

# Reasoning with Cases

## A Selected Bibliography

Trevor Bench-Capon  
Department of Computer Science  
University of Liverpool

### General History of the Field

Trevor J. M. Bench-Capon, [Michał Araszkiwicz](#), [Kevin D. Ashley](#), [Katie Atkinson](#), [Floris Bex](#), [Filipe Borges](#), [Danièle Bourcier](#), [Paul Bourgine](#), [Jack G. Conrad](#), [Enrico Francesconi](#), [Thomas F. Gordon](#), [Guido Governatori](#), [Jochen L. Leidner](#), [David D. Lewis](#), [Ronald Prescott Loui](#), [L. Thorne McCarty](#), [Henry Prakken](#), [Frank Schilder](#), [Erich Schweighofer](#), [Paul Thompson](#), [Alex Tyrrell](#), [Bart Verheij](#), [Douglas N. Walton](#), [Adam Zachary Wyner](#): A history of AI and Law in 50 papers: 25 years of the international conference on AI and Law. *Artif. Intell. Law* 20(3): 215-319 (2012)

Trevor Bench-Capon (2017). [HYPOs Legacy: Introduction to the Virtual Special Issue](#). *Artificial Intelligence and Law*, Vol 25 No 2. Pages 205-250.

### Thorne McCarty

L. Thorne McCarty, Reflections on TAXMAN: An Experiment in Artificial Intelligence and Legal Reasoning, *Harvard Law Review*, vol. 90, pages 837-893 (1977).

L. Thorne McCarty, [N. S. Sridharan](#): The Representation of an Evolving System of Legal Concepts: II. Prototypes and Deformations. *IJCAI 1981*: 246-253

"A Computational Theory of *Eisner v. Macomber*," in C. Ciampi, ed., *Artificial Intelligence and Legal Information Systems*, pages 329-355 (North-Holland Publishing Co., 1982).

L. Thorne McCarty: An Implementation of *Eisner v. Macomber*. *ICAIL 1995*: 276-286

### Edwina Rissland

Edwina L. Rissland: Examples in Legal Reasoning: Legal Hypotheticals. *IJCAI 1983*: 90-93

Edwina L. Rissland, [Jody J. Daniels](#): A Hybrid CBR-IR Approach to Legal Information Retrieval. *ICAIL 1995*: 52-61

Edwina L. Rissland, [M. Timur Friedman](#): Detecting Change in Legal Concepts. *ICAIL 1995*: 127-136

### HYPO

Edwina L. Rissland, [Kevin D. Ashley](#): A Case-Based System for Trade Secrets Law. *ICAIL 1987*: 60-66

[Kevin D. Ashley](#), Edwina L. Rissland: A Case-Based Approach to Modeling Legal Expertise. [IEEE Expert](#) 3(3): 70-77 (1988)

Kevin D. Ashley: Reasoning with Cases and Hypotheticals in HYPO. [International Journal of Man-Machine Studies](#) 34(6): 753-796 (1991)

Ashley, K.D., (1990). *Modeling Legal Argument: Reasoning with Cases and Hypotheticals*. The MIT Press / Bradford Books, Cambridge, MA.

## CABARET

Edwina L. Rissland, [David B. Skalak](#): CABARET: Rule Interpretation in a Hybrid Architecture. [International Journal of Man-Machine Studies](#) 34(6): 839-887 (1991)

Edwina L. Rissland, [David B. Skalak](#): CABARET: Rule Interpretation in a Hybrid Architecture. [International Journal of Man-Machine Studies](#) 34(6): 839-887 (1991)

[David B. Skalak](#), Edwina L. Rissland: Arguments and cases: An inevitable intertwining. [Artif. Intell. Law](#) 1(1): 3-44 (1992)

## BANKXX

Edwina L. Rissland, [David B. Skalak](#), [M. Timur Friedman](#): BankXX: Supporting Legal Arguments through Heuristic Retrieval. [Artif. Intell. Law](#) 4(1): 1-71 (1996)

Edwina L. Rissland, [David B. Skalak](#), [M. Timur Friedman](#): Evaluating a Legal Argument Program: The BankXX Experiments. [Artif. Intell. Law](#) 5(1-2): 1-74 (1997)

## CATO

[Vincent Alevan](#), Kevin D. Ashley: Doing Things with Factors. [ICAIL 1995](#): 31-41

[Vincent Alevan](#), Kevin D. Ashley: Evaluating a Learning Environment for Case-Based Argumentation Skills. [ICAIL 1997](#): 170-179

Alevan, V. (1997). Teaching Case-Based Argumentation Through a Model and Examples. Ph.D. Thesis, Intelligent Systems Program, University of Pittsburgh.

## IBP

Stefanie Brüninghaus, [Kevin D. Ashley](#): Predicting Outcomes of Case-Based Legal Arguments. [ICAIL 2003](#): 233-242

[A Predictive Role for Intermediate Legal Concepts](#), Ashley, K. and Brüninghaus, S. (2003). In the *Proceedings 16th Annual Conference on Legal Knowledge and Information Systems*, Jurix-03. pp. 153-162. Utrecht, The Netherlands. December. IOS Press, Amsterdam.

Stefanie Brüninghaus, [Kevin D. Ashley](#): Generating Legal Arguments and Predictions from Case Texts. [ICAIL 2005](#): 65-74

Stefanie Brüninghaus, [Kevin D. Ashley](#): Generating Legal Arguments and Predictions from Case Texts. [ICAIL2005](#): 65-74

## Reconstructing Factor Based Reasoning

T.J.M. Bench-Capon, *Arguing with Cases*, in Proceedings of JURIX 97, GNI Nijmegen, 1997, pp 85-100.

Henry Prakken, [Giovanni Sartor](#): Modelling Reasoning with Precedents in a Formal Dialogue Game. [Artif. Intell. Law](#) 6(2-4): 231-287 (1998)

M. Allen, [Trevor J. M. Bench-Capon](#), [Geof Staniford](#): A Multi-Agent Legal Argument Generator. [DEXA Workshop 2000](#): 1080-1086

[John F. Horty](#), Trevor J. M. Bench-Capon: A factor-based definition of precedential constraint. [Artif. Intell. Law](#) 20(2): 181-214 (2012)

Trevor J. M. Bench-Capon: Representing Popov v Hayashi with dimensions and factors. [Artif. Intell. Law](#) 20(1): 15-35 (2012)

Adam Rigoni, 2015. An improved factor based approach to precedential constraint. *Artificial Intelligence and Law*, 23(2), pp.133-160.

Henry Prakken, 2019. Modelling accrual of arguments in ASPIC+. In *Proceedings of the Seventeenth International Conference on Artificial Intelligence and Law* (pp. 103-112).

Henry Prakken 2019, December. Comparing Alternative Factor-and Precedent-Based Accounts of Precedential Constraint. In *Proceedings of JURIX 2019: The Thirty-second Annual Conference* p. 73-82. IOS Press.

## Dimensions and Factors with Magnitude

Edwina Rissland and Kevin Ashley, 2002. A note on dimensions and factors. *Artificial Intelligence and Law*, 10(1-3), pp.65-77.

Bench-Capon, Trevor and Rissland, Edwina, 2001. Back to the future: dimensions revisited. In *Proceedings of JURIX 2001*.

Trevor Bench-Capon and Katie Atkinson, 2017. Dimensions and Values for Legal CBR. In *JURIX* (pp. 27-32).

Adam Rigoni. Representing dimensions within the reason model of precedent. *Artificial Intelligence and Law* 26, no. 1 (2018): 1-22.

Trevor Bench-Capon and Katie Atkinson., 2018. Lessons from Implementing Factors with Magnitude. In *JURIX* (pp. 11-20).

John Horty, 2019. Reasoning with dimensions and magnitudes. *Artificial Intelligence and Law*, 27(3), pp.309-345.

## Argumentation

T.J.M. Bench-Capon, 2002. Representation of Case Law as an Argumentation Framework. In T. Bench-Capon, Daskalopoulou, A., and Winkels, R., (eds) Legal Knowledge and Information Systems, Proceedings of Jurix 2002. IOS Press: Amsterdam. pp 103-112.

[Adam Zachary Wyner](#), Trevor J. M. Bench-Capon: Modelling Judicial Context in Argumentation Frameworks. [J. Log. Comput.](#) **19**(6): 941-968 (2009)

Colen, S., Crossen, F., & Verheij, B. (2009). How Much Logical Structure is Helpful in Content-Based Argumentation Software for Legal Case Solving?

Henry Prakken: Reconstructing Popov v. Hayashi in a framework for argumentation with structured arguments and Dungean semantics. [Artif. Intell. Law](#) **20**(1): 57-82 (2012)

Tom Gordon and Doug Walton, 2012. A Carneades reconstruction of Popov v Hayashi. *Artificial Intelligence and Law*, **20**(1), pp.37-56

Henry Prakken and Giovanni Sartor, 2015. Law and logic: A review from an argumentation perspective. *Artificial Intelligence*, **227**, pp.214-245.

Tom Gordon and Doug Walton, 2016, September. Formalizing Balancing Arguments. In Proceedings of COMMA 2016 (pp. 327-338).

Michal Araskiewicz and Tomasz Zurek, 2017. Balancing with Thresholds. *Legal Knowledge and Information Systems*, p.107-112.

## Values

Trevor J. M. Bench-Capon: The missing link revisited: The role of teleology in representing legal argument. [Artif. Intell. Law](#) **10**(1-3): 79-94 (2002)

Henry Prakken: An exercise in formalising teleological case-based reasoning. [Artif. Intell. Law](#) **10**(1-3): 113-133 (2002)

Giovanni Sartor Teleological arguments and theory-based dialectics. . [Artif. Intell. Law](#) **10**(1-3): 95-112 (2002)

Trevor J. M. Bench-Capon, [Giovanni Sartor](#): A model of legal reasoning with cases incorporating theories and values. [Artif. Intell.](#) **150**(1-2): 97-143 (2003)

Trevor J. M. Bench-Capon, [Katie Atkinson](#), [Alison Chorley](#): Persuasion and Value in Legal Argument. [J. Log. Comput.](#) **15**(6): 1075-1097 (2005)

[Adam Zachary Wyner](#), Trevor J. M. Bench-Capon, [Katie Atkinson](#): Arguments, Values and Baseballs: Representation of Popov v. Hayashi. [JURIX 2007](#): 151-160

Trevor J. M. Bench-Capon, [Sanjay Modgil](#): Case law in extended argumentation frameworks. [ICAIL 2009](#): 118-127

Latifa Al-Abdulkarim, Hatie Atkinson, and Trevor Bench-Capon, 2015. Factors, issues and values: Revisiting reasoning with cases. In *Proceedings of the 15th international conference on artificial intelligence and law* (pp. 3-12).

## Argumentation Schemes

[Katie Greenwood](#), Trevor J. M. Bench-Capon, [Peter McBurney](#): Towards a Computational Account of Persuasion in Law. [ICAIL 2003](#): 22-31

[Katie Atkinson](#), Trevor J. M. Bench-Capon, [Peter McBurney](#): Arguing about cases as practical reasoning. [ICAIL 2005](#): 35-44

[Adam Zachary Wyner](#), Trevor J. M. Bench-Capon: Argument Schemes for Legal Case-based Reasoning. [JURIX 2007](#): 139-149

Trevor Bench-Capon, Henry Prakken, Adam Wyner and Katie Atkinson (2013). [Argument Schemes for Reasoning with Legal Cases Using Values](#). Proceedings of *Fourteenth International Conference on Artificial Intelligence and Law*. ICAIL 2013 pp13-22.

Katie Atkinson, Trevor Bench-Capon, Henry Prakken and Adam Wyner, 2013. Argumentation Schemes for Reasoning about Factors with Dimensions. In Proceedings of *JURIX 2013* (pp. 39-48).

Henry Prakken, Adam Wyner, Trevor Bench-Capon and Katie Atkinson (2015), [A formalisation of argumentation schemes for legal case-based reasoning in ASPIC+](#). *Journal of Logic and Computation*, 25(5) pp 1141-66.

## AGATHA

[Alison Chorley](#), Trevor J. M. Bench-Capon: AGATHA: Using heuristic search to automate the construction of case law theories. [Artif. Intell. Law 13](#)(1): 9-51 (2005)

## Theory Construction

[Alison Chorley](#), Trevor J. M. Bench-Capon: An empirical investigation of reasoning with legal cases through theory construction and application. [Artif. Intell. Law 13](#)(3-4): 323-371 (2005)

[Adam Zachary Wyner](#), Trevor J. M. Bench-Capon, [Katie Atkinson](#): Towards formalising argumentation about legal cases. [ICAIL 2011](#): 1-10

## Neural Networks

Trevor J. M. Bench-Capon: Neural Networks and Open Texture. [ICAIL 1993](#): 292-297

## Semantic Networks

Karl Branting: Representing and Reusing Explanations of Legal Precedents. [ICAIL 1989](#): 103-110

Karl Branting: Building Explanations from Rules and Structured Cases. [International Journal of Man-Machine Studies](#) 34(6): 797-837 (1991)

Karl Branting: A Reduction-Graph Model of Ratio Decidendi. [ICAIL 1993](#): 40-49

Karl Branting: A computational model of ratio decidendi. [Artif. Intell. Law](#) 2(1): 1-31 (1993)

## Extending Factors

Roth, B., & Verheij, B. (2004). Dialectical Arguments and Case Comparison. *Legal Knowledge and Information Systems. JURIX 2004: The Seventeenth Annual Conference* (ed. Gordon, T.F.), 99-108. Amsterdam: IOS Press.

## Evidence

F.J. Bex, H. Prakken & B. Verheij (2007) Formalising argumentative story-based analysis of evidence. *Proceedings of the 11th International Conference on Artificial Intelligence and Law*, 1-10. New York: ACM Press.

F.J. Bex, S.W. van den Braak, H. van Oostendorp, H. Prakken, H.B. Verheij & G.A.W. Vreeswijk (2007) Sense-making software for crime investigation: how to combine stories and arguments? *Law, Probability & Risk* 6:145-168

F.J. Bex, P.J. van Koppen, H. Prakken & B. Verheij (2010) A Hybrid Formal Theory of Arguments, Stories and Criminal Evidence. *Artificial Intelligence and Law* 18:2, 123-152

F.J. Bex (2011) *Arguments, Stories and Criminal Evidence: A Formal Hybrid Theory*. Springer, Dordrecht.