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BOOK REVIEW

# Eveline T. Feteris: Fundamentals of legal argumentation

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Argumentation has been at the heart of the AI and Law enterprise since its very beginning. One of the earliest AI and Law programs, Taxman (McCarty 1976), attempted to model the majority and minority arguments in a leading case, *Eisner v Macomber*, computationally. Since then many AI and Law researchers have explored legal argumentation, using both formal techniques (see Prakken and Sartor (2015) for a survey) and more empirical techniques (see Bench-Capon 2017). Equally long standing is the investigation of legal argumentation from the perspective of argumentation theory[1], in particular that of the pragma-dialectics group at the University of Amsterdam, from which this book originates. Eveline Feteris has been a long standing member (since 1986) of this group, and has published extensively on legal argumentation including (Feteris 1994, 1996, 1997, 2000, 2002, 2005, 2008) and (Feteris 2016). The book under review is a completely updated, revised and extended second edition: the first edition was published in 1999, so updating was very much required. Given this commonality of interest, and proximity (University of Amsterdam has also hosted an AI and Law group, currently known as the Leibnitz Centre for Law, throughout this period), it is perhaps surprising that there has not been more interaction between the two communities, In fact the two communities have remained relatively distinct with their own journals (*Artificial Intelligence and Law* as against *Argumentation* and *Informal Logic*) and their own conferences (ICAIL and JURIX as against OSSA

[1] "Argumentation theory" means different things to different people. Feteris speaks of the work of "philosophers, legal theorists and legal philosophers". I shall try to refer to this perspective as *informal argumentation theory*, to distinguish it from the computational models of AI and AI and Law. The author herself is located in the Faculty of Humanities, Capaciteitsgroep Taalbeheersing, Argumentatietheorie en Retorica, at the University of Amsterdam.

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in Canada and ISSA in Amsterdam). There was an attempt to bring the communities together in 1996 when there was a workshop *Dialectical Legal Argument: Formal and Informal Models*, held in conjunction with JURIX, at Tilburg, with speakers drawn from both AI and Law and pragma-dialectics. Although this led to a special issue of *AI and Law* (Volume 8, Issue 2–3, 2000) edited by Eveline Feteris and Henry Prakken (Feteris and Prakken 2000), its success was limited, and there was little further interchange beyond some individual interaction (Henry Prakken and Bart Verheij are acknowledged in this book for their comments on and critiques of the chapters on the Logical Approach and Toulmin's model respectively). The workshop revealed significant differences in aims (building computational and formal models on the one hand and informal models on the other) and, perhaps more importantly, culture. As an example, the AI and Law speakers, coming from Computer Science, *presented* their papers in a rather informal fashion using overheads, while the pragma-dialectitians, coming from Philosophy, literally *read* their papers, word for word, as was (and perhaps still is) normal for philosophy papers. The result of the workshop was to emphasise differences rather than discover commonalities and there has been very little coming together at the community level since. This is not intended as a criticism of either community, more an indication of how hard it is to sustain interdisciplinary initiatives.

Nonetheless AI and Law has frequently looked to particular pieces of work in informal argumentation theory for inspiration. Toulmin (who famously said that *logic was formalised jurisprudence*) introduced a pioneering argument schema in Toulmin (1958) which has been found useful by a variety of AI and Law researchers, including Marshall (1989), Zeleznikow and Stranieri (1995), Bench-Capon (1998) and (Verheij 2009). Alexy (1989) was influential in European AI and Law in the 80s and 90s, and especially on Gordon's Pleadings Game (Gordon 1993). Perelman and Olbrechts-Tyteca (1980) has inspired the notion of value based reasoning which is widely used in AI and Law to perform teleological reasoning: e.g. (Berman and Hafner 1993; Bench-Capon and Sartor 2003) and (Bench-Capon et al. 2005). Perhaps most influential of all the informal argumentation theorists on current AI amd Law is Doug Walton, whose idea of argumentation schemes and associated critical questions (Walton et al. 2008) is used by a variety of people, both in AI and Law and in computational argument generally. Indeed argumentation schemes have largely replaced dialogue games as a way of representing legal procedures (e.g. Prakken et al. 2013; Walton et al. 2016). Moreover Walton has personally engaged with the AI and Law community and has worked with several members of that community, e.g. Gordon et al. (2007), Atkinson et al. (2013) and Walton et al. (2016). Thus informal argumentation theory, though developed largely (with the exception of Walton) independently of AI and Law, is highly relevant to AI and Law, and has inspired a good deal of work in AI and Law, even though pragma-dialectics itself has made relatively little impact.

This review, given the journal in which it is to appear, will be written very much from the perspective of an AI and Law researcher, in particular one based in a Computer Science department, with a keen interest in computational models of argument. This means that I shall attempt to relate this book to what is thought

about argumentation in AI and Law, and to attempt to identify what may be found useful to AI and Law researchers.

The book which is the subject of this review is subtitled *a survey of theories on the justification of judicial decisions* and, as a survey, should be seen and used more as a textbook than as a monograph. It should be looked to for descriptions of the leading work in the field rather than for a particular approach to the subject. After an introductory discussion of legal argumentation and interpretation, the second chapter describes logical approaches to legal argumentation. The next seven chapters each look at a particular argumentation theorist: Stephen Toulmin, Chaim Perelman, Jurgen Habermas, Neil MacCormick, Robert Alexy, Aulis Aarnio and Aleksander Peczenik. As noted above some are known in AI and Law (Toulmin, Perelman, MacCormick and Alexy) and others (Habermas, Aarnio and Peczenik) less so. The tenth chapter provides an overview of the pragme-dialectical approach, founded by Frans van Eemeren and Rob Grootendors, and of which Feteris is a practitioner. As one might expect this is by far the longest and most detailed of these chapters: some 50 pages as against around 20 pages for the others. Chapter 11 surveys legal justification by looking at different countries and legal systems and the final chapter discusses some main trends in (informal argumentation) research on legal argumentation.

Each of the chapters is self contained, with is own abstract and references which means that each chapter can be read on its own if the reader wishes to find out more about a particular topic or theorist. For the most part they are well written, clear and succinct and have good individual bibliographies and so make excellent starting points, whether used to provide some basic knowledge on the topic of the chapter or as starting point for further investigation.

Chapter 2 is where we can find discussion of AI and Law. In particular section 6 is entitled *The Role of Logic in Legal Justification in Approaches of AI and Law*, and focuses especially on defeasibility, as addressed through non-monotonic logics, argumentation schemes and dialogue systems. It is perhaps indicative of the rather continental European approach of the book that AI and Law is seen as part of the logical approach thus sidelining the research on reasoning with legal cases, which is important in the UK and US, which have precedent based Common Law systems, making arguing with legal cases a key feature. Important systems such as HYPO, CATO and CABARET are mentioned, but only in passing. Many AI and Law researchers would, however, see the developments in arguing with cases (see Bench-Capon 2017) as important to AI and Law, and the efforts to reconcile them with logical and computational models as logic as central to AI and Law. Important work attempting to express precedent based reasoning in logical terms such as Horty and Bench-Capon (2012) and Rigoni (2015) is not mentioned at all. Better surveys of AI and Law work are available in Prakken and Sartor (2015) for logic approaches and Bench-Capon (2017) for case based approaches, both of which contain more detail than is possible in this section.

I shall not consider the individual argumentation theorist chapters: they are a good place to seek an overview of these writers from Feteris' perspective. There is little reference to an AI and Law perspective: the chapter on Perelman for example contains no mention of the extensive work on the use of purpose and value in AI and

Law since the topic was introduced by Berman and Hafner (1993). Instead I shall jump straight to Chapter 10, which describes the pragma-dialectical approach, since this is Feteris' own approach, and possibly unfamiliar to AI and Law researchers.

Informal argumentation theory may be seen as exploring what conditions need to met for a discussion to count as a rational means of reconciling a difference of opinion or belief. One method of establishing these conditions is to identify the *stages* through which the discussion should go, and the rules to which it should conform. Pragma-dialectics does this by providing a model of an *ideal critical discussion* in which argumentation is seen as an *activity*, As the name implies, pragma-dialectics focus on the dialogical and pragmatic aspects. Thus pragma-dialectics in general speaks of four stages of a critical discussion (confrontation, opening, argumentation and conclusion) and ten rules:

1. Freedom: which requires that discussants do not prevent each other from advancing standpoints or from casting doubt on standpoints.
2. Burden of proof: which requires a discussant to defend a standpoint if requested to do so.
3. Standpoint: which requires an attack on a standpoint to relate to the standpoint that has indeed been advanced by the other discussant.
4. Relevance: a standpoint can only be defended by advancing argumentation relating to that standpoint.
5. Unexpressed premise: premises attributed to the discussants must be explicit.
6. Starting point: A discussant may not falsely present a premise as an accepted starting point nor deny a premise representing an accepted starting point.
7. Argument pattern: A discussant may not regard a standpoint as conclusively defended if the defense does not take place by means of an appropriate argumentation pattern that is correctly applied.
8. Validity: A discussant may only use arguments that are logically valid or capable of being made logically valid by making explicit one or more unexpressed premises.
9. Closure: A failed defense of a standpoint must result in the discussant that put forward the standpoint retracting it and a conclusive defense of the standpoint must result in the other discussant retracting its doubt about the standpoint.
10. Usage rule: A discussant must not use formulations that are insufficiently clear or confusingly ambiguous and formulations must be interpreted as carefully and accurately as possible

Particular discussions such as legal discussions can then be analysed in terms of this ideal model by supplying additional information regarding stages and the conditions for moving from one to another, the particular patterns (schemes) to be used in rule seven, rules of interpretation to be used in rule ten and so forth.Thus the section on legal justification sets out "how the different stages of a critical discussion are represented in various forms of legal procedure" (p 210). The chapter also examines the role of the judge by explaining how the judge's activities contribute to each of the stages. The bulk of the chapter is, however, taken up by considering prototypical argument patterns, with subsections devoted to patterns for

– justification;
– interpretation;
– weighing and balancing.

If we now relate this to argumentation and law we can see that a different perspective is on offer here. Argumentation in AI and Law is closely tied to computational argumentation (many members of the computational argumentation community[2] and for the last two decades this community has been heavily influenced by the abstract argumentation frameworks of Dung (1995) and developments from these abstract frameworks offering structured argumentation, such as ASPIC+ (Modgil and Prakken 2014) and Carneades (Gordon 2012). As a result the modelling of legal procedures using argumentation has tended to drop out of picture. The three ply argumentation of HYPO (see Bench-Capon 2017) which mirrors the Oral Hearing procedure of the US Supreme Court, and the Pleadings Game (Gordon 1993) which modelled a specific stage of US civil proceedings (and which was inspired by the informal argumentation theorist, Alexy) gave way to dialogue games based on the logical games of Hamlin (1970) and Mackenzie (1979). These games are not tied to any particular procedure. Features of the dialogue games based on legal procedures is that they tend to contain fewer plies with more content, and that the locutions exchanged in the moves tend to more complex than the propositions exchanged in the logic based games (e.g. Prakken and Sartor 1996). Often too, in the logic based dialogue games all the attention is placed on the argumentation stage: the opening and concluding stages are typically represented, if at all, by a single move each. As time has passed there has been much less emphasis on dialogue and the aims of modelling real procedures have diminished. Where stages are used (e.g. Atkinson and Bench-Capon (2007) has problem formulation, argument generation and argument evaluation stages), they are stages in the reasoning process as a whole, not in constructing arguments. Similarly dynamic argumentation (e.g. Prakken 2001) tends to locate the dynamics in the construction of the *framework*, not in the construction of individual arguments. In both cases the arguments arrive fully formed. The contrast is well seen in Feteris' discussion of Toulmin. Whereas AI and Law and computational argument have seen the components of Toulmin's arguments (data, warrant, backing and rebuttal) as structural elements of arguments bound together by a set of relations (e.g. Bench-Capon et al. 1991). Feteris sees them as *stages* in the construction of arguments (page 51). Recalling that the aim of the original AI and Law dialogue system, the Pleadings Game (Gordon 1993), was indeed to model a legal procedure, researchers in AI and Law may find it worthwhile to look again at this topic and consider exploring argumentation as an *activity* rather than seeing arguments as objects: revisiting these temporal aspects of argumentation and returning to modelling particular legal procedures. If so, they will be well advised to be aware of what pragma dialectics has to say on the topic.

[2] Manifest since 2006 in the biennial COMMA conferences and the journal *Argument and Computation*. The ever increasing importance of computational argumentation has been a feature of general AI over the last two decades.

The other aspect which is neglected in AI and Law as a consequence of drawing inspiration from logic and computational argumentation is pragmatics. Logic strives after unambiguous, context free, understanding of utterances. Thus its preference is for a clear semantics at the expense of pragmatics. For example, in logic, conjunction carries no implication of sequence, disjunction is always inclusive and implication ignores considerations of relevance, whereas all of these connectives need to make use of the context of the utterance in everyday discourse. Context has received some attention in computation argumentation, perhaps most notably the dialogue types of Walton and Krabbe (1995), and there is considerable use made of pragmatics in Atkinson et al. (2013) to distinguish between the interpretation of utterances in deliberation dialogues from similar utterances in persuasion dialogues, using Grice's maxims of conversational implicature (Grice 1975). Making use of pragmatic aspects of argumentation, whether deriving from Grice's maxims or from the critical discussion rules of pragma-dialectics may well prove fruitful in AI and Law in future.

Although investigation of legal argumentation by the informal logic community as represented in this book has proceeded largely separately from investigation of legal argument in AI and Law, which has tended rather to look to computational argumentation for its inspiration, this book should be seen as a valuable resource by AI and Law researchers. There are (at least) four ways in which it could prove useful:

- It provides an excellent overview for those who want to gain a general knowledge of informal argumentation theory as applied to legal argumentation;
- For those familiar with one particular argumentation theorist, it can round out the picture to show what is special to that theorist and what is part of the accepted consensus of informal argumentation;
- Sometimes one encounters reference to a particular argumentation theorist with whom one is unfamiliar and so wants some more information about that theorist;
- People looking for new approaches, might want to consider whether aspects drawn from informal argumentation theory in general and pragma-dialectics in particular, such as the stages of argumentation or the role of pragmatics, can provide the inspiration for some novel ideas applicable to AI and Law.

The final chapter identifies some main trends in Research into Legal Argumentation. Obviously these are as seen from the perspective of informal argumentation theory, and so do not appear (to me at least) to directly provide an agenda for AI and Law. None the less they do indicate the directions in which informal argumentation theory may be heading, and this may prove a useful heads up to some AI and Law researchers.

## References

Alexy R (1989) A theory of legal argumentation: the theory of rational discourses as a theory of legal justification. Clarendon Press, Wotton-under-Edge

Atkinson K, Bench-Capon T (2007) Practical reasoning as presumptive argumentation using action based alternating transition systems. Artif Intell 171(10–15):855–874
Atkinson K, Bench-Capon T, Walton D (2013) Distinctive features of persuasion and deliberation dialogues. Argum Comput 4(2):105127
Bench-Capon T (1998) Specification and implementation of Toulmin Dialogue Game. In: Proceedings of JURIX 1998, pp 5–20
Bench-Capon T (2017) Hypo's legacy: introduction to the virtual special issue. Artif Intell Law 25:1–46
Bench-Capon T, Sartor G (2003) A model of legal reasoning with cases incorporating theories and values. Artif Intell 150(1–2):97–143
Bench-Capon T, Lowes D, McEnery A (1991) Argument-based explanation of logic programs. Knowl Based Syst 4(3):177–183
Bench-Capon T, Atkinson K, Chorley A (2005) Persuasion and value in legal argument. J Logic Comput 15(6):1075–1097
Berman DH, Hafner CD (1993) Representing teleological structure in case-based legal reasoning: the missing link. In: Proceedings of the 4th International Conference on Artificial Intelligence and Law, pp 50–59
Dung PM (1995) On the acceptability of arguments and its fundamental role in nonmonotonic reasoning, logic programming and n-person games. Artif Intell 77(2):321–357
Feteris E T (1996) The analysis and evaluation of legal argumentation from a pragma-dialectical perspective. In: International conference on formal and applied practical reasoning, pp 151–166
Feteris ET (1994) Recent developments in legal argumentation theory: dialectical approaches to legal argumentation. Rev Int Semiot Jurid 7(2):133–153
Feteris ET (1997) A survey of 25 years of research on legal argumentation. Argumentation 11(3):355–376
Feteris ET (2000) A dialogical theory of legal discussions: Pragma-dialectical analysis and evaluation of legalargumentation. Artif Intell Law 8(2):115–135
Feteris ET (2002) A pragma-dialectical approach of the analysis and evaluation of pragmatic argumentation in a legal context. Argumentation 16(3):349367
Feteris ET (2005) The rational reconstruction of argumentation referring to consequences and purposes in the application of legal rules: A pragma-dialectical perspective. Argumentation 19(4):459–470
Feteris ET (2008) The pragma-dialectical analysis and evaluation of teleological argumentation in a legal context. Argumentation 22(4):489–506
Feteris ET (2016) Prototypical argumentative patterns in a legal context: the role of pragmatic argumentation in the justification of judicial decisions. Argumentation 30(1):61–79
Feteris ET, Prakken H (2000) Introduction: dialectical legal argument: formal and informal models. Artif Intell Law 8(2):107–113
Gordon TF (2012) The Carneades web service. In: Proceedings of COMMA 2012, IOS Press, pp 517–518
Gordon TF (1993) The pleadings game. Artif Intell Law 2(4):239–292
Gordon TF, Prakken H, Walton D (2007) The Carneades model of argument and burden of proof. Artif Intell 171(10):875–896
Grice HP (1975) Logic and conversation. In: Cole P, Morgan J (eds) Syntax and semantics vol 3, speech acts. Academic Press, New York, pp 43–58
Hamlin CL (1970) Fallacies. Methuen, London
Horty JF, Bench-Capon T (2012) A factor-based definition of precedential constraint. Artif Intell Law 20(2):181–214
Mackenzie JD (1979) Question-begging in non-cumulative systems. J Philos Logic 8(1):117–133
Marshall CC (1989) Representing the structure of a legal argument. In: Proceedings of the 2nd International Conference on Artificial Intelligence and Law, pp 121–127
McCarty LT (1976) Reflections on TAXMAN: an experiment in artificial intelligence and legal reasoning. Harv Law Rev 90:837
Modgil S, Prakken H (2014) The ASPIC+ framework for structured argumentation: a tutorial. Argum Comput 5(1):31–62
Perelman C, Olbrechts-Tyteca L (1980) The new rhetoric: a treatise on argumentation. University of Notre Dame Press, Notre Dame
Prakken H (2001) Relating protocols for dynamic dispute with logics for defeasible argumentation. Synthese 127(1):187–219
Prakken H, Sartor G (1996) A dialectical model of assessing conflicting arguments in legal reasoning. Artif Intell Law 4(3–4):331368

Prakken H, Sartor G (2015) Law and logic: a review from an argumentation perspective. Artif Intell 227:214–245
Prakken H, Wyner A, Bench-Capon T, Atkinson K (2013) A formalization of argumentation schemes for legal case-based reasoning in ASPIC+. J Logic Comput 25(5):1141–1166
Rigoni A (2015) An improved factor based approach to precedential constraint. Artif Intell Law 23(2):133–160
Toulmin S (1958) The uses ofargument. Cambridge University Press, Cambridge
Verheij B (2009) The Toulmin argument model in artificial intelligence. In: Simari G, Rahwan I (eds) Argumentation in artificial intelligence. Springer, Berlin, pp 219–238
Walton D, Krabbe EC (1995) Commitment in dialogue: basic concepts ofinterpersonal reasoning. SUNY press, Albany
Walton D, Reed C, Macagno F (2008) Argumentation schemes. Cambridge University Press, Cambridge
Walton D, Sartor G, Macagno F (2016) An argumentation framework for contested cases of statutory interpretation. Artif Intell Law 24(1):51–91
Zeleznikow J, Stranieri A (1995) The split-up system: integrating neural networks and rule-based reasoning in the legal domain. In: Proceedings of the 5th International Conference on Artificial Intelligence and Law, pp 185–194