# List of publications

## Dr. Xavier Parent

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## **Textbook**

1. X. Parent and L. van der Torre. *Introduction to Deontic Logic and Normative Systems*, College Publications, Texts in Logic and Reasoning, UK, London, 2018.

#### Co-editions

- 2. D. Gabbay, J. Horty, X. Parent, R. van der Meyden and L. van der Torre (eds). *Handbook of Deontic Logic and Normative Systems*, Volume 2, College Publications, London, 2021.
- C. Benzmüller, X. Parent and F. Ricca, "Logic rules and reasoning: Selected papers from the 2nd International Joint Conference on Rules and Reasoning (RuleML+RR 2018)", *Journal of Theory and Practice of Logic Programming*, volume 21, number 1, 2021.
- 4. X. Parent and J. Meheus (guest editors), "Special issue: deontic modalities in natural language" (selected and revised papers from the 12th International Conference on Deontic Logic and Normative Systems, DEON 2014), *Journal of Logic and Computation*, volume 29, issue 3, July 2019.
- C. Benzmüller, X. Parent and A. Steen (eds.), "Selected student contributions and workshop papers of LuxLogAI 2018", *EasyChair*, Kalpa Publications in Computing, volume 10, 2019.
- C. Benzmüller, F. Ricca, X. Parent, D. Roman (eds). Rules and Reasoning Second International Joint Conference, RuleML+RR 2018, Luxembourg, September 18-21, 2018, Proceedings. Lecture Notes in Computer Science Volume 11092, Springer, 2018.
- 7. D. Gabbay, J. Horty, X. Parent, R. van der Meyden and L. van der Torre (eds). *Handbook of Deontic Logic and Normative Systems*, Volume 1, College Publications, London, 2013.
- 8. F. Cariani, D. Grossi, J. Meheus and X. Parent (eds), *Deontic Logic and Normative Systems*, 12th International Conference, 2014, July 12-15, 2014. Proceedings. Lecture Notes in Computer Science Volume 8554, Springer, 2014.

#### Papers in refereed academic journals

- 9. X. Parent, "A modal embedding of an intuitionistic I/O operation". In V. de Paiva and S. Artemov (guest eds.), *IfColog*, Volume 8, Number 8, Special issue: Intuitionistic Modal Logic and Applications, September 2021, pp. 2350-2362.
- C. Benzmüller, X. Parent, L. van der Torre, A. Farjami, D. Fuenmayor, P. Meder,
   A. Steen, V. Zahoransky, "LogiKEy workbench: deontic logics, logic combi-

- nations and expressive ethical and legal reasoning (Isabelle/HOL dataset)", In *Data in Brief*, Elsevier, volume 33, number 106409, pp. 1-10, 2020. (Note: data publication)
- 11. C. Benzmüller, X. Parent and L. van der Torre, "Designing normative theories for ethical and legal reasoning: LogiKEy framework, methodology, and tool support". *Artificial Intelligence* (special issue "Ethics for autonomous systems"), 2020, 287, pp. 103348.
- 12. C. Benzmüller, A. Farjami and X. Parent, "Åqvist's dyadic deontic logic E in HOL", *IfCoLog*, special issue "MIning and Reasoning with LEgal texts (MIREL)", 2019, 6(5), pp. 733-755.
- 13. C. Benzmüller, A. Farjami, P. Meder and X. Parent, "I/O Logic in HOL", *If-CoLog*, special issue "MIning and Reasoning with LEgal texts (MIREL)", 2019, (6)5, pp. 715-732.
- 14. X. Parent and L. van der Torre, "I/O logics for normative reasoning", *Filosofiska*, 2019, 6(1), pp. 189–208.
- 15. X. Parent and L. van der Torre, "Detachment in normative systems: examples, inference patterns, properties", *IfCoLog*, 2017, 4(9), pp. 2295-3039.
- 16. X. Parent, "Completeness of Åqvist's systems E and F", *Review of Symbolic Logic*, 2015, 8 (1), pp. 164-177.
- 17. X. Parent, "Optimality vs maximality in dyadic deontic logic Completeness results for systems in Hansson's tradition", *Journal of Philosophical Logic*, 2014, 43(6), pp. 1101-1128.
- 18. D. Gabbay, M. de Boer, X. Parent and M. Slavkovik, "Two-dimensional standard deontic logic", *Synthese*, 2012, 187(2), pp. 623-660.
- 19. X. Parent, "Moral particularism in the light of deontic logic", *Artificial Intelligence and Law* (DEON'10 special issue), 2011, 19(2-3), pp. 75-98.
- 20. X. Parent, "A complete axiom set for Hansson's deontic logic DSDL2", *Logic Journal of the IGPL (Interest Group in Pure and Applied Logics)*, 2010, 18(3), pp. 422-429.
- 21. A. Jones and X. Parent, "Normative-informational positions A modal-logical approach", *Artificial Intelligence and Law*, 2008, 16(1), pp. 7-23.
- 22. A. Jones and X. Parent, "A convention-based approach to Agent Communication Languages", *Group Decision and Negotiation*, 2007, 16, pp. 101-141.
- 23. X. Parent, "Remedial interchange, contrary-to-duty obligation, and commutation", *Journal of Applied Non-Classical Logics*, 2003, 13(3/4), pp. 345-375.
- 24. X. Parent, "Cumulativity, identity and time in deontic logic", *Fundamenta Informaticae*, 2001, 48, pp. 237-252.

# Chapters in books

- 25. C. Benzmüller, A. Farjami and X. Parent, "Dyadic deontic logic in HOL: faithful embedding and meta-theoretical experiments". In S. Rahman, M. Armgardt and H. C. Nordtveit Kvernenes (eds.), New Developments in Legal Reasoning and Logic: From Ancient Law to Modern Legal Systems, volume 23 of Logic, Argumentation & Reasoning, Springer, 2022.
- 26. X. Parent, "Preference-based semantics for Hansson-type dyadic deontic logics: A survey of results". In D. Gabbay, J. Horty, X. Parent, R. van der Meyden and L. van der Torre (eds), *Handbook of Deontic Logic and Normative Systems*,

- Volume 2, College Publications, London, 2021, p. 7-70.
- X. Parent, D. Gabbay and L. van der Torre, "Intuitionistic basis for input/output logics". In S. O. Hansson (ed), *David Makinson on Classical Methods for Non-Classical Problems*, Springer, Series Oustanding Contributions to Logic, Vol. 3, 2014, pp. 263-286.
- X. Parent and L. van der Torre, "Input/output logic". In D. Gabbay, J. Horty, X. Parent, R. van der Meyden and L. van der Torre, (eds), *Handbook of Deontic Logic and Normative Systems*, Volume 1, College Publications, London, 2013, pp. 499-544.
- J. Broersen, S. Cranefield, Y. Elrakaiby, D. Gabbay, D. Grossi, E. Lorini, X. Parent, L. van der Torre, L. Tummolini, P. Turrini, and F. Schwarzentruber, "Normative reasoning and consequence", *Normative Multi-Agent Systems*, Dagstuhl Follow-Ups, 2013, pp. 33-70.
- 30. J. Broersen, D. Gabbay, A. Herzig, E. Lorini, J.-J. Meyer, X. Parent and L. van der Torre) "Deontic logic". In S. Ossowski (ed), *Agreement Technologies*, 2013, Springer, Dordrecht Heidelberg, pp. 171-180.
- 31. X. Parent, "Why be afraid of identity?". In A. Artikis, R. Craven, N. Kesim, B. Sadighi and K. Stathis (eds), *Logic Programs, Norms and Action: Essays in Honor of Marek J. Sergot on the Occasion of His 60th Birthday*, 2012, Springer, LNCS, pp. 295-307.
- 32. X. Parent, P. Turini, L. van der Torre and S. Colombo Tosatto, "Contrary-to-duties in games". In A. Artikis, R. Craven, N. Kesim, B. Sadighi and K. Stathis (eds), Logic Programs, Norms and Action: Essays in Honor of Marek J. Sergot on the Occasion of His 60th Birthday, 2012, Springer, LNCS, pp. 329-348.
- 33. X. Parent and P. Livet, "Conditional, revision and argumentation" (in French). In P. Livet (ed.) *Révision des Croyances*, 2002, Paris: Hermès Science Publication, pp. 229-258.

## Papers in refereed conferences with formal proceedings

- 34. A. Ciabattoni, N. Olivetti and X. Parent "Dyadic obligations: proofs and countermodels via hypersequents". Accepted for presentation at *PRIMA 2022*.
- 35. X. Parent and C. Benzmüller, "Automated verification of deontic correspondences in Isabelle/HOL–first results". Forthcoming in: C. Benzmüller and J. Ottens (eds), *Automated Reasoning in Quantified Non-Classical Logics (ARQNL 2022)*, 4th International Workshop (associated with FLoc and IJCAR 2022), 11 August 2022, Haifa, Israel, CEUR-WS.
- 36. "On some weakenings of transitivity in the logic of norms (extended abstract)". In O. Arieli, G. Casini and L. Giordano (eds), NMR 2022: International Workshop on Non-Monotonic Reasoning (associated with FLoc and KR 2022), 7-8 August 2022, Haifa, Israel, CEUR-WS, vol. 3197, pp. 147-150.
- 37. A. Ciabattoni, G. Sartor and X. Parent, "A Kelsenian deontic Logic". In E. Schweighofer (ed.), *Proc. of the 34th International Conference on Legal Knowledge and Information Systems (JURIX)*, Frontiers in Artificial Intelligence and Applications, 2021, IO Press, pp. 141-150.
- 38. C. Benzmüller, X. Parent and L. van der Torre, "Designing normative theories of ethical reasoning" (extended abstract, plus poster). In *30th International Joint Conference on Artificial Intelligence*, IJCAI 2021, journal paper track.

- 39. C. Benzmüller, X. Parent and L. van der Torre, "Designing normative theories for ethical and legal reasoning: LogiKEy framework, methodology, and tool support (extended abstract)". In 17th Conference on Principles of Knowledge Representation and Reasoning (KR 2020), Recently Published Research track, 2020.
- 40. M. Olswewski, X. Parent and L. van der Torre, "I/O logics with a consistency check—the case of permission". In F. Liu, A. Marra, P. Portner, and F. Van De Putte (eds.), *Deontic Logic and Normative Systems: 15th International Conference* (DEON2020/2021, Munich), London: College Publications, 2021.
- 41. C. Benzmüller, A. Farjami and X. Parent, "A dyadic deontic logic in HOL". In J. Broersen, C. Condoravdi, S. Nair and G. Pigozzi (eds.), *Deontic Logic and Normative Systems*—14th International Conference, DEON 2018, Utrecht, The Netherlands, 3-6 July, 2018, College Publications, pp. 33-50, 2018.

  \*\*\* John-Jules Meyer best paper award \*\*\*
- 42. X. Parent and L. van der Torre, "I/O logics with a consistency check". In J. Broersen, C. Condoravdi, S. Nair, G. Pigozzi (eds.), *Deontic Logic and Normative Systems 14th International Conference*, DEON 2018, Utrecht, The Netherlands, 3-6 July, 2018, College Publications, pp. 33-50, 2018.
- 43. C. Benzmüller, X. Parent and L. van der Torre, "A deontic logic reasoning infrastructure", In R. Miller, D. Nowotka and F. Manea (eds.), *14th Conference on Computability in Europe, CiE 2018*, Kiel, Germany, July 30-August, 2018, Springer, 2018.
- 44. Z. Baniasadi, M. Cramer, C. Max and X. Parent, "A model for regulating ethical preferences in machine ethics". In Kurosu Masaaki (ed.), *Human-Computer Interaction. Theories, Methods, and Human Issues*, 2018, Springer International Publishing, p.481-506.
  - \*\*\* Best paper award \*\*\*
- 45. X. Parent and L. van der Torre, "The pragmatic oddity in a norm-based semantics". In G. Governatori (Ed.), *16th International Conference on Artificial Intelligence & Law* (ICAIL-17), ACM, 2017.
- 46. A. Ambrossio, X. Parent and L. van der Torre, "Cumulative aggregation". In O. Roy, A. Tamminga and M. Willer (eds), *Deontic Logic and Normative Systems*, 13th Int Conference, DEON 2016, College Publications, UK, 2016, p. 1-15.
- 47. X. Parent and L. van der Torre, "Sing and dance!. Input/output logics without weakening." In: F. Cariani, D. Grossi, J. Meheus and X. Parent (eds), Deontic Logic and Normative Systems, 12th International Conference, DEON 2014, 2014, Springer, LNCS.
- 48. X. Parent and L. van der Torre, "Aggregative deontic detachment for normative reasoning". In T. Eiter and C. Baral and G. De Giacomo (eds), *Principles of Knowledge Representation and Reasoning*. Proceedings of the 14th International Conference KR 2014. AAAI Press, 2014.
- 49. X. Parent, "Moral particularism and deontic logic". In G. Sartor and G. Governatori (eds), *Proceedings of the 10th International Conference on Deontic Logic*, Deontic Logic (DEON 2010), Florence, July 2010, LNA, Springer-Verlag, Berlin Heidelberg, 2010, pp. 84-96.
  - \*\*\* Best paper award DEON 2010 \*\*\*

- 50. X. Parent, "On the strong completeness of Åqvist's dyadic deontic logic G". In R. van der Meyden and L. van der Torre (eds.), *Deontic Logic in Computer Science*, Proceedings of the 9th International Conference on Deontic Logic (DEON 2008), Luxembourg, July 2008, LNAI 5076, Springer-Verlag, Berlin Heidelberg, 2008, pp. 189-202.
- 51. F. Vraalsen, M. S. Lund, T. Mahler, X. Parent and K. Stølen. "Specifying legal risk scenarios using the Coras threat modelling language". In P. Hessmann, V. Issarny and S. Shin (eds), *Trust Management*, Proceedings of the 3nd International Conference on Trust Management, iTrust 2005, Paris, 23-26 May 2005, Springer Verlag, LNCS 3477, 2005, pp. 45-61.
- 52. A. Jones and X. Parent, "Signalling conventions and conversation". In F. Dignum (ed), *Advances in Agent Communication: International Workshop on Agent Communication Languages ACL 2003, Melbourne, Australia, July 14, 2003*, Lecture Notes in Artificial Intelligence, Springer Verlag, 2004, pp. 1-17.
- 53. X. Parent, "Defeasible conditional obligation: some remarks". In R. Hilpinen and R. Demolombe (eds.) *Proceedings of the 5th International Workshop on Deontic Logic*, 20-22 January 2000, Toulouse, France, pp. 301-309.

# Other archival publications

- 54. C. Benzmüller, F. Ricca and X. Parent, "Report on the Second International Joint Conference on Rules and Reasoning (RuleML+RR 2018)", *AI Magazine*, 2019, 40(2), pp. 73-74.
- 55. X. Parent. Review of *Coherent Systems* by Karl Schlechta. In *Logic Journal of the IGPL (Interest Group in Pure and Applied Logics)*, 13, 2005, pp. 353-359.

#### **Under review**

- 56. X. Parent, "On some weakened forms of transitivity in the logic of norms" (full version of item 36). Submitted to *Journal of Symbolic Logic*.
- 57. M. Olszewski, X. Parent, L. van der Torre, "Permissive and regulative norms in deontic logic". Submitted to *Journal of Logic and Computation*.