CONTRIBUTORS

Andrew Aberdein is Assistant Professor of Logic and Humanities at Florida Institute of Technology. Before coming to Florida he taught at the University of Edinburgh. He graduated with a Ph.D. in Logic & Metaphysics from the University of St. Andrews in 2001. Dr Aberdein's principal research is concerned with the interplay between logic and the philosophy of science. He is particularly interested in the contribution that argumentation theory can make to the understanding of the formal sciences.

Txetxu Ausín is Contract Researcher at the Institute of Philosophy, Spanish National Research Council CSIC (www.ifs.csic.es). He holds a PhD in Philosophy and a BA in Advanced Studies in Logics and Foundations of Computer Science and Cognitive Science. He has been Assistant Professor of Professional Ethics of Communication, Logic, and Argumentation at the European University of Madrid. He is a member and Secretary-Treasurer of the Spanish Leibniz Society (www.leibnizsociedad.org). His research is focused on deontic logics and argumentation with norms, applied ethics and human rights, and the legal and political writings of Leibniz. His most recent publication is the book, in Spanish, Between Logics and Law: Paradoxes and Normative Conflicts (2005).

Lilian Bermejo-Luque holds a PhD in Philosophy from the University of Murcia in Spain. She works on the integration of the logical, rhetorical and dialectical aspects of argumentation.

Cristiano Castelfranchi is full professor of Cognitive Sciences at the University of Siena, and director of the Institute for Cognitive Sciences and Technologies of the National Research Council in Rome. He is a cognitive scientist, with a background in linguistics and psychology, who is active in several scientific communities, including cognitive sciences, Multi-Agent Systems and social simulation. He is a Fellow of ECCAI, program chair of AAMAS-2002, chair of several international workshops, and an advisory member of several international conferences and societies (e.g. Cognitive Science; IFMAS). He participated in a number of research networks under the FP4, FP5 and FP6. His research interests include cognitive agent theory and architecture; multi-agent systems; agent-based social simulation; argumentation theories; social cognition and emotions; trust and deception. He has extensively published on all these topics, and he has been invited speaker at IJCAI'97 and in several other conferences on AI, logics, and cognitive sciences. He is member of the editorial board of the *Journal of Autonomous Agents and MAS* and *Cognitive Science Quarterly*, and of the MIT *CogNet*.

Robert H. Ennis received his PhD from the University of Illinois, UC and now is Professor Emeritus at the same institution, and Immediate Past-President of the Association for Informal Logic and Critical Thinking. He has been a Fellow at the Center for Advanced Study in the Behavioral Sciences at Stanford, California, President of the Philosophy of Education Society, a Post-Doctoral Fellow at the

University of California, Berkeley, a full professor at Cornell University, and a physical-science teacher at the Oakwood Twp. High School in Illinois. Ennis is the author of three books, *Ordinary Logic, Logic in Teaching*, and *Critical Thinking*; co-author of one book, *Evaluating Critical Thinking*; co-editor of two books, *Language and Concepts in Education* and *Philosophy of Educational Research*; and co-author of three critical thinking tests: *Cornell Critical Thinking Test Level X, Cornell Critical Thinking Test Level Z*, and *Ennis-Weir Critical Thinking Essay Test*. He is author of over fifty articles, co-author of six articles, and editorial-board member for three journals: *Informal Logic, Inquiry*, and *Teaching Philosophy*. His academic web site is http://faculty.ed.uiuc.edu/rhennis, where more details can be found.

James B. Freeman is Professor of Philosophy at Hunter College of The City University of New York, where he has taught since 1978. His main area of research is informal logic and argumentation theory. His informal logic text, Thinking Logically: Basic Concepts for Reasoning (Englewood Cliffs, NJ: Prentice Hall, 1988, 1993), presents a method of diagramming argument structure integrating elements of the Toulmin model with the "standard" approach, familiar from the texts of Stephen N. Thomas and others. His monograph, Dialectics and the Macrostructrue of Arguments: A Theory of Argument Structure (Berlin and New York: Foris Publications, 1991), critically appraises the Toulmin model and argues for incorporating various aspects of the model into the standard approach as presented in Thinking Logically. His latest book, Acceptable Premises: An Epistemic Approach to an Informal Logic Problem (Cambridge: Cambridge University Press, 2005), calls upon the Toulmin model to explicate certain issues concerning the acceptability of basic premises. Besides the paper presented in this volume, he discusses explicating relevance through Toulmin's notion of warrant in "Relevance, Warrants, Backing, Inductive Support," Argumentation 6 (1992), 219-235. He is currently concerned with the problem of connection adequacy in arguments, specifically with assaying relevance and ground adequacy.

John Fox was educated at Durham and Cambridge Universities in the UK, and then carried out research in AI and cognitive science at Carnegie-Mellon and Cornell Universities in the USA. At Cancer Research UK he leads the Advanced Computation Laboratory whose research straddles computer science, artificial intelligence and software engineering with a particular focus on medicine (see www.acl.icnet.uk). Fox has published widely in AI and cognitive science and biomedical engineering, and was founding editor of the Knowledge Engineering Review (Cambridge University Press). Recent publications include Safe and Sound: Artificial Intelligence in Hazardous Applications (AAAI and MIT Press, July 2000), which deals with many aspects of the theory and use of argumentation within the context of autonomous agents. In 1996 the ACL received the 20th Anniversary Gold Medal of the European Federation of Medical Informatics for its work on PROforma, a declarative agent specification language, and an associated suite of application development tools. Among the applications of PROforma are decision support and workflow management, many of which have been developed and validated for medical use (www.openclinical.org/gmm proforma.html). He is

scientific coordinator of the ASPIC project (Argumentation Service Platform with Integrated Components), which is funded by the EU (see www.argumentation.org).

G. Thomas Goodnight is Professor of Communication and Director of the Doctoral Program, the Annenberg School for Communication, at the University of Southern California in Los Angeles, California. Professor Goodnight writes in the areas of controversy, public argument, the rhetoric of science, and rhetorical theory and criticism. He has published works on these topics in the *Quarterly Journal of Speech, Informal Logic*, and *Argumentation*.

David Hitchcock is Professor of Philosophy at McMaster University in Hamilton, Canada. He is the author of *Critical Thinking: A Guide to Evaluating Information* (Toronto: Methuen, 1983) and (with Milos Jenicek, MD) of *Evidence-Based Practice: Logic and Critical Thinking in Medicine* (Chicago: AMA Press, 2005). He has published scholarly papers on non-deductive (enthymematic, conductive, inductive and analogical) inference; on a variety of other topics in the theory of argumentation (constraints on formal systems of inquiry dialogues, deliberation dialogue (with Peter McBurney), practical reasoning (with Rod Girle, Peter McBurney and Bart Verheij), the fallacy of denying the antecedent); on Plato, Aristotle and the Stoics; and on Tarski's conception of logical consequence. He is currently at work on a monograph on the concept of consequence (the inferential concept, not the causal one).

James F. Klumpp is Professor of Communication at the University of Maryland. He has written extensively in contemporary rhetorical theory and particularly in argumentation theory, and studies contemporary and historical discourse as a rhetorical critic. He has edited the journal *Argumentation and Advocacy* and has been the Director of the NCA/AFA Summer Conference in Argumentation.

Christian Kock is Professor of Rhetoric in the Department of Media, Cognition, and Communication at the University of Copenhagen. He was co-founder of the Academic Writing Centre at that institution and has been a Visiting Professor of English at Indiana University, Bloomington. His research interests include argumentation theory and pedagogy, public debate, writing pedagogy, literary and musical aesthetics, and the history of rhetoric. He is author or co-author of a number of monographs, textbooks and articles across these fields, in Danish and English. He is a member of the Humanities Subcommittee of the Research Council of Norway.

Manfred Kraus is lecturer for Classics at the University of Tübingen, Germany. He studied Classics and German Language and Literature in Munich and Oxford and took his degree of Dr. phil. in 1984 at the University of Munich. The title of his doctoral thesis is *Name und Sache. Ein Problem im frühgriechischen Denken* (Amsterdam: B.R. Grüner 1987). He has written various articles on topics concerning Greek and Latin literature, ancient philosophy, the history of rhetoric and the theory of argumentation, and has contributed a number of major articles to the *Historisches Wörterbuch der Rhetorik* edited at Tübingen. His main scholarly interests are early Greek philosophy, the philosophy of Plato and Aristotle, philosophy of language, poetics and aesthetics of Greek tragedy, history of education, theory and history of rhetoric from antiquity to modern times, and the theory of

argumentation (with special emphasis on the theory of the enthymeme). He is currently a member of the Council of the International Society for the History of Rhetoric (ISHR) and co-editor of the journal *Rhetorica*.

Ronald P. Loui holds a joint Computer Science and Philosophy doctoral degree from the University of Rochester, and studied intellectual history and applied mathematics at Harvard. He is currently an Associate Professor in Computer Science and Engineering at Washington University in St. Louis. A recognized innovator in artificial intelligence, logic, and the mathematical foundations of social science, he has been studying citation counts in his field for fifteen years.

Sanjay Modgil was educated at Imperial College London, where he completed an MSc in Computer Science and a PhD in logic. He is currently a senior research fellow employed on the EU 6th framework ASPIC project (Argumentation Service Platform with Integrated Components). His current research interests are in non-monotonic reasoning, logical argumentation systems, and applications of this work in a medical domain. Previous research has focused on logic programming techniques and Description Logics and applications of this work in medical expert systems and medical planning.

Fabio Paglieri is a researcher in Cognitive Science, with a strong background in philosophical epistemology, cognitive and social psychology, formal logic, and Artificial Intelligence. His research interests are focused on the cognitive dynamics of doxastic and motivational states (belief formation and revision, practical reasoning, goal-oriented behaviour, motivated reasoning, intention processing, anticipatory mechanisms), their integration in social practices (argumentation, coordination, cooperation, altruism, emergence and evolution of social institutions), and the formal modelling of these phenomena in BDI logics, multi-agent systems and gametheoretical models, plus several foundational issues, such as the nature of mental representations and the distinction between implicit and explicit mental states. He is currently working at the University of Siena and at the Institute for Cognitive Sciences and Technologies of the CNR in Roma: in the recent past, he has been a visiting student at the Institute for Logic, Language and Computation at the University of Amsterdam. The discussion of his PhD dissertation in Cognitive Science at the University of Siena is due in July 2006, title Belief dynamics: From cognitive architectures to formal models, and back again. For further information and a full list of publications, see http://www.media.unisi.it/cirg/fp/paglieri.html.

Robert C. Pinto is Professor Emeritus at the University of Windsor, where he has taught since 1963. He holds a Ph.D. in philosophy from the University of Toronto, and is a member of the editorial boards of *Argumentation* and *Informal Logic*. His publications include *Argument, Inference and Dialectic* (Kluwer, 2001); with J.A. Blair, *Reasoning:* A *Practical Guide* (Prentice-Hall, 1993); and with Hans V. Hansen, *Fallacies: Classical and Contemporary Readings* (Pennsylvania State Press, 1995).

Henry Prakken is a lecturer in the Intelligent Systems Group (http://www.cs.uu.nl/ groups/IS/) of the computer science department at Utrecht University, and professor of Law and ICT at the Law Faculty (http://www.rug.nl/law/index) of the

University of Groningen. He holds master's degrees in law (1985) and philosophy (1988) from the University of Groningen. In 1993 Henry Prakken obtained his PhD degree at the Free University Amsterdam with a thesis titled *Logical Tools for Modelling Legal Argument*. He is interested in logical foundations of common-sense reasoning, and in the application of Artificial Intelligence and advanced IT to legal reasoning, dispute resolution, group decision making and negotiation.

Chris Reed is Lecturer and Assistant Head of Research in the Division of Applied Computing at the University of Dundee in Dundee, Scotland. Since acquiring his PhD in 1998, he has focused his research on the interdisciplinary area lying between artificial intelligence and the theory of argumentation. He has published about 50 papers in refereed conference proceedings and journals, and has attracted both government and industrial funding, in the United Kingdom and internationally. In 2000 he organized the Symposium on Argument and Computation, an international meeting and collaborative authoring effort that helped to kick-start interdisciplinary work between argumentation and AI. From 2001 to the present, he has co-organized with Floriana Grasso a series of workshops on computational models of natural argument.

Glenn Rowe is a lecturer in Applied Computing at the University of Dundee in Scotland. His research interests include computer-based learning and computer-based assessment, particularly in the teaching of programming. He is also interested in the application of biologically inspired techniques such as ant swarm models and genetic algorithms to practical problems such as optimizing heat exchange in chemical plants. In the argumentation field, he is the main software developer in the Araucaria project (in collaboration with Chris Reed). He and Chris are currently putting the finishing touches on Araucaria version 3.1, which includes Wigmore diagrams in addition to the standard and Toulmin diagrams featured in version 3.0.

Wouter H. Slob received his PhD from the University of Groningen in 2002. A revised version of his dissertation was published as *Dialogical Rhetoric; an essay on truth and normativity after postmodernism*, Kluwer, Dordrecht (2002). His fields of interest are logic, argumentation, theology, and philosophy of history. Presently, he works as a minister in the Dutch Reformed Church and teaches at the Department of Theology in Groningen.

Olaf Tans is a legal philosopher and political scientist working as post-doctoral researcher at the legal faculty of the University of Amsterdam. In 2003 he defended his PhD thesis, which analyses the function of constitutional norms in political communities from a discourse perspective. More generally his research interests are: processes of constitutional ordering, the development of European democracy, evolution of law, and practical reasoning.

Stephen Edelston Toulmin is a University Professor and Adjunct Professor of Anthropology, International Relations, and Religion at the University of Southern California. He is the author of *An Examination of the Place of Reason in Ethics* (1950), *Philosophy of Science: An Introduction* (1953), *The Uses of Argument* (1958), *Foresight and Understanding: An Enquiry into the Aims of Science* (1961), *Human Understanding* (1972), *Knowing and Acting: An Invitation to Philosophy*

(1976), The Return to Cosmology: Postmodern Science and the Theology of Nature (1982), Cosmopolis: The Hidden Agenda of Modernity (1990), and Return to Reason (2001). He is also the co-author of The Fabric of the Heavens: The Development of Astronomy and Dynamics (1961, with June Goodfield), The Architecture of Matter (1965, with June Goodfield), The Discovery of Time (1965, with June Goodfield), Wittgenstein's Vienna (1973, with Alan Janik), An Introduction to Reasoning (1979 and 1984, with Richard Rieke and Alan Janik), and The Abuse of Casuistry: A History of Moral Reasoning (1988, with Albert R. Jonsen).

Bart Verheij is assistant professor at the Artificial Intelligence department of the University of Groningen, the Netherlands. His research has focused on defeasible argumentation, legal argumentation, argumentation support software and argumentation schemes, often using formalism as a tool of analysis. In his future work, the perspective of multi-agent systems will be emphasized, e.g. by studying arguing agents and artificial societies. Bart Verheij's dissertation is entitled *Rules, Reasons, Arguments. Formal studies of argumentation and defeat* (1996). He is the author of the book *Virtual Arguments. On the Design of Argument Assistants for Lawyers and Other Arguers* (2005). Further information is available at http://www.ai.rug.nl/~verheij/.

James F. Voss is Emeritus Professor of Psychology and Political Science of the University of Pittsburgh and former Associate Director and Senior Scientist of the Learning Research and Development Center of the same institution. He has published in a variety of research areas including the role of knowledge in subsequent learning, expert and novice differences in social science problem solving, psychological processes in argumentation including the use of narrative as argument, argumentation as a factor in the learning of history, and expert performance in history.

Mark Weinstein is Professor and Chair of the Department of Educational Foundations at Montclair State University in New Jersey. His chapter in the present volume combines his original interest in logic and philosophy of science with his more recent concern with applied epistemology as the foundation for critical thinking and argument.

John Woods is Director of the Abductive Systems Group at the University of British Columbia and the Charles S. Peirce Professor of Logic in the Group on Logic and Computation at King's College London. He has written extensively on philosophical logic and fallacy theory, concerning which latter Woods is cooriginator, with Douglas Walton, of the so-called Woods-Walton Approach. His Logic of Fiction (Mouton, 1974) is widely recognized as one of the pioneering works in the formal semantics of non-denoting terms. Woods' recent books include Paradox and Paraconsistency (Cambridge, 2003), which is an exploration of conflict resolution in the absence of empirical checkpoints, and The Death of Argument (Kluwer, 2004), a collection of articles on fallacies. Woods is also coauthor, with Dov Gabbay, of Agenda Relevance (2003) and The Reach of Abduction (2005), both from Elsevier. Work in progress includes a co-authored book on dialetheic logic under the working title, True Contradictions.

John Zeleznikow is a full Professor of Information Systems at Victoria University, Melbourne, Australia. Prior to this, he spent two and a half years at the University of Edinburgh, Scotland, UK, where he was the Director of the Joseph Bell Centre for Forensic Statistics and Legal Reasoning at the University of Edinburgh Law School. Professor Zeleznikow has successfully supervised ten PhD students, published two research books, forty refereed journal articles and one hundred refereed conference articles. Professor Zeleznikow's current research focus is upon Information Technology applications in law, including Web-based decision support, knowledge discovery and data-mining, negotiation and dispute resolution.

- Abdullaev, S.: 1977, 'Zu den Möglichkeiten der Transposition der Satzarten im Deutschen Die Grundstrukturen der rhetorischen Frage und des imperativischen Ausrufs', Deutsch als Fremdsprache 14, 263-270.
- Aberdein, A.: 2005, 'The Informal Logic of Mathematical Proof', in R. Hersh (ed.), 18 Unconventional Essays on the Nature of Mathematics, Springer-Verlag, New York, pp. 56-70.
- Aberdein, A.: 2006, 'Managing informal mathematical knowledge: Techniques from informal logic', Lecture Notes in Artficial Intelligence 4108, 208-221.
- Alchourrón, C., P. Gärdenfors and D. Makinson: 1985, 'On the Logic of Theory Change: Partial Meet Contraction and Revision Functions', *Journal of Symbolic Logic* 50, 510-530.
- Alcolea Banegas, J.: 1998, 'L'Argumentació en Matemàtiques', in E. Casaban i Moya (ed.), XIIè Congrés Valencià de Filosofia, Valencià, pp. 135-147. Translation at http://my.fit.edu/~aberdein/Alcolea.pdf.
- Aleven, V.: 1997, *Teaching Case Based Argumentation Through an Example and Models*, PhD Thesis, The University of Pittsburgh.
- Alexy, R.: 1989, A Theory of Legal Argumentation. The Theory of Rational Discourse as Theory of Legal Justification, Clarendon Press, Oxford.
- Anscombe, G.E.M.: 1957, Intention, Basil Blackwell, Oxford.
- Anzilotti, G.I.: 1982, 'The Rhetorical Question as an Indirect Speech Device in English and Italian', Canadian Modern Language Review 38, 290-302.
- Apostel, L.: 1960, 'Toward the Formal Study of Models in the Formal and Non-formal Sciences', Synthèse 12, 125-161.
- Aristotle: 1926, *The Art of Rhetoric*, in J.H. Freese (trans.), Loeb Classical Library 193, Harvard University Press, Cambridge.
- Aristotle: 1937, *Problems*, books 22-38, *Rhetorica ad Alexandrum*, in W.S. Hett and H. Rackham (trans.), Loeb Classical Library 317, Harvard University Press, Cambridge.
- Aristotle: 1989, *Topica*, in E.S. Forster (trans.), Loeb Classical Library 391, Harvard University Press, Cambridge.
- Ashley, K.D.: 1990, Modeling Legal Argument: Reasoning with Cases and Hypotheticals, MIT Press, Cambridge.
- Ashley, K.D.: 2004, 'Capturing the Dialectic Between Principles and Cases', Jurimetrics 44, 229-279.
- Atkinson, K., T.J.M. Bench-Capon and P. McBurney: 2005, 'Arguing about Cases as Practical Reasoning', in *Proceedings of the Tenth International Conference of Artificial Intelligence and Law*, ACM Press, New York, pp. 35-44.
- Ausín, T. and C. Roldán: 2005, 'Leibnizian Basis for Intercultural Dialogue', in F. Triki, T. Ausín, R. Parellada and V. Serrano (eds.), Formes de Rationalité et Dialogue Interculturel, Hildesheim, Olms, pp. 83-102.
- Austin, J.L., 1946, 'Other Minds', Proceedings of the Aristotelian Society, Supplementary Volume XX, 148-187.
- Austin, J.L.: 1962, How to Do Things with Words, Harvard University Press, Cambridge.
- Austin, J.L.: 1970, 'Other Minds', in J.O. Urmson and G.J. Warnock (eds.), *Philosophical Papers*, 2nd. ed., Oxford University Press, London, pp. 76-116.
- Ball, W.J.: 1994, 'Using Virgil to Analyse Public Policy Arguments: A System Based on Toulmin's Informal Logic', Social Science Computer Review 12, 26-37.
- Barak, A.: 1989, Judicial Discretion, Y. Kaufmann (trans.), Yale University Press, New Haven.
- Barth, E.M. and E.C.W. Krabbe: 1982, From Axiom to Dialogue: A Philosophical Study of Logics and Argumentation, Walter de Gruyter, Berlin/New York.
- Bates, B.R., J.A. Lynch, J.L. Bevan and C.M. Condit: 2005, 'Warranted Concerns, Warranted Outlooks: A Focus Group Study of Public Understandings of Genetic Research', Social Science and Medicine 60, 331-344
- Bayer, K. (ed.): 1993, M. Tullius Cicero, Topica. Die Kunst, richtig zu argumentieren. Lateinisch und deutsch, Artemis & Winkler, München.

- Beardsley, M.C.: 1950, Practical Logic, Prentice Hall, Englewood Cliffs.
- Bellucci, E. and J. Zeleznikow: 2005, 'Trade-off Manipulations in the Development of Negotiation Decision Support Systems', Proceedings of the Thirty-Eighth Hawaii International Conference on System Sciences, IEEE Computer Society, Los Alamitos, pp. 36-42.
- Bellucci, E. and J. Zeleznikow: 2006, 'Developing Negotiation Decision Support Systems that Support Mediators: A Case Study of the Family Winner System', to appear in Artificial Intelligence and
- Bench-Capon, T.J.M.: 1997, 'Argument in Artificial Intelligence and Law', Artificial Intelligence and Law 5, 249-261.
- Bench-Capon, T.J.M.: 1998, 'Specification and Implementation of Toulmin Dialogue Game', in J.C. Hage, T.J.M. Bench-Capon, A.W. Koers, C.N.J. de Vey Mestdagh and C.A.F.M. Grütters (eds.), Legal Knowledge Based Systems. JURIX: The Eleventh Conference, Gerard N oodt Institute, Nijmegen, pp. 5-20.
- Bench-Capon, T.J.M.: 2003, 'Persuasion in Practical Argument Using Value-based Argumentation Frameworks', Journal of Logic and Computation 13, 429-448.
- Bench-Capon, T.J.M., D. Lowes and A.M. McEnery: 1991, 'Argument-based Explanation of Logic Programs', Knowledge Based Systems 4, 177-183.
- Bench-Capon, T.J.M. and G. Sartor: 2003, 'A Model of Legal Reasoning with Cases Incorporating Theories and Values', Artificial Intelligence 150, 97-143.
- Bengoetxea, J.: 1993, The Legal Reasoning of the European Court of Justice, Towards a European Jurisprudence, Clarendon Press, Oxford.
- Bergman, P.: 1997, Trial Advocacy in a Nutshell, 3rd. ed., West Publishing Co., St. Paul.
- Berlin, I.: 2002, 'Two Concepts of Liberty', in H. Hardy (ed.), Liberty, Incorporating Four Essays on Liberty, Oxford University Press, Oxford, pp. 166-217.
- Berman, D.H. and C.D. Hafner: 1987, 'Indeterminacy: A Challenge to Logic-based Models of Legal Reasoning', in Yearbook of Law, Computers and Technology, Vol. 3, Butterworths, London, pp. 1-35.
- Bermejo-Luque, L.: 2004, 'Rhetorical Criteria for Argument Evaluation?', in T. Suzuki (ed.), Proceedings of the 2nd Tokyo Conference on Argumentation and Social Cognition, Japan Debate Association, Tokyo, pp. 147-151.
- Bex, F.J., H. Prakken, C. Reed and D.N. Walton: 2003, 'Towards a Formal Account of Reasoning about Evidence: Argumentation Schemes and Generalisations', Artificial Intelligence and Law 11, 125-165.
- Béziau, J.Y. (ed.): 2005, Logica Universalis, Birkhäuser Verlag, Basel.
- Blair, J.A.: 1999, 'Presumptive Reasoning/Argument, an Overlooked Class', Protosociology 13, 46-60.
- Blair, J.A.: 2001, 'Walton's Argumentation Schemes for Presumptive Reasoning: A Critique and Development', *Argumentation* 15, 365-379.
- Blair, J.A.: 2003, 'Towards a Philosophy of Argument', in J.A. Blair, D. Farr, H.V. Hansen and R.H. Johnson (eds.), Informal Logic at 25: Proceedings of the Windsor Conference (CD-ROM), OSSA,
- Bobzien, S.: 1996, 'Stoic Syllogistic', Oxford Studies in Ancient Philosophy 14, 133-192.
- Boutilier, C.: 1998, 'A Unified Model of Qualitative Belief Change: A Dynamical Systems Perspective', Artificial Intelligence 98, 281-316.
- Brady, R.: 2005, Universal Logic, CSLI, Stanford.
- Brandom, R.: 1994, Making It Explicit, Harvard University Press, Cambridge.
- Brandom, R.: 2000, Articulating Reasons: An Introduction to Inferentialism, Harvard University Press, Cambridge.
- Brandom, R.: 2002, Tales of the Mighty Dead: Historical Essays in the Metaphysics of Intentionality, Harvard University Press, Cambridge.
- Branting, L.K.: 1994, 'A Computational Model of Ratio Decidendi', Artificial Intelligence and Law 2, 1-31.
- Branting, L.K.: 2003, 'An Agenda for Empirical Research in AI and Law', in L.K. Branting and S. Brüninghaus (eds.), Proceedings of the Workshop on the Evaluation of Legal Reasoning and Problem-Solving Systems, 9th International Conference on Artificial Intelligence and Law (ICAIL-03), Edinburgh, pp. 28-35.
- Bratman, M.: 1992, 'Practical Reasoning and Acceptance in a Context', *Mind* **101**, 1-15.

 Brewer, S.: 1996, 'Exemplary Reasoning: Semantics, Pragmatics, and the Rational Force of Legal Argument by Analogy', Harvard Law Review 109, 923-1028.

Brockriede, W. and D. Ehninger: 1960, 'Toulmin on Argument: An Interpretation and Application', Quarterly Journal of Speech 46, 44-53.

Brockriede, W. and D. Ehninger: 1963, Decision by Debate, Harper and Row, New York.

Bromby, M.C. and M.J. Hall: 2002, 'The Development and Rapid Evaluation of the Knowledge Model of ADVOKATE: An Advisory System to Assess the Credibility of Eyewitness Testimony', in T.J.M. Bench-Capon, A. Daskalopulu and R.G.F. Winkels (eds.), Legal Knowledge and Information Systems. JURIX 2002: The Fifteenth Annual Conference, IOS Press, Amsterdam, pp. 143-152.

Burke, M.: 1985, 'Unstated Premises', Informal Logic 7, 107-118.

Burks, A.W.: 1951, 'The Logic of Causal Propositions', Mind 60, 363-382

Burleson, B.R.: 1979, 'On the Analysis and Criticism of Arguments: Some Theoretical and Methodological Considerations', *Journal of the American Forensic Association* 15, 137-147.

Burnyeat, M.: 1994, 'Enthymeme: Aristotle on the Logic of Persuasion', in D.J. Furley and A. Nehamas (eds.), *Aristotle's Rhetoric: Philosophical Essays*, Princeton University Press, Princeton, NJ, pp. 39-46.

Burton, G.O.: 2004, Stasis, in *Silva Rhetoricae: The Forest of Rhetoric*. http://rhetoric.byu.edu/; accessed 31 March 2005.

Bush, R.A.B. and J.P. Folger: 1995, *The Promise of Mediation: Responding to Conflict through Empowerment and Recognition*, The Jossey Bass Conflict Resolution Series, Wiley, San Francisco.

Cacioppo, J.T. and R.E. Petty: 1982, 'Language Variables, Attitudes, and Persuasion', in E.B. Ryan and H. Giles (eds.), Attitudes Towards Language Variation: Social and Applied Contexts, Edward Arnold, London, pp. 189-207.

Calhoun, G.: 1988/1989, 'Social Theory and the Law: Systems Theory, Normative Justification, and Postmodernism', Northwestern University Law Review 83, 398-460.

Cantwell, J.: 1998, 'Resolving Conflicting Information', Journal of Logic, Language and Information 7, 191-220.

Carlson, G.N. and F.J. Pelletier (eds.): 1995, *The Generic Book*, The University of Chicago Press, Chicago.

Carroll, L.: 1895 'What the Tortoise Said to Achilles', Mind 4, 278-280.

Carroll, L.: 1973, Euclid and His Modern Rivals, Dover, New York.

Castelfranchi, C.: 1996, 'Reasons: Belief Support and Goal Dynamics', Mathware & Soft Computing 3, 233-247.

Castelfranchi, C.: 1997, 'Representation and Integration of Multiple Knowledge Sources: Issues and Questions', in V. Cantoni, V. Di Gesù, A. Setti and D. Tegolo (eds.), *Human and Machine Perception: Information Fusion*, Plenum Press, New York, pp. 235-254.

Chesñevar, C.I., A.G. Maguitman and R.P. Loui: 2000, 'Logical Models of Argument', ACM Computing Surveys 32, 337-383.

Chi, M.T.H., P.J. Feltovich and R. Glaser: 1981, 'Categorization and Representation of Physics Problems by Experts and Novices', Cognitive Science 5, 121-125.

Chisholm, R.: 1957, Perceiving: A Philosophical Study, Cornell University Press, Ithaca.

Chisholm, R.: 1966, Theory of Knowledge, Prentice-Hall, Englewood Cliffs.

Chisholm, R.: 1977, Theory of Knowledge, 2nd. ed., Prentice-Hall, Englewood Cliffs.

Christie, G.: 1986, 'An Essay on Discretion', Duke Law Journal 35, 747-778.

Chryssafidou, E. and M. Sharples: 2003, 'Computer-supported Planning of Essay Argument Structure', in F.H. van Eemeren, J.A. Blair, C.A. Willard and A.F. Snoeck Henkemans (eds.), *Proceedings of the Fifth Conference of the International Society for the Study of Argumentation*, Sic Sat, Amsterdam, pp. 189-194.

Churchland, P.: 1988, Matter and Consciousness. MIT Press, Cambridge.

Clark, P.: 1991, A Model of Argumentation and Its Application in a Cooperative Expert System, PhD thesis. Turing Institute, Department of Computer Science, University of Strathclyde, Glasgow.

Clarke, D.S., Jr.: 1989, Rational Acceptance and Purpose: An Outline of a Pragmatist Epistemology, Rowan and Littlefield, Totawa.

Coady, C.A.J.: 1992, Testimony: A Philosophical Study, Clarendon Press, Oxford.

Cohen, L.J.: 1982, 'Are People Programmed to Commit Fallacies? Further Thoughts about the Interpretation of Experimental Data and Probability Judgement', *Journal of Theory and Social Behavior* 12, 251-274

Cohen, L.J.: 1997, The Probable and the Provable, Clarendon Press, Oxford.

- Conrad, R.: 1982, 'Rhetorische Fragen', Zeitschrift für Slawistik 27, 420-428.
- Coulson A.S., D.W. Glasspool, J. Fox and J. Emery: 2001, 'RAGs: A Novel Approach to Computerized Genetic Risk Assessment and Decision Support from Pedigrees', Methods of Information in Medicine 40, 315-322.
- Crowe, M.: 1975, 'Ten "Laws" Concerning Patterns of Change in the History of Mathematics', *Historia Mathematica* 2, 161-166.
- Dascal, M.: 1978, La Sémiologie de Leibniz, Aubier Montaigne, Paris.
- Dascal, M.: 1987, Leibniz. Language, Signs and Thought, John Benjamins, Amsterdam/Philadelphia.
- Dascal, M.: 2001, 'Nihil sine Ratione → Blandior Ratio', in VII. Internationaler Leibniz-Kongress: Nihil sine Ratione: Mensch, Natur und Technik im Wirken von G. W. Leibniz, Technische University, Berlin, pp. 276-280.
- Dick, J.: 1987, 'Conceptual Retrieval and Case Law', Proceedings of the First International Conference on Artificial Intelligence and Law, ACM Press, Boston, pp. 106-115.
- Douglas, M. and A. Wildavsky: 1983, Risk and Culture, University of California Press, Berkeley.
- Doyle, J.: 1992, 'Reason Maintenance and Belief Revision: Foundations vs. Coherence Theories', in P. Gärdenfors (ed.), *Belief Revision*, Cambridge University Press, Cambridge, pp. 29-51.
- Dragoni, A. F. and P. Giorgini: 2003, 'Distributed Belief Revision', Autonomous Agents and Multi-Agent Systems 6, 115-143.
- Dung, P.M.: 1995, 'On the Acceptability of Arguments and Its Fundamental Role in Nonmonotonic Reasoning, Logic Programming and *n*-Person Games', *Artificial Intelligence* 77, 321-357.
- Dworkin, R.: 1977, Taking Rights Seriously, Harvard University Press, Cambridge.
- Dworkin, R.: 1986, Law's Empire, Duckworth, London.
- Eberle, R.: 1971, 'Replacing One Theory by Another under Preservation of a Given Feature', *Philosophy of Science* **38**, 486-500.
- Eco, U., 1993, La Ricerca della Lingua Perfetta nella Cultura Europea, Laterza, Roma et Bari.
- Eemeren, F.H. van, J.A. Blair, C.A. Willard and A.F. Snoeck Henkemans (eds.): 2003, *Anyone Who Has a View: Theoretical Contributions to the Study of Argumentation*, Kluwer, Dordrecht.
- Eemeren, F.H. van and R. Grootendorst: 1992, Argumentation, Communication, and Fallacies: a Pragma-Dialectical Perspective, Lawrence Erlbaum Associates, Hillsdale.
- Eemeren, F.H. van and R. Grootendorst. 2004, A Systematic Theory of Argumentation: The Pragmadialectical Approach, Cambridge University Press, Cambridge.
- Eemeren, F.H. van, R. Grootendorst, S. Jackson and S. Jacobs: 1993, *Reconstructing Argumentative Discourse*, The University of Alabama Press, Tuscaloosa.
- Eemeren, F.H. van, R. Grootendorst and T. Kruiger: 1984, The Study of Argumentation, Irvington.
- Eemeren, F.H. van, R. Grootendorst and T. Kruiger. 1987, Handbook of Argumentation Theory: A Critical Survey of Classical Backgrounds and Modern Studies, Foris Publications, Dordrecht.
- Eemeren, F.H. van, R. Grootendorst, A.F. Snoeck Henkemans, J.A. Blair, R.H. Johnson, E.C.W. Krabbe, C. Plantin, D.N. Walton, C.A. Willard, J. Woods and D. Zarefsky: 1996, Fundamentals of Argumentation Theory: A Handbook of Historical Backgrounds and Contemporary Developments, Lawrence Erlbaum Associates, Mahwah.
- Eemeren, F.H. van and P. Houtlosser: 1999, 'Strategic Maneuvering in Argumentative Discourse', *Discourse Studies* 1, 479-497.
- Eemeren, F.H. van and P. Houtlosser: 2002, 'Strategic Maneuvering with the Burden of Proof', in F.H. van Eemeren (ed.), Advances in Pragma-Dialectics, Sic Sat, Amsterdam/Vale Press, Newport News, pp. 13-28.
- Elvang-Gøransson M., P.J. Krause and J. Fox: 1993a, 'Acceptability of Arguments as Logical Uncertainty', in M. Clarke, R. Kruse and S. Moral (eds.), Symbolic and Quantitative Approaches to Reasoning and Uncertainty; Proc. European Conference ECSQUARU 93, Berlin, Springer, pp. 79-84.
- Elvang-Gøransson M., P.J. Krause and J. Fox: 1993b, 'Dialectic Reasoning with Inconsistent Information', in D. Heckerman and A. Mamdani (eds.), *Uncertainty in Artificial Intelligence. Proceedings of the 9th Conference*, Morgan Kaufman, San Mateo, pp.114-121.
- Emery J., R. Walton, M. Murphy, J. Austoker, P. Yudkin, C. Chapman, A. Coulson, D. Glasspool and J. Fox: 2000, 'Computer Support for Interpreting Family Histories of Breast and Ovarian Cancer in Primary Care: Comparative Study with Simulated Cases', *British Medical Journal* 321, 28-32.

Ennis, R.H.: 1962, 'A Concept of Critical Thinking: A Proposed Basis for Research in the Teaching and Evaluation of Critical Thinking Ability', *Harvard Educational Review* 31, 81-111.

Ennis, R.H.: 1969, Ordinary Logic, Prentice-Hall, Englewood Cliffs.

Ennis, R.H.: 1981, 'A Conception of Deductive Logic Competence', Teaching Philosophy 4, 337-385.

Ennis, R.H.: 1982, 'Identifying Implicit Assumptions', Synthese 51, 61-86.

Ennis, R.H.: 1996, Critical Thinking, Prentice-Hall, Upper Saddle River.

Ennis, R.H.: 2001, 'Argument Appraisal Strategy: A Comprehensive Approach', Informal Logic 21, 97-140.

Ennis, R.H.: 2004, 'Applying Soundness Standards to Qualified Reasoning', Informal Logic 24, 23-39.

Fahnestock, J. and M. Secor: 2004, A Rhetoric of Argument, 3rd. ed., McGraw-Hill, Boston.

Falappa, M.A., G. Kern-Isberner and G. Simari: 2002, 'Explanations, Belief Revision and Defeasible Reasoning', Artificial Intelligence 141, 1-28.

Fallis, D.: 2003, 'Intentional Gaps in Mathematical Proofs', Synthese 134, 45-69.

Feteris, E.T.: 1997, 'A Survey of 25 Years of Research on Legal Argumentation', Argumentation 11, 355-376.

Finocchiaro, M.A.: 1994, 'Two Empirical Approaches to the Study of Reasoning', *Informal Logic* 16, 1-21.

Fisher, R. and W. Ury: 1981, Getting to YES: Negotiating Agreement Without Giving In, Houghton Mifflin, Boston.

Flick, G.A.: 1979, Natural Justice. Principles and Practical Application, Butterworths, Sydney.

Fox J.: 1990, 'Decision Support for Safety Critical Decisions', *Philiosophical Transactions of the Royal Society B* **327**, 555-567.

Fox J.: 2003, 'Logic, Probability and the Cognitive Foundations of Rational Belief', *Journal of Applied Logic* 1, 197-224.

Fox, J., D.A. Clark, A.J. Glowinski and M.J. O'Neil: 1990, 'Using Predicate Logic to Integrate Qualitative Reasoning and Classical Decision Theory', *IEEE Transactions on Systems, Man, and Cybernetics* 20, 347–357.

Fox, J. and S. Das: 1996, 'A Unified Framework for Hypothetical and Practical Reasoning', in D.M. Gabbay and H.J. Ohlbach (eds.), *Proceedings of the 1st International Conference on Formal and Applied Practical Reasoning (FAPR'96)*, Springer, Berlin, pp. 58-72.

Fox J. and S. Das: 2000, Safe and Sound: Artificial Intelligence in Hazardous Applications, MIT Press, Cambridge.

Fox, J. and D. Glasspool: 2001, 'REACT - A Decision-support System for Medical Planning', in S. Bakken (ed.), Proceedings of the American Medical Informatics Association Symposium 2001, Hanley and Belfus, Philadelphia, pp. 911.

Fox J., P.J. Krause and S. Ambler: 1992, 'Arguments, Contradictions, and Practical Reasoning', in B. Neumann (ed.), *Proceedings of the Tenth European Conference on Artificial Intelligence. August 3-7, 1992*, John Wiley & Sons, New York, pp. 623-626.

Fox J., P.J. Krause and M. Elvang-Goransson: 1993, 'Argumentation as a General Framework for Uncertain Reasoning', in D. Heckerman and E.H. Mamdani (eds.), Proceedings of the 9th Annual Conference on Uncertainty in Artificial Intelligence (UAI-93), Morgan Kaufman, Washington, pp. 428-434.

Fox J. and S. Parsons: 1998, 'Arguing about Beliefs and Actions', in A. Hunter and S. Parsons (eds.), Applications of Uncertainty Formalisms, Springer, Berlin, pp. 266-302.

Fraassen, B. van: 1971, Formal Semantics and Logic, MacMillan, New York.

Frank, J.: 1990, 'You Call That a Rhetorical Question? Forms and Functions of Rhetorical Questions in Conversation', *Journal of Pragmatics* 14, 723-738.

Franklin, J.: 2001, *The Science of Conjecture: Evidence and Probability before Pascal*, The Johns Hopkins University Press, Baltimore.

Frede, M.: 1974, Die stoische Logik, Vandenhoeck & Ruprecht, Göttingen.

Freeman, J.B.: 1991, Dialectics and the Macrostructure of Arguments: A Theory of Argument Structure, Foris, Berlin.

Freeman, J.B.: 1992, 'Relevance, Warrants, Backing, Inductive Support', Argumentation 6, 219-235.

Freeman, J.B.: 2000, 'What Types of Statements Are There?' Argumentation 14, 135-157.

Freeman, J.B.: 2003, 'The Pragmatic Dimension of Premise Acceptability', in F.H. van Eemeren, J.A. Blair, C.A. Willard and A.F. Snoeck Henkemans (eds.), *Anyone Who Has a View, Theoretical Contributions to the Study of Argument*, Argumentation Library, Vol. 8, Kluwer Academic Publishers, Dordrecht/Boston/London, pp. 17-26.

- Freeman, J.B.: 2005a, Acceptable Premises: An Epistemic Approach to an Informal Logic Problem, Cambridge University Press, Cambridge.
- Freeman, J.B.: 2005b, 'Systematizing Toulmin's Warrants: An Epistemological Approach', in D. Hitchcock (ed.), *The Uses of Argument. Proceedings of a Conference at McMaster University*, 18-21 May, 2005, OSSA, Hamilton, pp. 101-110.
- Frege, G.: 1950, The Foundations of Arithmetic. A Logico-Mathematical Enquiry into the Concept of Number, J.L. Austin (trans.), Blackwell, Oxford.
- Frijda, N.H., A.S.R. Manstead and S. Bem (eds.): 2000, *Emotions and Beliefs: How Feelings Influence Thoughts*, Cambridge University Press, Cambridge.
- Fuhrmann, M.: 1984, Die antike Rhetorik: eine Einführung, Artemis-Verlag, München.
- Gabbay, D.M., C.J. Hogger and J.A. Robinson (eds.): 1994, Handbook of Logic in Artificial Intelligence and Logic Programming. Volume 3. Nonmonotonic Reasoning and Uncertain Reasoning, Clarendon Press, Oxford.
- Gabbay D.M. and J. Woods: 2003a, Agenda Relevance: A Study in Formal Pragmatics, North Holland, Amsterdam.
- Gabbay D.M. and J. Woods: 2003b, 'Normative Models of Rationality: The Disutility of Some Approaches', *Logic Journal of IGPL* 11, 597-613.
- Gabbay D.M. and J. Woods: 2005, *The Reach of Abduction: Insight and Trial*, North Holland, Amsterdam.
- Gabbay D.M. and J. Woods: 2006, 'Fallacies as Cognitive Virtues', in O. Majer, A. Pietarinen and T. Tulenheimo (eds.), Logic, Games, and Philosophy: Foundational Perspectives, Springer, Berlin, forthcoming.
- Gärdenfors, P.: 1988, Knowledge in Flux: Modelling the Dynamics of Epistemic States, MIT Press, Cambridge.
- Gardner, A. vdL.: 1987, An Artificial Intelligence Approach to Legal Reasoning, MIT Press, Cambridge. Garssen, B.: 2001, 'Argument Schemes', in F.H. van Eemeren (ed.), Crucial Concepts in Argumentation
- Theory, Amsterdam University Press, Amsterdam, pp. 81-99.
 Gasper, D.R.: 1996, 'Analysing Policy Arguments', European Journal of Development Research 8, 36-62.
- Gasper, D.R. and R.V. George: 1998, 'Analyzing Argumentation in Planning and Public Policy: Assessing, Improving, and Transcending the Toulmin Model', *Environment and Planning B: Planning and Design* **25**, 367-390.
- Gelder, T.J. van: 2003, 'Enhancing Deliberation through Computer-supported Argument Visualization', in P.A. Kirschner, S.J. Buckingham Shum and C.S. Carr (eds.), Visualizing Argumentation: Software Tools for Collaborative and Educational Sense-Making, Springer, London, pp. 97-115.
- Gentzen, G.: 1935, 'Untersuchungen über das logische Schliessen', Mathematische Zeitschrift 39, 176-210, 405-431.
- George, A. and D.J. Velleman: 2002, *Philosophies of Mathematics*, Blackwell, Oxford.
- George, R.: 1972, 'Enthymematic Consequence', American Philosophical Quarterly 9, 113-116.
- George, R.: 1983, 'Bolzano's Consequence, Relevance, and Enthymemes', *Journal of Philosophical Logic* 12, 299-318.
- Gigerenzer, G. and R. Selten: 2001, 'Rethinking Rationality', in G. Gigerenzer and R. Selten (eds.), *The Adaptive Toolbox*, MIT Press, Cambridge, pp. 1-12.
- Gillies, D. (ed.): 1992, Revolutions in Mathematics, Clarendon, Oxford.
- Girle, R.: 2000, Modal Logics and Philosophy, McGill-Queen's University Press, Montreal and Kingston. Girle, R., D.L. Hitchcock, P. McBurney and B. Verheij: 2003, 'Decision Support for Practical Reasoning: A Theoretical and Computational Perspective', in C. Reed & T.J. Norman (eds.), Argumentation Machines. New Frontiers in Argument and Computation, Kluwer Academic Publishers, Dordrecht,
- Godden, D.M.: 2005, 'Psychologism in the Logic of John Stuart Mill: Mill on the Subject Matter and Foundations of Ratiocinative Logic', *History and Philosophy of Logic* **26**, 115-143.
- Goldman, A.: 1988, Epistemology and Cognition, Harvard University Press, Cambridge.
- Goldman, A.: 1999, *Knowledge in a Social World*, Oxford University Press, Oxford.
- Goldman, A.: 2002, 'The Unity of the Epistemic Virtues', in A. Goldman (ed.), *Pathways to Knowledge: Private and Public*, Oxford University Press, Oxford, pp. 51-70.
- Goodman, N: 1965, Fact, Fiction and Forecast, Bobbs-Merrill, Indianapolis.

Goodnight, G.T.: 1982, 'The Personal, Technical and Public Spheres of Argument: A Speculative Inquiry into the Art of Public Deliberation', *Journal of the American Forensic Association* 18, 214-227.

Goodnight, G.T.: 1991, 'Controversy', in D.W. Parson (ed.), *Proceedings of the Seventh SCA/AFA Conference on Argumentation*, Speech Communication Association, Washington DC, pp. 1-11.

Goodnight, G.T.: 1993, 'Legitimation Inferences: An Additional Component for the Toulmin Model', Informal Logic 15, 1-15.

Gordon, T.F.: 1995, *The Pleadings Game. An Artificial Intelligence Model of Procedural Justice*, Kluwer Academic Publishers, Dordrecht/Boston/London.

Gordon, T.F.: 2003, 'Artificial Intelligence Models of Legal Argumentation', Tutorial notes, Ninth International Conference on Artificial Intelligence and Law, Edinburgh.

Gough, J. and C. Tindale: 1985, 'Hidden or Missing Premises', Informal Logic 7, 99-106.

Govier, T.C.: 1985, A Practical Study of Argument, Wadsworth, Belmont.

Govier, T.C.: 1987, Problems in Argument Analysis and Evaluation, Foris, Providence.

Govier, T.C.: 1995, 'Reply to Massey', in H.V. Hansen and R.C. Pinto (eds.), *Fallacies: Classical and Contemporary Readings*, Pennsylvania State University Press, University Park, pp. 172-180. Revised version of Chapter 9, 'Four Reasons Why There are no Fallacies', of Govier (1987).

Grennan, W.: 1997, *Informal Logic: Issues and Techniques*, McGill-Queen's University Press, Montreal and Kingston.

Grésillon, A.: 1980, 'Zum linguistischen Status rhetorischer Fragen', Zeitschrift für Germanistische Linguistik 8, 273-289.

Griffin, J.: 1977, 'Are There Incommensurable Values?', Philosophy and Public Affairs 7, 39-59.

Groarke, L.: 1999, 'Deductivism within Pragma-dialectics', Argumentation 13, 1-16.

Haack, S.: 1978, Philosophy of Logics, Cambridge University Press, Cambridge.

Habermas, J.: 1981, The Theory of Communicative Action. Volume 1 Reason and the Rationalization of Society, T. McCarthy (trans.), Beacon Press, Boston.

Hage, J.C.: 1997, Reasoning with Rules. An Essay on Legal Reasoning and Its Underlying Logic, Kluwer Academic Publishers, Dordrecht.

Hage, J.C.: 2000, 'Dialectical Models in Artificial Intelligence and Law', Artificial Intelligence and Law 8, 137-172.

Hall, M.J., A. Stranieri and J. Zeleznikow: 2002, 'A Strategy for Evaluating Web-Based Discretionary Decision Support Systems', in Y. Manolopoulos and P. Návrat, Proceedings of ADBIS2002 - Sixth East-European Conference on Advances in Databases and Information Systems, Slovak University of Technology, Bratislava, pp. 108-120.

Hall, M.J., D. Calabro, T. Sourdin, A. Stranieri and J. Zeleznikow: 2005, 'Supporting Discretionary Decision Making with Information Technology: A Case Study in the Criminal Sentencing Jurisdiction', *University of Ottawa Law and Technology Journal* 2, 1-36.

Hamblin, C.L.: 1970, Fallacies, Methuen, London.

Hambrick, R.S.: 1974, 'A Guide for the Analysis of Policy Arguments', *Policy Sciences* **5**, 469-478.

Hample, D.: 1977, 'The Toulmin Model and the Syllogism', *Journal of the American Forensic Association* **14**(2), 1-9.

Hansen, H.V.: 2002, 'The Straw Thing of Fallacy Theory', Argumentation 16, 133-155.

Hansen, H.V. and R.C. Pinto: 1995, Fallacies: Classical and Contemporary Readings, Pennsylvania State University Press, University Park.

Hansson, S.: 1999, 'A Survey on Non-prioritized Belief Revision', Erkenntnis 50, 413-427.

Hardcastle, G. and A. Richardson (eds.): 2003, Logical Empiricism in North America, University of Minnesota Press, Minneapolis.

Hare, R.M.: 1952, The Language of Morals, Oxford University Press, Oxford.

Harman, G.: 1986, Change in View: Principles of Reasoning, MIT Press, Cambridge.

Hart, H.L.A.: 1961, The Concept of Law, Clarendon Press, Oxford.

Hartshorne, C. and P. Weiss: 1960, The Collected Papers of Charles Sanders Pierce, Harvard University Press, Cambridge.

Hastings, A.C.: 1963, A Reformulation of the Modes of Reasoning in Argumentation, Ph.D. Thesis, Northwestern University, Evanston.

Heath, T.: 1956, The Thirteen Books of Euclid's Elements. Dover, New York.

- Heidt, R.J.:1968, Stephen Toulmin's Argument Model as a Critical Device for Speech, Thesis, San Jose State College, San Jose.
- Hilbert, D.: 1935, *Gesammelte Abhandlungen*, *Band III*, Springer, Berlin and Heidelberg. Hilbert, D.: 1967, 'The Foundations of Mathematics', in J. van Heijenoort (ed.), *From Frege to Gödel*, Harvard University Press, Cambridge, 464-479, German original published in 1927.
- Hintikka, J.: 1969, Models for Modalities, D. Reidel, Dordrecht.
- Hintikka, J.: 1987, 'The Fallacy of Fallacies', Argumentation 1, 211-238.
- Hintikka, J.: 1997, 'What Was Aristotle Doing in His Early Logic, Anyway? A Reply to Woods and Hansen', Synthese 113, 241-249.
- Hitchcock, D.L.: 1985, 'Enthymematic Arguments', Informal Logic 7, 83-97.
- Hitchcock, D.L.: 1992, 'Reasoning by Analogy: A General Theory', in S.P. Norris (ed.), The Generalizability of Critical Thinking: Multiple Perspectives on an Educational Ideal, Teachers College Press, New York, pp. 109-124.
- Hitchcock, D.L.: 1994, 'Validity in Conductive Arguments', in R.H. Johnson and J.A. Blair (eds.), New Essays in Informal Logic, Informal Logic, Windsor, pp. 58-66.
- Hitchcock, D.L.: 1998, 'Does the Traditional Treatment of Enthymemes Rest on a Mistake?', Argumentation 12, 15-37.
- Hitchcock, D.L.: 2000, 'Fallacies and Formal Logic in Aristotle', History and Philosophy of Logic 21, 207-221.
- Hitchcock, D.L.: 2002, 'Sampling Scholarly Arguments: A Test of a Theory of Good Inference (plus appendix)', in H.V. Hansen, C.W. Tindale, J.A. Blair, R.H. Johnson and R.C. Pinto (eds.), Argumentation and Its Applications (CD-ROM), OSSA, Windsor.
- Hitchcock, D.L.: 2003a, 'Toulmin's Warrants', in F.H. van Eemeren, J.A. Blair, C.A. Willard and A.F. Snoeck Henkemans (eds.), Anyone Who Has a View, Theoretical Contributions to the Study of Argument, Argumentation Library, Vol. 8, Kluwer Academic Publishers, Dordrecht/Boston/London,
- Hitchcock, D.L.: 2003b, 'Toulmin's Warrants', in F.H. van Eemeren, J.A. Blair, C.A. Willard and A.F. Snoeck Henkemans (eds.), Proceedings of the 5th International Conference of Argumentation, Sic Sat, Amsterdam, pp. 485-490.
- Hitchcock, D.L.: 2005a, 'Good Reasoning on the Toulmin Model', in D.L. Hitchcock (ed.), The Uses of Argument: Proceedings of a Conference at McMaster University, 18-21 May, 2005, OSSA, Hamilton, pp. 199-208.
- Hitchcock, D.L.: 2005b, 'The Peculiarities of Stoic Propositional Logic', in K.A. Peacock and A.D. Irvine (eds.), Mistakes of Reason: Essays in Honour of John Woods, University of Toronto Press, Toronto, pp. 224-242.
- Hitchcock D.L., P. McBurney and S. Parsons: 2002, 'A Framework for Deliberation Dialogues', in H.V. Hansen, C.W. Tindale, J.A. Blair and R.H. Johnson (eds), Argumentation and its Applications. (CD-ROM), OSSA, Windsor.
- Hoaglund, J.: 1999, Critical Thinking, 3rd. ed., Vale Press, Newport News.
- Hofstadter, D.: 1980, Gödel, Escher, Bach: an Eternal Golden Braid, Vintage Books, New York.
- Horty, J.F.: 2001, 'Nonmonotonic Logic', in L. Goble (ed.), The Backwell Guide to Philosophical Logic, Blackwell Publishers, Oxford, pp. 336-361.
- Houtlosser, P.: 2002, 'Indicators of a Point of View', in F.H. van Eemeren (ed.), Advances in Pragmadialectics, Sic Sat, Amsterdam. pp. 169-184.
- Hülser, K.: 1987-1988, Die Fragmente zur Dialektik der Stoiker, 4 vols. Friedrich Frommann, Stuttgart/ Bad Cannstatt
- Hunter, A.: 2004, 'Towards high impact argumentation', in Proceedings of NMR2004, Whistler, Canada, pp. 227-232.
- Hurt, C.N., V. Patkar, R. Steele, S. Love, M. Williams, R. Thomson and J. Fox: 2005, 'A Quantitative and Qualitative Evaluation of the Effect of Computerised Decision Support for the Triple Assessment of Women Referred to Specialist Breast Cancer Units', Submitted for publication to Advanced Computation Laboratory Publications, London.
- Ilie, C.: 1994, What Else Can I Tell You? A Pragmatic Study of English Rhetorical Questions as Discursive and Argumentative Acts, Almqvist & Wiksell, Stockholm.

- Jacquette, D. (ed.): 2003, Philosophy, Psychology and Psychologism: Critical and Historical Readings on the Psychological Turn in Philosophy, Kluwer, Dordrecht and Boston.
- Jacquette, D.: 2005, 'Two Sides of Any Issue', in D.L. Hitchcock (ed.), The Uses of Argument: Proceedings of a Conference at McMaster University, 18-21 May, 2005, OSSA, Hamilton, pp. 209-217.
- Janik, A. and S.E. Toulmin: 1973, Wittgenstein's Vienna, Simon and Schuster, New York.
- Jenicek, M. and D.L. Hitchcock: 2005, Evidence-Based Practice: Logic and Critical Thinking in Medicine, AMA Press, Chicago.
- Johnson, P.E., I.A. Zualkernan and D.W. Tukey: 1993, 'Types of Expertise: An Invariant of Problem Solving', International Journal of Man Machine Studies 39, 641-665.
- Johnson, R.H.: 1995, 'Informal Logic and Pragma-dialectics: Some Differences', in F.H. van Eemeren, R. Grootendorst, J.A. Blair and C.A. Willard (eds.), Perspectives and Approaches. Proceedings of the Third ISSA Conference on Argumentation, II, Sic Sat, Amsterdam, pp. 237-245.
- Johnson, R.H.: 1996, The Rise of Informal Logic, Vale Press, Newport News.
- Johnson, R.H.: 2000, Manifest Rationality: A Pragmatic Theory of Argument, Lawrence Erlbaum Associates, Mahwah.
- Johnson, R.H. and J.A. Blair: 1977, Logical Self-Defense, McGraw-Hill Ryerson, Toronto.
- Johnson, R.H. and J.A. Blair: 1983, Logical Self-Defense, 2nd edition. McGraw-Hill Ryerson, Toronto.
- Johnston, I.: 2000, And Still We Evolve: A Handbook on the History of Modern Science, http://www.mala.bc.ca/~johnstoi/darwin/sect4.htm.
- Jonsen, A. and S.E. Toulmin: 1988, The Abuse of Casuistry: A History of Moral Reasoning, University of California Press, Los Angeles.
- Kadane, J.B. and D.A. Schum: 1996, A Probabilistic Analysis of the Sacco and Vanzetti Evidence, John Wiley & Sons, New York.
- Kahneman, D. and A. Tversky: 1974, 'Judgement under Uncertainty: Heuristics and Biases', Science 185, 1124-1131.
- Kakas, A. and P. Moraïtis: 2003, 'Argumentation Based Decision Making for Autonomous Agents', in Proceedings of AAMAS 2003, ACM, Melbourne, pp. 883-890.
- Katzay, J. and C. Reed: 2004, 'On Argumentation Schemes and the Natural Classification of Arguments', Argumentation 18, 239-259.
- Keynes J.M.: 1921, Treatise on Probability, Macmillan and Cambridge University Press, London.
- Kienpointner, M.: 1992, Alltagslogik: Struktur und Funktion von Argumentationsmustern, Frommann-Holzboog, Stuttgart/Bad Cannstatt.
- Kingston, J., L. Edwards and M.J. Hall: 2002, 'Prototyping a Legal Decision Support System: A Case Study', in *Proceedings of the 3rd International Conference on Law and Technology*, IASTED, Calgary, pp. 200-204.
- Kirschner, P.A., S.J. Buckingham-Shum and C.S. Carr: 2003, Visualizing Argument, Springer, London.
- Klayman, J.: 1995, 'Varieties of Confirmation Bias', in J. Busemeyer, R. Hastie and D.L. Medin (eds.), Decision Making from a Cognitive Perspective (Psychology of Learning and Motivation 32), Academic Press, New York, pp. 365-418.
- Kleene, S.: 1950, Introduction to Metamathematics, Van Nostrand, Princeton.
- Klumpp J.F.: 1981, 'A Dramatistic Approach to Fields', in G. Ziegelmueller and J. Rhodes (eds.), Dimensions of Argument: Proceedings of the Second Summer Conference on Argumentation, Speech Communication Association, Annandale, pp. 44-55.
- Klumpp, J.F.: 2005, 'The Three Arguments of Iraq', in C.A. Willard (ed.), Critical Problems in Argumentation, National Communication Association, Washington, pp. 726-732.
- Klumpp, J.F.: 2006, 'Facts, Truth and Iraq: A Call to Stewardship of Democractic Argument', in P. Riley (ed.), *Engaging Argument*, National Communication Association, Washington, pp. 1-12.
- Kneale, W. and M. Kneale: 1962, The Development of Logic, Clarendon Press, Oxford.
- Kock, C.: 2003, 'Multidimensionality and Non-Deductiveness in Deliberative Argumentation', in F.H. van Eemeren, J.A. Blair, C.A. Willard and A. F. Snoeck Henkemans (eds.), Anyone Who Has a View: Theoretical Contributions to the Study of Argumentation, Kluwer Academic Publishers, Dordrecht/Boston/London, pp. 157-171.

Kornblith, H.: 1993, Inductive Inference and Its Natural Ground: An Essay in Naturalistic Epistemology, MIT Press, Cambridge.

Kosso, P.: 1992, Reading the Book of Nature: An Introduction to the Philosophy of Science, Cambridge University Press, New York.

Kosso, P.: 2001, Knowing the Past: Philosophical Issues of History and Archeology, Humanity Books, Amherst.

Krause, P., S. Ambler, M. Elvang-Goransson and J. Fox: 1995, 'A Logic of Argumentation for Reasoning under Uncertainty', *Computational Intelligence* 11, 113-131.

Krause, P. and D. Clark: 1993, Representing Uncertain Knowledge: An Artificial Intelligence Approach, Intellect Books, Oxford.

Kruger, A.N.: 1975, 'The Nature of Controversial Statements', Philosophy & Rhetoric 8, 137-158.

Kuhn, T.S.: 1962, The Structure of Scientific Revolutions, University of Chicago Press, Chicago.

Langford, C. and R. Beebe: 1969, The Development of Chemical Principles, Addison-Wesley, Reading.

Levi, I.: 1991, *The Fixation of Belief and its Undoing*, Cambridge University Press, Cambridge.

Lindley, D.V.: 1985, Making Decisions, John Wiley and Sons, London.

Llewellyn, K.: 1962, Jurisprudence, University of Chicago Press, Chicago

Lodder, A.: 1999, DiaLaw - on Legal Justification and Dialogical Models of Argumentation, Kluwer Academic Publishers, Dordrecht.

Lodder, A. and J. Zeleznikow: 2005, 'Developing an Online Dispute Resolution Environment: Dialogue Tools and Negotiation Systems in a Three Step Model', *The Harvard Negotiation Law Review* 10, 287-338

Loftus, E.F.: 1979, Eyewitness Testimony, Harvard University Press, Cambridge.

Loftus, E.F. and J.M. Doyle: 1992, Eyewitness Testimony, Civil and Criminal, Michie, Charlottesville.

Loui, R.P.: 1995, 'Hart's Critics on Defeasible Concepts and Ascriptivism', in *Proceedings of the Fourth International Conference on Artifical lintelligence and Law (ICAIL-95)*, ACM Press, College Park, pp. 21-30.

Loui, R.P.: 1998, 'Process and Policy: Resource-Bounded Non-Demonstrative Reasoning', Computational Intelligence 14, 1-38.

Loui, R.P. and J. Norman: 1995, 'Rationales and Argument Moves', Artificial Intelligence and Law 3, 159-189.

Lundgren, R. and A. McMakin: 1998, Risk Communication, Batelle Press, Columbus.

Lutomski, L.S.: 1989, 'The Design of an Attorney's Statistical Consultant', in *Proceedings of the Second International Conference on Artificial Intelligence and Law*, ACM Press, New York, pp. 224-233.

MacCormick, N., 1978, Legal Reasoning and Legal Theory, Oxford University Press, Oxford.

Magnani, L.: 2001, Abduction, Reason and Science, Kluwer, New York.

Maria, G. Di (ed.): 1994, Marci Tulli Ciceronis Topica, L'Epos, Palermo.

Marshall, C.: 1989, 'Representing the Structure of Legal Argument', *Proceedings of the Second International Conference on Artificial Intelligence and Law*, ACM Press, New York, pp. 121-127.

Mates, B.: 1953, Stoic Logic, University of California Press, Berkeley/Los Angeles.

Matthijssen, L.: 1999, Interfacing Between Lawyers and Computers. An Architecture for Knowledge based Interfaces to Legal Databases, Kluwer Law International, Dordrecht.

McBurney, P. and S. Parsons: 2000, 'Tenacious Tortoises: A Formalism for Argument over Rules of Inference', Computational Dialectics (ECAI 2000 Workshop), Berlin.

McKerrow, R.: 1990, 'The Centrality of Justification: Principles of Warranted Assertability', in D.C. Williams and M.D. Hazen (eds.), Argumentation Theory and the Rhetoric of Assent, University of Alabama Press, Tuscaloosa, pp. 17-32.

Alabama Press, Tuscaloosa, pp. 17-32.

Means, M. and J.F. Voss: 1990, 'Who Reasons Well? Two Studies of Informal Reasoning among Children of Different Grade, Ability, and Knowledge Levels', *Cognition and Instruction*, 4, 139-178.

Medin, D.L. and A. Ortony: 1989, 'Comments on Part I: Psychological Essentialism', in S. Vosniadou and A. Ortony (eds.), *Similarity and Analogical Reasoning*, Cambridge University Press, Cambridge, pp. 179-95.

Meibauer, J.: 1986, Rhetorische Fragen, Max Niemeyer, Tübingen.

Mendelson, E.: 1964, Introduction to Mathematical Logic, Van Nostrand, Princeton.

Mill, J.S.: 1959, A System of Logic, Longman's Green, London.

Mostowski, A.: 1966, Thirty Years of Foundational Studies, Barnes and Noble, New York.

- Mueller, I.: 1981, *Philosophy of Mathematics and Deductive Structure in Euclid's Elements*, MIT Press, Cambridge.
- Nagel, E.: 1961, The Structure of Science, Harcourt, Brace and World, New York.
- Nash, J.: 1953, 'Two Person Cooperative Games', Econometrica 21, 128-140.
- Newell, A. and H.A. Simon: 1972, Human Problem Solving, Prentice-Hall, New Jersey.
- Norris, S.P.: 1979, *The Dependability of Observation Statements*, Rational Thinking Reports Number 8, Bureau of Educational Research, Urbana, ERIC document 183590.
- Norris, S.P.: 1981, 'A Concept of Observation Statements', Philosophy of Education 37, 132-142.
- Norris, S.P.: 1984, 'Defining Observational Competence', Science Education 68, 129-142.
- Norris, S.P.: 1985, 'The Philosophical Basis of Observation in Science and Science Education', Journal of Research in Science Teaching 22, 817-833.
- Norris, S.P. (ed.): 1992, The Generalizability of Critical Thinking: Multiple Perspectives on an Educational Ideal, Teachers College Press, New York.
- Norris, S.P. and R. King: 1984, 'Observation Ability: Determining and Extending its Presence', *Informal Logic* **6**(3), 3-9.
- Nussbaum, M.: 1991, Love's Knowledge: Essays on Philosophy and Literature, Oxford University Press, New York.
- Olaso, E. de: 1995, 'Cómo Discutir con los Escépticos? El Caso de Leibniz', in J.A. Nicolás and J. Arana (eds.), Saber y Conciencia. Homenaje a Otto Saame, Comares, Granada, pp. 323-332.
- Omer, I.A.: 1970, 'On the D-N Model of Scientific Explanation', Philosophy of Science 37, 417-33.
- O'Toole, R.R. and R.E. Jennings: 2004, 'The Megarians and the Stoics', in D.M. Gabbay and J. Woods (eds.), *Handbook of the History of Logic*, *Vol. 1: Greek, Indian and Arabian Logic*, Elsevier North Holland, Amsterdam, pp. 397-522.
- Paglieri, F.: 2004, 'Data-oriented Belief Revision: Towards a Unified Theory of Epistemic Processing', in E. Onaindia and S. Staab (eds.), *Proceedings of STAIRS 2004*, IOS Press, Amsterdam, pp. 179-190.
- Paglieri, F.: 2005, 'See What You Want, Believe What You Like: Relevance and Likeability in Belief Dynamics', in L. Cañamero (ed.), Proceedings AISB'05 Symposium 'Agents that Want and Like: Motivational and Emotional Roots of Cognition and Action', AISB, Hatfield, pp. 90-97.
- Paglieri, F. and C. Castelfranchi: 2005a, 'Revising Beliefs through Arguments: Bridging the Gap between Argumentation and Belief Revision in MAS', in I. Rahwan, P. Moraïtis and C. Reed (eds.), Argumentation in Multi-Agent Systems, Springer, Berlin, pp. 78-94.
- Paglieri, F. and C. Castelfranchi: 2005b, 'Arguments as Belief Structures: Towards a Toulmin Layout of Doxastic Dynamics?', in D.L. Hitchcock (ed.), *The Uses of Argument: Proceedings of a Conference at McMaster University, 18-21 May, 2005*, OSSA, Hamilton, pp. 356-367.
- Pagnucco, M.: 1996, *The Role of Abductive Reasoning within the Process of Belief Revision*, PhD Thesis, Department of Computer Science, University of Sydney, Sydney.
- Parsons, S., M. Wooldridge and L. Amgoud: 2003, 'Properties and Complexity of some Formal Interagent Dialogues', *Journal of Logic and Computation* 13, 347-376.
- Parsons, T.: 1996, 'What is Argument?', Journal of Philosophy 93, 164-185.
- Patterson, D.: 1996, Law and Truth, Oxford University Press, Oxford.
- Peirce, C.S.: 1931-1958, *Collected Works*, C. Hartshorne and P. Weiss (eds.), Harvard University Press, Cambridge
- Peirce, C.S.: 1955, Philosophical Writings of Peirce, J. Buchler (ed.), Dover Publications, New York.
- Perelman, C. and L. Olbrechts-Tyteca: 1958, La Nouvelle Rhétorique: Traité de l'argumentation. Presses Universitaires de France, Paris.
- Perelman, C. and L. Olbrechts-Tyteca: 1969, *The New Rhetoric*, University of Notre Dame Press, Notre Dame.
- Petty, R.E., J.T. Cacioppo and M. Heesacker: 1981, 'Effects of Rhetorical Questions on Persuasion: A Cognitive Response Analysis', *Journal of Personality and Social Psychology* **40**, 432-440.
- Pinto, R.C.: 1999, 'Argument Schemes and the Evaluation of Presumptive Reasoning: Some Reflections on Blair's Account', *Protosociology* 13, 61-69.
- Pinto, R.C.: 2001, Argument, Inference and Dialectic, Kluwer Academic Publishers, Dordrecht.
- Pinto, R.C.: 2002, 'Truth and Premiss Adequacy', in H.V. Hansen, C.W. Tindale, J.A. Blair, R.H. Johnson and R.C. Pinto (eds.), *Argumentation and its Applications* (CD-ROM), OSSA, Windsor.

- Pinto, R.C.: 2003a, 'Reasons', in F.H. van Eemeren, J.A. Blair, C.A. Willard and A.F. Snoeck Henkemans (eds.), *Anyone Who Has a View: Theoretical Contributions to the Study of Argumentation*, Kluwer, Dordrecht, pp. 3-15.
- Pinto, R.C.: 2003b: 'The Uses of Arguments in Communicative Contexts', in J.A. Blair, D. Farr, H.V. Hansen and R.H. Johnson (eds.), *Informal Logic at 25: Proceedings of the Windsor Conference* (CD-ROM), OSSA, Windsor.
- Pinto, R.C., J.A. Blair and K.E. Parr: 1993, *Reasoning: A Practical Guide for Canadian Students*, Prentice Hall Canada, Scarborough. A U.S. edition was published the same year as Pinto, R.C. and J.A. Blair, *Reasoning: A Practical Guide*, Prentice Hall, Englewood Cliffs.
- Pollock, J.L., 1970, 'The Structure of Epistemic Justification', American Philosophical Quarterly monograph series 4, 62-78.
- Pollock, J.L.: 1986, Contemporary Theories of Knowledge, Rowman and Littlefield, Totowa.
- Pollock, J.L.: 1987, 'Defeasible Reasoning', Cognitive Science 11, 481-518.
- Pollock, J.L.: 1995, Cognitive Carpentry: A Blueprint for How to Build a Person, MIT Press, Cambridge.
- Pollock, J.L.: 2001, 'Defeasible Reasoning with Variable Degrees of Justification', *Artificial Intelligence* 133, 233-282.
- Pollock, J.L. and A.S. Gillies: 2000, 'Belief Revision and Epistemology', Synthese 122, 69-92.
- Pólya, G.: 1968, Mathematics and Plausible Reasoning, Vol. 2: Patterns of Plausible Inference, Princeton University Press, Princeton.
- Popper, K.: 1959, The Logic of Scientific Discovery, Hutchinson, London. German original first published in 1935.
- Post, E.L.: 1944, 'Recursively Enumerable Sets of Positive Integers and Their Decision Problems', Bulletin of the American Mathematical Society **50**, 305-357.
- Prakken, H.: 1997, Logical Tools for Modelling Legal Argument. A Study of Defeasible Reasoning in Law, Kluwer Academic Publishers, Dordrecht.
- Prakken, H.: 2002, 'An Exercise in Formalising Teleological Case-based Reasoning', *Artificial Intelligence and Law* 10, 113-133.
- Prakken, H.: 2004, 'Analysing Reasoning about Evidence with Formal Models of Argumentation', *Law, Probability & Risk* 3, 33-50.
- Prakken, H., C. Reed and D.N. Walton: 2003, 'Argumentation Schemes and Generalisations in Reasoning about Evidence', in *Proceedings of the Ninth International Conference on Artificial Intelligence and Law*, ACM Press, New York, pp. 32-41.
- Prakken, H. and G. Sartor: 1996, A Dialectical Model of Assessing Conflicting Arguments in Legal Reasoning, Artificial Intelligence and Law 4, 331-368.
- Prakken, H. and G. Sartor: 1998, 'Modelling Reasoning with Precedents in a Formal Dialogue Game', Artificial Intelligence and Law 6, 231-287.
- Prakken, H. and G. Sartor: 2002, 'The Role of Logic in Computational Models of Legal Argument: A Critical Survey', in A. Kakas and F. Sadri (eds.), Computational Logic: Logic Programming and Beyond. Essays In Honour of Robert A. Kowalski, Part II. Springer Lecture Notes in Computer Science 2048, Berlin, pp. 342-380.
- Prakken, H. and G.A.W. Vreeswijk: 2002, 'Logics for Defeasible Argumentation', in D.M. Gabbay and F. Guenthner (eds.), *Handbook of Philosophical Logic, Second Edition*, Vol. 4, Kluwer Academic Publishers, Dordrecht, pp. 218-319.
- Priest, G.: 1987, In Contradiction: A Study of the Transconsistent, Kluwer, Dordrecht.
- Putnam, H.: 1975, 'The Logic of Quantum Mechanics', Mathematics, Matter and Method, Cambridge University Press, Cambridge, pp. 174-197.
- Putman, H.: 1983, Realism and Reason: Philosophical Papers, Vol. 3, Cambridge University Press, Cambridge.
- Quine, W. van O.: 1953, From a Logical Point of View, Harvard University Press, Cambridge.
- Quine, W. van O.: 1960, Word and Object, MIT Press, Cambridge.
- Quine, W. van O. and J.S. Ullian: 1978, The Web of Belief, Random House, New York.
- Rahwan, I., P. Moraïtis and C. Reed (eds.): 2005, Argumentation in Multi-Agent Systems, Springer, Berlin
- Raiffa, H.: 1982, The Art and Science of Negotiation, Harvard University Press, Cambridge.
- Raz, J., 1990, Practical Reason and Norms, Oxford University Press, Oxford.

Raz, J.: 2000, Engaging Reason: On the Theory of Value and Action, Oxford University Press, Oxford.

Reed, C. and T.J. Norman (eds.): 2003, Argumentation Machines. New Frontiers in Argument and Computation, Kluwer Academic Publishers, Dordrecht.

Reed, C. and G.W.A. Rowe: 2001, 'Araucaria: Software for Puzzles in Argument Diagramming and XML', in Department of Applied Computing, University of Dundee Technical Report.

Reed, C. and G.W.A. Rowe: 2004, 'Araucaria: Software for Argument Analysis, Diagramming and Representation', *International Journal of AI Tools* **14**, 961-980.

Reichenbach, H.: 1951, *The Rise of Scientific Philosophy*, University of California Press, Berkeley and Los Angeles.

Reinhardt, T.: 2003, Marcus Tullius Cicero, Topica, Oxford University Press, Oxford.

Reiter, R.: 1980, 'A Logic for Default Reasoning', Artificial Intelligence 13, 81-132.

Reitman, W.: 1965, Cognition and Thought, Wiley, New York.

Renn, O.: 1992, 'Concepts of Risk: A Classification', in S. Krimsky and D. Golding (eds.), Social Theories of Risk, Praeger, Westport, pp. 53-82.

Rescher, N.: 1976, Plausible Reasoning: An Introduction to the Theory and Practice of Plausible Inference, van Gorcum, Assen, Amsterdam.

Rescher, N.: 1978, *Dialectics: A Controversy-Oriented Approach to the Theory of Knowledge*, State University of New York Press, New York.

Rescher, N.: 1986, Leibniz: An Introduction to his Philosophy, University Press of America, Lanham.

Rescher, N.: 1988, Rationality, Clarendon Press, Oxford.

Rescher, N.: 2003, On Leibniz, University of Pittsburgh Press, Pittsburgh

Rittel, H.W. and M.M. Webber: 1973, 'Dilemmas in a General Theory of Planning', Policy Sciences 4, 155-169.

Robbin, J.: 1969, Mathematical Logic: A First Course, Benjamin, New York.

Roldán, C.: 1997, 'Theoria cum praxi: la vuelta a la complejidad. Apuntes para una filosofía práctica desde el perspectivismo leibniziano', *Isegoria* 17, 85-105.

Roldán, C.: 2005, 'Langue naturelle et éthique rationnelle', in D. Berlioz and F. Nef (eds.), *Leibniz et les Puissances du Langage*, Vrin, Paris, pp. 325-339.

Ross, H.L.: 1980, Settled Out of Court, Aldine, Chicago.

Rott, H.: 2001, Change, Choice and Inference: A Study of Belief Revision and Nonmonotonic Reasoning, Oxford University Press, Oxford.

Rowland, R.C.: 1982, 'The Influence of Purpose on Fields of Argument', in *Journal of the American Forensic Association* 18, 228-245.

Russell, B.: 1903, The Principles of Mathematics, George Allen and Unwin, London.

Russell, B.: 1967, 'Letter to Frege', in J. Heijenoort (ed.), *From Frege to Gödel*, Harvard University Press, Cambridge. Written in 1902, but previously unpublished.

Rutherford, D.: 1995, 'Philosophy and Language in Leibniz', in N. Jolley (ed.), *The Cambridge Companion to Leibniz*, Cambridge University Press, Cambridge.

Schacter, D.L. (ed.): 1995, Memory Distortion: How Minds, Brains, and Societies Reconstruct the Past, Harvard University Press, Cambridge.

Schacter, D.L.: 2001, The Seven Sins of Memory: How the Mind Forgets and Remembers, Houghton Mifflin, Boston.

Schauer, F.: 1991, Playing by the Rules. A Philosophical Examination of Rule-Based Decision-Making in Law and in Life, Clarendon Press, Oxford.

Schmidt-Radefeldt, J.: 1977, 'On So-called "Rhetorical" Questions', Journal of Pragmatics 1, 375-392.

Schroeder, C.: 1997, 'Knowledge and Power, Logic and Rhetoric, and Other Reflections in the Toulmin Mirror: A Critical Consideration of Stephen Toulmin's Contributions to Composition', in *Journal of Advanced Composition* 17, 95-107.

Scriven, M.: 1976, Reasoning, McGraw-Hill, New York.

Scriven, M.: 2003, 'The Philosophy of Critical Thinking and Informal Logic', in D. Fasko, Jr. (ed.), Critical Thinking and Reasoning, Hampton Press, Cresskill, pp. 21-45.

Searle, J.R.: 1969, Speech Acts: An Essay in the Philosophy of Language, Cambridge University Press, Cambridge.

Searle, J.R.: 1975, 'Indirect Speech Acts', in P. Cole and J.L. Morgan (eds.), *Syntax and Semantics*, *Vol.* 3: *Speech Acts*, Academic Press, New York, pp. 59-82.

Searle, J.R.: 1979, Expression and Meaning: Studies in the Theory of Speech Acts, Cambridge University Press, Cambridge.

Sellars, W.: 1948, 'Concepts as Involving Laws and Inconceivable without Them', Philosophy of Science 15, 287-315.

Sellars, W.: 1953, 'Inference and Meaning', Mind 62, 313-338.

Sellars, W.: 1963, Science, Perception and Reality, Routledge & Kegan Paul, London.

Sellars, W.: 1964, 'Induction as Vindication', Philosophy of Science 31, 197-231.

Sellars, W.: 1968, Science and Metaphysics: Variations on Kantian Themes, Routledge & Kegan Paul, London

Shapere, D.: 1982, 'The Concept of Observation in Science and Philosophy', Philosophy of Science 49, 485-525.

Shapin, S.: 2002, 'Dear Prudence' [Review of S.E. Toulmin's Return to Reason], London Review of Books 24, no. 2 (14 January 2002), pp. 25-27.

Siegel, H.: 1987, Relativism Refuted, D. Reidel, Dordrecht.

Siegel, H.: 1988, Educating Reason: Rationality, Critical Thinking and Education, Routledge, London and New York.

Siegel, H.: 1996, 'Instrumental Rationality and Naturalized Philosophy of Science', *Philosophy of Science* **63**, Proceedings, S116-S124.

Simon, H.A.:1973, 'The Structure of Ill-structured Problems', Artificial Intelligence 4, 181-201

Simonton, D.K.: 1999, Origins of Genius: Darwinian Perspectives on Creativity, Oxford University Press, Oxford.

Simosi, M.: 2003, 'Using Toulmin's Framework for the Analysis of Everyday Argumentation: Some Methodological Considerations', *Argumentation* 17, 185-202.

Simpson, J.A. and E.S.C. Weiner (eds.), 1991, The Oxford English Dictionary, 2nd ed., Clarendon Press, Oxford.

Skabar, A., A. Stranieri and J. Zeleznikow: 1997, 'Using Argumentation for the Decomposition and Classification of Tasks for Hybrid System Development', Progress in Connectionist Based Information Systems. Proceedings of the 1997 International Conference on Neural Information Processing and Intelligent Information Systems, Springer, Singapore, pp. 814-818.

Skalak, D.B. and E.L. Rissland: 1992, 'Arguments and Cases: An Inevitable Intertwining', *Artificial Intelligence and Law* 1, 3-44.

Skyrms, B.: 1966, Choice and Chance, Dickenson Publishing, Belmont.

Slob, W.H.: 2002a, Dialogical Rhetoric; An Essay on Truth and Normativity after Postmodernism, Kluwer, Dordrecht.

Slob, W.H.: 2002b, 'How to Distinguish Good and Bad Arguments: Dialogico-Rhetorical Normativity', Argumentation 16, 179-196.

Slob, W.H.: 2005, 'The Voice of the Other: A Dialogico-rhetorical Understanding of "Opponent" and Toulmin's "Rebuttal", in D.L. Hitchcock (ed.), The Uses of Argument: Proceedings of a conference at McMaster University, 18-21 May, 2005, OSSA, Hamilton, pp. 423-432.

Snoeck Henkemans, A.F.: 1997, Analysing Complex Argumentation, Sic Sat, Amsterdam.

Snoeck Henkemans, A.F.: 2002, 'Clues for Reconstructing Symptomatic Argumentation', in F.H. van Eemeren (ed.), *Advances in Pragma-dialectics*, Sic Sat, Amsterdam, pp. 185-196.

Sosa, E.: 1991, Knowledge in Perspective: Selected Essays in Epistemology, Cambridge University Press, Cambridge.

Sourdin, T.: 2002, Alternative Dispute Resolution, Law Book Company, Sydney.

Stalnaker, R.C.: 1984, Inquiry, MIT Press, Cambridge.

Stranieri, A. and J. Zeleznikow: 2001a, 'Copyright Regulation with Argumentation Agents', *Information and Communications Technology Law* 10, 109-123.

Stranieri, A. and J. Zeleznikow: 2001b, 'WebShell: The Development of Web Based Expert Systems', in M. Bramer, F. Coenen and A. Preece (eds.), Research and Development in Expert Systems XVIII.

Proceedings of ES2001- The Twenty-first SGES International Conference on Knowledge Based Systems and Applied Artificial Intelligence, Springer, London, pp. 245-258.

Stranieri, A., J. Zeleznikow, M. Gawler and B. Lewis: 1999, A Hybrid-neural approach to the Automation of Legal Reasoning in the Discretionary Domain of Family Law in Australia', *Artificial Intelligence and Law* 7, 153-183.

Stranieri, A., J. Zeleznikow and J. Yearwood: 2001, 'Argumentation Structures that Integrate Dialectical and Monolectical Reasoning', Knowledge Engineering Review 16, 331-348.

Strawson, P.F.: 1949, 'Truth', Analysis 9, 83-97.

Stump, E.: 1988, Boethius's In Ciceronis Topica, Cornell University Press, Ithaca/London.

Sunstein, C.R.: 1993, 'On Analogical Reasoning', Harvard Law Review 106, 741-749.

Suppes, P.: 1969, Studies in Methodology and Foundations of Science, Humanities Press, New York.

Tarski, A.: 1956, 'The Concept of Truth in Formalized Languages', in J.H. Woodger (trans.) Logic, Semantics, Metamathematics, Clarendon Press, Oxford, pp. 152-278.

Tennant, N.: 1992, Autologic, Edinburgh University Press, Edinburgh.

Thagard, P.: 1992, Conceptual Revolutions, Princeton University Press, Princeton.

Thagard, P.: 2000, Coherence in Thought and Action, MIT Press, Cambridge.

Thomas, S.N.: 1977, Practical Reasoning in Natural Language, Prentice-Hall, Englewood Cliffs.

Tindale, C.W.: 1999, Acts of Arguing: A Rhetorical Model of Argument, SUNY Press, Albany.

Toulmin, S.E.: 1950a 'Probability' in Proceedings of the Aristotelian Society, Supplementary

Toulmin, S.E.: 1950a, 'Probability', in *Proceedings of the Aristotelian Society*, Supplementary Vol. XXIV, The Aristotelian Society, London, pp. 27-62.

Toulmin, S.E.: 1950b, The Place of Reason in Ethics, University of Cambridge Press, Cambridge.

Toulmin, S.E.: 1953, *The Philosophy of Science: An Introduction*, The Hutchinson University Library, London.

Toulmin, S.E.: 1958, The Uses of Argument, Cambridge University Press, Cambridge.

Toulmin, S.E., 1964, *The Uses of Argument*, Cambridge University Press, Cambridge. Paperback edition of Toulmin (1958).

Toulmin, S.E.: 1970, 'Does the Distinction between Normal and Revolutionary Science hold Water?', in I. Lakatos and A. Musgrave (eds.), *Criticism and the Growth of Knowledge*, Cambridge University Press, Cambridge, pp. 39-47.

Toulmin, S.E.: 1972, Human Understanding, Harper and Row, New York.

Toulmin, S.E.: 1981, 'The Tyranny of Principles', The Hasting Center Report 6, 31-39.

Toulmin, S.E.: 1990[2001], Cosmopolis: The Hidden Agenda of Modernity, Spanish ed., B. Moreno (trans.), Península, Barcelona.

Toulmin, S.E.: 2001, Return to Reason, Harvard University Press, Cambridge.

Toulmin, S.E.: 2001[2003], Return to Reason, Spanish ed., I. González-Gallarza (trans.), Península, Barcelona.

Toulmin, S.E.: 2003, *The Uses of Argument*, 2nd. ed., Cambridge University Press, Cambridge.

Toulmin, S.E. and J. Goodfield: 1961, The Fabric of the Heavens, Harper and Row, New York.

Toulmin, S.E. and J. Goodfield: 1962, The Architecture of Matter, Harper and Row, New York.

Toulmin, S.E. and J. Goodfield: 1965, The Discovery of Time, Chicago University Press, Chicago.

Toulmin, S.E., R.D. Rieke and A. Janik: 1979, An Introduction to Reasoning, Macmillan, New York.

Toulmin, S.E., R.D. Rieke and A. Janik: 1984, *An Introduction to Reasoning*, 2nd ed., Macmillan, New York.

Trent, J.D.: 1968, 'Toulmin's Model of an Argument: An Examination and Extension', *Quarterly Journal of Speech* **54**, 252-259.

Trillas, E., C. Alsina and J.M. Terricabras: 1995, Introducción a la Lógica Borrosa, Ariel, Barcelona.

Tuomela, R.: 2000, 'Belief versus Acceptance', Philosophical Exploration 2, 122-137.

Tweney, R.D.: 1985, 'Faraday's Discovery of Induction: A Cognitive Approach', in D. Gooding and F. James (eds.), Faraday Rediscovered: Essays on the Life and Work of Michael Faraday: 1791-1867, Stockton Press, New York.

Urdang, L. (ed.): 1968, *The Random House Dictionary of the English Language*, Random House, New York.

Velthoven, B.C.J van and M.J. ter Voert: 2004, Geschillenbeslechtingsdelta 2003. Over verloop en afloop van (potentieel) juridische problemen van burgers, Den Haag, Ministerie van Justitie, WODC, serie Onderzoek en beleid nr. 219.

Verheij, B.: 1996, Rules, Reasons, Arguments. Formal Studies of Argumentation and Defeat, Doctoral Dissertation, University of Maastricht, The Netherlands.

Verheij, B.: 1999, 'Logic, Context and Valid Inference. Or: Can There be a Logic of Law?', in H.J. van den Herik, M.F. Moens, J. Bing, B. van Buggenhout, J. Zeleznikow and C.A.F.M. Grütters (eds.),

- Legal Knowledge Based Systems. JURIX 1999: The Twelfth Conference, Gerard Noodt Instituut, Nijmegen, pp. 109-121.
- Verheij, B.: 2001, 'Legal Decision-making as Dialectical Theory Construction with Argumentation Schemes', *The 8th International Conference on Artificial Intelligence and Law. Proceedings of the Conference*. ACM, New York. The full paper is available at http://www.ai.rug.nl/~verheij/publications.htm.
- Verheij, B.: 2002, 'Evaluating Arguments based on Toulmin's Scheme', in H.V. Hansen, C.W. Tindale, J.A. Blair, R.H. Johnson and R.C. Pinto (eds.), Argumentation and Its Applications (CD-ROM), OSSA, Windsor.
- Verheij, B.: 2003a, 'Artificial Argument Assistants for Defeasible Argumentation', *Artificial Intelligence* **150**, 291-324.
- Verheij, B.: 2003b, 'DefLog: On the Logical Interpretation of Prima Facie Justified Assumptions', Journal of Logic and Computation 13, 319-346.
- Verheij, B.: 2003c, 'Dialectical Argumentation with Argumentation Schemes: An Approach to Legal Logic', *Artificial Intelligence and Law* 11, 167–195.
- Verheij, B.: 2005a, 'Evaluating Arguments Based on Toulmin's Scheme', Argumentation 19, 347-371
- Verheij, B.: 2005b, Virtual Arguments. On the Design of Argument Assistants for Lawyers and Other Arguers, T.M.C. Asser Press, The Hague.
- Vincent, A. and J. Zeleznikow: 2005. 'Towards a Plea Bargaining Decision Support System for Legal Aid Lawyers in Victorian Lower Courts', *Proceedings of Second International ODR Workshop*, Wolf Legal Publishers, Nijmjegen, pp. 47-58.
- Vitrac, B.: 1990, Euclide d'Alexandrie: Les Éléments, Vol. 1, Presses Universitaires de France, Paris.
- Voss, J.F., R. Fincher-Kiefer, J. Wile and L.N. Silfies: 1993, 'On the Processing of Arguments', Argumentation 7, 165-181.
- Voss, J.F., T.R. Greene, T.A. Post and B.C. Penner: 1983, 'Problem Solving Skill in the Social Sciences', in G.H. Bower (ed.), The Psychology of Learning and Motivation: Advances in Research and Theory, Vol. 17, pp. 165-213.
- Voss, J.F. and M. Means: 1991, 'Learning to Reason via Instruction in Argumentation', Learning and Instruction 1, 337-350.
- Voss, J.F., S.W. Tyler and L. Yengo: 1983, 'Individual Differences in the Solving of Social Science Problems', in R. Dillon and R. Schmeck (eds.), *Individual Differences in Cognition*, Academic Press, New York, pp. 205-232.
- Voss, J.F., J. Wiley, J. Kennet, T.E. Schooler and L.N. Silfies: 1998, 'Representations of the Gulf Crisis as Derived from the US Senate Debate', in D.A. Sylvan and J.F. Voss (Eds.), *Problem Representation in Foreign Policy Decision Making*, Cambridge University Press, Cambridge, pp. 279-302.
- Vreeswijk, G.A.W.: 1997, 'Abstract Argumentation Systems', Artificial Intelligence 90, 225-279.
- Walker, G.B. and J. DiP. Congalton: 1987, 'Generic Argument and Argument Fields', *Journal of the American Forensic Association* 23, 125-135.
- Walton D.N.: 1989, Informal Logic. A Handbook for Critical Argumentation, Cambridge University Press, New York.
- Walton, D.N.: 1991, Begging the Question: Circular Reasoning as a Tactic of Argumentation, Greenwood Press, New York/Westport/ London.
- Walton, D.N.: 1995, A Pragmatic Theory of Fallacy, University of Alabama Press, Tuscaloosa.
- Walton, D.N.: 1996a, 'Plausible Deniability and Evasion of Burden of Proof', Argumentation 10, 47-58.
- Walton, D.N.: 1996b, Argumentation Schemes for Presumptive Reasoning, Lawrence Erlbaum Associates, Mahwah.
- Walton, D.N.: 1998, *The New Dialectic: Conversational Contexts of Argument*, University of Toronto Press, Toronto.
- Walton, D.N.: 2003, 'Is There a Burden of Questioning?', Artificial Intelligence and Law 11 1-43.
- Walton, D.N. and E.C.W. Krabbe: 1995, Commitment in Dialogue: Basic Concepts of Interpersonal Reasoning, SUNY Press, Albany.
- Walton, D.N. and C. Reed: 2003, 'Diagramming, Argumentation Schemes and Critical Questions', in F.H. van Eemeren, J.A. Blair, C.A. Willard and A.F. Snoeck Henkemans (eds.), *Anyone Who Has a View: Theoretical Contributions to the study of Argumentation*, Kluwer, Dordrecht, pp. 195-211.

- Walton R., C. Gierl, P. Yudkin, H. Mistry, M.P. Vessey and J. Fox: 1997, 'Evaluation of Computer Support for Prescribing (CAPSULE) Using Simulated Cases', *British Medical Journal* 315, 791-795.
- Wassermann, R.: 2000, Resource-bounded Belief Revision, ILLC DS-2000-01, Universiteit van Amsterdam, Amsterdam.
- Weinstein, M.: 1990, 'Towards a Research Agenda for Informal Logic and Critical Thinking', *Informal Logic* 12, 121-143.
- Weinstein, M.: 1991, 'Entailment in Argumentation,' in F.H. van Eemeren, R. Grootendorst, J.A. Blair and C.A. Willard (eds.), *Proceedings of the Second International Conference on Argumentation*, Vol. 1B, Sic Sat, Amsterdam, pp. 226-235.
- Weinstein, M.: 2002a, 'Exemplifying an Internal Realist Model of Truth', Philosophica 69, 20-49.
- Weinstein, M.: 2002b, 'Critical Review of Robert C. Pinto's Argument, Inference and Dialectic', Informal Logic 22, 161-180.
- Wenzel, J.W.: 1982, 'On Fields of Argument as Propositional Systems', *Journal of the American Forensic Association* 18, 204-213.
- Wigmore, J.H.: 1931, The Principles of Judicial Proof, 2nd. ed., Little, Brown and Co., Boston.
- Willard, C.A.: 1976. 'On the Utility of Descriptive Diagrams for the Analysis and Criticism of Arguments', *Communication Monographs* 43, 308-319.
- Willard, C.A.: 1981, 'Argument Fields and Theories of Logical Types', *Journal of the American Forensic Association* 17, 129-145.
- Willard C.A.: 1982, 'Argument Fields', in J.R. Cox and C.A. Willard (eds.), *Advances in Argumentation Theory and Research*, Southern Illinois University Press, Carbondale, pp. 24-77.
- Willard, C.A.: 1983, Argumentation and the Social Grounds of Knowledge, University of Alabama Press, Alabama.
- Willard, C.A.: 1989, A Theory of Argumentation, University of Alabama Press, Tuscaloosa.
- Williams, G.R.: 1983, Legal Negotiation and Settlement, West Publishing Co., St. Paul.
- Woods, J.: 2003, Paradox and Paraconsistency: Conflict Resolution in the Abstract Sciences, Cambridge University Press, Cambridge and New York.
- Woods, J.: 2004, The Death of Argument: Fallacies in Agent-Based Reasoning, Kluwer, Dordrecht and Boston.
- Woods, J.: 2005a, 'Epistemic Bubbles', in Artemov, S., H. Barringer, A.S.d'A. Garcez, L.C. Lamb and J. Woods (eds.), *We Will Show Them: Essays in Honour of Dov Gabbay*, Vol. 2, College Publications, London, pp. 732-771.
- Woods, J.: 2005b, 'Dialectical Considerations on the Logic of Contradiction', *Logic Journal of the IGPL* 13, 231-266.
- Woods, J. and H.V. Hansen: 1997, 'Hintikka on Aristotle's Fallacies', Synthese 113, 217-239.
- Woods J and K. Peacock: 2004 'Quantum logic and the unity of science', in S. Rehman, J. Symons, D.M. Gabbay and J.P. van Bendegem (eds.), *Logic, Epistemology and the Unity of Science*', Kluwer, Dordrecht and Boston, pp. 257-287.
- Woods, J. and D.N. Walton: 1989, Fallacies: Selected Papers 1972-1982, Foris de Gruyter, Berlin and New York.
- Wreen, M.J.: 1998, 'A Few Remarks on the Individuation of Arguments', in F.H. van Eemeren, R. Grootendorst, J.A. Blair and C. Willard (eds.), Proceedings of the 5th International Conference of Argumentation, Sic Sat, Amsterdam, pp. 883-888.
- Yearwood, J. and A. Stranieri: 1999, 'The Integration of Retrieval, Reasoning and Drafting for Refugee Law: A Third Generation Legal Knowledge Based System', *Proceedings of the Seventh International Conference on Artificial Intelligence and Law*, ACM, Oslo, pp. 117-126.
- Zarefsky, D.: 1982, 'Persistent Questions in the Theory of Argument Fields', *Journal of the American Forensic Association* **18**, 191-203.
- Zeleznikow, J.: 2000, 'Building Judicial Decision Support Systems in Discretionary Legal Domains', International Review of Law, Computers and Technology 14, 341-356.
- Zeleznikow, J.: 2003, 'An Australian Perspective on Research and Development required for the Construction of Applied Legal Decision Support Systems', Artificial Intelligence and Law 10, 237-260.

- Zeleznikow, J.: 2004, 'The Split-Up Project: Induction, Context and Knowledge Discovery in Law', *Law, Probability and Risk* 3, 147-168.
- Zeleznikow, J. and E. Bellucci: 2003, 'Family Winner: Integrating Game Theory and Heuristics to Provide Negotiation Support', in D. Bourcier (ed.), *Proceedings of the Sixteenth International Conference on Legal Knowledge Based Systems*, IOS Publications, Amsterdam, pp. 21-30.
- Zillman, D.: 1972, 'Rhetorical Elicitation of Agreement in Persuasion', *Journal of Personality and Social Psychology* **21**, 159-165.
- Zillman, D.: 1974, 'Rhetorical Elicitation of Concession in Persuasion', *The Journal of Social Psychology* **94**, 223-236.

The index contains references to subjects discussed thematically in the chapters, as well as to names of persons. It has been compiled on the basis of chapter indexes provided by their authors.

a majora argumantum saa argumantum a	Appel, K. 336, 337
a maiore, argumentum see argumentum a maiore	applicable warrant 213
a minore, argumentum see argumentum a	application, rule <i>see</i> rule application
minore	applied logic 1
Abdullaev, S. 317, 321	appraisal of real arguments <i>see</i> real
Aberdein, A. 17, 18, 21, 327, 331, 336, 339	arguments, appraisal of
acceptance 166, 174 act, illocutionary see illocutionary act	appropriateness 391
	Araucaria 18
action, truth conditions for see truth	arbiter, neutral see neutral arbiter
conditions for an action	ArguMed 181, 184, 191
ad hominem, argumentum see argumentum ad	argument 49ff, 53ff, 57, 68
hominem	argument game 238
adequacy 166, 174	Argument Markup Language (AML) 352
adequate information 211-213	argument pattern 316-317, 323-324
Adler, J.E. 218, 397	argument schemes 13, 22, 217, 231-246, 372
adversarial nature of legal argument see legal	argument(s)
argument, adversarial nature of	aggregation see aggregation of arguments
affirmation, unembedded, occurrences of	analytic 106
'probably' in 146, 158, 164	appraisal strategy 147, 148
agency, cognitive see cognitive agency	as a fundamental language activity 103, 113
agent-based reasoning 387	assessment of 103, 104, 112
agents 274	boxed see boxed arguments
individual see individual agents	canons of 107
aggregation of arguments 283	chain see chain argument
AGM model of belief revision 19, 37,	challenging 113
357-359	compound see compound arguments
agreeings and disagreeings, 'probably' in see	contextless 148, 155-156, 164
'probably' in agreeings and disagreeings	courses in 104
agreement, intersubjective see intersubjective	critical see critical arguments
agreement	diagramming see diagramming arguments
Alchourrón, C. 360, 361 see also AGM	evaluation 180, 181-202
model of belief revision	evolution of evolution of arguments
Alcolea Banegas, J. 329, 330, 336, 337, 339	fields of 80-83, 88, 89, 99, 109-113
aleatory probability 381	from analogy see analogy, argument from
Alexander, P. 26	from cause to effect see cause to effect,
Alexy, R. 220, 221	argument from
Allen, D. 145	from parts to whole see parts to whole,
Alsina, C. 271	argument from
Alston, W.P. 388	from principle 107
alternative dispute resolution 297	implicit/explicit see implicit/explicit
ambiguation 385	arguments
ampliation 378	in mathematics 17, 327-339
analogy, argument from 323	layout of see layout of argument
analytic arguments see argument(s), analytic	pedagogy 108, 112, 115
analyticity 2, 389	perceiving 113
Antony (Marcus Antonius) 317	practical standards for 107, 147-148
Anzilotti, G.I. 321	public see public argument
Apostel, L. 58	quasi-syllogistic 318, 319, 324

real, appraisal of <i>see</i> real arguments, appraisal of real, emphasis on 146-149, 151, 155, 156, 164	assumptions, prima facie justified <i>see</i> prima facie justified assumptions Atticus 317
recursive <i>see</i> recursive arguments	audience 321, 323, 324 Ausín, T. 13, 14, 261, 272
regular see regular arguments	Austin, J.L. 35, 36, 130, 146, 157, 186
rhetorical <i>see</i> rhetorical argument	authoritative reference source 211
rules for 107	Axiom of Choice 330
standards 147, 148, 149	Ayer, A. 35, 36
strategic dimension of 105	,,
strength 283	background knowledge 147, 156, 164
strength of 103, 113	backing 2, 14-19, 49, 50ff, 88-90, 104, 112,
substantial 2, 106	181, 182, 192, 193, 278, 318-324
synthetic character of 110, 113	Ball, W.J. 293
testing 113	Barak, A. 290
topical 324, 325	Barth, E.M. 165-168
warrant-establishing 43, 64, 107, 109, 214,	Barwise, J. 35, 36
229	Bates, B. 110
warrant-using 48, 107, 109, 214, 229	BATNA 295
argumentation 52ff, 55ff, 63, 65, 69	Battersby, M. 218
and decision making 274, 280, 287 and medicine 277-282	Bayer, K. 315 Beebe, R. 66
actions/plans 275, 281	Beethoven, L. van 28
beliefs 275, 281	begging the question 323
committing to decisions 287	behaviorism, stimulus-response <i>see</i> stimulus-
defeasible see defeasible argumentation	response behaviorism
medical treatment plans 278-280	behaviour, probabilistic <i>see</i> probabilistic
nature of 168	behaviour
problem solution, integration of see	belief revision 19, 355-372 see also AGM
problem solution argumentation	model of belief revision
integration	data-oriented see data-oriented belief
schemes 13, 22	revision (DBR)
software 181, 183, 184, 191	belief selection 361, 362
argumentative commitment 170-173	beliefs 355-372
argumentative complexes, understanding of 110	non-negotiability of see
argumentative normativity 173	non-negotiability of beliefs
argumentative qualification 170	Bellucci, E. 299, 300
argumentative responsibilities 167	Bench-Capon, T.J.M. 182, 236, 243-245, 293,
argument-based logics 236-238 argument-closure 172	343, 348 Bengoetxea, J. 222
argumentum a maiore 323	Benthem, J. van 397
argumentum a minore 323	Berg, J. 145
argumentum ad hominem 322	Bergman, P. 240
argumentum e contrario 323-324	Berlin, I. 247
Aristotle 26, 29, 49, 169, 252, 258, 266, 313,	Berman, D. 231
386, 388, 389, 395	Bermejo-Luque, L. 5-7, 23, 71, 76
arithmetic 49-52, 54-56	Bermudo, P. 263
Arthur, R.T.W. 269, 272	best-explanation standards 149, 163-164
artificial intelligence 13	Bex, F.J. 239, 240, 346, 356, 357
artificial intelligence and law 231-246	Béziau, JY. 397
Ashley, K.D. 227, 242	bias, confirmation see confirmation bias
assessment of arguments see argument(s),	Blair, J.A. 117, 130, 165, 217, 218
assessment of	Bobzien, S. 314, 315
associated conditional see conditional,	Boethius 316
associateu	Bourbaki, N. 27

box-and-arrow diagrams 18	Chi, M.T.H. 305
boxed arguments 179	Church, A. 35, 36
Boyle-Charles Law 58	Churchland, P. 67
Brady, R. 397	Cicero, M.T. 16, 313-324
Braithwaite, R. 26	citation counts of Toulmin's work 31-37
branching reducer 62, 66ff	claim(s) 2, 18, 107-109, 112, 113, 181, 182,
Brandom, R. 117, 118, 137, 140	185, 186-189, 204, 215, 282, 318-320
Branting, K. 239, 293	generic see generic claims
Brewer, S. 223	inference see inference claims
Brockriede, W. 13, 21, 105, 249,	Clark, P. 293
254	· ·
	classical logics for argumentation <i>see</i> logics for argumentation, classical
Bromby, M.C. 240, 294	
Bruza, P. 397	classical proofs 17
Bunge, M. 35, 36	classification of warrants see warrants,
burden of proof 167, 172, 173	classification of
evading of 322	clinical decision-making 14
shifting of 322	Coady, C.A.J. 89
burden of questioning 172	coercion 355
Burks, A.W. 92	cognition 386
Burleson, B. 73	cognitive agency 388
Burnyeat, M. 315, 316	cognitive aspects of reasoning and arguing 20
Burton, G.O. 42	cognitive psychology see psychology,
Bush, R.A.B. 300	cognitive
	cognitive resources 382
Cacioppo, J.T. 321	Cohen, L.J. 100, 384, 392
Caesar 317	coherence, explanatory explanatory coherence
calculus, probability see probability calculus	coherentism 269
Calhoun, G. 229	Collingwood, R.G. 4, 25
Can do principle see arguments, canons of	commitment
Canfield, J. 145	conception of deductive validity 155, 156,
Cantor, G. 388	160-161, 164
CAPSULE 279	argumentative see argumentative
Carlson, G.N. 382	commitment
Carnap, R. 35, 36, 50, 65	committing, guarded 145-146, 155-164
Carroll, L. 78, 189, 333, 335	justification of 160-164
Cartwright, N. 35, 36	complex cases 4, 42-44
case-based reasoning see precedent-based	complexity, computational see computational
reasoning	complexity
cases, complex see complex cases	compound arguments 219, 220
Castelfranchi, C. 19, 22, 359-361, 363-367,	computational complexity 382
372, 375-377	computational models 355, 371, 372
casuistry 255, 265	computerizing appraisal of reasoning 146,
cause to effect, argument from 324	151, 164
central meaning, functional explanation of	conceptual change 375
deviations from <i>see</i> functional	conclusion 204, 209, 213-216
explanation of deviations from central	vector-like 171
meaning	conditional(s) 185-201
chain argument 112	associated 187
	material 149, 187
challenging arguments <i>see</i> argument(s), challenging	
	'probably' in see 'probably' in
Characteristica Universalis 262, 263	conditionals
charity, principle of <i>see</i> principle of charity	universally quantified see universally
Chellas, B. 36	quantified conditional
chemistry 52ff, 62ff, 66, 68	conditions, truth see truth conditions
Chesñevar, C.I. 196	confirmation bias 211-212

conjunction 314-317	data-oriented belief revision (DBR) 19, 359,
connectionism 290	360
Conrad, R. 321	decision making
consequence 53, 59, 60, 61, 64ff, 69	and argumentation <i>see</i> argumentation and
consequentialism 266, 269	decision making
consistency 151, 152, 153, 155-156, 164	clinical see clinical decision-making
	S S
constraints 306, 310	discretionary see discretionary
resource see resource constraints	decision-making
Constructive Dilemma 333	decision support software 14
constructive proofs 17, 333	decision support systems, legal see legal
content 231	decision support systems
contextless arguments see argument(s),	decision theory, rational <i>see</i> rational decision
contextless	theory
contexts in which 'probably' is embedded	Dedijer, S. 27
146, 157-164	deductive logic 146, 148, 149, 155, 156, 164,
contexts of dialogue 355, 356	328, 384, 389
contextual definition 145, 146, 163	deductive standards 147-149, 155, 156, 164
contingency 262, 264-266, 268, 270, 272	deductive validity 147-149, 155, 156, 164
continuity 380	commitment conception of 155, 156,
principle of see principle of continuity	160-161, 164
contradiction 155	deductivism 6, 80
contrarium 323-324	Dee, J. 263
controversies 263, 265	defeasibility 36, 225, 267
controversy, legitimation see legitimation	defeasible argumentation 11, 181, 184, 193-201
controversy	defeasible Modus Ponens see Modus Ponens,
conversational model 108-112	defeasible
counter-argument 177	defeasible reasoning 236, 365
counter-argument 177 counter-considerations 166, 174, 179, 180	e ,
	defeater 10, 18, 22
counter-rebuttal 175	overriding see overriding defeater
courses	rebutting see rebutting defeater
critical thinking see critical thinking	undercutting see undercutting defeater
courses	undermining see undermining defeater
in argument see argument(s), courses in	defeaters
informal logic see informal logic courses	justification that none apply see
courts, law see law courts	justification that no defeaters apply
Couturat, L. 272	justified assumption that none apply see
Craig Interpolation Lemma 57	justified assumption that no defeaters
criteria, dialectical see dialectical criteria	apply
critical arguments 17, 327, 329, 338, 339	definition, contextual 145, 146, 163
critical questions 216, 217	definitions, dictionary 154, 163
critical thinking courses 146, 148, 149, 164	DefLog 181, 184, 191, 235
criticism, standards of, evolution of see	deliberation 252
standards of criticism, evolution of	Dennett, D. 32
critics, rhetorical see rhetorical critics	deontic logic 271
Crowe, M. 329	dependency, field see field dependency
	Descartes, R. 23, 247, 261, 262
Dalgarno, G. 263	description 206
Dascal, M. 264, 267, 270	determinism 262
data 2, 18, 104, 105, 181, 182, 185, 186-189,	deviations from central meaning, functional
204, 318-320	explanation of <i>see</i> functional
networks 364, 370	explanation of deviations from central
properties 372	meaning
structure 19	Dewey, J. 4, 25, 271
warranting power of see warranting power	Di Maria, G. 315, 316
of data	diagramming arguments 17-18, 19

diagrams 173-179	Ehninger, D. 13, 21, 105, 249, 254
box-and-arrow see box-and-arrow	Einstein, A. 27, 168
diagrams	embedded occurrences of 'probably' 146,
Toulmin see Toulmin diagrams	157-164
translating see translating diagrams	empirical intuition 93, 98, 99
dialectic 225-227	empirical warrant 92
	1
dialectical criteria 166	Ennis, R.H. 8, 9, 22, 23, 145, 147, 149, 187,
dialectical interpretation 184, 198	206, 209, 210, 218
dialectical logic 181	entailment 49, 51-56, 58, 65
dialectical negation see negation,	enthymeme 16, 313, 314, 316-324
dialectical	entitlement-preservation 7-8
dialogico-rhetorical approach 10	epistemological relativism 71, 73
dialogue, contexts of see contexts of dialogue	epistemology 49, 53, 65
Dick, J. 293	equilibrium, reflective <i>see</i> reflective
dictionary definitions see definitions,	equilibrium
dictionary	
	established reason <i>see</i> reason, established
dimensions 250, 255-258	ethics 253, 258, 259
Diogenes Laertius 314, 315	Euclid 74, 327, 330, 331, 333, 335, 338
Dion 315	evaluation 10-11
direct observation 205-207	of arguments <i>see</i> argument(s), evaluation
written records of see written records of	effect of rebuttal on see rebuttal, effect on
direct observation	evaluation
direct quotation, 'probably' in see 'probably'	evidence
in direct quotation	proportionalism 8
disagreement 231	reasoning about 240, 241
discourse, practical see practical discourse	relativity to <i>see</i> relativity to the evidence
discretion 290	evolution
discretionary decision-making 15	of arguments 223, 229
discussion, types of 169	evolution
discussions, mixed see mixed discussions	of standards of criticism <i>see</i> standards of
disjunction, exclusive 315, 316	criticism, evolution of
dispute resolution, alternative see alternative	examples, 'probably' used in see 'probably',
dispute resolution	used in examples
dispute resolution, online see online dispute	excluded middle, law of see law of excluded
resolution	middle
Dodgson, C. see Carroll, L.	exclusive disjunction <i>see</i> disjunction,
domain-relativity 392	exclusive
domain-specific logics 21	experience 147, 156, 164
domain-specificity 375	expert opinion 210
Douglas, M. 46	experts and expert performance 307-310
Doyle, J. M. 206-209, 360, 362, 376	explanation 56ff, 64
Dretske, F. 264	explanatory coherence 381
Dung, P.M. 181, 184, 198, 285, 286, 343	extensions to the Toulmin model 16, 18,
Dworkin, R. 290	21-22
DWOIKIII, K. 290	21-22
Eharla D 50	Enhanced I 257 225
Eberle, R. 59	Fahnestock, J. 257, 325
e contrario, argumentum see argumentum e	fallacies 322-323, 385-387
contrario	fallacy, speech-act see speech-act fallacy
Eco, U. 263	fallibilism 20, 384
Eddington, A. 394	Fallis, D. 338
Eemeren, F.H. van 165-167, 169, 177, 182,	'false' 148, 161
187, 218, 223, 309, 318, 322, 360, 372,	Feltovich 305
376, 389	Ferguson, S. 145
effect of rebuttal on evaluation see rebuttal,	
errett or recuttur on evaluation see recuttur,	Feteris, E.T. 220

field 1, 5, 6	Garssen, B. 233
see also argument(s), fields of	Gasper, D. 118, 220, 222
dependency 2, 4, 6, 7, 22, 23, 75, 83-85,	Gauss, C.F. 27
107	Gauss, C.P. 27 Geach, P. 35
of arguments see argument(s), fields of	Gelfond-Schneider Theorem 333
field-dependent warrant see warrant,	general warrant 214
	•
field-dependent	generalization 56, 58, 65ff
field-invariance 107	generic claims 378
field-invariant pattern of analysis 1	Gentzen, G. 390
field-invariant warrant see warrant,	geometrically base logics 104
field-invariant filibustering 167	George, A. 333 George, R. 30, 222
Fincher-Kiefer, R. 303	
Finocchiaro, M.A. 212	Gerhardt, C.I. 272 Gestalt theory 305
first-order logic 389	Gigerenzer, G. 392
Fisher, R. 298	Gil, F. 263
Fitting, M. 35	Gillies, D. 329, 360, 369, 376
Flick, G.A. 290	Girard, J. 35, 36
Florida Philosophical Association 145	Girle, R. 202, 384
focusing strategies 367	Glaser, R. 305
Fodor, J. 264	Godden, D. 101, 143, 390
Folger, J.P. 300	Goldman, A. 115, 116, 397
force/criteria (of use of modal terms) 72, 79,	'good' 157, 158, 164
83, 84	good information 212
form	good reasoning 203-217
logical see logical form	Goodfield, J. 5, 49, 52, 53
propositional see propositional form	Goodman, N. 69
formal logic 22, 183, 327, 328, 391	goodness 204
formal warrant see warrant, formal	Goodnight, G.T. 4, 5, 22, 23, 39, 82, 397
Four Colour Conjecture 336, 338	Goodwin, J. 217
Fox, J. 14, 15, 22, 251, 273, 275, 276, 279,	Gordon, T. 233, 236, 241, 245
282, 285, 343, 350	Govier, T. 55, 115, 218, 310
fox-hunting 252	gradualism 270, 271
Fraassen, B. van 58, 397	Grasso, F. 403
Frank, J. 321	Greene, T.A. 306, 307, 310
Franklin, J. 383	Grennan, W. 78, 217, 218, 311
Frede, M. 314	Grésillon, A. 321, 322
Freeman, J.B. 6, 7, 10, 22, 23, 87, 139, 165,	Griffin, J. 251
166, 169, 170, 172, 175-179, 218, 342,	Griffin, N. 218
345	Grootendorst, R. 165-167, 169, 177, 218, 223,
Frege, G. 38, 263, 381, 390	309, 318, 360, 376, 389
Fuhrmann, M. 254	grounds 205-211, 214, 215, 217, 318
function 56-59, 61, 64ff	justified see justified grounds
function of warrants 108, 109	Grua, G. 272
functional approach 103, 108, 109, 112-114	guarded committing see committing, guarded
functional explanation of deviations from	
central meaning 157-164	Haack, S. 187
fuzzy logic 270, 271	Habermas, J. 4, 5, 39, 40, 43, 47, 48
	Hafner, C. 231
Gabbay, D.M. 196, 382, 392, 397	Hage, J.C. 181, 184, 187, 192, 195, 196, 198,
Galen 315	225, 241, 247
gaps, inferential see inferential gaps	Haken, W. 336, 337
Gärdenfors, P. 35, 36, 267, 360, 361, 365, 375	Hall, M.J. 240, 294, 296
see also AGM model of belief revision	Hamblin, C.L. 165, 389
Gardner, A. 241, 242	Hambrick, R.S. 222

Hample, D. 77, 78, 310	influences on Toulmin 25, 26
Hansen, H.V. 389	informal logic 201, 352, 356, 359
Hardcastle, G. 67	courses 130, 132, 146-149, 164
Hare, R.M. 157, 158	information 382
Hart, H.L.A. 36, 37, 290	adequate see adequate information
Hartshorne, C. 54	good see good information
Hastings, A.C. 217	practically obtainable <i>see</i> practically
Hatcher, D. 397	obtainable information
Heath, T. 331, 335	processing model 305
Heesacker, M. 321	update 362-364
Heiberg, J.L. 335	information, relevant see relevant information
Heidt, R.J. 223	inquiry 49, 51ff, 56ff, 60, 63ff, 69
Heisenberg, W. 388	Institute of Scientific Information 32
Hempel, C. 35, 36, 57	institutional intuition 93-95, 97, 99
Hilbert, D. 390, 395	institutional warrant 92-93, 97, 100
Hintikka, J. 35, 36, 55, 389	integration, problem solution argumentation
Hitchcock, D. 1, 7, 11, 22, 23, 65, 77, 85, 95,	see problem solution argumentation
115-126, 128, 129, 131, 133, 136, 143,	integration
145, 150, 156, 184, 186, 187, 190,	Intermediate Value Theorem 333, 334
202-208, 219, 223, 314, 318, 320, 345,	interpretation, dialectical see dialectical
347, 377	interpretation
Hofstadter, D. 32, 189	intersubjective agreement 387
Houtlosser, P. 76, 322, 372	intuition 92-95, 99, 100
Hülser, K. 315	empirical see empirical intuition
Hume, D. 26, 28	institutional see institutional intuition
Traine, B. 20, 20	intuitionistic logics for argumentation see
ideal models 375, 389	logics for argumentation, intuitionistic
idealized logic 103-109	invalidity 377
idioms, probabilistic <i>see</i> probabilistic idioms	Iraq war 113
Ilie, C. 321, 322	Irvine, A.D. 397
illocutionary act 146	isomorphism 58ff, 64ff
ill-structured problems 15, 306	18011101p1118111 3611, 0411
imperatives, 'probably' in see 'probably' in	Jacquette, D. 264, 290
imperatives	Janik, A. 10, 13, 17, 21, 32, 40, 41, 71, 128,
implicit warrant see warrant, implicit	203, 254, 318
implicit/explicit arguments 368-370	Jenicek, M. 218
incommensurability 5, 75, 250-252, 255-259	Jennings, R.E. 315, 316
incompatibility 250, 314-317, 323, 324	Johnson, P.E. 293
incompossibility 315	Johnson, R.H. 68, 88, 89, 99, 101, 143, 165,
inconsistency 150, 155-156	166, 170, 218, 360, 397
retention of between persons 153-154, 163	Jonsen, A.R. 14, 253, 254, 256, 265, 391
retention of speaker's 152, 163	jurisprudence 268
indemonstrable (undemonstrated) syllogism	justification 206
314-320	that no defeaters apply 215
indirect speech, 'probably' in see 'probably'	solution see solution justification
in indirect speech	justified assumption that no defeaters apply
individual agents 381	214-215
individual variation 362, 368	justified assumptions, prima facie see prima
inductive logic 382	facie justified assumptions
inductive strength 376	justified grounds 205-211
inference	justified observation 206, 207
claims 78, 79	justified warrant 213, 214
legitimation see legitimation inference	
license 107, 204	Kadane, J.B. 240
inferential gaps 338	Kahneman, D. 385

Valvas A 266 272	Ladder A.D. 200
Kakas, A. 366, 372 Kant, I. 28, 269	Lodder, A.R. 299 Loemker L.M. 272
	Loftus, E.F. 206-209
Kempe, A. 336-338	
Kennet, J. 303	logic 1, 49, 50ff, 85, 261-253, 267, 268, 270
Kienpointner, M. 217	applied see applied logic
kinds of rebuttal see rebuttal, kinds of	deductive see deductive logic
King, R. 206, 209	deontic see deontic logic
Kingston, J. 294	dialectical see dialectical logic
Kircher, A. 263	first-order see first-order logic
Kirschner, P.A. 343	formal see formal logic
Klayman, J. 212	fuzzy see fuzzy logic
Kleene, S. 35, 36, 64	idealized see idealized logic
Klumpp, J.F. 7, 23, 73, 103, 112	inductive see inductive logic
Kneale, W. and M. 50, 316	informal see informal logic
'know' 157, 164	nonmonontonic see nonmonotonic logic
knowledge, social see social knowledge	quantum see quantum logic
Kock, C. 13, 22, 247, 250, 252	universal see universal logic
Kornblith, H. 95	working see working logic
Kosso, P. 205, 206	Logic of Argument 282-287
Krabbe, E.C.W. 165-169, 172, 274, 360,	argument construction 282
377	argument evaluation 283
Kraus, M. 16, 276, 282, 313, 348, 397	logical form 231
Kripke, S. 35, 36, 391	logical particles 391
Kruger, A.N. 90	logical roles 165
Kruiger, T. 165, 166, 223, 318	logical validity 106
Kuhn, T. 35, 36, 251, 329	logics
	argument-based see argument-based
Laertius, D. 186, 314, 315	logics
Lakatos, I. 27, 35, 36, 269	domain-specific see domain-specific
Lamb, L. 397	logics
Langford, C. 66	for argumentation, classical 255
language, ordinary see ordinary language	for argumentation, intuitionistic 282
law and artificial intelligence see artificial	geometrically base see geometrically base
intelligence and law	logics
law courts 106	Loui, R.P. 4, 21, 31, 36, 181, 184, 198, 244
law of excluded middle 333	Löwenheim-Skolem Theorem 64
layout of argument 104, 106, 108, 114	Ludwig, Kirk 145
legal argument, adversarial nature of 236	Lutomski, L.S. 239
legal decision support systems 294	•
legal problem solving 238-240	MacCormick, N. 219, 221
legal reasoning 12-13, 15, 224-246	Magnani, L. 52
legitimation controversy 44, 46, 47	Mahler, G. 29
legitimation inference 5, 40, 41	Make Do principle 390
Leibniz, G.W. 13, 14, 27, 261-272, 386	Makinson, D. see AGM model of belief
Lenin, V.I. 4, 25, 26	revision
Levi, I. 35, 36, 360	maneuverings, tactical 322, 323, 324
Lewis, C.I. 384	manoeuvring, strategic see strategic
license, inference see inference license	manoeuvring
Lindley, D. 275, 276	Marshall, C. 293
lines of argument 307, 311, 312	Martin-Löf, P. 36
linguistic qualifier see qualifier, linguistic	material conditional see conditional, material
Llewellyn, K. 292	material implication, paradoxes of 149
Llull, R. 263	Mates, B. 314
loaded question see question, loaded	mathematical probability see probability,
Locke, J. 261	mathematical

mathematics, arguments in see arguments in	multidimensionality 249, 257, 258
mathematics	Munson, R. 37
Matthijssen, L. 293	N 1 F 50
Mauthner, F. 29	Nagel, E. 58
McBurney, P. 189, 202	Nash, J. 299
McKerrow, R. 110	nature of argumentation see argumentation,
meaning 156, 157-164 meaning, central, functional explanation of	negation, dialectical 197
deviations from <i>see</i> functional	network, neural, technology see neural
explanation of deviations from central	network technology
meaning	networks, data see data networks
meaning, functional explanation of deviations	neural network technology 15
from central 157-164	neutral arbiter 172
means 303	Newell, A. 304
medicine and argumentation see	Newton, I. 27, 247, 248, 261
argumentation and medicine	Nizolious, M. 269
Medin, D.L. 95	noetic 52-55, 65, 69
Meibauer, J. 321, 322	non-affirmation occurrences of 'probably'
memory 207-209	146, 157-164
memory of what one has previously observed	nonmonotonic logic 55, 183, 184, 197, 231,
or experienced 207-209	232, 236, 243, 246, 287, 391
Mendelson, E. 58	non-negotiability of beliefs 356
metamathematics 57ff	non-numerical probability see probability,
metatheory 5	non-numerical
microargument 103, 109	Norman, J. 184, 244, 343, 366, 376
Mill, J.S. 252, 387, 390	normativity 375, 388-390
mixed discussions 167	argumentative see argumentative
modal qualifier 79, 318-320	normativity
modal terms 72	Norris, S.P. 205-207, 209, 214
model 49-69	numbers, unavailability of, for 'probably' 151
model chain 59ff, 63, 65ff, 68	Nussbaum, M. 247, 252
models	
computational see computational	objective probability see probability, objective
models	observation 205, 206
conversational see conversational	direct see direct observation
model	direct, written records of see written
ideal see ideal models	records of direct observation
information processing information	justified see justified observation
processing model	occurrences of 'probably' in unembedded
of emerging truth 5, 54ff probabilistic see probabilistic models	affirmation <i>see</i> affirmation, unembedded, occurrences of
Toulmin see Toulmin model	'probably' in
modes of syllogism, Stoic see syllogism,	Olaso, E. de 265
Stoic, modes of	Olbrechts-Tyteca, L. 22, 256, 343, 360
Modgil, S. 14, 15, 22, 273	Omer, I.A. 57
Modus Ponens 187-189, 191-193, 197, 199,	online dispute resolution 299
236, 241	ontic set 60ff
defeasible 236	ontology 59, 60ff
monism 252	opinion, expert <i>see</i> expert opinion
Moore, D. 29	ordinary language 149, 154, 156
Moore, G. E. 29	Ortony, A. 95
Moraïtis, P. 366, 372	Oscar VII 28
Mostowski, A. 54	OSSA 145
Mueller, I. 335	other, voice of the see voice of the other
Multi-Agent Systems (MAS) 358, 362	O'Toole, R.R. 314-316

Out and English Distinguis (OED) 154	D TA 206 207 210 211
Oxford English Dictionary (OED) 154	Post, T.A. 306, 307, 310, 311
overriding defeater 215	postulate, success see success postulate
D. I E. 10 22 165 250 261 262 272	practical discourse 219-230
Paglieri, F. 19, 22, 165, 359-361, 363-372,	practical reasoning 12, 387
375-377	practical standards for arguments see
Pagnucco, M. 361	argument(s), practical standards for
papers, theoretical <i>see</i> theoretical papers	practically obtainable information 213
paradoxes of material implication see material	practice 53, 59, 62, 63, 69
implication, paradoxes of	pragma-dialectics 322, 356, 368, 391
Parsons, S. 202, 282, 366, 376	pragmatic turn 57, 59, 60, 64
Parsons, T. 344	pragmatics of reasoning 217
particles, logical see logical particles	Prakken, H. 13, 22, 181, 184, 187, 195,
parts to whole, argument from 324	196, 198, 231, 235, 236, 239-243,
Pascal, B. 20, 138, 371, 383, 384, 394	286
past tense, 'probably' in see 'probably' in past	precedent-based reasoning 243-245
tense	premiss 204, 211, 318, 319
pattern of analysis, field-invariant see field-	suppressed 313
invariant pattern of analysis	pressure, psychological 321, 324
Patterson, D. 222	presumption 265, 266
Peacock, K. 396	previous good reasoning or argument 209
Peano arithmetic 54	Priest, G. 381
Peano, G. 54, 214	prima facie justified assumptions 197, 198
pedagogy of arguments see argument(s),	prima facie reasons 237
pedagogy	principle
Peirce, C.S. 7, 38, 54, 56, 63, 117, 386	Can Do see Can Do principle
Pelletier, F.J. 382	of charity 378, 389
Penner, B.C. 306, 307, 310, 311	of continuity 270, 271
perceiving arguments see argument(s),	of sufficient reason 261
perceiving	of syllogism 320
Perelman, Ch. 22, 23, 37, 165, 252, 253, 255,	of transition 270, 271
256, 343, 360	Make Do see Make Do principle
citation counts 33	probabilistic behaviour 380
periodic table of elements 62	probabilistic idioms 380
persistent model set 62, 67	probabilistic models 358
personal testimony 209	probabilistic reasoning 378
perspective 380	probability 20, 317, 324, 379
perspectivism 269	aleatory see aleatory probability
Petersen example 318-319	calculus 375, 378-381, 389
Petty, R.E. 321	mathematical 154
Philoponus 315	non-numerical 154
Pinto, R.C. 7-9, 23, 65, 85, 115-117, 125, 126,	objective 150, 153, 163
130, 132, 134, 137-139, 142, 215, 217,	objective numerical 146, 150-154, 163
218	statistical 154
Plato 252, 257	subjective 151-154, 163
plausibility 370, 371, 376, 379-381	'probable' 146, 150-154, 163
Poincaré, H. 23	'probably' 8-9, 145-164
polarity shift 321	and 'probable', distinction 146, 150-154,
Pollock, J.L. 17, 18, 127, 146, 181, 184, 195,	163
198, 215, 236, 239, 240, 286, 337-338,	contexts in which embedded see contexts
347, 354, 355, 357, 360, 369, 376	in which 'probably' is embedded
Pólya, G. 339	defined 145-146, 163
Pons Asinorum 335	embedded occurrences of see embedded
Popper, K. 34, 115, 383	occurrences of 'probably'
possibility 379, 380	in agreeings and disagreeings 157, 161,
Post, E.L. 390	162, 164
•	*

in conditionals 157, 160, 161, 164 in direct quotation 157, 159, 160, 164 in imperatives 157, 161, 164 in indirect speech 157-159, 164 in past tense 157, 158, 164 in questions and wonderings 157, 161, 164 non-affirmation occurrences of see non- affirmation occurrences of 'probably' substituting for 151-154, 164 used in examples 147, 148, 150, 160 problem-solving 15-16 legal see legal problem solving problems ill-structured see ill-structured problems stopping see stopping problem	quantitative 283 speech-act interpretation of 8, 145-164 stripping the 147 qualitative qualifier see qualifier, qualitative quantified conditional, universally see universally quantified conditional quantitative qualifier see qualifier, quantitative quantum logic 394 quasi-syllogism 318, 319, 324 quasi-syllogistic arguments see argument(s), quasi-syllogistic questioning, burden of see burden of questioning questions
representation 305, 306, 311 solution argumentation integration 312 well-structured see well-structured problems progress, scientific see scientific progress progressive model chain 60, 65, 66 Oxford English Dictionary 154 Random House Dictionary of the English	and wonderings, 'probably' in see 'probably' in questions and wonderings critical see critical questions loaded 321 rhetorical see rhetorical questions Quine, W. 35, 36, 69, 116, 122, 133, 134 Ouintilian 324
Language 154 proofs 327, 330-336, 338-339 burden of see burden of proof constructive see constructive proof classical see classical proofs properties, data see data properties	quotation, direct, 'probably' in see 'probably' in direct quotation RAGs 280 Raiffa, H. 299 Random House Dictionary of the English
proportionalism, evidence <i>see</i> evidence proportionalism propositional form 104-107, 109, 114 propositions 107, 108, 112, 148, 155-156, 164 protocol 303, 307, 310-312	Language 154 rational decision theory 389 rationalism 248, 250, 248, 261, 263, 266, 267, 272 rationality 262, 265, 266, 270, 272 Raz, J. 220, 247, 250-252, 255, 256, 258, 388
prudence 265, 266, 268 prudential reasoning 44, 45 psychological pressure <i>see</i> pressure, psychological psychologism 386 psychology, cognitive 321	real arguments <i>see</i> argument(s), real, emphasis on appraisal of 146, 147, 148, 149, 151, 155, 156, 163 realism 66 realization 56, 59, 62, 67
public argument 113 public speaking 104, 112 Putnam, H. 35, 36, 64, 66, 390 Pythagoras's Theorem 335 qualification, argumentative see	reason, established 172, 180 reasonableness 262, 265, 267, 268 Reason-based Logic 241 reasoning 11, 376, 386, 391 see also legal reasoning about evidence see evidence, reasoning
argumentative qualification qualified reasoning 147, 148 qualifier 2, 8-9, 14, 18, 22, 109, 112, 148, 154, 181, 182, 189, 282 see also modal qualifier linguistic 283, 284 modal see modal qualifier qualitative 283	about defeasible see defeasible reasoning good see good reasoning legal see legal reasoning practical see practical reasoning pragmatics of see pragmatics of reasoning precedent-based see precedent-based reasoning

probabilistic see probabilistic reasoning	rhetorical critics 104, 110, 113
probabilistic <i>see</i> probabilistic reasoning	
prudential see prudential reasoning	rhetorical questions 16, 314, 317, 321-323,
qualified see qualified reasoning	324, 325
solo verbal see solo verbal reasoning	Richardson, A. 67
reasons, prima facie see prima facie reasons	Richter Scale 65
rebuttal 2, 10, 11, 17-18, 109, 112, 173, 174,	Rieke, R.D. 10, 13, 17, 21, 40, 41, 71, 103,
181, 182, 193-201, 215, 318-320, 324,	128, 203, 254, 318
328, 332, 337-339	risk 45, 46
effect on evaluation 195-201	Rissland, E.L. 241, 243
kinds of 194, 195, 198-200	Robbin, J. 57
rebutting defeater 17, 215, 237	Roldán, C. 264, 272
reception of The Uses of Argument 4, 22, 23,	roles, logical see logical roles
26	Ross, D. 37
records, written, of direct observation see	Ross, H.L. 297
written records of direct observation	Rowe, G. 18, 19, 22, 341, 343, 357
recursive arguments 367	rule application 219, 225-229, 241, 242
reduction 61-68	rules for arguments see argument(s), rules for
Reed, C. 18, 19, 22, 168, 184, 239, 341, 343,	Russell, B. 34, 36, 381, 390
344, 346, 356, 357, 366, 376	Rutherford, D. 264
reference source, authoritative see	radiofford, D. 201
authoritative reference source	Sartor, G. 231, 236, 241-244
reflective equilibrium 389	scales of reason, weighing 267, 268, 270
regular arguments 17, 327, 329, 330, 336,	scant resources 375, 382
338, 339	scepticism 262, 267
Reichenbach, H. 35, 36, 392	Schacter, D.L. 207, 208
Reinhardt, T. 314-316, 320, 323	Schauer, F. 225
reinstatement 201, 238	scheme, Toulmin see Toulmin scheme
Reiter, R. 181, 184, 198	schemes, argument see argument schemes
Reitman, W. 305	Schepers, H. 267
relativism 4-6, 22-23	Schiavo, T. 112, 113
epistemological <i>see</i> epistemological	Schiller, A. 38
relativism	Schmidt-Radefeldt, J. 317, 321
relativity to the evidence 150	Schooler, T.E. 303
relevance 87, 88, 100, 166, 174	Schroeder, C. 73
relevant information 211, 212	Schum, D.A. 240
reliability, of warrant see warrant reliability	science 5
reliable warrant 8	
Renn, O. 46	scientific progress 20
,	scientific structure 58-67
representation, problem see problem	Scriven, M. 78, 149, 178, 382, 392, 397
representation	Searle, J.R. 9, 92, 96, 97, 125, 157-164, 184,
Rescher, N. 35-37, 116, 146, 264, 265, 269,	321 SEDVIC 147 149 157 174
300, 363, 375, 384	SEBKUS 147, 148, 156, 164
resource constraints 20	secondary triad 109
resources,	Secor, M. 257
cognitive see cognitive resources	Sellars, W. 7, 117, 123, 136
scant see scant resources	Selten, R. 392
responsibilities, argumentative see	sensitivity 147, 156, 164
argumentative responsibilities	Sextus Empiricus 314, 315
retention of inconsistency see inconsistency,	Shapere, D. 205, 206
retention of	Shapin, S. 328
retraction 172	shift, polarity see polarity shift
rhetoric 253, 255-259, 267	Siegel, H. 5, 49, 50, 52, 53, 141, 143, 397
Rhetoric to Herennius 324	Silfies, L.N. 303
Rhetorica ad Alexandrum 254, 255, 258	Simchen, O. 397
rhetorical argument 103, 112, 114	Simon, H.A. 304, 305

Simonton, D.K. 32	strategies, focusing see focusing strategies
Simosi, M. 110	Strawson, P.F. 26, 157
Simpson, J.A. 154	strength of arguments see argument(s),
Simpson, O.J. 27	strength of
situation, understanding the 147, 156, 164	strength, inductive see inductive strength
Skabar, A. 293	stripping the qualifier <i>see</i> qualifier,
Skalak, D.B. 241, 243	stripping the
Skyrms, B. 383	structure, data see data structure
Slob, W.H. 9, 10, 21, 165, 171-173, 264, 377	Stump, E. 316
Snoeck Henkemans, A.F. 76, 177, 309	sub-arguments 179
social knowledge 109	subjective probability <i>see</i> probability,
software	subjective
argumentation see argumentation	substantial arguments see argument(s),
software	substantial
decision support see decision support	substituting for 'probably' see 'probably',
software	substituting for
solo verbal reasoning 203	success postulate 19
solution justification 312	sufficient reason, principle of see principle of
problem, argumentation integration see	sufficient reason
problem solution argumentation	Sunstein, C.R. 223
integration	superposition 335
sorites 331	Suppes, P. 35, 36, 58
soundness 376	suppressed premiss see premiss, suppressed
standards 147	syllogism 104, 105, 313-321, 324
loosening 147	indemonstrable (undemonstrated) see
Sourdin, T. 290	indemonstrable (undemonstrated)
speaking, public <i>see</i> public speaking	syllogism
speech act 145, 146, 155, 157-164, 321	principle of see principle of syllogism
fallacy 157	Stoic, modes of 314-316
interpretation of qualifier <i>see</i> qualifier,	synthetic character of arguments see
speech-act interpretation of	argument(s), synthetic character of
Sperber, D. 267	systems,
Spinoza, B. 262	
	Split-Up see Split-Up system
Split-Up system 292	Multi-Agent see Multi-Agent Systems
St. Augustine 386	(MAS)
Stalnaker, R. 35, 360, 372	
standards 376	tactical maneuverings <i>see</i> maneuverings,
argument see argument(s), standards	tactical
best-explanation <i>see</i> best-explanation	Tans, O. 12, 13, 22, 219
standards	targets 376
deductive 147, 148, 149, 155, 156, 164	Tarski, A. 35, 36, 52, 63, 64, 388, 390
of criticism, evolution of 27, 28	technology, neural network see neural
soundness see soundness standards	
	network technology
statistical probability see probability,	Tennant, N. 396
statistical	tense, past, 'probably' in see 'probably' in
stimulus-response behaviorism 305	past tense
Stoic logic 314-317, 318	terms, modal see modal terms
Stoic syllogism, modes of <i>see</i> syllogism,	Terricabras, J.M. 271
Stoic, modes of	test, Toulmin see Toulmin test
Stoics 314-315	testimony, personal <i>see</i> personal testimony
stopping problem 287	testing arguments <i>see</i> argument(s), testing
Stranieri, A. 290-292, 294, 295	Thagard, P. 385, 388
strategic dimension of arguments see	Theaetetus 17, 27, 330-332, 336
argument(s), strategic dimension of	theorem, Pythagoras's see Pythagoras's
strategic manoeuvring 368	Theorem 335

theoretical papers 375 Theoria cum Praxi 262, 264, 269, 272 theory 49-56, 58-68	universally quantified conditional 378 unreasonability 168 update, information see information update
Theory, Gestalt see Gestalt theory theory, rational decision see rational decision theory	Urdang, L. 154 Ury, W. 298
time 382	vagueness 231
to warrant 103, 104, 109-114	validity 20, 84, 85, 375, 376, 378
topical arguments see argument(s), topical	deductive <i>see</i> deductive validity
topic-neutrality 391	deductive, commitment conception of <i>see</i>
topics 26, 314, 323-324, 325	commitment conception of deductive
Toulmin, S.E. passim	validity
citation counts 31-37	logical see logical validity
diagrams 18	variation, individual see individual variation
influences on see influences on Toulmin	vector-like conclusion <i>see</i> conclusion, vector-
model 1-3, 103, 318-319, 324	like
and its extensions 307	Velleman, D.J. 333
extensions to see extensions to the	Velthoven, B.C.J. 297
Toulmin model	verbal reasoning, solo see solo verbal
scheme 1-2, 182, 184	reasoning
test 19	Verheij, B. 1, 10, 11, 21-23, 174, 180,
transition, principle of see principle of	184, 187, 188, 191, 195-198, 202,
transition	215, 218, 227, 235, 236, 241, 286,
translating diagrams 18, 19	354, 374, 377
Trent, J.D. 223	Vitrac, B. 335
triad, secondary see secondary triad	Voert, M.J. ter 297
Trillas, E. 271	voice of the other 10
'true' 148, 157, 162, 164	Voss, J. F. 15, 16, 303, 304, 306-311
truth 49-58, 61, 63, 66, 68, 170	Vreeswijk, G. 181, 184, 196, 198, 235
truth conditions 148, 155, 164	W. I. D. 20
for an action 148, 155	Walter, B. 29
model of emerging see model of emerging truth	Walton, D.N. 37, 166, 168, 169, 172, 184, 202, 217, 233, 239, 243, 274, 279, 322,
Truth Maintenance Systems (TMS) 358,	323, 346, 356, 358, 360, 376, 377,
372	389-391
truth-functions 315, 316	warrants 2, 7-8, 15-16, 23, 49-52, 55, 63,
truth-preservation 376, 378	65-66, 69, 77, 78, 87-101, 104-108, 112,
Tuomela, Raimo 171	113, 181, 182, 189-192, 224-229,
Tversky, A. 385	248-250, 252, 253, 257, 307, 312,
Tweney, R.D. 306	318-324
Tyler, S.W. 304, 307-309	applicable see applicable warrant
	classification of 6
Ullian, J. 69	empirical see empirical warrant
unavailability of numbers see numbers,	field-dependent 318, 320
unavailability of	field-invariant 318, 320
uncertainty 231	formal 320
undercutting defeater 18, 195, 337-339	function of <i>see</i> function of warrants
understanding of argumentative complexes	general see general warrant
see argumentative complexes,	implicit 318, 324
understanding of	institutional see institutional warrant
understanding the situation see situation,	justified see justified warrant
understanding the	reliability 100
universal logic 394	reliable see reliable warrant
universal warrant <i>see</i> warrant, universal universalism 391	to see to warrant universal 214, 319
universationi 371	umversar 214, 319

warrant-construction 224-228
warrant-establishing arguments see
argument(s), warrant-establishing
warrant-using arguments see argument(s),
warrant-using
warranting 103, 104, 109-114
power of data 109
weighing scales of reason see scales of reason,
weighing
Weiner, E.S.C. 154
Weinstein, M.L. 5, 22, 23, 49, 51, 54, 57,
63-66, 124, 152, 218
Weiss, P. 54
well-structured problems 305, 306
Wenzel, J. 81, 85
'what we would say' 149
Whitehead, A. 35, 36
Wildavsky, A. 46
Wiley, J. 303
Wilkins, J. 263
Willard, C.A. 5, 74, 75, 111, 328

Williams, G.R. 297
Wilson, D. 267
Wittgenstein, L. 4, 25, 28, 29, 32, 34, 248
Woods, J. 19-22, 379, 381, 382, 385, 389-393, 396, 397
Woods-Walton Approach 387
Wooldridge, M. 417
working logic 103-109, 112, 114, 271
Wright, G. von 35, 36
written records of direct observation 207
Yearwood, J. 294, 295
Yengo, L. 304, 307-309

Zadeh, L. 35, 36 Zarefsky, D. 73, 82 Zeleznikow, J. 15, 22, 289, 290, 292, 294, 295, 297, 299-301 Zermelo, E. 17, 329 Zillman, D. 321