



Synergy in the Antipodes

ICAIL-97 Conference Report

By Karl Branting

Two hundred and twenty-seven years after Captain James Cook's arrival on the coast of what is now Victoria, Australia, AI and Law researchers from around the world retraced Cook's journey to attend the Sixth International Conference on AI and Law (ICAIL-97). The warmth of "Aussie" hospitality was a prominent feature of the Conference, which took place on the University of Melbourne campus from 30 June to 3 July, 1997. This warmth was reflected in Melbourne's weather, which many participants from Northern Europe and the US found too mild to be recognizable as winter. Melbourne's convenient public transportation, abundant cultural and shopping opportunities, prominent public art, and friendly inhabitants provided an ideal conference setting.

Conference co-chairs John Zeleznikow and Dan Hunter smoothly coordinated the exceptionally full conference agenda, which included a number of activities in the surrounding community. An opulent conference banquet, which featured such delicacies as kangaroo salad, was held in the historic Ripponlea Homestead. The banquet's invited speaker, Barry Jones, member of the Australian House of Representatives, former Australian Minister for Science and Technology, prolific author, and quiz-show whiz, presented a clever and provocative presentation in which he adjured the assembled academics to cast off the pall of political passivity. At a conference breakfast at the Royal Botanic Gardens, a second invited speaker, IAAIL Presi-

dent Edwina Rissland, explored the history and complexities of case-based reasoning against a background of black swans and exotic foliage.

The technical program consisted of talks falling into five broad areas:

- Machine learning
- Automated document drafting
- Web-based systems
- System construction
- Models of legal reasoning

There were many more presentations on machine learning than in any previous ICAIL, probably reflecting the increasing spread of machine learning techniques beyond the machine learning community. Ross Quinlan, one of the machine learning community's best-known and most prolific researchers, delivered an invited talk that provided an overview of the basic concepts of machine learning and suggested some approaches to index induction. Initial work in inducing indices from free text was described in papers by Bruninghaus and Ashley; Daniels and Rissland; Moens, Uyttendaele, and Dumortier; and Merkl and Schweighofer. Use of machine learning for prediction was described by Wilkins and Pillaipakkamatt (predicting the elapsed time between the arrest of an offender and the final disposition of his or her case) and Zeleznikow and Stranieri (predicting the distribution of marital assets).

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The trend towards increasing emphasis on the fundamental legal task of document drafting was evidenced by the number of automated document drafting papers presented. Two papers addressed the task of legislative drafting (Arnold-Moore; Tiscornia and Turchi). Other papers presented document models based on speech-act theory (Branting, Lester, and Callaway) and SGML (Poulin, Huard, and Lavoie).

The growing importance of the World-Wide Web was reflected in papers on web interfaces for rule-based systems (Greenleaf, Mowbray, King, Cant, and Chung) and web-based collaborative argumentation systems (Gordon and Karacapilidis; Loui, Norman, Altepeter, Pinkard, Craven, Lindsay, and Folz). The commercial potential of the web was illustrated in an impressive demonstration of web-delivered expert systems by SoftLaw concurrent with the technical presentations.

Papers on construction of knowledge-based legal systems fell into three groups: development of legal ontologies (Visser, Kralingen, and Bench-Capon); methodologies (Bench-Capon and Visser); and case studies (Oskamp and Trager; Fisher). J.C. Smith gave a presentation on Flexicon, a very ambitious information retrieval system.

The final principal area of emphasis was models of legal reasoning. Logic-based models had the largest number of representatives, including papers by Prakken and Sartor; Cholvy, Cuppens, and Saurel; Verheij, Hage, and Lodder; van der Torre and Tan; and Allen and Saxon. Thorne McCarty delivered a provocative paper criticizing rule- and case-based models of legal argument and sketching an alternative theory-based model. James Palmer presented a novel model based on merit arguments. Analogical and case-based approaches were described by Indurkha; Alevan and Ashley; and Okubo and Haraguchi.

The conference included a panel discussion, sponsored by Anstat Legal Publishers and organized by George Vossos, on the commercialization of legal expert systems. The panelists were Peter Johnson (SoftLaw Canberra Australia), Daniel Poulin (University of Montreal), Justice Tony Graham (Family Court of Australia), Fred Parnon (CounselWare, New York City), Marnix Weusten (University of Utrecht, the Netherlands) and Lynne Haultaine (Australian Broadcasting Corporation).

An unusual approach was taken to poster papers in ICAIL-97: an evening session was set aside during which poster-paper authors were given ten minutes each to summarize their work. This restricted format led to very concise presentations that I found to be an effective alternative to the typical free-form mingling style of poster sessions.

Three workshops were held in connection with ICAIL-97. The Fourth International Workshop on a Legal Expert System for the CISG, sponsored by Hajime Yoshino of Meiji Gakuin University, Tokyo, explored approaches to developing AI formalizations and decision-support systems for the United Nations Convention on Contracts for the International Sale of Goods (CISG). Nearly 50 nations, including the USA, Germany, UK, Russia, China, and Australia, have adopted the CISG. The CISG is therefore a unique resource for the international AI and Law community. The workshop included invited talks by Trevor Bench-Capon and by Martin Davies of the University of Melbourne.

The First International Workshop on Legal Ontologies (LEGONT97), which was held the day after ICAIL-97, consisted of eight presentations on approaches to conceptualizing legal domains in terms of their primitive entities and relations. The aim of the workshop was to compare different legal ontologies to get a better understanding of the reasons why different researchers conceptualize their domain differently and to investigate the relation between legal tasks and ontologies.

Finally, a Workshop on Judicial Decision Support Systems took place concurrently with LEGONT97. The majority of presentations concerned sentencing information systems (SIS), programs designed to assist judges in making more informed sentencing decisions. Development of SISs is occurring rapidly in a number of countries, including Israel, Australia, and Scotland. Other presentations concerned automated judicial document drafting systems and modeling discretionary judicial decision-making. Several papers from the workshop were expanded into submissions for a special issue of the Journal of Information Law & Technology (<http://elj.warwick.ac.uk/jilt/>) on judicial applications of artificial intelligence.

ICAIL-97 had a particularly extensive and well-organized families program. Lisa Zeleznikow led a number of activities for family members, including shopping at Queen Victoria Market, a tour of the National Gallery of Victoria, wine-tasting at Ferguson's Winery in the Yarra Valley Winery region, a visit to the Healesville Animal Sanctuary, and a tour of Sovereign Hill, an outdoor museum devoted to the Australian gold-rush. For the benefit of graduate students attending the conference, a post-conference Doctoral consortium was organized by Andrew Stranieri at the University of Ballarat.

If we would guide by the light of reason, we must let our minds be bold.
—Justice Louis Brandeis

Oslo, Norway, to host ICAIL-99 Conference

At ICAIL-97, in Melbourne, Australia, the executive committee of the IAAIL voted to hold ICAIL-99 in Oslo, Norway, with Jon Bing and Andrew Jones as co-chairs of the Organising Committee, and Thomas Gordon as chair of the Programme Committee. The dates for ICAIL-99 will be 14-17 June 1999.

Following the pattern of previous ICAILs, Monday 14 June will be reserved for tutorials and (possibly) workshops, which will be held at The Norwegian Research Centre for Computers and Law, in downtown Oslo. The main conference sessions, with presentation of accepted papers, invited speakers, etc., will take place on the Tuesday, Wednesday and Thursday, in an auditorium on the main campus of the University of Oslo, which is a very short journey by public transport from the town

centre.

As was the case in Melbourne, it is likely that some further workshops or seminars will be organised for the day following the conference, Friday 18.

For additional information, please contact the co-chairs at the following addresses:

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RECENT EVENTS

Sixth National Conference/Second European Conference on Law, Computers, and Artificial Intelligence: "The Provision of Networked Services" April 20 - 21, 1998 University of Hertfordshire

The main theme of this conference was the provision of network services. The purpose of the conference was to bring together those interested in technical network issues as well as those concerned with the professional use of network services. The conference was aimed at both those who are instrumental in the computational aspects of system development and those professional users who are concerned with the nature of their current use of this service medium and how changes to its future structure are likely to affect them.

For additional information, please contact:

Dave Chadwick
Co-ordinator CTI Law Technology Centre
University of Warwick
Coventry CV4 7AL
<http://www.law.warwick.ac.uk>

Applied Ontology: A Marvin Farber Conference On Law And Institutions In Society April 24 - 25, 1998 Department of Philosophy, SUNY Buffalo

Law and of social institutions in general are naturally suited to ontological analysis. The focus of this conference was the ontology of laws, norms and rules; the ontology of speech acts;

the ontology of international law (secession, immigration, citizenship; cross-cultural and comparative legal ontology); the ontology of land and real estate (law and naive geography); the ontology of crime and punishment; the ontology of environmental law; the ontology of cyberspace and of intellectual property; and the ontology of the human genome project (genetic patents, genes as expressions). The conference included a special symposium organized as part of the conference on John Searle's book "The Construction of Social Reality," with responses by the author.

For additional information, contact:

Farber Conference
Department of Philosophy
SUNY Buffalo, NY 14260-1010
Tel. 716 645 2444 Ext. 707
Fax. 716 645 6139
ontology@acsu.buffalo.edu
or
<http://wings.buffalo.edu/philosophy/farber.html>

Fourth International Workshop On Deontic Logic In Computer Science (DEON '98) Bologna, Italy, 8-10 January, 1998

The biannual DEON workshops are intended to promote research and cooperation in a rapidly expanding interdisciplinary area, linking the formal study of normative concepts and

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COMING EVENTS

5th International Conference on Substantive Technology in Law School and Law Practice

Stockholm, 1 - 4 July 1998

Stockholm University, Faculty of Law Institute for Law and Informatics (IRI)

The Fifth International Conference on Substantive Technology in Law School and Law Practice will take place in Stockholm, Sweden, 1-4 July, 1998. The previous conferences were arranged in Salzburg, Chicago, Paris and Montreal. Participation in the Stockholm conference will be by invitation.

For additional information, please contact Peter Seipel, pseipel@juridicum.su.se

Fifth International Conference of the Istituto per la Documentazione Giuridica of the Italian National Research Council

LAW IN THE INFORMATION SOCIETY Legal Documentation, Administrative Innovation, The Lawyer's Training and Role (Florence, Auditorium of the Banca Toscana, 2-5 dicembre 1998)

The purpose of the conference is to define as far as possible a uniform framework of the phenomena which, through the applications of computer technologies, have interested the legal world in recent years. The conference aims at focusing on how the use of computer technology has not only vastly increased possibilities for the acquisition of legal knowledge but has also made an important contribution to the application and interpretation of legal phenomena, the normalization of legal language and the structure and drafting of legal instruments as well as the theoretical elaboration of new legal categories, especially in relationships between the citizen and the Public Administration. In the light of an epic change like that which occurred in the XV century with the introduction of printing, we, therefore, need to carefully reflect on the significance of the use of these technologies and on the lawyer's role in the information society, which requires suitable training tools not only with regard to legal knowledge and the eventual use of applications but also with regard to the demand for updating the teaching methodologies in traditional legal disciplines.

- Scientific Committee: Nicola Palazzolo (IDG director) Costantino Ciampi, Isabella D'Elia, Elio Fameli, Pietro Mercatali, Roberta Nannucci, Mario Ragona, Fiorenza Socci, Pierluigi Spinosa, Giancarlo Taddei Elmi, Daniela Tiscornia
- Technical Informatics Committee: Fabrizio Turchi (coordinatore) Franco Bargellini, Paolo Guidotti, Fabio Marinari, Pierluigi Spinosa
- Organizing Secretariat: Gabriella Bargellini, Simona

Binazzi, Gabriella Lippi, Giuliana Marrani Istituto per la Documentazione Giuridica del Consiglio Nazionale delle Ricerche Via Panciatichi, 56/16 - 50127 Firenze (Italy) Tel.: + 39 055-43995, Fax: +39 055-4221637, E-mail: conv98@idg.fi.cnr.it

■ Important dates:

- √ 31 May 1998 200/500 word abstracts to submission to Secretariat (via e_mail to conv98@idg.fi.cnr.it, on floppy disk via mail, on paper in 5 copies)
- √ 15 July 1998 notification of acceptance
- √ 15 September 1998 final papers for the publication in the Proceeding on CD
- √ 30 September 1998 request of demonstration on PC

The Second French-American Conference on Law and Artificial Intelligence

Sponsored by the Universite de Paris 1, Universite de Picardie Ecole de Hautes Etudes Commerciales du Nord (EDHEC) and Syracuse University College of Law 11-13 June 1998, Ecole de Hautes Etudes Commerciales du Nord, Nice, France

In April 1996, the First French-American Conference in Law and Artificial Intelligence took place at Syracuse University College of Law, Syracuse, New York, U.S.A. The First Conference was intended to bridge the gap between the designers and the users of legal expert systems. The conference also sought to explore expert system approaches which used different technologies and which captured the essence of different legal systems.

This conference will provide a forum for the designers and users of legal expert systems to consider some of the topics the revolution will raise, such as: lawyers and the revolution of networks; the conception and the development of intelligent systems and agents; legal and administrative applications of neuronal technologies, expert systems, dynamic systems, and chaotic or non linear models; new legal services available as a result of law-related networks, databases, search engines, data warehouse, etc.; the impact, on legal information systems, of changes within the legal professions; the design, development and use of multimedia products for legal teaching; and the concepts of collective information systems and the "legal village."

See <http://www.edhec.asso.fr> or contact:

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Executive Committee News

On July 2, 1997, the biennial IAAIL Membership meeting was held during ICAIL-97 at the University of Melbourne. After an announcement of the plans for ICAIL-99 (see related article, page 3), the election of new officers was the first order of business. As of January 1, 1998, the IAAIL Executive Committee is:

- Anja Oskamp, President
- Kevin Ashley, Vice President
- Carole Hafner, Secretary-Treasurer
- Trevor Bench-Capon (1998-2001)
- Karl Branting (1998-1999, replacing Kevin Ashley)
- Tom Gordon (1996-1999)
- John Zeleznikow (1998-2001)

The Nominating Committee is:

- Edwina Rissland, Past President and Chair
- Ron Loui (1998-2001)
- Henry Prakken (1996-1999)
- Marek Sergot, Past Past President

The other main item of business was a discussion of the best way to honor the many contributions of Don Berman to the AI and Law field. The Executive Committee announced the formation of a Donald H. Berman Memorial Fund, which will be used to sponsor an award for the best student paper presented at future ICAIL meetings. Those wishing to contribute to the fund should use the membership form in this issue of AI and Law News or contact Carole Hafner.

International Association for Artificial Intelligence and Law (IAAIL)

President: Anja Oskamp
Department of Computing
Vrije Universiteit

Vice President: Kevin Ashley
Learning Research and Development Center
University of Pittsburg

Secretary/Treasurer: Carole D. Hafner
College of Computer Science
Northeastern University

AI & Law News is a publication of the International Association for Artificial Intelligence and Law. Correspondence concerning *AI & Law News* should be directed to Karl Branting, IAAIL Newsletter Editor, Department of Computer Science, University of Wyoming, P.O. Box 3682, Laramie, WY 82071, USA; Tel: (307) 766-4258; Fax: (307) 766-4036; Internet: karl@uwyo.edu

For information on IAAIL membership, contact Carole Hafner, College of Computer Science, Northeastern University, Boston, MA 02115, Tel: (617) 373-5116, Fax: (617) 373-5121, Internet: hafner@ccs.neu.edu

Layout and design by Susan Branting

Book Reviews Needed

After a number of years of service as book review editor of *Artificial Intelligence and Law* journal, Anne Gardner has relinquished this role to Henry Prakken. Dr. Prakken invites reviews of books within the scope of the journal (as described at <http://nathan.gmd.de/iaail/journal/journal.html>). Free review copies will be made available when possible.

Reviewers are solicited for the following books:

- Tom Gordon. *The Pleadings Game: An Artificial Intelligence Model of Procedural Justice*. Dordrecht: Kluwer, 1995.
- R.W. van Kralingen, *Frame-Based Conceptual Models of Statute Law*. The Hague: Kluwer Law International, 1995.
- P.R.S. Visser, *Knowledge Specification for Multiple Legal Tasks*. The Hague: Kluwer Law International, 1995.
- Henry Prakken & Giovanni Sartor, (eds.) *Logical Models of Legal Argumentation*. Dordrecht etc.: Kluwer Academic Publishers, 1997. (Reprint of *Artificial Intelligence and Law*, Vol. 4, nos 3-4, 1996)
- Lamber M.M. Royackers, *Extending Deontic Logic for the Formalisation of Legal Rules*. Dordrecht etc: Kluwer Law and Philosophy Library, 1998.

Reviews of other suitable books are also invited.

For further information, please contact:

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Recent Events

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normative systems with computer science and artificial intelligence. This area now commands the attention of a variety of researchers: some are interested in formal analyses of normative concepts and normative systems per se, such as legal theorists, deontic logicians and formal semanticists, and some are interested in applications of such analyses in AI models of normative reasoning, or in formal models of norm-governed behaviour of computer systems (including their interaction with humans and other computer systems).

For more information, consult the workshop WWW page, at <http://www.cirfid.unibo.it/~deon98>

International Association for Artificial Intelligence and Law

<http://nathan.gmd.de/iaail/iaail.html>

1998 Membership Form

Name: _____

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***Make check payable to IAAIL and
return this form with payment to:***

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Please check one:

- Regular Member (includes Vol. 6 of *AI and Law* journal) \$65
- Reduced Membership (reduced membership does not include *AI and Law* journal) \$30
- Full-Time Student \$40

Special offer for new members:

(while supplies last)

- Volume 5 of *AI and Law* \$45
- Volume 4 of *AI and Law* \$45

IF Full-Time Student:

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