

Curriculum Vitae of Yanjing Wang (July 2022)

PERSONAL INFORMATION

Date of birth: March 1982
Gender: male

CONTACT INFORMATION

Department of Philosophy Peking University
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RESEARCH INTERESTS

modal logic (especially epistemic logic, first-order modal logic, non-normal modal logic, and polyadic modal logic), non-classical logics, formal semantics, formal epistemology, logics in AI and TCS, formal verification, and academic ethics

SELECTED RECENT CONTRIBUTIONS (2011-)

- Systematic study of epistemic logic of know-wh (*know whether/what /how /why who...*).
- A general method for axiomatizing Dynamic Epistemic Logic without using reduction axioms.
- Introducing the *bundled fragments* of First-order Modal Logic.
- Developing know-how based logical method for AI planning
- Introducing *de re* updates and corresponding techniques.
- Introducing modal logical mereology.
- Developing the model theory of weakly aggregative logics
- Introducing the know-how semantics of intuitionistic and intermediate logics
- Axomatizing modal and tense logics over various kinds of lattices.

EDUCATION

Centrum Wiskunde & Informatica (CWI),
Amsterdam, The Netherlands

Ph.D in Logic

July 2006 – Sept. 2010

- Dissertation: *Epistemic Modelling and Protocol Dynamics*
- Supervisor: Prof. Jan van Eijck
- The diploma was issued by **University of Amsterdam (UvA)**

Institute for Logic language and Computation (ILLC), UvA,
Amsterdam, The Netherlands

MSc in Logic (Cum Laude)

Sept. 2004 – Mar. 2006

- Thesis: *Indexed Semantics and Its Application in Modelling Interactive Unawareness*
- Supervisor: Prof. Frank Veltman and Dr. Maricarmen Martinez

Department of Philosophy, Peking University,
Beijing, China

BA in Philosophy, BA in Economics

Sept. 2000 – Jun. 2004

ACADEMIC POSITIONS

Vice-chair, Department of Philosophy, Peking University
Director, Center for Logic, Language and Cognition
Full Professor

Aug. 2018 – present
Feb. 2022 – present
Aug. 2022 – present

Associate Professor (tenured)

Feb. 2018 – July 2022

Associate Professor

Aug. 2012 – Jan. 2018

Assistant Professor

Sept. 2010 – July 2012

PROFESSIONAL EXPERIENCE

Member of:

Association of Symbolic Logic, Chinese Association of Logic (secretary-general of the modern logic chapter), Western Returned Scholars Association, Chinese Mathematical Society (committee member of the mathematical logic chapter)

Associate editor of:

Journal of Philosophical Logic (April 2022 –)

Advisory Board Member of:

Master of Logic program at ILLC, Amsterdam

Steering Committee Member of:

Logical Aspects of Multi-Agent Systems (LAMAS)

PC member of:

LORI2013/2015, TARK 2015, AAMAS2015, LOFT2016, IJCAI2016, KR2016, ICLA2017, WoLLIC2018, AiML2020, LORI2021, LAMAS+SR 2022

Served as external reviewer for:

AAMAS, CSL, LICS, KR, TARK, LORI, ESSLLI-StuS, ACM Transactions on Computational Logic, Journal of Applied Non-Classical Logics, Synthese, Studia Logica, Journal of Logic and Computation, The Review of Symbolic Logic, Artificial Intelligence, Journal of Logic, Language and Information, Journal of Philosophical Logic, Journal of Artificial Intelligence Research, Erkenntnis, Mathematical Reviews

International events organized

Logical Dynamics: New Trends and Interfaces, Peking University, Oct. 9th 2011

Epistemic Logics in AI, Peking University, Aug. 10th 2013

Delta Logic workshop IX, Peking University, Sept. 8th, 2018

PKU Week of Mathematical Philosophy, Peking University, June 20-27, 2019

PKU Mathematical Philosophy: On the Occasion of the Centenary of Russell's Visit to Peking University, Peking University, Sept.- Dec., 2020

Workshop on Decidable Fragments of FOML, FLoC, July 31 2022 (postponed LICS workshop due to Covid)

National conference organized, as PC chair

National conference on modern logic 2015, Hebei University, 2015

National conference on modern logic 2016, Southwest University, 2016

PROJECTS:

as PI:

Decidable fragments of first-order modal logic (SSFC grant 19BZX135)

Beyond “knowing that”: non-standard epistemic logic (Top-notch Young Professionals program)

Protocol-based logical dynamics (SSFC grant 11CZX054)

Starting Grant of Returned Overseas Chinese Scholars

as participant:

Multidisciplinary cognition studies (Key Project of National Social Science Foundation of China 12&ZD119)

Logic based cognitive studies (Key Project of National Social Science Foundation of China 11&ZD088)

Studies on logic and philosophy of mathematics (MOE Project of Key Research Institute of Humanities and Social Sciences in Universities 12JJD720011)

Action-sequence based studies on imperatives and deontic logic (SSFC grant 12CZX053)

TEACHING

Advanced modal logic

Spring of 2011-2022

Epistemic logic

Fall of 2015-2022

Logical dynamics

Fall of 2011-2014, 2018

Logic in Math, Philosophy and CS

Fall of 2016

SUPERVISION

In the Ph.D. defense committee of: Yanjun Li (University of Groningen), Malvin Gattinger (University of Amsterdam)

Co-PhD supervisor for: Jie Fan, Yanjun Li, Jixin Liu, Yu Wei, Xun Wang

Master thesis supervised: Xi Chen, Tszyuen Lau, Chao Xu, Yingying Cheng, Dazhu Li, Xingchi Su, Jingzhi Fang, Mo Liu, Yiting Wang, Haoyu Wang, Kaiyang Lin

Undergraduate thesis supervised: Tingxiang Zou, Shihao Xiong, Yifeng Ding, Tao Gu, Zhouhang Zhou, Xinyu Wang, Yunsong Wang, Cheng Liao, Yilun Wang, Wen Tang

HONOURS AND AWARDS

Beth Scholarship, The Netherlands 2004-2006

INSA JRD-TATA Fellowship, India 2012

National Program for Support of Top-notch Young Professionals, China, 2015

New Zealand Centre Visiting Research Fellowship, New Zealand, 2017

National Program for Support of Leading Scholars in Philosophy and Social Sciences, China, 2020

PUBLICATIONS

Including papers in *Advances in Modal Logic* (6), *TARK* (7), *Synthese* (6), *Review of Symbolic Logic* (3), *Artificial Intelligence* (3), *Annals of Pure and Applied Logic* (2), *IJCAI* (3), *LORI*(6), *ICLA*(4), *WoLLIC* (2):

Books

1. Yanjing Wang: Chinese translation of *Saints and Scamps: Ethics in Academia* by Steven Cahn, Peking University Press 2021

In refereed international books and journals

2. Jixin Liu, Yifeng Ding, Yanjing Wang: Model Theoretical Aspects of Weakly Aggregative Modal Logic. *Journal of Logic, Language and Information* 31:261–286, 2022.
3. Haoyu Wang, Yanjing Wang, Yunsong Wang: Inquisitive Logic as an Epistemic Logic of Knowing How. *Annals of Pure and Applied Logic* (In press)
4. Dazhu Li, Yanjing Wang: Mereological Bimodal Logics *The Review of Symbolic Logic* (Online first)
5. Raul Fervari, Fernando R. Velázquez-Quesada, Yanjing Wang: Bisimulations for Knowing How Logics. *The Review of Symbolic Logic* (Online first)
6. Yanjing Wang, Yu Wei, Jeremy Seligman: Quantifier-free Epistemic Term-modal Logic with Assignment Operator, *Annals of Pure and Applied Logic*:173(3), 103071 (Largely extended journal version of the AiML2018 conference paper)
7. Yanjun Li, Yanjing Wang: Neighbourhood Semantics for Logic of Knowing How. *Synthese* 199: 8611–8639
8. Yanjun Li, Yanjing Wang: Planning-based knowing how: a unified approach, *Artificial Intelligence* 296:103487, 2021
9. Chao Xu, Yanjing Wang, and Thomas Studer: A logic of knowing why, *Synthese* 198: 1259–1285, 2021.
10. Yanjing Wang: A logic of goal-directed knowing how, *Synthese* 195 (10): 4419-4439. 2018. (Extended journal version of the LORI15 conference paper)
11. Yanjun Li, Barteld Kooi and Yanjing Wang: A Dynamic Epistemic Framework for Reasoning about Conformant Probabilistic Plans, in *Artificial Intelligence* 268: 54-84.
12. Thomas Agotnes, Hans van Ditmarsch, Yanjing Wang: True lies. in *Synthese* 195 (10): 4581-4615. 2018.

13. Yanjing Wang: Beyond knowing that: a new generation of epistemic logics, in *Jaakko Hintikka on knowledge and game theoretical semantics*, 499-533, (2018) Springer
14. Yanjun Li, Quan Yu, Yanjing Wang: More for free: A dynamic epistemic framework for conformant planning. *Journal of Logic and Computation* 27(8):2383-2410. (largely extended version of the TARK 2015 conference paper)
15. Tszyuen Lau and Yanjing Wang: Knowing your ability, in *The Philosophical Forum* 47(3-4):415-424 (2016), Wiley-Blackwell
16. Kai Li and Yanjing Wang: From rules to runs - a dynamic epistemic take of imperfect information take. *Studies in Logic* 8(4):74-107 (2015)
17. Jie Fan, Yanjing Wang and Hans van Ditmarsch: Contingency and knowing whether, in *Review of Symbolic Logic* 8(1):75-107 (2015), Cambridge University Press
18. Hans van Ditmarsch, Sujata Ghosh, Rineke Verbrugge, Yanjing Wang: Hidden protocols: Modifying our expectations in an evolving world. *Artificial Intelligence* 208: 18-40 (2014), Elsevier (largely extended version of the TARK 2011 conference paper)
19. Yanjing Wang and Qinxiang Cao, On axiomatizations of Public Announcement Logic. *Synthese* 190(1S): 103-134 (2013), Springer (largely extended version of the LORI 2011 conference paper)
20. Yanjing Wang, Review of *Logical Dynamics: Information and Interaction*, *Studia Logica* 102(3): 647-654, (2014), Springer
21. Fenrong Liu and Yanjing Wang, Reasoning about agent types and the hardest logic puzzle ever. *Minds and Machines* 23(1):123-161 (2012), Springer
22. Jan van Eijck, Floor Sietsma, Yanjing Wang: Composing models. *Journal of Applied Non-Classical Logics* 21(3-4): 397-425 (2011), Taylor & Francis
23. Hans van Ditmarsch, Jan van Eijck, Floor Sietsma, Yanjing Wang, On the Logic of Lying, *Games, Actions and Social Software*, pp. 41-72 (2012), Springer
24. Francien Dechesne, Yanjing Wang: To know or not to know: epistemic approaches to security protocol verification. *Synthese* 177(S1): 51-76 (2010), Springer
25. Francien Dechesne, Jan van Eijck, Wouter Teepe, Yanjing Wang: What is protocol analysis? and Protocol Analysis and Dynamic Epistemic Logic, pp. 135-146 and pp. 147-162 in: *Discourses on Social Software*, Jan van Eijck and Rineke Verbrugge (eds), Vol. 5 of Texts in Logic and Games (2009), University of Amsterdam Press

In refereed international conference proceedings

26. Xiaoyang Wang and Yanjing Wang: Tense Logics over Lattices, In Proceedings of WoLLIC 2022
27. Mo Liu, Anantha Padmanabha, R. Ramanujam and Yanjing Wang: Generalized Bundled Fragments of First-order Modal Logic, in Proceedings of MFCS 2022
28. Haoyu Wang, Yanjing Wang, Yunsong Wang: An Epistemic Interpretation of Tensor Disjunction. In Proceedings of Advances in Modal Logic 2022.
29. Yifeng Ding, JixinLiu, Yanjing Wang: Hypergraphs, local reasoning, and weakly aggregative modal logic. In Proceedings of LORI 2021: 153-167
30. Michael Cohen, Wen Tang, Yanjing Wang: De Re Updates. In Proceedings of TARK 2021: 103-117
31. Yanjun Li, Yanjing Wang: Knowing How to Plan. In Proceedings of TARK 2021: : 233-247
32. Xinyu Wang, Yanjing Wang: Knowledge-now and Knowledge-all. In Proceedings of LORI 2019: 399-412
33. Jixin Liu, Yanjing Wang, Yifeng Ding: Weakly Aggregative Modal Logic: Characterization and Interpolation. In Proceedings of LORI 2019: 153-167
34. Yanjun Li, Yanjing Wang: Multi-agent knowing how via multi-step plans: a dynamic epistemic planning based approach. In Proceedings of LORI 2019: 126-139
35. Malvin Gattinger, Yanjing Wang: How to Agree without Understanding Each Other: Public Announcement Logic with Boolean Definitions. In Proceedings of TARK 2019: 206-220
36. Yanjing Wang and Jeremy Seligman: When Names Are Not Commonly Known: Epistemic Logic with Assignments. in *Advances in Modal Logic* Vol. 12 (2018): 611-628, College Publications

37. Anantha Padmanabha, R. Ramanujam, Yanjing Wang: Bundled fragments of first order modal logic: (un)decidability in Proceedings of FSTTCS2018 LIPIcs 112: 43:1-43:20
38. Yanjing Wang: A new modal framework for epistemic logic. in Proceedings of TARK 2017: 493-512 EPTCS
39. Raul Fervari, Andreas Herzig, Yanjun Li, Yanjing Wang: Strategically knowing how. In Proceedings of IJCAI 2017:1031-1038, AAAI
40. Jan van Eijck, Malvin Gattinger, Yanjing Wang: Knowing Values and Public Inspection, in Proceedings of ICLA 2017: 77-90, Springer
41. Yanjun Li, Yanjing Wang: Achieving while maintaining: A logic of knowing how with intermediate constraints, in Proceedings of ICLA 2017:154-167, Springer
42. Tao Gu and Yanjing Wang: "Knowing value" logic as a normal modal logic, in *Advances in Modal Logic* Vol. 11: 362-381 (2016), College Publications
43. Yanjing Wang: A logic of knowing how, in *Proceedings of LORI2015*:392-405, Springer
44. Yanjing Wang and Jie Fan: Epistemic Informativeness, in *Proceedings of the Second Asian Workshop on Philosophical Logic*, Studia Logica Library, Springer
45. Quan Yu, Yanjun Li, Yanjing Wang: A Dynamic Epistemic Framework for Conformant Planning, in *Proceedings of TARK2015*: 249-259, EPTCS
46. Yanjing Wang: Representing Imperfect Information of Procedures with Hyper Models. in *Proceedings of ICLA 2015*: 218-231. Springer.
47. Yanjing Wang, Jie Fan: Conditionally knowing what, in *Advances in Modal Logic* Vol. 10: 569-587 (2014), College Publications
48. Jie Fan, Yanjing Wang and Hans van Ditmarsch: Almost necessary, in *Advances in Modal Logic* Vol. 10: 178-197 (2014), College Publications
49. Yanjing Wang, Guillaume Aucher: An Alternative Axiomatization of DEL and its Applications, in Proceedings of IJCAI 2013: 1139-1146. AAAI press.
50. Yanjing Wang, Jie Fan: Knowing that, Knowing what, and Public Communication: Public Announcement Logic with Kv Operators, in Proceedings of IJCAI 2013: 1147-1154. AAAI press.
51. Yanjing Wang and Yanjun Li, Not all those who wander are lost: dynamic epistemic reasoning in navigation, in *Advances in Modal Logic* Vol. 9, pp.559-580 (2012), S. Ghilardi and L. Moss eds., College publications
52. Yanjing Wang: Reasoning about Protocol Change and Knowledge. ICLA 2011: 189-203, Springer
53. Yanjing Wang: On Axiomatizations of PAL. LORI 2011: 314-327, Springer
54. Hans P. van Ditmarsch, Sujata Ghosh, Rineke Verbrugge, Yanjing Wang: Hidden protocols. TARK 2011: 65-74, ACM digital library
55. Yanjing Wang, Floor Sietsma, Jan van Eijck: Logic of information flow on communication channels. AAMAS 2010: 1447-1448, full version in DALI 2010: 130-147, Springer
56. Yanjing Wang, Lakshmanan Kuppusamy, Jan van Eijck: Verifying epistemic protocols under common knowledge. TARK 2009: 257-266, ACM Digital library
57. Francien Dechesne, Simona Orzan, Yanjing Wang: Refinement of Kripke Models for Dynamics. ICTAC 2008: 111-125, Springer
58. Taolue Chen, Jaco van de Pol, Yanjing Wang: PDL over Accelerated Labeled Transition Systems. TASE 2008: 193-200, IEEE computer society
59. Jan van Eijck, Yanjing Wang: Propositional Dynamic Logic as a Logic of Belief Revision. WoLLIC 2008: 136-148, Springer
60. Muhammad Torabi Dashti, Yanjing Wang: Risk Balance in Exchange Protocols. ASIAN 2007: 70-77, Springer
61. Francien Dechesne, Yanjing Wang: Dynamic Epistemic Verification of Security Protocols: framework and case study. In Proc. Logic Rationality and Interaction (LORI 2007): pp.129-144 College Publications

Edited columns/volumes

Yanjing Wang: Beyond “knowing that”: nonstandard epistemic logics. *Studies in Logic* 9 (4) 2016

Yanjing Wang: Proceedings of the 2016 National Conference on Modern Logic, *Studies in Logic* 10 (2) 2017

RECENT INVITED TALKS (2019-)

Dec 9th 2021 SCNU, Epistemic Logic and Epistemic Puzzles

Dec 3rd 2021 NCML 2021 Academic Ethics relevant to you and me

Nov 11th 2021 LiRA + A|C joint Seminar @ ILLC: Intuitionistic Logic as an Epistemic Logic of Knowing How

Nov 6th 2021 National Conference on Philosophy of Math: What is Intuitionistic Truth?

Oct 14th 2021 Fudan Logic Seminar: Bundled Fragments of First-order Modal Logic and Its Applications

Aug 25 2021 IJCAI Journal Track: Planning-based knowing how: a unified approach

July 7 2021 Math, Logic and Philosophy Workshop @Peking University: Decoding Non-classical Logics

April 14 2021 PKU Philosophy Symposium: Hintikka meets Plato: An Adventure of $\exists\Box$

April 10 2021 Delta Workshop@Wuhan University: Knowing How to Understand Intuitionistic Logic

Dec 24 2020 Sichuan University: Hintikka meets Plato

May 5 2020 Tsinghua University: When names are not commonly known: epistemic logic with assignments

Dec 28 2019 Wuhan University: Logics of Knowing How

Dec 27 2019 Hongyi Lecture Series @Wuhan University, Epistemic Logic: From Philosophy to AI

Nov 9 2019 NCML2019 in Beijing: On Supervising Graduate Students

Oct. 18 2019 LORI Plenary Talk: Beyond Knowing That: A New Generation of Epistemic Logic