstitutional, grounding its argument on the

definition of family as a 'natural society based on marriage' (Italian Constitution, art. 29). This definition is gender-neutral; however, what shall be considered as a 'natural society'? As Damele put it (Damele 2011):

[...] the Court resorts also to a psychological argument, saying that 'with this expression, as one can deduce from the preliminary work of the constituent assembly, the constitutional legislator meant underline that the family has original rights, not derived from the authority of the State or of the legal order'. As we can see, the naturalistic argument is still implicit, but the strategy of the Court is to hide this argument, which ultimately states the unnaturalness of same-sex marriage, by resorting to the intention of the legislator. It thus shifts the burden of proof to the 'Constituent Fathers'.

Here the argument proceeds from the 'nature' of family, which amounts to what is traditionally perceived as a family.

In order to understand the argumentative structure of the naturalistic argument works, it is necessary to analyse how the concept of 'nature' is appealed to from a dialectical and rhetorical perspective. From a dialectical perspective, 'nature' can be appealed to as a scientific law (the causal 'nature of the things'), i.e. a commonly accepted principle that does not need to be further proved. For instance we can consider the following case (*People v. Collins*, 214 Ill. 2d 206, at 218, 2005):

In a prosecution under 720 Ill. Comp. Stat. 5/24-1.5 (2002), the State is not required to introduce evidence concerning the force or velocity of bullets as they fall to the ground, or the angle or direction of the discharge. The inherent danger caused by the reckless discharge of a firearm into the air, and the obvious ricochet effect that may occur when bullets fall to the ground, are matters of common sense.

In this case the scientific law governing the velocity of bullets does not need to be proved, as it is a scientific law commonly accepted by the scientific community, and is part of the accepted opinions (Damele 2012).

The scientific naturalistic argument need to be distinguished from the ontological naturalistic ones, which are grounded on other uses of the idea of 'nature', such as the 'nature' of a concept, a value (Guastini 2011, p. 242), or a goal. These latter arguments make explicit appeal to the ontological structure of what is referred to as 'natural.' For example, in the medieval tradition the ability to laugh was regarded as an essential characteristic of human being, as part of his nature (called 'specific nature', see Thomas Aquinas *Summa Theologiae*, Q. 51 A. 1). We can consider the following argument (*Lewis v. Harris*, 875 A.2d 259 at 277, 2005):

[...] a core feature of marriage is its binary, opposite-sex nature. Interestingly, plaintiffs admittedly have no quarrel with the legal requirement that marriage be limited to a union of two people. But, the binary idea of marriage arose precisely because there are two sexes.

The problem of the fundamental shared characteristics of a concept is to establish what is actually shared, and by whom. The ontological naturalistic argument was supported in the past by the idea of a divine order of things, which *was to be* shared because of its divine nature. In this sense, the popular acceptance was based on the authority of religion. For instance we can consider the following argument (*Scott v. State*, 39 Ga. 321, at 326, 1869):

Before the laws, the Code of Georgia makes all citizens equal, without regard to race or color. But it does not create, nor does any law of the State attempt to enforce, moral or social equality between the different races or citizens of the State. Such equality does not in fact exist, and never can. The God of nature made it otherwise, and no human law can produce it, and no human tribunal can enforce it. There are gradations and classes throughout the universe. From the tallest arch angel in Heaven, down to the meanest reptile on earth, moral and social inequalities exist, and must continue to exist through all eternity.

Nowadays the concept of 'nature' of the things mirrors a commonly accepted meaning, beliefs shared because of different reasons, such as culture or tradition. In this sense, the ontological naturalistic argument can be interpreted as based on the 'common sense' (Soboleva 2007; see

also Eskridge 1997 for the evolution of the notion of 'crime against nature). The 'natural' meaning of a concept (Fed. Deposit Ins. Corp. v. Meyer, 510 U.S. 471, 1994; *Perrin* v. *United States*, 444 U.S. 37, at 42, 1979; 322 L Ed Digest §165) constitutes a presumption of acceptance (*Lewis v. Harris*, 908 A.2d 196, at 206, 2006):

The State rests its case on age-old traditions, beliefs, and laws, which have defined the essential nature of marriage to be the union of a man and a woman. The long-held historical view of marriage, according to the State, provides a sufficient basis to uphold the constitutionality of the marriage statutes. Any change to the bedrock principle that limits marriage to persons of the opposite sex, the State argues, must come from the democratic process.

This characteristic of what is considered to be 'natural' and the extremely vague and often undefined meaning of nature can be frequently used for implicitly redefining a concept. For instance, the definition of 'crime against nature' was implicitly modified many times throughout the years in the United States by broadening or restricting what a 'natural sexual relationship' meant (Eskridge 1997, p. 1029). Depending on the social policy goals pursued by the courts, homosexuality was first included in this concept and later excluded from it.

The presumptive effect of the 'natural' meaning can also explain the rhetorical uses of this argument, grounded on the mechanism of dissociation (see Van Rees 2009). This strategy consists in an implicit redefinition, in which the original meaning of a term is split into two concepts, a 'real' or 'true' one, and an apparent one (Perelman & Olbrechts -Tyteca 1969, p. 418). Dissociation has been used several times by the parties to trial for redefining 'marriage'. 'Real marriage' became a marriage made with serious intentions, and not in jest (*Girvan v. Griffin*, 91 N.J. Eq. 141, 1919), or in which the husband resides with the family (*Cavalry Portfolio Services, LLC v. Douilly*, Index No. 315/08, Supreme Court of New York 2008), or in which the wife 'cares about the marriage and her marital duties' (*Anton v. Anton*, 118 A.2d 605, 1955). The strategy of appealing to the 'real marriage' can also hide an operational definition, which replaces the meaning of a concept with the criteria that can be used for classifying specific cases. In this fashion, a

marriage is not 'real' if the wife does not take her husband's last name and knows the man from a short time (Damon v. Ashcroft, 360 F.3d 1084, 2004).

Two different schemes underlie the two distinct types of naturalistic argument: the argument from cause to effect and the argument from popular opinion. In the first case, a scientific law is used to draw a certain conclusion. In this sense, the reason corresponds to a law of nature that cannot be rebutted until contrary evidence is provided (Walton, Reed & Macagno 2008, p. 328).

Argumentation scheme 6: Argument from cause to effect

Major premise:	Generally, if A occurs, then B will (might) occur.
Minor premise:	In this case, A occurs (might occur).
Conclusion:	Therefore in this case, <i>B</i> will (might) occur.

The following defeasibility conditions are associated with this scheme, representing the possible attacks to the presumptive nature of the scheme:

CQ1: How strong is the causal generalization?

CQ2: Is the evidence cited (if there is any) strong enough to warrant the causal generalization?

CQ3: Are there other causal factors that could interfere with the production of the effect in the given case?

The second type of naturalistic argument can be represented using the argument from popular opinion. What is regarded as 'natural' depends on what is commonly accepted in a given culture at a given time. The popular acceptance is regarded as a heuristic reason for accepting the conclusion (Walton, Reed & Macagno 2008, p. 125):

Major premise:	If a large majority in a particular reference group G
	accepts A as true (false), then there exists a defeasi-
	ble presumption in favor of (against) A.
Minor premise:	A large majority accepts A as true (false).
Conclusion:	Therefore, there exists a presumption in favor of
	(against) A.

The critical questions are the following ones:

CQ1: Does a large majority of the cited reference group accept A as true?

CQ2: Is there other relevant evidence available that would support the assumption that *A* is not true?

CQ3: What reason is there for thinking that the view of this large majority is likely to be right?

The difference between this type of argument and the ontological naturalistic one is the ambiguity of the concept of nature in the latter. As mentioned above, the objective structure of the real is often advanced as the commonly accepted one. However, the presumptive force of the two concepts is clearly different. While the passage from what is commonly accepted to what is objectively real (real marriage...) can be accepted, an ontological claim (the essence of marriage is...) cannot be easily rejected by appealing to popular opinion. This passage can be represented as follows:

Major premise:	If the nature of x is A , then there exists a defeasible
	x is A .
Minor premise:	A large majority accepts that x is A .
Conclusion:	Therefore, x is A .

The ambiguity increases the burden of rejection and the force of the argument.

6. Conclusion

Argumentation schemes are abstract representations of natural and defeasible arguments. They combine a logical or quasi-logical structure with a semantic, material relation linking the premises to the conclusion. They can be used to represent the logical and semantic relation of the interpretative arguments analyzed by Tarello, pointing out their defeasibility conditions and the different possible logical structures. The defeasible nature of the scheme is shown by means of critical questions, which identify the default conditions of the reasoning and the possible ways of rebutting or attacking them.

This 'translation' of the arguments of interpretation into the argumentation schemes framework has been applied to the analogical and naturalistic arguments, which show how the procedure can be extended to the other kinds of interpretative arguments set out by Tarello. In both cases the transformation of the arguments of interpretation into schemes shows that the arguments can be complex. The argumentative structure of analogical arguments can be described according to two distinct patterns, one aimed at redefining a category, the other at creating a new one. The naturalistic argument can be divided into two kinds, the appeal to scientific principles and the appeal to common sense. The first case can be represented by the argument from cause to effect, while the second one hides an argument from popular opinion, often mixed with other strategies.

7. References

Abaelardus, P. (1970). Dialectica, ed. L. M. De Rijk. Assen: Van Gorcum.

Ashley, K. (1991). Reasoning with cases and hypotheticals in hypo. *International Journal of Man-Machine Studies* 34 (6): 753-96.

Boethius, A. M. S. (1978). *De topicis differentiis*. Translated by E. Stump. Ithaca: Cornell University Press.

Carston, R. (2002). Thoughts and utterances. Malden: Blackwell.

Cendon, P. (Ed.) (2011). Commentario al codice civile. Milano: Giuffrè.

Colombo, G. M. (2003). Sapiens aequitas: l'equità nella riflessione canonistica tra i due codici. Roma: Pontificia Università Gregoriana.

- Damele, G. (2011). Sulle motivazioni della recente sentenza della Corte costituzionale italiana in materia di matrimonio omosessuale. Un confronto con la giurisprudenza del Tribunal Constitucional portoghese. *Diritto e Questioni Pubbliche* 1: 631-661.
- Damele, G. (2012, in press). Verdade e Comunicação. Notas sobre argumentação e decisão judiciária. In R. do Carmo (Eds.). *Linguagem, argumentação e decisão judiciária*. Coimbra: Coimbra Editora.
- Eemeren, F. H. van & Grootendorst, R. (2004). *A systematic theory of argumentation: The pragma-dialectical approach*. Cambridge: Cambridge University Press.
- Eskridge, W. (1996). Law and the construction of the closet: American regulation of same-sex intimacy, 1880-1946. *Iowa law review* 82: 1007-1136.
- Feteris, E. (1999). Fundamentals of legal argumentation: a survey on the justification of judicial decisions. Dordrecht: Kluwer Academic Publishers.
- Friesen, J. (1996). When common law courts interpret civil codes. *Wisconsin International Law Journal* 15: 1-27.
- Greenawalt, K. (2002). Constitutional and statutory interpretation. In J. Coleman & S. Shapiro (Eds.), *Jurisprudence and philosophy of law* (pp. 289-310). Oxford: Oxford University Press.
- Grennan, W. (1997). *Informal logic*. Montreal, Quebec: McGill-Queen's University Press.
- Guastini, R. (2011). Interpretare e argomentare. Milano: Giuffrè.
- Hamblin, C. (1970). Fallacies. Newport News: Vale Press.
- Hastings, A. (1963). A reformulation of the modes of reasoning in argumentation. Evanston, Illinois: Ph.D. Dissertation, Northwestern University.
- Horn, L. (1995). Vehicles of meaning: unconventional semantics and unbearable interpretation. *Washington University Law Quarterly* 73: 1145-1152.
- Kienpointner, M. (1992a). How to classify arguments. In F. H. van Eemeren, R. Grootendorst, J. A. Blair & C. A. Willard (Eds.), *Argumentation Illuminated* (pp. 178-188). Amsterdam: Amsterdam University Press.
- Kienpointner, M. (1992b). *Alltagslogik: Struktur und Funktion von Argumentationsmustern*. Stuttgart, Germany: Fromman-Holzboog.
- Macagno, F. & Walton, D. (2009). Argument from analogy in law, the classical tradition, and recent theories. *Philosophy and Rhetoric* 42, 2: 154-182.
- Macagno, F. (2011). The presumptions of meaning. Hamblin and equivocation. *Informal Logic* 31, 4: 367-393.
- Macagno, F. (2012). Presumptive reasoning in interpretation. Implicatures and conflicts of presumptions. *Argumentation* 26 (2): 233-265.
- McCormick, N. (1995). Argumentation and interpretation in law. *Argumentation* 9: 467-480.

- Patterson, D. (2004). Interpretation in law. *Diritto e questioni pubbliche* 4: 241-259.
- Perelman, C. & Olbrechts-Tyteca, L. (1969). *The New Rhetoric: a treatise on argumentation*. Translated by J. Wilkinson & P. Weaver. Notre Dame, Ind.: University of Notre Dame Press.
- Rigotti E. (2009). Whether and how classical topics can be revived within contemporary argumentation theory. In: F. H. van Eemeren & B. Garssen (Eds.), *Pondering on problems of argumentation* (pp. 157-178). Amsterdam: Springer.
- Rigotti, E. & Cigada, S. (2004). La comunicazione verbale. Milano: Apogeo.
- Rigotti, E. & 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. & Rocci, A. (2006). Le signe linguistique comme structure intermédiaire. In L. de Saussure (Ed.), *Nouvelles perspectives sur Saussure* (pp. 219-247). Genève: Publications du Cercle Ferdinand de Saussure.
- Searle, J. (1981). *Expression and meaning. Studies in the theory of speech acts.* Cambridge: Cambridge University Press.
- Soboleva, A. (2007). Topical jurisprudence: reconciliation of law and rhetoric. In A. Wagner, W. Werner & D. Cao (Eds.), *Interpretation, law and the construction of meaning* (pp. 49-63). Amsterdam: Springer.
- Sorensen, R. (2003). Vagueness and the desiderata for definition. In J. Fetzer, D. Shatz & N. Schlesinger (Eds.), *Definitions and definability: philosophical perspectives* (pp. 71-109). Dordrecht: Kluwer.
- Stump, E. (1989). *Dialectic and its place in the development of medieval logic*. Ithaca: Cornell University Press.
- Summers, R. (1991). Statutory interpretation in the United States. In N. McCormick & R. Summers (Eds.), *Interpreting statutes: a comparative study* (pp. 407-459). Aldershot: Dartmouth.
- Tarello, G. (1980). L'interpretazione della legge. Milano: Giuffrè.
- Walton, D. (1996). Argumentation schemes for presumptive reasoning. Mahwah, N.J.: Lawrence Erlbaum Publishers.
- Walton, D. (2002). *Legal argumentation and evidence*. University Park, Pa.: The Pennsylvania State University Press.
- Walton, D. (2006). Fundamentals of critical argumentation. New York: Cambridge University Press.
- Walton, D., Reed, C. & Macagno, F. (2008). *Argumentation schemes*. New York: Cambridge University Press.