Torben Braüner's List of Publications

Refereed Workshop and Conference Papers

[1] T. Braüner. A model of intuitionistic affine logic from stable domain theory. In S. Abiteboul and E. Shamir, editors, *Proceedings of International Colloquium on Automata, Languages and Programming*, volume 820 of *Lecture Notes in Computer Science*, pages 340–351. Springer-Verlag, 1994.

[2] T. Braüner. The Girard translation extended with recursion. In L. Pacholski and J. Tiuryn, editors, *Proceedings of Annual Conference of the European Association for Computer Science Logic*, volume 933 of *Lecture Notes in Computer Science*, pages 31–45. Springer-Verlag, 1995.

[3] T. Braüner. A simple adequate categorical model for PCF. In Ph. de Groote and J. R. Hindley, editors, *Proceedings of Third International Conference on Typed Lambda Calculi and Applications*, volume 1210 of *Lecture Notes in Computer Science*, pages 82–98. Springer-Verlag, 1997.

[4] T. Braüner and V. de Paiva. A formulation of linear logic based on dependency-relations. In M. Nielsen and W. Thomas, editors, *Proceedings of Annual Conference of the European Association for Computer Science Logic*, volume 1414 of *Lecture Notes in Computer Science*, pages 129–148. Springer-Verlag, 1998.

[5] T. Braüner. Peircean graphs for the modal logic S5. In M.-L. Mugnier and M. Chein, editors, *Conceptual Structures: Theory, Tools and Applications; Proceedings of Sixth International Conference on Conceptual Structures*, volume 1453 of *Lecture Notes in Artificial Intelligence*, pages 255–269. Springer-Verlag, 1998.

[6] T. Braüner, C. Donner, and P. Øhrstrøm. A software system for learning Peircean graphs. In W. Tepfenhart and W. Cyre, editors, *Conceptual Structures: Standards and Practices; Proceedings of Seventh International Conference on Conceptual Structures*, volume 1640 of *Lecture Notes in Artificial Intelligence*, pages 184–197. Springer-Verlag, 1999.

[7] T. Braüner, J.F. Nilsson, and A. Rasmussen. Conceptual graphs as algebras – with an application to analogical reasoning. In W. Tepfenhart and W. Cyre, editors, *Conceptual Structures: Standards and Practices; Proceedings of Seventh International Conference on Conceptual Structures*, volume 1640 of *Lecture Notes in Artificial Intelligence*, pages 456–469. Springer-Verlag, 1999.

[8] T. Braüner and P. Øhrstrøm. Towards a diagrammatic formulation of modal and temporal logic. In F. Daoud, editor, *Working Notes of AAAI'99 Fall Symposium on Modal and Temporal Logic-based Planning for Open Networked Multimedia Systems*, pages 61–67. AAAI, 1999.

[9] T. Braüner. Homophonic theory of truth for tense logic. In F. Wolter, H. Wansing, M. de Rijke, and M. Zakharyaschev, editors, *Advances in Modal Logic, Volume 3*, pages 59–72. World Scientific, 2002.

[10] T. Braüner, P. Hasle, and P. Øhrstrøm. Determinism and the origins of temporal logic. In H. Barringer, M. Fisher, D.M. Gabbay, and G. Gough, editors, *Advances in Temporal Logic*, volume 16 of *Applied Logic Series*, pages 185–206. Kluwer Academic Publishers, 2000.

[11] T. Braüner, P. Hasle, and P. Øhrstrøm. Ockhamistic logics and true futures of counterfactual moments. In L. Khatib and R. Morris, editors, *Proceedings of Fifth International Workshop on Temporal Representation and Reasoning*, pages 132–139. IEEE Press, 1998. Affiliated to *11th Annual Florida Artificial Intelligence Research Symposium*.

[12] T. Braüner. A cut-free Gentzen formulation of the modal logic S5. In R. de Queiroz and W. Carnielli, editors, *Proceedings of 6th Workshop on Logic, Language, Information and Computation*, pages 79–88, 1999.

[13] T. Braüner. Natural deduction for hybrid logic (extended abstract). In C. Areces and M. de Rijke, editors, *Workshop Proceedings of Methods for Modalities 2*. ILLC Amsterdam, 2001.

[14] T. Braüner. Functional completeness for a natural deduction formulation of hybridized S5. In P. Balbiani, N.-Y. Suzuki, F. Wolter, and M. Zakharyaschev, editors, *Advances in Modal Logic, Volume 4*, pages 31–49. King's College Publications, 2003.

[15] T. Braüner. Natural deduction for first-order hybrid logic. In C. Areces, P. Blackburn, M. Marx, and U. Sattler, editors, *Workshop Proceedings of Fourth Workshop on Hybrid Logics*, pages 37–51, 2002. Affiliated to *IEEE Symposium on Logic in Computer Science*.

[16] T. Braüner and V. de Paiva. Towards constructive hybrid logic (extended abstract). In C. Areces and P. Blackburn, editors, *Workshop Proceedings of Methods for Modalities 3*, 2003. 15 pages.

[17] T. Bolander and T. Braüner. Two tableau-based decision procedures for hybrid logic. In H. Schlingloff, editor, *4th Workshop "Methods for Modalities" (M4M), Informatik-Bericht Nr. 194*, pages 79–96. Humboldt-Universität zu Berlin, 2005.

[18] J.U. Hansen, T. Bolander, and T. Braüner. Many-valued hybrid logic. In C. Areces and R. Goldblatt, editors, *Advances in Modal Logic, Volume 7*, pages 111–132. College Publications, 2008.

[19] T. Braüner. First-order hybrid logic: Introduction and survey. In *Volume of Abstracts of The 2011 International Conference on Non-classical Modal and Predicate Logics*, pages 35–41, 2011.

[20] T. Braüner. Hybrid-logical reasoning in false-belief tasks. In B.C. Schipper, editor, *Proceedings of Fourteenth Conference on Theoretical Aspects of Rationality and Knowledge (TARK)*, pages 186–195, 2013. ISBN 978-0-615-74716-3, available at http://tark.org.

[21] P. Blackburn, T. Braüner, T. Bolander, and K.F. Jørgensen. A Seligman-style tableau system. In K. McMillan, A. Middeldorp, and A. Voronkov, editors, *Logic for Programming, Artificial Intelligence, and Reasoning*, volume 8312 of *Lecture Notes in Computer Science*, pages 147–163. Springer Publishing Company, 2013.

[22] T. Braüner. Hybrid-logical reasoning in the Smarties and Sally-Anne tasks: What goes wrong when incorrect responses are given? In *Proceedings of the 37th Annual Meeting of the Cognitive Science Society*, pages 273–278. Pasadena, California: Cognitive Science Society, 2015.

[23] T. Braüner, P. Blackburn, and I. Polyanskaya. Recursive belief manipulation and second-order false-beliefs. In *Proceedings of the 38th Annual Meeting of the Cognitive Science Society*, pages 2579–2584. Philadelphia, Pennsylvania, USA: Cognitive Science Society, 2016.

[24] T. Braüner, P. Blackburn, and I. Polyanskaya. Second-order false-belief tasks: Analysis and formalization. In *Proceedings of Workshop on Logic, Language, Information and Computation (WoLLIC 2016)*, volume 9803 of *Lecture Notes in Computer Science*, pages 125–144. Springer-Verlag, 2016.

[25] K.F. Jørgensen, P. Blackburn, T. Bolander, and T. Braüner. Synthetic completeness proofs for Seligman-style tableau systems. In András Máté Lev Beklemishev, Stéphane Demri, editor, *Proceedings of Advances in Modal Logic 2016*, volume 11 of *Advances in Modal Logic*, pages 302–321. College Publications, 2016.

[26] I. Polyanskaya, T. Braüner, and P. Blackburn. Second-order false beliefs and recursive complements in children with Autism Spectrum Disorder. In *BUCLD 42: Proceedings of the 42nd annual Boston University Conference on Language Development*, pages 632–643. Cascadilla Press, 2018.

[27] T. Braüner, I. Polyanskaya, and P. Blackburn. A logical investigation of false-belief tasks. In *Proceedings of the 40th Annual Meeting of the Cognitive Science Society*, pages 45–46. Madison, Wisconsin, USA: Cognitive Science Society, 2018.

[28] T. Braüner and P. Blackburn. Formal semantics for the Sally-Anne tasks. In *Proceedings of the 4th Asian Workshop on Philosophical Logic*, pages 16–27. Tsinghua University, Beijing, China, 2018.

[29] P. Blackburn, T. Braüner, and I. Polyanskaya. Linguistic recursion and Danish discourse particles: Language in children with autism spectrum disorder. Language, Cognition, and Mind. Springer Nature, 2019. In press.

Refereed Journal Papers

[30] T. Braüner. A general adequacy result for a linear functional language. *Theoretical Computer Science*, 177:27–58, 1997. Based on talk given at *10th Workshop on the Mathematical Foundations of Programming Semantics*, 1994.

[31] T. Braüner. A simple adequate categorical model for PCF, II. *Fundamenta Informaticae*, 33:339–368, 1998. Extended version of paper [3] (4 out of 24 papers in the proceedings were selected for publication in this journal).

[32] T. Braüner. Modal logic, truth, and the master modality. *Journal of Philosophical Logic*, 31:359–386, 2002. Revised and extended version of [9].

[33] T. Braüner. A cut-free Gentzen formulation of the modal logic S5. *Logic Journal of the IGPL*, 8:629–643, 2000. Full version of [12].

[34] T. Braüner. Natural deduction for hybrid logic. *Journal of Logic and Computation*, 14:329–353, 2004. Revised and extended version of [13].

[35] T. Braüner. Two natural deduction systems for hybrid logic: A comparison. *Journal of Logic, Language and Information*, 13:1–23, 2004.

[36] T. Braüner. Natural deduction for first-order hybrid logic. *Journal of Logic, Language and Information*, 14:173–198, 2005. Revised and extended version of [15].

[37] T. Braüner. Proof-theoretic functional completeness for the hybrid logics of everywhere and elsewhere. *Studia Logica*, 81:191–226, 2005. Revised and extended version of [14].

[38] T. Braüner and V. de Paiva. Intuitionistic hybrid logic. *Journal of Applied Logic*, 4:231–255, 2006. Revised and extended version of [16].

[39] T. Braüner. Axioms for classical, intuitionistic, and paraconsistent hybrid logic. *Journal of Logic, Language and Information*, 15:179–194, 2006.

[40] T. Bolander and T. Braüner. Tableau-based decision procedures for hybrid logic. *Journal of Logic and Computation*, 16:737–763, 2006. Revised and extended version of [17].

[41] T. Braüner. Why does the proof-theory of hybrid logic work so well? *Journal of Applied Non-Classical Logics*, 17:521–543, 2007.

[42] T. Braüner. Adding intensional machinery to hybrid logic. *Journal of Logic and Computation*, 18:631–648, 2008.

[43] T. Braüner. Intuitionistic hybrid logic: Introduction and survey. *Information and Computation*, 209:1437–1446, 2011.

[44] T. Braüner. First-order hybrid logic: Introduction and survey. *Logic Journal of the IGPL*, 22:155–165, 2014. Full version of [19].

[45] T. Braüner. Hybrid-logical reasoning in the Smarties and Sally-Anne tasks. *Journal of Logic, Language and Information*, 23:415–439, 2014. Revised and extended version of [20].

[46] P. Blackburn, T. Bolander, T. Braüner, and K.F. Jørgensen. Completeness and termination for a Seligman-style tableau system. *Journal of Logic and Computation*, 27:81–107, 2017. Revised and extended version of [21].

[47] J.U. Hansen, T. Bolander, and T. Braüner. Many-valued hybrid logic. *Journal of Logic and Computation*, 28:883–908, 2018. Revised and extended version of [18].

[48] I. Polyanskaya, P. Blackburn, and T. Braüner. Theory of Mind, linguistic recursion and autism spectrum disorder. *Beyond Philology*, 14/1:69–95, 2017.

[49] T. Braüner, P. Blackburn, and I. Polyanskaya. Being deceived: Information asymmetry in second-order false belief tasks. *Topics in Cognitive Science*, 2019. In press.

Edited Works

[50] P. Hasle, P. Øhrstrøm, T. Braüner, and J. Copeland, editors. *Revised and Expanded Edition of Arthur N. Prior: Papers on Time and Tense*. Oxford University Press, 2003.

[51] T. Braüner, P. Hasle, and P. Øhrstrøm, editors. *The Logic of Time and Modality*, 2006. Special issue of *Synthese*, volume 150(3). Contains papers given at *Conference on The Logic of Time and Modality*, Roskilde University, October 31 – November 1, 2003.

[52] P. Blackburn, T. Bolander, T. Braüner, V. de Paiva, and J. Villadsen, editors. *Proceedings of the International Workshop on Hybrid Logic 2006*, 2007. Special issue of *Electronic Notes in Theoretical Computer Science*, volume 174, issue 6.

[53] J. Villadsen, T. Bolander, and T. Braüner, editors. *Proceedings of the International Workshop on Hybrid Logic 2007. 19th European Summerschool in Logic, Language and Information*, 2007. 95 pages.

[54] T. Bolander and T. Braüner, editors. *Proceedings of the 6th Workshop on Methods for Modalities (M4M-6 2009)*, 2010. Special issue of *Electronic Notes in Theoretical Computer Science*, volume 262.

[55] T. Bolander and T. Braüner, editors. *Proceedings of the International Workshop on Hybrid Logic and Applications 2010*, 2011. Special issue of *Electronic Notes in Theoretical Computer Science*, volume 273.

[56] T. Braüner and T. Bolander, editors. *HYBRID LOGIC: Dedicated to the Memory of Volker Weber*, 2009. Special issue of *Journal of Logic, Language and Information*, volume 18(4). Includes papers given at *International Workshop on Hybrid Logic 2007*.

[57] T. Bolander, T. Braüner, S. Ghilardi, and L. Moss, editors. *Advances in Modal logic, Volume 9*. College Publications, 2012.

Encyclopedia and Handbook Contributions

[58] T. Braüner and S. Ghilardi. First-order modal logic. In P. Blackburn, J. van Benthem, and F. Wolter, editors, *Handbook of Modal Logic*, pages 549–620. Elsevier, 2007.

[59] T. Braüner. Hybrid logic. In E.N. Zalta, editor, *The Stanford Encyclopedia of Philosophy*. Stanford University, 2005. On-line encyclopedia article available at http://plato.stanford.edu/entries/logic-hybrid. Substantive revision 2017.

[60] T. Braüner. Hybrid logic. In D.M. Gabbay and F. Guenthner, editors, *Handbook of Philosophical Logic, 2nd Edition*, volume 17, pages 1–77. Springer-Verlag, 2013.

Monographs

[61] T. Braüner. *An Axiomatic Approach to Adequacy*. PhD thesis, Department of Computer Science, University of Aarhus, 1996. 168 pages. Published as Technical Report BRICS-DS-96-4.

[62] T. Braüner. Hybrid logic and its proof-theory. Computer Science Research Report 124, Roskilde University, Denmark, 2009. Thesis accepted in fulfillment of the requirements for the Danish higher doctorate dr.scient. (doctor scientiarum).

[63] T. Braüner. *Hybrid Logic and its Proof-Theory*, volume 37 of *Applied Logic Series*. Springer, 2011. Based on dr.scient. thesis [62].

Popular and Semi-Popular Science Publications

[64] T. Braüner. Kurt Gödel og Ufuldstændigheden. *Weekendavisen IDEER*, 2006. Newspaper article, May 24.

[65] T. Braüner. Logikkens muligheder og grænser. *Aktuel Naturvidenskab*, 6:32–34, 2006.

[66] T. Braüner. Hybrid-logik - fra filosofi til datalogi. *Aktuel Naturvidenskab*, 2:40–43, 2010.

[67] T. Braüner. Logikkens muligheder og grænser: Om standse-problemet og Gödels sætninger. In T. Ploug, editor, *Mening med Tiden*, pages 49–65. Aalborg Universitetsforlag, 2015.

Introductory and Survey Papers

[68] T. Braüner. Introduction to linear logic. Technical Report BRICS-LS-96-6, Department of Computer Science, University of Aarhus, 1996. iiiv+55 pages. Lecture notes for BRICS Mini-course aimed at Ph.D. students.

[69] T. Braüner. Arthur Prior's temporal logic and the origin of contemporary hybrid logic. In P. Schmechtig and G. Schönrich, editors, *Persistenz–Indexikalität–Zeiterfahrung*, pages 301–336. Ontos–Verlag, 2011. Survey paper associated with an invited talk given at the workshop *Persistenz–Indexikalität–Zeiterfahrung*, Technical University of Dresden, 2008, Germany.

[70] T. Braüner and P. Hasle. Sprog, tid og logik. In P.J. Henrichsen and H. Prebensen, editors, *Sprog og Matematik*, pages 84–101. Handelshøjskolens Forlag, Copenhagen, 2003. Contribution to textbook aimed at high school teachers in mathematics.

[71] T. Braüner. An introduction to A.N. Prior's logic of time and modality. 9 pages. Paper associated with an invited tutorial given at *Second International Workshop on the History and Philosophy of Logic, Mathematics, and Computation*, 2002. Also published in PHINEWS Volume 3, April 2003.

Various Other Publications

[72] T. Braüner and V. de Paiva. Cut-elimination for full intuitionistic linear logic. Technical Report 395, Computer Laboratory, University of Cambridge, 1996. 27 pages.

[73] P. Hasle and T. Braüner. Systemudvikling – logos eller mythos? *Rhetorica Scandinavica*, 6:33–45, 1998.

[74] T. Braüner. Review of book: Willem Conradie and Valentin Goranko, Logic and Discrete Mathematics: A Concise Introduction, Wiley, 2015. *Studia Logica*, 106:671–673, 2018.